

Before the  
Federal Communications Commission  
Washington, D.C. 20554

In the Matter of )  
 )  
Amendment of Parts 2, 15, 18 and Other )  
Parts of the Commission's Rules to Simplify ) ET Docket No. 97-94  
and Streamline the Equipment Authorization )  
Process for Radio Frequency Equipment )

To: The Commission

REPLY COMMENTS

Pursuant to Section 1.415 of the Commission's Rules,<sup>1</sup> Alcatel Network Systems, Inc. ("Alcatel"),<sup>2</sup> by its attorneys, hereby submits its Reply Comments on the Commission's above-captioned Notice of Proposed Rule Making ("NPRM").<sup>3</sup> In the NPRM, the Commission seeks to update and simplify its equipment authorization rules.

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<sup>1</sup>47 C.F.R. §1.415 (1997).

<sup>2</sup>Alcatel is a wholly-owned subsidiary of Alcatel Alsthom, one of the world's largest corporations (with annual sales in excess of \$30 billion) and the world's largest manufacturer and supplier of telecommunications equipment. In particular, Alcatel Alsthom is the world's largest independent manufacturer and supplier of microwave radios. Formerly Collins Radio and Rockwell International, Alcatel, with over \$1 billion in annual sales, is a world leader in manufacturing microwave and light wave transmission systems. Alcatel's equipment is used for a wide range of services, including short, medium and long-haul voice, video and data transmission. Its microwave customers include all the Bell Operating Companies, most major independent telephone companies, cellular operators, power and other utility companies, oil companies, railroads, industrial companies, and state and local government agencies.

<sup>3</sup>The NPRM appeared in the Federal Register on May 5, 1997. 62 FR 24383 (May 5, 1997).

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In Reply Comments filed contemporaneously herewith, the Fixed Point-to-Point Communications Section, Network Equipment Division of the Telecommunications Industry Association (the "Section"), states that, in the NPRM, the Commission properly proposes subjecting manufacturers of fixed point-to-point microwave service ("FS") radios to the self-authorization Declaration of Conformity ("DoC") procedure instead of to the Notification grant requirement.<sup>4</sup> Alcatel joins the Section in supporting this proposal, with one important caveat.

As demonstrated in the Section's Reply Comments, FS manufacturers must be exempted from the requirement, under Section 2.948(d) of the Commission's Rules, that testing for DoC compliance only can occur at a facility accredited under specific guidelines. This accreditation requirement would be unnecessary and counter-productive because:

- FS radio manufacturers either are ISO 9001 accredited, like Alcatel,<sup>5</sup> or they successfully have satisfied comparable testing requirements.
- The DoC accreditation procedure is inapplicable to licensed FS radios because it was designed to protect against harmful interference by widely deployed unlicensed consumer products, such as PCs and peripherals. By contrast, FS radios are operated under stringent Part 101 interference protection requirements.
- FS manufacturers are fully capable of conducting necessary DoC testing. Historically, they successfully, and without incident, have performed the necessary tests for Type Acceptance and Notification, which are more stringent procedures than the DoC procedure.
- Significant delays of up to 24 months and cost increases of up to \$250,000 would result if the DoC accreditation requirement is imposed upon FS radio manufacturers.
- Innovation in developing new FS radios to support emerging wireless technologies would be discouraged due to more burdensome product approval requirements.

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<sup>4</sup>NPRM at ¶ 18.

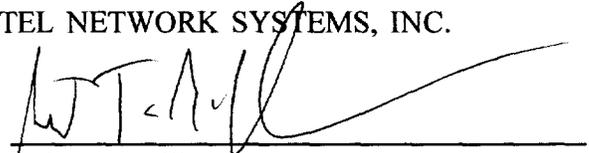
<sup>5</sup>See Alcatel's attached ISO documentation.

Thus, for the foregoing reasons, Alcatel strongly urges that the Commission permit FS radio manufacturers to use the DoC procedure, provided that they can test for compliance at their own facilities without having them accredited.

Respectfully submitted,

ALCATEL NETWORK SYSTEMS, INC.

By:

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August 15, 1997

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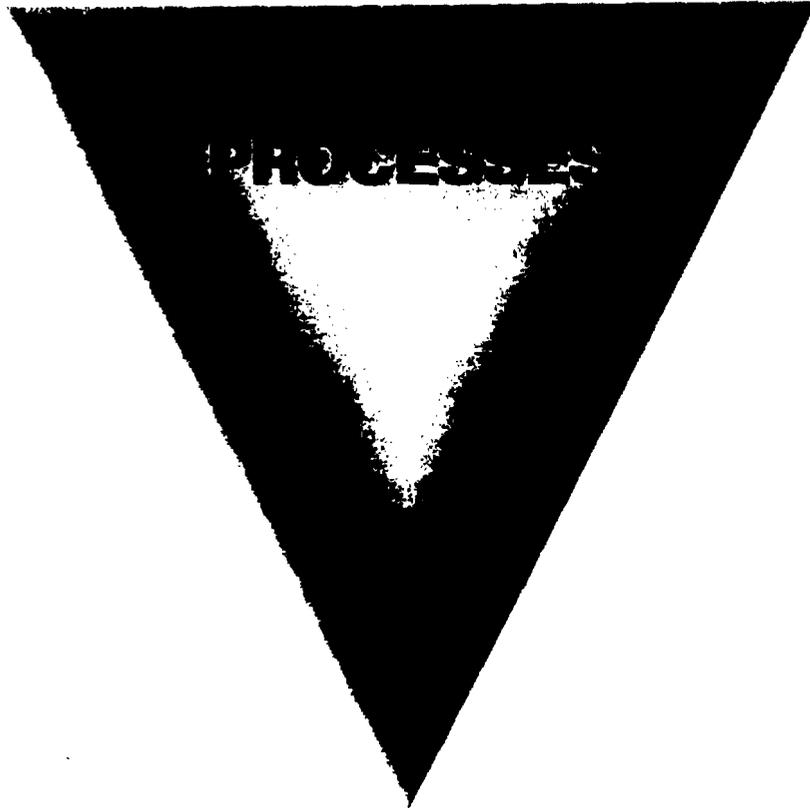
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# Leadership

## Strategic Planning

CUSTOMERS

EMPLOYEES



### BUSINESS RESULTS

### Information & Analysis

### Continuous Improvement

# ISO

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## 1.1 Purpose

The Alcatel Network Systems, Inc. (ANS) Quality Manual describes the Quality Management System that has been adopted for all ANS locations. This manual includes all requirements of the International Standards ISO 9001:1994 using 9000-3 guidance, appropriate elements of ISO 14000 and additional requirements necessary for ANS to be a world class supplier.

This System has three interrelated objectives:

- To reinforce customers' confidence that ANS is capable of delivering products and services that meet customers' quality expectations.
- To attain and maintain desired quality at an optimum cost through planned and efficient use of people, technological, and material resources available.
- To develop and improve key cross functional business processes.

## 1.2 Applicability & Use

The Quality Manual applies to all products, processes and services within all groups of ANS. Each organization is responsible for developing necessary systems, capability, and documentation to implement requirements specified in the manual. Periodic quality audits shall be conducted to verify compliance.



## 2.1 The Alcatel Business Community

The Alcatel Telecom approach is to preserve the benefits of decentralization, while providing strong central product strategies and key central functions. This forms an efficient virtual network of people, ideas, and resources.

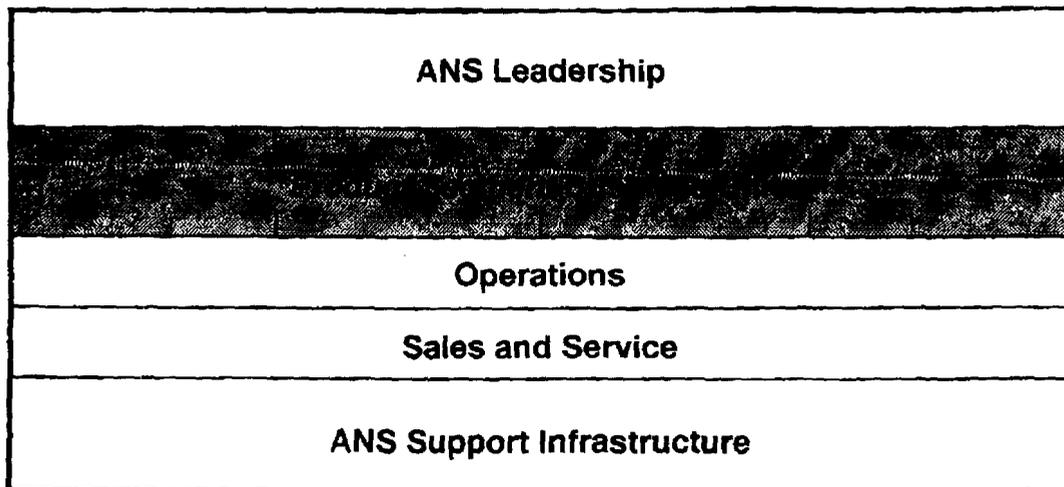
Alcatel Network Systems, Inc. (ANS) is one such center of excellence comprising:

- Business Units that report both locally and to their respective business divisions
- Core business functions that report locally and serve the Business Units, playing a key role in our mutual success

Just as ANS partnerships are developed with suppliers and customers to support Business Unit success, all of these related units within ANS rely on specific internal customer-supplier relationships.

## 2.2 ANS Executive Team

The ANS executive team consists of the ANS core staff and business unit executives. Together, they guide ANS to achieve results supporting both product segment and common goals. The relationship of this team is depicted in the figure below.



### 3.1 Leadership

The ANS executive team provides the leadership to:

- Establish company values respecting the requirements of stakeholders
- Set company direction
- Create high performance expectations
- Instill in the work force a strong customer focus.
- Promote societal responsibility and community involvement.
- Sustain a safe and healthy work environment and climate conducive to performance excellence, full participation, and personal and organizational growth.

### 3.2 Critical Success Factors

The executive council defines the strategic direction for ANS based on the following Critical Success Factors (CSF's) defined in Vision 2002:

- Retain and recruit highly motivated employees and create an environment for continuous learning.
- Reinforce customer focus as our competitive advantage.
- Achieve committed financial performance annually, while continuing to invest in future growth.
- Provide a portfolio of products, systems, and services that meet or exceed customer expectations.
- Achieve competitive time-to-market performance.
- Leverage world wide Alcatel products, technology, and resources.
- Achieve a total quality environment with continuous improvement through active employee involvement.
- Maintain high standards of integrity and ethical conduct.

Senior management within each group provides the leadership to assure continuation of the CSF's within their respective organizations through Long Term Objectives (LTO's) And Short Term Objectives (STO's).

Annual reviews of LTO's and STO's provide the basis for continuous improvement of the ANS Quality Management System.

### **3.3 Employees**

ANS employees are responsible for implementing the ANS Quality Policy within their work environment. Each ANS employee is an empowered team member responsible for both their individual and the team's performance, satisfaction and well being.

To make it possible for every employee to succeed, ANS promotes:

- Total employee involvement
- Open communications
- Employee development
- Employee feedback
- An environment of trust
- Highest standards of integrity and ethical conduct

Employees are encouraged to develop and use their full potential, aligned with company objectives and personal development.

### **3.4 Customers**

ANS's quality policy is to satisfy the quality expectations of our customers - both external and internal.

Everything we do affects the customer whether external or internal. Therefore, to meet the quality expectation of our customers, ANS maintains a customer focus by applying the following principles:

- Aligning customer needs with supplier capabilities to ensure that ANS is doing right things right.
- Developing work processes that link employees as customers and suppliers in a chain.
- Monitoring customer requirements through continuous communications.

### **3.5 Processes**

ANS recognizes the need for common processes across each of its Business Units to improve overall company performance. As a result, ANS will:

- Define and improve core business processes that introduce and deliver products and services to customers
- Define and improve support processes
- Define and improve supplier management processes
- Develop metrics and measurement methods for these processes and compare them to "best in class" for our industry.

## 4.0 Quality System Requirements

### 4.1 Management Responsibility

The Chief Executive Officer of ANS has ultimate responsibility to establish quality policy, and where necessary, to approve or reject recommendations from the Quality organization.

The ANS Vice President of Quality and Customer Satisfaction is responsible for ensuring that an adequate organization exists within the company to address and control all systems necessary for the effective operation of the ANS Quality Management System.

Executive management reviews the entire quality system at appropriate intervals to provide assurance of its continuing suitability and effectiveness.

### 4.2 Quality System

As a minimum, all functions of ANS shall have a documented quality system which complies with the appropriate level of the ISO 9000 series standards and where appropriate, for software, to ISO 9000-3 or equivalent. The primary and supporting responsibilities for each functional organization and business group are described in the Management Responsibility management practice. The responsibility for ensuring compliance lies with the quality representative of the Business Unit or function.

Quality planning shall take into account the company's overall strategic and operational goals and shall identify the requirements for effective implementation and maintenance of the documented Quality System. Depending on customer requirements, Quality plans will also be produced for specific products and projects, detailing the processes, and the monitoring and control activities necessary to assure customer satisfaction.

A master index with links to all ANS Quality Management System documents shall be maintained under part number 8BD 00023 0000 QRZZA

### 4.3 Contract Review

A review shall be conducted of all offers, tenders, contracts, and orders. A review shall be conducted to ensure that customer requirements, whether new or changed, are adequately defined and documented, differences are resolved, and the capability exists to meet defined requirements. It is essential that any ambiguity in customer requirements be eliminated and that a full understanding of the customer's requirements be established to ensure the correctness and validity of contracts. Records of each review shall be maintained. Responsibility for the review is the function receiving the contract or making the offer unless this responsibility is delegated elsewhere.

#### **4.4 Design Control**

ANS shall implement and maintain design control procedures as defined in the product life cycle documentation. These procedures will involve planning, design, verification, validation, and change control activities. There shall be a plan prepared for each design and development activity. Design reviews shall be conducted.

Software activity will operate as a minimum under a quality system based on ISO 9000-3 or equivalent. To this end action shall be in place to improve the management and processes involved in software design and replication.

The responsibility for design control rests with the head of each Business Unit.

#### **4.5 Document and Data Control**

All documents shall be reviewed and approved for release by duly authorized persons.

Standard methods shall be defined for adding and identifying revisions. These revisions shall be approved by the same functional authority that approved the original document.

Procedures of the appropriate issue shall be made available to all locations where required for the effective functioning of the quality system.

Responsibility for ensuring compliance rests with the document owner. Compliance with procedures shall be monitored by the relevant quality representative

Records of changes shall be maintained.

#### **4.6 Purchasing**

Requirements for purchased products shall be established and conformance to these requirements shall be ensured. Assessment of suppliers, purchasing data, and verification of purchased product performance are major categories within these requirements.

Suppliers shall be selected on the basis of their ability to meet specified requirements including quality, design, delivery, service, production capacity, stability, and price. Purchasing documents shall contain data clearly describing the product ordered.

Whenever possible, use shall be made of the resources of the corporate Purchasing function.

#### **4.7 Control of Customer Supplied Product**

Customer supplied product or materials shall be handled with the same care and diligence as materials purchased under the normal material control system. Any loss, damage or other occurrence making the product unsuitable for use shall be reported to the customer.

#### **4.8 Product Identification and Traceability**

Identification and traceability requirements shall be established and procedures shall be in place to ensure compliance to requirements. Assuming that product identification and/or traceability are required, the following are the minimum requirements to be met:

Wherever possible, each item shall be identified through appropriate stages of manufacture, installation, repair, or modification.

Where applicable, the unique identification shall be recorded on all documents, such as process, inspection, and test records.

Finished products shall be identified and recorded in a configuration management system.

#### **4.9 Process Control**

Processes which have a direct effect on product quality must be carried out under controlled conditions. Documentation shall exist to describe these processes sufficiently to ensure they are conducted within process control.

The characteristics of processes and products must be monitored and controlled to ensure compliance with specified requirements. The results obtained from the monitoring activity must be subject to analysis. There must be written procedures covering data collection and analysis at various identified points in the process. Inspection and test parameters must exist which show the specified requirements. Special processes shall be continuously monitored.

#### **4.10 Inspection and Testing**

All material received for use in or with ANS products and all product passing through the manufacturing process shall be verified according to documented procedures. Product conformance to specified requirements may be established by inspection, testing, process monitoring techniques or control standards. Material shall be held pending completion of verification requirements except when released under positive recall procedures.

No product shall be delivered until all verification activities specified in the documented procedure(s) have been satisfactorily completed. Outgoing quality audits will be conducted to monitor finished product quality.

Records of verification activities shall be maintained in accordance with section 4.16.

#### **4.11 Control of Inspection, Measuring and Test Equipment**

All inspection, measuring and test equipment used to demonstrate the conformity of products against the specified requirements shall be calibrated according to a documented procedure.

Primary master standards shall be calibrated and certified by approved facilities having standards traceable to National Standards.

Records shall be maintained and evaluated periodically to ascertain adequacy of inspection intervals presently in use.

#### **4.12 Inspection and Test Status**

A system shall be maintained for indicating the status of inspection and test throughout production and installation by means of authorized stamps, tags, labels, route cards, inspection records, test software, or physical location. The authority responsible for the release of conforming product shall be clearly identified.

#### **4.13 Control of Non-conforming Product**

Non-conforming product shall be clearly identified and physically segregated (when practical) from the production flow or installation process to prevent inadvertent use, shipment, or mixing with conforming product

#### **4.14 Corrective and Preventive Action**

When non-conformities are identified, the cause of their occurrence shall be investigated, corrective action taken, and preventive measures initiated. When corrective action is necessary, controls shall ensure that the intended action has been performed and is effective. There shall be a system to ensure that any change to existing procedures as a result of corrective actions are implemented and recorded.

Customer complaints shall be recorded and handled expeditiously in a manner that provides quality and reliability improvements to products and satisfaction to customers. Customer complaints which have not been resolved within a reasonable time shall be escalated to the Vice President of Quality and Customer Satisfaction.

Preventive action shall be carried out to resolve potential causes of non-conformities. They shall also include identifying equipment and processes that would reduce quality if preventive action is not performed. Preventive action shall be scheduled and performed on these elements and records shall be kept. Ongoing analysis of records shall be performed to allow early detection of adverse trends and immediate corrective action. The Quality System shall be reviewed and improvements implemented to reduce the risk of failure.

#### **4.15 Handling, Storage, Packaging, Preservation and Delivery**

Methods and means will be provided to ensure that handling products does not cause damage or deterioration.

Secure storage areas or stock rooms shall be provided to prevent damage or deterioration of the product and/or production material. In order to detect any deterioration, the condition of product and/or production material in stock shall be assessed at appropriate intervals.

Packing, preservation, and marking processes (including materials used) required to ensure conformance to specified requirements shall be controlled. All products shall be identified, preserved, and segregated from the time of receipt until responsibility for the product ceases.

Appropriate methods shall be identified to ensure the preservation of product until responsibility for that product passes to the customer.

The quality of product shall be protected after final inspection and test. Where contractually specified, this protection shall be extended to include delivery to destination.

#### **4.16 Control of Quality Records**

Legible quality records shall be generated and maintained to demonstrate the achievement of the required quality and the effective operation of the Quality System. Quality records shall be readily retrievable, and accumulated quality records shall be reviewed and evaluated by responsible personnel in order to identify adverse trends and to improve systems, records, etc. Quality records shall be utilized in compiling trend analysis from inspection data. Associated records shall demonstrate the use of the data for corrective action.

#### **4.17 Internal Quality Audits**

Internal quality audits that evaluate the Quality System of ANS shall be carried out using documented procedures following yearly plans. Records shall be kept and results of these audits shall be reviewed by the appropriate management.

Internal quality audits shall objectively evaluate the adequacy of all aspects of the Quality System. Audits shall be carried out by appropriately trained personnel who are not directly responsible for the function being audited. Audits shall be performed in accordance with documented audit procedures.

Management responsible for the functions being audited shall review, agree on, and correct deficiencies revealed in the audit report. All actions taken to correct deficiencies shall be verified for effectiveness.

The results of internal audits shall be considered as part of the Management Review of the Quality System.

#### **4.18 Training**

All functions shall identify and document the specific job skills and competencies required to achieve functional requirements. The competence of personnel carrying out such functions shall be verified through review, examination, or other means to determine additional training or expertise needed where this is appropriate. Records of personnel competence and training shall be retained.

#### **4.19 Servicing**

Comprehensive instructions covering servicing activities shall be produced and made available. The design and operation of special tools and equipment, including measuring and test equipment, used for servicing activities shall be maintained and calibrated.

#### **4.20 Statistical Techniques**

Applications for statistical techniques shall be recognized and applied wherever the verification of process capabilities and product characteristics will be enhanced.

#### **4.21 Quality Improvement Process**

Continuous quality improvement is a vital part of the ANS Quality Management System and shall be implemented within all functions and Business Units. This will be accomplished within a total quality environment which promotes continuous quality improvement through active employee involvement and utilization of measurement data from both internal and external sources

Evidence of continuous quality improvement shall be retained by ANS functional departments and Business Units.

#### **4.22 Collection and Analysis of Field Performance Data**

Appropriate field performance data shall be collected and analyzed to provide a basis for quality and reliability improvements. Areas where product reliability can be improved shall be identified and appropriate action taken.

#### **4.23 Customer Satisfaction**

Appropriate customer satisfaction measurements shall be defined, used, and analyzed to obtain information relating to customer satisfaction. This information will be used to evaluate decisions that effect customers. It will also be used to continually improve processes and system to increase customer satisfaction.

Measurements shall include data from sources such as Customer surveys, Customer report cards, Customer and Supplier partnership programs.

## Environmental Management

Alcatel Network Systems will operate in a manner that respects the environment and integrates the following principles in its management:

- Ensure that employees are properly informed and, where relevant, properly trained to conduct their activities in an environmentally responsible manner.
- Foster openness and dialogue with the community in which it operates and with authorities about the potential impacts of operations; develop and maintain disaster plans where significant hazards exist.
- Develop and improve operations and technologies with regard to the efficient use of energy and materials, giving preference to renewable resources, minimizing waste and adverse environmental impacts, disposing of residual waste safely and responsively.
- Assess the environmental impact of processes before starting and before decommissioning a facility or leaving a site.
- Develop and manufacture products and services that are safe for their intended use, efficient in their use of energy, protect the environment and that can be recycled or disposed of safely, including their packaging, by advising the customer where relevant.
- Participate in efforts to improve environmental protection and understanding throughout industry.
- Set stringent guidelines and continuously improve them in light of technological advances and new environmental data, using appropriate government requirements as a basis.
- Assess compliance with group programs and legal requirements, measure environmental performance improvement and provide appropriate information to general management.
- Promote the adoption of these same principles by contractors and suppliers.

**6.0 Cross Reference to Management Practices and ISO 9001**

ANS Quality Manual Element	Title	Management Practice	ISO 9001 Element
4.1	Management Responsibility	8BD 00008 0000 QRZZA	4.1
4.2	Quality System	8BD 00010 0000 QRZZA	4.2
4.3	Contract Review	8BD 00038 0001 QRZZA	4.3
4.4	Design Control	8BD 00049 0200 QRZZA	4.4
4.5	Document and Data Control	88D 00009 0000 QRZZA	4.5
4.6	Purchasing	8BD 00041 4001 QRZZA	4.6
4.7	Control of Customer Supplied Product	8BD 00033 0001 QRZZA	4.7
4.8	Product Identification and Traceability	8BD 00019 0001 QRZZA	4.8
4.9	Process Control	8BD 00019 0002 QRZZA	4.9
4.10	Inspection and Testing	8BD 00019 0003 QRZZA	4.10
4.11	Inspection, Measuring, and Test Equipment	8BD 00019 0004 QRZZA	4.11
4.12	Inspection and Test Status	8BD 00019 0005 QRZZA	4.12
4.13	Control of Non-conforming Product	8BD 00019 0006 QRZZA	4.13
4.14	Corrective and Preventive Action	8BD 00023 2207 QRZZA	4.14
4.15	Handling, Storage, Packaging, Preservation and Delivery	8BD 00041 2000 QRZZA	4.15
4.16	Quality Records	8BD 00023 2105 QRZZA	4.16
4.17	Internal Quality Audits	8BD 00023 2100 QRZZA	4.17
4.18	Training	8BD 00034 0101 QRZZA	4.18
4.19	Servicing	8BD 00033 0002 QRZZA	4.19
4.20	Statistical Techniques	8BD 00019 0007 QRZZA	4.20
4.21	Quality Improvement Process	8BD 00023 2103 QRZZA	—
4.22	Collection and Analysis of Field Performance Data	8BD 00023 2200 QRZZA	—
4.23	Customer Satisfaction	8BD 00023 2201 QRZZA	—

## CERTIFICATE OF SERVICE

I, Cris Cary, hereby certify that a true and correct copy of the foregoing Reply Comments was sent this 15th day of August, 1997, via first class mail, postage prepaid, to the following parties:

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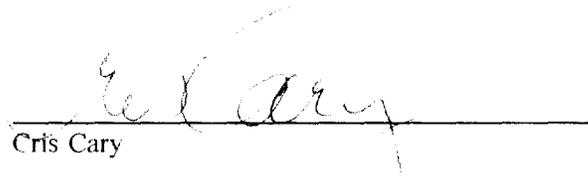
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