

3.4 NON-DOMESTIC SERVICES (L.34.1.3.4)(C.2.1.9)

Qwest uses a combination of owned assets and strategic international partners to deliver non-domestic services – ensuring that providers with local knowledge are leveraged.

Qwest's international coverage extends to [REDACTED]

[REDACTED]

[REDACTED] This extensive breadth of coverage is due to Qwest's long-standing strategy to satisfy the voice and data connectivity requirements of our global customer base, and to provide world-class service with a high level of quality and reliability. We do so by:

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

This enables Qwest to supply Agencies with best-of-breed service, network connectivity, and mature, well engineered and planned services. These services include well established technologies such as [REDACTED]

[REDACTED]

[REDACTED]

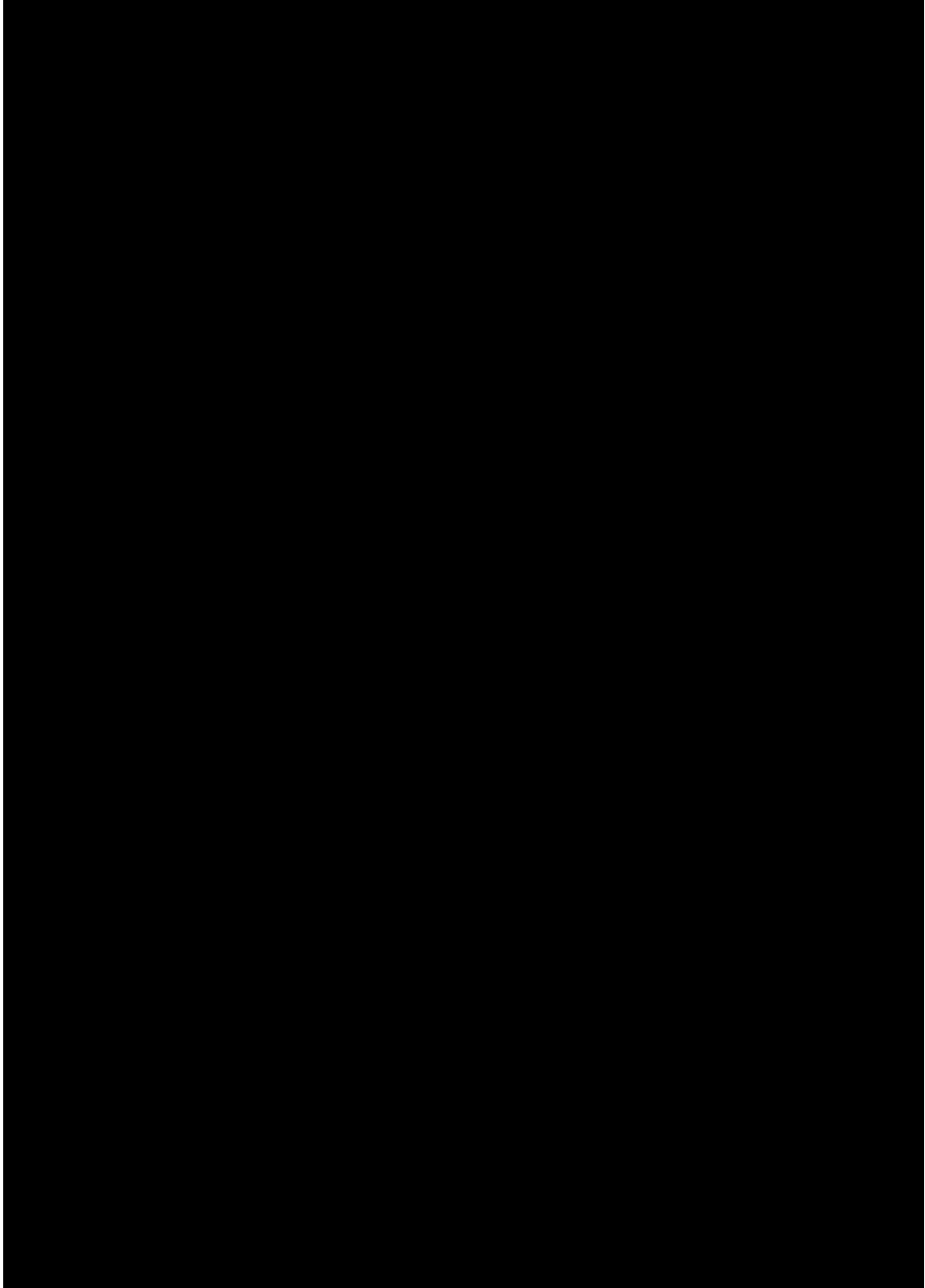
[REDACTED]

[REDACTED]

[Redacted]

[Redacted]

[Redacted] Points-of-Presence (POPs) in key markets [Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]



[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Through arrangements with other carriers, Qwest is able to deliver service to areas not directly served via [REDACTED]

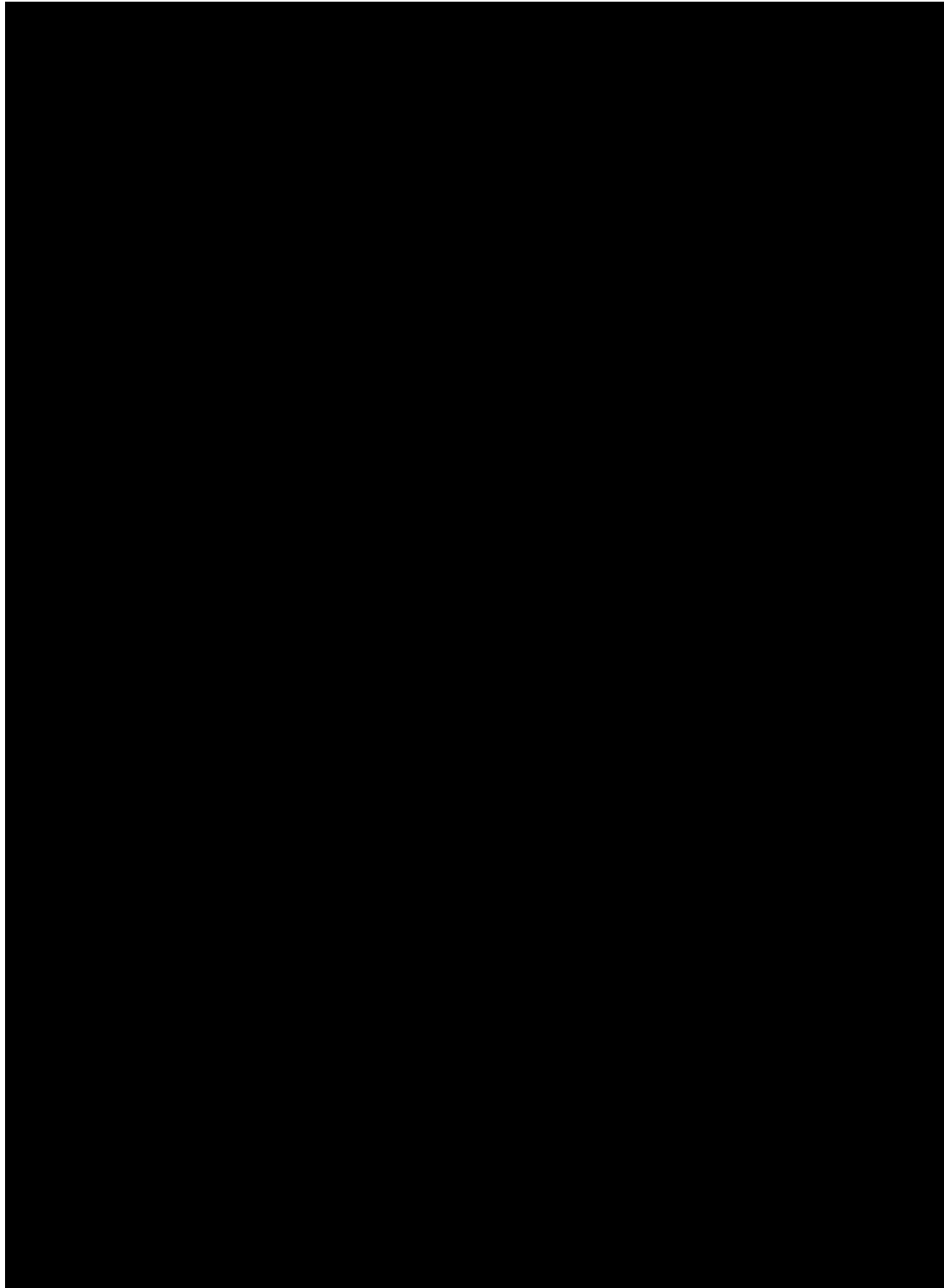
[REDACTED]

[REDACTED]

All Qwest international service, regardless of the provider, will be provided to Agencies in the context of a consistent service delivery and assurance environment. Qwest will be responsible for all service delivery, including service ordering, notifications, acknowledgements, and service assurance functions such as repair, configuration management, and trouble handling. [REDACTED]

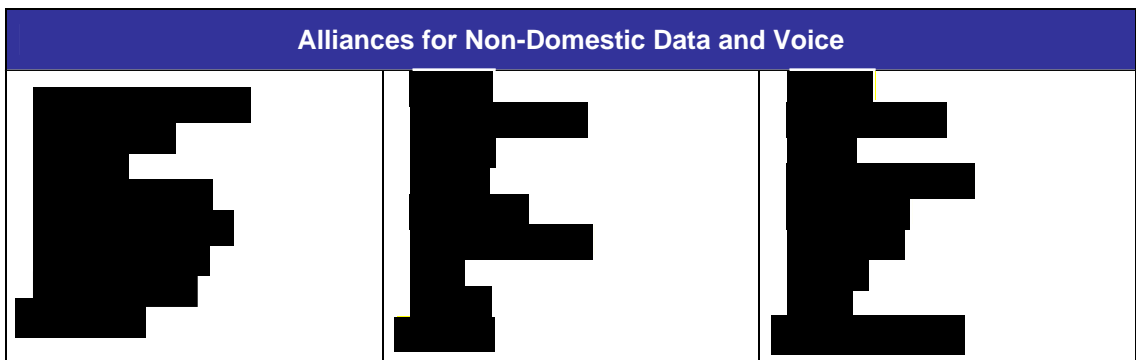
[REDACTED]

Qwest's key international relationships, shown in [REDACTED] were established based on a rigorous evaluation process that rates a potential supplier based on previous track records of performance, network architecture, network quality, coverage, product set, pricing, customer care, and brand recognition. Only best-in-breed network providers are chosen to extend services for our domestic-based Agencies.



Qwest continuously monitors and reviews the performance of our international suppliers and is able to respond quickly to any trouble issues by leveraging our relationships with them. The international long distance network is based on geographically diverse and redundant network architecture. With multiple carriers on each international route, Qwest is able to switch route providers in real-time.

Figure 3.4-4. Non-Domestic Carrier Overview



3.4.1 Describe Arrangements with Non-Domestic Carriers (L.34.1.3.4(a))

Global coverage includes delivery of service from domestic Service Delivery Points (SDPs) to non-domestic SDPs, from non-domestic SDPs to domestic SDPs, and from non-domestic SDPs to non-domestic SDPs. It is critical to our business to have well defined provider relationships where performance and quality standards are maintained and adhered to at the highest level. These relationships are maintained by our Carrier Management Organization that is exclusively dedicated to managing the relationships with all international providers, carriers and Postal, Telegraph and Telephone (PTTs). This team's core responsibilities are to:

[Redacted text block]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

In addition, a team of dedicated professionals from Network Operations monitors the Service Level Agreement (SLA) performance of our international service or network vendors around the clock. They are able to react quickly to any outages or other factors that may affect Agency services and request for credits when service metrics are not met. Most of our service or network vendors' contracts are performance-based to further ensure consistent quality of services and high reliability. Our international service or network vendors monitor their core networks 24x7x365 and are held to the highest standards of quality and reliability in serving the needs of our global Agency users. In addition, because Qwest is monitoring SDP to SDP, we use the data gathered to proactively trigger trouble tickets with our supplier to resolve off-net troubles faster than a passive response would.

Qwest connects to our international alliance networks, shown in

[REDACTED]

[REDACTED]

Figure 3.4.1-1. International Data Network

Region	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Provider	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Region	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Features	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Region	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]			
Support	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

For Internet service, Qwest peers both in the U.S. and abroad with our international providers. Qwest rates as one the best connected Internet Service Providers (ISPs) in the world as reported [REDACTED]

[REDACTED]

[REDACTED] This ensures geographic diversity for routing traffic on and off the Qwest IP network, and mitigates performance problems inherent to one of the classic bottlenecks in communication networks, the undersea links connecting continents.

[REDACTED]

Qwest's international long distance network is built upon geographically diverse and redundant network architecture. The network is designed to provide two classes of international long distance voice service: premium and standard. The gateway architecture ensures that there will be

no traffic contention between premium and standard services and allows the highest quality of service to Agencies. Qwest will provide our premium class of service to Agencies.

The international long distance network is designed with redundancy and fail-safe measures. Each route has a backup to a different voice switch to ensure call completion. For every route, there will be up to seven alternative carriers to complete traffic should the first carrier in route become congested. Alternative carriers are added to the originating voice switches in case the international gateway is congested or down.



Figure 3.4.1-2. International Voice Network

Region	[Redacted]	[Redacted]	[Redacted]	[Redacted]
Provider	[Redacted]	[Redacted]	[Redacted]	[Redacted]

Region	[Redacted]	[Redacted]	[Redacted]	[Redacted]
Features	[Redacted]	[Redacted]	[Redacted]	[Redacted]
Support	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]				

Qwest has strict performance standards associated with each international provider. This extends across all products, from private line services through Internet access and Inter-AS MPLS. As part of our bilateral agreement with each international provider, Qwest negotiates a set technical and operational performance Service Level Agreements (SLAs). In general, the technical metrics of these agreements are based on best commercial practices and tailored to the physical realities of the locations being served. These SLAs include, for example:

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted text block]

International Customers

Qwest's international, Federal, and multi-national commercial Government customers include the [REDACTED]

[REDACTED]

Combined, our international customers purchase millions of dollars of Qwest international service, including Voice, Private Line, ATM/FR, IPS, and Network-Based IP VPN services originating and terminating in Qwest service areas around the world.

Qwest International Service – Federal Examples

Qwest provides a network in the Asia-Pacific region for a Government Agency:

[REDACTED]

[Redacted text block]

**3.4.2 Describe Security Measures with Non-Domestic Carriers
(L.34.1.3.4(b))**

All Qwest Points of Presence (POPs) and foreign provider POPs are physically secured using the following measures:

[Redacted text block]

[REDACTED]

3.4.3 Interoperability Between Domestic and Non-Domestic Locations (L.34.1.3.4(c))

All private line, ATM, FR, IP and voice network interconnections begin with discussions with each foreign provider carrier agreeing on network protocols (SDH/SONET interfaces), SLAs, speeds and locations of the interconnect and scope of the network feature support. Once these basic parameters are agreed upon, provisioning and testing of the circuits and product sets takes place. Testing varies according to the services being offered; however, testing generally includes Bit Error Rate (BER) testing, protocol testing, a circuit provisioning test, and a disaster recovery test. Once all the testing is complete, interconnect documentation is finalized and put under change control for maintenance purposes.

[REDACTED]

In addition, the migration of the Qwest Network to a packet-centric infrastructure is well under way. The migration and specific milestones, phases and dates for our architectural evolution of services is detailed in Section 3.3.3.5, *Model for Services Convergence*.

In key points throughout the globe, Qwest is able to offer end-to-end overhead bit-transparency. This is accomplished in higher-order optical hand-off situations where the Qwest transport node (wavelength multiplexer)

interfaces directly to the end Agency equipment on either side. This meets the needs of Agencies that require transparent Data Communications Channels across transport paths.

Voice signaling inter-working is simplified to two core protocols: [REDACTED]

[REDACTED] Qwest only uses foreign providers that are able to comply with one or both of these standards, leaving the in-country specific variant (Local ISUP or Telephone User Part (TUP)) up to the terminating party. The streamlined commonality in our delivery allows for less complexity, hence better control over the routing and performance of the service.

The numbering plan for non-domestic locations conforms to country-specific numbering plans as per international standards. All features identified as Networx Enterprise mandatory are either provided, if supported locally, or will be supported when the non-domestic partner provides the service commercially in the area involved. Qwest also supports country-specific non-domestic Public Switched Telephone Network (PSTN) numbers and/or toll-free numbers when provided and commercially available from a non-domestic partner for dial-in access of services.

Qwest has strict guidelines and procedures for the [REDACTED] [REDACTED] including requirements for multiple interconnection POPs with geographic diversity and protocol requirements. [REDACTED]

[REDACTED]

Qwest has a NOC-to-NOC relationship with every correspondent carrier. A process and procedures document is written, as well as a commercial interface document, for both carriers. [REDACTED]

[REDACTED]

Each provider NOC has a list of Qwest escalation numbers, telephone numbers, email addresses, and contact personnel. Conversely, Qwest has the same information from each foreign carrier. Also, the process and procedures document and the network escalation plan are updated each year.

Additionally, Qwest and our foreign carriers implement procedures for the provisioning process that detail the submission of an order, managing the installation of an order, and ensuring the end-to-end testing of the circuit.

3.4.4 Plan For Extending Existing Arrangements and Creating New Ones (L.34.1.3.4 (d))

Where using existing relationships is not a possibility, Qwest will evaluate, select, and implement new relationships to provide world-class communication services.

Qwest has several strategic goals for expanding capabilities internationally:

[REDACTED]

[REDACTED]

Qwest has been very successful in building new relationships to provide services to some of the most demanding Agencies— [REDACTED]

[REDACTED]