**Committee Name:** IP-NNI TF

**Meeting Date:** 19 Jan 2021

**TITLE: PTSC -** Non-IP Call Authentication TF Status Update

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**ISSUE NUMBER:** NA

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**ABSTRACT:**

This contribution provides an update on the progress of ATIS’ PTSC Non-IP Call Authentication WG.

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1. **Introduction**

The Non-IP Call Authentication (NONIPCA) task force within ATIS’ Packet Technologies and Systems Committee (PTSC) is focused on call authentication for TDM-based Originating Service Providers (OSP) and Terminating Service Providers (TSP) and will complement the work already being addressed in the joint ATIS/SIP Forum IP-NNI Task Force. This report provides an update on the status of NONIPCA deliverables.

1. Deliverables

**SHAKEN: OOB Token Transmission for TDM Networks** (PTSC-NONIPCA-2021-00006R002)

**Abstract**: The SHAKEN framework enables an authorized VoIP service provider to deliver cryptographic proof to a called user via SIP signaling that the calling user is authorized to use the calling telephone number. This specification extends the current SHAKEN framework to enable service providers using TDM signaling to participate in the SHAKEN ecosystem without placing any new requirements on authorized SHAKEN service providers.

**Status**: The text of this document is considered stable, and the task force has been instructed to carefully review the document before the next meeting on 29 Jan 2021 as it is expected the authors will request the document be sent to letter ballot.

**Dependencies**:

* The NONIPCA TF charter requires an evaluation of the viability of implementing proposed call authentication mechanisms for TDM networks. This evaluation is being conducted in a separate TR (see below) and is an essential part of developing practical call authentication mechanisms for TDM networks.
* The ATIS PTSC Non-IP Call Authentication Task Force has determined that the “Out-of-Band Token Transmission for TDM Networks” document’s scope will be limited to SHAKEN and “div” PASSporTs (“ppt” = “shaken” or “ppt” = “div”). The description of how other PASSporT types will utilize the OOB mechanisms should be described in the documents that describe the other PASSporT type or in new documents specific to each PASSporT type.

**Extending STIR/SHAKEN over TDM** (PTSC-NONIPCA-2020-00008R009)

**Abstract:** The SHAKEN framework enables a SHAKEN-authorized VoIP Service Provider to deliver cryptographic proof to a called user via SIP signaling that the calling user is authorized to use the calling telephone number. This specification extends this current framework to enable transferring verified attestation levels over TDM interconnects.

**Status**: The text of this document is considered stable, and the task force has been instructed to carefully review the document before the next meeting on 29 Jan 2021 as it is expected the authors will request the document be sent to letter ballot.

**Dependencies**:

* The NONIPCA TF charter requires an evaluation of the viability of implementing proposed call authentication mechanisms for TDM networks. This evaluation is being conducted in a separate TR (see below) and is an essential part of developing practical call authentication mechanisms for TDM networks.

**Technical Report on Alternatives for Caller Authentication for Non-IP Traffic** (PTSC-NONIPCA-2021-00005R000)

**Abstract**: The SHAKEN framework enables a SHAKEN-authorized VoIP Service Provider to deliver cryptographic proof to a called user via SIP signaling that the calling user is authorized to use the calling telephone number. This Technical Report considers scenarios where SIP connectivity is not available end-to-end (i.e., “non-IP” scenarios) and identifies potential mechanisms for to determine that the calling user is authorized to use the calling telephone number.

**Status**: This document has identified criteria for evaluating the viability of implementing proposed call authentication mechanisms for TDM networks, and these criteria have been provisionally agreed by the task force. The next step is to use these criteria to evaluate the proposed call authentication mechanisms in PTSC-NONIPCA-2021-00006R002 and PTSC-NONIPCA-2020-00008R009. Now that we have stable text for call authentication mechanisms, it is intended to begin this evaluation. It should be noted that we do not intend to attempt to pick “winners and losers” but to perform an independent “viability assessment” for each proposal.

**Dependencies**:

* If changes are made to the call authentication mechanisms during the letter ballot process, the evaluation will need to be updated.

Although the charter for the NONIPCA task force recognizes there may be additional deliverables, these have not yet been identified.