

July 1, 2014

**EX PARTE**  
**Via Electronic Filing**

Ms. Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12th Street, SW  
Washington, DC 20554

Re: *Telephone Number Portability, et al.*, CC Docket No. 95-116, WC Docket Nos.  
07-149 & 09-109

Dear Ms. Dortch:

Telcordia Communications, Inc., d/b/a/ iconectiv hereby submits redacted public versions of the bid documents it is making available to those who have signed the Revised Protective Order issued in this proceeding.

Sincerely yours,

/s/ Mark D. Davis

Mark D. Davis  
*Counsel for Telcordia Technologies, Inc. d/b/a/  
iconectiv*

**Survey-2015-LNPA-RFP-1**

Survey Deadline: 4/22/2013 11:59:59 PM

A survey is a simple way for a project sponsor to gather information about your company to determine the possibility of doing business. These surveys typically include general questions about the company, specifications of goods and services to be provided, expertise, and other questions specific to the sponsor. You have been invited to respond to this survey.

**Please note: Your response has been submitted to the sponsor. It is final and may not be edited.**

## 1. GENERAL PROJECT INFORMATION

STATEMENT:

### Introduction and Purpose

1.1

Pursuant to the Telecommunications Act of 1996, the Federal Communications Commission (FCC) has adopted a succession of orders implementing Local Number Portability (LNP), which allows consumers to change service providers for telecommunications services at the same location without changing their telephone numbers. Currently, LNP is enabled in the seven United States former Regional Bell Operating Company (RBOC) service areas or regions, including their related Territories (each a "Region" and collectively, the "Regions") through seven databases, one in each Region, collectively referred to as the Number Portability Administration Center/Service Management System (NPAC/SMS). Each Regional database is operated and administered by a Local Number Portability Administrator (LNPA), neutral and independent from Telecommunications Carriers. A separate Master Agreement governs the operation and administration of the NPAC/SMS by the LNPA in each of the seven Regions and specifies the terms and conditions for providing NPAC/SMS services (referred to as the "Services").

All Master Agreements in all Regions are managed by the North American Portability Management LLC (NAPM LLC), and all Master Agreements in all Regions expire on June 30, 2015. The FCC has delegated authority to its advisory committee, the North American Numbering Council (NANC), working in consultation with the NAPM LLC, to implement a vendor selection process, for the next-generation NPAC/SMS in all Regions, to commence at the expiration of the current Master Agreements. This vendor selection process includes issuance of a Request For Information (RFI) and a subsequent Request For Proposal (RFP) and will culminate in the selection of the LNPA in each of the seven Regions. The purpose of the NANC is to advise the Commission and to make recommendations, reached through consensus, that foster efficient and impartial number administration. The NANC, a diverse body with consumer, state government, and industry representatives, has established an LNPA Selection Working Group (SWG) to oversee the selection process of the LNPA. See Order, WC Docket No. 09-109 and CC Docket No. 95-116, DA 11-883, (adopted May 16, 2011) for process information and the respective roles of the FCC, NANC, and NAPM LLC. During this process, options for replacement and/or enhancement of the current NPAC/SMS in all Regions may be considered.

The purpose of the RFP is to provide each prospective RFP vendor (referred to as a Respondent or a Bidder) with an opportunity to demonstrate how its proposal satisfies the requirements of the RFP and will benefit Telecommunications Carriers and other qualified parties who will be Users of the NPAC/SMS and who rely upon the NPAC/SMS for the rating, routing, and billing of calls, law enforcement and other parties who may be granted certain limited and special access to NPAC/SMS data for other permissible purposes, and ultimately consumers. Each Respondent is instructed to answer all questions in as concise and complete a manner as possible, and in many instances, the Respondent is provided with an opportunity to elaborate on its answers.

The RFP process is comprised of three surveys, which should be completed in this order: (1) Vendor Qualification, (2) Technical Requirements Document, and (3) the RFP. The Technical Requirements Document (TRD) identifies both the technical requirements describing the requisite technical capability of any proposal and some of the required obligations of an LNPA to administer the NPAC/SMS(s). Although great care has been taken to ensure the accuracy of the TRD and other reference documents, it is the Respondent's responsibility to ensure that any response to a specific NPAC/SMS technical requirement contained herein is based on the latest NPAC/SMS Functional Requirements Specification (FRS) and other reference documents as currently published and made available to the industry. FRS Rel 3.4.1(a) was used in creating the TRD FRS sections. Each technical document (FRS, IIS, GDMO, ASN 1.0) has its own glossary, abbreviations, figures and tables.

The NAPM LLC has authorized one of its Advisory Committees, the Future of NPAC Subcommittee (hereafter referred to as the FoNPAC), to project manage the RFP process, including the solicitation and evaluation of responses to this RFP survey. The Iasta® SmartSource SRM® Tool will be used to gather, evaluate, and weigh all responses to this RFP as part of the LNPA selection process. The LNPA selection process is expected to conclude on or about March 2013.

STATEMENT:

### Vendor RFP Response Instructions

1.2

1. All responses to this RFP survey must be submitted through the Iasta® SmartSource SRM® Tool. The Iasta® SmartSource SRM® Tool is an "on demand" technology that contains product platforms (such as Product Management and Decision Optimization) for sourcing teams.
2. All questions about this RFP survey must be posted in the on-line "Forum" in the Iasta® SmartSource SRM® Tool. Questions will be answered by the FoNPAC as quickly as possible. Please note that all questions and answers can be viewed by any party with access to this RFP survey in the Iasta® SmartSource SRM® Tool.
3. Respondents must satisfy the Vendor Qualification Criteria in the Vendor Qualification survey in order for a Respondent's submission to this RFP to be considered.
4. All responses and submissions in connection with this RFP survey must be complete, truthful, and accurate. Material misrepresentations or omissions may result in disqualification or reductions in scoring.
5. A response to the RFP survey must be received on or before the RFP Response Cut-Off date as described in Section 1.5 of this RFP survey via the Iasta® SmartSource SRM® Tool.

STATEMENT:

### Treatment of Information and Confidentiality

1.3

All responses to the RFP survey become the property of the NAPM LLC upon submission, and the NAPM LLC and the FoNPAC expressly reserve the right to reject any and all responses to this RFP survey subject to FCC approval. The NAPM LLC and the FoNPAC may engage an independent consultant to assist in the evaluation of responses to this RFP survey, the Vendor Qualification Criteria survey, and the TRD survey and to make recommendations to the NAPM LLC and the FoNPAC. The NAPM LLC and the FoNPAC reserve the right to request additional information or clarification.

The information submitted by each Respondent will be treated as confidential and may be shared ONLY in accordance with the terms of the confidentiality agreements with members of the NANC's SWG, the FoNPAC, and the NAPM LLC and ONLY upon prior confirmation that each member of such groups has executed the confidentiality agreement. The confidentiality agreements may be found on the NAPM website: [http://www.napmlc.org/pages/NPACRFP/NPACRFP\\_refdocs.aspx](http://www.napmlc.org/pages/NPACRFP/NPACRFP_refdocs.aspx). Respondent's information will also be shared with FCC staff in connection with evaluation of a Respondent's RFP response.

All supporting documents related to a Respondent's submission to this RFP survey must reference "Request for Proposal No. 2015-LNPA-RFP-1." RFP survey responses must be submitted in accordance with the instructions in Section 1.2 VENDOR RFP RESPONSE INSTRUCTIONS. Any RFP survey response submitted after the RFP Cut-off Date as described in Section 1.5 of this RFP survey will not be considered. A Respondent is solely responsible for

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<b>1.4</b>	<p><b>STATEMENT:</b></p> <p><b>Local Number Portability (LNP)</b></p> <p>LNP is the ability of users of telecommunications services, to retain, at the same location, existing telephone numbers without impairment of quality, reliability, or convenience when switching from one Telecommunications Carrier to another. (See 47 USC § 153(37)).</p> <p>Currently, the LNPA provides a total solution for maintaining, administering, and operating the NPAC/SMS in each of seven United States Regions for the continued operation of LNP. The NPAC/SMS is the system that manages the porting and pooling of telephone numbers (TNs).</p> <p>The NPAC/SMS in each Region serves as a central coordination point for LNP activity in that Region. The LNPA provides management, administration, and oversight for, as well as integration of, Data Center operations, hardware and software development, and all maintenance-related functions. The LNPA is responsible for achieving performance standards established and amended from time to time by the industry, for providing user and technical support services (e.g. Help Desk), for providing off-line testing with service providers' systems and training for industry participants on an ongoing day-to-day basis.</p> <p>The NPAC/SMS is a hardware and software platform that comprises the database in each Region required to effect the porting/pooling of telephone numbers and proper call routing of telephone numbers and associated advanced calling features in all Regions. In general, the NPAC/SMS receives information from both the old and new service providers (concurrency, routing information, including the new Location Routing Number (LRN)), validates the information received, and broadcasts the new routing information when an "activate" message is received, indicating that the end user customer has been physically connected to the new service provider's network. The NPAC/SMS also contains a record of all ported/pooled telephone numbers and a history file of transactions relating to the porting/pooling of a telephone number. The NPAC/SMS provides the ability to retransmit LNP information to service providers under certain conditions. The NPAC/SMS is not involved in real time call processing, because this function resides solely in the respective networks of the underlying service providers.</p> <p>The NPAC/SMS interfaces with service providers via their Service Order Activation (SOA) systems and Local Service Management Systems (LSMS). The NPAC/SMS Interoperable Interface Specification (IIS) defines the interface between the NPAC/SMS and the SOA/LSMS systems for a regional architecture. The NPAC/SMS Functional Requirements Specification (FRS) defines functional and operational requirements for the NPAC/SMS. The Abstract Syntax Notation 1 (ASN.1) describes the data structures for encoding, transmitting, and decoding data. The Guidelines for the Definition of Managed Objects (GDMO) serves as the guideline for defining network objects under the Telecommunications Management Network. The above-referenced current technical documents are posted at the following URL: <a href="http://www.napmlc.org/pages/NPACRFP/NPACRFP_REFDOCS.aspx">www.napmlc.org/pages/NPACRFP/NPACRFP_REFDOCS.aspx</a>.</p>
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<b>1.5</b>	<p><b>STATEMENT:</b></p> <p><b>RFP Vendor Selection Process Time Line</b></p> <p>Below is the proposed time line for the vendor selection pursuant to the RFP. The FoNPAC reserves the right to modify or adjust the following dates or to otherwise change or amend the time line, with the consent of the FCC:</p> <p><b>RFP:</b>  <b>08/13/2012 - Public Notice published by FCC</b>  <b>02/05/2013 - Vendors may request login credentials to access the Iasta® SmartSource SRM® Tool from the FoNPAC</b>  <b>02/05/2013 - RFP survey, Vendor Qualification survey, and the TRD survey made available in the Iasta® SmartSource SRM® Tool</b>  <b>04/05/2013 - RFP Response Cut-off Date, the date all responses and submissions to the RFP survey, Vendor Qualification survey, and the TRD survey are due</b>  <b>08/05/2013 - LNPA Vendor Selection Recommendation by the FoNPAC to the SWG</b>  <b>09/20/2013 - Estimated date for FCC approval of Vendor selection for all Regions</b></p>
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<b>1.6</b>	<p><b>STATEMENT:</b></p> <p><b>Iasta® SmartSource SRM® Tool Training</b></p> <p>A Respondent can access on-line training within the Iasta® SmartSource SRM® Tool with Respondent's login credentials. The information in the "Training" section on this project website is easily accessed to learn more about using this tool. A Respondent can find the "Training" link on the left side of the project website.</p> <p><b>Abbreviations and Terminology:</b></p> <p>Refer to "Glossary of Terms and Abbreviations" document in the Iasta® SmartSource SRM® Tool.</p>
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<b>1.7*</b>	<p><b>QUESTION:</b></p> <p><b>Respondent Acknowledgement</b></p> <p>1. Respondent agrees that the submission of responses to the RFP process constitutes acceptance of all referenced and required terms and conditions set forth in this RFP survey and in the Vendor Qualification survey and the TRD survey.</p> <p>2. Responses to this RFP survey submitted by the Respondent through IASTA® SmartSource SRM® Tool are legally valid quotes.</p> <p><b>Does the Respondent acknowledge that,</b></p> <p><b>1) its submission of a proposal pursuant to this RFP process through IASTA® SmartSource SRM® Tool constitutes its acceptance of all terms and conditions set forth in this RFP survey, including the Vendor Qualification survey and TRD survey, and</b></p> <p><b>2) all responses by Respondent to this RFP survey through IASTA® SmartSource SRM® Tool constitute legally binding quotes and offers, subject to acceptance and to the Best and Final Offer provision of Section 13.6 of this RFP survey.</b></p>
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## 2. VENDOR QUALIFICATION CRITERIA

<b>2.1</b>	<p><b>STATEMENT:</b></p> <p>In order for a Respondent's responses to the RFP to be considered, the Respondent must complete the "2015-LNPA-VENDOR QUALIFICATION" survey in IASTA® SmartSource SRM® Tool.</p>
<b>2.2*</b>	<p><b>QUESTION:</b></p> <p>Upon completion of the Vendor Qualification Survey, return to this question and certify that the Respondent has answered all of the questions in that survey by responding "YES" or "NO" to the following question:</p> <p><b>Has the Respondent answered every question in the 2015-LNPA-VENDOR QUALIFICATION survey?</b></p> <p>Yes</p>

## 3. TECHNICAL REQUIREMENTS DOCUMENT

<b>3.1*</b>	<p><b>QUESTION:</b></p> <p>The Technical Requirements Document (TRD) is a separate survey called, "2015-LNPA-Technical Requirements Document."</p> <p>In order for a Respondent's responses to the RFP to be considered, the Respondent must go to the <b>2015-LNPA-Technical Requirements Document</b> survey and completely answer each question in that survey.</p> <p>Upon completion of the <b>2015-LNPA-Technical Requirements Document</b> survey, return to this page and certify that the Respondent has answered all questions in that survey, by responding "Yes" or "No" to the following question:</p> <p><b>Has the Respondent answered every question in the TRD survey and attached a summary as required in the TRD Detailed Response Section?</b></p> <p>Yes</p>
<b>3.2</b>	<p><b>STATEMENT:</b></p> <p><b>Technical Reference Documents</b> are located on the NAPM LLC web site at <a href="http://www.napmlc.org/pages/NPACRFP/NPACRFP_REFDOCS.aspx">www.napmlc.org/pages/NPACRFP/NPACRFP_REFDOCS.aspx</a></p> <p>When a Respondent prepares its quote and submits responses, the Respondent must review all specifications and drawings associated with a particular item, as the Respondent is responsible for quoting to all material, performance, quality, and engineering requirements for each individual item.</p>

## 4. VENDOR PERFORMANCE AUDITS

<b>QUESTION:</b>	<p><b>Gateway Evaluation Process (GEP)</b></p> <p>The Gateway Evaluation Process (GEP) measures the LNPA's satisfaction of several key performance requirements (referred to as the GEP Elements) through quarterly audits reported and compiled on an annual basis (the GEP Audit) in each Region. The GEP Audit measures the LNPA's satisfaction of the GEP Elements during specific 12 consecutive calendar month periods (each period referred to as an "Evaluation Period" or "EP"). The GEP Audit for each respective EP for each Region shall be performed pursuant to an Audit Plan by an auditor selected and compensated in accordance with the requirements of the Master Agreement for each Region (the "GEP Auditor").</p> <p>The GEP and the GEP Audit, including the results thereof, for any EP will be used for purposes of determining whether a price reduction shall apply for an applicable reduction period, that is, for a specified period after the EP. The GEP is independent of, and in addition to, any other requirements in the Master Agreement for the LNPA's satisfaction of Service Level Requirements (SLRs) and any other monitoring or assessment of the LNPA's performance in providing Services under the Master Agreements, and is independent from, and in addition to, any other assessment of damages, performance credits, or other remedies for non-performance or breach under the Master Agreements.</p> <p>The GEP Elements shall include, but need not be limited to, the following measurements: Service Availability Satisfaction (including general Service Availability, Partial Service Availability, and Interface Availability); Billing Satisfaction (including both timeliness of delivery and accuracy); Scheduled Service Unavailability Satisfaction; Benchmarking Satisfaction; Report Satisfaction (including both timeliness of delivery and accuracy), Root Cause Analysis Satisfaction, and Problem Escalation Satisfaction.</p> <p>For purposes of this RFP survey, the GEP shall include the following requirements:</p> <p><b>REQ 1:</b> The GEP Audits shall be performed quarterly and reported annually for consecutive and successive EPs during the term of the Master Agreements by a third party GEP Auditor at the LNPA's expense.</p> <p><b>REQ 2:</b> The selection of the third party auditor shall be agreed upon by LNPA and NAPM LLC.</p> <p><b>REQ 3:</b> The third party auditor shall be a neutral third party that is not affiliated with either the LNPA or NAPM LLC.</p> <p><b>REQ 4:</b> LNPA shall work jointly with the NAPM LLC for input and approval into defining the qualifications, scope of service and automatic termination criteria of third party GEP auditor.</p> <p><b>REQ 5:</b> Upon selection of GEP auditor, LNPA shall work with NAPM LLC and the GEP auditor to define the criteria, metrics and methods and techniques for obtaining data, and the required contents of the GEP audit report to measure LNPA's satisfaction of each GEP element.</p> <p><b>REQ 6:</b> The LNPA shall work with NAPM LLC and the chosen third party GEP auditor to create an audit plan that includes, but is not limited to, collection of data, consideration of data, evaluation of results, initial validation process and the preparation of the GEP audit reports.</p> <p><b>REQ 7:</b> The chosen third party GEP auditor will prepare and issue a GEP audit report to LNPA and NAPM LLC within 30 days following each EP.</p> <p><b>REQ 8:</b> A price reduction shall apply, or the Master Agreements may be terminated, if any of the above requirements are not completed within the timeframe specified in the Master Agreements.</p> <p><b>REQ 9:</b> The pricing reduction amounts and computation, terms, impacts and any additional credits or penalties shall be determined in the Master Agreements.</p> <p><b>REQ 10:</b> The first EP shall commence on the first day of 'All Regions Live' with the first quarterly audit results for the first EP completed and reported</p>
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within 30 days after the end of the first period.

**REQ 11:** Each annual GEP Audit Report for each EP shall include, at a minimum, the following: (1) a determination for each GEP Element whether one or more 'Failures' of that GEP Element has occurred; and (2) adequate substantiation in support of the preceding determinations.

**Definition of Failures for GEP Elements**

The Respondent shall agree to each GEP Element set forth below with its associated 'Failure' definition.

**Service Availability Failure** – Service Availability is defined in the SLR section of the RFP survey as SLR 1. A 'Failure' shall be considered to occur when the monthly measurement of Service Availability during the EP fails to satisfy SLR 1 for any single month in the EP. It is possible to have more than one Failure within an EP for this GEP Element.

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**Partial Service Unavailability** - Partial Service Unavailability is defined in the SLR section of the RFP survey as SLR 3. A 'Failure' shall be considered to occur during an EP when an NPAC/SMS hardware component fails and affects one or more, but not all, users for more than 10 minutes in any single month in the EP. It is possible to have more than one Failure within an associated EP.

**Interface Availability Failure** – Interface Availability is defined in the SLR section of the RFP survey as SLR 7. A 'Failure' shall be considered to occur when the monthly measurement of SLR 7 falls below 99.99% in any calendar month of the EP for any Users' mechanized interfaces for any single month in the EP. It is possible to have more than one failure within an associated EP.

**Report Satisfaction** – Identification of Reports to be included in this GEP Element and their associated delivery dates, shall be identified within the Master Agreements. There are two parts to the Report Satisfaction GEP Element – On-Time Delivery and Accuracy.

- On-time Delivery - A 'Failure' shall be considered to occur when the agreed upon reports from the Master Agreements during the EP are not delivered on or before the specified agreed upon date for any single month in the EP. It is possible to have more than one Failure within an EP.
- Accuracy – A 'Failure' shall be considered to occur when corrections have to be made to report data in agreed upon reports from the Master Agreements for any single calendar month in the EP. It is possible to have more than one Failure within an EP.

**Scheduled Service Unavailability** – Scheduled Service Unavailability is defined in the SLR section of the RFP survey as SLR 2. A 'Failure' shall be considered to occur when the Scheduled Service Unavailability for any month during the EP exceeds the time period for SLR 2 stated in the Master Agreements for any single calendar month in the EP. It is possible to have more than one failure within an associated EP.

**Benchmarking Satisfaction** – This GEP Element for Benchmarking Satisfaction is separate and distinct from the requirements for a Benchmarking Process (as defined in Section 4.6) under the other provisions of the Master Agreements. The GEP Element of Benchmarking Satisfaction is solely with respect to determining whether a 'Failure' occurred during an EP for a specific EP Benchmarking Plan (defined below). There will be at least four phases of Benchmarking for purposes of this GEP Element, and a 'Failure' of the Benchmarking Satisfaction GEP Element shall be considered to occur if the LNPA does not complete any of the phases through issuance of required deliverables within the required timeframes for each such phase as agreed upon by the LNPA and NAPM LLC during the EP, subject to the right of the NAPM LLC to make the relevant determination.

- Phase 1 Benchmarking Plan Development Phase has a deliverable of an issuance of final EP Benchmarking Plan.
- Phase 2 Benchmarking Data Collection and Report Phase has a deliverable of an issuance of the EP Benchmarking Report.
- Phase 3 Benchmarking Evaluation Phase has a deliverable of issuance of an Action Plan and an associated timeline for implementation.
- Phase 4 Benchmark Implementation Phase has a deliverable of completion of the Action Plan.

**Root Cause Analysis and Reporting Satisfaction** – This GEP Element measures satisfaction during an EP of the LNPA's obligation to prepare and to deliver Root Cause Analysis Reports in accordance with the requirements of the Master Agreements. A 'Failure' shall be considered to occur for any single outage (which shall be defined in the Master Agreements) that occurs within the EP, if any one or more of the specified and defined Root Cause Analysis Reports for that specific outage is not delivered within the agreed upon timeframe. For purposes of the foregoing, only one 'Failure' shall be given effect and considered to have occurred with respect to any single outage no matter how many Root Cause Analysis Reports with respect to that outage were not delivered within the specific time periods specified for their delivery; however, it is possible to have more than one Failure within an EP with respect to different outages.

**Problem Escalation Satisfaction** – This GEP Element measures satisfaction during an EP of the LNPA's obligation for all outages that occur during an EP to escalate management and supervisory responsibility to resolve the outage through the appropriate management hierarchy and within the time periods established for such escalation until resolution of the outage in accordance with the requirements of the Master Agreements. A 'Failure' shall be considered to occur if for any single outage that occurred during an EP, management and supervisory responsibility for resolving the outage is not escalated through the appropriate management hierarchy or within the required time periods as set forth in the Master Agreements.

**Billing Timeliness of Delivery Satisfaction** – A 'Failure' shall be considered to occur if any Monthly Invoice (to be defined in the Master Agreements) for any User is not delivered during an EP on or before the Due Date (to be defined in the Master Agreements) either (a) any two consecutive months in the EP, or (b) any three or more months (even if not consecutive) during the EP. There can only be one 'Failure' of this GEP Element during an EP.

**Billing Accuracy Satisfaction** - A 'Failure' shall be considered to occur when based upon a measurement technique determined jointly by the LNPA, third party GEP Auditor, and the NAPM LLC to measure accuracy, on a monthly basis, fewer than 99.9% of Monthly Invoices are accurate. There can only be one 'Failure' of this GEP Element during an EP. If the LNPA, the GEP Auditor, and the NAPM LLC cannot agree on any of the preceding on or before a date specified in the Master Agreements, the NAPM LLC shall make the relevant determination.

**Does the Respondent agree to the GEP audit definitions, terms, and requirements as outlined above?**

Agree

QUESTION:

**Neutrality Review**

**Overview:**

Any LNPA, in connection with its role as operating and maintaining an NPAC/SMS and providing Services, shall engage a third party (Neutrality Auditor) to conduct a review of the LNPA's Neutrality in every Region in which it is acting as the LNPA every six months at the sole expense of the LNPA (the Neutrality Audit) and deliver a legal opinion substantiating the LNPA's Neutrality during that six month period (Neutrality Report). For purposes of the foregoing sentence, the "legal opinion" required to be delivered by the LNPA and constituting the Neutrality Report shall mean (1) a written communication, (2) that is delivered to the NAPM LLC and the FCC expressly for the purpose of evaluating the Neutrality of the LNPA for use in connection with evaluation of the continued compliance of the LNPA with the Master Agreements, (3) that is prepared by a person licensed and in good standing to practice law in any state of the United States and who represents the LNPA, and (4) that constitutes a third party legal opinion governed by and subject to the RESTATEMENT (THIRD) OF THE LAW GOVERNING LAWYERS and the Opinion Accord of the American Bar Association Section of Business Law (1991).

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**Requirements of Neutrality Review:**

Satisfaction of Criteria for Neutral Third Party:

For purposes of the Neutrality Review, Neutrality shall mean that at all times during the relevant six month period the LNPA as the Primary Vendor and all of its Sub-Contractors are Neutral Third Parties. A Neutral Third Party shall be defined in the Master Agreements, but shall at a minimum mean the following:

(A) In accordance with law and FCC regulations (FCC 96-286 paras. 89, 92, 93, 98; and in FCC 97-289 paras. 25, 29, 30, 127 and 47 CFR, Section 52.12(a)), a non-governmental entity that is impartial and is not aligned with any particular telecommunications industry segment and that can assure that access to the NPAC/SMS for all qualified Users is at all times evenhanded, impartial and nondiscriminatory;

(B) The entity must satisfy ALL of the following criteria:

(1) The entity

a. is not a Telecommunications Service Provider,

b. is not owned by, or does not own, any Telecommunications Service Provider; provided that ownership interests (measured by equity interest in stock, partnership interests, whether general or limited, joint venture participation, or member interests in a limited liability company) or voting power (on any one or more matters) of ten percent (10%) or less (of the total outstanding ownership interests or voting power) shall not be considered ownership for this purpose;

c. and is not an affiliate, by common ownership or otherwise, of a Telecommunications Service Provider. For purposes of this definition, an affiliate is an entity that controls, is controlled by, or is under common direct or indirect control with another entity, and an entity shall be deemed to control another if such entity possesses either directly or indirectly (i) ownership interests (measured by equity interest in stock, partnership interests, whether general or limited, joint venture participation, or member interests in a limited liability company) of greater than ten percent (10%) (of the total outstanding ownership interests), (ii) voting power (on any one or more matters) of greater than ten percent (10%) (of the total outstanding voting power), or (iii) the power to direct or to cause the direction of management and policies of such entity, whether through ownership of or rights to vote, by contract, agreement, or otherwise.

(C) The entity or any Affiliate has not issued a majority of its debt to, nor derive a majority of its revenues (not including the NPAC/SMS) from, any Telecommunications Service Provider. For this purpose, "majority" means greater than 50%, and "debt" means stocks, bonds, securities, notes, loans or any other instrument of indebtedness.

(D) Notwithstanding the aforementioned neutrality criteria, the entity is not subject to undue influence by parties with a vested interest in the outcome of numbering administration and activities, and the entity is not involved in a contractual or other arrangement that would impair its ability to administer the NPAC/SMS fairly and impartially as an LNPA or to implement the schedule set forth in the IASTA® SmartSource SRM® Tool, called the FoNPAC Timeline.

For purposes of the above criteria, a Telecommunications Service Provider is an entity that either (I) possesses the requisite authority to engage in the provision to the public of facilities-based wireline local exchange or CMRS telecommunications services in any State or Territory of the United States, or (ii) is one of the following three classes of interconnected Voice over Internet Protocol ("VoIP") providers: (I) Class 1, a standalone interconnected VoIP provider that obtains numbering resources directly from the North American Numbering Plan Administrator (NANPA) and the Pooling Administrator (PA) and connects directly to the PSTN (i.e., not through a PSTN Telecommunications Service Provider partner); or (II) Class 2, an interconnected VoIP provider that partners with a facilities-based Public Switched Telephone Network (PSTN) Telecommunications Service Provider to obtain numbering resources and connectivity to the PSTN via the Telecommunications Service Provider partner; or (III) Class 3, A non-facilities-based reseller of interconnected VoIP services that utilizes the numbering resources and facilities of another interconnected VoIP provider (analogous to the "traditional" PSTN reseller).

The Respondent must specifically address and demonstrate that as a Primary Vendor it is a Neutral Third Party and must disclose the identity and corporate affiliations of all Sub-Contractor(s) that it engages in providing the Services required by the Master Agreements (including software and hardware Sub-Contractors).

**Answers to Specific Questions:**

The Neutrality Review also shall address each of the questions provided below; including a summary of findings, detailed statement of findings, and a description of investigative methods for each question.

1. Does the LNPA, in its operation of the NPAC, provide services under non-discriminatory terms, rates, and conditions?
2. Does the LNPA qualify as an NPAC User as defined by the criteria used to grant User status to any entity?
3. Do any services provided by the LNPA in the operations of non-NPAC businesses utilize User Data not available to any other User?
4. In the LNPA's operations of non-NPAC businesses, is the LNPA's use of the NPAC/SMS data consistent with the intended uses of rating, routing, billing, and network maintenance?
5. Are the services provided by the non-NPAC businesses possible only because LNPA operates the NPAC?
6. Could any non-LNPA entity provide services which utilize NPAC/SMS Data, identical to those services offered by the non-NPAC LNPA business?
7. Does the LNPA in the operations of non-NPAC businesses disclose any NPAC/SMS Data to any entity that would otherwise not be eligible to receive it?
8. Does the LNPA maintain Neutrality in public forums, not favoring the positions of an industry segment or segments, or an industry member or members, over others, as demonstrated in the records of public forums and ex-parte meetings?

**Does the Respondent acknowledge that if selected to be the LNPA it will abide by the requirements for conducting and delivering a Neutrality Review every six months during the term of the Master Agreement to which it is a party, the terms, and requirements as outlined above and as to be included in each Master Agreement?**

Acknowledged

**QUESTION:**

**Business Continuity Plan Requirements**

**REQ 1:** The LNPA shall have a Business Continuity Plan that will be executed in case of severe service disruptions due to a catastrophic event (fire, act of nature, war, etc.), as more fully to be described in the Master Agreements. A service disruption could result from, but not limited to; a loss of key personnel, loss of facilities, and loss of critical IT systems.

**REQ 2:** The LNPA, at its sole expense, shall conduct periodic unannounced Business Continuity Plan Exercises that are non-service impacting to assure that employees understand and follow the Business Continuity Plan and to assess the adequacy of the Business Continuity Plan.

**REQ 3:** The LNPA shall, at its sole expense, prepare and deliver to the NAPM LLC a written report regarding the conduct and results of each Business Continuity Plan Exercise, including a specification of corrective actions and anticipated timelines for implementation, if any.

**Please attach a copy of an existing Business Continuity Plan in use by Respondent.**

**Does Respondent fully agree to conduct and implement a Business Continuity Plan, including Business Continuity Plan Exercises as outlined above?**

Agree

**Optional Attachments:**

[RFP Section 4.3 ExampleBCPTT.pdf](#) (1.5 MB)

[RFP Section 4.3 Business Continuity Plan Requirements.pdf](#) (117.9 KB)

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[RFP\\_Section 4.3\\_ExampleBCPSG.pdf](#) (659.5 KB)

## QUESTION:

**LNPA NPAC/SMS Data Center Operations Audit**

The LNPA must agree to conduct and report on an annual audit of the NPAC/SMS Data Center operations. The LNPA must agree to provide and to operate at least two redundant NPAC/SMS Data Centers, separated geographically within the continental United States.

**REQ 1:** A Data Center Operations Audit shall be conducted annually, at the LNPA's sole expense, of all of its NPAC/SMS Data Center operations by its internal auditors.

**REQ 2:** A written report of each Annual Data Center Operations Audit shall be prepared by the LNPA and provided to the NAPM LLC and the FCC within an agreed upon timeframe, including a specification of corrective actions and anticipated timelines for implementation, if any.

**REQ 3:** The Annual Data Center Operations Audit Report shall address the accuracy of the LNPA's invoices for Services, NPAC/SMS and facilities security, back-up sufficiency, disaster recovery procedures, and overall compliance with industry standards for similar data center operations, as more fully delineated in the Master Agreements.

**REQ 4:** Upon receipt of a report on the Annual Data Center Operations Audit Report, the NAPM LLC may, at its own expense and utilizing its own auditor, conduct an audit of the NPAC/SMS Data Center operations of the same or differing scope as the LNPA's annual audit upon notification to the LNPA.

**REQ 5:** The LNPA shall provide to the NAPM LLC and its selected auditor, access during normal business hours to the LNPA's staff, books, records, supporting documentation and NPAC/SMS Data Centers to perform the audit.

**REQ 6:** The LNPA shall provide the NAPM LLC use of the NPAC/SMS system and software used to perform the LNPA services to perform and/or assist in the audit.

**REQ 7:** The LNPA shall provide the NAPM LLC access to its service locations or other facilities as may be necessary for the NAPM LLC or its third party designees to perform the audits.

**REQ 8:** For an agreed upon timeframe, LNPA shall provide NAPM LLC and/or its third party designees on LNPA's premises office space, office furnishings (including lockable cabinets), telephone and facsimile service, utilities and office related equipment and duplicating services as NAPM LLC and/or its third party designees may require to perform an audit.

**REQ 9:** The LNPA shall keep books, records, and supporting documentation sufficient to document the operation of the NPAC and all invoices paid or payable by the Users for Services for the current fiscal year and at least four preceding fiscal years during which the LNPA acted under the Master Agreements.

**REQ 10:** If any audit requested by the NAPM LLC or a regulatory authority identifies any non-compliance with any law, regulation, audit requirement or generally accepted accounting principle relating to the NPAC/SMS, the LNPA shall take actions to comply at its own expense.

**Does the Respondent fully agree to support the process, terms, and requirements of the Annual Data Center Operations Audit as outlined above?**

4.4\*

Agree

## QUESTION:

**User Charges Audit**

**REQ 1:** The NAPM LLC shall, at its initial expense, have the right to request an audit of fees and other charges to Users no more frequently than once in any 12 month period of time to determine if fees and charges are accurate and in compliance with the Master Agreements (User Charges Audit). If, as a result of the User Charges Audit, the NAPM LLC determines that the LNPA in any Region has overcharged Users, the NAPM LLC shall notify LNPA of the amount of such overcharge and if the LNPA agrees with the results of the User Charges Audit or if the NAPM LLC prevails in any dispute regarding such audit as provided in the Master Agreements, the LNPA shall promptly refund to affected Users the amount of the overcharge, plus interest, at the rate of one and one quarter percent (1 1/4%) per month or the highest rate allowed by law in the State of Delaware, whichever is highest, from the date payment was received. In the event any such audit reveals an overcharge to Users during any audited period exceeding five percent (5%) or more of a particular fee category as set forth in the Master Agreements, the LNPA shall reimburse the NAPM LLC for the cost of such audit. If the LNPA and the NAPM LLC disagree with the results of User Charges Audit, the dispute shall be resolved in accordance with the provisions of the Master Agreements.

**Does the Respondent fully agree to support the process, terms, and requirements of the User Charges Audit as outlined above?**

4.5\*

Agree

## QUESTION:

**Benchmarking Process**

Benchmarking is defined as a measurement of the quality of an organization's policies, products, programs, strategies, and procedures, and their comparison with standard measurements or similar measurements of comparable industry or commercial peers.

The Benchmarking Process for the LNPA provides an analytic tool for determining how other comparable organizations achieve and maintain high performance levels, for determining, re-evaluating, and calibrating the performance standards and metrics for the LNPA by comparison to other comparable organizations, and for identifying improvements in performance. Benchmarking the performance metrics, processes, and technologies of the LNPA provides opportunities for continuous process and operations improvement and to become "best in class." The Benchmarking Process is separate and distinct from the more limited GEP Element of Benchmarking Satisfaction. The Benchmarking Process is a comprehensive plan providing for the regular, periodic, and systematic benchmarking of the LNPA's overall performance under the Master Agreements in each Region during the entire term of the Master Agreements.

**REQ 1:** The LNPA shall work with the NAPM LLC jointly to formulate for each Region, within 60 days of 'All Regions Live' the initial Benchmarking Process Plan, providing the details of the measurement and comparison of certain specified elements (the Benchmarks) and the process for data collection and evaluation with respect to those Benchmarks.

**REQ 2:** The Benchmarking Process Plan shall be implemented and the Benchmarking Process shall be conducted by the LNPA or, at NAPM LLC's option, by a third party not affiliated with the LNPA and selected by the NAPM LLC.

**REQ 3:** All fees and expenses incurred to conduct and/or support the Benchmarking Process shall be paid by the LNPA.

**REQ 4:** The Benchmarking Process Plan shall provide for the measurement and comparison of the Benchmarks and data collection and evaluation with respect to those Benchmarks at least annually or at a frequency mutually agreed upon by the LNPA and NAPM LLC.

**REQ 5:** Within 30 days after completion of the Benchmark Process, a written report (the Benchmarking Report) shall be provided to the NAPM LLC to include results, supporting schedules, and substantiating documentation.

**Benchmarking Phases**

The Benchmarking process, which can be a lengthy and time consuming process, has been separated into four phases. Each phase identifies and documents the objective, any items mutually agreed upon, deliverables, timeframes and a document identifying actions completed to date. These phases help ensure the process is moving forward in a timely manner. The four phases of benchmarking are identified below.

## 1. Benchmarking Plan Development Phase

The first phase includes development of a plan including those items identified by the NAPM LLC that will be evaluated.

## 2. Benchmarking Data Collection and Report Phase

The second phase of benchmarking begins immediately upon approval of the EP Benchmarking Plan and involves the collection and analysis of data. This phase ends with the delivery of EP Benchmarking Report.

## 3. Benchmarking Evaluation Phase

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<b>REDA</b>	<p>The third phase of benchmarking begins within 30 days of the end of phase two, benchmarking data collection and report phase. Phase three begins with an Evaluation Report which includes the following:</p> <ol style="list-style-type: none"> <li>a. An evaluation of the EP Benchmarking Report</li> <li>b. Recommendations of corrective actions, if necessary</li> <li>c. An implementation plan</li> </ol> <p>4. Benchmarking Implementation Phase</p> <p>The last phase of benchmarking begins with the approval of the implementation plan and timeline and ends with the successful and on time implementation of the plan.</p> <p>Requirements below indicate how the benchmarking process will be implemented for the LNPA.</p> <p><b>REQ 6:</b> The LNPA shall commence the EP Benchmarking Plan Development Phase on or before 14 days following request by the NAPM LLC to initiate EP Benchmarking.</p> <p><b>REQ 7:</b> The LNPA shall meet with NAPM LLC on a recurring basis as mutually agreed upon to provide updates on the creation of the EP Benchmarking Plan.</p> <p><b>REQ 8:</b> The NAPM LLC shall have final approval of the EP Benchmarking Plan before proceeding to the next phase.</p> <p><b>REQ 9:</b> The LNPA shall provide an EP Benchmarking Report on or before the date and with requirements identified and agreed upon in the EP Benchmarking Plan.</p> <p><b>REQ 10:</b> Within 30 days of completion of the EP Benchmarking Report the LNPA shall prepare and deliver to the NAPM LLC an Evaluation Report setting forth recommendations for corrective actions as needed with a plan for implementation.</p> <p><b>REQ 11:</b> The LNPA shall meet with the NAPM LLC on a mutually agreed upon timeframe for jointly discussing the Evaluation Report, corrective actions identified and the plan for implementation.</p> <p><b>REQ 12:</b> The LNPA and the NAPM LLC shall mutually agree upon the implementation plan and the time period for implementation.</p> <p><b>REQ 13:</b> The LNPA shall deliver the corrective action plan on time and as outlined in the implementation plan.</p> <p><b>Does Respondent fully agree to conduct and to implement the benchmarking process, terms, and requirements as outlined above, including the Benchmarking Process Plan, the Periodic Benchmarking, and the Benchmarking Report?</b></p>
Agree	

## 5. NEW USER EVALUATION (NUE) AND THE NUE PROCESS

<b>5.1*</b>	<p><b>QUESTION:</b></p> <p><b>Determination of Who May Access the NPAC/SMS Overview</b></p> <p>The LNPA shall be responsible for administering access to the NPAC/SMS by determining if an Applicant qualifies as a User pursuant to the qualifications and requirements of the Master Agreements and if a User, once granted access, continues to qualify for access to the NPAC/SMS; however, in certain cases an independent third party evaluator (the New User Evaluator or the NUE) shall be responsible for making determinations of whether certain Applicants qualify as Users and whether an existing User continues to qualify as a User (collectively the NUE Process). The determination of whether any Applicant qualifies for Services as a User, whether made by the LNPA or the NUE, shall be based upon a good-faith, reasonable interpretation of the information provided by such Applicant pursuant to the New User Application and the definition of "User" in the Master Agreements.</p> <p><b>Categorization of Applicants by the LNPA</b></p> <p>The first step in determining whether access to the NPAC/SMS is permissible is to categorize Applicants. Based solely upon the New User Application, the LNPA shall categorize each Applicant as either (A) a Service Provider, (B) a provider of telecommunications-related services (PTRS), or (C) "other," which shall refer to any Applicant that is not identified in the New User Application as either a Service Provider or a PTRS. An Applicant may not be categorized as more than one of (A), (B), or (C) above in any single New User Application, but may submit separate New User Applications in order to qualify under more than one category.</p> <p><b>Responsibility for Determination Based Upon Categorization of the Applicant</b></p> <p>If an Applicant is categorized as a Service Provider, the LNPA shall process the New User Application pursuant to the Master Agreements and the New User Application Methods &amp; Procedures (M&amp;P), and the LNPA shall determine if the Applicant qualifies as a User. If the Applicant is classified as "other," then the LNPA shall contact the Applicant to determine whether "other" is the correct categorization of the Applicant, and if the LNPA cannot determine that the Applicant's category is either a Service Provider or a PTRS, then the LNPA shall refer the New User Application (and all supporting documentation and substantiation) to the NAPM LLC for further consideration.</p> <p>For every Applicant categorized as a PTRS, including the LNPA and every Affiliate of the LNPA, and for every existing User for which the LNPA has received a Misuse Allegation, the LNPA shall refer the matter to the NUE for a determination of whether the PTRS Applicant qualifies as a User and whether an existing User continues to qualify as a User in accordance with the NUE Process. The LNPA and an Affiliate of the LNPA may qualify as a User as a PTRS only upon completion of a New User Application and only with respect to each separate single service or product offered (i) that in any way makes use of User Data, (ii) that is not considered a Service under these Master Agreements, and (iii) for which the PTRS is not compensated under the Master Agreements (a User Service). Whether the LNPA or an Affiliate of the LNPA qualifies as a User shall be determined by the NUE for every User Service, every User Service Material Modification, and every Acquired User Service of the LNPA. In determining whether the LNPA or an Affiliate of the LNPA qualifies as a User, the NUE and the NUE Process shall impose additional requirements on the LNPA and an Affiliate of the LNPA not imposed upon other PTRS Applicants.</p> <p>In general, a PTRS may be granted access to the NPAC/SMS Data for the exclusive purpose of routing, rating, or billing of calls, or for performing network maintenance in connection with the provision of telecommunications-related services. The NUE conducts a Permitted User Review to determine whether an Applicant satisfies this requirement and whether an existing User who has been subject to a Misuse Allegation continues to satisfy this requirement. With respect to determining whether the LNPA or an Affiliate of the LNPA qualifies to be granted access to the NPAC/SMS Data the NUE conducts the following reviews in addition to the Permitted Use Review: a Data Provisioning Review, a Pricing Review, and a Payment Review (individually referred to as an NUE Review and all collectively referred to as NUE Reviews).</p> <p>Depending on how a matter is referred to it and which NUE Review is, or which combination of the NUE Reviews are, accomplished, the NUE shall then render one of the following three separate written reports: a New User Findings Report, an Administrator User Service Findings Report, or a Misuse Allegation Findings Report (each individually referred to as a Findings Report and all collectively referred to as Findings Reports). A Findings Report may be affirmative, negative or indeterminate, or the NUE may fail to issue its Findings Report within the required time. Subject to specific appeal and dispute resolution procedures set forth in the Master Agreements, the determination of the NUE shall be conclusive.</p> <p><b>Does the Respondent agree to implement and follow the NUE Process and to adhere to the requirements and procedures summarized above for determining whether an Applicant or an existing User, including the LNPA and its Affiliates, qualify to be granted access to the NPAC/SMS, and, in particular, does the Respondent agree to the imposition of additional NUE Reviews not imposed upon other PTRS Applicants or Users, as summarized above, with respect to every User Service, every User Service Material Modification, and every Acquired User Service of the LNPA and an Affiliate of the LNPA?</b></p>
Agree	

## 6. NUMBER PORTABILITY ADMINISTRATION CENTER

<b>6.1</b>	<p><b>STATEMENT:</b></p> <p><b>Overview of the Role and Responsibility of the LNPA to the NPAC and NPAC/SMS</b></p> <p>The Number Portability Administration Center (NPAC) is the overall system and infrastructure that supports LNP and telephone number pooling in the United States. Managed and administered by the LNPA, the NPAC consists of the NPAC/SMS hardware, software, and data platform, the data center infrastructure, including operations and support personnel, and the Help Desk infrastructure and personnel.</p> <p>The NPAC/SMS is a hardware and software platform that contains the database of information required to effect the porting and pooling of TNs. The NPAC/SMS is not involved in actual call routing, but rather receives, stores, and broadcasts data on ported and pooled telephone numbers, and provides informational reports based on the information contained in the database. This information is necessary to allow each user's network to properly route calls.</p>
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The LNPA shall manage and administer the NPAC and the NPAC/SMS database, as well as the infrastructure required to do so. The LNPA shall be responsible for the maintenance and performance of the NPAC and the NPAC/SMS.

QUESTION:

### User Support and User Training

The LNPA shall be responsible for user support as required and specified in the Master Agreements and associated M&Ps. Specifically, the LNPA shall (a) provide appropriate training for users; (b) provide technical support for users; and (c) perform both initial and ongoing acceptance testing for any and all functionalities.

**REQ 1:** The LNPA shall be responsible for initial and ongoing training and user support.

**REQ 2:** The LNPA shall train Users, upon request, including, but not limited to:

- (a) uploading ported/pooled TN data and user data,
- (b) receiving and understanding broadcasts,
- (c) receiving and understanding error/success messages,
- (d) requesting, receiving, and understanding mass changes,
- (e) requesting, receiving, and understanding reports (including billing), and
- (f) understanding security and encryption measures.

**REQ 3:** The LNPA shall provide technical support for users who experience problems including, but not limited to:

- (a) uploading ported/pooled TN data and user data;
- (b) receiving and understanding broadcasts;
- (c) receiving and understanding error/success messages;
- (d) requesting, receiving, and understanding mass changes;
- (e) requesting, receiving, and understanding reports (including billing); and
- (f) understanding security and encryption measures.

**REQ 4:** The LNPA shall provide the necessary technical support to correct any data transmission problems encountered in the interfaces between the NPAC/SMS and a user.

**Does the Respondent agree to fully comply with the above requirements in time to meet the published implementation date? If not, please explain.**

6.2\*

Agree

QUESTION:

### Acceptance Testing

**REQ 1:** The LNPA shall perform acceptance testing of the initial software and hardware configurations in the NPAC/SMS and its interfaces.

**REQ 2:** The LNPA shall perform acceptance testing of all modifications or upgrades to software and hardware configurations in the NPAC/SMS and its interfaces. This software and hardware testing shall be scheduled so as not to inhibit the ongoing functionality of the NPAC/SMS and its interfaces.

**REQ 3:** The LNPA shall resolve all problems encountered during testing.

**REQ 4:** The LNPA shall document all testing procedures and test results and shall make those results available to users.

**REQ 5:** The LNPA shall certify all NPAC/SMS software and hardware configurations before release for operation.

**Does the Respondent agree to fully comply with the above requirements in time to meet the published implementation date? If not, please explain.**

6.3\*

Agree

QUESTION:

### NPAC/SMS Data Center Redundancy Requirements

**REQ 1:** For each Region, there shall be at least two completely redundant NPAC/SMS Data Centers, consisting of at least one primary Data Center and at least one backup Data Center, separated geographically within the continental United States and each Data Center housing separate and distinct NPAC/SMS databases for each of the seven Regions.

**REQ 2:** Careful consideration must be given to the locations of the redundant NPAC/SMS Data Centers, so as not to locate them in areas prone to natural disasters, e.g., hurricanes, tornados, earthquakes, etc. Respondent must identify and justify the location of each NPAC/SMS Data Center to ensure appropriate redundancies and avoidance of natural disaster areas.

**REQ 3:** NPAC/SMS Data will be replicated synchronously such that the NPAC/SMS databases in each of the redundant Data Centers shall be updated simultaneously, in real time, as transactions are processed.

**REQ 4:** Direct transmission facility connections from a service provider to each NPAC/SMS Data Center location must be provided.

**REQ 5:** Diverse and redundant transmission paths connecting the two geographically separated NPAC/SMS Data Centers must be provided.

**REQ 6:** The ability to completely failover all circuits connecting service providers to the NPAC/SMS, all applications, and NPAC/SMS databases from the primary NPAC/SMS Data Center to a backup NPAC/SMS Data Center, and then to revert from the backup NPAC/SMS Data Center to the Primary NPAC/SMS Data Center must be supported.

**REQ 7:** The ability for all service providers to successfully failover to the backup NPAC/SMS site and back must be tested annually (Annual Failover Exercise). The LNPA must work with all service providers to resolve any issues discovered during each Annual Failover Exercise and must identify and implement corrective action.

**Does the Respondent agree to fully comply with the above requirements in time to meet the published implementation date, including specifically providing at least two completely redundant NPAC/SMS Data Centers for each Region, maintaining separate and distinct databases for each Region, supporting failover, and conducting Annual Failover Exercises? If not, please explain.**

6.4\*

Agree

QUESTION:

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**Help Desk Minimum Requirements**

6.5\*

**REQ 1:** The LNPA shall provide and staff a user Help Desk accessible via a toll-free number to answer and resolve User questions and issues.

**REQ 2:** At a minimum, the Help Desk will be staffed with live operators Monday-Friday, from 7am to 7pm Central, excluding holidays designated in the Master Agreements (Help Desk Business Hours).

**REQ 3:** Outside of normal staffed Help Desk business hours, at a minimum, 99.0% of all requests for callbacks to users must be made within 15 minutes.

**REQ 4:** For service affecting trouble tickets, a minimum of 100% of all commitments to get back to the user after the initial contact will be met.

**REQ 5:** A minimum of 90% of the calls during normal staffed business hours must be answered by live operators within 10 seconds. The interval measurement begins when the caller chooses the option to speak with a live agent and ends when a live agent answers the call.

**REQ 6:** The Help Desk will maintain an abandoned call rate of less than 1.0%. The interval measurement will begin when the caller chooses the option to speak with a live agent; the interval ends when the caller abandons the call, but only after at least ten seconds has elapsed with no answer.

**Does the Respondent agree to fully comply with the above requirements with respect to the Help Desk in time to meet the published implementation date? If not, please explain.**

Agree

QUESTION:

**Test Bed Requirements**

6.6\*

**REQ 1:** The LNPA will provide a permanent test bed, at no additional cost, to enable Service Providers and their vendors to perform testing of the current production NPAC/SMS software release.

In addition, in order for Service Providers and their vendors to test new NPAC/SMS software releases, the LNPA will make available during the entire period of pre-production testing an additional separate test bed, at no additional cost. After rollout of each new NPAC/SMS software release into production, the new NPAC/SMS software release will be loaded into the permanent "current release" test bed, at no additional cost.

The test beds must replicate the production current release and new release NPAC/SMS software environments, respectively.

**REQ 2:** The data contained in the test beds shall be determined by industry testing participants and provided by the LNPA as determined and needed for Service Provider and vendor testing.

**Does the Respondent agree to fully comply with the above requirements in time to meet the published implementation date? If not, please explain.**

Agree

QUESTION:

**Data Center Security**

6.7\*

**REQ 1:** The LNPA shall maintain and enforce, at all times, adequate NPAC/SMS data center safety and physical security procedures, subject to inspection, audit, and approval by and on behalf of the NAPM LLC.

**REQ 2:** NPAC/SMS servers, Data Centers, and NPAC/SMS User Data must be maintained and stored in the continental United States. No data relating to the Service will be stored, maintained, or warehoused, in a physical or electronic form, at, in, or through, a site, on services, or otherwise, located outside of the continental United States.

**Does the Respondent agree to fully comply with the above requirements in time to meet the published implementation date? If not, please explain.**

Agree

QUESTION:

**Additional LNPA Support Requirements**

6.8\*

**REQ 1:** The LNPA must provide and administer a web domain that has similar features and functionality as the current NPAC.com website.

**REQ 2:** The LNPA must protect and preserve all Local Number Portability Administration Working Group (LNPA WG) information that is stored on the current NPAC.com website and must make all such LNPA WG information available and accessible on its web domain.

**REQ 3:** The LNPA must support the LNPA WG and other relevant industry groups at meetings and conference calls, including, but not limited to, providing a Change Management process and administrator.

**REQ 4:** The technology, hardware, and software of the NPAC ecosystem must be updated on an ongoing basis as necessary to meet or exceed all Service Level Requirements (SLRs) and performance and reliability requirements without additional cost to the industry.

**Does the Respondent agree to fully comply with the above requirements in time to meet the published implementation date? If not, please explain.**

Agree

QUESTION:

**Interactive Voice Response (IVR) Requirements**

The LNPA must provide and support an Interactive Voice Response (IVR) system capable of allowing authorized users to query and obtain, on a single call to the NPAC/SMS IVR system, Local Service Provider (LSP) information (LSP name and contact number (if available)) for up to a maximum of 20 telephone numbers (ported, pooled, non-ported, non-pooled) in a single contact. The NPAC/SMS IVR system must also meet or exceed the following:

**REQ 1:** Reliability - 99.9% Availability must be provided by redundant NPAC/SMS IVR systems.

**REQ 2:** 7x24 Availability - The NPAC/SMS IVR system must be available to users on a 7 day per week, 24 hour per day basis.

**REQ 3:** Security Access (PIN per service provider) - PIN access must be required to gain access to the NPAC/SMS IVR System. LNPA personnel must be capable of administering PINs individually or in blocks.

**REQ 4:** System Hold Time - Using management information reports and real-time system monitoring, LNPA personnel must be capable of monitoring and measuring NPAC/SMS IVR system hold and request processing times.

**REQ 5:** Multiple requests on a single access - The NPAC/SMS IVR system must be capable of allowing authorized users to request LSP information for up to a maximum of 20 (tunable parameter) ported, pooled, non-ported, or non-pooled TNs on a single call.

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**REQ 6:** Traffic measurement capability - The NPAC/SMS IVR system must contain a standard suite of system utilization reports for measuring and analyzing IVR system traffic.

**REQ 7:** Disaster recovery and backup - Disaster recovery and backup must be provided through the use of redundant IVR systems. In addition, authorized users must have the capability of calling the LNPA-provided Help Desk to reach LNPA personnel capable of providing corresponding LSP information for a single or set of telephone numbers.

**REQ 8:** Alternative to IVR system -In addition to the NPAC/SMS IVR system, authorized Users must have the capability of calling the LNPA Help Desk during Help Desk Business Hours to reach LNPA personnel capable of providing corresponding LSP information for a single or set of telephone numbers.

**REQ 9:** Toll-free number access - The NPAC/SMS IVR system must be accessible to authorized users via an LNPA-provided toll-free telephone number.

**REQ 10:** Per access billing process - Each call made to the NPAC/SMS IVR system must be tracked from start to finish. For every call, the NPAC/SMS IVR system must capture: the PIN making the call, the menu options selected, the telephone numbers inquired about, the results of the inquiry(ies), and the length of the call. Using this data, the system for rendering any IVR billing must be capable of billing on a usage or access basis.

**Does the Respondent agree to fully comply with the above requirements with respect to the NPAC/SMS IVR system in time to meet the published implementation date? If not, please explain.**

Agree

## QUESTION:

**Outage Escalation and Root Cause Analysis Reports****Outage Defined:**

The LNPA has responsibility for both reporting the occurrence of NPAC/SMS Outages and resolving Outages as quickly as possible to reduce the impacts to end user consumers. The term Outage will be defined in the Master Agreements for each Region, but generally means any occurrence in the operation of the NPAC/SMS that adversely affects the ability of the NPAC/SMS to port telephone numbers successfully. "Resolved" and "resolution" with respect to any Outage shall mean that the Outage has ended and that service availability for all Users has been restored.

**Outage Problem Escalation:**

If an Outage is not resolved within the specified time period in the Master Agreements, then the LNPA agrees that primary management and direct responsibility for resolution shall be escalated to successively higher levels of supervisory personnel within the LNPA as outlined in requirements below. This escalation process and hierarchy is referred to as Problem Escalation.

**REQ 1:** The LNPA shall escalate an Outage or a Partial Outage issue to the Manager level within 30 minutes following detection of Outage or Partial Outage, respectively, if not resolved.

**REQ 2:** The LNPA shall escalate an Outage or a Partial Outage issue to the Director level within 45 minutes following detection of Outage or Partial Outage, respectively, if not resolved.

**REQ 3:** The LNPA shall escalate an Outage or a Partial Outage issue to the Vice President level within 60 minutes following detection of Outage or Partial Outage, respectively, if not resolved.

**REQ 4:** Escalation in accordance with the above-summarized schedule and hierarchy will be documented and substantiated by delivery of electronic mail communications showing both a date and time stamp, with a hard-copy of such electronic mail communications printed and stored by the LNPA during the entire term of the Master Agreements, for later retrieval and review.

If the internal management structure of the Respondent or the nomenclature used to describe the Respondent's management structure is different than the structure and nomenclature used herein, then escalation shall occur in accordance with these requirements to those levels of supervisory personnel within the Respondent that have duties and responsibilities substantially equivalent to or greater than those identified in these requirements.

**Root Cause Analysis Reports:**

Upon the detection of Outages, Root Cause Analysis (RCA) reports are required by the LNPA when a system issue, or outage, occurs impacting more than one user. RCA reports shall be delivered within the timeframes as specified in the requirements below.

**REQ 1:** The LNPA shall prepare and circulate a Preliminary RCA report within 24 hours following detection of an Outage, which shall include the LNPA's best determination as of that point in time of the root cause of the Outage, along with a summarization of the reason or basis for that determination.

**REQ 2:** The LNPA shall prepare and circulate a Definitive RCA report within five business days following detection of an Outage, which shall include the LNPA's best determination as of that point in time of the root cause of the Outage, a brief description of techniques and practices used to determine that root cause, a summary of the reason or basis for the determination, and a summary of difference in determinations between the Preliminary RCA Report and the Definitive RCA Report.

**REQ 3:** The LNPA shall prepare and circulate a Corrective Action Plan within 10 business days after the date the Preliminary RCA report should have been issued (even if not issued), which summarizes the corrective action to be taken and a schedule for implementation to avoid a reoccurrence of an Outage.

**Does the Respondent fully agree to conduct and implement the Outage Problem Escalation and Root Cause Analysis processes as outlined above? If not, please explain.**

Agree

6.10\*

## 7. REQUIRED ENHANCEMENTS AND FUTURE CONSIDERATIONS

## STATEMENT:

**Required Enhancements and Future Considerations**

7.1

The following enhancements to the NPAC/SMS described in this section are required for implementation and availability at the time of turn-up of the next-generation NPAC/SMS platform in June 2015.

All costs for development and implementation of these required enhancements must be included in the Respondent's quoted price in response to this RFP survey.

## QUESTION:

**Alternative Interface**

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<p><b>REDA</b></p> <p><b>7.1.1*</b></p>	<p><b>REQ 1:</b> The Respondent's quoted price in response to this RFP must include all costs to develop and implement a new alternative NPAC/SMS interface to migrate from the current CMIP interface.</p> <p><b>REQ 2:</b> The LNPA WG is currently developing technical requirements for an alternative interface as part of NANC Change Order 372. Alternative interfaces under consideration at this time include XML and JSON, but others could be considered at a later time. Once developed and implemented, the new interface must be available and supported in addition to the current CMIP interface until such time that the industry sunsets support of the CMIP interface.</p> <p><b>Does the Respondent's quoted price include <u>all</u> costs to develop and implement a new alternative NPAC/SMS interface and to migrate to that interface from the current CMIP interface?</b></p>
Yes	
<p><b>7.1.2*</b></p>	<p>QUESTION:</p> <p><b>Support of IPv6</b></p> <p><b>REQ 1:</b> The Respondent's quoted price in response to this RFP survey must include all costs to develop and implement NPAC/SMS support of IPv6 addressing.</p> <p>The LNPA WG is currently developing technical requirements for NPAC/SMS support of IPv6 addressing as part of NANC Change Order 447.</p> <p><b>REQ 2:</b> The NPAC/SMS must support dual IPv4 and IPv6 stacks.</p> <p><b>Does the Respondent's quoted price include <u>all</u> costs to develop and implement NPAC/SMS support of dual IPv4 and IPv6 address stacks?</b></p>
Yes	
<p><b>7.1.3*</b></p>	<p>QUESTION:</p> <p><b>Elimination of NPAC/SMS support of Non-EDR</b></p> <p><b>REQ 1:</b> The Respondent's quoted price in response to this RFP survey must include all costs to develop and implement the elimination of NPAC/SMS support of non-Efficient Data Representation (non-EDR) SOA and LSMS systems.</p> <p>The LNPA WG is currently developing technical requirements for the elimination of NPAC/SMS support of non-EDR as part of NANC Change Order 448.</p> <p><b>Does the Respondent's quoted price include <u>all</u> costs to develop and implement the elimination of NPAC/SMS support of non-EDR SOA and LSMS systems?</b></p>
Yes	
<p><b>7.2</b></p>	<p>STATEMENT:</p> <p><b>Future Considerations</b></p> <p>The following items described in this section are included as possible future considerations. Should they become required enhancements at some point in the future, all costs to develop and implement the NPAC/SMS enhancements must be included as part of the annual fixed price per the requirements in Section 13 of this RFP survey.</p>
<p><b>7.2.1*</b></p>	<p>QUESTION:</p> <p><b>Automation of processes between the NPAC/SMS and the Pooling Administration System (PAS)</b></p> <p>The following processes currently require manual provisioning between the NPAC/SMS and the Pooling Administration System, but in the future, it may be determined to implement complete automation of these processes:</p> <ul style="list-style-type: none"> <li>Provisioning of Pooling Administration requests (e.g., Part 1b forms) in the NPAC/SMS,</li> <li>Provisioning of Service Provider requests (e.g., activation, modification, disconnects of pooled blocks) in the PAS.</li> </ul> <p><b>REQ 1:</b> The next-generation NPAC/SMS architecture must be flexible enough to support any required enhancement in the future to incorporate complete automation of the above-described processes between the NPAC/SMS and the PAS.</p> <p><b>REQ 2:</b> The annual fixed price per the requirements in Section 13 of this RFP survey must include all costs to develop and implement the complete automation of the above-described processes between the NPAC/SMS and the PAS, if such automation is selected as a future enhancement.</p> <p><b>Does the Respondent's proposed NPAC/SMS platform architecture have the flexibility to incorporate this future consideration should it become required as an enhancement, and does the Respondent's fixed price per the requirements in Section 13 of this RFP survey include all costs to develop and implement this future consideration if it is selected as an enhancement?</b></p>
Yes	
<p><b>7.2.2*</b></p>	<p>QUESTION:</p> <p><b>Combining steps for Intra-Service Provider ports</b></p> <p>The NPAC/SMS currently requires separate steps and messages for the creation and activation of intra-Service Provider ports. It may be required in the future to combine the creation and activation steps for intra-Service Provider ports into one step and message.</p> <p><b>REQ 1:</b> The next-generation NPAC/SMS architecture must be sufficiently flexible to support any required enhancement in the future to combine the creation and activation steps for intra-Service Provider ports into one step and message.</p> <p><b>Does Respondent's proposed NPAC/SMS platform have the flexibility to incorporate this future consideration should it become required?</b></p>
Yes	
<p><b>7.2.3*</b></p>	<p>QUESTION:</p> <p><b>Inter-carrier Communications</b></p> <p><b>REQ 1:</b> The next-generation NPAC/SMS architecture must be flexible in order to support any required enhancement in the future to incorporate into the NPAC/SMS the inter-carrier communication process that currently precedes the NPAC/SMS LNP provisioning process.</p> <p><b>Does the Respondent's proposed NPAC/SMS platform have the flexibility to incorporate this future consideration should it become required?</b></p>

REDA Yes

<b>7.2.4*</b>	<p>QUESTION:</p> <p><b>Future Mandated Changes</b></p> <p><b>REQ 1:</b> The next-generation NPAC/SMS architecture must be flexible in order to support any required enhancements in the future as a result of regulatory mandates.</p> <p><b>REQ 2:</b> The annual fixed price per the requirements in Section 13 of this RFP survey must include all costs to develop and implement any required enhancements in the future as a result of regulatory mandates.</p> <p><b>Does Respondent's proposed NPAC/SMS platform have the flexibility to incorporate this future consideration should it become required as an enhancement, and does Respondent's fixed price per the requirements in Section 13 of this RFP survey include all costs to develop and implement this future consideration if it is selected as an enhancement?</b></p>
Yes	

<b>7.2.5*</b>	<p>QUESTION:</p> <p><b>PSTN to IP Transition</b></p> <p><b>REQ 1:</b> The next-generation NPAC/SMS architecture must be flexible in order to support the transition of the Public Switched Telephone Network (PSTN) to an all-Internet Protocol (IP) network. In addition, the LNPA must work expeditiously with the industry to implement any required changes.</p> <p><b>Does the Respondent's proposed NPAC/SMS platform have the flexibility to incorporate this future consideration should it become required?</b></p>
Yes	

<b>7.3</b>	<p>QUESTION:</p> <p><b>Required Enhancements and Future Considerations Response</b></p> <p>If the Respondent desires to further explain any of the responses to the requirements in Sections 7.1 and 7.2, please attach one document further describing or explaining those responses and the architectural solutions here.</p>
Attachments:	
<a href="#">RFP Section 7.3 Required Enhancements and Future Considerations Response.pdf</a> (419.6 KB)	

<b>7.4</b>	<p>QUESTION:</p> <p><b>Additional Information Regarding Cloud Computing - Optional</b></p> <p>Please provide Respondent's view regarding the applicability for incorporating cloud computing to enhance the operations and functionality of the NPAC/SMS. Please attach any drawings and explanation for the proposed architectural solution.</p>
Attachments:	
<a href="#">RFP Section 7.4 Additional Information Regarding Cloud Computing - Optional.pdf</a> (197.9 KB)	

<b>7.5</b>	<p>QUESTION:</p> <p><b>Additional Information Regarding Web Services Interface - Optional</b></p> <p>Please provide Respondent's view regarding the applicability for incorporating a web services interface to enhance the operations and functionality of the NPAC SMS. Please attach any drawings and explanation for the proposed architectural solution.</p>
Attachments:	
<a href="#">RFP Section 7.5 Additional Information Regarding Web Services Interface - Optional.pdf</a> (138.3 KB)	

## 8. NANC LNP PROCESS FLOWS

<b>8.1*</b>	<p>QUESTION:</p> <p><b>NANC LNP Process Flows</b></p> <p>The following URL contains the posted FCC-mandated NANC LNP Process Narratives and Flows:</p> <p><a href="https://www.napmlc.org/pages/npacrfp/npacRFP_RefDocs.aspx">https://www.napmlc.org/pages/npacrfp/npacRFP_RefDocs.aspx</a></p> <p>The documents referenced are:</p> <ul style="list-style-type: none"> <li>• NANC_OPS_Flows_Narratives_v4.1(04-16-2010). doc</li> <li>• NANC_Flows_4.0_10-16-2009.ppt</li> </ul> <p><b>Does the Respondent acknowledge that its proposal and responses to this RFP survey adhere to the above-referenced FCC-mandated NANC LNP Process Narratives and Flows?</b></p>
Acknowledged	

## 9. SERVICE LEVEL REQUIREMENTS

<b>9.1*</b>	<p>QUESTION:</p> <p><b>Service Level Requirements for Measurement and Reporting</b></p> <p>The Service Level Requirements (SLRs) in this Section 9 of the RFP survey supersede any SLRs documented in the FRS or elsewhere.</p> <p><b>Does Respondent acknowledge and understand that the SLRs in this Section 9 of the RFP survey supersede any SLRs documented in the FRS or elsewhere and are the SLRs to be used for purposes of all responses to this RFP survey?</b></p>
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REDA Acknowledged

## STATEMENT:

**Table of Contents for SLRs**

SLR 1 - Service Availability  
 SLR 2 - Scheduled Service Unavailability  
 SLR 3 - Partial Service Unavailability  
 SLR 4 - LSMS Broadcast Time  
 SLR 5 - SOA to NPAC Interface Rates  
 SLR 6 - NPAC to LSMS Interface Transaction Rates  
 SLR 7 - SOA/LSMS Interface Availability  
 SLR 8 - Unscheduled Backup Cutover Time  
 SLR 9 - NPAC/SMS Partial Disaster Restoral Interval  
 SLR 10 - NPAC/SMS Full Disaster Restoral Interval  
 SLR 11 - Administration of any NPAC/SMS Tables  
 SLR 12 - User Problem Resolution - Speed of Answer  
 SLR 13 - User Problem Resolution - Abandoned Call Rate  
 SLR 14 - User Problem Resolution - After Hours Callbacks  
 SLR 15 - User Problem Resolution - Commitments Met  
 SLR 16 - Logon Administration - Timely Process Request Processing  
 SLR 17 - System Security - Security Error Log  
 SLR 18 - System Security - Remedy Invalid Access Event  
 SLR 19 - NPA Split/Mass Changes  
 SLR 20 - Unscheduled Service Unavailability Notification - Upon Detection  
 SLR 21 - Unscheduled Service Unavailability Notification - Update

9.2

## STATEMENT:

**Summary of NPAC/SMS Service Level Requirements**

The following is a schedule of Service Affecting and Non Service Affecting SLRs for the NPAC/SMS in each Region. The description of the SLRs and the addition, elimination, or modification of SLRs set forth below is subject to change from time to time as provided in the Master Agreements. Further, the descriptions and composition of the SLRs ultimately included in the Master Agreements may differ from those set forth below, but the descriptions and composition of the SLRs set forth below shall be used for purposes of responding to this RFP survey.

The following are definitions of certain terms used in the SLR table set forth below:

- (a) The term "Service Availability" shall mean at least one service provider is able to access and invoke all NPAC/SMS capabilities through its respective interface, to either the NPAC/SMS Production Computer System or the NPAC/SMS Disaster Recovery Computer System. Service Availability measures the reliability of the service provided by the NPAC/SMS, and does not include time due to Scheduled Service Unavailability, if any. The term "Service Unavailability" shall mean that Service Availability is not present.
- (b) The term "Interface Availability" shall mean an NPAC/SMS interface is available to each service provider to establish, maintain, and utilize an association with the NPAC/SMS system designated as the "live" system (either the NPAC/SMS Production Computer System or the NPAC/SMS Disaster Recovery Computer System) at any point in time. Interface Availability measures the reliability of the NPAC/SMS interfaces collectively, excluding interface outages resulting from Service Unavailability events and Scheduled Service downtime.
- (c) Unless otherwise defined in the specific SLR, all other defined terms shall have the meanings ascribed to them in the Master Agreements.

9.3

## STATEMENT:

**SLR 1 - Service Availability****Requirement:**

**REQ 1:** Maintain a 99.99% or better level of Service Availability.

**Description:**

Service Availability (SA) means that at least one User, excluding the LNPA and its Affiliates, is able to access and invoke all NPAC/SMS capabilities through its respective interface. Service Unavailability (SU) means that Service Availability is not present and is the same as the loss of Service Availability. The end of a loss of Service Availability occurs when the first User, excluding the LNPA and its Affiliates, appears in Recovery

The total seconds of Service Availability possible in a month does not include the loss of Service Availability due to Scheduled Service Unavailability (SSU), even if the SSU is in excess of the SLR for SSU. Thus when 100% Service Availability is reported for a month, this means only that there was no Unscheduled Service Unavailability during that month.

When the NPAC/SMS is unable to re-establish Service Availability at the end of an SSU interval because of hardware or software failure, an SLR 1 event is declared -- the SLR 1 event begins at the end of that SSU interval -- and RCA Reports are issued. However, if the inability to reestablish Service Availability is due to the planned maintenance activity requiring additional time in excess of the SLR for SSU, the SSU interval continues and an SLR 2 event is declared, but not an SLR 1 event.

Any interval of Service Unavailability due to a Failover is included in determining whether SLR 1 has been satisfied or not satisfied, unless Service Unavailability is waived by the NAPM LLC in its discretion, for example, because it was due to the Annual Failover Exercise.

The NPAC may experience loss of Service Availability events where no service provider association is aborted. In these cases, the timestamp of the first successful inbound CMIP transaction that occurs after the event has begun will determine the end of the outage.

If the NPAC database server experiences hardware or software failure prior to processes losing connection, recognition of the loss of Service Availability will be based on the last application software event successfully committed to the database. This methodology to recognize loss of Service Availability is necessary when the database is unable to process transactions prior to the log file recording the timestamp of processes losing connection.

The interval between this last timestamp before the loss of Service Availability and the time at which the first User appears in recovery is the period during which Service Availability is defined as being lost.

**Calculating Service Level Achieved:**

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The total seconds in the month, minus the seconds of SSU, represent the potential Service Availability seconds in the month. The number of seconds of actual Service Availability divided by the number of seconds of potential Service Availability, the quotient expressed as a percentage, is the percent Service Availability for the month. That is, only Unscheduled Service Unavailability (USU) intervals are deducted from the potential Service Availability interval to determine actual Service Availability.

Expressed algebraically, where A is total seconds in the month, B is SSU within agreed-to limits, C is SSU in excess of agreed-to limits, and D is USU, Service Availability is defined as follows and expressed as a percentage:

$$\frac{A - (B + C) - D}{A - (B + C)} \times 100\%$$

**Reporting Service Level Results:**

A performance report summary is required that shows the percent of time during the month of Service Availability. A separate detail page indicating how the result was derived, showing total seconds in the month, seconds of SSU within the agreed-to SLR level for SSU and seconds in excess of agreed-to SLR level for SSU, and seconds of USU, must be provided. A table showing dates and duration of USU events must be displayed in a separate SU detail report.

STATEMENT:

**SLR 2 - Scheduled Service Unavailability**

**Requirement:**

**REQ 2:** Scheduled Service Unavailability (SSU) may not occur outside of the industry-agreed upon maintenance windows, with respect to both time of occurrence and duration, unless otherwise approved by the NAPM LLC.

**Description:**

The current industry-approved NPAC maintenance windows are as follows:

First Sunday of each month: midnight to 9:00 a.m., Central.  
All other Sundays: midnight to 7:00 a.m., Central.

When the NPAC/SMS is unable to re-establish Service Availability at the end of a Scheduled Service Unavailability (SSU) interval because of hardware or software failure, an SLR 1 event is declared -- the SLR 1 event begins at the end of that SSU interval -- and RCA are issued. However, if the inability to establish Service Availability is due to the planned maintenance activity requiring additional time in excess of the SLR for SSU, the SSU interval continues and an SLR 2 event is declared, but not an SLR 1 event.

9.5

Any interval of Service Unavailability due to a Failover is included in the SLR 1 calculation. The sole exception to this is the Failover exercise scheduled approximately annually.

**Measuring Service Level:**

SLR 2 measurement is based on same data sources as SLR 1.

When a loss of Service Availability occurs and Scheduled Service Unavailability begins, the log files are searched for the event timestamp indicating the first instance of database loss prior to the restoration timestamp. The interval between the last timestamp before the loss of Service Availability and the time at which the first User, excluding the LNPA and its Affiliates, appears in Recovery is the period during which Service Availability is defined as being lost. This loss of Service Availability is classified as Scheduled Service Unavailability when the Service Availability loss is intentional and defined notice intervals have been met, or when the loss occurs during the NPAC/SMS maintenance window agreed-to by Customer; otherwise, the loss of Service Availability is classified as Unscheduled Service Unavailability (USU).

**Calculating and Reporting Service Level Achieved:**

A performance report summary indicating only whether the agreed-to level of SSU was "met" or "not met" must be provided. A separate detail page indicating how the result was derived, showing the date, duration, and start and end times for each SSU event and the number of hours agreed to and the time in excess of the amount agreed to for each event must also be provided.

STATEMENT:

**SLR 3 - Partial Service Unavailability**

**Requirement:**

**REQ 3:** An NPAC/SMS hardware component failure or any other disruption in the operation of the NPAC/SMS that causes at least one User to lose the ability to access and invoke all NPAC/SMS capabilities for more than 10 minutes for a reason other than loss of Interface Availability constitutes Partial Service Unavailability.

**Description:**

The intent of SLR 3 is to measure a disruption in the NPAC/SMS operations that affects one or more Users in a Region, but not all Users in the Region, that is due to any NPAC/SMS hardware component failure or disruption unrelated to any LSMS/SOA interface failures (SLR 7).

9.6

An NPAC/SMS hardware component failure or any other disruption in the operation of the NPAC/SMS that causes at least one User to lose the ability to access and invoke all NPAC/SMS capabilities for fewer than 10 consecutive minutes does not constitute Partial Service Unavailability. Any interval of Partial Service Unavailability is not included in the SLR 7 calculation.

**Measuring Service Level:**

This SLR measures the time required to restore complete service to all impacted users due to an NPAC component failure resulting in service unavailability to one or more, but not all, users in a Region.

Time in excess of 10 minutes to restore complete service to all affected users will result in a "miss" of SLR 3.

**Calculating and Reporting Service Level Achieved:**

The time required to completely restore service to all affected users is determined. If any complete service restoration effort exceeds ten minutes, the SLR is reported as "not met" and time stamp details are provided.

STATEMENT:

**SLR 4 - LSMS Broadcast Time**

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**Requirement:**

**REQ 4:** Average response time of three seconds from activation request to broadcast.

**Description:**

"Response time" is the interval between receiving a request to activate an SV and the point at which NPAC has processed the request and is broadcast.

In addition to report the average time to initiate a broadcast, a calculation also is to be made to show what percent of the broadcasts were initiated within three seconds.

9.7

**Measuring Service Level:**

The source of data for the measurement of SLR 4 is the NPAC router log for the NPAC production region. Router logs are downloaded from the active application to the central reporting server daily. In the case of fail-over to the other NPAC region, the designation of the "active" system is changed automatically as part of the Failover process.

**Calculating and Reporting Service Level Achieved:**

At the end of the month, the total quantity of broadcasts is determined. The time interval measured as described above for every broadcast is added together. The total measured time is divided by the total quantity of broadcasts. The quotient is the "average time required to initiate a broadcast."

The quantity of broadcasts initiated within three seconds is determined. This quantity is divided by the total quantity of broadcasts and the quotient expressed as a percentage to indicate the "percent broadcasts initiated within three seconds."

The percent of broadcasts performed within three seconds and the average delay is reported.

**STATEMENT:****SLR 5 - SOA to NPAC Interface Transaction Rates****Requirement:**

**REQ 5:** Maintain a minimum of seven transactions per second per User SOA for 99.9% of the transactions.

**Description:**

To the extent there is sufficient offered load, maintain, for 99.9% of the CMIP transactions, a rate of seven CMIP transactions per second (sustained) over each SOA to NPAC SMS interface association; however, this interface requirement does not apply when there are at least 70 CMIP transactions per second (sustained) for a single NPAC SMS region.

A SOA system may have more than one NPAC association. The term "User SOA" therefore refers to an NPAC SOA association and the seven transactions per second rate is per SOA association.

9.8

**Measuring Service Level:**

During normal operation of the NPAC system, measurements are taken to determine the count of outstanding inbound and outbound messages for each SOA association. The OS Stack is measured to determine the quantity of outstanding inbound CMIP messages within the CMIP toolkit. The NPAC event queue is measured to determine the quantity of outstanding outbound CMIP messages. No throughput calculation for the SLR is necessary unless the inbound or outbound outstanding message count is greater than one, indicating the NPAC SMS is in a backlog condition and not processing transactions in real time. For each case where there is a backlog condition, the inbound plus outbound transaction rate is calculated to determine whether the CMIP transactions per second requirement is being met.

**Calculating and Reporting Service Level Achieved:**

The throughput rate is calculated by capturing the start and end times for each backlog condition as well as the count of inbound and outbound messages during the backlog condition. For the purposes of this calculation, a CMIP message is defined as a request message and the associated response message. Dividing the delta CMIP message count by the delta time yields the transaction rate for any given backlog interval.

If no more than .1% of the CMIP transactions for each SOA association fail to meet the lesser of either the offered load or the required CMIP transactions per second rate, then the SLR is reported as met. That is, all SOA associations individually must meet the SLR criterion for the SLR to be met. An exception to this occurs for intervals where the total SOA association CMIP transaction rate equals or exceeds 70.0 per second. During such intervals, the individual SOA association transaction rate requirement is superseded by the region-wide transaction rate requirement and the SLR 5 criterion is met even if the individual SOA association rate criterion is not.

**STATEMENT:****SLR 6 - NPAC to LSMS Interface Transaction Rates****Requirement:**

**REQ 6:** Maintain a minimum of seven transactions per second per User LSMS for 99.9% of the transactions.

**Description:**

To the extent there is sufficient offered load, maintain, for 99.9% of the CMIP transactions, a rate of seven CMIP transactions per second (sustained) over each NPAC SMS to Local SMS interface association; however, this interface requirement does not apply when there are at least 210 CMIP transactions per second (sustained) for a single NPAC SMS region.

**Measuring Service Level:**

During normal operation of the NPAC system, measurements are taken to determine the count of outstanding inbound and outbound messages for each LSMS association. The OS Stack is measured to determine the quantity of outstanding inbound CMIP messages within the CMIP toolkit. The NPAC event queue is measured to determine the quantity of outstanding outbound CMIP messages. No throughput calculation for the SLR is necessary unless the inbound or outbound outstanding message count is greater than one, indicating the NPAC SMS is in a backlog condition and not processing transactions in real time. For each case where there is a backlog condition, the inbound plus outbound transaction rate is calculated to determine whether the CMIP transactions per second requirement is being met.

9.9

**Calculating and Reporting Service Level Achieved:**

The throughput rate is calculated by capturing the start and end times for each backlog condition as well as the count of inbound and outbound messages during the backlog condition. For the purposes of this calculation, a CMIP message is defined as a request message and the associated response message. Dividing the delta CMIP message count by the delta time yields the transaction rate for any given backlog interval.

If no more than .1% of the CMIP transactions for each LSMS association fail to meet the lesser of either the offered load or the required CMIP transactions per second rate, then the SLR is reported as met. That is, all LSMS associations individually must meet the SLR criterion for the SLR to be met. An exception to this occurs for intervals where the total LSMS association CMIP transaction rate equals or exceeds 210 per second. During such intervals, the individual LSMS association transaction rate requirement is superseded by the region-wide transaction rate requirement and the SLR 6 criterion is met even if the individual LSMS association rate criterion.

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## STATEMENT:

**SLR 7 - SOA/LSMS Interface Availability****Requirement:****REQ 7:** Maintain an Interface Availability at a minimum of 99.99%**Description:**

Interface Availability is calculated each month only for Users who have had their mechanized NPAC interface for the entire Report month.

All calculations are done on a regional level for monthly performance reporting, but interface availability also is calculated and reported on an individual SPID basis.

Any performance credits due to impaired Interface Availability are allocated to the entire region, not specifically to the User experiencing the loss of Interface Availability.

**Measuring Service Level:**

Edge Routers

Router log files are monitored at a port level to determine whether or not all of a User's network connection ports to the NPAC are available. If any of the User's ports becomes unavailable, the event is logged and NPAC personnel are notified of the event. NPAC personnel determine whether User's circuit or hardware problem is causing the port unavailability. A trouble ticket is opened to track the investigation and its outcome. An SLR 7 miss will be recorded only if all of a User's interfaces are impacted by the NPAC port failure. That is, if at least one NPAC port dedicated to the SPID is available, then no SLR 7 event is deemed to have occurred.

**LAN**

If the User has one interface available to the NPAC, but the LNPA's LAN is down (or slow), the LAN problem will be logged and investigated. NPAC personnel will determine the time period during which the User was impacted using one of the following methods:

1. NPAC/SMS periodically polls each User's edge router and mechanized servers with "pings" and "SNMP GETs". Every five minutes, a series of polls is taken and logged. If a poll fails, a retry is attempted. A potential LAN outage is logged if three successive polls of a User fail. If the logged poll failure event is determined to be caused by the LNPA, LAN restoration will be noted when the polling once again becomes successful.
2. Some Users do not allow the LNPA to poll their edge routers and systems. For these Users, a potential LAN outage event will be determined indirectly. For example, "pings" to the NPAC's edge routers will be done. A potential LAN outage will be logged if three successive polls fail to a given edge router. If the logged poll failure event is determined to be caused by the LNPA, LAN restoration will be noted when the polling once again becomes successful.

For outages not covered in items 1 and 2 above, the exact cause and duration can be extremely difficult to pinpoint. In many cases, the outage time is reconstructed from multiple router logs, system change logs, and application logs. Experience shows that these events are never the same, and logs, techniques, and resources required to investigate them are never the same. The GEP Auditor will use either the Root Cause Analysis (RCA) or Monthly Performance Reports as the data source of SLR 7 event start and end times.

The duration of interface unavailability is the period from when all of a User's network interface connections to the NPAC gateway routers became unavailable to the time the User's first network interface became available again.

The start time of interface unavailability is measured from when first polling attempt fails; end time occurs when polling becomes successful. For case where User does not allow the LNPA to ping its systems, the start time is measured from the time internal polling is unsuccessful; the end time occurs when internal polling becomes successful.

**Calculating Service Level Achieved:**

An adjustment would be made for periods of lost Interface Availability that occur during periods of lost NPAC Service Availability to avoid overstating the impact of lost Interface Availability.

The Monthly Performance Report displays the average Interface Availability as a percentage for the region as a whole, but includes a Details section showing the calculation of Interface Availability for each User.

The sum of each user's interval of Interface Availability, divided by the quantity of interfaces, yields the average Interface Availability. This is divided by the interval of Service Availability and expressed as a percentage.

The GEP metric for GEP Element 1b is the monthly measurement and tabulation of the LNPA's satisfaction of SLR 7 for all of a User's Mechanized Interfaces in the region. Achievement of the 99.99% interface availability criterion is tabulated separately for each SPID.

Interface Availability for each User is defined as  $X/Y * 100\%$  where:

A = Loss of Service Availability, but not due to Scheduled Service Unavailability

B = Loss of Service Availability due to Scheduled Service Unavailability

C = Loss of Interface Availability for the SPID

X = Time interface available to SPID, that is  $X = (\text{total time available}) - A - B - C$

Y = Total time in the report month that Interface Available, that is  $Y = (\text{total time}) - A - B$

Note that A, B, C, X, and Y all are expressed in seconds

**Reporting Service Level Results:**

The summary page for SLR 7 displays a percent Interface Availability for the region overall and refers the reader to the Details portion of the Report. The Details section displays, by SPID, the individual occurrences of lost interface availability, showing for each occurrence the date, start and end times, and event duration. Each SPID's individual interface availability percentage also is displayed.

In addition to the regional results and associated details for each individual SPID's interface availability, the percentage of individual interfaces that experience 99.99% or better availability each month also is displayed.

## STATEMENT:

**SLR 8 - Unscheduled Backup Cutover Time****Requirement:****REQ 8:** A maximum of 10 minutes to cutover to the backup site.

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<b>REDA</b>	<p><b>Description:</b></p> <p>The term "Cutover" here means to "Failover" from the active site to the backup site.</p> <p>The term "backup site" here means only the data center that is not the active site at the time the Failover is initiated; that is, the direction of Failover is not relevant to this SLR.</p> <p>Up to 10 minutes is allowed from the initiation of Failover to the completion of Failover where "completion" is recognized as occurring when the first User appears in recovery at the Failover site.</p> <p>Any interval of Service Unavailability due to a Failover is included in the SLR 1 calculation. The sole exception to this is the Failover exercise scheduled approximately annually.</p> <p><b>Measuring Service Level:</b></p> <p>Start of Failover Interval</p> <p>If active site's application server is available to initiate Failover, then Failover start time is indicated by the timestamp "Failover Initiated" located in the log files. However, if the active site's application server is not available to initiate Failover, then the inactive site must be brought on line manually.</p> <p>End of Failover Interval</p> <p>The timestamp for the end of Failover is the timestamp showing when the first User appears in recovery (SOA or LSMS) at the new active site. This timestamp information is not logged, so a snapshot is taken and saved in case needed for verification purposes later.</p> <p><b>Calculating and Reporting Service Level Achieved:</b></p> <p>The time required to complete each Failover attempted is determined. If any Failover required in excess of 10 minutes, the SLR is reported as "not met" and time stamp details are provided.</p>
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9.11

STATEMENT:	<p><b>SLR 9 - NPAC/SMS Partial Disaster Restoral Interval</b></p> <p><b>Requirement:</b></p> <p><b>REQ 9:</b> Partial restoration will be equal to or less than four hours (Partial restoration meaning the capability of receiving, processing and broadcasting updates).</p> <p><b>Description:</b></p> <p>Restoration is recognized as occurring when the first User appears in recovery at the active site.</p> <p><b>Measuring Service Level:</b></p> <p>Recognition of the loss of Service Availability is based on the timestamp made when NPAC/SMS processes lose connection. The timestamp is written in log files. If this timestamp cannot be found, measurement of the loss of Service Availability is based on last log entry due to hardware or software failure. Re-initialization of NPAC/SMS processes likewise causes timestamps to be written and indicate the resumption of Service Availability.</p> <p>When a loss of Service Availability has occurred, the log files are searched for the event timestamp indicating the first instance of database loss prior to the restoration timestamp.</p> <p>The interval between these last timestamps before the loss of Service Availability and the time at which the first User appears in Recovery is the period during which Service Availability is defined as being lost.</p> <p><b>Calculating and Reporting Service Level Achieved:</b></p> <p>The duration of each instance of loss of Service Availability is determined. Periods of Scheduled Service Unavailability are not included in the calculation. The total number of times Service Availability is lost and the number of times the loss exceeded four hours is determined. However, only if Service Availability is lost continuously for more than four hours is the SLR reported as "not met."</p>
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9.12

STATEMENT:	<p><b>SLR 10 - NPAC/SMS Full Disaster Restoral Interval</b></p> <p><b>Requirement:</b></p> <p><b>REQ 10:</b> Full restoration will occur at a maximum of six hours.</p> <p><b>Description:</b></p> <p>This means that the NPAC/SMS also can do audits and handle queries.</p> <p><b>Measuring Service Level:</b></p> <p>The "sent" timestamp of the e-mail notification to industry that full restoration has occurred provides documentation of the event.</p> <p><b>Calculating and Reporting Service Level Achieved:</b></p> <p>The time stamp of the loss of service availability (as described in SLR 1) is compared with the timestamp of the e-mail to industry providing notification that full disaster restoral has been accomplished. If the interval exceeds six hours, the SLR is reported as "not met."</p>
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9.13

STATEMENT:	<p><b>SLR 11 - Administration of any NPAC/SMS Tables</b></p> <p><b>Requirement:</b></p> <p><b>REQ 11:</b> 99.99% error free updating</p> <p><b>Measuring Service Level:</b></p> <p>The measurement of table administration service level uses as a base line the total number of entries made in each field of each table in each region from every GUI and mechanized interface transaction for the report month.</p> <p><b>Calculating Service Level Achieved:</b></p> <p>The total base line numbers are compared to the previous month totals and the difference is the number of updates for the present month of data. The new base line is now used to calculate against the number of errors collected by the NPAC/SMS, and internal trouble tickets tracked as "error table administration" to produce a ratio of errors to the base line.</p>
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**Reporting Service Level Results:**

The Performance Report Summary Page shows Met/Not Met with a note of the quantity of table updates performed during the month.

## STATEMENT:

**SLR 12 - User Problem Resolution, Speed of Answer****Requirement:**

**REQ 12:** Minimum 90% calls during Normal Business Hours answered by live operators within 10 seconds.

**Description:**

The interval measurement begins when the caller chooses the option to speak with a live agent and ends when a live agent answers the call. Calls abandoned before the option to speak with a live agent are not included in the total call volume count. Calls abandoned after that point, but before the ten-second threshold is reached, also are not included in the count.

**Measuring Service Level:**

The call management system collects data daily on the total number of calls received during normal business hours and the quantity of those calls answered within 10 seconds.

**Calculating and Reporting Service Level Achieved:**

The daily counts for each Help Desk business day are added together. The total number of calls answered by live agent within 10 seconds are divided by the total number of calls received for which caller selects option to speak with live agent and does not abandon the call after that point in less than 10 seconds. The quotient is expressed as a percentage.

In addition to the percent of eligible calls answered within 10 seconds, the fraction of days the requirement is met also is displayed as a percentage.

9.15

## STATEMENT:

**SLR 13 - User Problem Resolution, Abandoned Call Rate****Requirement:**

**REQ 13:** Less than 1.0% abandoned call rate.

**Description:**

The interval measurement begins when the caller chooses the option to speak with a live agent; the interval ends when the caller abandons the call, but only after at least ten seconds has elapsed with no answer.

**Measuring Service Level:**

The call management system collects data daily on the total number of calls received during normal business hours for which the caller elects to speak with a live agent, and on the quantity of those calls abandoned after the caller has waited at least 10 seconds for a live agent to answer.

**Calculating and Reporting Service Level Achieved:**

The total of the daily counts of calls on which the caller abandons the call after waiting at least 10 seconds to speak with a live agent is divided by the total of the daily counts of calls on which the caller choose the option to speak with a live agent. The quotient is expressed as a percentage.

In addition to the percent of eligible calls abandoned, the fraction of days the requirement is met also is displayed as a percentage.

9.16

## STATEMENT:

**SLR 14 - User Problem Resolution, After Hours Callbacks****Requirement:**

**REQ 14:** 99.0% callback within 15 minutes for requests made during other than Normal Business Hours.

**Measuring Service Level:**

This SLR measures the proportion of calls to Help Desk received outside of Normal Business Hours that are returned within 15 minutes.

The Help Desk collects data and reports daily the following information:

- date and time caller page sent (caller saves message]
- option selected (immediate call-back versus reply next business day]
- date and time caller message retried by agent
- Login ID of agent retrieving message

The Help Desk daily reports are reviewed manually and the messages for which immediate call-back requested are identified. There is no direct measurement of time customer is called by agent, however; the presumption is that the time the agent retrieves the message is the time the customer is called back.

**Calculating and Reporting Service Level Achieved:**

The SLR result is the number of messages for which the call-back time is within 15 minutes of the caller's request divided by the total number of messages for which an immediate call-back is requested. The quotient is expressed as a percentage.

9.17

## STATEMENT:

**SLR 15 - User Problem Resolution, Commitments Met****Requirement:**

**REQ 15:** 100% of all commitments to get back to the User after the initial contact will be met.

**Description:**

This SLR applies only to Service Affecting tickets. Since Priority 1 tickets are subject instead to the SLR 20 and SLR 21 requirements, and Priority 3 and

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Priority 4 tickets do not involve Service Affecting situations, this SLR applies only to Priority 2 tickets.

9.18

PRIORITY LEVEL	LEVEL	DEFINITION	SA or Non-SA
1	Critical	The situation affects ALL Service Providers (SPs) in one or more regions; a regional outage has occurred and LNP services are not available to any Service Provider in a particular region.	Service Affecting
2	High	Issues that affect ONE SP in one or more regions that result in the loss of ability to port TN(s) <u>AND/OR</u> all issues associated with SP's system associating and communicating with NPAC/SMS via either their mechanized (SOA/LSMS) or LTI interfaces.	Service Affecting
3	Medium	The situation is NOT service affecting, however a solution is needed ASAP. Service is impaired although porting transactions are being executed.	Non-Service Affecting
4	Cosmetic	The situation is a general question/inquiry that a Service Provider was concerned with or where an SP needed clarification.	Non-Service Affecting

**Measuring Service Level:**

The Help Desk is required to respond to the NPAC User within one hour of the creation of a Priority 2 ticket. A subsequent contact is required when the second hour has elapsed and subsequent contacts are required as agreed. A final contact is made when the ticket is closed. SLR 15 reflects the proportion of these contacts that are made on time.

The measurements begin when a tracking ticket is created and end when the ticket is put in "resolved" status. The ticket is not placed in a "resolved" status until the request is processed.

The system for trouble ticket management and tracking collects the data.

**Calculating and Reporting Service Level Achieved:**

The sum of all required contacts made on time for Priority 2 tickets is divided by the sum of all the required contacts for the Priority 2 tickets. The quotient is expressed as a percentage.

9.19

STATEMENT:

**SLR 16 - Logon Administration, Timely Request Processing**

**Requirement:**

**REQ 16:** Process 99.5% of all approved requests within six business hours of receipt.

**Description:**

This SLR applies only to requests from new or existing LTI users.

This SLR does not apply to requests for dedicated ports or for key exchanges.

**Measuring Service Level:**

This SLR measures the proportion of all requests for SecurIDs and Log-on IDs [user name and password] that are processed within six business hours of the request's receipt.

The measurements begin when a tracking ticket is created and end when the ticket is put in "resolved" status. The ticket is not placed in a "resolved" status until the request is processed.

**Calculating and Reporting Service Level Achieved:**

The sum of requests to be measured that are processed within six business hours of receipt is divided by the total quantity of these type of requests received. The quotient is expressed as a percentage.

9.20

STATEMENT:

**SLR 17 - System Security, Security Error Log**

**Requirement:**

**REQ 17:** Monitor and record unauthorized system access.

**Measuring Service Level:**

Security events tables in each NPAC/SMS database are queried and stored in a security event log table, then the events are categorized by type.

**Calculating and Reporting Service Level Achieved:**

The number of occurrences of unauthorized system access for the reporting month is summed and the sum is reported in the performance report. The notes section of the performance report includes a description of these events. If there are no occurrences of unauthorized system access during the reporting month, the letters "nmo" (no monthly occurrence) are entered in the report.

9.21

STATEMENT:

**SLR 18 - System Security, Remedy Invalid Access Event**

**Requirement:**

**REQ 18:** Remedy logon security permission errors immediately after user notification.

**Measuring Service Level:**

A security error is an invalid access event.

**Calculating and Reporting Service Level Achieved:**

The database supporting the trouble management system is queried to collect data for this SLR.

A failure to meet this SLR would be reported as "not met" and an explanation provided.

STATEMENT:

**SLR 19 - NPA Split/Mass Changes**

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**Requirement:**

**REQ 19:** Notify users within 10 business days of receipt of notification of the need for an NPA split/mass change.

**Description:**

This notice requirement applies only to the initial notice of a planned NPA split. The SLR does not require that users also be notified of each subsequent modification to the NPA split's plan such as rate areas or codes added or deleted and changes in anticipated dates for permissive dialing arrangements; the NPAC does not assume industry's responsibility to remain aware of changes in NPA split plans.

**Measuring Service Level:**

This SLR measures the proportion of all notifications received by NPAC of an upcoming NPA split that are sent to an industry distribution list within 10 days of NPAC's receipt of the notice. The NPAC notification date is the date of the initial NANPA Industry Letter.

**Calculating and Reporting Service Level Achieved:**

The "sent" timestamp of the e-mail sent by the LNPA to the industry that provides the initial NPA split notice is compared with the date of the initial NANPA Industry Letter.

A failure to meet this SLR would be reported as "not met" and an explanation provided.

**9.23**

**STATEMENT:**

**SLR 20 - Unscheduled Service Unavailability Notification - Upon Detection**

**Requirement:**

**REQ 20:** Notify user within 15 minutes of detection of an occurrence of unscheduled service unavailability during normal business hours (7AM-7PM Central). And notify user within 15 minutes of detection of an occurrence of unscheduled service unavailability outside of normal business hours (7PM to 7AM Central). Outside of normal business hours, when the unscheduled service unavailability ends within the 15 minute period, the notification must be sent no later than 9AM the following day.

**Measuring Service Level:**

The "sent" timestamp of the e-mail notice to industry is compared with the time at which the priority 1 ticket was opened.

**Calculating and Reporting Service Level Achieved:**

A failure to meet this SLR would be reported as "not met" and an explanation provided.

**9.24**

**STATEMENT:**

**SLR 21 - Unscheduled Service Unavailability Notification - Update**

**Requirement:**

**REQ 21:** Provide 30-minute updates of NPAC status following an occurrence of unscheduled service unavailability through recorded announcement and client bulletins.

**Measuring Service Level:**

A manual review is performed of the "sent" timestamps for the e-mail updates to industry. Note that the industry may request that the 30-minute notifications be suspended and no further notices be issued until service is again available.

**Calculating and Reporting Service Level Achieved:**

A failure to meet this SLR would be reported as "not met" and an explanation provided.

**9.25\***

**QUESTION:**

**Does the Respondent acknowledge that adherence to ALL SLRs shown in the RFP sections 9.4 thru 9.24 are incorporated into its proposal?**

Yes

**10. NPAC USER METHODS & PROCEDURES**

**QUESTION:**

**NPAC User Methods and Procedures**

The LNPA is responsible to provide industry approved NPAC User M&Ps providing step-by-step instructions to complete actions requested of the NPAC/SMS. The documentation must be up to date and easily accessible by all NPAC users.

All NPAC User M&Ps are developed and approved via an industry consensus process. The Respondent's proposal must include development of new M&Ps to address updates to the NPAC platform or technology upgrades, and support changes to existing industry approved M&Ps.

Listed below are the existing M&P subject areas:

- NEW CUSTOMERS AND SERVICE PROVISIONING
- NEW CUSTOMER SET UP PROCESS
- CONNECTIVITY TO THE NPAC
- EXISTING USER MODIFICATIONS
- NPAC HELP DESK
  - NPAC HELP DESK AND THE ROLE OF THE USER SUPPORT ANALYSIS
  - NPAC HELP DESK HOURS OF OPERATION
  - RECOGNIZED HOLIDAYS
  - AFTER-HOURS SUPPORT
  - NPAC HELP DESK AUTHORIZATION LIST
  - AUTOMATED TELEPHONE NUMBER LOOK-UP SYSTEM
  - CUSTOMER CONTACT LIST MANAGEMENT
  - NPAC SECURE SITE ACCESS
  - NPAC PUBLIC SITE ACCESS

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NPAC HELP DESK PROBLEM RESOLUTION  
 PROBLEM RESOLUTION  
 MECHANIZED ASSOCIATION TROUBLESHOOTING  
 LTI ACCESS TROUBLESHOOTING

NPAC SUPPORT SERVICES  
 BILLABLE CONTACTS  
 SUBSCRIPTION VERSION (SV) PROVISIONING  
 SUBSCRIPTION VERSION (SV) STATUS DESCRIPTIONS  
 NPAC/SMS TUNABLES  
 NPA-NXX MANAGEMENT  
 LRN MANAGEMENT  
 LTI GUI LOGON MANAGEMENT  
 FULL AND DELTA BULK DATA DOWNLOADS  
 NPA-NXX FILTER SET UP  
 EMERGENCY NPA-NXX FILTERS  
 NPA SPLITS  
 NPAC REPORTS  
 FTP SITE REQUESTS  
 PORTING IN ERROR/FAILURE TO PORT  
 MASS MODIFICATIONS

NPAC/SMS OPERATIONS  
 NPAC SERVICE LEVEL REQUIREMENTS  
 NPAC SYSTEM OUTAGES  
 SCHEDULED SERVICE UNAVAILABILITY (SSU) SCHEDULE  
 SERVICE PROVIDER AND NPAC MAINTENANCE NOTIFICATIONS  
 LARGE PORT NOTIFICATIONS

NEW NPAC SOFTWARE RELEASES AND TESTING  
 NPAC SOFTWARE RELEASES/UPGRADES  
 TESTING  
 CONTINUING CERTIFICATION REQUIREMENTS

NPAC POOLING OPERATIONS  
 POOLING ACTIVITIES IN THE NPAC  
 NPAC VALIDATIONS

NPAC BILLING AND COLLECTIONS  
 BILLING DISPUTES AND RESOLUTION

OTHER INFORMATION  
 NPAC WEBSITES  
 ADDITIONAL WEBSITES

**If selected, does the Respondent agree to develop and deliver, prior to implementation, the aforementioned list of M&Ps and any additional M&Ps as may be needed?**

Agree

## 11. OTHER LNPA SERVICES

### QUESTION:

#### Intermodal Ported Telephone Number Identification Service

The FCC has adopted rules prohibiting the initiation of telephone calls using automatic telephone dialing systems or an artificial or prerecorded voice to telephone numbers assigned to a paging service, cellular telephone service, specialized mobile radio service or other radio common carrier service, or any service for which the called party is charged for the call (such conduct referred to as TCPA Prohibited Conduct).

If selected, an LNPA must provide in each Region a service separate from the Service provided to Users, to provide certain User Data elements to certain parties satisfying specific qualification requirements for the sole purpose of allowing such parties to avoid engaging in TCPA Prohibited Conduct. This service shall be referred to as the Intermodal TN ID Service.

**REQ 1:** The LNPA shall only provide the Intermodal TN ID Service to Qualified Limited User Data Recipients as defined in the Master Agreements. The LNPA shall require parties requesting the Intermodal TN ID Service to complete an application.

**REQ 2:** The LNPA shall determine, based upon a good-faith, reasonable interpretation of the information provided by such applicant whether the User Data requested constitutes solely Intermodal Ports AND whether the intended use of the requested User Data is for the sole purposes of permitting that applicant as a Qualified Limited User Data Recipient to avoid engaging in TCPA Prohibited Conduct by verifying whether TNs are assigned to a paging service, cellular telephone service, specialized mobile radio service, or other radio common carrier service or any service for which the called party is charged for the call or allowing that applicant as a Qualified Limited User Data Recipient to disclose, sell, assign, lease or otherwise provide to another third party who qualify as a Second Tier Limited User Data Recipients.

**REQ 3:** The LNPA shall provide a quarterly report listing all applicants for the Intermodal Ported TN ID Service during the preceding quarter and all current Qualified Limited User Data Recipients and Second Tier Limited User Data Recipients. Additionally, this report shall identify in a separate section all new Qualified Limited User Data Recipients and Second Tier Limited User Data Recipients.

**REQ 4:** The LNPA shall ensure that the Intermodal Ported TN ID Service does not adversely affect the operation and performance of the NPAC/SMS, and any adverse effect shall be cause for termination of the Intermodal Ported TN ID Service.

**REQ 5:** An Intermodal Ported Service TN ID Service help desk support shall be established by the LNPA. The telephone number for such help desk services shall be different than any telephone number for a NPAC/SMS Help Desk and no charges or costs associated with the Intermodal Ported Service TN ID Service help desk shall be included in any charges to NPAC/SMS Users with respect to Services.

**REQ 6:** The LNPA shall make available on a daily basis, two files consisting of lists of intermodal ports to TNs segregated between wireline to wireless ports and wireless to wireline ports on a password secure Web/FTP site for downloading by Qualified Limited User Data Recipients.

**REQ 7:** The User Data elements of such Intermodal Ports shall consist exclusively of TNs and no other User Data elements.

**REQ 8:** The LNPA shall not provide the Qualified Limited User Data Recipient direct access to the NPAC/SMS or any other User Data Elements.

**REQ 9:** The Intermodal Ported TN ID Service shall only be provided to Qualified Limited User Data Recipients after execution and delivery of an agreement satisfying the requirements set forth in the Master Agreements and substantially the form approved by the NAPM LLC (the Intermodal Ported TN ID Service Agreement).

**REQ 10:** The LNPA shall not be entitled to compensation of any kind for the provision of the Intermodal Ported TN ID Service from the NAPM LLC or Users and shall look solely to the

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respective Qualified Limited User Data Recipients for any and all compensation for the provision of the Intermodal Ported TN ID Service (referred to as the Intermodal Charges). The LNPA must agree and acknowledge that the Intermodal Ported TN ID Service is discretionary and elective within the meaning of Paragraph 92 of the Federal Communication Commission's Third Report and Order, FCC 98-82, and is not necessary for the provision of LNP. Accordingly, the LNPA must agree and acknowledge that the basis and methodology for the determination and computation of the Intermodal Charges and the allocation and assessment of the Intermodal Charges among respective Qualified Limited User Data Recipients are intended to constitute reasonable usage-based charges. Further, the LNPA must agree that Intermodal Charges shall not be more than Cost plus the Fee set forth in the Master Agreements, and that such Cost plus the Fee methodology will be a uniform, non-discriminatory, fair, and reasonable usage based charge, although the LNPA shall acknowledge the possibility that such methodology could be challenged. The LNPA must agree to compute and to allocate the compensation for the provision of Intermodal Ported TN ID Service in a fair and non-discriminatory manner so that such Intermodal Charges are reasonable usage-based charges, consistent with the rules, regulations, orders, opinions and decisions of the FCC and other regulatory body having jurisdiction or delegated authority with respect to the NPAC/SMS or the Master Agreements.

**REQ 11:** The LNPA shall annually, at its own expense, engage the GEP Auditor separately to audit compliance with the requirements set forth in the Master Agreements with respect to the Intermodal Ported TN ID Service (referred to as the Intermodal Services Audit). The costs and expenses of the Intermodal Services Audit shall be charged and accounted for separately from the costs and expenses of the GEP Audit. A report from the GEP Auditor regarding the results of the Intermodal Services Audit (Intermodal Services Audit Report) shall be provided to the NAPM LLC.

**REQ 12:** In addition to the Intermodal Services Audit, the Intermodal Ported TN ID Service shall be included in the Neutrality Review conducted every six months.

**Does the Respondent's proposal fully comply with the requirements listed above in time to meet the published implementation date? If no, please explain.**

Yes

QUESTION:

**Enhanced Platform for Law Enforcement Agencies and Public Safety Answering Point Providers**

As a result of LNP, it is not possible to reliably identify the service provider responsible for a telephone number. However, this service provider information is essential to law enforcement agencies and entities performing public safety answering point (PSAP) functions in the performance of their official duties.

The LNPA must provide, in each Region, a service separate from the service provided to Users, to provide certain User Data elements to certain parties satisfying specific qualification requirements as either law enforcement agencies or PSAPs for the sole purpose of allowing such parties to use these User Data elements for their lawful law enforcement and public safety activities. This service shall be referred to as the Enhanced Law Enforcement Platform.

The requirements below are specific to the LNPA's provision of Enhanced Law Enforcement Platform services.

**REQ 1:** The LNPA shall provide to qualified law enforcement agencies and PSAPs access to certain portions of User Data to be used for lawful activities.

**REQ 2:** The Enhanced Law Enforcement Platform Service shall only be provided to law enforcement agencies and PSAPs, hereby referred to as Qualified Recipients.

**REQ 3:** The LNPA shall ensure that the Enhanced Law Enforcement Platform Service does not adversely affect the operation and performance of the NPAC/SMS, and any adverse effect shall be cause for termination of Enhanced Law Enforcement Platform Service.

**REQ 4:** The Enhanced Law Enforcement Platform Service help desk telephone number shall be different from any telephone number for NPAC/SMS Help Desk, and no charges or costs associated with the Enhanced Law Enforcement Platform Service help desk shall be included in any charges to NPAC/SMS Users with respect to Services.

**REQ 5:** The Enhanced Law Enforcement Platform Service shall only be provided to a Qualified Recipient if such party enters into and executes the Enhanced Law Enforcement Platform Service Agreement that satisfies the requirements set forth in the Master Agreements and that is in substantially the form approved by the NAPM LLC. Each Enhanced Law Enforcement Platform Service Agreement shall be only between the LNPA and the Qualified Recipient.

**REQ 6:** As part of the Enhanced Law Enforcement Platform Service, the LNPA shall make available the following Enhanced Law Enforcement Platform Data Elements:

- NPAC SPID of the service provider associated with a telephone number
- Identity of that service provider
- The date on which the port(s) from one service provider (by NPAC SPID) to another service provider (by NPAC SPID) occurred with respect to that telephone number
- The current contact name and number for each service provider as submitted in any manner to the NPAC by each service provider as its law enforcement and/or emergency contact

**REQ 7:** The LNPA shall employ an LSMS to provision current and historical Enhanced Law Enforcement Platform Data Elements into the Enhanced Law Enforcement Platform.

**REQ 8:** The LNPA shall provide access to the Enhanced Law Enforcement Platform by virtual private network (machine to machine) or Internet (person to GUI). Access to Enhanced Law Enforcement Platform shall be accomplished by authenticated, secure and encrypted means.

**REQ 9:** Enhanced Law Enforcement Platform services shall not provide Qualified Recipients, either directly or indirectly, access to the NPAC/SMS or any NPAC User Data other than the Enhanced Law Enforcement Platform Data Elements, and the Enhanced Law Enforcement Platform cannot provide any other data elements or information to Qualified Recipients whether or not such data elements or information if obtained from public sources or any other source.

**REQ 10:** The Enhanced Law Enforcement Platform Service shall allow a Qualified Recipient to query an unlimited number of times but may not request Enhanced Law Enforcement Platform Data Elements for more than 100 TNs per query.

**REQ 11:** The LNPA may authorize a Qualified Recipient to use Enhanced Law Enforcement Platform Data Elements received as part of the Enhanced Law Enforcement Platform Service only for lawful purposes within the statutory authority of the Qualified Recipient.

**REQ 12:** The LNPA shall require that each Qualified Recipient warrant that it will comply with all applicable laws, orders and regulations, including those applicable to the NPAC/SMS, including User Data.

**REQ 13:** The Enhanced Law Enforcement Platform Data Elements provided as part of the Enhanced Law Enforcement Platform Service, being User Data, shall remain User Data and Confidential Information.

**REQ 14:** LNPA shall re-verify once every calendar year each Qualified Recipient's organization.

**REQ 15:** The LNPA shall provide an annual report listing all Qualified Recipients in effect during the previous twelve-month period, and separately list all Qualified Recipients that were newly qualified during the same period.

**REQ 16:** The LNPA shall annually engage a third party acceptable to both the LNPA and the NAPM LLC, separately to complete an Enhanced Law Enforcement Platform Service

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Audit to audit the LNPA's compliance with the following requirements:

- Qualify, evaluate confirm and report on Qualified Recipients
- Include in each Qualified Recipients Enhanced Law Enforcement Platform Service Agreement restrictions on the use of data
- Ensure there is no interaction between Enhanced Law Enforcement Platform and the production NPAC/SMS
- Charge each Qualified Recipient consistent with its Enhanced Law Enforcement Platform Service Agreement.

**REQ 17:** The costs and expenses of the Enhanced Law Enforcement Platform Service Audit shall be charged and accounted for separately from the costs and expenses of the GEP Audit. The cost and expenses of the Enhanced Law Enforcement Platform Service Audit shall be the responsibility of the LNPA.

**REQ 18:** The LNPA shall not be entitled to compensation of any kind with respect to the Enhanced Law Enforcement Platform Service from the NAPM LLC or Users and shall look solely to the respective Qualified Recipients for any and all compensation for the provision of the Enhanced Law Enforcement Platform Service (referred to as the Platform Charges). The LNPA must agree and acknowledge that the Enhanced Law Enforcement Platform Service is discretionary and elective within the meaning of Paragraph 92 of the Federal Communication Commission's Third Report and Order, FCC 98-82, and is not necessary for the provision of number portability. Accordingly, the LNPA must agree and acknowledge that the basis and methodology for the determination and computation of the Platform Charges and the allocation and assessment of the Platform Charges among respective Qualified Recipients are intended to constitute reasonable usage-based charges. Further, the LNPA must agree that Platform Charges shall not be more than Cost plus the Fee set forth in the Master Agreements, and that such Cost plus the Fee methodology will be a uniform, non-discriminatory, fair, and reasonable usage based charge, although the LNPA shall acknowledge the possibility that such methodology could be challenged. The LNPA must agree to compute and to allocate the compensation for the provision of Enhanced Law Enforcement Platform Service in a fair and non-discriminatory manner so that such Platform Charges are reasonable usage-based charges, consistent with the rules, regulations, orders, opinions and decisions of the FCC and other regulatory body having jurisdiction or delegated authority with respect to the NPAC/SMS or the Master Agreements.

**REQ 19:** In addition to the Enhanced Law Enforcement Platform Service Audit, within ninety (90) days after the end of each calendar year, the LNPA will cause its regular independent auditor to commence a review of the accuracy and validity of the Costs and Fees (as such terms are defined in the Master Agreements) and related calculations associated with the Enhanced Law Enforcement Platform Service (the Cost Review.) Within sixty (60) days after commencing the Cost Review, the auditor shall issue a sufficiently detailed report (the Cost Report) to the NAPM LLC validating the Costs incurred and the Fee applied and charged.

**REQ 20:** In addition to the Enhanced Law Enforcement Platform Service Audit and the Cost Review, the Enhanced Law Enforcement Platform Service shall be included in the Neutrality Review conducted every six months.

**REQ 21:** An Enhanced Law Enforcement Platform Service help desk support shall be established by the LNPA. The TN for such help desk services shall be different than any TN for a NPAC/SMS Help Desk and no charges or costs associated with the Enhanced Law Enforcement Platform Service help desk shall be included in any charges to NPAC/SMS Users with respect to services.

**Does the Respondent's proposal fully comply with these requirements in time to meet the published implementation date? If no, please explain.**

Yes

QUESTION:

**LNPA Reports to NAPM LLC**

The following is a list of required reports provided by the LNPA to the NAPM LLC at no cost; provided, however, that this list may be changed and reports deleted or added prior to entering into the Master Agreements for all Regions.

	Report Name	Frequency	Report Description
1	<b>Weekly LLC report - various SV counts</b>	Weekly	Report requested by LLC. Report shows count as of Sunday night, and change since previous report, of total EDR records and of SVs with EULV, EULT, and Billing ID data and SVs with VoIP, MMS, or SMS URI fields populated.
2	<b>Billable Transactions Report</b>	Monthly	Display of total industry "billable" transactions, by month/year and cumulatively.
3	<b>PE Reports</b>	Monthly	Also known as "Monthly Performance Report" for each of the 7 US regions. Package includes a tab for each report listed in rows a through r. Some of these are auditable under Element 2 of the GEP (as identified below).
a	Top 10 (Tickets)	Monthly	
b	(SLR) Performance	Monthly	Audited under Element 2 of the GEP
c	SLR 1 Detail	Monthly	Audited under Element 2 of the GEP
d	SLR 2 Detail	Monthly	Audited under Element 2 of the GEP
e	SLR 3 Detail	Monthly	Audited under Element 2 of the GEP
f	SLR 7 Detail	Monthly	Audited under Element 2 of the GEP
g	Service Unavailability	Monthly	Audited under Element 2 of the GEP
h	Billing	Monthly	Audited under Element 2 of the GEP
i	GEP Penalties	Monthly	
j	SOW Report	Monthly	Audited under Element 2 of the GEP
k	NPAC/SMS Test Platform Services	Monthly	
l	New Customers	Monthly	Audited under Element 2 of the GEP
m	IntraSP Pooling	Monthly	
n	LERG Pooling	Monthly	
o	(Block) Receipt & Activation	Monthly	Audited under Element 2 of the GEP
p	(Block) Modification	Monthly	Audited under Element 2 of the GEP
q	(Block) Reclamation	Monthly	Audited under Element 2 of the GEP
r	(Block) Pooled-Ported	Monthly	Audited under Element 2 of the GEP
s	Annual Summary	Annually	Audited under Element 2 of the GEP. Included with the December PE Reports.
4	<b>Performance Results</b>	Bi-monthly	A bi-monthly review of performance against SLR and GEP metrics as well as a presentation of audit and survey results.
5	<b>Enhanced Law Enforcement Platform Cost Review</b>	Annually	Required under SOW 53. A review by auditor of the accuracy and validity of the Costs and related calculations under Section 15.8(ii) of the Amendment.
6	<b>Enhanced Law Enforcement Platform</b>	Annually	Required under SOW 53. Audit of LNPA's compliance with the requirements in Sections 15.8(h), 15.8(f) (iv), Telcordia00023

REDA	Service Audit report		15.8(f)(ii) and 15.8(f)(ix) of the Amendment.
<b>11.3*</b>	7 <b>Intermodal Cost Report (WDNC)</b>	Annually	Required under SOW 48. A review and determination by auditor of validity of the Costs and related calculations under Section 15.7(ii) of the Amendment.
	8 <b>Intermodal Services Audit Report (WDNC)</b>	Annually	Required under SOW 48. Audit of LNPA's compliance with section 15.7 of the Amendment.
	9 <b>NUE Findings Reports for PTRS User Application</b>	Per occurrence	Required under SOW 62. The NUE reviews each PTRS User Application to determine whether the applicant has a need to access to NPAC data ("User Data") and whether the applicant's intended use is a "Permitted Use."
	10 <b>NUE Annual Review</b>	Annually	Required under SOW 62. Each LNPA User Service is subjected to a Data, Pricing, and Payments Review to assure LNPA is subject to the same requirements and processes as any other User.
	11 <b>Neutrality Report</b>	Annually	Prepared by designated auditor. In addition to their opinion on our assertion of neutrality, this report focuses on neutrality of NPAC operations and LNPA as an NPAC User.
	12 <b>Neutrality Report</b>	Quarterly	Prepared by auditor. Auditor provides neutral third-party (approved by the FCC) opinion on LNPA's assertion of neutrality
	13 <b>CFO Certification</b>	Quarterly	CFO certifies LNPA has sufficient capital and expense funding to accommodate all NPAC related work for next six months. A product of the Assignment Agreement.
	14 <b>Annual Disaster Recovery exercise read-out</b>	Annually	Exercise is required under article 12.3 of Master Agreement.
	15 <b>RCA reports</b>	Per occurrence	Required under Element 5 of the GEP. Description of outage events, along with root-cause, outage times and corrective actions taken to restore service.
	16 <b>Post-Mortem Reports</b>	Per occurrence	Provides details of maintenance events including the work that was done, the time that the system was taken down and brought back up
	17 <b>Master Agreements and SOWs</b>	Annually	Provides a copy of all the Master Agreements and subsequent Amendments and SOWs
	18 <b>Evidence of NPAC Application Software Escrow</b>	Per occurrence	Required under Exhibit M of the Master Agreement. Evidence of Application Software Escrow. NAPM LLC counsel listed as a "beneficiary" so he gets notification of escrow deposit directly from data storage vendor.
	19 <b>Evidence of Billing Software Escrow</b>	Per occurrence	Required under Exhibit M of Master Agreement. Evidence of Billing Software Escrow. NAPM LLC counsel listed as a "beneficiary" so he gets notification of escrow deposit directly from data storage vendor.
	20 <b>Billable Transactions (broken down by conventional-LRN versus pseudo-LRN) without credit adjustments</b>	Monthly	Report required under SOW 79. The six "billable transaction" categories displayed on NPAC web site are further broken down into transactions involving conventional LRNs and transactions involving pseudo LRNs.
	21 <b>Capacity Report</b>	Monthly	Required under SOW 70. Provides history and two year projection of EDR record count.
	22 <b>Enhanced Law Enforcement Platform list of current users</b>	Annually	Required under SOW 53. Annual report lists all LEAs and PSAPs in effect during the previous twelve-month period, and separately lists all LEAs and PSAPs that were newly qualified during the same period.
	23 <b>WDNC list of current users</b>	Quarterly	Required under SOW 48. Quarterly report lists all applicants during the preceding quarter and all current recipients.
	24 <b>NPAC Customer List</b>	Monthly	List of all Users with access to each regional NPAC.
	25 <b>Miscellaneous Projects Status Reports</b>	n/a	Typically reported first to PEs and then to LLC. Recent examples are TN/LRN LATA mismatch clean-up status and results of Permitted Use Reminder distribution.

**Does the Respondent acknowledge that its proposal will support providing the reports listed above at no additional charge to the NAPM LLC?**

Acknowledged

<b>11.4*</b>	QUESTION: <b>LNPA Reports to FCC</b>
	Monthly reports are currently provided to the FCC by the LNPA. Coordination between the LNPA and the FCC will be necessary to determine the specific requirements. The expense of these reports shall be absorbed by the LNPA. <b>Does the Respondent acknowledge that its proposal will support providing the reports pursuant to FCC requests at no additional charge?</b>

Acknowledged

**12. MISCELLANEOUS REQUIREMENTS**

<b>12.1*</b>	QUESTION: <b>Vendor Code of Conduct</b>
	<b>Does the Respondent have a formal Code of Conduct policy? If so, please attach.</b>

Yes

Optional Attachments:

[RFP Section 12.1 Vendor Code of Conduct.pdf](#) (126.9 KB)  
[RFP Section 12.1 Ericsson Code of Business Ethics.pdf](#) (2.7 MB)

QUESTION:	Telcordia00024
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**REDA**

**12.2\***

**User Satisfaction Survey**

The LNPA shall be responsible for planning, formulating, and conducting an annual User satisfaction survey. This survey will assist the LNPA on continuous improvement and facilitate User feedback, problem identification, and identify performance gaps and achievements. The results of the User satisfaction survey shall be used to ascertain the Users' level of satisfaction with LNPA Services. An annual report shall be delivered to the NAPM LLC.

**REQ 1:** The LNPA shall create and send an annual User satisfaction survey to all Users of NPAC/SMS. The LNPA shall conduct the survey and report its results at its own expense. The survey shall include questions about all aspects of the operations of the NPAC/SMS and the Services, including, but not limited to, Customer Service, Billing, Operations, New Service Roll Out and Industry Forums. The LNPA shall provide an opportunity to Users within the survey to add optional comments.

**REQ 2:** The LNPA shall receive approval from NAPM LLC of questions to be included on the User satisfaction survey prior to publication.

**REQ 3:** The LNPA User satisfaction survey shall be compiled anonymously so that names of Users are kept confidential in reporting the results.

**REQ 4:** The LNPA shall track survey results annually with comparisons of previous year's results. The LNPA shall use the results of the survey to identify performance gaps, create a corrective action plan and timeline for improvement and track to resolution.

**REQ 5:** The LNPA shall report results of each annual User Satisfaction Survey to the NAPM LLC.

**Does the Respondent agree to conduct this annual User satisfaction survey in accordance with the requirements summarized above?**

**If the Respondent currently conducts a customer satisfaction survey, please attach the last five years results and a redacted sample of the survey.**

Agree

Optional Attachments:

[RFP Section 12.2 User Satisfaction Survey.pdf](#) (119.8 KB)

[RFP Section 12.2 2012 Customer Satisfaction Questionnaire.pdf](#) (163.5 KB)

[RFP Section 12.2 2012 Customer Support Survey Results.pdf](#) (146.3 KB)

**12.3\***

**QUESTION:**

**Transition and Implementation Plan**

The objective of the transition and implementation plan is to assure the continuity of NPAC/SMS functions in accordance with the appropriate requirements during a change in the LNPA or applicable Master Agreement in any Region. The plan will become necessary only if an LNPA other than the incumbent became the LNPA in any Region.

This plan must include both the anticipated transition period and a list of transition activities from the incumbent to the new LNPA. Respondent shall provide an implementation approach (tasks and milestones), staff management approach (staff categories and hours per task), risk management approach, change control approach, and quality assurance approach to develop, implement, and transition to the new NPAC/SMS without disrupting current or continuing NPAC operations within the published timeline. The incumbent LNPA and the new LNPA shall work cooperatively to facilitate a smooth transition and implementation of the NPAC/SMS.

Transition time intervals for individual functions and services performed by the LNPA shall be included in this transition and implementation plan to allow for an effective migration of responsibilities to the LNPA. The following assumptions should be used in the development of this plan:

- The new LNPA will assume all LNPA responsibilities over the course of the transition period
- The new LNPA will provide the resources needed to carry out its obligations during the transition and implementation
- The new LNPA will be thoroughly conversant with all industry administration and assignment guidelines including all the NPAC ecosystem requirements
- The new LNPA will absorb its own expenses related to its portion of the transition and implementation of the new NPAC ecosystem

If any of these assumptions are not met, the NAPM LLC reserves the right to cease transition activities until the LNPA resolves the deficiencies, after consultation and approval of the NAPM LLC. Penalties will be assessed to the selected vendor for failure to implement within the published timeline.

**Does the Respondent agree to the requirements with respect to the transition and implementation plan as stated above?**

**Please attach the Respondent's proposed transition and implementation plan.**

Agree

Optional Attachments:

[RFP Section 12.3 Transition and Implementation Plan.pdf](#) (1.4 MB)

**13. PRICING AND CONTRACT TERMS**

**13.1\***

**QUESTION:**

**Term of the Master Agreements in Each Region**

**Contract Term**

The term of the Master Agreement in each of the Regions will be a seven year term (initial five year term with two optional one year renewals) to run from the conclusion of the current Master Agreements contract and/or acceptance of all Regions being live on the NPAC system, whichever is the later date, through the date that equals seven years thereafter, unless terminated earlier under terms and conditions to be determined through negotiations and set forth in the Master Agreements. The Master Agreements may be renewed for two subsequent, consecutive one year terms, subject to approval by the FCC or its delegate.

The NAPM LLC, after approval by the FCC or its delegate, must provide at least 30 days written notice to the LNPA of its intent to renew prior to the end of the initial five year term or any subsequent renewal term. The LNPA must provide at least 180 days written notice to the NAPM LLC of its intent not to renew prior to the end of the initial five year term or any subsequent renewal term.

Telcordia00025

REDA	<b>Does the Respondent acknowledge the above-summarized initial term and renewal terms of the Master Agreements?</b>
	Acknowledged
13.2*	<p>QUESTION:</p> <p><b>Failure to Meet Requirements and Conditions of the NPAC/SMS</b></p> <p>Each Master Agreement in each Region shall specify the requirements for a Project Plan and accompanying Test Schedule, setting forth the terms, conditions, milestones, and respective dates for testing and remediation of defects, and culminating in Acceptance of the NPAC/SMS and full operability and live in all Regions to Users. Each Master Agreement will also set forth the consequences and remedies for any failure or delay in satisfying and complying with the Project Plan and Test Schedule, ranging from the imposition of Performance Credits, Liquidated Damages, other monetary or injunctive remedies, to Termination of the Master Agreement.</p> <p><b>Does the Respondent acknowledge the above-summarized consequences for failing to meet requirements and conditions of the NPAC/SMS?</b></p>
	Acknowledged
13.3*	<p>QUESTION:</p> <p><b>Payment Terms</b></p> <p>In consideration of fulfillment and performance by the LNPA of its obligations to provide NPAC/SMS Services to Users in the separate Regions for the term of the Master Agreements, the LNPA shall be compensated exclusively by fees paid by Users pursuant to signed User Agreements and under Pricing Schedules to be negotiated and set forth in the Master Agreements. The LNPA will allocate all allocable charges to the Users based on their Service Provider Allocation Percentage as determined by the FCC Allocation Model or as otherwise directed by the FCC or other applicable authority, including legislation. The NAPM LLC will have no obligation to pay the LNPA any compensation for any Services or other amounts. The LNPA will not provide Services in any Region to any party except pursuant to an executed NPAC/SMS User Agreement. In addition to allocated charges, additional charges may be assessed to, and payable by, Users for each allowable service element requested by Users. For the purpose of pro-rating charges for partial months, each month will be deemed to have (30) days. Promptly after the end of each Billing Cycle, the LNPA will prepare and send to each User an invoice for the amount of its User Charges plus any other charges to be determined through negotiations and pursuant to the Master Agreements. The LNPA will also prepare and deliver to the NAPM LLC a report (Monthly Summary of Charges) setting forth the billing calculations for each User in each Region. All invoices will be due and payable within (45) days of the date of the invoice.</p> <p><b>Does the Respondent acknowledge the above-summarized general description of the payment terms?</b></p>
	Acknowledged
13.4*	<p>QUESTION:</p> <p><b>Pricing Model</b></p> <p>It is the expectation of the NAPM LLC that factors such as future and ongoing advances in database storage and retrieval technology, economies of scale resulting from NPAC/SMS database growth, and continuing operational efficiencies will serve significantly to lower the year-over-year cost of operating and administering the NPAC/SMS platform. The NAPM LLC requires that cost savings be passed on by the LNPA to Users and should be reflected in Respondent's bid price in response to this RFP Survey. In addition, by responding to this RFP Survey, Respondent agrees to meet with the NAPM LLC on a mutually agreed upon schedule during the term of the contract, but no less frequently than biennially, to review the ongoing cost to operate and administer the NPAC/SMS platform in order to adjust the annual flat fee for the remainder of the term of the Master Agreements to reflect any such savings achieved.</p> <p><b>Allocable Charges</b></p> <p>The pricing model will be an annual fixed fee with no annual price escalators, no transaction volume floor, no transaction volume ceiling, and no recovery or reserve for any unpaid User invoices. The LNPA will allocate the annual fixed fee to the Users based on their Service Provider Allocation Percentage as determined by the FCC Allocation Model or as otherwise directed by the FCC, its delegate, or other applicable authority, including legislation.</p> <p>All Users not subject to allocable charges (because for example, they have no end-user telecommunications revenue upon which an allocated share can be assessed) will be invoiced \$100 per year, per Region in which the User operates, in the form of an annual fee, and the LNPA shall reduce the overall allocable industry flat fee base with these collected charges.</p> <p><b>Direct Charges</b></p> <p>The cost of certain additional NPAC/SMS services requested by Users and provided by LNPA but which did not constitute Services under the Master Agreements, shall be billed directly to, and paid directly by, the requesting User and not allocated to other Users. These services subject to direct charges include the following:</p> <ol style="list-style-type: none"> <li>1. Any recurring cost per Virtual Private Network (VPN) access to NPAC network</li> <li>2. Any recurring cost per Dedicated Mechanized Interface to NPAC network</li> <li>3. Cost per NPAC User manual request support</li> <li>4. Cost per standard report requested by User</li> <li>5. Cost per ad hoc report requested by User</li> <li>6. Any non-recurring cost per log-on ID established</li> <li>7. Any non-recurring cost per mechanized interface established (existing NPAC users are not to be treated as new entrants)</li> <li>8. Cost to support new carrier initial LSMS interoperability testing (existing NPAC users are not to be treated as new entrants)</li> <li>9. Cost to support new carrier initial SOA interoperability testing (existing NPAC users are not to be treated as new entrants)</li> <li>10. Per hour cost for LNPA test engineer support subsequent to initial system testing</li> </ol> <p>If Respondent has any additional direct charges in its proposal, please provide details and pricing in Section 14.3.</p> <p><b>Statements of Work</b></p> <p>The cost for any Statements of Work requested by the NAPM LLC in any Region during the term of the Master Agreements, whether generated as a result of NANC Change Orders developed, approved, and recommended by the LNPA-Working Group, or generated directly from the NAPM LLC, shall be included as part of the annual fixed price and shall not result in a separate additional charge or an increase in the annual fixed price. The cost for any Statements of Work generated at the request of an individual User shall be borne by the User or Users requesting a Statement of Work; provided, however, that any such Statement of Work nonetheless still requires approval of the NAPM LLC and may not degrade or affect the performance of the NPAC/SMS or the delivery of Services.</p> <p><b>Does the Respondent acknowledge the above-summarized Pricing Model and agree to be bound thereby in accordance with the Master Agreements?</b></p>
	Acknowledged

Telcordia00026

<b>REDA</b>	<p>QUESTION:</p> <p><b>Most Favored Customer</b></p> <p>During the term of the Master Agreements in each Region, the terms and conditions offered to Users for Services shall be at least as favorable as the terms and conditions, including the pricing, provided by the LNPA to any other customers who receive NPAC/SMS-type services under comparable agreements. If the LNPA provides more favorable terms to another customer for NPAC/SMS services of the type received by Users pursuant to the Master Agreements in any Region, subject to the following paragraph, the NAPM LLC may substitute all or any portion of such more favorable terms for the terms of Master Agreements and the NPAC/SMS User Agreements, including, if appropriate, the lowest charges included in such terms, retroactive to the date the more favorable terms became effective as to such other customer of the LNPA.</p> <p>The Master Agreements shall establish processes and procedures for determining the application and operation of this Most Favored Customer Clause, including, but not limited to, the process for determining if certain services or contracts are comparable, for evaluating whether certain terms are more or less favorable, whether terms must be considered in conjunction with other terms because they are related, the process by which the LNPA must advise the NAPM LLC upon entering into a comparable agreement, and the process by which the NAPM LLC can elect more favorable terms. "Terms" includes, but is not limited to, rates, prices, charges, target amounts, liquidated damages, contractual terms and conditions, or any other contractual element (including, without limitation, service level requirements) affecting the price of NPAC/SMS Services offered or the rights or obligations of the parties or Users under either this Agreement or the NPAC/SMS Users Agreement.</p> <p><b>Does the Respondent acknowledge the above-summarized Most Favored Customer Clause and agree to be bound thereby in accordance with the Master Agreements?</b></p>
<b>13.5*</b>	<p>Acknowledged</p>

<b>REDA</b>	<p>QUESTION:</p> <p><b>Best and Final Offer</b></p> <p>After responses are submitted to this RFP survey, the NAPM LLC FoNPAC may decide to seek best and final offers from one or more Respondents.</p> <p>A best and final offer may be requested for any number of reasons, including but not limited to, the following: clarification or revision of certain technical items or responses to the RFP survey, the Vendor Qualification survey, or the TRD survey; revised pricing or costs; clarification of certain pricing or cost items; subcontracting plans; and certification of cost or pricing data. If a best and final offer is requested of any bidder, each bidder that has submitted a bid that the NANC/NAPM has not otherwise disqualified, shall have the opportunity to submit a best and final offer.</p> <p>If the NAPM LLC FoNPAC decides to seek best and final offers, selected Respondents will be notified of the areas to be addressed and the date and time in which the best and final offer must be returned. Proposal scores may be adjusted in light of the new information received in the best and final offer. A best and final offer may be requested on price/cost alone.</p> <p><b>Does the Respondent acknowledge the above-summarized best and final offer procedure and agree to be bound by it?</b></p>
<b>13.6*</b>	<p>Acknowledged</p>

## 14. SUBMITTING BIDS

<b>REDA</b>	<p>QUESTION:</p> <p><b>Bid Process Overview</b></p> <p>All bids/proposals in response to this RFP survey must be submitted through the lasta® SmartSource SRM® Tool. Hard copy, facsimile, or Email bids/proposals will not be considered qualifying responses for this RFP survey.</p> <p>A Respondent may submit proposals for one, all, or any combination of some but not all of the seven Regions. A Respondent may submit proposals for one or more Regions individually (each referred to as a "Regional Proposal"), for one or more combinations of Regions together, either for fewer than all Regions (each referred to as a "Partial Combined Proposal") or for all seven Regions (referred to as a "Full Combined Proposal").</p> <p>In addition to being evaluated as individual Regional Proposals, all of a Respondent's Regional Proposals automatically shall be combined and evaluated as Partial Combined Proposals and, if for all Regions, as a Full Combined Proposal, unless a Respondent expressly submits one or more Partial Combined Proposals or a Full Combined Proposal, or the Respondent expressly limits any of its Regional Proposals from being evaluated as Partial Combined Proposals or a Full Combined Proposal.</p> <p>If a Respondent submits both (a) individual Regional Proposals for more than one Region or for all Regions and (b) a Partial Combined Proposal or Full Combined Proposal for any combination of those same Regions, then Respondent must itemize and explain the reasons for the differences, including the determination of price, between the Regional Proposals and the Partial or Full Combined Proposal that include those same Regions.</p> <p>If a Respondent submits one or more Regional Proposals or a Partial Combined Proposal, then such Respondent must itemize and explain with specificity how such Respondent will coordinate its NPAC solution in the Regions in which it has made a proposal with the NPAC solution or solutions in other Regions in which it has not made a proposal and how it will overcome the resultant complexities of multiple LNPAs and allocate or absorb the costs and expenses of such coordination and complexity. In addition, such Respondent must also answer the following questions:</p> <ol style="list-style-type: none"> <li>1. What would be the additional complexities, costs, and support necessary for national Service Providers, or Service Providers serving territory in two or more Regions served by different LNPAs, to connect their SOAs and LSMSs to multiple LNPA NPAC platforms and maintain those multiple connections, and how would those additional costs be determined, allocated, or absorbed?</li> <li>2. How would national Service Providers, or Service Providers serving territory in two or more Regions served by different LNPAs connect their test bed platforms to multiple NPAC LNPA test beds in different Regions and how would additional costs be determined, allocated, or absorbed?</li> <li>3. How would NPAC releases and carrier deployment of new features be implemented over NPAC solutions of different LNPAs in different Regions, and how would additional costs be determined, allocated, or absorbed?</li> <li>4. What would be the additional complexities, costs, and support necessary to conduct annual disaster recovery and failover testing for each additional LNPA in separate Regions, and how would additional costs be determined, allocated, or absorbed?</li> <li>5. What would be the additional complexities, costs, and support necessary for national Service Providers, or Service Providers serving territory in two or more Regions served by different LNPAs, to obtain reports and data from NPAC solutions of different LNPAs in different Regions, and how would additional costs be determined, allocated, or absorbed?</li> <li>6. How would the following matters be addressed and what would be the additional complexities and how would additional costs be determined, allocated, or absorbed:       <ol style="list-style-type: none"> <li>a. Coordination of tunable parameter changes among multiple NPAC LNPAs;</li> <li>b. Coordination of SPID migration limitations and process;</li> <li>c. Coordination of NPAC software release development and implementations among different LNPAs that could have different development cycles;</li> <li>d. Resolution of differences among LNPA software implementations, some of which could be service-affecting;</li> <li>e. Consolidation of data and information from multiple LNPAs into one LNPA WG website;</li> <li>f. Changes to Service Provider local systems;</li> <li>g. Resolution of disputes over software release development and implementation differences;</li> <li>h. Neutral Change Management Administration;</li> </ol> </li> </ol>
<b>14.1*</b>	<p>Telcordia00027</p>

REDA

- i. Development of Service Provider internal processes to accommodate differences in multiple LNPA M&Ps;
- j. Processing, verifying, forecasting, and paying bills to multiple LNPAs;
- k. Access, coordination, and management of Enhanced Law Enforcement Platform and Intermodal TN ID Service by multiple LNPAs; and
- l. Negotiation, execution, and reconciliation of differences in Master Agreements with multiple LNPAs?

The NAPM LLC, working in conjunction with the NANC, will recommend for selection an LNPA in each of the seven Regions pursuant to the evaluation criteria stated in the RFP. The selection of the LNPA will be made without the requirement of discussions or interviews, but discussions and interviews may be held if desired by the FoNPAC. All Respondents are encouraged to submit their best proposal; each Respondent's proposal in response to this RFP survey should contain the Respondent's best terms from a technical, management, and cost standpoint, as outlined in Section 14.1.1.

**The Respondent acknowledges the above bid process overview.**

**Please provide an attachment addressing the questions above, as necessary.**

Acknowledged

Optional Attachments:

[RFP Section 14.1 Multi-Vendor NPAC-TNS.pdf](#) (1.1 MB)

[RFP Section 14.1 Bid Process Overview – Regional Responses.pdf](#) (423.4 KB)

**QUESTION:**

**Evaluation Criteria**

This Section summarizes the evaluation criteria that will be used for evaluation of proposals, selection, and award. After a Respondent has satisfied the Vendor Qualification Criteria set forth in the Vendor Qualification survey, the following factors will be evaluated and considered based on the quality and thoroughness of the response and a demonstration of a complete understanding of the requirements in the RFP survey and the TRD survey.

**Basis for Award**

Each Respondent's proposal submitted in response to this RFP survey will be evaluated against the following criteria listed in order of importance: Technical, Management, and Cost. Technical merit plays a significant role in selecting the LNPA. The Technical and Management criteria when combined are significantly more important than the Cost criterion alone. If Respondents' Technical and Management merits are not significantly disparate, the Cost may become determinative. Each Respondent is encouraged, therefore, to submit as a response to this RFP survey a proposal with sound Technical and Management merits, supported by competitive pricing. Subject to FCC oversight, the selection of an LNPA in each of the seven regions will be made on a determination of which technically acceptable proposal(s) is most advantageous to the industry and other affected individuals or entities, considering price and the other evaluation criteria stated in the RFP survey.

**A. Technical Criteria**

The following are the factors constituting the technical criteria. Factor 1, Factor 2 and Factor 3 are equally important.

Factor 1, Operational Performance

The Respondent demonstrates an understanding of and competency in all operational performance aspects of the NPAC ecosystem for the full term of the Master Agreements in each Region. Factors of operational performance include, but are not limited to, the following requirements:

- Volume/Throughput
- Service Level
- Change Management
- Audit Administration
- Reporting

Factor 2, Reliability and Functionality

The Respondent demonstrates an understanding of and competency in the requirements to operate the system, and to provide the service during the term of the Master Agreements in each Region. The Respondent also demonstrates an understanding of and competency in the system availability, testing, disaster recovery, backup, and help desk requirements and provides confidence (through analysis or other demonstrable means) that their NPAC/SMS will enable the Respondent to meet all SLRs and other system performance requirements.

Factor 3, Security

The Respondent demonstrates a full understanding of and competency in the security requirements to operate the NPAC/SMS. This includes meeting all data security and privacy requirements.

If the Respondent does not submit a single proposal for all Regions or Respondent's submission does not equate to a combined bid for nationwide service for all Regions, the Respondent must provide explanations, itemization, and responses to the matters set forth in 14.1 above.

**B. Management Criteria**

The following are the factors constituting the management criteria. Factor 1 is most important. Factor 2 is more important than Factor 3.

Factor 1, Customer Service

The Respondent demonstrates the ability to provide excellent customer service to a wide spectrum of organizations, customers, and stakeholders.

Factor 2, Vendor Experience and Performance

The Respondent's past performance demonstrates the ability to:

- Develop and deploy a comparable automated system;
- Staff, manage, and operate an NPAC or comparable service operation;
- Meet schedule requirements and manage contract costs;
- Communicate with and support a wide spectrum of organizations, customers, and stakeholders;
- Provide full financial and operational reporting and insight;
- Develop and implement escalation procedures; and
- Survey end users to gain feedback on help desk and user experience.

Factor 3, Financial Stability

The Respondent demonstrates that it has the financial strength and stability to endure negative economic impacts.

**C. Cost Criteria**

Please refer to Section 13.4 of this RFP survey - Pricing Model

14.1.1\*

REDA

Technical merit plays a more significant role than cost in determining contract award. The non-cost evaluation factors when combined are significantly more important than cost. As Respondent's technical proposals become more equal, cost may become the determining factor. Competition will be used to determine price reasonableness.

If the Respondent does not submit a single proposal for all Regions or Respondent's submission does not equate to a combined bid for nationwide service for all Regions, the Respondent must provide explanations, itemization, and responses to the matters set forth in 14.1 above.

**Does the Respondent acknowledge the above-summarized evaluation criteria and agree to be bound by them?**

Acknowledged

QUESTION:

**Allocable Charges**

14.2

Each Respondent must attach an Excel spreadsheet based upon the sample yearly flat rate pricing table specified below for each of its proposals separately for each of the seven years (initial five year term with two optional one year renewals) of the term of all Master Agreements. If a Respondent submits proposals for each Region separately, then the flat rate pricing table must be provided for each such Region; if the Respondent submits a proposal for any combination of all or fewer than all Regions, then the flat rate pricing table must be provided for each combination of Regions. More than one flat rate pricing table may be submitted depending on the Respondent's proposals, but each flat rate pricing table must be clearly labeled. Provide complete and precise dollar amounts where applicable. Each year is defined as the period beginning July 1 and ending June 30 of the following year.

The pricing model will be an annual fixed fee with no annual price escalators, no transaction volume floor, no transaction volume ceiling, and no recovery of any unpaid User invoices from the rest of the industry. The LNPA will allocate the annual fixed fee to the Users based on their Service Provider Allocation Percentage as determined by the FCC Allocation Model or as otherwise directed by the FCC or other applicable authority, including legislation.

All Users not subject to allocable charges or with no end-user telecommunications revenue will be invoiced \$100 per year, per region in the form of an annual fee, and LNPA shall reduce the overall allocable industry flat fee base by these collected charges.

**Please attach a detailed Excel document using the sample formatting below.**

	Year 2015-2016	Year 2016-2017	Year 2017-2018	Year 2018-2019	Year 2019-2020	Year 2020-2021	Year 2021-2022
Allocable Industry Flat Fee in U.S. Dollars for All Combined NPAC Regions	(no answer)						
Allocable Industry Flat Fee in U.S. Dollars for MidAtlantic NPAC Region	(no answer)						
Allocable Industry Flat Fee in U.S. Dollars for Midwest NPAC Region	(no answer)						
Allocable Industry Flat Fee in U.S. Dollars for NorthEast NPAC Region	(no answer)						
Allocable Industry Flat Fee in U.S. Dollars for SouthEast NPAC Region	(no answer)						
Allocable Industry Flat Fee in U.S. Dollars for SouthWest Region	(no answer)						
Allocable Industry Flat Fee in U.S. Dollars for West Coast NPAC Region	(no answer)						
Allocable Industry Flat Fee in U.S. Dollars for Western NPAC Region	(no answer)						
Optional Regional Combination (must identify Regions)	(no answer)						

Optional Attachments:

- [RFP Section 14.2 Pricing Summary.pdf](#) (284.8 KB)
- [RFP Section 14.2 Allocable Charges \(Offer 1of2 Combined\).xlsx](#) (18.9 KB)
- [RFP Section 14.2 Allocable Charges \(Offer 2of2 Regional Combination\).xlsx](#) (19.1 KB)

QUESTION:

**Direct Charges**

14.3\*

The cost of certain services requested by Users and provided by the LNPA shall be billed directly to the requesting User and not allocated to all Users. These services subject to direct charges are shown in the direct charges table provided. Each year of the initial term of the Master Agreements is defined as the period beginning July 1 and ending June 30 of the following year.

Each Respondent shall fill out each cell in the direct charges table for each of its proposals, if any, (in U.S. dollars) for all seven Regions for each of the seven years (initial five year term with two optional one year renewals) of the term of all Master Agreements. Each cell must be populated with a complete and precise dollar amount. Appropriate entries are numeric only and cells must not be left blank. The direct charges table should only be completed once and the charges will be applicable to each Region.

**Please fill out each required box in the table below and also attach an Excel document using the same format.**

**In addition, if the Respondent has other direct charges, please include the pricing schedule and details for those additional direct charges in the same Excel document.**

REDA

## 15. OPTIONAL ATTACHMENTS

QUESTION:

### 15.1 (OPTIONAL)

Attach any supplemental documentation here.

Attachments:

[RFP\\_Section 15.1\\_Supplemental Documentation.pdf](#) (2 MB)

## 16. NEXT STEPS

STATEMENT:

### Next Steps

The FoNPAC will evaluate all responses to the RFP survey, the Vendor Qualification survey, and the TRD survey. The FoNPAC's evaluation is expected to commence on or about April 5, 2013 per the published timeline. The FoNPAC expects to present its recommendation for selection of a successor LNPA to the NAPM LLC for consideration, and the NAPM LLC expects to make its recommendation to the NANC SWG no later than August 5, 2013.

### 16.1

Upon consensus of the NANC SWG expected about August, 2013, the NANC SWG expects to present its recommendation for selection of a successor LNPA to the NANC for approval in August 2013. The NANC chair will then seek to reach consensus on the recommendation and present that consensus recommendation, along with the evaluation report substantiating that recommendation (including the final number of votes for each Respondent), to the FCC or its delegate, for approval as directed in Order DA 11-883. If consensus cannot be reached in the NANC, the NANC chair shall inform the FCC and forward the NAPM LLC's, NANC SWG's, and NANC's separate evaluation information to the FCC. Upon receipt of this documentation, the FCC will select a successor LNPA around September 2013, and communicate its decision to the NANC chair and the NAPM LLC.

The NAPM LLC shall notify all Respondents concerning the successor LNPA, and the SWG will then be disbanded. The NAPM LLC will commence contract negotiations with the successor LNPA around September 2013, and work to enter into definitive Master Agreements in all Regions by or before February 2014. The NAPM LLC will submit the completed Master Agreements to the FCC for review and approval by or before February 2014. Per the published timeline, FCC approval of the Master Agreements in all Regions is anticipated around March 2014.

The NAPM LLC and the LNPA will execute the Master Agreements on or about March 2014, and the LNPA will be directed by the NAPM LLC to initiate the design, development, system testing, vendor and industry certification process for the successor NPAC/SMS in order to deliver a properly and fully functional NPAC system no later than June 28, 2015.

Notwithstanding the foregoing, these anticipated dates may change.

Please note: Your response has been submitted to the sponsor. It is final and may not be edited.



**RFP\_Section 4.3**

**ExampleBCPSG**

**ENTIRE DOCUMENT IS  
HIGHLY CONFIDENTIAL**

Telcordia00032 – Telcordia00036

## **RFP\_Section 4.3**

## **ExampleBCPTT**

**ENTIRE DOCUMENT IS  
HIGHLY CONFIDENTIAL**

Telcordia00037 – Telcordia00083

# Section 7 – Required Enhancements and Future Considerations

## RFP\_Section 7.3\_Required Enhancements and Future Considerations Response

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Telcordia Technologies, Inc. dba iconectiv.



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# 1 Introduction

[REDACTED]

## 2 Required Enhancements

### 2.1 Alternative Interface

#### 2.1.1 Enhancement Opportunity

The LNPA WG has expressed interest in implementing an alternate to the current CMIP mechanized interface. The Telcordia team has been actively participating in the LNPA Working Group discussions and providing contributions regarding the formation and development of NANC Change Order 372.

#### 2.1.2 Compliance

The Telcordia NPAC/SMS will support this enhancement as defined in Change Order 372 and associated existing documents (FRS, IIS) and new documents (XML Interface Specification). Telcordia's response to this RFP survey includes all costs to develop and implement.

[Redacted]

#### 2.1.3 Benefit

Service Providers and Service Bureaus that operate a mechanized interface between NPAC and their local SOA and LSMS systems will be able to choose the interface to utilize to best meet their business and technical objectives.

#### 2.1.4 Proposed Changes

[Redacted]

## 2.2 Support of IPv6

### 2.2.1 Enhancement Opportunity

Due to the impending exhaustion of the IPv4 addressing currently in use, NPAC/SMS support of IPv6 addressing is being proposed in NANC Change Order 447. The NPAC/SMS must support dual IPv4 and IPv6 stacks. In March 2012 the LNPA WG agreed to the content in NANC Change Order 447 for eliminating non-EDR support and submitted it to the NAPM LLC.

### 2.2.2 Compliance

The Telcordia NPAC/SMS will support this enhancement as defined in NANC Change Order 447. Telcordia's response to this RFP survey includes all costs to develop and implement.

### 2.2.3 Benefit

IPv6, or Internet Protocol version 6, is the successor to Internet Protocol Version 4. IPv4 provides the addressing mechanism that has been used to address computers on the internet since the internet was founded as a research project. IPv6 provides two main improvements over IPv4, namely

- ◆ a vastly increased address pool
- ◆ increased efficiency processing packet headers

The immediate driver for switching from IPv4 to IPv6 is the imminent exhaustion of the IPv4 address space.

Many Service Providers, through corporate initiatives, are streamlining their networks and would like to use IPv6 as the addressing scheme used to:

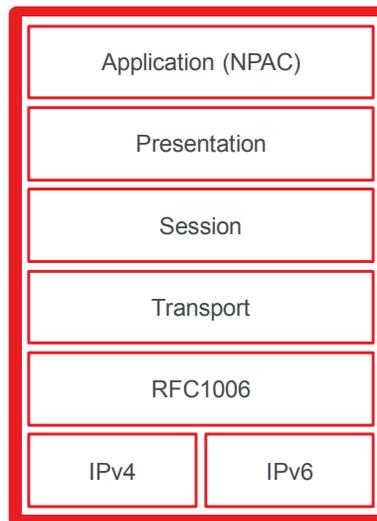
- ◆ connect their local systems (LSMS and SOA) to the NPAC for the CMIP Interface
- ◆ web interface
- ◆ and SFTP file transfer.

## 2.2.4 Proposed Changes

### OSI Stack support for IPv6

The Open Systems Interface (OSI) Stack used for communication between the Service Provider Local Systems and the NPAC uses the IP layer at its lowest level. The stack is able to utilize to both an IPv4 and an IPv6 address and can establish a CMIP association via either IP address. As a result, the Telcordia NPAC Solution is able to communicate with Local Systems using either IPv4 or IPv6 addressing.

The solution leverages the DataUnits OSI stack technology which has been in production more than five years. DataUnits is currently used in over a dozen service provider locations as part of their LNP local system and test environment solutions. It is hardened product that has a proven track record regarding reliability and functionality.



**Figure 1 – OSI Stack Support for IPv6**

## 2.3 Elimination of NPAC/SMS support of Non-EDR

### 2.3.1 Enhancement Opportunity

The NPAC/SMS has previously supported Number Pooling supporting both EDR (Efficient Data Representation) and Non-EDR porting flows on a per service provider basis. In March 2012 the LNPA WG agreed to the content in NANC Change Order 448 for eliminating non-EDR support and submitted it to the NAPM LLC.

### 2.3.2 The Description of Change from NANC 448

The proposed change order modifies the NPAC to use only Number Pool Blocks (NPBs) when downloading Number Pool information to the LSMS. This applies to activates, modifies, and disconnects of Number Pool Blocks. Upon implementation of this change order, no pooled Subscription Versions will be broadcast to any LSMS, and all SPIDs will be considered EDR capable. Furthermore, there will be no ability to restore the non-EDR functionality. The removal of other embedded software that deals with non-EDR (e.g., business rules, database, CMIP processing) will be updated as NPAC Development Team resources become available.

### **2.3.3 Compliance**

The Telcordia NPAC/SMS will support this change as defined in NANC Change Order 448 and associated requirements specification documents (FRS, IIS). Telcordia’s response to this RFP survey includes all costs to develop and implement.

### **2.3.4 Benefit to the Industry**

Removal of Non-EDR will simplify and consolidate a number of the porting flows supported by NPAC/SMS to interface with each LSMS.

### **2.3.5 Proposed Changes**



### 3 Future Considerations

#### 3.1 Automation of processes between the NPAC/SMS and the Pooling Administration System (PAS)

##### 3.1.1 Enhancement Opportunity:

The Telcordia next-generation NPAC/SMS architecture is flexible enough to support any required enhancement in the future to incorporate automation of the described processes between the NPAC/SMS and the PAS including:

- ◆ Provisioning of Part 1B Forms
- ◆ Provisioning of SP requests that effect PAS (activation, deletes, modifications of blocks)

Telcordia notes that to the extent there is not an interface available today for it to match, the proposed process described below may also require some minor changes to PAS that may need to be worked via the Industry Numbering Committee and the NANC Oversight Working Group. Telcordia commits to providing the necessary resources to support that industry effort.

##### 3.1.2 Potential Changes

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]



### 3.1.3 Benefit

[REDACTED]

### 3.1.4 Compliance

[REDACTED]

## 3.2 Combining steps for Intra-Service Provider ports

### 3.2.1 Enhancement Opportunity

The NPAC/SMS currently requires separate steps and messages for the creation and activation of Intra-Service Provider (SP) ports. It may be required in the future to combine the creation and activation steps for Intra-Service Provider ports into one step and message.

### 3.2.2 Compliance

The Telcordia NPAC/SMS will support this potential future enhancement if it is required by the industry.

### 3.2.3 Benefit to the Industry

[REDACTED]

### 3.2.4 Potential Changes

[REDACTED]

[REDACTED]

- [REDACTED]

- [REDACTED]

[REDACTED]

[REDACTED]

### 3.3 Inter-carrier Communications

#### 3.3.1 Enhancement Opportunity

In the existing NANC flows, the new and old service providers involved in a port communicate with each other, prior to interacting with the NPAC/SMS, to validate and confirm that the TN or set of TNs can be ported. In the future, the industry may desire to incorporate this inter-carrier communication process into the NPAC/SMS. Incorporating this functionality would make the U.S. NPAC functionality similar to the NPAC PLUS functionality in the Telcordia Number Portability Clearinghouse that is deployed in 15 countries around the world.

#### 3.3.2 Compliance

The Telcordia NPAC/SMS will support this enhancement if it is required by the industry. [REDACTED]

#### 3.3.3 Benefit to the Industry

[REDACTED]

[REDACTED]

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

### 3.3.4 Potential Changes

#### 3.3.4.1 Defining the Solution

[REDACTED]

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
  - [REDACTED]
  - [REDACTED]
  - [REDACTED]

[REDACTED]

- [REDACTED]
- [REDACTED]



### 3.3.4.2 General Changes and Impacts

[REDACTED]

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

[REDACTED]

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

[REDACTED]

- [REDACTED]
- [REDACTED]

3.3.4.3 [Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[REDACTED]

■ [REDACTED]

[REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

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3.3.4.4 [REDACTED]

[REDACTED]



[Redacted]

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- [Redacted]
- [Redacted]

[Redacted]

[Redacted]

- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]

[Redacted]



### 3.3.5 Conclusion



## 4 Future Mandated Changes

[Redacted]

### 4.1 PSTN to IP Transition

[Redacted]

#### 4.1.1 Introduction

[Redacted]

## 4.1.2 Aspects of an IP Environment that Require NPAC Consideration

### 4.1.2.1 IP environments are geographically neutral,

[REDACTED]

### 4.1.2.2 Routing and Interconnection in a PSTN-IP Environment

[REDACTED]

[REDACTED]

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

[REDACTED]

[REDACTED]

#### 4.1.2.3 IP Address Resolution, ENUM and The Role of NPAC

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]



[Redacted text block]

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[Redacted text line]

[Redacted text block]

[Redacted text line]

### 4.1.3 Compliance

[Redacted text block]



## Section 7 – REQUIRED ENHANCEMENTS AND FUTURE CONSIDERATIONS

### RFP\_Section 7.4\_Additional Information Regarding Cloud Computing – Optional

#### 1.1 Enhancement Opportunity

Please provide Respondent's view regarding the applicability for incorporating cloud computing to enhance the operations and functionality of the NPAC/SMS.

#### 1.2 Considerations

[Redacted]

- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]

[Redacted]

[Redacted]

- [Redacted]
- [Redacted]
- [Redacted]

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- [Redacted]

- [Redacted]

[Redacted]

[Redacted]

[Redacted]

## Section 7 – REQUIRED ENHANCEMENTS AND FUTURE CONSIDERATIONS

### RFP\_Section 7.5\_Additional Information Regarding Web Services Interface – Optional

#### 1.1 Enhancement Opportunity

Please provide Respondent's view regarding the applicability for incorporating a web services interface to enhance the operations and functionality of the NPAC SMS.

#### 1.2 Considerations

[Redacted]

[Redacted]

[Redacted]

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Telcordia Technologies, Inc. dba iconectiv.

[Redacted]

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- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]

[Redacted]

[Redacted]



# CODE OF BUSINESS ETHICS



# AN OVERVIEW

of fundamental Group policies and directives guiding  
our relationships to each other and to our stakeholders.

Further details and additional rules for specified areas of operations are found in the **Group Policies**<sup>1</sup>  
and **Group Directives**<sup>2</sup> as well as in local instructions.

<sup>1</sup> **Group Policies:**

[http://internal.ericsson.com/page/hub\\_inside/company/management\\_and\\_control/group\\_policies/index.jsp](http://internal.ericsson.com/page/hub_inside/company/management_and_control/group_policies/index.jsp)

<sup>2</sup> **Group Directives:**

[http://internal.ericsson.com/page/hub\\_inside/company/management\\_and\\_control/group\\_directives/index.jsp](http://internal.ericsson.com/page/hub_inside/company/management_and_control/group_directives/index.jsp)

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# LETTER FROM THE PRESIDENT

**Dear Colleagues,**

Integrity and ethics have always characterized the way we conduct business at Ericsson. Working with a strong sense of integrity is critical to maintaining trust and credibility with our customers, partners, colleagues, shareholders and other stakeholders. The Code of Business Ethics is our guiding framework.

I expect all employees to share a commitment to the highest level of integrity and ethics in the conduct of business. As an employee and a responsible corporate citizen, you must acknowledge the Code of Business Ethics and follow the Code in your daily work. It is up to each one of us to support Ericsson's strong ethical reputation as a trusted partner to our stakeholders.



Hans Vestberg  
President & CEO  
May 2012

# OUR GUIDING PRINCIPLES

We at Ericsson share the commitment to the highest level of integrity and ethics in the conduct of business. Integrity and ethics have always characterized the way we conduct business. Operating with a strong sense of integrity is critical to maintaining trust and credibility with our customers, partners, employees, shareholders and other stakeholders.

Creating an environment of transparency in the conduct of business is a high priority for all of us. Our Code of Business Ethics is our promise to operate with candor and truthfulness in our dealings and communications to the marketplace. We expect that the company will be operated in accordance with the principles set forth in this Code and that everyone, from the members of the Board of Directors and the Executive Leadership Team to each individual Ericsson employee, will be held accountable for meeting these standards.

Our Code of Business Ethics contains rules regarding individual and peer responsibilities, as well as responsibilities to our employees, customers, suppliers, shareholders and other stakeholders and includes:

- Compliance with laws, rules and regulations (including insider trading laws)
- Protecting confidential and other proprietary information and that of our customers and vendors
- Protection and proper use of company assets
- Respecting human rights throughout our business operations
- Dealing with conflicts of interest
- Promoting full, fair, accurate, timely and understandable disclosure in financial reports and other public communications
- Protecting the environment
- Supporting the reporting of any unlawful or unethical behavior

# OUR RESPONSIBILITY FOR COMPLIANCE

Each of us is required to review and follow this Code, as well as to comply with all applicable laws and Ericsson's Group policies and directives. Failure to do so may result in civil and criminal liability and may result in disciplinary actions including termination of employment.

We place additional responsibilities on our managers. They must, through their actions, demonstrate the importance of compliance. Leading by example is critical, as is being available for employees who have ethical questions or wish to report possible violations.

Managers must ensure that this Code is enforced through appropriate disciplinary measures. Managers may not turn a blind eye toward unethical conduct.

Waivers of this Code of Business Ethics may be granted on a case-by-case basis but only in extraordinary circumstances. Waivers of this Code for employees may be made only by a member of the Executive Leadership Team. Any waiver of this Code for our directors, CEO or other senior officers with financial reporting responsibilities may be made only by our Board of Directors or the appropriate committee of our Board of Directors



# REPORTING VIOLATIONS

**Employees** - Employees are encouraged to report any conduct that they believe, in good faith, to be a violation of laws or the Code of Business Ethics to their manager or in accordance with locally established procedure. If the manager is involved in the situation or cannot or has not adequately addressed the concerns, employees are advised to report to a manager of higher rank or in accordance with locally established procedure.

**Suppliers, customers and others** - Other persons than employees, such as suppliers, customers and other partners involved with Ericsson, may report suspected violations of laws or the Code of Business Ethics to the local operations manager or in accordance with locally established procedure.

**Ericsson Reporting Violations** - If none of the above mentioned reporting channels is available or appropriate, and if the alleged violation

- is conducted by Group or local management, and
- relates to corruption, questionable accounting or auditing matters or otherwise seriously affects vital interests of the Group or personal health and safety,

the violation may be reported through the whistleblower process Ericsson Reporting Violations. Reports can be handled in the process if in accordance with local legislation applicable to persons involved. Information about the Ericsson Reporting Violations process is available on the [Ericsson intranet](#)<sup>1</sup> and on the [Ericsson website](#)<sup>2</sup>.



Managers are expected to seriously address a reported issue and work to ensure a satisfactory resolution in alignment with our Group ethics and values and with any local statutory or regulatory obligations. Ericsson will not accept any discrimination or retaliation against the individual reporting the violation for having in good faith reported alleged violations.

<sup>1</sup>[http://internal.ericsson.com/page/hub\\_inside/support/audits\\_ass\\_cert/rep\\_violations/index.jsp](http://internal.ericsson.com/page/hub_inside/support/audits_ass_cert/rep_violations/index.jsp)

<sup>2</sup>[http://www.ericsson.com/thecompany/corporate\\_governance/code\\_of\\_business\\_ethics/reporting\\_violations](http://www.ericsson.com/thecompany/corporate_governance/code_of_business_ethics/reporting_violations)

# RESPECTING HUMAN RIGHTS THROUGHOUT OUR BUSINESS OPERATIONS

The UN Guiding Principles for Business and Human Rights<sup>3</sup> call for companies to respect internationally recognized human rights throughout their value chain and within their sphere of influence. We actively work to integrate these principles into our governance framework.

For the purpose of protecting human rights and promoting fair employment conditions, safe working conditions, responsible management of environmental issues and high ethical standards, our Code of Conduct shall be applied in the production, supply and support of Ericsson products and services worldwide.

Anyone working for Ericsson should be entitled to his or her basic human rights and should not be forced to suffer physically or mentally from his or her work in any way. We recommend that all employees should be free to peacefully and lawfully form and join associations of their own choosing, and should have the right to bargain collectively. Ericsson does not accept child labor.

No employee should be discriminated against because of e.g. race, color, sex, sexual orientation, marital status, pregnancy, parental status, religion, political opinion, nationality, ethnic background, social origin, social status, disability, age or union membership.

All employees should know the basic terms and conditions of their employment. We recommend that all employees with the same experience, performance and qualifications receive equal pay for equal work with respect to those performing the same jobs under similar working conditions.



The health of the workers and the safety of the workplace shall always be a priority concern. This applies to all aspects of working conditions including labeling and handling of chemicals, noise level, temperature, ventilation, lighting and quality of and access to sanitary facilities.

Ericsson supports the United Nations Global Compact<sup>4</sup> initiative, covering the areas of human rights, labor standards, environmental management and anti-corruption. In order to make this commitment clear to employees, suppliers, customers and other stakeholders, our Code of Conduct is based on the Global Compact's ten principles and is publicly available on [Ericsson's website](#)<sup>5</sup>.

Suppliers and their subcontractors shall be required to comply with the Code of Conduct and to verify compliance.

<sup>3</sup><http://www.ohchr.org/documents/issues/business/A.HRC.17.31.pdf>

<sup>4</sup><http://www.unglobalcompact.org/>

<sup>5</sup>[http://www.ericsson.com/article/sustainable-sourcing\\_1804976481\\_c](http://www.ericsson.com/article/sustainable-sourcing_1804976481_c)

# COMPLIANCE WITH LAWS, RULES AND REGULATIONS

Ericsson shall comply with all laws and regulations that apply to its business. As you conduct Ericsson's business you may encounter a variety of legal issues. It is the responsibility of each employee to seek appropriate advice on relevant legal requirements and other legal issues.

**International business dealings** – Specific laws and regulations apply to our participating in international business. Employees involved in foreign business transactions must be familiar with, and adhere to, all applicable foreign and domestic laws and regulations. Ericsson employees involved in international business matters must, for example, be aware of applicable export and import regulations, anti-boycott provisions, trade embargos and sanctions in force.

**Anti-trust** – Ericsson is dedicated to promoting fair competition. Fair competition is the basis for business development and innovation. All Ericsson employees shall compete in the open market as vigorously and constructively as possible, while consistently complying with the law in each of the countries in which Ericsson operates. Anti-trust law matters must be handled in concert with Group Function Legal Affairs, which function is responsible for the management and co-ordination of such matters when initiated or otherwise dealt with by court or other authority.

**Accounting and financial reporting** – Ericsson is required to follow strict accounting principles and standards, to report financial information accurately and completely, and to have appropriate internal controls and processes to ensure that accounting and financial reporting complies with law, regulations and listing requirements. You must do all you can to support the company's efforts in this area.



**Insider Trading** – All Ericsson employees shall act in strict compliance with all applicable insider trading and stock tipping rules and regulations.

You are not permitted to, directly or indirectly, buy or sell stock or securities in any publicly traded company, including Ericsson, while in possession of inside information regarding such company or to disclose inside information to anyone within or outside Ericsson including family, friends, co-workers or others for whom such information is not necessary for the performance of his/her duties for Ericsson.

"Inside Information" is non-public information, which is likely to have a significant effect on the trading price of the concerned stock or securities.

# COMMUNICATION AND FINANCIAL INFORMATION

It is important that you have a good understanding of your unit's operational and financial performance to increase your involvement in improving operations. This must be balanced with Ericsson's financial disclosure policy and legal requirements, specified in frameworks such as the insider rules, listing and reporting rules of stock exchanges and supervisory authorities for securities. Ericsson's obligation to comply with these requirements defines the way to manage material news that might impact the stock price. Comments about financial performance and prospects to external parties shall only be made by official spokespersons as authorized in the spokespersons directive and in conjunction with activities supported by Group Function Communications.



The authorized spokespersons are assigned to represent the company externally. You shall not, on behalf of the company, comment about Ericsson or its affairs to the media, investors, financial or industry analysts, outside consultants, or on Internet chat pages or in other public forums without approval from Group Function Communications.

Employees involved in financial reporting shall always provide full, fair, accurate, timely and understandable disclosure in reports and documents that Ericsson files with or submits to, government agencies, authorities and in other public communications.

# DEALING WITH CONFLICTS OF INTEREST

At Ericsson, we make business decisions based on the best interests of the Group rather than personal considerations or relationships. A conflict of interest arises when anything interferes with or influences the exercise of an employee's independent judgment in the best interests of Ericsson. We must avoid situations in which our personal interest may conflict with, or even appear to conflict with, the interests of the Group.

The following are examples of situations to be particularly aware of:

**Business opportunities** – You may not take business opportunities for yourself that are discovered in your duties for Ericsson if this could be contrary to the interests of Ericsson. Nor may you otherwise use Ericsson property or information or your position at Ericsson for personal gain.

**Other Employment** – Any employment outside Ericsson, with or without compensation, must not harm job performance at Ericsson. You may not engage in outside business interests that divert time and attention away from Ericsson responsibilities or require work during Ericsson time. Avoid any potential conflict of interest by not accepting employment from any telecommunications organization or suppliers, contractors, agents, customers or competitors to Ericsson.

**Board memberships and other outside affiliations** – Service on a board of directors or similar body of a for-profit enterprise or government agency is not permitted if creating a conflict of interest. All such service must be approved in advance by your manager. Serving on boards of not-for-profit or community organizations does not require prior approval unless there is a potential conflict of interest with Ericsson.

**Political activities** – Ericsson will not make contributions or payment or otherwise give any

endorsement, directly or indirectly, to political parties or committees or to individual politicians. You may not make any political contribution on behalf of Ericsson or through the use of corporate funds or resources.

**Gifts, benefits, reimbursements and entertainment** – An Ericsson employee may not offer or accept gifts, benefits, reimbursements or entertainment to or from a third party that would constitute a violation of laws or that could affect, or appear to affect, the professional judgment in the performance of the respective work or duties for Ericsson or a third party.

**Bribes, kickbacks, etc.** – No one may, directly or indirectly, demand or accept, offer or give any kind of bribe, kickback or any other unlawful or unethical benefit to employees or other representatives or associates of Ericsson or any third party. Any such offer or proposed arrangement must be reported immediately to Group Function Legal Affairs.

**Disclosure of conflicts of interest** – Ericsson requires that employees disclose situations or transactions that reasonably would be expected to give rise to a conflict of interest. If you suspect that you are involved in a transaction or any other arrangement that presents a conflict of interest, or something that others could reasonably perceive as a conflict of interest, you must report it to your manager or to the Group Function Legal Affairs. Your manager and the Group Function Legal Affairs will work with you to determine whether there is a conflict of interest and, if so, how best to address it. Although transactions or arrangements presenting conflicts of interest are not automatically prohibited, certain of such transactions or arrangements may be undesirable, and for certain persons, such as members of senior management, such transactions or arrangements may require the approval by the Audit Committee of the Board of Directors or a shareholders' meeting.

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# PROTECTION AND PROPER USE OF COMPANY ASSETS



Ericsson has a wide variety of assets, including physical assets, proprietary information and intellectual property. You are responsible for protecting Ericsson property entrusted to you and for helping to protect Ericsson's assets in general. To do this you must be aware of and understand Ericsson's security directives. You must be alert and report any loss or risk of loss of Ericsson properties to the security department or your manager as soon as they come to your attention.

Below, you find certain instructions for internal and external handling of information, communication systems and intellectual property.

**Intellectual property** – Intellectual property includes a variety of properties for example computer programs, technical documentation and inventions. Certain intellectual property is, or can be made, subject to special protection through copyright, patent right, trademark right, etc.

Intellectual property is an asset of utmost value to Ericsson and must be treated with appropriate care. You must follow and, in case of doubt, seek instructions on how you shall act to protect this valuable asset.

Intellectual property created by you under your employment is transferred and assigned to Ericsson by law and/or your employment contract or other agreement, with the exceptions stated in international conventions, laws and your agreement with Ericsson.

**Use of Ericsson's communication systems –**

Ericsson's communication systems, including connections to the Internet, shall be used for conducting Ericsson business or for other incidental purposes authorized by your management or applicable Group directive as well as applicable instructions. Always make sure you follow instructions regarding handling of passwords and PIN codes assigned to you.

Unacceptable use of Ericsson's communication systems includes processing, sending, retrieving, accessing, displaying, storing, printing or otherwise disseminating material and information that is fraudulent, harassing, threatening, illegal, racial, sexually oriented, obscene, intimidating, defamatory or otherwise inconsistent with a professional conduct.

**When you leave Ericsson** – You must return all Ericsson assets, including documentation and any media containing Ericsson proprietary information. You remain bound by the restrictions for use and disclosure of Ericsson proprietary information.

# PROTECTING INFORMATION



## **Protecting Ericsson's confidential and proprietary information and that of our customers and vendors**

Ericsson employees have access to information owned by Ericsson and sometimes also to information owned by third parties. Such information may be financial information, business plans, technical information, information about employees and customers and other types of information. Non-authorized access, use and disclosure may damage Ericsson or the third party and, therefore, you are not allowed to access, use or disclose the information unless you have been properly authorized to do so. Non-authorized access, use and disclosure may also be a violation of laws including privacy regulations. Whenever in doubt of your authorization, you must seek instructions.

## **Here are some rules that will help protect Ericsson information:**

1. Do not disclose to others information not made public by Ericsson except for
  - (i) persons working for Ericsson having access in their work to the kind of information at hand and who have justified reason to have the information,
  - (ii) anyone else authorized by Ericsson as receiver of such information or
  - (iii) persons to whom you, according to your work duties, shall give such information.
2. Do not directly or indirectly access, duplicate, reproduce or make use of proprietary information other than in the course of your duties and work for Ericsson.
3. Upon learning of any wrongful use or treatment of confidential information, promptly notify your manager and cooperate in full with Ericsson to protect such information.
4. Do not store Ericsson information on private computers or other media not provided by Ericsson.
5. If you need to bring information outside Ericsson premises for fulfilling your work tasks, you must return the information when the tasks outside of Ericsson premises are fulfilled. You may not store information in your home or elsewhere.

# PROTECTING THE ENVIRONMENT

Environment is an area of importance to us and our stakeholders and Ericsson has for many years been actively working to minimize its environmental footprint. One of the Group's main environmental goals is to reduce the energy consumption of its products and to offer our customers the most energy efficient products on the market.

The environmental management system is based on ISO 14001 and is integrated in the Ericsson Group Management System. Ericsson's overall environmental performance is achieved by implementing the Group Sustainability Policy, which commits Ericsson to:

- Continuously reduce the environmental impact of our own operations
- Increase the knowledge and awareness about sustainability among employees
- Use Design for Environment (DfE) strategies to achieve continuous environmental improvements regarding mass and energy flows related to Ericsson's product portfolio
- Engage in selected activities that, in addition to promoting Ericsson's business, have positive socio-economic impacts and promote the vision of communication for all
- Use Life-Cycle Assessment (LCA) methodology as a means for determining significant aspects and as a basis for communicating environmental performance of our operations, products, services and solutions
- Engage our suppliers to ensure adequate sustainability standards in our supply chain
- Actively engage with our stakeholders about our sustainability performance



- Meet or exceed applicable legal requirements in the socio-economic and environmental areas
- Provide product take-back services to our customers as part of our producer responsibility, to assist them in the end-of-life management of products and solutions

It is your responsibility to treat environmental issues in a professional way but also to help Ericsson develop and implement the inherent business opportunities that our energy-lean industry sector can offer to help create a more sustainable society.

# OUR OBLIGATIONS AS RESPONSIBLE CORPORATE CITIZENS

We strive to be responsible citizens in the communities where we do business and we believe that telecommunication contributes to economic prosperity and social equity.

We actively work to reduce our environmental impacts and to maximize socio-economic benefits to society. This requires us to be sensitive to social and environmental concerns and to provide stakeholders with appropriate and accurate responses to inquiries.

As a global leader in the telecom industry, Ericsson believes that the products and services it offers have the potential to offer tremendous benefits to society. At the same time, it is important to behave in a socially and ethically responsible way. We care about the people who take part in the production and support of our products and services worldwide. We strive to maximize energy efficiency and to minimize environmental impacts of our products and solutions in the societies in which we operate.

It is important that the Ericsson brand is always associated with respect for human rights, fair and safe working conditions and environmentally sound business practice.

Ericsson supports the United Nations' Global Compact<sup>6</sup> initiative, covering the areas of human rights, labor standards, environmental management and anti-corruption. We recognize the importance of the UN Guiding Principles on Business and Human Rights<sup>7</sup>.

<sup>6</sup><http://www.unglobalcompact.org>

<sup>7</sup><http://www.ohchr.org/documents/issues/business/A.HRC.17.31.pdf>



Request for Proposal No. 2015-LNPA-RFP-1.  
RFP\_Section 12.1\_Ericsson Code of Business Ethics.pdf  
**ION**

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**Telcordia00128**

Group Policy 011 03-2927  
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## Section 12 – Miscellaneous Requirements

### RFP\_Section 12.1\_Vendor Code of Conduct

The Ericsson Code of Business Ethics is a document that all employees of Ericsson and all of its subsidiaries including Telcordia must acknowledge and follow in their daily work.

The Ericsson Code of Business Ethics contains rules regarding individual and peer responsibilities, as well as responsibilities to our employees, customers, suppliers, shareholders and other stakeholders and includes:

- ◆ Compliance with laws, rules and regulations (including insider trading laws)
- ◆ Protecting confidential and other proprietary information and that of our customers and vendors
- ◆ Protection and proper use of company assets
- ◆ Respecting human rights throughout our business operations
- ◆ Dealing with conflicts of interest
- ◆ Promoting full, fair, accurate, timely and understandable disclosure in financial reports and other public communications
- ◆ Protecting the environment
- ◆ Supporting the reporting of any unlawful or unethical behavior

Upon Telcordia being selected as an LNPA vendor, whether national or regional, Telcordia will develop a special supplement to the Ericsson Code of Business Ethics covering Telcordia in its role as the LNPA vendor.

### PROPOSED LNPA CODE OF CONDUCT Supplement

1. The LNPA will never, directly or indirectly, show any preference or provide any special consideration to any Telecommunications Carrier with respect to LNPA services.
2. The LNPA shall not share LNP user data or proprietary information of any Telecommunications Carriers served by the LNPA (except as necessary for the performance of LNPA duties).
3. The LNPA shall not share confidential information about its LNPA business services or operations with employees of any Telecommunications Carrier (except as necessary for the performance of LNPA duties).
4. No employee, contractor, officer, or director of the LNPA directly involved in LNPA services will hold any interest, financial or otherwise, that would cause the LNPA to no longer be neutral, without obtaining prior approval from the FCC or recusing himself or herself from all activities of the LNPA.
5. No person serving in the management of the LNPA, as a member of the Board of Directors, as a Managing Member of an LLC, or as a General Partner of a partnership of the LNPA and directly involved in LNPA services may simultaneously serve in the management, as a member of the Board of Directors, as a Managing Member of an LLC, or as a General Partner of a partnership of

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any Telecommunications Carrier, without obtaining prior approval from the FCC or recusing himself or herself from all activities of the LNPA.

6. The LNPA shall retain all decision making authority regarding LNPA services; any sub-contractor shall provide services to the specific direction of the LNPA and shall not have discretionary decision making authority regarding LNPA services.

Attached in this section is the Ericsson Code of Business Ethics that is currently in place and followed by the Telcordia employees.



ION

# TELCORDIA IS NOW PART OF ERICSSON



**Insert Name (optional)**

Title (optional)

[www.telcordia.com](http://www.telcordia.com)

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[email@telcordia.com](mailto:email@telcordia.com)

**<Product Name> Customer Support  
Customer Satisfaction Questionnaire**

#Date

Dear #Ms./Mr. :

Telcordia would like your views on the quality and value of your current <Customer and Solution Care Center (CSCC) and Installation & Deployment (I&D) Support> for <Product Name>.

The purpose of this evaluation is twofold: (1) provide a vehicle to determine if the Support group has met your expectations, and (2) identify areas where Telcordia can improve on the value delivered.

We ask that you please review the attached questions. Please complete the form and return it to us via mail or e-mail by <today + 14>. If you would like, we can arrange a conference call to discuss your findings.

Please feel free to contact me with any questions and/or concerns you may have.

Sincerely,

#Name  
#Title  
#Organization Name

[Redacted]

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the elements of success

Request for Proposal No. 2015-LNPA-RFP-1.  
RFP\_Section 12.2\_2012 Customer Support Survey Results.pdf

# 2012 Customer Support Survey Results

## Customer and Solution Care Center (CSCC)

**Prepared for:**

LNPA RFP 12.1 User Satisfaction Survey



## Section 12 – Miscellaneous Requirements

### RFP\_Section 12.2\_User Satisfaction Survey

Telcordia agrees to conduct this annual User satisfaction survey in accordance with the requirements provided in the LNPA Section 12.2.

Telcordia has continually obtained feedback from its customers at multiple levels that includes surveying service desk users and managers, periodic user group meetings and also through periodic manager and executive level meetings. We have found the more personal approach of meetings with customers enables us to receive more direct and pointed feedback on how we can continually improve our products and their support. We continue to support both approaches and we will support this requirement.

In response to this requirement, attached is the Telcordia Customer Support – Customer Satisfaction Questionnaire. It surveys the Customer and Solution Care Center (CSCC) and Installation and Deployment (I&D) Support of the Telcordia products. This survey covers the broad range of the Telcordia products, over 60 products in total. Also attached is a summary of the results over a five-year period. The responses were based on the following ratings:

[REDACTED]

[REDACTED]

[REDACTED]

Across the broad range of its products Telcordia has consistently Met and Exceeded its customer expectations.

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## Section 12 – Miscellaneous Requirements

### RFP\_Section 12.3\_Transition and Implementation Plan

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## 1 Introduction

*The Telcordia Team's transition approach assures continuity of service, reduces risk, and minimizes the cost of transition to a new Local Number Portability Administrator (LNPA) by applying the tools and processes developed on similar transitions around the world, executed by personnel with directly applicable experience from those projects.*

The Telcordia Team brings the best business and technical resources to the transition, implementation, and operation of the LNPA solution. In turn, the solution created by the Telcordia Team offers a strong option to North American Portability Management (NAPM) as it considers additional vendors to support its critical services.

The extensive transition experience of Telcordia and its data center partner SunGard reduces risk and ensures continuity of Number Portability Administration Center (NPAC)/Service Management System (SMS) functions throughout the transition process. Key elements of our transition plan include:

- [REDACTED]

The Telcordia Team is a leader in the Local Number Portability (LNP) industry and brings all of the skills needed to create, maintain, and administer all systems and services as the LNPA.

- ◆ As a leader in both knowledge and experience in LNP client systems, Telcordia is fluent in the unique terminology and technology of the North American NPAC implementation with a strong understanding of the requirements and performance expectations. Telcordia has been a major player in the LNP industry since its inception in 1996. Telcordia is well respected and known for our thought-leadership in the LNPA WG meetings. With our many local production client systems connected to the existing NPAC implementations, we understand that these client systems must have the same uptime, availability, and performance characteristics as the NPAC. The same business rules, timers, and API message sets implemented in the NPAC are essentially implemented in these local systems as well.

- ◆ Telcordia's data center and service partner, SunGard is one of the world's leading software and technology services companies. They provide software and technology services to financial services, education and public sector organizations. They also provide disaster recovery services, managed services, information availability consulting services and business continuity management software. SunGard serves approximately 25,000 customers in more than 70 countries. SunGard provides proven strength and stability in Data Center facility design and operations. SunGard is laser focused on IT Service Management with committed focus and continual investment in Data Center facilities, tools and people. With an experienced focused management team and a deep understanding of design and capacity planning issues, SunGard can identify potential infrastructure implementation gaps. Their experience prevents potential issues such as power and cooling issues that could jeopardize continuous application operations. SunGard has continually demonstrated its success to diverse customers across multiple industries by providing 24/7/365 Data Center monitoring and management, established service desk procedures, disaster recovery, security management, problem escalation, and data backup and recovery procedures.

The industry can have confidence that the transition plan and solution provided by the Telcordia team provides a low risk hosted application from two vendors that are qualified to execute this implementation with no disruption to current operations. Further, we understand the inherent risk and potential impact of transitioning from one NPAC administrator to an NPAC clearinghouse administered by a new vendor. To offset any potential disruption and minimize any cost of transition, we have created a plan, detailed in this section that describes the potential risks and provides a mitigation plan.

[Redacted]

[Redacted]

[Redacted]

The Telcordia transition and implementation planning begins prior to contract award, and continues after award with a phased ramp-up of people, tools and processes, to ensure an on-time Go-Live with no disruption of current operations.

The following sections summarize the approach and basic elements of the transition plan detailed in the remainder of this document. These include the approaches for:

- ◆ Transition and Implementation
- ◆ Staff Management
- ◆ Risk Management
- ◆ Change Management
- ◆ Quality Assurance

The Telcordia and SunGard teams have identified these elements from previous successful application implementations and transitions. The remainder of the document provides a summary of these elements as well as two appendices on the LNPA Solution Staffing Plan and Telcordia Project Management to provide additional context for the Transition and Implementation Plan.

## 1.1 Transition and Implementation Approach

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## 1.2 Staff Management Approach

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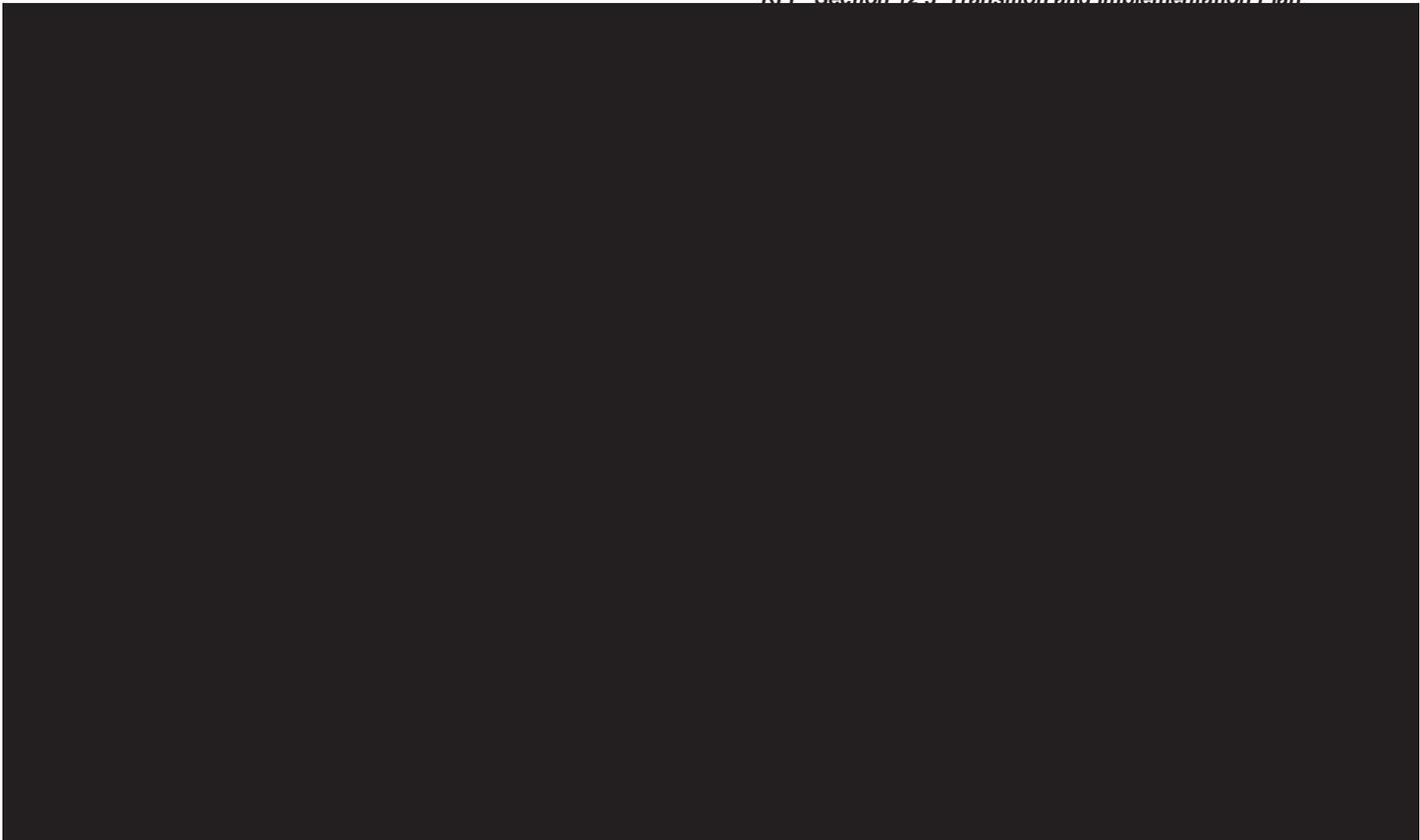
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## 1.3 Project Risk Management Approach

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#### 1.4 Change Control Approach

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## 1.5 Quality Assurance Approach

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## 2 Transition and Implementation Approach

### 2.1 Implementation Overview

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## 2.2 Transition Process

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## 2.3 Transition Phases



### 2.3.1 Customer Onboarding

#### 2.3.1.1 Customer Agreements and Documentation



- [Redacted]
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### 2.3.1.2 Documentation

[Redacted]

### 2.3.1.3 Customer Training

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### 2.3.2 Data Center Preparation

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### 2.3.3 Telcordia System Configuration

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### 2.3.5 Go-Live Preparation

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#### 2.3.5.1 Production NPAC SMS Configuration

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*iconectiv Number Portability Administration Center  
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RFP\_Section 12.3\_Transition and Implementation Plan*

### 2.3.5.1.1 NPAC SMS Customer Configuration

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### 2.3.5.1.2 Support System Configuration

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### 2.3.5.2 Transition Testing

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### 2.3.5.3 Final Transition Test and Go-Live

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### 2.3.6 Production Operation

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## 2.4 NPAC Data Transition Process

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### 2.4.1 Data Transition Process

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#### 2.4.1.1 Data Download Imports

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### 2.4.1.2 Pending Subscription Version Handling

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### 2.4.2 Transition Data Validation

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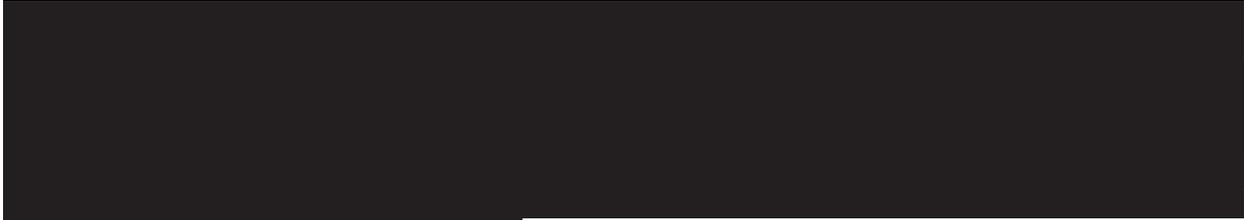
[REDACTED]

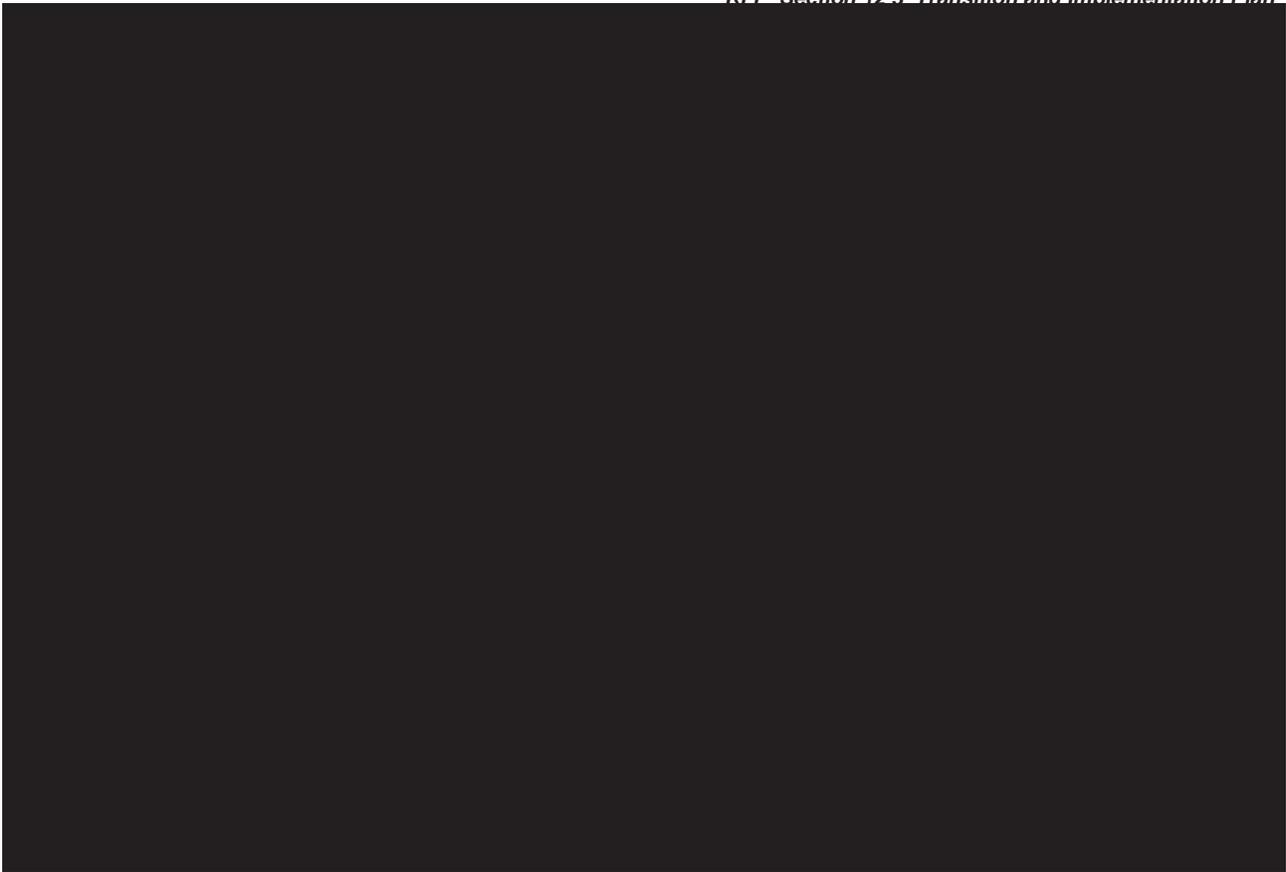
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## 2.6 Detailed Transition Schedule





## 2.7 Contingency Planning and Testing

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### 3 Staff Management Approach

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### 3.1 Transition Team Staffing

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### 3.2 Team Size

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## 4 Project Risk Management Approach

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### 4.1 Risk Management Approach

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## 4.2 Risk Identification

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## 4.3 Risk Estimation

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#### 4.4 Risk Evaluation

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#### 4.5 Risk Response Planning

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## 4.6 Risk Monitoring

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## 4.7 Risk Control

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## 5 Change Control Approach

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### 5.1 Industry Software Change Management

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### 5.2 Data Center Change Management

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### 5.3 Change Control Procedures



Figure 5 – Change Control Process Flow





ION

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## 6 Quality Assurance Approach

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### 6.1 Pre-delivery Solution Testing

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### 6.2 Early Customer Testing

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### 6.3 Certification/ITP Testing

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### 6.4 Application Turn-up Testing

[Redacted]

### 6.5 Service Provider to Service Provider (Group) Testing

[Redacted]



## 6.6 Performance Testing



## 6.7 Transition Testing



## 6.8 Failover and Disaster Recovery Testing



## 6.9 Review and Testing of Methods and Procedures



## 7 Summary

The Telcordia transition plan brings together the right people, processes and tools to allow for a low risk, cost effective transition to the Telcordia LNPA Solution. The Telcordia transition team under the guidance of its Executive Program Manager will work diligently with the industry to provide a production LNPA solution that meets industry expectations in all areas including functionality, availability, and performance.

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## 8 Appendices

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## Appendix A – LNPA Solution Staffing Plan

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## 8.1 NPAC Executive Team

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## 8.2 Delivery Operations

[Redacted]

### 8.2.1 Service Operations

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### 8.2.2 Service Delivery

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### 8.3 Customer Service

[Redacted]

#### 8.3.1 Program Management Office (PMO)

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#### 8.3.2 Customer Service Desk

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##### 8.3.2.1 Help Desk

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### 8.3.2.2 NPAC SMS Administration

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### 8.3.2.3 Account Management

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### 8.3.3 Industry Relations

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## 8.4 Service Management

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### 8.4.1 Quality Control

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### 8.4.2 Neutrality Assurance

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### 8.4.3 Legal/Regulatory

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### 8.4.4 User Agreement Management and User Support

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### 8.4.5 Billing

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## Appendix B – Telcordia Project Management

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### 8.5 Project Management Plan

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## 8.6 Project Communications



## 8.7 Meeting Planning and Management



## 8.8 Action Item Tracking System

[Redacted]

## 8.9 Documentation Management

[Redacted]

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## 8.10 Program Kickoff Meeting

[Redacted]

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## 8.11 Weekly Status Reports and Briefings

[Redacted]

## 8.12 Monthly Status Report and Meeting

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## 8.13 Technical Status Meetings

[Redacted content]

## 8.14 Project Management Deliverables

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## Section 14 – Submitting Bids

### RFP\_Section 14.1\_Bid Process Overview – Regional Responses

#### *Introduction*

The US NPAC was defined to support porting in 7 different regions in the US. The current porting requirements in all the standards documents support porting within each region. As originally envisioned in the FCC Order in 1996 there would be multiple regional administrators to enhance the competitiveness of the NPAC/SMS solution for the telecommunication industry. To date the NPAC has been implemented and supported by one LNPA but all the standards and the manner in which porting has been operating since 1997 have been on a regional basis. Introducing multiple LNPAs is technically supportable and will require no changes at the NPAC/SMS except to support the efficiency in the way multiple LNPAs going forward can operationally support the US telecommunication service providers. In addition, given that the interfaces to NPAC are standardized and well defined via the industry number portability specifications, the service provider's local billing or operation support systems would not be impacted by the introduction of multiple LNPAs. These local systems will continue to interface with the service provider's SOA and LSMS in the same manner as they do today.

The following responses address the questions asked in section 14.1 in the LNPA RFP Survey covering how multiple LNPAs can operate to continue to deliver NPAC/SMS number portability with the required services, support and performance.

- 1. What would be the additional complexities, costs, and support necessary for national Service Providers, or Service Providers serving territory in two or more Regions served by different LNPAs, to connect their SOAs and LSMSs to multiple LNPA NPAC platforms and maintain those multiple connections, and how would those additional costs be determined, allocated, or absorbed?**

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Telcordia Technologies, Inc. dba iconectiv.

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[REDACTED]	[REDACTED]	[REDACTED]

2. How would national Service Providers, or Service Providers serving territory in two or more Regions served by different LNPAs connect their test bed platforms to multiple NPAC LNPA test beds in different Regions and how would additional costs be determined, allocated, or absorbed?

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**3. How would NPAC releases and carrier deployment of new features be implemented over NPAC solutions of different LNPAs in different Regions, and how would additional costs be determined, allocated, or absorbed?**

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**4. What would be the additional complexities, costs, and support necessary to conduct annual disaster recovery and failover testing for each additional LNPA in separate Regions, and how would additional costs be determined, allocated, or absorbed?**

[Redacted]

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5. What would be the additional complexities, costs, and support necessary for national Service Providers, or Service Providers serving territory in two or more Regions served by different LNPAs, to obtain reports and data from NPAC solutions of different LNPAs in different Regions, and how would additional costs be determined, allocated, or absorbed?

[Redacted]

[Redacted]

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- [Redacted]

6. How would the following matters be addressed and what would be the additional complexities and how would additional costs be determined, allocated, or absorbed:

*6.a. Coordination of tunable parameter changes among multiple NPAC LNPAs*

[Redacted]

[Redacted]

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**6.b. Coordination of SPID migration limitations and process**

[Redacted]

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**6.c. Coordination of NPAC software release development and implementations among different LNPAs that could have different development cycle**

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**6.d. Resolution of differences among LNPA software implementations, some of which could be service-affecting**

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**6.e. Consolidation of data and information from multiple LNPAs into one LNPA WG website**

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**6.f. Changes to Service Provider local systems**

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**6.g. Resolution of disputes over software release development and implementation differences**

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**6.h. Neutral Change Management Administration**

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**6.j. Processing, verifying, forecasting, and paying bills to multiple LNPAs**

[REDACTED]

**6.k. Access, coordination, and management of Enhanced Law Enforcement Platform and Intermodal TN ID Service by multiple LNPAs**

[REDACTED]

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**6.I. Negotiation, execution, and reconciliation of differences in Master Agreements with multiple LNPAs?**

[Redacted]

**14.1 Section Summary:**

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**RFP\_Section 14.1**  
**Multi-Vendor NPAC-TNS**

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CONFIDENTIAL

Telcordia00218 – Telcordia00234

**RFP\_Section 14.2**  
**Pricing Summary**

**ENTIRE DOCUMENT IS  
HIGHLY CONFIDENTIAL**

Telcordia00235 – Telcordia00236

## Section 15 – Optional Attachments

### Section 15.1 – Supplemental Documentation

#### Purpose

This document is an overview of Telcordia NPAC SMS Solution and Services. We are providing this optional submission as a tool for the evaluator to have a single document that relates the disparate questions and optional attachments of the surveys to the Evaluation Criteria and Basis for Award for the RFP as provided in 14.1.1. This optional document is organized by those criteria. This document ties together the different areas of the survey related to the Evaluation Criteria, it will add detail and examples in the cases where a question may not have had an optional attachment or such detail extended beyond the scope of the question, and in some cases provides a reference to Optional Attachments for other sections where related detail may also be found.

Evaluation Criteria	15.1 Optional Response Paragraph
Technical Criteria: Factor 1, Operational Performance	1.2
Technical Criteria: Factor 2, Reliability and Functionality	1.3
Technical Criteria: Factor 3, Security	1.4
Management Criteria: Factor 1, Customer Service Summary	2.1
Management Criteria: Factor 2, Vendor Experience and Performance Summary	2.2
Management Criteria: Factor 3, Financial Stability	2.3

In addition, to provide an integrated view of the proposal noted in other sections, supplemental topics are also included to expand on selected technical, operational and management elements that are required but to which other elements of the survey did not directly lend themselves. These include, but are not limited to, summaries of our submissions regarding Transition Plan, Business Continuity Plan, Enhancements and Future Considerations.

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# 1 Executive Summary

*The Telcordia team will bring a low risk, fully compliant, technically innovative solution to the NPAC with a clearly defined transition plan designed with no impact on current operations while ensuring an on-time delivery with significant cost savings.*

Backed by the strength of Ericsson, the Telcordia NPAC SMS Solution and Services brings together two of the world’s leading telecommunications firms with a combined history of delivering excellence in critical telecommunications systems. Telcordia is the world’s leading provider of number portability **systems** with more number portability system deployments in more countries than any vendor in the world, which is described in detail in the Vendor Qualification Survey (VQS) Section 3.1.1 Optional Attachment and in our Past Performance (VQS Section 3.3.4). Service Providers serving more than 2 Billion subscribers worldwide rely on Telcordia systems for number portability. Telcordia number portability systems process multiple transactions for 90% of the wireless ports in the U.S. and those transactions are usually in a national database rather than smaller regional databases, requiring performance beyond what is provided for by the NPAC today or even the new requirements for this procurement. Telcordia has conservatively processed more than 2 Billion number portability transactions in the U.S. in the last 8 years. Telcordia is also a leading provider of network database systems and managed services that are in the call path of network operators in the U.S. and around the world. Telcordia network database systems process millions of transactions a day with no down time, even during maintenance and upgrades, exponentially exceeding both the old or the new NPAC performance and reliability requirements. Telcordia will bring that experience to the delivery of the NPAC to help assure a seamless transition and excellence in delivery, operations and management to the operations of this critical service.

Telcordia’s data center and service partner, SunGard is one of the premier data center and network services provider in the United States providing exceptionally high-availability data centers to not only the telecommunications industry but also to the financial, health, and government sectors. In addition to delivering certified Tier 3 and Tier 4+ data center services, SunGard also provides help desk and network provisioning services that consistently meet and exceed customer expectations. It hosts data center applications that manage millions of daily transactions for the financial industry and thousands of logins and help desk tickets with excellent customer satisfaction.

To deliver the robust functionality and highest reliability that is critical to the NPAC work, Telcordia’s strategic, customer-focused approach is based on:

- ◆ Our 20 years of extensive development, deployment and excellence in customer satisfaction in numbering and number portability related work.
- ◆ Providing Number Portability systems and services in more countries than any other vendor in the world, working with Service Providers that serve more than 1.5 Billion subscribers.
- ◆ Experience as the leading U.S. number portability systems provider with deployment in every US region, with 90%\_ of wireless number porting transactions flowing through Telcordia systems. For each wireless port, Telcordia systems perform multiple transactions.
- ◆ Experience as the leading provider of network database systems and services with network grade reliability and performance, experience that will be applied to our delivery of NPAC
- ◆ Experience as the thought leader and leading provider of systems for IP related resolution and security including ENUM, Query Resolver, Device ID and Message Hub, all of which are critical aspects of a transition to IP based networks and to provide for assurance of a smooth transition to IP based communication that will continue to use telephone numbers as unique, internationally agreed and portable ID mechanisms.

Our solution provides an NPAC approach that brings

- ◆ **Low Risk:** We will develop a detailed transition plan, with a fully populated risk register identifying clear mitigation approaches to minimize those risks. In addition, we will rely on transparent integration between Telcordia and SunGard to bring their experience, especially in U.S. number portability solutions and data centers, and technologies to mitigate key operation risks.
- ◆ **Operational excellence:** We have demonstrated success on wide array of successful Telcordia projects, leveraging the innovations and economies of scale based on experience gain delivering the largest number portability and data center/services experience in the U.S. and around the world. Telcordia's experience includes help define Number Portability requirements in the U.S.
- ◆ **Cost savings:** An efficient, effective approach that identifies clear savings for subscribers and consumers, backed up by the financial strength and stability of Telcordia backed by Ericsson.
- ◆ **Exemplary Customer Service:** Our proven customer service is based on successful, large-scale, complex LNPA and data center projects around the world.
- ◆ **Full compliance:** Our approach meets, or exceeds all RFP requirements, as demonstrated through examples and in-depth analysis.

Our successful ability to provide the diversified yet seamless NPAC service is proven: we have executed this work with exceptional customer service to earn a wealth of customer references, detailed in Section 3.3.1 and 3.3.4 of the VQS, for implementing, transitioning and operating number portability solutions and more complex in-network implementations.

For the NPAC, we are leveraging our proven approach to development - the Telcordia Quality Method of Operations (QMO) - used to successfully deliver both US and international Number Portability and network database implementations, as described in Section 3.3.1 and 3.3.4 of the VQS. Telcordia has an industry-recognized software development methodology, which employs a disciplined approach to software development and process improvement. Distinct phases comprise this methodology each with specific entrance and exit criteria. An independent internal organization conducts periodic compliance reviews of product organizations and processes.

We will surround that approach with the adoption of and adherence to the IT Infrastructure Library (ITIL) Framework of best practices for Service Design, Service Delivery/Transition, Service Operations, Management and Continuous Improvement, which will ensure the utmost reliability and customer-focused functionality of our NPAC solution and services. For details about the QMO and ITIL see Appendix A.

Further, as a leading provider of Operations and Maintenance (O&M) services in support of the Numbering Portability ecosystem, Telcordia brings innovations and improvements while reducing costs of the NPAC service delivery during the life of the contract.

*Continual Service Improvement* is the ITIL best practice concerned with maintaining value for customers through the continual evaluation and improvement of the quality of services. Quality measurements and metrics (including implementation of benchmarking and the GEP and Customer Surveys) will be included in these processes. In addition the Telcordia QMO is a key portion of implementing these practices.

## 1.1 Key Components of the Telcordia Team Solution to Address All Evaluation Criteria in RFP Section 14.1

The remainder of this document describes how the components of Telcordia's proposal in response to the RFP meet or exceed the RFP Evaluation Criteria. It is organized by the Section 14.1 Criteria and summarized below.

### 1.1.1 Section 2. Technical Criteria

#### 1.1.1.1 2.1 Introduction

Section 2.1 summarizes the Telcordia NPAC SMS solution.

Section 2.1.1 summarizes the Architecture and Design and Section 2.1.1 summarizes Key Architecture and Design Considerations

It notes that Telcordia is delivering a robust, fully compliant Solution to support the Industry's number portability needs as defined in this RFP. [REDACTED]

#### 1.1.1.2 2.2 Factor 1, Operational Performance

Section 2.2 summarizes and amplifies the Telcordia NPAC SMS Solution as described in the TRD Section 12.1 Summary and other RFP response attachments. It demonstrates our understanding of all operational performance aspects of the NPAC ecosystem for the full term of the Master Agreements in each Region. Factors of operational performance include but are not limited to the following:

- ◆ Section 2.2.1: Demonstrates the Volume/Throughput and availability
  - Section 2.2.1.1: Telcordia NPAC Performance Test and Measurements summarizes the tested capabilities of the Telcordia NPAC initial software and hardware architecture and the processes used as a base for the Solution Architecture
- ◆ Section 2.2.2 Service Level: This section describes the commitment to adhere to the SLRs and provides a reference guide for the evaluator.
- ◆ Section 2.2.3 Change Management: Summarizes Telcordia's change management policy and provides a reference to more detail and information on Technology Upgrades.
- ◆ 2.2.3 Audit Administration: This Section discusses Telcordia's understanding an ability to meet the operational performance aspects of the following audits:
  - Gateway Evaluation Process (GEP) Audit
  - Neutrality Audit
  - Business Continuity Plan Exercise
  - LNPA NPAC SMS Data Center Operations Audit
  - User Charges Audit
  - Benchmarking
  - Other LNPA Services Audits

- ◆ Section 2.2.5 Reporting: Notes that The Telcordia Solution will support all of the currently defined and expected reports, and that the Solution is extensible to support future reports as required. Reports may be accessible from a single secure website via a single user login process.
- ◆ Section 2.2.6 Other Operational Performance Aspects: This section describes Telcordia’s understanding an ability to meet the operational performance aspects of a number of other operational performance aspects of the NPAC ecosystem:
  - NPAC Web Content Support
  - Interactive Voice Response (IVR) Service
  - Enhanced Platform for Law Enforcement and Public Safety
  - Intermodal Ported Number Identification Service
  - NPAC Knowledge Base and Support Portal Web Page
  - Customer Training
  - LNPA Process Flows
  - User Methods and Procedures

**1.1.1.3 Section 2.3 Factor 2 - Reliability and Functionality**

This section demonstrates Telcordia’s understanding of and competency in the requirements to operate the system, and our ability to provide the service during the term of the Master Agreements in each region. We demonstrate an understanding of and competency in:

- ◆ Section 2.3.1 System Availability: provides insight to Telcordia’s strategy to achieve the system availability required of the NPAC SMS service and our data center availability partner, SunGard’s ability to provide the availability required.
- ◆ Section 2.3.2 Testing Solution: Describes our Quality Assurance process and our Comprehensive Test Environment as well as Additional Test Features and Capabilities.
- ◆ Section 2.3.3 Disaster Recovery and Backup: Summarizes our Business Continuity Plan including both our Disaster Recovery Plans and the architecture and plan for Backup of all data in the Telcordia NPAC SMS. Also included is a summary of the Outage Analysis process including Root Cause Analysis.
- ◆ Section 2.3.4 Telcordia Service Desk: Describes how Telcordia meets the Help Desk Requirements and provides for quality Service Management of the NPAC SMS and related services. It also describes the benefits of the Telcordia solution of 24/7/365 live support at no added charge and Support Portal, NPAC Knowledge Base and chat capabilities.
- ◆ Section 2.35 Telcordia’s Ability to Meet All SLRs and Other System Performance Requirements: Summarizes the compliance with all SLRs and the Telcordia and SunGard Service Level Management systems, processes and procedures.

**1.1.1.4 Section 2.4 Factor 3, Security**

This section describes Telcordia’s security approach to delivering the NPAC SMS Solution.

- ◆ Section 2.4.2 Meeting Data Center and Other Security Requirements: Describes the Telcordia and its data center partners security plans, processes and procedures for securing the NPAC SMS Solution.

- ◆ Section 2.4.3 Meeting FRS and IIS Security Requirements: Addresses the primary interface types that are employed in our NPAC SMS solution along with an overview of how we'll address security as it relates to requirements in TRD sections.

### 1.1.2 Section 3. Management Criteria

- ◆ Section 3.1 Introduction: Notes that the management proposal consists of detailed structures and plans based on decades of experience delivering systems and services to the telecommunications industry and that the section reviews and summarizes those plans and qualifications.

#### 1.1.2.1 Section Factor 1, Customer Service Summary

Notes that the ability to deliver Customer Service is built the following factors:

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  - [Redacted]
- [Redacted]
  - [Redacted]
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### 1.1.2.2 Section Factor 1, Customer Service Summary

- ◆ Section 3.4 LNP Experience Within the Regions: Provides information on Telcordia's customer service experience in the Regions.
- ◆ Section 3.5 LNP Experience in Other Countries: Provides information on Telcordia's customer service experience in other countries.
- ◆ Section 3.6 Other Products and Services Successful Performance of functional / technical skills required on LNP activities: Describes the other products and skills Telcordia and its data center partner SunGard demonstrate excellent satisfaction and performance on related skills and services.
- ◆ Section 3.7 Customer Benefits from Successful Performance and Proven Results: Notes that as demonstrated in our references in Section 3.3.4 and our Past Performance Questionnaires submitted in response to Section 3.3.5 the Telcordia team provides significant value to its clients in implementing systems and services related to number portability and other mission critical systems and services:
- ◆ Sections 3.8 and 3.9 provide information about how the 6 Telcordia references and the 3 SunGard reference projects meet or exceed the past performance evaluation criteria.

### 1.1.2.3 Factor 3, Financial Stability

This section describes Telcordia and its parent company Ericsson's financial position and strength noting that Telcordia is extremely well-positioned to endure negative economic impacts as it is backed by a parent with substantial financial wherewithal as demonstrated by considerable revenues, market capitalization and net cash position, and robust cash generating ability. Furthermore, Ericsson has more than proved its longevity as it has withstood every economic downturn over the past 137 years.

## 2 Technical Criteria

### 2.1 Introduction

The Telcordia NPAC SMS Solution and Services are built on over 17 years of direct experience working with and delivering products and services to the North American LNP Industry. The Solution offering leverages:

- ◆ Our experience as demonstrated in Section 3.3 below
- ◆ The latest state of the art
  - Hardware
  - Database
  - Networking
  - Monitoring
  - Reporting
- ◆ Flexible software application design
- ◆ ITIL-compliant service delivery
- ◆ Reliability of a proven data center partner for:
  - Availability,
  - Security,
  - Network services.

Telcordia is delivering a robust, fully compliant Solution to support the Industry's number portability needs as defined in this RFP.



As documented in the Technical Requirements Document (TRD) Section 12.1 Summary Response, the Telcordia NPAC SMS Solution is fully compliant with the NPAC SMS Functional Requirements Specification (FRS) and conforms to the NPAC SMS Interoperable Interface Specification (IIS), and the solution will also conform to the NANC 372 XML Based Alternate Interface.

Telcordia is committed to meeting or exceeding all of the current requirements. Through its extensible architecture, the solution is also well-positioned to support future requests in a timely and cost-effective manner.

#### 2.1.1 Architecture and Design





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## 2.2 Factor 1, Operational Performance

This Section summarizes and amplifies the Telcordia NPAC SMS Solution as described in the TRD Section 12.1 Summary and other RFP response attachments. It demonstrates our understanding of all operational performance aspects of the NPAC ecosystem for the full term of the Master Agreements in each Region. Factors of operational performance include but are not limited to the following:

- ◆ Volume/Throughput
- ◆ Service Level
- ◆ Change Management
- ◆ Audit Administration
- ◆ Reporting
- ◆ Other Operational Performance Aspects

### 2.2.1 Volume/Throughput/Availability

The following are the FRS requirements and the volume, throughput, and availability SLRs in RFP Section 9 that are expected to be incorporated in the Master Agreements for the regions:

- ◆ The Telcordia Solution will meet the 24X7 requirement for interface availability (FRS R6-26)
- ◆ The Telcordia Solution will meet or exceed the 99.99% interface reliability requirement (LNP RFP SLR 1, superseding FRS R6-27)
- ◆ The Telcordia Solution will meet or exceed 7 transactions/sec/association SOA to NPAC SMS interface transaction rates – sustained (FRS R6-28.1)
- ◆ The Telcordia Solution will meet or exceed the peak rate of 10 transactions/sec for 5 min w/in any 60 minute window SOA to NPAC SMS interface transaction rates – peak (FRS R6-28.2)
- ◆ The Telcordia Solution will meet or exceed the bandwidth requirement of 70 transactions/sec for a region SOA to NPAC SMS interface transaction rates - total bandwidth (FRS RR6-107)
- ◆ The Telcordia Solution will meet or exceed the 7 transactions/sec/association NPAC SMS to Local SMS interface transaction rates – sustained (FRS RR6-108)
- ◆ The Telcordia Solution will meet or exceed the currently required 210 transactions/sec for a region NPAC SMS to Local SMS interface transaction rates - total bandwidth (FRS RR6-109)

The initial Solution has been designed to meet or exceed these operational performance volume/throughput/availability requirements.

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

### 2.2.1.1 Telcordia NPAC Performance Test and Measurements

This section summarizes the tested capabilities of the Telcordia NPAC initial software and hardware architecture and the processes used as a base for the Solution Architecture documented in the TRD Section 12.1 Summary.

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[Redacted line]

### 2.2.1.2 Results

The results of the tests executed are summarized below. [Redacted]

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■ [Redacted]

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**2.2.2 Service Level**

**2.2.2.1 Service-Level Requirements for Measurement and Reporting**

[Redacted]

Telcordia understands and acknowledges that the Service-Level Requirements (SLRs) in Section 9 of the LNP RFP survey supersede all SLRs documented in the FRS or elsewhere and that all the SLRs identified in the LNP RFP are to be used for purposes of all responses to the RFP.

**2.2.2.2 Adherence to ALL SLRs in RFP Sections 9.4 through 9.24**

Telcordia understands the performance aspects of the NPAC ecosystem and the importance of providing a quality service for the Industry. Number Portability has evolved to become an essential part of doing business as a Service Provider in the U.S. Telcordia is committed to providing a cost-effective solution that meets or exceeds the required service levels designated by the Industry.

Telcordia acknowledges adherence to all SLRs shown in the RFP sections 9.4 through 9.24 are incorporated in the proposal and Telcordia’s Solution. The SLRs are addressed in the various documents as shown in the following table:

SLR No.	[Redacted]	Reference Section in
SLR – 1 Service Availability	[Redacted]	Reference TRD Summary Section 5
SLR – 2 Scheduled Service Unavailability	[Redacted]	Reference in industry agreement or master agreement

SLR No.	How our solution address the SLR	Reference Section in
SLR – 3 Partial Service Unavailability	[Redacted]	Reference TRD Summary Section 5.1
SLR – 4 LSMS Broadcast Time	[Redacted]	Reference TRD Summary Section 5.
SLR – 5 SOA to NPAC Interface Rates	[Redacted]	Reference TRD Summary Section 5; Operational Performance Section 2.2.2.1.
SLR – 6 NPAC to LSMS Interface Rates	[Redacted]	Reference TRD Summary Section 5; Operational Performance Section 2.2.2.1.
SLR – 7 Interface Availability	[Redacted]	Reference Reliability and Functionality Section 2.3.6.
SLR – 8 Cutover Time	[Redacted]	Reference TRD Section 5.
SLR – 9 Partial Disaster Restoral	[Redacted]	Reference TRD Section 5.

SLR No.	How our solution address the SLR	Reference Section in
SLR – 10 Full Disaster Restoral	[Redacted]	Reference Section 6. TRD
SLR – 11 Table Administration	[Redacted]	Reference Security Section 2.4.3.5.
SLR – 12 Average Speed of Answer	[Redacted]	Reference Reliability and Functionality Section 2.3.6.
SLR – 13 Abandoned Call Rate	[Redacted]	Reference Reliability and Functionality Section 2.3.6.
SLR – 14 After Hours Call Backs	[Redacted]	Reference Reliability and Functionality Section 2.3.4.1
SLR – 15 Commitments Met	[Redacted]	Reference Reliability and Functionality Section 2.3.6.
SLR – 16 LTI Logon Creates	[Redacted]	Reference Reliability and Functionality Section 2.3.6.
SLR – 17 System Security, Security Error Log	[Redacted]	Reference Security Section 2.4.3.6.

SLR No.	How our solution address the SLR	Reference Section in
SLR – 18 Security Corrections	[Redacted]	Reference Security Section 2.4.3.3.
SLR – 19 NPA/Mass Split Notice	[Redacted]	Reference Reliability and Functionality 3.2.5.2.1.
SLR – 20 Unscheduled Unavailability	[Redacted]	Reference Reliability and Functionality Section 2.3.6.
SLR – 21 Unscheduled Unavailability Updates	[Redacted]	Reference Reliability and Functionality Section 2.3.4.2.

As demonstrated in the referenced sections, and by the prototype testing above and in Appendix B, the Telcordia Solution exhibits an understanding of and ability to implement the operational performance required by the NPAC ecosystem SLRs.

### 2.2.3 Change Management

Telcordia provides a practical, user-focused change management plan as part of the NPAC Project Management Plan that is user centric, collaborative, and leverages industry best practices.

[Redacted]

#### 2.2.3.1 Technology Upgrades

[Redacted]

## 2.2.4 Audit Administration

The RFP Section 4 and Section 11 require the following audits to be performed and administered:

- ◆ Gateway Evaluation Process (GEP) Audit
- ◆ Neutrality Audit
- ◆ Business Continuity Plan Exercise
- ◆ LNPA NPAC SMS Data Center Operations Audit
- ◆ User Charges Audit
- ◆ Benchmarking
- ◆ Other LNPA Services Audits

The following demonstrates Telcordia’s understanding and ability to meet the operational performance aspects of the audits for the NPAC ecosystem.

### 2.2.4.1 Gateway Evaluation Process (GEP)

Telcordia agrees to the GEP Audit definitions, terms and requirements as outlined in Question 4.1 of the LNP RFP. The Telcordia Quality Control team will be responsible for administration of and reporting on the audits and all follow on Performance Improvement Plans.

Telcordia acknowledges that it will be audited on all the measurements outlined in RFP 4.1:

- ◆ Service Availability Satisfaction including general Service Availability, Partial Service Availability, and Interface Availability,
- ◆ Billing Satisfaction including both timeliness of delivery and accuracy,
- ◆ Scheduled Service Unavailability Satisfaction,
- ◆ Benchmarking Satisfaction,
- ◆ Report Satisfaction including both timeliness of delivery and accuracy,
- ◆ Root Cause Analysis Satisfaction,
- ◆ Problem Escalation Satisfaction

Telcordia will hire a third party auditor and work with the LLC to define the GEP criteria, and the audit plan. The audits will be performed quarterly and reported annually as required. Telcordia acknowledges that agreed-to price reductions, credits or penalties may apply based on audit results.

Telcordia is committed to delivering all of the Gateway Evaluation Process with the tools and framework of our Quality Assurance Approach discussed in RFP Section 12.3 Transition Plan and integrated tools to promote and support the effectiveness of systems, operations, and services.

### 2.2.4.2 Neutrality

The Telcordia Neutrality Officer will lead the Neutrality Assurance team in working with the agreed-to auditor for Neutrality. Telcordia will work with the LLC and the FCC, as required, to develop an audit plan that provides a review of the elements outlined in Section 4.2 of the RFP. It is expected that the audit will review compliance with the elements provided in the Legal Opinion and compliance with the Code of Conduct. In addition, the review will be expected to cover the following:

1. Does the LNPA, in its operation of the NPAC, provide services under non-discriminatory terms, rates, and conditions?
2. Does the LNPA qualify as an NPAC User as defined by the criteria used to grant User status to any entity?
3. Do any services provided by the LNPA in the operations of non-NPAC businesses utilize User Data not available to any other User?
4. In the LNPA's operations of non-NPAC businesses, is the LNPA's use of the NPAC SMS data consistent with the intended uses of rating, routing, billing, and network maintenance?
5. Are the services provided by the non-NPAC businesses possible only because LNPA operates the NPAC?
6. Could any non-LNPA entity provide services which utilize NPAC SMS Data, identical to those services offered by the non-NPAC LNPA business?
7. Does the LNPA in the operations of non-NPAC businesses disclose any NPAC SMS Data to any entity that would otherwise not be eligible to receive it?
8. Does the LNPA maintain Neutrality in public forums, not favoring the positions of an industry segment or segments, or an industry member or members, over others, as demonstrated in the records of public forums and ex-parte meetings?

The audit will be performed and reported on every six months as required. The Neutrality Officer is responsible for certifying this audit and works with the Neutrality Assurance Team to implement any necessary corrections or improvement plan.

### 2.2.4.3 Business Continuity Plan Exercise

Telcordia understands the importance of Number Portability to our clients' business and daily operations and the need to provide continuous uninterrupted LNPA and NPAC SMS services. The Solution is architected to avoid service disruptions that could be caused by catastrophic events (e.g., hurricane), ensuring uninterrupted service is provisioned.

Telcordia will meet all of the Requirements in the *RFP Section 4.3*. Per these requirements, Telcordia will prepare a Business Continuity Plan which addresses the entire solution including infrastructure, the NPAC SMS application, and Support Systems as well as Operations and Management. Telcordia's solution and staff fully embrace and understand the Business Continuity Plan. A sample Business Continuity Plan may be found in *RFP Section 4.3* attachments.

Telcordia will conduct periodic unannounced, non-service impacting mock exercises that results in the components of the Business Continuity Plan being executed as noted below on audits. Telcordia will monitor and measure the performance of its solution and staff in executing the Business Continuity Plan during these exercises, and for each exercise, prepare a report for the NAPM LLC analyzing the results of the exercise. If components of the solution failed to provide the expected results of following the Business

Continuity Plan during an exercise, the report to the NAMP LLC will also contain a corrective action plan and implementation schedule to bring all elements of the solution into conformance with the Plan.

The Telcordia Quality Control team will be responsible for implementing the exercises, reporting on the results and implementing any Performance Improvement Plan.

#### **2.2.4.4 LNPA NPAC SMS Data Center Operations Audit**

The Telcordia Solution leverages vast experience established in compliance with corporate policies for Data Centers. Our data center solution is overviewed in the TRD Section 12.1 Summary – Section 6. Our data center partner, SunGard, conducts internal audits on a regular basis. The Telcordia Quality Control team will work with the SunGard's Audit Compliance group to develop a customized audit plan that specifically tests

- ◆ Accuracy of invoices
- ◆ NPAC SMS and facilities security
- ◆ Back-up sufficiency
- ◆ Disaster recovery procedures, and
- ◆ Overall compliance with industry standards for data center operations

The Telcordia Quality Control team working with the SunGard Audit compliance group will provide the report to the LLC and implement any necessary Performance Improvement Plan.

If the LLC procures an independent auditor, the team, Telcordia and SunGard, will provide the support required to conduct that audit as required.

Telcordia will keep all books, records and supporting documentation as required.

#### **2.2.4.5 User Charges Audit**

Telcordia acknowledges that the LLC has the right to request an audit of user fees and other charges to Users. The Telcordia Billing Team will work with the LLC auditor to provide the information required to demonstrate accuracy of billing, showing that the Telcordia fee is allocated and properly invoiced to Users per the FCC allocation model and for any other charges to Users (such as charges to PTRS or Other Users). Telcordia acknowledges that refunds, if required, will be provided as a credit on the Users next invoice.

#### **2.2.4.6 Benchmarking Process**

The Telcordia Quality Control team will be responsible for implementing the requirement for Benchmarking in RFP Section 4.6. Using the ITIL framework and our Quality Method of Operation (QMO), Telcordia supports continuous improvement efforts such as the benchmark program required.

The NAMP LLC will be engaged in the benchmark planning process to help identify the specific aspects of our operations they may want to benchmark. A third-party consulting firm specializing in particular areas of operational focus will be engaged to deliver unbiased comparisons of IT performance.

Once benchmarks are identified, Telcordia and the selected consulting firm will work to develop and implement the Benchmarking Plan. Then, following the Benchmarking Plan, an audit of our operational

area of focus will be performed and results compare with industry standards. An EP Benchmarking Report will be provided with the results of the process.

Within 30 days of the completion of the EP Benchmarking Report the Telcordia Quality Control team will provide the LLC, with an Evaluation Report setting forth the Performance Improvement Plan.

#### **2.2.4.7 Other LNPA Services Audits**

The Telcordia Quality Control team will be responsible for managing the audits required for the Intermodal Ported Telephone Number Identification Service and the Enhanced Platform for Law Enforcement Agencies.

In both cases a third party agreeable to both the LLC and Telcordia will be hired by Telcordia to perform the audits. The audits shall include compliance with the requirements and Master Agreement for the Services. In addition to the Services Review for the Enhanced Platform for Law Enforcement Agencies a Cost Review will be performed yearly in accordance with, requirement 19. Both services will be included in the Neutrality Audit and the costs for the audits of these services will be kept separate from the GEP Audit expense.

#### **2.2.4.8 Conclusion**

Telcordia recognizes the importance of the audit programs in the operations and performance of the NPAC ecosystem and has teams dedicated to audit and implementation of subsequent performance improvements.

### **2.2.5 Reporting**

Telcordia understands the importance of reporting capabilities in the operational performance of the NPAC. The Telcordia Solution will support all of the currently defined and expected reports. This includes all of the reporting capabilities and reports identified in the NPAC SMS FRS, as well as reports for the NAPM LLC (LNP RFP Section 11.3) and the FCC (LNP RFP Section 11.4). The Solution is extensible to support future reports as required. Reports may be accessible from a single secure website via a single user login process.

The Telcordia team has the right domain expertise required to quickly understand the NPAC business requirements and thereby deliver all the necessary report types and features required to operate the NPAC and maintain NPAC service level requirements.

Telcordia will work with the NAPM LLC and with the Service Provider community to design templates and report formats for each report supported.

Examples of the supported report features include:

- ◆ Managing scheduled reports
- ◆ Service Provider Administration Report
- ◆ Error Log report
- ◆ User report
- ◆ System Parameter report
- ◆ System Statistics report

- ◆ Database Report
- ◆ Service Element report

User Reports:

- ◆ Subscriptions
- ◆ Service Provider Profile
- ◆ Network Management
- ◆ Number Pooling
- ◆ Audits

### 2.2.5.1 NAPM LLC Reports

Telcordia will provide all reports to the NAPM LLC as required. The report formats will be agreed on by both Telcordia and the LLC. Telcordia will develop, to the extent possible, reports with the same look and feel and with all of the same data as reports that are used by the LLC today. In addition, Telcordia would, if desired, make a web portal available for the LLC to get ad-hoc versions of the report data or historical reports.

The following reports as noted in RFP Volume Section 11.3 above would be supported:

- ◆ Weekly LLC reports – various SV counts
- ◆ Billable transaction reports
- ◆ PE Reports
  - Top 10 tickets
  - SLR Performance
  - SLR 1
  - SLR 2
  - SLR 3
  - SLR 7
  - Service Unavailability
  - Billing
  - GEP Penalties
  - SOW Report
  - NPAC SMS Test Platform Services
  - New Customers
  - IntraSP Pooling
  - LERG Pooling
  - (Block) Receipt & Activation
  - (Block) Modification
  - (Block) Pooled-Ported

- Annual Summary
- ◆ Performance Results
- ◆ Enhanced LEAP Cost Review
- ◆ Enhanced LEAP Service Audit Report
- ◆ Intermodal Cost Report (WDNC)
- ◆ Intermodal Services Audit Report (WDNC)
- ◆ NUE Findings for PTRS User Application
- ◆ NUE Annual Review
- ◆ Neutrality Report (Annual & Quarterly)
- ◆ CFO Certification
- ◆ Annual Disaster Recovery exercise readout
- ◆ RCA reports
- ◆ Post-Mortem reports
- ◆ Master Agreement and SOWs
- ◆ Evidence of NPAC Application Software Escrow
- ◆ Evidence of Billing Software Escrow
- ◆ Billable Transaction by conventional LRN vs. pseudo LRN
- ◆ Capacity Report
- ◆ Enhanced LEAP user list
- ◆ WDNC user list
- ◆ NPAC Customer list
- ◆ Misc. project status reports

Telcordia will provide any other additional reports required by the LLC. The flexible reporting methodology and tools being deployed by Telcordia and the detailed ITIL process will allow for reports to be created as needed quickly and easily for any data retained by NPAC SMS.

### **2.2.5.2 Regulatory Reports**

Telcordia will support provision of reports to the FCC and to any State Regulators as required. To the extent the formats that are being used today are made available Telcordia will develop reports with the same look and feel as being provided currently. In addition, Telcordia would if desired make a web portal available for the Regulators to get ad-hoc versions of the report data specific to them or historical reports.

Telcordia understands that the FCC is, for example, minimally provided with: SVs remaining in NPAC at the end of a period, wireline-wireline and wireline-wireless port information, and ports between carrier types by state and number of carriers porting by state for use in their numbering trends report done by the Industry Analysis and Technology Division of the Wireline Competition Bureau.

Telcordia will provide any other additional reports required by the FCC or States as permitted for by the Agreement. The flexible reporting methodology and tools being deployed by Telcordia and the detailed

ITIL process will allow for reports to be created as needed quickly and easily for any data retained by the Telcordia NPAC SMS.

## 2.2.6 Other Operational Performance Aspects

This section provides details about the following additional aspects of support included in our service offering:

- ◆ NPAC Web Content Support
- ◆ Interactive Voice Response (IVR) Service
- ◆ Enhanced Platform for Law Enforcement and Public Safety
- ◆ Intermodal Ported Number Identification Service
- ◆ NPAC Knowledge Base and Support Portal Web Page
- ◆ Customer Training
- ◆ LNPA Process Flows
- ◆ User Methods and Procedures

### 2.2.6.1 NPAC Web Content Support

We include in our offering full-service web administration support that is customized and crafted to meet the industry’s NPAC business needs. We will operate in either a multi-LNPA environment in which Telcordia will maintain a separate NPAC website via [www.npac.us](http://www.npac.us) or assume the maintenance and improvement of the existing site information as a national provider.

Our web application development will address features, functionality, and needs including:

- ◆ Enterprise web portal development with a wide range of services for daily NPAC operational support such as online trouble ticket submission, knowledge database search capabilities, business intelligence and analytics capabilities and customizable communications with news and updated support content. Our web portal solution will help organize and conduct daily tasks efficiently and effectively [Requirement 1].
- ◆ As the LNPA, Telcordia will maintain, protect and preserve both public and secure intellectual and public property knowledge of all things related to the conversation and development of the number portability through the efforts discussed within the LNPA Working Group. We understand that long-term access to reliable and authentic digital materials is at the heart of delivering this objective and also prepare to help bridge the gaps where fragmentation of knowledge and skills among the community stakeholders exists within the multi-LNPA scenario [Requirement 2].

### 2.2.6.2 Interactive Voice Response (IVR) Service

Telcordia understands the importance of an NPAC IVR service [RFP Section 6.9] and the important role the service plays not only to carrier lookup by field technicians but also its role in providing services to U.S. law enforcement and public safety agencies.

Telcordia will design and integrate all the necessary call flows and develop all the IVR scripts required to ensure seamless delivery of porting information to our IVR users. We have experience providing similar IVR services that operate 24x7 [Requirement 2] and will have a minimum availability of 99.9%

[Requirement 1]. For this NPAC contract, we will record consistent and professional voice prompts. We understand our users may require access to porting details in single instances or in batches in real-time. To support this need, our experienced technical team will ensure that the data is accessible in real-time and that script updates are fully tested and applied in a timely fashion. As part of our process improvement, as customers navigate the menus, we will gather and analyze usability and efficiency data and recommend script adjustments to enhance this service.

The IVR platform is self sufficient, containing all of the technology necessary to successfully interact with customers via speech or touchtone without operator intervention. The system may also be configured to permit customers to press a button to speak directly to our help desk. Additional features supported are:

- ◆ Security access PIN
- ◆ Administrative management reports
- ◆ Multiple queries on a single access
- ◆ Toll-free number access
- ◆ Usage and access reporting

Our IVR solution will address requirements in section 6.9, as described in the TRD Section 12.1 Summary Attachment – Section 7.7.

U.S. law enforcement agencies, public safety providers, and 911 Service Providers will be able to utilize our IVR solution to perform the following:

- ◆ Search by individual telephone number, up to 20 telephone numbers per access.
- ◆ Identify whether the telephone number is ported.
- ◆ Identify the current Service Provider and legal point of contact for queried TN.

### **2.2.6.3 Enhanced Platform for Law Enforcement and Public Safety**

Beyond the IVR requirement, Telcordia will also be prepared to provide an enhanced platform for law enforcement agencies and public safety answering point providers to access NPAC data beyond the IVR limitation of 20 telephone numbers per access, as describe in TRD Section 12.1 Summary Attachment – Section 7.8. This enhanced platform will be made available via our web portal and will extend to web-based applications and content to smartphones and other wireless devices.

The enhanced platform will have the following capabilities beyond the IVR offering:

- ◆ Provide up-to-date porting history.
- ◆ API to retrieve information in bulk based on a range or list of telephone numbers.
- ◆ Online access.
- ◆ Search by GUI, file upload, or API.
- ◆ Provides historical porting detail.
- ◆ Number look-up beyond 20 per session.

Telcordia will work the law enforcement user community to ensure that the API interface and report formats meet their needs with a minimum of changes to the potential impact on this user community as discussed in the RFP Section 12.3 Transition Plan.



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*iconectiv Number Portability Administration Center  
Request for Proposal No. 2015-LNPA-RFP-1.  
RFP\_Section 15.1\_Supplemental Documentation*

**2.2.6.4 Intermodal Ported Number Identification Service**

Telcordia will provide an intermodal ported number identification service as required in RFP Section 11.1 for the purpose of enabling compliance by marketers with the TCPA.

Telcordia agrees that it will provide this service separate from the NPAC SMS service provided to NPAC Users and we will ensure that it does not adversely impact the operation and performance of the NPAC SMS.

We will only provide the service to qualified recipients as defined by the Master Agreement. We will provide a quarterly report listing the applicants for the data in the previous quarter and the recipients as provided in Requirement 3. We will establish a separate contact number for the help desk services for this service and costs for support of that help desk will be associated with that separate project.

Fees for provisioning of the service to its users of the service will be separate and reasonable based on usage and otherwise comply with Requirement 10 and the service will be included in the GEP audit and Neutrality review paid for by Telcordia.

**2.2.6.5 Customer Training**

Telcordia will not only provide quality instruction in a classroom setting, but also provide post-class support to our NPAC customers in the form of online web-based courses that complement the live class to help reinforce learning.

Beyond the traditional instructor-led training, we'll also provide web-based resources during and after class to help reinforce the live class/training. Any user that completes training will be given access to the training materials. All updates to the content will be available online, providing the student with access to the latest version of the material.

For those looking for further savings, Telcordia will also be offering an online platform to deliver a classroom experience directly to the users via the web. Whether it's in classroom or via the web, Telcordia will provide a complete course on number portability and NPAC user support and training that will encompass but not be limited to [RFP Section 6.2]:

- ◆ Uploading ported/pooled TN data and user data,
- ◆ Receiving and understanding broadcasts,
- ◆ Receiving and understanding error/success messages,
- ◆ Requesting, receiving, and understanding mass changes,
- ◆ Requesting, receiving, and understanding reports (including billing), and
- ◆ Understanding security and encryption measures.

Telcordia NPAC training can be delivered “off-the-shelf,” or customized for the learning needs of our users and clients via our on-site training program offerings.

**2.2.6.6 NANC LNP Process Flows**

The North American Numbering Council (NANC) Local Number Portability (LNP) Process Flows will be supported and consist of a set of graphically described Process Flows and associated Narratives that describe each step in the Process Flows. They cover:

- ◆ Port Initiation and Authorization - interactions between Service Providers that currently occur outside of the NPAC/SMS for the New Service Provider to initiate porting activities and obtain authorization from the Old Service Provider for the port to occur.
- ◆ Port Initiation and Activation at the NPAC/SMS - interactions between Service Providers and the NPAC SMS for the New and Old Service Provider to initiate, authorize, and activate the port at the NPAC/SMS, as well as additional provisioning activities outside of the NPAC SMS performed by the New and Old SP. This also includes process steps that the NPAC SMS performs, such as running timers and executing tasks when timers expire.
- ◆ Additional Provisioning Related Flows – these identify interactions between Service Providers or between Service Providers and the NPAC SMS when a port is placed into conflict and removed from conflict, when a pending port is cancelled or cancellation is removed, or when an existing port is disconnected by the current service provider.
- ◆ Miscellaneous Flows – these flows identify the steps followed and NPAC/SMS functions performed when a Service Provider requests the NPAC to perform an audit, a Service Provider opens a new NPA-NXX code to porting, or the NPAC SMS determines that a newly created ported TN or NPA-NXX-X is the first porting related activity occurring in an NPA-NXX.

The NANC LNP Process Flows and associated narratives are supported by the following NPAC/SMS documentation:

- ◆ NPAC SMS Functional Requirements Specification (FRS) – the business logic requirements described in the FRS describe the functionality that NPAC SMS provides to support the steps in the NANC LNP Process Flows.
- ◆ NPAC SMS Interoperable Interface Specifications (IIS), Part 2 – the message flow specifications describing the messages and their order flowing between Service Provider Local Systems (SOA and LSMS) and the NPAC SMS, including the message flows to support the NANC LNP Process Flows. This document will apply to both the existing CMIP interface and the alternative NPAC SMS interface that is currently being worked and defined by the LNPA WG industry participants.
- ◆ NPAC SMS Interoperable Interface Specifications (IIS), Part 1 – describes the security and operation of the CMIP interface between Service Provider’s local systems (SOA and LSMS) and the NPAC SMS. The associated GDMO and ASN.1 describe the details for each message supported on the interface.
- ◆ The final “NPAC SMS XML INTERFACE SPECIFICATION” when completed and approved.

Telcordia is committed to performing all work in compliance with all NANC Operational flow narratives specified within RFP Specifications and committed to ensuring our implementation conforms to the FRS, IIS, ASN.1 and GDMO standards. As part of the Change Management process, we will keep up to date with the current North American Numbering Council (NANC) Local Number Portability (LNP) process flows.

### **2.2.6.7 NPAC User Methods and Procedures**

Telcordia’s commitment to service excellence begins with our ability to deliver consistent and repeatable processes that adhere to industry best practices and that follow our Operational and Management Processes and Programs. We will reinforce and maintain the integrity of the portability workflows in the development of the customized Methods and Procedures required in Section 10 of the RFP.

We will develop and maintain NPAC User Methods and Procedure documents and configuration management processes in our configuration management database (CMDB). The complete list can be found in Table 1. As a part of our administration management we are prepared to:

- ◆ Match the current Method and Procedure when available customized to the Telcordia environment.
- ◆ Incorporate screen shots and diagrams where doing so will facilitate understanding.
- ◆ Coordinate, schedule and facilitate the meetings to review the documents.
- ◆ Conduct live run-through or equivalent tabletop exercises for usability by the intended audience.

Our NPAC User M&Ps will be reviewed continually by the Telcordia NPAC SMS Administration team. Users or staff can suggest changes at any time. Telcordia will deliver at least the following M&Ps per the schedule described in the *RFP Section 12.3 Transition Plan*.

**Table 1 – Current NPAC User Methods and Procedure List**

<b>NPAC User Method and Procedures</b>
New Customers And Service Provisioning
New Customer Set Up Process
Connectivity To The NPAC
Existing User Modifications
<b>NPAC Help Desk</b>
NPAC Help Desk And The Role Of The User Support Analysis
NPAC Help Desk Hours Of Operation
Recognized Holidays
After-Hours Support
NPAC Help Desk Authorization List
Automated Telephone Number Look-Up System
Customer Contact List Management
NPAC Secure Site Access
NPAC Public Site Access
<b>NPAC Help Desk Problem Resolution</b>
Problem Resolution
Mechanized Association Troubleshooting
NPAC Web Port Access Troubleshooting
<b>NPAC Support Services</b>
Billable Contacts
Subscription Version (SV) Provisioning
Subscription Version (SV) Status Descriptions

NPAC SMS Tunables
NPA-NXX Management
LRN Management
NPAC Web Portal Logon Management
Full And Delta Bulk Data Downloads
NPA-NXX Filter Set Up
Emergency NPA-NXX Filters
NPA Splits
NPAC Reports
SFTP Site Requests
Porting In Error/Failure To Port
Mass Modifications
<b>NPAC SMS Operations</b>
NPAC Service Level Requirements
NPAC System Outages
Scheduled Service Unavailability (SSU) Schedule
Service Provider And NPAC Maintenance Notifications
Large Port Notifications
<b>New NPAC Software Releases And Testing</b>
NPAC Software Releases/Upgrades
Testing
Continuing Certification Requirements
NPAC Pooling Operations
Pooling Activities In The NPAC
NPAC Validations
NPAC Billing And Collections
Billing Disputes And Resolution
Other Information
NPAC Websites
Additional Websites

## 2.3 Factor 2 - Reliability and Functionality

This section demonstrates Telcordia's understanding of and competency in the requirements to operate the system, and our ability to provide the service during the term of the Master Agreements in each region. We demonstrate an understanding of and competency in:

- ◆ system availability,
- ◆ testing,
- ◆ disaster recovery and backup
- ◆ help desk requirements

We also provide analysis and examples that demonstrate that the Telcordia NPAC SMS will enable the Respondent to meet all SLRs and other system performance requirements.



We have chosen to utilize ITIL best practices as the IT management governance framework to deliver an effective and mature IT Service Management solution that helps manage reliability and performance and continuous service improvement.

### 2.3.1 System Availability

This section provides insight to Telcordia's strategy to achieve the system availability required of the NPAC SMS service. Telcordia has long-standing, recognized diligence in hardware and software design for high performance and reliability.

Telcordia NPAC software and servers are designed to deliver extremely high levels of availability. Hardware and software components are constructed to minimize the impact of component, function, or data failure. The maintenance architecture incorporates a multi-faceted ability to diagnose and remedy potential causes of failure, and to enable rapid service restoration when a problem occurs.



- [Redacted]

- [Redacted]

[Redacted]

- [Redacted]

- [Redacted]

- [Redacted]

- [Redacted]

- [Redacted]

2.3.1.1 [Redacted]

[Redacted]

[Redacted]



### 2.3.1.2 System Availability Conclusion



### 2.3.1.3 Data Center Facilities and Technology Infrastructure

The following section provides some detail about the data center facilities, technology infrastructure, and telecommunications services that will be used to support the NPAC SMS Program. The facilities and technology proposed will meet the needs of the NPAC SMS service today and will be updated and

expanded during the lifetime of the contract to ensure that Telcordia continues to adopt best practices to help ensure that our data center meets or exceeds the requirements of the NPAC SMS Administration.



Telcordia and SunGard, our data center partner, would be glad to arrange a site visit to one of the facilities for LLC review.



### 2.3.2 Testing Solution

Our Quality Assurance Approach is discussed in the *RFP Section 12.3 Transition Plan*. Telcordia has been actively involved with the development of the industry test suite and flows since the inception of number portability. We have contributed to the industry creation of the current interoperability test suite and the turn-up test suite and continue to actively participate in the development of new methods for testing by providing input to the small team revising the testing procedures at the LNPA WG. We contribute to help improve test suites so that they are not just simulations of cases but allow for flow through testing with Service Provider systems. In addition, Telcordia's testing and software quality procedures have been used in our network database systems which have executed change management for new releases for more than 15 years without a single outage. Telcordia's also has extensive experience in developing test suites and executing application-level compatibility and interoperability tests across 15 distinct NPAC-PLUS implementations internationally requiring end-to-end congruency of business processes, information exchange, and interoperability of technology solutions.

This translates to proven experience and helps positions us as a viable portability partner with the right resources to support the Service Providers and industry testing needs. Our proposed solution allows vendors and carriers to have greater flexibility by providing other options for system testing in addition to those required by the industry standards each LNPA is most likely comply to.

### 2.3.2.1 Solutions Offering: Comprehensive Test Environment

[Redacted]

[Redacted]

[Redacted]

### 2.3.2.2 Additional Test Features and Capabilities

In addition to the features mentioned above, our test solution also covers:

- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]

[REDACTED]

- [REDACTED]

[REDACTED]

- [REDACTED]

[REDACTED]

- [REDACTED]

[REDACTED]

- [REDACTED]

[REDACTED]

Telcordia's Quality Assurance and Testing Approach demonstrates our understanding of the requirements involving the need for continuous reliable availability of the NPAC SMS and demonstrates our ability to meet the related SLRs.

### 2.3.3 Disaster Recovery and Backup

Telcordia understands Disaster Recovery, Back Up and Business Continuity, and we have designed the architecture accordingly, and have plans in place to address these areas.

The *TRD Section 12.1 Summary* details the Disaster Recovery Architecture in Section 6.

[REDACTED]

[REDACTED]

[Redacted]

2.3.3.1 [Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

2.3.3.2 [Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted text block]

[Large redacted text block]

[Redacted text block]

### 2.3.3.3 Backup and restore capabilities

[Redacted text block]

◆ [Redacted text block]

◆ [REDACTED]

◆ [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

### 2.3.4 Telcordia Service Desk

This section demonstrates our understanding of the requirements and provides insight to our operational support approach. The Telcordia Service Desk proposal meets and in several instances exceeds the requirements in the RFP as discussed below. The service desk will leverage the latest in custom service management portals using the services of our data center partner SunGard to ensure real time monitoring and incident resolution.

Our approach utilizes the ITIL best practices framework to deliver a consolidated Service Desk solution. As part of this approach, the Telcordia service desk handles a range of services, acting as the single point of contact (SPOC<sup>1</sup>) for 24/7/365 support. [REDACTED] The Service Desk features a toll-free telephone number for all NPAC support interactions, including trouble ticket escalations and resolutions.

[REDACTED]

- [REDACTED]

- [REDACTED]

---

<sup>1</sup> Telcordia acknowledges it is required to provide a different Help Desk contact for some of the Other LNPA services such as the Intermodal Ported TN Id Service.

- [REDACTED]
- [REDACTED]
- [REDACTED]

These processes aid in ensuring that we provide consistent, efficient customer service with the agility to adapt immediately to new issues, changing priorities, and unexpected events.

#### 2.3.4.1 NPAC Help Desk

We have designed our NPAC Help Desk to meet or exceed the SLRs as provided in RFP Section 6.5:

- ◆ **Requirement 1:** The LNPA shall provide and staff a user Help Desk accessible via a toll-free number to answer and resolve User questions and issues.
- ◆ **Requirement 2:** At a minimum, the Help Desk will be staffed with live operators Monday-Friday, from 7am to 7pm Central, excluding holidays designated in the Master Agreements (Help Desk Business Hours).
- ◆ **Requirement 3:** Outside of normal staffed Help Desk business hours, at a minimum, 99.0% of all requests for callbacks to users must be made within 15 minutes.
- ◆ **Requirement 4:** For service affecting trouble tickets, a minimum of 100% of all commitments to get back to the user after the initial contact will be met.
- ◆ **Requirement 5:** A minimum of 90% of the calls during normal staffed business hours must be answered by live operators within 10 seconds. The interval measurement begins when the caller chooses the option to speak with a live agent and ends when a live agent answers the call.
- ◆ **Requirement 6:** The Help Desk will maintain an abandoned call rate of less than 1.0%. The interval measurement will begin when the caller chooses the option to speak with a live agent; the interval ends when the caller abandons the call, but only after at least ten seconds has elapsed with no answer.

[REDACTED]

[REDACTED]



[Redacted text]

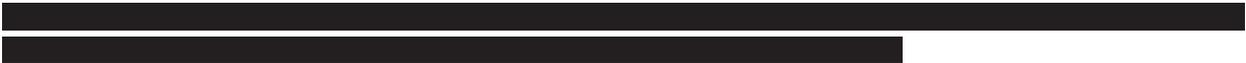
[Redacted text]

[Redacted text]

[Redacted text]

[Redacted text]

- [Redacted]

***NPAC SMS Admin Support Approach***

Telcordia understands that NPAC SMS support is critical and will support it with an NPAC SMS Admin Support team that includes Application experts, number portability experts and security experts as discuss in the NPAC SMS Admin team in Section 3.2.5.2.2 below.

A high-level overview of our NPAC SMS Admin support approach is illustrated in Figure 7.



### **2.3.5 Telcordia's Ability to Meet All SLRs and Other System Performance Requirements**

Telcordia demonstrates our ability to meet or exceed all SLRs and Other System Performance Requirements in several sections of this document:

- ◆ Section 2.1 Introduces the Solution Architecture and describes our ability to technically deliver the System Performance SLRs.

- ◆ Section 2.2.1 describes our ability to meet or exceed the Volume and Throughput SLRs.
- ◆ Section 2.2.2 demonstrates via testing the ability of the hardware and software functionality to meet or exceed the FRS volume and throughput requirements.
- ◆ Section 2.2.3 Service Level describes Telcordia's compliance with the SLRs for Measurement and Reporting and adherence to all SLRs in RFP Section 9.4-9.24.
- ◆ Section 2.2.5.1 describes our compliance with the GEP which provides additional assurance that the SLRs are being met or exceeded.
- ◆ Section 2.2.5.6 describes the benchmarking process which provides additional assurance that the service remains best in class from a performance perspective.
- ◆ Section 2.3.1 describes the System Availability features and approach to further demonstrate our ability to meet or exceed the availability SLRs.
- ◆ Section 2.3.2 describes the Data Center facilities and infrastructure and demonstrates our ability to meet or exceed the Data Center related SLRs.
- ◆ Section 2.3.4 describes the Disaster Recovery and Backup and demonstrates our ability to meet or exceed the D/R SLRs.
- ◆ Section 2.3.5 describes the Telcordia Service Desk and Help Desk demonstrating our ability to meet or exceed the Help Desk SLRs.

In our experience, in addition to architecture and service design, more is need to meet or exceed SLRs consistently and to deliver ongoing excellent customer service. In order to deliver this, we will also focus on continuous service management through the use of IT Service Management (ITSM) ITIL best practices framework.

[REDACTED]

[REDACTED]

[REDACTED]



Table 2 represents a partial list of NPAC performance service-level requirements that Telcordia will track within our SLM system.

**Table 2 – Performance Service-level tracking as a part of our Service Level Management**

Performance Standard	Typical Minimum Acceptable Quality Level
Service Availability	Maintain a 99.99% or better level of Service Availability.
Scheduled Service Unavailability	Scheduled Service Unavailability (SSU) that occurs outside of the industry-agreed upon maintenance window.
Partial Service Unavailability	Hardware component failure or any other disruption in the operation of the NPAC SMS that causes at least one user for more than 10 minutes for a reason other than loss of Interface Availability.
LSMS Broadcast Time	Average response time of three seconds from activation request to broadcast.
SOA to NPAC Interface Rates	Maintain a minimum of seven transactions per second per user SOA for 99.9% of the transactions.
NPAC to LSMS Interface Rates	Maintain a minimum of seven transactions per second per user LSMS for 99.9% of the transactions.
Interface Availability	Maintain an Interface Availability at a minimum of 99.99%.
Application Cutover Time	A maximum of 10 minutes to cut over to the backup site.

Performance Standard	Typical Minimum Acceptable Quality Level
NPAC SMS Partial Disaster Restoral Interval	Partial restoration will be equal to or less than four hours. (Partial restoration meaning the capability of receiving, processing and broadcasting updates.)
NPAC SMS Full Disaster Restoral Interval	Full restoration will occur at a maximum of six hours.

Our Service Level Management approach provides for continual identification, monitoring, and review of the operational support levels defined with our Service Level Agreements (SLAs) module within the toolsets. In addition to the SLA monitoring, Figure 9 provides a high-level overview the other modules that will assist in supporting our overall operational solution.



### 2.3.5.1 Service Delivery and Service Improvements

The Telcordia Solution places a strong emphasis on progress reporting and assessment as the foundation for our corrective action and continuous improvement activities. As discussed in the previous section, we regularly review performance results and the Benchmarking results to assess our progress and expose opportunities for improvement. We then follow sound, established procedures for Change Management as described in the *Section 12.3 Transition Plan* and continuously improve our performance.

Telcordia with its data center partner demonstrates in its Past Performance Experience, in the system architecture and solution design, in the data center and service desk design the ability to deliver the SLR performance for NPAC and this section demonstrates our ability to manage and continuously improve our performance to deliver customer satisfaction.

## 2.4 Factor 3, Security

### 2.4.1 Introduction

Telcordia recognizes the importance of proper management of all of the Industry's assets. This ranges from the physical facilities required to manage/operate the NPAC to the data contained within the service. The appropriate security and privacy must be maintained and evolved as new features are implemented (e.g., change order NANC 372, the alternate interface or new feature that may contain more sensitive user data, such as those that support VoIP, LTE and advanced features).

As a local system vendor, Telcordia has many years of experience with supporting the required security implementations and protecting our customers' assets across a large number of US Service Providers. One example of supporting application level security, Telcordia's North American Number Portability Gateway is deployed in individual Service Provider environments and is also deployed in a Service Bureau arrangement supporting over 100 clients, some whom access the system via mechanized interfaces and others who access via a Web-based GUI. The SMG ensures that only authorized clients can access the system through either interfacing mechanism, ensures that users or systems only access and invoke capabilities for which they are authorized, and ensures users or systems can only access and modify their own data with the appropriate logging and notifications.

[REDACTED]

[REDACTED]

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

- [REDACTED]

- [REDACTED]

- [REDACTED]
- [REDACTED]
- [REDACTED]

[REDACTED]

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

[REDACTED]

[REDACTED]

#### 2.4.2.2 Additional Security and Security-related Features

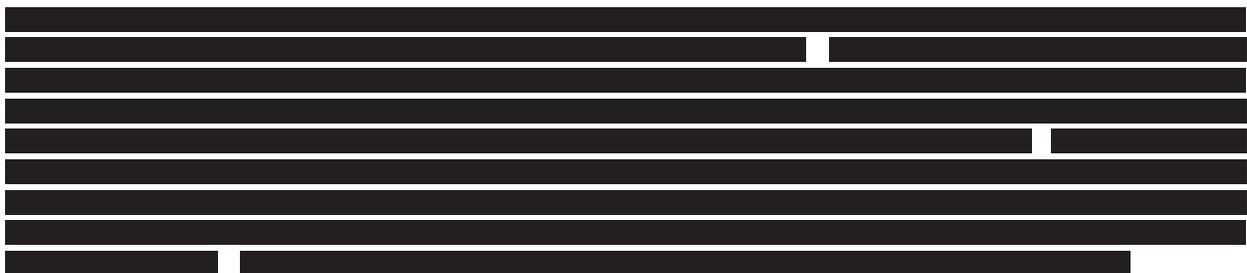
Telcordia processes large volumes of sensitive data for many different customers. To protect this data and the equipment used to process it, comprehensive physical security measures have been implemented within our operations data processing and contact center facilities. Purposeful building design works in conjunction with data and personnel security measures to provide seamless and protected delivery of services. Telcordia provides physically secured facilities for its people, equipment, and documentation. The Telcordia Solution also supports the following:

- [REDACTED]
- [REDACTED]
- [REDACTED]

## 2.4.3 Meeting FRS and IIS Security Requirements

### 2.4.3.1 Interface Security

This section addresses the primary interface types that are employed in our NPAC SMS solution along with an overview of how we'll address security as it relates to requirements in TRD sections 7.1 and 7.2. The three interface types are: mechanized CMIP interface, mechanized XML alternative interface and web portal access (secure website access to LTI/Admin GUI, knowledge base and other operations tools; sFTP server access). The table below illustrates the OSI protocol stack technologies that are employed for each of the primary interfaces types. Shaded areas represent where primary security management is provided for each of the interface types.



[Redacted]

All infrastructure, source and NPAC-related software and data will be housed in Telcordia-controlled data centers within the US.

The following touches upon how we'll ensure integrity for various NPAC SMS components.

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- [Redacted]

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■ [Redacted]

The NPAC Security Administration Support staff will be notified to investigate all audits exceeding the thresholds of our internal policy and/or the thresholds specified within the FRS.

### 2.4.3.7 OSI Security

The Telcordia Solution supports the OSI security requirements identified in TRD Section 7.9. ■

[Redacted]

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- [Redacted]

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## 3 Management Criteria

### 3.1 Introduction

The Telcordia management proposal consists of detailed structures and plans based on decades of experience delivering systems and services to the telecommunications industry. As noted above and in our Transition Plan Telcordia has the systems, processes and procedures, transition plan, staffing plan, and management plan to deliver a service that meets the industry's needs for this critical service at the best value and can assure ongoing satisfaction with continuous service improvement by a company with the financial stability to deliver for the long term. This section reviews and summarizes those plans and qualifications.

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### 3.2.1 Staff Management Plan

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### 3.2.5.2.3 Account Management

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### 3.2.5.3 Industry Relations

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### 3.2.6 Service Management

[Redacted]

### 3.2.6.1 New User Evaluation and User Agreement Management

[Redacted]

### 3.2.6.2 Quality Control

[Redacted]

### 3.2.6.3 Neutrality Assurance

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### 3.2.6.4 Regulatory Relations/Legal

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### 3.2.6.5 Billing

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### 3.2.7 Proven Customer Service to Wide Range of Clients

The Telcordia Customer Service design is proven by decades of past performance for many service provider customers and for regulators as LNPA. Over 1,000 operators use Telcordia products and services worldwide and several have renewed contracts with Telcordia for more nearly 30 years. Telcordia provides number portability, anti-theft and anti-counterfeit device registries, information services, mobile messaging, and spectrum management services in dozens of countries to a wide range of small, mid-size, and large wireline, wireless, cable, and IP customers. It provides number portability clearinghouse services in over 15 countries, enabling both fixed and mobile number portability.

Telcordia's parent company Ericsson provides services across telecommunications industry segments. Ericsson provides infrastructure services to many of the nation's telecommunications service providers and has over 400 customers for more providing excellent customer service for more than 100 years. Ericsson also provides network infrastructure and services for fixed broadband providers and supports IP-based services and applications, including mobile TV, IPTV, video on demand and content management. Ericsson also provides managed services to a range of telecommunications customers. Additionally, it provides managed services to TV/media and IT systems. More than half of the equipment involved in Ericsson's managed services agreements is provided by other infrastructure vendors. Ericsson also provides operations support services/business support services (OSS/BSS) for a wide range of wireless, wireline, cable, and IP customers.

The Telcordia team data center availability services partner, SunGard Availability Services provides disaster recovery services, managed services, information availability consulting services and business continuity management software to more than 8,000 customers in North America and Europe. With five million square feet of data center and operations space at over 90 facilities in ten countries, SunGard assists IT organizations across virtually all industry and government sectors to prepare for and recover from emergencies by helping them minimize their computer downtime and optimize their uptime. Since pioneering commercial disaster recovery in the 1970s, SunGard has helped customers recover from unplanned interruptions resulting from major disasters including hurricane Sandy in 2012, the Gulf Coast hurricanes in 2008, widespread flooding in the UK in 2007, hurricane Katrina and Gulf Coast hurricanes in 2005, Florida hurricanes in 2004, the Northeast U.S. blackout in 2003, and the terrorist attacks of September 11, 2001.

Both Telcordia and SunGard are using the ITIL best practices framework for service management and have continuous improvement processes in place to help assure continued excellent customer satisfaction as discussed in Appendix A to this document. Those processes include the use of customer satisfaction surveys for both companies. The quality of the both Telcordia and SunGard's implementation of the processes is demonstrated by the quality certifications in the Section 3.3.1 VQS Attachment at section 4.2. See Section 12.2 of the RFP response for more details on the current surveys. Telcordia, for example, has passed 23 consecutive audits of its Quality Method of Operations with no significant findings.

Finally, both Telcordia and SunGard have implemented our systems and services with high customer satisfaction for decades and this is demonstrated below in Section 3.3 as well as in the Section 3.3.1 and 3.3.4 attachments to the VQS and the Performance Surveys themselves.

## 3.3 Factor 2, Vendor Experience and Performance Summary

As is demonstrated in Sections 3.3.1 and 3.3.4 of Telcordia's VQS response, Telcordia has experience providing LNP gateway systems, NPAC Plus and network database services in all of the NPAC regions and 17 other countries around the world.

Telcordia, with the financial strength of Ericsson, brings together two of the world's leading telecommunications firms with a combined history of delivering excellence in critical telecommunications

systems and services working with SunGard, one of the world's leading software and technology services companies, provide low-risk transition at minimum cost and operational impact.

Telcordia past performance demonstrates:

- ◆ Providing number portability systems in all NPAC regions since the beginning of LNP
- ◆ Providing LNP systems and services in 17 countries; more than any other vendor in the world, and
- ◆ Providing network systems and managed service with high availability, high-transaction volume/throughput databases
- ◆ A suite of other products and services with thousands of customers demonstrating the technical and management skills to deliver U.S. NPAC services.

*Telcordia is the leading global supplier with experience in both NPAC systems, services and high availability in-call path network database systems*

Our ability to provide the diversified yet seamless NPAC service is demonstrated by our past performance and references: we have executed this work with exceptional customer service to earn a wealth of customer references, for implementing, transitioning and operating data center solutions in number portability and comparable complex implementations.

### 3.3.1 LNP Experience Within the Regions

As is discussed in VQS Section 3.3.1, Telcordia has worked since the very first day of number portability in the U.S. Developing the first number portability system in the world for toll-free number portability in

- *Telcordia processed the first service provider port with toll free*
- *Telcordia processed the first U.S. geographic port through its SOA*
- *Telcordia processed the first mobile port through its WICIS Gateway*
- *Telcordia has processed more portability related transactions than NPAC itself.*

1992 as the neutral number administrator and SMS/800 system and network database provider. Telcordia has been working on the NPAC Functional Requirement Specifications (FRS) and Interoperable Interface Specification (IIS) development since the beginning for US NPAC delivering the first systems to be certified to connect to the NPAC, and those systems have been in service for more than 15 years.

Telcordia is the leading Service Order Activation (SOA) provider with multiple deployments of its North American Number Portability Gateway in all NPAC regions. Approximately 90% of wireless number porting transactions goes through Telcordia systems.

The Telcordia North American Number Portability Gateway is based on the ATIS OBF Wireless Inter-carrier Communications Interface Specification that includes patented contributions from Telcordia, and this is the enabling technology for U.S. MNP to be the most efficient in the world. In fact because Telcordia systems handle the WICIS and the NPAC SOA transactions as well as the LSMS transactions and Toll-Free portability, Telcordia has likely processed more portability related transactions than NPAC itself.

### 3.3.2 LNP Experience in Other Countries

*Telcordia NP systems provide services to providers with more than 1.5 Billion subscribers, more than any other vendor in the world.*

As is discussed in VQS Section 3.3.1, Telcordia is the leading provider of number portability administration systems and services worldwide. The Telcordia Number Portability Clearinghouse (NPC) is an NPAC PLUS system because it includes the base NPAC functions for

TN porting PLUS pre-port business rules (like the LSR/FOC or WICIS process). It was the first system to do so in the world. The Telcordia NPAC PLUS design has become the de facto standard of number portability worldwide. Telcordia has deployed NPAC PLUS in 15 countries, more deployments than any other vendor in the world. In addition, the Telcordia Number Portability Gateway (NPG) leverages Telcordia's experience in service provider operations support systems (OSS) and provides a number portability local system gateway (combining SOA and LSMS functionality) between a service provider's back office billing and network systems and the NPAC or NPC in a country, allowing for seamless flow-through porting. Telcordia's systems have interfaces to every major vendor including Neustar, Tekelec and many others. Telcordia has experience developing and testing interfaces with vendors around the world to deliver NP solutions that meet or exceed expectations.

*Telcordia continues to innovate in number portability solutions*

- *Delivered the first multi-vendor regional NPAC solution in India*
- *Delivered the first NPC with IP/ENUM Query Resolution Service in Thailand.*
- *Delivered the first NPC with Device Registry functionality in Chile*

In India Telcordia delivered the world first NPAC Plus system in a multi-vendor regional environment.

- ◆ This brought the ongoing benefits of competition between NPAC vendors to service providers and the end users in India resulting in an advance NP system with a per port cost that is significantly lower than that currently being experienced in the U.S.
- ◆ [REDACTED]
- ◆ Works effectively without a single complaint with the other LNPA in India.
- ◆ [REDACTED]

### 3.3.3 Other Products and Services Successful Performance of functional / technical skills required on LNP activities

As is discussed in VQS Section 3.3.1, Telcordia delivers a suite of solutions agnostically and neutrally to service providers worldwide. The other Telcordia products and services that demonstrate the functional and technical skills required for the full range of LNPA activities for delivery of NPAC services in the U.S. with excellent customer satisfaction include:

- ◆ Toll Free System with Portability
- ◆ Routing and Number Administration

- ◆ Mobile ID
- ◆ Message Hub and Resolver Services and
- ◆ Hosted Managed Services

Our Past Performance demonstrates excellent on time delivery and customer service, including technical and management skills over decades to deliver the NPAC service in the U.S. Telcordia has the experience, expertise, management systems and with Ericsson the financial strength to provide unparalleled services for NPAC performance in the United States.

Telcordia has new future facing products and services that will bring knowledge and leadership to NPAC services of the future including:

- ◆ Query Resolver/ENUM
- ◆ Device Registry

Telcordia’s data center and service partner, SunGard is one of the world’s leading software and technology services companies. They provide software and technology services to financial services, education and public sector organizations. They also provide disaster recovery services, managed services, information availability consulting services and business continuity management software. SunGard serves approximately 25,000 customers in more than 70 countries. Highlights of SunGard capabilities include:

- ◆ 5 million square feet of data center and operations space at over 90 facilities in 10 countries,
- ◆ Pioneer of commercial disaster recovery services
- ◆ Specialization in information availability solutions,
- ◆ Vast experience, technology expertise, resource management capabilities, and vendor neutrality
- ◆ Quality Metrics, Certification and Continuous Improvement Processes

In addition, SunGard also has significant applicable experience implementing performance surveys demonstrating excellent customer satisfaction.

### **3.3.4 Customer Benefits from Successful Performance and Proven Results**

As is demonstrated in our references in VQS Section 3.3.4 and our Past Performance Questionnaires submitted in response to Section 3.3.5, the Telcordia team provides significant value to its clients in implementing systems and services related to number portability and other mission critical systems and services:

- ◆ Enabling Efficient Wireless Number Portability in the U.S. through the North American Number Portability Gateway – 90%+ of the U.S. MNP volume
- ◆ Delivery of SP local NP systems that connect with NPAC databases in all 8 regions and worldwide – understanding provider environments and delivering customized features adding value
- ◆ Delivery of the first NP system with toll-free – Enabling Toll-Free service in the U.S. delivering billions of calls with no downtime
- ◆ Delivery of world’s first multi-vendor regional NPAC Plus in India
- ◆ Delivery of first NP platform in Latin America – fast deployment with no upfront investment
- ◆ Routing Administration in the U.S. – Every

*Telcordia has more than 1,000 customers for its products and services enabling porting, routing, message delivery and interconnection to more than 1.5 Billion subscribers worldwide!*



ION

*iconectiv Number Portability Administration Center  
Request for Proposal No. 2015-LNPA-RFP-1.  
RFP\_Section 15.1\_Supplemental Documentation*

service provider's ported and pooled TN references Telcordia data with an LRN

### 3.3.5 Telcordia Team Past Performance Meets or Exceeds the Evaluation Criteria

The projects in our past performance exemplify our experience and expertise in regional local NPAC SMS systems and services, international NPAC PLUS systems, and the technical, operational and management skills to earn excellence in customer service, as highlighted below.

In addition to the three references required for VQS Section 3.3.4 Telcordia has asked 2 other customers to submit Past Performance Questionnaires for evaluation for a total of 5 references demonstrating our ability to deliver number portability in the U.S., number portability around the world, and demonstrating the technical skills of managing network databases in a managed service.

**Telcordia is providing the following references:**

- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]

These references demonstrate that Telcordia meets the Past Performance Criteria as outlined in the table below.

Past Performance Criteria	Telcordia Team Depth and Breadth of Relevant Experience
Experience with LNPA or NPAC/SMS services within the Regions	<ul style="list-style-type: none"> <li>■ Wireline local systems to support U.S. service providers</li> <li>■ Telcordia local systems (WNP, WICIS and SOA) process 90+% of wireless ports resulting in more underlying transactions than the NPAC itself</li> <li>■ Enables wireless-to-wireless porting interval to meet the SLAs of our customers</li> <li>■ Critical component of delivering fast seamless portability in the U.S.</li> <li>■ [Redacted]</li> </ul>
LNPA provider number portability administration in other countries or of other countries	<p>Telcordia as described in attachment VQS_Section 3.3.1_Experience Description has the most LNP NPAC PLUS equivalent deployments of any vendor:</p> <ul style="list-style-type: none"> <li>■ NP solutions deployed in 18 countries outside the U.S.</li> <li>■ Provide NP-related services to providers with nearly 1.5 billion subscribers</li> <li>■ Interfaces to hundreds service provides and vendors in 18 countries outside the U.S.</li> <li>■ Processed more than three billion number portability transactions worldwide.</li> <li>■ [Redacted]</li> </ul>



<p>Communicate with/support organizations, customers, &amp; stakeholders; implement escalation</p>	<ul style="list-style-type: none"> <li>Telcordia provides escalation points to its customers and commits to providing efficient escalation to managers with the ability to resolve customer issues within the rules, regulations and requirements of number portability administration. The organization is designed to provide customer support and communications at all levels [REDACTED]</li> <li>[REDACTED]</li> </ul>
<p>Provide full financial and operational reporting and insight</p>	<ul style="list-style-type: none"> <li>Telcordia SOA provides transaction reports for financial insight regarding port transaction charges.</li> <li>Telcordia NPAC PLUS systems provide reports for transaction based financial charges.</li> <li>All Telcordia systems provide full operational reporting.</li> <li>[REDACTED]</li> </ul>
<p>Survey users to gain feedback on help desk and user experience</p>	<ul style="list-style-type: none"> <li>Telcordia has implemented customer satisfaction surveys via its help desk for several of its products and SunGard also provides help desk surveys as part of its services as demonstrated in the referenced projects below.</li> <li>The Telcordia Quality Method of Operation for continuous improvement includes performance surveys.</li> <li>Our data center partner, SunGard, as noted below, uses both “in-flight” surveys and annual customer surveys as part of their Continuous Improvement Process.</li> <li><b>Several of the North American Past Performance references have participated in the Telcordia Customer Satisfaction surveys that are part of our QMO continuous improvement process.</b></li> </ul>
<p>Meet special requirements for expedited delivery or service</p>	<ul style="list-style-type: none"> <li>Nearly all of the deployments of Telcordia’s NPAC PLUS products included special requirements and customization for delivery all of which were performed on time with expedited delivery schedules.</li> <li>Telcordia has also delivered specialized features and met specialized customer requirements in the SOA and LSMS delivery.</li> <li><b>The Past Performance, for all of the Telcordia references, demonstrates Telcordia’s ability to meet special requirements for service. In addition, several projects required expedited delivery.</b> [REDACTED]</li> </ul>
<p>Past Performance Criteria</p>	<p><b>Telcordia Team Depth and Breadth of Relevant Experience</b></p>

<p>Experience with LNPA or NPAC/SMS services within the Regions</p>	<ul style="list-style-type: none"> <li>▪ Wireline local systems to several of the largest U.S. service providers</li> <li>▪ Telcordia local systems (WNP, WICIS and SOA) process 90+% of wireless ports resulting in more underlying transactions than the NPAC itself</li> <li>▪ Enables wireless-to-wireless porting interval to meet the SLAs of our customers</li> <li>▪ Critical component of delivering fast seamless portability in the U.S.</li> <li>▪ [REDACTED]</li> </ul>
<p>LNPA provider number portability administration in other countries</p>	<p>Telcordia as described in attachment VQS_Section 3.3.1_Experience Description has the most LNP NPAC PLUS equivalent deployments of any vendor:</p> <ul style="list-style-type: none"> <li>▪ NP solutions deployed in 18 countries outside the U.S.</li> <li>▪ Provide NP-related services to providers with nearly 1.5 billion subscribers</li> <li>▪ Interfaces to hundreds service provides and vendors in 18 countries outside the U.S.</li> <li>▪ Processed more than three billion number portability transactions worldwide.</li> <li>▪ [REDACTED]</li> </ul>
<p>Functional/technical skills required on LNP activities performed for other customers</p>	<ul style="list-style-type: none"> <li>▪ Provide fully compliant SOA and 8 region LSMS</li> <li>▪ Leading provider of Availability Services, Data Center, and Managed Recovery exceeds requirements</li> <li>▪ Demonstrated delivery of high availability network systems and services processing millions queries a day</li> <li>▪ Demonstrated Service Monitoring and Help Desk Support</li> <li>▪ [REDACTED]</li> </ul>
<p>Ability to provide excellent customer service</p>	<ul style="list-style-type: none"> <li>▪ Past Performance Demonstrating High Levels of Customer Satisfaction in             <ul style="list-style-type: none"> <li>○ Delivery of U.S. NP requirements in the regions</li> <li>○ Delivery of NP services worldwide in 19 countries</li> <li>○ Deliver of network managed services delivering high volume high availability services</li> <li>○ Delivery of complex new systems on time, on budget and with high customer satisfaction</li> </ul> </li> <li>▪ <b>Customer satisfaction is shown in all of five of our Past Performance references; we have been delivering quality number portability and network services to our customers since the very start of number portability.</b></li> </ul>

<p>Develop and deploy a comparable automated system; meet schedule/cost</p>	<ul style="list-style-type: none"> <li>▪ Telcordia SOA and LSMS systems meet all the relevant requirements FRS and the IIS as shown in three of our past performance references.</li> <li>▪ Telcordia provides a system comparable to NPAC PLUS pre-port functionality in 17 countries around the world including two of our past performance references.</li> <li>▪ Telcordia provides high availability system and services exceeding the NPAC performance requirements in one of our past performance references.</li> <li>▪ <b><i>Past Performance in all five of our references demonstrates on time delivery of cost-effective solutions of systems that either represent a significant portion of US NPAC functionality or are for more than comparable systems.</i></b></li> </ul>
<p>Staff, manage, and operate an NPAC or comparable service operation;</p>	<ul style="list-style-type: none"> <li>▪ Telcordia has delivered and operated Number Portability Systems and services since 1992, starting with the delivery of toll-free number portability through developing best practices for service delivery.</li> <li>▪ SunGard: delivered critical infrastructure data centers, system networks, and help desks for thousands of customers in hundreds of countries.</li> <li>▪ [REDACTED]</li> </ul>
<p>Communicate with/support organizations, customers, &amp; stakeholders; implement escalation</p>	<ul style="list-style-type: none"> <li>▪ Telcordia provides escalation points to its customers and commits to providing efficient escalation to managers with the ability to resolve customer issues within the rules, regulations and requirements of provision of number portability administration. The organization is designed to provide customer support and communications at all levels [REDACTED]</li> <li>▪ [REDACTED]</li> </ul>
<p>Provide full and operational reporting and insight</p>	<ul style="list-style-type: none"> <li>▪ Telcordia SOA provides transaction reports for financial insight regarding port transaction charges</li> <li>▪ Telcordia NPAC PLUS systems provide reports for transaction based financial charges</li> <li>▪ All Telcordia systems provide full operational reporting.</li> <li>▪ [REDACTED]</li> </ul>

<p>Survey users to gain feedback on help desk and user experience</p>	<ul style="list-style-type: none"> <li>▪ Telcordia has implemented customer satisfaction surveys via its help desk for several of its products and SunGard also provides help desk surveys as part of its services as demonstrated in the in the reference projects below.</li> <li>▪ The Telcordia Quality Method of Operation for continuous improvement includes performance surveys.</li> <li>▪ Our data center partner, SunGard, as noted below, uses both “in-flight” surveys and annual customer surveys as part of their Continuous Improvement Process.</li> <li>▪ <b>Several of the N. American past performance references have participated in the Telcordia Customer Satisfaction surveys that are part of our QMO continuous improvement process.</b></li> </ul>
<p>Meet special requirements for expedited delivery or service</p>	<ul style="list-style-type: none"> <li>▪ Nearly all of the deployments of Telcordia’s NPAC PLUS products included special requirements and customization for delivery all of which were performed on time with expedited delivery schedules.</li> <li>▪ Telcordia has also delivered specialized features and met specialized customer requirements in the SOA and LSMS delivery.</li> <li>▪ <b>The past performance references for all five of the Telcordia references demonstrate Telcordia meeting special requirements for the services. In addition, several required expedited delivery.</b> [REDACTED]</li> </ul>

Telcordia Discriminators

*With systems installed that are larger and higher availability than NPAC, the Telcordia Past Performance demonstrates our ability to deliver and operate this critical service.*

### 3.3.5.1 Demonstration of Customer Excellence in Data Center Services and Data Transition Services

Telcordia’s partner for data center, availability and help desk services, SunGard, has thousands of customers that can demonstrate past performance of their availability and data center services as well as their proven service management, continuous improvement and importantly their proven methodology to transition large data services.

SunGard has references available for the projects described below for which contact information can be made available on request to demonstrate the technical and management skills to deliver an NPAC data center and related availability services that meet or exceed the performance criteria.

The following table summarizes the reference projects that demonstrate the technical capabilities to meet or exceed the data center, availability and help desk services for LNPA as part of the Telcordia team.

Relevant Aspects	Project	Financial Services Payment Processing	Healthcare -- Hospitals	International Financial Services Client
Data Center Hosting		Multiple data centers, including Production, DR and UAT/Dev	4 hosting sites, brand neutral, primary/secondary site configuration, mobile recovery sites as needed.	
High Reliability / Availability				
24-hour Operations		24x7	24x7	24x7
Large Volumes of Data		80 TB of data	n/a	Large hosted storage with 50TB of data
Large Volumes of Transactions		Over 124 million ATM/POS – more than 200 million total transactions	n/a	Thousands of daily transactions for International banking end customers
Government Regulatory	/	Financial, PCI, SASE, HIPAA	HIPAA	Private
Service Desk		200 tickets per month, ITIL	300 + calls per month, ITIL	100 calls/tkts per month, ITIL
Transition				
Transition Project Management		Phased design, planning and implementation. Proof-of-concept, UAT testing & signoff prior to production implementation and transition to Operations.	<p>“Flip Switch” separation from old to green field environment,</p> <p>Initial proof-of-concept. On-going phased transition management driven by customer’s schedule. Exceptional Build and Activate responsiveness to each request. Regularly scheduled weekly checkpoints to provide general support and planning of upcoming needs.</p>	PMI framework for phased design, planning and implementation, followed with failover testing before transition into operations

Relevant Aspects	Project	Financial Services Payment Processing	Healthcare -- Hospitals	International Financial Services Client
Users of Service				
End Users	n/a		1,250 hospital systems used in the course of providing care to facilities with over 1,000 beds and 7,000 providers.	Thousands of financial end customers
Large entities (clearinghouse)	[REDACTED]		4 hospitals with over 1,000 beds and over 60 operating rooms.	1 main regional branch and application access to thousand regional branches
Customer Satisfaction Surveys				
Trailer Surveys			YES	
Annual Surveys	YES		YES	YES

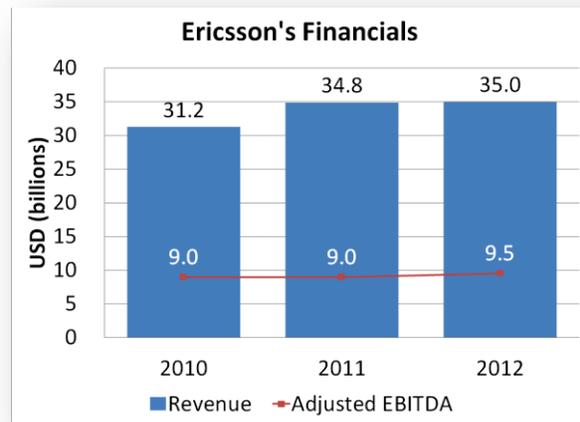
*These reference projects demonstrate the technical skills to meet or exceed the relevant requirements for LNPA data center, availability and help desk services.*

### 3.4 Factor 3, Financial Stability

As a wholly owned subsidiary of Ericsson, Telcordia does not issue separate financial statements. Consequently, Telcordia’s financial solvency is certified through the consolidated audited financial statements of its parent Ericsson. Telcordia’s global market leadership position in number portability and other interconnection solutions is further strengthened by the financial backing and stability of Ericsson, which are shared below.

Ericsson builds its strength on the combination of core assets: technology leadership, services leadership and global scale. With a well-diversified customer base, Ericsson has strong and long-standing customer relationships with over 400 customers in 180 countries, and employs over 100,000 highly skilled and engaged employees. Ericsson, which has been in business for 137 years, boasts a strong balance sheet with a significantly large cash position to ensure the financial flexibility to invest in future growth and to capture new business opportunities, such as this multi-year NPAC contract.

Telcordia is extremely well-positioned to endure negative economic impacts as it is backed by a parent with substantial financial wherewithal as demonstrated by considerable revenues, sizeable market capitalization and net cash position, and robust cash generating ability. Furthermore, Ericsson has more than proved its longevity as it has withstood every economic downturn over the past 137 years.



#### 3.4.1 Financial Strength

In 2010, 2011 and 2012, Ericsson generated consolidated revenues of \$31.2, 34.8 and 35.0 billion, respectively, growing revenues by a compounded annual growth rate of 6%. In 2010, 2011 and 2012, Ericsson generated adjusted Earnings Before Interest, Taxes and Depreciation (EBITDA) of \$9.0, 9.0 and 9.5 billion, respectively. Ericsson generated \$3 billion in 2012 operating cash flow, ended 2012 with a gross cash position of \$12 billion, a net cash position (with total cash exceeding total debt) of \$6 billion. In 2012 Ericsson’s free cash flow (cash flow from operations less capital expenditures) from continuing operations totaled \$2.6 billion. Furthermore, Ericsson yielded an operating margin of 9.7%, which remains the highest among its traditional publicly listed telecom competitors and boasted a sizeable March 2013 market capitalization of approximately \$40 billion.

*Please note that the Ericsson financial metrics shared above were extracted from the attached 2012 Ericsson annual report and converted from the Swedish Krona (SEK) to the U.S. Dollar (USD) based on a 4/1/2013 exchange rate of 6.5154 SEK/USD as posted in the Wall Street Journal.*

#### 3.4.2 Annual Reports Including Audited Financials

Ericsson’s audited financial statements are included in the three attached Ericsson annual reports to shareholders for the years 2010, 2011 and 2012.

### 3.4.3 Sub-Contractor: SunGard

#### 3.4.3.1 Overview

Pioneering disaster recovery in the 1970s, SunGard Data Systems, Inc. is one of the world’s leading software and technology services companies. SunGard is the largest privately held software and services company and is ranked 480 on the Fortune 500. They provide software and technology services to financial services, education and public sector organizations. They also provide disaster recovery services, managed services, information availability consulting services and business continuity management software. SunGard serves approximately 25,000 customers in more than 70 countries. SunGard’s revenue is highly diversified by customer. During each of the past three fiscal years, no single customer has accounted for more than 3% of total revenue. SunGard’s solid liquidity position assures its customers that SunGard is, and will continue to be, a reliable and stable service provider for years to come.

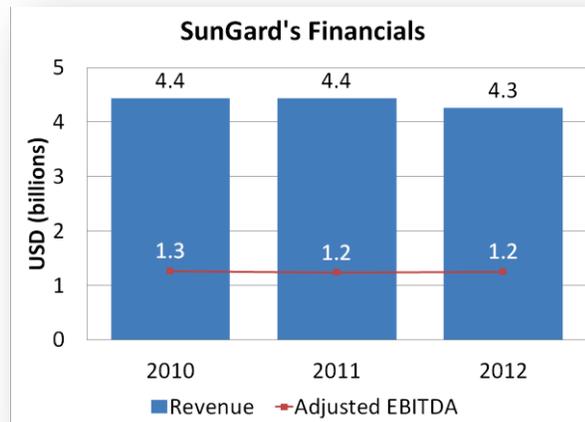
Formerly listed on the NYSE (ticker symbol SDS) on August 11, 2005 the company was acquired by a consortium of seven private equity investment firms in a transaction valued at \$11.3 billion. The partners in the acquisition were Silver Lake Partners, Bain Capital, Blackstone Group, Goldman Sachs Capital Partners, Kohlberg Kravis Roberts & Co., Providence Equity Partners, and Texas Pacific Group.

Combining deep domain datacenter and information availability experience, diversified operations and resulting financials with the backing by a consortium of the world’s leading private equity firms, ensures long-term strength, wherewithal and stability that should comfort any prospective customer requiring mission critical services.

#### 3.4.3.2 Financial Strength

In 2010, 2011 and 2012, SunGard generated consolidated revenues of \$4.4, 4.4 and 4.3 billion, respectively. 70% of the company’s revenues is highly recurring due to longer term contracts and significant switching costs. Consolidated adjusted EBITDA for the same time period was \$1.3, 1.2 and 1.2 billion.

In 2010, 2011 and 2012, SunGard generated consolidated cash flow from continuing operations of \$601, 606 and 645 million, respectively. At the end of 2012 SunGard had cash and equivalents of \$546 million. In 2012 SunGard’s free cash flow (cash flow from operations less capital expenditures) from continuing operations totaled \$385M.



#### 3.4.3.3 Annual Reports Including Audited Financials

SunGard’s audited financial statements are included in the three attached SunGard 10Ks or annual reports to the SEC for the years 2010, 2011 and 2012 found in VQS Section 3.2.

## Appendix A Telcordia QMO and ITIL

[Redacted content]

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- [Redacted]

## ITIL Service Management Approach

ITIL is a public framework that describes Best Practice in IT service management. It provides a framework for the governance of IT, the ‘service wrap’, and focuses on the continual measurement and improvement of the quality of IT service delivered, from both a business and a customer perspective. This focus is a major factor in ITIL’s worldwide success and has contributed to its prolific usage and to the key benefits obtained by those organizations deploying the techniques and processes throughout their organizations.

Some of these benefits include:

- ◆ Increased user and customer satisfaction with IT services
- ◆ Improved service availability, directly leading to increased business profits and revenue
- ◆ Financial savings from reduced rework, lost time, improved resource management and usage
- ◆ Improved time to market for new products and services
- ◆ Improved decision making and optimized risk.

The Telcordia Solution has embraced this framework, and it is also used by our data center partner, to deliver the end-to-end NPAC SMS service to the Industry enabling many of the benefits identified above.

The ITIL Framework defines best practices for 5 core areas (described in 5 books) and 25 processes within those areas. The five areas are: Service Strategy, Service Design, Service Transition, Service Operation and Continual Service Improvement.

*Service Strategy* is the core governance and business management area and includes Business Relationship Management, Financial Management, and Demand Management processes. The Telcordia Service, Solution features and Management solution used these best practices. Most of these functions are in Business Management group of Telcordia NPAC with participation of experts in the Service Delivery, Service Management teams.

*Service Design* are the best practices for appropriately designing a new solution, service or feature and include Service Level Management, Capacity Management, Availability Management, Service Continuity Management, Information Security Management, Supplier Management and Design Coordination. The Service Design must take all of these process best practices into consideration to deliver an approved design to *Service Transition*.

*Service Transition* are the best practices for development, test, transition planning and support. Included are processes for Change Management, Change Evaluation, Release and Deployment Management, Service Asset and Configuration Management, Knowledge Management, Service Validation and Testing, and Transition Planning and Support. The Telcordia QMO practices are important part of implementing these best practices. Once the release is tested, validated, and with change management approval transitioned into production the solution goes into *Service Operation*.

*Service Operation* are the best practices for operation of the service to provide outstanding customer satisfaction including conformance with all Service Levels committed to in *Service Design*. *Service*

*Design* has best practices for four Functions (teams) in order to provide these operations. An important part of the best practice is providing a Single Point of Contact for customers for service inquiries, requests and trouble resolution. This is done via the Service Desk function. The Service Desk includes the help desk and provides ingress for the following processes: Request Fulfillment, Access Management, Problem as well as Event and Incident management. *Service Operations* also includes best practices for the following functions: Technical Management, IT Operations Management, and Application Management.

*Continual Service Improvement* is the best practice concerned with maintaining value for customers through the continual evaluation and improvement of the quality of services. Quality measurements and metrics (including implementation of benchmarking and the GEP and Customer Surveys) will be included in these processes. In addition Telcordia QMO is a key portion of implementing these practices.

This section focus on two of the five core publications of the key principles of IT service management:

- ◆ Service Operation
  - The purpose of Service Operation is to deliver agreed levels of service to users and customers, and to manage the applications, technology and infrastructure that support delivery of the services.
- ◆ Continual Service Improvement
  - Continual Service Improvement (CSI) is concerned with maintaining value for customers through the continual evaluation and improvement of the quality of services and the overall maturity of the ITSM service lifecycle and underlying processes.

The Telcordia Solution includes the components in the data center infrastructure to support the ITIL V3 library. The infrastructure contains recognized products such as Services Now and Zenoss for operating and monitoring the Service. The product suite and the processes/governance allows for the following ITIL V3 capabilities to support the requirements in the RFP.

- ◆ Event Management Process

An event is a change of state that has significance for the management of a configuration item (CI) or IT service (for example hardware scheduled maintenance). An event may indicate that something is not functioning correctly, leading to an incident being logged. Events may also indicate normal activity, or a need for routine intervention such as changing a tape.

Event management depends on monitoring, but it is not the same as monitoring. Event management generates and detects notifications, whilst monitoring checks the status of components even when no events are occurring.

Events may be detected by a CI sending a message, or by a management tool polling the CI. After an event has been detected it may lead to an Incident, Problem or Change, or it may simply be logged in case the information is needed.

Response to an event may be automated or may require manual intervention. If actions are needed then a trigger, such as an SMS message or an incident being automatically logged, can alert support staff.

- ◆ Incident Management Process

An incident is an unplanned interruption to an IT service, or a reduction in the quality of an IT service. Failure of a configuration item that has not yet impacted service is also an incident.

The purpose of Incident Management is to restore normal service as quickly as possible, and to minimize the adverse impact on business operations. Incidents are often detected by event management, or by users contacting the service desk. Incidents are categorized to identify who

should work on them and for trend analysis, and they are prioritized according to urgency and business impact.

If an incident cannot be resolved quickly, it may be escalated. Functional escalation passes the incident to a technical support team with appropriate skills; hierarchical escalation engages appropriate levels of management. After the incident has been investigated and diagnosed, and the resolution has been tested, the Service Desk should ensure that the user is satisfied before the incident is closed.

◆ Request Fulfillment Process

A service request is a request from a user for information or advice, or for a standard change, or for access to an IT service.

The purpose of Request Fulfillment is to enable users to request and receive standard services; to source and deliver these services; to provide information to users and customers about services and procedures for obtaining them; and to assist with general information, complaints and comments.

All requests should be logged and tracked. The process should include appropriate approval before fulfilling the request.

◆ Access Management Process

The purpose of the Access Management process is to provide the rights for users to be able to access a service or group of services, while preventing access to non-authorized users.

Access Management helps to manage confidentiality, availability and integrity of data and intellectual property.

Access Management is concerned with identity (unique information that distinguishes an individual) and rights (settings that provide access to data and services). The process includes verifying identity and entitlement, granting access to services, logging and tracking access, and removing or modifying rights when status or roles change.

◆ Problem Management Process

A problem is a cause of one or more incidents. The cause is not usually known at the time a problem record is created, and the problem management process is responsible for further investigation.

The key objectives of Problem Management are to prevent problems and resulting incidents from happening, to eliminate recurring incidents and to minimize the impact of incidents that cannot be prevented.

Problem Management includes diagnosing causes of incidents, determining the resolution, and ensuring that the resolution is implemented. Problem Management also maintains information about problems and the appropriate workarounds and resolutions.

Problems are categorized in a similar way to incidents, but the goal is to understand causes, document workarounds and request changes to permanently resolve the problems. Workarounds are documented in a Known Error Database, which improves the efficiency and effectiveness of Incident Management.

◆ Common Service Operation Activities

Service Operation includes a number of activities that are not part of the five processes described. These include:

- Monitoring and control: to detect the status of services and CIs and take appropriate corrective action
- Console management/operations bridge: a central coordination point for monitoring and managing services
- Management of the infrastructure: storage, databases, middleware, directory services, facilities/data center etc.

The processes outlined for our QMO and ITIL best practices that are implemented in the Telcordia team environments are referenced throughout the response, and are more fully documented in the 5 ITIL books and the Telcordia QMO process details that are used to our audits. More detail can be provided upon request.

## Appendix B: Performance Test and Measurements Results

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**RFP\_Section 14.2**  
**Allocable Charges (Offer 1of2, Combined)**

ENTIRE DOCUMENT IS  
HIGHLY CONFIDENTIAL

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**RFP\_Section 14.2**  
**Allocable Charges (Offer 2of2, Reg Combo)**

**ENTIRE DOCUMENT IS  
HIGHLY CONFIDENTIAL**

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## **RFP\_Section 14.3**

### **Direct Charges (Offer 1of2 Combined)**

**ENTIRE DOCUMENT IS  
HIGHLY CONFIDENTIAL**

Telcordia10332

## **RFP\_Section 14.3**

### **Direct Charges (Offer 2of2, Regional Combination)**

**ENTIRE DOCUMENT IS  
HIGHLY CONFIDENTIAL**

Telcordia10333

Welcome, Joel Zamlong with Telcordia Technologies Inc

[Logout](#)[Home](#) > [Current Projects](#) > [431766 - LNPA RFP](#) > [Project Package](#) > Survey-2015-LNPA-Vendor Qualification**Survey-2015-LNPA-Vendor Qualification**  
**Survey Deadline: 4/22/2013 11:59:59 PM**

A survey is a simple way for a project sponsor to gather information about your company to determine the possibility of doing business. These surveys typically include general questions about the company, specifications of goods and services to be provided, expertise, and other questions specific to the sponsor. You have been invited to respond to this survey.

**Please note: Your response has been submitted to the sponsor. It is final and may not be edited.**

## 1. GENERAL PROJECT INFORMATION

**STATEMENT:****Introduction and Purpose**

Pursuant to the Telecommunications Act of 1996, the Federal Communications Commission (FCC) has adopted a succession of orders implementing Local Number Portability (LNP), which allows consumers to change service providers for telecommunications services at the same location without changing their telephone numbers. Currently, LNP is enabled in the seven United States former Regional Bell Operating Company (RBOC) service areas or regions, including their related Territories (each a "Region" and collectively, the "Regions") through seven databases, one in each Region, collectively referred to as the Number Portability Administration Center/Service Management System (NPAC/SMS). Each Regional database is operated and administered by a Local Number Portability Administrator (LNPA), neutral and independent from Telecommunications Carriers. A separate Master Agreement governs the operation and administration of the NPAC/SMS by the LNPA in each of the seven Regions and specifies the terms and conditions for providing NPAC/SMS services (referred to as the "Services").

All Master Agreements in all Regions are managed by the North American Portability Management LLC (NAPM LLC), and all Master Agreements in all Regions expire on June 30, 2015. The FCC has delegated authority to its advisory committee, the North American Numbering Council (NANC), working in consultation with the NAPM LLC, to implement a vendor selection process for the next-generation NPAC/SMS in all Regions, to commence at the expiration of the current Master Agreements. This vendor selection process includes issuance of a Request For Information (RFI) and a subsequent Request For Proposal (RFP) and will culminate in the selection of the LNPA in each of the seven Regions. The purpose of the NANC is to advise the Commission and to make recommendations, reached through consensus, that foster efficient and impartial number administration. The NANC, a diverse body with consumer, state government, and industry representatives, has established an LNPA Selection Working Group (SWG) to oversee the selection process of the LNPA. See Order, WC Docket No. 09-109 and CC Docket No. 95-116, DA 11-883, (adopted May 16, 2011) for process information and the respective roles of the FCC, NANC, and NAPM LLC. During this process, options for replacement and/or enhancement of the current NPAC/SMS in all Regions may be considered.

**1.1**

The purpose of the RFP is to provide each prospective RFP vendor (referred to as a Respondent or a Bidder) with an opportunity to demonstrate how its proposal satisfies the requirements of the RFP and will benefit Telecommunications Carriers and other qualified parties who will be Users of the NPAC/SMS and who rely upon the NPAC/SMS for the rating, routing, and billing of calls, law enforcement and other parties who may be granted certain limited and special access to NPAC/SMS data for other permissible purposes, and ultimately consumers. Each Respondent is instructed to answer all questions in as concise and

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complete a manner as possible, and in many instances, the Respondent is provided with an opportunity to elaborate on its answers.

The RFP process is comprised of three surveys, which should be completed in this order: (1) Vendor Qualification, (2) Technical Requirements Document, and (3) the RFP. This Vendor Qualification survey is the first step in the RFP process and is intended to provide uniform Vendor Qualification Criteria and acceptance of key business terms and conditions as a condition for consideration of a Respondent's responses to the RFP survey.

The qualification process will require satisfaction of the following two requirements:

1. Submission of detailed responses to the Vendor Qualification Criteria, set forth in Section 3, by the RFP Response Cut-off Date described in Section 1.5, including representations regarding neutrality (as defined in Section 3.4) and acceptance of key business terms and conditions; and
2. Substantiation of neutrality, pursuant to a legal opinion, delivered on or before the RFP Response Cut-off Date indicated in Section 1.5.

The NAPM LLC has authorized one of its Advisory Committees, the Future of NPAC Subcommittee (hereafter referred to as the FoNPAC) to project manage the RFP process, including the solicitation and evaluation of responses to this Vendor Qualification survey. The Ista® SmartSource SRM® Tool will be used to gather, evaluate, and weigh all responses to this Vendor Qualification survey as part of the LNPA selection process. The LNPA selection process is expected to conclude around September 2013.

#### STATEMENT:

### Local Number Portability (LNP)

LNP is the ability of users of telecommunications services, to retain, at the same location, existing telephone numbers without impairment of quality, reliability, or convenience when switching from one Telecommunications Carrier to another. (See 47 USC § 153(37)).

Currently, the LNPA provides a total solution for maintaining, administering, and operating the NPAC/SMS in each of seven United States Regions for the continued operation of LNP. The NPAC/SMS is the system that manages the porting and pooling of telephone numbers (TNs).

The NPAC/SMS in each Region serves as a central coordination point for LNP activity in that Region. The LNPA provides management, administration, and oversight for, as well as integration of, Data Center operations, hardware and software development, and all maintenance related functions. The LNPA is responsible for achieving performance standards established and amended from time to time by the industry, for providing user and technical support services (e.g. Help Desk), for providing off-line testing with service providers' systems and training for industry participants on an ongoing day-to-day basis.

The NPAC/SMS is a hardware and software platform that comprises the database in each Region required to effect the porting/pooling of telephone numbers and proper call routing of telephone numbers and associated advanced calling features in all Regions. In general, the NPAC/SMS receives information from both the old and new service providers (concurrency, routing information, including the new Location Routing Number (LRN)), validates the information received, and broadcasts the new routing information when an "activate" message is received, indicating that the end user customer has been physically connected to the new service provider's network. The NPAC/SMS also contains a record of all ported/pooled telephone numbers and a history file of transactions relating to the porting/pooling of a telephone number. The NPAC/SMS provides the ability to retransmit LNP information to service providers under certain conditions. The NPAC/SMS is not involved in real time call processing, because this function resides solely in the respective networks of the underlying service providers.

1.2

The NPAC/SMS interfaces with service providers via their Service Order Activation (SOA) systems and Local Service Management Systems (LSMS). The NPAC/SMS Interoperable Interface Specification (IIS) defines the interface between the NPAC/SMS and the SOA/LSMS systems for a Regional architecture. The NPAC/SMS Functional Requirements Specification (FRS) defines functional and operational requirements for the NPAC/SMS. The Abstract Syntax Notation 1 (ASN.1) describes the data structures for representing, encoding, transmitting, and decoding data. The Guidelines for the Definition of Managed Objects (GDMO) serves as the guideline for defining network objects under the Telecommunications Management Network. The above-referenced current technical documents are posted at the following URL:  
[https://www.napmlc.org/pages/npacrfp/npac\\_rfp.aspx](https://www.napmlc.org/pages/npacrfp/npac_rfp.aspx)

**STATEMENT:****Vendor Qualification Response Instructions****1.3**

1. All responses to this Vendor Qualification survey must be submitted through the lasta® SmartSource SRM® Tool. The lasta® SmartSource SRM® Tool is an "on demand" technology that contains product platforms (such as Product Management and Decision Optimization) for sourcing teams.
2. All questions about the Vendor Qualification survey must be posted in the on-line "Forum" in the lasta® SmartSource SRM® Tool. Questions will be answered by the FoNPAC as quickly as possible. Please note that all questions and answers can be viewed by any User with access to this RFP survey in the lasta® SmartSource SRM® Tool.
3. Respondents must satisfy the Vendor Qualification Criteria set forth in Section 3 of this Vendor Qualification survey in order for a Respondent's RFP submission to be considered.
4. All responses to this Vendor Qualification survey must be received on or before the RFP Response Cut-off Date as described in Section 1.5 of this Vendor Qualification survey via the lasta® SmartSource SRM® Tool.

**STATEMENT:****Treatment of Information and Confidentiality**

All responses to this Vendor Qualification survey become the property of the NAPM LLC upon submission, and the NAPM LLC and the FoNPAC expressly reserve the right to reject any and all responses to this Vendor Qualification survey after consultation with the FCC, without an explanation. The NAPM LLC and the FoNPAC may engage an independent consultant to assist in the evaluation of responses to this Vendor Qualification survey, and to the RFP survey and the TRD survey and to make recommendations to the NAPM LLC and the FoNPAC. The NAPM LLC and the FoNPAC reserve the right to request additional information or clarification.

The information submitted by each Respondent will be treated as confidential and may be shared ONLY in accordance with the terms of the confidentiality agreements with members of the NANC's SWG, the FoNPAC, and the NAPM LLC and ONLY upon prior confirmation that each member of such groups has executed the confidentiality agreement. The confidentiality agreements may be found on the NAPM website:

[http://www.napmlc.org/pages/NPACRFP/NPACRFP\\_refdocs.aspx](http://www.napmlc.org/pages/NPACRFP/NPACRFP_refdocs.aspx). A Respondent's information will also be shared with FCC staff in connection with evaluation of a Respondent's RFP response.

**1.4**

**ION**

All supporting documents related to a Respondent's submission to this Vendor Qualification survey must reference "Request for Proposal No. 2015-LNPA-VENDOR QUALIFICATION-1." Vendor Qualification survey responses must be submitted in accordance with the instructions in Section 1.3 VENDOR QUALIFICATION RESPONSE INSTRUCTIONS. Any Vendor Qualification survey response submitted after the RFP Response Cut-off Date as described in Section 1.5 of this Vendor Qualification survey will not be considered. A Respondent is solely responsible for ensuring that its response is submitted and received by the FoNPAC in accordance with the instructions. All submissions in connection with this RFP, including this Vendor Qualification survey must be complete, truthful, and accurate. Material misrepresentations or omissions may result in disqualification or reductions in scoring.

In exchange for consideration of a Respondent's submission to this Vendor Qualification survey, Respondent agrees by such submission to indemnify and hold harmless the NAPM LLC, the FoNPAC, the SWG, their employees, officers, agents, contractors, consultants, Members, and counsel from and against any and all liabilities, demands, damages, expenses and losses arising from such submission and response and any subsequent award or decision not to award a contract pursuant to the RFP or the vendor selection process. The Respondent shall be solely responsible for any claims, costs, or damages it incurs in connection with all submissions and responses to this Vendor Qualification survey.

**1.5**

**STATEMENT:**

**RFP Process Time Line**

Below is the proposed time line for the vendor selection pursuant to the RFP. The FoNPAC reserves the right to modify or adjust the following dates or to otherwise change or amend the time line, with the consent of the FCC:

**RFP:**

**08/13/2012 - Public Notice published by FCC**  
**02/05/2013 - Vendors may request login credentials to access the lasta® SmartSource SRM® Tool from the FoNPAC**  
**02/05/2013 - RFP survey, Vendor Qualification survey, and the TRD survey made available on the lasta® SmartSource SRM® Tool**  
**04/05/2013 - RFP Response Cut-off Date, the date all responses and submissions to the RFP survey, Vendor Qualification survey, and the TRD survey are due**  
**08/05/2013 - LNPA Vendor selection recommendation by the FoNPAC to the SWG**  
**09/20/2013 - Estimated date for FCC approval of Vendor selection for all Regions**

**1.6**

**STATEMENT:**

**lasta® SmartSource SRM® Tool Training**

A Respondent can access on-line training within the lasta® SmartSource SRM® Tool with Respondent's login credentials. The information in the "Training" section on this project website is easily accessed to learn more about using this tool. A Respondent can find the "Training" link on the left side of the project website.

**Abbreviations and Terminology:**

Refer to "Glossary of Terms and Abbreviations" document in the lasta® SmartSource SRM® Tool.

**1.7\***

**QUESTION:**

**Respondent Acknowledgement**

Respondent agrees that the submission of responses to this Vendor Qualification survey

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constitutes <sup>ION</sup> acceptance of all referenced and required terms and conditions set forth in this Vendor Qualification survey.

Acknowledged

## 2. GENERAL VENDOR COMPANY INFORMATION

**2.1\*** **QUESTION:**

Please provide detail of the types of businesses or different lines of business in which the Respondent is engaged, including the percentages and revenues from each such type or lines of business.

Please see the optional attachment.

**Optional Attachments:**

 [VQS Section 2.1 Types and Lines of Business Detail.pdf](#) (147.7 KB)

**2.2\*** **QUESTION:**

Please provide the following information about Respondent:

<b>Company Name</b>	Telcordia Technologies, Inc.
<b>Company Address 1</b>	444 Hoes Lane
<b>Company Address 2</b>	(no answer)
<b>City, State and Zip Code</b>	Piscataway, New Jersey 08854
<b>Primary Contact Name</b>	Joel Zamlong
<b>Primary Contact Phone</b>	732 699 8695
<b>Primary Contact Email</b>	jzamlong@telcordia.com
<b>Secondary Contact Name</b>	Tara O'Neill Diaz
<b>Secondary Contact Phone</b>	732 699 2664
<b>Secondary Contact Email</b>	todiaz@telcordia.com

\* Red cells are required

**2.3\*** **QUESTION:**

Is the above address also the accounts receivable address for the Respondent? If not, please provide the accounts receivable address in the area below.

No, the above address is not the account receivable address. The following is:

**2.4\*** **QUESTION:**

Please provide details of the ownership and organizational structure, including affiliates and subsidiaries, of the Respondent, including a listing of all Officers and members of the Board of Directors.

Please see the optional attachment.

**Optional Attachments:**

 [VQS Section 2.4 Ownership and Organizational Structure.pdf](#) (180.7 KB)

**2.5\*** **QUESTION: ION**

How many years has the Respondent been in business? Has the Respondent ever done business under a different name(s), to include mergers and acquisitions? If so, please provide the name(s).

Telcordia has been in business for 29 years since 1984. It was originally Bell Communications Research (Bellcore). In 1997, Bellcore was purchased by SAIC and then renamed as Telcordia in 1999. In 2005 Telcordia was purchased by Warburg Pincus and Providence Equity Partners. In January 2012 Telcordia was purchased by Telefonaktiebolaget LM Ericsson and still operates as an independent wholly owned subsidiary, Telcordia Technologies, Inc.

Ericsson has been in business for 137 years since 1876.

On February 14, 2013, Ericsson announced that Telcordia would do business as iconectiv. Ericsson launched the new iconectiv brand to promote and strengthen the iconectiv business identity and support its portfolio of powerful, trusted, neutral solutions for the telecommunications industry including number portability clearinghouses and gateways, mobile messaging services, anti-theft mobile device registries, spectrum management databases and other interconnection information services.

**2.6\*** **QUESTION:**

Is the Respondent publicly traded or privately held?

Public Company

**2.7** **QUESTION:**

If the Respondent is publicly traded, please provide the stock symbol and the exchange where the Respondent's stock is traded.

Telcordia Technologies, Inc. is a wholly owned subsidiary of Ericsson. Telefonaktiebolaget LM Ericsson is traded on the New York NASDAQ and the Stockholm OMX under the symbol ERIC.

**2.8\*** **QUESTION:**

What is the total number of employees of the Respondent?

Telcordia Technologies, Inc. currently has approximately 300 employees. Ericsson has approximately 110,000 employees worldwide and 15,000 in North America.

### 3. VENDOR QUALIFICATION CRITERIA

**3.1** **STATEMENT:**

IN ORDER TO BE CONSIDERED AS A PRIMARY VENDOR FOR THE RFP, PROVIDE DETAILED RESPONSES TO **ALL** OF THE QUESTIONS LISTED IN THIS SECTION 3 AS VENDOR QUALIFICATION CRITERIA.

**3.2\*** **QUESTION:**

Financial Responsibility and Stability (capability to perform for the duration of the Master Agreements)

In order to be recommended for selection under the RFP vendor selection process as a Primary Vendor, a Respondent must possess sufficient financial responsibility and stability commensurate with the scope and duration of the Services to be delivered pursuant to the Master Agreements. Please provide a concise description of the financial condition of the Respondent as the Primary Vendor and of all Sub-Contractor(s), if any, that the Respondent will engage or include in providing the Services required by the RFP. In addition to answering all questions in the Vendor Qualification survey, please attach:

- The most recent audited financial statements and annual report for the previous three years of the Respondent and all such Sub-Contractor(s), if any.

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- Responses must include all characteristics of the Respondent's (and all such Sub-Contractor(s)', if any) financial strength and wherewithal to demonstrate that they can perform under a multi-year business contract of the magnitude and duration potentially to be awarded under the RFP.

Please see the optional attachments.

**Optional Attachments:**

- [VQS Section 3.2 Financial Stability of Telcordia and SunGard.pdf](#) (297.3 KB)
- [VQS Section 3.2 Ericsson 2012 Annual Report.pdf](#) (7.2 MB)
- [VQS Section 3.2 Ericsson 2011 Annual Report.pdf](#) (16.1 MB)
- [VQS Section 3.2 Ericsson 2010 Annual Report.pdf](#) (12 MB)
- [VQS Section 3.2 SunGard 2012 Annual Report \(Form 10K\).pdf](#) (1.3 MB)
- [VQS Section 3.2 SunGard 2011 Annual Report \(Form 10K\).pdf](#) (1.3 MB)
- [VQS Section 3.2 SunGard 2010 Annual Report \(Form 10K\).pdf](#) (1.2 MB)

**STATEMENT:**

**3.3**

Local Number Portability (LNP) Experience:

In order to be recommended for selection under the RFP vendor selection process as a Primary Vendor, a Respondent must possess sufficient experience and technical and operational capabilities to deliver the Services required by the RFP in a timely, cost-effective, and technically and operationally proficient manner.

**QUESTION:**

**3.3.1\***

**Provide a description of:**

- any experience the Respondent and/or any Sub-Contractor(s) that the Respondent may engage, has as an LNPA or provider of NPAC/SMS services, or knowledge of how LNP is implemented within the Regions;
- any experience the Respondent and/or any Sub-Contractor(s) the Respondent may engage, has as an LNPA or provider of number portability administration that is performed in other countries which may be similar to the way LNP is implemented within the Regions;
- products and services offered, customers served, successful performance of the functional/technical skills required on LNP activities performed for other customers (including contract duration, scope and order of magnitude of contract values);
- customer benefits that resulted from such successful performance; and
- proven results for exceptional customer service.

These responses must include a concise description of the principal business of the Respondent and Sub-Contractor(s), if any, including such items as company background, characteristics of business strength, and any accomplishments and capabilities that demonstrate a strong foundation for managing and operating the NPAC/SMS.

- (Note: A document can be attached with this information.)

Please see the optional attachment.

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ION

Optional Attachments:

 [VQS Section 3.3.1 LNP Experience Optional Attachment.pdf](#) (749 KB)

QUESTION:

**3.3.2\***

Identify and describe all threatened, pending, or concluded lawsuits or proceedings of any kind, (including but not limited to proceedings involving a governmental authority, whether federal, state, local, or foreign), during the immediately preceding five years, asserting or involving terminations, breach or non-performance or deficient performance by the Respondent or such Sub-Contractors that the Respondent has or would engage, under contracts, agreements or other arrangements, and identify and describe all threatened, pending, or concluded proceedings involving neutrality under any contract or arrangement.

(Note: a document can be attached, if necessary)

During the immediately preceding five years, Telcordia has no threatened, pending, or concluded lawsuits or proceedings asserting or involving contract terminations, breach or non-performance or deficient performance by Telcordia. Further, Telcordia has no threatened, pending, or concluded proceedings involving neutrality under any contract or arrangement.

As a wholly owned subsidiary of Ericsson, a publicly traded company, any material litigation would be disclosed in the Ericsson Annual Report. See "Legal Proceedings" on page 43 of the Ericsson 2012 annual report for additional information regarding publicly disclosed pending litigation involving the Ericsson group companies. Generally, Telcordia does not make the details of past, pending or current litigation publicly available. However, Telcordia represents that there is no pending litigation which would prevent it from fulfilling its obligations under any contract finally awarded to Telcordia.

As with any global services company with revenues in excess of \$1 billion per year, the SunGard Availability Services group may have some number of disputes that are being resolved at any particular time. This is standard operation for any large company. However, SunGard is not aware of any past or pending litigation that would impact its ability to perform all services proposed under SunGard's Agreement. This statement above corroborates with Sungard's statement to the SEC in its 2012 annual report (See attachment in Section 3.2; ITEM 3. LEGAL PROCEEDINGS, p.18) that no current legal proceedings will be material to its business, financial condition or results of operations.

In conclusion, Telcordia attests that there is no threatened, pending or concluded lawsuits that can impact the ability of Telcordia or its subcontractor, Sungard, to deliver this solution.

Optional Attachments:

QUESTION:

**3.3.3\***

Identify and explain any other instances of terminations of contracts, agreements or other arrangements within the preceding five years, prior to the completion or full term, whether voluntarily or by action of other parties.

[REDACTED]

Optional Attachments:

QUESTION:

Provide three current client references that Respondent has been doing business with, for three years or longer. Client references may not include the NAPM LLC itself or any individual that serves as a company representative or consultant for the NAPM LLC,

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**3.3.4\***

<sup>ION</sup>  
FoNPAC or SWG. Include the client or customer's official or registered name, nature of relationship, contact title, phone number, and email address.


\* Red cells are required

**Optional Attachments:**

 [VQS Section 3.3.4 Client References.pdf](#) (372.3 KB)

**3.3.5\***

**QUESTION:**

**Past Performance Reference Questionnaire**

The RFP Respondent shall complete Part I of the Past Performance Reference Questionnaire (see Reference Questionnaire in the Iasta® SmartSource SRM® Tool attachment area). The Respondent shall arrange with its client references, including at least those references identified in section 3.3.4, for completion of PART II of the Questionnaire. Client references may not include the NAPM LLC itself or any individual that serves as a company representative or consultant for the NAPM LLC, FoNPAC or SWG. Respondent must ensure that its references return the completed Part II to the NAPM LLC, in a sealed envelope, by the RFP Response Cut-off Date. Additional instructions are included in the Questionnaire.

**Has the Respondent distributed the Past Performance Reference Questionnaires?**

Yes

**3.3.6\***

**QUESTION:**

List three large client or customer accounts that Respondent has obtained in the past 12 months.


\* Red cells are required

**Optional Attachments:**

**3.3.7\***

**QUESTION:**

Provide three client or customer contacts, including contact information that have terminated business with you or not renewed over the last five years, and specify the length of time services were provided prior to termination and the reasons for termination.

If you do not have any client or customer contacts that fit these criteria, please indicate "none" in each red box.

[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]

\* Red cells are required

**STATEMENT:**

Neutrality

In accordance with law and FCC regulations (FCC 96-286 paras. 89, 92, 93, 98; and in FCC 97-289, paras. 25, 29, 30, 127 and CFR Title 47, Section 52.12(a)), in order to be recommended for selection under the RFP vendor selection process as a Primary Vendor, a Respondent must be a non-governmental entity that is impartial and is not aligned with any particular telecommunications industry segment and that can assure that access to the NPAC/SMS for all qualified Users is at all times evenhanded, impartial and nondiscriminatory. This criterion requires that the Primary Vendor (and all Sub-Contractors that the Primary Vendor will engage or include in providing the Services) must at all times be "Neutral Third Parties." For purposes of being a Neutral Third Party, an entity must satisfy **ALL** of the following criteria:

(1) The entity

a. is not a Telecommunications Service Provider,

b. is not owned by, or does not own, any Telecommunications Service Provider; provided that ownership interests (measured by equity interest in stock, partnership interests, whether general or limited, joint venture participation, or member interests in a limited liability company) or voting power (on any one or more matters) of ten percent (10%) or less (of the total outstanding ownership interests or voting power) shall not be considered ownership for this purpose;

c. and is not an affiliate, by common ownership or otherwise, of a Telecommunications Service Provider. For purposes of this definition, an affiliate is an entity that controls, is controlled by, or is under common direct or indirect control with another entity, and an entity shall be deemed to control another if such entity possesses either directly or indirectly (i) ownership interests (measured by equity interest in stock, partnership interests, whether general or limited, joint venture participation, or member interests in a limited liability company) of greater than ten percent (10%) (of the total outstanding ownership interests), (ii) voting power (on any one or more matters) of greater than ten percent (10%) (of the total outstanding voting power), or (iii) the power to direct or to cause the direction of management and policies of such entity, whether through ownership of or rights to vote, by contract, agreement, or otherwise.

(2) The entity or any Affiliate has not issued a majority of its debt to, nor derive a majority of its revenues (not including the NPAC/SMS) from, any Telecommunications Service Provider. For this purpose, "majority" means greater than 50%, and "debt" means stocks, bonds,

### 3.4

securities, notes, loans or any other instrument of indebtedness.

(3) The entity is not subject to undue influence by parties with a vested interest in the outcome of numbering administration and activities, and the entity is not involved in a contractual or other arrangement that would impair its ability to administer the NPAC/SMS fairly and impartially as an LNPA or to implement the schedule set forth in the IASTA® SmartSource SRM® Tool, called the FoNPAC Timeline.

For purposes of the above three criteria, a Telecommunications Service Provider is an entity that either (i) possesses the requisite authority to engage in the provision to the public of facilities-based wireline local exchange or CMRS telecommunications services in any State or Territory of the United States, or (ii) is one of the following three classes of interconnected Voice over Internet Protocol ("VoIP") providers: (I) Class 1, a standalone interconnected VoIP provider that obtains numbering resources directly from the North American Numbering Plan Administrator (NANPA) and the Pooling Administrator (PA) and connects directly to the PSTN (i.e., not through a PSTN Telecommunications Service Provider partner); or (II) Class 2, an interconnected VoIP provider that partners with a facilities-based Public Switched Telephone Network (PSTN) Telecommunications Service Provider to obtain numbering resources and connectivity to the PSTN via the Telecommunications Service Provider partner; or (III) Class 3, A non-facilities-based reseller of interconnected VoIP services that utilizes the numbering resources and facilities of another interconnected VoIP provider (analogous to the "traditional" PSTN reseller).

The Respondent must specifically address and demonstrate that as a Primary Vendor it is a Neutral Third Party. This may include a demonstration of how the Respondent will cure any deficiencies in neutrality if it is awarded the LNPA contract. The Respondent must disclose the identity and corporate affiliations of all Sub-Contractor(s) that it will engage or include in providing the Services required by the RFP (including software and hardware Sub-Contractors), if any and all contractual relationships, arrangements or other factors that would enhance or impair the Primary Vendor's and Sub-Contractors' ability to ensure that the LNPA is at all times a Neutral Third Party and that access to the NPAC/SMS for all qualified users is at all times evenhanded, impartial, and nondiscriminatory.

The Respondent must also demonstrate an understanding and willingness to implement policies and procedures that will ensure satisfaction of these criteria and requirements.

The technical requirements for NPAC/SMS are defined in the RFP. It is possible for a Primary Vendor that is precluded from being the NPAC/SMS Administrator may be allowable as another Primary Vendor's Sub-Contractor (hardware/software provider) if that Primary Vendor qualifies as a Neutral Third Party in responding to the RFP.

A Respondent's submission to this Vendor Qualification survey and the RFP must fully disclose the corporate identity or affiliation of its Sub-Contractor(s), if any. Failure to adequately do so may be a basis on which to disqualify the Primary Vendor from the RFP.

#### QUESTION:

##### **Neutrality Audit**

The Respondent must submit a Legal Opinion, at its expense, to substantiate its neutrality per the criteria set forth in section 3.4 of this Vendor Qualification survey. The Legal Opinion must be substantiated with supporting information, and this information shall be delivered to the FCC, NAPM LLC and the FoNPAC. The NAPM LLC will initially decide whether the Respondent satisfies the Neutrality criteria. Prior to award, the FCC will verify neutrality compliance. If the FCC determines that a Respondent is not in compliance with the neutrality criteria, and such noncompliance will not be cured by the start date of the new LNPA contract, the FCC shall disqualify the Respondent from the procurement.

The "Legal Opinion" required to be delivered by every Respondent pursuant to Section 3.5

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<b>3.5*</b>	<p>shall mean (1) a written communication, (2) that is delivered to the FCC, NAPM LLC and the FoNPAC expressly for the purpose of responding to this Vendor Qualification survey and for use in connection with evaluation pursuant to the RFP, (3) that is prepared by a person licensed and in good standing to practice law in any state of the United States and who represents the Respondent, (4) that concludes that Respondent is a Neutral Third Party as set forth in Section 3.4, and (5) that constitutes a third party legal opinion governed by and subject to the RESTATEMENT (THIRD) OF THE LAW GOVERNING LAWYERS and the Opinion Accord of the American Bar Association Section of Business Law (1991).</p> <p>As long as the Respondent submits a Legal Opinion by the RFP Response Cut-Off Date, the submission shall be considered on the merits, pursuant to the Evaluation Criteria in the RFP, and may not be disqualified on neutrality grounds. Failure by a Respondent to deliver a Legal Opinion substantiating Neutrality on or before the RFP Response Cut-Off Date indicated in Section 1.5 will disqualify the Respondent from consideration.</p> <p><b>Respondent understands that by submitting a response and attaching a Legal Opinion to this section, it acknowledges and agrees to the foregoing requirement of the delivery of a Legal Opinion substantiating Neutrality.</b></p>
<p>Agree</p>	
<p>Optional Attachments:</p> <p> <a href="#">VQS Section 3.5 WG Neutrality Legal Opinion.pdf</a> (13.7 MB)</p>	

<b>3.6</b>	<p><b>STATEMENT:</b></p> <p><b><u>Acceptance of Key Business Terms and Conditions</u></b></p> <p>Each Respondent submitting Responses to the RFP must submit responses to this Vendor Qualification survey to identify which of the following key business terms and conditions that such Respondent as the Primary Vendor, would agree to or not agree to if selected for recommendation as an LNPA to the SWG, by answering "Agree" or "Disagree" to each business term and condition. These terms and conditions are expected to be included in one or both of each Master Agreement between a successful Primary Vendor as an LNPA and the NAPM LLC in each Region and the uniform User Agreement between a successful Primary Vendor as an LNPA and each User of the NPAC/SMS; however, the following is not a comprehensive or complete listing of all contractual terms and conditions that may be included in those final and definitive agreements.</p>
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<b>3.6.1*</b>	<p><b>QUESTION:</b></p> <p><b><u>Question 1:</u></b></p> <p>The LNPA shall provide the NPAC/SMS and all Services at or above specified Service Level Requirements, and the Master Agreements and User Agreements shall specify remedies and recourse for any failure by the Primary Vendor to provide the NPAC/SMS and the Services at or above the Service Level Requirements. These remedies and this recourse may include monetary Performance Credits, price reductions, and, in certain specified circumstances, termination.</p>
<p>Agree</p>	

<b>3.6.2*</b>	<p><b>QUESTION:</b></p> <p><b><u>Question 2:</u></b></p> <p>The LNPA shall be compensated solely and exclusively from payments by Users pursuant to uniform and nondiscriminatory User Agreements and in accordance with</p> <p style="text-align: center;">Telcordia05011</p>
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applicable regulatory requirements and shall not look to or in any way seek payment from the NAPM LLC.

Agree

QUESTION:

**3.6.3\***

**Question 3:**

The LNPA must post a Performance Bond or equivalent Letter of Credit or other instrument in an amount in each Region sufficient to ensure the prompt and faithful performance under the Master Agreements and User Agreements, payable as specifically to be set forth therein and in the Master Agreements, in the event of the termination of the Master Agreements before the term specified therein, for any reason other than a regulatory event, but including by reason of the failure of the LNPA to remain and to be a Neutral Third Party.

Agree

QUESTION:

**3.6.4\***

**Question 4:**

The LNPA shall monitor its compliance with all Service Level Requirements specified in the Master Agreements and the Methods and Procedures documents (M&Ps) and certain other specified requirements and functionalities set forth in the Master Agreements and User Agreements and issue reports on such compliance at specified periodic intervals.

Additionally, by submitting response to the RFP, Respondent understands and agrees that any NANC Change Orders implemented in the NPAC/SMS subsequent to the issuance of the RFP, or scheduled for implementation prior to the turn-up of the next-generation NPAC/SMS described in the RFP, MUST be incorporated into the proposed NPAC/SMS platform and ready for implementation at turn-up as part of the Services to be offered under the Master Agreements.

Agree

QUESTION:

**3.6.5\***

**Question 5:**

The LNPA must agree to submit to a Gateway Evaluation Process (GEP) detailed in the Master Agreements and M&Ps to monitor enumerated key performance requirements (referred to as GEP Elements), the failure of which will result in remedies in addition to and separate from Performance Credits and the other specific remedies and recourse set forth in the Master Agreements and User Agreements with respect to all Service Level Requirements generally. Pursuant to this GEP, an independent third party (GEP Auditor) compensated by the LNPA shall measure, audit and report on the LNPA's satisfaction of these GEP Elements during specific 12 calendar month periods (each referred to as an "Evaluation Period"). Pursuant to this GEP compliance with these GEP Elements will be reported as either "Pass" or "Fail" and depending on the frequency and number of "Fails" during any specific Evaluation Period, certain reductions in pricing or other remedies under the Master Agreements will apply until the following Evaluation Period and its resulting report. The qualifications of the GEP Auditor, the selection of the GEP Auditor, certain terms regarding the scope of services and terms of a contract between the LNPA and the GEP Auditor, and certain details of the conduct and operation of the GEP shall be determined jointly by the LNPA and the NAPM LLC. If the LNPA and the NAPM LLC cannot agree to these items with specified time periods, the NAPM LLC shall make the relevant determination.

Agree

<b>3.6.6*</b>	<p style="text-align: center;">QUESTION:</p> <p><b><u>Question 6:</u></b></p> <p>The NAPM LLC shall have the right to terminate each Master Agreement entered into through this RFP with the LNPA for reasons of default as defined in the Master Agreements after a specified cure period has passed, including, but not limited to, unauthorized assignment and failure to provide adequate Services or to satisfy the Service Level Requirements, the failure of the LNPA to remain a Neutral Third Party, the merger into or acquisition of the LNPA by an entity that is not a Neutral Third Party, by an adverse change in the financial stability of the LNPA, including receivership, bankruptcy or assignment for the benefit of creditors, or for any reason or under circumstance required by or related to a change in the law or regulations requiring such termination. Upon such termination, unless Transition Services are provided as required below, Users shall be responsible for paying the LNPA only for Services performed prior to such termination, and Users shall not be liable for anticipated or expected profits, charges or fees on Services not performed. The NAPM LLC shall have absolutely no liability for any payments to the LNPA.</p>
Agree	

<b>3.6.7*</b>	<p style="text-align: center;">QUESTION:</p> <p><b><u>Question 7:</u></b></p> <p>Upon termination for any reason or non-renewal at the conclusion of the term of a Master Agreement, the LNPA shall agree to cooperate with the NAPM LLC, if requested, to effect the orderly transition of Services to a successor LNPA by providing specified Transition Services for a specified period at reasonable rates consistent with the charges in effect prior to termination or non-renewal.</p>
Agree	

<b>3.6.8*</b>	<p style="text-align: center;">QUESTION:</p> <p><b><u>Question 8 :</u></b></p> <p>Because of the possibility that the impartiality of the LNPA could be impaired or could suffer from an appearance that it is impaired, if the LNPA seeks directly or through an Affiliate to qualify as a User of the NPAC/SMS, it must agree to submit to a determination of its eligibility to be a User by an independent third party selected by the NAPM LLC and compensated by the LNPA (the "New User Evaluator" or "NUE") subject to certain dispute resolution procedures set forth in the Master Agreement (the NUE Process). This determination by the NUE shall be made after an evaluation is performed by the NUE for each and every product or service that the LNPA wishes to offer as a result of being a User before such product or service is launched and periodically thereafter and may include considerations or limitations not imposed upon other Users because they are not also acting as the LNPA. The consequences of a determination under this NUE Process that is adverse to the LNPA may be discontinuation or termination of services or products offered or contemplated to be offered by the LNPA. The NUE Process will also be used for other purposes detailed in the Master Agreements and the cost of the NUE for those purposes will also be borne solely by the LNPA.</p>
Agree	

<b>3.6.9*</b>	<p style="text-align: center;">QUESTION:</p> <p><b><u>Question 9:</u></b></p> <p>The NAPM LLC shall be granted appropriate license rights in and to any technology or other intellectual property that is developed for and at the request of NAPM LLC for the NPAC/SMS and for the purposes of providing the Services; and the LNPA and all Sub-</p>
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	<p><b>ION.</b> Contractor(s), if any, shall agree to appropriate limitations on their use of any such technology or other intellectual property for purposes other than the express provision of the NPAC/SMS and the Services.</p>
Agree	

<b>3.6.10*</b>	<p><b>QUESTION:</b></p> <p><b><u>Question 10:</u></b></p> <p>The LNPA and Sub-Contractor(s), if any, shall deposit all technology and other intellectual property (including Source Code and Object Code) and related documentation under its control, that is necessary to the operation of the NPAC/SMS and the provision of these Services, including all billing and collections functions, with a mutually agreeable escrow agent for release to and the use by the NAPM LLC (or its agents or contractors) as a nontransferable licensee, or to allow a successor Primary Vendor as a nontransferable licensee, the ability to operate the NPAC/SMS and to provide Services, in the event of termination or non-renewal of the Master Agreements for a specified time.</p>
Agree	

<b>3.6.11*</b>	<p><b>QUESTION:</b></p> <p><b><u>Question 11:</u></b></p> <p>The LNPA shall, at its own cost and expense, obtain and maintain all licenses, authorization, permits and permissions required by applicable legislative enactment and regulatory authorizations necessary to operate and maintain the NPAC/SMS in each Region and to offer the Services, to pay all taxes incident thereto (including but not limited to, all applicable sales and use taxes and levies) and to comply with all applicable federal, state, county and local laws, ordinances, regulations and codes in the performance of the obligations under the Master Agreements and the User Agreements, including but not limited to the compliance with all immigration laws, regulations, rulings, and ordinances.</p>
Agree	

<b>3.6.12*</b>	<p><b>QUESTION:</b></p> <p><b><u>Question 12:</u></b></p> <p>The LNPA shall organize itself by division, profit center or other physical or accounting means, to allow all costs, expenses and revenues from or associated with the NPAC/SMS and providing the Services to be identified and audited, so that use of the NPAC/SMS and the Services are provided and billed in the most cost-effective, non-discriminatory, and transparent means possible.</p>
Agree	

<b>3.6.13*</b>	<p><b>QUESTION:</b></p> <p><b><u>Question 13:</u></b></p> <p>The LNPA shall be required during the term of the Master Agreements to provide any price enhancements, additions and changes to the NPAC/SMS and to the Services pursuant to specific Statements of Work or other means in accordance with a procedure and process set forth in the Master Agreements.</p>
Agree	

	<p><b>QUESTION:</b></p>
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**3.6.14\***

**Question 14:**

The LNPA shall be responsible for providing disaster recovery and backup plans with respect to the Data Centers sufficient to ensure that all data on the NPAC/SMS is recoverable at all times. In the event of a disaster, the LNPA shall not increase its charges under the Master Agreements in any Region or User Agreements or charge Users usage fees or other charges in addition to the fees otherwise payable under the Master Agreements and User Agreements. Such disaster recovery and backup process shall be subject to audit and periodic testing.

Agree

**3.6.15\***

**QUESTION:**

**Question 15:**

NPAC/SMS servers and data centers and NPAC/SMS User Data must be maintained and stored in the continental United States. No data relating to any such Service will be stored, at, in, or through a site located outside of the continental United States.

The LNPA must agree and commit that it will not store, maintain, or warehouse, NPAC/SMS User Data in a physical or electronic form, on servers or otherwise, at any location that is not within the continental United States.

Agree

**3.6.16\***

**QUESTION:**

**Question 16:**

The LNPA must agree and acknowledge that the NAPM LLC is not granting any exclusive right to provide Services in any Region.

Agree

**3.6.17\***

**QUESTION:**

**Question 17:**

The LNPA must agree to be bound by a Most Favored Customer provision in the Master Agreement for all Regions, whereby in the event that the LNPA provides porting and pooling services similar in nature, scope and configuration to those provided through the NPAC/SMS (hereinafter a "Comparable Agreement"), on more favorable terms or with more favorable pricing, or both, than those under the Master Agreements and User Agreements (even if there are less favorable terms and pricing as well), then the LNPA must extend those more favorable terms and pricing under the Master Agreements and User Agreements awarded under the RFP. In addition, the LNPA must agree to advise the NAPM LLC in writing when it has entered into a Comparable Agreement and must expressly identify and categorize those terms and pricing arrangements which the LNPA has determined are more favorable and those which are less favorable than those under the Master Agreements and User Agreements.

Agree

**3.6.18\***

**QUESTION:**

**Question 18:**

The LNPA, on behalf of itself and any Sub-Contractors, must agree that User Data shall be maintained as confidential information and may not be used or commercially exploited in any manner other than for the performance of the LNPA's obligations under the Master Agreements and User Agreements, subject to certain regulatory or legal requirements or, in certain cases, upon the consent of the NAPM LLC as set

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forth in the Master Agreements.

Agree

**3.6.19\***

**QUESTION:**

**Question 19:**

The LNPA and Sub-Contractor(s), if any, agree to indemnify and hold harmless the NAPM LLC, its Members and their parents, subsidiaries, other affiliates, their direct and indirect customers, and the officers, directors, employees, successors, agents, consultants, representatives, attorneys and counsel, successors and assigns of any and all of them (collectively, the "Indemnified Parties"), from and against any and all claims, losses, damages, expenses, liabilities, suits, demands, causes of action, including costs and reasonable attorney's fees, or liens, including without limitation, those based on contract or tort, that arise out of or result from any or all of the following:

- (i) Injury or death to persons, or loss or damage to any and all property, including theft, in any way arising directly or indirectly out of, or occasioned by, caused or alleged to have been caused by, or on account of, the performance as the LNPA, or its Sub-contractor(s), if any, or its agents, or any director, officer, employee, agent or representative under the RFP, the Master Agreements or the User Agreements;
- (ii) Assertions under Workers Compensation or similar acts made by persons furnished by or employed by the LNPA or Sub-Contractor(s), if any, or by reason of any injuries to such persons; and
- (iii) Any failure on the part of the LNPA, or Sub-Contractor(s), if any, to satisfy all claims for labor, equipment, materials and other obligations relating to the performance under the Master Agreements or User Agreements.

The LNPA must agree to defend or settle, at its own expense, any action or suit asserted against the Indemnified Parties, including all proceedings involving income, sales, use, or other taxes, and shall reimburse the Indemnified Parties for reasonable attorneys' fees, interest, costs of suit and all other expenses incurred by the Indemnified Parties in connection therewith.

Agree

**3.6.20\***

**QUESTION:**

**Question 20:**

The LNPA, on behalf of itself and all Sub-Contractor(s), if any, will defend or settle, at its own expense, any and all claims and suits against any of the Indemnified Parties alleging that any products or services furnished pursuant to the Master Agreements or the User Agreements, including any portion of the Services, infringe or constitute a misappropriation of any patent, trade secret, copyright or proprietary interest. The Primary Vendor will also pay all damages and costs that by final judgment or settlement may be assessed against or chargeable to any of the Indemnified Parties due to such infringement or misappropriation.

If a Primary Vendor's products or services, including any portion of the Services, become, or in the NAPM LLC's opinion are likely to become, the subject of a claim of infringement, the Primary Vendor will, at its option: (1) procure for the NAPM LLC the right to continue using the applicable product or service; or (2) replace or modify the product or service to provide the NAPM LLC with a non-infringing product or service that is functionally equivalent in all material respects.

Agree

**QUESTION:**

**Question 21:**

During the term of this Agreement, the LNPA and Sub-Contractor(s), if any, shall obtain and maintain, with financially reputable insurers (i.e., carriers with an A.M. Best rating of A- :VIII, or better) which are licensed to do business in all jurisdictions where any work is performed or the Services are provided and which are reasonably acceptable to NAPM LLC, not less than the following levels of insurance coverage for each Region for which an RFP Contract is awarded:

- a.) Worker's Compensation insurance coverage as provided for under any worker's compensation or similar law in any jurisdiction where any work is performed, of not less than the minimum required coverage amount required under the law of any jurisdiction where work is performed, and Employer's Liability insurance coverage of at least \$500,000 per each occurrence and in the aggregate;
- b.) Commercial General Liability insurance coverage, including coverage for Contractual Liability and Products/Completed Operations Liability, with a limit of not less than \$10,000,000 combined single limit per occurrence for bodily injury, property damage and personal injury liability (with contractual exclusion deleted) and in the amount of at least \$10,000,000 in the general aggregate, naming NAPM LLC, its members, their directors, officers, employees, agents and/or representatives as additional insured;
- c.) Business Auto liability insurance coverage covering the ownership, maintenance or use of any owned, non-owned or hired automobiles with a limit of not less than \$2,000,000 combined single limit per accident for bodily injury and property damage liability, naming NAPM LLC, its members, their directors, officers, employees, agents and/or representatives as additional insured;
- d.) Umbrella/Excess liability insurance coverage with limits of not less than \$15,000,000 combined single limit in excess of the above-referenced Employer's Liability insurance coverage, Commercial General Liability insurance coverage and Business Auto liability insurance coverage naming NAPM LLC, its members, their directors, officers, employees, agents and/or representatives as additional insured;
- e.) "All Risk" Property insurance coverage covering not less than the full replacement cost of all Data Centers and personal property at risk, including business interruption or Continuation Insurance coverage sufficient to allow a Primary Vendor to continue to satisfy its obligations as an LNPA under the Master Agreements and User Agreements during the period of any covered loss.
- f.) Errors and Omissions Liability insurance coverage in the amount of at least \$20,000,000 per claim with an annual aggregate of at least \$20,000,000 inclusive of legal defense costs.

Neither the LNPA nor its insurer(s) shall have a right of subrogation against the NAPM LLC based on any loss or liability insured against under the foregoing insurance. Policies for the above-referenced insurance must be endorsed to name the NAPM LLC as an additional insured and state: "North American Portability Management LLC is to be notified in writing at least thirty (30) days prior to cancellation of or any material change in the coverage limits." Also, the LNPA must furnish certificates evidencing the foregoing insurance coverage within thirty (30) days following execution of any Master Agreement and prior to the commencement of any work and prior to the renewal thereof, in form and content to NAPM LLC, evidencing that the above insurance is in force and contains a provision that it will not be canceled or materially altered without first giving NAPM LLC thirty (30) days prior written notice and that all coverage is primary to any insurance carried by NAPM LLC or its Members.

Telcordia05017

**3.6.21\***

**ION**  
 Nothing contained in this section shall limit the LNPA's or Sub-Contractor's, if any, liability to NAPM LLC to the limits of insurance coverage certified or actually carried.

Agree

**3.6.22\***

**QUESTION:**  
**Question 22:**  
 A Respondent shall submit a list of all Sub-Contractor(s), if any are to be engaged by the Respondent as the Primary Vendor, to NAPM LLC with these responses, for review and approval. Any subsequent change in the use of any Sub-Contractor(s) shall require the review and approval of NAPM LLC.

Acknowledged

Optional Attachments:  
 [VQS Section 3.6.22 Sub-Contractor List.pdf](#) (61.8 KB)

**3.6.23\***

**QUESTION:**  
**Question 23:**  
 The LNPA shall not have the right to assign any obligations, rights, duties or responsibilities under the Master Agreements or User Agreements, without the prior written approval of the NAPM LLC, nor shall the LNPA have the right to assign or to pledge any monies due or accounts received under any Statement of Work or the Master Agreements or User Agreements without the prior written approval of the NAPM LLC.

Agree

**3.6.24\***

**QUESTION:**  
**Question 24:**  
 The governing law under the RFP, the Master Agreements and the User Agreements entered into through the RFP shall be that of the State of Delaware.

Agree

**3.6.25\***

**QUESTION:**  
**Question 25:**  
 The LNPA, on behalf of itself and all Sub-Contractors, if any, must agree with respect to any dispute arising in connection with any Master Agreement in any region or with any User Agreement to be bound by binding arbitration in the state of Colorado in accordance with the procedure agreed to in each Master Agreement.

Agree

**3.6.26\***

**QUESTION:**  
**Question 26:**  
 In the event that the deployment of the NPAC/SMS or any aspect of the Service for any Region does not pass a mutually agreed upon Acceptance Plan set forth in the Master Agreement for that Region, designed to determine the LNPA's compliance with the functional and technical requirements of the RFP, the NAPM LLC shall have the option to terminate the Master Agreement in that Region without any penalties whatsoever to it or its Members, and their parents, subsidiaries, other affiliates,

	<p><b>ION</b>                  their direct and indirect customers and any Users, and the officers, directors, employees, successors, agents, consultants, representatives, attorneys and counsel, successors and assigns of any and all of them and the LNPA shall be liable for liquidated damages in the amount to be specified for each Region in which the Master Agreement is terminated.</p>
<p>Agree</p>	

<p><b>3.6.27*</b></p>	<p><b>QUESTION:</b></p> <p><b><u>Question 27:</u></b></p> <p>The LNPA, on behalf of itself and any Sub-Contractors must agree to the following limitations on liability under the Master Agreements and User Agreements for each Region:</p> <p>NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR ANY INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF OR IN CONNECTION WITH THE FURNISHING, PERFORMANCE OR USE OF ANY SOFTWARE OR SERVICES PROVIDED UNDER A MASTER AGREEMENT, THE USER AGREEMENTS OR ANY STATEMENT OF WORK OR THE PERFORMANCE OR NONPERFORMANCE OF OBLIGATIONS UNDERTAKEN. EACH PARTY WAIVES ANY CLAIM TO PUNITIVE DAMAGES AGAINST THE OTHER.</p> <p>THE LIMITATIONS OR EXCULPATIONS OF LIABILITY SET FORTH IN THE FIRST SENTENCE WILL NOT BE APPLICABLE TO:</p> <p>(a) INDEMNIFICATION CLAIMS;</p> <p>(b) LIABILITY RESULTING FROM THE GROSS NEGLIGENCE OR WILLFUL MISCONDUCT OF A PARTY; OR</p> <p>(c) ANY BREACH OF A PARTY'S CONFIDENTIALITY OBLIGATIONS.</p>
<p>Agree</p>	

<p><b>3.6.28*</b></p>	<p><b>QUESTION:</b></p> <p><b><u>Question 28:</u></b></p> <p>A Respondent must commit to and represent that as an LNPA it possesses the ability to adopt and comply with the RFP's delivery schedule described in the FoNPAC Timeline as shown in the IASTA® SmartSource SRM® Tool.</p>
<p>Agree</p>	

**4. NEXT STEPS**

<p><b>4.1</b></p>	<p><b>STATEMENT:</b></p> <p><b><u>Conclusion:</u></b></p> <p>Respondents will be notified if their responses to this Vendor Qualification survey are rejected, in whole or in part.</p>
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**Please note: Your response has been submitted to the sponsor. It is final and may not be edited.**

## Vendor Qualification Survey (VQS) Section 2 – General Vendor Company Information

### VQS\_Section 2.1\_Types and Lines of Business Detail

*Provide detail of the types of businesses or different lines of business in which the Respondent is engaged, including the percentages and revenues from each such type or lines of business.*

#### iconectiv Response

Telcordia Technologies, Inc. (Telcordia), the Respondent, is a wholly owned subsidiary of Telefonaktiebolaget LM Ericsson (Ericsson), doing business as iconectiv, develops market leading solutions that enable operators to interconnect networks, devices, and applications critical to evolving the global telecommunications marketplace. iconectiv’s powerful, trusted, neutral solutions for the telecommunications industry includes number portability clearinghouses and gateways, mobile messaging services, anti-theft mobile device registries, spectrum management databases and other interconnection information services. iconectiv’s solutions are used by more than 1,000 operators, regulators and content providers and are currently used to provide services to over 1.5 billion end users. Telcordia is the leader in number portability solutions with 19 deployments around the world.

On February 14, 2013, Ericsson announced that Telcordia would do business as iconectiv. Ericsson launched the new iconectiv brand to promote and strengthen the iconectiv business identity and support its portfolio.

As Telcordia is a wholly owned subsidiary of Ericsson, it does not issue separate financial statements. Consequently, Telcordia’s financial solvency is certified through the consolidated audited financial statements of its parent, Ericsson. Telcordia’s global leadership position in number portability and other interconnection solutions is further strengthened by the financial backing of Ericsson.

Ericsson, which generated \$35.0 billion in 2012 revenues, operates its business and reports its financials in the following three business segments:

#### NETWORKS EQUIPMENT AND SYSTEMS

Networks delivers products and solutions for mobile access, IP and transport networks and core networks. The offering includes:

- ◆ Radio access solutions that interconnect with devices such as mobile phones, tablets and PCs.
- ◆ IP and transport solutions as well as transmission/backhaul including microwave and optical transmission solutions for mobile and fixed networks
- ◆ Switching and IMS solutions for core networks
- ◆ Operations Support Systems (OSS), supporting operators’ management of existing networks and introduction of new technologies and services.

Networks represented \$18.0 billion or 51% of the total 12 months of 2012 revenue.

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#### iconectiv CONFIDENTIAL – RESTRICTED ACCESS

This document and the confidential information it contains shall be used by NAPM LLC solely in consideration of a possible business arrangement with iconectiv and for no other purpose, and shall only be distributed, routed or made available to authorized persons having a need to know in accordance with the NDA executed between the NAPM LLC and Telcordia Technologies, Inc. on October 1, 2012.

Telcordia Technologies, Inc. dba iconectiv.

## GLOBAL SERVICES

Globally, 60,000 service professionals enable operators to monetize increasing data traffic and ensure high user experience in networks. Ericsson uses global processes, methods and tools to ensure quality and efficiency in the networks. Global Services include:

- ◆ Professional Services; consulting and systems integration, managed services, network design and optimization as well as customer support
- ◆ Network Rollout.

Global Services represented \$14.9 billion or 43% of the total 12 months of 2012 revenue.

## SUPPORT SOLUTIONS

Support Solutions provides enablers and applications for operators. The offering includes:

- ◆ Operations and Business Support Systems (OSS and BSS); enabling management of networks and services, customer interaction and revenue management
- ◆ TV and Media management; enabling operators, broadcasters and content owners to create multiscreen TV experience on all devices
- ◆ M-Commerce; software solutions and hosted services to enable mobile financial services and global interoperability.

Support Solutions represented \$2.1 billion or 6% of the total 12 months of 2012 revenue.

Telcordia is part of the Support Solutions business segment.

## Vendor Qualification Survey (VQS) Section 2 – General Vendor Company Information

### VQS\_Section 2.4\_Ownership and Organizational Structure

*Please provide details of the ownership and organizational structure, including affiliates and subsidiaries, of the Respondent, including a listing of all Officers and members of the Board of Directors.*

#### iconectiv Response

##### Ownership of Respondent:

Telcordia Technologies, Inc. (Respondent) is 100% owned by TTI Holding Corporation 1 (Delaware corp).

TTI Holding Corporation 1 is 100% owned by Telcordia Holdings, Inc. (Delaware corp)

Telcordia Holdings, Inc. is 100% owned by Ericsson Holdings II Inc. (Delaware corp)

Ericsson Holdings II Inc. is 100% owned by Telefonaktiebolaget LM Ericsson (LM Ericsson) (Swedish company).

##### Subsidiaries:

The following entities are active subsidiaries of Telcordia Technologies, Inc., the Respondent (either directly or through another subsidiary):

1. Telcordia Technologies International, Inc. (Delaware corp)
2. Telcordia Operations Limited (Ireland)
3. Administradora de la Portabilidad Argentina S.A (Argentina Joint Venture/ Respondent owns 90%)
4. Telcordia Italy SRL
5. Telcordia Technologies Chile S.A. (Chile)
6. InterConnect Communications, Ltd. (UK)
7. Telcordia (Thailand) Ltd. (Thailand)
8. MNP Interconnection Telecom Solutions India Private Limited (India Joint Venture/Respondent owns 74%)
9. Telcordia Technologies Mexico S. de R.L. de C.V. (Mexico)
10. Telcordia Technologies, Inc. Greek Branch
11. Telcordia Technologies, Inc. Dubai Branch

iconectiv CONFIDENTIAL – RESTRICTED ACCESS

This document and the confidential information it contains shall be used by NAPM LLC solely in consideration of a possible business arrangement with iconectiv and for no other purpose, and shall only be distributed, routed or made available to authorized persons having a need to know in accordance with the NDA executed between the NAPM LLC and Telcordia Technologies, Inc. on October 1, 2012.

Telcordia Technologies, Inc. dba iconectiv.

In addition, as a result of the transfer of the business units other than the Interconnection Business Unit (which remains in Telcordia Technologies, Inc. dba iconectiv), there are a number of other Respondent subsidiaries in the process of being closed, as they are no longer necessary.

**Respondent Officers:**

Richard Jacowleff	President and Chief Executive Officer – iconectiv
John G. Fechter Jr.	Executive Vice President and Chief Financial Officer – iconectiv
Tara O’Neill Diaz	Executive Vice President and General Counsel - iconectiv
Chris Drake	Executive Vice President and Chief Technical Officer – iconectiv

**Respondent Directors\*:**

Per Lofgren – Chief Financial Officer, Ericsson Inc.  
John Moore – General Counsel, Ericsson Inc.

\* As noted in response to Question 3.5, Respondent is committed to reconstituting the Board of Directors such that it will have a majority of independent directors when awarded the contract.



# TAKE THE WORLD WITH YOU

DRIVING MOBILE BROADBAND



Wherever you're going, whatever you're doing,  
mobile broadband means you take the world with you.



Our friends and families are online. Our workmates too – everyone around us.

We keep our most precious possessions online and we grow our most ambitious ideas. We store our music. We post our photos and stream the films we love. We manage our diaries and nurture our business plans.

We meet people online. We express ourselves and share our experiences. We chat, we network and we trade.

With mobile broadband, you're not tied down by a cable, or even by a wireless hotspot. Wherever you're going, whatever you're doing, you take the world with you.

It could be in your lap, your palm or your pocket. In the city or the country, stationary or on the move. You can access anything, on any screen, any time.

In 2010, 600 million people had this possibility. By 2016 almost 5 billion will.

That's the power of mobile broadband.

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\* Chapters covered by the Auditors' Report, constituting the legal annual report.

## OUR VISION

Our vision is to be the prime driver in an all-communicating world.

This means a world where everyone can use voice, data, images and video to share ideas and information, wherever and whenever they want.

We aim to make people's lives richer and easier, provide affordable communications for all and enable new ways of doing business.

## Annual Publications

The **Annual Report** describes Ericsson's financial and operational performance during 2010. This publication includes a **Corporate Governance Report**.

Ericsson issues a separate **Sustainability and Corporate Responsibility Report**.

# LETTER FROM HANS VESTBERG



## Dear shareholders,

In 2010, Group sales decreased –2 percent to SEK 203.3 billion. Our operating margin, before JV's and excluding restructuring charges, was flat at 12 percent. Net income increased 172 percent to SEK 11.2 billion, mainly due to improvements in earnings in our joint venture Sony Ericsson and less restructuring charges.

In the first half of 2010, we were still impacted by the economic slowdown in the world. In the latter part of the year, sales of mobile broadband took off, especially in North America and Japan. This was driven by a strong increase in mobile data traffic.

During the year, we struggled with the industry-wide component shortage. While the supply of components has now normalized we are still not fully meeting the increased demand on certain mobile broadband products due to the increased customer demand.

We have four Group targets that should secure increased shareholder value: grow faster than the market, deliver best-in-class margins, cash conversion of more than 70 percent and improved earnings in our JVs.

Early market data indicates that we kept our market shares in our network and services businesses. We delivered the industry's best-in-class margins and achieved a cash conversion of 112 percent. The fourth target, growth in JV earnings, was partly reached thanks to better performance in Sony Ericsson.

2010 was the year when mobile broadband took off. The number of mobile subscriptions increased by more than 60 percent to about 600 million and the number is forecasted to almost double and hit 1 billion this year.

Once you are connected, you want connectivity 24/7, wherever you are.

This will become a reality for more and more people since we will see more smartphones in the market, and also more affordable ones. Embedded mobile broadband modules will become standard in laptops and other devices. To meet this consumer demand, network speed, capacity and quality are prerequisites.

In the networked society, everything that benefits from a connection will be connected. We have spoken about how 50 billion devices will be networked by 2020. We are already today enabling the networked society: from the concept of building future networks in demanding urban settings, to our networks which recently attained speeds of 168 Mbps on HSPA – to our business in TV and media, and our services, which help manage and integrate the complex networks that are behind the networked society.

Of course our joint ventures bring devices into the picture, and we are finding that this is getting more and more personal for consumers. No longer is the device only a tool for them; it is part of themselves that they want to have alongside them during their daily lives.

Finally, I would like to sincerely thank all our highly dedicated and skilled employees for their efforts in 2010. In 2011, we will focus even more on understanding and meeting our customer demand, ultimately seeking increased value for our shareholders. Continued long-term growth and profitability are Ericsson's characteristics, along with a healthy financial position.

Hans Vestberg  
President and CEO

“LONG-TERM GROWTH  
AND PROFITABILITY  
ARE ERICSSON'S  
CHARACTERISTICS”

## FINANCIAL RESULTS IN SHORT

### NET SALES

SEK 203.3 (206.5) billion

### OPERATING MARGIN\*

12% (12%)

### NET INCOME

SEK 11.2 (4.1) billion

### NET CASH

SEK 51.3 (36.1) billion

### EARNINGS PER SHARE

SEK 3.46 (1.14)

\*Excluding restructuring charges and share in earnings of JVs

# OUR BUSINESS

Communication technology is positively changing the way we work and live. As a leading provider of communications infrastructure, services and multimedia solutions, Ericsson strives to enable this change. We constantly innovate to empower people, business and society.

Network infrastructure provides the fundamentals for people to communicate. Today, more than 40 percent of the world's mobile traffic passes through networks provided by Ericsson. The networks we support for operators serve more than 2 billion subscriptions.

We are also a global leader in telecom services, which accounts for close to 40 percent of our revenues.

Currently, we serve approximately 400 customers, most of whom are network operators. Our ten largest customers account for 46 percent of our net sales.

New customers include TV and media companies as well as utility companies.

Our total addressable market was estimated at approximately USD 200 billion in 2009 (excluding joint ventures' markets).

To best reflect our business, we report five business segments, two of which are the joint ventures Sony Ericsson and ST-Ericsson.



**ERICSSON**

## NETWORKS

Segment Networks develops and delivers mobile and fixed infrastructure equipment and related software. We pioneered 2G/GSM and 3G/WCDMA mobile technologies. We now provide 4G/LTE as the evolution of mobile broadband and toward all-IP environments. Our portfolio also includes CDMA solutions as well as xDSL, fiber and microwave transmission.

## MULTIMEDIA

Segment Multimedia develops and delivers software-based solutions for real-time & on-demand TV, consumer & business applications and Business Support Systems (BSS) for telecom operators. Revenue management, i.e. software based solutions for charging and billing, is part of BSS.

## GLOBAL SERVICES

With more than 45,000 services professionals globally, we have robust local capabilities with global expertise in managed services, consulting, systems integration, customer support and network rollout. We manage complex projects with advanced IS/IT competence and multi-vendor experience.

## JOINT VENTURES



**Sony Ericsson**

Sony Ericsson offers mobile phones, accessories, content and applications. Sony Ericsson is a 50/50 joint venture with Sony Corporation.



ST-Ericsson offers wireless platforms and semiconductors for leading handset manufacturers. ST-Ericsson is a 50/50 joint venture with STMicroelectronics.

# OUR SOLUTIONS

We are shifting our focus toward a more solutions-oriented sales process. During the year, we therefore organized our portfolio into seven solution areas to better address customer needs. Here we describe our solutions, the business drivers and the market trends.

<b>MOBILE BROADBAND</b>	<b>4</b>
<b>FIXED BROADBAND AND CONVERGENCE</b>	<b>6</b>
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## MOBILE BROADBAND

### WHAT IS MOBILE BROADBAND?



Mobile broadband is a wireless access technology that offers at least 1 Mbps. It enables high-speed internet access services, such as video streaming.



### User trends

1. Smartphones change behavior



2. Soaring video usage



3. Demand for 24/7 internet connectivity



24/7 connectivity to the internet is becoming an essential part of modern life. During the year, we met increased demand for mobile broadband infrastructure and services. The accelerated demand was fuelled by smartphones and notebooks, coupled with sharply rising usage of video services (like YouTube). Mobile data traffic more than doubled in 2010 and is expected to double annually over the coming three years.

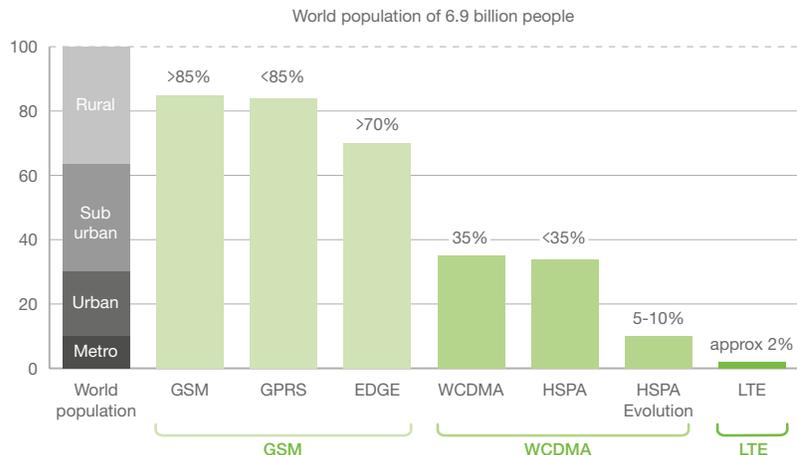
### Expansion opportunities

Today, we are doing for broadband what we did for voice 20 years ago – making it mobile and affordable for the vast majority of people. Mobile subscriptions worldwide have reached 5.3 billion of which approximately ten percent are now on mobile broadband. We estimate the number of mobile broadband subscriptions to reach almost 5 billion in 2016, the vast majority being for smartphones.

Our broadband solutions not only include equipment but also business advice, systems integration and roll-out service for fast implementation of cost-effective solutions.

### COVERAGE

Percentage of population



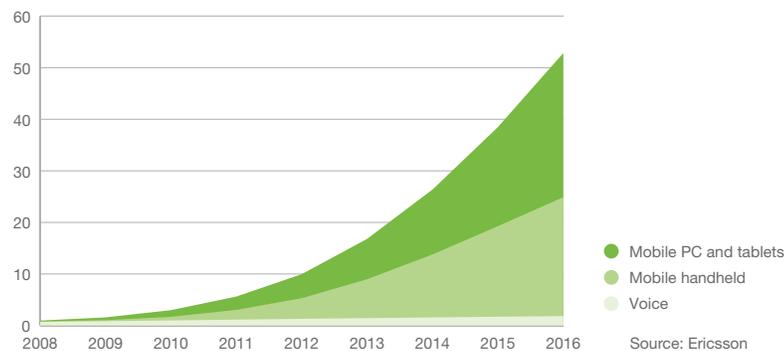
## Meeting the need for speed

To accommodate the massive growth in data traffic, operators are turning to us to boost capacity and speed in their networks. Networks are continuously being upgraded as the number of data users and data volume transported increase. All Ericsson-supplied commercial WCDMA networks have now been upgraded to HSPA. Four of our customers have launched 4G/LTE networks in 2010, covering 140 million people, 60 percent of whom are served by Ericsson LTE equipment.

On the devices side, notebooks and other electronic devices are equipped with our latest 3G/HSPA broadband modules, delivering speeds of up to 21 Mbps.

### SUBSCRIBER TRAFFIC IN MOBILE ACCESS NETWORKS

Yearly Exabytes (10<sup>18</sup>)



## Operators implement tiered pricing

When mobile broadband was introduced, many operators offered flat rates and unlimited usage to encourage fast uptake of service. A challenge for operators today is to secure user experience and increase revenue from mobile broadband. The answer is differentiated service offerings. Tiered pricing and innovative business models are becoming more common. The user can thus select and pay for a subscription with a certain service level. Voice still represents the main source of revenue for operators. Data traffic accounts for approximately 30 percent of total revenues on average and will represent the majority of future growth.

## Ramp up of our RBS 6000

The multi-standard radio base station, RBS 6000, can run 2G/GSM, 3G/WCDMA and 4G/LTE technologies in the same unit, using different frequency spectrum bands. The RBS 6000 takes up 25 percent less space and reduces power consumption by up to 65 percent compared to previous-generation RBSs. This is a significant saving as operators may spend up to 50 percent of operating expenses on power. Many operators are therefore looking to modernize their radio networks with the RBS 6000. Modernization projects often involve a high degree of consulting, systems integration and network rollout.

Core networks may also need capacity upgrades to accommodate increasing data traffic and speed. Our 4G/LTE core network, the Evolved Packet Core, is an all-IP network, supporting both mobile and fixed access. Our 2G and 3G packet core networks require only a software upgrade to support 4G/LTE access.

## Mobile broadband stimulates GDP growth

High-speed broadband infrastructure (mobile and fixed) is becoming as essential as roads, water and electricity. Studies show a direct correlation between broadband penetration and GDP growth. In emerging markets, many users can access the internet only via mobile devices due to the lack of fixed network infrastructure.

### SPEED AND DATA TRAFFIC



**Feature phone user**  
10 kbps  
approx. 10 MB/month



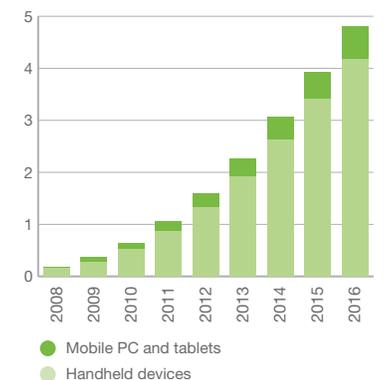
**Smartphone user**  
100-1,000 kbps  
approx. 100 MB/month



**Mobile PC/tablet user**  
>1 Mbps  
approx. 1 GB/month

### MOBILE BROADBAND TREND

Subscriptions (billion)



### RBS 6000

Our multi-standard radio base station RBS 6000 can be remotely upgraded with software.

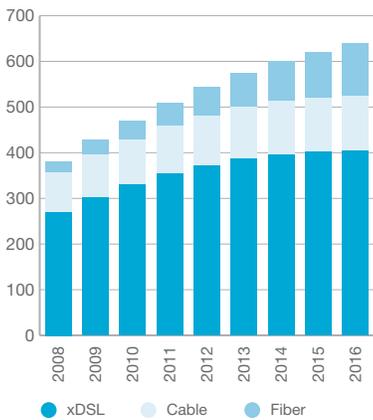
# FIXED BROADBAND AND CONVERGENCE

**500 MILLION SUBSCRIPTIONS**

are connected to fixed broadband networks.

Includes all technologies.

**FIXED BROADBAND TREND**  
Subscriptions (million)



Source: Ericsson.  
Includes xDSL, Cable and Fiber.  
Other technologies excluded.

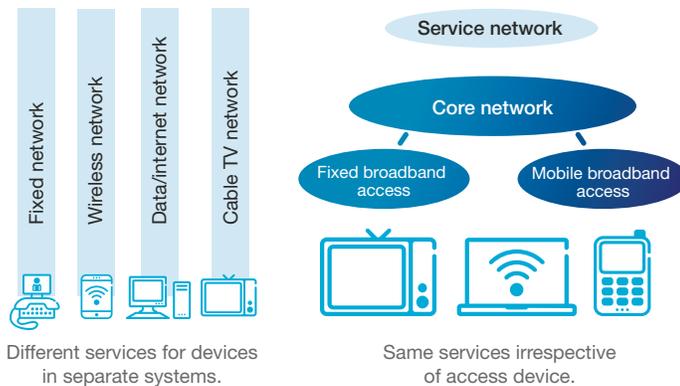
## Fixed broadband

In today's mature markets, most data traffic is handled by fixed networks. Operators compete by evolving their networks to provide fast internet speeds, reliable high-definition IPTV and video on demand. We enable this by providing end-to-end broadband access solutions via high-speed fiber (such as GPON) and copper (xDSL).

## All-IP networks and convergence

To reduce cost and enable service bundling, fixed traffic can be provided over a multi-service network converging telephony, internet and TV. This multi-service network is IP based, providing lower-cost and higher-performance broadband services. IP starts in the core network. Our Evolved Packet Core (EPC) provides support for multiple access technologies and fixed-mobile convergence. New functionality is introduced through software upgrades. With our breadth of experience, we provide a service, including consulting and systems integration, to manage transformation of networks to all-IP, often involving multiple-vendor equipment.

## NETWORK TRANSFORMATION



# COMMUNICATION SERVICES



Communication services are the services people use to interact with each other, such as voice and video calls as well as text and multimedia messaging. These operator-based services are provided globally and are based on industry standards, ensuring interoperability.

As voice and SMS still account for the main part of operator revenues, operators now exploit opportunities to enhance user experience while reducing costs for voice communication.

Users want enriched communication and the ability to instantaneously share experiences and information with family, friends and colleagues – anywhere, anytime and to any device. Our IP Multimedia Subsystem (IMS) makes this possible. Services controlled by IMS are voice (incl. HD-voice), video calls, the Rich Communication Suite (RCS) and messaging. With RCS, consumers get a suite of IMS-based services (e.g. presence information, chat and content sharing) from the address book of a mobile phone or from a broadband connection.

## MANAGED SERVICES

Network operations have traditionally been seen as core to operators. Today, competitive pressure, rapid technology evolution and changing user demands drive another focus. Many operators now view strategy, marketing and customer retention as being equally important as technology. Our managed services agreements free up in-house resources for this focus, and can reduce network operating costs by as much as 20 percent.

We have a long history of taking on employees from operators. We have invested USD 1 billion in tools, methods and processes to secure capabilities and competence.

### Improving operators' operational efficiency

The need to improve operational efficiency, reducing both capital expenditures and operating expenses, is a key driver for an operator to change its business. It is estimated that a mature operator spends approximately 5-6 percent of revenues on network equipment and 10-12 percent on operating the network, i.e. operating expenses account for twice the capital expenditures for networks. Our network operations contracts are often multi-year, multi-technology and multi-vendor agreements.

### Simplifying network complexity

Another key driver is the increasing complexity of networks as they are transformed and modernized. IT and telecom convergence creates many opportunities for us to act as an advisor, both in streamlining business and operations support systems and helping to quickly and cost-efficiently introduce new services.

### Shared networks and shared capacity

The initial growth of managed services was driven by operational efficiency. There is now an increasing demand for business models that support shared capacity and network sharing between two or more operators. This trend also drives structural efficiencies in the networks. Managed services play a decisive role in this evolution.

# 750 MILLION

subscribers worldwide are served by networks that we manage.



### Outsourcing trends:

- > Reduce and control spending
- > Focus on key business priorities
- > Greater operational efficiency
- > Lower risks, reduce complexity
- > Shared capacity – structural efficiency

## TV AND MEDIA MANAGEMENT

### TV is going digital and interactive

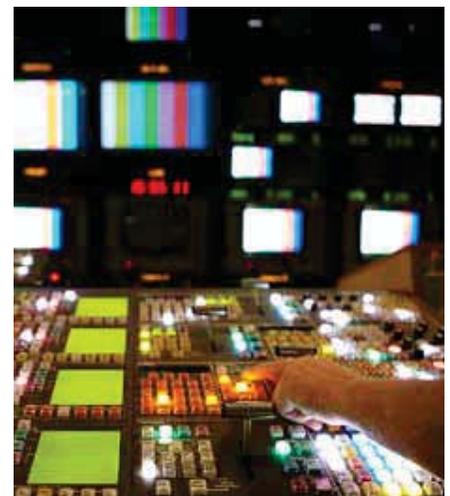
In the converging media landscape, broadcast and broadband are coming together, moving towards a connected world.

The worldwide digital TV market is growing. TV solutions and services enable global media companies and operators (cable, satellite, telecom and terrestrial) to deliver TV content, either directly to consumers or for professional digital video content exchange.

With a broad suite of open standards-based products, we offer high-quality solutions for digital TV, HDTV, video on demand, IPTV, mobile TV, connected home and content management.

High-performance video means large amounts of traffic in the networks. This can be handled with our media distribution (MDN) solution for video delivery over IP, combining a content distribution network with our TV portfolio.

Business consulting, systems integration and implementation ensure a smooth launch of new TV services and infrastructure.



## OPERATIONS AND BUSINESS SUPPORT SYSTEMS



### Operations Support Systems – for control

Rising network complexity drives the need for one consolidated “dashboard-style” Operations Support System (OSS). Our OSS includes capabilities for performance monitoring and fault management, configuration and security management as well as systems to optimize performance for efficiency. OSS can also handle multi-vendor equipment.

### Business Support Systems – efficient billing and charging

Our Business Support Systems (BSS) support operators in instant provisioning and activation of services, devices and price plans. Our solutions can also provide real-time convergent charging (i.e. the user gets one invoice for both mobile and fixed usage) and billing and data management. With our solutions, operators can capture and secure revenue streams. Users can instantly start using a new service or device and control their spending.

Operators have to handle the increased data traffic in their networks along with many new devices. At the same time, operators introduce tiered pricing and new business models in order to maximize their revenues for mobile broadband services as well as voice traffic. This development requires upgrading of old support systems as well as the introduction of new BSS solutions.

Consulting and systems integration services are vital components of BSS solutions.

## CONSUMER AND BUSINESS APPLICATIONS



### Interaction and collaboration

To support operators in growing their revenues, we provide new means of interaction and collaboration. Our solutions include messaging, social networks, location-based services, media, advertising, internet commerce and enterprise applications.

We support our customers in the modernization and consolidation of legacy service delivery systems and messaging systems, such as SMS, MMS and video mail.

Our Business Communication Suite (BCS) targets the enterprise market. It enables sharing of voice, video data, messaging and web conferences in a collaborative environment.

Our multimedia brokering solution facilitates payment and distribution of content. We act as the interface between enterprises and multiple mobile operators with consumer data and services such as via SMS.

Several of our solutions can be delivered as cloud services.

# OUR ASSETS

## Unique global presence and scale

Our global presence and scale give us a competitive advantage. In the industry consolidation, where operators are merging, we can handle larger cross-border contracts as well as targeted local assignments. It is key for us to stay close to customers, building trust, earning a strong track record and applying our in-depth expertise.

Today, over 1,000 networks in more than 180 countries use equipment supplied by us. Over the years, we have gained local knowledge and experience in network rollouts and systems integration as well as managing, upgrading and modernizing networks.

## Technology leadership – investing for the future

Our technology leadership is a key asset that we leverage. We focus on early involvement in creating new technologies, strong contribution in technology standardization work, development of intellectual property rights and establishment of licensing agreements. We pioneered the development of digital AXE switching, 2G/GSM, 3G/WCDMA and 4G/LTE, leading to 27,000 granted patents. We invested approximately 15 percent of our total sales into R&D in 2010. At year end, the number of R&D employees was more than 20,000. Over 80 percent of our product development is software related.



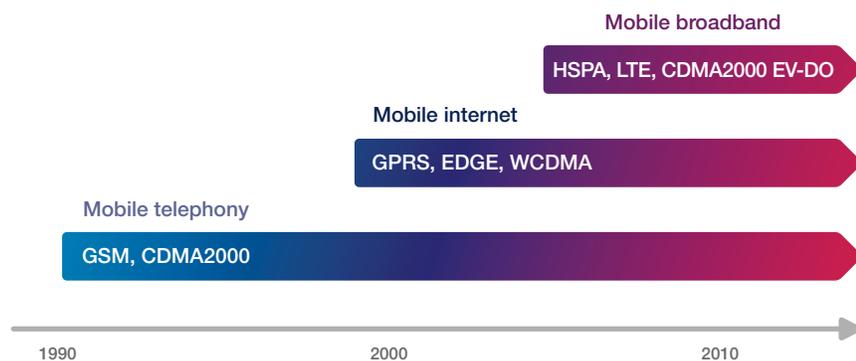
## Ericsson Academy

In 2010 we launched Ericsson Academy and Learning Services. It is an online platform for sharing knowledge and inspiration both internally and externally. The site offers free telecom tutorials, technical snapshots and a forum to exchange smart ideas.

[www.ericsson.com/academy](http://www.ericsson.com/academy)

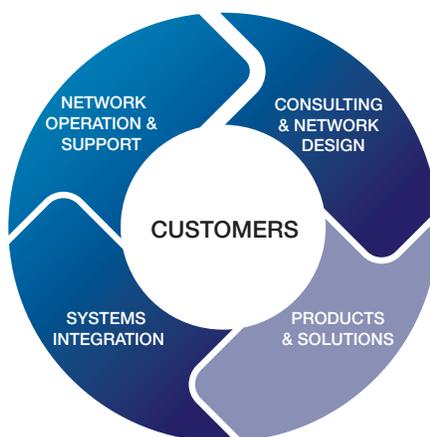
## Creating a winning culture

We want to attract and develop the most competent, high-performing and motivated people in the industry. The culture we encourage is innovative, fast moving and responsive, with a business-winning mindset. To get the entire company moving in this direction, we implemented a group wide empowerment program. We also run a leadership training program to promote global diversity and cultivate top talent worldwide.



## Services leadership

Networks are becoming increasingly complex and often include multi-vendor equipment. The knowledge gained from managing networks for 750 million subscribers is an asset. Today our global services organization handles consulting, systems integration, network rollout, network operation, customer support and education. Competence development is further enhanced by insourcing staff from operators and acquiring companies in consulting and systems integration.



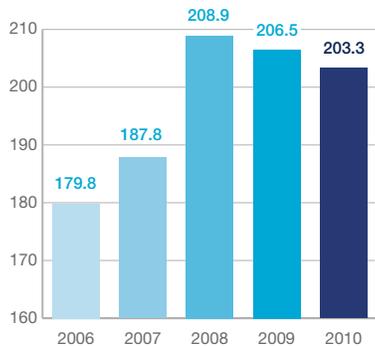
Our breadth of experience enables us to offer end-to-end support to our customers.

## Putting consumer insight to work

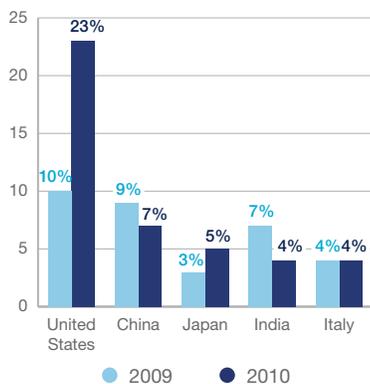
To stay abreast of consumer trends, we use our ConsumerLab market research unit, which conducts more than 40,000 interviews annually. This represents the combined opinions and behavior patterns of more than 1 billion people. Not only do we incorporate these insights into our product development, but we can also make them available to our customers.

# 2010 HIGHLIGHTS

**FIVE YEAR SALES**  
SEK billion



**TOP FIVE COUNTRIES IN SALES**  
Percentage of total sales



## JANUARY-MARCH

- > World record of 84 Mbps HSPA demonstrated.
- > TeliaSonera rolls out 4G/LTE in Norway and Sweden, with core network and RBS 6000 from Ericsson. Three more customers have since launched LTE.
- > Ericsson delivers LTE network equipment and services to AT&T.
- > A world record is set with 1 Gbps for LTE in a live demo.
- > Ericsson performs a live demo of the world's first high-speed microwave radio connection with a transporting capacity of 2.5 Gbps.

## APRIL-JUNE

- > Ericsson increases presence in Korea by acquiring Nortel's stake in the joint venture LG-Nortel. The business is consolidated by Ericsson.
- > First managed operations contract in Canada, for Mobilicity's 3G network.
- > Indosat, Indonesia, prepares for 4G and launched Asia's fastest network with 42 Mbps.
- > Ericsson chosen to operate Telefonica's network operations center in São Paulo.
- > Ericsson provides industry's first 3D sports television network, ESPN 3D, with standards-based video processing solution, tuned for 3D and HD broadcasts.

## JULY-SEPTEMBER

- > Mobile data is growing ten times faster than voice.
- > China Mobile Hebei selects Ericsson as its managed services partner.
- > MetroPCS launches first 4G/LTE network in the USA, with Ericsson as primary supplier.
- > Ericsson gets its largest fiber-to-the-home contract in India.
- > Ericsson announces embedded mobile broadband modules – world's first to support 21 Mbps (HSPA) for notebooks and other consumer electronics.
- > EMOBILE upgrades its HSPA network with the HSPA Evolution technology – the highest-speed network in Japan with a peak data rate of 42 Mbps.

## OCTOBER-DECEMBER

- > TeliaSonera renews and expands its managed services contract with Ericsson to include field service for voice and data networks in 29 countries.
- > Hans Vestberg, CEO, participated via Telepresence at COP 16 in Mexico, to stress the importance of ICT in addressing climate change.
- > Ericsson is selected as key equipment and services provider for next evolution of the Sprint network, supplying radio access, core and IP/Microwave backhaul.
- > Ericsson wins managed services contract with China Unicom.
- > Verizon Wireless launches the world's largest LTE network with Ericsson as the primary vendor.
- > 3 Italia chooses Ericsson for data center consolidation and modernization of IT infrastructure.

# FIVE-YEAR SUMMARY

For definitions of the financial terms used, see Glossary, Financial Terminology and Exchange Rates.

FIVE-YEAR SUMMARY						
SEK million	2010	Change	2009	2008	2007	2006
<b>Income statement items</b>						
Net sales	203,348	-2%	206,477	208,930	187,780	179,821
Operating income	16,455	178%	5,918	16,252	30,646	35,828
Financial net	-672	-307%	325	974	83	165
Net income	11,235	172%	4,127	11,667	22,135	26,436
<b>Year-end position</b>						
Total assets	281,815	4%	269,809	285,684	245,117	214,940
Working capital	105,488	6%	99,079	99,951	86,327	82,926
Capital employed	182,640	1%	181,680	182,439	168,456	142,447
Gross cash	87,150	14%	76,724	75,005	57,716	62,280
Net cash	51,295	42%	36,071	34,651	24,312	40,728
Property, plant and equipment	9,434	-2%	9,606	9,995	9,304	7,881
Stockholders' equity	145,106	4%	139,870	140,823	134,112	120,113
Non-controlling interest	1,679	45%	1,157	1,261	940	782
Interest-bearing liabilities and post-employment benefits	35,855	-12%	40,653	40,354	33,404	21,552
<b>Other information</b>						
Earnings, per share, basic, SEK	3.49	203%	1.15	3.54	6.87	8.27
Earnings, per share, diluted, SEK	3.46	204%	1.14	3.52	6.84	8.23
Cash dividends per share, SEK	2.25 <sup>1)</sup>	13%	2.00	1.85	2.50	2.50
Stockholders' equity per share, SEK	45.34	4%	43.79	44.21	42.17	37.82
<b>Number of shares outstanding (in millions)</b>						
<i>end of period, basic</i>	3,200	-	3,194	3,185	3,180	3,176
<i>average, basic</i>	3,197	-	3,190	3,183	3,178	3,174
<i>average, diluted</i>	3,226	-	3,212	3,202	3,193	3,189
Additions to property, plant and equipment	3,686	-8%	4,006	4,133	4,319	3,827
Depreciation and write-downs/impairments of property, plant and equipment	3,296	-6%	3,502	3,105	2,914	3,038
Acquisitions/capitalization of intangible assets	7,246	-	11,413	1,287	29,838	18,319
Amortization and write-downs/impairments of intangible assets	6,657	-23%	8,621	5,568	5,459	4,479
Research and development expenses	31,558	-5%	33,055	33,584	28,842	27,533
<i>as percentage of net sales</i>	15.5%	-	16.0%	16.1%	15.4%	15.3%
<b>Ratios</b>						
Operating margin excluding joint ventures	8.7%	-	6.5%	8.0%	12.5%	16.7%
Operating margin	8.1%	-	2.9%	7.8%	16.3%	19.9%
EBITA margin	11.0%	-	6.7%	9.4%	18.0%	21.0%
Cash conversion	112%	-	117%	92%	66%	57%
Return on equity	7.8%	-	2.6%	8.2%	17.2%	23.7%
Return on capital employed	9.6%	-	4.3%	11.3%	20.9%	27.4%
Equity ratio	52.1%	-	52.3%	49.7%	55.1%	56.2%
Capital turnover	1.1	-	1.1	1.2	1.2	1.3
Inventory turnover days	74	-	68	68	70	71
Trade receivables turnover	3.2	-	2.9	3.1	3.4	3.9
Payment readiness, SEK million	96,951	9%	88,960	84,917	64,678	67,454
<i>as percentage of net sales</i>	47.7%	-	43.1%	40.6%	34.4%	37.5%
<b>Statistical data, year-end</b>						
Number of employees	90,261	9%	82,493	78,740	74,011	63,781
<i>of which in Sweden</i>	17,848	-2%	18,217	20,155	19,781	19,094
Export sales from Sweden, SEK million	100,070	6%	94,829	109,254	102,486	98,694

<sup>1)</sup> For 2010, as proposed by the Board of Directors.

**18%** INCREASE  
IN 2010 OF  
MARKET CAPITALIZATION

> **OMX Stockholm Index**  
increase in 2010: **23 percent**

> **S&P 500 Index**  
increase in 2010: **13 percent**

> **Ericsson's total market**  
capitalization at year end:  
**SEK 255 (215) billion**

#### THE ERICSSON SHARE

##### Share listings

NASDAQ OMX, Stockholm  
NASDAQ, New York

Total number of shares outstanding	3,273,351,735
of which Class A shares	261,755,983
of which Class B shares	3,011,595,752
of which Ericsson treasury shares, Class B	73,088,515
Quotient value	SEK 5.00
Market capitalization, December 31, 2010	approx. SEK 255b.
GICs (Global Industry Classification)	45201020

##### Ticker codes

NASDAQ OMX Stockholm	ERIC A ERIC B
NASDAQ, New York	ERIC
Bloomberg NASDAQ OMX Stockholm	ERICA SS ERICB SS
Bloomberg NASDAQ	ERIC US
Reuters NASDAQ OMX Stockholm	ERICa.ST ERICb.ST
Reuters NASDAQ	ERIC.O
ISIN	
ERIC A	SE0000108649
ERIC B	SE0000108656
ERIC	US2948216088
CUSIP	294821608

# SHARE INFORMATION

## STOCK EXCHANGE TRADING

The Ericsson Class A and Class B shares are listed on NASDAQ OMX Stockholm. In the United States, the Class B shares are listed on NASDAQ in the form of American Depositary Shares (ADS) evidenced by American Depositary Receipts (ADR) under the symbol ERIC. Each ADS represents one Class B share.

In 2010, approximately 6 (7) billion Ericsson shares were traded, of which about 3.4 billion were traded on NASDAQ OMX Stockholm and about 1.6 billion were traded on NASDAQ. (Note: The approximate total volumes include trading on alternative trading venues such as BATS Europe, Burgundy, Chi-X Europe.)

Trading volume in Ericsson shares decreased by approximately 30 percent on NASDAQ OMX Stockholm and decreased by approximately 7 percent on NASDAQ as compared to 2009.

#### CHANGES IN NUMBER OF SHARES AND CAPITAL STOCK 2006–2010

		Number of shares	Share capital
2006	December 31 (no changes)	16,132,258,678	16,132,258,678
2007	December 31 (no changes)	16,132,258,678	16,132,258,678
2008	June 2, reverse split 1:5	3,226,451,735	16,132,258,678
2008	July 23, new issue. (Class C shares, later converted to Class B)	19,900,000	99,500,000
2008	December 31	3,246,351,735	16,231,758,678
2009	June 8, new issue (Class C-shares, later converted to Class B)	27,000,000	135,000,000
2009	December 31	3,273,351,735	16,366,758,678
2010	December 31	3,273,351,735	16,366,758,678

#### PERFORMANCE INDICATORS

	2010	2009	2008	2007 <sup>2)</sup>	2006 <sup>2)</sup>
Earnings per share, diluted (SEK)	3.46	1.14	3.52	6.84	8.23
Operating income per share (SEK) <sup>1)</sup>	7.42	5.80	7.50	9.64	11.29
Cash flow from operating activities per share (SEK)	8.31	7.67	7.54	6.04	5.82
Stockholders' equity per share, basic, end of period (SEK)	45.34	43.79	44.21	42.17	37.82
P/E ratio	22	57	17	11	17
Total shareholder return (%)	22	15	-20	-43	3
Dividend per share (SEK) <sup>3)</sup>	2.25	2.00	1.85	2.50	2.50

<sup>1)</sup> For 2010, 2009 and 2008 excluding restructuring charges.

<sup>2)</sup> 2006 and 2007 restated for reverse split 1:5 in 2008.

<sup>3)</sup> For 2010 as proposed by the Board of Directors.

For definitions of the financial terms used, see Glossary, Financial Terminology and Exchange Rates.

All performance indicators except Earnings per share, diluted, and Stockholders' equity per share, basic, end of period are calculated on average number of shares outstanding, basic.

# SHARE TREND

In 2010, Ericsson's total market capitalization increased by about 18 (13) percent to SEK 255 billion (SEK 215 billion in 2009). The OMX Stockholm Index on NASDAQ OMX Stockholm increased by 23 percent, the S&P 500 Index increased by 13 percent and the NASDAQ composite index increased by 17 percent.

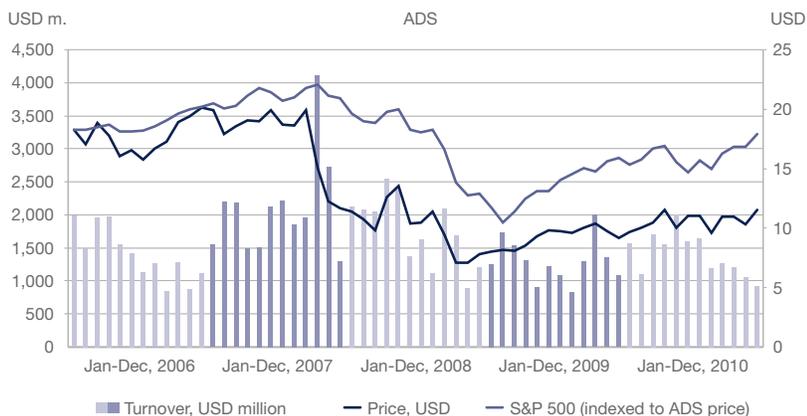
## SHARE TURNOVER AND PRICE TREND, NASDAQ OMX STOCKHOLM



■ Turnover, SEK million    — Price, SEK    — OMX Stockholm (indexed to share price)

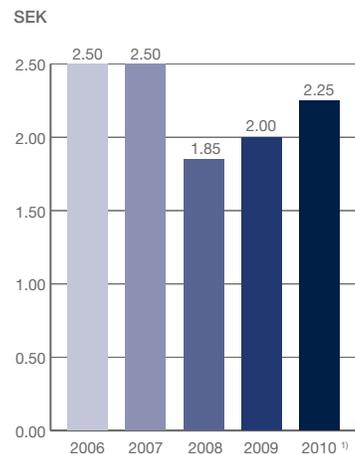
Volumes reflect trading on NASDAQ OMX Stockholm only.

## SHARE TURNOVER AND PRICE TREND, US MARKET



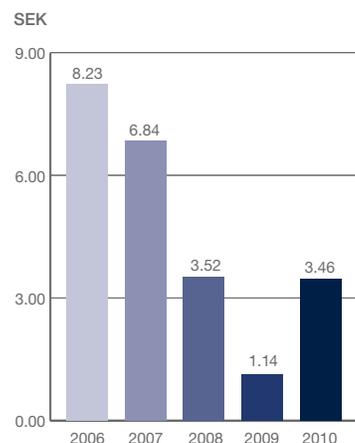
■ Turnover, USD million    — Price, USD    — S&P 500 (indexed to ADS price)

## DIVIDEND PER SHARE

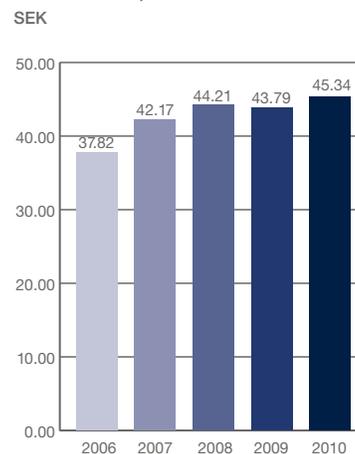


<sup>1)</sup> For 2010 as proposed by the Board of Directors.

## EARNINGS PER SHARE, DILUTED



## STOCKHOLDERS' EQUITY PER SHARE, BASIC



## OFFER AND LISTING DETAILS

### Principal trading market – NASDAQ OMX Stockholm – share prices

The table below states the high and low share prices for our Class A and Class B shares as reported by NASDAQ OMX Stockholm for the last five years. Trading on the exchange generally continues until 5:30 p.m. (CET) each business day. In addition to trading on the exchange there is also trading off the exchange and on alternative venues during trading hours and also after 5:30 p.m. (CET).

NASDAQ OMX Stockholm publishes a daily Official Price List of Shares which includes the volume of recorded transactions in each listed stock, together with the prices of the highest and lowest recorded trades of the day. The Official Price List of Shares reflects price and volume information for trades completed by the members. The equity securities listed on the NASDAQ OMX Stockholm Official Price List of Shares currently comprise the shares of 258 companies.

### Host market NASDAQ – ADS prices

The table below states the high and low share prices quoted for our ADSs on NASDAQ for the last five years. The NASDAQ quotations represent prices between dealers, not including retail mark-ups, markdowns or commissions, and do not necessarily represent actual transactions.

SHARE PRICES ON NASDAQ OMX STOCKHOLM					
(SEK)	2010	2009	2008	2007 <sup>1)</sup>	2006 <sup>1)</sup>
Class A at last day of trading	74.00	65.00	59.30	76.80	138.00
Class A high for year (June 21, 2010)	88.40	78.80	83.60	148.50	154.50
Class A low for year (January 4, 2010)	65.20	55.40	40.60	73.00	104.50
Class B at last day of trading	78.15	65.90	58.80	75.90	138.25
Class B high for year (June 21, 2010)	90.45	79.60	83.70	149.50	155.00
Class B low for year (January 4, 2010)	65.90	55.50	40.60	72.65	104.50

<sup>1)</sup> 2006 and 2007 restated for reverse split 1:5 in 2008.

SHARE PRICES ON NASDAQ NEW YORK					
(USD)	2010	2009	2008	2007 <sup>1)</sup>	2006 <sup>1)</sup>
ADS at last day of trading	11.53	9.19	7.81	11.68	20.12
ADS high for year (April 23, 2010)	12.39	10.92	14.00	21.71	20.57
ADS low for year (February 5, 2010)	9.40	6.60	5.49	11.12	14.44

<sup>1)</sup> 2006 and 2007 restated for reverse split 1:5 in 2008.

SHARE PRICES ON NASDAQ OMX STOCKHOLM AND NASDAQ						
Period	NASDAQ OMX Stockholm				NASDAQ	
	SEK per Class A share		SEK per Class B share		USD per ADS <sup>1)</sup>	
	High	Low	High	Low	High	Low
<b>Annual high and low</b>						
2006 <sup>2)</sup>	154.50	104.50	155.00	104.50	20.57	14.44
2007 <sup>2)</sup>	148.50	73.00	149.50	72.65	21.71	11.12
2008	83.60	40.60	83.70	40.60	14.00	5.49
2009	78.80	55.40	79.60	55.50	10.92	6.60
2010	88.40	65.20	90.45	65.90	12.39	9.40
<b>Quarterly high and low</b>						
2009 First Quarter	78.00	55.40	78.70	55.50	9.65	6.60
2009 Second Quarter	78.80	64.10	79.60	64.00	9.92	8.10
2009 Third Quarter	78.60	65.80	79.50	66.10	10.84	9.10
2009 Fourth Quarter	76.25	64.70	76.95	65.25	10.92	8.94
2010 First Quarter	78.70	65.20	80.00	65.90	11.33	9.40
2010 Second Quarter	88.40	73.00	90.45	74.15	12.39	9.51
2010 Third Quarter	86.55	69.00	89.35	70.85	12.20	9.62
2010 Fourth Quarter	77.05	66.95	79.95	68.85	11.71	9.96
<b>Monthly high and low</b>						
August 2010	79.45	69.00	81.05	70.85	11.40	9.62
September 2010	78.50	69.70	80.65	71.85	11.33	9.98
October 2010	74.50	68.80	76.80	70.65	11.60	10.49
November 2010	72.00	66.95	74.20	68.85	11.20	9.96
December 2010	77.05	70.00	79.95	72.45	11.71	10.48
January 2011	78.55	72.50	82.00	74.80	12.61	10.99

<sup>1)</sup> One ADS = 1 Class B share.

<sup>2)</sup> 2006 and 2007 restated for reverse split 1:5 in 2008.

## SHAREHOLDERS

As of December 31, 2010, the Parent Company had 630,592 shareholders registered at Euroclear Sweden AB (the Central Securities Depository – CSD), of which 1,334 holders had a US address. According to information provided by Citibank, there were 262,814,956 ADSs outstanding as of December 31, 2010, and 4,888 registered holders of such ADSs. A significant number of Ericsson ADSs are held by banks, broker and/or nominees for the accounts of their customer. As of December 31, 2010, the number of bank, broker and/or nominee accounts holding Ericsson ADSs was 196,360.

According to information known at year-end 2010, almost 78 percent of our Class A and Class B shares were owned by institutions, Swedish and international.

Our major shareholders do not have different voting rights than other shareholders holding the same classes of shares.

As far as we know, the Company is not directly or indirectly owned or controlled by another corporation, by any foreign government or by any other natural or legal person(s) separately or jointly.

TOP EXECUTIVES AND BOARD MEMBERS, OWNERSHIP			
	Number of Class A shares	Number of Class B shares	Voting rights, percent
Top executives and Board members as a group (31 persons)	2,416	3,937,920	0.07
For individual holdings, see Corporate Governance Report.			

The table shows the total number of shares in the Parent Company owned by top executives and Board members (including Deputy employee representatives) as a group as of December 31, 2010.

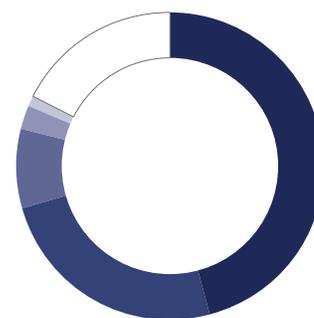
The following table shows share information, as of December 31, 2010, with respect to our 15 largest shareholders, ranked by voting rights, as well as percentage of voting rights as of December 31, 2010, 2009 and 2008.

LARGEST SHAREHOLDERS, DECEMBER 31, 2010 AND PERCENTAGE OF VOTING RIGHTS, DECEMBER 31, 2010, 2009 AND 2008							
Identity of person or group <sup>1)</sup>	Number of Class A shares	Of total Class A shares, percent	Number of Class B shares	Of total Class B shares, percent	2010 Voting rights, percent	2009 Voting rights, percent	2008 Voting rights, percent
Investor AB	102,664,038	39.22	61,414,664	2.04	19.33	19.33	19.42
AB Industrivärden	77,680,600	29.68	0	0.00	13.80	13.62	13.28
Handelsbankens Pensionsstiftelse	19,800,000	7.56	0	0.00	3.52	3.52	3.00
Skandia Liv	15,719,072	6.01	10,745,693	0.36	2.98	3.02	2.89
Swedbank Robur Fonder AB	1,495,549	0.57	138,868,343	4.61	2.73	3.07	2.44
Pensionskassan SHB Försäkringsföreningen	11,672,000	4.46	0	0.00	2.07	2.25	2.26
BlackRock Fund Advisors	0	0.00	81,187,654	2.70	1.44	1.81	0.00
Dodge & Cox, Inc.	0	0.00	80,330,400	2.67	1.43	1.05	0.98
AMF Pensionsförsäkring AB	800,000	0.31	67,174,148	2.23	1.34	1.30	1.55
OppenheimerFunds, Inc.	0	0.00	72,416,412	2.40	1.29	1.29	1.31
Handelsbanken Fonder AB	1,340	0.00	59,260,630	1.97	1.05	0.94	1.02
Gamla Livförsäkringsbolaget SEB Trygg Liv	4,675,919	1.79	12,275,600	0.41	1.05	0.98	1.04
Aberdeen Asset Managers Ltd.	0	0.00	56,648,517	1.88	1.01	0.71	0.38
SEB Investment Management AB	498,441	0.19	50,604,935	1.68	0.99	0.89	0.98
PRIMECAP Management Co.	0	0.00	52,241,292	1.73	0.93	0.83	0.56
Others	26,749,024	10.21	2,268,427,464	75.32	45.04	45.39	48.89
<b>Total</b>	<b>261,755,983</b>	<b>100.00</b>	<b>3,011,595,752</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

<sup>1)</sup> Source: Capital Precision.

### FIVE LARGEST COUNTRIES

Percent of capital



- Sweden: 45.85% (47.17%)
- United States: 24.94% (24.29%)
- United Kingdom: 8.17% (7.33%)
- Norway: 2.45% (2.63%)
- Singapore: 1.34% (0.58%)
- Other countries: 17.25% (18.00%)

Source: Capital Precision

# LETTER FROM MICHAEL TRESCHOW



## Dear shareholders,

When I summarized year 2009, I wrote that the key future opportunities for the industry and Ericsson would be increased mobile traffic. In 2010 we saw massive data traffic uptake, driven by laptops and smartphones. The global mobile data traffic actually more than doubled. As a consequence, Ericsson saw a growing demand for mobile broadband.

The telecom industry has for a very long time been characterized by rapid technology development and consolidation. Along with the introduction of new technologies, Ericsson's business is becoming more and more services and software-related. Management has taken action to adapt the Company to this change and the implementation of a new organization has so far been smooth. This is an important foundation for Ericsson's future growth.

In 2010, Ericsson acquired companies to the value of SEK 3.3 billion. Many new employees came aboard during the year, 5,250 joined through acquisitions and about 1,300 through managed services contracts. The Board closely follows the integration of acquired businesses and the insourcing of new employees from operators via managed services contracts. Ericsson has a well-established integration process and a culture where new colleagues quickly become a part of the Company.

During the year, The Board has continued to monitor the Company's remuneration principles. The Board is of the opinion that Ericsson has a well-balanced and competitive compensation structure which rewards performance. We think it is beneficial that senior executives invest in shares and we hope the new long-term variable remuneration (LTV) program will prove to be motivational.

Ericsson has a strong financial position with net cash of SEK 51.3 billion. A strong cash position is important since it gives the Company the ability to play a role in industry consolidation and to strengthen its assets in areas such as systems integration and consulting.

At my very first Board meeting in April 2002, Ericsson was in a quite different situation. The Company was in a financial crisis and at that meeting, we took the decision to propose a rights offering of SEK 30 billion. Since then we have paid back about SEK 41.9 billion in dividends to our shareholders, including the proposed dividend for 2010. In 2002 the share price declined below the subscription price of SEK 3.80 per B-share. Following the rights offering the share price saw sustained growth until 2007. Since then the share price has underperformed.

It has been an exciting journey for me to help to steer Ericsson and shape the industry during my years as Chairman of the Board. I have introduced two new CEOs and their management teams. We have seen the services part of the Company grow to represent close to 40 percent of revenues. Ericsson and the industry are now in the initial phase of rolling out mobile broadband on a large scale.

It is an exciting future ahead for Ericsson. Taking into account the Company's strong market and financial position, it is well positioned to continue to lead the industry.

After nine years in this position it is time to hand over to my successor. I wish the new chairman and Ericsson all the best.

Michael Treschow  
Chairman of the Board

# BOARD OF DIRECTORS' REPORT

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This Board of Directors' Report is based on Ericsson's consolidated financial statements, prepared in accordance with IFRS as endorsed by the EU. The application of reasonable but subjective judgments, estimates and assumptions to accounting policies and procedures affects the reported amounts of assets and liabilities and contingent assets and liabilities at the balance sheet date as well as the reported amounts of revenues and expenses during the reporting period. These amounts could differ materially under different judgments, assumptions and estimates. Please see Note C2 – "Critical Accounting Estimates and Judgments" (p. 54).

Also non-IFRS measures are used to provide meaningful supplemental information to the IFRS results. Non-IFRS measures are designed to facilitate analysis by indicating Ericsson's underlying performance. However, these measures should not be viewed in isolation or as substitutes to the IFRS measures. A reconciliation of non-IFRS measures with the IFRS results can be found on page 22.

This report includes forward-looking statements subject to risks and uncertainties. Actual developments could differ materially from those described or implied. Please see "Forward-Looking Statements" (p. 126) and "Risk Factors" (p. 119).

The external auditors review the quarterly interim reports, perform audits of the Annual Report and report their findings to the Board and its Audit Committee.

The terms "Ericsson", "the Group", and unless the context reasonably requires otherwise also "the Company", all refer to Telefonaktiebolaget LM Ericsson and its subsidiaries. The "Parent Company" solely refers to Telefonaktiebolaget LM Ericsson. Unless otherwise noted, numbers in parentheses refer to the previous year (i.e. 2009).

## NET SALES SEK 203.3 (206.5) BILLION

Sales decreased –2%.

## OPERATING MARGIN 12% (12%)

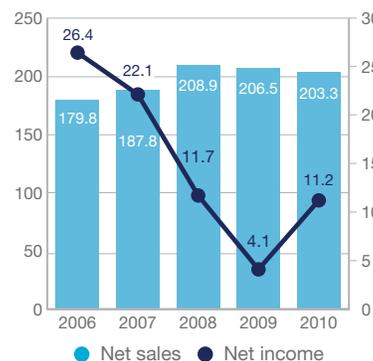
EXCL. JOINT VENTURES AND  
RESTRUCTURING CHARGES

Operating income was  
24.4 (24.6) billion.

## CASH FLOW SEK 29.8 (28.7) BILLION

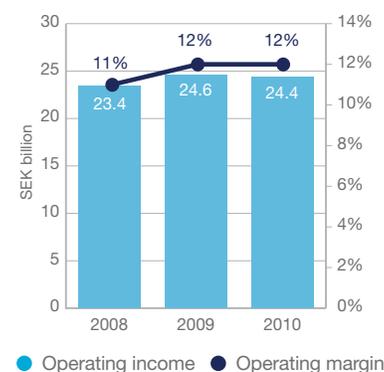
Cash flow is adjusted for cash  
outlays for restructuring of  
SEK 3.3 (4.2) billion.

NET SALES AND NET INCOME  
SEK billion



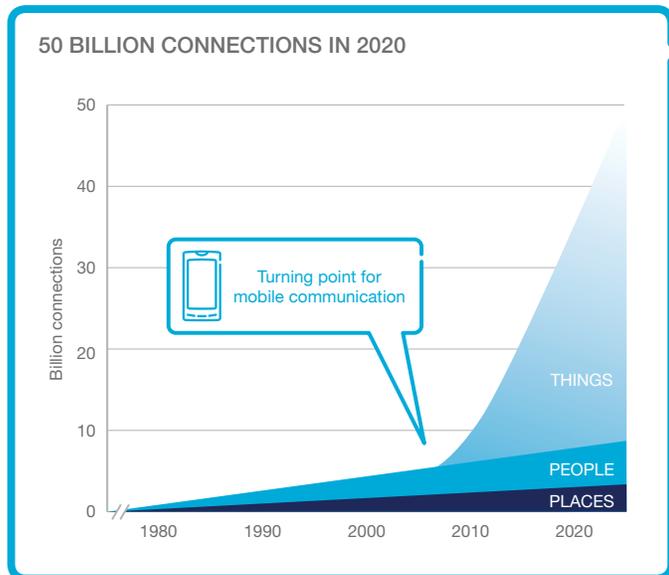
OPERATING INCOME AND  
OPERATING MARGIN

Excluding restructuring charges and share in  
earnings of JVs



## VISION

Ericsson's vision is to be the prime driver in an all-communicating world. The vision of an all-communicating world is rapidly becoming a reality as there are more than 5.3 billion subscriptions today for mobile telecommunications. Ericsson envisions a continued evolution, from having connected 5 billion people to connecting 50 billion "things". The Company envisions that anything that can benefit from being connected will be connected, mainly via mobile broadband.



## STRATEGY

By leveraging global presence and scale as well as technology and services leadership, Ericsson will continue to be the prime driver in the telecom industry.

### Global presence and scale

Ericsson has today business in more than 180 countries. The Company is the largest provider of operator equipment and with 45,000 service professionals, the Company has secured scale advantages.

Going forward, Ericsson intends to increase its market share in the solution areas: Communication Services, Consumer and Business Applications, Fixed Broadband and Convergence, Managed Services, Mobile Broadband, Operations and Business Support Systems and Television and Media Management.

With its strong financial position, the Company intends to grow also through acquisitions, targeting small and medium-sized companies.

Ericsson sees opportunities to increase its footprint, i.e. installed equipment base, mainly in Europe, where its market share is lower than the overall global position. By outperforming its competitors, there is an opportunity for the Company to grow footprint by achieving a larger part of a roll-out project than initially assigned by the customer.

### MARKET INDICATORS

In understanding where the market is heading, Ericsson follows different drivers.

For segment Networks the Company monitors the traffic development in the networks and the evolution of the installed equipment. These parameters vary between countries and regions. Operators' total capital expenditure is not a key indicator since only around 50 percent of the cost is related to telecom. Of the telecom part, about 10-15 percent is designated for telecom equipment. Accordingly, operator capital expenditure can therefore decrease without necessarily impacting Ericsson sales.

For segment Global Services, it is relevant to study operators' operating expenses, since Ericsson offers services and solutions to reduce their operating cost.

Multimedia is more fragmented, with a number of parameters for different parts of the business.

### BUSINESS MIX

Ericsson's Group margins depend to a high degree on the business mix with the proportion of services, software and hardware content as well as type of projects. Rolling out a new network, increasing coverage, or modernizing a network, means deploying hardware, i.e. radio base stations (RBSs) and controllers, on a large scale. These projects are often won in open tenders in a highly competitive environment. Later, after deployment, the hardware will be regularly upgraded with software to enable for example higher data speeds and new functionality/features. These upgrades normally provide the Company with more even revenue streams. The initial large projects are a necessary first step to secure future software and services business when upgrades and/or expansions of the networks take place.

### Technology leadership

By continuing to invest in research and development (R&D), the Company will secure its technology leadership. The objectives are to deliver superior performance and to be the thought leader in the industry.

Ericsson has one of the industry's largest organizations for R&D.

### RESEARCH AND DEVELOPMENT

The Company's total spend on R&D was SEK 29.9 (27.0) billion excluding restructuring charges. More than 20,000 people work in developing products and solutions. With approximately 600 research engineers, research accounts for about three percent of the overall investment in R&D.

All research is closely connected to future solutions and products. The applied research usually targets products that will reach the market within three to five years. Research performed in the areas of multimedia and user services target products and solutions which are closer in time. An increasing part of the solutions are software based which requires a different mode of operation in R&D. During the last years, developing

## ION

the Company's software capabilities has been important and a key part of this has been to implement new ways of working. An agile engineering method has been implemented, allowing quick response to market changes. The new ways of working as well as product packaging, enable online delivery of software, and new customization possibilities. The strategy to develop software-based solutions also means new business models in the customer engagement, such as software subscription or software-as-a-service.

The research activities are performed in-house as well as in collaboration with research institutes and universities. An essential part of the research work is performed in parallel with standardization work. Standardization is performed together with peers in different industry bodies. Open standards are a foundation for the industry in order to secure ecosystems and interoperability.

To speed up the transfer of knowledge and research concepts into product development, research engineers responsible for the initial project usually move along to the product development units. To fill the gap in the research organization, Ericsson continuously recruits talented research engineers with the task to take on new projects.

When developing new technologies such as 3G/WCDMA or 4G/LTE, the project cycles have normally been longer, up to ten years. However, when developing new services or applications other project models have been created with shorter lead-times, sometimes only a few months. In order to shorten the time from idea to product, Ericsson has introduced beta tests with up to 1,000 users trying out new services and applications. A focus area for Ericsson is now how to support the commercialization of these ideas into new solutions.

Every quarter, the executive team in Ericsson reviews the project portfolio in R&D. Return on investment is calculated as net present value for the different projects.

Read more about Ericsson's R&D in 2010 on page 20.

#### INTELLECTUAL PROPERTY RIGHTS AND LICENSING

The intellectual property rights (IPR) are licensed to other companies (infrastructure equipment suppliers, embedded module suppliers, handset suppliers and mobile application developers) in return for royalty payments and/or access to their IPRs. The Company is of the opinion that it has access to all essential patents that are material to the business in part or in whole. The net revenue from IPRs was about SEK 4.6 (4.5) billion in 2010.

#### Services leadership

With 45,000 service professionals across the world, the Company has the industry's largest services organization. The Company provides managed services, consulting and systems integration, customer support and network rollout. The services organization, with its broad skills and experiences, provides a competitive advantage for sales of infrastructure.

Drawing on the experiences gained in providing services related to the infrastructure business, the Company is also able to offer new, more advanced and stand-alone services,

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VQS\_Section 3.2\_Ericsson 2010 Annual Report.pdf

such as managing data centers. A key area is to develop new business models such as network sharing and new ways of bundling technology and services. The Company has over the years strengthened its competence in services through the insourcing of staff from telecom operators and acquiring small and medium-sized companies in the field of consulting and systems integration.

#### Moving into new industry segments

Ericsson has in 2010 taken the decision to increase its efforts to approach customers in new segments, such as governments, health industry, transport and utilities. These are industries with either similar business models as telecom operators and/or obvious benefits from mobile broadband.

#### Guiding principles

The basic principles for Ericsson's strategy are:

- > Customer intimacy; highly qualified employees working closely with the customer to create effective solutions
- > Continuous process improvements and innovation in all areas
- > Scale in delivery and technical solutions.

## BUSINESS FOCUS

#### Meeting demand for mobile broadband worldwide

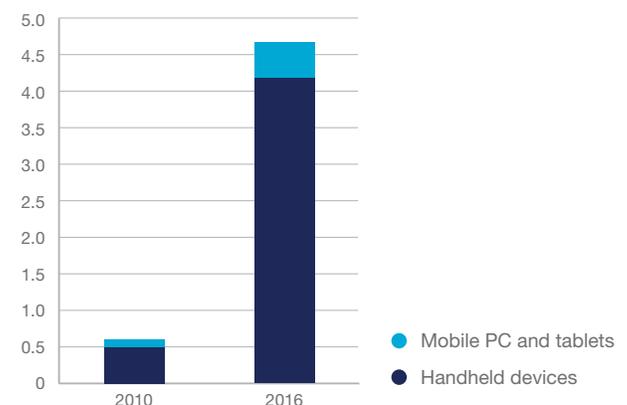
The business focus in 2010 has been to provide operators with mobile broadband. The most obvious driver of this development was the massive data traffic growth, especially in the US and Japan.

Recently introduced mobile devices such as smartphones and tablets drive data traffic and the need for higher speeds and enhanced capacity in the networks.

Telecom operators across the world see an increasing part of their revenues emerging from data, although voice still is the main source for sales revenues. For some operators in Japan, mobile data represents more than 50 percent of total revenues. In many countries, such as the US, operators have introduced tiered pricing for mobile data services, further spurring demand for data services. In addition, quality of service has become a

#### MOBILE BROADBAND GROWTH

Subscriptions (billion)



differentiator for operators, driving investments for expansions and upgrades.

For Ericsson, this resulted in an increasing demand for mobile broadband and quicker than expected ramp-up of volumes of the new radio-base station RBS 6000. During the first half of 2010, Ericsson was still impacted by the cautious operator investments that started in the second half of 2009. The Company also put a lot of focus on mitigating the effects of the industry-wide component shortage that occurred mid 2010. While the supply of components has now normalized, we are still not fully meeting the increased demand on certain mobile broadband products. The total global number of mobile subscriptions is 5.3 billion. In 2010, mobile broadband subscriptions increased more than 60 percent to approximately 600 million, still only representing some 10 percent of total mobile subscriptions. Ericsson expects the strong uptake for mobile broadband to continue in 2011. Already in 2011, the number of mobile broadband subscriptions is expected to hit one billion. This development is mainly driven by the use of smartphones. Devices with embedded modules such as tablets are also expected to show continuously strong growth.

### Increasing market share

In 2010, focus was also on increasing footprint in Europe and to secure footprint in the rollout of 3G networks in India. In Europe, approximately 800,000 radio-base stations are expected to be replaced. These base stations were installed before 2004 and consume 30 percent more energy than new equipment. Since energy represents a significant part of the total operating expenses of a radio site, replacement is a good business case. Ericsson has seen the initial modernization of networks in Europe and has so far managed to gain contracts in countries where the Company previously had a weaker position. However, modernization projects typically last for a couple of years, so it is still too early to conclude what the Company's market position will be. Ericsson has in general a lower market share in Europe than in the rest of the world. This was a result of the 3G rollouts that took place in Europe approximately eight years ago. Ericsson was then in a financially turbulent situation and lost out on certain 3G deals.

In India, 3G rollouts started in 2010 and Ericsson has maintained a market share in line with its 2G position.

Ericsson also acquired companies to strengthen its market position:

- > Nortel's GSM business in North America with 350 employees
  - > Nortel's share in LG-Nortel in Korea with 1,300 employees.
- Ericsson also signed agreements to acquire GDNT, a Chinese R&D and services company with 1,100 employees, and the Nortel multi-service switch business. These two businesses were not consolidated in 2010.

### Technology

Ericsson invested SEK 29.9 (27.0) billion in R&D in 2010, excluding restructuring charges. The increase is mainly a result of consolidation of acquired companies.

Of the total cost for development of new products in 2010, the majority was spent on further enhancements of 3G/WCDMA/HSPA as well as 4G/LTE. Resources are also spent on further adaptations of 2G/GSM although at lower levels compared to previous years.

The complexity in the industry with a number of technologies installed, new solutions and services as well as more frequencies used, requires continued efforts in R&D to secure Ericsson's technology leadership also in coming years.

Current radio research focus is on ensuring that radio networks can handle the massive data growth that we have experienced since introducing mobile broadband technologies.

Ericsson held 27,000 (25,000) granted patents globally as of December 31, 2010. The Company is expected to hold approximately 25 percent of all essential patents in LTE.

The Company has a number of essential patents relating to GSM, Edge, WCDMA, HSPA, TD-SCDMA, CDMA2000, WiMAX and LTE. Ericsson also holds patents in other areas, including IMS, voice-over-IP, ATM, messaging, WAP, Bluetooth, SDH/SONET, WDM and carrier Ethernet.

Read more about Ericsson's R&D strategy and IPR's on page 18.

### Increasing services business

In 2010, 54 (30) managed services contracts were signed, with fixed, mobile and cable operators and for enterprise networks. 26 (9) of the contracts were extensions or expansions.

The year was also characterized by further acquisitions. The Company acquired companies in the area of consulting and systems integrations:

- > Pride in Italy with 1,000 employees
- > InCode, a US strategy and consulting firm with 45 employees
- > Optimi, a US-Spanish network management and optimization company with 200 employees.

### Competence and skills

Ericsson introduced a new go-to-market model in 2010. The Company set up ten regions, replacing the former 23 market units. The regions approach customers with solutions, covering services, software and hardware. By this, Ericsson will move from a product-led to a solutions-led sales approach, selling the full breadth of the portfolio. The Company also started up projects in the regions, developing solutions for new customer segments.

At year end, Ericsson had 90,261 (82,493) employees. In 2010, 5,250 individuals joined Ericsson through acquisitions and about 1,300 through managed services contracts. Approximately 5,000 were made redundant and 6,000 were recruited. The vast majority of recruitments took place in India, China and Brazil. These new recruitments were primarily made within the areas of R&D and service delivery.

Half of the workforce, 45,000 people, are service professionals. The competence and capabilities of the Company's employees is increasingly service and software oriented.

# OPERATIONAL GOALS AND RESULTS

Ericsson’s overall goal is to create shareholder value. Management uses four metrics to monitor the Company’s overall performance: faster than market sales growth, a best-in-class margin, a strong cash conversion and growth in JV earnings.

## Shareholder value creation



### GROW FASTER THAN THE MARKET

The Company is the largest provider of operator equipment. In the market for 4G/LTE, the Company’s market share is higher than for earlier radio technology generations since Ericsson has managed to get a good start in the rollout of 4G/LTE. The 4G/LTE market is still small though, since it is in its initial phase. When including CDMA in the operator equipment market, Ericsson increased its market share in 2010 due to the acquired Nortel business. In professional services, the company is estimated to have kept or slightly increased its market share. The overall market position for segment Multimedia is difficult to assess, as the market is fragmented.

### BEST-IN-CLASS OPERATING MARGIN

The operating margin for the Company, excluding joint ventures and restructuring charges, was 12 (12) percent. Based on reported results for 2010, the margin remains the highest among the Company’s traditional telecom competitors that are publicly listed.

### CASH CONVERSION OF OVER 70 PERCENT

The cash conversion rate for 2010 was 112 (117) percent, reflecting a strong focus on cash flow and a higher net income. Cash conversion is defined as cash flow from operating activities divided by net income reconciled to cash.

### GROWTH IN JV EARNINGS

JV earnings improved in 2010 to SEK –0.7 (–6.1) billion, excluding restructuring charges. Ericsson’s share in earnings in Sony Ericsson was SEK 0.9 (–4.8) billion, excluding restructuring charges, and in ST-Ericsson SEK –1.5 (–1.3) billion, excluding restructuring charges. Sony Ericsson’s improved results were driven by a streamlined product portfolio focused on higher-end smartphones and an improved cost structure. ST-Ericsson is on its way of completing the transition program and has new products coming.

### Other performance indicators

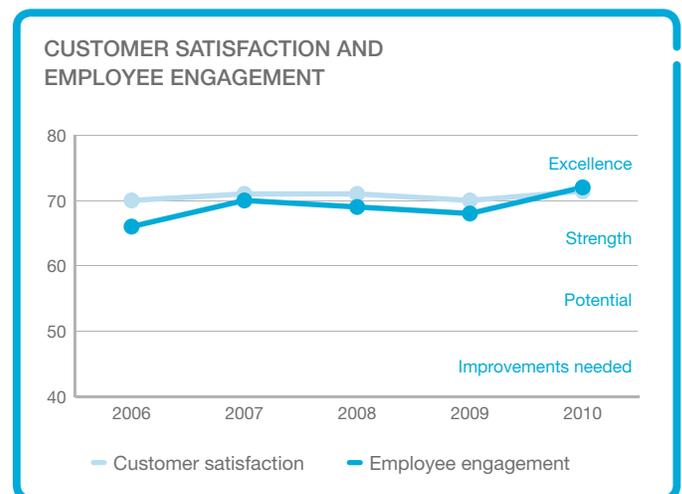
Ericsson believes that satisfied customers and motivated employees are key to success.

### CUSTOMER SATISFACTION

Every year, an independent customer satisfaction survey is performed. In 2010, approximately 10,000 representatives, in different professions, of Ericsson customers around the world were polled to assess their satisfaction with Ericsson, compared to its main competitors. Over the past five years, Ericsson has maintained a level of excellence. The goal is to increase this level further.

### EMPLOYEE ENGAGEMENT

In 2004 Ericsson began measuring motivation among its employees. This survey is conducted by an independent company. In 2010, 87 (91) percent of all employees across the world responded to the survey. The human capital index, which measures employee contribution in adding value for customers and meeting business goals, was 72 (69). This is a high level, but as with customer satisfaction, the objective is to further increase employee engagement and motivation.



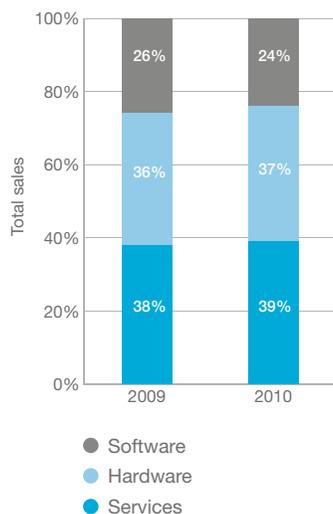
## FINANCIAL RESULTS OF OPERATIONS

## ABBREVIATED INCOME STATEMENT WITH RECONCILIATION IFRS – NON-IFRS MEASURES

SEK billion	IFRS			Restructuring charges			Non-IFRS measures		Percent change	Non-IFRS measures 2008
	2010	2009	2008	2010	2009	2008	2010	2009		
Net sales	203.3	206.5	208.9				203.3	206.5	-2%	208.9
Cost of sales	-129.1	-136.3	-134.6	-3.4	-4.2	-2.5	-125.7	-132.1	-5%	-132.1
Gross income	74.3	70.2	74.3	-3.4	-4.2	-2.5	77.6	74.4	4%	76.8
Gross margin %	36.5%	34.0%	35.5%				38.2%	36.0%		36.8%
Operating expenses	-58.6	-60.0	-60.6	-3.5	-7.1	-4.2	-55.2	-52.9	4%	-56.4
Operating expenses as % of sales	28.8%	29.0%	29.0%				27.1%	25.6%		27.0%
Other operating income and expenses	2.0	3.1	3.0	-	-	-	2.0	3.1	-35%	3.0
Operating income before share in earnings of JVs and associated companies	17.6	13.3	16.7	-6.8	-11.3	-6.7	24.4	24.6	-1%	23.4
Operating margin % before share in earnings of JVs and associated companies	8.7%	6.5%	8.0%				12.0%	11.9%		11.2%
Share in earnings of JVs and associated companies	-1.2	-7.4	-0.4	-0.5	-1.3	-0.9	-0.7	-6.1		0.4
Operating income	16.5	5.9	16.3	-7.3	-12.6	-7.6	23.7	18.5	28%	23.9
Operating margin %	8.1%	2.9%	7.8%				11.7%	9.0%		11.4%
Financial income and expense, net	-0.7	0.3	1.0							
Taxes	-4.5	-2.1	-5.6							
Net income	11.2	4.1	11.7							
EPS diluted (SEK)	3.46	1.14	3.52							

Non-IFRS measures are used in the income statement as supplemental information to the IFRS results. Since there were significant restructuring costs during 2008, 2009 and 2010 and consequently significant impact on reported results and margins, non-IFRS measures excluding restructuring charges are presented to facilitate analysis by indicating Ericsson's underlying performance. However, these measures should not be viewed in isolation or as substitutes to the IFRS measures. For more details on the restructuring activities and corresponding charges, please see Note C5 – "Expenses by Nature".

## SOFTWARE, HARDWARE AND SERVICES SHARE OF SALES



## Financial results of operations

Growth of sales, operating margin and net income are the overriding targets. In 2010, sales did not increase despite the strong demand for mobile broadband in the second half of the year. However, net income improved significantly, mainly due to improvements in Sony Ericsson earnings and less restructuring charges. For 2011, the main objectives remain. To achieve these targets, an essential ingredient is a continued focus on cost and internal efficiency work.

## Sales

The cautious operator investments that started to impact in the second half of 2009 continued during the first half 2010. In the second half of 2010 demand for mobile broadband started to increase. During part of the year, the Company struggled with the industry-wide component shortage. At year end, the supply of components had normalized. Despite necessary inflow of components, the Company could at year-end not fully meet the increased demand on certain mobile broadband products. In 2010, voice related sales decreased and the increase in demand for mobile broadband products and services could not fully compensate for that decline.

Sales were also negatively impacted by the strong SEK. Sales for comparable units, adjusted for currency exchange rate effects and hedging, decreased -7 percent.

In 2010, the Company saw the share of software sales decline to 24 (26) percent of sales. The portion of hardware increased to 37 (36) percent. The increase in

## ION

hardware is a result of demand for mobile broadband products. In the short term, the software share might continue to decrease due to a higher portion of projects with a lot of hardware. Longer term, the software part should increase following more expansions and upgrades of networks.

### Seasonality

The Company's quarterly sales, income and cash flow from operations are seasonal in nature, generally lowest in the first quarter of the year and highest in the fourth quarter. This is mainly a result of the seasonal purchase patterns of network operators.

MOST RECENT FIVE-YEAR AVERAGE SEASONALITY				
	First quarter	Second quarter	Third quarter	Fourth quarter
Sequential change	-21%	9%	-5%	30%
Share of annual sales	22%	25%	23%	30%

### Gross margin

Gross margin, excluding restructuring, improved to 38 (36) percent due to business mix with a higher proportion of network upgrades and expansions. Cost of sales was also reduced as a result of efficiency work.

### Operating expenses

To secure continued technology leadership, focus is on innovation and R&D. R&D expenses amounted to SEK 29.9 (27.0) billion. Spending on R&D as a percentage of sales was 15 (13) percent. The increase is a result of lower sales, higher investments in certain R&D areas and the acquired Nortel and LG-Ericsson operations. In 2011, R&D expenses of SEK 31-33 billion is estimated, including restructuring charges. The amount might fluctuate due to currency exchange rate effects.

Selling and administrative expenses, excluding restructuring charges, was stable in relation to sales 12 (13) percent. The amount was SEK 25.3 (25.9) billion. In the year, there were positive effects from efficiency work along with the strong SEK. However, costs for the integration of acquired companies impacted negatively. The Company also conducted a growing number of LTE trials across the world which increased selling and administrative expenses.

### Operating margin before JVs

Despite the improved gross margin, operating margin, before share in JV earnings and excluding restructuring charges, was flat at 12 (12) percent. This was an effect of increased R&D expenses.

### Share in earnings of JVs

Sony Ericsson returned to profit in 2010, after two years of losses. The turnaround has been possible thanks to restructuring and a streamlined product portfolio focused on higher-end smartphones.

ST-Ericsson is still reporting a loss. The company is on its way of completing the transition program and has new products coming. Ericsson's share in Sony Ericsson's income before tax was SEK 0.9 (-4.8) billion, excluding restructuring charges. Ericsson's share in ST-Ericsson's income before tax, adjusted to IFRS, was SEK -1.5 (-1.3) billion, excluding restructuring charges.

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### Operating income

Operating income increased significantly, due to improved earnings in Sony Ericsson.

### Financial net

The financial net was SEK -0.7 (0.3) billion. The difference is mainly attributable to a negative impact of around SEK 0.6 billion due to foreign exchange currency revaluation effects and lower interest net of SEK 0.3 billion compared to 2009.

### Taxes

The tax expense for the year was SEK 4.5 (2.1) billion or 28.8 (33.9) percent of income after financial items. The tax rate may vary between years depending on business and geographic mix. The tax rate excluding joint ventures and associated companies was 25.7 (25.7) percent due to lower tax rate from the loss-making joint venture.

### Net income

Net income increased SEK 7.1 billion to SEK 11.2 (4.1) billion as a result of improved earnings in Sony Ericsson and less restructuring charges.

### Earnings per share, diluted

Earnings per share increased by SEK 2.32 to SEK 3.46 (1.14), as a result of improved net income. The Board of Directors proposes a dividend of SEK 2.25 (2.00).

### Restructuring charges

Total restructuring charges were SEK 6.8 (11.3) billion. Cash outlays was SEK 3.3 (4.2) billion. A cost reduction program was initiated in 2009 and completed by the second quarter 2010. Charges of SEK 4.2 billion were taken in 2010 related to the program. In the second half of the year, an additional SEK 2.6 billion in charges were taken. These charges primarily relate to efficiency activities in service delivery, product development and administration. At the end of the year, cash outlays of SEK 3.2 billion remain to be made. In 2011, restructuring charges of approximately SEK 2 billion are estimated.

RESEARCH AND DEVELOPMENT PROGRAM			
	2010	2009	2008
Expenses (SEK billion) <sup>1)</sup>	29.9	27.0	30.9
As percent of Net sales	14.7%	13.1%	14.8%
Employees within R&D as at December 31 <sup>2)</sup>	20,800	18,300	19,800
Patents <sup>2)</sup>	27,000	25,000	24,000

<sup>1)</sup> Excluding restructuring charges.

<sup>2)</sup> The number of employees and patents are approximate.

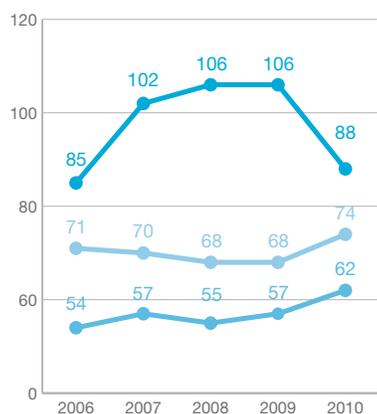
## FINANCIAL POSITION

## CONSOLIDATED BALANCE SHEET (ABBREVIATED)

December 31, SEK billion	2010	2009	2008		2010	2009	2008
<b>ASSETS</b>				<b>EQUITY AND LIABILITIES</b>			
Non-current assets, total	83.4	87.4	87.2	Equity	146.8	141.0	142.1
of which intangible assets	46.8	48.2	48.2	Non-current liabilities	38.3	43.3	39.5
of which property, plant and equipment	9.4	9.6	10.0	of which post-employment benefits	5.1	8.5	9.9
of which financial assets	14.5	15.3	14.1	of which borrowings	27.0	30.0	24.9
of which deferred tax assets	12.7	14.3	14.9	of which other non-current liabilities	6.2	4.8	4.7
Current assets, total	198.4	182.4	198.5	Current liabilities	96.8	85.5	104.1
of which inventory	29.9	22.7	27.8	of which provisions	9.4	12.0	14.0
of which trade receivables	61.1	66.4	75.9	of which current borrowings	3.8	2.1	5.5
of which other receivables/financing	20.2	16.6	19.8	of which trade payables	25.0	18.9	23.5
of which short-term investments, cash and cash equivalents	87.2	76.7	75.0	of which other current liabilities	58.6	52.5	61.0
<b>Total assets</b>	<b>281.8</b>	<b>269.8</b>	<b>285.7</b>	<b>Total equity and liabilities <sup>1)</sup></b>	<b>281.8</b>	<b>269.8</b>	<b>285.7</b>

<sup>1)</sup> Of which interest-bearing liabilities and post-employment benefits SEK 35.9 billion (SEK 40.7 billion in 2009).

## KEY RATIOS



- Days sales outstanding  
Target is less than 90 days
- Inventory turnover days  
Target is less than 65 days
- Payable days  
Target is more than 60 days

Ericsson's strategy is to maintain a strong balance sheet including a sufficiently large cash position to ensure the financial flexibility to operate freely and to capture business opportunities. This has been particularly important during the past years' difficult macroeconomic and financial market situation.

By maintaining a strong cash position, the Company can also maintain an active strategy for mergers and acquisitions. During 2010, Ericsson made five acquisitions and strengthened its market position in the USA and Korea along with adding competencies in consulting and systems integration.

An important focus area is the release of working capital. Major efforts have been made during the year in order to reduce days sales outstanding and inventory turnover days as well as to increase payable days. The target for inventory turnover days was not met, while the other two were achieved. The efforts to release further working capital will continue in 2011.

At year end, the strong SEK impacted net operating assets positively when translating assets denominated in foreign currencies into SEK.

The Board of Directors will propose to the Annual General Meeting 2011 a dividend of SEK 2.25 per share. In 2010, the dividend was SEK 2.00 per share. When considering the level of dividend, the Board of Directors take into account the need to secure a continued strong cash position as well as capital needed in order to secure a healthy business going forward.

### Current assets

**Inventory** levels have been higher than expected due to the industry-wide component shortage and supply chain bottlenecks. At year end, inventory was SEK 29.9 (22.7) billion. The higher inventory level followed a higher level of work in progress in the regions. This was an effect from delayed project implementations within network rollout due to the component shortage earlier in the year. Effects from component shortage and supply chain bottlenecks were eliminated at year end while there was still an impact of slightly higher component inventories. The target of inventory turnover days less than 65 days was not reached and improvement efforts will continue in 2011.

## ION

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VQS\_Section 3.2\_Ericsson 2010 Annual Report.pdf

**Trade receivables:** Days sales outstanding reached high levels in parts of the year, but had improved significantly at year end, reaching 88 (106) days at year end. The improvement was mainly due to a strong collection and positive effects from a stronger SEK. The Company's nominal credit losses have historically been low and continued to be so in 2010.

**Net cash** increased to SEK 51.3 (36.1) billion, mainly due to a strong operating cash flow. Read more about changes in cash on page 26.

### Equity

Equity increased by SEK 5.8 billion to SEK 146.8 (141.0) billion. Net income was SEK 11.2 (4.1) billion and a dividend of SEK 6.7 (6.3) billion was paid during the year. The equity ratio was maintained at a healthy level of 52 (52) percent.

Return on equity increased to 7.8 (2.6) percent, primarily due to improved earnings in the joint venture Sony Ericsson and less restructuring charges.

Return on capital employed (ROCE) improved to 9.6 (4.3) percent. Excluding restructuring charges, ROCE would have been 13.6 (11.2) percent.

### Non-current liabilities

**Post-employment benefits** related to defined benefit plans declined to SEK 5.1 (8.5) billion. The year 2010 was characterized by a general increase in discount rates and plan assets yielded higher than expected. Consequently, the Company experienced a decrease in the net pension liability and the funded ratio (plan assets as percentage of defined benefit obligations) increased to 89 (76) percent.

### Current liabilities

**Provisions** declined to SEK 9.4 (12.0) billion. SEK 3.2 (4.3) billion were related to restructuring. The cash outlays of provisions were SEK 7.2 billion. The lower amount of provisions is mainly a result of business mix with more upgrades and expansions. There is also an effect of improved project management as well as geographical mix. Provisions will fluctuate over time, depending on business mix, market mix and technology shifts.

**Payable days** increased by five days to 62 (57) days. The target of payable days of above 60 days was met.

**Non-current borrowings** decreased to SEK 27.0 (30.0) billion. No major changes were made in the debt maturity profile during 2010. Debt of SEK 3.4 billion is maturing in 2012 and SEK 5.4 billion in 2013. The Company also has unutilized committed credit facilities of USD 2.0 billion available, maturing in 2014.

### Credit ratings at "solid investment grade"

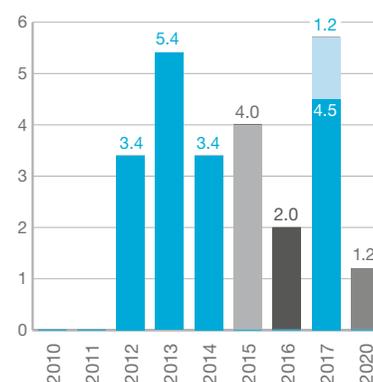
Credit ratings were unchanged during 2010, remaining at "solid investment grade": Moody's at Baa1 and Standard & Poor's at BBB+, both with stable outlook.

### Off-balance sheet arrangements

There are currently no material off-balance sheet arrangements that have, or would be reasonably likely to have, a current or anticipated effect on the Company's financial condition, revenues, expenses, result of operations, liquidity, capital expenditures or capital resources.

#### DEBT MATURITY PROFILE

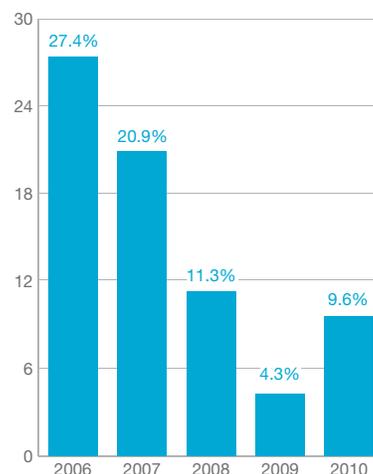
SEK billion



- Notes and bonds
- Financial leases
- Loan from the European Investment Bank
- Loan from the Swedish Export Credit Corporation
- Loan from the Swedish Export Credit Corporation, guaranteed by the Swedish Export Credit Guarantee Board

#### RETURN ON CAPITAL EMPLOYED

Percent



## CASH FLOW

CASH FLOW (ABBREVIATED) JANUARY-DECEMBER			
SEK billion	2010	2009	2008
Net income	11.2	4.1	11.7
Income reconciled to cash	23.7	21.0	26.0
Changes in operating net assets	2.9	3.5	-2.0
Cash flow from operating activities	26.6	24.5	24.0
Adjusted operating cash flow <sup>1)</sup>	29.8	28.7	22.1
Cash flow from investing activities	-12.5	-37.5	-8.5
<i>of which capital expenditures, sales of PP&amp;E, product development</i>	-5.2	-4.9	-4.1
<i>of which acquisitions/divestments, net</i>	-2.8	-18.1	1.8
<i>of which short-term investments for cash management purposes and other investing activities</i>	-4.5	-14.5	-6.2
Cash flow before financing activities	14.0	-13.0	15.5
Cash flow from financing activities	-5.7	-1.7	-7.2
Cash conversion (Cash flow from operating activities divided by income reconciled to cash)	112%	117%	92%
Gross cash (Cash, cash equivalents and short-term investments)	87.1	76.7	75.0
Net cash (Gross cash less interest-bearing liabilities and post-employment benefits)	51.3	36.1	34.7

<sup>1)</sup> Cash flow from operations excl. restructuring cash outlays that have been provided for.

At the end of the year, gross cash had increased by SEK 10.4 billion to SEK 87.2 (76.7) billion. The increase was mainly attributed to a strong cash flow from operating activities of SEK 26.6 (24.5) billion, offsetting investing activities of SEK 12.5 (37.5) billion and a dividend to shareholders of SEK 6.7 (6.3) billion.

Net cash increased to SEK 51.3 (36.1) billion.

### Cash flow from operating activities

The adjusted operating cash flow was positively impacted by improved net income as well as released working capital.

Cash flow from operating activities tends to fluctuate between quarters. This is due to changes in trade receivables where there is a seasonal effect from project completion. There is also an effect from seasonal purchase patterns of network operators. The cash flow is therefore evaluated on a yearly basis.

### Cash flow from investing activities

Cash outlays for recurring investing activities increased slightly to SEK -5.2 (-4.9) billion.

Acquisitions and divestments during the year were net SEK -2.8 (-18.1) billion, with the major items being the Nortel stake in the LG-Nortel joint venture and Nortel's GSM business in North America. Divestments were SEK 0.5 (1.2) billion.

Cash outflow for short-term investments for cash management purposes and other investing activities was net SEK -4.5 (-14.5) billion, largely attributable to SEK -3.0 (-17.1) billion of short-term investments.

### Capital expenditures

Annual capital expenditures are normally around two percent of sales and are expected to remain at this level. This corresponds to the needs for keeping and maintaining the current capacity level, including the introduction of new technology and methods. The expenditures are largely related to test equipment in R&D units, network operations centers as well as manufacturing and repair operations.

The Board of Directors reviews the Company's investment plans and proposals.

The Company has sufficient cash and cash generation capacity to fund expected capital expenditures as well as acquisitions without external borrowings in 2011.

We believe that the Company's property, plant and equipment and the facilities the Company occupies are suitable for its present needs in most locations. As of December 31, 2010, no material land, buildings, machinery or equipment were pledged as collateral for outstanding indebtedness.

CAPITAL EXPENDITURES 2006-2010					
SEK billion	2010	2009	2008	2007	2006
Capital expenditures	3.7	4.0	4.1	4.3	3.8
<i>of which in Sweden</i>	1.4	1.3	1.6	1.3	1.0
as percent of net sales	1.8%	1.9%	2.0%	2.3%	2.2%

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VQS\_Section 3.2\_Ericsson 2010 Annual Report.pdf

## Cash flow from financing activities

Dividends paid in the amount of SEK –6.7 (–6.3) billion, were partly offset by increased borrowings of SEK 1.1 billion and other financing activities of SEK –0.1 billion.

## Cash conversion

Cash conversion was 112 (117) percent, well above the target of 70 percent. Over the past three years, cash conversion has been above target.

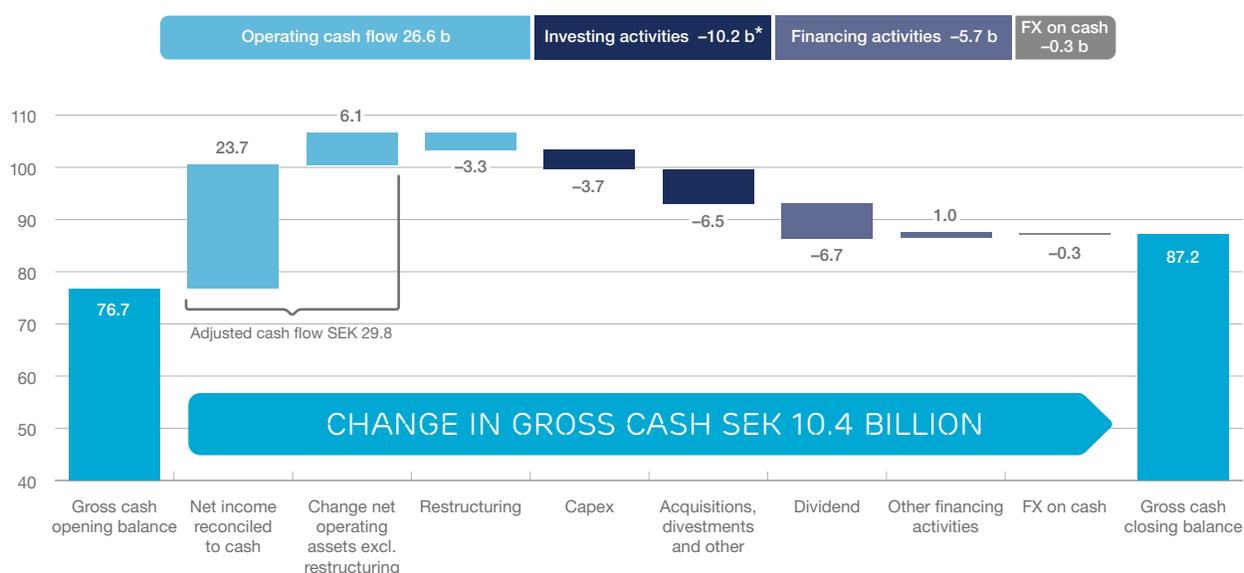
The cash conversion was largely attributable to the strong improvement in net operating assets and the lower income reconciled to cash.

## Restricted cash

Cash balances in certain countries with restrictions on transfers of funds to the Parent Company as cash dividends, loans or advances amounted to SEK 10.8 (8.9) billion.

### CHANGE IN GROSS CASH 2010

SEK billion



\* As disclosed under Financial Terminology, Gross Cash is defined as cash, cash equivalents and short-term investments. Cash, as presented in the balance sheet and related notes includes cash, cash equivalents and short-term investments of a maturity less than three months. Due to different treatment of cash in the above table and related foreign currency impact, the amounts differ from those in other presentations of cash flows.

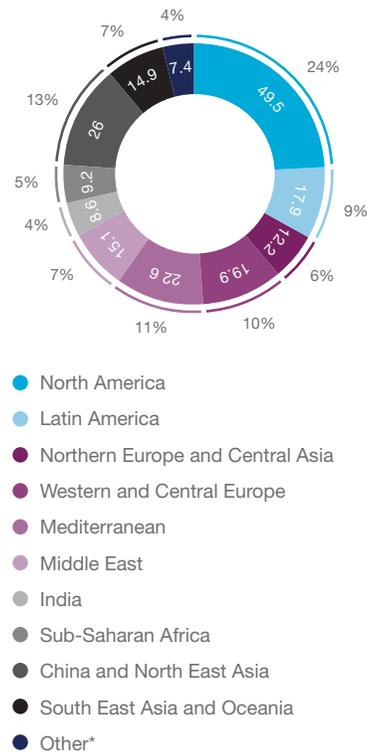
# BUSINESS RESULTS

## Regional development

The regions are the Company's primary sales channels. As of January 1, 2010, Ericsson has changed its geographical reporting. Instead of the five geographical areas reported in previous years, ten regions are reported, mirroring the new internal geographical organization.

### SALES BY REGION 2010

Net sales (SEK billion and percent)



### SALES PER REGION AND SEGMENT 2010

SEK billion	Networks	Global Services	Multi-media	Total	Percent change
North America	30.5	17.7	1.3	49.5	107%
Latin America	9.2	7.7	0.9	17.9	-11%
Northern Europe & Central Asia	7.2	4.3	0.6	12.2	2%
Western & Central Europe	8.3	10.5	1.0	19.9	-12%
Mediterranean	10.6	10.6	1.4	22.6	-10%
Middle East	7.2	6.6	1.4	15.1	-17%
Sub-Saharan Africa	3.6	4.6	1.0	9.2	-40%
India	5.1	2.8	0.7	8.6	-43%
China & North East Asia	17.1	8.3	0.5	26.0	0%
South East Asia & Oceania	7.8	6.5	0.6	14.9	-29%
Other*	6.0	0.5	1.1	7.4	4%
<b>Total</b>	<b>112.7</b>	<b>80.1</b>	<b>10.5</b>	<b>203.3</b>	<b>-2%</b>
Share of total	56%	39%	5%	100%	
Percent change	-1%	1%	-21%	-2%	

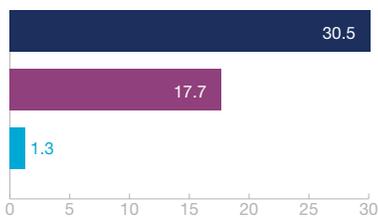
\*Other - This includes sales of e.g. mobile broadband modules, cables, power modules as well as licensing and IPR. Mobile broadband modules are sold directly by business unit Networks to PC/netbook manufacturers. A central IPR unit manages sales of licenses to equipment vendors or others who wish to use Ericsson's patented technology. TV solutions are sold both through other equipment vendors as resellers and directly by business unit Multimedia to cable-TV operators.

The contracts mentioned are a selection of deals signed by Ericsson in 2010. Ericsson normally publicly announces only a part of its wins. Typically only agreements that have some kind of significance in terms of strategy or value are announced via a press release. Ericsson also always seeks for customer approval for any contract release.

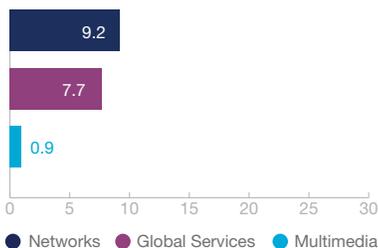
### SALES PER REGION AND SEGMENT 2010

SEK billion

#### NORTH AMERICA



#### LATIN AMERICA



## NORTH AMERICA

Sales was positively impacted by the acquired Nortel businesses and negatively affected by the strong SEK. Ericsson became the largest player in the region, driven by organic growth as well as acquisitions. The main growth drivers were the managed services agreement with Sprint, data traffic driven network expansions and the initial build out of LTE networks. Ericsson is a leading supplier of WCDMA/CDMA and LTE to Verizon, AT&T and MetroPCS. MetroPCS and Verizon commercially launched their LTE networks in 2010. North America is Ericsson's largest market measured in sales and its second largest after Sweden measured in number of employees.

Sprint announced Ericsson as key partner in their network evolution strategy "Network vision" program.

## LATIN AMERICA

The region was characterized by major mergers between regional operators. Lower cost smartphones have created continuous growth in mobile broadband usage, driving operators to invest in networks and services. The services business developed favorably, especially managed services. LTE trials are ongoing in the region.

The world's first solution to connect public buses to mobile broadband was provided by Dataprom and Ericsson in Brazil. Ericsson was also selected to manage Telefonica's network operation center in São Paulo with core, transmission and fixed-access equipment.

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NORTHERN EUROPE AND CENTRAL ASIA

In the eastern part of the region, both 2G expansions and mobile broadband buildouts are taking place. In Scandinavia, focus is on 4G/LTE deployments. 4G/LTE trials are planned or ongoing across the region. Operators have operational efficiency high on the agenda, which creates good demand for managed services. Denmark's leading operator TDC is about to upgrade to 4G/LTE and has chosen Ericsson to supply and manage its nationwide network. Ericsson was also chosen to provide the broadband access network based on VDSL2 technology to TeliaSonera.

WESTERN AND CENTRAL EUROPE

Mobile broadband usage continues to increase in the region. Following conclusions of auctions for 4G/LTE in several markets, Ericsson has been selected for a number of 4G/LTE trials now being implemented with major operators. Ericsson is also supporting operators in connection with data capacity and modernization projects. Operators' focus on efficiency continued to drive strong interest for managed services, network sharing and network transformation leading to opportunities in both services and networks. The UK is at the forefront of network sharing. Ericsson has completed the consolidation of shared sites (over 12,000) for Mobile Broadband Network Ltd (MBNL). Ericsson also extended the managed services business through extensions of existing contracts. This includes a three-year extension with Netia Poland, as well as a renewed and expanded multi-country managed services contract with TeliaSonera International Carrier for field operation services for voice and data networks, built on multi-vendor equipment. Ericsson also signed a five-year managed field service contract for Vodafone in Germany.

MEDITERRANEAN

Operator investments especially in Spain and Greece were cautious due to the overall economic environment and price competition among operators. In order to meet demand for mobile broadband services, operators continued to focus on network modernization. Operational efficiency continues to be high on the agenda, creating good momentum for managed services and consulting in networks as well as in all ICT areas.

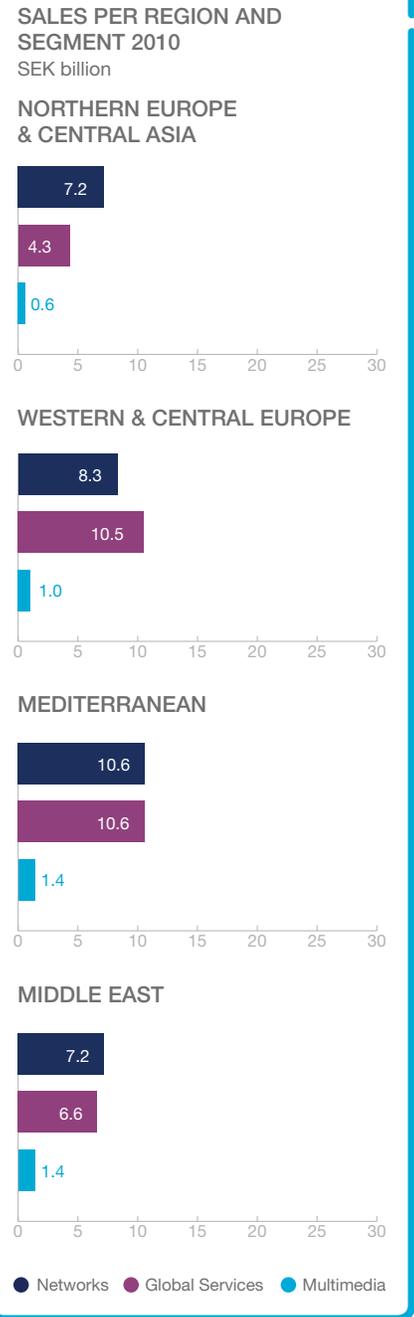
Ericsson signed a seven-year managed services contract with 3 Italia for data center consolidation and modernization of IT infrastructure.

The largest utility company in Spain, Endesa, selected Ericsson to operate its corporate telecommunication network.

MIDDLE EAST

The sales drop was caused by cautious operator investments in parts of the region. Development in the region showed large variations where the Gulf countries continued to show good momentum, while most other parts of the region were slow. Services continues to be a large part of the business, representing 43 percent of total sales. Operators are starting to show interest in 4G/LTE with several trials going on throughout the region. Mobile subscriptions in the region are developing positively with net additions for both voice and broadband services.

To offer innovative services to its customers, the Qtel Group chose Ericsson's Service Delivery Platform. Its customers across the Middle East, North Africa and South East Asia get access to new multimedia services such as social networking and mobile music.



**SALES PER REGION AND SEGMENT 2010**  
SEK billion

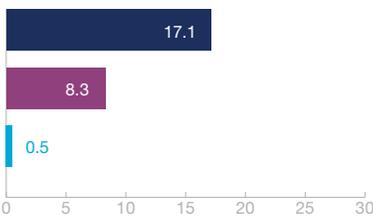
**SUB-SAHARAN AFRICA**



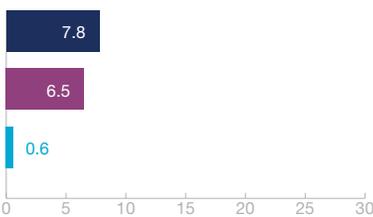
**INDIA**



**CHINA AND NORTH-EAST ASIA**



**SOUTH-EAST ASIA AND OCEANIA**



● Networks ● Global Services ● Multimedia

**SUB-SAHARAN AFRICA**

The region was impacted by the global economic downturn with a tight credit environment as well as operator consolidation. The region is predominately a market where 2G rollouts are in focus. However, demand for mobile broadband is emerging throughout the region, although at a low pace. Services sales increased and now represents 50 percent of total sales.

**INDIA**

India sales were impacted by 3G auctions and security clearance in the first half of the year. In the middle of the year, Ericsson got security clearance for deliveries of equipment. In the fall, contracts for 3G deployments were signed. Ericsson has a market share for 3G which is in line with its 2G position. Throughout the year, the recurring services business maintained good development. Radius Infratel signed a fiber-to-the-home contract with Ericsson, providing more than half a million subscribers with fixed broadband.

**CHINA AND NORTH-EAST ASIA**

While operators on mainland China are still focused on successful 3G launches, operators across the region also now have 4G/LTE on the agenda. In Japan, demand for mobile broadband had a positive effect on sales.

Ericsson won a managed services contract with China Unicom for field maintenance of radio base station sites, fixed network and transmission as well as a contract with China Mobile for field maintenance of radio base station sites. Leading Japanese operator SoftBank Mobile invested in capacity by upgrading its HSPA radio access network with Ericsson’s RBS 6000. Increased use of smartphones and advanced mobile applications boost data traffic and in order to ensure continued user quality, EMOBILE has enhanced its network with 3G/HSPA 42 Mbps supplied by Ericsson.

On June 30, the acquisition of Nortel’s part of LG-Nortel was completed. This positions Ericsson as a leading vendor in Korea. Another milestone was the showcase of the first complete TD-LTE solution with end-to-end-capabilities, together with ST-Ericsson in China.

**SOUTH-EAST ASIA AND OCEANIA**

Sales of network equipment were weaker overall due to cautious investment in a number of markets. Investment highlights include network expansions in Bangladesh and Indonesia. Access to spectrum for 3G and 4G/LTE remains a limitation in several markets. Overall there is an increasing interest for managed services among operators in several countries.

The region includes a mix of markets focused on long-term government-sponsored fiber deployments as well as operator investment in 3G/HSPA upgrades and 4G/LTE trials. Other markets in the region are continuing to expand in 2G and mobile broadband.

Indonesian GSM and 3G operator AXIS extended its managed services contract with Ericsson. Ericsson will be responsible for AXIS’ network operations, field maintenance, support services and spare parts management in Greater Jakarta and Northern Sumatra. Indosat has commissioned Ericsson to modernize its network and launched Asia’s fastest mobile network, based on Ericsson’s 3G/HSPA 42 Mbps.

## Networks

Network sales declined –1 percent to SEK 112.7 (114.0) billion. Sales were positively impacted by the acquisition of Nortel businesses. There was a negative impact from the industry-wide component shortage during the year.

In November 2009, Nortel’s CDMA and LTE business were consolidated in Networks. Nortel’s GSM business was consolidated on March 31, 2010. On June 30, 2010, the former LG-Nortel business, now named LG-Ericsson, was consolidated in Networks.

Mobile broadband sales increased during the year, especially driven by demand in North America and Japan. The increased demand related to radio, backhaul and packet core. Voice-related sales, i.e. 2G radio and core, was slow in the year and could not be compensated for by the increase in mobile broadband.

The operating margin was 15 (14) percent. The improvement is due to cost reductions as well as business mix in the first half of the year with a higher proportion of network upgrades and expansions.

Sales to network operators are normally based on multi-year frame agreements after an initial tender. During the frame agreement, software, equipment, services and spare parts are called off according to price lists.

The value of the market for operator equipment was approximately USD 100 billion in 2009. Market data shows that Ericsson has a market share of approximately 40 percent in GSM/WCDMA radio base stations.

To grow market share organically Ericsson is striving to increase footprint, especially in Europe where the Company has a lower market share than elsewhere. Network modernization projects, along with the 3G rollouts in India, puts initial pressure on gross margin. However, these projects are essential parts of the Company’s strategy to build a good platform for continued long-term growth and profitability.

Ericsson has focus on operational excellence and cost efficiencies. For hardware, cost efficiencies can be gained by using more standardized components, merging platforms and using more land transportation etc. In software development and implementation, efficient programming, project execution and re-use of platforms are key to keeping costs down. Measures to secure these cost efficiencies are an element of every operation.

In 2010, Ericsson commercially launched its multi-standard radio base station RBS 6000 which is now shipping in large volumes. A number of commercial 4G/LTE launches took place in the US and Sweden, with Ericsson as a supplier. Operators have launched 4G/LTE covering more than 140 million people, of whom 60 percent are served by Ericsson 4G/LTE equipment. The Company could thus secure early volume deliveries of 4G/LTE. These activities should give the Company competitive scale advantages.

An industry-wide component shortage hit the Company in 2010, making it difficult for the Company to meet the increased demand for mobile broadband related products. Ericsson ramped up production of its new radio base station RBS 6000 much quicker and with less quality issues than expected. To mitigate the effects of the industry-wide component shortage, internal measures were taken to re-design products and to secure a reduced degree of customized components. In the fourth quarter, the supply of components had normalized.

In the Networks segment, Ericsson competes mainly with large and well-established telecommunication equipment suppliers. The most significant competitors include Alcatel-Lucent, Huawei, Nokia Siemens Networks, Cisco, ZTE and Juniper. The Company also competes with local and regional manufacturers and providers of telecommunications equipment.

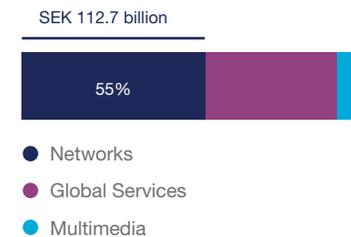
**NETWORKS SALES  
SEK 112.7 (114.0)  
BILLION**

- > Good demand for mobile broadband
- > Voice sales slow
- > 40% market share

**15%** operating margin excl. restructuring charges

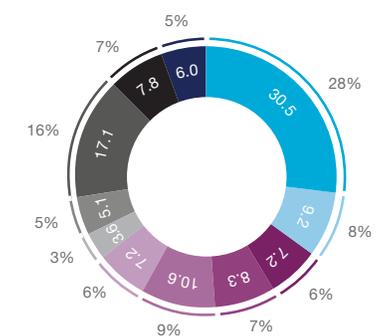
**-1%** sales growth

### NETWORKS SALES OF TOTAL 2010



### NETWORKS SALES BY REGION 2010

Net sales (SEK billion and percent)



- North America
- Latin America
- Northern Europe and Central Asia
- Western and Central Europe
- Mediterranean
- Middle East
- Sub-Saharan Africa
- India
- China and North East Asia
- South East Asia and Oceania
- Other

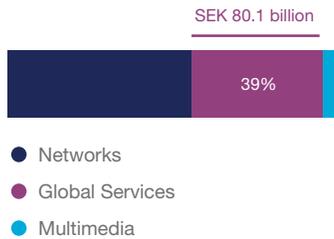
## GLOBAL SERVICES SALES SEK 80.1 (79.2) BILLION

- > Strong growth in managed services
- > Supports 2 billion people 24/7

11% operating margin excl. restructuring charges

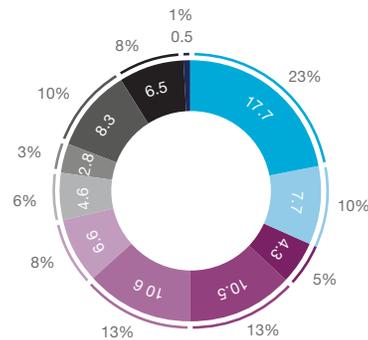
1% sales growth

### GLOBAL SERVICES SALES OF TOTAL 2010



### GLOBAL SERVICES SALES BY REGION 2010

Net sales (SEK billion and percent)



- North America
- Latin America
- Northern Europe and Central Asia
- Western and Central Europe
- Mediterranean
- Middle East
- Sub-Saharan Africa
- India
- China and North East Asia
- South East Asia and Oceania
- Other

## Global Services

Global Services sales increased 1 percent to SEK 80.1 (79.2) billion. Operating margin was 11 (11) percent. Global Services includes Professional Services and Network Rollout.

Professional Services consists of managed services, consulting and systems integration, customer support and education. Professional Services increased 4 percent to SEK 58.5 (56.1) billion and in local currencies 9 percent, in line with previous years' growth pace. Managed Services increased 21 percent to SEK 21.1 (17.4) billion. The increase was primarily driven by the contract with the US-based operator Sprint, which started in September 2009. The contract value was USD 5.5 billion for seven years at the time of the announcement.

Two thirds of Professional Services' revenues are recurring, mainly managed services and customer support. Contracts are often long, five to seven years, and payments are made in advance. Consulting and systems integration deals are by nature shorter and paid after fulfillment of contract.

Network Rollout decreased -7 percent to SEK 21.6 (23.1) billion. Network rollout includes turnkey projects with a large part of third party sourcing, making it a lower-margin business.

Ericsson's services offering covers all areas within an operator's operational scope. Ericsson can be provided the opportunity to design, plan, build and manage a core network or operate all field operations for an operator's business support system, service, core, transmission and access network. Most often however, operators turn to Ericsson for support in a certain part of its operation. Ericsson has three assignments where the Company is responsible for everything within an operator's operational scope. Those agreements are with Sprint in the US, 3 in the UK and 3 in Italy. Ericsson manages networks, or parts of networks, with 450 million subscribers. If also field operations and spare parts management contracts are included, the figure is 750 million subscribers.

Over the past years, Ericsson has seen a growing interest from operators for sharing the access networks. Through this, operators can reduce cost for the so called passive equipment at a site, like rental costs for towers, power and cooling. Execution of a sharing plan requires complex integration of multi-vendor systems, which is one of Ericsson's key competencies.

The total global telecom services market was valued at USD 239-249 billion in 2009 (see graph on next page). Roughly two thirds is operator-internal operating spending. Services handled by suppliers represented a third of the total market. Over the years 2005-2009 the total services market grew in average by about 11 percent annually.

Ericsson estimates its market share in telecom services at over 10 percent. Due to the fragmented market, Ericsson is by far the largest player. The Company has 45,000 professionals across the world. Over the years, the Company has insourced more than 20,000 employees from operators.

Services is a local business and all competitors therefore basically have the same cost structure. In order to gain synergies and cost efficiencies, global methods, processes and tools are a prerequisite. Over the past years, Ericsson has invested USD 1 billion in developing methods, processes and tools, securing efficiencies and cost advantages. As telecom is becoming more and more of a software industry, monitoring and maintenance of networks as well as upgrading of software can be done remotely. Ericsson today has four global network operations service centers in Mexico, Romania, India and China. The Company secures the operation of networks around the clock, throughout the year, for 2 billion subscribers.

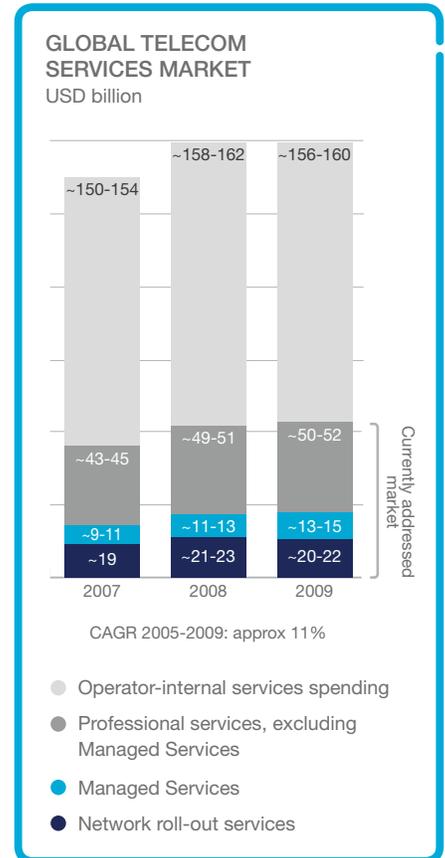
In managed services, Ericsson can insource employees from the customer. In the transition period, restructuring costs are taken, for e.g. replacement of

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IS/IT-systems, migration of employees into new systems and premises. All this to transform operations to standardized processes, methods and tools. In this process, management's leadership and communication skills are of utmost importance. Ericsson has a culture of putting individuals in focus, showing respect and giving employees the opportunities to develop. In the transformation phase, following the transition, scale synergies are carried through.

Of operators' internal operating expenditures a large part relates to IS/IT. With solutions for Operations Support Systems (OSS) and Business Support Systems (BSS), Ericsson targets also this IS/IT-oriented part of the market. OSS/BSS are software-based solutions, but require a lot of integration work on the customer's site, both for IS/IT and telecom systems. Systems integration business is also important to the Business Support System's (BSS) area within segment Multimedia.

Competition in the Global Services segment includes many of the traditional telecommunication equipment suppliers. Since a lot of business in Global Services is about moving up the value chain, the Company competes with large companies from other industry sectors, such as Accenture, HP, IBM, Oracle and India-based off-shore companies, e.g. Tata Consultancy Services and Tech Mahindra. Among competition is also a large number of smaller but specialized companies operating on a local or regional basis.



# MULTIMEDIA SALES SEK 10.5 (13.3) BILLION

- > Weak sales for revenue management
- > Good development in TV

-4% operating margin excl. restructuring charges

-21% sales growth for comparable units

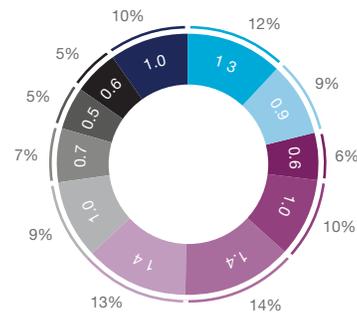
## MULTIMEDIA SALES OF TOTAL 2010



- Networks
- Global Services
- Multimedia

## MULTIMEDIA SALES BY REGION 2010

Net sales (SEK billion and percent)



- North America
- Latin America
- Northern Europe and Central Asia
- Western and Central Europe
- Mediterranean
- Middle East
- Sub-Saharan Africa
- India
- China and North East Asia
- South East Asia and Oceania
- Other

## Multimedia

Multimedia sales declined -21 percent to SEK 10.5 (13.3) billion. Operating margin was -4 (8) percent. The segment showed a strong recovery in the last quarter, mainly as a result of increased operator investments in revenue management as well as continued good development for TV solutions.

In 2010, a program for return to profitability was initiated. The program includes phase-out of products, reduction of sourcing and supply costs and decoupling of software and hardware using commercial off-the-shelf hardware. Increased volumes at the end of the year resulted in a recovery in the last quarter.

Operations within Multimedia are divided into three areas with their specific market drivers.

Business Support Systems is the segment's largest market with a total value of about USD 35 billion in 2009. Within this market, the revenue management market is the largest. The Company is the market leader and more than 1.2 billion subscribers are charged and billed via Ericsson's solutions.

The decline in Multimedia's total sales 2010 was mainly related to revenue management. Segment Multimedia in general and revenue management in particular has a large exposure to markets such as India, Middle East and Sub-Saharan Africa where operators postponed investments mainly due to operator consolidation. Going forward, there is growth potential as operators want to modernize their business support systems to capture the full revenue potential of mobile broadband and to merge billing and charging systems into one solution.

The second largest operation in Multimedia is Television and Media Management which developed well in 2010. The compression business continues to grow. Ericsson is the leading player with a market share of 25 percent in compression and 40 percent in IPTV head-ends. The worldwide digital TV market showed strong growth, with digital TV homes expected to double in the next five years.

The third operation is Consumer and Business Applications. A key aim is to support operators in modernizing their legacy value-added services environment, by providing for example messaging systems and service delivery systems. With a market share of 40 percent in mobile positioning and more than 10 percent in service delivery platforms, Ericsson holds a leading position. The Business Communication Suite targets the enterprise market. It combines unified communication with mobility, providing business communities with a collaboration and multimedia solution.

Multimedia is mainly a software business. The solutions often require local adaptations in customers' networks. Therefore Multimedia sales also drive sales of systems integration services.

The market for the Multimedia segment is rather fragmented. Competitors vary widely depending on the solution being offered. They include many of the traditional telecommunication equipment and IT suppliers, such as Amdocs and Comverse, as well as companies from other industries, such as Harmonic, Oracle and Thompson.

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Request for Proposal No. 2015-LNPA-VENDOR QUALIFICATION-1.  
VQS\_Section 3.2\_Ericsson 2010 Annual Report.pdf

## Joint Ventures

## SONY ERICSSON

Sony Ericsson is a 50/50 joint venture between Sony Corporation and Ericsson, established in 2001. Sony Ericsson is accounted for according to the equity method.

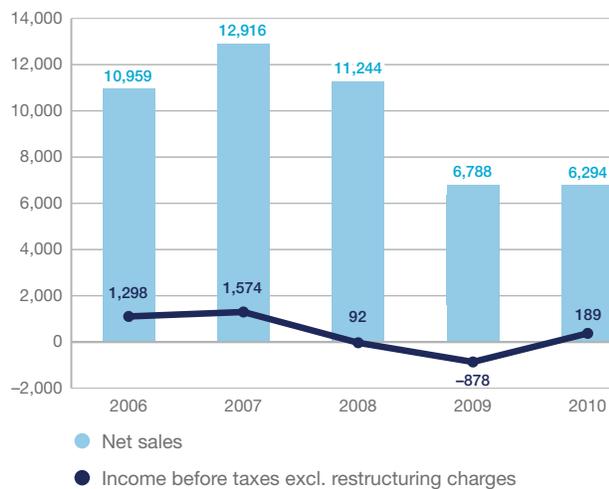
The global handset market is believed to have increased slightly in volume to almost 1.2 billion units. Sony Ericsson's market share in the total global handset market 2010 was approximately 4 percent in units and 6 percent in value. Sony Ericsson focuses on the smartphone segment and the Android operating system.

Units shipped declined by –25 percent to 43.1 (57.1) million while the average selling price increased by 23 percent to EUR 146 (119). Sales decreased by –7 percent to EUR 6.3 (6.8) billion. Gross margin improved during the year to 29 (15) percent as benefits of cost reductions and new smartphones materialized.

Income before taxes, excluding restructuring charges, was EUR 0.2 (–0.9) billion. Income increased during the year thanks to improved gross margin and reduced operating expenses. Ericsson's share in Sony Ericsson's income before taxes was SEK 0.7 (–5.7) billion.

Sony Ericsson's primary competitors include Apple, HTC, LG, Motorola, Nokia, RIM and Samsung.

**SONY ERICSSON NET SALES AND ADJUSTED INCOME BEFORE TAXES**  
Euro million



## ST-ERICSSON

ST-Ericsson is a 50/50 joint venture between STMicroelectronics and Ericsson, which started in February, 2009. ST-Ericsson is accounted for according to the equity method. It has one of the industry's strongest product offerings in semiconductors and platforms for mobile devices. ST-Ericsson is a key supplier to top handset manufacturers. In 2010, ST-Ericsson continued its transition, merging three operations. Its focus today is to deliver new products to the market.

Sales declined –9 percent to USD 2.3 (2.5) billion. The operating loss for the year, adjusted for restructuring costs, was USD –0.4 (–0.4) billion.

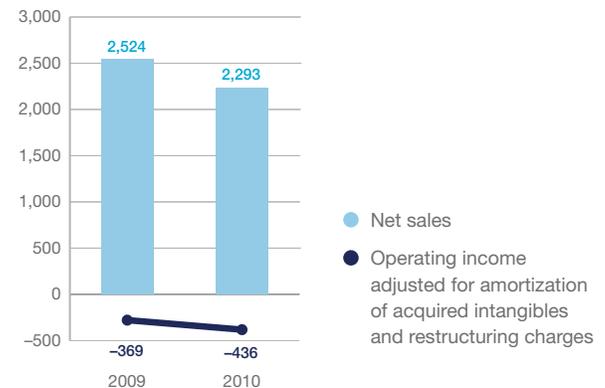
ST-Ericsson is reporting in US-GAAP. Ericsson's share in ST-Ericsson's income before taxes, adjusted to IFRS, was SEK –1.8 (–1.8) billion. Adjustments for IFRS-compliance mainly consist of capitalization of R&D expenses for hardware development.

The Company's net financial position was USD –82 (229) million at year-end. In the fourth quarter 2010, a short-term credit facility of USD 150 million made available on a 50:50 basis by parent companies was utilized.

During 2010, two restructuring plans of USD 345 million were finalized. The first one of USD 230 million gave full impact from third quarter and the second plan of USD 115 million was completed by year end.

ST-Ericsson's largest competitor is Qualcomm. The market is growing in complexity as several new operating systems for handsets and other devices have been launched, e.g. Google's Android, Microsoft's Windows and Samsung's Bada.

**ST-ERICSSON NET SALES AND ADJUSTED OPERATING INCOME**  
USD million



All figures in accordance with reported adjusted US GAAP figures

## LEGAL AND TAX PROCEEDINGS

Together with most of the mobile communications industry, Ericsson has been named a defendant in two class action lawsuits in the US in which plaintiffs allege that adverse health effects could be associated with mobile phone usage. The cases are currently pending in federal court in Pennsylvania and the Superior Court of the District of Columbia. In September 2008, the federal court in Pennsylvania dismissed the plaintiffs' claims as preempted by federal law. The Third Circuit Court of Appeals subsequently affirmed this ruling. In July 2010, the D.C. Superior Court granted in part and denied in part the defendants' motion to dismiss. In September 2010, the

plaintiff filed a third amended complaint. In October 2010, the defendants moved to dismiss the District of Columbia case.

In April 2007, an Australian company, QPSX Developments Pty Ltd., filed a patent infringement lawsuit against Ericsson and other defendants in the US, alleging that Ericsson infringed a patent related to Asynchronous Transfer Mode (ATM) technology. The lawsuit was stayed in August 2009 pending the resolution of a reexamination proceeding in the US Patent and Trademark Office (PTO). The stay was lifted in November 2010 after all the asserted patent claims were confirmed as valid by the PTO. The trial is scheduled for September 2011.

Swedish fiscal authorities have disallowed deductions for sales commission payments via external service companies to sales agents in certain countries. Most of the taxes have already been paid. The decision covering the fiscal year 1999 was appealed. In December 2006, the County Administrative Court in Stockholm rendered a judgment in favor of the fiscal authorities. The Administrative Court of Appeal in Stockholm affirmed the County Administrative Court's judgment. The judgment has been appealed to the Administrative Supreme Court. For more information on risks related to litigations, see chapter Risk Factors.

In January 2011, a US company SynQor filed a patent infringement lawsuit against Ericsson Inc. in the Eastern District of Texas alleging that Ericsson infringes five U.S. patents related to bus converters. In February 2011, SynQor filed a motion for preliminary injunction seeking to prevent Ericsson from manufacturing, using, selling, and offering for sale in the U.S. and/or importing into the U.S. certain unregulated and semi-regulated bus converters and any Ericsson products that contain those bus converters. SynQor also seeks to prevent Ericsson from selling the accused bus converters to companies that in-turn sell products incorporating the bus converters in or into the U.S.

## MATERIAL CONTRACTS

Material contractual obligations are outlined in Note C32 "Contractual obligations". These are primarily related to operating leases for office and production facilities, purchase contracts for outsourced manufacturing, R&D and IT operations, and the purchase of components for the Company's own manufacturing.

Ericsson is party to certain agreements, which include provisions that may take effect or be altered or invalidated by a change in control of the Company as a result of a public takeover offer. However, none of the agreements currently in effect would entail any material consequence to Ericsson due to a change in control of the Company.

## CORPORATE GOVERNANCE

In accordance with the Annual Accounts Act (1995:1554 Chapter 6, Section 6), a separate Corporate Governance Report, including an Internal Control section, has been prepared.

### Continued Compliance with the Swedish Corporate Governance Code

The Company applies the Swedish Corporate Governance Code. The Company is committed to complying with best-practice corporate governance standards on a global level wherever possible. This includes continued compliance with the corporate governance provisions expressed by this Code without deviations.

### An ethical business

Ericsson's Code of Business Ethics summarizes the Group's fundamental policies and directives governing its relationships internally, with its stakeholders and with others. It also sets out how the Group works to achieve and maintain its high standards. There have been no amendments or waivers to Ericsson's Code of Business Ethics for any Director, member of management or other employee.

### Board of Directors 2010/2011

The Annual General Meeting on April 13, 2010, re-elected Michael Treschow as Chairman of the Board and Roxanne S. Austin, Sir Peter L. Bonfield, Börje Ekholm, Ulf J. Johansson, Sverker Martin-Löf, Nancy McKinstry, Anders Nyrén, Carl-Henric Svanberg and Marcus Wallenberg as Directors of the Board. The Annual General Meeting elected Hans Vestberg and Michelangelo Volpi as new members of the Board. Anna Guldstrand, Jan Hedlund and Karin Åberg were appointed as union representatives with Pehr Claesson, Kristina Davidsson and Karin Lennartsson as deputies.

### Management

Hans Vestberg was appointed President and CEO, succeeding Carl-Henric Svanberg, as of January 1, 2010. The President and CEO is supported by the Executive Leadership Team which, in addition to the President and CEO, consists of heads of Group Functions, heads of business units, two heads of region and the Chief Brand Officer. A management system is implemented to ensure that the business is well controlled and able to fulfill the objectives of major stakeholders within established risk limits. The system also monitors internal control and compliance with applicable laws, listing requirements and governance codes.

### Remuneration

Fees to the members of the Board of Directors and the remuneration of Group management as well as the 2010 guidelines for remuneration to senior management are reported in Notes to the Consolidated Financial Statements – Note C29, "Information Regarding Members of the Board of Directors, the Group management and Employees".

## ION

As of December 31, 2010, there were no loans outstanding from and no guarantees issued to or assumed by Ericsson for the benefit of any member of the Board of Directors or senior management.

All relevant information regarding remuneration can be found in chapter Remuneration Report.

### The Board of Directors' proposal for guidelines for remuneration to senior management

The Board of Directors proposes that the current guidelines for remuneration and other employment terms for the senior management (Remuneration Policy) remain unchanged for the period up to the 2012 Annual General Meeting.

Details of how Ericsson delivers on these principles and policy, including information on previously decided long-term variable remuneration that has not yet become due for payment, can be found Note C29, "Information regarding Members of the Board of Directors, the Group management and Employees".

## RISK MANAGEMENT

Risks are broadly categorized into operational and financial risks. Ericsson's risk management is based on the following principles, which apply universally across all business activities and risk types:

- > Risk management is an integrated part of the Ericsson Group Management System
- > Each operational unit is accountable for owning and managing its risks according to policies, directives and process tools. Decisions are made or escalated according to defined delegation of authority. Financial risks are coordinated through Group Function Finance
- > Risks are dealt with during the strategy process, the annual planning and target setting, the continuous monitoring through monthly and quarterly steering group meetings and during operational processes by transaction (customer bid/contract, acquisition, investment and product development projects). They are subject to various controls such as decision tollgates and approvals.

A central security unit coordinates management of certain risks, such as business interruption, information security and physical security. A Crisis Management Council deals with ad hoc events of serious nature.

For information of risks that could impact the fulfillment of the targets and form the basis for mitigating activities, see the other sections of the Board of Directors' Report, Notes C14, "Trade receivables and customer finance", C19, "Interest-bearing liabilities", C20, "Financial risk management and financial instruments" and chapter Risk Factors on page 119.

## SOURCING AND SUPPLY

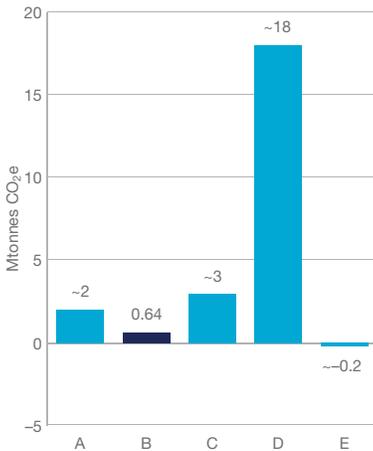
Ericsson's hardware largely consists of electronics, such as circuit boards, radio frequency (RF) modules, antennas etc. For manufacturing, the Company purchases customized and standardized components, services etc. from several global providers as well as from numerous local and regional suppliers. Certain types of components, such as power modules and cables, are produced in-house.

The production of electronic modules and sub-assemblies is mostly outsourced to manufacturing services companies, of which the vast majority is in low-cost countries. Node production is largely done in-house and on-demand. This consists of assembly, testing of modules and integrating them into complete radio base stations, mobile switching centers etc.

Where possible Ericsson relies on alternative supply sources. When selecting a new supplier, the supplier code of conduct should be met. Variations in market prices for raw materials generally have a limited effect on total cost of goods sold.

## SUSTAINABILITY AND CORPORATE RESPONSIBILITY

### ERICSSON LIFE-CYCLE ASSESSMENT CARBON FOOTPRINT 2010



#### Activities in 2010

- A = Supply chain
- B = Ericsson's own activities

#### Future (lifetime) operation of products delivered 2010

- C = Operator activities
- D = Products operation
- E = End-of-life treatment

- Direct emissions (Ericsson own activities)
- Indirect emissions (all other life-cycle related emissions)

~ = approximately

Ericsson received recognition and a number of prestigious awards for its sustainability and corporate responsibility achievements.

Vodafone presented Ericsson with its Corporate Responsibility supplier award.

Greenpeace named Ericsson one of the best ICT companies in its Cool IT Leaderboard. Ericsson's focus and accomplishment on sustainability and life-cycle management was awarded the InfoWorld Green Award. Gartner has also recognized Ericsson for its sustainability leadership.

The Company has implemented strong social, environmental and ethical standards supporting risk management and value creation. This commitment generates positive business impacts that benefit society.

Ericsson's approach to Sustainability and Corporate Responsibility (CR) is integrated into its core business operations and in its relationships with stakeholders. The Board of Directors considers these aspects in governance decision-making. Group level policies and directives ensure consistency across global operations.

Ericsson publishes an annual Sustainability and CR Report which provides additional information.

### Minimizing risk

#### RESPONSIBLE BUSINESS PRACTICES

Ericsson supports the UN Global Compact and endorses its ten principles regarding human and labor rights, anti-corruption and environmental protection. The Ericsson Group Management System includes policies and directives that cover responsible business practices, such as the Code of Business Ethics, Code of Conduct (CoC), anti-corruption and environmental management. It is reinforced by training, workshops and monitoring, including a global assessment program run by an external assurance provider in which CR criteria represent approximately 20 percent of the total areas assessed. During 2010, Ericsson launched a new Sustainability Policy and an e-learning program on Sustainability and CR for all employees.

#### SUPPLY CHAIN

Suppliers must comply with Ericsson's CoC. Some 150 employees, covering all regions, are trained as supplier CoC auditors and the Company performs regular audits and works with suppliers to ensure measurable and continuous improvements. Findings are followed up to ensure that lasting improvements are made. As a complement to the audits, a free web-based CoC training is now available for all suppliers in 13 languages. To effectively address the issue of conflict minerals, Ericsson participates in the Global e-Sustainability Initiative (GeSI) work group for conflict minerals.

#### DESIGN FOR ENVIRONMENT

Processes and controls are in place to ensure compliance with relevant product related environmental, customer and regulatory requirements. The areas covered are energy efficiency and materials management. To better meet the rapidly changing legal requirements on materials management a new materials declarations tool was released in 2010.

#### TAKE-BACK

Ericsson Ecology Management and Product Take-back is a global initiative to take responsibility of products at the end of their life. More than 95 percent of decommissioned equipment is recycled, exceeding the EU Waste Electronic Electrical Equipment Directive (WEEE) stipulation of 75 percent. During 2010 more than 2,500 tonnes of e-waste were collected. This is less than 2009 due to there being a fewer number of operator change-outs of equipment. During 2010, Ericsson has continued to improve its capabilities to handle WEEE in Latin America and the Middle East as well as in production facilities in Sweden, India and China. Alignment of the process in order to comply with the Indian WEEE Directive has also begun.

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Ericsson is a partner in the Ghana E-waste project. Its goal is to establish local recycling capabilities and transform informal e-waste recycling into a formal business and thereby help to alleviate poverty. This is being coordinated by the Raw Materials Group in cooperation with the Ghana Environmental Protection Agency and financed by the Nordic Development Fund.

RADIO WAVES AND HEALTH

Ericsson provides public information on radio waves and health, and supports independent research to further increase knowledge in this area. Ericsson has co-sponsored over 90 studies related to electromagnetic fields, radio waves and health since 1996. Independent expert groups and public health authorities, including the World Health Organization, have reviewed the total amount of research and consistently concluded that the balance of evidence does not demonstrate any health effects associated with radio wave exposure from either mobile phones or radio base stations.

Creating value

THE ENVIRONMENTAL OPPORTUNITY

Information and Communication Technology (ICT) represents about two percent of global CO<sub>2</sub> emissions, but can potentially offset a significant portion of the remaining 98 percent from other sectors. Ericsson takes active measures to ensure that its own carbon footprint will be continuously reduced. A carbon footprint reduction target was set in 2008, to reduce emissions relative to products sold by 40 percent over five years, from in-house activities and the life-cycle impacts of products. In 2010, Ericsson met the annual 10 percent reduction target:

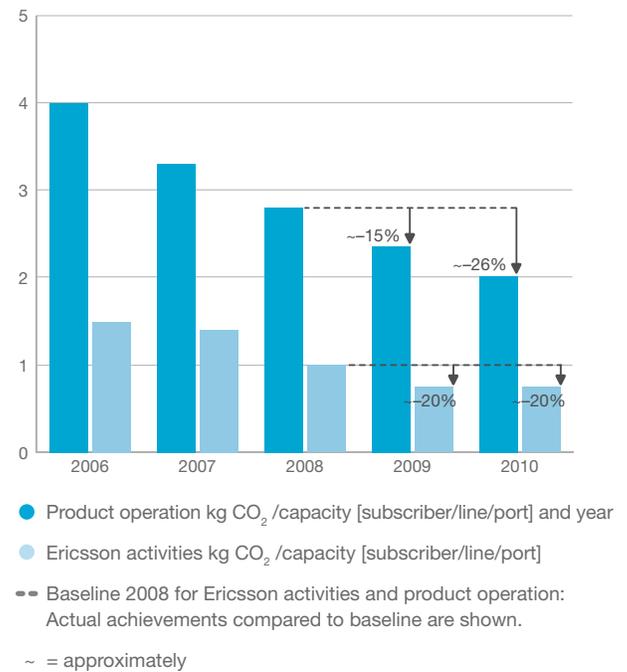
- > There was a slight increase in direct emissions from Ericsson’s in-house activities. Component shortages have led to an increase in shipping by air, and business travel has increased somewhat due to increased number of employees
- > A 14 percent reduction was achieved in indirect emissions from products in operation per capacity, resulting in 26 percent total from 2008. This improvement was mainly due to the introduction of the radio base station RBS 6000 family.

In addition, part of Ericsson’s sustainability strategy is to focus on the role that broadband can play in helping to offset global CO<sub>2</sub> emissions. Ericsson focused on sustainable city solutions, and has actively engaged in global climate policy, including the Guadalajara ICT Declaration and Global e-Sustainability Initiative publication “Evaluating the Carbon-Reducing Impacts of ICT”.

MEETING THE MILLENNIUM DEVELOPMENT GOALS

Mobile connectivity fuels economic growth, which is particularly vital for the billions of people living at the base of the economic pyramid – the markets of the future. Ericsson is committed to using its technology and competence to help achieve the UN Millennium Development Goals (MDGs), and customer engagement is part of its strategy to meet this aim.

CARBON FOOTPRINT TARGET RESULT 2010



In 2010, Ericsson and its partners, The Earth Institute, Columbia University and Millennium Promise, launched a global education initiative, Connect To Learn, as an extension of its commitment to the MDGs.

ERICSSON RESPONSE

Ericsson Response is a global employee volunteer initiative with the aim to rapidly roll out communication solutions and provide telecommunications experts to assist disaster relief operations. Ericsson Response cooperates with the UN Office for the Coordination of Humanitarian Affairs (UNOCHA), the UN World Food Programme (WFP), the UN Children’s fund (UNICEF) and other International Organizations and Non-Governmental Organizations (NGO) like the International Federation of Red Cross and Red Crescent Societies (IFRC) and Save the Children.

In 2010, support was provided to WFP and UNICEF working in Haiti, Port-au-Prince, during six months of on-site work by 19 volunteers. This is one of the longest disaster response deployments of Ericsson Response’s history. This year also marked the tenth anniversary and a decade of relief work provided by Ericsson Response.

## PARENT COMPANY

The Parent Company business consists mainly of corporate management, holding company functions and internal banking activities. It also handles customer credit management, performed on a commission basis by Ericsson Credit AB. The Parent Company is the owner of a substantial part of Ericsson's intellectual property rights. It manages the patent portfolio, including patent applications, licensing and crosslicensing of patents and defending of patents in litigations. The Parent Company has 6 (6) branch offices. In total, the Group has 68 (65) branch and representative offices.

### Financial information

Net sales for the year amounted to SEK 0.0 (0.3) billion and income after financial items was SEK 6.8 (8.1) billion. Exports accounted for 100 (100) percent of net sales. The Parent Company had no sales in 2010 or 2009 to subsidiaries, while 45 (45) percent of total purchases of goods and services were from such companies.

Major changes in the Parent Company's financial position for the year included:

- > Investments in LG-Ericsson of SEK 1.9 billion
- > Decreased current and non-current receivables from subsidiaries of SEK 8.3 billion
- > Increased other current receivables of SEK 1.6 billion
- > Increased cash, cash equivalents and short-term investments of SEK 9.2 billion
- > Increased current and non-current liabilities to subsidiaries of SEK 4.7 billion
- > Decreased other current liabilities of SEK 0.2 billion.

At year end, cash, cash equivalents and short-term investments amounted to SEK 71.6 (62.4) billion.

### Share information

As per December 31, 2010, the total number of shares was 3,273,351,735, of which 261,755,983 were Class A shares, each carrying one vote, and 3,011,595,752 Class B shares, each carrying one tenth of one vote. The two largest shareholders at year end were Investor and Industrivärden holding 19.33 and 13.80 percent respectively of the voting rights in the Parent Company.

Both classes of shares have the same rights of participation in the net assets and earnings.

In accordance with the conditions of the Long-Term Variable Remuneration Program (LTV) for Ericsson employees, 5,890,018 treasury shares were sold or distributed to employees in 2010. The quotient value of these shares was SEK 29.4 million, representing less than 1 percent of capital stock, and compensation received amounted to SEK 59.8 million. The holding of treasury stock at December 31, 2010 was 73,088,515 Class B shares. The quotient value of these shares is SEK 365.4 million, representing 2.2 percent of capital stock, and the related acquisition cost amounts to SEK 622.2 million.

### Proposed disposition of earnings

The Board of Directors proposes that a dividend of SEK 2.25 (2.00) per share be paid to shareholders duly registered on the record date April 18, 2011, and that the Parent Company shall retain the remaining part of non-restricted equity.

The Class B treasury shares held by the Parent Company are not entitled to receive a dividend. Assuming that no treasury shares remain on the record date, the Board of Directors proposes that earnings be distributed as follows:

Amount to be paid to the shareholders	SEK 7,365,041,404
Amount to be retained by the Parent Company	SEK 35,608,440,926
<hr/>	
Total non-restricted equity of the Parent Company	SEK 42,973,482,330

As a basis for its dividend proposal, the Board of Directors has made an assessment in accordance with Chapter 18, Section 4 of the Swedish Companies Act of the Parent Company's and the Group's need for financial resources as well as the Parent Company's and the Group's liquidity, financial position in other respects and long-term ability to meet their commitments. The Group reports an equity ratio of 52 (52) percent and a net cash amount of SEK 51.3 (36.1) billion.

The Board of Directors has also considered the Parent Company's result and financial position and the Group's position in general. In this respect, the Board of Directors has taken into account known commitments that may have an impact on the financial positions of the Parent Company and its subsidiaries.

The proposed dividend does not limit the Group's ability to make investments or raise funds, and it is our assessment that the proposed dividend is well-balanced considering the nature, scope and risks of the business activities as well as the capital requirements for the Parent Company and the Group.

## BOARD ASSURANCE

The Board of Directors and the President declare that the consolidated financial statements have been prepared in accordance with IFRS, as adopted by the EU, and give a fair view of the Group's financial position and results of operations. The financial statements of the Parent Company have been prepared in accordance with generally accepted accounting principles in Sweden and give a fair view of the Parent Company's financial position and results of operations.

The Board of Directors' Report for the Ericsson Group and the Parent Company provides a fair view of the development of the Group's and the Parent Company's operations, financial position and results of operations and describes material risks and uncertainties facing the Parent Company and the companies included in the Group.

Stockholm February 21, 2011  
Telefonaktiebolaget LM Ericsson (publ)  
Org. no. 556016-0680

**Sverker Martin-Löf**  
Deputy Chairman

**Michael Treschow**  
Chairman

**Marcus Wallenberg**  
Deputy Chairman

**Roxanne S. Austin**  
Member of the Board

**Sir Peter L. Bonfield**  
Member of the Board

**Börje Ekholm**  
Member of the Board

**Ulf J. Johansson**  
Member of the Board

**Nancy McKinstry**  
Member of the Board

**Anders Nyrén**  
Member of the Board

**Carl-Henric Svanberg**  
Member of the Board

**Hans Vestberg**  
President, CEO and member of the Board

**Michelangelo Volpi**  
Member of the Board

**Anna Guldstrand**  
Member of the Board

**Jan Hedlund**  
Member of the Board

**Karin Åberg**  
Member of the Board

# CONSOLIDATED INCOME STATEMENT AND STATEMENT OF COMPREHENSIVE INCOME

CONSOLIDATED INCOME STATEMENT				
Years ended December 31, SEK million	Notes	2010	2009	2008
Net sales	C3, C4	203,348	206,477	208,930
Cost of sales		-129,094	-136,278	-134,661
<b>Gross income</b>		<b>74,254</b>	<b>70,199</b>	<b>74,269</b>
Gross margin (%)		36.5%	34.0%	35.5%
Research and development expenses		-31,558	-33,055	-33,584
Selling and administrative expenses		-27,072	-26,908	-26,974
<b>Operating expenses</b>		<b>-58,630</b>	<b>-59,963</b>	<b>-60,558</b>
Other operating income and expenses	C6	2,003	3,082	2,977
<b>Operating income before shares in earnings of joint ventures and associated companies</b>		<b>17,627</b>	<b>13,318</b>	<b>16,688</b>
Operating margin before shares in earnings of joint ventures and associated companies (%)		8.7%	6.5%	8.0%
Share in earnings of joint ventures and associated companies	C12	-1,172	-7,400	-436
<b>Operating income</b>		<b>16,455</b>	<b>5,918</b>	<b>16,252</b>
Financial income	C7	1,047	1,874	3,458
Financial expenses	C7	-1,719	-1,549	-2,484
<b>Income after financial items</b>		<b>15,783</b>	<b>6,243</b>	<b>17,226</b>
Taxes	C8	-4,548	-2,116	-5,559
<b>Net income</b>		<b>11,235</b>	<b>4,127</b>	<b>11,667</b>
Net income attributable to:				
Stockholders of the Parent Company		11,146	3,672	11,273
Non-controlling interest		89	455	394
Other information				
Average number of shares, basic (million)	C9	3,197	3,190	3,183
Earnings per share attributable to stockholders of the Parent Company, basic (SEK) <sup>1)</sup>	C9	3.49	1.15	3.54
Earnings per share attributable to stockholders of the Parent Company, diluted (SEK) <sup>1)</sup>	C9	3.46	1.14	3.52

<sup>1)</sup> Based on Net income attributable to stockholders of the Parent Company.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME				
Years ended December 31, SEK million	Notes	2010	2009	2008
<b>Net income</b>		<b>11,235</b>	<b>4,127</b>	<b>11,667</b>
<b>Other comprehensive income</b>				
Actuarial gains and losses, and the effect of the asset ceiling, related to pensions	C16	3,892	-633	-4,019
Revaluation of other investments in shares and participations				
Fair value remeasurement	C16	7	-2	-6
Cash Flow hedges				
Gains/losses arising during the period	C16	966	665	-5,116
Reclassification adjustments for gains/losses included in profit or loss	C16	-238	3,850	1,192
Adjustments for amounts transferred to initial carrying amount of hedged items	C16	-136	-1,029	-
Changes in cumulative translation adjustments	C16	-3,259	-1,067	7,314
Share of other comprehensive income on joint ventures and associated companies	C16	-434	-259	1,253
Tax on items relating to components of Other comprehensive income	C16	-1,120	-1,040	2,330
<b>Total other comprehensive income</b>		<b>-322</b>	<b>485</b>	<b>2,948</b>
<b>Total comprehensive income</b>		<b>10,913</b>	<b>4,612</b>	<b>14,615</b>
Total Comprehensive Income attributable to:				
Stockholders of the Parent Company		10,814	4,211	13,988
Non-controlling interest		99	401	627

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# CONSOLIDATED BALANCE SHEET

December 31, SEK million	Notes	2010	2009
<b>ASSETS</b>			
<b>Non-current assets</b>			
Intangible assets	C10		
Capitalized development expenses		3,010	2,079
Goodwill		27,151	27,375
Intellectual property rights, brands and other intangible assets		16,658	18,739
Property, plant and equipment	C11, C26, C27	9,434	9,606
<b>Financial assets</b>			
Equity in joint ventures and associated companies	C12	9,803	11,578
Other investments in shares and participations	C12	219	256
Customer finance, non-current	C12	1,281	830
Other financial assets, non-current	C12	3,079	2,577
Deferred tax assets	C8	12,737	14,327
		83,372	87,367
<b>Current assets</b>			
Inventories	C13	29,897	22,718
Trade receivables	C14	61,127	66,410
Customer finance, current	C14	3,123	1,444
Other current receivables	C15	17,146	15,146
Short-term investments	C20	56,286	53,926
Cash and cash equivalents	C25	30,864	22,798
		198,443	182,442
<b>TOTAL ASSETS</b>		<b>281,815</b>	<b>269,809</b>
<b>EQUITY AND LIABILITIES</b>			
<b>Equity</b>			
Stockholders' equity	C16	145,106	139,870
Non-controlling interest in equity of subsidiaries	C16	1,679	1,157
		146,785	141,027
<b>Non-current liabilities</b>			
Post-employment benefits	C17	5,092	8,533
Provisions, non-current	C18	353	461
Deferred tax liabilities	C8	2,571	2,270
Borrowings, non-current	C19, C20	26,955	29,996
Other non-current liabilities		3,296	2,035
		38,267	43,295
<b>Current liabilities</b>			
Provisions, current	C18	9,391	11,970
Borrowings, current	C19, C20	3,808	2,124
Trade payables	C22	24,959	18,864
Other current liabilities	C21	58,605	52,529
		96,763	85,487
<b>TOTAL EQUITY AND LIABILITIES <sup>1)</sup></b>		<b>281,815</b>	<b>269,809</b>

<sup>1)</sup> Of which interest-bearing liabilities and post-employment benefits SEK 35,855 million (SEK 40,653 million in 2009).

# CONSOLIDATED STATEMENT OF CASH FLOWS

January–December, SEK million	Notes	2010	2009	2008
<b>Operating activities</b>				
Net income		11,235	4,127	11,667
Adjustments to reconcile net income to cash	C25	12,490	16,856	14,318
		23,725	20,983	25,985
<b>Changes in operating net assets</b>				
Inventories		-7,917	5,207	-3,927
Customer finance, current and non-current		-2,125	598	549
Trade receivables		4,406	7,668	-11,434
Trade payables		5,964	-3,522	4,794
Provisions and post-employment benefits		-2,739	-2,950	3,830
Other operating assets and liabilities, net		5,269	-3,508	4,203
		2,858	3,493	-1,985
<b>Cash flow from operating activities</b>		<b>26,583</b>	<b>24,476</b>	<b>24,000</b>
<b>Investing activities</b>				
Investments in property, plant and equipment	C11	-3,686	-4,006	-4,133
Sales of property, plant and equipment		124	534	1,373
Acquisitions of subsidiaries and other operations	C25, C26	-3,286	-19,321	-74
Divestments of subsidiaries and other operations	C25, C26	454	1,239	1,910
Product development	C10	-1,644	-1,443	-1,409
Other investing activities		-1,487	2,606	944
Short-term investments		-3,016	-17,071	-7,155
<b>Cash flow from investing activities</b>		<b>-12,541</b>	<b>-37,462</b>	<b>-8,544</b>
<b>Cash flow before financing activities</b>		<b>14,042</b>	<b>-12,986</b>	<b>15,456</b>
<b>Financing activities</b>				
Proceeds from issuance of borrowings		2,580	14,153	5,245
Repayment of borrowings		-1,449	-9,804	-4,216
Sale of own stock and options exercised		51	69	3
Dividends paid		-6,677	-6,318	-8,240
Other financing activities		-175	199	-
<b>Cash flow from financing activities</b>		<b>-5,670</b>	<b>-1,701</b>	<b>-7,208</b>
Effect of exchange rate changes on cash		-306	-328	1,255
<b>Net change in cash</b>		<b>8,066</b>	<b>-15,015</b>	<b>9,503</b>
<b>Cash and cash equivalents, beginning of period</b>		<b>22,798</b>	<b>37,813</b>	<b>28,310</b>
<b>Cash and cash equivalents, end of period</b>	C25	<b>30,864</b>	<b>22,798</b>	<b>37,813</b>

# CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

	Notes	Capital stock	Additional paid in capital	Revaluation of other investments in shares and participations	Cash flow hedges	Cumulative translation adjustments	Retained earnings	Stockholders' equity	Non-controlling interest (NCI)	Total equity
January 1, 2010		16,367	24,731	-4	78	663	98,035	139,870	1,157	141,027
Total comprehensive income	C16	-	-	4	440	-3,808	14,178	10,814	99	10,913
<b>Transactions with owners</b>										
Stock issue		-	-	-	-	-	-	-	-	-
Sale of own shares		-	-	-	-	-	52	52	-	52
Stock Purchase Plans		-	-	-	-	-	762	762	-	762
Dividends paid		-	-	-	-	-	-6,391	-6,391	-286	-6,677
Business combinations		-	-	-	-	-	-	-	708	708
<b>December 31, 2010</b>		<b>16,367</b>	<b>24,731</b>	<b>-</b>	<b>518</b>	<b>-3,145</b>	<b>106,636</b>	<b>145,106</b>	<b>1,679</b>	<b>146,785</b>
January 1, 2009		16,232	24,731	-1	-2,356	2,124	100,093	140,823	1,261	142,084
Total comprehensive income	C16	-	-	-3	2,434	-1,461	3,241	4,211	401	4,612
<b>Transactions with owners</b>										
Stock issue		135	-	-	-	-	-	135	-	135
Sale of own shares		-	-	-	-	-	75	75	-	75
Repurchase of own shares		-	-	-	-	-	-135	-135	-	-135
Stock Purchase and Stock Option Plans		-	-	-	-	-	658	658	-	658
Dividends paid		-	-	-	-	-	-5,897	-5,897	-421	-6,318
Business combinations		-	-	-	-	-	-	-	-84	-84
<b>December 31, 2009</b>		<b>16,367</b>	<b>24,731</b>	<b>-4</b>	<b>78</b>	<b>663</b>	<b>98,035</b>	<b>139,870</b>	<b>1,157</b>	<b>141,027</b>
January 1, 2008		16,132	24,731	5	307	-6,345	99,282	134,112	940	135,052
Total comprehensive income	C16	-	-	-6	-2,663	8,469	8,188	13,988	627	14,615
<b>Transactions with owners</b>										
Stock issue		100	-	-	-	-	-	100	-	100
Sale of own shares		-	-	-	-	-	88	88	-	88
Repurchase of own shares		-	-	-	-	-	-100	-100	-	-100
Stock Purchase and Stock Option Plans		-	-	-	-	-	589	589	-	589
Dividends paid		-	-	-	-	-	-7,954	-7,954	-286	-8,240
Business combinations		-	-	-	-	-	-	-	-20	-20
<b>December 31, 2008</b>		<b>16,232</b>	<b>24,731</b>	<b>-1</b>	<b>-2,356</b>	<b>2,124</b>	<b>100,093</b>	<b>140,823</b>	<b>1,261</b>	<b>142,084</b>

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

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## C1 SIGNIFICANT ACCOUNTING POLICIES

The consolidated financial statements comprise Telefonaktiebolaget LM Ericsson, the Parent Company, and its subsidiaries ("the Company") and the Company's interests in joint ventures and associated companies. The Parent Company is domiciled in Sweden at Torshamnsgatan 23, SE-164 83 Stockholm.

The consolidated financial statements for the year ended December 31, 2010, have been prepared in accordance with International Financial Reporting Standards (IFRS) as endorsed by the EU and RFR 1 "Additional rules for Group Accounting", related interpretations issued by the Swedish Financial Reporting Board (Rådet för finansiell rapportering), and the Swedish Annual Accounts Act. For the financial reporting of 2010, the Company has applied IFRS as issued by the IASB (IFRS effective as per December 31, 2010) and without any early application. There is no difference between IFRS effective as per December 31, 2010, and IFRS as endorsed by the EU, nor is RFR 1 related interpretations issued by the Swedish Financial Reporting Board (Rådet för Finansiell Rapportering) or the Swedish Annual Accounts Act in conflict with IFRS.

The financial statements were approved by the Board of Directors on February 21, 2011. The balance sheets and income statements are subject to approval by the annual meeting of shareholders.

New standards, amendments of standards and interpretations, effective as from January 1, 2010, changing presentation or disclosure:

- > IFRS 3 Business Combinations (revised with prospective application)  
The revised standard continues to apply the acquisition method to business combinations, with some significant changes. For example, the definition of a business and a business combination has been expanded, all payments to purchase a business are to be recorded at fair value at the acquisition date, with contingent cash payments classified as debt subsequently re-measured through the income statement. There is a choice on an acquisition-by-acquisition basis to measure the non-controlling interest in the acquiree either at fair value or at the non-controlling interest's proportionate share of the acquiree's net assets. All acquisition related costs shall be expensed as incurred.
- > IAS 27 Consolidated and separate financial statements (revised with prospective application). The revised standard requires the effects of all transactions with non-controlling interests to be recorded in equity if there is no change in control and these transactions will no longer result in goodwill or gains or losses. The standard also specifies the accounting when control is lost. Any remaining interest in the entity is re-measured to fair value, and a gain or loss is recognized in income statement.

The following new or amended standards and interpretations have also been adopted:

- > IFRIC17, Distributions of Non-Cash Assets to Owners (Issued November 27, 2008)
- > IFRS 2, amendment, Group Cash-settled Share-based Payment Transactions (issued June 18, 2009)
- > Improvements to IFRSs (Issued April 16, 2009).

None of the new or amended standards and interpretations has had any significant impact on the financial result or position of the Company. However, the impact on business combination accounting due to the revised IFRS 3 Business Combinations is dependent on type and size of any future arrangement involving a business combination.

For information on "New standards and interpretations not yet adopted" please see page 54.

## Changes in financial reporting structure

### CHANGE IN SEGMENTS

As of January 1, 2010, Ericsson reports the following segments: Networks, Global Services, Multimedia, Sony Ericsson and ST-Ericsson.

The only change compared to previous years is that Network Rollout is now included in Global Services instead of Networks. All other segments are unchanged. With this change the external reporting is aligned with the new internal reporting structure.

Segments as of January 1, 2010:

- > Networks
  - > Global Services
    - > Of which Professional Services
      - > Of which Managed Services
    - > Of which Network Rollout
  - > Multimedia
  - > Sony Ericsson
  - > ST-Ericsson

### CHANGE IN GEOGRAPHICAL BREAK DOWN

As of January 1, 2010, the geographical reporting structure is changed. Instead of five geographical areas, ten regions are reported, mirroring the new internal geographical organization. A part called "Other" is also reported, consisting of business not reported in the geographical structure, e.g. embedded modules, cables, power modules as well as intellectual property rights and licenses.

Regions as of January 1, 2010:

- > North America
- > Latin America
- > Northern Europe and Central Asia
- > Western and Central Europe
- > Mediterranean
- > Middle East
- > Sub-Saharan Africa
- > India
- > China and Northeast Asia
- > South East Asia and Oceania
- > Other

In 2008 and 2009 Ericsson reported top 15 countries in sales. As of January 1, 2010, top five countries are reported.

### Basis of presentation

The financial statements are presented in millions of Swedish Krona (SEK). They are prepared on a historical cost basis, except for certain financial assets and liabilities that are stated at fair value: derivative financial instruments, financial instruments held for trading, financial instruments classified as available-for-sale and plan assets related to defined benefit pension plans.

### Basis of consolidation

The consolidated financial statements are prepared in accordance with the purchase method. Accordingly, consolidated stockholders' equity includes equity in subsidiaries, joint ventures and associated companies earned only after their acquisition.

Subsidiaries are all companies in which Ericsson has an ownership interest, directly or indirectly, including effective potential voting rights, has the power to govern the financial and operating policies generally associated with ownership of more than one half of the voting rights or in which Ericsson by agreement has control. The financial statements of subsidiaries are included in the consolidated financial statements from the date that control commences until the date that control ceases.

Intra-group balances and any unrealized income and expense arising from intra-group transactions are fully eliminated in preparing the consolidated financial statements. Unrealized losses are eliminated in the same way as unrealized gains, but only to the extent that there is no evidence of impairment.

## Business combinations

### BUSINESS COMBINATIONS FROM JANUARY 1, 2010

At the acquisition of a business, the cost of the acquisition, being the purchase price, is measured as the fair value of the assets given, and liabilities incurred or assumed at the date of exchange, including any cost related to contingent consideration. Transaction costs attributable to the acquisition are expensed as incurred. The acquisition cost is allocated to acquired assets, liabilities and contingent liabilities based upon appraisals made, including assets and liabilities that were not recognized on the acquired entity's balance sheet, for example intangible assets such as customer relations, brands, patents and financial liabilities. Goodwill arises when the purchase price exceeds the fair value of recognizable acquired net assets. Final amounts are established within one year after the transaction date at the latest.

In case there is a put option for non-controlling interest in a subsidiary a corresponding financial liability is recognized.

### BUSINESS COMBINATIONS BEFORE JANUARY 1, 2010

At the acquisition of a business, the cost of the acquisition, being the purchase price, was measured as the fair value of assets acquired, and liabilities incurred or assumed at the date of exchange, plus costs directly attributable to the acquisition. The acquisition cost was allocated to acquired assets, liabilities and contingent liabilities based upon appraisals made, including assets that were not recognized on the acquired entity's balance sheet, for example intangible assets such as customer relations, brands and patents. Goodwill arose when the purchase price exceeded the fair value of recognizable acquired net assets. Final amounts had to be established within one year after the transaction date.

## Non-controlling interest

### ACQUISITIONS FROM JANUARY 1, 2010

The Company treats transactions with non-controlling interests as transactions with equity owners of the Company. For purchases from non-controlling interests, the difference between any consideration paid and the relevant share acquired of the carrying value of net assets of the subsidiary is recorded in equity. Gains or losses on disposals to non-controlling interests are also recorded in equity.

When the Company ceases to have control or significant influence, any retained interest in the entity is remeasured to its fair value, with the change in carrying amount recognized in profit or loss. The fair value is the initial carrying amount for the purposes of subsequently accounting for the retained interest in an associate, joint venture or financial asset. In addition, any amounts previously recognized in other comprehensive income in respect of that entity are accounted for as if the Company had directly disposed of the related assets or liabilities. This may mean that amounts previously recognized in other comprehensive income are reclassified to profit or loss.

At acquisition, there is a choice on an acquisition-by-acquisition basis to measure the non-controlling interest in the acquiree either at fair value or at the non-controlling interest's proportionate share of the acquiree's net assets.

### ACQUISITIONS BEFORE JANUARY 1, 2010

The Company treated transactions with non-controlling interests (formerly minority interests) as transactions with external parties. Disposals of minority interests were recognized as gains and losses in the income statement. Purchases from non-controlling interests resulted in goodwill

if there were differences between any consideration paid and the relevant share acquired of the carrying value of net assets of the subsidiary. The non-controlling interest in the acquiree was measured at the non-controlling interests proportionate share of the acquiree's net assets.

## Joint ventures and associated companies

Investments in joint ventures and associated companies, i.e. where voting stock interest, including effective potential voting rights, is at least 20 percent but not more than 50 percent, or where a corresponding influence is obtained through agreement, are accounted for in accordance with the equity method. Under the equity method, the investment in an associate is initially recognized at cost and the carrying amount is increased or decreased to recognize the investor's share of the profit or loss of the investee after the date of acquisition.

Ericsson's share of income before taxes is reported in item "Share in earnings of joint ventures and associated companies", included in Operating Income. This is due to that these interests are held for operating rather than investing or financial purposes. Ericsson's share of income taxes related to joint ventures and associated companies is reported under the line item Taxes in the income statement.

Unrealized gains on transactions between the Company and its associated companies and joint ventures are eliminated to the extent of the Company's interest in these entities. Unrealized losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred.

Shares in earnings of joint ventures and associated companies included in consolidated equity which are undistributed are reported in Retained earnings in the balance sheet.

Impairment testing as well as recognition or reversal of impairment of investments in each joint venture is performed in the same manner as for intangible assets other than goodwill. The entire carrying amount of each investment, including goodwill, is tested as a single asset. See also description under "Intangible assets other than goodwill" below.

If the ownership interest in an associate is reduced but significant influence is retained, only a proportionate share of the amounts previously recognized in other comprehensive income are reclassified to profit or loss where appropriate.

## Foreign currency remeasurement and translation

Items included in the financial statements of each entity of the Company are measured using the currency of the primary economic environment in which the entity operates ("the functional currency"). The consolidated financial statements are presented in Swedish Krona (SEK), which is the Parent Company's functional and presentation currency.

## TRANSACTIONS AND BALANCES

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at period-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognized in the income statement, unless deferred in Other Comprehensive Income (OCI) under the hedge accounting practices as described below.

Changes in the fair value of monetary securities denominated in foreign currency classified as available-for-sale are analyzed between translation differences resulting from changes in the amortized cost of the security and other changes in the carrying amount of the security. Translation differences related to changes in the amortized cost are recognized in profit or loss, and other changes in the carrying amount are recognized in OCI.

Translation differences on non-monetary financial assets and liabilities are reported as part of the fair value gain or loss.

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## Group companies

The results and financial position of all the group entities that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

- > assets and liabilities for each balance sheet presented are translated at the closing rate at the date of that balance sheet;
- > income and expenses for each income statement are translated at average exchange rates; and
- > all resulting net exchange differences are recognized as a separate component of OCI.

On consolidation, exchange differences arising from the translation of the net investment in foreign operations, and of borrowings and other currency instruments designated as hedges of such investments, are accounted for in OCI. When a foreign operation is partially disposed of or sold, exchange differences that were recorded in OCI are recognized in the income statement as part of the gain or loss on sale.

Goodwill and fair value adjustments arising on the acquisition of a foreign entity are treated as assets and liabilities of the foreign entity and translated at the closing rate.

There is no significant impact due to a currency of a hyperinflationary economy.

## Statement of cash flows

The statement of cash flow is prepared in accordance with the indirect method. Cash flows in foreign subsidiaries are translated at the average exchange rate during the period. Payments for subsidiaries acquired or divested are reported as cash flow from investing activities, net of cash and cash equivalents acquired or disposed of, respectively.

Cash and cash equivalents consist of cash, bank, and short-term investments that are highly liquid monetary financial instruments with a remaining maturity of three months or less at the date of acquisition.

## Revenue recognition

The Company offers a comprehensive portfolio of telecommunication and data communication systems, multimedia solutions and professional services, covering a range of technologies.

The contracts are of four main types:

- > delivery-type.
- > contracts for various types of services, for example multi-year managed services contracts.
- > license agreements for the use of the Company's technology or intellectual property rights, not being a part of another product.
- > construction-type.

The majority of the Company's products and services are sold under delivery-type contracts including multiple elements, such as base stations, base station controllers, mobile switching centers, routers, microwave transmission links, various software products and related installation and integration services. Such contract elements generally have individual item prices in agreed price lists per customer.

Sales are recorded net of value added taxes, goods returned, trade discounts and rebates. Revenue is recognized with reference to all significant contractual terms when the product or service has been delivered, when the revenue amount is fixed or determinable, and when collection is reasonably assured. Specific contractual performance and acceptance criteria may impact the timing and amounts of revenue recognized.

The profitability of contracts is periodically assessed, and provisions for any estimated losses are made immediately when losses are probable.

For sales between consolidated companies, associated companies, joint ventures and segments, the Company applies arm's length pricing.

## DEFINITIONS OF CONTRACT TYPES AND RELATED MORE SPECIFIC REVENUE RECOGNITION CRITERIA

Different revenue recognition methods, based on either IAS 18 "Revenue" or IAS 11 "Construction contracts", are applied based on the solutions provided to customers, the nature and sophistication of the technology involved and the contract conditions in each case.

The contract types that are accounted for in accordance with IAS 18 are:

- > Delivery-type contracts, i.e. contracts for delivery of a product or a combination of products to form a whole or a part of a network as well as delivery of stand-alone products. Medium-size and large delivery type contracts generally include multiple elements. Such elements are normally standardized types of equipment or software as well as services, such as network rollout. Revenue is recognized when risks and rewards have been transferred to the customer, normally stipulated in the contractual terms of trade. For delivery-type contracts with multiple elements, revenue, including the impact of any discount or rebate, is allocated to each element based on relative fair values. If there are undelivered elements essential to the functionality of delivered elements, the Company defers recognition of revenue until all elements essential to the functionality have been delivered.
- > Contracts for services include various types of services such as: training, consulting, engineering, installation, multi-year managed services and hosting. Revenue is generally recognized when the services have been provided. Revenue for managed service contracts and other services contracts covering longer periods is recognized pro rata over the contract period.
- > Contracts generating license fees from third parties for the use of the Company's technology or intellectual property rights. Revenue is normally recognized based on sales of products sold to the customer/licensee.

The contract type that is accounted for in accordance with IAS 11 is:

- > Construction-type contracts. In general, a construction-type contract is a contract where the Company supplies to a customer, a complete network, which to a large extent is based upon new technology or includes major components which are specifically designed for the customer. Revenues from construction-type contracts are recognized according to stage of completion, generally using the milestone output method.

## Earnings per share

Basic earnings per share are calculated by dividing net income attributable to stockholders of the Parent Company by the weighted average number of shares outstanding (total number of shares less treasury stock) during the year.

Diluted earnings per share are calculated by dividing net income attributable to stockholders of the Parent Company, when appropriate adjusted by the sum of the weighted average number of ordinary shares outstanding and dilutive potential ordinary shares. Potential ordinary shares are treated as dilutive when, and only when, their conversion to ordinary shares would decrease earnings per share.

Stock options and rights to matching shares are considered dilutive when the actual fulfillment of any performance conditions as of the reporting date would give a right to ordinary shares. Furthermore, stock options are considered dilutive only when the exercise price is lower than the period's average share price.

## Financial assets

Financial assets are recognized when the Company becomes a party to the contractual provisions of the instrument. Regular purchases and sales of financial assets are recognized on the settlement date.

Financial assets are derecognized when the rights to receive cash flows from the investments have expired or have been transferred and the Company has transferred substantially all risks and rewards of ownership. Separate assets or liabilities are recognized if any rights and obligations are created or retained in the transfer.

The Company classifies its financial assets in the following categories: at fair value through profit or loss, loans and receivables, and available for sale. The classification depends on the purpose for which the financial assets were acquired. Management determines the classification of its financial assets at initial recognition.

Financial assets are initially recognized at fair value plus transaction costs for all financial assets not carried at fair value through profit or loss. Financial assets carried at fair value through profit or loss are initially recognized at fair value, and transaction costs are expensed in the income statement.

The fair values of quoted financial investments and derivatives are based on quoted market prices or rates. If official rates or market prices are not available, fair values are calculated by discounting the expected future cash flows at prevailing interest rates. Valuations of FX options and Interest Rate Guarantees (IRG) are made by using a Black-Scholes formula. Inputs to the valuations are market prices for implied volatility, foreign exchange and interest rates.

#### FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS

Financial assets at fair value through profit or loss are financial assets held for trading. A financial asset is classified in this category if acquired principally for the purpose of selling or repurchasing in the near term.

Derivatives are classified as held for trading, unless they are designated as hedges. Assets in this category are classified as current assets.

Gains or losses arising from changes in the fair values of the "financial assets at fair value through profit or loss"-category (excluding derivatives) are presented in the income statement within Financial income in the period in which they arise. Derivatives are presented in the income statement either as cost of sales, other operating income, financial income or financial expense, depending on the intent with the transaction.

#### LOANS AND RECEIVABLES

Receivables are subsequently measured at amortized cost using the effective interest rate method, less allowances for impairment charges. Trade receivables include amounts due from customers. The balance represents amounts billed to customer as well as amounts where risk and rewards have been transferred to the customer but the invoice has not yet been issued.

Collectability of the receivables is assessed for purposes of initial revenue recognition.

#### AVAILABLE-FOR-SALE FINANCIAL ASSETS

Available-for-sale financial assets are non-derivatives that are either designated in this category or not classified in any of the other categories. They are included in non-current assets unless management intends to dispose of the investment within 12 months of the balance sheet date.

Dividends on available-for-sale equity instruments are recognized in the income statement as part of financial income when the Company's right to receive payments is established.

Changes in the fair value of monetary securities denominated in a foreign currency and classified as available-for-sale are analyzed between translation differences resulting from changes in amortized cost of the security and other changes in the carrying amount of the security. The translation differences on monetary securities are recognized in profit or loss; translation differences on non-monetary securities are recognized in OCI. Changes in the fair value of monetary and non-monetary securities classified as available-for-sale are recognized in OCI. When securities classified as available-for-sale are sold or impaired, the accumulated fair value adjustments previously recognized in OCI are included in the income statement.

#### IMPAIRMENT

At each balance sheet date, the Company assesses whether there is objective evidence that a financial asset or a group of financial assets is impaired. In the case of equity securities classified as available-for-sale, a significant or prolonged decline in the fair value of the security below its cost is considered as an evidence that the security is impaired. If any such evidence exists for available-for-sale financial assets, the cumulative loss – measured as the difference between the acquisition cost and the current fair value, less any impairment loss on that financial asset previously recognized in profit or loss – is removed from OCI and recognized in the income statement. Impairment losses recognized in the income statement on equity instruments are not reversed through the income statement.

An assessment of impairment of receivables is performed when there is objective evidence that the Company will not be able to collect all amounts due according to the original terms of the receivable. Significant financial difficulties of the debtor, probability that the debtor will enter bankruptcy or financial reorganization, and default or delinquency in payments are considered indicators that the trade receivable is impaired. The amount of the allowance is the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the original effective interest rate. The carrying amount of the asset is reduced through the use of an allowance account, and the amount of the loss is recognized in the income statement within selling expenses. When a trade receivable is finally established as uncollectible, it is written off against the allowance account for trade receivables. Subsequent recoveries of amounts previously written off are credited to selling expenses in the income statement.

#### Financial Liabilities

Financial liabilities are recognized when the Company becomes bound to the contractual obligations of the instrument.

Financial liabilities are derecognized when they are extinguished, i.e. when the obligation specified in the contract is discharged, cancelled or expires.

#### BORROWINGS

Borrowings are initially recognized at fair value, net of transaction costs incurred. Borrowings are subsequently stated at amortized cost; any difference between the proceeds (net of transaction costs) and the redemption value is recognized in the income statement over the period of the borrowings using the effective interest method.

Borrowings are classified as current liabilities unless the Company has an unconditional right to defer settlement of the liability for at least 12 months after the balance sheet date.

#### TRADE PAYABLES

Trade payables are recognized initially at fair value and subsequently measured at amortized cost using the effective interest method.

#### DERIVATIVES AT FAIR VALUE THROUGH PROFIT OR LOSS

Certain derivative instruments do not qualify for hedge accounting and are accounted for at fair value through profit or loss. Changes in the fair value of these derivative instruments that do not qualify for hedge accounting are recognized immediately in the income statement either as cost of sales, other operating income, financial income or financial expense, depending on the intent of the transaction.

## ION

## Derivative financial instruments and hedging activities

Derivatives are initially recognized at fair value at trade date and subsequently re-measured at fair value. The method of recognizing the resulting gain or loss depends on whether the derivative is designated as a hedging instrument, and if so, the nature of the item being hedged. The Company designates certain derivatives as either:

- a) **fair value hedge:** a hedge of the fair value of recognized liabilities;
- b) **cash flow hedge:** a hedge of a particular risk associated with a highly probable forecast transaction; or
- c) **net investment hedge:** a hedge of a net investment in a foreign operation.

At the inception of the hedge, the Company documents the relationship between hedging instruments and hedged items, as well as its risk management objectives and strategy for undertaking various hedging transactions. The Company also documents its assessment, both at hedge inception and on an ongoing basis, of whether the derivatives that are used in hedging transactions are highly effective in offsetting changes in fair values or cash flows of the hedged items.

The fair values of various derivative instruments used for hedging purposes are disclosed in Note C20, "Financial Risk Management and Financial Instruments". Movements in the hedging reserve in OCI are shown in Note C16, "Equity and OCI".

The fair value of a hedging derivative is classified as a non-current asset or liability when the remaining maturity of the hedged item is more than 12 months, and as a current asset or liability when the remaining maturity of the hedged item is less than 12 months. Trading derivatives are classified as current assets or liabilities.

### FAIR VALUE HEDGES

Changes in the fair value of derivatives that are designated and qualify as fair value hedges are recorded in the income statement, together with any changes in the fair value of the hedged asset or liability that are attributable to the hedged risk. The Company only applies fair value hedge accounting for hedging fixed interest risk on borrowings. Both gains and losses relating to the interest rate swaps hedging fixed rate borrowings and the changes in the fair value of the hedged fixed rate borrowings attributable to interest rate risk are recognized in the income statement within Financial expenses. If the hedge no longer meets the criteria for hedge accounting, the adjustment to the carrying amount of a hedged item for which the effective interest method is used is amortized to profit or loss over the remaining period to maturity.

### CASH FLOW HEDGES

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognized in OCI. The gain or loss relating to an ineffective portion is recognized immediately in the income statement within financial income or expense.

Amounts deferred in OCI are recycled in the income statement in the periods when the hedged item affects profit or loss (for example, when the forecast sale that is hedged takes place), either in Net Sales or Cost of Sales. When the forecast transaction that is hedged results in the recognition of a non-financial asset (for example, inventory or fixed assets), the gains and losses previously deferred in OCI are transferred from OCI and included in the initial measurement of the cost of the asset. The deferred amounts are ultimately recognized in Cost of Sales in case of inventory or in Depreciation in case of fixed assets. When a hedging instrument expires or is sold, or when a hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss which at that time remains in OCI is recognized in the income statement when the forecast transaction is ultimately recognized. When a forecast transaction is no longer expected to occur, the cumulative gain or loss that was reported in OCI is immediately transferred to the income statement within financial income or expense.

### NET INVESTMENT HEDGES

Hedges of net investments in foreign operations are accounted for similarly to cash flow hedges. Any gain or loss on the hedging instrument relating to the effective portion of the hedge is recognized in OCI. A gain or loss relating to an ineffective portion is recognized immediately in the income statement within financial income or expense. Gains and losses deferred in OCI are included in the income statement when the foreign operation is partially disposed of or sold.

### Financial guarantees

Financial guarantee contracts are initially recognized at fair value (i.e. usually the fee received). Subsequently, these contracts are measured at the higher of:

- > the amount determined as the best estimate of the net expenditure required to settle the obligation according to the guarantee contract, and
- > the recognized contractual fee less cumulative amortization when amortized over the guarantee period, using the straight-line-method.

The best estimate of the net expenditure comprises future fees and cash flows from subrogation rights.

### Inventories

Inventories are measured at the lower of cost or net realizable value on a first-in, first-out (FIFO) basis.

Risks of obsolescence have been measured by estimating market value based on future customer demand and changes in technology and customer acceptance of new products.

### Intangible assets

#### INTANGIBLE ASSETS OTHER THAN GOODWILL

Intangible assets other than goodwill comprise capitalized development expenses and acquired intangible assets, such as patents, customer relations, trademarks and software. At initial recognition, capitalized development expenses are stated at cost while acquired intangible assets related to business combinations are stated at fair value. Subsequent to initial recognition, both capitalized development expenses and acquired intangible assets are stated at initially recognized amounts less accumulated amortization and any impairment. Amortization and any impairment losses are included in Research and development expenses, mainly for capitalized development expenses and patents, in Selling and administrative expenses, mainly for customer relations and brands, and in Cost of sales.

Costs incurred for development of products to be sold, leased or otherwise marketed or intended for internal use are capitalized as from when technological and economical feasibility has been established until the product is available for sale or use. These capitalized expenses are mainly generated internally and include direct labor and directly attributable overhead. Amortization of capitalized development expenses begins when the product is available for general release. Amortization is made on a product or platform basis according to the straight-line method over periods not exceeding five years. Research and development expenses directly related to orders from customers are accounted for as a part of Cost of sales. Other research and development expenses are charged to income as incurred.

Amortization of acquired intangible assets, such as patents, customer relations, brands and software, is made according to the straight-line method over their estimated useful lives, not exceeding ten years. However, if the economic benefit related to an item of intangible assets is front-end loaded the amortization method reflects this. Thus, the amortization for such an item is amortized on a digressive curve basis and the asset value decreases with higher amounts in the beginning of the useful life compared to the end.

The Company has not recognized any intangible assets with indefinite useful life other than goodwill.

Impairment tests are performed whenever there is an indication of possible impairment. However, intangible assets not yet available for use are tested annually. An impairment loss is recognized if the carrying amount of an asset or its cash-generating unit exceeds its recoverable amount. The recoverable amount is the higher of the value in use and the fair value less costs to sell. In assessing value in use, the estimated future cash flows after tax are discounted to their present value using an after-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. Application of after tax amounts in calculation, both in relation to cash flows and discount rate is applied due to that available models for calculating discount rate include a tax component. The after tax discounting, applied by the Company is not materially different from a discounting based on before-tax future cash flows and before-tax discount rates, as required by IFRS.

Corporate assets have been allocated to cash-generating units in relation to each unit's proportion of total net sales. The amount related to corporate assets is not significant. Impairment losses recognized in prior periods are assessed at each reporting date for any indications that the loss has decreased or no longer exists. An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amounts and if the recoverable amount is higher than the carrying value. An impairment loss is reversed only to the extent that the asset's carrying amount after reversal does not exceed the carrying amount, net of amortization, which would have been reported if no impairment loss had been recognized.

## GOODWILL

As from the acquisition date, goodwill acquired in a business combination is allocated to each cash-generating unit (CGU) of the Company expected to benefit from the synergies of the combination. Ericsson's five operating segments have been identified as CGUs. Goodwill is assigned to four of them, Networks, Professional Services, Multimedia and ST-Ericsson.

An annual impairment test for the CGUs to which goodwill has been allocated is performed in the fourth quarter, or when there is an indication of impairment. Impairment testing as well as recognition of impairment of goodwill is performed in the same manner as for intangible assets other than goodwill, see description under "Intangible assets other than goodwill" above. An impairment loss in respect of goodwill is not reversed.

Additional disclosure is required in relation to goodwill impairment testing, see Note C2, "Critical Accounting Estimates and Judgments" below and in Note C10, "Intangible Assets".

## Property, plant and equipment

Property, plant and equipment are stated at cost less accumulated depreciation and any impairment losses.

Depreciation is charged to income, generally on a straight-line basis, over the estimated useful life of each component of an item of property, plant and equipment, including buildings. Estimated useful lives are, in general, 25–50 years for real estate and 3–10 years for machinery and equipment. Depreciation and any impairment charges are included in Cost of sales, Research and development or Selling and administrative expenses.

The Company recognizes in the carrying amount of an item of property, plant and equipment the cost of replacing a component and derecognizes the residual value of the replaced component.

Impairment testing as well as recognition or reversal of impairment of property, plant and equipment is performed in the same manner as for intangible assets other than goodwill, see description under "Intangible assets other than goodwill" above.

Gains and losses on disposals are determined by comparing the proceeds less cost to sell with the carrying amount and are recognized within Other operating income and expenses in the income statement.

## Leasing

### LEASING WHEN THE COMPANY IS THE LESSEE

Leases on terms in which the Company assumes substantially all the risks and rewards of ownership are classified as finance leases. Upon initial recognition, the leased asset is measured at an amount equal to the lower of its fair value and the present value of the minimum lease payments. Subsequent to initial recognition, the asset is accounted for in accordance with the accounting policy applicable to that type of asset, although the depreciation period must not exceed the lease term.

Other leases are operating leases, and the leased assets under such contracts are not recognized on the balance sheet. Costs under operating leases are recognized in the income statement on a straight-line basis over the term of the lease. Lease incentives received are recognized as an integral part of the total lease expense, over the term of the lease.

### LEASING WHEN THE COMPANY IS THE LESSOR

Leasing contracts with the Company as lessor are classified as finance leases when the majority of risks and rewards are transferred to the lessee, and otherwise as operating leases. Under a finance lease, a receivable is recognized at an amount equal to the net investment in the lease and revenue is recognized in accordance with the revenue recognition principles.

Under operating leases the equipment is recorded as property, plant and equipment and revenue as well as depreciation is recognized on a straight-line basis over the lease term.

## Income taxes

Income taxes in the consolidated financial statements include both current and deferred taxes. Income taxes are reported in the income statement unless the underlying item is reported directly in equity or OCI. For those items, the related income tax is also reported directly in equity or OCI. A current tax liability or asset is recognized for the estimated taxes payable or refundable for the current year or prior years.

Deferred tax is recognized for temporary differences between the book values of assets and liabilities and their tax values and for tax loss carry forwards. A deferred tax asset is recognized only to the extent that it is probable that future taxable profits will be available against which the deductible temporary differences and tax loss carry forwards can be utilized. Deferred tax is not recognized for the following temporary differences: goodwill not deductible for tax purposes, for the initial recognition of assets or liabilities that affect neither accounting nor taxable profit, and for differences related to investments in subsidiaries when it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred tax is measured at the tax rate that is expected to be applied to the temporary differences when they reverse, based on the tax laws that have been enacted or substantively enacted by the reporting date. An adjustment of deferred tax asset/liability balances due to a change in the tax rate is recognized in the income statement, unless it relates to a temporary difference earlier recognized directly in equity or OCI, in which case the adjustment is also recognized in equity or OCI.

The measurement of deferred tax assets involves judgment regarding the deductibility of costs not yet subject to taxation and estimates regarding sufficient future taxable income to enable utilization of unused tax losses in different tax jurisdictions. All deferred tax assets are subject to annual review of probable utilization. The largest amounts of tax loss carry forwards relate to Sweden, with indefinite period of utilization.

## Provisions

Provisions are made when there are legal or constructive obligations as a result of past events and when it is probable that an outflow of resources will be required to settle the obligations and the amounts can be reliably estimated. When the effect of the time value of money is material, discounting is made of estimated outflows. However, the actual outflows as a result of the obligations may differ from such estimates.

## ION

The provisions are mainly related to warranty commitments, restructuring, customer projects and other obligations, such as unresolved income tax and value added tax issues, claims or obligations as a result of patent infringement and other litigations, supplier claims and customer finance guarantees.

Product warranty commitments consider probabilities of all material quality issues based on historical performance for established products and expected performance for new products, estimates of repair cost per unit, and volumes sold still under warranty up to the reporting date.

A restructuring obligation is considered to have arisen when the Company has a detailed formal plan for the restructuring (approved by management), which has been communicated in such a way that a valid expectation has been raised among those affected.

Project related provisions include estimated losses on onerous contracts, contractual penalties and undertakings. For losses on customer contracts, a provision equal to the total estimated loss is recorded when a loss from a contract is anticipated and possible to estimate reliably. These contract loss estimates include any probable penalties to a customer under a loss contract.

Other provisions include provisions for unresolved tax issues, litigations, supplier claims, customer finance and other provisions. The Company provides for estimated future settlements related to patent infringements based on the probable outcome of each infringement. The ultimate outcome or actual cost of settling an individual infringement may vary from the Company's estimate.

The Company estimates the outcome of any potential patent infringement made known to the Company through assertion and through the Company's own monitoring of patent-related cases in the relevant legal systems. To the extent that the Company makes the judgment that an identified potential infringement will more likely than not result in an outflow of resources, the Company records a provision based on the Company's best estimate of the expenditure required to settle with the counterpart.

In the ordinary course of business, the Company is subject to proceedings, lawsuits and other unresolved claims, including proceedings under laws and government regulations and other matters. These matters are often resolved over a long period of time. The Company regularly assesses the likelihood of any adverse judgments in or outcomes of these matters, as well as potential ranges of possible losses. Provisions are recognized when it is probable that an obligation has arisen and the amount can be reasonably estimated based on a detailed analysis of each individual issue.

Certain present obligations are not recognized as provisions as it is not probable that an economic outflow will be required to settle the obligation or the amount of the obligation cannot be measured with sufficient reliability. Such obligations are reported as contingent liabilities. For further detailed information, see Note C24, "Contingent liabilities".

## Post-employment benefits

Pensions and other post-employment benefits are classified as either defined contribution plans or defined benefit plans. Under a defined contribution plan, the Company's only obligation is to pay a fixed amount to a separate entity (a pension trust fund) with no obligation to pay further contributions if the fund does not hold sufficient assets to pay all employee benefits. The related actuarial and investment risks fall on the employee. The expenditures for defined contribution plans are recognized as expenses during the period when the employee provides service. Under a defined benefit plan, it is the Company's obligation to provide agreed benefits to current and former employees. The related actuarial and investment risks fall on the Company.

The present value of the defined benefit obligations for current and former employees is calculated using the Projected Unit Credit Method. The discount rate for each country is determined by reference to market yields on high-quality corporate bonds that have maturity dates approximating the terms of the Company's obligations. In countries where

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there is no deep market in such bonds, the market yields on government bonds are used. The calculations are based upon actuarial assumptions, assessed on a quarterly basis, and are as a minimum prepared annually. Actuarial assumptions are the Company's best estimate of the variables that determine the cost of providing the benefits. When using actuarial assumptions, it is possible that the actual results will differ from the estimated results or that the actuarial assumptions will change from one period to another. These differences are reported as actuarial gains and losses. They are for example caused by unexpectedly high or low rates of employee turnover, changed life expectancy, salary changes, changes in the discount rate and differences between actual and expected return on plan assets. Actuarial gains and losses are recognized in OCI in the period in which they occur. The Company's net liability for each defined benefit plan consists of the present value of pension commitments less the fair value of plan assets and is recognized net on the balance sheet. When the result is a net benefit to the Company, the recognized asset is limited to the total of any cumulative past service cost and the present value of any future refunds from the plan or reductions in future contributions to the plan.

The net of return on plan assets and interest on pension liabilities is reported as financial income or expense, while the current service cost and any other items in the annual pension cost are reported as operating income or expense.

Payroll taxes related to actuarial gains and losses are included in determining actuarial gains and losses.

## Share-based compensation to employees and the Board of Directors

Share-based compensation is related to remuneration to all employees, including key management personnel and the Board of Directors.

Under IFRS, a company shall recognize compensation costs for share-based compensation programs based on a measure of the value to the company of services received under the plans.

This value is based on the fair value of, for example free shares at grant date, measured as stock price as per each investment date. The value at grant date is charged to the income statement as any other remuneration over the service period. For example, value at grant date is 90. Given the normal service period of three years within Ericsson, 30 are charged per year during the service period.

The amount charged to the income statement is reversed in equity each time of the income statement charge.

The reason for this accounting principle of IFRS is that compensation cost is a cost with no direct cash flow impact. The purpose of share-based accounting according to IFRS (IFRS 2) is to present an impact of share based programs, being part of the total remuneration, in the income statement.

## COMPENSATION TO EMPLOYEES

### Stock purchase plans

For stock purchase plans, compensation costs are recognized during the vesting period, based on the fair value of the Ericsson share at the employee's investment date. The fair value is based upon the share price at investment date, adjusted for the fact that no dividends will be received on matching shares prior to matching and other features that are non-vesting conditions. The employee pays a price equal to the share price at investment date for the investment shares. The investment date is considered as the grant date. In the balance sheet, the corresponding amounts are accounted for as equity. Vesting conditions are non-market based and affect the number of shares that Ericsson will match. Other features of a share-based payment are not vesting conditions. These features would need to be included in the grant date fair value for transactions with employees and others providing similar services. In the period when an employee takes a refund of previously made contributions

(and stops making further contributions) all remaining compensation expense is recognized. Non-vesting conditions would not impact the number of awards expected to vest or valuation thereof subsequent to grant date. When calculating the compensation costs for shares under performance-based matching programs, the Parent Company at each reporting date assesses the probability that the performance targets are met. Compensation expenses are based on estimates of the number of shares that will match at the end of the vesting period. When shares are matched, social security charges are to be paid in certain countries on the value of the employee benefit. The employee benefit is generally based on the market value of the shares at the matching date. During the vesting period, estimated amounts for such social security charges are accrued.

## COMPENSATION TO THE BOARD OF DIRECTORS

During 2008, the Parent Company introduced a share-based compensation program as a part of the remuneration to the Board of Directors. The program gives non-employed Directors elected by the General Meeting of Shareholders a right to receive part of their remuneration as a future payment of an amount which corresponds to the market value of a share of class B in the Parent Company at the time of payment, as further disclosed in Note C29, "Information Regarding Members of the Board of Directors, the Group Management and Employees". The cost for cash settlements is measured and recognized based on the estimated costs for the program on a pro rata basis during the service period, being one year. The estimated costs are remeasured during and at the end of the service period.

## Segment reporting

An operating segment is a component of a company whose operating results are regularly reviewed by the Company's chief operating decision maker, (CODM), to make decisions about resources to be allocated to the segment and assess its performance. Within the Company, the Group Management Team is defined as the CODM function.

The segment presentation, as per each segment is based on the accounting policies as disclosed in this note. The arm's length principle is applied in transactions between the segments.

The Company's segment disclosure about geographical areas is based on in which country transfer of risks and rewards occur.

## Borrowing costs

The Company capitalizes borrowing costs in relation to qualifying assets, for the Company normally being internally generated intangible assets as capitalized development expenses. All other borrowing costs are expensed as incurred.

## Government grants

Government grants are recognized when there is a reasonable assurance of compliance with conditions attached to the grants and that the grants will be received.

For the Company, government grants are linked to performance of research or development work or to capital expenditures that are subsidized as governmental stimulus to employment or investments in a certain country or region. Government grants linked to research and development are normally deducted in reporting the related expense, whereas grants related to assets are accounted for deducting the grant when establishing the acquisition cost of the asset.

## New standards and interpretations not yet adopted

A number of issued new standards, amendments to standards and interpretations are not yet effective for the year ended December 31, 2010, and have not been applied in preparing these consolidated financial statements:

Below is a list of standards/interpretations that have been issued, except for amendments related to IFRS 1, 'First time adoption of International Financial Reporting Standards' and are effective for the periods starting as from January 1, 2011.

- > **Amendment to IAS 32, 'Financial instruments: Presentation – Classification of rights issues'**  
The IASB amended IAS 32 to allow rights, options or warrants to acquire a fixed number of the entity's own equity instruments for a fixed amount of any currency to be classified as equity instruments provided the entity offers the rights, options or warrants pro rata to all of its existing owners of the same class of its own non-derivative equity instruments.
- > **IFRIC 19, 'Extinguishing financial liabilities with equity instruments'**  
Clarifies the requirements of IFRSs when an entity renegotiates the terms of a financial liability with its creditor and the creditor agrees to accept the entity's shares or other equity instruments to settle the financial liability fully or partially.
- > **IAS 24, 'Related party disclosures' (revised 2009)**  
Amends the definition of a related party and modifies certain related party disclosure requirements for government-related entities, associated companies and joint ventures.
- > **Amendments to IFRS 7**  
Amends disclosures in relation to transfers of financial assets.
- > **Amendment to IFRIC 14, IAS 19 – 'The limit on a defined benefit asset, minimum funding requirements and their interaction'**  
Removes unintended consequences arising from the treatment of prepayments where there is a minimum funding requirement. This results in prepayments of contributions in certain circumstances being recognized as an asset rather than an expense.
- > **IFRS 9, 'Financial instruments'**  
IFRS 9 is the first standard issued as part of a wider project to replace IAS 39. IFRS 9 retains but simplifies the mixed measurement model and establishes two primary measurement categories for financial assets: amortized cost and fair value. The basis of classification depends on the entity's business model and the contractual cash flow characteristics of the financial asset. The guidance in IAS 39 on impairment of financial assets and hedge accounting continues to apply.
- > **Improvements to IFRSs 2010.**

The amendments are generally applicable for annual periods beginning at January 1, 2011, except for Amendments to IFRS 7 that is applicable as from January 1, 2012, and IFRS 9 that is applicable as from January 1, 2013. The EU has not endorsed Amendments to IFRS 7, IFRS 9 or Improvements to IFRSs.

None of the amendments effective as from January 1, 2011, are expected to have a significant impact on the Company's financial result or position. The impact of amendments to IFRS 7 and IFRS 9 have not yet been evaluated.

## C2 CRITICAL ACCOUNTING ESTIMATES AND JUDGMENTS

The preparation of financial statements and application of accounting standards often involve management's judgment and the use of estimates and assumptions deemed to be reasonable at the time they are made. However, other results may be derived with different judgments or using different assumptions or estimates, and events may occur that could require a material adjustment to the carrying amount of the asset or liability affected. Following are the accounting policies subject to such judgments and the key sources of estimation uncertainty that the Company believes could have the most significant impact on the reported results and financial position.

The information in this note is grouped as per:

- > Key sources of estimation uncertainty.
- > Judgments management has made in the process of applying the Company's accounting policies.

### Revenue recognition

#### *Key sources of estimation uncertainty*

Estimates are necessary in evaluation of contractual performance and estimated total contract costs for assessing whether any loss provisions are to be made or if customers will reach conditional purchase volumes triggering contractual discounts to be given.

#### *Judgments made in relation to accounting policies applied*

Parts of the Company's sales are generated from large and complex customer contracts. Managerial judgment is applied regarding, among other aspects, conformance with acceptance criteria and if transfer of risks and rewards to the buyer has taken place to determine if revenue and costs should be recognized in the current period, degree of completion and the customer credit standing to assess whether payment is likely or not to justify revenue recognition.

### Trade and customer finance receivables

#### *Key sources of estimation uncertainty*

The Company monitors the financial stability of its customers and the environment in which they operate to make estimates regarding the likelihood that the individual receivables will be paid. Total allowances for estimated losses as of December 31, 2010, were SEK 1.1 (1.7) billion or 1.6 (2.4) percent of gross trade and customer finance receivables.

Credit risks for outstanding customer finance credits are regularly assessed as well, and allowances are recorded for estimated losses.

### Inventory valuation

#### *Key sources of estimation uncertainty*

Inventories are valued at the lower of cost and net realizable value. Estimates are required in relation to forecasted sales volumes and inventory balances. In situations where excess inventory balances are identified, estimates of net realizable values for the excess volumes are made. Inventory allowances for estimated losses as of December 31, 2010, amounted to SEK 3.1 (3.0) billion or 10 (12) percent of gross inventory.

### Investments in joint ventures and associated companies

#### *Key sources of estimation uncertainty*

Impairment testing is performed after initial recognition whenever there is an indication of impairment.

At December 31, 2010, the amount of joint ventures and associated companies amounted to SEK 9.8 (11.6) billion.

### Deferred taxes

#### *Key sources of estimation uncertainty*

Deferred tax assets are recognized for temporary differences between the carrying amounts for financial reporting purposes of assets and liabilities and the amounts used for taxation purposes and for tax loss carry-forwards. The largest amounts of tax loss carry-forwards are reported in Sweden, with an indefinite period of utilization (i.e. with no expiry date). The valuation of tax loss carry-forwards, deferred tax assets and the Company's ability to utilize tax losses is based upon management's estimates of future taxable income in different tax jurisdictions. For further detailed information, please refer to Note C8, "Taxes".

At December 31, 2010, the value of deferred tax assets amounted to SEK 12.7 (14.3) billion. The deferred tax assets related to loss carryforwards are reported as non-current assets.

### Accounting for income-, value added- and other taxes

#### *Key sources of estimation uncertainty*

Accounting for these items is based upon evaluation of income-, value added- and other tax rules in all jurisdictions where we perform activities. The total complexity of rules related to taxes and the accounting for these require management's involvement in judgments regarding classification of transactions and in estimates of probable outcomes of claimed deductions and/or disputes.

### Capitalized development expenses

#### *Key sources of estimation uncertainty*

Impairment testing is performed after initial recognition whenever there is an indication of impairment. Intangible assets not yet available for use are tested annually. The impairment testing amounts are based on estimates of future cash flows for the respective products.

At December 31, 2010, the capitalized development expenses amounted to SEK 3.0 (2.1) billion. An impairment charge of SEK 0 (0.2) billion was recognized as a part of the restructuring program. Under this program decisions were taken to phase out certain products. The impairment charge relates to balances for these products.

#### *Judgments made in relation to accounting policies applied*

Development costs that meet IFRS' intangible asset recognition criteria for products that will be sold, leased or otherwise marketed as well as those intended for internal use are capitalized. The starting point for capitalization is based upon management's judgment that technological and economical feasibility is confirmed, usually when a product development project has reached a defined milestone according to the Company's established project management model. Capitalization ceases and amortization of capitalized development costs begin when the product is available for general release.

The definition of amortization periods and the evaluation of impairment indicators also require management's judgment.

### Acquired intellectual property rights and other intangible assets, including goodwill

#### *Key sources of estimation uncertainty*

At initial recognition, future cash flows are estimated, to ensure that the initial carrying values do not exceed the expected discounted cash flows for the items of this type of assets. After initial recognition impairment testing is performed whenever there is an indication of impairment, except for goodwill for which impairment testing is performed at least once per year. Negative deviations in actual cash flows compared to estimated cash flows as well as new estimates that indicate lower future cash flows might result in recognition of impairment charges. One source of uncertainty related to future cash flows is long-term movements in exchange rates.

The market capitalization of the Company as per year-end 2010 well exceeded the value of the Company's net assets.

For further discussion on goodwill, see Note C1, "Significant Accounting Policies" and C10, "Intangible Assets". Estimates related to acquired intangible assets are based on similar assumptions and risks as for goodwill.

At December 31, 2010, the amount of acquired intellectual property rights and other intangible assets amounted to SEK 43.8 (46.1) billion, including goodwill of SEK 27.2 (27.4) billion. The Company has also recognized goodwill in ST-Ericsson of SEK 1.4 (1.3) billion, as disclosed in note C12, "Financial Assets, Non-Current". An impairment charge of SEK 0.9 (4.3) billion was recognized as a part of the restructuring program. Under this program decisions were taken to phase out certain products. The impairment charge relates to balances for these products.

#### ***Judgments made in relation to accounting policies applied***

At initial recognition and subsequent remeasurement, management judgments are made, both for key assumptions and regarding impairment indicators. In the purchase price allocation made for each acquisition, the purchase price shall be assigned to the identifiable assets, liabilities and contingent liabilities based on fair values for these assets. Any remaining excess value is reported as goodwill. This allocation requires management judgment as well as the definition of cash generating units for impairment testing purposes. Other judgments might result in significantly different results and financial position in the future.

## **Provisions**

### **WARRANTY PROVISIONS**

#### ***Key sources of estimation uncertainty***

Provisions for product warranties are based on current volumes of products sold still under warranty and on historic quality rates for mature products as well as estimates and assumptions on future quality rates for new products and estimates of costs to remedy the various qualitative issues that might occur. Total provisions for product warranties as of December 31, 2010, amounted to SEK 2.5 (2.5) billion.

### **PROVISIONS OTHER THAN WARRANTY PROVISIONS**

#### ***Key sources of estimation uncertainty***

Provisions, other than warranty provisions, mainly comprise amounts related to contractual obligations and penalties to customers and estimated losses on customer contracts, restructuring, risks associated with patent and other litigations, supplier or subcontractor claims and/or disputes, as well as provisions for unresolved income tax and value added tax issues. The estimates related to the amounts of provisions for penalties, claims or losses receive special attention from the management. At December 31, 2010, provisions other than warranty commitments amounted to SEK 7.3 (9.9) billion. For further detailed information, see Note C18, "Provisions".

#### ***Judgments made in relation to accounting policies applied***

Whether a present obligation is probable or not requires judgment. The nature and type of risks for these provisions differ and management's judgment is applied regarding the nature and extent of obligations in deciding if an outflow of resources is probable or not.

## **Pension and other post-employment benefits**

#### ***Key sources of estimation uncertainty***

Accounting for the costs of defined benefit pension plans and other applicable post-employment benefits is based on actuarial valuations, relying on key estimates for discount rates, expected return on plan assets, future salary increases, employee turnover rates and mortality tables. The discount rate assumptions are based on rates for high-quality fixed-income investments with durations as close as possible to the Company's pension plans. Expected returns on plan assets consider long-term historical returns, allocation of assets and estimates of future long-term investment returns. At December 31, 2010, defined benefit obligations for pensions and other post-employment benefits amounted to SEK 28.7 (30.7) billion and fair value of plan assets to SEK 25.4 (23.2) billion. For more information on estimates and assumptions, see Note C17, "Post-Employment Benefits".

## **Financial instruments, hedge accounting and foreign exchange risks**

#### ***Key sources of estimation uncertainty***

Foreign exchange risk in highly probable sales and purchases in future periods are hedged using foreign exchange derivative instruments designated as cash-flow hedges. Forecasts are based on estimations of future transactions, a forecast is therefore per definition uncertain to some degree.

#### ***Judgments made in relation to accounting policies applied***

Establishing highly probable sales and purchases volumes involve gathering and evaluating sales and purchases estimates for future periods as well as analyzing actual outcome versus estimates on a regular basis in order to fulfill effectiveness testing requirements for hedge accounting. Changes in estimates of sales and purchases might result in that hedge accounting is discontinued.

For further information regarding risks in financial instruments, see Note C20, "Financial Risk Management and Financial Instruments".

## C3 SEGMENT INFORMATION

### Operating segments

When determining our operating segments, we have looked at which markets and what type of customers our products and services aim to attract as well as what distribution channels they are sold through. We have also considered commonality regarding technology, research and development. To best reflect our business focus and to facilitate comparability with peers, we report five operating segments:

- > Networks
- > Professional Services
- > Multimedia
- > Sony Ericsson
- > ST-Ericsson

**Networks** delivers products and solutions for mobile and fixed broadband access, core networks, and transmission. The offering includes:

- > Radio access solutions that interconnect with devices such as mobile phones, notebooks and PCs, supporting all major standardized mobile technologies.
- > Fixed access solutions for both fiber and copper, such as GPON and DSL, increase the customers' ability to modernize fixed networks to enable IP-based services with high bandwidth.
- > IP core network solutions (switching, routing and control) include softswitches, IP infrastructure for edge- and core routing, IP Multimedia Subsystem (IMS) and media gateways.
- > Transmission/backhaul; microwave (MINI-LINK) and optical transmission solutions for mobile and fixed networks.
- > Network management tools; supporting operators' management of existing networks as well as introduction of new network architectures, technologies and services. This includes tools for configuration, performance monitoring, security management, inventory management and software upgrades.

**Global Services** delivers managed services, consulting and systems integration, customer support and network rollout services. The offering includes:

- > Managed services comprise solutions for network design and planning, network operations (the management of day-to-day operations of customer networks), field operations and site maintenance and shared solutions such as hosting of platforms and applications.
- > Consulting and Systems integration; technology and operational consulting, integration of multi-vendor equipment, design and integration of new solutions and handling of technology change and transformation programs, learning services and optimization services ensuring the best possible user experience. Industry-specific solutions for vertical industries are also included.
- > Customer support; staff world-wide provide around-the-clock support and advice to ensure network uptime and performance.
- > Network rollout services, deploying new networks, modernizing and expanding existing networks.

**Multimedia** provides enablers and applications for operators. The offering includes:

- > TV solutions; a suite of open, standards-based digital TV solutions in HD, 3G or standard quality (real-time and on-demand), combined with interactive services. The offering includes IPTV solutions, video compression, on-demand solutions, content management systems, advertising and interactive TV applications for operators, service providers, advertisers and content providers.

- > Consumer and business applications; solutions for the consumer include service delivery platforms, Rich Communication Suite (RCS), messaging, a social media portal, and location-based services. Enterprise market solutions include converged business communication solutions such as Ericsson Business Communication Suite (BCS). Brokering solutions facilitate payment and distribution of content.
- > Business Support Systems includes Revenue Management (Pre-paid, Post-paid, convergent Charging and Billing), Customer Care, Provisioning, Device Management and Analytics.

**Sony Ericsson**, the joint venture delivers innovative and feature-rich mobile phones and accessories. The JV forms an essential part of our end-to-end capability for mobile multimedia services.

**ST-Ericsson**, the joint venture develops semiconductors and wireless platforms for GSM, EDGE, WCDMA, HSPA, TD-SCDMA and LTE to handset manufacturers, as well as to mobile operators and device manufacturers.

Sony Ericsson's and ST-Ericsson's results are reported according to the equity method under "Share in earnings of joint ventures and associated companies" in the income statement.

### Unallocated

Some revenues, costs, assets and liabilities are not identified as part of any operating segment and are therefore not allocated. Examples of such items are costs for corporate staff, IT costs and general marketing costs.

### Regions

Our Regions are our primary sales channel. The Company operates world-wide and reports its operations divided into ten regions. Other includes sales of for example embedded modules, cables, power modules as well as licensing and IPR.

- > North America
- > Latin America
- > Northern Europe & Central Asia
- > Western and Central Europe
- > Mediterranean
- > Middle East
- > Sub-Saharan Africa
- > India
- > China & North East Asia
- > South East Asia & Oceania
- > Other

### Major customers

The Company does not have any customer for which revenues from transactions have exceeded 10 percent of the Company's total revenues for the years 2010, 2009 or 2008.

We derive most of our sales from large, multi-year agreements with a limited number of significant customers. Out of a customer base of approximately 400, mainly network operators, the 10 largest customers account for 46 (42) percent of our net sales. Our largest customer accounted for approximately 8 (5) percent of sales in 2010. For more information, see Risk Factors, "Market, Technology and Business Risks".

OPERATING SEGMENTS									
2010	Networks	Global Services	Multi-media	Sony Ericsson	ST-Ericsson	Total Segments	Unallocated	Eliminations <sup>1)</sup>	Group
Segment sales	111,459	80,117	10,504	60,118	13,116	275,314	–	–73,234	202,080
Inter-segment sales	1,249	6	13	60	3,403	4,731	–	–3,463	1,268
<b>Net sales</b>	<b>112,708</b>	<b>80,123</b>	<b>10,517</b>	<b>60,178</b>	<b>16,519</b>	<b>280,045</b>	<b>–</b>	<b>–76,697</b>	<b>203,348</b>
<b>Operating income</b>	<b>12,481</b>	<b>6,513</b>	<b>–643</b>	<b>1,523</b>	<b>–3,527</b>	<b>16,347</b>	<b>–805</b>	<b>913</b>	<b>16,455</b>
Operating margin (%)	11%	8%	–6%	3%	–21%	6%	–	–	8%
Financial income									1,047
Financial expenses									–1,719
<b>Income after financial items</b>									<b>15,783</b>
Taxes									–4,548
<b>Net income</b>									<b>11,235</b>
<b>Other segment items</b>									
Share in earnings of joint ventures and associated companies	–64	–17	–2	664	–1,763	–1,182	10	–	–1,172
Amortization	–4,554	–303	–806	–25	–930	–6,618	–	955	–5,663
Depreciation	–2,600	–555	–144	–731	–1,022	–5,052	–	1,753	–3,299
Impairment losses	–675	–276	–52	–	–61	–1,064	–	61	–1,003
Reversals of impairment losses	9	2	1	–	–	12	–	–	12
Restructuring expenses	–3,915	–2,675	–207	–402	–536	–7,735	–17	469	–7,283
Gains/losses from divestments	154	53	92	–	–	299	59	–	358
<sup>1)</sup> Sony Ericsson and ST-Ericsson are accounted for in accordance with the equity method. The difference between what is reported to the CODM and externally is eliminated in the Eliminations column.									

REGIONS		
2010	Net sales	Non-current assets <sup>3)</sup>
North America	49,473	7,251
<i>Of which the United States</i>	46,104	6,977
Latin America	17,882	1,998
Northern Europe & Central Asia <sup>1)2)</sup>	12,171	42,112
Western & Central Europe <sup>2)</sup>	19,868	8,629
Mediterranean	22,628	1,523
Middle East	15,099	84
Sub-Saharan Africa	9,194	51
India	8,626	262
China & North East Asia	25,965	3,795
<i>Of which China</i>	14,633	1,013
South East Asia & Oceania	14,902	351
Other <sup>1) 2)</sup>	7,540	–
<b>Total</b>	<b>203,348</b>	<b>66,056</b>
<sup>1)</sup> <i>Of which Sweden</i>	4,237	41,683
<sup>2)</sup> <i>Of which EU</i>	43,707	46,563
<sup>3)</sup> Total non-current assets excluding financial instruments, deferred tax assets, and post-employment benefit assets.		

For employee information, see Note C29, "Information Regarding Members of the Board of Directors, the Group Management and Employees".

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OPERATING SEGMENTS									
2009	Networks <sup>1)</sup>	Global Services <sup>1)</sup>	Multimedia	Sony Ericsson	ST-Ericsson	Total Segments	Unallocated	Eliminations <sup>2)</sup>	Group
Segment sales	113,339	79,038	12,996	71,984	13,535	290,892	–	–85,519	205,373
Inter-segment sales	746	82	276	164	5,731	6,999	–	–5,895	1,104
<b>Net sales</b>	<b>114,085</b>	<b>79,120</b>	<b>13,272</b>	<b>72,148</b>	<b>19,266</b>	<b>297,891</b>	<b>–</b>	<b>–91,414</b>	<b>206,477</b>
<b>Operating income</b>	<b>7,598 <sup>3)</sup></b>	<b>6,271 <sup>4)</sup></b>	<b>655</b>	<b>–10,820</b>	<b>–2,615</b>	<b>1,089</b>	<b>–855</b>	<b>5,684</b>	<b>5,918</b>
Operating margin (%)	7%	8%	5%	–15%	–14%	0%	–	–	3%
Financial income									1,874
Financial expenses									–1,549
<b>Income after financial items</b>									<b>6,243</b>
Taxes									–2,116
<b>Net income</b>									<b>4,127</b>
<b>Other segment items</b>									
Share in earnings of joint ventures and associated companies	37	33	–1	–5,693	–1,762	–7,386	–14	–	–7,400
Amortization	–2,673	–574	–910	–165	–828	–5,150	–	941	–4,209
Depreciation	–2,768	–627	–155	–1,124	–997	–5,671	–	2,121	–3,550
Impairment losses	–4,333 <sup>3)</sup>	–	–80	–	–46	–4,459	–	46	–4,413
Reversals of impairment losses	38	9	2	–	–	49	–	–	49
Restructuring expenses	–8,358 <sup>3)</sup>	–2,434	–385	–1,754	–890	–13,821	–82	1,322	–12,581
Gains/losses from divestments	10	777 <sup>4)</sup>	41	–	47	875	–32	–	843
<sup>1)</sup> Amounts for 2009 and 2008 have been restated to be consistent with the segment allocation method applied as from 2010.									
<sup>2)</sup> Sony Ericsson and ST-Ericsson are accounted for in accordance with the equity method. The difference between what is reported to the CODM and externally is eliminated in the Eliminations column.									
<sup>3)</sup> Including impairment losses related to restructuring activities of SEK 4.3 billion.									
<sup>4)</sup> In Q2 2009, the TEMS business was divested, resulting in a capital gain of SEK 0.8 billion.									

REGIONS		
2009	Net sales	Non-current assets <sup>3)</sup>
North America	23,912	8,359
<i>Of which the United States</i>	21,538	8,100
Latin America	20,025	2,066
Northern Europe & Central Asia <sup>1)2)</sup>	11,981	44,091
Western & Central Europe <sup>2)</sup>	22,459	11,713
Mediterranean	25,161	1,352
Middle East	18,250	115
Sub-Saharan Africa	15,341	49
India	15,262	225
China & North East Asia	25,960	988
<i>Of which China</i>	18,455	903
South East Asia & Oceania	20,849	417
Other <sup>1)2)</sup>	7,277	–
<b>Total</b>	<b>206,477</b>	<b>69,375</b>
<sup>1)</sup> <i>Of which Sweden</i>	4,096	43,574
<sup>2)</sup> <i>Of which EU</i>	49,313	49,158
<sup>3)</sup> Total non-current assets excluding financial instruments, deferred tax assets, and post-employment benefit assets.		

For employee information, see Note C29, "Information Regarding Members of the Board of Directors, the Group Management and Employees".

OPERATING SEGMENTS								
2008	Networks <sup>1)</sup>	Global Services <sup>1)</sup>	Multimedia <sup>2)</sup>	Sony Ericsson	Total Segments	Unallocated	Eliminations <sup>3)</sup>	Group
Segment sales	120,504	70,467	12,614	108,492	312,077	–	–108,492	203,585
Inter-segment sales	16	41	5,288	261	5,606	–	–261	5,345
<b>Net sales</b>	<b>120,520</b>	<b>70,508</b>	<b>17,902</b>	<b>108,753</b>	<b>317,683</b>	<b>–</b>	<b>–108,753</b>	<b>208,930</b>
<b>Operating income</b>	<b>12,540</b>	<b>4,951</b>	<b>–118</b>	<b>–1,094</b>	<b>16,279</b>	<b>–618</b>	<b>591</b>	<b>16,252</b>
Operating margin (%)	10%	7%	–1%	0%	5%	–	–	8%
Financial income								3,458
Financial expenses								–2,484
<b>Income after financial items</b>								<b>17,226</b>
Taxes								–5,559
<b>Net income</b>								<b>11,667</b>
<b>Other segment items</b>								
Share in earnings of joint ventures and associated companies	–25	91	1	–503	–436	–	–	–436
Amortization	–3,210	–368	–1,429	–53	–5,060	1	53	–5,006
Depreciation	–2,347	–532	–228	–1,138	–4,245	–1	1,138	–3,108
Impairment losses	–547	–	–19	–	–566	–	–	–566
Reversals of impairment losses	6	1	–	–	7	–	–	7
Restructuring expenses	–4,870	–1,533	–337	–1,692	–8,432	–20	846	–7,606
Gains/losses from divestments	9	–16	992	–	985	113	–	1,098
<sup>1)</sup> Amounts for 2009 and 2008 have been restated to be consistent with the segment allocation method applied as from 2010.								
<sup>2)</sup> Multimedia figures include the Mobile Platforms business which from 2009 is part of ST-Ericsson.								
<sup>3)</sup> Sony Ericsson is accounted for in accordance with the equity method. The difference between what is reported to the CODM and externally is eliminated in the Eliminations column.								

REGIONS		
2008	Net sales	Non-current assets <sup>3)</sup>
North America	15,538	8,917
<i>Of which the United States</i>	<i>14,132</i>	<i>8,829</i>
Latin America	22,897	1,676
Northern Europe & Central Asia <sup>1)2)</sup>	14,854	47,037
Western & Central Europe <sup>2)</sup>	21,502	5,537
Mediterranean	29,559	1,499
Middle East	17,844	70
Sub-Saharan Africa	15,339	54
India	15,204	156
China & North East Asia	22,081	816
<i>Of which China</i>	<i>15,068</i>	<i>688</i>
South East Asia & Oceania	20,978	464
Other <sup>1)2)</sup>	13,134	–
<b>Total</b>	<b>208,930</b>	<b>66,226</b>
<sup>1)</sup> <i>Of which Sweden</i>	<i>8,876</i>	<i>46,458</i>
<sup>2)</sup> <i>Of which EU</i>	<i>57,601</i>	<i>52,945</i>
<sup>3)</sup> Total non-current assets excluding financial instruments, deferred tax assets, and post-employment benefit assets.		

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## C4 NET SALES

NET SALES			
	2010	2009	2008
Sales of products and network rollout services	140,222	145,873	150,846
Of which:			
<i>Delivery-type contracts</i>	140,156	144,908	148,358
<i>Construction-type contracts</i>	66	965	2,488
Professional Services sales	58,529	56,123	48,978
License revenues <sup>1)</sup>	4,597	4,481	9,106
<b>Net sales</b>	<b>203,348</b>	<b>206,477</b>	<b>208,930</b>
Export sales from Sweden	100,070	94,829	109,254

<sup>1)</sup> The ST-Ericsson joint venture was formed in February 2009, figures for 2008 include licenses revenues from Mobile Platforms.

## C5 EXPENSES BY NATURE

EXPENSES BY NATURE			
	2010	2009	2008
Goods and services	130,725	124,627	138,298
Amortization and depreciation	8,962	7,759	8,114
Impairments and obsolescence allowances, net of reversals	966	5,637	2,680
Employee remunerations	57,183	54,877	51,297
Interest expenses	1,719	1,549	2,484
Taxes	4,548	2,116	5,559
<b>Expenses incurred</b>	<b>204,103</b>	<b>196,565</b>	<b>208,432</b>
Less:			
Inventory changes <sup>1)</sup>	8,465	-4,784	3,761
Additions to Capitalized development	1,647	1,443	1,409
<b>Expenses charged to the Income Statement</b>	<b>193,991</b>	<b>199,906</b>	<b>203,262</b>

<sup>1)</sup> The inventory changes are based on changes of gross inventory values prior to obsolescence allowances.

The cost reduction program, initiated in first quarter 2009, has been completed by the second quarter 2010. Total restructuring charges in 2010 were SEK 6.8 (11.3) b. Cost and capital efficiency remain high on the company agenda and efficiency work will continue also in 2011. This primarily relates to service delivery, product development and administration. Restructuring charges are included in the expenses presented above.

RESTRUCTURING CHARGES BY FUNCTION			
	2010	2009	2008
Cost of sales	3,354	4,180	2,540
R&D expenses	1,682	6,045	2,648
Selling and administrative expenses	1,778	1,034	1,572
<b>Total restructuring charges</b>	<b>6,814</b>	<b>11,259</b>	<b>6,760</b>

## C6 OTHER OPERATING INCOME AND EXPENSES

OTHER OPERATING INCOME AND EXPENSES			
	2010	2009	2008
Gains on sales of intangible assets and PP&E	301	193	302
Losses on sales of intangible assets and PP&E	-422	-126	-190
Gains on sales of investments and operations	577	962	1,236
Losses on sales of investments and operations	-219	-119	-138
Capital gains/losses, net	237	910	1,210
Other operating revenues	1,766	2,172	1,767
<b>Total other operating income and expenses</b>	<b>2,003</b>	<b>3,082</b>	<b>2,977</b>

## C7 FINANCIAL INCOME AND EXPENSES

FINANCIAL INCOME AND EXPENSES	2010		2009		2008	
	Financial income	Financial expenses	Financial income	Financial expenses	Financial income	Financial expenses
Contractual interest on financial assets	811	–	1,287	–	2,938	–
<i>Of which on financial assets at fair value through profit or loss</i>	304	–	814	–	2,282	–
Contractual interest on financial liabilities	–	–1,315	–	–1,616	–	–2,023
<i>Of which on financial liabilities at fair value through profit or loss</i>	–	–	–	–	–	–
Net gain/loss on:						
Instruments at fair value through profit or loss <sup>1)</sup>	295	–206	635	155	322	280
<i>Of which included in fair value hedge relationships</i>	–	151	–	155	–	–32
Available for sale	–	–	–	–	–	–
Loans and receivables	–68	–	–53	–	191	–
Liabilities at amortized cost	–	–4	–	–2	–	–656
Other financial income and expenses	9	–194	5	–86	7	–85
<b>Total</b>	<b>1,047</b>	<b>–1,719</b>	<b>1,874</b>	<b>–1,549</b>	<b>3,458</b>	<b>–2,484</b>

<sup>1)</sup> Excluding net gain from operating assets and liabilities, SEK 1,528 million (net gain of SEK 2,247 million in 2009, net loss of SEK 4,234 million in 2008), reported as Cost of Sales.

## C8 TAXES

The Company's expense for 2010 was SEK 4,548 (2,116) million or 28.8 (33.9) percent of the income after financial items. The tax rate may vary between years depending on business and geography mix. The tax rate excluding joint ventures and associated companies was 25.7 (25.7) percent mainly due to a lower tax rate on losses made by the joint venture.

INCOME TAXES RECOGNIZED IN THE INCOME STATEMENT	2010	2009	2008
Current income taxes for the year	–4,635	–4,605	–5,574
Current income taxes related to previous years	–35	441	167
Deferred tax income/expense (–)	307	661	–297
<i>Sub total</i>	<i>–4,363</i>	<i>–3,503</i>	<i>–5,704</i>
Share of taxes in joint ventures and associated companies	–185	1,387	145
<b>Taxes</b>	<b>–4,548</b>	<b>–2,116</b>	<b>–5,559</b>

A reconciliation between actual tax expense for the year and the theoretical tax expense that would arise when applying statutory tax rate in Sweden, 26.3 percent, on income before taxes is shown in the table below.

RECONCILIATION OF SWEDISH INCOME TAX TO THE ACTUAL INCOME TAX	2010	2009	2008
Tax rate in Sweden (26.3%)	–4,150	–1,643	–4,823
Effect of foreign tax rates	–405	–812	22
<i>Of which joint ventures and associated companies</i>	<i>–467</i>	<i>–550</i>	<i>1</i>
Current income taxes related to previous years	–35	441	167
Recognition/remeasurement of tax losses related to previous years	–257	8	–169
Recognition/remeasurement of deductible temporary differences related to previous years	172	267	62
Tax effect of non-deductible expenses	–830	–1,155	–986
Tax effect of non-taxable income	880	630	327
Tax effect of changes in tax rates	77	148	–159
<b>Taxes</b>	<b>–4,548</b>	<b>–2,116</b>	<b>–5,559</b>

## Deferred tax balances

Tax effects of temporary differences and tax loss carryforwards are attributable as shown in the table below:

	2010		2009	
	Deferred tax assets	Deferred tax liabilities	Net balance	Net balance
Intangible assets and property, plant and equipment	543	3,725	359	3,096
Current assets	3,398	110	2,481	53
Post-employment benefits	976	636	852	472
Provisions	2,019	12	2,240	–
Equity	781	–	1,901	–
Other	3,395	–	4,343	459
Loss carryforwards	3,537	–	3,961	–
Deferred tax assets/liabilities	14,649	4,483	16,137	4,080
Netting of assets/liabilities	–1,912	–1,912	–1,810	–1,810
<b>Net deferred tax balances</b>	<b>12,737</b>	<b>2,571</b>	<b>10,166</b>	<b>12,057</b>

CHANGES IN DEFERRED TAXES, NET		
	2010	2009
Opening balance, net	12,057	12,120
Recognized in income statement	307	661
Recognized in OCI	–1,120	–1,040
Acquisitions/disposals of subsidiaries	–606	186
Translation differences	–472	130
<b>Closing balance, net</b>	<b>10,166</b>	<b>12,057</b>

Tax effects reported directly in Other Comprehensive Income amount to SEK –1,120 (–1,040) million, of which actuarial gains and losses related to pensions SEK –836 (173) million, cash flow hedges SEK –183 (–1,059) million and deferred tax on gains/losses on hedges on investments in foreign entities SEK –101 (–154) million.

Deferred tax assets are only recognized in countries where the Company expects to be able to generate corresponding taxable income in the future to benefit from tax reductions.

Significant tax loss carryforwards are related to countries with long or indefinite periods of utilization, mainly Sweden and the US. Of the total deferred tax assets for tax loss carryforwards, SEK 3,537 million, SEK 2,222 million relate to Sweden with indefinite time of utilization. Due to the Company's strong current financial position and taxable income during 2010, Ericsson has been able to utilize part of its tax loss carryforwards during the year. The assessment is that Ericsson will be able to generate sufficient income in the coming years to also utilize the remaining parts.

Deferred tax assets for Sony Ericsson and ST-Ericsson are not included, as they are accounted for in accordance with the equity method. Sony Ericsson has in its annual report deferred tax assets of EUR 574 million. The major part of the tax assets relates to the Swedish company.

## INVESTMENTS IN SUBSIDIARIES

Due to losses in certain subsidiary companies, the book value of certain investments in those subsidiaries are less than the tax value of these investments. Since deferred tax assets have been reported with respect also to losses in these companies, and due to the uncertainty as to which deductions can be realized in the future, no additional deferred tax assets are reported.

## TAX LOSS CARRYFORWARDS

Deferred tax assets regarding tax loss carryforwards are reported to the extent that realization of the related tax benefit through future taxable profits is probable also when considering the period during which these can be utilized, as described below.

At December 31, 2010, the available tax loss carryforwards amounted to SEK 13,030 (14,493) million. The tax effect of these tax loss carryforwards are reported as an asset.

The final years in which these loss carryforwards can be utilized are shown in the following table:

TAX LOSS CARRYFORWARDS YEAR OF EXPIRATION		
Year of expiration	Tax loss carryforwards	Tax effect
2011	0	0
2012	32	7
2013	299	80
2014	898	244
2015	498	119
2016 or later	11,303	3,087
<b>Total</b>	<b>13,030</b>	<b>3,537</b>

Tax loss carryforwards for Sony Ericsson and ST-Ericsson are not included, as they are accounted for in accordance with the equity method.

## C9 EARNINGS PER SHARE

EARNINGS PER SHARE 2008–2010			
	2010	2009	2008
<b>Basic</b>			
Net income attributable to stockholders of the Parent Company (SEK million)	11,146	3,672	11,273
Average number of shares outstanding, basic (millions)	3,197	3,190	3,183
<b>Earnings per share, basic (SEK)</b>	<b>3.49</b>	<b>1.15</b>	<b>3.54</b>
<b>Diluted</b>			
Net income attributable to stockholders of the Parent Company (SEK million)	11,146	3,672	11,273
Average number of shares outstanding, basic (millions)	3,197	3,190	3,183
Dilutive effect for stock option plans	–	–	1
Dilutive effect for stock purchase plans	29	22	18
Average number of shares outstanding, diluted (millions)	3,226	3,212	3,202
<b>Earnings per share, diluted (SEK)</b>	<b>3.46</b>	<b>1.14</b>	<b>3.52</b>

## C10 INTANGIBLE ASSETS

INTANGIBLE ASSETS 2010									
	Capitalized development expenses				Goodwill	Intellectual property rights (IPR), trademarks and other intangible assets			
	To be marketed	For internal use		Total		Total	Trademarks, customer relationships and similar rights	Patents and acquired R&D	Total
		Acquired costs	Internal costs						
<b>Accumulated acquisition costs</b>									
Opening balance	5,221	2,060	1,376	8,657	27,375	10,624	24,898	35,522	
Acquisitions/capitalization	1,389	153	102	1,644	–	521	–	521	
Balances regarding acquired businesses <sup>1)</sup>	–	–	–	–	1,256	2,800	1,025	3,825	
Sales/disposals	–	–	–	–	–	–	–55	–55	
Contribution to joint ventures	–	–	–	–	–	–	–	–	
Translation difference	–	–	–	–	–1,480	–363	–538	–901	
<b>Closing balance</b>	<b>6,610</b>	<b>2,213</b>	<b>1,478</b>	<b>10,301</b>	<b>27,151</b>	<b>13,582</b>	<b>25,330</b>	<b>38,912</b>	
<b>Accumulated amortization</b>									
Opening balance	–2,104	–1,630	–1,087	–4,821	–	–2,639	–9,875	–12,514	
Amortization	–422	–145	–97	–664	–	–1,450	–3,549	–4,999	
Sales/disposals	–	–	–	–	–	–	27	27	
Translation difference	–	–	–	–	–	152	294	446	
<b>Closing balance</b>	<b>–2,526</b>	<b>–1,775</b>	<b>–1,184</b>	<b>–5,485</b>	<b>–</b>	<b>–3,937</b>	<b>–13,103</b>	<b>–17,040</b>	
<b>Accumulated impairment losses</b>									
Opening balance	–1,665	–55	–37	–1,757	–	–	–4,269	–4,269	
Impairment losses <sup>2)</sup>	–49	–	–	–49	–	–	–945	–945	
<b>Closing balance</b>	<b>–1,714</b>	<b>–55</b>	<b>–37</b>	<b>–1,806</b>	<b>–</b>	<b>–</b>	<b>–5,214</b>	<b>–5,214</b>	
<b>Net carrying value</b>	<b>2,370</b>	<b>383</b>	<b>257</b>	<b>3,010</b>	<b>27,151</b>	<b>9,645</b>	<b>7,013</b>	<b>16,658</b>	

<sup>1)</sup> For more information on acquired businesses, see Note C26 "Business Combinations".

<sup>2)</sup> The write-down (impairment charge) of SEK 0,9 billion is a consequence of the restructuring program decision to phase out certain products.

The goodwill is allocated to the operating segments Networks SEK 16.5 (16.5) billion, Global Services SEK 4.1 (3.7) billion and Multimedia SEK 6.6 (7.2) billion.

The recoverable amounts for cash-generating units are established as the present value of expected future cash flows. Estimation of future cash flows includes assumptions mainly for the following key financial parameters:

- > Sales growth
- > Development of operating income (based on operating margin or cost of goods sold and operating expenses relative to sales)
- > Development of working capital and capital expenditure requirements.

The assumptions regarding revenue growth, approved by group management and each operating segment's management, are based on industry sources and projections made within the Company for the development 2011–2015 for key industry parameters:

- > The number of global mobile subscriptions is estimated to grow from 5.3 billion by the end of 2010 (6 billion by the end of 2011) to approximately 8 billion by the end of 2015. Of these, some hundred millions (approximately 450 million 2015) will have mobile PC connections, while more than 3 billion 2015 will have a mobile broadband connection. Mobile PC includes USB dongles and embedded modules for CDMA2000 EV-DO, HSPA, LTE, Mobile WiMax and TDSCDMA and can also be used for fixed applications.

## ION

Mobile Broadband includes CDMA2000 EV-DO, HSPA, LTE, Mobile WiMax and TDSCDMA. It includes handsets, USB dongles and embedded modules. The vast majority is handsets.

- > Fixed broadband subscriptions will grow from around 500 million (470 in 2010 and 510 in 2011) to around 600 million in the same time perspective. Fixed broadband includes Fiber, Cable and xDSL
- > Mobile traffic volume is estimated to increase (around 15 times 2010–2015, around 8 times 2011–2015), while the fixed Internet traffic is estimated to increase (around 6 times 2010–2015, around 4 times 2011–2015), however from a much larger base.

The demand for multimedia solutions is driven by the opportunities for new types of service offerings enabled by IP technology and high-speed broadband. There is strong IPTV subscriber growth, rapid growth in digital viewing and on-demand services. The development and build out of Mobile Broadband networks and increasing number of mobile broadband subscriptions drives growth in service introduction and traffic. This puts high demand on charging and payment systems. The Business Support Systems' growth is driven by introduction of new services, new business models and price plans.

The demand for professional services is also driven by an increasing business and technology complexity. Therefore, operators review their business models and look for vendor partners that can take on a broader responsibility, including outsourcing of network operations.

The assumptions are also based upon information gathered in the

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VQS\_Section 3.2\_Ericsson 2010 Annual Report.pdf

Company's long-term strategy process, including assessments of new technology, the Company's competitive position and new types of business and customers, driven by the continued integration of telecom, data and media industries.

The impairment testing is based on specific estimates for the first five years and with a reduction of nominal annual growth rate to an average GDP growth of 3 (3) percent per year thereafter. The impairment tests for goodwill did not result in any impairment.

A number of sensitivity tests have been made, for example applying lower levels of revenue and operating income. Also when applying these estimates no goodwill impairment is indicated.

As per year end 2010, the market capitalization of the Company well exceeded the value of the Company's net assets.

An after-tax discount rate of 8 (12) percent has for all cash generating units been applied for the discounting of projected after-tax cash flows. The assumptions for 2009 are disclosed in note C10 in the Annual Report of 2009.

The Company's discounting is based on after-tax future cash flows and after-tax discount rates. This discounting is not materially different from a discounting based on before-tax future cash flows and before-tax discount rates, as required by IFRS.

In Note C1, "Significant Accounting Policies", and Note C2, "Critical Accounting Estimates and Judgments", further disclosures are given regarding goodwill impairment testing.

INTANGIBLE ASSETS 2009									
	Capitalized development expenses				Goodwill	Intellectual property rights (IPR), trademarks and other intangible assets			
	For internal use			Total		Total	Trademarks, customer relationships and similar rights	Patents and acquired R&D	Total
	To be marketed	Acquired costs	Internal costs		Total				
<b>Accumulated acquisition costs</b>									
Opening balance	5,518	1,821	1,217	8,556	24,877	9,429	20,450	29,879	
Acquisitions/capitalization	1,045	239	159	1,443	–	602	2	604	
Balances regarding divested/acquired businesses <sup>1)</sup>	–	–	–	–	3,534	811	5,021	5,832	
Sales/disposals	–	–	–	–	–21	–142	–	–142	
Contribution to joint ventures	–1,342	–	–	–1,342	–	–	–	–	
Translation difference	–	–	–	–	–1,015	–76	–575	–651	
<b>Closing balance</b>	<b>5,221</b>	<b>2,060</b>	<b>1,376</b>	<b>8,657</b>	<b>27,375</b>	<b>10,624</b>	<b>24,898</b>	<b>35,522</b>	
<b>Accumulated amortization</b>									
Opening balance	–1,570	–1,562	–1,042	–4,174	–	–2,425	–6,853	–9,278	
Amortization	–534	–68	–45	–647	–	–360	–3,202	–3,562	
Sales/disposals	–	–	–	–	–	131	–	131	
Translation difference	–	–	–	–	–	15	180	195	
<b>Closing balance</b>	<b>–2,104</b>	<b>–1,630</b>	<b>–1,087</b>	<b>–4,821</b>	<b>–</b>	<b>–2,639</b>	<b>–9,875</b>	<b>–12,514</b>	
<b>Accumulated impairment losses</b>									
Opening balance	–1,508	–55	–37	–1,600	–	–	–14	–14	
Impairment losses <sup>2)</sup>	–157	–	–	–157	–	–	–4,255	–4,255	
<b>Closing balance</b>	<b>–1,665</b>	<b>–55</b>	<b>–37</b>	<b>–1,757</b>	<b>–</b>	<b>–</b>	<b>–4,269</b>	<b>–4,269</b>	
<b>Net carrying value</b>	<b>1,452</b>	<b>375</b>	<b>252</b>	<b>2,079</b>	<b>27,375</b>	<b>7,985</b>	<b>10,754</b>	<b>18,739</b>	

<sup>1)</sup> During 2009, Ericsson acquired Nortel SEK 8.7 billion.

<sup>2)</sup> The write-down (impairment charge) of SEK 4.3 billion is a consequence of the restructuring program decision to phase out certain products.

## C11 PROPERTY, PLANT AND EQUIPMENT

PROPERTY, PLANT AND EQUIPMENT 2010					
	Real estate	Machinery and other technical assets	Other equipment, tools and installations	Construction in process and advance payments	Total
<b>Accumulated acquisition costs</b>					
Opening balance	4,217	5,298	18,087	578	28,180
Additions	283	411	1,480	1,512	3,686
Balances regarding divested/acquired businesses	14	4	473	-5	486
Sales/disposals	-102	-543	-1,449	-148	-2,242
Reclassifications	87	190	817	-1,094	-
Translation difference	-261	-356	-832	-29	-1,478
<b>Closing balance</b>	<b>4,238</b>	<b>5,004</b>	<b>18,576</b>	<b>814</b>	<b>28,632</b>
<b>Accumulated depreciation</b>					
Opening balance	-1,692	-3,557	-13,058	-	-18,307
Depreciation	-361	-629	-2,309	-	-3,299
Balances regarding divested businesses	-2	-3	-297	-	-302
Sales/disposals	60	553	1,384	-	1,997
Reclassifications	4	9	-13	-	-
Translation difference	122	250	598	-	970
<b>Closing balance</b>	<b>-1,869</b>	<b>-3,377</b>	<b>-13,695</b>	<b>-</b>	<b>-18,941</b>
<b>Accumulated impairment losses</b>					
Opening balance	-45	-91	-131	-	-267
Impairment losses	-	-6	-3	-	-9
Reversals of impairment losses	-	-	12	-	12
Sales/disposals	-	-	-	-	-
Translation difference	2	2	3	-	7
<b>Closing balance</b>	<b>-43</b>	<b>-95</b>	<b>-119</b>	<b>-</b>	<b>-257</b>
<b>Net carrying value</b>	<b>2,326</b>	<b>1,532</b>	<b>4,762</b>	<b>814</b>	<b>9,434</b>
Contractual commitments for the acquisition of property, plant and equipment as per December 31, 2010, amounted to SEK 303 (236) million.					
The reversal of impairment losses have been reported under Cost of sales.					

PROPERTY, PLANT AND EQUIPMENT 2009					
	Real estate	Machinery and other technical assets	Other equipment, tools and installations	Construction in process and advance payments	Total
<b>Accumulated acquisition costs</b>					
Opening balance	4,054	6,131	18,058	795	29,038
Additions	362	657	1,699	1,288	4,006
Balances regarding divested/acquired businesses	-	-183	-95	-1	-279
Sales/disposals	-282	-1,241	-2,184	-148	-3,855
Reclassifications	240	151	947	-1,338	-
Translation difference	-157	-217	-338	-18	-730
<b>Closing balance</b>	<b>4,217</b>	<b>5,298</b>	<b>18,087</b>	<b>578</b>	<b>28,180</b>
<b>Accumulated depreciation</b>					
Opening balance	-1,545	-4,211	-12,967	-	-18,723
Depreciation	-303	-735	-2,512	-	-3,550
Balances regarding divested businesses	-	112	191	-	303
Sales/disposals	174	1,188	1,873	-	3,235
Reclassifications	-75	-51	126	-	-
Translation difference	57	140	231	-	428
<b>Closing balance</b>	<b>-1,692</b>	<b>-3,557</b>	<b>-13,058</b>	<b>-</b>	<b>-18,307</b>
<b>Accumulated impairment losses</b>					
Opening balance	-47	-125	-148	-	-320
Impairment losses	-	-	-1	-	-1
Reversals of impairment losses	-	33	16	-	49
Sales/disposals	-	-	-	-	-
Translation difference	2	1	2	-	5
<b>Closing balance</b>	<b>-45</b>	<b>-91</b>	<b>-131</b>	<b>-</b>	<b>-267</b>
<b>Net carrying value</b>	<b>2,480</b>	<b>1,650</b>	<b>4,898</b>	<b>578</b>	<b>9,606</b>
Contractual commitments for the acquisition of property, plant and equipment as per December 31, 2009, amounted to SEK 236 (229) million.					
The reversal of impairment losses have been reported under Cost of sales.					

## C12 FINANCIAL ASSETS, NON-CURRENT

EQUITY IN JOINT VENTURES AND ASSOCIATED COMPANIES						
	Joint ventures		Associated companies		Total	Total
	2010	2009	2010	2009	2010	2009
Opening balance	10,317	6,694	1,261	1,294	11,578	7,988
Share in earnings	-1,099	-7,455	-73	55	-1,172	-7,400
Taxes	-181	1,388	-4	-1	-185	1,387
Translation difference	-391	-277	-47	-17	-438	-294
Change in hedge reserve	22	6	-	-	22	6
Pensions	-20	21	-	-	-20	21
Dividends	-	-	-119	-70	-119	-70
Contributions to joint ventures and associated companies	-	9,941 <sup>1)</sup>	138	2	138	9,943
Reclassification	-	-1	-1	-2	-1	-3
<b>Closing balance</b>	<b>8,648<sup>2)</sup></b>	<b>10,317<sup>2)</sup></b>	<b>1,155<sup>3)</sup></b>	<b>1,261</b>	<b>9,803</b>	<b>11,578</b>

<sup>1)</sup> Including contribution of SEK 5.0 billion paid to STMicroelectronics.  
<sup>2)</sup> Including goodwill for ST-Ericsson of SEK 1,381 million (SEK 1,341 million in 2009).  
<sup>3)</sup> Goodwill, net, amounts to SEK 16 million (SEK 16 million in 2009).

ERICSSON'S SHARE OF ASSETS, LIABILITIES AND INCOME IN JOINT VENTURE SONY ERICSSON MOBILE COMMUNICATIONS			
	2010	2009	2008
Non-current assets	3,622	4,003	3,228
Current assets	9,904	12,790	21,190
Non-current liabilities	592	130	157
Current liabilities	10,533	14,675	17,593
<b>Net assets</b>	<b>2,401</b>	<b>1,988</b>	<b>6,668</b>
Net sales	30,089	36,074	54,377
Income after financial items	705	-5,540	-400
Income taxes	-231	1,252	151
<b>Net income</b>	<b>474</b>	<b>-4,288</b>	<b>-249</b>
Net income attributable to:			
Stockholders of the Parent Company	433	-4,441	-353
Non-controlling interest	41	153	104
Assets pledged as collateral	-	182	-
Contingent liabilities	16	17	20

ERICSSON'S SHARE OF ASSETS, LIABILITIES AND INCOME IN JOINT VENTURE ST-ERICSSON		
	2010	2009
Non-current assets	6,673	7,238
Current assets	2,249	3,856
Non-current liabilities	214	129
Current liabilities	2,519	2,691
<b>Net assets</b>	<b>6,189</b>	<b>8,274</b>
Net sales	8,260	9,633
Income after financial items	-1,762	-1,762
Income taxes	50	136
<b>Net income</b>	<b>-1,712</b>	<b>-1,626</b>
Net income attributable to:		
Stockholders of the Parent Company	-1,713	-1,626
Non-controlling interest	1	-
Assets pledged as collateral	3	-
Contingent liabilities	-	6

ERICSSON'S SHARE OF ASSETS, LIABILITIES AND INCOME IN ASSOCIATED COMPANY ERICSSON NIKOLA TESLA D.D. <sup>1)</sup>			
	2010	2009	2008
Non-current assets	92	311	394
Current assets	749	754	695
Non-current liabilities	2	3	6
Current liabilities	209	240	253
<b>Net assets</b>	<b>630</b>	<b>822</b>	<b>830</b>
Net sales	784	994	1,182
Income after financial items	17	90	139
Income taxes	-1	1	-5
<b>Net income</b>	<b>16</b>	<b>91</b>	<b>134</b>
Net income attributable to:			
Stockholders of the Parent Company	16	91	134
Non-controlling interest	-	-	-
Assets pledged as collateral	4	5	5
Contingent liabilities	43	151	172

<sup>1)</sup> Ericsson's share is 49.07 percent.

All three companies apply IFRS in the reporting to Ericsson.

OTHER FINANCIAL ASSETS, NON-CURRENT								
	Other investments in shares and participations		Customer finance, non-current		Derivatives, non-current		Other financial assets, non-current	
	2010	2009	2010	2009	2010	2009	2010	2009
<b>Accumulated acquisition costs</b>								
Opening balance	1,660	1,783	1,232	1,082	843	2,814	3,197	3,557
Additions	114	1	3,562	408	–	–	683	389
Business combinations	–33	–	–	–	–	–	–	–
Disposals/repayments/deductions	–	–36	–3,322	–258	–	–	–35	–244
Change in value in funded pension plans <sup>1)</sup>	–	–	–	–	–	–	726	–521
Reclassifications	–	–1	–	–	–	–	–	–
Revaluation	–	–	–	–	–843	–1,971	–	–
Translation difference	–134	–87	2	–	–	–	–189	16
<b>Closing balance</b>	<b>1,607</b>	<b>1,660</b>	<b>1,474</b>	<b>1,232</b>	<b>–</b>	<b>843</b>	<b>4,382</b>	<b>3,197</b>
<b>Accumulated impairment losses/allowances</b>								
Opening balance	–1,404	–1,474	–402	–236	–	–	–1,463	–1,454
Impairment losses/allowance	–75	–3	2	–222	–	–	–7	–74
Business combinations	–	–	–	–	–	–	–	–
Disposals/repayments/deductions	–26	–	206	56	–	–	–	–
Translation difference	117	73	1	–	–	–	167	65
<b>Closing balance</b>	<b>–1,388</b>	<b>–1,404</b>	<b>–193</b>	<b>–402</b>	<b>–</b>	<b>–</b>	<b>–1,303</b>	<b>–1,463</b>
<b>Net carrying value</b>	<b>219</b>	<b>256</b>	<b>1,281</b>	<b>830</b>	<b>–</b>	<b>843</b>	<b>3,079</b>	<b>1,734</b>

<sup>1)</sup> This amount includes asset ceiling. For further information, see Note C17, "Post-employment benefits".

## C13 INVENTORIES

INVENTORIES	2010	2009
Raw materials, components, consumables and manufacturing work in progress	8,509	6,190
Finished products and goods for resale	11,894	6,621
Contract work in progress	9,494	9,907
<b>Inventories, net</b>	<b>29,897</b>	<b>22,718</b>

Contract work in progress includes amounts related to delivery-type contracts, service contracts and construction-type contracts with ongoing work in progress.

Reported amounts are net of obsolescence allowances of SEK 3,090 (2,961) million.

The increase in inventories during 2010 is due to higher level of working progress in the regions. During the year it has been industry component shortages and supply chain bottlenecks.

MOVEMENTS IN OBSOLESCENCE ALLOWANCES	2010	2009	2008
Opening balance	2,961	3,493	2,752
Additions, net	250	562	1,553
Utilization	–165	–1,297	–1,039
Translation difference	–46	2	250
Balances regarding acquired/divested businesses	90	201	–23
<b>Closing balance</b>	<b>3,090</b>	<b>2,961</b>	<b>3,493</b>

The amount of inventories recognized as expense and included in Cost of sales was SEK 47,415 (52,255) million.

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## C14 TRADE RECEIVABLES AND CUSTOMER FINANCE

TRADE RECEIVABLES AND CUSTOMER FINANCE		
	2010	2009
Trade receivables excluding associated companies and joint ventures	61,609	67,133
Allowances for impairment	-766	-924
Trade receivables, net	60,843	66,209
Trade receivables related to associated companies and joint ventures	284	201
Trade receivables, total	61,127	66,410
Customer finance	4,725	3,046
Allowances for impairment	-321	-772
Customer finance, net	4,404	2,274
Of which short term	3,123	1,444
Credit commitments for customer finance	3,282	3,027

Days Sales Outstanding were 88 (106) in December, 2010.

MOVEMENTS IN ALLOWANCES FOR IMPAIRMENT						
	Trade receivables			Customer finance		
	2010	2009	2008	2010	2009	2008
Opening balance	924	1,471	1,351	772	326	275
Additions	282	388	651	25	595	90
Utilization	-285	-583	-492	-87	-67	-3
Reversal of excess amounts	-169	-312	-81	-359	-37	-74
Reclassification	33	10	-69	-	-	-
Translation difference	-19	-43	115	-30	-45	38
Balances regarding acquired/divested business	-	-7	-4	-	-	-
Closing balance	766	924	1,471	321	772	326

### AGING ANALYSIS AS PER DECEMBER 31, 2010

	Amount	of which neither impaired nor past due	of which impaired, not past due	of which past due in the following time intervals		of which past due and impaired in the following time intervals	
				less than 90 days	90 days or more	less than 90 days	90 days or more
Trade receivables excluding associated companies and joint ventures	61,609	54,510	52	2,227	1,500	418	2,902
Allowances for impairment of receivables	-766	-	-16	-	-	-90	-660
Customer finance	4,725	3,804	528	62	85	18	228
Allowances for impairment of customer finance	-321	-	-75	-	-	-18	-228

### AGING ANALYSIS AS PER DECEMBER 31, 2009

	Amount	of which neither impaired nor past due	of which impaired, not past due	of which past due in the following time intervals		of which past due and impaired in the following time intervals	
				less than 90 days	90 days or more	less than 90 days	90 days or more
Trade receivables excluding associated companies and joint ventures	67,133	58,727	43	2,962	2,081	774	2,546
Allowances for impairment of receivables	-924	-	-8	-	-	-180	-736
Customer finance	3,046	1,292	1,314	9	1	145	285
Allowances for impairment of customer finance	-772	-	-342	-	-	-145	-285

## Credit risk

Credit risk is divided into three categories: credit risk in trade receivables, customer finance risk and financial credit risk (see C20, Financial Risk Management and Financial Instruments).

### Credit risk in trade receivables

Credit risk in trade receivables is governed by a policy applicable for all legal entities in Ericsson. The purpose of the policy is to:

- > Avoid credit losses through establishing internal standard credit approval routines in all Ericsson legal entities
- > Ensure monitoring and risk mitigation of defaulting accounts, i.e. events of non-payment and/or delayed payments from customers
- > Ensure efficient credit management within the Company and thereby improve Days Sales Outstanding and Cash Flow
- > Ensure payment terms are commercially justifiable
- > Define escalation path and approval process for payment terms and customer credit limits.

The credit worthiness of all customers is regularly assessed and a credit limit is set. Through credit management system functionality, credit checks are performed every time a sales order or an invoice is generated in the source system. This is based on the credit risk set on the customer. Credit blocks appear if the credit limit set on customer is exceeded or if past due receivables are higher than permitted levels. Release of a credit block requires authorization.

Letters of credits are used as a method for securing payments from customers operating in emerging markets, in particular in markets with unstable political and/or economic environment. By having banks confirming the letters of credit, the political and commercial credit risk exposures to Ericsson are mitigated.

Trade receivables amounted to SEK 61,609 (67,133) million as of December 31, 2010. Provisions for expected losses are regularly assessed and amounted to SEK 766 (924) million as of December 31, 2010. Ericsson's nominal credit losses have, however, historically been low. The amounts of trade receivables closely follow the distribution of Ericsson's sales and do not include any major concentrations of credit risk by customer or by geography. The five largest customers represent 29 (26) percent of the total trade receivables.

### Customer finance credit risk

All major commitments to finance customers are made only after the approval by the Finance Committee of the Board of Directors according to the established credit approval process.

Prior to the approval of new facilities reported as customer finance, an internal credit risk assessment is conducted in order to assess the credit rating of each transaction (for political and commercial risk). The credit risk analysis is made by using an assessment tool, where the political risk rating is identical to the rating used by all Export Credit Agencies within the OECD. The commercial risk is assessed by analyzing a large number of parameters, which may affect the level of the future commercial credit risk exposure. The output from the assessment tool for the credit rating also include an internal pricing of the risk. This is expressed as a risk margin per annum over funding cost. The reference pricing for political and commercial risk, on which the tool is based, is reviewed using information from Export Credit Agencies and prevailing pricing in the bank loan market for structured financed deals. The objective is that the internally set risk margin shall reflect the assessed risk and that the pricing is as close as possible to the current market pricing. A reassessment of the credit rating for each customer finance facility is made on a regular basis.

Risk provisions related to customer finance risk exposures are only made upon events which occur after the financing arrangement has become effective and which are expected to have a significant adverse impact on the borrower's ability and/or willingness to service the outstanding debt. These

events can be political (normally outside the control of the borrower) or commercial, e.g. a borrower's deteriorated creditworthiness.

As of December 31, 2010, Ericsson's total outstanding exposure related to customer finance was SEK 4,725 (3,046) million. As of December 31, 2010, Ericsson also had unutilized customer finance commitments of SEK 3,282 (3,027) million. During 2010 Ericsson transferred certain customer finance assets to third parties, and continues to recognize a part of such assets corresponding to the extent of its continuing involvement. The total carrying amount of the original assets transferred is SEK 3,808 (560) million, the amount of the assets that Ericsson continues to recognize is SEK 190 (28) million, and the carrying amount of the associated liabilities is SEK 190 (28) million. Customer finance is arranged for infrastructure projects in different geographic markets and for a large number of customers. As of December 31, 2010, there were a total of 74 (68) customer finance arrangements originated by or guaranteed by Ericsson. The five largest facilities represented 44 (43) percent of the total credit exposure.

Of Ericsson's total outstanding customer finance exposure as of December 31, 2010, 66 (57) percent was related to Central and Eastern Europe, Middle East and Africa, 11 (15) percent to the Americas, 9 (14) percent to Western Europe, and 14 (14) percent to Asia Pacific.

The effect of risk provisions and reversals for customer finance affecting the income statement amounted to a net positive impact of SEK 331 million compared to a negative impact of SEK 480 million in 2009. Credit losses amounted to SEK 87 (67) million. A credit loss reported in 2005 was partly recovered in 2010 for the amount of SEK 136 million.

Security arrangements for customer finance facilities normally include pledges of equipment, pledges of certain assets belonging to the borrower and pledges of shares in the operating company. Restructuring efforts for cases of troubled debt may lead to temporary holdings of equity interests. If available, third-party risk coverage is as a rule arranged. "Third-party risk coverage" means that a financial payment guarantee covering the credit risk has been issued by a bank, an export credit agency or other financial institution. A credit risk transfer under a sub participation arrangement with a bank can also be arranged. In this case the entire credit risk and the funding is taken care of by the bank for the part that they cover. A credit risk cover from a third party may also be issued by an insurance company. During 2010, Ericsson has not taken possession of any collateral it holds as security or called on any other credit enhancement.

Information about guarantees related to customer finance is included in note C24, "Contingent Liabilities".

The table below summarizes Ericsson's outstanding customer finance as of December 31, 2010 and 2009.

OUTSTANDING CUSTOMER FINANCE		
	2010	2009
Total customer finance	4,725	3,046
Accrued interest	69	57
Less third-party risk coverage	-1,409	-382
Ericsson's risk exposure	3,385	2,721

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## C15 OTHER CURRENT RECEIVABLES

OTHER CURRENT RECEIVABLES		
	2010	2009
Prepaid expenses	2,369	2,403
Accrued revenues	1,850	1,538
Advance payments to suppliers	881	776
Derivatives with a positive value <sup>1)</sup>	3,042	1,760
Taxes	5,439	4,830
Other	3,565	3,839
<b>Total</b>	<b>17,146</b>	<b>15,146</b>

<sup>1)</sup> Also see Note C20 "Financial Risk Management and Financial Instruments"

## C16 EQUITY AND OTHER COMPREHENSIVE INCOME

### Capital stock 2010

Capital stock at December 31, 2010, consisted of the following:

CAPITAL STOCK		
Parent Company	Number of shares	Capital stock
Class A shares	261,755,983	1,309
Class B shares	3,011,595,752	15,058
<b>Total</b>	<b>3,273,351,735</b>	<b>16,367</b>

The capital stock of the Parent Company is divided into two classes: Class A shares (quota value SEK 5.00) and Class B shares (quota value SEK 5.00). Both classes have the same rights of participation in the net assets and earnings. Class A shares, however, are entitled to one vote per share while Class B shares are entitled to one tenth of one vote per share.

At December 31, 2010, the total number of treasury shares was 73,088,516 (78,978,533 in 2009 and 61,066,097 in 2008) Class B shares. Ericsson did not repurchase shares in 2010, in relation to the Stock Purchase Plan.

RECONCILIATION OF NUMBER OF SHARES		
	Number of shares	Capital stock
Number of shares Jan 1, 2010	3,273,351,735	16,367
Number of shares Dec 31, 2010	3,273,351,735	16,367

For further information about number of shares, see chapter Share information.

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### Dividend proposal

The Board of Directors will propose to the Annual General Meeting 2011 a dividend of SEK 2.25 per share (2.00 in 2010 and 1.85 in 2009).

### Additional paid in capital

Relates to payments made by owners and includes share premiums paid.

### Revaluation of other investments in shares and participations

The fair value reserve comprises the cumulative net change in the fair value of available-for-sale financial assets until the investments are derecognized or impaired.

### Cash flow hedges

The cash flow hedge reserve comprises the effective portion of the cumulative net change in the fair value of cash-flow-hedging instruments related to hedged transactions that have not yet occurred.

### Cumulative translation adjustments

The cumulative translation adjustments comprises all foreign currency differences arising from the translation of the financial statements of foreign operations, changes regarding revaluation of goodwill in local currency as well as from the translation of liabilities that hedge the Company's net investment in foreign subsidiaries.

### Retained earnings

Retained earnings, including net income for the year, comprise the earned profits of the Parent Company and its share of net income in subsidiaries, joint ventures and associated companies. Actuarial gains and losses related to pensions are included in retained earnings.

## EQUITY AND OTHER COMPREHENSIVE INCOME 2010

2010	Capital stock	Additional paid in capital	Revaluation of other investments in shares and participations	Cash flow hedges	Cumulative translation adjustments	Retained earnings	Stockholders' equity	Non-controlling interest (NCI)	Total equity
<b>January 1, 2010</b>	16,367	24,731	-4	78	663	98,035	139,870	1,157	141,027
<b>Net income</b>									
Group	-	-	-	-	-	12,503	12,503	89	12,592
Joint ventures and associated companies	-	-	-	-	-	-1,357	-1,357	-	-1,357
<b>Other comprehensive income</b>									
Actuarial gains and losses, and the effect of the asset ceiling, related to pensions									
Group	-	-	-	-	-	3,892	3,892	-	3,892
Joint ventures and associated companies	-	-	-	-	-	-27	-27	-	-27
Revaluation of other investments in shares and participations									
Fair value remeasurement									
Group	-	-	7	-	-	-	7	-	7
Joint ventures and associated companies	-	-	-	-	-	-	-	-	-
Cash flow hedges									
Gains/losses arising during the year									
Group	-	-	-	966	-	-	966	-	966
Joint ventures and associated companies	-	-	-	31	-	-	31	-	31
Reclassification adjustments for gains/losses included in profit or loss									
Group	-	-	-	-238 <sup>1)</sup>	-	-	-238	-	-238
Joint ventures and associated companies	-	-	-	-	-	-	-	-	-
Adjustments for amounts transferred to initial carrying amount of hedged items									
Group	-	-	-	-136	-	-	-136	-	-136
Joint ventures and associated companies	-	-	-	-	-	-	-	-	-
Changes in cumulative translation adjustments									
Group	-	-	-	-	-3,269 <sup>2)</sup>	-	-3,269	10	-3,259
Joint ventures and associated companies	-	-	-	-	-438	-	-438	-	-438
Tax on items relating to components of OCI <sup>3)</sup>									
Group	-	-	-3	-183	-101 <sup>4)</sup>	-833	-1,120	-	-1,120
Joint ventures and associated companies	-	-	-	-	-	-	-	-	-
<b>Total other comprehensive income</b>									
Group	-	-	4	440	-3,808	3,032	-332	10	-322
Joint ventures and associated companies	-	-	-	-	-	-	-	-	-
<b>Total comprehensive income</b>									
Group	-	-	4	440	-3,808	14,178	10,814	99	10,913
Joint ventures and associated companies	-	-	-	-	-	-	-	-	-
<b>Transactions with owners</b>									
Stock issue									
Group	-	-	-	-	-	-	-	-	-
Joint ventures and associated companies	-	-	-	-	-	52	52	-	52
Sale of own shares									
Stock Purchase Plan									
Group	-	-	-	-	-	762	762	-	762
Joint ventures and associated companies	-	-	-	-	-	-	-	-	-
Dividends paid									
Group	-	-	-	-	-	-6,391	-6,391 <sup>5)</sup>	-286	-6,677
Joint ventures and associated companies	-	-	-	-	-	-	-	708	708
Business combinations									
Group	-	-	-	-	-	-	-	-	-
Joint ventures and associated companies	-	-	-	-	-	-	-	-	-
<b>December 31, 2010</b>	<b>16,367</b>	<b>24,731</b>	<b>-</b>	<b>518</b>	<b>-3,145</b>	<b>106,636</b>	<b>145,106</b>	<b>1,679</b>	<b>146,785</b>

<sup>1)</sup> SEK 1,139 million is recognized in Net Sales, SEK -586 million is recognized in Cost of Sales and SEK -315 million is recognized in R&D expenses.

<sup>2)</sup> Changes in cumulative translation adjustments include changes regarding revaluation of goodwill in local currency of SEK -1,480 million (SEK -1,015 million in 2009, SEK 2,993 million in 2008), gain/loss from hedging activities of foreign entities, SEK 385 million (SEK 586 in 2009, SEK -660 million in 2008) and SEK 140 million (SEK 10 million in 2009, SEK 13 million in 2008) of realized gain/losses net from sold/liquidated companies.

<sup>3)</sup> For further disclosures, see note C8 "Taxes".

<sup>4)</sup> Deferred tax on gains/losses on hedges on investments in foreign entities.

<sup>5)</sup> Dividends paid per share amounted to SEK 2.25 (SEK 2.00 in 2009 and SEK 1.85 in 2008).

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EQUITY AND OTHER COMPREHENSIVE INCOME 2009										
	Capital stock	Additional paid in capital	Revaluation of other investments in shares and participations	Cash flow hedges	Cumulative translation adjustments	Retained earnings	Stockholders' equity	Non-controlling interest (NCI)	Total equity	
<b>January 1, 2009</b>	16,232	24,731	-1	-2,356	2,124	100,093	140,823	1,261	142,084	
<b>Net income</b>										
Group	-	-	-	-	-	9,685	9,685	455	10,140	
Joint ventures and associated companies	-	-	-	-	-	-6,013	-6,013	-	-6,013	
<b>Other comprehensive income</b>										
Actuarial gains and losses, and the effect of the asset ceiling, related to pensions										
Group	-	-	-	-	-	-633	-633	-	-633	
Joint ventures and associated companies	-	-	-	-	-	28	28	-	28	
Revaluation of other investments in shares and participations										
Fair value remeasurement										
Group	-	-	-2	-	-	-	-2	-	-2	
Joint ventures and associated companies	-	-	-	-	-	-	-	-	-	
Cash flow hedges										
Gains/losses arising during the year										
Group	-	-	-	665	-	-	665	-	665	
Joint ventures and associated companies	-	-	-	7	-	-	7	-	7	
Reclassification adjustments for gains/losses included in profit or loss										
Group	-	-	-	3,850	-	-	3,850	-	3,850	
Joint ventures and associated companies	-	-	-	-	-	-	-	-	-	
Adjustments for amounts transferred to initial carrying amount of hedged items										
Group	-	-	-	-1,029	-	-	-1,029	-	-1,029	
Joint ventures and associated companies	-	-	-	-	-	-	-	-	-	
Changes in cumulative translation adjustments										
Group	-	-	-	-	-1,013	-	-1,013	-54	-1,067	
Joint ventures and associated companies	-	-	-	-	-294	-	-294	-	-294	
Tax on items relating to components of OCI										
Group	-	-	-1	-1,059	-154	174	-1,040	-	-1,040	
Joint ventures and associated companies	-	-	-	-	-	-	-	-	-	
<b>Total other comprehensive income</b>										
Group	-	-	-3	2,434	-1,461	-431	539	-54	485	
Joint ventures and associated companies	-	-	-	-	-	-	-	-	-	
<b>Total comprehensive income</b>										
Group	-	-	-3	2,434	-1,461	3,241	4,211	401	4,612	
Joint ventures and associated companies	-	-	-	-	-	-	-	-	-	
<b>Transactions with owners</b>										
Stock issue										
Group	135	-	-	-	-	-	135	-	135	
Joint ventures and associated companies	-	-	-	-	-	75	75	-	75	
Sale of own shares										
Group	-	-	-	-	-	-135	-135	-	-135	
Joint ventures and associated companies	-	-	-	-	-	-	-	-	-	
Repurchase of own shares										
Stock Purchase and Stock Option Plans										
Group	-	-	-	-	-	658	658	-	658	
Joint ventures and associated companies	-	-	-	-	-	-	-	-	-	
Dividends paid										
Group	-	-	-	-	-	-5,897	-5,897	-421	-6,318	
Joint ventures and associated companies	-	-	-	-	-	-	-	-84	-84	
Business combinations										
Group	-	-	-	-	-	-	-	-	-	
Joint ventures and associated companies	-	-	-	-	-	-	-	-	-	
<b>December 31, 2009</b>	<b>16,367</b>	<b>24,731</b>	<b>-4</b>	<b>78</b>	<b>663</b>	<b>98,035</b>	<b>139,870</b>	<b>1,157</b>	<b>141,027</b>	

## EQUITY AND OTHER COMPREHENSIVE INCOME 2008

	Capital stock	Additional paid in capital	Revaluation of other investments in shares and participations	Cash flow hedges	Cumulative translation adjustments	Retained earnings	Stockholders' equity	Non-controlling interest (NCI)	Total equity
<b>January 1, 2008</b>	16,132	24,731	5	307	-6,345	99,282	134,112	940	135,052
<b>Net income</b>									
Group	-	-	-	-	-	11,564	11,564	394	11,958
Joint ventures and associated companies	-	-	-	-	-	-291	-291	-	-291
<b>Other comprehensive income</b>									
Actuarial gains and losses related to pensions									
Group	-	-	-	-	-	-4,019	-4,019	-	-4,019
Joint ventures and associated companies	-	-	-	-	-	4	4	-	4
Revaluation of other investments in shares and participations									
Fair value remeasurement									
Group	-	-	-6	-	-	-	-6	-	-6
Joint ventures and associated companies	-	-	-1	-	-	-	-1	-	-1
Cash flow hedges									
Gains/losses arising during the year									
Group	-	-	-	-5,116	-	-	-5,116	-	-5,116
Joint ventures and associated companies	-	-	-	36	-	-	36	-	36
Reclassification adjustments for gains/losses included in profit or loss									
Group	-	-	-	1,192	-	-	1,192	-	1,192
Adjustments for amounts transferred to initial carrying amount of hedged items									
Group	-	-	-	-	-	-	-	-	-
Changes in cumulative translation adjustments									
Group	-	-	-	-	7,081	-	7,081	233	7,314
Joint ventures and associated companies	-	-	-	-	1,214	-	1,214	-	1,214
Tax on items relating to components of OCI									
Group	-	-	1	1,225	174	930	2,330	-	2,330
<b>Total other comprehensive income</b>									
Group	-	-	-6	-2,663	8,469	-3,085	2,715	233	2,948
<b>Total comprehensive income</b>									
Group	-	-	-6	-2,663	8,469	8,188	13,988	627	14,615
<b>Transactions with owners</b>									
Stock issue									
Group	100	-	-	-	-	-	100	-	100
Sale of own shares									
Group	-	-	-	-	-	88	88	-	88
Repurchase of own shares									
Group	-	-	-	-	-	-100	-100	-	-100
Stock Purchase and Stock Option Plans									
Group	-	-	-	-	-	589	589	-	589
Joint ventures and associated companies	-	-	-	-	-	-	-	-	-
Dividends paid									
Group	-	-	-	-	-	-7,954	-7,954	-286	-8,240
Business combinations									
Group	-	-	-	-	-	-	-	-20	-20
<b>December 31, 2008</b>	16,232	24,731	-1	-2,356	2,124	100,093	140,823	1,261	142,084

## C17 POST-EMPLOYMENT BENEFITS

Ericsson sponsors a number of post-employment benefit plans throughout the Company, which are in line with market practice in each country. The year 2010 was characterized by the overall increase in discount rates, and a higher than expected return on plan assets. Consequently, the Company experienced a decrease in the net pension liability, and an actuarial gain.

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### Section One: Amount Recognized in the Consolidated Balance Sheet

AMOUNT RECOGNIZED IN THE CONSOLIDATED BALANCE SHEET						
	Sweden	UK	Euro zone	US	Other	Total
<b>2010</b>						
Defined benefit obligation (DBO) <sup>1)</sup>	14,980	5,437	3,163	2,693	2,437	28,710
Fair value of plan assets <sup>2)</sup>	12,389	5,691	2,514	2,048	2,793	25,435
Deficit/Surplus (+/-)	2,591	-254	649	645	-356	3,275
Unrecognized past service costs	-	-	5	-	-60	-55
Closing balance	2,591	-254	654	645	-416	3,220
Plans with net surplus excluding asset ceiling <sup>3)</sup>	-	290	643	-	939	1,872
<b>Provision for post-employment benefits <sup>4)</sup></b>	<b>2,591</b>	<b>36</b>	<b>1,297</b>	<b>645</b>	<b>523</b>	<b>5,092</b>
<b>2009</b>						
Defined benefit obligation (DBO) <sup>1)</sup>	16,150	5,688	3,840	2,781	2,258	30,717
Fair value of plan assets <sup>2)</sup>	10,927	5,336	2,406	1,974	2,563	23,206
Deficit/Surplus (+/-)	5,223	352	1,434	807	-305	7,511
Unrecognized past service costs	-	-	-14	-	-79	-93
Closing balance	5,223	352	1,420	807	-384	7,418
Plans with net surplus excluding asset ceiling <sup>3)</sup>	-	190	29	-	896	1,115
<b>Provision for post-employment benefits <sup>4)</sup></b>	<b>5,223</b>	<b>542</b>	<b>1,449</b>	<b>807</b>	<b>512</b>	<b>8,533</b>
<sup>1)</sup> For details on DBO, please refer to section three of this note.						
<sup>2)</sup> For details on plan assets, please refer to section four of this note.						
<sup>3)</sup> Plans with a net surplus, i.e. where plan assets exceed DBO, are reported as Other financial assets, non-current (please see Note C12 "Financial Assets").						
<sup>4)</sup> Plans with net liabilities are reported in the balance sheet as Post-employment benefits, non-current.						

## Section Two: Total Pension Expenses Recognized in the Income Statement

The expenses for post-employment benefits within Ericsson are distributed between defined contribution plans and defined benefit plans, with a trend toward defined contribution plans.

PENSION COSTS FOR DEFINED CONTRIBUTION PLANS AND DEFINED BENEFIT PLANS						
	Sweden	UK	Euro zone	US	Other	Total
<b>2010</b>						
Pension cost for defined contribution plans	1,037	95	433	244	192	2,001
Pension cost for defined benefit plans <sup>1)</sup>	762	153	159	30	-14	1,090
<b>Total</b>	<b>1,799</b>	<b>248</b>	<b>592</b>	<b>274</b>	<b>178</b>	<b>3,091</b>
Total pension cost expressed as a percentage of wages and salaries						7.1%
<b>2009</b>						
Pension cost for defined contribution plans	1,686	73	385	124	185	2,453
Pension cost for defined benefit plans <sup>1)</sup>	674	66	202	49	144	1,135
<b>Total</b>	<b>2,360</b>	<b>139</b>	<b>587</b>	<b>173</b>	<b>329</b>	<b>3,588</b>
Total pension cost expressed as a percentage of wages and salaries						8.7%
<b>2008</b>						
Pension cost for defined contribution plans	1,607	40	345	114	72	2,178
Pension cost for defined benefit plans <sup>1)</sup>	625	156	179	35	33	1,028
<b>Total</b>	<b>2,232</b>	<b>196</b>	<b>524</b>	<b>149</b>	<b>105</b>	<b>3,206</b>
Total pension cost expressed as a percentage of wages and salaries						8.3%

<sup>1)</sup> See cost details in table below.

COST DETAILS FOR DEFINED BENEFIT PLANS RECOGNIZED IN THE INCOME STATEMENT						
	Sweden	UK	Euro zone	US	Other	Total
<b>2010</b>						
Current service cost	631	161	129	32	140	1,093
Interest cost	643	314	182	159	172	1,470
Expected return on plan assets	-511	-322	-141	-130	-253	-1,357
Past service cost	-	-	33	-	9	42
Curtailments, settlements and other	-1	-	-44	-31	-82	-158
<b>Total</b>	<b>762</b>	<b>153</b>	<b>159</b>	<b>30</b>	<b>-14</b>	<b>1,090</b>
<b>2009</b>						
Current service cost	594	205	138	35	131	1,103
Interest cost	590	284	194	171	155	1,394
Expected return on plan assets	-366	-270	-125	-156	-208	-1,125
Past service cost	-	-	5	-	25	30
Curtailments, settlements and other	-144	-153	-10	-1	41	-267
<b>Total</b>	<b>674</b>	<b>66</b>	<b>202</b>	<b>49</b>	<b>144</b>	<b>1,135</b>
<b>2008</b>						
Current service cost	539	186	141	29	122	1,017
Interest cost	549	299	160	142	133	1,283
Expected return on plan assets	-431	-310	-143	-137	-201	-1,222
Past service cost	-	-	11	-	8	19
Curtailments, settlements and other	-32	-19	10	1	-29	-69
<b>Total</b>	<b>625</b>	<b>156</b>	<b>179</b>	<b>35</b>	<b>33</b>	<b>1,028</b>

## Sections three to six focus on the defined benefit plans

### Section Three: Change in the Defined Benefit Obligation, DBO

The DBO is the gross pension liability.

CHANGE IN THE DEFINED BENEFIT OBLIGATION						
	Sweden	UK	Euro zone	US	Other	Total
<b>2010</b>						
Opening balance	16,150	5,688	3,840	2,781	2,258	30,717
Current service cost	631	161	129	32	140	1,093
Interest cost	643	314	182	159	172	1,470
Employee contributions	–	11	4	–	5	20
Pension payments	–159	–99	–82	–169	–194	–703
Actuarial gain/loss (–/+)	–2,285	–157	–569	46	104	–2,861
Settlements	–	–	–14	–	–104	–118
Curtailments	–1	–	–30	–38	–93	–162
Business combinations <sup>1)</sup>	–	–	74	–	148	222
Other	1	–20	95	30	8	114
Translation difference	–	–461	–466	–148	–7	–1,082
<b>Closing balance</b>	<b>14,980</b>	<b>5,437</b>	<b>3,163</b>	<b>2,693</b>	<b>2,437</b>	<b>28,710</b>
<i>Of which medical benefit schemes</i>	–	–	–	594	–	594
<b>2009</b>						
Opening balance	14,866	4,867	3,557	2,789	1,931	28,010
Current service cost	594	205	138	35	131	1,103
Interest cost	590	284	194	171	155	1,394
Employee contributions	–	14	4	–	12	30
Pension payments	–107	–108	–90	–172	–142	–619
Actuarial gain/loss (–/+)	351	543	204	143	–120	1,121
Settlements	–	–	–	–	–1	–1
Curtailments	–144	–153	–14	–	–	–311
Business combinations	–	–	–	–	–13	–13
Other	–	–13	74	26	40	127
Translation difference	–	49	–227	–211	265	–124
<b>Closing balance</b>	<b>16,150</b>	<b>5,688</b>	<b>3,840</b>	<b>2,781</b>	<b>2,258</b>	<b>30,717</b>
<i>Of which medical benefit schemes</i>	–	–	–	631	–	631

<sup>1)</sup> Business combinations in 2010 are related to the acquisition of LG-Nortel and Pride Spa.

### FUNDED STATUS

The funded ratio, defined as total plan assets in relation to the total defined benefit obligation (DBO), was 88.6 percent in 2010, compared to 75.5 percent in 2009.

The following table summarizes the value of the DBO per geographical area based on whether there are plan assets wholly or partially funding each pension plan.

VALUE OF THE DEFINED BENEFIT OBLIGATION						
	Sweden	UK	Euro zone	US	Other	Total
<b>2010</b>						
DBO, closing balance	14,980	5,437	3,163	2,693	2,437	28,710
<i>Of which partially or fully funded</i>	14,527	5,437	2,086	2,072	1,998	26,120
<i>Of which unfunded</i>	453	–	1,077	621	439	2,590
<b>2009</b>						
DBO, closing balance	16,150	5,688	3,840	2,781	2,258	30,717
<i>Of which partially or fully funded</i>	15,660	5,688	2,659	2,119	1,813	27,939
<i>Of which unfunded</i>	490	–	1,181	662	445	2,778

## Section Four: Change in the Plan Assets

A majority of pension plans have assets managed by local Pension Trust funds, whose sole purpose is to secure the future pension payments to the employees.

CHANGE IN THE PLAN ASSETS						
	Sweden	UK	Euro zone	US	Other	Total
<b>2010</b>						
Opening balance	10,927	5,336	2,406	1,974	2,563	23,206
Expected return on plan assets	511	322	141	130	253	1,357
Actuarial gain/loss (+/-)	222	265	105	103	-42	653
Employer contributions	729	343	173	58	93	1,396
Employee contributions	-	11	3	-	5	19
Pension payments	-	-119	-43	-103	-119	-384
Settlements	-	-	-	-	-104	-104
Business combinations <sup>1)</sup>	-	-	-	-	164	164
Other	-	-	53	-	-4	49
Translation difference	-	-467	-324	-114	-16	-921
<b>Closing balance</b>	<b>12,389</b>	<b>5,691</b>	<b>2,514</b>	<b>2,048</b>	<b>2,793</b>	<b>25,435</b>
<b>2009</b>						
Opening balance	8,181	4,407	2,330	2,289	1,830	19,037
Expected return on plan assets	366	270	125	156	208	1,125
Actuarial gain/loss (+/-)	1,076	342	-136	-253	162	1,191
Employer contributions	1,305	387	213	49	122	2,076
Employee contributions	-	14	4	-	12	30
Pension payments	-	-122	-75	-115	-125	-437
Settlements	-	-	-	-	-	-
Business combinations	-	-	-1	-	-11	-12
Other	-1	-	90	-	-2	87
Translation difference	-	38	-144	-152	367	109
<b>Closing balance</b>	<b>10,927</b>	<b>5,336</b>	<b>2,406</b>	<b>1,974</b>	<b>2,563</b>	<b>23,206</b>

<sup>1)</sup> Business combinations in 2010 are related to the acquisition of LG-Nortel.

Refunds from or reductions in future contributions to plan assets are recognized if they are available and firmly decided.

ACTUAL RETURN ON PLAN ASSETS						
	Sweden	UK	Euro zone	US	Other	Total
2010	733	587	246	233	211	2,010
2009	1,441	612	-10	-97	370	2,316

ASSET ALLOCATION						
	Sweden	UK	Euro zone	US	Other	Total
<b>2010</b>						
Equities	4,326	2,028	1,277	1,134	458	9,223
Interest-bearing securities	7,508	3,207	970	870	1,837	14,392
Other	555	456	267	44	498	1,820
<b>Total</b>	<b>12,389</b>	<b>5,691</b>	<b>2,514</b>	<b>2,048</b>	<b>2,793</b>	<b>25,435</b>
<i>Of which Ericsson securities</i>	-	-	-	-	-	-
<b>2009</b>						
Equities	3,824	1,825	1,094	1,069	394	8,063
Interest-bearing securities	7,103	2,801	1,051	741	1,747	13,586
Other	-	710	261	164	422	1,557
<b>Total</b>	<b>10,927</b>	<b>5,336</b>	<b>2,406</b>	<b>1,974</b>	<b>2,563</b>	<b>23,206</b>
<i>Of which Ericsson securities</i>	-	-	-	-	-	-

Equity instruments amount to 36 (35) percent of the total assets, interest bearing instruments amount to 57 (59) percent of the total assets, and other instruments amount to 7 (6) percent of the total assets.

The contributions to the defined benefit plans for the upcoming year will be based on the development of the financial markets as well as on the growth of the pension liability, and how these developments affect the target funding ratio of the Company.

## Section Five: Actuarial Gains and Losses Reported Directly in Other Comprehensive Income

ACTUARIAL GAINS AND LOSSES REPORTED DIRECTLY IN OTHER COMPREHENSIVE INCOME		
	2010	2009
Cumulative gain/loss (-/+) at beginning of year	5,326	5,402
Recognized gain/loss (-/+) during the year	-3,514	-70
Translation difference	37	-6
Cumulative gain/loss (-/+) at end of year	1,849	5,326

Since January 1, 2006, Ericsson applies immediate recognition of actuarial gains and losses directly in the statement of Other Comprehensive Income. Actuarial gains and losses may arise from either a change in actuarial assumptions or in deviations between estimated and actual outcome.

Actuarial gains/losses (-/+) related to IFRIC 14 "The Limit on a Defined Benefit Asset, Minimum Funding Requirements and their Interaction", had an effect on other comprehensive income amounting to SEK 29 million in 2010 (SEK 662 million in 2009). For further details, see Note C12, "Financial Assets, Non-Current".

MULTI-YEAR SUMMARY					
	2010	2009	2008	2007	2006
Plan assets	25,435	23,206	19,037	20,236	18,395
DBO	28,710	30,717	28,010	25,226	24,612
Deficit/Surplus (-/+)	-3,275	-7,511	-8,973	-4,990	-6,217
<b>Actuarial gains and losses (-/+)</b>					
Experience-based adjustments of pension obligations	177	310	57	-76	232
Experience-based adjustments of plan assets	-653	-1,191	2,952	59	-358

## Section Six: Actuarial Assumptions

ACTUARIAL ASSUMPTIONS					
	Sweden	UK	Euro zone <sup>1)</sup>	US <sup>1)</sup>	Other <sup>1)</sup>
<b>2010</b>					
Discount rate	4.80%	5.40%	5.59%	5.73%	8.55%
Expected return on plan assets for the year	4.55%	6.00%	6.27%	7.00%	9.91%
Future salary increases	3.25%	4.50%	2.91%	4.50%	5.70%
Inflation	2.00%	3.50%	2.00%	2.50%	3.50%
Health care cost inflation, current year	n/a	n/a	n/a	9.00%	n/a
Life expectancy after age 65 in years, males	21	22	22	18	19
Life expectancy after age 65 in years, females	24	24	25	20	22
<b>2009</b>					
Discount rate	4.00%	5.60%	5.26%	5.89%	8.91%
Expected return on plan assets for the year	4.55%	6.00%	6.31%	7.00%	9.34%
Future salary increases	3.25%	4.90%	2.92%	4.50%	6.77%
Inflation	2.00%	3.60%	2.17%	2.50%	3.80%
Health care cost inflation, current year	n/a	n/a	n/a	9.00%	n/a
Life expectancy after age 65 in years, males	21	21	22	18	18
Life expectancy after age 65 in years, females	24	24	25	20	22

<sup>1)</sup> Weighted average.

- > Actuarial assumptions are assessed on a quarterly basis.
- > The discount rate for each country is determined by reference to market yields on high-quality corporate bonds.
- > The overall expected long-term return on plan assets is a weighted average of each asset category's expected rate of return. The expected return on interest-bearing investments is set in line with each country's market yield. Expected return on equities is derived from each country's risk free rate with the addition of a risk premium.
- > Salary increases are partially affected by fluctuations in inflation rate.
- > The net periodic pension cost and the present value of the DBO for current and former employees are calculated using the Projected Unit Credit (PUC) actuarial cost method, where the objective is to spread the cost of each employee's benefits over the period that the employee works for the Company.

### SENSITIVITY ANALYSIS FOR MEDICAL BENEFIT SCHEMES

The effect (in SEK million) of a one percentage point change in the assumed trend rate of medical cost would have the following effect:

SENSITIVITY ANALYSIS FOR MEDICAL BENEFIT SCHEMES		
	1 percent increase	1 percent decrease
Net periodic post-employment medical cost	3	-3
Accumulated post-employment benefit obligation for medical costs	54	-46

## Section Seven: Information on issues affecting the Net Pension Liability for the year

### SWEDEN

In 2010, The Swedish defined benefit obligation has been calculated using a discount rate based on yields of covered bonds, which is higher than a discount rate based on yields of government bonds. The Swedish covered bonds are considered high quality bonds, mainly AAA-rated, as they are secured with assets, and the market for covered bonds is considered deep and liquid, thereby meeting IAS19 requirements.

As before, Ericsson has secured the disability- and survivors' pension part of the ITP Plan through an insurance solution with the insurance company Alecta. Although this part of the plan is classified as a multi-employer defined benefit plan, it has not been possible for Ericsson to get sufficient information to apply defined benefit accounting, and therefore, it has been accounted for as a defined contribution plan.

Alecta has a collective funding ratio which is a buffer for its insurance commitments to protect against fluctuations in investment return and insurance risks. Alecta's target ratio is 140 percent and reflects the fair value of Alecta's plan assets as a percentage of plan commitments, then measured in accordance with Alecta's actuarial assumptions, which are different from those in IAS 19. Alecta's collective funding ratio was 146 in 2010 (141 in 2009).

## C18 PROVISIONS

PROVISIONS	Warranty	Restructuring	Project related	Other	Total
<b>2010</b>					
Opening balance	2,533	4,299	1,694	3,905	12,431
Additions	1,743	2,640	1,285	1,046	6,714
Reversal of excess amounts	-297	-335	-353	-869	-1,854
<i>Negative effect on Income Statement</i>					4,860
Cash out/Utilization	-1,466	-3,261	-1,547	-880	-7,154
Balances regarding divested/acquired businesses	182	-	28	-	210
Reclassification	-182	176	62	-200	-144
Translation differences	-44	-289	-64	-62	-459
<b>Closing balance</b>	<b>2,469</b>	<b>3,230</b>	<b>1,105</b>	<b>2,940</b>	<b>9,744</b>
<b>2009</b>					
Opening balance	1,931	3,830	3,794	4,795	14,350
Additions	2,141	4,920	1,952	2,129	11,142
Reversal of excess amounts	-171	-210	-451	-915	-1,747
<i>Negative effect on Income Statement</i>					9,395
Cash out/Utilization	-1,427	-4,248	-3,459	-1,595	-10,729
Balances regarding divested/acquired businesses	96	-	-	16	112
Reclassification	19	146	-128	-595	-558
Translation differences	-56	-139	-14	70	-139
<b>Closing balance</b>	<b>2,533</b>	<b>4,299</b>	<b>1,694</b>	<b>3,905</b>	<b>12,431</b>

Provisions will fluctuate over time depending on business mix, market mix as well as technology shifts. Risk assessment in the ongoing business is performed monthly to identify the need for new additions and reversals. Management uses its best judgment to estimate provisions based on this assessment. In certain circumstances, provisions are no longer required due to more favorable outcomes than anticipated, which affect the provisions balance as a reversal. In other cases the outcome can be negative, and if so, a charge is recorded in the income statement.

For 2010, new or additional provisions amounting to SEK 6.7 billion were made, and SEK 1.9 billion were reversed. The actual cash outlays for 2010 was SEK 7.2 billion compared with the estimated SEK 8 billion. The expected cash outlays in 2011 is approximately SEK 8 billion.

Of the total provisions, SEK 353 (461) million are classified as non-current. For more information, see Note C1, "Significant Accounting Policies" and Note C2, "Critical Accounting Estimates and Judgments".

### Warranty provisions

Warranty provisions are based on historic quality rates for established products as well as estimates regarding quality rates for new products and costs to remedy the various types of faults predicted. The actual cash outlays for 2010 was SEK 1.5 billion and in line with the expected SEK 2 billion. Provisions amounting to SEK 1.7 billion were made and due to more favorable outcomes in certain cases reversals of SEK 0.3 billion were made. The cash outlays of warranty provisions during year 2011 is estimated to approximately SEK 2 billion.

### Restructuring provisions

The cost reduction program initiated in the first quarter 2009 was completed by the second quarter 2010. The total restructuring charges for the program was SEK 15.5 billion of which SEK 6.9 billion were provided for as restructuring provisions. In the second half of the year the cost reduction continued and primarily relates to continuous efficiency activities in service delivery and development, transformation in managed services contracts and product rationalization. In 2010 SEK 2.6 billion (4.9) in provision were made. The cash outlays were 3.3 billion (4.2) for the full year and SEK 0.7 billion were related to restructuring programs before 2009. The cash outlay for 2011 is estimated to approximately SEK 3 billion.

### Project related provisions

Project provisions relate to estimated losses on onerous contracts, including probable contractual penalties. The cash outlays of project related provisions were SEK 1.5 billion and in line with the estimated SEK 1 billion. Provisions amounting to SEK 1.3 billion were made and SEK 0.4 billion were reversed due to a more favorable outcome than expected. The cash outlays for 2011 is estimated to be approximately SEK 1 billion.

### Other provisions

Other provisions include provisions for tax issues, litigations, supplier claims, and other. The cash outlays was SEK 0.9 billion in 2010 compared to the estimate of SEK 2 billion. During 2010, new provisions amounting to SEK 1.0 billion were made and SEK 0.9 billion were reversed during the year due to a more favorable outcome. For 2011, the estimated cash outlays is approximately SEK 2 billion.

## C19 INTEREST-BEARING LIABILITIES

As of December 31, 2010, Ericsson's outstanding interest-bearing liabilities were SEK 30.8 (32.1) billion.

INTEREST-BEARING LIABILITIES		
	2010	2009
<b>Borrowings, current</b>		
Current part of non-current borrowings <sup>1)</sup>	760	684
Other current borrowings	3,048	1,440
<b>Total current borrowings</b>	<b>3,808</b>	<b>2,124</b>
<b>Borrowings, non-current</b>		
Notes and bond loans	20,646	23,801
Other borrowings, non-current	6,309	6,195
<b>Total non-current interest-bearing liabilities</b>	<b>26,955</b>	<b>29,996</b>
<b>Total interest-bearing liabilities</b>	<b>30,763</b>	<b>32,120</b>

<sup>1)</sup> Including notes and bond loans of SEK 0 (0) million.

All outstanding notes and bond loans are issued by the Parent Company under its Euro Medium-Term Note (EMTN) program. Bonds issued at a fixed interest rate are swapped to a floating interest rate using interest rate

swaps, resulting in a weighted average interest rate of 2.65 (2.88) percent at December 31, 2010. These bonds are revalued based on changes in benchmark interest rates according to the fair value hedge methodology stipulated in IAS 39.

On December 23, 2010, the USD 625 million bilateral loan with Swedish Export Credit Corporation (SEK) was renegotiated to reduce interest expense and to prolong the maturity profile. USD 325 million was amortized. The remaining USD 300 million will mature in 2016 according to the original plan. At the same time a new bilateral bond of USD 170 million was issued with maturity 2020. Consequently gross cash was reduced by USD 155 million. The new bond is not guaranteed by EKN (The Swedish Export Credit Guarantee Board).

In 2008 Ericsson signed a seven year loan of SEK 4.0 billion with the European Investment Bank. The loan supports Ericsson's R&D activities to develop the next generation of mobile broadband technology at sites in Kista, Gothenburg and Linköping in Sweden.

NOTES AND BOND LOANS						
Issued-maturing	Nominal amount	Coupon	Currency	Book value (SEK m.)	Maturity date (yy-mm-dd)	Unrealized hedge gain/loss (incl. in book value)
2004-2012	450	2.420%	SEK	450	12-12-07 <sup>2)</sup>	
2007-2012	1,000	5.100%	SEK	1,035	12-06-29	-35
2007-2012	2,000	2.200%	SEK	2,000	12-06-29 <sup>3)</sup>	
2007-2014	375	1.314%	EUR	3,383	14-06-27 <sup>4)</sup>	
2007-2017	500	5.380%	EUR	5,059 <sup>1)</sup>	17-06-27	-571
2009-2013	600	5.000%	EUR	5,521 <sup>1)</sup>	13-06-24	-129
2009-2016	300	3.35281%	USD	2,041	16-06-23 <sup>5)</sup>	
2010-2020	170	2.69281%	USD	1,157	20-12-23 <sup>6)</sup>	
<b>Total</b>				<b>20,646</b>		<b>-735</b>

<sup>1)</sup> Interest rate swaps are designated as fair value hedges.

<sup>2)</sup> Next contractual repricing date 2011-06-03 (semi annual).

<sup>3)</sup> Next contractual repricing date 2011-03-25 (quarterly).

<sup>4)</sup> Next contractual repricing date 2011-03-24 (quarterly).

<sup>5)</sup> Next contractual repricing date 2011-03-21 (quarterly).

<sup>6)</sup> Next contractual repricing date 2011-03-18 (quarterly).

ION

## C20 FINANCIAL RISK MANAGEMENT AND FINANCIAL INSTRUMENTS

Ericsson's financial risk management is governed by a policy approved by the Board of Directors. The Finance Committee of the Board of Directors is responsible for overseeing the capital structure and financial management of the Company and approving certain matters (such as acquisitions, investments, customer finance commitments, guarantees and borrowing) and is continuously monitoring the exposure to financial risks.

Ericsson defines its managed capital as the total Company equity. For Ericsson, a robust financial position with a strong equity ratio, investment grade rating, low leverage and ample liquidity is deemed important. This provides financial flexibility and independence to operate and manage variations in working capital needs as well as to capitalize on business opportunities.

Ericsson's overall capital structure should support the financial targets: to grow faster than the market, deliver best-in-class margins and generate a healthy cash flow. The capital structure is managed by balancing equity, debt financing and liquidity in such a way that the Company secure funding of operations at a reasonable cost of capital. Regular borrowings are complemented with committed credit facilities to give additional flexibility to manage unforeseen funding needs. Ericsson strive to finance growth, normal capital expenditures and dividends to shareholders by generating sufficient positive cash flows from operating activities.

Ericsson's capital objectives are:

- > An equity ratio above 40 percent.
- > A cash conversion rate above 70 percent.
- > To maintain a positive net cash position.
- > To maintain a solid investment grade rating by Moody's and Standard & Poor's.

CAPITAL OBJECTIVES RELATED INFORMATION		
	2010	2009
Capital (SEK billion)	147	141
Equity ratio (percent)	52	52
Cash conversion rate (percent)	112	117
Positive net cash (SEK billion)	51.3	36.1
<b>Credit rating</b>		
Moody's	Baa1	Baa1
Standard & Poor's	BBB+	BBB+

Ericsson has a treasury function with the principal role to ensure that appropriate financing is in place through loans and committed credit facilities, to actively manage the Company's liquidity as well as financial assets and liabilities, and to manage and control financial risk exposures in a manner consistent with underlying business risks and financial policies. Hedging activities, cash management and insurance management are largely centralized to the treasury function in Stockholm.

Ericsson also has a customer finance function with the main objective to find suitable third-party financing solutions for customers and to minimize recourse to Ericsson. To the extent customer loans are not provided directly by banks, the Parent Company provides or guarantees vendor credits. The customer finance function monitors the exposure from outstanding vendor credits and credit commitments.

Ericsson classifies financial risks as:

- > Foreign exchange risk
- > Interest rate risk
- > Credit risk
- > Liquidity and refinancing risk
- > Market price risk in own and other equity instruments.

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The Board of Directors has established risk limits for defined exposures to foreign exchange and interest rate risks as well as to political risks in certain countries.

For further information about accounting policies, please see Note C1, "Significant Accounting Policies".

### Foreign exchange risk

Ericsson is a global company with sales mainly outside Sweden. Revenues and costs are to a large extent in currencies other than SEK and therefore the financial results of the Company are impacted by currency fluctuations.

Ericsson reports the financial accounts in SEK and movements in exchange rates between currencies will affect:

- > Specific line items such as Net sales and Operating income.
- > The comparability of our results between periods.
- > The carrying value of assets and liabilities.
- > Reported cash flows.

Net sales and Operating Income are affected by changes in foreign exchange rates from two different kinds of exposures, translation exposure and transaction exposure. In the Operating Income we are primarily exposed to transaction exposure which is partially addressed by hedging.

CURRENCY EXPOSURE				
Exposure currency	Translation exposure	Transaction exposure	Net exposure	Net exposure, percent of total
<b>Net sales</b>				
USD	46.6	40.8	87.4	43%
EUR	27.4	10.5	37.9	19%
CNY	13.5	-0.3	13.2	6%
JPY	8.8	0.6	9.4	5%
INR	8.3	-1.1	7.2	4%
GBP	7.8	-1.5	6.3	3%
BRL	5.9	-0.2	5.7	3%
SEK	41.7	-37.6	4.1	2%
Other	42.2	-11.2	31.0	15%
<b>Pre-hedge total</b>	<b>202.2</b>	<b>0.0</b>	<b>202.2</b>	<b>100%</b>
Hedge			1.1	
<b>Total Net sales</b>			<b>203.3</b>	
<b>Net cost</b>				
USD	-45.9	-14.7	-60.6	33%
SEK	-32.8	-15.3	-48.1	26%
EUR	-25.8	-4.5	-30.3	16%
CNY	-12.8	1.1	-11.7	6%
INR	-9.0	3.6	-5.4	3%
BRL	-5.9	0.7	-5.2	3%
JPY	-8.4	4.3	-4.1	2%
GBP	-7.5	6.8	-0.7	0%
Other	-37.9	18.0	-19.9	11%
<b>Pre-hedge total</b>	<b>-186.0</b>	<b>0.0</b>	<b>-186.0</b>	<b>100%</b>
Hedge			-0.8	
<b>Total Net cost</b>			<b>-186.8</b>	
<b>Operating income</b>				<b>16.5</b>

### TRANSLATION EXPOSURE

Translation exposure relates to Sales and Cost of Sales in foreign entities when translated into SEK upon consolidation. These exposures can not be addressed by hedging, but as the Income Statement is translated using average rate, the impact of volatility in foreign currency rates is reduced.

## TRANSACTION EXPOSURE

Transaction exposure relates to Sales and Cost of sales in non-reporting currencies in individual group companies. Foreign exchange risk is as far as possible concentrated to Swedish group companies, primarily Ericsson AB. Sales to foreign subsidiaries are normally denominated in the functional currency of the receiving entity, and export sales from Sweden to external customers are normally denominated in USD or other foreign currency. In order to limit the exposure toward exchange rate fluctuations on future revenues and costs, committed and forecasted future sales and purchases in major currencies are hedged, for the coming 6–12 months.

According to Company policy, transaction exposure in subsidiaries' balance sheets (i.e. trade receivables and payables and customer finance receivables) should be fully hedged, except for non-tradable currencies. Group Treasury has a mandate to leave selected transaction exposures in subsidiaries' balance sheets unhedged up to an aggregate Value at Risk (VaR) of SEK 20 million, given a confidence level of 99 percent and a 1-day horizon.

Foreign exchange exposures in balance sheet items are hedged through offsetting balances or derivatives.

As of December 31, 2010, outstanding foreign exchange derivatives hedging transaction exposures had a net market value of SEK 0.6 (0.3) billion. The market value is partly deferred in the hedge reserve in OCI to offset the gains/losses on hedged future sales in foreign currency.

## Cash flow hedges

The purpose of hedging forecasted revenues and costs is to reduce volatility in the income statement. Hedging is done by selling or buying foreign currencies against the functional currency of the hedging entity using FX forwards.

Hedging is done based on a rolling 12-month exposure forecast. Ericsson uses a layered hedging approach, where the closest quarters are hedged to a higher degree than later quarters. Each consecutive quarter is hereby hedged on several occasions and is covered by an aggregate of hedging contracts initiated at various points in time, which supports the objective of reducing volatility in the income statement from changes in foreign exchange rates.

## TRANSLATION EXPOSURE IN NET ASSETS

Ericsson has many subsidiaries operating outside Sweden with other functional currencies than SEK. The results and net assets of such companies are exposed to exchange rate fluctuations, which affect the consolidated income statement and balance sheet when translated to SEK. Translation risk related to forecasted results from foreign operations can not be hedged, but net assets can be addressed by hedging.

Translation exposure in foreign subsidiaries is hedged according to the following policy established by the Board of Directors:

Translation risk related to net assets in foreign subsidiaries is hedged up to 20 percent in selected companies. The translation differences reported in OCI during 2010 were negative, SEK 3.7 billion, including hedging gain of SEK 0.4 billion.

## Interest rate risk

Ericsson is exposed to interest rate risk through market value fluctuations in certain balance sheet items and through changes in interest revenues and expenses. The net cash position was SEK 51.3 (36.1) billion at the end of 2010, consisting of cash, cash equivalents and short-term investments of SEK 87.2 (76.7) billion and interest-bearing liabilities and post-employment benefits of SEK 35.9 (40.7) billion.

Ericsson manages the interest rate risk by (i) matching fixed and floating interest rates in interest-bearing balance sheet items and (ii) avoiding significant fixed interest rate exposure in Ericsson's net cash position. The policy is that interest-bearing assets shall have an average interest duration between 10 and 14 months and interest-bearing liabilities an average

interest duration shorter than 6 months, taking derivative instruments into consideration. Treasury has a mandate to deviate from the asset management benchmark given by the Board and take FX positions up to an aggregate risk of VaR SEK 30 million given a confidence level of 99 percent and a 1-day horizon.

As of December 31, 2010, 97 (88) percent of Ericsson's interest-bearing liabilities and 90 (61) percent of Ericsson's interest-bearing assets had floating interest rates, i.e. interest periods of less than 12 months.

When managing the interest rate exposure, Ericsson uses derivative instruments, such as interest rate swaps. Derivative instruments used for converting fixed rate debt into floating rate debt are designated as fair value hedges.

## Fair value hedges

The purpose of fair value hedges is to hedge the variability in the fair value of fixed-rate debt (issued bonds) from changes in the relevant benchmark yield curve for its entire term by converting fixed interest payments to a floating rate (e.g. STIBOR or LIBOR) by using interest rate swaps (IRS). The credit risk/spread is not hedged.

The fixed leg of the IRS is matched against the cash flows of the hedged bond. Hereby the fixed-rate bond/debt is converted into a floating-rate debt in accordance with the policy.

OUTSTANDING DERIVATIVES <sup>1)</sup>				
Fair value	2010		2009	
	Asset	Liability	Asset	Liability
<b>Currency derivatives</b>				
Maturity within 3 months	581	1,086	580	500
Maturity between 3 and 12 months	945	505	910	423
Maturity 1 to 3 years	2	21	90	44
Maturity 3 to 5 years	–	–	84	–
Maturity more than 5 years	–	–	3	–
<b>Total currency derivatives</b>	<b>1,528</b>	<b>1,613 <sup>2)</sup></b>	<b>1,666 <sup>3)</sup></b>	<b>967</b>
<i>Of which designated in cash flow hedge relations</i>	662	–	96	–
<i>Of which designated in net investment hedge relations</i>	–	3	–	62
<b>Interest rate derivatives</b>				
Maturity within 3 months	6	28	–	–
Maturity between 3 and 12 months	76	61	28	40
Maturity 1 to 3 years	544	118	49	151
Maturity 3 to 5 years	184	34	175	40
Maturity more than 5 years	705	87	685	58
<b>Total interest rate derivatives</b>	<b>1,515</b>	<b>329 <sup>2)</sup></b>	<b>937 <sup>3)</sup></b>	<b>289</b>
<i>Of which designated in fair value hedge relations</i>	862	–	845	–

<sup>1)</sup> Some of the derivatives with short maturities are recognized in the balance sheet as non-current due to hedge accounting.

<sup>2)</sup> Of which SEK 902 million is reported as non-current liabilities.

<sup>3)</sup> Of which SEK 843 million is reported as non-current assets.

## Sensitivity analysis

Ericsson uses the VaR methodology to measure foreign exchange and interest rate risks in portfolios managed by Treasury. This statistical method expresses the maximum potential loss that can arise with a certain degree of probability during a certain period of time. For the VaR measurement, Ericsson has chosen a probability level of 99 percent and a 1-day time horizon. The daily VaR measurement uses market volatilities and correlations based on historical daily data (one year).

The average VaR calculated for 2010 was for the interest rate mandate SEK 20.3 (14.3) million and for the transaction exposure mandate SEK 9.8 (13.9) million. No VaR-limits were exceeded during 2010.

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## Financial credit risk

Financial instruments carry an element of risk in that counterparties may be unable to fulfill their payment obligations. This exposure arises in the investments in cash, cash equivalents, short-term investments and from derivative positions with positive unrealized results against banks and other counterparties.

Ericsson mitigates these risks by investing cash primarily in well-rated securities such as treasury bills, government bonds, commercial papers, and mortgage covered bonds with short-term ratings of at least A-1/P-1 and long-term ratings of AAA. Separate credit limits are assigned to each counterparty in order to minimize risk concentration. We have had no sub-prime exposure in our investments. All derivative transactions are covered by ISDA netting agreements to reduce the credit risk. No credit losses were incurred during 2010, neither on external investments nor on derivative positions.

At December 31, 2010, the credit risk in financial cash instruments was equal to the instruments' carrying value. Credit exposure in derivative instruments was SEK 3.0 (2.6) billion.

## Liquidity risk

Liquidity risk is that Ericsson is unable to meet its short-term payment obligations due to insufficient or illiquid cash reserves.

Ericsson minimizes the liquidity risk by maintaining a sufficient net cash position. This is managed through centralized cash management, investments in highly liquid interest-bearing securities, and by having sufficient committed credit lines in place to meet potential funding needs. For information about contractual obligations, please see Note C32, "Contractual obligations". The current cash position is deemed to satisfy all short-term liquidity requirements.

During 2010, cash and bank and short-term investments increased by SEK 10.5 billion to SEK 87.2 billion. The increase was mainly due to positive operating cash flow.

CASH, CASH EQUIVALENTS AND SHORT-TERM INVESTMENTS (SEK billion)	Remaining time to maturity				Total
	< 3 months	< 1 year	1-5 years	>5 years	
Bank Deposits	29.4	0.1	-	-	29.5
<b>Type of issuer/ counterpart</b>					
Governments	-	9.3	23.5	2.9	35.7
Banks	1.5	-	4.0	-	5.5
Corporations	-	-	-	-	-
Mortgage institutes	-	-	15.3	1.2	16.5
<b>2010</b>	<b>30.9</b>	<b>9.4</b>	<b>42.8</b>	<b>4.1</b>	<b>87.2</b>
<b>2009</b>	<b>31.8</b>	<b>2.6</b>	<b>34.4</b>	<b>7.9</b>	<b>76.7</b>

The instruments are either classified as held for trading or as assets available for sale with maturity less than one year and therefore short-term investments. Cash, Cash Equivalents and short-term investments are mainly held in SEK unless off-set by EUR-funding.

## REFINANCING RISK

Refinancing risk is the risk that Ericsson is unable to refinance outstanding debt at reasonable terms and conditions, or at all, at a given point in time.

REPAYMENT SCHEDULE OF LONG-TERM BORROWINGS <sup>1)</sup>

Nominal amount (SEK billion)	Current maturities of long-term debt	Notes and bonds (non-current)	Liabilities	Total
			to financial institutions (non-current)	
2011	0.8	-	-	0.8
2012	-	3.5	0.9	4.4
2013	-	5.4	-	5.4
2014	-	3.4	-	3.4
2015	-	-	4.1	4.1
2016	-	2.0	-	2.0
2017	-	4.5	-	4.5
2018	-	-	-	-
2019	-	-	-	-
2020	-	1.2	-	1.2
<b>Total</b>	<b>0.8</b>	<b>20.0</b>	<b>5.0</b>	<b>25.8</b>

<sup>1)</sup> Excluding finance leases reported in Note C27, "Leasing".

Debt financing is mainly carried out through borrowing in the Swedish and international debt capital markets.

Bank financing is used for certain subsidiary funding and to obtain committed credit facilities.

FUNDING PROGRAMS <sup>1)</sup>	Amount	Utilized	Unutilized
	Euro Medium-Term Note program (USD million)	5,000	3,003
Euro Commercial Paper program (USD million)	1,500	-	1,500
Swedish Commercial Paper program (SEK million)	5,000	-	5,000
Long-term Committed Credit facility (USD million)	2,000	-	2,000
Indian Commercial Paper program (INR million)	5,000	3,200	1,800

<sup>1)</sup> There are no financial covenants related to these programs.

At year-end, Ericsson's credit ratings remained at Baa1 (Baa1) by Moody's and BBB+ (BBB+) by Standard & Poor's, both considered to be "Solid Investment Grade".

## Financial instruments carried at other than fair value

The fair value of the majority of the Company's financial instruments are determined based on quoted market prices or rates. In the following tables, carrying amounts and fair values of financial instruments that are carried in the financial statements at other than fair values are presented. Assets valued at fair value through profit or loss showed a net gain of SEK 1.1 billion. For further information about valuation principles, please see Note C1, "Significant accounting policies".

FINANCIAL INSTRUMENTS CARRIED AT OTHER THAN FAIR VALUE <sup>1)</sup>	Carrying amount		Fair value	
	2010	2009	2010	2009
SEK billion				
Current maturities of non-current borrowings	0.8	0.7	0.8	0.7
Notes and bonds	20.6	23.8	20.5	22.8
Other borrowings non-current	5.1	4.8	5.0	4.0
<b>Total</b>	<b>26.5</b>	<b>29.3</b>	<b>26.3</b>	<b>27.5</b>

<sup>1)</sup> Excluding finance leases reported in Note C27, "Leasing".

Financial instruments excluded from the tables, such as trade receivables and payables, are carried at amortized cost which is deemed to be equal to fair value. When a market price is not readily available and there is insignificant interest rate exposure affecting the value, the carrying value is considered to represent a reasonable estimate of fair value.

## Market price risk in own shares and other listed equity investments

### RISK RELATED TO OUR OWN SHARE PRICE

Ericsson is exposed to the development of its own share price through stock option and stock purchase plans for employees and synthetic share-based compensations to the Board of Directors. The obligation to deliver shares, or pay compensation amounts, under these plans is covered by holding Ericsson Class B shares as treasury stock and warrants for issuance of new Ericsson Class B shares or provisions. An increase in the share price will result in social security charges, which represents a risk to both income and cash flow. The cash flow exposure is fully hedged through the holding of Ericsson Class B shares as treasury stock to be sold to

generate funds to cover also social security payments, and through the purchase of call options on Ericsson Class B shares. For further information about the stock option and stock purchase plans, please see note C29, "Information Regarding Members of the Board of Directors, the Group Management and Employees".

FINANCIAL INSTRUMENTS, CARRYING AMOUNTS												2010	2009
SEK billion	Customer finance C14	Trade receivables C14	Short-term investments	Cash equivalents	Borrowings C19	Trade payables C22	Other financial assets C12	Other current receivables C15	Other current liabilities C21	Other non-current liabilities			
Assets at fair value through profit or loss	–	–	56.3	1.5	–	–	–	3.0	–1.0	–0.9	58.9	56.0	
Loans and receivables	4.4	61.1	–	2.1	–	–	2.7	–	–	–	70.3	73.7	
Available for sale assets	–	–	–	–	–	–	–	–	–	–	–	–	
Financial liabilities at amortized cost	–	–	–	–	–30.8	–25.0	–	–	–	–	–55.8	–51.0	
<b>Total</b>	<b>4.4</b>	<b>61.1</b>	<b>56.3</b>	<b>3.6</b>	<b>–30.8</b>	<b>–25.0</b>	<b>2.7</b>	<b>3.0</b>	<b>–1.0</b>	<b>–0.9</b>	<b>73.4</b>	<b>78.7</b>	

## C21 OTHER CURRENT LIABILITIES

OTHER CURRENT LIABILITIES	2010	2009
Income tax liabilities	2,228	1,890
Advances from customers	5,946	4,903
Liabilities to associated companies and joint ventures	115	152
Accrued interest	349	378
Accrued expenses, of which	31,463	29,957
Employee related	10,063	10,137
Supplier related	12,273	10,769
Other <sup>1)</sup>	9,127	9,051
Deferred revenues	11,415	8,267
Derivatives with a negative value <sup>2)</sup>	1,039	1,255
Other <sup>3)</sup>	6,050	5,727
<b>Total</b>	<b>58,605</b>	<b>52,529</b>

<sup>1)</sup> Major balance relates to accrued expenses for customer projects.

<sup>2)</sup> See Note C20, "Financial Risk Management and Financial Instruments".

<sup>3)</sup> Includes items such as VAT and withholding tax payables and other payroll deductions, and liabilities for goods received where invoice is not yet received.

## C22 TRADE PAYABLES

TRADE PAYABLES	2010	2009
Payables to associated companies and joint ventures	157	1,186
Other	24,802	17,678
<b>Total</b>	<b>24,959</b>	<b>18,864</b>

## C23 ASSETS PLEDGED AS COLLATERAL

ASSETS PLEDGED AS COLLATERAL	2010	2009
Chattel mortgages	191	167
Bank deposits	467	383
<b>Total</b>	<b>658</b>	<b>550</b>

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## C24 CONTINGENT LIABILITIES

CONTINGENT LIABILITIES		
	2010	2009
Contingent liabilities	875	1,245
<b>Total</b>	<b>875</b>	<b>1,245</b>

Contingent liabilities assumed by Ericsson include guarantees of loans to other companies of SEK 25 (76) million. Ericsson has SEK 413 (542) million issued to guarantee the performance of a third party. All ongoing legal and tax proceedings have been evaluated, their potential economic outflows and probability estimated and necessary provisions made.

Financial guarantees for third party amounted to SEK 191 (52) million as of December 31, 2010. Maturity date for major part of the issued guarantees occurs in 2019 at latest.

Sony Ericsson Mobile Communications AB (SEMC) has been granted term loans and credit facilities of SEK 3,157 million, of which SEK 2,106 million were utilized as of December 31, 2010. The parent companies of Ericsson and Sony Corporation have issued guarantees for these term loans and credit facilities on a 50/50 basis, without joint responsibility. Thus Ericsson's guaranteed amount is maximum SEK 1,579 million excluding interest. As of December 31, 2010, Ericsson's part of the outstanding amount is SEK 1,037 million excluding accrued interest of SEK 16 million. Maturity dates for the issued guarantees are 2011 (SEK 1,128 million) and 2012 (SEK 451 million). See also Note C30, "Related Party Transactions".

## C25 STATEMENT OF CASH FLOWS

Interest paid in 2010 was SEK 977 million (SEK 772 million in 2009, SEK 1,689 million in 2008) and interest received was SEK 1,083 million (SEK 1,900 million in 2009, SEK 2,375 million in 2008). Taxes paid, including withholding tax, were SEK 4,808 million (SEK 4,427 million in 2009, SEK 4,274 million in 2008).

Cash and cash equivalents includes cash of SEK 27,231 million (SEK 18,372 million in 2009) and temporary investments of SEK 3,633 million (SEK 4,426 million in 2009). For more information regarding the disposition of cash and cash equivalents and unutilized credit commitments, see Note C20, "Financial Risk Management and Financial Instruments".

Cash restricted due to currency regulations or other legal restrictions in certain countries amounted to SEK 10,836 million (SEK 8,907 million in 2009, SEK 8,197 million in 2008).

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ADJUSTMENTS TO RECONCILE NET INCOME TO CASH			
	2010	2009	2008
<b>Property, plant and equipment</b>			
Depreciation	3,299	3,550	3,108
Impairment losses/reversals of impairments	-3	-48	-3
<b>Total</b>	<b>3,296</b>	<b>3,502</b>	<b>3,105</b>
<b>Intangible assets</b>			
<i>Amortization</i>			
Capitalized development expenses	664	647	1,726
Intellectual Property Rights, brands and other intangible assets	4,999	3,562	3,280
<b>Total amortization</b>	<b>5,663</b>	<b>4,209</b>	<b>5,006</b>
<i>Impairments</i>			
Capitalized development expenses	49	157	562
Intellectual Property Rights, brands and other intangible assets	945	4,255	-
<b>Total</b>	<b>6,657</b>	<b>8,621</b>	<b>5,568</b>
<b>Total depreciation, amortization and impairment losses on property, plant and equipment and intangible assets</b>	<b>9,953</b>	<b>12,123</b>	<b>8,673</b>
Taxes	351	-1,011	1,032
Dividends from joint ventures/associated companies <sup>1)</sup>	119	70	3,863
Undistributed earnings in joint ventures/associated companies <sup>1)</sup>	1,357	6,013	291
Gains/losses on sales of investments and operations, intangible assets and PP&E, net <sup>2)</sup>	-237	-910	-1,210
Other non-cash items <sup>2) 3)</sup>	947	571	1,669
<b>Total adjustments to reconcile net income to cash</b>	<b>12,490</b>	<b>16,856</b>	<b>14,318</b>
<sup>1)</sup> See also note C12, "Financial Assets, Non-Current".			
<sup>2)</sup> See also note C26, "Business Combinations".			
<sup>3)</sup> Refers mainly to unrealized foreign exchange, gains/losses on financial instruments.			

ACQUISITIONS/DIVESTMENTS OF SUBSIDIARIES AND OTHER OPERATIONS		
	Acquisitions	Divestments
<b>2010</b>		
Cash flow from business combinations <sup>1)</sup>	-3,286	454
<b>Total</b>	<b>-3,286</b>	<b>454</b>
<b>2009</b>		
Cash flow from business combinations <sup>1)</sup>	-9,633	1,239
Capital contribution to joint venture	-9,688	-
<b>Total</b>	<b>-19,321</b>	<b>1,239</b>
<b>2008</b>		
Cash flow from business combinations <sup>1)</sup>	-74	654
Other investments	-	1,256
<b>Total</b>	<b>-74</b>	<b>1,910</b>
<sup>1)</sup> See also note C26, "Business Combinations".		

## C26 BUSINESS COMBINATIONS

### Acquisitions and divestments

#### ACQUISITIONS

ACQUISITIONS 2008–2010			
	2010	2009	2008
Cash	3,789	9,633	74
<b>Total consideration</b>	<b>3,789</b>	<b>9,633</b>	<b>74</b>
<b>Acquisition-related costs</b>	<b>67<sup>1)</sup></b>	<b>–</b>	<b>–</b>
<b>Net asset acquired</b>			
Cash and cash equivalents	570	5	–
Property, plant and equipment	205	297	–
Intangible assets	3,825	5,832	–209
Investments in associates	138	–	–
Other assets	2,506	1,235	887
Provision, incl. post-employment benefits	–390	–	–
Other liabilities	–3,573	–1,270	278
<b>Total identifiable net assets</b>	<b>3,281</b>	<b>6,099</b>	<b>956</b>
<b>Non-controlling interest</b>	<b>–748</b>	<b>–</b>	<b>–</b>
<b>Goodwill</b>	<b>1,256</b>	<b>3,534</b>	<b>–882</b>
	<b>3,789</b>	<b>9,633</b>	<b>74</b>

<sup>1)</sup> Acquisition-related costs are included in Selling and administrative expenses in the consolidated income statement.

In 2010, Ericsson made acquisitions with a cash flow effect amounting to SEK 3,286 (9,633) million, primarily:

- > **inCode:** On September 7, 2010, the Company announced that it had entered into an asset purchase agreement to acquire certain assets of inCode's Strategy and Technology Group, a premier professional services firm providing strategic business and consulting services to leading North American telecommunications clients. inCode is consolidated by the Company as of September 30 2010. The purchase price was USD 12 million on a cash and debt free basis. The acquisition includes certain assets of inCode's Strategy and Technology Group, including contracts, technology and intellectual property, and about 45 employees throughout the US and Canada.
- > **LG-Nortel:** On April 21, 2010, the Company announced that it had entered into a share purchase agreement to acquire Nortel's majority shareholding (50 percent + 1 share) in LG-Nortel, the joint venture of LG Electronics and Nortel Networks. In 2009, LG-Nortel generated approximately USD 650 million of sales. The purchase price was USD 234 million on a cash and debt free basis. The acquisition has significantly expanded the Company's footprint in the Korean market and provided well established sales channel and strong R&D capability in the country. Furthermore, the acquisition provided the Company with an industrial base and the ability to build new customer relationships. Part of the acquisition costs is recognized as goodwill due to the competence acquired. The non-controlling interest is measured at the non-controlling interest's share of the acquiree's net assets. Net Sales for acquired LG-Nortel business amounted to approximately SEK 2,322 million for the period July 1 – December 31, 2010. If LG-Nortel had been consolidated from January 1, 2010, the sales had amounted to approximately SEK 3,820 million. The acquired LG-Nortel business had a positive impact on the result. Approximately 1,300 employees were transferred. LG-Nortel is consolidated by the Company as of June 30, 2010, and is included in segment Networks. The new name of the joint venture is LG-Ericsson. Transaction costs for the acquisition amounted to SEK 24 million.

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- > **Nortel GSM:** On November 25, 2009, the Company announced it had entered to acquire certain assets of the Carrier Networks division of Nortel relating to Nortel's GSM business in the US and Canada. Nortel GSM was consolidated by the Company as of March 31, 2010. The acquisition further strengthens the Company's ability to serve North America's leading wireless operators. The purchase was structured as an asset sale at a cash purchase price of USD 79 million on a cash and debt free basis. Approximately 350 employees were transferred to Ericsson. Transaction costs for the acquisition amounted to SEK 22 million
- > **Optimi:** On December 22, 2010, the Company announced the acquisition of Optimi Corporation, a US-Spanish telecommunications vendor providing products and services within the networks optimization and management sector to leading clients in telecommunications. The purchase price was USD 99 million on a cash and debt free basis. Approximately 200 highly skilled professionals and a complete portfolio of services and tools were transferred to the Company. Optimi is consolidated by the Company as of December 31.
- > **Pride:** On January 12, 2010, the Company announced it had acquired all shares in Italian Pride Spa, a consulting and systems integration company, operating in Italy. The purchase price was EUR 66 million on a cash and debt free basis. The aim was to further strengthen the Company's offering in the systems integration and consultancy field. Pride employs about 1,000 employees. Goodwill is related to business footprint and critical mass in Systems Integration. Pride is consolidated by the Company as of January 29, 2010.

The preliminary purchase price allocation made in 2009 related to Nortel CDMA were finalized 2010 with the following effects: An increase in inventory of SEK 114 million, a decrease in other assets of SEK 191 million, an increase of other liabilities of SEK 67 million, an increase of intangible assets of SEK 281 MSEK and a decrease in goodwill of SEK 137 million.

NORTEL CDMA BUSINESS (2009)			
	Book value	Fair value adjustments	Fair value
<b>Net assets acquired</b>			
<b>Intangible assets</b>			
Intellectual property rights	–	4,979	4,979
Customer relationships	–	811	811
Goodwill	–	2,957	2,957
<b>Other assets and liabilities</b>			
Inventory	187	–	187
Property, plant and equipment	261	–	261
Other assets	392	–	392
Other liabilities	–1,242	–	–1,242
<b>Total purchase price</b>			<b>8,345</b>
<b>Less:</b>			
Cash and cash equivalents	–	–	–
<b>Cash flow effect</b>			<b>8,345</b>

The determination of purchase price allocation and fair values of assets acquired and liabilities assumed is based on preliminary appraisal; therefore, these values may be subject to adjustments.

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## DIVESTMENTS

DIVESTMENTS 2008–2010			
	2010	2009	2008
Cash	454	1,239	654
Net assets disposed of			
Property, plant and equipment	21	5	3
Other assets	372	586	1,005
Other liabilities	-183	-38	-456
	210	553	552
Net gains from divestments	357	780	296
Less Cash and cash equivalents	-113	-94	-194
Cash flow effect	454	1,239	654

In 2010, the Company made divestments with a cash flow effect amounting to SEK 454 (1,239) million.

- > Ericsson Federal Inc. (EFI): On January 3, 2011, the Company announced the completion of the sale of 100 percent of the shares in EFI to Tailwind Capital, a private equity firm focused on growing companies. EFI was consolidated by the Company until the sale in the end of December 2010. The sale resulted in a gain amounting to SEK 216 million and a cash flow effect of SEK 360 million.

Divestments in 2009 refer mainly to TEMS with a gain amounting to SEK 777 million and a cash flow effect of SEK 926 million.

TEMS BUSINESS (2009)	
Net assets disposed of	2009
Property, plant and equipment	5
Other assets	276
Other liabilities	-38
	243
Net gains from divestments	777
Less:	
Cash and cash equivalents	94
Cash flow effect	926

## ACQUISITIONS 2008–2010

Company	Description	Date of announcement
Optimi	A US-Spanish telecommunications vendor providing products and services within the networks optimization and management sector with around 200 employees.	Dec 22, 2010
inCode	An asset purchase agreement of certain assets with around 45 employees. A premier professional services firm providing strategic business and consulting services.	Sep 7, 2010
LG-Nortel	Nortel's majority shareholding (50 percent + 1 share) in LG-Nortel with around 1,300 employees.	Apr 21, 2010
Pride	Italian consulting and systems integration company with around 1,000 employees.	Jan 12, 2010
Nortel GSM	An asset purchase agreement of the Carrier Networks division of Nortel relating to GSM business.	Nov 25, 2009
Nortel	An asset purchase agreement of the Carrier networks division of Nortel relating to CDMA and LTE technology.	Nov 13, 2009
Elcoteq	Estonian electronics manufacturing service company with around 1,200 employees.	June 17, 2009
Bizitek	Turkish systems integrator of business support systems with around 116 employees.	May 28, 2009
Mobeon	Swedish company. Acquisition of shares.	Mar 31, 2008

## DIVESTMENTS 2008–2010

Company	Description	Date of announcement
EFI	Sale of Ericsson Federal Inc. (EFI).	Jan 3, 2011
TEMS	Tools for air interface monitoring and radio network planning.	Mar 23, 2009
Enterprise	PBX solutions business.	May 1, 2008

## C27 LEASING

### Leasing with the Company as lessee

Assets under finance leases, recorded as property, plant and equipment, consist of:

FINANCE LEASES		
	2010	2009
<b>Acquisition costs</b>		
Real estate	1,846	1,942
Machinery	3	4
	1,849	1,946
<b>Accumulated depreciation</b>		
Real estate	-687	-662
Machinery	-3	-4
	-690	-666
<b>Accumulated impairment losses</b>		
Real estate	-54	-49
<b>Net carrying value</b>	<b>1,105</b>	<b>1,231</b>

As of December 31, 2010, future minimum lease payment obligations for leases were distributed as follows:

FUTURE MINIMUM LEASE PAYMENT OBLIGATIONS FOR LEASES		
	Finance leases	Operating leases
2011	155	3,097
2012	153	2,586
2013	151	1,754
2014	230	1,203
2015	131	722
2016 and later	997	2,216
<b>Total</b>	<b>1,817</b>	<b>11,578</b>
Future finance charges <sup>1)</sup>	-568	n/a
<b>Present value of finance lease liabilities</b>	<b>1,249</b>	<b>11,578</b>

<sup>1)</sup> Average effective interest rate on lease payables is 5.87 percent.

Expenses in 2010 for leasing of assets were SEK 3,675 (3,839) million, of which variable expenses were SEK 51 (0) million. The leasing contracts vary in length from 1 to 18 years.

The Company's lease agreements normally do not include any contingent rents. In the few cases they occur, they relate to charges for heating linked to the oil price index. Most of the leases of real estate contain terms of renewal, giving the company the right to prolong the agreement in question for a predefined period of time. All of the finance leases of facilities contain purchase options. Only a very limited number of the Company's lease agreements contain restrictions on stockholders' equity or other means of finance. The major agreement contains a restriction stating that the Parent Company must maintain a stockholders' equity of at least SEK 25 billion.

### Leases with the Company as lessor

Leasing income mainly relates to subleasing of real estate. These leasing contracts vary in length from 1 to 11 years.

At December 31, 2010, future minimum payment receivables were distributed as follows:

FUTURE MINIMUM PAYMENT RECEIVABLES		
	Finance leases	Operating leases
2011	-	52
2012	-	13
2013	-	13
2014	-	13
2015	-	13
2016 and later	-	38
<b>Total</b>	<b>-</b>	<b>142</b>
Unearned financial income	-	n/a
Uncollectible lease payments	-	n/a
<b>Net investments in financial leases</b>	<b>-</b>	<b>n/a</b>

Leasing income in 2010 was SEK 94 (181) million.

## C28 TAX ASSESSMENT VALUES IN SWEDEN

TAX ASSESSMENT VALUES IN SWEDEN		
	2010	2009
Land and land improvements	65	58
Buildings	295	265
<b>Total</b>	<b>360</b>	<b>323</b>

# C29 INFORMATION REGARDING MEMBERS OF THE BOARD OF DIRECTORS, THE GROUP MANAGEMENT AND EMPLOYEES

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### Remuneration to the Board of Directors

REMUNERATION TO MEMBERS OF THE BOARD OF DIRECTORS								
	Board fees	Number of synthetic shares/portion of Board fee	Value at grant date of synthetic shares allocated 2010	Number of previously allocated synthetic shares	Net change in value of allocated synthetic shares <sup>1)</sup>	Committee fees	Total fees paid in cash <sup>2)</sup>	Total remuneration 2010
	A			B		C		(A+B+C)
<b>Board member</b>								
Michael Treschow	3,750,000	32,856/75%	2,812,474	79,070.80	948,927	250,000	1,359,509 <sup>3)</sup>	5,120,910
Marcus Wallenberg	750,000	2,190/25%	187,464	5,270.80	63,256	125,000	687,500	938,220
Sverker Martin-Löf	750,000	0/0%	–	–	–	–	750,000	750,000
Roxanne S. Austin	750,000	6,571/75%	562,478	15,813.60	189,779	250,000	437,500	1,189,756
Sir Peter L. Bonfield	750,000	2,190/25%	187,464	5,270.80	63,256	250,000	812,500	1,063,220
Börje Ekholm	750,000	6,571/75%	562,478	15,813.60	189,779	125,000	312,500	1,064,756
Ulf J. Johansson	750,000	6,571/75%	562,478	15,813.60	189,779	350,000	615,357 <sup>3)</sup>	1,367,613
Nancy McKinstry	750,000	4,380/50%	374,928	13,097.60	167,534	125,000	500,000	1,042,462
Anders Nyrén	750,000	0/0%	–	–	–	125,000	875,000	875,000
Carl-Henric Svanberg	750,000	4,380/50%	374,928	–	–32,631	–	375,000	717,297
Hans Vestberg	–	–	–	–	–	–	–	–
Michelangelo Volpi	750,000	4,380/50%	374,928	–	–32,631	–	375,000	717,297
<b>Employee Representatives</b>								
Monica Bergström	4,500	–	–	–	–	–	4,500	4,500
Pehr Claesson	15,000	–	–	–	–	–	15,000	15,000
Kristina Davidsson	15,000	–	–	–	–	–	15,000	15,000
Anna Guldstrand	15,000	–	–	–	–	–	15,000	15,000
Jan Hedlund	15,000	–	–	–	–	–	15,000	15,000
Karin Lennartsson	10,500	–	–	–	–	–	10,500	10,500
Karin Åberg	15,000	–	–	–	–	–	15,000	15,000
<b>Total</b>	<b>11,340,000</b>	<b>70,089</b>	<b>5,999,618</b>	<b>150,150.80</b>	<b>1,747,048</b>	<b>1,600,000</b>	<b>7,189,866</b>	<b>14,936,533 <sup>4)</sup></b>

<sup>1)</sup> The difference in value as of December 31, 2010, compared to December 31, 2009 (for synthetic shares allocated 2008 and 2009), and compared to grant date 2010 (for synthetic shares allocated 2010). The value of synthetic shares allocated in 2008 and 2009 includes respectively SEK 1.85 and SEK 2.00 per share in compensation for dividends resolved by the Annual General Meetings 2009 and 2010.

<sup>2)</sup> Committee fee and cash portion of the Board fee.

<sup>3)</sup> Including an amount corresponding to statutory social charges in respect of the part of the fee that has been invoiced through a limited liability company.

<sup>4)</sup> Excluding social security charges in the amount of SEK 3,077,266

#### Comments to the table

- > The Chairman of the Board was entitled to a Board fee of SEK 3,750,000 and a fee of SEK 125,000 for each Board committee on which he served.
- > The other Directors appointed by the Annual General Meeting were entitled to a fee of SEK 750,000 each. In addition, each non-employed Director serving on a Board committee received a fee of SEK 125,000 for each committee. However, the Chairman of the Audit Committee received a fee of SEK 350,000 and the other non-employed members of the Audit Committee received a fee of SEK 250,000 each.
- > Members of the Board, who are not employees of the Company, have not received any remuneration other than the fees and synthetic shares as above. None of the directors have entered into a service contract with the Parent Company or any of its subsidiaries, providing for termination benefits.
- > Members and Deputy Members of the Board who are Ericsson employees received no remuneration or benefits other than their entitlements as employees. However, a fee of SEK 1,500 per attended Board meeting was paid to each employee representative on the Board and their deputies.
- > According to new rules it has been possible for Board members fulfilling certain criteria to invoice the amount of the Board and Committee fee. The Board member is allowed to add to the invoice an amount corresponding to social charges. The social charges thus included in the

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invoiced amount are not higher than the general payroll tax that would otherwise have been paid by the Company. The entire amount, e.g. the cash portion of the Board fee and the committee fee, including social charges, constitutes the invoiced Board fee

- > The Annual General Meeting 2010 resolved that non-employed Directors may choose to receive the Board fee, (i.e. exclusive of committee fee) as follows: i) 25 percent of the Board fee in cash and 75 percent in the form of synthetic shares, with a value corresponding to 75 percent of the Board fee at the time of allocation, ii) 50 percent in cash and 50 percent in the form of synthetic shares, or iii) 75 percent in cash and 25 percent in the form of synthetic shares. Directors may also choose not to participate in the synthetic share program and receive 100 percent of the Board fee in cash. Committee fees are always paid in cash.

The number of synthetic shares is based on a volume-weighted average of the market price of Ericsson Class B shares on the NASDAQ OMX Stockholm exchange during the five trading days immediately following the publication of Ericsson's interim report for the first quarter of 2010: SEK 85.60. The number of synthetic shares is rounded down to the nearest whole number of shares.

The synthetic shares are vested during the Directors' term of office and the right to receive payment with regard to the allocated synthetic shares occurs after the publication of the Company's year-end financial statement during the fifth year following the Annual General Meeting which resolved on the synthetic share program, i.e. in 2015.

The amount payable shall be determined based on the volume-

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weighed average price for shares of Class B during the five trading days immediately following the publication of the year-end financial statement.

Synthetic shares were allocated to members of the Board for the first time 2008, on equal terms and conditions as resolved 2009 and 2010. Payment based on synthetic shares may thus occur for the first time in 2013 with respect to the synthetic shares allocated 2008. The value of all outstanding synthetic shares fluctuates in line with the market value of Ericsson's Class B share and may differ from year to year compared to the original value on their respective grant dates. The change in value of the outstanding synthetic shares is established each year and affects the total recognized costs that year. As per December 31, 2010 the total number of synthetic shares under the programs is 220,239.80 and the total accounted debt is SEK 17,649,112.

## Remuneration to the Group management

### REMUNERATION COSTS

The total remuneration to the President and CEO and to other members of the Group management, hereafter presented as the Executive Leadership Team (ELT) includes fixed salary, short-term and long-term variable remuneration, pension and other benefits. These remuneration elements are based on the guidelines for remuneration and other employment conditions for senior management as approved at AGM 2010, see the approved guidelines in section "2010 Remuneration Policy".

#### REMUNERATION COSTS INCURRED DURING 2010 FOR THE PRESIDENT AND CEO AND OTHER MEMBERS OF EXECUTIVE LEADERSHIP TEAM

SEK	The President	Other members of ELT	Total 2010	Total 2009
Salary	12 573 789	84 697 698	97 271 487	61 653 309
Provisions for annual variable remuneration earned 2010 to be paid 2011	6 737 556	26 592 809	33 330 365	21 364 557
Long-term variable remuneration provision	1 253 262	6 467 584	7 720 846	3 172 351
Pension costs	5 586 760	24 994 073	30 580 833	47 573 897
Other benefits	80 962	4 142 484	4 223 446	2 423 437
Social charges and taxes	7 842 186	30 246 918	38 089 103	36 674 431
<b>Total</b>	<b>34 074 515</b>	<b>177 141 565</b>	<b>211 216 080</b>	<b>172 861 982</b>

#### Comments to the table

- > As of January 1, 2010, Hans Vestberg was appointed President and CEO.
- > During 2010, there were two Executive Vice Presidents, appointed by the Board of Directors. None of them has acted as deputy to the President and CEO during the year. The Executive Vice Presidents are included in the group "Other members of ELT".
- > The group "Other members of ELT" comprises the following persons: Jan Frykhammar, Johan Wibergh, Jan Wäreby, Magnus Mandersson, Cesare Avenia, Carl Olof Blomqvist, Håkan Eriksson, Douglas Gilstrap, Henry Sténson, Marita Hellberg (up to June 30), Torbjörn Possne (up to September 30), Rima Qureshi (from February 1), Mats H. Olsson (from February 8), Angel Ruiz (from February 8) and Bina Chaurasia (from November 15).
- > Included in "salary" for the President and CEO is vacation pay and a one-off cost of SEK 2 million in connection with changing the terms and conditions of the President and CEO's long-term variable remuneration arrangements 2010.
- > The ELT has a significantly different composition compared to 2009, with more diversity as to nationalities, gender and experience, both on local contracts as well as expatriate contracts. To be able to attract and retain decisions on long-term compensation commitments have been made during 2010, cost for these commitments are included in salary for other members of ELT. For 2009 there were no such commitments.
- > The salary stated in the table for other members of the ELT includes vacation pay paid during 2010 as well as other contracted compensation which were paid during 2010 or provisioned for 2010. Deferred salary, earned 2010 to be paid 12 months or later after period end amounts to SEK 6,097,404.
- > "Long-term variable remuneration provisions" refers to the compensation costs during 2010 for all outstanding share-based plans. For a description of compensation cost, including accounting treatment, see Note C1, "Significant Accounting Policies", section Share-based compensation to employees and the Board of Directors.
- > For the President and CEO and other members of ELT employed in Sweden a supplementary plan is applied in addition to the occupational pension plan for salaried staff on the Swedish labor market (ITP) with pension from 60 years. These pension plans are not conditional upon future employment at Ericsson.
- > Ericsson's commitments for benefit based pensions per December 31, 2010, under IAS 19 amounted to SEK 5,177,173 for the President and CEO which includes ITP plan and temporary disability and survivor's pension. For other members of ELT the Company's commitments amounted to SEK 45,368,650 of which SEK 35,087,673 refers to the

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ITP plan and the remaining SEK 10,280,977 to temporary disability and survivor's pensions.

- > For previous Presidents and CEOs, the Company has made provisions for defined benefit pension plans in connection with their active service periods within the Company.

OUTSTANDING MATCHING RIGHTS		
As per December 31, 2010	The President	Other members of ELT
Number of Class B shares		
Stock Purchase Plans 2007, 2008, 2009 and 2010 and Executive Performance Stock Plans 2008, 2009 and 2010	142,373	687,562

#### Comments to the table

- > For the definition of matching rights, see description in section "Long-term variable remuneration".
- > The number of matching rights is based on maximum performance matching under Executive Performance Stock Plans, 2008, 2009 and 2010 for all members of ELT during 2010.
- > 2007 award lapsed for the Performance Stock Plan, so for 2007 only the matching under the Stock Purchase Plan is included in outstanding matching rights.
- > During 2010, the President and CEO received 2,314 matching shares and other members of ELT 17,093 matching shares.

#### 2010 REMUNERATION POLICY

Remuneration at Ericsson is based on the principles of performance, competitiveness and fairness. These principles and good practice in Sweden guide our policy to:

- > Attract and retain highly competent, performing and motivated people that have the ability, experience and skill to deliver on the Ericsson strategy.
- > Encourage behavior consistent with Ericsson's culture and core values of professionalism, respect and perseverance.
- > Ensure fairness in reward by delivering total remuneration that is appropriate but not excessive.
- > Ensure a total compensation mix of fixed and variable remuneration and benefits that reflects the Company's principles and is competitive where Ericsson competes for talent.
- > Encourage variable remuneration which, first, aligns employees with clear and relevant targets, second, reinforces performance and, third, enables flexible remuneration costs.
- > Ensure that all variable remuneration plans have maximum award and vesting limits.
- > Encourage employees to deliver sustained performance and build up a personal shareholding in Ericsson, aligning the interests of shareholders and employees.
- > Communicate clearly to both employees and shareholders how Ericsson translates remuneration principles and policy into practice.

#### Group Management

For senior management consisting of the Executive Leadership Team, including the President and CEO, in the following referred to as the "Group Management", total remuneration consists of fixed salary, short- and long-term variable remuneration, pension and other benefits. Furthermore, the following guidelines apply for Group Management:

- > Variable remuneration is through cash and stock-based programs awarded against specific business targets derived from the long-term business plan approved by the Board of Directors. Targets may include financial targets at either corporate or unit level, operational targets, employee motivation targets and customer satisfaction targets.
- > With the current composition of Group Management, the Company's cost during 2010 for the variable remuneration of Group Management

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can, at a constant share price, amount to between 0 and 140 percent of the aggregate fixed salary cost, all excluding social security costs.

- > All benefits, including pension benefits, follow the competitive practice in the home country taking total compensation into account. The retirement age is normally 60 to 65 years of age.
- > By way of exception, additional arrangements can be made when deemed required. Such additional arrangement shall be limited in time and shall not exceed a period of 36 months and two times the remuneration that the individual concerned would have received had no additional arrangement been made.
- > The mutual notice period may be no more than six months. Upon termination of employment by the Company, severance pay amounting to a maximum of 18 months fixed salary is paid. Notice of termination given by the employee due to significant structural changes, or other events that in a determining manner affect the content of work or the condition for the position, is equated with notice of termination served by the Company.

### Long-Term Variable Remuneration

#### THE STOCK PURCHASE PLAN

The Stock Purchase Plan is designed to offer an incentive for all employees to participate in the Company where practicable, which is consistent with industry practice and with our ways of working. For the 2010 plan employees are able to save up to 7.5 percent (President and CEO 10 percent) of gross fixed salary (President and CEO gross fixed salary and annual variable remuneration) for purchase of Class B contribution shares at market price on the NASDAQ OMX Stockholm or ADS's (American Depository Share) at NASDAQ (contribution shares) during a twelve-month period (contribution period). If the contribution shares are retained by the employee for three years after the investment and the employment with the Ericsson Group continues during that time, the employee's shares will be matched with a corresponding number of Class B shares or ADS's free of consideration. Employees in 94 countries participate in the plans.

The table below shows the contribution periods and participation details for ongoing plans as of December 31, 2010.

STOCK PURCHASE PLANS			
Plan	Contribution period	Number of participants at launch	Take-up rate – percent of all employees
Stock Purchase plan 2007	August 2007 – July 2008	19,000	26%
Stock Purchase plan 2008	August 2008 – July 2009	19,000	25%
Stock Purchase plan 2009	August 2009 – July 2010	18,000	25%
Stock Purchase plan 2010	August 2010 – July 2011	22,000	27%

Participants save each month, beginning with August payroll, towards quarterly investments. These investments (in November, February, May and August) are matched on the third anniversary of each such investment, subject to continued employment, and hence the matching spans over two financial years and two tax years.

#### THE KEY CONTRIBUTOR RETENTION PLAN

The Key Contributor Retention Plan is part of Ericsson's talent management strategy and is designed to give recognition for performance, critical skills and potential as well as encourage retention of key employees. Under the program, up to 10 percent of employees (2010: 7,201 employees) are selected through a nomination process that identifies individuals according to performance, critical skills and potential. Participants selected obtain one extra matching share in addition to the ordinary one matching share for each contribution share purchased under the Stock Purchase Plan during a twelve-month program period.

## EXECUTIVE PERFORMANCE STOCK PLANS

Plan	Base year EPS <sup>1)</sup>	Target average annual EPS growth range <sup>2)</sup>	Matching share vesting range <sup>3)</sup>	Maximum opportunity as percentage of fixed salary <sup>4)</sup>
Executive Performance Stock Plan 2007 <sup>5)</sup>	8.83	5% to 15%	0.67 to 4 1 to 6 1.33 to 8	30% 45% 72%
Executive Performance Stock Plan 2008	4.43	5% to 15%	0.67 to 4 1 to 6 1.33 to 8	30% 45% 72%
Executive Performance Stock Plan 2009	2.90	5% to 15%	0.67 to 4 1 to 6 1.33 to 8	30% 45% 72%
Executive Performance Stock Plan 2010	1.14	5% to 15%	0.67 to 4 1 to 6 1.5 to 9	30% 45% 162%

<sup>1)</sup> Sum of four quarters up to June 30 of plan years, up to and including 2009. For 2010 plan the sum of 4 quarters up to December 31, 2010.

<sup>2)</sup> EPS range found from three-year average EPS of the twelve quarters to the end of the performance period and corresponding growth targets.

<sup>3)</sup> Corresponding to EPS range (no Performance Share Plan matching below this range). Matching shares per contribution share invested in addition to Stock Purchase Plan matching according to program of up to 4, 6 or 9 matching shares.

<sup>4)</sup> At full investment, full vesting and constant share price. Excludes Stock Purchase Plan matching.

<sup>5)</sup> The 2007 Executive Performance Stock Plan did not vest. All awards have also lapsed for the matching share vesting range 1.33 to 8 shares for the 2008 and 2009 plans following the only participant, the former President and CEO, leaving the Company.

## THE EXECUTIVE PERFORMANCE STOCK PLAN

The Executive Performance Stock Plan is designed to focus the management on driving earnings and provide competitive remuneration. Senior executives, including ELT, are selected to obtain up to four or six extra shares (performance matching shares) in addition to the ordinary one matching share for each contribution share purchased under the Stock Purchase Plan. Up to 0.5 percent of employees (2010: 264 executives) are offered to participate in the plan. The President and CEO is allowed to invest

up to 10 percent of fixed salary and Short-Term Variable Remuneration in contribution shares and may obtain up to nine performance matching shares in addition to the Stock Purchase Plan matching share for each contribution share. The performance matching is subject to the fulfillment of a performance target of average annual Earnings per Share (EPS) growth. The table shows all Executive Performance Stock Plans as per December 31, 2010.

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SHARES FOR ALL PLANS							
Plan (million shares)	Originally designated <sup>1)</sup>	Outstanding beginning of 2010	Awarded during 2010	Exercised/ matched during 2010	Forfeited/ expired during 2010	Outstanding end of 2010	Compensation costs charged during 2010 (MSEK)
	A	B	C	D	E	F=B+C-D-E	G
2006 Stock Purchase Plan, Key Contributor Retention Plan and Executive Performance Stock Plans	6.4	3.3	–	2.7	0.6	–	18 <sup>3)</sup>
2007 Stock Purchase Plan, Key Contributor Retention Plan and Executive Performance Stock Plans	9.7	8.6	–	1.4	0.1	7.1 <sup>2)</sup>	130 <sup>3)</sup>
2008 Stock Purchase Plan, Key Contributor Retention Plan and Executive Performance Stock Plans	16.5	11.3	–	0.1	0.2	11.0 <sup>2)</sup>	247 <sup>3)</sup>
2009 Stock Purchase Plan, Key Contributor Retention Plan and Executive Performance Stock Plans	22.4	2.5	7.6	0.1	0.1	9.9 <sup>2)</sup>	351 <sup>3)</sup>
2010 Stock Purchase Plan, Key Contributor Retention Plan and Executive Performance Stock Plans	19.4	–	3.0	–	–	3.0 <sup>2)</sup>	11 <sup>3)</sup>
<b>Total</b>	<b>74.4</b>	<b>25.7</b>	<b>10.6</b>	<b>4.3</b>	<b>1.0</b>	<b>31.0</b>	<b>757 <sup>4)</sup></b>

<sup>1)</sup> Adjusted for rights offering and reverse split when applicable.

<sup>2)</sup> Presuming maximum performance matching under the Executive Performance Stock Plans. The 2006 and 2007 plans have lapsed.

<sup>3)</sup> Fair value is calculated as the share price on the investment date, reduced by the net present value of the dividend expectations during the three-year vesting period. Net present value calculations are based on data from external party. Fair value is also adjusted for participants failing to keep hold of their contribution shares during the vesting period. For shares under the Executive Performance Stock Plans, the Company assesses the probability of meeting the performance targets when calculating the compensation cost. Fair value of the Class B share at each investment date during 2010 was: February 15 SEK 64.47, May 15 SEK 75.26, August 15 SEK 67.44 and November 15 SEK 62.57.

<sup>4)</sup> Total compensation costs charged during 2009: SEK 529 million, 2008: SEK 572 million.

## SHARES FOR ALL PLANS

All plans are funded with treasury stock and are equity settled. Treasury stock for all plans has been issued in directed cash issues of Class C shares at the quotient value and purchased under a public offering at the subscription price plus a premium corresponding to the subscribers' financing costs, and then converted to Class B shares.

For all plans, additional shares have been allocated for financing of social security expenses. Treasury stock is sold on the NASDAQ OMX Stockholm to cover social security payments when arising due to matching of shares. During 2010, 669,700 shares were sold at an average price of SEK 77.09. Sale of shares is recognized directly in equity.

If, as of December 31, 2010, all shares allocated for future matching under the Stock Purchase Plan were transferred, and shares designated to cover social security payments were disposed of as a result of the exercise and the matching, approximately 50 million Class B shares would be transferred, corresponding to 1.5 percent of the total number of shares outstanding, 3,200 million. As of December 31, 2010, 73 million Class B shares were held as treasury stock.

The table above shows how shares (representing matching rights but excluding shares for social security expenses) are being used for all outstanding plans. From left to right the table includes (A) the number of shares originally approved by the Annual General Meeting, adjusted for reverse split where applicable; (B) the number of originally designated shares that were outstanding at the beginning of 2010; (C) the number of shares awards that were granted during 2010; (D) the number of shares matched during 2010; (E) the number of shares forfeited by participants or expired under the plan rules during 2010; (F) the balance left as outstanding at the end of 2010, having added new awards to the shares outstanding at the beginning of the year and deducted the shares related to awards matched, forfeited and expired. The final column (G) shows the compensation costs charged to the accounts during 2010 for each plan, calculated as fair value in SEK.

For a description of compensation cost, including accounting treatment, see Note C1, "Significant Accounting Policies", section Share-based compensation to employees and the Board of Directors.

## Employee numbers, wages and salaries

## EMPLOYEE NUMBERS

AVERAGE NUMBER OF EMPLOYEES						
			2010		2009	
	Men	Women	Total	Men	Women	Total
North America	11,005	2,770	13,775	9,366	2,358	11,724
Latin America	5,326	1,328	6,654	5,876	1,254	7,130
Northern Europe & Central Asia <sup>1)2)</sup>	15,227	5,821	21,048	16,271	6,082	22,353
Western & Central Europe <sup>2)</sup>	9,338	1,817	11,155	10,003	2,021	12,024
Mediterranean <sup>2)</sup>	9,034	2,670	11,704	7,956	2,403	10,359
Middle East	3,544	468	4,012	3,541	428	3,969
Sub Saharan Africa	1,331	359	1,690	1,716	412	2,128
India	5,783	835	6,618	3,818	370	4,188
China & North East Asia	6,867	2,948	9,815	4,897	2,113	7,010
South East Asia & Oceania	3,976	1,378	5,354	4,155	1,320	5,475
<b>Total</b>	<b>71,431</b>	<b>20,394</b>	<b>91,825</b>	<b>67,599</b>	<b>18,761</b>	<b>86,360</b>
<sup>1)</sup> Of which Sweden	13,066	4,355	17,421	13,930	4,591	18,521
<sup>2)</sup> Of which EU	32,045	9,843	41,888	32,970	10,055	43,025

## NUMBER OF EMPLOYEES AT YEAR END

	2010	2009
<b>Employees by region</b>		
North America	13,498	11,222
Latin America	7,181	6,055
Northern Europe & Central Asia <sup>1)2)</sup>	21,425	21,993
Western & Central Europe <sup>2)</sup>	10,818	11,622
Mediterranean <sup>2)</sup>	10,795	9,509
Middle East	3,982	3,744
Sub Saharan Africa	1,626	2,104
India	6,710	4,184
China & North East Asia	9,807	6,894
South East Asia & Oceania	4,419	5,166
<b>Total</b>	<b>90,261</b>	<b>82,493</b>
<sup>1)</sup> Of which Sweden	17,848	18,217
<sup>2)</sup> Of which EU	40,743	41,396

## EMPLOYEES BY GENDER AND AGE AT YEAR END 2010

	Female	Male	Percent of total
Under 25 years old	1,385	3,911	6%
26–35 years old	6,976	24,369	35%
36–45 years old	7,317	26,135	37%
46–55 years old	3,264	12,668	18%
Over 55 years old	908	3,328	5%
<b>Percent of total</b>	<b>22%</b>	<b>78%</b>	<b>100%</b>

## NUMBER OF EMPLOYEES RELATED TO COST OF SALES AND OPERATING EXPENSES

	2010	2009	2008
Cost of sales	45,628	41,521	35,717
Operating expenses	44,633	40,972	43,023
<b>Total</b>	<b>90,261</b>	<b>82,493</b>	<b>78,740</b>

## EMPLOYEE MOVEMENTS

	2010	2009
Head count at year-end	90,261	82,493
Employees who have left the Company	10,066	9,147
Employees who have joined the Company	17,834	12,900
Temporary employees	978	693

## EMPLOYEE WAGES AND SALARIES

## WAGES AND SALARIES AND SOCIAL SECURITY EXPENSES

	2010	2009
Wages and salaries	43,390	41,247
Social security expenses	13,793	13,630
<i>Of which pension costs</i>	<i>3,091</i>	<i>3,588</i>

Amounts related to the President and CEO and the Group Management Team are included.

## WAGES AND SALARIES PER REGION

	2010	2009
North America <sup>3)</sup>	10,236	6,358
Latin America	2,269	2,181
Northern Europe & Central Asia <sup>1)2)</sup>	11,464	11,918
Western & Central Europe <sup>2)</sup>	6,153	7,063
Mediterranean <sup>2)</sup>	5,053	5,619
Middle East	1,680	1,865
Sub Saharan Africa	849	974
India	881	674
China & North East Asia	2,923	2,393
South East Asia & Oceania	1,882	2,202
<b>Total</b>	<b>43,390</b>	<b>41,247</b>
<sup>1)</sup> Of which Sweden	10,086	10,324
<sup>2)</sup> Of which EU	21,858	23,734
<sup>3)</sup> Of which the United States	8,098	4,928

Remuneration in foreign currency has been translated to SEK at average exchange rates for the year.

## REMUNERATION TO BOARD MEMBERS AND PRESIDENTS IN SUBSIDIARIES

	2010	2009
Salary and other remuneration	289	315
<i>Of which annual variable remuneration</i>	<i>43</i>	<i>42</i>
Pension costs	29	34

## BOARD MEMBERS, PRESIDENTS AND GROUP MANAGEMENT BY GENDER AT YEAR END

	2010		2009	
	Females	Males	Females	Males
<b>Parent Company</b>				
Board members and President	33%	67%	38%	62%
Group Management	14%	86%	8%	92%
<b>Subsidiaries</b>				
Board members and Presidents	10%	90%	10%	90%

## ION

## C30 RELATED PARTY TRANSACTIONS

During 2010, various related party transactions were executed pursuant to contracts based on terms customary in the industry and negotiated on an arm's length basis. For information regarding equity and Ericsson's share of assets, liabilities and income in joint ventures and associated companies, see Note C12, "Financial Assets, Non-Current". For information regarding transactions with senior management, see Note 29, "Information Regarding Members of the Board of Directors, the Group Management and Employees".

### Sony Ericsson Mobile Communications AB (SEMC)

In October 2001, SEMC was established as a joint venture between Sony Corporation and Ericsson, and a substantial portion of Ericsson's handset operations was sold to SEMC. The joint venture is headquartered in London, United Kingdom. As part of the formation of the joint venture, contracts were entered into between Ericsson and SEMC.

Major transactions are as follows:

- > **License revenues.** Both owners of SEMC, Sony Corporation and Ericsson, receive license revenues for SEMC's usage of trademarks and intellectual property rights. The decline in license revenues during 2009 is a consequence of the formation of ST-Ericsson.
- > **Purchases.** Ericsson purchases mobile phones from SEMC to support contracts with a number of customers for mobile systems which also include limited quantities of phones.
- > **Dividends.** Both owners of SEMC receive dividends, when so decided by the board of directors. During 2010 Ericsson received no dividends from SEMC.

SONY ERICSSON MOBILE COMMUNICATIONS			
	2010	2009	2008
<b>Related party transactions</b>			
License revenues	1,255	1,746	5,856
Purchases	61	164	261
Ericsson's share of dividends	–	–	3,627
<b>Related party balances</b>			
Receivables	258	369	1,002
Liabilities	8	14	176

SEMC has been granted term loans and credit facilities of SEK 3,157 million, of which SEK 2,106 million were utilized as of December 31, 2010. The parent companies of Ericsson and Sony Corporation have issued guarantees for these term loans and credit facilities on a 50/50 basis, without joint responsibility. Thus Ericsson's guaranteed amount is maximum SEK 1,579 million excluding interest. As of December 31, 2010, Ericsson's part of the outstanding amount is SEK 1,037 million excluding accrued interest of SEK 16 million. Maturity dates for the issued guarantees are 2011 (SEK 1,128 million) and 2012 (SEK 451 million). See also Note C24, "Contingent Liabilities".

### ST-Ericsson

ST-Ericsson, the joint venture between Ericsson and STMicroelectronics, was formed on February 2, 2009, by merging Ericsson Mobile Platforms with ST-NXP Wireless. The joint venture is equally owned by Ericsson and STMicroelectronics. ST-Ericsson is an industry leader in design, development and the creation of cutting-edge mobile platforms and wireless semiconductors. ST-Ericsson is a key supplier to four of the industry's top five handset manufacturers, who together represent about 80 percent of global handset shipments, as well as to other leading companies in the industry. The joint venture is headquartered in Geneva, Switzerland, and employs approximately 8,000 persons.

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Major transactions are as follows:

- > **Sales.** Ericsson provides ST-Ericsson with services in the areas of R&D, HR, IT and facilities.
- > **Purchases.** Major part of Ericsson's purchases from ST-Ericsson consists of chipsets and R&D services.
- > **Dividends.** Both owners of ST-Ericsson receive dividends, when so decided by the board of directors. During 2010 Ericsson received no dividends from ST-Ericsson.

ST-ERICSSON		
	2010	2009
<b>Related party transactions</b>		
Sales	403	740
Purchases	629	624
Ericsson's share of dividends	–	–
<b>Related party balances</b>		
Receivables	53	244
Liabilities	48	365

ST-Ericsson has been granted a revolving credit facility of USD 200 million, which is equally shared by Ericsson and STMicroelectronics. As of December 31, 2010, the amount drawn on the facility was SEK 1,030 million. Each parent lent SEK 515 million.

Ericsson does not have any contingent liabilities, assets pledged as collateral or guarantees towards ST-Ericsson.

### Ericsson Nikola Tesla d.d.

Ericsson Nikola Tesla d.d. is a joint stock company for design, sales and service of telecommunication systems and equipment, and an associated member of the Ericsson Group. Ericsson Nikola Tesla d.d. is located in Zagreb, Croatia. Ericsson holds 49.07 percent of the shares.

Major transactions are as follows:

- > **Sales.** Ericsson sells telecommunication equipment to Ericsson Nikola Tesla d.d.
- > **License revenues.** Ericsson receives license revenues for Ericsson Nikola Tesla d.d.'s usage of trademarks.
- > **Purchases.** Ericsson purchases development resources from Ericsson Nikola Tesla d.d.
- > **Dividends.** Ericsson received dividends from Ericsson Nikola Tesla d.d. during 2010.

ERICSSON NIKOLA TESLA D.D.			
	2010	2009	2008
<b>Related party transactions</b>			
Sales	563	654	1,020
License revenues	2	7	9
Purchases	566	569	547
Ericsson's share of dividends	104	66	227
<b>Related party balances</b>			
Receivables	120	93	85
Liabilities	75	70	58

Ericsson does not have any contingent liabilities, assets pledged as collateral or guarantees toward Ericsson Nikola Tesla d.d.

## C31 FEES TO AUDITORS

FEES TO AUDITORS			
	PwC	Others	Total
<b>2010</b>			
Audit fees	79	5	84
Audit related fees	17	1	18
Tax services fees	16	2	18
Other fees	7	2	9
<b>Total</b>	<b>119</b>	<b>10</b>	<b>129</b>
<b>2009</b>			
Audit fees <sup>1)</sup>	88	3	91
Audit related fees <sup>1)</sup>	18	–	18
Tax services fees	16	2	18
Other fees <sup>1)</sup>	3	2	5
<b>Total</b>	<b>125</b>	<b>7</b>	<b>132</b>
<b>2008</b>			
Audit fees <sup>1)</sup>	88	4	92
Audit related fees <sup>1)</sup>	15	–	15
Tax services fees	14	2	16
Other fees <sup>1)</sup>	2	5	7
<b>Total</b>	<b>119</b>	<b>11</b>	<b>130</b>

<sup>1)</sup> Allocation of fees to auditors is based on the requirements in the Swedish Annual Accounts Act. 2008 and 2009 figures are restated for comparability.

During the period 2008–2010, in addition to audit services, PwC provided certain audit related services, tax and other services to the Company. The audit related services include quarterly reviews, SAS 70 reviews and services in connection with issuing of certificates and opinions. The tax services include general expatriate services and corporate tax compliance work. Other services include consultation on financial accounting, services related to acquisitions, operational effectiveness and assessments of internal control.

Audit fees to other auditors largely consist of local statutory audits for minor companies.

## C32 CONTRACTUAL OBLIGATIONS

CONTRACTUAL OBLIGATIONS 2010					
SEK billion	Payment due by period				Total 2010
	<1 year	1–3 years	3–5 years	>5 years	
Long-term debt <sup>1)2)</sup>	1.6	10.7	7.9	8.1	28.3
Finance lease obligations <sup>3)</sup>	0.1	0.3	0.4	1.0	1.8
Operating leases <sup>3)</sup>	3.1	4.3	1.9	2.2	11.5
Other non-current liabilities	0.0	0.4	0.2	1.8	2.4
Purchase obligations <sup>4)</sup>	7.7	–	–	–	7.7
Trade Payables	25.0	–	–	–	25.0
Commitments for customer financing <sup>5)</sup>	3.3	–	–	–	3.3
<b>Total</b>	<b>40.8</b>	<b>15.7</b>	<b>10.4</b>	<b>13.1</b>	<b>80.0</b>

<sup>1)</sup> Including interest payments.  
<sup>2)</sup> See also Note C20, "Financial Risk Management and Financial Instruments".  
<sup>3)</sup> See also Note C27, "Leasing".  
<sup>4)</sup> The amounts of purchase obligations are gross, before deduction of any related provisions.  
<sup>5)</sup> See also Note C14, "Trade Receivables and Customer Financing".

For information about financial guarantees, see Note C24, "Contingent Liabilities"

Except for those transactions described in this report, Ericsson has not been a party to any material contracts over the past three years other than those entered into during the ordinary course of business.

# PARENT COMPANY INCOME STATEMENT AND STATEMENT OF COMPREHENSIVE INCOME

PARENT COMPANY INCOME STATEMENT				
Years ended December 31, SEK million	Notes	2010	2009 <sup>1)</sup>	2008
Net sales <sup>1)</sup>	P2	33	300	5,086
Cost of sales		-29	-21	-669
<b>Gross income</b>		<b>4</b>	<b>279</b>	<b>4,417</b>
Selling expenses		-1,370	-1,399	-1,113
Administrative expenses		-1,586	-1,738	-1,271
<b>Operating expenses</b>		<b>-2,956</b>	<b>-3,137</b>	<b>-2,384</b>
Other operating income and expenses	P3	3,118	2,977	3,065
<b>Operating income</b>		<b>166</b>	<b>119</b>	<b>5,098</b>
Financial income	P4	7,474	9,358	24,131
Financial expenses	P4	-829	-1,396	-9,791
<b>Income after financial items</b>		<b>6,811</b>	<b>8,081</b>	<b>19,438</b>
Transfers to (-)/from untaxed reserves				
Changes in depreciation in excess of plan	P15	-100	417	-251
Changes in other untaxed reserves	P15	-	485	-227
		-100	902	-478
Taxes	P5	-117	-804	-1,733
<b>Net income</b>		<b>6,594</b>	<b>8,179</b>	<b>17,227</b>

<sup>1)</sup> Effective January 1, 2009, the right to all license revenues from third parties was transferred to Ericsson AB, a wholly owned subsidiary.

PARENT COMPANY STATEMENT OF COMPREHENSIVE INCOME				
Years ended December 31, SEK million	Notes	2010	2009	2008
<b>Net income</b>		<b>6,594</b>	<b>8,179</b>	<b>17,227</b>
<b>Other comprehensive income</b>				
Cash Flow hedges				
Gains/losses arising during the period		136	612	773
Amounts transferred to initial carrying amount of hedged items		-136	-1,385	-
Tax on items relating to components of OCI		-	204	-204
<b>Total other comprehensive income</b>		<b>-</b>	<b>-569</b>	<b>569</b>
<b>Total comprehensive income</b>		<b>6,594</b>	<b>7,610</b>	<b>17,796</b>

# PARENT COMPANY BALANCE SHEET

December 31, SEK million	Notes	2010	2009
<b>ASSETS</b>			
<b>Fixed assets</b>			
Intangible assets	P6	1,046	2,219
Tangible assets	P7, P26	527	527
<b>Financial assets</b>			
<b>Investments</b>			
Subsidiaries	P8, P9	77,566	75,540
Joint ventures and associated companies	P8, P9	13,066	13,066
Other investments	P8	84	10
Receivables from subsidiaries	P8, P12	6,666	10,316
Customer finance, non-current	P8, P11	1,027	846
Deferred tax assets	P5	302	387
Other financial assets, non-current	P8	302	1,179
		<b>100,586</b>	<b>104,090</b>
<b>Current assets</b>			
Inventories	P10	57	61
<b>Receivables</b>			
Trade receivables	P11	36	42
Customer finance, current	P11	1,479	590
Receivables from subsidiaries	P12	15,385	20,035
Current income taxes		355	360
Other current receivables	P13	4,299	2,677
Short-term investments	P19	56,148	53,926
Cash and cash equivalents	P19	15,439	8,477
		<b>93,198</b>	<b>86,168</b>
<b>TOTAL ASSETS</b>		<b>193,784</b>	<b>190,258</b>

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## PARENT COMPANY BALANCE SHEET (CONTINUED)

December 31, SEK million	Notes	2010	2009
<b>STOCKHOLDERS' EQUITY, PROVISIONS AND LIABILITIES</b>			
<b>Stockholders' equity</b>	P14		
Capital stock		16,367	16,367
Revaluation reserve		20	20
Statutory reserve		31,472	31,472
Restricted equity		47,859	47,859
Retained earnings		36,380	33,774
Net income		6,594	8,179
Non-restricted equity		42,974	41,953
		90,833	89,812
<b>Untaxed reserves</b>	P15	1,015	915
<b>Provisions</b>			
Pensions	P16	389	372
Other provisions	P17	571	697
		960	1,069
<b>Non-current liabilities</b>			
Notes and bond loans	P18	20,646	23,801
Liabilities to credit institutions	P18	4,000	4,000
Liabilities to subsidiaries	P12	26,862	28,966
Other non-current liabilities		1,334	244
		52,842	57,011
<b>Current liabilities</b>			
Current maturities of long-term borrowings	P18	–	–
Trade payables	P21	399	335
Liabilities to subsidiaries	P12	45,956	39,135
Other current liabilities	P20	1,779	1,981
		48,134	41,451
<b>TOTAL STOCKHOLDERS' EQUITY, PROVISIONS AND LIABILITIES</b>		193,784	190,258
Assets pledged as collateral	P22	658	550
Contingent liabilities	P23	13,783	13,072

# PARENT COMPANY STATEMENT OF CASH FLOWS

Years ended December 31, SEK million	Notes	2010	2009	2008
<b>Operating activities</b>				
Net income		6,594	8,179	17,227
Adjustments to reconcile net income to cash	P24	1,288	-3,831	5,146
		7,882	4,348	22,373
<b>Changes in operating net assets</b>				
Inventories		4	20	4
Customer finance, current and non-current		-1,070	193	-478
Trade receivables		283	261	-464
Trade payables		331	-132	16
Provisions and pensions		-109	-4	-49
Other operating assets and liabilities, net		1,954	-685	2,252
		1,393	-347	1,281
<b>Cash flow from operating activities</b>		<b>9,275</b>	<b>4,001</b>	<b>23,654</b>
<b>Investing activities</b>				
Investments in tangible assets		-160	-124	-388
Sales of tangible assets		9	109	8
Investments in shares and other investments		-2,178	-11,015	-305
Divestments of shares and other investments		42	1,134	2,122
Lending, net		8,973	6,663	1,541
Other investing activities		-287	-9	31
Short-term investments		-2,940	-14,436	-6,760
<b>Cash flow from investing activities</b>		<b>3,459</b>	<b>-17,678</b>	<b>-3,751</b>
<b>Cash flow before financing activities</b>		<b>12,734</b>	<b>-13,677</b>	<b>19,903</b>
<b>Financing activities</b>				
Changes in current liabilities to subsidiaries		3,503	4,755	-470
Proceeds from new borrowings		-	11,532	4,000
Repayment of borrowings		-1,055	-8,910	-3,119
Sale of own shares and options exercised		-	68	89
Dividends paid		-6,391	-5,897	-7,954
Settled contributions from/to (-) subsidiaries		-209	-1,363	-7,582
Other financing activities		-310	-	-7
<b>Cash flow from financing activities</b>		<b>-4,462</b>	<b>185</b>	<b>-15,043</b>
Effect from remeasurement in cash		-1,310	-79	629
<b>Net change in cash and cash equivalents</b>		<b>6,962</b>	<b>-13,571</b>	<b>5,489</b>
<b>Cash and cash equivalents, beginning of period</b>		<b>8,477</b>	<b>22,048</b>	<b>16,559</b>
<b>Cash and cash equivalents, end of period</b>	P19	<b>15,439</b>	<b>8,477</b>	<b>22,048</b>

From 2008, the effect from remeasurement in cash and other adjustments to reconcile net income to cash have been included. From 2009, Short-term investments with remaining maturity greater than three months have been moved to Investing activities from cash and short-term investments, and 2008 have been restated accordingly.

# PARENT COMPANY STATEMENT OF CHANGES IN STOCKHOLDERS' EQUITY

	Capital stock	Revaluation reserve	Statutory reserve	Total restricted equity	Disposition reserve	Fair value reserves	Other retained earnings	Non-restricted equity	Total
<b>January 1, 2010</b>	16,367	20	31,472	47,859	100	–	41,853	41,953	89,812
Total comprehensive income	–	–	–	–	–	–	6,594	6,594	6,594
<b>Transactions with owners</b>	–	–	–	–	–	–	–	–	–
Stock issue	–	–	–	–	–	–	–	–	–
Sale of own shares	–	–	–	–	–	–	52	52	52
Stock Purchase Plans	–	–	–	–	–	–	8	8	8
Repurchase of own shares	–	–	–	–	–	–	–	–	–
Contribution from/to (–) subsidiary companies	–	–	–	–	–	–	1,029	1,029	1,029
Tax on contributions	–	–	–	–	–	–	–271	–271	–271
Dividends paid	–	–	–	–	–	–	–6,391	–6,391	–6,391
<b>December 31, 2010</b>	<b>16,367</b>	<b>20</b>	<b>31,472</b>	<b>47,859</b>	<b>100</b>	<b>–</b>	<b>42,874</b>	<b>42,974</b>	<b>90,833</b>
<b>January 1, 2009</b>	16,232	20	31,472	47,724	100	569	41,285	41,954	89,678
Total comprehensive income	–	–	–	–	–	–569	8,179	7,610	7,610
<b>Transactions with owners</b>	–	–	–	–	–	–	–	–	–
Stock issue	135	–	–	135	–	–	–	–	135
Sale of own shares	–	–	–	–	–	–	75	75	75
Stock Purchase and Stock Option Plans	–	–	–	–	–	–	139	139	139
Repurchase of own shares	–	–	–	–	–	–	–135	–135	–135
Contribution from/to (–) subsidiary companies	–	–	–	–	–	–	–2,403	–2,403	–2,403
Tax on contributions	–	–	–	–	–	–	610	610	610
Dividends paid	–	–	–	–	–	–	–5,897	–5,897	–5,897
<b>December 31, 2009</b>	<b>16,367</b>	<b>20</b>	<b>31,472</b>	<b>47,859</b>	<b>100</b>	<b>–</b>	<b>41,853</b>	<b>41,953</b>	<b>89,812</b>

# NOTES TO THE PARENT COMPANY FINANCIAL STATEMENTS

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## P1 SIGNIFICANT ACCOUNTING POLICIES

The financial statements of the Parent Company, Telefonaktiebolaget LM Ericsson, have been prepared in accordance with RFR 2 "Reporting in separate financial statements". RFR 2 requires the Parent Company to use the same accounting principles as for the Group, i.e. IFRS to the extent allowed by RFR 2.

The main deviations between accounting policies adopted for the Group and accounting policies for the Parent Company are:

### Subsidiaries, associated companies and joint ventures

The investments are accounted for according to the acquisition cost method. Investments are carried at cost and only dividends are accounted for in the income statement. An impairment test is performed annually and write-downs are made when permanent decline in value is established.

Contributions to/from subsidiaries and shareholders' contributions are accounted for according to UFR 2 issued by the Swedish Financial Reporting Board. Contributions to/from Swedish subsidiaries are reported directly in equity, net of taxes, as these transactions are aimed at reducing Swedish taxes. Shareholders' contributions increase the Parent Company's investments.

### Classification and measurement of financial instruments

IAS 39 Financial Instruments: Recognition and Measurement is adopted, except regarding financial guarantees where the exception allowed in RFR 2 is chosen. Financial guarantees are included in Contingent liabilities.

### Leasing

The Parent Company has one rental agreement which is accounted for as a finance lease in the consolidated statements and as an operating lease in the Parent Company financial statements.

### Deferred taxes

The accounting of untaxed reserves in the balance sheet results in different accounting of deferred taxes as compared to the principles applied in the consolidated statements. Swedish GAAP and tax regulations require a company to report certain differences between the tax basis and book value as an untaxed reserve in the balance sheet of the stand-alone financial statements. Changes to these reserves are reported as an addition to, or withdrawal from, untaxed reserves in the income statement.

### Pensions

Pensions are accounted for in accordance with the recommendation FAR SRS RedR 4 "Accounting for pension liability and pension cost" from the Institute for the Accountancy Profession in Sweden. According to RFR 2, IAS 19 shall be adopted regarding supplementary disclosures when applicable.

### Segment information

Segment information is reported according to requirements in the Swedish Annual Accounts Act regarding net sales for business segments and geographical areas.

### Borrowing costs

All borrowing costs in relation to qualifying assets are expensed as incurred.

### Business combinations

Transaction costs attributable to the acquisition are included in the cost of acquisition in the parent company statements compared to Group Statements where these costs are expenses as incurred.

### Critical accounting estimates and judgments

See Notes to the Consolidated Financial Statements – Note C2, "Critical Accounting Estimates and Judgments". Major critical accounting estimates and judgments applicable to the Parent Company include "Trade and customer finance receivables" and "Acquired intellectual property rights and other intangible assets, excluding goodwill".

## P2 SEGMENT INFORMATION

NET SALES	2010	2009	2008
North America	–	99	2,192
<i>Of which the United States</i>	–	–7	–
Latin America	33	47	37
Northern Europe & Central Asia <sup>1)2)</sup>	–	–56	1,506
Western & Central Europe <sup>2)</sup>	–	12	97
Mediterranean <sup>2)</sup>	–	31	–
Middle East	–	–	–
Sub-Saharan Africa	–	–	–
India	–	–	–
China & North East Asia	–	167	1,254
<i>Of which China</i>	–	38	50
South East Asia & Oceania	–	–	–
Other	–	–	–
<b>Total</b>	<b>33</b>	<b>300</b>	<b>5,086</b>
<sup>1)</sup> <i>Of which Sweden</i>	–	–56	1,506
<sup>2)</sup> <i>Of which EU</i>	–	–13	1,603

Parent Company net sales in 2010 relate to business segment Networks. (Parent Company net sales in 2009 and 2008 in Sweden were mainly related to business segment Multimedia and the remaining part of net sales were related to business segment Networks).

## P3 OTHER OPERATING INCOME AND EXPENSES

OTHER OPERATING INCOME AND EXPENSES	2010	2009	2008
License revenues and other operating revenues			
Subsidiary companies	2,305	2,433	2,407
Other	815	532	659
Net gains/losses (–) on sales of tangible assets	–2	12	–1
<b>Total</b>	<b>3,118</b>	<b>2,977</b>	<b>3,065</b>

## P4 FINANCIAL INCOME AND EXPENSES

FINANCIAL INCOME AND EXPENSES			
	2010	2009	2008
<b>Financial Income</b>			
Result from participations in subsidiary companies			
Dividends	6,369	5,732	14,465
Net gains on sales	8	1,087	676
Result from participations in joint ventures and associated companies			
Dividends	104	66	3,854
Net gains on sales	–	1	–
Result from other securities and receivables accounted for as fixed assets			
Net gains on sales	26	–	807
Other interest income and similar profit/loss items			
Subsidiary companies	221	386	1,233
Other	746	2,086	3,096
<b>Total</b>	<b>7,474</b>	<b>9,358</b>	<b>24,131</b>
<b>Financial Expenses</b>			
Losses on sales of participations in subsidiary companies	–	–27	–
Write-down of investments in subsidiary companies	–82	–551	–7,027
Write-down of participations in other companies	–	–1	–
Interest expenses and similar profit/loss items			
Subsidiary companies	–95	–150	–1,068
Other	–612	–630	–1,655
Other financial expenses	–40	–37	–41
<b>Total</b>	<b>–829</b>	<b>–1,396</b>	<b>–9,791</b>
<b>Financial net</b>	<b>6,645</b>	<b>7,962</b>	<b>14,340</b>
Interest expenses on pension liabilities are included in the interest expenses shown above.			

## P5 TAXES

### Income taxes recognized in the income statement

The following items are included in Taxes:

TAXES			
	2010	2009	2008
Current income tax on contributions, net	271	–610	–1,155
Other current income taxes for the year	–288	–250	–250
Current income taxes related to prior years	–15	–47	–21
Deferred tax income/expense (–) related to temporary differences	–85	103	–307
<b>Taxes</b>	<b>–117</b>	<b>–804</b>	<b>–1,733</b>

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A reconciliation between actual tax expense for the year and the theoretical tax expense that would arise when applying the statutory tax rate in Sweden, 26.3 percent (starting from January 1, 2009), on income before taxes shown in the table below.

RECONCILIATION OF ACTUAL INCOME TAX RATE TO THE ACTUAL INCOME TAX RATE			
	2010	2009	2008
Tax rate in Sweden (26.3%)	–1,765	–2,363	–5,309
Current income taxes related to prior years	–15	–47	–21
Tax effect of non-deductible expenses	–91	–77	–83
Tax effect of non-taxable income	1,776	1,828	5,630
Tax effect related to write-downs of investments in subsidiary companies	–22	–145	–1,968
Tax effect of change in deferred tax rate	–	–	18
<b>Actual tax cost (–)</b>	<b>–117</b>	<b>–804</b>	<b>–1,733</b>

### Deferred tax balances

Tax effects of temporary differences have resulted in deferred tax assets as follows:

DEFERRED TAX ASSETS		
	2010	2009
Deferred tax assets	302	387

Deferred tax assets refer mainly to costs related to customer finance and provisions for restructuring costs.

## P6 INTANGIBLE ASSETS

PATENTS, LICENSES, TRADEMARKS AND SIMILAR RIGHTS		
	2010	2009
<b>Accumulated acquisition costs</b>		
Opening balance	3,888	3,888
Sales/disposals	–	–
<b>Closing balance</b>	<b>3,888</b>	<b>3,888</b>
<b>Accumulated amortization</b>		
Opening balance	–1,669	–1,284
Amortization	–228	–385
Sales/disposals	–	–
<b>Closing balance</b>	<b>–1,897</b>	<b>–1,669</b>
<b>Accumulated impairment losses</b>		
Opening balance	–	–
Impairment losses	–945	–
<b>Closing balance</b>	<b>–945</b>	<b>–</b>
<b>Net carrying value</b>	<b>1,046</b>	<b>2,219</b>

The balances relate mainly to Marconi and Redback trademarks acquired during 2006 and 2007. The useful life and amortization period for these trademarks has been set to 10 years. The write-down (impairment charge) of SEK 945 million is a consequence of the restructuring program decision to phase out certain products.

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## P7 TANGIBLE ASSETS

TANGIBLE ASSETS				
	Land and buildings	Other equipment and installations	Construction in process and advance payments	Total
<b>2010</b>				
<b>Accumulated acquisition costs</b>				
Opening balance	13	1,050	67	1,130
Additions	-	26	135	161
Sales/disposals	-	-50	-	-50
Reclassifications	-	76	-76	-
<b>Closing balance</b>	<b>13</b>	<b>1,102</b>	<b>126</b>	<b>1,241</b>
<b>Accumulated depreciation</b>				
Opening balance	-	-603	-	-603
Depreciation	-	-149	-	-149
Sales/disposals	-	38	-	38
<b>Closing balance</b>	<b>-</b>	<b>-714</b>	<b>-</b>	<b>-714</b>
<b>Net carrying value</b>	<b>13</b>	<b>388</b>	<b>126</b>	<b>527</b>
<b>2009</b>				
<b>Accumulated acquisition costs</b>				
Opening balance	13	1,113	140	1,266
Additions	-	22	100	122
Sales/disposals	-	-258	-	-258
Reclassifications	-	173	-173	-
<b>Closing balance</b>	<b>13</b>	<b>1,050</b>	<b>67</b>	<b>1,130</b>
<b>Accumulated depreciation</b>				
Opening balance	-	-571	-	-571
Depreciation	-	-193	-	-193
Sales/disposals	-	161	-	161
<b>Closing balance</b>	<b>-</b>	<b>-603</b>	<b>-</b>	<b>-603</b>
<b>Net carrying value</b>	<b>13</b>	<b>447</b>	<b>67</b>	<b>527</b>