NANC – LNPA Working Group Problem/Issue Identification Document

# PIM 87

## Revised 5/3/2016

**LNP Problem/Issue Identification and Description Form**

**Submittal Date**: 03 /30/2016

**Company(s) Submitting Issue**: Bright House Networks Information Systems

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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:** (Brief statement outlining the problem/issue.)

LNPA WG best practices reflect the consensus of the working group regarding the preferred processes for

porting. Best Practice 0004, N-1 Carrier Methodology Clarification, was originally submitted by the working group in December 2001. The most current version 5.0 was a result of revisiting the practice in January 2005.

The best practice states that the N-1 carrier is responsible for performing the dip and describes the role of a “donor carrier” in certain situations. To clarify the meaning of this term, the LNPA WG confirms the donor carrier is the A-Block Code Holder designated in the LERG for the NPA-NXX of the called number (default carrier for routing calls based on the NPA-NXX of the called number).

The LNPA WG periodically reviews the Best Practices to determine whether each remains applicable to the current porting environment. Based on these reviews, a practice may be modified or deleted.

Bright House believes BP4 requires additional detail and edits as it relates to donor carrier.

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

A. Examples & Impacts of Problem/Issue:

Example- EAS Interlata calls originating in Duluth MN LATA 624 and terminating in Superior WI LATA 352 where originating SP is routing calls to ILEC tandem in LATA 624, tandem is performing dip (assumed) and routing to “A” code owner donor switch, donor is dipping (LRN) and routing to ILEC tandem LATA 352, and 352 tandem is terminating call to terminating LRN end office switch.

Impact- As BP4 states today, the donor carrier is responsible for dip and transit for the originating carrier under certain provisions during EAS Interlata calls.

More specifically this scenario includes the donor not only performing the LNP dip but also utilizing an inbound trunk and outbound trunk for the duration of the originating customers call. This creates technical challenges in the areas of platform design, traffic engineering and trunk capacity planning, and in cases where the donor carrier’s platforms are technically unable support the donor carrier role, i.e. networks designed to function as closed networks, not terminating traffic for other carriers customers, additional development may be required to fulfill the donor role.

B. Frequency of Occurrence:

NANC – LNPA Working Group Problem/Issue Identification Document

# PIM 87

## Revised 5/3/2016

Undefined, where applicable based on tariff.

C. NPAC Regions Impacted:

Canada Mid Atlantic Midwest Northeast Southeast Southwest Western

West Coast ALL\_X\_

D. Rationale why existing process is deficient:

BP4 currently impacts all “A” code holders including CLEC’s and VoIP SP’s (new regulation allows VoIP’s to be code holders, requires following all applicable LNP rules).

Although known instances are limited, the current 5.0 practice involving donor carrier traffic termination without an “established agreement in place” and as a “long term solution” creates potential for abuse and does not account for the evolution of voice technology over the last 11 years nor does it consider changes to federal regulation.

Legacy TDM Switches (Alcatel-Lucent 5ESS, Nortel DMS-10, etc.), have had a lifetime of well over 30 years, most today being at their end-of-life, end-of-support phase. A technical limitation rooted to a legacy TDM switch, if not solutioned in EAS scenarios through exception routing (local or toll), should not result in the industry creating exceptions and workarounds like the donor carrier solution.

The donor carrier solution places little accountability on the originating carrier and creates a greater vulnerability for fraud scenarios which were not present at the time 5.0 was released (i.e. traffic pumping).

Donor carriers are inadvertently disadvantaged by this responsibility.

We wish to allow carriers the flexibility to choose and negotiate among themselves which carrier shall perform the database query, according to what best suits their individual networks and business plans.

E. Identify action taken in other committees / forums:

F. Any other descriptive items:

## Suggested Resolution:

Revisions to BP4 5.0, page 11, EAS section

NANC – LNPA Working Group Problem/Issue Identification Document

# PIM 87

## Revised 5/3/2016

**Option #1**, add language stating the originating carrier is responsible for dip and routing of interLATA calls to EAS codes **or** entering into an agreement with another entity for dip and routing **or** upon prior agreement relying on the donor carrier for dip and routing.

*On interLATA calls to EAS codes, the originating carrier* ***is*** *responsible for performing the database dip and routing the call to the switch serving the terminating carrier (1)* ***or*** *entering into an agreement with another entity to perform the dip and routing on its behalf so that the call is not sent to the donor carrier (A code holder and so that the call is not dropped).(2)*

***Or*** *the originating carrier may…*

*On interLATA calls to EAS codes where the originating carrier does not support the function to route the call as a local call to ported numbers via an interLATA LRN, originating carrier and donor carrier will establish a prior agreement. (3) The donor carrier in the terminating LATA performs the role of the N-1 carrier (i.e does the database dip and routes the call to the switch serving the ported number). In this instance, the donor carrier will perform the LNP query in the terminating LATA in either that carrier’s donor end office or terminating LATA tandem, whichever terminates trunks from the originating LATA on calls to EAS codes. (Note that the terminating LATA tandem case is only applicable if the donor carrier has a tandem in the terminating LATA, and all switches in the originating LATA that can place local calls to the EAS codes in the terminating LATA have trunking to the tandem in the terminating LATA per mutually accepted interconnect agreements.) The originating carrier is responsible for compensation to the donor carrier for performing the N-1 database dip function.*

1. *Added language that is similar to local & toll section of BP4, describing originating carrier as responsible for dip and routing*
2. *Added new language, or is responsible for entering into an agreement with 3rd party to dip and routing*
3. *Added new language. Will establish an agreement….*

**Option #2**, same as above minus the reference to the donor carrier. Remove the donor carrier concept from BP4 entirely.

*On interLATA calls to EAS codes, the originating carrier* ***is*** *responsible for performing the database dip and routing the call to the switch serving the terminating carrier* ***or*** *entering into an agreement with another entity to perform the dip and routing on its behalf.*

N-1 carrier to follow the FCC rules for dip and routing as mentioned in toll section of BP4.

*“N-1 carrier is responsible for ensuring that databases are queried, as necessary, to effectuate number portability.*

*The N-1 carrier can meet this obligation by* ***either*** *querying the number portability database itself* ***or*** *by arranging with another entity to perform database queries on behalf of the N-1 carrier.” (4)*

*Regardless of the status of a carrier’s obligation to provide number portability,* ***all*** *carriers have the duty to route calls to ported numbers. In other words, carriers* ***must*** *ensure that their call routing procedures do not result in dropped calls to ported numbers.*

*In this regard, the Commission stated clearly:*

*We emphasize that a carrier operating a* ***non-****portability-capable switch* ***must*** *still properly route calls originated by customers served by that switch to ported numbers. When the switch operated by the carrier designated to perform the number portability database query is* ***non****-portability-capable, that carrier could*

NANC – LNPA Working Group Problem/Issue Identification Document

# PIM 87

## Revised 5/3/2016

***either*** *send it to a portability-capable switch operated by that carrier to do the database query,* ***or*** *enter*

*into an arrangement with another carrier to do the query.(5)*

1. *New language referencing toll section of BP4, page 7, section 73*
2. *New language referencing toll section of BP4, page 10, last cite referencing DA 04-1304*
3. **Final Resolution:**

This PIM resulted in the updating of BP 004 - N-1 Carrier Methodology Clarification.

**LNPA WG:** (only) Final Resolution Date: 9/13/2016

Item Number: PIM 087 v2 Related Documents: BP 004

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

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