SHAKEN and STIRed: and thoughts on the Current State of: Call Validation Display

SIPNOC 2017

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When you have a lemon ...make lemonade

- Work in progress
- Disclaimer: The following opinions are those of a deranged, raving lunatic and do not necessarily reflect the opinions of the SIP Forum or its member companies..

• What is the FCC Doing?

We now have the first Notice of Inquiry (NOI) on STIR SHAKEN: https://apps.fcc.gov/edocs_public/attachmatch/DOC-343731A1.pdf

Advanced Methods to Target and Eliminate Unlawful Robocalls Notice of Proposed Rulemaking and Notice of Inquiry - CG Docket No. 17-59

IMHO this only is a start. The new Docket is now active: CG Docket No. 17-97

https://www.fcc.gov/document/call-authentication-trust-anchor

Call Blocking NPRM (No Not Call) will only deal with non-allocated portions of the North American Numbering Plan.

What is the FCC Doing?

North American Numbering Council [NANC] will be taking up these issues on December 7.

https://www.fcc.gov/document/chairman-pai-announces-members-leadershipnumbering-council

It's an interesting agenda with 4 new standing committees.

Numbering Administration Oversight Working Group (IETF MODERN ???)
Call Authentication Trust Anchor Issues Working Group (STIR/SHAKEN)
Toll Free Number Modernization Issues Working Group
Nationwide Number Portability Issues Working Group

What will the FCC do next?

STIR/SHAKEN is going to happen. The question is what's next?

IMHO the U.S. Government will take proactive action to establish the National Numbering Trust Anchor and establish a governance model.

Canada and UK will probably follow U.S. actions.

To mandate or not to mandate adoption...that is the question.

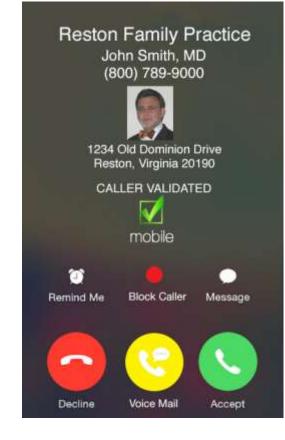
Enhanced Call Validation Display Options Empower the Consumer

Existing User Display is limited to 15 Character ASCII for CNAM [Calling Name Delivery] and the Calling Party Number. This is what needs to be enhanced.

Calling party could display business name, address and potentially a picture as well based on Enhanced CNAM. A business opportunity for carriers.

Calling party can display alternative number to protect privacy when responding to consumer inquiries.

Protect Emergency Personnel from revealing their true Calling Party Number.



What are the minimum elements to be imparted to the User Agent aka the Phone ?

• Start with Green Yellow Red?







- First separate what is objective validation data vs. subjective data.
- What other kinds of value-added information can be given to the user by the service provider?
 - Logos?
 - Pictures?
 - Theme songs?

Enhanced Call Validation Display

Network has no confidence in the signaling path whatsoever; data analytics indicates possible malicious call.

Signaling to consumer indicates very high level of distrust in the call.

Network can alternatively block the call based on clear consumer preference.





Other examples...

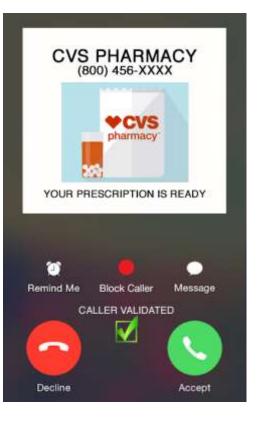


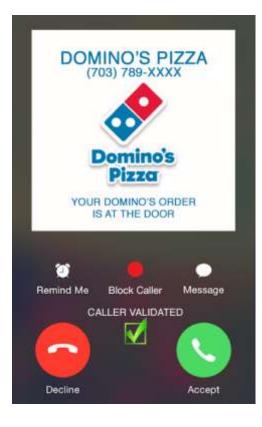


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More Examples: Caller Identity in National Security / Emergency Preparedness Communications NS/EP



In-Bound Call Center Dashboards

• The needs of Enterprises may not be the same as Consumers.

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Courtesy SecureLogix