LNP Problem/Issue Identification and Description Form

**Submittal Date** (mm/dd/yyyy): 5/3/2006 **PIM 56 v3**

**Company(s) Submitting Issue**: Sprint Nextel

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**(NOTE: Submitting Company(s) is to complete this section of the form along with Sections 1, 2 and 3.)**

1. **Problem/Issue Statement:** Incorrectly provisioned LNP databases.

While all carriers receive updates in their LSMS when porting customers, some carriers are not provisioning their LNP databases correctly. When this scenario occurs, customers are not able to terminate or receive calls from those carrier’s networks that did not provision their LNP databases. That is, when the ported customer makes a call, the callED Party’s Caller ID service may not work properly.  This would occur if the callED party’s network’s LNP data was not correct, since the callED party’s network might be unable to find the CNAM record for the calling party.  In a worst-case scenario, the callED party would automatically reject the unidentified call.

1. **Problem/Issue Description:** (Provide detailed description of problem/issue.)

A. Examples & Impacts of Problem/Issue:

This type of problem typically impacts the ability of a customer to make or complete some of their calls. Following are some examples:

1. A number of customers were ported by Sprint Nextel, and after the port, Sprint Netxel found that the customers were unable to receive or complete calls to or from some of their friends and relatives. The root cause of the problem turned out to be that one of the ILEC’s pair of Service Control Points (SCPs) was not updated. The pair of SCPs alternated handling calls, and each time the SCP that had not been updated attempted to route the call, the call failed. In these cases, it took more than a week after the customer reported the problem for the problem to be discovered and resolved.
2. In another example, a customer ported from an ILEC to a wireless carrier and found that they could not complete calls that terminated in a third LECs territory. The third LEC was able to prove that they were using the correct LRN for routing so the wireless carrier had to go to the first LEC to make sure that all their LNP databases had been updated correctly. This activity took a couple of weeks before the customer was eventually able to complete their calls just as they had before porting their number.

It is typical for this type of problem to take a week or more to resolve.

1. Frequency of Occurrence:

We have had 3 occurrences in the last 60 days.

1. NPAC Regions Impacted:

Canada\_\_\_ Mid Atlantic \_\_\_ Midwest\_\_\_ Northeast\_\_\_ Southeast\_X\_\_ Southwest\_\_\_ Western\_\_\_

West Coast\_\_\_ ALL\_X\_

1. Rationale why existing process is deficient:

We believe the existing process of receiving a response from a carriers’ LSMS acknowledging receipt of the port is deficient due to the fact that it does not indicate the network was provisioned correctly. The customer that cannot make or receive calls as they had before they ported their number is unhappy and more than likely will have problems making their calls for a week or more while the carriers involved discover that they have not updated all their LNP databases.

E. Identify action taken in other committees / forums: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

F. Any other descriptive items: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. **Suggested Resolution:**

Similar to the LSMS partial failures we get today, identify a mechanism to receive a notification from carriers’ LNP databases that the switch provisioning failed or was successful. A carrier’s SCP should respond to the LSMS when the update is completed and the carrier’s LSMS should return the SCP concurrence back to the NPAC.

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Alternatively, identify a step by step procedure for carriers to follow when attempting to resolve this type of problem expeditiously after it has occurred.

Another suggestion would be to make test calls to validate the completion of calls originating from major local networks and through major IXCs to newly ported numbers. At a minimum, perform an analysis of possible LNP troubles.  The idea would be to institute a test call barrage in response to a trouble report, rather than with every port’s completion on routine basis.  But if a particular port involved a sensitive customer, then test calling could be initiated even absent a trouble report a few minutes after the port competed.

Incorporate a industry update for LSMS to respond to the industry when the SCP’s have been updated.

1. **Final Resolution:**

This PIM resulted in the creation of Best Practice 51 - Proper and Timely Updates to LNP Routing Databases

**LNPA WG:** (only) Final Resolution Date: 09/11/2007

Item Number: PIM 56 v3 Related Documents: BP 051

Issue Resolution Referred to: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Why Issue Referred: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_