11. RECOMMENDATION - CHANGE MANAGEMENT AND COMPLIANCE PROCESS

11.1 Change Management Required

11.1.1 The LNPA T&O Task Force members recognize that, having developed and recommended technical and operational standards for the industry to follow for the implementation of NPAC SMS, ongoing changes to the requirements must be managed. The members agree and recommend that an open industry group, such as this Task Force, or other similar group designated by the NANC, should be charged to continue to recommend ongoing technical standards for the NPAC as changes are identified and introduced.

11.2 Change Management Process

11.2.1 The LNPA T&O Task Force members further recommend that a change management process be developed, by the designated oversight group, which will provide an open and neutral facility for the submission and consideration of changes requested to the NANC FRS and/or NANC IIS requirements specifications. The procedures should include the definition of standard change request documents, vehicles/facilities for the submission and distribution of requests, and timetables for the process of open consideration and prioritization of such requests.

11.2.2 The LNPA T&O Task Force adopted an interim process to ensure continued consistency in the submission and consideration of changes to the NANC FRS and/or NANC IIS requirements specifications until NANC finalizes a recommendation on a permenant process. The interim process includes all the components of the change management process described in Section 11.2.1, however, administration of the process is performed by one of the NPAC vendors. While the industry is responsible for all decisions made concerning changes, it is important to move the administrative role to a neutral organization managed by the industry.

11.3 Compliance Process

11.3.1 The LNPA T&O Task Force members also agree that compliance with the published NANC FRS and NANC IIS standards is expected, and that instances of non-compliance may be reported to the NANC for appropriate action.

APPENDIX A

ISSUES AND RESOLUTIONS

ISSUES AND RESOLUTIONS

I. ISSUE STATEMENT

LNP Provisioning Flows Issue

A. The issue concerned the amount of control the old and new SPs can exercise during the customer porting process in the NPAC as documented in the provisioning flows. Following failure by the Task Force to reach a consensus, the issue was escalated to the LNPA Selection Working Group on January 7, 1997, and presented to NANC on January 13. NANC directed the Task Force to continue working the issue and to report back to the NANC chairman on January 23.

ISSUE RESOLUTION

LNP Provisioning Flows Issue

A. After several attempts to reach compromise, the ILECs made a proposal that was adopted with minor modifications on January 20, 1997. Following are descriptions of the three (3) part compromise proposed by the ILEC members of the LNPA T&O Task Force followed by the compromise adopted by the full Task Force:

1. <u>ILEC Proposal</u>

   a. After the Firm Order Commitment (FOC) is received by the new Service Provider (SP), both old and new SPs send subscription records to the NPAC which must include the FOC due date. The FOC due date will be no earlier than three (3) business days after the FOC receipt date. No NPAC subscription version may activate before the FOC due date unless a new FOC is negotiated with the old SP.

   b. The NPAC SMS processing timers will include business hours only. Local business hours are to be defined as 12 daytime hours per day on Mondays through Fridays, except holidays. (Time zone issue must be resolved and will be addressed separately.)

   c. An old SP may only cause a subscription version to be set to conflict state one (1) time from the pending state, and only up to noon on the business day before the subscription due date. Within six (6) business hours of the conflict initiation, "conflict off" may be set only by the old SP alone or by the concurrence of both SPs. After six (6) business hours, "conflict off" may be set by the new

SP alone, **except** when the LSR/FOC process has not been followed, and/or the subscription version submitted to the NPAC SMS includes a vacant, non-working telephone number, then the old SP alone controls the conflict/cancellation process.

2. Accepted Compromise

a. The ILEC proposal was accepted. This represents a compromise by the CLECs as they maintain this adds an additional day to the provisioning process since the three (3) business days are counted from the FOC due date rather than the LSR receipt date.

b. The ILEC proposal was accepted.

c. An old SP may only cause a subscription version to be set to conflict state one (1) time from the pending state, and only up to noon on the business day before the subscription due date. Within six (6) business hours of the conflict initiation, "conflict off" may be set only by the old SP alone or by the concurrence of both SPs. After six (6) business hours "conflict off" may be set by either the old or new SP. This represents a compromise by the ILECs as the ILEC proposal included an exception to the conflict process where the old SP controlled removal from conflict in certain cases.

B. Points a and c above are linked, therefore, withdrawal or modification of either point by industry factions nullifies the compromise agreement. In addition, adoption of the compromise is contingent on satisfying the following conditions:

1. The Task Force will recommend a policy to the Working Group for NANC and FCC concurrence that carriers will not port unassigned numbers unless and until there is an explicit authorization for such porting from a regulator with appropriate jurisdiction.

2. A tracking vehicle in the NPAC will be developed to measure the reasons transactions are placed into conflict. This measurement becomes the vehicle to identify specific SPs or processes needing improvement and subsequently to develop process improvement plans.

3. The LNPA T&O Task Force will recommend to the Working Group for NANC and FCC concurrence an expedited process to resolve instances of SP non-compliance with the assumption that all SPs will follow the Local Service Request (LSR) and Firm Order Commitment (FOC) processes.

C. The industry vote in support of the compromise provisioning flows was unanimous in both the Task Force and the Working Group. However, while

Pacific Bell voted yes, they do not agree with a process that does not allow the prevention of porting of unassigned telephone numbers or telephone numbers that do not have an associated LSR and FOC. Pacific Bell recognizes the need to move forward with these process flows with the condition that NANC recommend that porting of unassigned numbers is prohibited until a commission approved process for number pooling is in place. Pacific Bell reserves the right to appeal to the commission on this issue.

II. ISSUE STATEMENT

Service Provider-to-Service Provider (SP-to-SP)Audits Issue

A. There was disagreement regarding the use of SP-to-SP audits in the NPAC SMS. These audits are used when a customer notifies their SP of a repair problem and the SP launches an audit to determine if there are discrepancies between NPAC SMS and Local SMS (LSMS) subscription data. This issue concerns minimizing the functions performed by the NPAC. A proposal, which did not reach consensus, was made providing for screening of audits, allowing an SP to block audits from any other SP.

ISSUE RESOLUTION

Service Provider-to-Service Provider Audits Issue

A. On January 30, 1997, the LNPA T&O Task Force agreed to allow the SP-to-SP audit function without screening in the NPAC SMS, but to monitor the use of audits to identify the effectiveness and efficiency of the process in resolving repair calls.

III. ISSUE STATEMENT

Mismatch of Provisioning Download and Network Upload Rate Issue

A. The NPAC SMS to LSMS interface transaction rate, as defined in the NANC FRS, is 25 telephone numbers (TNs) per second, sustained for five (5) minutes for each such interface. The SCP requirement states that the LSMS must support the download rate specified by the NPAC, and contains a goal for activating portability for subscribers within 15 minutes after the record for the ported subscriber is downloaded by the NPAC. This requirement is defined in the Generic Requirements for SCP Application and GTT Function for Number Portability, Issue 0.99, January 6, 1997. However, prior issues of this document have consistently stated an SCP requirement of one (1) TN per second update rate; hence, the mismatch. The SCP generic requirements document also indicates that the NPAC SMS transaction rate places requirements for the

processing of download records on the LSMS, SCP LNP application, and LNP GTT function, which must be addressed by the vendor and the SP.

ISSUE RESOLUTION

Mismatch of Provisioning Download and Network Upload Rate Issue

A. The Task Force concluded that the NPAC SMS requirement of 25 TNs per second will remain unchanged. The LNPA T&O Task Force recommends gaining experience by monitoring the downloads from the NPAC SMS and the ability of the network elements to activate subscriptions within the target interval of 15 minutes. This issue will be revisited when this data is available.

IV. ISSUE STATEMENT

Network Element Update Acknowledgment Issue

A. There is no acknowledgment of update from the network element (i.e., SCP) back to the NPAC SMS. This results in the NPAC SMS knowing only that the LSMS has received the ported TN information and does not tell it whether the SP's network was updated.

ISSUE RESOLUTION

Network Element Update Acknowledgment Issue

A. After many discussions and considerable research on this issue, it was decided that due to an unacceptably high level of complexity to implement changes to network provisioning systems, the Task Force would not pursue network element acknowledgment at this time.

V. ISSUE STATEMENT

Interactive Voice Response Unit Issue

A. The LNPA T&O Task Force considered requiring an Interactive Voice Response (IVR) unit for NPAC development. The purpose of the IVR is to provide automated responses to calls issued by selected users (e.g., service providers' technicians, E911 personnel, etc.) who require the name of the Service Provider (SP) of a ported subscriber.

1. The IVR concept originated from help desk calls to the 800 SMS. With experience, it was determined that a high percentage of those calls (approximately 80%) were inquiries concerning the SP associated with a certain toll free number. When an IVR was installed to handle such

calls in an automated fashion, the 800 SMS help desk's efficiency was increased substantially.

2. Due to the similarity between the 800 SMS and the NPAC SMS, the IVR concept was introduced to provide a mechanism for SPs and emergency personnel to determine the SP of a ported subscriber (provider name and telephone number of a business/repair office), based on the ported telephone number. The users of the IVR are issued a password for validation prior to use of the IVR.

ISSUE RESOLUTION

Interactive Voice Response Unit Issue

A. There is no consensus that an IVR is necessary for NPAC development. The recommendation is to gain experience with NPAC SMSs in production and determine whether an IVR would alleviate help desk inquiries. Furthermore, there are other means to retrieve the same information in the current design, namely:

   1. The SP information associated with a ported customer is downloaded to each Local SMS after activation at the NPAC SMS. SP contact information is available through the NPAC SMS to the Local SMS interface. Each SP can rely on its Local SMS to retrieve relevant porting information, including contact information for the service provider of a ported customer.

B. The LNPA T&O Task Force recommends that it gain practical experience with the NPAC SMSs, measure type and volume of help desk calls, and revisit the IVR issue when this data is available.

APPENDIX B

INTER-SERVICE PROVIDER LNP OPERATIONS FLOWS

INTER-SERVICE PROVIDER LNP OPERATIONS FLOWS
- PROVISIONING -

4/25/97
NANC
ISSUE 1.0

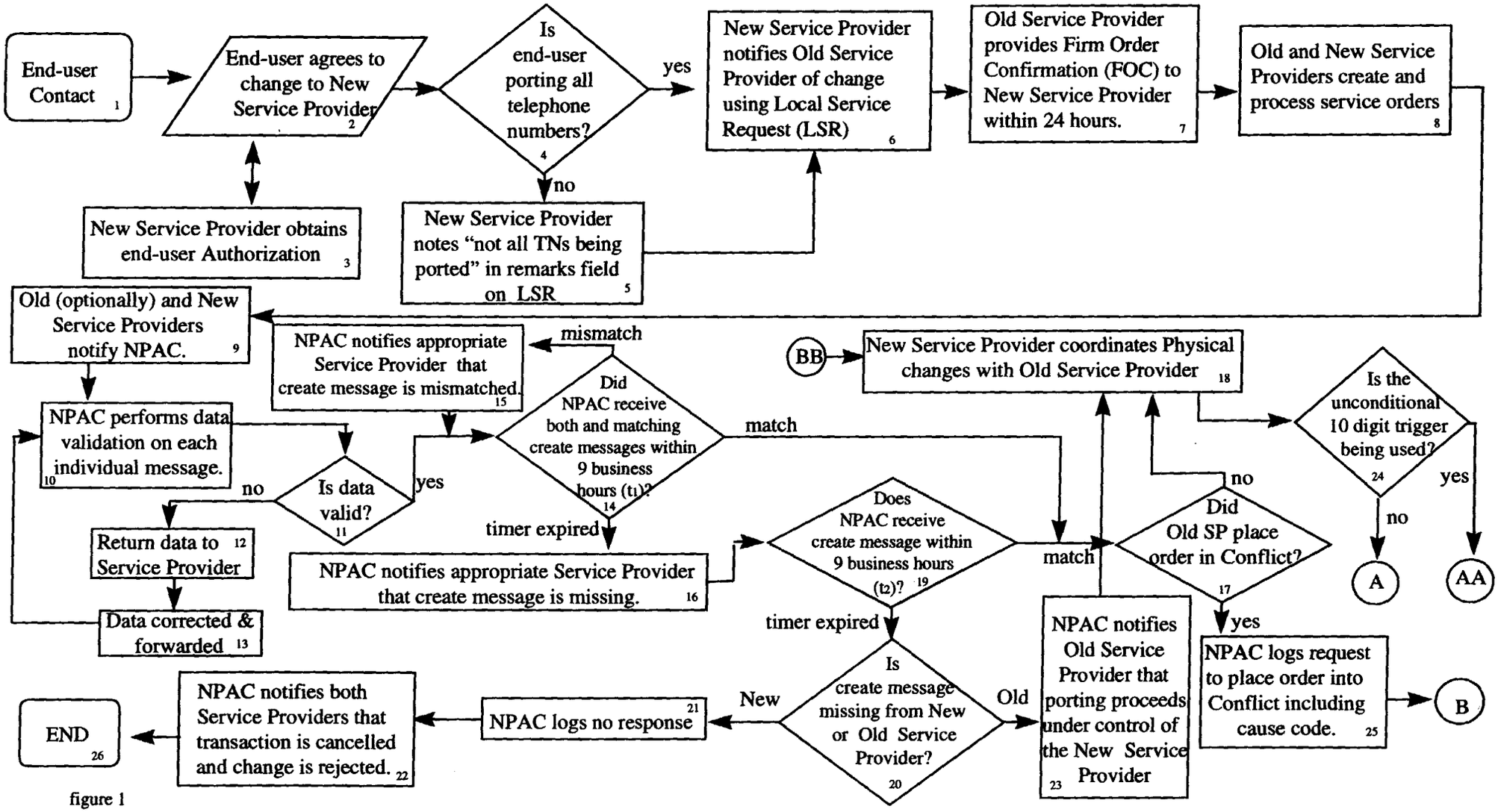

figure 1

Provisioning
Figure 1

Step	Description
1. End-user Contact	• The process begins with an end-user requesting service from the New Service Provider. • It is assumed that prior to entering the provisioning process the involved NPA/NXX was opened for porting.
2. End-user agrees to change to New Service Provider	• End-user agrees to change to New Service Provider and requests retention of current telephone number (TN)
3. New Service Provider obtains end-user Authorization	• New Service Provider obtains authority from end-user to act as the official agent on behalf of the end-user. The New Service Provider is responsible for demonstrating necessary authority.
4. Is end-user porting all telephone numbers?	• The New Service Provider determines if customer is porting all TNs. • If yes, go to Step (6). • If no, go to Step (5).
5. New Service Provider notes "not all TNs being ported" in remarks field on LSR.	• The New Service Provider makes a note in the remarks section of the LSR to identify whether the end-user is not porting all telephone numbers (TNs).
6. New Service Provider notifies Old Service Provider of change using Local Service Request (LSR).	• The New Service Provider notifies the Old Service Provider of the porting using the LSR and sends the information via an electronic gateway, FAX, or other manual means. The LSR process is defined by the Ordering and Billing Forum (OBF) and the electronic interface by the Telecommunications Industry Forum (TCIF).

Provisioning
Figure 1

Step	Description
7. Old Service Provider provides Firm Order Confirmation (FOC) to New Service Provider within 24 hours.	• The minimum expectation is that the FOC is returned within 24 hours excluding weekends unless otherwise defined by inter-company agreements. It is the responsibility of the Old Service Provider to contact the New Service Provider if the Old Service Provider is unable to meet the 24 hour expectation for transmitting the FOC. If the FOC is not received by the New Service Provider within 24 hours, then the New Service Provider contacts the Old Service Provider. • The FOC due date is no earlier than three (3) business days after the FOC receipt date. The first TN ported in an NPA-NXX is no earlier than five (5) business days after FOC receipt date. It is assumed that the porting interval is not in addition to intervals for other requested services related to the porting (e.g., unbundled loops). The interval becomes the longest single interval required for the services requested. • The FOC process is defined by the OBF and the electronic interface by the TCIF.
8. Old and New Service Providers create and process service orders.	• The Service Providers create and process their service orders through their internal service order systems, from the information provided on the FOC and LSR.
9. Old (optionally) and New Service Providers notify NPAC.	• Due date on create message is the due date on the FOC. Any change of due date to NPAC is the result of a change in the FOC due date. • Service Providers enter subscription data into NPAC SMS via SOA interface for porting of end-user in accordance with the NANC Functional Requirements Specification (FRS) and the NANC Interoperability Interface Specifications (IIS).

Provisioning
Figure 1

Step	Description
10. NPAC performs data validation on each individual message.	• NPAC SMS validates data to ensure value formats and consistency as defined in the FRS. This is not a comparison between Old and New Service Provider messages.
11. Is data valid?	• If yes, go to Step (14). If this is the first valid create message, the t_1 timer is started. • If no, go to Step (12).
12. Return data to Service Provider.	• If the data is not valid, the NPAC returns notification to the Service Provider for correction.
13. Data corrected and forwarded.	• The Service Provider, upon notification from the NPAC SMS, corrects the data and forwards back to NPAC SMS.
14. Did NPAC receive both and matching create messages within nine (9) business hours (t_1).	• If matching, go to Step (17). • If mismatched, go to Step (15). • If t_1 timer expires, go to Step (16). • NPAC SMS processing timers include business hours only, except where otherwise specified. Local business hours are defined as 12 daytime hours per day on Monday through Friday, except holidays. Holidays and business hours are regionally defined.
15. NPAC notifies appropriate Service Provider that information is mismatched.	• The NPAC informs the Service Provider that sent the second create that the messages are mismatched. If necessary, the Service Provider notified coordinates the correction.
16. NPAC notifies appropriate Service Provider that create message is missing.	• If Service Providers do not notify the NPAC SMS and/or provide matching data, the NPAC SMS sends a notification to the Service Provider who did not respond to the port.

Provisioning
Figure 1

Step	Description
	• The NPAC SMS provides an Initial Concurrence Window tunable parameter (t_1) defined as the number of hours after the subscription version was initially created by which both Service Providers can authorize transfer of subscription service. The current default is nine (9) business hours. • The t_2 timer starts.
17. Did Old Service Provider place order in Conflict.	• If yes, go to Step (25). • If no, go to Step (18). • Check Concurrence Flag Yes or No. If no, a conflict cause code as defined in the FRS, is designated. Old Service Provider makes a concerted effort to contact New Service Provider prior to placing subscription in conflict. Old Service Provider may initiate conflict with proper conflict cause code at anytime prior to noon of the business day before the due date.
18. New Service Provider coordinates physical changes with Old Service Provider.	• The New Service Provider has the option of requesting a coordinated order. This is the re-entry point from the Inter-Service Provider LNP Operations Flows - Conflict Flow for the Service Creation Provisioning Process tie point BB. • If coordination is requested on the LSR, an indication of yes or no for the application of a 10-digit trigger is required. If no coordination indication is given, then by default, the 10-digit trigger is applied as defined in inter-company agreements. If the New Service Provider requests a coordinated order and specifies 'no' on the application of the 10-digit trigger, the Old Service Provider uses the 10-digit trigger at its discretion.

Provisioning
Figure 1

[illegible]	[illegible]
19. Does NPAC receive information within nine (9) business hours (t_2)?	• The NPAC SMS provides a Final Concurrence Window tunable parameter (t_2), defined as the number of hours after the concurrence request is sent by the NPAC SMS. The current default is nine (9) business hours. • NPAC SMS processing timers include business hours only, except where otherwise specified. Local business hours are defined as 12 daytime hours per day on Monday through Friday, except holidays. Holidays and business hours are regionally defined. • If create messages match, go to Step (17). • If t_2 timer expires, go to Step (20). • If create messages are mismatched they will be processed in the same manner as Step (15).
20. Is create message missing from New or Old Service Provider?	• If New Service Provider, go to Step (21). • If Old Service Provider, go to Step (23).
21. NPAC logs no response.	• The NPAC records that no matching create message was received from the New Service Provider.
22. NPAC notifies both Service Providers that transaction is cancelled and change is rejected.	• The subscription version is immediately cancelled by NPAC SMS. Both Service Providers take appropriate action related to internal work orders.
23. NPAC notifies Old Service Provider that porting proceeds under control of New Service Provider.	• A notification message is sent to the Old Service Provider noting that the porting is proceeding in the absence of any message from the Old Service Provider.
24. Is the Unconditional 10-Digit Trigger being used?	• If yes, go to Inter-Service Provider LNP Operations Flows - Provisioning with Unconditional 10-Digit Trigger - tie point AA. • If no, go to Inter-Service Provider LNP Operations Flows - Provisioning without Unconditional 10-digit Trigger - tie point A.

Provisioning
Figure 1

Step	Description
	• The unconditional 10-digit trigger is an option assigned to a line on a donor switch during the transition period when the line is physically moved from donor switch to recipient switch. During this period it is possible for the TN to reside in both donor and recipient switches at the same time. • The unconditional 10-digit trigger may be applied by the New Service Provider.
25. NPAC logs request to place order into Conflict including conflict cause code.	• Go to Inter-Service Provider LNP Operations Flows - Conflict Flow for the Service Creation Provisioning Process - tie point B.
26. END	

INTER-SERVICE PROVIDER LNP OPERATIONS FLOWS
- PROVISIONING WITHOUT UNCONDITIONAL 10-DIGIT TRIGGER -

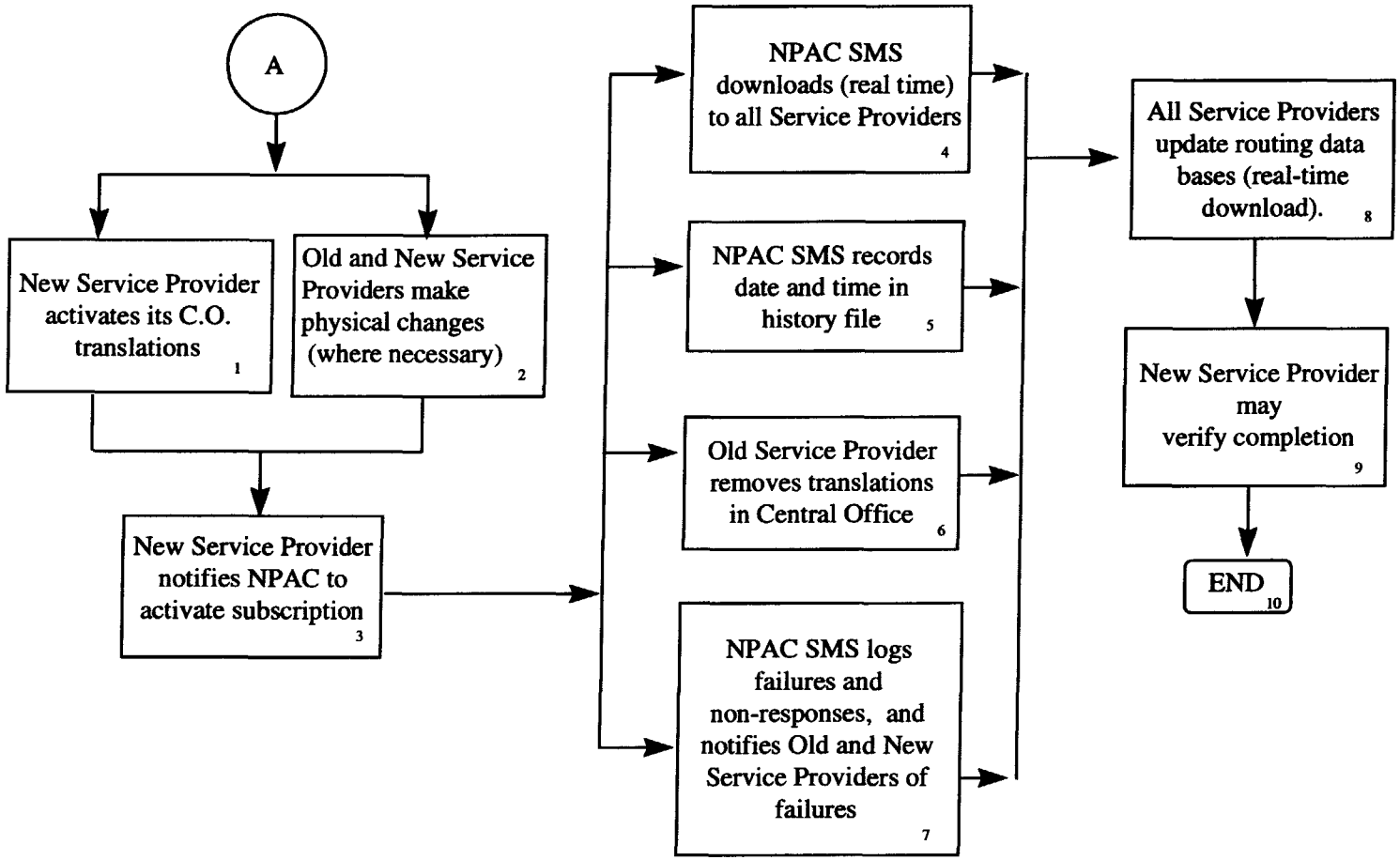

figure 2

Provisioning Without Unconditional 10-Digit Trigger
Figure 2
Flow A

Step	Description
NOTE: Steps 1 and 2 are worked concurrently.	
1. New Service Provider activates its Central Office translations.	• The New Service Provider activates its own Central Office translations.
2. Old and New Service Providers make physical changes (where necessary).	• Physical changes may or may not be coordinated. Coordinated physical changes are based on inter-connection agreements. • Following completion of steps 1 and 2, the New Service Provider is now providing dial tone to ported end user.
3. New Service Provider notifies NPAC to activate subscription.	• The New Service Provider sends an activate message to the NPAC SMS via the SOA. • No NPAC subscription version may activate before the FOC due date.
NOTE: Steps 4, 5, 6, and 7 may be concurrent, but at a minimum should be completed ASAP.	
4. NPAC SMS Downloads (real time) to all Service Providers.	• The NPAC SMS broadcasts new subscription data to all Service Providers in the serving area in accordance with the NANC FRS and NANC IIS. The Generic Requirements for Service Control Point (SCP) Applications and GTT Function for Number Portability document contains a reference to a target interval for SCP updates.
5. NPAC SMS records date and time in history file.	• The NPAC SMS records the current date and time as the Activation Date and Time stamp, after all Local SMSs have successfully acknowledged receipt of new subscription version.

Provisioning Without Unconditional 10-Digit Trigger
Figure 2
Flow A

Step	Description
6. Old Service Provider removes translations in Central Office.	• The Old Service Provider initiates the removal of translation either at designated Due Date and Time or, if the order was designated as coordinated, upon receipt of a call from the New Service Provider.
7. NPAC SMS logs failures and non-responses and notifies the Old and New Service Providers of failures.	• The NPAC SMS resends the activation to a Local SMS that did not acknowledge receipt of the request. The number of NPAC SMS attempts to resend is a tunable parameter for which the current default is three (3) attempts. Once this cycle is completed NPAC personnel investigate possible problems. In addition, the NPAC sends a notice via SOA interface to both the Old and New Service Providers with a list of Local SMSs that failed activation.
8. All Service Providers update routing databases (real time download).	• This is an internal process and is performed in accordance with the Generic Requirements for SCP Applications and GTT Functions for Number Portability document.
9. New Service Provider may verify completion.	• The New Service Provider may make test calls to verify that calls to ported numbers complete as expected.
10. END	

INTER-SERVICE PROVIDER LNP OPERATIONS FLOWS
- PROVISIONING WITH UNCONDITIONAL 10-DIGIT TRIGGER -

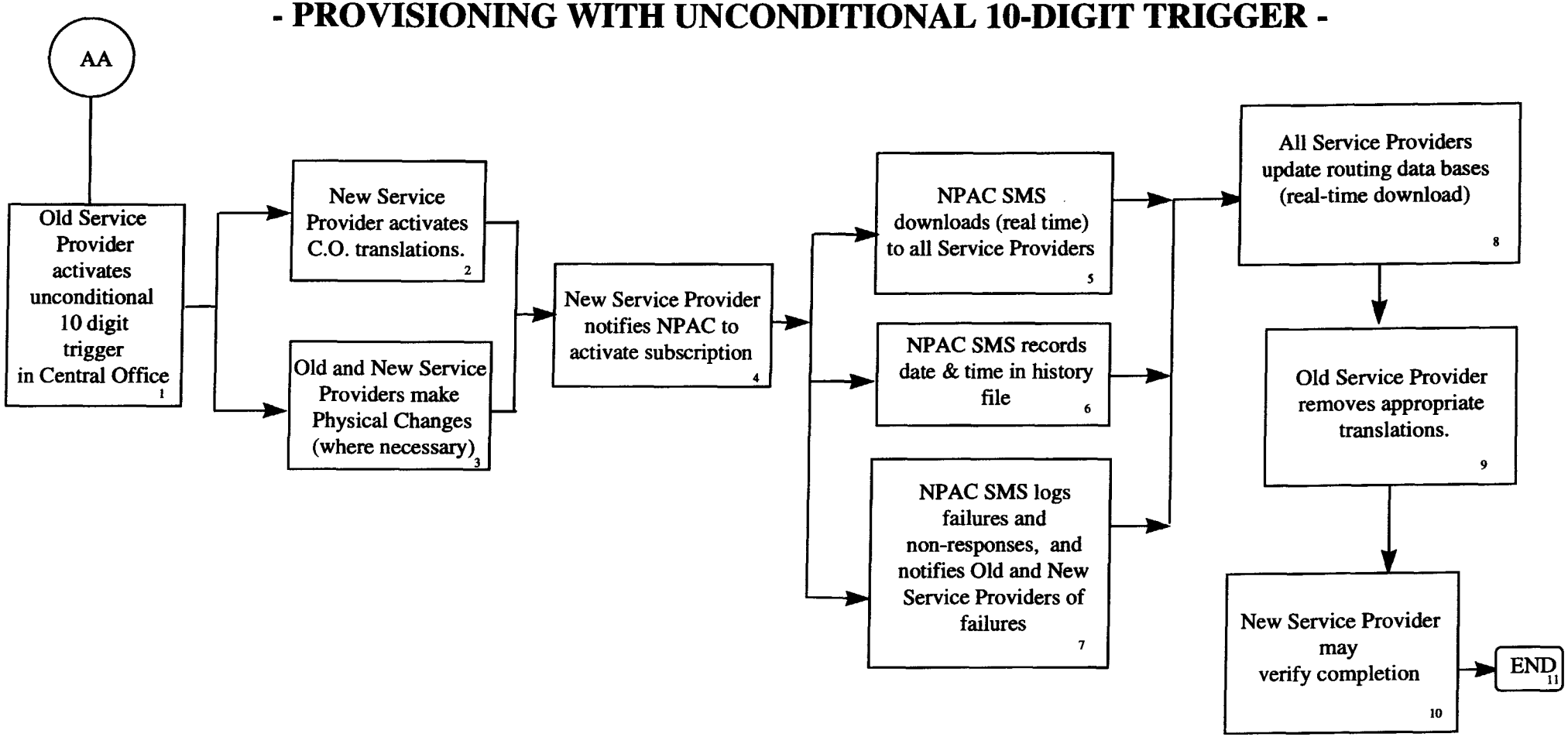

figure 3

Provisioning With Unconditional 10-Digit Trigger
Figure 3
Flow AA

Step	Description
1. Old Service Provider activates unconditional 10-digit trigger in Central Office.	• The actual time for trigger activation is defined on a regional basis. • The unconditional 10-digit trigger may optionally be applied by the New Service Provider.
NOTE: Steps 2 and 3 may be worked concurrently.	
2. New Service Provider activates Central Office translations.	• The New Service Provider activates their own Central Office translations.
3. Old and New Service Providers make physical changes (where necessary).	• Any physical work or changes are made by either Old or New Service Providers as necessary. • Physical changes may or may not be coordinated. Coordinated physical changes are based on inter-connection agreements.
4. New Service Provider notifies NPAC to activate subscription.	• The New Service Provider sends an activate message via the SOA interface to the NPAC SMS. • No NPAC subscription version may activate before the FOC due date.
NOTE: Steps 5, 6, and 7 may be concurrent, but at a minimum should be completed ASAP.	
5. NPAC SMS Downloads (real time) to all Service Providers.	• The NPAC SMS broadcasts new subscription data to all Service Providers in the serving area in accordance with the NANC FRS and NANC IIS. The Generic Requirements for Service Control Point (SCP) Applications and GTT Function for Number Portability document contains a reference to a target interval for SCP updates.

Provisioning With Unconditional 10-Digit Trigger
Figure 3
Flow AA

Step	Description
6. NPAC SMS records date and time in history file.	• The NPAC SMS records the current date and time as the Activation Date and Time stamp, after all Local SMSs successfully acknowledged receipt of new subscription version.
7. NPAC SMS logs failures and non-responses and notifies the Old and New Service Providers of failures.	• The NPAC SMS resends the activation to a Local SMS that did not acknowledge receipt of the request. The number of NPAC SMS attempts to resend is a tunable parameter for which the current default is three (3) attempts. Once this cycle is completed NPAC personnel investigate possible problems. In addition, the NPAC sends a notice via SOA interface to both the Old and New Service Providers with a list of Local SMSs that failed activation.
8. All Service Providers update routing databases (real time download).	• This is an internal process and is performed in accordance with the Generic Requirements for SCP Applications and GTT Functions for Number Portability document.
9. Old Service Provider removes appropriate translations.	• After update of its databases the Old Service Provider removes translations associated with the ported TN. The specific time for removal may be specified on a regional basis.
10. New Service Provider may verify completion.	• The New Service Provider may make test calls to verify that calls to ported numbers complete as expected.
11. END	

INTER-SERVICE PROVIDER LNP OPERATIONS FLOWS
- CONFLICT FLOW FOR THE SERVICE CREATION PROVISIONING PROCESS -

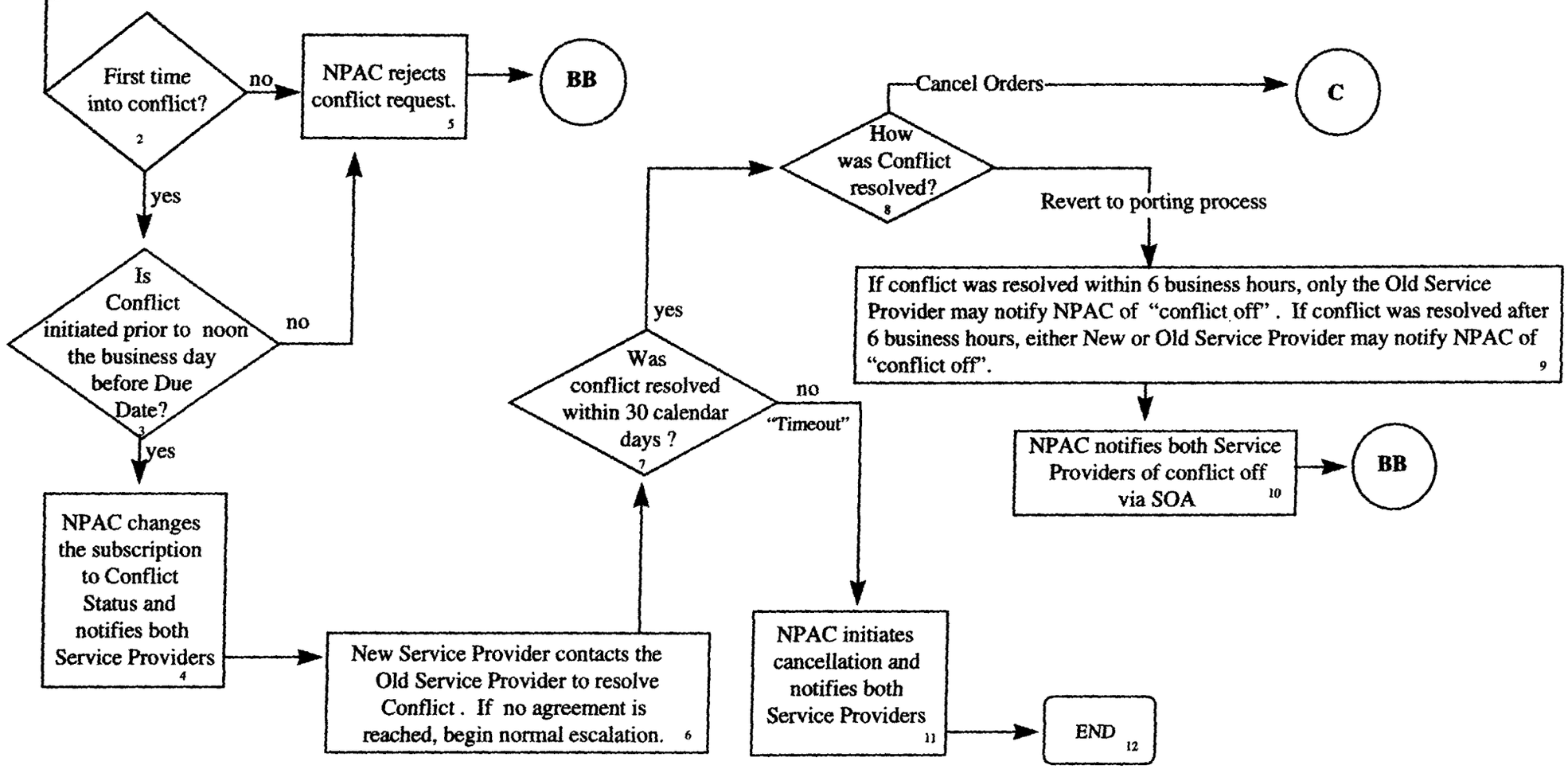

figure 4

Conflict Flow for the Service Creation Provisioning Process
Figure 4
Flow B

Step	Description
1. Tie-point (B)	• The conflict flow is entered through the Provisioning process flow (Figure 1) through tie point (B), when the Old Service Provider enters a concurrence flag of "No", and designates a conflict cause code.
2. First time into conflict?	• The Old Service Provider may only place subscription into conflict status one time. If this is the first time for the Old Service Provider to place the order into conflict, proceed to Step (3); if not, proceed to Step (5).
3. Is Conflict initiated prior to noon the business day before Due Date?	• If no, go to Step (5). • If yes, go to Step (4).
4. NPAC changes subscription to Conflict Status and notifies both Service Providers.	• Both Service Providers take appropriate action related to internal work orders. • Subscriptions may be modified while in the conflict state (e.g., due date).
5. NPAC rejects conflict request.	• NPAC notifies Service Provider of rejection. • Proceed to tie point BB on the Provisioning flow (Figure 1).
6. New Service Provider contacts the Old Service Provider to resolve Conflict. If no agreement is reached, begin normal escalation.	• The escalation process is defined in the inter-company agreements.
7. Was conflict resolved within 30 calendar days?	• From the time a subscription is placed in conflict, there is a 30 calendar day limit after which it is removed from the NPAC database. If it is resolved within the 30 calendar day limit, proceed to Step (8); if not, the subscription request will "time out" and proceed to Step (11).

Conflict Flow for the Service Creation Provisioning Process
Figure 4
Flow B

Steps	Description
8. How was Conflict resolved?	• Conflict resolution initiates one of two actions: 1) cancellation of the subscription, or 2) resumption of the service creation provisioning process. If the conflict is resolved by cancellation of the subscription, then proceed to the Cancellation Flows for Provisioning Process (Figure 5) through tie point C. If the conflict is otherwise resolved, proceed to Step (9).
9. If conflict was resolved within six (6) business hours, only the Old Service Provider may notify NPAC of "conflict off". If conflict was resolved after six (6) hours, either the New or Old Service Provider may notify NPAC of "conflict off".	• In order for the porting process to continue at least one Service Provider must remove the subscription from conflict.
10. NPAC notifies both Service Providers of conflict off via SOA.	• NPAC notifies both Service Providers of the change in subscription status. The porting process resumes as normal, proceeding to the Provisioning process flow (Figure 1) at tie point BB.
11. NPAC initiates cancellation and notifies Service Providers.	• NPAC notifies both Service Providers that the subscription version status was updated to *cancelled.* • Both Service Providers take appropriate action related to internal work orders.
12. END	.

INTER-SERVICE PROVIDER LNP OPERATIONS FLOWS
- CANCELLATION FLOW FOR PROVISIONING PROCESS -

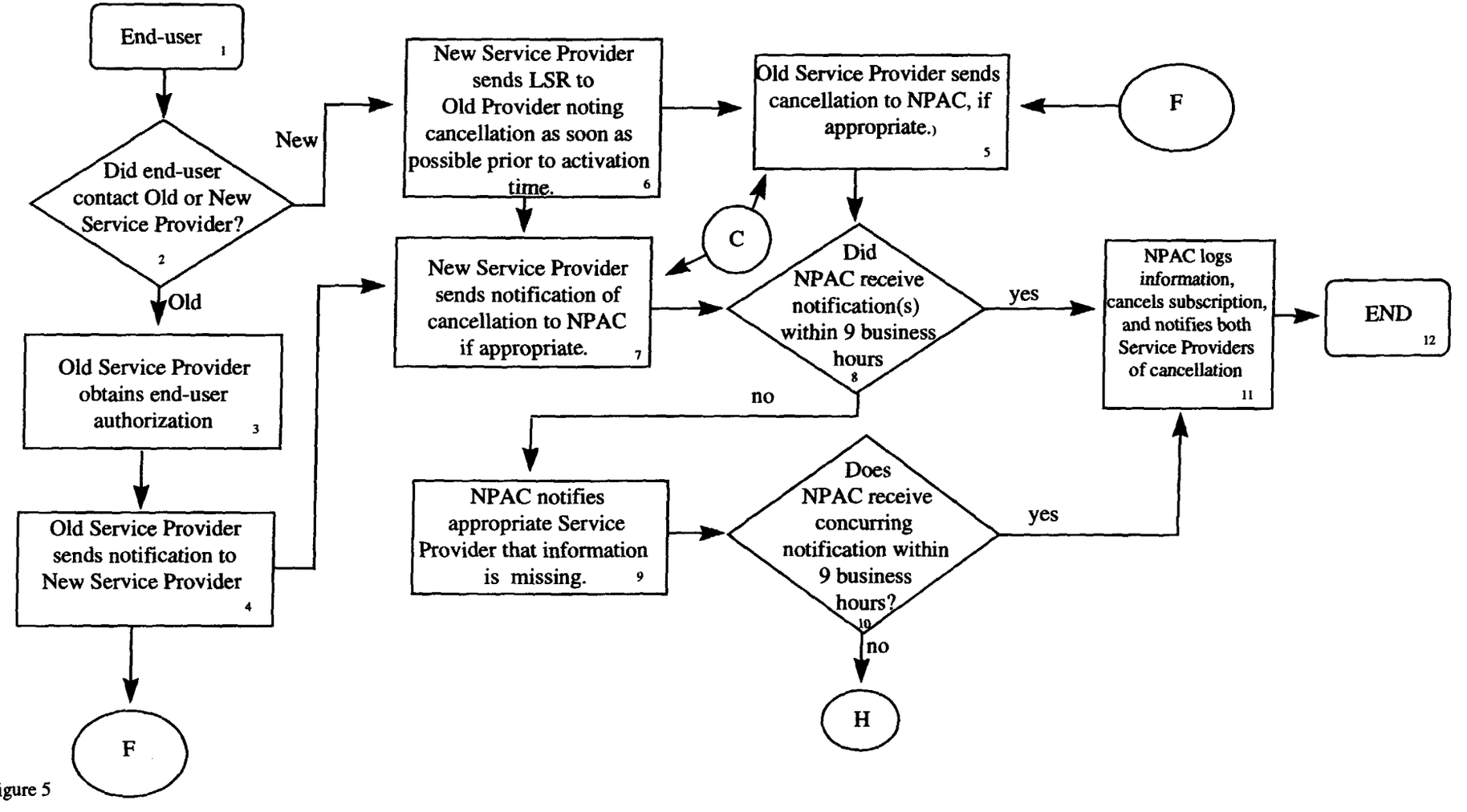

figure 5