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May 21, 2014

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Via Email

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: *Ex Parte* Presentation
GN Docket No. 13-5, WC Docket No. 12-353

Dear Ms. Dortch:

On May 19, 2014, representatives from the Alliance for Telecommunications Industry Solutions (ATIS) and the SIP Forum met with representatives of the Wireline Competition Bureau to discuss the joint ATIS-SIP Forum work to develop a detailed specification related to IP network-to-network interconnection (NNI). The written presentation discussed during the meeting is attached hereto.

In attendance at this meeting were the following representatives from the Bureau: Matt DelNero, Deputy Bureau Chief; Jean Ann Collins, Attorney, Competition Policy Division; Kalpak Gude, Division Chief, Pricing Policy Division; Heather Hendrickson, Attorney Advisor, Competition Policy Division; Richard Hovey, Technologist, Competition Policy Division; Melissa Droller Kirkel, Attorney, Competition Policy Division; Alec MacDonell, Telecommunications Systems Specialist, Industry Analysis and Technology Division; and Tim Stelzig, Deputy Division Chief, Competition Policy Division.

The ATIS and SIP Forum representatives in attendance were: Susan Miller, ATIS President and CEO; Richard Shockey, Chairman of the Board of Directors of the SIP Forum; Andrew White, ATIS Vice President of Technology and Standards; and Thomas Goode, ATIS General Counsel.

A copy of this letter is being submitted on the record of the above-referenced dockets. If there are any questions, please contact the undersigned.

Sincerely,

Thomas Goode
ATIS General Counsel



SIP FORUM

Enabling the All-IP Transition

May 19, 2014

The IP-NNI Initiative

In December 2013, the Alliance for Telecommunications Industry Solutions (ATIS) and the SIP Forum launched a joint task force to develop a detailed specification of IP-NNI (Network-to-Network Interface) for all North American Service Providers.

- ATIS is a global standards development organization that develops technical and operations standards for information, entertainment, and communications technologies.
- ATIS' Packet Technology and Systems Committee (PTSC) develops standards and technical reports related to services, architectures, and signaling, including IP Interconnection.
- The SIP Forum advances the adoption of products and services based on the Session Initiation Protocol (SIP), and maintains and serves a global community of commercial SIP-based service and technology providers.

It started with one service.

Standard User
Interface



+

Common
Platform



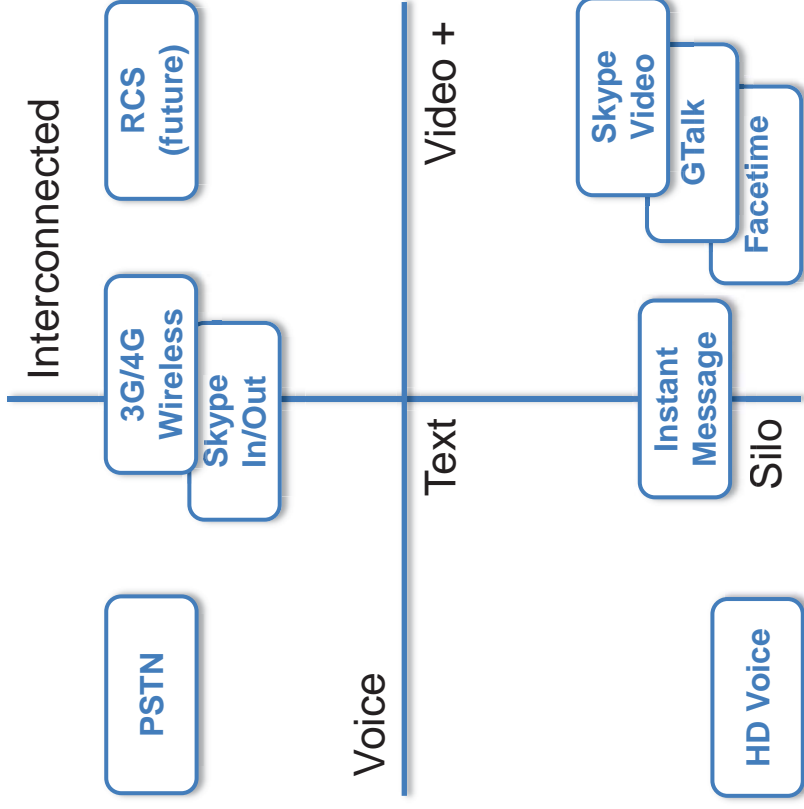
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Global
Communications



- Uniform addressing plan
- Single, automated user interface
- Attach anywhere, call anybody
- On demand, scalable

Then it got more complicated.



- Available services have evolved from the PSTN.
 - Text, Video, and Multimedia
 - Available in Silos
- Interoperable services are limited to voice and text.
- Technologies such as Rich Communications Services (RCS) promise interoperable evolution.
- Work is required to gain consensus on implementation.
 - Web
 - Wireline
 - Wireless

Business agreement is required on interconnection and interoperability.

ATIS Program for Transition to All-IP

Executive Leadership and Engagement

- ATIS Board of Directors
- Technology and Operations Council

Architecture and Services

- Wireless, Fixed, and Cable Architecture and Interconnection
- Emergency Services including Multimedia and SMS
- Lawful Intercept
- Communications APIs

Information Infrastructure

- Telephone Numbering Evolution
- SMS/800 Number Administration and Evolution
- Inter-provider Ordering and Billing
- Inventory Management

Operational Excellence

- Next Generation Interconnection and Interoperability
- Network Reliability in conjunction with FCC Network Outage Reporting System
- Synchronization

SIP Forum Program

Task Force

- ATIS/SIP Forum IP-NNI Joint Task Force (100+ current participants)

Task Groups

- Fax-over-IP [FoIP] Task Group
- SIPconnect Task Group
- SIPconnect Interoperability Certification [SC-IT] Task Group
- SIP Over IPv6 [IPv6] Task Group
- User Agent Configuration [UA-Config] Task Group
- Video Relay Services [VRS] Task Group (created specifically at the request of the FCC CTO)
- WebRTC Task Group

Events

- SIPit, SIPconnect-IT and RTCWeb-it Interop Testing Events
- SIPNOC “SIP Network Operator’s Conference”

IP-NNI Initiative

- Through this initiative, ATIS and the SIP Forum will jointly develop a detailed specification that promotes communications interoperability and addresses key industry challenges.
 - Enhance standards-based IP interconnection.
 - Leverage efficiencies gained by industry standardization.
 - Address differences in how SIP works “on the wire” that have been exposed by deployment experience.
 - Every instance of IP interconnection is a one-off, requiring a detailed engineering analysis and often involving “protocol normalization” between service providers.
 - Agree to methodology to translate E.164 numbers for SIP routing data.

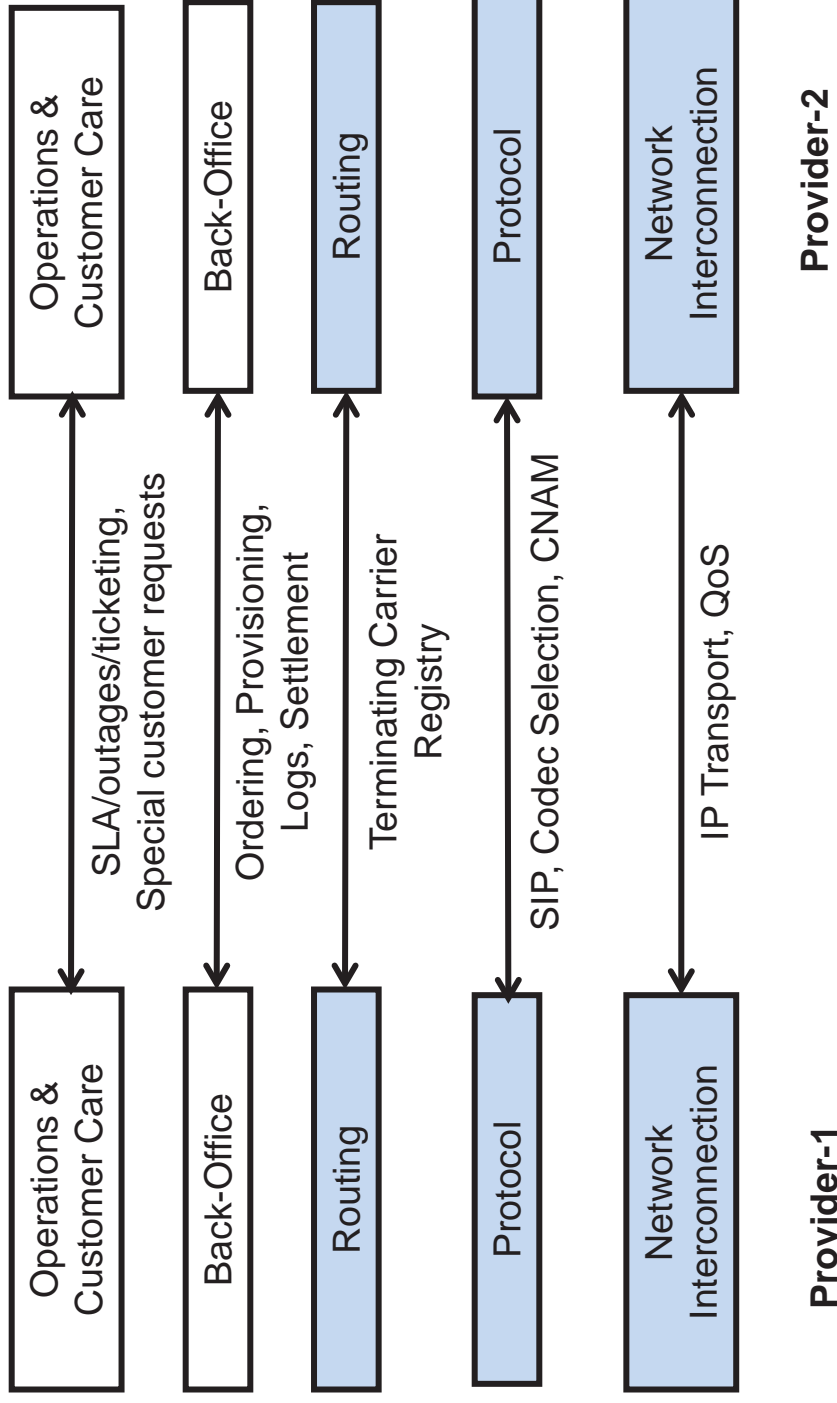
IP-NNI Initiative

- The initiative will allow the industry to continue to support key principles:
 - Universal connectivity to next generation broadband networks and services;
 - The protection of consumers, including safeguards against fraudulent, deceptive and unfair business practices;
 - Uninterrupted, seamless access to public safety, national security, emergency preparedness/response services;
 - Continued network reliability and robustness; and
 - The facilitation of competition and innovation.

Leaders, Membership and Process

- The initiative is co-lead by:
 - Martin Dolly, AT&T
 - Chris Wendt, Comcast
 - John Barnhill, GENBAND
- The initiative is open to members of ATIS and the SIP Forum.
- There is broad industry participation from wireline providers (LECs, cable and broadband), wireless providers, and vendors.
- Work is being completed through face-to-face and virtual meetings with decisions being made via consensus.

What is Network Interconnection?



The ATIS and SIP Forum collaboration focuses on SIP protocol interoperability.

Scope: Protocol

- Define reference architecture with functional entities necessary for IP-based interconnection.
- Provide exact specification for all protocols at the NNI:
 - SIP options that MUST be supported;
 - SIP options that SHOULD be supported;
 - Limit protocol options where necessary for interoperability; and
 - Provide additional detail to resolve ambiguity.
- Specify methods for negotiating protocols, protocol extensions, and exchanging capability information between carriers.
 - Specify consensus methods of formulating SIP protocol messages where multiple options exist in standards.
- Specify the exact presentations of Fully Qualified Domain Names in “From:”, “To:” and “PAI” fields.

Scope: Routing

- Define the architecture for a shared “Thin” Registry(s) of NNI interconnection data.
 - Determine if/how Infrastructure ENUM is used.
- Specify a mechanism for using the shared registry(s) to identify the terminating carrier of record.
- For IP-originated calls, specify the preferred header for Calling Name (CNAM) data, and specify how that data is presented to the terminating proxy (*i.e.* format, syntax and processing of such data).
- The expectation is that the signaling of CNAM would not survive interworking to SS7.

Proposed Milestones

- Dec 2013: Kick-Off Meeting.
- March 2014: Goals and Requirements for NNI Architecture.
- June 2014: Initial Readout on Progress on Routing Framework and IP Interconnect Protocol.
- Feb 2015: Network-to-Network Interface Profile.

Conclusion

- The complex transition to the All-IP Network can be facilitated through industry collaboration.
- Many standards exist, but companies must agree on an interoperable implementation.
- Through this initiative, ATIS and the SIP Forum are developing detailed specifications that define the protocol implementation.
- ATIS and SIP Forum look forward to working with the Commission to facilitate the transition to an All-IP Network.

Questions

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For more information about ATIS, please visit: www.atis.org
For more information about SIP Forum, please visit: <http://www.sipforum.org>



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Supplementary Material

ATIS Background

- Founded in 1984
- ATIS develops solutions that include:
 - Standards;
 - Specifications;
 - Requirements;
 - Business use cases;
 - Software toolkits; and
 - Interoperability testing.
- Founding Partner of 3GPP, oneM2M
- Broad membership comprised of service providers, manufacturers, public safety agencies, software companies, etc.

SIP Forum Background

- ❖ Founded in 2000
- ❖ Non-Profit IP Communications Industry Association
- ❖ Membership ranks include:
 - Corporate “Full Members” that pay annual dues and support the work of the Forum
 - Academic Institutions and Research Orgs
 - Individual “Participant” Members (>15K)