

Table of Contents

1.0 Executive Summary	1-1
2.0 Cross-Reference Tables	2-1
3.0 Technical Response.....	3-1
3.1 WITS 3 Architecture and Services (L.30.1.3.1, M.2.1.1, C.2.1.11, Req_ID 867)	3-2
3.1.1 Approach to Ensure the Delivery of High Quality, Secure, and Reliable WITS 3 Services (L.30.1.3.1.1, M.2.1.1.a-c))	3-4
3.1.1.1 Level 3 Approach to Providing WITS 3 Services	3-4
3.1.1.1.1 Description of Level 3 Architecture to Support WITS 3 (C.2.1)	3-4
3.1.1.1.2 Approach to Providing Local Voice Services (C.2.2, Req_ID 874, 875)	3-7
Basic Service Capabilities (C.2.2.1, Req_ID 876, 881)	3-9
Features (C.2.2.2, Req_ID 882)	3-10
Performance (C.2.1.9, C.2.2.3, Req_ID 850)	3-13
Interfaces (C.2.2.4, Req_ID 889).....	3-13
3.1.1.1.3 Approach to Providing Optional Services	3-14
3.1.1.1.3.1 Dedicated Transmission Services (DTS) (C.2.4)	3-14
Basic Service Capabilities (C.2.4.1, Req_ID 911, 913)	3-15
Features (C.2.4.2, Req_ID 921)	3-22
Performance (C.2.4.3, Req_ID 922)	3-25
Interfaces (C.2.4.4)	3-25

3.1.1.1.3.2 Dark Fiber Services (C.2.8) 3-27

 Basic Service Capabilities (C.2.8.1,
 Req_ID 977, 979) 3-29

 Features (C.2.8.2, Req_ID 980) 3-43

 Performance (C.2.8.3) 3-45

 Interfaces (C.2.8.4, Req_ID 981, 982)..... 3-45

3.1.1.1.4 Additional Proposed Services..... 3-47

 3.1.1.1.4.1 [REDACTED] 3-70

 [REDACTED] 3-70

 [REDACTED] 3-70

 [REDACTED] 3-70

 [REDACTED] 3-70

 Standard Features 3-71

3.1.1.2 Interconnecting WITS 3 Network with LEC and Other Specified
 Government Networks (L.30.1.3.1.1.a), C.2.1.7) 3-76

3.1.1.3 Maintaining Compatibility with Existing WITS Interfaces
 (L.30.1.3.1.1.b), C.2.1.7, Req_ID 836)..... 3-79

3.1.1.4 Meeting DOD MLPP requirements (L.30.1.3.1.1.c), C.2.2.2.1)..... 3-81

3.1.1.5 Ensuring Local Number Portability (LNP) (L.30.1.3.1.1.d), C.2.2.1) .. 3-81

3.1.2 Flexibility of Approach (L.30.1.3.1.2, M.2.1.1.d), C.2.1.10.5,
 Req_ID 792, 793)..... 3-83

 3.1.2.1 Accommodation of Traffic Growth..... 3-83

 3.1.2.2 Evolution in Service Requirements 3-84

 3.1.2.3 Advances in Technology..... 3-85

 3.1.2.4 Change in Regulatory Environment 3-85

3.1.3 Service Coverage (L.30.1.3.1.3, M.2.1.1.e)) 3-86

 3.1.3.1 Overview of Level 3 Footprint within the NCR 3-86

 3.1.3.2 Identified Communities of Interest 3-87

3.1.3.3	Degree to Which Level 3 Footprint Supports Existing and Future WITS Customers	3-96
3.1.4	Serving Offices Used to Deliver WITS 3 Services (L.30.1.3.1.4)	3-97
3.1.5	Provisioning of Services (L.30.1.3.1.5).....	3-98
3.1.5.1	Service Ordering Intervals and Associated Provisioning T&Cs	3-99
3.1.5.2	Approach to Managing Subcontractors and Carrier Relations in Delivering End-To-End Service.....	3-101
3.1.6	Contingency Plan (L.30.1.3.1.6, C.6, Req_ID 1042)	3-104
3.1.7	Quality Assurance Plan (L.30.1.3.1.7).....	3-106
3.2	WITS 3 Technical Support Services (L.30.1.3.2)	3-107
3.2.1	Description of Proposed Services (L.30.1.3.2.1, Req_ID 799).....	3-107
3.2.2	Added Value of Proposed Services (L.30.1.3.2.2)	3-111
3.3	WITS 3 Customer Premise Equipment (L.30.1.3.3, C.4)	3-113
3.3.1	Proposed Equipment (L.30.1.3.3.1, C.4.1, C.4.2, Req_ID 1020, 1022).....	3-113
3.3.2	Equipment Compliance with Requirements (L.30.1.3.3.2, C.4.3).....	3-114
3.3.3	Added Value of Equipment (L.30.1.3.3.3)	3-114
Appendix A	WITS 3 Contingency Plan	A-1
Appendix B	WITS 3 Quality Assurance Plan	B-1

List of Tables

Table EX-1	Level 3's offer meets the key objectives of WITS 3	1-3
Table 3.1-1	VS Basic Capabilities and Features	3-10
Table 3.1-2	DTS Interface Rates	3-17
Table 3.1-3	DTS Interfaces	3-26
Table 3.1-4	OVS Types Interface Handoff.....	3-27
Table 3.1-5	NCR Colocation Facilities.....	3-43
Table 3.1-6	NVS Component Features	3-47
Table 3.1-7	NVS Station Capabilities	3-53
Table 3.1-8	Standard Tier NVS Capabilities.....	3-58
Table 3.1-9	NVS Premier Tier Station Capabilities.....	3-63
Table 3.1-10	NVS Optional Station Features	3-67
Table 3.1-11	NVS Optional Group Features.....	3-69
Table 3.1-12	Rate Zones and Partitioning.....	3-88
Table 3.1-13	Proposed NPA/NXX Groupings for Voice Service.....	3-89
Table 3.1-14	Level 3's Proposed DTS Service Coverage	3-94
Table 3.1-15	Local Serving Offices with V&H Coordinates.....	3-98
Table 3.1-16	Voice Service Ordering Intervals.....	3-100
Table 3.1-17	DTS Service Ordering Intervals.....	3-101
Table 3.2-1	Description of the Level 3 Team's Labor Categories for Technical Support Services.....	3-107
Table 3.3-1	List of Initial Level 3 Equipment Offering for WITS.....	3-114
Table A-1	Level 3 standardized terminology used for communications	A-18
Table B-1	Quality Performance Objectives and Measurements	B-6
Table B-2	8-Step SIP process	B-23

List of Figures

Figure EX-1	Level 3 is a robust and reliable service provider to GSA and its agencies	1-1
Figure EX-1	Level 3 shares GSA's vision for successful WITS 3 Implementation.....	1-2
Figure EX-3	Level 3 architecture for delivering WITS 3 voice services	1-4
Figure EX-4	Level 3's repetitive transition process ensures smooth transition Of services to Level 3's network.....	1-6
Figure 3.1-1	Level 3 IP Voice and Data Services Network	3-3
Figure 3.1-2	Level 3 Services Architecture	3-5
Figure 3.1-3	Level 3 Voice Switching Infrastructure	3-8
Figure 3.1-4	Map of 5ESS switches in NCR	3-9
Figure 3.1-5	Demarc in the Gateway/Synergy site	3-20
Figure 3.1-6	Service Assurance	3-22
Figure 3.1-7	Redundancy of Working Paths	3-24
Figure 3.1-8	Legacy Level 3 Routes in the DC Area	3-31
Figure 3.1-9	Expanded Route Map for the District of Columbia.....	3-32
Figure 3.1-10	McLean/Vienna VA Area	3-33
Figure 3.1-11	Dark Fiber Routes from Legacy Looking Glass Networks	3-34
Figure 3.1-12	Dark Fiber Routes from Legacy Looking Glass Networks in Northern Fairfax County	3-35
Figure 3.1-13	Additional Dark Fiber Routes in Northern Fairfax County.....	3-36
Figure 3.1-14	Gateway and Colocation Facility	3-39
Figure 3.1-15	NVS Architecture Map.....	3-49
Figure 3.1-16	EIPT Functional Architecture.....	3-70
Figure 3.1-17	EIPT Connectivity.....	3-75

Figure 3.1-18	Level 3 Voice Service Architecture and Connectivity	3-76
Figure 3.1-19	Typical CPE connectivity into The Level 3 Network	3-80
Figure 3.1-20	World Wide Network and Metro Network	3-86
Figure 3.1-21	Metro Presence	3-87
Figure 3.1-22	Level 3's Proposed Geographic Footprint	3-88
Figure 3.1-23	Map Location of Serving Offices.....	3-99
Figure 3.1-24	Sample VPN Scorecard	3-102
Figure A-1	Examples of government and industry participants	A-11
Figure A-2	Level 3 Business Continuity Planning Process Model.....	A-13
Figure A-3	Business Continuity Program Repository	A-19
Figure A-4	Gateway Screening Functional Diagram	A-50
Figure A-5	Map of Downtown Washington, DC.....	A-52
Figure A-6	Fully diverse to customer premises	A-53
Figure A-7	Fully diverse to manhole	A-53
Figure A-8	Diverse to SWC.....	A-53
Figure A-9	Card Protection Diversity.....	A-54
Figure A-10	Overlapping BLSR SONETS rings connecting the National Capital Region to the rest of the United States	A-57
Figure A-11	The National Capital Region – multiple paths, POPs, and equipment.....	A-58
Figure B-1	Our process for continuous operational improvement	B-19
Figure B-2	Our Change Control Process	B-20
Figure B-3	MAX TTR Summary	B-26
Figure B-4	Private Line Scorecard	B-27
Figure B-5	SLA Summary	B-28
Figure B-6	SLA expedite report.....	B-29