BEFORE THE WASHINGTON UTILITIES AND

TRANSPORTATION COMMISSION

IN THE MATTER OF THE INVESTIGATION)		
INTO U S WEST COMMUNICATIONS, INC.'S)		
COMPLIANCE WITH §271(C) OF THE)	DOCKET NO.	UT-970300
TELECOMMUNICATIONS ACT OF 1996.)		

DIRECT TESTIMONY OF

MARGARET S. BUMGARNER
ON BEHALF OF
U S WEST COMMUNICATIONS, INC.

MARCH 22, 2000

NOTICE OF CONFIDENTIALITY: THE PORTIONS OF THIS DOCUMENT IDENTIFIED BELOW HAVE BEEN FILED UNDER SEAL.

Exhibit MSB-3 is Amendment #14 to the Agreement for Services Between SCC Communications Corporation and U S WEST Communications, Inc. Exhibit MSB-9 List of CLECs by Checklist Item.

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I.QUALIFICATIONS AND PURPOSE OF TESTIMONY

2 Q. PLEASE STATE YOUR NAME, POSITION, EMPLOYER, AND BUSINESS ADDRESS.

- **4** A. My name is Margaret S. Bumgarner. I am employed by U S WEST Communications (U S WEST) as Director Regulatory Strategy. My business address is Room 2803,
- 6 1600 7th Avenue, Seattle, Washington, 98191.

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7 Q. PLEASE REVIEW YOUR EDUCATION, WORK EXPERIENCE AND PRESENT RESPONSIBILITIES.

9 A. I have a Bachelor of Science Degree in Education/Biology from Washington State University (1973). In 1973, I started working for Pacific Northwest Bell as a supervisor 10 in the network organization. I held several management positions in the network 11 12 organization including installation, assignment, installation and repair service centers, 13 network budget analysis, switching operations and network administration staff. In 14 1982, I began working in the Planning and Engineering department doing divestiture 15 network planning, prepared the network equal access compliance plan filed with the 16 Department of Justice, and I supervised the staff for switch engineering and network design. In 1986, I became U S WEST's representative to the national industry forums 17 18 addressing technical network compatibility issues and numbering issues. I also managed the network planning groups responsible for numbering and common 19 20 channel signaling. In recent years, I was responsible for a wide range of federal 21 public policy issues, including numbering, access reform, and interconnection. I am 22 currently Director - Regulatory Strategy responsible for state testimony on several of 23 the Section 271 checklist items and for U S WEST's federal filing.

24 Q. HAVE YOU TESTIFIED BEFORE THE COMMISSION PREVIOUSLY?

25 A. No. I have appeared as a witness on Section 271 checklist items in the states of Nebraska and Arizona.

27 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

28 A. The purpose of my testimony is to demonstrate that U S WEST has satisfied the requirements of the Telecommunications Act of 1996 (Act) and the related FCC 29 30 regulations for four of the checklist items: access to Basic 911 and E911 emergency services (checklist item No. 7(I), numbering administration (checklist item No. 9), 31 32 access to call-related databases and associated signaling (checklist item No. 10), and 33 local dialing parity (checklist item No. 12). My testimony will review how U S WEST 34 has met the needs of competitive local exchange carriers (CLECs) for these checklist items as required by the Act. 35

U S WEST has submitted a Statement of Generally Available Terms and Conditions (SGAT) to the Washington Commission on March 22, 2000. My testimony will demonstrate that U S WEST's SGAT establishes legally binding obligations for U S WEST to provide access to 911/E911, numbering administration, access to call-related databases and signaling, and local dialing parity in conformance with the Act and FCC rules. Similar obligations are contained in the existing Commission-approved interconnection agreements that U S WEST has entered into with CLECs in Washington.

II.EXECUTIVE SUMMARY

2 Q. PLEASE PROVIDE A SUMMARY OF YOUR TESTIMONY.

A. U S WEST has satisfied the 911/E911, numbering administration, access to call-related databases and associated signaling, and local dialing parity requirements of the Telecommunications Act of 1996 (Act) that are prerequisites for U S WEST's entry into the interLATA long distance market in Washington. My testimony reviews the checklist requirements found in Section 271 of the Act and related FCC regulations for access to 911 and E911 emergency services (checklist item No. 7(I), numbering administration (checklist item No. 9), access to call-related databases and associated signaling necessary for call routing and completion (checklist item No. 10), and local dialing parity (checklist item No. 12). These requirements are met through legally binding commitments included in the various Commission-approved interconnection agreements and the Statement of Generally Available Terms and Conditions (SGAT) in Washington.

Access to 911 and E911 Services

The Act and the FCC's rules require U S WEST to provide CLECs with nondiscriminatory access to Basic 911 (911) and Enhanced 911 (E911) services. Such access includes the various components of a 911/E911 system, including 911/E911 trunking, 911/E911 routing, the E911 database and the associated database updates. U S WEST provides such nondiscriminatory access through the terms of its SGAT and through the terms of Commission-approved interconnection agreements. U S WEST provides access to 911/E911 services to CLECs in the same manner as U S WEST obtains such access. As of January 31, 2000, U S WEST has provided E911 service to 21 facility-based CLECs in Washington by providing 204 E911 trunks between the CLECs' switches and the US WEST selective Facilities-based CLECs have 200,967 records in the E911 database. U S WEST has provided 911/E911 services to 25 resellers in Washington who access 911/E911 services using the same facilities as U S WEST's end user customers. U S WEST also stands ready to provide 911/E911 services to CLECs who purchase unbundled switching, although there is no demand for unbundled switching at this time. CLECs purchasing unbundled switching would, like the resellers, use the same facilities as U S WEST's end user customers to access 911/E911 services. U S WEST will provide CLECs with performance indicators that demonstrate the nondiscriminatory provisioning of 911/E911 trunking and E911 database updates. The technical requirements, processes, and detailed procedures for providing access to 911/E911 services have been documented for the CLECs.

Numbering Administration

The Act required that until the FCC established its guidelines, plan or rules,

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US WEST was to provide nondiscriminatory access to telephone numbers. The FCC established a transition plan to transfer the numbering administration functions to an independent third party administrator. Prior to that transfer, the FCC established two requirements for nondiscriminatory access to telephone numbers: it required a Local Exchange Carrier (LEC) administrator to 1) charge a uniform fee; and, 2) to use standard assignment procedures for all carriers, including itself. US WEST is no longer the Central Office Code Administrator in its region. The responsibility for numbering administration transitioned to NeuStar (formerly Lockheed Martin IMS) on September 1, 1998. Prior to the transfer of these functions, US WEST provided nondiscriminatory access to telephone numbers through the assignment of central office codes (NXXs) to itself and other carriers using the national industry guidelines and forms. US WEST assigned NXX codes to other carriers, at no charge, and in substantially the same time and manner as it assigned codes to itself, using the same industry guidelines now applied by NeuStar.

Access to Call-Related Databases and Associated Signaling

The Act and the FCC rules require U S WEST to provide nondiscriminatory access to U S WEST's signaling network and call-related databases. U S WEST's signaling network consists of signaling links, signal transfer points (STPs), and call-related databases, including the Local Number Portability (LNP) database, the toll free service database (8XX), the Line Information Database (LIDB), the InterNetwork Calling Name (ICNAM) database, the emergency services E911 database, and the Advanced Intelligent Network (AIN) databases. U S WEST's SGAT, as well as the Commission-approved interconnection agreements, provide for nondiscriminatory access to US WEST's signaling network and call-related databases. Several carriers operating in Washington are interconnected with U S WEST's signaling network and. in addition, there are third party signaling network providers interconnected to U S WEST's signaling network providing access for other carriers. There are 2 CLECs using U S WEST's 8XX database, 1 CLEC using the LIDB database, 1 CLEC using the LNP database, and no CLECs using U S WEST's ICNAM or AIN databases in Washington. The technical requirements, processes and detailed procedures for access to U S WEST's signaling network and call-related databases have been documented for the CLECs.

Local Dialing Parity

The Act and the FCC rules require U S WEST to provide access to such services or information necessary to allow local dialing parity. Local dialing parity is the ability of all local exchange customers to dial the same number of digits to make any given local call. U S WEST customers and CLEC customers dial the same number of digits to make local calls. These local calls include calls to other customers regardless of their local service provider, and calls to operator services, directory assistance, and provisions for directory listings. There are no unreasonable dialing delays because any given local call is made in the same manner with the same number of dialed

digits by U S WEST customers and CLEC customers.

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In summary, this testimony demonstrates that U S WEST has satisfied four of the checklist requirements that were established as a prerequisite of U S WEST's entry into the interLATA long distance market in Washington. Specifically, U S WEST has satisfied the checklist requirements for access to 911/E911 services, numbering administration, access to call-related databases and associated signaling necessary for call routing and completion, and local dialing parity. U S WEST provides access to these services and capabilities in accordance with the requirements of the Act and the FCC's rules. The Washington Commission should therefore find that U S WEST has satisfied these checklist requirements.

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III.CHECKLIST ITEM NO. 7(I) - 911 AND E911 SERVICES

2 Q. WHAT DO THE ACT AND FCC RULES REQUIRE WITH REGARD TO CHECKLIST COMPLIANCE FOR 911 AND E911 SERVICES?

A. The Act requires U S WEST to provide "[n]ondiscriminatory access to – (I) 911 and E911 Services." In its Ameritech Michigan Order, the FCC found that "section 271 requires a BOC to provide competitors access to its 911 and E911 services in the same manner that a BOC obtains such access, *i.e.*, at parity." Specifically, the FCC found that BOCs must provide "unbundled access to . . . 911 interconnection, including the provision of dedicated trunks from the [CLEC's] switching facilities to the 911 controlling office [selective router] at parity with what [the BOC] provides itself."

11 Q. DOES US WEST SATISFY THE REQUIREMENTS OF THE ACT AND THE FCC?

12 A. Yes. As of January 31, 2000, U S WEST has provided E911 service to 21 facility-13 based CLECs (who operate their own switches) in Washington, by providing E911 14 trunking between the CLECs' switches and the U S WEST selective router. 15 U S WEST has provisioned 204 E911 trunks for facilities-based CLECs in 16 Washington and these facilities-based CLECs have 200.967 records in the E911 database, as of January 31, 2000. U S WEST has also provided 911/E911 services 17 18 to 25 resellers who obtain 911/E911 services by using the same facilities as the 19 U S WEST end user customers. U S WEST stands ready to provide 911/E911 services to CLECs who purchase unbundled switching through its SGAT and 20 21 approved interconnection agreements, although there is no demand for unbundled 22 switching at this time. U S WEST's Commission-approved interconnection 23 agreements and the SGAT make access to 911/E911 services available to CLECs 24 in Washington. U S WEST has provided nondiscriminatory access to 911/E911 25 service to both facility-based CLECs and resellers in Washington. Proprietary Exhibit 26 MSB-9 identifies the facilities-based CLECs and resellers to which U S WEST has 27 provided access to 911/E911 service in Washington.

28 Q. PLEASE DESCRIBE HOW U S WEST ASSISTS NEW FACILITIES-BASED CLECS 29 ESTABLISH THEIR 911/E911 SERVICE?

30 A. When a new facilities-based CLEC requests service, their U S WEST Account
 31 Manager will facilitate its 911/E911 service implementation. U S WEST will provide
 32 all of the necessary information for the CLEC to establish their 911/E911 service.
 33 The information provided to CLECs includes information about PSAP contacts, PSAP
 34 locations and jurisdictions, Emergency Services Numbers, and tandem locations

Section 271(c)(2)(B)(vii) of the Act. Ameritech Michigan Order, 12 FCC Rcd at 20679.

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(selective routers). Also, SCC, the database manager for U S WEST, will provide a copy of the Master Street Address Guide (MSAG) with updates provided on a quarterly basis to CLECs and U S WEST. If the CLEC needs further assistance, the U S WEST Account Manager will arrange a meeting for the CLEC with the PSAP representatives, the U S WEST 911 Managers, and state regulatory representatives to clarify specific state requirements, jurisdictional boundaries and E911 network requirements. The U S WEST Account Manager can also arrange meetings for the CLEC with U S WEST technical and marketing personnel to discuss their network serving arrangement and process the appropriate trunk request forms.

Facilities-based CLECs must establish their own service arrangement with U S WEST's database provider, currently SCC, for loading and maintaining their subscriber information. The U S WEST Account Manager will arrange for a meeting between the new entrant and SCC, if desired. The facilities-based CLEC must also seek approval from the appropriate agencies, including PSAPs and other public agencies, for all 911 serving arrangements and to certify network performance.

16 Q. DOES US WEST HAVE DOCUMENTED METHODS AND PROCEDURES FOR CLECS TO ACCESS 911/E911 SERVICES?

18 A. Yes. U S WEST has methods and procedures for access by the CLECs to the 911/E911 services. U S WEST's processes are based on the industry guidelines and 19 20 standards developed by the National Emergency Number Association (NENA). 21 These processes are documented for the CLECs in the Interconnect and Resale 22 Resource Guide. U S WEST updates its Interconnect and Resale Resource Guide 23 periodically to incorporate new legal requirements, process enhancements, and 24 changes to NENA guidelines and standards. Notification of changes to these 25 processes is sent to CLECs by their U S WEST account managers. Exhibit MSB-1 26 provides the process flows for CLECs to implement access to U S WEST's 911/E911 27 services and make database updates.

28 Q. PLEASE DESCRIBE THE COMPONENTS OF THE 911/E911 NETWORK.

A. U S WEST currently provides both Basic 911 and Enhanced 911 services in Washington. Basic 911 (911) and Enhanced 911 (E911) both route 911 calls from an end user to the appropriate Public Safety Answering Point (PSAP). Enhanced 911 (E911) also provides the name and address of the calling party to the PSAP. The 911 and E911 services U S WEST provides include the following components. The U S WEST E911 network is illustrated in Exhibit MSB-2.

911 Trunking – These trunks interconnect an end office switch – whether owned by U S WEST or a CLEC – to the government agency that answers

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Interconnect and Resale Resource Guide website: http://www.uswest.com/carrier.

emergency calls. Basic 911 trunks extend directly from the end office switch to the emergency agency. Enhanced 911 (E911) trunks extend from an end office switch to a selective router, with separate E911 trunks extending from the selective router to the emergency agency.

E911 Selective Router – The E911 selective router acts as a tandem switch in the E911 network. It is connected, by E911 trunks, to each of the end office switches in the geographical area served by the router. The selective router is also connected by E911 trunks to each of the government agencies' PSAPs served by the router. On a given E911 call, the selective router connects an incoming E911 trunk from an end office to an outgoing E911 trunk to the appropriate emergency agency.

Public Safety Answering Point (PSAP) – The PSAP is the name for the government agency that answers emergency calls. The PSAP may be connected directly to a particular end office switch through Basic 911 (911) trunks or, alternatively, the PSAP may be connected to an end office switch through a selective router for Enhanced 911 (E911).

E911 Database – The E911 database is also known as the Automatic Location Identification/Data Management System (ALI/DMS or ALI). The E911 database contains the automatic number identification (ANI), customer name, street address, and local service provider for each subscriber for the geographic area it serves. The E911 database provides the PSAP with the name and street address of the calling party. Where U S WEST provides E911 services, the E911 database is owned and managed by SCC. SCC is a third party database manager that provides E911 database management services for U S WEST, other local exchange carriers, and CLECs.

E911 Database Updates – The E911 database must be updated when a subscriber changes local service provider, telephone number, name, or street address.

- 29 Q. IS US WEST ABLE TO PROVIDE ACCESS TO 911 AND E911 SERVICES ACROSS 30 ITS WASHINGTON TERRITORY?
- 31 A. Yes.

- 32 Q. PLEASE DESCRIBE HOW U S WEST PROVIDES ACCESS FOR FACILITY-BASED CLECS WITH THEIR OWN END OFFICE SWITCH TO 911/E911 SERVICE.
- A. A facility-based CLEC which operates its own end office switch must be connected to the 911/E911 network by establishing 911 or E911 trunks. The trunk requirements are dependent on whether the 911 services are Basic 911 (911) or Enhanced 911 (E911).

1 In a typical Basic 911 arrangement, a facility-based CLEC must establish 911 trunks 2 from its end office switch directly to the PSAP. Each 911 call is forwarded by the 3 CLEC over these trunks to the PSAP, whose attendants answer the emergency calls. 4 There is no direct involvement by U S WEST in such an arrangement, although, if 5 requested by the CLEC, U S WEST will provide the 911 trunks between the CLEC 6 switch and the PSAP. 7 8 9 10 11 In a typical Enhanced 911 arrangement, a facilities-based CLEC must establish E911 trunks from its end office switch to the U S WEST selective router in the same 12 13 manner that U S WEST connects its end office switches to the selective router. 14 15 16 **17** 18 19 Facility-based CLECs may establish 911/E911 interoffice trunk facilities between the CLEC's end office switch and the PSAP or selective router either by self-provisioning 20 21 the facility, or by obtaining the facility from U S WEST. U S WEST will also provide 911 trunk terminations at the selective router. 22 23 In conformance with the Act and the FCC's rules, U S WEST's SGAT obligates 24 U S WEST to provide 911/E911 trunks to facility-based CLECs in a nondiscriminatory

1	manner. For example, the SGAT requires:
2 3 4	For a facility-based CLEC, U S WEST shall provide 911 interconnection, including the provision of dedicated trunks from CLEC end office switch to the 911 control office, at parity with what U S WEST provides itself. ⁵
5 6	PLEASE DESCRIBE HOW U S WEST PROVIDES ACCESS TO 911/E911 SERVICE FOR CLECS' END USERS SERVED BY A U S WEST SWITCH.
7 8 9 10	A. If a CLEC's end users are served by a U S WEST end office switch, either through resale of U S WEST's retail services or through unbundled switching, the CLEC's 911 calls are routed from the U S WEST end office switch to the E911 selective router on the same E911 trunks used for U S WEST's end user customers.
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16 17 18	CLECs who serve their end users through U S WEST's unbundled switching or through resale of U S WEST's services utilize the same 911/E911 trunking as U S WEST's retail customers. The SGAT requires:
19 20 21 22 23	For a reseller CLEC, or a CLEC using unbundled switching, U S WEST shall provide CLEC with access to the same 911 trunks used for U S WEST's retail end-users which extend from the U S WEST end office switch to the Basic 911 PSAP or the E911 tandem. CLEC access to such 911 trunks shall be on a shared, non-discriminatory basis. ⁶

See Section 10.3.7.4 of U S WEST's SGAT. See Section 10.3.7.5 of U S WEST's SGAT.

1 Q. PLEASE DESCRIBE HOW US WEST PROVIDES ACCESS TO THE E911 TRUNKS BETWEEN THE SELECTIVE ROUTER AND THE PSAP.

Where Enhanced 911 service is offered, U S WEST provides access to the shared 3 Α. 4 transport of 911 call delivery for facility-based CLECs and to CLECs who purchase 5 unbundled switching or resale, affording the same arrangements, standards and 6 elements used by U S WEST. These arrangements utilize trunking already in place 7 between the U S WEST E911 selective routers and the PSAP locations for areas served by U S WEST. Thus, for CLECs purchasing resale or unbundled switching. 8 9 CLECs get the exact same E911 service that U S WEST provides to its own 10 customers.

11 Q. WILL U S WEST PROVIDE DIRECT CONNECTION TO U S WEST FRAMES FOR FACILITY-BASED CLECS?

- A. Yes. Direct connection to U S WEST frames for E911 trunks is available to facilities-based CLECs, either through a direct connection from the CLEC's switch or a direct connection from the CLEC's collocated equipment, in accordance with the FCC's rules. US WEST does not require an intermediate frame for CLEC interconnection. The SGAT requires:
- US WEST will provide CLEC the same connection to the network as
 US WEST uses for provision of services to US WEST end-users. The
 direct connection to US WEST's network is provided to CLEC through
 direct use of US WEST's existing cross connection network. CLEC and
 US WEST will share the same distributing frames for similar types and
 speeds of equipment, where technically feasible and space permitting.
- CLEC terminations will be placed on the appropriate U S WEST cross connection frames using standard engineering principles. CLEC terminations will share frame space with U S WEST terminations on U S WEST frames without a requirement for an intermediate device, such as a SPOT (Single Point of Termination) frame, and without direct access to the COSMIC™ or MDF. This provides a clear and logical demarcation point for U S WEST and CLEC.⁸

31 Q. PLEASE DESCRIBE HOW THE 911/E911 TRUNKS ARE MONITORED TO MAINTAIN SERVICE QUALITY.

33 A. To ensure an appropriate grade of service for 911/E911 service provided to end

See 47 C.F.R. § 51.323(K)(2); First Report and Order, CC Docket 98-147, 14 FCC RCD 4761 ¶ 42, (March 31, 1999) (Advanced Services Order).

See Sections 8.2.1.24-8.2.1.25 of U S WEST's SGAT.

users, U S WEST and facility-based CLECs must monitor the traffic level on 911/E911 trunks, and install additional trunks as required. In the event a 911/E911 call is blocked, such blockage must be detected at the originating end office switch. That is because the blocked call does not go beyond the originating end office switch. Therefore, both U S WEST and the facility-based CLEC must each perform monthly studies on their own 911/E911 trunks to determine if sufficient trunks are in place to handle the emergency call volume. This blockage data is shared and discussed with the PSAP operator to ensure mutual agreement on the E911 trunk group sizing requirements between the end office switches and the selective router or between the end office switches and the PSAP if no selective router is used.

If a CLEC determines, with approval by the PSAP operator, that its 911/E911 trunk quantities are insufficient to handle its emergency call volume, the CLEC may place an order with U S WEST for additional 911 trunks. Trunk additions are made for the CLEC on the same terms that U S WEST adds 911/E911 trunks for itself. For example, the SGAT requires U S WEST to provide trunking to CLECs, including taking corrective action to alleviate 911/E911 trunk blockages, on a nondiscriminatory basis:

If required by CLEC, U S WEST shall interconnect direct trunks from CLEC's network to the Basic 911 PSAP, or the E911 tandem. Such trunks may alternatively be provided by CLEC. If provided by U S WEST, such trunks will be provided on a non-discriminatory basis. . . .

For CLEC-identified 911 trunk blockages, U S WEST agrees to take corrective action using the same trunking service procedures used for U S WEST's own E911 trunk groups.⁹

25 DOES US WEST PROTECT 911/E911 TRUNKS?

Yes. Proper circuit identification and protection for 911/E911 trunk circuits is essential. Consequently, U S WEST has provided 911 trunk circuit protection for itself and independent local exchange carriers for many years. Furthermore, U S WEST provides the same protection for CLEC 911 circuits as it provides for its own 911 circuits. U S WEST's procedures for protecting 911 circuits are to attach red tags or labels to every appearance of a 911 circuit in the central office to guard against accidental intrusive access. The protected appearances include the Digital Signal 1 Cross-connect (DSX) panels, carrier channel units, and any other access points.

U S WEST also has procedures in place to ensure that facility-based CLECs' 911 or
 E911 trunks are not deactivated without adequate notice. Before any 911/E911 trunk
 can be deactivated by a U S WEST employee, the U S WEST 911 Care Center in

See Sections 10.3.7.1-10.3.7.2 of U S WEST's SGAT.

- 1 Minneapolis must verify that a valid deactivation service order request has been
- 2 submitted by the CLEC. These deactivation procedures apply uniformly to both
- 3 U S WEST and CLEC 911/E911 trunks.
- 4 Because all 911 circuits are protected, regardless of the identity of the local service
- **5** provider, U S WEST's protection of 911 circuits is nondiscriminatory. Furthermore,
- 6 U S WEST has provided this protection to independent telephone companies'
- 7 911/E911 circuits for years, and it works well. Therefore, U S WEST provides
- 8 nondiscriminatory access to 911/E911 interconnection and the protection of all
- **9** 911/E911 circuits.

10 Q. PLEASE DESCRIBE 911/E911 CALL ROUTING.

- 11 A. Public agencies determine whether Basic 911 or Enhanced 911 service will be used
- in a particular geographic area, and how each end office switch will access the Public
- Safety Answering Points (PSAPs). In some cases, the public agency may choose to
- establish 911 trunks directly between end office switches and the PSAP. In many
- cases, public agencies have chosen to use a selective router to terminate E911 trunk
- groups from many end office switches and to establish a single E911 trunk group
- from the selective router to the PSAP.
- The public agency also determines the quantity of trunks that are required in each
- 19 911/E911 trunk group to serve their communities. Therefore, the public agency is the
- primary decision-maker for trunk group design, size and routing -- not U S WEST or
- the CLEC.
- If the CLEC routes its emergency traffic from its end office switch over E911 trunks
- to the U S WEST selective router, the CLEC must forward the Automatic Number
- Identification (ANI) of the calling party on the E911 trunk group for each E911 call.
- When the emergency call arrives at the selective router, a selective routing table will
- identify the PSAP associated with the end user's ANI. The selective router then
- forwards the E911 call along with the calling party's ANI to the designated PSAP over
- the E911 trunks between the selective router and the PSAP. If the PSAP has been
- equipped for E911, it will interrogate the 911 database, which returns the end user
- address that is associated with the ANI to the emergency service attendant.

31 Q. IS E911 CALL ROUTING THE SAME FOR U S WEST AND CLEC END USERS?

- Yes. The routing of an emergency call from a U S WEST end office and a CLEC end
- office to the selective router and from the selective router to the PSAP is identical.
- The same selective router is used for both U S WEST and CLEC emergency traffic,
- and U S WEST and CLEC traffic share the same E911 trunks between the selective
- **36** router and the PSAPs.
- 37 If a CLEC serves its customers through the use of U S WEST's end office switch.

- 1 either through unbundled switching or resale, the CLEC's end users access the PSAP
- through the same E911 trunks between the U S WEST end office and the selective
- 3 router, the same selective router, and the same E911 trunks between the selective
- 4 router and the PSAPs as U S WEST uses.

5 Q. PLEASE DESCRIBE THE E911 DATABASE MANAGEMENT.

- **6** A. Where U S WEST provides Enhanced 911 services, the E911 database, also known
- as the Automatic Location Identification/Data Management System (ALI/DMS or ALI)
 database, is owned and administered by an independent third party -- SCC.
- 9 Database updates are required whenever a customer's name, ANI, street address or
- service provider is changed. The responsibility for providing E911 database updates
- 11 to the database administrator varies, depending on whether a CLEC resells
- U S WEST's retail services, or whether the CLEC is a facilities-based provider.

13 Q. PLEASE DESCRIBE HOW E911 DATABASE UPDATES ARE PROVIDED FOR RESALE CLECS.

- 15 A. For resellers, U S WEST provides E911 database updates on behalf of the CLEC
- using the exact same procedures U S WEST uses to update the E911 database for
- U S WEST's own end users. Facility-based CLECs, whether the CLEC's end users
- are served by the CLEC's end office switch or through use of unbundled switching,
- must provide their own E911 database updates directly to the E911 database administrator. Facility-based CLECs must perform their own E911 database updates
- because U S WEST does not have the ANI, customer name, or street address for
- 22 customers of facility-based CLECs.

23 Q. PLEASE DESCRIBE HOW E911 DATABASE UPDATES ARE PROVIDED FOR FACILITIES-BASED CLECS.

- 25 A. When an end user changes service providers from U S WEST to a CLEC, there are
- instances when the E911 database must be updated. When a customer moves from U S WEST to a facilities-based CLEC using its own switch, both U S WEST and the
- US WEST to a facilities-based CLEC using its own switch, both US WEST and the
- CLEC update the database. The E911 database will receive a disconnect ("migrate")order from U S WEST and a connect order from the CLEC. This is true whether
- interim number portability (INP) or long-term number portability (LNP) is used to port
- the customer's telephone number to the facilities-based CLEC.
- Where interim number portability (INP) is still in place, it is not technically possible for
- the CLEC's switch to use the same ANI that the U S WEST switch used, even though
- the customer's dialed telephone number remains the same. Consequently, the end
- user's ANI will change when served by the CLEC's switch. Therefore, it is essential
- that the CLEC place the customer's new ANI, with its associated name and street address, in the E911 database when the customer begins to utilize the CLEC's
- service. Similarly, U S WEST must remove the customer's disconnected ANI from

- the E911 database. The U S WEST database record is deleted with the disconnect order and the CLEC creates a new record containing the customer's new ANI (network address number) and the ported telephone number.
- 4 Where long-term number portability (LNP) is in place, the customer's ANI does not 5 change, but the CLEC is still responsible for updating the E911 database record for 6 its customer. The facilities-based CLEC must update the record to indicate that it is 7 now the service provider for this customer and U S WEST will no longer have records 8 for this customer's name, address or ANI. Therefore, U S WEST sends a disconnect 9 ("migrate") order which "unlocks" the customer's record, and the CLEC sends a connect order to the E911 database administrator which provides their company 10 11 identification and "locks" the customer's record. Future updates for this record can 12 only be generated by the CLEC.

13 Q. DOES US WEST'S DATABASE ADMINISTRATOR, SCC, HAVE PROCEDURES TO 14 ENSURE END USER CUSTOMERS' RECORDS ARE NOT REMOVED WHEN 15 CHANGING TO A NEW SERVICE PROVIDER?

- **16** A. Yes. To ensure a customer's record is not removed from the ALI database 17 prematurely, SCC has instituted an industry developed procedure. SCC does not 18 remove the customer record but creates an "unlocked record" in the E911 database. 19 The "unlocked record" remains unchanged in the E911 database until the CLEC sends a corresponding connect ("migrate") order to SCC. As the owner of the 20 21 account, the CLEC is then responsible for updating the E911 database record and 22 "locking" the customer's record. These procedures ensure that a customer's ANI will not be removed from the E911 database. 23
- On the other hand, if the CLEC serves its new end user through unbundled switching or resale and there is no change in the customer's telephone number, name or address, it is not necessary to send a disconnect order to the E911 database. The previous E911 database entry will continue to contain the same ANI, name and address information. The service provider information will be updated from the completed service order.

30 Q. HOW FREQUENTLY DOES U S WEST UPDATE THE E911 DATABASE FOR ITSELF AND RESALE CLECS?

32 A. If a CLEC resells U S WEST's retail services, U S WEST will update the E911 database at the same time as U S WEST updates its own customers' records. In 33 34 fact, the U S WEST records and the reseller CLEC records are sent together in the same batch update that is sent every night on the data link to SCC. The batch 35 36 updates include all the completed service records for that day. There is no way to 37 identify which records are for U S WEST customers versus the customers of the 38 E911 database entries for resold services flow directly from resale CLECs. 39 U S WEST to SCC in the identical way and at the same time that updates for 1 U S WEST retail customer records flow to SCC.

2 Q. DOES US WEST HAVE PROCESSES TO MINIMIZE E911 DATABASE ERRORS?

- A. Yes. U S WEST has implemented preventive measures to ensure that E911 database errors are minimized. For resold services, U S WEST has implemented edit functions in the service order system to assist in determining errors in the customer record data prior to processing the service order. For example, when an end user changes service providers through resale, a comparison is made on the customer's address information, telephone prefix and class of service for consistency to ensure the record can be loaded into the 911 system in a timely and accurate fashion.
- If the database administrator, SCC, detects an error on the resale CLEC's service order or a U S WEST retail service order, SCC will attempt to correct it. In the case of a U S WEST retail or resale CLEC error, if SCC is unable to correct the error, SCC will contact the U S WEST service center for assistance. SCC's current practice is to begin resolution of database errors within 24 hours after receipt of the completed service orders.

16 Q. WHAT PROBLEMS, IF ANY, ARE CAUSED BY CLEC ERRORS IN THE E911 DATABASE?

Although errors affect the accuracy of the 911 database, the provisioning of the order is not affected and the customer will be able to make calls to the 911 system. The PSAP operator typically reconfirms the customer's information while handling the call.

21 Q. HOW ARE E911 DATABASE ERRORS CORRECTED FOR FACILITIES-BASED 22 CLECS?

- **23** A. In the case of facility-based CLECs, SCC will interface directly with the CLEC to 24 resolve record errors. SCC analysts are available to CLECs to reconcile all error files 25 during normal business hours of operation. The CLEC and SCC may negotiate a 26 variety of arrangements to address error detection and correction based on the 27 individual needs of each company. Each facility-based CLEC has its own data link 28 to SCC to update its customers' records. Therefore, SCC has the capability to report 29 speed and accuracy results separately for U S WEST and facility-based CLECs, as 30 well as other independent local exchange carriers.
- 31 Q. IS U S WEST OBLIGATED TO PROVIDE 911 DATABASE ENTRIES FOR CLECS
 32 WITH THE SAME ACCURACY AND RELIABILITY THAT IT MAINTAINS ITS OWN
 33 911 DATABASE ENTRIES?
- 34 A. Yes. The FCC requires that a BOC "must maintain the 911 database entries for competing LECs with the same accuracy and reliability that it maintains the database

entries for its own customers."¹⁰ The FCC also requires that, for facilities-based carriers, the BOC must provide "unbundled access to [its] 911 database . . . at parity with what [the BOC] provides to itself."¹¹

The 911 database entries for all CLECs are maintained with the same accuracy and reliability as database entries for U S WEST. U S WEST's SGAT obligates U S WEST to provide database entries for facility-based CLECs at the same accuracy and reliability that U S WEST provides for its own customers. U S WEST has included in its contract with SCC the requirements for SCC to provide E911 database management services to all CLECs and independent companies operating in the U S WEST region in a manner that is competitively neutral to, and in parity with, those provided to U S WEST. A copy of the amendment to U S WEST's agreement with SCC is included as Exhibit MSB-3. The SGAT also requires that:

U S WEST will ensure that the 911 database entries for CLEC will be maintained with the same accuracy and reliability that U S WEST maintains for U S WEST's own end-users.¹²

U S WEST's SGAT and the contract with SCC ensure that resellers of U S WEST's services will have 911 database updates at the same level of accuracy and reliability as U S WEST provides for its end users:

For resold services, U S WEST, or its designated database provider, will provide updates to the ALI database in a manner that is at the same level of accuracy and reliability as such updates are provided for U S WEST's endusers. For resold accounts, CLEC shall provide U S WEST with accurate enduser location information to be updated to the ALI/DMS database. U S WEST shall use its current process to update and maintain end user information in the ALI/DMS database.¹³

U S WEST's SGAT provides for nondiscriminatory error correction:

U S WEST and the third party administrator (SCC) will provide nondiscriminatory error correction for records submitted to the Automatic Location Identification (ALI) database. For resold accounts, if SCC detects errors, it will attempt to correct them. If SCC is unable to correct the error, SCC will contact U S WEST for error resolution. For errors referred to U S WEST, U S WEST will provide the corrections in a non-discriminatory manner. If U S WEST is unable to resolve the error, U S WEST will

^{1 10} Ameritech Michigan Order, 12 FCC Rcd at 20679.

ld.

See Section 10.3.4.1 of U S WEST's SGAT.

See Section 10.3.5.1 of U S WEST's SGAT.

contact the Resale-CLEC for resolution. In the case of facility-based
 CLECs, the third party administrator, SCC, will interface directly with the
 CLEC to resolve record errors.¹⁴

4 Q. PLEASE DESCRIBE THE PERFORMANCE INDICATORS AND U S WEST'S PERFORMANCE FOR UPDATES TO THE E911 DATABASES.

Α. U S WEST's performance indicator ES-1 is designed to demonstrate that U S WEST provides E911 database updates for resellers in a nondiscriminatory manner. Performance indicator ES-1, ALI Data Base Updates Completed within 24 hours, provides a measure of the timeliness of E911 database updates performed by U S WEST on behalf of CLECs. The indicator measures the degree to which updates for the E911 database are transmitted by U S WEST to the E911 database administrator, SCC, within 24 hours. Thus, ES-1 measures the percentage of batch updates to the ALI Database accomplished within 24 hours of service order completion.

ALI Data Base Updates Completed within 24 Hours

	Jan'99	Feb'99	Mar'99	Apr'99	May'99	Jun'99	Jul'99	Aug'99	Sep'99
ES-1 ALI DB Updates w/in 24 Hrs	100%	100%	100%	100%	100%	100%	100%	100%	100%
	Oct'99	Nov'99	Dec'99	Jan'00	Feb'00	Mar'00	Apr'00	May'00	Jun'00
ES-1 ALI DB Updates w/in 24 Hrs	100%	100%	100%	100%					

Results of ES-1 for the months of January 1999 through January 2000 all reflect that 100% of the E911 – ALI Database updates were accomplished within 24 hours. These results demonstrate that U S WEST has made all database updates on time and provides database updates for resellers in a nondiscriminatory manner.

In addition to the ES-1 indicator, the 911 database administrator, SCC, produces reports on the speed and accuracy of the database updates. SCC's report currently provides individual company data for each facility-based local service provider, however, the U S WEST data is aggregated with the resellers' data. U S WEST and SCC are in the process of implementing the NENA III standards for a "RSID" (reseller identification) so that reports can be produced for individual resellers separate from U S WEST's data. Until the new reseller service provider identifier (RSID) is implemented, a reseller CLEC may request a non-routine manual audit on selected records for its customers. The new report by RSID is planned for Second Quarter

See Section 10.3.6.4 of U S WEST's SGAT.

- 1 2000. Exhibit MSB-4 is a summary of the reports for Washington from December
- **2** 1998 through January 2000.

3 Q. WILL U S WEST PROVIDE ANY OTHER PERFORMANCE INDICATORS FOR ACCESS TO 911/E911?

Yes. There are several new performance indicators associated with 911/E911 being developed by the Regional Oversight Committee (ROC) workshops. These new performance indicators will be available during Second Quarter 2000.

8 Q. HOW DOES U S WEST RECOVER ITS COSTS FOR PROVIDING ACCESS TO CLECS FOR 911/E911 SERVICES?

- 10 A. The 911/E911 services offered by U S WEST to other carriers, including independent telephone companies, do not traditionally involve payments going from carrier to carrier. The SGAT and contracts negotiated in Washington do not charge CLECs for access to 911/E911 service.¹⁵ The management of the E911 database is performed by SCC who may assess charges to both U S WEST and CLECs for updates to the E911 database and for other services, such as providing copies of the Master Street
- **16** Address Guide.
- US WEST generally recovers the cost of facilities it deploys to provide CLECs with access to 911/E911 services by billing the PSAP operator. US WEST bills its customers a 911/E911 surcharge which is remitted to the PSAP operator. US WEST presumes that CLECs will bill a similar surcharge to their customers on behalf of the PSAP operator.

22 Q. PLEASE SUMMARIZE YOUR TESTIMONY FOR CHECKLIST ITEM NO. 7(I) - ACCESS TO 911 AND E911 SERVICES.

24 A. In accordance with the requirements of the Act and FCC rules, U S WEST provides CLECs with nondiscriminatory access to Basic and Enhanced 911 services. Such 25 26 access is available whether a CLEC resells U S WEST's retail services or whether a 27 CLEC is facilities-based, either through the use of the CLEC's own end office switch 28 or though the CLEC's use of unbundled switching provided by U S WEST. As of January 31, 2000, U S WEST has provided E911 service to 21 facility-based CLECs 29 30 in Washington by providing 204 E911 trunks between the CLECs' switches and the 31 U S WEST selective router. Facilities-based CLECs have 200,967 records in the 32 E911 database as of January 31, 2000. U S WEST has provided 911/E911 services to 25 resellers in Washington, who access 911/E911 services using the same 33 34 facilities as U S WEST's end user customers. Commission-approved interconnection 35 agreements in Washington and the SGAT make access to Basic and Enhanced 911

See Section 10.3.2.13 of U S WEST's SGAT.

services available to CLECs. U S WEST has documented the processes and procedures for CLECs to access the 911 and E911 services. CLECs have the ability to offer their customers the same access to 911 and E911 services as the customers of U S WEST utilize. Therefore, the Commission should find that U S WEST satisfies checklist item No. 7(I).

IV.CHECKLIST ITEM NO. 9 - NUMBERING ADMINISTRATION

2 Q. WHAT DO THE ACT AND FCC RULES REQUIRE WITH REGARD TO CHECKLIST COMPLIANCE FOR NUMBERING ADMINISTRATION?

A. The Act requires that "[u]ntil the date by which telecommunications numbering administration guidelines, plan, or rules are established, non-discriminatory access to telephone numbers for assignment must be provided to [a CLEC's] telephone exchange service customers. After that date, compliance with such guidelines, plan or rules."16

9 Q. HAS THE FCC ADOPTED REGULATIONS PURSUANT TO THE ACT THAT 10 GOVERN THE ASSIGNMENT OF CENTRAL OFFICE CODES?

- 11 A. Yes. Prior to the Act, in July 1995, the FCC ordered that numbering administration of NPAs and NXXs be centralized at the national level and transferred to an independent third party administrator.
- The FCC adopted regulations, pursuant to the Act, to govern the assignment of NXX codes. In its Second Interconnection Order, the FCC established two requirements for numbering administration until the transition to the third party administrator was completed.¹⁸ Any telecommunications carrier performing central office code administration:
- 19 (1) shall charge uniform fees for the assignment or use of central office codes, including to itself and its affiliates; and,
- 21 (2) shall apply identical standards and procedures for processing central office codes.
- The FCC also created a federal advisory committee, the North American Numbering Council (NANC), to provide advice and recommendations regarding numbering administration and to have oversight for the selection and transition to the new independent third party administrator.

27 Q. HAVE NUMBERING ADMINISTRATION GUIDELINES BEEN ESTABLISHED?

Yes. Central office codes (NXXs) are assigned based on the Central Office Code
 Assignment Guidelines developed by the national Industry Numbering Committee
 (INC), formerly the Industry Carriers Compatibility Forum (ICCF), and published as

See Section 271(c)(2)(B)(ix) of the Act.

Report and Order, Administration of the North American Numbering Plan, CC Docket 92-237, released July 13, 1995.

^{1 18} See 47 C.F.R. § 52.15(c).

1 INC 95-0407-008. These guidelines were developed in response to a 1991 FCC request.

3 Q. DOES US WEST SATISFY THE REQUIREMENTS OF THE ACT AND THE FCC 4 RULES?

- Yes. U S WEST is no longer responsible for central office number administration.
 The FCC transferred the central office number administration functions to the new independent third party North American Numbering Plan Administrator (NANPA), NeuStar (formerly Lockheed Martin IMS) on September 1, 1998.
- Prior to the transfer of the numbering administration responsibilities to NeuStar,
 U S WEST provided nondiscriminatory access to telephone numbers for assignment
 by CLECs in compliance with the Act and FCC rules. U S WEST met the FCC's two requirements by:
- 13 (1) not charging any fees for the assignment or use of central office codes; and,
 - (2) using the Central Office Code Assignment Guidelines (INC 95-0407-008) developed by the national Industry Numbering Committee (INC) as the uniform standards and procedures to process NXX code requests and assignment of those codes. U S WEST applied the same guidelines and procedures for requests for NXX codes whether the request originated from U S WEST or a CLEC. These are the same guidelines and forms now used by NeuStar to process NXX code requests. The guidelines are available on NANPA's website and the Alliance for Telecommunications Industry Solutions' (ATIS) website.¹⁹

23 Q. DID U S WEST ASSIGN CENTRAL OFFICE CODES (NXX) IN SUBSTANTIALLY 24 THE SAME AMOUNT OF TIME AS CODES ASSIGNED TO ITSELF IN 25 WASHINGTON?

26 A. Yes. U S WEST assigned 75 NXX codes to CLECs in Washington during the twelve 27 months prior to the FCC's transfer of these functions to the new administrator. 28 U S WEST averaged 4.8 days to assign NXX codes for the CLECs and averaged 29 3.82 days to assign 34 NXX codes to itself. U S WEST assigned all NXX codes, 30 except two, within 10 working days of the date of receipt of a request, as required by 31 Section 5.2.2 of the industry's guidelines. U S WEST assigned NXX codes to CLECs 32 in substantially the same time as it assigned NXX codes to itself. Exhibit MSB-5 33 shows NXX assignments by U S WEST for Washington from September 1997 34 through August 1998.

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NANPA website: <u>www.nanpa.com</u> and the ATIS website: www.atis.org.

1 Q. DID U S WEST REFUSE ANY NXX ASSIGNMENT REQUEST FROM A CLEC IN WASHINGTON?

3 A. No, not that I am aware of.

4 Q. DOES US WEST HAVE PROCESSES TO ENSURE THAT NXX CODES ARE ACTIVATED IN A NONDISCRIMINATORY AND TIMELY MANNER?

6 A. Yes. U S WEST has put processes in place to ensure that NXX codes are activated 7 in a nondiscriminatory and timely manner, according to the industry guidelines. U S WEST has a group of employees in the Network Operations organization that 8 9 ensure all NXX activations are completed accurately and on time. The routing 10 information, rating information and effective dates are published in the national Local 11 Exchange Routing Guide (LERG). Each carrier is responsible for providing accurate 12 and complete information to the LERG for NXX codes assigned to them. When a new NXX code is assigned, all industry members – incumbent LECs, CLECs, wireless 13 14 carriers – must activate the code in all of their respective switches within the NPA. 15 The methods, procedures, and process flows are documented on the Wholesale 16 Markets website.20

17 Q. DOES US WEST HAVE A PERFORMANCE INDICATOR FOR NXX CODE ACTIVATIONS?

Yes. U S WEST is currently implementing the performance measurement for NXX code activations that has been developed in the Regional Oversight Committee's workshops. The Performance Indicator is NP-1 NXX Code Activation. It should be available by the end of First Quarter 2000.

23 Q. WILL US WEST CONTINUE TO COMPLY WITH THE INDUSTRY GUIDELINES AND FCC RULES?

- Yes. U S WEST will continue to comply with the industry guidelines and FCC rules as applied by the North American Numbering Plan Administrator, NeuStar.
 U S WEST has committed to comply with these guidelines and FCC rules, including the provision of its NXX data, when requested by NeuStar or the FCC, in the SGAT:
- Central Office Code Administration has now transitioned to NeuStar. Both Parties agree to comply with industry guidelines and commission rules, including those sections requiring the accurate reporting of data to the Central Office Code Administrator.²¹

Wholesale Markets website: http://www.uswest.com/carrier/bulletins/process.

See Section 13.2 of U S WEST's SGAT.

- 1 Q. DID U S WEST RECEIVED ANY COMPLAINTS REGARDING ITS NUMBERING
- 2 ADMINISTRATION IN WASHINGTON PRIOR TO THE TRANSITION OF THOSE
- **3 FUNCTIONS TO NEUSTAR?**
- **4** A. No, not that I am aware of.
- 5 Q. HOW DOES U S WEST MANAGE LIMITATIONS IN NUMBERING RESOURCES, SUCH AS NXX FREEZES?
- 7 A. Because U S WEST is no longer the central office code administrator, it does not
- 8 manage numbering resources or any limitations in numbering resources. U S WEST
- 9 only manages its internal numbers ("line numbers") for assignment to end user
- 10 customers.
- 11 Q. PLEASE SUMMARIZE YOUR TESTIMONY FOR CHECKLIST ITEM NO. 9 12 NUMBERING ADMINISTRATION.
- **13** A. The FCC, pursuant to the Act, established its requirements for provision of 14 nondiscriminatory access to telephone numbers and established a transition plan to 15 transfer the numbering administration functions to an independent third party 16 administrator. U S WEST is no longer responsible for numbering administration in 17 its region. Prior to the FCC's transfer of this function to the new administrator, 18 U S WEST provided nondiscriminatory access to telephone numbers according to the 19 Act and FCC regulations. U S WEST had interconnection agreements in place in Washington making telephone numbers available to CLECs. U S WEST did not 20 21 charge for the assignment of central office codes (NXXs) and assigned NXXs to other 22 carriers in exactly the same manner as it assigned codes to itself, using the industry 23 developed guidelines and forms. Thus, U S WEST satisfied the FCC's two 24 requirements for numbering administration. In addition, U S WEST's processes 25 ensure that NXX codes are activated in a nondiscriminatory and timely manner, and 26 according to the industry guidelines. Therefore, the Commission should find that U S WEST satisfies checklist item No. 9. 27

1 V.CHECKLIST ITEM NO. 10 – CALL-RELATED DATABASES AND ASSOCIATED SIGNALING

3 Q. WHAT DO THE ACT AND FCC RULES REQUIRE WITH REGARD TO CHECKLIST COMPLIANCE FOR ACCESS TO CALL-RELATED DATABASES AND ASSOCIATED SIGNALING?

- A. The competitive checklist of Section 271 requires that U S WEST provide "nondiscriminatory access to databases and associated signaling necessary for call routing and completion."²² In its First and Third Interconnection Orders,²³ the FCC also determined that unbundled signaling and access to call-related databases constituted UNEs under Section 251(c)(3).
- The FCC's rules regarding nondiscriminatory access to signaling links allow CLECs to use U S WEST's signaling network for signaling between their switches, signaling to U S WEST's switches and signaling to other networks interconnected to U S WEST's signaling network in the same manner as U S WEST provides access to itself.
- 16 The FCC's rules provide for nondiscriminatory access to the call-related databases used for transmission, routing, billing and collection, or other aspects of providing a 17 18 telecommunications service, e.g., the Line Information Database (LIDB), the Toll Free 19 Calling (8XX) database, the Local Number Portability (LNP) database, and the 20 Advanced Intelligent Network (AIN) database. The FCC's rules also provide for 21 unbundled access to U S WEST's Service Management Systems (SMS) to create, 22 modify, or update information in the call-related databases in a manner that complies 23 with Section 222 of the Act regarding the use and disclosure of customer information.
- On November 5, 1999, the FCC released its decision in the Third Interconnection Order in CC Docket 96-98²⁴ which reaffirmed that signaling and call-related databases are network elements that incumbent LECs must provide on an unbundled basis. The Third Interconnection Order added the 911/E911 databases to the list of call-related databases which I have already addressed in the previous section of my testimony for Checklist Item No. 7(I) 911 and E911 Services.

30 Q. DOES US WEST SATISFY THE REQUIREMENTS OF THE ACT AND THE FCC 31 RULES?

32 A. Yes. U S WEST provides nondiscriminatory access to its signaling network and call-

See Section 271(c)(2)(B)(x) of the Act.

²³ See 47 C.F.R. § 51.319(e)(1-3).

Third Report and Order and Fourth Notice of Proposed Rulemaking, CC Docket No. 96-98, FCC 99-238, (November 5, 1999) (Third Interconnection Order).

related databases through the terms of its SGAT as well as the terms of Commission-approved interconnection agreements. U S WEST has provided access directly to several carriers operating in Washington and to others through third party signaling network (hub) providers. CLECs may interconnect with U S WEST's signaling network to facilitate signaling between their switches and U S WEST's end office and tandem switches. U S WEST's pricing for signaling and access to call-related databases in its interconnection agreements and its SGAT comply with the FCC's pricing rules, as determined by the Washington Commission in its Cost Docket No. UT-960369. The terms and conditions for access to the U S WEST signaling network are contained in the SGAT in Section 9.13 – Access to Signaling.

11 CLECs may also interconnect with U S WEST's signaling network to facilitate 12 signaling to other carriers' switches that are connected to U S WEST's signaling 13 network and to gain access to U S WEST's call-related databases or to other 14 providers' databases. Terms and conditions for access to the AIN, LIDB, 8XX and 15 Calling Name databases are contained in Sections 9.14, 9.15, 9.16, and 9.17 of the SGAT. Access to U S WEST's number portability (LNP) database is addressed in 16 Section 10.2 of the SGAT and is available pursuant to U S WEST's interstate tariff, 17 18 FCC Tariff #5, according to the FCC's requirements.

19 Q. DOES U S WEST HAVE DOCUMENTED METHODS, PROCEDURES AND STANDARDS FOR CLECS TO ACCESS THE CALL-RELATED DATABASES AND ASSOCIATED SIGNALING?

22 A. Yes. The processes and procedures for access to U S WEST's signaling network and call-related databases have been documented for the CLECs and are available 23 24 on U S WEST's website. 25 U S WEST updates its Interconnect and Resale Resource 25 Guide periodically to incorporate new legal requirements, process enhancements, 26 and changes to NENA guidelines and standards. Notification of changes to these 27 processes is sent to CLECs by their U S WEST account managers. U S WEST's 28 signaling network and processes are based upon industry guidelines and standards. 29 The standards and technical publications used by U S WEST are listed in Section 30 21.0 of the SGAT. Exhibit MSB-7 provides the process flows for CLEC access to 31 U S WEST's signaling network and call-related databases.

32 Q. PLEASE BRIEFLY DESCRIBE HOW U S WEST'S NETWORK USES SIGNALING AND CALL-RELATED DATABASES.

The U S WEST network consists of end office switches, tandem switches and call-related databases. The U S WEST network is interconnected with other networks, including the switches of interexchange carriers, other local exchange carriers and CLECs. Each of these switches and call-related databases, regardless of provider.

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^{1 25} Interconnect and Resale Resource Guide website: http://www.uswest.com/carrier.

can be considered a "node" on the Public Switched Telephone Network (PSTN).
 Each node in the PSTN must exchange information with other nodes to facilitate the completion of a local or long distance telephone call. The exchange of information

between network nodes is referred to as signaling.

A simple use of signaling is the establishment of a call between two end office switches. The originating switch must send to the terminating switch the called telephone number. The terminating switch must send the originating switch the equivalent of ringing (if the called line is available) or busy tone (if the called line is busy). To complete the call, the two end offices must agree on the trunk that will be used to carry the conversation. Finally, if the called party hangs up, the terminating end office must inform the originating office to release the trunk for reuse and to terminate billing, if required.

More complex types of calls also require signaling. For example, a call may traverse a tandem switch, or require the interrogation of a call-related database, or involve two or more interconnected networks such as two local exchange carriers and an interexchange carrier.

The signaling network facilitates communication between end office switches, tandem switches, interexchange carrier switches, CLEC switches and other local exchange carrier switches for establishing voice grade trunk connections. The signaling network also facilitates communication between these switches and the various call-related databases that are associated with the signaling network. For example, an end office switch may communicate with the toll free service (8XX) database through the signaling network to acquire the routing information for a particular toll free telephone number. Likewise, an operator system may communicate with a Line Information Database (LIDB) to validate billing information on an operator handled call, e.g., collect, calling card and bill to third party.

Signaling on the Public Switched Telephone Network is now almost universally performed through a separate signaling network using the Signaling System 7 (SS7) protocol. The signaling network is a packet switched communication network that allows call control messages to be transported on a dedicated high-speed data network that is separate and distinct from the voice communication network.

Exhibit MSB-8 illustrates U S WEST's signaling network and CLEC interconnection to the signaling network.

34 Q. PLEASE DESCRIBE THE COMPONENTS OF THE U S WEST SIGNALING NETWORK.

- A. The U S WEST signaling network consists of the following components:
- 37 Signaling Links Signaling links connect a network node, such as an end office,

1 tandem, or call-related database to the signaling network.

Signal Transfer Point (STP) – STPs are the "tandem switches" of the signaling network. Signaling links from network nodes are terminated at the STP. A network node will deliver a signaling message via its signaling link to the STP. Depending on the destination of that signaling message, the STP delivers the signaling message to another signaling link for delivery to the terminating network node.

Call-Related Databases – Call-related databases are databases that are used in the routing of voice traffic on the PSTN. The call-related databases are the toll-free service database (8XX), the Line Information Database (LIDB), the InterNetwork Calling Name (ICNAM) database, the Local Number Portability (LNP) database, and the Advanced Intelligent Network (AIN) database. Call-related databases are connected, like other network nodes, to a STP via a signaling link.

Service Management System (SMS) – SMS is a system that is used to update
 the contents of a call-related database.

16 Q. DOES US WEST HAVE A LEGALLY BINDING COMMITMENT TO PROVIDE ACCESS TO ITS DATABASES AND ASSOCIATED SIGNALING?

18 A. Yes. The Act's checklist requires that U S WEST provide "nondiscriminatory access to databases and associated signaling necessary for call routing and completion."
 20 U S WEST provides such access, pursuant to its SGAT:

U S WEST will provide CLEC with nondiscriminatory access to signaling networks, including signaling links and Signaling Transfer Points (STP). Access to U S WEST's signaling network provides for the exchange of signaling information between U S WEST and CLEC necessary to exchange traffic and access call-related databases. Signaling networks enable CLEC the ability to send SS7 messages between its switches and U S WEST's switches, and between CLEC's switches and those third party networks with which U S WEST's signaling network is connected. CLEC may access U S WEST's signaling network from a CLEC switch via unbundled transport elements between CLEC's switch and U S WEST STPs. CLEC may access U S WEST's signaling network from each of its switches via a signaling link pair between its switch and the U S WEST STPs. CLEC may make such connection in the same manner as U S WEST connects one of its own switches to STPs. The Common Channel Signaling used by the parties shall be Signaling System 727

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See Section 271(c)(2)(B)(x) of the Act.

See Section 9.13.1.1 of U S WEST's SGAT.

CLECs may interconnect their switches directly to U S WEST's STPs or CLECs may interconnect their own STPs with U S WEST's STPs. In either case, the CLEC's call routing and database queries are handled in the same manner as U S WEST's call routing and database queries. Finally, CLECs may also interconnect with U S WEST's signaling network through a third party signaling network provider. Exhibit MSB-8 illustrates how CLECs may gain access to U S WEST's signaling network.

9 Q. PLEASE DESCRIBE HOW U S WEST SATISFIES THE ACT AND FCC RULES FOR PROVIDING CLECS NONDISCRIMINATORY ACCESS TO U S WEST'S SIGNALING NETWORK.

U S WEST satisfies the FCC's rules through its SGAT. For example, the FCC required U S WEST to provide nondiscriminatory access on an unbundled basis to:

Signaling Networks: Signaling networks include, but are not limited to, signaling links and signaling transfer points.²⁸

As required by the FCC, U S WEST provides such nondiscriminatory access to signaling links and signaling transfer points (STPs) on an unbundled basis through the terms of U S WEST's SGAT:

U S WEST will provide CLEC with nondiscriminatory access to signaling networks, including signaling links and Signaling Transfer Points (STP).²⁹

The FCC's rules also state that when a CLEC "purchases unbundled switching capability from an incumbent LEC, the incumbent LEC shall provide access to its signaling network from that switch in the same manner in which it obtains such access itself." U S WEST provides such access to its signaling network to purchasers of unbundled switching pursuant to its SGAT:

Local switch ports include CLEC use of U S WEST's signaling network for traffic originated from the line-side switching port. CLEC access to the U S WEST signaling network shall be of substantially the same quality as the access that U S WEST uses to provide service to its own end-users.³¹

^{1 28} Third Interconnection Order; 47 C.F.R. § 51.319(e)(1).

See Section 9.13.1.1 of U S WEST's SGAT.

^{1 30 47} C.F.R. § 51.319 (e)(1)(A).

See Section 9.11.2.2 of U S WEST's SGAT.

- 1 Therefore, when a CLEC orders unbundled switching, the CLEC's signaling traffic is
- 2 routed over the U S WEST signaling network in the exact same manner as
- **3** U S WEST's signaling traffic is routed.

4 Q. ARE ANY CLECS PURCHASING UNBUNDLED SIGNALING LINKS IN WASHINGTON?

- **6** A. Yes. There are 5 CLECs purchasing unbundled signaling links in Washington.
- 7 Proprietary Exhibit MSB-9 identifies the CLECs to which U S WEST is providing
- **8** unbundled signaling links.

9 Q. WILL U S WEST PROVIDE DIRECT CONNECTION TO U S WEST FRAMES FOR FACILITY-BASED CLECS?

- 11 A. Yes. Direct connections to U S WEST's frames are available to facilities-based CLECs for signaling interconnection and unbundled signaling links, either through a
- direct connection from the CLEC's switch or a direct connection from the CLEC's collocated equipment in accordance with the FCC's rules.³² U S WEST does not
- require an intermediate frame for CLEC interconnection. The SGAT requires:
- U S WEST will provide CLEC the same connection to the network as
- U S WEST uses for provision of services to U S WEST end-users. The
- direct connection to U S WEST's network is provided to CLEC through
 direct use of U S WEST's existing cross connection network. CLEC and
- direct use of U S WEST's existing cross connection network. CLEC and U S WEST will share the same distributing frames for similar types and
- speeds of equipment, where technically feasible and space permitting.
- 22 CLEC terminations will be placed on the appropriate U S WEST cross
- 23 connection frames using standard engineering principles. CLEC
- terminations will share frame space with U S WEST terminations on
- US WEST frames without a requirement for an intermediate device, such
- as a SPOT (Single Point of Termination) frame, and without direct access
- to the COSMIC[™] or MDF. This provides a clear and logical demarcation
- point for U S WEST and CLEC.³³

29 Q. PLEASE DESCRIBE U S WEST'S CALL-RELATED DATABASES.

- 30 Call-related databases store data that is used for billing and collection, or the
- transmission, routing, or other provision of a telecommunications service. If a call-
- related database is required for a given call, the end office switch or tandem switch
- will send a query, over the signaling network, to the appropriate call-related database,

see 47 C.F.R. § 51.323(K)(2); Advanced Services Order, ¶ 42.

¹ 33 See Sections 8.2.1.24-8.2.1.25 of U S WEST's SGAT.

which will return information useful in processing the call. The following are general descriptions of U S WEST's call-related databases:

Local Number Portability (LNP): The LNP database stores the identification of the end office switch that serves a particular telephone number. The LNP database facilitates number portability by allowing a customer to retain a telephone number, while changing local service providers. U S WEST has deployed a pair of LNP databases that serve all the Washington exchanges which have implemented LNP. On a local call within Denver, for example, the originating end office can query the LNP databases to identify the terminating central office associated with the called telephone number.

Line Information Database (LIDB): The LIDB database provides screening and validation on alternately billed services for operator handled calls, including bill-to-third, collect, and calling card calls. For example, the records in LIDB can be used by a local service provider to determine whether a particular end user will accept a collect call.

Toll Free Calling (8XX): The 8XX database enables a CLEC to determine where an originating toll-free call should be routed. On such a call, a CLEC will send the 800-NXX-XXXX, 888-NXX-XXXX, or 877-NXX-XXXX telephone number dialed by its end user to the U S WEST 8XX database through use of the U S WEST signaling network. The 8XX database provides call routing information for the specific 800, 888 or 877 toll-free telephone number that the CLEC transmitted to the database. The database transmits the call routing information to the CLEC over the same signaling network on which the request was received. The CLEC uses this routing information to forward the call to the appropriate network for call completion.

InterNetwork Calling Name (ICNAM): The ICNAM database enables a CLEC to query for the listed name information for the calling number in order to deliver that information to the CLEC's end user (called number). The ICNAM database contains the current listed name data by working telephone number served or administered by U S WEST, including listed name data provided by other carriers participating in the Calling Name Delivery Service arrangement.

Advanced Intelligent Network (AIN): The AIN database is the brand name for a type of call-related database that can be used to provide new features for an end user. The capabilities of an AIN database are activated through AIN triggers. A trigger is a point in the call processing where a database query must be made to determine the action to be taken. For example, an end user on a U S WEST end office switch may establish a restricted calling list that will not allow calls to be placed from the end user's

telephone line to specific telephone numbers. The list will be stored in an AIN database and an AIN trigger will be established in the switch to notify the call processing equipment to check this list on every call originated from this end user's line. Then, when a call is originated from this line, the end office switch will analyze the called telephone number and find the AIN trigger that will instruct the switch to query an AIN database. A query will be sent to the designated database and the restricted dialing list will be reviewed. If the dialed number is on the list, the call will be directed to an intercept announcement. On the other hand, if the called number is not on the restricted list, then the call will be sent to the appropriate destination for call completion.

Enhanced 911 (E911): As described previously in my testimony for Checklist Item No. 7(1), the E911 database contains the automatic number identification (ANI), customer name, street address, and local service provider for each subscriber for the geographic area it serves. The E911 database provides the PSAP with the name and street address of the calling party. Where U S WEST provides E911 services, the E911 database is owned and managed by SCC. SCC is a third party database manager that provides E911 database management services for U S WEST, other local exchange carriers, and CLECs.

21 Q. DOES U S WEST PROVIDE NONDISCRIMINATORY ACCESS TO THE CALL-22 RELATED DATABASES?

Yes. The Act's checklist requires that U S WEST provide "nondiscriminatory access to databases and associated signaling necessary for call routing and completion."
 The FCC's rules require U S WEST to provide nondiscriminatory access to call-related databases, as follows:

For purposes of switch query and database response through a signaling network, an incumbent LEC shall provide access to its call-related databases, including but not limited to, the Calling Name Database, 911 Database, E911 Database, Line Information Database, Toll Free Calling Database, Advanced Intelligent Network Databases, and downstream number portability databases by means of physical access at the signaling transfer point linked to the unbundled database.³⁵

U S WEST satisfies the above requirements through the terms of its SGAT:

35 USWEST will provide CLEC with nondiscriminatory access

See Section 271(c)(2)(B)(x) of the Act.

Third Interconnection Order; 47 C.F.R. § 51.319(e)(2)(A).

to signaling networks, including signaling links and Signaling Transfer Points (STP). Access to U S WEST's signaling network provides for the exchange of signaling information between U S WEST and CLEC necessary to exchange traffic and access call-related databases. . . 36

6 Q. DO ANY CLECS USE U S WEST'S CALL-RELATED DATABASES IN WASHINGTON?

- 8 A. Yes. In Washington, there are 2 CLECs using the 8XX database, 1 CLEC using
- LIDB, 1 CLEC using LNP, and no CLECs using the ICNAM and AIN databases.
 There are CLECs using U S WEST's ICNAM database in other states. No facilities-
- 11 based CLEC has requested to use U S WEST's AIN database in any state.
- U S WEST stands ready to provide access to any CLEC that requests AIN access.
- Proprietary Exhibit MSB-9 identifies the CLECs using U S WEST's call-related
- **14** databases.
- 15 Q. ARE THERE ANY CALL-RELATED DATABASES THAT WASHINGTON
 16 COMPETITORS HAVE REQUESTED ACCESS TO THAT U S WEST WILL NOT OR
 17 CANNOT PROVIDE?
- **18** A. No.

19 Q. DOES U S WEST PROTECT THE CUSTOMER PROPRIETARY INFORMATION 20 THAT IS CONTAINED IN THE CALL-RELATED DATABASES?

- **21** A. Yes. US WEST protects the customer proprietary information that is included in call-22 related databases. For LIDB and Calling Name service, U S WEST is implementing a service provider identifier applied to each end user line record in the databases. 23 24 This identifier will designate the owner of each line record to ensure the records of 25 one provider are not shared with another provider. LIDB and Calling Name database management are considered a "safe harbor" in U S WEST. Access to the databases 26 27 is limited to a specific group of employees responsible for managing the LIDB and Calling Name databases. By providing only restricted access to the databases, 28 29 U S WEST ensures that the privacy of customer records is maintained. Customer 30 proprietary information is protected because service providers cannot store or use this data for marketing or other purposes.37 31
- The AIN database will also include a unique identifier in each customer record that will designate the "responsible organization" or the record owner. As with LIDB and Calling Name, the AIN database is restricted to a specific group of U S WEST employees, in a safe harbor environment, responsible for maintaining the database.

See Section 9.13.1.1 of U S WEST's SGAT.

See Section 5.16 Nondisclosure of U S WEST's SGAT.

This restriction is intended to preserve the privacy of customer records. The service provider for each customer record can be identified and is used to dictate the availability of information. This prevents the records of one provider from being shared with another provider.

The information contained in the U S WEST LNP and 8XX databases are updated from third party owned and administered databases. Each of the customer records in these databases has an identifier for the "responsible organization" or the record owner.

9 Q. PLEASE DESCRIBE HOW U S WEST SATISFIES THE ACT AND FCC RULES FOR PROVIDING CLECS NONDISCRIMINATORY ACCESS TO U S WEST'S SERVICE MANAGEMENT SYSTEMS.

12 A. The FCC requires U S WEST to provide CLECs "with the information necessary to enter correctly, or format for entry, the information relevant for input into the incumbent LEC's service management system." U S WEST provides access, on an unbundled basis, to the U S WEST Service Management Systems (SMS) that will allow CLECs to create, modify or update information in U S WEST's call-related databases.

18 CLECs may choose to store their end user telephone number information in the U S WEST LIDB and Calling Name databases. CLECs may provide line record 19 20 updates in accordance with the terms identified in their respective interconnection agreements. The Service Order Provisioning Interface (SOPI) system is the route 21 U S WEST internal service orders follow to load data into the Line Validation 22 Administration System (LVAS) to update the LIDB and Calling Name data. CLECs 23 24 transmit updates to the U S WEST LIDB and Calling Name databases via an e-mail 25 with a data formatted file to be loaded into LVAS or facsimile process. This process can be used for multiple updates daily. The LVAS access is addressed in Section 26 27 9.15.2 of the SGAT.

For AIN service, U S WEST provides two forms of access for CLECs. First, a CLEC may use the AIN SMS process (which is largely manual) to update a record in an existing U S WEST AIN database for a service such as Remote Access Forwarding. Second, a CLEC may use the U S WEST service creation process to create a new AIN service to be placed in a U S WEST AIN database for CLEC use.

For service creation, U S WEST provides access to the AIN Customized Services (ACS), allowing CLECS the use of U S WEST's service application development process on a nondiscriminatory basis to design, create and test AIN-based services. The elements of service creation and testing are combined to meet the individual

Third Interconnection Order; 47 C.F.R. § 51.319(e)(3)(B).

- needs of the CLEC. The service logic can be established in the U S WEST AIN database after service creation. Currently, the service creation process is manual, built by a U S WEST AIN technician, and is the same manual process used for U S WEST service creation.
- 5 The AIN Platform Access (APA) process involves building and maintaining the CLEC 6 end user line record in the U S WEST AIN database for provisioning and call 7 processing. The CLEC may populate end user data using the Local Service Request 8 form (service order) and an electronic file for loading by a U S WEST AIN technician 9 into the database. Electronic access for the APA process will be addressed as part 10 of the AIN Customized Services development. APA is addressed in Section 9.14.2.2 of the SGAT. Currently there are no CLECs using U S WEST's AIN database in 11 12 Washington or anywhere in U S WEST's region.
- The records in U S WEST's LNP and 8XX databases are updated by downloading information from third-party owned and administered databases. In the case of U S WEST's LNP database, the records are updated from a regional Number Portability Administration Center (NPAC) database that is owned and administered by a third-party, NeuStar, as required by the FCC. The information in U S WEST's 8XX database is updated from a national database administered by Telcordia's Database Services Management, Inc. (DSMI), according to FCC rules.
- 20 Q. HAS US WEST RECEIVED ANY COMPLAINTS REGARDING ITS PROVISION OF ACCESS TO CALL-RELATED DATABASES AND ASSOCIATED SIGNALING IN WASHINGTON?
- **23** A. No, not that I am aware of.
- 24 Q. PLEASE SUMMARIZE YOUR TESTIMONY FOR CHECKLIST ITEM NO. 10 ACCESS TO CALL-RELATED DATABASES AND ASSOCIATED SIGNALING.
- **26** A. U S WEST meets all of the conditions for Section 271(c)(2)(B)(x) relative to 27 nondiscriminatory access to call-related databases and associated signaling. 28 U S WEST has Commission-approved interconnection agreements in place in 29 Washington as well as the SGAT, which require U S WEST to make access to its 30 signaling network and call-related databases available to CLECs in a 31 nondiscriminatory manner. Moreover, there are several CLECs operating in Washington which are interconnected with U S WEST's signaling network. 32 33 addition, there are third party signaling network providers interconnected to 34 U S WEST's signaling network providing access to other carriers. There are 2 CLECs using U S WEST's 8XX database, 1 CLEC using LNP, 1 CLEC using LIDB, and no 35 36 CLECs using the ICNAM and AIN call-related databases in Washington. Based on 37 this evidence, the Commission should find that U S WEST satisfies checklist item No. 38 10.

VI.CHECKLIST ITEM NO. 12 - LOCAL DIALING PARITY

2 Q. WHAT DO THE ACT AND FCC RULES REQUIRE WITH REGARD TO CHECKLIST COMPLIANCE FOR LOCAL DIALING PARITY?

- 4 Α. The Act requires U S WEST to provide nondiscriminatory access to such services or 5 information as are necessary to allow the requesting carrier to implement local dialing 6 parity in accordance with the requirements of Section 251(b)(3) of the Act.³⁹ Section 7 251(b)(3) of the Act requires all LECs to provide dialing parity to competing providers 8 of telephone exchange service and telephone toll service, and have the duty to permit 9 all such providers to have nondiscriminatory access to telephone numbers, operator services, directory services, directory assistance, and directory listing, with no 10 11 unreasonable dialing delays.
- The Act defines "dialing parity" to mean that a person that is not an affiliate of a local exchange carrier is able to provide telecommunications services in such a manner that customers have the ability to route automatically, without the use of any access code, their telecommunications to the telecommunications services provider of the customer's designation from among two or more telecommunications services providers (including such local exchange carrier).⁴⁰
- The FCC in its Second Interconnection Order established the requirement for local dialing parity that customers within a local calling area are able to dial the same number of digits to make a local telephone call notwithstanding the identity of the customer's or the called party's service provider.⁴¹

22 Q. PLEASE DESCRIBE HOW U S WEST SATISFIES THE REQUIREMENTS OF THE 23 ACT AND THE FCC RULES.

24 A. U S WEST has specific legal obligations to make local dialing parity available in its25 various interconnection agreements and pursuant to the SGAT. The SGAT states:

The Parties shall provide local dialing parity to each other as required under Section 251(b)(3) of the Act. U S WEST will provide local dialing parity to competing providers of telephone exchange service and telephone toll service, and will permit all such providers to have non-discriminatory access to telephone numbers, operator services, directory assistance, and directory listings, with no unreasonable dialing delays. The CLEC may elect to route all of its end-user customers' calls in the same manner as U S WEST routes its end-user customers' calls, for a given call type (e.g., 0, 0+, 1+, 411), or the

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See Section 271(c)(2)(B)(xii) of the Act.

¹ See Section 3(a)(39) (47 U.S.C. 153) of the Act.

^{1 41} See 47 C.F.R. § 51.207.

CLEC may elect to custom route its end-user customers' calls differently than U S WEST routes its end user's calls. Additional terms and conditions with respect to customized routing are described in Sections 9.12 of this SGAT and Agreement. Customized Routing may be ordered as an application with Resale or Unbundled Local Switching.⁴²

There are no differences in the number of digits U S WEST or CLEC customers must dial to complete a given local call to any other local customer or to access operator services or directory assistance. All U S WEST switches provide dialing parity to competitors for local calls.

10 Q. DOES US WEST REQUIRE CLEC CUSTOMERS TO DIAL ANY ACCESS CODES 11 OR ADDITIONAL DIGITS TO COMPLETE THE SAME TYPES OF CALLS OR CAUSE 12 UNREASONABLE DIALING DELAYS?

13 A. No. U S WEST does not impose any requirement or technical constraint that requires CLEC customers to dial any access codes or greater number of digits than 14 15 U S WEST customers to complete the same call, or that causes CLEC customers to 16 experience inferior quality with post-dialing delays. Originating calls from CLECs to a U S WEST central office are processed in accordance with technical requirements 17 for local switching and incur no unreasonable dialing delay. 43 Dialed digits transmitted 18 19 or received by U S WEST's switches utilize the same translations and routing tables for completing a call, regardless of whether the call originates on another carrier's 20 21 network. A call originating from a CLEC's network is treated the same as a call 22 originating from within U S WEST's network, because U S WEST's switches can not 23 distinguish between such calls.

24 Q. DOES U S WEST PROVIDE DIALING PARITY FOR CUSTOMIZED ROUTING OF CLEC CUSTOMERS' CALLS USING U S WEST SWITCHES?

A. Yes. U S WEST provides for dialing parity for customized routing of CLEC customers' calls when using U S WEST switches either as a reseller or through unbundled local switching. CLEC customers' calls can be routed to, for example, an operator services provider or directory assistance provider of the CLEC choosing without dialing different or additional digits or access codes than U S WEST customers dial to access the same services. Customized Routing is available in the SGAT in Section 9.12.

32 Q. DOES US WEST PROVIDE FOR TOLL DIALING PARITY?

33 A. Yes. U S WEST completed implementation of toll dialing parity (1+ equal access

See Section 14.1 of U S WEST's SGAT.

Technical Requirements LSSGR TR-NWT-000505 Call Processing and Special Report SR-TSV-002275, BOC Notes on the LEC Networks.

- dialing) for intraLATA calls in Washington on February 8, 1999. U S WEST's
- 2 intraLATA toll dialing parity implementation was made pursuant to an implementation
- 3 plan approved by the Washington Commission.44 U S WEST implemented toll dialing
- 4 parity in all of its switches in Washington using the "2-PIC" subscription method.

5 Q. HOW DOES U S WEST INFORM CUSTOMERS OF THEIR LONG DISTANCE PROVIDER OPTIONS?

- **7** A. In accordance with the Washington Commission's order⁴⁵, if the customer is uncertain
- 8 as to their choice of carrier, the U S WEST service representative will offer to read a
- **9** list of the companies available, in random order.

10 Q. DOES US WEST CHARGE CLECS FOR DIALING PARITY?

11 A. No. There are no charges for dialing parity.

12 Q. HAVE THERE BEEN ANY COMPLAINTS REGARDING US WEST'S PROVISION OF DIALING PARITY IN WASHINGTON?

14 A. No, not that I am aware of.

15 Q. PLEASE SUMMARIZE YOUR TESTIMONY FOR CHECKLIST ITEM NO. 12 – LOCAL DIALING PARITY.

17 The Act, and the related FCC rules, require that U S WEST provide local dialing parity such that telephone exchange service customers dial the same number of digits to 18 19 make a given local telephone call without regard to the local service provider of the 20 calling or called party. All customers - regardless of whether local service is provided by a CLEC or U S WEST - are able to dial the same number of digits to originate local 21 calls. U S WEST's interconnection agreements in Washington and the SGAT make 22 23 local dialing parity available to CLECs. There have been no complaints to the FCC or Washington Commission regarding dialing parity. For the factors related to local 24 dialing parity (telephone numbers, operator services, directory assistance, and 25 directory listing, with no unreasonable dialing delays), the dialing patterns or use of 26 the services are the same, regardless of whether the customer uses U S WEST's 27 service or a CLEC's service. Therefore, the Commission should find that U S WEST 28 29 satisfies checklist item No. 12.

Washington State Docket No. UT-980340, issued October 14, 1998.

Washington State Docket No. UT-980340, issued January 29, 1999.

1 VII.CONCLUSION

2 Q. PLEASE SUMMARIZE YOUR TESTIMONY.

3 Α. My testimony addressed the requirements of the Telecommunications Act of 1996 for four of the checklist items: access to 911/E911 emergency services, numbering 4 5 administration, access to signaling and call-related databases, and local dialing parity. 6 I described how U S WEST has met the requirements found in the Act and the related 7 FCC regulations in terms of our various approved interconnection agreements and 8 SGAT in Washington, and how U S WEST fulfills those requirements. Therefore, I recommend that the Commission find that U S WEST has satisfied the requirements 9 of Section 271(c)(2)(B)(vii) 911 and E911 Services, Section 271(c)(2)(B)(ix) 10 Numbering Administration, Section 271(c)(2)(B)(x) Databases and Associated 11 Signaling, and Section 271(c)(2)(b)(xii) Local Dialing Parity checklist items. 12

13 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

14 A. Yes it does.

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BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

IN THE MATTER OF THE INVESTIGATION)		
INTO U S WEST COMMUNICATIONS, INC.'S)		
COMPLIANCE WITH §271(C) OF THE 970300)	DOCKET NO.	UT-
TELECOMMINICATIONS ACT OF 1996)			

EXHIBITS OF

MARGARET S. BUMGARNER

ON BEHALF OF

US WEST COMMUNICATIONS, INC.

MARCH 22, 2000

NOTICE OF CONFIDENTIALITY: THE PORTIONS OF THIS DOCUMENT IDENTIFIED BELOW, HAVE BEEN FILED UNDER SEAL.

Exhibit MSB-3 is Amendment #14 to the Agreement for Services Between SCC Communications Corporation and U S WEST Communications, Inc.

Exhibit MSB-9 List of CLECs by Checklist Item.

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Enhanced 911 Diagram	MSB-2
SCC Contract Amendment [Confidential]	
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SCC TSS E911 System Performance Report - Washington	MSB-4
U S WEST C.O. Code Assignments – Washington (Sept. 97-Aug. 98)	MSB-5
Process Flows – NXX Activations	MSB-6
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