November 15, 2002



Alliance for Telecommunications **Industry Solutions** 

> Problem Solvers to the Telecommunications Industry

Standards Committee T1

**Telecommunications** Industry Forum

Ordering and Billing Forum

Mr. Thomas J. Sugrue **Bureau Chief** Wireless Telecommunications Bureau Federal Communications Commission 445 12th Street, SW

Washington DC 20544

Network Interconnection Interoperability Forum

> Industry Numbering Committee

Protection Engineers Group

Standards Committee 05

Network Reliability Steering Committee

Internetwork Interoperability Test Coordination Committee

> Telecommunications Fraud Prevention Committee

International Forum on ANSI-41 Standards Technology

> Interactive Voice Response Forum

> > TTY Forum

Administrative Council for Terminal Attachments

**IMSI Oversight Council** 

**Emergency Services** Interconnection Forum

Re: Ex Parte Communication, In the Matter of Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, Non-Initialized Phones, CC Docket No. 94-102, RM-8143 (released September 30, 2002) ("Order").

Dear Mr. Sugrue:

The purpose of this letter is to respond to the Federal Communications Commission's ("FCC's" or "Commission's") request, as set forth in the above captioned matter, for further information regarding the International Roaming Mobile Identification Numbers ("IRMs") numbering regime. In the Order, the Commission invited ex parte communications on the issue of potential resource impacts to the IRM assignment pool resulting from the rule designating "123-456-7890" as the telephone number/mobile identification number for nonservice initialized phones and newly manufactured "911 only" wireless handsets. Specifically, this letter provides information from the Alliance For Telecommunications Industry Solutions ("ATIS") International Forum on ANSI-41 Standards Technology ("IFAST") on the following issues posed by the Commission: (1) why the transmission of one particular number necessarily results in the stranding of one million numbers from the IRM assignment pool and, (2) whether these numbers [123-456-7890] have already been removed from the IRM numbering pool, and, if so, what problems this poses.<sup>2</sup>

The ATIS IFAST is an industry consensus body that develops guidelines, and assigns IRMs to carriers offering international roaming services. IRMs allow for international roaming and ensure unique identification of each active mobile

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ATIS

<sup>&</sup>lt;sup>1</sup> See In the Matter of Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, Non-Initialized Phones, CC Docket No. 94-102, RM-8143, Order (rel. September 30, 2002) at para. 14. The issue of potential impact to the IRM assignment pool as a result of the Commission's new rule designating "123-456-7890" as the telephone number/mobile identification number for non-service initialized phones and newly manufactured 911 only handsets, was initially cited in the ATIS Emergency Services and Interconnection Forum ("ESIF") Petition for Reconsideration and Request for Stay filed June 12, 2002.

<sup>&</sup>lt;sup>2</sup> Order at para. 14.



phone subscription. More than 109 organizations participate in IFAST, including wireless service suppliers, network operators, equipment suppliers, government organizations, consultants, and industry associations. IFAST has members on every continent (except Antarctica), and participants from 37 countries.<sup>3</sup>

The Forum participants reviewed the Commission's questions and offer the following information for clarification.

(1) It is unclear why the transmission of one particular number necessarily results in the stranding of one million numbers from the IRM assignment pool.

IRMs are assigned in blocks of one million to carriers in order to identify a range for each carrier providing international roaming capability. IRMs follow the format 0/1XXX+6D. The four-digit prefix (0/1XXX) is assigned to wireless service providers by the IFAST as an "IRM Network Identifier." The last six digits are assigned by the service provider to which an IRM(s) has been assigned. Should the IRM "123-456-7890" be removed from the IRM numbering pool, the IRM Network Identifier "1234" must be removed from the list of available IRM network identifiers in order to eliminate potential confusion, as well as the risk that "1234-567-890" could be assigned as an international roamer, rather than an emergency-only mobile in an emergency situation.

(2) Because 911-only phones already exist, it is unclear whether these numbers have already been removed from the IRM numbering pool, and, if so, what problems this poses.

The IRM Network Identifier "1234" has not been removed from the IRM numbering pool. The IFAST's IRM Assignment Guidelines and Procedures ("Guidelines and Procedures") outline the proper procedures for the assignment and use of IRMs. <sup>4</sup> The Guidelines and Procedures state, in relevant part:

The assignment principles defined below allow all international wireless service providers the greatest possible latitude in providing seamless international roaming capabilities in ANSI-41 based systems.

<sup>&</sup>lt;sup>3</sup> IFAST participants include representative from Argentina, Brazil, Canada, Colombia, Chile, France, Israel, Japan, Kazakhstan, Korea, Malaysia, Mexico, Paraguay, Peru, Philippines, Russia, Taiwan, United Kingdom, United States, and Venezuela. Further information on ATIS and the IFAST may be found at www.atis.org and www.ifast.org.

<sup>&</sup>lt;sup>4</sup> International Roaming Mobile Identification Number ("MIN") ("IRM") Assignment Guidelines and Procedures, Version 4.0.



- IRMs shall be assigned to permit the most effective and efficient use of a finite resource in order to maximize the existing allocated resource inventory and to defer, as long as practical, the need to request additional MIN resources.
- The IRM administrator<sup>5</sup> will:
  - Assign IRMs in a fair, timely and impartial manner to any applicant that meets the criteria for assignment (Section 6).
  - Assign IRMs on a first come, first served basis from the available pool.
  - Make all assignments based on the procedures in these guidelines.
  - Treat sensitive information received from applicants as proprietary and confidential, and not to be shared with non-administrator personnel.
- The payment of an application fee and an administrative fee is required with an application for an IRM. Any entity applying for an IRM must pay outstanding invoices for their past IRM maintenance fees before any application can be processed by the Administrator.
- IRM assignees are required to pay an annual IRM maintenance fee (contact the IFAST Secretariat<sup>6</sup> for fee schedule). In the case of a shared IRM, all assignees are required to pay the full maintenance fee. The IFAST will submit an annual bill to each IRM assignee. Payment is expected within 30 days. However, if payment is not received within 5 months of billing, the assignee will receive a letter indicating that if payment if not received in an additional 30 days, the assigned IRM(s) will be returned to the IRM inventory for reassignment. Reassignment can occur following the normal "dormant" period (6 months).
- IRMs will be assigned to any ANSI-41 based wireless network that will provide roaming between other ANSI-41 based networks in other countries, included in the North American Numbering Plan ("NANP") serving area. IRMs can also be assigned to wireless networks not based in a specific geographic country, e.g., Global Mobile Satellite Service ("GMSS") networks.<sup>7</sup>

The IRM administrator has not received an application or a payment for the IRM Network Identifier "1234", therefore, the IRM administrator has not assigned that number to a U.S. service provider. Due to the

<sup>&</sup>lt;sup>5</sup> The IRM administrator is appointed by the IFAST and manages and coordinates the assignment of the IRMs, under the oversight of the IFAST. Guidelines and Procedures, Section 1. The current IRM administrator is David Crowe, President, Cellular Networking Perspectives, Ltd. (Calgary, Canada).

<sup>&</sup>lt;sup>6</sup> ATIS currently serves as the IFAST Secretariat.

<sup>&</sup>lt;sup>7</sup> Guidelines and Procedures, Section 4, Assignment Principles.



Commission's proposed rule to use "123-456-7890" as the telephone number/mobile identification number for non-service initialized phones and newly manufactured "911 only" wireless handsets to address the lack of call-back capability, the IRM administrator has marked the IRM Network Identifier "1234" in the IRM database accordingly. Additionally, the IRM administrator is advising any entity requesting the IRM Network Identifier "1234" of the Commission's proposed rule. However, since the IRM resource is limited, the IRM Administrator cannot hold the IRM Network Identifier "1234" indefinitely.

The IRM resource is limited, and must be shared by all analog, TDMA, and CDMA cellular carriers that operate outside of North America, as well as some companies using cellular systems for data transmission that operate within North America. There are only 2,000 IRM blocks, and assigning one for purposes other than identifying mobile subscriptions sets a dangerous precedent.

Should you have any questions regarding this matter, please contact me at (202) 434-8847. If further clarifying information is necessary or would be helpful, ATIS and the IFAST participants stand ready to assist the Commission.

Sincerely,

Megan L. Campbell General Counsel

Cc: Fred Gaechter, Telcordia, IFAST Chair

David Crowe, Cellular Networking Perspectives, Ltd., IRM

Administrator

Syed Zaeem Hosain, Aeris Communications, IFAST Vice Chair for the

Bernardo Martinez, IUSACELL, IFAST Vice Chair for Mexico Adolfo Acevedo, Telefonica Moviles Peru, IFAST Vice Chair for Latin

Douglas Rollender, Lucent, IFAST Equipment Vendor Vice Chair David Grootwassink, Verisign, IFAST Gateway Operator Vice Chair Jim Nixon, T-Mobile USA, ESIF Chair Jim Lankford, SBC, ESIF Vice Chair Astin Buchanan, Tarrant County 9-1-1, ESIF Vice Chair

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