

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Implementing Section 503 of RAY BAUM’S Act)	WC Docket Nos. 18-335
)	
Rules and Regulation Implementing the Truth in)	WC Docket Nos. 11-39
Caller ID Act of 2009)	

Reply Comments of Yaana Technologies LLC

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EXECUTIVE SUMMARY

One of the principal purposes of the instant proceeding is to implement provision of Section 503 of Ray Baum's Act amending 47 U.S.C. 227(e)(1) pertaining to inaccurate caller identification information by expanding the scope to apply to "any person outside the United States if the recipient is within the United States, in connection with any voice service or text messaging service". In so doing, Congress effectively mandated Commission engagement in the many global venues and extensive activities presently devoted to this topic – especially those of the International Telecommunication Union (ITU) whose intergovernmental and industry standards and permanent secretariat activities constitute the basis for the international voice and text messaging services and identifiers at issue. The Act recognizes the global scope of the problems and challenges that require greater cooperation and engagement by the Commission.

The docket thusfar – both for the Commission's own NPRM and the comments filed - evidences little cognizance of these global venues and activities, much less a plan for engagement in them. The only exceptions are found in the Comments of CTIA which devoted a section to this subject and the expansion of the related proposed Commission rule, as well as Yaana Technologies' own *ex parte* comments.

It was perhaps ironic that during the comment period of the rulemaking, the principal intergovernmental venue for addressing the call spoofing challenges (ITU-T Study Group 2) – and essential for implementing the Ray Baum's Act provision - was meeting in Geneva and advanced its work with a specific new work item. Although there was no active engagement by the U.S., the work was broadly supported by national Administrations and network operators.

Going forward, the Commission as part of this proceeding must include comprehensive recognition and a plan of engagement for the global legal, institutional, technical, and operational ecosystems and trust mechanisms associated with caller identification information. The legal, technical, and operational challenges here are longstanding and global, and will necessarily require global solutions working with the 192 other nations involved.

1. Yaana Technologies LLC (Yaana) is a Silicon Valley based global provider of security-related telecommunication and internet compliance obligation services. See www.yaanatech.com. For more than twenty years, Yaana has devoted significant resources to participation in security compliance related regulatory proceedings and industry technical standards and operator activities in the United States, multiple other nations, as well as regional and intergovernmental bodies – in many cases leading the industry standards activities. During the past three years, it has contributed two major

reports on the global caller identification ecosystem, activities, and technologies to one of the principal bodies - ETSI's Cybersecurity Technical Committee.¹

A. Sec. 503 of Ray Baum's Act necessitates FCC involvement in the longstanding global ecosystem for enhancing call identification trust

2. A century and a half ago, nations first met to establish the first international treaty arrangements for voice telephony as an extension to those already relating to text communications. A century ago, those arrangements were expanded to include technical and operational specifications with a dedicated international body designated the *Comité Consultatif International des Communications Téléphoniques à grande distance*. A half century ago, the United States with FCC engagement, led the international effort to create an international direct distance service, the associated identifiers and trust mechanisms that include intergovernmental standards such as E.164, and ITU secretariat registration mechanisms. (The U.S. obtained a country identifier of "1" in the process.) A quarter century ago, the U.S. pursuant to the FCC's *Computer III* and its related international policies, similarly led the international effort to create caller identity services as part of globalizing Intelligent Network capabilities. The engagement and provisions led to a stable ecosystem of law, technology, and operational practices that significantly enhanced global call identification trust.

3. Two decades ago, the Commission, as well as multiple U.S. Administrations generally, began diminishing this engagement - to essentially eliminate it, except for continuing oversight of its own portion of the identifier space through the North American Numbering Plan and its administration. One of the resulting adverse consequences of this withdrawal from international activities and enforcement mechanisms is the problem now being faced – a marked increase in unwanted voice and text traffic and purposely spoofed identifiers. Sec. 503 of Ray Baum's Act calls for a change in this practice of neglect and re-engagement with other countries in the necessary venues – especially ITU-T and its relevant study groups.

¹ See *Overview of spoofed call developments*, ETSI Doc. CYBER(16)008006, Sep 2016; *Update on spoofed call developments overview*, ETSI Doc. CYBER(17)009022, Feb 2017.

B. The comments filed in the proceeding reflect the highly specialized subject matter and scope

4. The docket submissions thusfar – both for the Commission’s own NPRM and the comments filed - are plainly disappointing. It evidences essentially no cognizance of the associated global ecosystem, much less a plan for engagement in it. The only exceptions are found in the Comments of CTIA which devoted a section to this subject and the expansion of the related proposed Commission rule, as well as Yaana Technologies’ own *ex parte* comments.²

5. On the other hand, this should not be surprising given that an entire generation has passed – allowing the institutional history and knowledge base to disappear, as well as a diminution in the appreciation of public international law. Additionally, the subject matter and venues are those requiring highly specialized knowledge with little commercial value – effectively necessitating participation by government personnel over long periods of time.

C. Specific new international technical and operational standards solutions have been initiated

6. A broad-based international ecosystem of global institutional initiatives and development have emerged over the past twenty years to deal specifically with unsolicited and spoofed calling and detailed in the initial ETSI overview material.³ It has given rise to an extensive “global call mitigation ecosystem.”⁴ Even the contemporary U.S. focused work in the IETF on STIR and SHAKEN has its origins in efforts begun a decade earlier in ITU-T.⁵ One of the more prominent events occurred with the convening of a global ITU workshop on Caller ID Spoofing.⁶

7. On 19 February, a mere four days following the release of the FCC's NPRM on the Ray Baum's Act Congressional mandate, the world's intergovernmental body

² [CTIA Comments](#), 3 Apr 2019 at 8; Yaana Technologies, [ex parte 2 Feb 2019](#) and [ex parte 7 Mar 2019](#).

³ See n. 1, *supra*.

⁴ See ETSI, *Overview of spoofed call developments*, 8 Sep 2016, Doc. CYBER(16)008006 at 5.

⁵ See ITU-T, Verisign, *Implementation of Universal Global Trusted Service Provider Identity (Trusted SPID)*, 2008; UK, *Service Provider Identifiers (SPIDs)*, ITU-T COM2-90, April 2008.

⁶ See ITU Workshop on “Caller ID Spoofing”, Geneva, 2 Jun 2014 at <https://www.itu.int/en/ITU-T/Workshops-and-Seminars/callerid/Pages/default.aspx>.

responsible for implementing international telephony services including CallerID convened in Geneva for an eight-day meeting that notably included spoofing. In fact, it has been dealing with international CallerID spoofing for many years — bringing together operators, vendors, and national authorities to deal with the challenges. A total of 27 documents were related to CallerID and Calling Number spoofing — a number of them providing insight and collaboration with other organizations and venues throughout the world working on the spoofing challenges.⁷ It adopted a new work item specifically dedicated to contemporary call spoofing.⁸

8. In addition to the work in ITU-T Study Group 2 (operations), new and existing work was progressed at the January 2019 meeting of Study Group 17 with a total of thirteen input contribution submissions comprising a total of 58 documents devoted to spoofing. Additionally, considerable mobile and 5G work on call spoofing exists in 3GPP with several hundred related contributions over the past year. However, there is only one global intergovernmental venue with the subject matter jurisdiction and legal authority necessary to implement Ray Baum’s Act, and that is the ITU-T.

D. Ray Baum’s Act Sec. 503 objectives can only be met by effective Commission engagement in the multiple substantial existing international and intergovernmental venues and activities

9. The Commission in the NRPM proposes "to extend the reach of [Commission] caller ID spoofing rules to include communications originating from outside the United States to recipients within the United States." However, it cannot exercise such extraterritorial jurisdiction, and indeed is obligated to act through long-standing treaty obligations and activities dedicated to accomplishing such actions. As noted in para. 8, above, the Commission pursuant to Ray Baum’s Act, must re-engage in ITU-T work, as well as other global international venues like 3GPP to mitigate spoofed calling. Put another way, unless the FCC attends to its own international responsibilities as it once

⁷ See ITU-T Study Group 2, *Report of Study Group 2 meeting*, Geneva, 19-28 February 2019, Doc. SG2-R12.

⁸ See ITU-T Study Group 2, *Report of Working Party 1/2 (Numbering, naming, addressing, routing identification and service provision)*, Geneva, 19-28 February 2019, Doc. SG2-R13, at 5. See also, ITU-T Study Group 2, *A.1 template for the new work item on spoofing*, Doc. SG2-TD580R1.

did, no other U.S. agency or private entity is likely to expend the resources, and the results will be the work undertaken by other national Administrations. And, that might be an acceptable outcome. It would, however, be great to see some level of FCC leadership demonstrated.