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North American Numbering Council
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RECEIVED

MAY 07 2004

Federal Communications Commission
Office of the Secretary

May 3, 2004

Mr. William Maher
Chief, Wireline Competition Bureau
Federal Communications Commission
445 Twelfth Street, S.W.
Washington, D.C. 20554

Re: Intermodal Porting Intervals

Dear Mr. Maher:

On November 10, 2003, the FCC asked the North American Numbering Council (NANC) to consider the implications of reducing the interval of time required to port telephone numbers between wireline and wireless service providers ("intermodal porting"). NANC quickly formed an Issues Management Group (IMG) to prepare a response to the Commission's request. The IMG, under the leadership of NANC Vice Chair Hoke Knox, devoted considerable time, talent and other resources over the last four months (an estimated 2,000 work hours) to the production of a comprehensive Report & Recommendation.

Attached is the "Report & Recommendation on Intermodal Porting Intervals" which was adopted by NANC during a duly noticed telephone conference call meeting earlier today. The report makes some specific recommendations for a porting procedure which would shorten the porting times and it also identifies a number of additional issues which need to be addressed by the industry and regulatory bodies.

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If you have any specific questions about the substance of the Report & Recommendation, I would suggest that you contact Mr. Knox at (913) 315-9060.

Sincerely,

Robert C. Atkinson
Chairman

Attachment

cc: NANC Members (w/out attachment)
Carol Mattey - FCC
Eric Einhorn - FCC
Cheryl Callahan - FCC
Sanford Williams - FCC
Deborah Blue – FCC

NANC Report & Recommendation on Intermodal Porting Intervals

May 3, 2004

Prepared for the NANC
by the
Intermodal Porting Interval
Issue Management Group

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1. EXECUTIVE SUMMARY

The Federal Communications Commission (FCC), on November 10, 2003, asked the North American Numbering Council (NANC) to provide input on reducing the porting interval for intermodal porting. The FCC asked the NANC to also include corresponding updates to the NANC LNP process flows and provide any recommendations on an appropriate transition period. The NANC should also provide its recommendations promptly as the FCC intends to review the record and address the porting interval.

In evaluating six proposal combinations, the IMG agreed that two procedures hold particular promise. Orders received in a mechanized manner should be responded to in five hours or less (proposal C2). Ten Digit Triggers should be set a full day before 12:01 AM of the confirmed due date (proposal A3). This combination offers the shortest "maximum porting interval" (53 hours) and greatest time reduction in hours (43) for the "Low" estimated cost impact. The NANC's Issue Management Group (IMG) Proposal Analysis indicates that there are no cost impacts on batch processes, complex changes to SP programming, changes to existing NPAC timers, or NPAC software changes. Thus, this proposal combination could offer the most economical opportunity for the industry to substantially reduce the porting interval for consumers.

In summary, the IMG considers the C2/A3 proposal the most promising and recommends that the NANC forward this document to the FCC and ask that the appropriate industry and regulatory bodies be given additional time necessary to prepare a complete analysis of this alternative. Section 10 titled "Further Considerations" identifies issues not addressed by the IMG. Although some of these issues are being addressed by the LNPA-WG, Section 10 identifies additional issues that may impact the implementation of proposal C2/A3 and therefore further analysis by Service Providers and Regulators is warranted before a decision is made to implement C2/A3. The IMG would like to note that this report has not been evaluated by the NANC's LNPA-WG and that the IMG did not attempt to determine if the C2/A3 proposal achieves the customer benefits desired by the FCC.

Based upon known information at this time, the IMG estimates that the industry would need approximately 24 months to implement the C2 proposal after an FCC mandate is issued. In addition, to the extent that LNP-capable switches are already provisioned with the 10-digit trigger, proposal A3 could be implemented more quickly.

2. BACKGROUND

In CC Docket 95-116, FCC 03-284 released November 10, 2003 the FCC asked for "comment on whether we should reduce the current wireline four business-day porting interval for intermodal porting. If so, what porting interval should we adopt"?[1]

The FCC also asked for comment on "whether adjustments to the NPAC processes, including interfaces and porting triggers, would be required. In addition, we seek comment

[1] CC Docket 95-116, FCC 03-284 released November 10, 2003 ¶ 49

on the risks, if any, associated with reducing the porting interval for intermodal porting. We seek comment on an appropriate transition period in the event a shorter porting interval is adopted, during which time carriers can modify and test their systems and procedures".[2]

The FCC asked "the North American Numbering Council (NANC) to provide input on reducing the porting interval for intermodal porting. The NANC should also include corresponding updates to the NANC LNP process flows and provide any recommendations on an appropriate transition period".[3]

The FCC indicated that "[r]educing the porting interval could benefit consumers by making it quicker for consumers to port their numbers. To that end, wireless carriers intend to complete intermodal wireless ports within two and one-half hours. There, however, may be technical or practical impediments to requiring wireline carriers to achieve shorter porting intervals for intermodal porting.[4]

On December 22, 2003, the NANC met via conference call and formed the Intermodal Porting Interval Issues Management Group (IMG) to address the above issues for the FCC.

3. NPAC PORTING PROCESS

The Number Portability Administration Center (NPAC) porting process is the same for wireless and wireline, except that the wireless Initial Concurrence Window (T1 timer) and Final Concurrence Window (T2 timer) are 1 business hour instead of 9 business hours.

Also, the NPAC SMS business hours are different and occur 7 days a week rather than just Monday through Friday as is the case for the wireline timers. The Conflict Resolution (6 business hours) and Initial Cancellation (9 business hours) and Final Cancellation (9 business hours) timers are the same but likewise run in different time periods and days. [5][6]

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2 Ibid. ¶ 50

3 Ibid. ¶ 51

4 Ibid. ¶ 49

5 There is one other small difference. For the "wireline" family of timers, there is a point relative to the due date beyond which a pending SV (Subscription Version) cannot be placed into conflict. There is no corresponding limitation for the "wireless" family of timers.

6 (1.) If both SPs have sent their create messages to NPAC, and the old SP create message had its concurrence flag set to "true" then the NPAC timers become moot; they would have no impact on the activation so it wouldn't matter that they were "wireless" timers.

(2.) While the two families of NPAC timers often are referred to as the "wireline" and the "wireless" timers, the timers used for a carrier are based on an SP's NPAC profile, i.e., what the SP tells NPAC it wants determines which set of timers is used, it is not based on what type of carrier is involved. In fact, some rural wireless carriers have elected the "wireline" timers for their port-out and port-in timers.

3. NPAC PORTING PROCESS (Cont'd)

Control of Activation Date Ultimately Rests with the NNSP

The due date/time entry must be the same on the old SP create and the new SP create. When the NPAC is satisfied that a match exists, the T1/T2 timer sequence stops (if the timers have not already expired).

Once the NPAC has verified this match, either SP can modify its entry in the due date/time field without concern about continuing to match the other SP's due date/time entry. The NPAC does not require either SP's due date/time change to be agreed to by the other SP.

Later, when the new SP activates the pending Subscription Version (SV), the NPAC uses the due date/time shown on the new SP's create message to determine whether it is too soon to permit the activation to occur.

If the new SP alone has sent a Create message to the NPAC, the due date value still could be modified with no action required of the old SP. However, the T1 and T2 timers still must run their course before activation could occur, since there is no Create message from the old SP to indicate its concurrence with the port.

4. WIRELINE PORTING INTERVAL

The current industry agreed porting interval for wireline service is four (4) days for simple ports. This includes a maximum of one (1) day for the exchange of the Local Service Request (LSR) and the Firm Order Confirmation (Port Response) between the old service provider and the new service provider, and three (3) days to accomplish the port of the telephone number from the old service provider to the new service provider.

LSR/Port Response Process

When a customer decides to port their number the new service provider collects information from the customer that is necessary for porting. The information gathered is used by the new service provider to prepare a LSR that is sent to the old service provider. The LSR is an industry standard form developed by the Ordering & Billing Forum.

The maximum one (1) day LSR/Port Response process requires that the new service provider and the old service provider exchange information and agree on a due date to port the customer. Typically, the new service provider will send, via FAX or electronically, a LSR to the old service provider with the customer information, details on the port and the requested due date. The old service provider has 24 hours to verify the information on the LSR and to respond to the new service provider with a Port Response which will contain an agreed upon due date and confirm that the information on the LSR is correct. Factors such as the quantity of telephone numbers being ported, type of service impacted, use of the Unbundled Network Elements (UNE) or the involvement of resellers will help determine the actual due date of the port.

4. WIRELINE PORTING INTERVAL (Cont'd)

LSR/Port Response Process (Cont'd)

If the LSR information is not correct, the old service provider will clarify the request and steps will be taken to resolve the problem.

The exchange of the LSR and the Port Response between the old and new service providers indicates agreement that the number can be ported, and it indicates the date on which the port is expected to occur.

Ten-Digit Trigger

The unconditional ten-digit trigger (TDT) is a central office software-switching feature optionally assigned to a number on a donor switch during the transition period when the number is physically moved from donor switch to recipient switch.[7] The feature forces the switch to search the LNP database on every call to determine if the database has been updated with new LNP routing instructions.

The setting of the TDT causes the switch to query the appropriate LNP network database for calls to the applicable TN, and eliminate some of the close co-ordination needed between the Old Network Service Provider (ONSP) and New Network Service Provider (NNSP) during the completion of the porting process by eliminating the need for the donor switch disconnect to take place simultaneously with NPAC activation.

The unconditional TDT forces a query to the provider's LNP database on calls originating from the ONSP switch and allows the TN to be resident in both the ONSP and NNSP switches during the porting interval while ensuring that calls complete properly.[8]

In essence, the Ten Digit Trigger forces the donor switch (the switch out of which the code is to be ported) to query the database for possible porting before completing the call. Without the Trigger the donor switch would find the number to be working in its own tables, and the donor switch would not perform the query. This trigger is typically set in the ONSP switch no later than the day before the due date of the port.

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[7] The 10 Digit Trigger shall be operational no later than 11:59PM in the donor switch (ONSP) the day prior to the anticipated port-out date.

[8] NNSP may also use TDT in pre-provisioning based on the process flows.

4. WIRELINE PORTING INTERVAL (Cont'd)

Wireline Porting Process

A minimum three (3) day porting interval is the agreed upon interval for wireline carriers to perform system updates and the physical work required to complete a simple port once the LSR/Port Response process is complete. Factors such as the quantity of numbers being ported, type of service impacted, use of the Unbundled Network Elements (UNE), loop facilities or the involvement of resellers may result in the porting process to be longer than three days.

After the new SP receives the Port Response, the new SP sends a create message to the NPAC. The message indicates the telephone number being ported, the new call routing information for this number, the agreed upon due date, and the NPAC SPID of the old SP and new SP.[9] If there is no corresponding create message at NPAC from the old SP, the NPAC notifies the old SP that a port is pending. The NPAC starts its T1 timer. Note that the old SP create message is optional in this process.

The T1 timer runs for 9 NPAC business hours, that is, between the hours of 7 a.m. and 7 p.m. Central time, Monday through Friday. If the old SP has not sent its create message by the time T1 expires and T2 begins, then another notification is sent to the old SP. For the case where it is the old SP who has sent its create message to the NPAC first, the new SP may elect to receive these same notifications.

Regardless of which SP sends its create message first, once the NPAC receives a matching create message from both SPs, the timers become moot. (A matching create message means that the telephone number, due date, and the old and new SP's NPAC Service Provider's IDs (SPIDs) are the same in both create messages.) Until both the T1 and T2 timers expire, or are mooted by receipt of both SPs' create messages, the new SP cannot activate the pending port. If either the T2 timer expires or the old SP concurs before the due date, the new SP still must wait to activate the port until the due date is reached. The due date can be changed by the new SP, incidentally, provided both SPs have sent their create messages to NPAC.

[9] Due date is a "timestamp" field with the format MMDDYYYYHHMMSS. All digits are required. Industry agreement is that the seconds portion is always 00. For a wireless Create, HHMM is the agreed upon time. For a wireline Create, typically, the HHMM is populated with 0000, but this is not necessarily required.

4. WIRELINE PORTING INTERVAL (Cont'd)

Wireline Porting Process (Cont'd)

If the old SP sends a create message to NPAC, it must include an explicit indication of concurrence or objection to the port. If the old SP's create message indicates objection -- the concurrence flag is set to false – then the pending port is placed into a conflict state. When this occurs, the NPAC starts a "conflict resolution window timer" during which only the old SP can remove the pending port from conflict. After the "conflict resolution window timer" expires, either SP can remove the pending port from conflict.[10] The "conflict resolution window" timer runs only between 7 a.m. and 7 p.m. Central time, Monday through Friday. Conflict can be invoked after the create is sent. Conflict can be invoked repeatedly, but the "conflict concurrence window" occurs only the first time a conflict is invoked.

Upon receipt of the activate message, the NPAC determines that the pending port is not in conflict and that the T1-T2 timers are not still in play, and then broadcasts the ported TN information to all LSMSs in the region. Some old SPs proceed with their disconnect work based on the port's agreed upon due date, either on that date or a day later. Other SPs begin their disconnect processes when the NPAC broadcast for the number is observed.

While the above text describes the provisioning process, both service providers must also start the internal processes that will address the port within their infrastructure. For example, the new service provider must provision the service in the serving switch and make arrangements for a serving facility while the old service provider must issue the service orders to disconnect service to this customer at the due time on the due date. The old and new service providers' provisioning, routing, billing, maintenance, and administrative systems must be updated to accomplish the transfer of the telephone number. Typically, the old and new service providers complete OSS and central office updates within one day after the port.

Key points about the wireline-porting interval are:

- The existing or current flows allow a period of two business days for the concurrence of the old service provider
- The time to return the Port Response may be less than 24 hours when fully mechanized (non-fax) and no errors exist on the LSR.
- Regardless of the port intervals, if activation of the port is done prior to the completion of the TN disconnect by the old service provider, a "mixed service" condition exists until the disconnect is completed.[11]

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[10] The LNPA WG, through the Problem Identification Management (PIM) Process is working on PIM 22 which seeks to eliminate the timer functionality and postpone a port placed into conflict under cause code 50 (LSR Not Received) or 51 (FOC Not Issued) until the conflict is resolved.

[11] Mixed service is the period of time during which both the old and new service providers have the number activated.

4. WIRELINE PORTING INTERVAL (Cont'd)

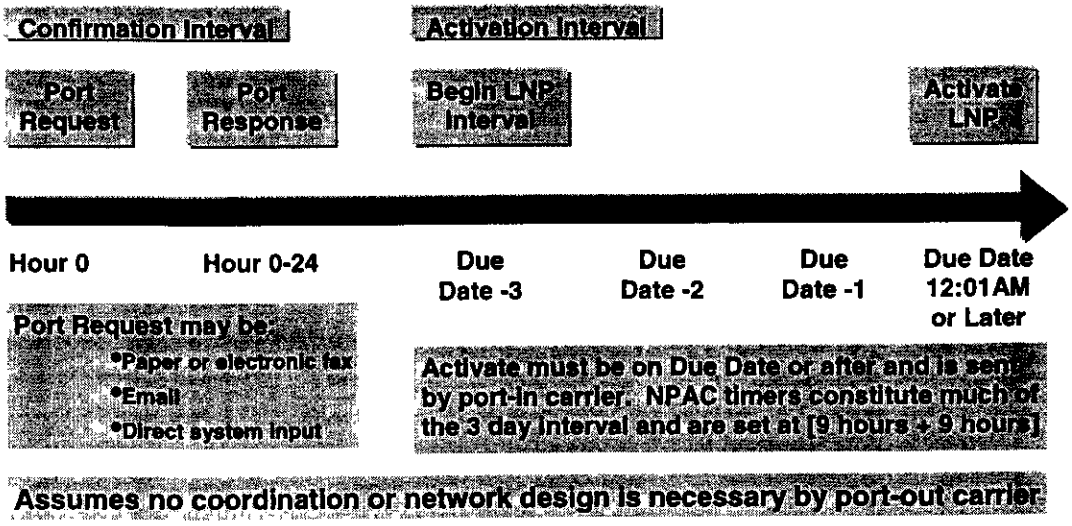
Wireline Porting Process (Cont'd)

A pending port can be canceled at the customer's request or because a conflict between the SPs cannot be resolved. From the NPAC's standpoint, a port is cancelled when either the pending port has not been activated 30 days after its due date or has been in conflict for 30 days, or when the new SP sends NPAC a cancellation request. When both SPs send a cancellation request, the pending port is cancelled immediately. If only the new SP sends a cancellation request, a pair of "cancel request acknowledgement" timers must run, each for nine hours. Like other timers described before in this family of "long" or "wireline" timers, these "cancel request acknowledgement" timers operate only during the 7 a.m. to 7 p.m. Central time, Monday through Friday NPAC SMS "business hours."

Following is a pictorial view of the process for simple port confirmation and activation:

Simple Port Confirmation and Activation

- Current wireline LNP intervals



5. WIRELESS PORTING INTERVAL

The wireless porting interval is based upon the expectation of wireless customers to go to a wireless point of sale and leave with functional service and handset/terminal. The wireless industry's customer acquisition and provisioning systems are all geared to meet this expectation. Thus, to satisfy the wireless business model, the wireless industry agreed to 30 minutes for a port request (wireless intercarrier communication process (ICP) equivalent of the wireline LSR/Port Response), and two hour NPAC activation process (1 hour Initial and Final Concurrence Window timers), for a total of a 2-1/2 hour wireless porting interval for a simple port request.

Port Request and Response Process

When the customer requests service and to port their telephone number to a New Service Provider (NSP), the NSP will verify the customer's identity, obtain and certify their authorization to port the number. This includes obtaining their Social Security, current Old Service Provide (OSP) account, and/or their tax identification (based upon zip code) number(s). The New Network Service Provider (NNSP) also confirms that the number is eligible for porting (i.e. that the NXX is portable and in the local serving area).

Once this certification is complete, the NNSP enters the required port request data into their system, and the port request is edited, formatted, and sent to the Old Network Service Provider (ONSP) via an interface, the New Interface Communication Process (NICP), usually either a clearinghouse or the NNSP's Service Order Administration (SOA) system. The NICP stores and transmits the port request to the ONSP's Old Interface Communication Process (OICP) and issues a transmit-received acknowledgement. If there is no acknowledgement response, NNSP resolution is invoked. If a transmit acknowledgement is received, the timers begin tracking time.

The OICP then edits and stores the port request. If the request cannot be validated within 30 minutes a "Delay" response is sent. Given that the customer/account has already been certified, to reduce fallout, the major wireless carriers agreed to validate on three numerical fields (telephone number, social security number or account number or tax identification number, and five-digit zip code), plus pin or pass code if protection has been requested by the customer. The ONSP validates the port request and issues a port response, either a "confirm" if the validation data matches or a "deny" with reason code if the validation data does not match. The ONSP sends the response via the OICP to the NICP and requests a transmit acknowledgement. The NICP stores the response and sends an acknowledgement. If no transmit acknowledgement is received, resolution is required with the NNSP. Once the NNSP receives the confirm response, the NNSP has completed the ICP process and continues the porting process at the NPAC.

6. ASSUMPTIONS

The IMG will not presume that the previously developed wireline porting interval of four days can be reduced, but will instead review the processes and evaluate proposals to see if the interval can be reduced.

Only SIMPLE *(see glossary)* ports will be defined and discussed in this IMG report Complex ports *(see glossary)* are not included. Complex ports are ports that generally require more time for coordination due to factors such as number of lines, multiple geographic locations, multiple time zones, involvement of multiple service providers, or other similar factors. Simple ports generally involve fewer complicating factors, e.g. single-line account port.

Intermodal porting is defined as wireline to wireless and wireless to wireline porting. This report does not address wireless to wireless and wireline to wireline porting intervals.

Options to shorten the porting intervals require ports be error-free.

Shortening the intermodal porting interval would require use of an automated process for the port request and port response.[12] Shorter intervals would not be supported where a low-tech interface is used. Low-tech interfaces include fax and email.

7. DISCUSSION QUESTIONS

A. What were the reasons the four business day interval was initially introduced?[13]

For ports from wireline providers to wireless, wireless Service Providers desire reduced porting intervals from those currently used by the wireline segment of the industry.[14] The current porting intervals for wireline include a maximum of one (1) business day for the LSR/Port Response process and three (3) business days for the porting process. Wireline ports may be accomplished in less time when conditions are optimal, however, the timeframes were established to support the complex systems and work processes of all the wireline Service Providers. A variety of systems are used during the porting process including, but not limited to the following:

- LSR/Port Response Systems – *Processing of inter-Service Provider communication documents*

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[12] Port request refers to the Local Service Request (LSR) or Wireless Port Request (WPR). Port response refers to the Firm Order Confirmation (Port Response) or Wireless Port Request Response (WPRR).

[13] Wireline business days are Monday-Friday, 7 a.m. to 7 p.m. CST.

[14] Wireless Wireline Integration Subcommittee 2nd Report.

7. DISCUSSION QUESTIONS (Cont'd)

A. (Cont'd)

- Service Order Systems – *Initiate the service orders for Service Provider provisioning and to begin the porting process*
- Inventory Systems – *Manage the distribution and assignment of equipment and telephone numbers*
- Work Force Assignment Systems – *Schedule assignments to accomplish any facilities work*
- Billing Systems – *Update records required to ensure accurate billing*
- Maintenance Systems – *Update records required to enable quality trouble resolution*
- Switch Administration Systems – *Maintain switch translations and activate optional ten-digit triggers*
- E911 Systems – *Update records to ensure accurate customer data*

The above systems were individually designed and developed by each wireline Service Provider. Many of these systems operate in batch environments that require at least an overnight timeframe to process updates. Porting intervals were negotiated during 1996 and 1997 by the wireline industry segment to allow for differences in processing parameters of these various carriers' systems.

The one (1) day LSR/Port Response process and the three (3) day porting interval were negotiated by the wireline carriers in order to perform all of the system updates and any physical work required to accomplish the port. For example, the batch service order process used by many wireline carriers results in the need for the one (1) day LSR/Port Response process. During the three (3) day porting timeframe, a batch process is used by many Service Providers to complete the translations work needed to activate the ten-digit trigger in order to enable routing calls to ported customers, and subsequently, to disconnect the porting customer.

The current intervals perform the additional function of providing a necessary interval for validation. These intervals serve as a process brake when questions arise concerning a specific port, for instance, when steps are performed out of normal sequence. A new service provider, issues a create message to NPAC before sending an order to the old service provider and receiving a Port Response. The old service provider must scramble to send its message to NPAC before expiration of the T1 timer. Failure to do so represents additional work steps to research a NPAC message querying for an order, that may very well be in process, but delayed by late service order issuance.

7. DISCUSSION QUESTIONS (Cont'd)

A. (Cont'd)

When a new service provider, as another example, issues a create message to NPAC without ever issuing an order to the old service provider, the old service provider first finds out about the order from the NPAC. The old service provider may invoke a conflict timer, but the total number of business hours available to handle the port before it becomes active is the sum of the T2 timer and the conflict timer, currently 15 hours. Any adjustment of these timers creates less time to communicate with the new service provider, research the problem, check the account, and resolve the problem in a way consistent with end user wishes.

A final error that the 3 day interval forms a safeguard against occurs when the new service provider issues porting requests for telephone numbers which may include a number not shown on the account record. In short, in any circumstance where the requested porting activity does not agree with messages sent to the NPAC and the LSR received by the losing carrier. The intervals are designed to allow enough time for the carriers to work out these differences before a port occurs that could potentially put an end user out of service.

B. What might apply to the intermodal port?

Carriers may need to modify their Operational Support Systems (OSS), Service Order Entry Systems (SOE), Service Order Administration (SOA), Local Service Management System (LSMS) to use the shorter intermodal porting interval.

The NPAC currently has two separate timers depending on the type of port, wireless to wireless, or wireline to wireline and intermodal. The introduction of a third timer for use in limited circumstances (simple ports) within the context of an intermodal port would necessitate development work within the NPAC as well as carrier systems interfacing with the NPAC.

C. Should the IMG examine the costs, benefits, and methodologies involved in reducing the four-day interval and define a reasonable transition period?

Based on the technical detail required to implement a shorter intermodal porting interval, a transition period commensurate with the system design changes should be allowed after the FCC mandates the new porting interval. This time period would allow carriers time to design, budget, and implement the new porting interval within their respective networks and associated systems. Additional time would also allow modification to the NPAC based on the outcome of this analysis and any subsequent FCC orders.

8. PROPOSALS

Proposals are identified below as a Confirmation ("C") interval or an Activation ("A") interval. The confirmation interval includes port request and port response. The activation interval is the time after port response until the port is activated in the respective industry networks.

Each proposal offered may have implications related to state jurisdiction over issues such as performance measurements that need to be considered in the analysis of each proposal. For example, performance measurements are not uniform across all states.

Proposal C1 - (Port request and port response within 1 hour) (port response is either Port Response or port denial within one hour)

An automated interface standard for passing port requests and port responses would be needed with this interface being established as a public domain interface. All service providers that plan to use the shorter porting interval would be required to use proposed public domain interface for passing port requests and port responses.

A reduction in the intermodal porting interval could be feasible if all carriers used the same validation criteria as the major wireless carriers. These validation criteria are the ported number, social security number or account number or tax identification number, five-digit zip code, and pin or pass code if applicable. This validation, together with the certification of the customer identity via the service activation process, authorization to port the number, and the use of a standard automated interface, would simplify the port request process and significantly reduce the amount of data exchange necessary.

For example, carriers could exchange the following standardized data fields:

NNSP (New Network Service Provider Service Profile, Company Code SPID)
ONSP (Old Network Service Provider Service Profile, Company Code SPID)
REQ NO (Request Number, order tracking)
NPDI (Number Portability Direction Indicator, to set NPAC timers)
DDT (Due Date and Time … this should be set by the intermodal porting interval)
IMP CON (Implementation contact information for resolutions)
TEL NO (Telephone number of implementation contact)

Plus the validation criteria:

Ported # (porting telephone number)
SSN/ACCT (Social Security Number or Account Number or Tax Identification Number)
ZIP CODE (five digit zip code)
PSWD/PIN (optional pin or password if protection was requested by the customer)

8. PROPOSALS (Cont'd)

With the reduced validation criteria and fields, a standard format and associated interface requirement are easily defined for simple ports. Consequently, port confirmations and responses could be executed within a short time frame of 60 minutes. Moreover, there would be fewer errors and a significantly reduced fall out percentage that could reduce the processing costs associated with simple intermodal port requests.

Once the port request confirmation/Port Response is received, the Inter-carrier Communication Process (ICP) is complete. Subsequently, both the New Network Service Provider (NNSP) and the Old Network Service Provider (ONSP) can initiate the NPAC port activation process by submitting a Subscription Version Create.

Proposal C2 – (Mechanized port request, reduced Port Response interval Activation interval remains 3 days)

A new service provider may reduce the Firm Order Confirmation (Port Response) interval by establishing a mechanized interface. To the extent that the mechanized interface obviates the need for the order to be retyped manually on the receiving end, the Port Response interval may be reduced not to exceed 5 hours from receipt of an error-free order.

This five hour interval will be established reciprocally, when a carrier who is offering a 5 hour Port Response wishes also to use a mechanized interface to avail itself of a 5 hour Port Response for ports in the opposite direction.

Proposal A1 – (2 Day Port Activation After Port Response) (New NPAC timers for simple intermodal ports)

Establish a two-day interval for Simple Ports (as defined in Glossary). A three-day interval continues to apply to non-intermodal simple ports. This option necessitates a check of order activity against account record to insure that only one line is on the account, before an interval shorter than the three-day wireline standard is confirmed with a Port Response. This option may require a third set of timers to be developed, ones specifically set to reach a two day port interval.

To make this interval reliable, the factors listed at the end of Proposal A2 may apply for Proposal A1 as well, depending on its design. Though the factors are described below, they can be listed as follows:

1. **Changes in or elimination of performance measure remedies in the area of LNP ports.** With industry agreement and state commission cooperation in relaxing or removing the Performance Measurements associated with percent of orders that are completed before expiration of timers, it would be possible to shoot for a shorter goal.

8. PROPOSALS (Cont'd)

2. **Improved order accuracy.** With further ordering experience on the part of wireless providers and their service bureaus, as orders are processed more efficiently, quicker due dates can be offered to end users.

3. **Reciprocal Commitment.** With reciprocity and parity in shorter intervals (where not only ILECs, but all communications companies are under equal obligation to achieve quicker provisioning), the industry can move together for the benefit of our mutual customers.

4. **Adherence to NANC defined flows.** With Industry agreement that orders will not be sent to the NPAC until after Port Response has been received, the T1 timer may be reduced, without generating duplicate work for old service providers.

Proposal A2 – (2 Day Port Activation – Shortened Existing Timers)
Another methodology for reducing the provisioning interval (from Port Response to completion of order) is to work with the existing process, and adjust the timers for all standard orders. By working with all standard orders, a great deal of money and time is saved in not developing an additional process, and not running the process on a separate basis once developed.

Proposal A2 recognizes that the current process is based on a period of time that NPAC waits for both orders to arrive (9 hours), the time to advise a provider that its order is missing (another 9 hours) and the time for the old service provider to place an order in conflict if there is a problem (6 hours). Based on the following conditions, these timers may be reduced, and a two day activation interval achieved for all orders currently worked in three days.

1. **Changes in or elimination of performance measure remedies in the area of LNP ports.** With industry agreement and state commission cooperation in relaxing or removing the Performance Measurements associated with percent of orders that are completed before expiration of timers, it would be possible to shoot for a shorter goal.

2. **Improved order accuracy.** With further ordering experience on the part of wireless providers and their service bureaus, as orders are processed more efficiently, quicker due dates can be offered to end users.

3. **Reciprocal Commitment.** With reciprocity and parity in shorter intervals (where not only ILECs, but all communications companies are under equal obligation to achieve quicker provisioning), the industry can move together for the benefit of our mutual customers.

4. **Adherence to NANC defined flows.** With Industry agreement that orders will not be sent to the NPAC until after Port Response has been received, the T1 timer may be reduced, without generating duplicate work for old service providers.

8. PROPOSALS (Cont'd)

5. **A method to handle data portion of line sharing.** The FCC has ordered that when a port out is requested on a loop where the High Frequency portion is being used by a data carrier, the data carrier must be given a chance to place orders to retain use of the High Frequency portion.[15] The time offered the data provider to research, currently is three days for some LECs. A two day interval for porting out the number can not be met without adjusting Data CLECs' expectation, either through negotiation or regulatory assistance.

The reduction in T1 timer will become difficult if new service providers "jump the gun" and send the NPAC notice early, as the T1 timer would then be expiring even while the old provider is still receiving the order. If T1 expires and NPAC sends notifications to old carriers for orders that old carriers are processing on a timely manner, duplicate work is created in tracing the reports. Proposal A2 is based on agreement that steps will be handled sequentially, order to old provider, Port Response to new provider, then messages to NPAC.

Proposal A2 includes a reduction of T1 timer to 5 hours (from 9), and reduction of due dates from 3 business days after Port Response to 2 business days after Port Response.

Proposal A3 (Adapted from Wireless/Wireline Integration Reports)

This approach describes how an ONSP can facilitate the NNSP's ability to activate an intermodal port up to 24 hours prior to the due-date[16] identified on the Port Response[17]. This can be accomplished if the ONSP agrees to send a subscription version to the NPAC no later than 24 hours prior to NPAC due-date and sets the 10-digit trigger on the number in the donor switch no later than 11:59 pm on due date minus 2.

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15 In the FCC's Line Sharing Order FCC 99-355 released 12/9/1999, the FCC said in Paragraph 72, "We note that in the event that the customer terminates its incumbent LEC provided voice service, for whatever reason, the competitive data LEC is required to purchase the full stand-alone loop network element if it wishes to continue providing xDSL service " The FCC reiterated its finding in this regard in its TRO order. *See* TRO FCC 03-36 released 8/21/2003, ¶269.

16 The interval described by this proposal does not alter or change the existing wireline intervals, but provides an option to use an intermodal porting interval that is transparent to existing industry porting intervals.

17 Since port-outs to wireless consumers may include a mixed service interval, the wireless SP is responsible for implementing verifiable confirmation by the consumer regarding the 911 and billing implications, e.g., the customer will be billed by the wireline SP up to the day and time the wireline service is disconnected on the Port Response due-date.

8. PROPOSALS (Cont'd)

Proposal A3 (Adapted from Wireless/Wireline Integration Reports) (Cont'd)

After receiving NPAC notification that the ONSP has sent a positive create message to the NPAC (assumes the ONSP already set the 10-digit trigger), the NNSP is now aware that there were no problems with the port[18] and that they can if they desire initiate the transmission of a modify message to the NPAC to change the NPAC due-date. This act by the NNSP does not require further intervention or activity on the part of the ONSP or require the ONSP to change the Port Response due-date.

Note that this opportunity is only available to orders that flow-through 100% since otherwise, the need to perform complex system changes[19] to address fall-out prior to the Port Response due-date is beyond the scope of this proposal[20].

This approach may work as follows:

1. The NNSP submits an LSR which is processed by the ONSP.
2. The ONSP issues a Port Response specifying the due-date within standard industry intervals.
3. The NNSP acknowledges receipt of the Port Response and if the NNSP receives Port Response jeopardy, the NNSP needs to resubmit the LSR.
4. The NNSP sends a subscription version to the NPAC corresponding the Port Response due-date and time.
5. The ONSP OSSs begin to process the order in its service order provisioning systems[21] and sets the 10-digit trigger on its donor switch and sends the subscription version to the NPAC no later than 11:59 pm on due date minus 2 (new process).[22]

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18 This approach is for "flow-through" orders only and orders that "fall-out" during the editing/verification steps performed by the ONSP within its OSSs during the post-Port Response (activation) interval do not qualify.

19 An analysis of complex SP system changes needed to provide the mechanized tools and the impact upon human resources necessary to address NNSO queries regarding ports that do not "flow-through" 100% has yet to be performed and would likely change the IMG's opinion of this proposal relative to other proposals.

20 To this point, queries to the ONSP by the NNSP to advance the due-date and/or ask why a port has not yet and/or was not available for porting during the 24 hours prior to the Port Response due-date are prohibited, otherwise, this proposal would need to include complex SP system changes. Also see footnote 4.

21 This approach is for "flow-through" orders only and orders that "fall-out" during the editing/verification steps performed by the ONSP within its OSSs during the post-Port Response (activation) interval do not qualify.

22 This proposal only applies to orders that "flow-through" which include a single residential or business TN POTS line that passes individual ONSP OSS edits and verification steps during the activation interval.

8. PROPOSALS (Cont'd)

Proposal A3 (Adapted from Wireless/Wireline Integration Reports) (Cont'd)

6. The NNSP is notified by NPAC[23] that the ONSP has sent a subscription version to the NPAC for the TN.

7. No earlier than 24 hours before Port Response due-date, the NNSP sends a modify to NPAC changing the NPAC due-date[24] and time (new process).

8. Upon activation by the NNSP, the mixed service interval begins and the customer can originate calls using her wireline and wireless handset, but all calls will be received by the wireless handset only (new process).

9. On the Port Response due-date, the wireline service is disconnected and ordinary activities practiced today using the existing wireline intervals are performed by the ONSP in the case of wireline ONSP.

[23] SPs will not be measured or penalized if a TN is not made available for porting within the 24 hours prior to due date since the condition for this proposal is that otherwise the order did not flow-through 100%.

[24] The NNSP would not change the due-date using the LSR process but will directly contact NPAC to specify the intermodal activation due-date that appears in the NPAC as the new due-date

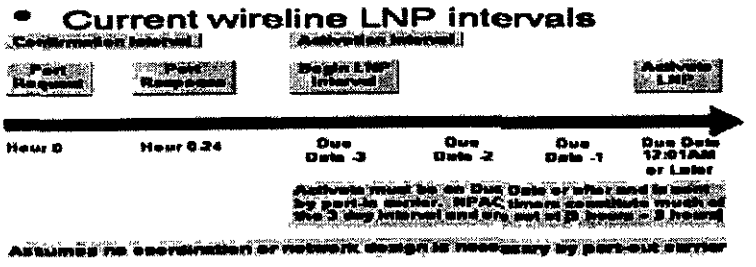
9. IMG ANALYSIS

Proposal Analysis

	Time Saved Confirmation Interval	Time Saved Activation Interval	Time Saved Proposals C1 & A1	Time Saved Proposals C1 & A2	Time Saved Proposals C1 & A3	Time Saved Proposals C2 & A1	Time Saved Proposals C2 & A2	Time Saved Proposals C2 & A3	Estimated Cost (Note 4)
Proposal C1	23 hours	N/A	23	23	23				Very High
Proposal C2	19 hours	N/A				19	19	19	Low
Proposal A1	N/A	24 hours	24			24			High
Proposal A2	N/A	24 hours		24			24		Medium
Proposal A3	N/A	24			24			24	Low
Proposal A4	N/A	17							Low
Total Time Saved in Hours			47	47	47	43	43	43	Note 1
New max porting interval in hours			49	49	49	53	53	53	Note 2
SP Change from Batch to Non-Batch			Yes	Yes	Yes	No	No	No	
Complex Change in SP Programing			Yes	Yes	Yes	Yes	No	No	
Change existing NPAC Timers			No	Yes	No	No	Yes	No	
NPAC Software Change			Yes	No	No	Yes	No	No	
Esimated Cost (Note 4)			Very High	Very High	Very High	High	Medium	Low	

Note:
1. *Current Intermodal Porting Interval time is 96 hours.*
2. Hours are related to wireline "business days", between the hours of 7 a.m. and 7 p.m. Central time, Monday through Friday.
3. Complex Change in SP Programing includes OSSs & SOA changes
4. Estimated Costs Categories (10 Major Carriers). Very High - >$600M, High - $100M-$600M, Medium - $50M-$100M, Low - <$50M
5. SP - Service Provider, NPAC - Number Portability Administration Center
6. Time Saved Confirmation Interval: This is the maximum hours that would be saved if port request and port response were both completed during the same business day for proposals C1 or C2.
7 Time Saved Activation Interval: This is the exact number of hours saved if the activation were planned for the same time of day regardless of proposal implementation.

Simple Port Confirmation and Activation



9. IMG ANALYSIS (Cont'd)

Work Steps Required to Implement a Shorter Intermodal Porting Interval

NPAC Changes

The NPAC today does not determine whether or not a transaction involves an intermodal port. Instead, the selection of timers to apply in a particular porting transaction is based on information about each SP contained in the regional NPAC Service Management System's (SMS's) User Profile data. It is the comparison of the involved carriers' timer profile settings that determines whether a porting transaction is to be treated as intermodal, i.e., to determine whether the port should be processed using the long timers. (The long timers and certain other related NPAC process intervals, including the days and times those processes operate, are sometimes referred to as the "wireline" timers; these are invoked as the default process values in what apparently are intermodal porting situations.)

The NANC IMG proposal adds a criterion to timer selection that is event-specific. That is, no longer will it be sufficient in every transaction to determine whether the old SP's port-out timer is the same as, or is different from, the new SP's port-in timer. (When the two are different, there is presumption of an intermodal port and the process defaults to the long timer values.) Instead, it will be necessary to have an explicit indication provided to the NPAC SMS that a particular transaction involves an intermodal port that is defined as "simple." This requires a design change for both the NPAC itself and for User systems involved in "simple intermodal" ports. The NPAC software must be changed to accommodate a third family of timers, for use in "simple intermodal" ports, and to recognize an indication by the old SP and/or new SP that a transaction involves a "simple intermodal" port. This interface change likewise would require a change to the carriers' systems.

A somewhat different approach would be to have the two SP's involved in a port indicate which of the three timer-families they wanted applied and then to have NPAC default to the longer of the two. Because the current process is not strictly a determination of inter-modality, an expansion of the User Profile data also might be requested, to add an explicit indication of each User's carrier type. This new indicator then would be used to identify intermodal porting in addition to the interface change made to identify which transactions involve "simple intermodal" ports. Or the User Profile data might be left as is and instead the interface change broadened to include an indication of which type of intermodal port is occurring. A more detailed discussion of the impact on the NPAC SMS design can be provided once a complete and detailed description of the desired NPAC behavior is provided.

9. IMG ANALYSIS (Cont'd)

911 Impacts - Intermodal Porting Interval Change

Changes in the porting interval itself should not negatively impact 911.

For wireline to wireless porting, the 911 wireline address records used for routing and address display at the public safety answering point (PSAP) are deleted from the automatic location identification (ALI) database after wireline phone service is discontinued/disconnected. These processes are currently in place and should not be negatively impacted by any change in time interval.

For wireless to wireline porting, the 911 wireline address records used for routing and address display at the PSAP are inserted/added. That process today takes place after the wireline phone service is activated (usually within a business day). Shortening the porting interval itself should not negatively impact that process which will still take place after the wireline phone service is activated (usually within a business day).

The wireless to wireline porting process may also require the opening of a new code (NPA-NXX) in 911 databases to establish default routing in various failure conditions. Some 911 service providers/local exchange carriers (LECs) have already opened all wireless codes in their areas so that process will not be needed. This is a quick process and should be accomplished within a business day after wireline phone service is activated.

A 911 callback issue exists during the mixed service interval of porting, when there are two phones on two separate networks, with both capable of dialing 911. This issue with the technicalities of which phone can be called back, dependent upon which stage of porting has or has not occurred, is fully documented in Section 4 of the LNPA-WG 3Rd Report on Wireless-Wireline Integration, filed with NANC September 30, 2000.

Since this mixed service callback issue occurs between the time the new phone service is activated and the old phone service is deactivated/disconnected, shortening of that process reduces the time frame of potential, negative 911 impact (PSAP inability to call back the correct phone in an emergency situation).

Carrier Operational Support Systems Impacts/changes

"Excerpt Source: WWISC 3rd Report"

Many of the SPs that are participating in Local Number Portability (LNP) employ the use of large mainframe computer systems. These systems are the core processing systems that run their business operations and provide service to their customers. Most of these existing systems use a batch processing method, which means collecting data during the normal work day and then sorting, processing and distributing this data to other internal and external systems during off peak hours.

9. IMG ANALYSIS (Cont'd)

These existing systems provide functions such as, Service Order Processing from order creation through to order completion, Customer Billing, Directory Listing updates, Customer Service records generation and maintenance, 911 updates, Network systems updates for call routing/completion and Customer feature provisioning, etc. Because these systems form the core of the business operation and are inter-dependant on one another, a change to one system may have a cascading effect on the next system. It is estimated a reduction in the porting interval could impact at least 10 to 15 major existing systems within a company.

Elimination of appropriate batch processing would facilitate the possibility of a reduced porting interval. However, to consider a change from batch processing to real time data processing would require an in-depth systems analysis of all business processes that use these systems. This analysis is required to insure that other business processes are not broken by such a change. A normal high level analysis of this type requires, in addition to the systems analysis, cost development, budget preparation and approval, software/hardware development and implementation. Accomplishment of these activities would be a very labor intensive and time consuming effort leading to increased expense.

Another aspect of system change is the effect on operations personnel and staffing levels. Current operations often minimize the staffing level during off peak hours. Changing from the batch processing method of operation could extend staffing hours, particularly on the weekends. Operational changes of this nature could require 24 hours, 7 days a week (24x7) operations, making system development, deployment and maintenance more expensive and difficult. This would require staffing on a 24x7 basis, thus increasing expense to the companies' operation and thus the consumer.

For example, the batch service order process used by many wireline carriers results in the need for the one (1) day LSR/Port Response process. During the three (3) day porting timeframe, a batch process is used by many Service Providers to complete the translations work needed to activate the ten-digit trigger in order to enable routing calls to ported customers, and subsequently, to disconnect the porting customer.

Cost Recovery

NANC is concerned with industry cost but does not deal with cost recovery. However, under the current FCC rules cost recovery is allowed for LNP implementation using a "but for LNP" clause to identify recoverable costs. Shortening the porting interval impacts LECs and may impact CMRS carriers and should meet the "but for LNP" rule. This shorter porting interval was neither a part of the 1997 LNP process flows nor a part of industry design. Considering the potential industry costs, and given the fact that these costs potentially meet the "but for" standard, depending upon what the Commission chooses to

9. IMG ANALYSIS (Cont'd)

do, explicit cost recovery for any incremental intermodal porting costs for ILECs is an issue which should be resolved by the Commission (or other appropriate regulatory authority) rather than this IMG or the NANC. Of course, non-ILEC service providers are allowed to recover their respective incremental LNP costs in any legal manner.

Rural Telephone Company Impacts

In order to support a shorter porting interval, service providers will need to change internal operating software, business practices and implement mechanized systems and automated interfaces with other carriers.

The Commission should recognize that this may cause economic impacts on rural telephone companies that may not be justified considering the size of the customer base, customer density, or availability of alternate service providers and that rural telephone companies may seek a waiver from LNP and or shorter porting intervals under the existing rules and regulations.

10. ADDITIONAL CONSIDERATIONS

NANC Flows

There was general agreement that the IMG should not open the NANC flows while writing this report. To engineer these technical flows around policy issues would be tough. The IMG agreed that it develop a baseline process, then have the LNPA WG update the flows with what is agreed to or wait for the FCC to rule on the porting interval first to ensure the flows will be adopted with the proper interval.

Inadvertent Ports

There is some concern about inadvertent ports with a shorter porting interval. Industry participants will need to follow the established emergency restoration procedures for those end users that are ported by mistake (see NPAC website).

Further Analysis

Existing Intermodal Issues Not Yet Analyzed vis-à-vis Proposals by LNPA-WG

As a result of differences between the wireless and wireline intercarrier communication process, several intermodal porting issues have been identified and are being addressed in the interest of reducing fallout and improving the consumer's porting experience. Below are six issues being addressed by the NANC's LNPA-WG. In addition to the LNPA-WG, CTIA and USTA have established a Task Force to expedite resolution of intermodal porting issues, and several intermodal issues have been referred to the OBF for resolution.

10. ADDITIONAL CONSIDERATIONS (Cont'd)

The IMG did not evaluate the impact each of the proposals may have upon possible resolutions to these intermodal issues being addressed at the various industry committees. It is recommended that these committees take into consideration these impacts if the FCC mandates an intermodal porting interval.

- **Ports Attempted While Port Conflict Still Unresolved**
  Customers are taken out of service inadvertently when a NNSP continues with a port that had been placed into Conflict by an ONSP. The LNPA-WG is developing the requirements for NANC Change Order 375.
  (LNPA PIM (Problem Identification Management) 22V3 - Verizon)

- **Intermodal "Port Confirmation" Port Date Not Recognized**
  There is a fundamental difference between wireless WICIS and wireline LSOG. Wireless providers have developed our process to interpret a confirmed response to mean that everything in the LSR sent is confirmed. When a wireline provider changes a field and still confirms the port, WSP systems fail to send an SV create and activation message and the port fails. FOC allows for a due date and time change on confirmations, but is not allow on the WPRR.
  (LNPA PIM 28 – Sprint PCS; OBF LSOP Issue 2729/Interspecies Task Force (ITF))

- **Inconsistent Intermodal Porting Processes Cause Service Disruption on Due Date**
  Customers porting from a wireline carrier are disconnected in the donor switch before the wireless carrier activates the port. Inter-modal porting processes were not clearly defined or developed by the industry prior to wireless local number portability implementation.
  (LNPA PIM 29 – Sprint PCS)

- **Intermodal Port Date Change (Post Confirmation) Not Recognized**
  If a wireline SPs identifies a problem with a port and is not able to meet the originally confirmed desired due date and time, then wireline service providers send a 'jeopardy' notice to the wireless SP changing the original DDT. Wireless carriers currently cannot support these jeopardy notices this creates fall-out on inter-modal ports. The customer loses service when the disconnect is performed by the ONSP on the due date but the NNSP has failed to activate the port.
  (LNPA PIM 31 – Syniverse/TSI)

- **CSR Not Executable For Intermodal Porting From Reseller Type 1**
  When the OSP is not the ONSP but a reseller and the number porting is a "Type 1" number there is not enough information provided on the CSR for the Wireless SP to complete the LSR. M&Ps for interrogating the CSR (for example, DSL, RingMate and Centrex) prior to Wireless sending an LSR, including the step of informing the customer that they need to prepare for changes to any other services provided by the LEC prior to the NNSP issuing an LSR is needed so CSRs can be used to create an executable LSR.
  (LNPA PIM 32V2 – Syniverse/TSI)

10. ADDITIONAL CONSIDERATIONS (Cont'd)

SP Operational Systems Issues Warranting Further Analysis To Verify Feasibility

Given the limited time for which detailed analysis could be done, there may be technical issues that warrant further analysis.

- A service order cancellation or jeopardy prior to due date will not undo the NPAC port activation needed to avoid the end user from being without incoming service. Most SP systems are due date driven and although cancellations can be done on the due date, they can not be undone if the port is activated prior to due-date. Processes that allow the port to "revert back to prior state" may be needed to minimize customer service disruptions if ports are allowed to take place prior to due date.

- Processing of billing changes/notifications happen on or after due date and the customer education/impact of advancing activation has yet to be analyzed.

- Wireline disconnects are due-date driven and if a port takes place prior to due date all existing pre-due date system processes and manual activities have yet to be fully analyzed to ensure they can be performed without incident in the post due-date timeframe. In one example, a major LEC has difficulty completing disconnects if the port is activated in advance of the due date.

- Some SP systems do not allow personnel to distinguish between wireless and wireline ports nor can they determine if a service order has flowed through and is eligible for a shortened interval before issuing the port confirmation, making it difficult to administer the process and respond to customer requests and/or wireless SP inquiries as to the candidacy of porting prior to due date.

- Service Providers should consider the impacts on existing porting processes and back office processes if they choose to activate a port prior to the due date. The A3 Proposal (Adapted from Wireless/Wireline Integration Reports) allows a port to be activated 24 hours prior to the due date if there is no problem with the port request. Activating early requires modification of the due date on the SV at the NPAC. Service Providers may choose to automate this process. Automating the modify of the subscription due date will require business and technical requirements to be identified, system development and testing to ensure all issues are addressed so that customers won't experience delays or porting errors.

- Intermodal ports are subject to fallout and those that require manual intervention are only required to be available for activation on the due date, however, NNSPs who fail to see a port available for activation prior to the due date may call the LEC to ask why. Some LECs are not able to track flow-through for wireless intermodal porting and systems and/or tools may need to be identified and prepared so that intermodal porting activity can be monitored.

10. ADDITIONAL CONSIDERATIONS (Cont'd)

State Regulatory Issues

Local jurisdictions (State PUCs) may require LECs to report specific porting events relative to state and/or industry porting standards in the form of performance metrics. Changes to industry standards as well as the need to track and report on porting activity that take place prior to the due date may require State PUCs to introduce revisions and additions to the current metrics reported by LECS.

- The benefit to customers realized by shortening the porting interval was not measured by the IMG. There was a conscious decision by the IMG to let Regulatory authorities determine if (1) the interval was sufficiently shortened to warrant implementation of one of the alternatives and (2) the quantity of anticipated intermodal porting activity was sufficient to warrant implementation given that (a) some Wireless SPs may opt not to invoke the shortened porting interval and (b) the quantity of intermodal ports which actually "flow through" may not achieve the level of activity regulators believe warrant such an implementation.

- Additional time and system modifications to SP systems may be required if regulators determine that SPs must employ the shortened porting interval for all "flow-through" candidates to ensure customers derive the optimal benefit from the shortened porting interval, given the cost of implementation.

- Additional time and system modifications to SP systems may be required if regulators require all SPs participate 100% in the shortened intermodal porting interval using fully automated processing of ports from order issuance through port activation.

Need for Simple Intermodal Data

The IMG did not attempt to determine the quantity of simple intermodal ports--ports that are error free, require no network changes nor coordination with the porting-out carrier. If the quantity of simple intermodal ports is small, do the benefits to consumers to support a shorter intermodal porting interval justify the costs? The IMG did not evaluate the costs benefit analysis to consumers for a shorter porting interval.

One Local Service Ordering Guideline (LSOG) Version for Porting

The industry may consider establishing one common LSOG version (a uniform format and exchange of information) and a single mechanized interface that could yield efficiencies by reducing the implementation time and effort required to deploy a mechanized interface when compared to automating the various intercarrier communication process, formats and forms in use by trading partners today. Currently, each LEC may choose a different LSOG version based on their business needs to process consumer updates including porting. The standard in porting is to use the Old Service Provider's (OSP) forms. To automate porting requests, a service provider must be able to automatically process any LSOG version (the Local Service Ordering & Provisioning (LSOP) committee is currently working on LSOG version 10) that the OSP may be using.

10. ADDITIONAL CONSIDERATIONS (Cont'd)

One Local Service Ordering Guideline (LSOG) Version for Porting (Cont'd)

Service Providers that serve a large geographic area have to be able to process any LSOG version that other service providers are using in that geographic area. A service provider could find it necessary to be able to process LSOG version 1 through 10 and more as new LSOG versions are approved for production, and this would be very expensive to automate and maintain.

11. FINDINGS AND CONCLUSION

The IMG considered two confirmation proposals with either of three activation proposals in reducing the intermodal porting interval for wireline to/from wireless porting. The combination of proposals equated to six proposal plans.

The estimated high level cost of the C1 proposal and the difference of only four hours between the shorter porting interval of the C1 and C2 proposal combinations appears to eliminate the C1 combination proposals from consideration as a potential solution. The C1 proposal could cost the industry and consumers in excess of $600M to $1B. These costs do not consider savings due to a reduction in manual staff processes which have not been calculated.

Proposal A1 requires a new set of timers for the NPAC and changes to the industries' OSSs which make this proposal very expensive. Proposal A3 achieves the same time saved at a much lower cost to the industry and consumers.

The A2 proposal was evaluated but eliminated after discussions related to the impact to existing processes for complex orders. The IMG agreed that this proposal did not allow enough time to consider the handling of complex orders and Proposal A2 is not recommended at this time.

In reviewing the C2 proposal combinations, the C2 & A3 combination provides the shorter porting interval and the most economical approach to an intermodal porting interval based on the proposals considered. In addition to the items in the Other Considerations section of this report, one concern of this proposal combination is that there is a mixed service interval for 911 that NENA believes is sustainable and yet allows a shortening of the intermodal porting interval. An additional concern is the period of time the consumer will have two lines (cellular and landline) and will be billed for both. This problem is sustainable as well. At the point of sale, the new provider should advise that as long as dial tone is available on the old line, it is available for use and will incur billing.

12. RECOMMENDATIONS

The FCC asked that the NANC provide modified LNP process flows for the shorter intermodal porting interval. The IMG develop multiple proposals for shorting the porting interval and recommends that the LNPA WG update the LNP process flows if the FCC issues an order on its conclusion regarding shortening the intermodal porting interval. This will ensure that the correct LNP process flows are adopted.

Of the six proposal combinations evaluated, proposal combination C2 and A3 offers the shortest "maximum porting interval" (53 hours) and greatest reduction Total Time Saved in Hours (43) for the "Low" estimated cost impact. The IMG Proposal Analysis indicates that there are no cost impacts on batch processes, complex changes to SP programming, changes to existing NPAC timers, or NPAC software changes. Thus, this proposal combination could offer the most economical opportunity for the industry to substantially reduce the porting interval for consumers.

In order to support the C2 shorter Confirmation Interval, SPs would be required to use a mechanized interface. The IMG recommends that the C2 and A3 proposal apply only to simple intermodal port requests that are "error free" as described in this report. Based upon known information at this time, the IMG estimates that the industry would need approximately 24 months to implement the C2 proposal after an FCC mandate is issued. In addition, to the extent that LNP-capable switches are already provisioned with the 10-digit trigger, proposal A3 could be implemented more quickly.

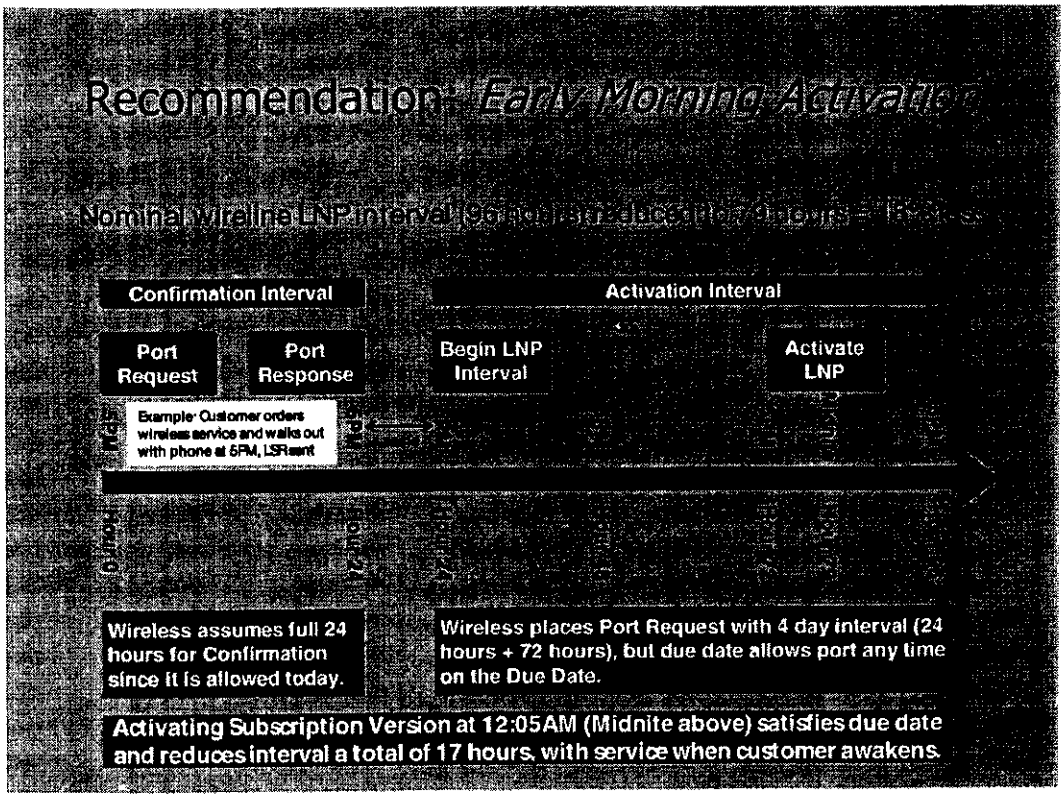
In summary, the IMG considers the C2/A3 proposal the most promising and recommends that the NANC forward this document to the FCC and ask that the appropriate industry and regulatory bodies be given additional time necessary to prepare a complete analysis of this alternative. Section 10 titled "Further Considerations" identifies issues not addressed by the IMG. Although some of these issues are being addressed by the LNPA-WG, Section 10 identifies additional issues that may impact the implementation of proposal C2/A3 and therefore further analysis by Service Providers and Regulators is warranted before a decision is made to implement C2/A3. The IMG would like to note that this report has not been evaluated by the NANC's LNPA-WG and that the IMG did not attempt to determine if the C2/A3 proposal achieves the customer benefits desired by the FCC.

The NANC IMG would like to share with the FCC that the IMG spent an estimated 900 work hours in meeting time to discuss and write the report and the participants along with their respective subject matter experts spent an additional 1,100 hours work hours in providing input to this report. The total work hours spent on the report are estimated to be 2,000 hours.

12. RECOMMENDATIONS (Cont'd)

Early Morning Activation Can Reduce the Porting Interval Now

The nominal interval of 96 hours can be reduced unilaterally by a wireless carrier (or any carrier) which activates its porting record shortly after midnight on the due date. Assuming an 11:59PM 10 Digit Trigger (10DT) deployment in the donor switch, LNP activation in the early morning (e.g., 12:05AM) can reduce several hours from the total interval. The mean porting time-of-day is mid-to-late afternoon. Using 5PM as an average port time, 17 hours would be reduced from the 96 hour interval, an 18% reduction. This practice is used by some carriers today. This recommendation may be implemented for little or no cost, can be deployed immediately by some carriers, and provides a tangible benefit to end users.



13. GLOSSARY

OSS – Operational Support System

Port Response – Firm Order Confirmation

Complex Ports - Complex ports currently have an activation interval in excess of three days, and may be negotiated between service providers. One form of complexity involves the first number of an NPA-NXX to be ported. This first number currently requires a five day activation period.

LNP – Local Number Portability.

LSR – Local Service Request/Port Request.

NNSP – New Network Service Provider.

NPAC – Number Portability Administration Center.

ONSP – Old Network Service Provider.

Simple Port - Simple ports are defined as those ports that: do not involve unbundled network elements, involve an account for a single line (porting a single line from a multi-line account is not a simple port), do not include complex switch translations (e.g., Centrex or Plexar, ISDN, AIN services, remote call forwarding, multiple services on the loop), may include CLASS features such as Caller ID, and do not include a reseller. All other ports are considered "complex" ports.

(and/or)

Simple Port:

A "Simple Port":

- Does not include any Unbundled Network Elements (UNE) or loop facilities.
- Involves an account for a single line only. (Porting a single line from a multi-line account is not a simple port.)
- Does not include complex services, such as:
  - Centrex or Plexar
  - ISDN
  - AIN services
  - Remote call forwarding
  - Multiple services on the loop (DSL etc.)
  - Wireline DID

13. GLOSSARY (Cont'd)

Simple Port:

- May include CLASS features such as:
  - Caller ID
  - Automatic call back
  - Automatic redial
  - Etc.

- Does not include a reseller.

- Does not include numbers associated with Wireless Type 1 interconnection arrangements.

SP – Service Provider.

SV (Subscription Version) - the term for the NPAC's ported number record. The data includes the telephone number, routing information specific to that ported number and other information related to the record such as the current SP ID. The SV stored at NPAC has more information than is transmitted when broadcast is done and is somewhat larger than the corresponding SV contained in a user's LNP database.

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