LNP Problem/Issue Identification and Description Form

**Submittal Date** (08/7/2020): **PIM 133 v6**

**Company(s) Submitting Issue**: 10x People

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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.)

Use of NPAC Data for preventing financial fraud is difficult due to missing or potentially inaccurate data. When numbers are given to Virtual Network Operators, it is difficult to find the service provider who is contracted with the customer and the length of that relationship. Similarly, SV Type may not accurately reflect the Line Type.

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

A. Examples & Impacts of Problem/Issue:

Financial institutions use many different data sources to determine if the customer calling or making an online transaction with a financial institution is in fact the customer and not a fraudster. NPAC data through PortData Validate is a key component to fraud detection/mitigation. It is used in conjunction with other data sources to validate possession of the device, ownership and behavior of the customer.

To help prevent financial fraud the following telecom related data is important in assessing risk:

Service Provider – The Service Provider with whom the customer is contracted.

Line Type (SV Type) – Wireless, VoIP, Wireline, etc

Line Tenure - Length of ownership of the phone number

Service Provider Tenure – Time with Service Provider with the phone number, not limited to a recent port that might indicate porting fraud.

Accuracy of the data received is key in proper fraud identification. Inaccurate or incomplete NPAC data may paint an inaccurate picture resulting in a higher confidence level that the caller is trustworthy.

Inaccurate or missing data may occur in the following situations.

- If a service provider is a reseller of a wholesaler (wireline or wireless), and an Alt-SPID is not provided the number will show as belonging to the wholesaler/provider, and NOT the reseller that has the relationship with the end user customer.

- If the phone number is assigned or ported between resellers on a wholesaler network without NPAC involvement, not only will the actual provider of the service not be correct, but the service provider tenure will also not be accurate.

- If the SV Type is used as Line Type it may not be accurate. Currently the SV Type if not provided by the Service Provider is defaulted based on the Service Provider Type. This is not accurate in all cases. Current values of SV Type are wireline, wireless, class2\_voip\_no\_num\_assgnmt, vowifi, prepaid\_wireless, class1\_and\_2\_voip\_with\_num\_assignment. Additionally, there are sv\_type\_6 – sv\_type\_9 values that are not in use today.

Use of sv\_type\_6 -9 to provide additional information could have value. For instance, identifying residential wireline and enterprise wireline independently would give further information as residential wireline should be a fixed location with a low amount of calls whereas, enterprise wireline may not have a fixed location and could have a large amount of calls (i.e. call center).

B. Frequency of Occurrence:

Financial fraud is rampant in our society. Multiple instances of fraud occur on a daily basis. Billions of dollars are lost by consumers and financial agencies each year.

1. NPAC Regions Impacted:

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

 West Coast\_\_\_ ALL X

D. Rationale why existing process is deficient:

Population of Alt-SPID is strictly optional and is sparsely populated.

Wholesaler porting/assignment of numbers to their reseller partners or between their resellers typically are handled during the pre-port processing and do not typically result in NPAC transactions.

SV Type is defaulted based on Service Provider Type when the SV Type is not provided.

1. Identify action taken in other committees / forums:

None that we are aware of to date.

1. Any other descriptive items:

NANC 399 dated 01/05/05 that address the population of SV Type and Alternative SPID fields but does not do so in relation to fraud prevention.

Best Practice 00043 dated 11/25/06 addresses the population of Alt-SPID but does not do so in relation to fraud prevention.

NANC 438 dated 7/15/09 addresses the population of Last-Alt-SPID but does not do so in relation to fraud prevention.

1. **Suggested Resolution:**

Create a new best practice or update existing best practice(s) for population of NPAC data and its use in the current ecosystem not only for Fraud Prevention but also the evolution of VoIP Service Providers and the impacts to PSAPs and LEAs. Updates to consider include:

* Updating BP 00043 that addresses populate Alt-SPID with reseller SPID values to include not only fraud reasons but, also VoIP Service Providers use and impacts to PSAPs and LEAs that were raised in the NANC 399 change order.
* Updating BP 00043 or create a new BP to address populating of Last-Alt-SPID in instances where the subtending Service Provider of the network Service Provider that has the retail relationship with the end user (customer) is different than the subtending Service Provider of the network Service Provider identified in the Alt-SPID value. There is currently no best practice that addresses use of Last-Alt-SPID.

Additional Items to Consider include:

* Populating SV Type when the SV Type is not the same as the Service Provider Type to support VoIP network routing in Service Provider networks.
* Consider increasing use of SV Type residential wireline and enterprise wireline independently to further support industry needs in identifying call patterns and potential fraud situations.
1. **Final Resolution:**

This PIM will be closed.

Use of alt-SPID, last-alt-SPID fields vary from Service Provider to Service Provider. Some Service Providers do not support or utilize these optional fields. Service Providers that choose to populate the optional fields do so, as needed, to support their own company’s business needs. The business needs or reasons for populating any of these optional fields may vary or be unique to that Service Provider. Due to the different use of the fields, it was determined that no action should be taken.

Service Providers that support SV Type can choose to provide a value to support their own business needs.

SV Type is defaulted to the Service Provider type if a Service Provider does not support use of this field. This behavior is well documented in the FRS.

**LNPA WG:** (only) Final Resolution Date: 07/06/2021

Item Number: PIM #133 v6 Related Documents: BP 043, NANC 399

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

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