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Ex Parte VIA ECFS

October 13, 2017

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

RE: *WC Docket No. 17-97 Call Authentication Trust Anchor*

Dear Ms. Dortch:

On Thursday, October 5, 2017, I met with Jay Schwarz and Zenji Nakazawa, Wireline and Public Safety Advisors to Federal Communications Commission Chairman Pai, as well as Kris Monteith, Chief of Bureau, Sherwin Siy, Ann Stevens, and Patrick Webre of the Wireline Competition Bureau; Kenneth Carlberg, Chief Technologist of the Public Safety Homeland Security Bureau, as well as Eric Burger, Chief Technology Officer of the FCC.

I distributed a presentation which is attached.

I reviewed my views on the current 17-97 docket and emphasized my belief that the STIR/SHAKEN framework developed by the SIP Forum and ATIS Joint Task Force is the best current technology to rid our nation of the appalling pestilence of robocalls and Caller ID Spoofing.^{1 2} I noted my belief that our UK and CA partners at OFCOM and CRTC are considering these technologies as well.

I encouraged the FCC to proceed to a Notice of Proposed Rule Making on the 17-97 Docket at the earliest possible date.

¹ Views contained in this document are purely mine and do not necessarily represent the views of the SIP Forum its member companies and participants. www.sipforum.org

² <https://ecfsapi.fcc.gov/file/108142861719824/Shockey%20Consulting%20FCC%20Comments%20Call%20Authentication%2017-97%2017-59%20.pdf>

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My current concern is how the industry presents STIR/SHAKEN Call Validation Data to the American People and noted that the needs of consumers may be different from enterprises. The Docket has several thoughtful submissions from the Financial Services industry and Electric Utilities. I reviewed conversations the SIP Forum and ATIS had with the Federal Trade Commission on this subject.

There are clearly divergent views within the industry on how Call Validation Data should be displayed to consumers and what parameters could be displayed. I have made presentations on this subject to the North American Numbering Council and several other groups including NARUC.^{3 4}

It is a complicated problem. Many of us that work on the problem of robocalls and Caller ID spoofing are network engineers by trade and are not necessarily qualified to judge issues involving complicated user interface design. I do not presume that either the Federal Communications Commission nor the Federal Trade Commission has the requisite expertise in user interface design, however, a broad range of input is necessary if this process is going to succeed.

I noted my support for the idea that should the FCC proceed with a formal NPRM on the Call Authentication Trust Anchor the Commission should solicit from industry and interested parties their thoughts STIR/SHAKEN user interface design. This is a worthy and honorable avenue of inquiry for the FCC to pursue.

It is also self-evident that this technology has significant impact for both National Security / Emergency Preparedness (NS/EP) applications, such as FirstNet and US Military Command and Control Applications. I'm sure I speak for ATIS and SIP Forum that we would appreciate the ongoing help of the FCC in facilitating discussions among those parties.

I am available to answer any questions about these comments as should be needed.

Respectfully submitted,

/s

Richard Shockey
Principal

³ http://www.nanc-chair.org/docs/mtg_docs/Mar17_NANC_Robocall_Spoofing_Update.pdf

⁴ <https://www.sipforum.org/download/shaken-stired-naruc-summer-2017/?wpdmdl=3405>

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CC (Via Email) to: Jay Schwarz
Zenji Nakazawa
Kris Monteith
Sherwin Siy
Ann Stevens
Patrick Webre
Kenneth Carlberg
Eric Burger

Robocalls and Caller ID spoofing: beyond SHAKEN and STIRed: What are we going to do with Call Validation Display?

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- Work in progress



1

Where are we at with the SIP Forum ATIS Task Force

- Continuing to work Trust Anchor Governance Model.
- Emerging work on Application Programming Interfaces.
- Open source STIR/SHAKEN implementations under development on github. Name Vesper.
- We need to consider that STIR/SHAKEN is really a enabler of Call Filtering as much as it is a Call Authentication Method.
- Call Validation Display is really the ultimate enabler.
- What do you want us to do?

2

Other factoids of interest.

- 20 Companies have agreed to test STIR/SHAKEN in the ATIS Testbed
- UK OFCOM wants to have some policies in place within 18-24 months.
- A large ecosystem is starting to form around Call Scoring as well as Data Analytics engines.
- Data for enterprises will be different than for consumers.
- Early adopters include Financial Services, Health Care, Utilities.
- Fraud prevention, Reputation Management key business drivers.

3

STIR/SHAKEN is coming, now what?

What do we do with the data?

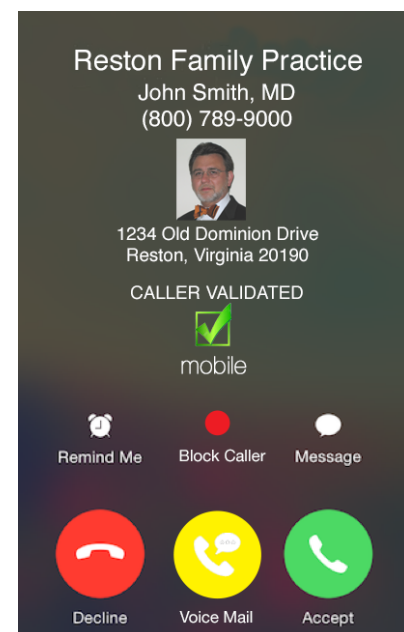
How is it displayed to the consumer?

We have about 2 seconds.

Graphics? Text? Enhanced CNAM?

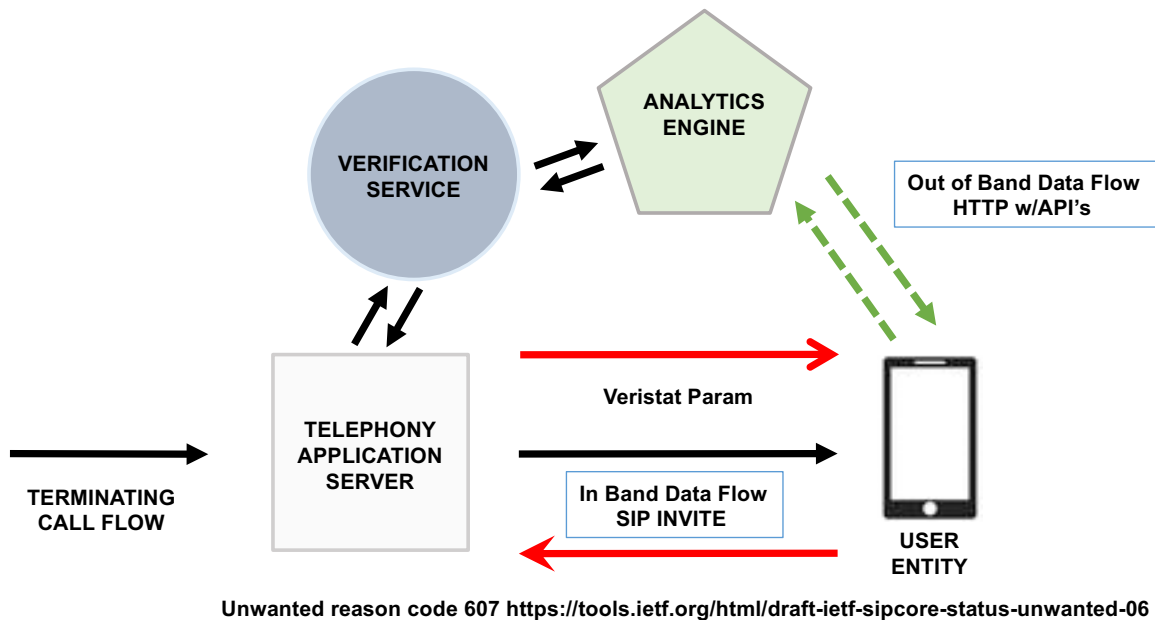
Data for enterprises will be different than for consumers.

Considerable debate on in band SIP INVITE vs out of band restful HTTP secure signaling.



4

User Agent Interaction at Termination



What are starting to debate 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. TRUE/FALSE vs Numeric scoring like credit scores?
- What other kinds of value added information can be given to the user by the service provider.
 - Logos?
 - Pictures?
 - Theme songs?

Personal observations.

- I repeat my personal belief outlined in my ex parte that STIR SHAKEN should be mandated.
- Nothing will deploy before 2019. Its just the way it works.
 - Some carriers will privately exchange keys in 2018.
- I do not believe the Call Validation Trust Anchor should be folded into the existing NANPA/Pooling administration. It is a separate set of skills.
 - Costs should be very low. 499 line item. 5M?
- We may need a TOM [Transition Oversight Manager] for startup implementation.