Contribution

TITLE: eCNAM review and clarifications
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Abstract
This contribution provides clarifications on enhanced CNAM, reviewing key features in ATIS-1000067 including the delivery mechanism.

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Enhanced Calling Name (eCNAM) and Robocalling

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AGENDA

I. Background on eCNAM

II. eCNAM Standards

III. What’s in a “name”? - Terminology and Related Concepts and how they differ.

IV. The Service vs. the Delivery mechanism

V. How can the Delivery mechanism help?

VI. Summary
Traditional CNAM was criticized for the limited 15 character length.

More data is in demand, so we introduced “enhanced calling name” in ATIS-1000067 in 2015.

eCNAM = longer NAME (35 ch.) + Additional Data about the caller
The Standards

What’s been accomplished so far

North America: ATIS-1000067.2015

3GPP Stage 1 Service description in TS 22.173

3GPP Protocol Requirements TS 24.196
Other Concepts and Terminology

1. Rich Call Data (rcd) – IETF Internet Draft PASSporT Extension for Rich Call Data-rcd-03
   - Information other than the calling number (e.g., name, address) is sent by the originating provider/user.
   - Sent as another SHAKEN PASSporT claim (similar to ‘origid’ or ‘attest’)

2. Rich Call Data services offered by the terminating provider
   - The term “Rich Call Data” means delivering more call information to the end user
   - Typically includes Number+Name+Additional information
   - Similar to eCNAM in concept
How does eCNAM differ?

**Originating Network**
- SHAKEN data
- Attestation levels

**Terminating Network**

Verification → Analytics → TAS or S-CSCF**

Where eCNAM is applied

- eCNAM assembles a variety of trusted data + analytics results into Call-Info headers destined to the UE
- The eCNAM service logic may also query data sources to retrieve additional caller info for inclusion in the display.

**TAS: Telephony Application Server**
**S-CSCF: Serving Call Session Control Function**
How can the ATIS-1000067 Delivery Mechanism help?

- Analytics can adapt to inform consumers of new scams quickly.
- The ATIS-1000067 eCNAM mechanism is best suited to relay the “metadata” including analytics results to the UE.
  - Acts as an “envelope” for the text and icons
  - One interface that supports different content for different carriers.
  - Even as attestation levels expand, the change in content occurs between analytics and the AS, which
    ★ minimizes impact on UE,
    ★ Creates fewer / no updates to standards.
## eCNAM vs. rcd

<table>
<thead>
<tr>
<th></th>
<th>rcd</th>
<th>ATIS-1000067 eCNAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data delivered from originating SP or originating user.</td>
<td>Metadata is obtained from sources trusted by terminating SP.</td>
<td></td>
</tr>
<tr>
<td>No analytics</td>
<td>Incorporates the benefits of analytics at the terminating end.</td>
<td></td>
</tr>
<tr>
<td>Format and content is determined by originating side</td>
<td>The final content and format to be displayed is up to terminating SP local policy.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Can adjust to meet consumer needs.</td>
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</table>
Advantages of eCNAM Delivery Mechanism

✅ More trusted because its metadata is not user-provided from the originating network.

✅ Allows each carrier the flexibility of applying their own rules
  ✅ The criteria each carrier wishes to apply in analytics
  ✅ The selection of text and iconography
  ✅ Customization for different types of end users
“Potential” Display Example

eCNAM can deliver the additional info after the TN has undergone “vetting” for verified and registered callers, and more.

(866)444-6100
Citibank
Fraud Department

Answer
Later
A Strong Warning Example

eCNAM may deliver additional text when the risk level assessed by analytics is very high; e.g, the infamous IRS scams. May send “do not give personal info” or a message that triggers the UE to play an audio of that phrase to the user.
Summary

- eCNAM is not just about delivering a name.

- ATIS-1000067 / 3GPP TS 24.196 delivery mechanism is a versatile call information delivery vehicle.

- Flexibility translates into more opportunities for carriers and analytics providers to serve consumers.
  - Anti-robocalling services may be the first example/application for this mechanism.
THANK YOU …