



January 10, 2014

1300 I Street, NW, Suite 400 West
Washington, DC 20005

Phone 202 515-2543
Fax 202 336-7922
maggie.m.mccready@verizon.com

Ex Parte

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

Re: Technology Transitions Policy Task Force, GN Docket 13-5

Dear Ms. Dortch:

On January 8, 2014, Kathleen M. Grillo, William H. Johnson, Christopher M. Miller, Alan Buzacott, Curtis L. Groves, and I from Verizon met with Jon Sallet and Stephanie Weiner of the Office of General Counsel, Julie Veach, Carol Matthey, Lisa Gelb, Patrick Halley, and Tim Stelzig of the Wireline Competition Bureau, and Jonathan Chambers and Henning Schulzrinne of the Office of Strategic Planning and Policy Analysis to discuss how Verizon is facilitating IP VoIP interconnection through voluntary commercial agreements.

Verizon has now agreed to IP VoIP interconnection terms with six providers. Since we last met with the Task Force on November 22, Verizon has completed and executed two commercial agreements for the exchange of voice traffic in IP format with Broadvox and InterMetro, and we have reached agreement on terms with two others. We said that the industry is progressing naturally to IP interconnection for VoIP traffic as more and more end-user customers adopt VoIP services. The Commission should let the market-driven migration of customers from circuit-switched TDM to packet-switched VoIP services lead the IP transition and avoid prescriptive regulatory requirements that would impede progress. We said that the Commission can best facilitate and encourage the natural, market-driven move to commercial IP interconnection arrangements by removing regulatory obstacles so that companies can move to new IP technologies and services faster.

As more customers move to VoIP from TDM-based voice services, the existing market-based incentives to enter into IP interconnection arrangements for VoIP traffic will grow stronger. For example, we explained that as more of our customers rely on FiOS Digital Voice service, we will exchange an increasing amount of our wireline voice traffic with other VoIP providers over interconnections in IP format. Likewise, as wireless carriers migrate to Voice over LTE services and handsets, incentives to exchange wireless voice traffic in IP format will accelerate. It makes business sense for Verizon to pursue these arrangements, especially where voice traffic is IP on both ends and both parties have strong incentives to interconnect and exchange voice traffic in IP format.

As this transition continues, it is reasonable to expect that VoIP providers will negotiate in good faith and agree to interconnect in IP format to exchange VoIP traffic with each other, as Verizon already is doing. While it is important for networks to remain interconnected, we explained that the interconnection rules enacted in 1996 were intended for a different era and marketplace with different services and technologies and that extending them to IP VoIP interconnection would harm the IP transition and consumers. We also discussed that some commenters have called for a light-touch regulatory backstop. As the Commission works through the technology transition, we intend to work with the Commission on a framework that promotes and encourages commercial IP VoIP interconnection agreements and addresses the more reasonable concerns that commenters have raised. That framework should, foremost, not harm IP VoIP interconnection by subjecting it to legacy regulation — such as state-by-state arbitration — that would undermine the benefits of the new technology.

Meanwhile, regulatory activity in some states is already threatening the IP transition. For example, the Michigan Public Service Commission recently determined that Section 251(c)(2) requires AT&T to interconnect with Sprint in IP format for voice.¹ Likewise, the Massachusetts Department of Telecommunications and Cable is considering whether it has the authority under Section 252 to regulate the voluntary commercial IP VoIP interconnection agreement between Verizon and Comcast.² These and other backwards looking regulatory overhangs may disrupt the progress the industry has made and continues to make through commercial negotiations and agreements. We explained that the Section 251/252 framework would force a patchwork of potentially inconsistent state regulation onto the same IP interconnection arrangements — arrangements that many times will not even have a point of physical interconnection in the regulating state.

Verizon has developed a process to work through the details of IP VoIP interconnection with its negotiating partners, and we explained this process in detail. We said that going forward, Verizon expects to implement IP interconnection arrangements for VoIP through the completion of two principal documents: an IP Interconnection Agreement and a SIP Interconnection Plan. In 2013 we developed templates for each. Verizon's IP Interconnection Agreement template includes an Interconnection Attachment that establishes macro-level requirements for the companies' IP interconnection arrangements, while the SIP Interconnection Plan implements those requirements through technical and operational details. We typically negotiate these two documents on parallel tracks. We discussed the following details regarding these templates and a related non-disclosure agreement used by Verizon when negotiating IP interconnection arrangements.

¹ Sprint Spectrum v. Michigan Bell Tel. Co., Case No, U-17349, Order, Michigan Pub. Serv. Comm'n. (Dec. 6, 2013).

² Investigation by the Department on its Own Motion to Determine whether an Agreement entered into by Verizon New England Inc., d/b/a Verizon Massachusetts is an Interconnection Agreement under 47 U.S.C. § 251 Requiring the Agreement to be filed with the Department for Approval in Accordance with 47 USC § 252, D.T.C. 13-6, Massachusetts Department of Telecommunications and Cable.

A. Template IP Interconnection Agreement

Verizon's template IP Interconnection Agreement proposes a single, nationwide agreement with providers that seek to interconnect to exchange VoIP traffic. It is not a collection of separate state agreements. All of Verizon's ILEC entities are parties to Verizon's template IP Interconnection Agreement.

The template IP Interconnection Agreement has five main components:

1. *General terms and conditions.*

The template IP interconnection agreement includes legal provisions that would typically be included in a wholesale commercial agreement. These include: assignment, audits, billing and payment, choice of law, confidentiality, cooperation with law enforcement, default, dispute resolution, force majeure, fraud, good faith performance, indemnification, limitation of liability, insurance, intellectual property, modification of agreement, notices, relationship of the parties, remedies, reservation of rights, service marks and trademarks, subcontractors, successors and assigns, taxes, term and termination, technology upgrades, third party beneficiaries, waivers, and warranties.

2. *Glossary.*

The Glossary includes definitions for certain terms in the template IP Interconnection Agreement.

3. *IP Interconnection Attachment.*

The IP Interconnection Attachment establishes the macro-level rules that govern the parties' interconnection. It covers several key areas.

Points of Interconnection. The template IP Interconnection Attachment provides that the companies will establish a minimum of two interconnection points at mutually agreed locations, with minimum bandwidth requirements and with the costs of cross-connects shared equally by the companies.

Scope of Traffic. The template IP Interconnection Attachment provides for the companies to exchange voice traffic between their respective VoIP customers. It encompasses the exchange of traffic from coast to coast. It is not limited to exchanging traffic within a LATA (or even a single state), as is the case with legacy interconnection agreements for circuit-switched TDM voice services.

Codecs and Transcoding. Codecs are the necessary protocols for encoding and decoding the voice service in an IP-enabled scenario. The template IP Interconnection Attachment establishes that the companies will develop a list of acceptable Codecs for exchanging traffic, a process for making changes to that list in the future, and the companies' responsibility for

transcoding where the originating company and terminating company are using different Codecs.

Service Quality and Disaster Recovery. The Interconnection Attachment sets forth aspirational targets for service quality (such as jitter, network latency, packet delivery, Mean Opinion Score, call completion ratio) and requires that the companies develop and implement methods and procedures for disaster recovery.

4. Pricing Attachment.

The template Pricing Attachment sets forth rates and charges that are designed to create incentives for companies to move VoIP traffic from TDM to IP interconnection and to avoid creating opportunities for rate arbitrage.

5. Ancillary Services Attachment.

The Ancillary Services Attachment provides for a variety of services that existing competitors obtain today through their legacy interconnection agreement for circuit-switched TDM services.

B. Session Initiation Protocol (“SIP”) Interconnection Plan

The template SIP Interconnection Plan incorporates the mutually agreed technical and operational details for the companies’ IP interconnection arrangement. There are nine main sections.

1. **SIP Profile.** The SIP Interconnection Plan sets forth the hardware and software versions of the companies’ respective IP nodes and the SIP signaling parameters the companies plan to support for call setup and delivery. This includes parameters such as the dialed telephone number, the caller’s telephone number, the caller’s name (if provided), and the privacy indicator.
2. **Media Profile.** The SIP Interconnection Plan sets forth the port ranges for the delivery of voice media, the expected codec, and the format for delivery of facsimiles.
3. **Points of Interconnection.** The SIP Interconnection Plan sets forth the exact number of interconnection points where the companies mutually agree to interconnect, the physical location of each interconnection point (typically a carrier hotel), the bandwidth for the cross connect(s) at each interconnection point and the method for sharing the costs of the cross-connects at each interconnection point.
4. **Interconnection Checklist.** The SIP Interconnection Plan sets forth mutually agreed interconnection details for each interconnection point, such as hub/node designation, router assignment and circuit information.

5. **VLANs.** The SIP Interconnection Plan sets forth the mutually agreed IP addresses and subnets for exchanging signaling information and media.
6. **Routing Tables.** The SIP Interconnection Plan sets forth each company's routing table for terminating traffic to each company's respective VoIP customers.
7. **Traffic Forecasts.** The SIP Interconnection Plan sets forth each company's traffic forecasts for the initial exchange of live traffic over the IP interconnection arrangement, disaggregated by Local Routing Numbers.
8. **Testing Plan.** The SIP Interconnection Plan sets forth the companies' mutually agreed test plan, including the criteria for success.
9. **Disaster Recovery Plan.** The SIP Interconnection Plan sets forth the companies' mutually agreed disaster recovery plan.

C. Non-Disclosure Agreement

Because both parties' information required for negotiating these documents is commercially sensitive, Verizon conducts IP interconnection negotiations in accordance with a non-disclosure agreement. The parties with whom we have negotiated have understood that signing a non-disclosure agreement is a routine first step in commercial negotiations, and our approach is no different from the way Verizon conducts commercial negotiations for wholesale services. The companies must exchange proprietary and competitively sensitive information in order to design and implement an efficient IP interconnection arrangement. Examples include: 1) detailed traffic data; 2) IP network component locations; 3) codecs; and 4) detailed call routing information.

* * *

Our commercially reasonable approach to IP VoIP interconnection is working. We look forward to continuing this discussion and building a framework that lets the market-driven migration of customers from TDM to VoIP services lead the IP transition for interconnection and avoids proscriptive regulatory requirements that would impede progress.

Pursuant to Section 1.1206 of the Commission's rules, a copy of this notice is being electronically filed in the above referenced docket. Please contact me with any questions.

Sincerely,



cc: Jon Sallet
Stephanie Weiner
Julie Veach

Carol Matthey
Lisa Gelb
Patrick Halley

Tim Stelzig
Jonathan Chambers
Henning Schulzrinne