

MANAGEMENT VOLUME TABLE OF CONTENTS

	Table of Contents	i
	List of Figures	vii
	List of Tables	xiv
	List of Acronyms	xxi
2.0	Management Volume [L.34.2]	1
2.0.1	2.0.1 AT&T Merger with Cingular Wireless - Change from Subcontractor to Subsidiary	4a
2.1	Executive Summary.....	ES-1
2.2	Compliance with RFP Requirements	
2.3	Management and Operations [L.34.2.3].....	5
2.3.1	Program Management [L.34.2.3.1]	30
2.3.1.1	Overview.....	30
2.3.1.2	Contractor’s Program Organization [L.34.2.3.1, C.3.2.2.1.1]	32
2.3.1.3	Program Management Plan [L.34.2.3.1, C.3.2.2.2]	42b
2.3.1.4	Key Personnel and Corporate Structure [H.12.1, H.12.2, H.12.3]	44
2.3.1.5	Policies and Procedures [L.34.2.3.1, C.3.2.2.1.4].....	54
2.3.1.6	Subcontractor Management [L.34.2.3.1, H.19]	55
2.3.1.7	Service Level Agreements [L.34.2.3.1, C.3.2.2.1.2, J.13.2, J.13.3.15]	58
2.3.1.8	Program Monthly Status Report and Reviews [L.34.2.3.1, C.3.2.2.6]	64
2.3.1.9	Financial Management [L.34.2.3.1, C.3.2.2.4]	64



2.3.1.10	Master Project Plan [C.3.2.2.3].....	65
2.3.1.11	Transition at Contract Expiration [C.3.2.2.11]	66
2.3.1.12	Price Management Mechanism	67
2.3.1.13	Summary	68
2.3.2	Network Management [L.34.2.3.2].....	70
2.3.3	Security Management [L.34.2.3.3, C.3.3.2]	104
2.3.3.1	Security Plan [L.34.2.3.3, C.3.3.2.2.1]	104
2.3.3.2	Security Management Capabilities [L.34.2.3.3]	113
2.3.3.3	Information Security [C.3.3.2.2.4]	124
2.3.3.4	Information Assurance [C.3.3.2.2.5]	134
2.3.3.5	Notification of Security Breaches [C.3.3.2.2.6]	144
2.3.3.6	Alarms and Audit Trails [C.3.3.2.2.7]	146a
2.3.3.7	Physical Security [C.3.3.2.2.9].....	148
2.3.3.8	Non-Domestic Services [C.3.3.2.2.12].....	152
2.3.3.9	Ongoing Security Refreshment [C.3.3.2.2.11]	154
2.3.3.10	Fraud Prevention Management [C.3.3.2.2.13].....	156a
2.3.3.11	Summary	161
2.3.4	Disaster Recovery [L.34.2.3.4]	164
2.3.4.1	The Disaster Recovery Plan [L.34.2.3.4, C.3.3.3.2.1].....	165
2.3.4.2	Disaster Recovery Capabilities [L.34.2.3.4].....	171
2.3.4.3	Fail-resistant Network Monitoring and Management [C.3.3.3.2.2]	177
2.3.4.4	Ongoing Disaster Recovery Preparedness [C.3.3.3.1.1, C.3.3.3.2.4].....	178
2.3.4.5	Summary	181
2.3.5	Customer Support [L.34.2.3.5], [C.3.4.1]	183
2.3.5.1	Overview.....	183
2.3.5.2	Government Customer Support Capabilities	185

2.3.5.3	Customer Interface Capabilities.....	193
2.3.6	Trouble and Complaint Handling [L.34.2.3.6], [C.3.4.2].....	198
2.3.6.1	Overview.....	198
2.3.6.2	Trouble and Complaint Handling [L.34.2.3.6]	199
2.3.6.3	Trouble and Complaint Handling Capabilities [L.34.2.3.6]. [C.3.4.2.2.1], [C.3.4.2.2.3].....	205
2.3.6.4	Escalation Procedures [C.3.4.2.2.4]	210
2.3.7	Business Relationship Management [L.34.2.3.7], [C.3.4.3]	214
2.3.8	Service Optimization [L.34.2.3.8].....	227
2.3.9	Service Ordering [L.34.2.3.9], [C3.5.1.2.1], [C.3.5.1.2.1.3], [C.3.5.1.2.2], [C.3.5.1.2.2.1], [C.3.5.1.2.2.5], [C.3.5.1.2.2.6], [J12]	235
2.3.9.1	Data Dictionary Package [L.34.2.3.9.1] [C.3.5.1.2.1.1].....	261
2.3.9.2	Provisioning Intervals [L.34.2.3.9.2] [C.3.5.1.2.2.6]	266
2.3.9.3	Information Exchange [L.34.2.3.9.3] [C.3.5.1.2.2] [C.3.5.1.2.2.1] [C.3.5.1.2.5] [C.3.5.1.2.6]	272
2.3.10	Billing [L.34.2.3.10, C.3.6].....	288
2.3.10.1	Data Dictionary Package [L.34.2.3.10.1, C.3.6.1.2.2, C.3.6.1.2.3, C.3.6.1.2.6, C.3.6.1.2.7, C.3.6.2.2.2, C.3.6.2.2.3, C.3.6.2.2.8, C.3.6.3.2.2, C.3.6.3.2.8].....	306
2.3.10.2	Information Exchange [L.34.2.3.10.2].....	318
2.3.11	Training [L.34.2.3.11], [C.3.7.2.1], [C.3.7.2.2], [C.3.7.2.3], [C.3.7.2.5].....	330
2.3.11.1	Courses Offered [L.34.2.3.11.1], [C.3.7.2.1]	337
2.3.11.2	Training Delivery Methods [L.34.2.3.11.2]	339



2.3.11.3 Training Administration [L.34.2.3.11.3], [C.3.7.2.2],
[C.3.7.2.3], [C.3.7.2.5]..... 342

2.3.12 Inventory Management [L.34.2.3.12] 349

2.3.12.1 Update Process [L.34.2.3.12.1] 350

2.3.12.2 Query Tools [L.34.2.3.12.2] 354

2.3.12.3 Interfaces [L.34.2.3.12.3] 357

2.3.12.4 Discrepancy Resolution [L.34.2.3.12.4] 365

2.3.12.5 Summary 373

2.3.13 Operational Support Systems [L.34.2.3.13], [C.3.9.2.2]..... 376

2.3.13.1 Verification Testing [L.34.2.3.13.1], [E.2], [E.2.1], [E.2.2] ... 402

2.3.13.2 Security and Performance [L.34.2.3.13.2, C.3.9.2.1]..... 410

2.3.13.3 Change Control [L.34.2.3.13.3], [C.3.9.2.3] 425

2.4 Transition [L.34.2.4]..... 432

2.4.1 Planning and Management [L.34.2.4.1, C.4.2.1, C.4.2.2,
C.4.2.3, C.4.2.4] 444

2.4.1.1 Initiate Transition Planning [C.4.2.1]..... 454

2.4.1.2 Create Transition Management Plan (TMP) [C.4.2.2]..... 456

2.4.1.3 Create Agency-Level Transition Plan (ALTP) [C.4.2.3]..... 459

2.4.1.4 Create Transition Project Specific Plans (TPSP) [C.4.2.4] . 462

2.4.2 Transition Cutover [L.34.2.4.2, C.4.2.6, C.4.2.7, C.4.2.8].... 464

2.4.2.1 Process Transition Orders [C.4.2.6]..... 470

2.4.2.2 Notify GSA and Agency of Transition Activities [C.4.2.7].... 473

2.4.2.3 Execute Transition [C.4.2.8] 477

2.4.3 Transition Inventory [L.34.2.4.3, C.4.2.5]..... 483

2.4.3.1 Create Transition Inventory [C.4.2.5]..... 486

2.4.4 Communication and Reporting [L.34.2.4.4, C.4.2.9]..... 489

2.4.4.1 Report on Transition Planning and Execution [C.4.2.9] 492



Appendices

A	Program Management Plan
B	Contractor Policies and Procedures
C	Security Plan for Networx
D	Networx Disaster Recovery Plan
E	Draft Training Plan
F	Operational Support Systems (OSS) Verification Test Plan
G	AT&T Labs OneProcessSM Operational Support Systems (OSS) Change Management Plan
H	Project Plan – Preliminary Transition Management Plan (PTMP)
I	AT&T Government Systems Planning and Development User Guide Networx Inventory Management
J	Overall Networx Program Monthly Status Report (Format)
K	AT&T Networx Monthly Financial Summary Status Report (Format)
L	Agency-Specific Networx SLA Compliance Report (Format)
M	Service Ordering Data Dictionary
N	Billing Data Dictionary
O	Key Personnel Resumes
P	Key Personnel, Easy Reference Contact Chart
Q	Marketing Materials
R	AT&T BusinessDirect [®] Application Roadmap
S	Subcontractors' Organization, Flow of Authority and Areas of Networx Responsibility
T	SLA Methodology by Service

MANAGEMENT VOLUME

LIST OF FIGURES

Figure 2.3-1: Networx Program Integration.....	6
Figure 2.3-2: Overview of CPO and CSO functions.....	7
Figure 2.3-3: All of the resources of AT&T can be applied to Networx.	11
Figure 2.3-4: AT&T’s Concept of One.....	16
Figure 2.3-5: AT&T’s Experience.....	24
Figure 2.3-6: Customized Solution Development Process.....	26
Figure 2.3.1.1-1: AT&T’s Networx Program.....	30
Figure 2.3.1.1-2: Networx Communication.	32
Figure 2.3.1.2-1: CPO at the Center of All Coordination & Communication..	33
Figure 2.3.1.2-2: AT&T’s Networx Program Focus Areas.....	34
Figure 2.3.1.2-3: AT&T’s Contractor’s Program Organization and Customer Support Office.....	35
Figure 2.3.1.2-4: The AT&T Networx Team.....	41
Figure 2.3.1.4-1: AT&T Corporate Structure.....	48
Figure 2.3.1.4-2: Subcontractor Relationship Structure.....	49
Figure 2.3.1.5-1: Policies and Procedures.....	55
Figure 2.3.1.10-1: Networx Master Project Plan.....	65
Figure 2.3.1.11-1 Networx Contract Responsibilities.....	67
Figure 2.3.2-1: Network Management System Architecture.	71
Figure 2.3.2-2: Network Management: Reliability + Performance.....	73
Figure 2.3.2-3: AT&T Global Network Operations Center (GNOC).....	74
Figure 2.3.2-4 Network Maintenance Workcenter Structure and Functions..	75
Figure 2.3.2-5 GNOC Morning Report.....	76
Figure 2.3.2-6: Global Fraud Management System.....	79
Figure 2.3.2-7: AT&T Business Direct Map Networx Customer Interface.....	84



Figure 2.3.2-8 [REDACTED] Architecture..... 88

Figure 2.3.2-9 Network Layer 1, 2, and 3 Cross Domain Fault
Correlation Architecture. 90

Figure 2.3.2-10: Networkx Help Desk Trouble Ticket Management. 92

Figure 2.3.2-11 [REDACTED] Architecture. 95

Figure 2.3.2-12: Conceptual Architecture for the AGMEMS Platform..... 98

Figure 2.3.3.1-1: AT&T’s Networkx Security Plan..... 105

Figure 2.3.3.1-2: AT&T’s Continuous analysis process. 107

Figure 2.3.3.1-3: The Security Manager within AT&T’s CPO..... 110

Figure 2.3.3.2-1: AT&T Provides Various Custom Solutions. 116

Figure 2.3.3.2-2: Defense Strategies of IP Networks..... 123

Figure 2.3.3.3-1: AT&T’s “Concept of One” Approach to Support
Systems Development. 129

Figure 2.3.3.3-2: Concept of [REDACTED]..... 130

Figure 2.3.3.6-1: AT&T Global Network Operations Center
Security Command..... 147

Figure 2.3.4.1-1: AT&T Network Survivability Protocol. 167

Figure 2.3.4.2-1: The Three Pillars of AT&T Service Continuity. 172

Figure 2.3.4.2-2: AT&T’s Response to World Trade Center Disaster. 174

Figure 2.3.4.2-3: AT&T’s NDR Trailers on site at the
World Trade Center Disaster. 175

Figure 2.3.4.3-1: AT&T Global Network Operations Center (GNOC)..... 177

Figure: 2.3.4.4-1: Shifting Paradigms that Achieve Zero
Application Downtime..... 178

Figure 2.3.5.1-1: Company Ranking for Online Customer Care. 184

Figure 2.3.5.1-2 Customer Support Office 185

Figure 2.3.5.2-1. Customer Support Organization 187



Figure 2.3.5.2-2: Worldwide Customer Service Organization –
Customer Care Centers of Excellence Value..... 188

Figure 2.3.5.2-3 Business Direct Offers a Variety of Tools
at Your Fingertips..... 190

Figure 2.3.5.2-4: AT&T Full Service Technical Support Group..... 191

Figure 2.3.5.2-5: People and Process. 192

Figure 2.3.6.2-1: Trouble and Complaint Handling Process. 200

Figure 2.3.6.2-2: Networx Customer Support Organization. 202

Figure 2.3.6.2-3: AT&T Global Network Operations Center (GNOC)..... 203

Figure 2.3.6.2-4: Business Direct Map Capabilities. 204

Figure 2.3.6.2-5: The Networx Subscriber [REDACTED] Portal. 205

Figure 2.3.6.3-1: AT&T **Business**Direct e-Maintenance Trouble Report.... 207

Figure 2.3.6.3-2: Business Direct e-Enabled Visibility and Control. 208

Figure 2.3.6.3-3: Trouble Ticket Summary Report..... 210

Figure 2.3.6.4-1: Networx Help Desk Trouble Ticket Management. 212a

Figure 2.3.7-1: Networx Pertinent Information. 215

Figure 2.3.7-2: Web Marketing Association Award. 217

Figure 2.3.7-3: Access Networx Subscriber Website..... 222

Figure 2.3.7-4: AT&T’s Business Direct Personalized Access..... 223

Figure 2.3.7-5: Network Subscriber Website Links. 225

Figure 2.3.8-1: Business Direct Map Capabilities 228

Figure 2.3.8-2: Process to Compile Agencies Optimized Solutions. 231

Figure 2.3.8-3: Networx Subscriber Site. 232

Figure 2.3.9-1: Welcome Screen. 238

Figure 2.3.9-2: Government eOrder Tool..... 239

Figure 2.3.9-3: Screen for Accessing All eOrdering Tools. 242

Figure 2.3.9-4: Secure, Web-based Portal. 248a

Figure 2.3.9-5: Acknowledgement and Confirmation Notices. 256



Figure 2.3.9-6: Government’s Networkx Security Requirements. 257

Figure 2.3.9.2-1: TSP Categories. 268

Figure 2.3.10-1: Simplifying the Process. 290

Figure 2.3.10-2: A single platform for Government users. 291

Figure 2.3.10-3: AT&T **BusinessDirect** Information Flow..... 293

Figure 2.3.10-4: Billing Data. 296

Figure 2.3.10-5: Two Types of Billing Arrangements..... 296

Figure 2.3.10-6: Standardized Direct Billing Process..... 297

Figure 2.3.10-7: Standardized Centralized Billing Process..... 298

Figure 2.3.10-8: Hierarchical Billing Flexibility. 299

Figure 2.3.10-9: Input Screen. 300

Figure 2.3.10-10: Hierarchy Manage Output. 300

Figure 2.3.10-11: Shared Tenant Arrangements. 302

Figure 2.3.10-12: Shared Tenant Billing Process. 303

Figure 2.3.10-13: Allocation Method..... 303

Figure 2.3.10.1-1: Sample Networkx Invoice..... 315

Figure 2.3.10.2-1: Sample Bill Inquiry Screen..... 319a

Figure 2.3.10.2-2: Secure Access to View Government Bill. 320

Figure 2.3.10.2-3: Dispute File Handling. 327

Figure 2.3.11-1: Continuous Improvement. 335

Figure 2.3.11.2-1: Flexible Solution for All Training. 340

Figure 2.3.11.2-2: GSA and Agencies have Access to Multiple
Course Delivery. 342

Figure 2.3.12-1: AT&T’s **BusinessDirect** Web-based Access
to Inventory Management Functions..... 350

Figure 2.3.12.1-1: AT&T’s Networkx Inventory Database Update Process. . 351

Figure 2.3.12.2-1: Inventory Management Report..... 355

Figure 2.3.12.2-2: Example of Typical Networkx Inventory History Report... 356

Figure 2.3.12.3-1: Government User’s Web-based Access through
AT&T **BusinessDirect**..... 358

Figure 2.3.12.3-2: AT&T’s Secure Networx Web Page..... 359

Figure 2.3.12.3-3: AT&T’s **BusinessDirect** Networx Inventory
Application Screen. 365

Figure 2.3.12.4-1: Networx Inventory Discrepancy Handling
Process Flowchart. 367

Figure 2.3.12.4-2: Create Discrepancy Resolution Screen..... 368

Figure 2.3.12.4-3: AT&T’s Networx Inventory Database Audit Process..... 372

Figure 2.3.13-1: AT&T **BusinessDirect** Sets New Standards. 377

Figure 2.3.13-2: AT&T’s Concept of One Philosophy. 379

Figure 2.3.13-3: Gated Controls Enable Complete and
Accurate Development..... 380

Figure 2.3.13-4: Welcome Screen. 389

Figure 2.3.13-5: Network Management System Architecture..... 390

Figure 2.3.13-6: Network and Inventory Viewed Through AT&T
BusinessDirect Map..... 391

Figure 2.3.13-7: Inventory Management Made Easy..... 393

Figure 2.3.13-8: Networx Orders Update ██████████
Management Database. 394

Figure 2.3.13-9: Leading the Way with Integrated Networx OSS..... 397

Figure 2.3.13-10: Accuracy Demonstrated through OSS
Verification Testing..... 399

Figure 2.3.13.1-1: Networx OSS Data Passes Through Interfaces to
Demonstrate OSS Operations. 404

Figure 2.3.13.1-2: Networx Services Verification Test Demonstrates
KPIs/AQLs. 407

Figure 2.3.13.1-3: Networkx Test Cases Demonstrate OSS
for the Government. 410

Figure 2.3.13.2-1: Security Management Controls Protect
GSA and Agencies..... 413

Figure 2.3.13.2-2: All Points OSS Security. 414

Figure 2.3.13.2-3: OSS Protected By People and Processes..... 414

Figure 2.3.13.2-4: OSS Protected by Systems. 417

Figure 2.3.13.2-5: Data Integrity Provided through
Concept of One Approach..... 423

Figure 2.3.13.2-6: Security Plan is the Key for Safeguards. 425

Figure 2.3.13.3-1: Disciplined Change Control Provides
Coordination with the Government..... 427

Figure 2.3.13.3-2: Various Means of Notification for OSS Changes..... 429

Figure 2.4-1: Strong Transition Bridge Supports Agencies..... 434

Figure 2.4-2: Four Transition Areas. 439

Figure 2.4-3: AT&T **Business**Direct Portal..... 443

Figure 2.4.1-1: TIMO Organization Focuses on All Aspects
of Agency Transitions..... 445

Figure 2.4.1-2: Escalation Resolution Team..... 448

Figure 2.4.1-3: Networkx CPO Infrastructure..... 449

Figure 2.4.1-4: Transition Bridge. 452

Figure 2.4.1.1-1: Up-front Planning Provides for Transition Success. 454

Figure 2.4.1.2-1: A Comprehensive TMP Equals a Seamless
Transition Experience. 456

Figure 2.4.1.2-2: TMP Development Process..... 457

Figure 2.4.1.3-1: ALTP. 459

Figure 2.4.1.3-2: ALTP Development Process..... 460

Figure 2.4.1.4-1: TPSP. 462



Figure 2.4.1.4-2: TPSP Development Process. 463

Figure 2.4.2.1-1: Process Transition Orders. 470

Figure 2.4.2.2-1: Up-To-Date Status on Transition Activities. 473

Figure 2.4.2.3-1: Seamless Execution of Transitions Resulting
from Thorough Planning..... 477

Figure 2.4.3.1-1: Accurate Inventory is Key to Successful Transition
and Future Activities..... 486

Figure 2.4.4-1: Effective Tools Allow for Effective Communications. 489



MANAGEMENT VOLUME

LIST OF TABLES

Table 2.0-1: GSA Networkx Goals.....	1
Table 2.3-1: AT&T's Networkx Program Focus Areas.....	11a
Table 2.3-2: The AT&T Networkx Team.....	14
Table 2.3-3: AT&T BusinessDirect Benefits.....	18
Table 2.3-4: AT&T Process and Procedure Infrastructure.....	20
Table 2.3-5: The World's Networking Company Working for Networkx.....	20
Table 2.3-6 Management and Operations Support.....	28
Table 2.3-7: AT&T's Networkx Features and Benefits.....	28
Table 2.3.1.2-1 Agency Focus Teams.....	39
Table 2.3.1.2-2 CPO Business Management Assignments.....	40
Table 2.3.1.2-3: CPO Capability and Authority.....	42
Table 2.3.1.3-1: Networkx PMP Summary.....	44
Table 2.3.1.4-1: Key Personnel.....	46
Table 2.3.1.4-2: Activity Coordination with Subcontractors.....	50
Table 2.3.1.4-3: Corporate Resources Available to Support the Networkx Contract.....	52
Table 2.3.1.4-4: Internal Escalation Contacts for Networkx.....	53
Table 2.3.1.4-5: Escalation Contacts for Networkx.....	54
Table 2.3.1.6-1: Subcontracting Approach.....	57
Table 2.3.1.6-2: Small Business Partner Sample.....	58
Table 2.3.1.7-1: SLA Manager Responsibilities.....	59
Table 2.3.1.7-2: SLA Metrics.....	61
Table 2.3.1.7-3: SLA Deviations.....	62
Table 2.3.1.7-4: Action Plan to Deliver SLA Compliance.....	63
Table 2.3.1.7-5: SLA Reporting Process.....	64



Table 2.3.1.12-1: Stipulated Deviations. 68

Table 2.3.1.13-1: Features and Benefits of AT&T’s Networx Program. 69

Table 2.3.2-1: Network Management System Architecture Components. 71

Table 2.3.2-2: iGEMS People, Process, and Tools..... 77

Table 2.3.2-3: AT&T Carrier Grade Security Capabilities. 79

Table 2.3.2-4: Cingular Fraud Management. 80

Table 2.3.2-5: Equipment Validation and Verification (V&V) Tests. 81

Table 2.3.2-6: Scheduled Maintenance. 82

Table 2.3.2-7: Service Affecting Faults and Fault Information. 91

Table 2.3.2-8: Service Outage Restoration Times and Percentages. 91

Table 2.3.2-9: AT&T Response Notifications. 93

Table 2.3.2-10: Contractor Driven and Government Driven Trouble Ticket
Escalation Procedures. 93

Table 2.3.2-11: Service-Specific Reports Available. 96a

Table 2.3.2-12: Overarching Network Management Capabilities
and Methodologies..... 100

Table 2.3.2-13: Strong Partner for GSA..... 101

Table 2.3.3.1-1: Operational and Technical Control Areas Addressed
in the Networx Security Plan. 111

Table 2.3.3.1-2: AT&T’s Security Awareness Training Requirements. 112

Table 2.3.3.2-1: AT&T’s Security Controls and Procedures. 114

Table 2.3.3.2-2: AT&T Custom Government Security Service Solutions. ... 118

Table 2.3.3.2-3: AT&T’s NDR Preparatory Steps in NSSE Planning. 120

Table 2.3.3.2-4: Five Phases of System Life Cycle. 121

Table 2.3.3.3-1: AT&T Security Practices vs. NIST SP 800-14. 127

Table 2.3.3.3-2: Proprietary Technologies Protecting
AT&T’s Infrastructure. 134

Table 2.3.3.4-1: AT&T’s Logical Access Management. 138



Table 2.3.3.4-2: AT&T’s Security Measures Protecting
 Network Infrastructure..... 140

Table 2.3.3.4-3: AT&T’s Procedures for Securing Network Elements. 144

Table 2.3.3.7-1: AT&T’s Multi-tiered Approach to Securing
 Networkx Facilities..... 149

Table 2.3.3.8-1: Securing Non-Domestic Network Nodes. 153

Table 2.3.3.10-1: AT&T IP Network Fraud and Abuse
 Center Responsibilities. 158

Table 2.3.3.10-2: Cingular’s Fraud and Abuse Protection Program..... 158

Table 2.3.3.10-3: AT&T Fraud Prevention Controls..... 159

Table 2.3.3.11-1: Features and Benefits of AT&T Security
 Management Solutions. 163

Table 2.3.4-1: Features and Benefits of Incomparable
 Disaster Recovery..... 165

Table 2.3.4.4-1: Recent Examples of AT&T’s Disaster
 Recovery Responses..... 179

Table 2.3.4.4-2: DR Drills Instill Readiness..... 180

Table 2.3.5.1-1: Features and Benefits..... 183

Table 2.3.5.1-2 Networkx CSO Responsibilities..... 184

Table 2.3.5.2-1: Customer Support Team. 187

Table 2.3.5.3-1: AT&T CSO Team Responds Quickly to All
 Means of Communications..... 194

Table 2.3.6-1: Features and Benefits..... 199

Table 2.3.6.3-1: Trouble/Complaint Handling Priorities by Service Type.... 206

Table 2.3.6.3-2: Typical Time Savings of Electronically Submitted
 Trouble Reports. 208

Table 2.3.6.4-1: External Escalation Contacts for Networkx..... 211

Table 2.3.6.4-2: Internal Escalation Contacts for Networkx..... 207a



Table 2.3.7-1: Features and Benefits..... 216

Table 2.3.7-2: User ID Elements Received from GSA or Agencies. 224

Table 2.3.7-3: Networx Website Links. 226

Table 2.3.8-1: Features and Benefits of AT&T's Service Optimization 229

Table 2.3.8-2: Service Optimization Scenarios..... 230

Table 2.3.9-1: Service Ordering Philosophy. 235

Table 2.3.9-2: AT&T **BusinessDirect** Features. 238

Table 2.3.9-3: Submit and Track Orders..... 241

Table 2.3.9-4: Provisioning and Maintenance Workcenters..... 244

Table 2.3.9-5 Service Order Workflow..... 246

Table 2.3.9-6: e-Order Benefits to the GSA..... 247

Table 2.3.9-7: Networx Records and Documentation Compliance 260a

Table 2.3.9-8: SOCN Listing Each CLIN and All Data Elements. 261

Table 2.3.9.1-1: UBI Definitions..... 263a

Table 2.3.9.2-1: Networx Service Order Intervals..... 267

Table 2.3.9.2-2: ASM Team Functions. 269

Table 2.3.9.2-3: SMD Capabilities. 270

Table 2.3.9.3-1: Notice Subject Line..... 273

Table 2.3.9.3-2: Ordering Data Elements. 275

Table 2.3.9.3-3: Order Receipt Acknowledgement. 275

Table 2.3.9.3-4: Sample Service Order Receipt Acknowledgement. 276

Table 2.3.9.3-5: Order Rejection Notice. 276

Table 2.3.9.3-6: Networx Order Business Rule Requirements. 277

Table 2.3.9.3-7: Sample Order Rejection Notice. 277

Table 2.3.9.3-8: Service Order Confirmation Data Elements..... 278

Table 2.3.9.3-9: Sample of SOC..... 279

Table 2.3.9.3-10: Firm Order Commitment Notice Data Elements..... 281

Table 2.3.9.3-11: Sample of Firm Order Commitment Notice..... 282



Table 2.3.9.3-12: Service Order Completion Notice Data Elements. 284

Table 2.3.9.3-13: Sample SOCN. 285

Table 2.3.9.3-14: Service Ordering Features and Benefits. 287

Table 2.3.10-1: AT&T **BusinessDirect** Gateway. 292

Table 2.3.10-2: Industry Recognition for AT&T **BusinessDirect**. 294

Table 2.3.10-3: ■■■ Features and Benefits Support GSA Accounts. 295

Table 2.3.10-4: Shared Tenant Methodologies. 302

Table 2.3.10-5: ■■■ Team Activities. 305

Table 2.3.10.1-1: Delivery of Data Dictionary Package for Billing. 307

Table 2.3.10.1-2: UBI Definitions. 309

Table 2.3.10.1-3: Billing Data Dictionary Sample Mapping. 310

Table 2.3.10.1-4: Field Characteristics. 311

Table 2.3.10.1-5: Translating billing codes. 312

Table 2.3.10.1-6: Low-Level Billing Details. 317

Table 2.3.10.1-7: Low-Level Billing. 318

Table 2.3.10.2-1: Billing Dispute Submittal Methods. 321

Table 2.3.10.2-2: Billing Dispute Data Elements. 322a

Table 2.3.10.2-3: Agency Adjustment File Data Elements. 324

Table 2.3.10.2-4: Differentiating adjustments from disputes. 325

Table 2.3.10.2-5: Dispute Receipt Acknowledgements File
Data Elements. 326

Table 2.3.11-1: A Reliable Training Program Exceeding
Government Requirements. 331

Table 2.3.11-2: Why Tech 2000? 332

Table 2.3.11-3: Employee eCampus. 333

Table 2.3.11-4: Excellent Marks for FTS2001 Crossover Training. 334

Table 2.3.11-5: Training Design, Development, and Delivery. 336

Table 2.3.11.2-1: Optimal Delivery Methods. 339



Table 2.3.11.2-2: Training Flexibility..... 341

Table 2.3.12.1-1: SOCN Data Elements..... 353

Table 2.3.12.2-1: Report Delivery Media and Transport Options..... 357

Table 2.3.12.4-1: Inventory Management System Monthly Report..... 373

Table 2.3.12.5-1: Inventory Management Features and Benefits..... 375

Table 2.3.13-1: AT&T **BusinessDirect** Provides Automated
OSS Functions..... 378

Table 2.3.13-2: Automated OSS Handle Daily Operations..... 378

Table 2.3.13-3: ISB Features and Benefits Support GSA Accounts..... 381

Table 2.3.13-4: Ordering Made Easy with AT&T **BusinessDirect**..... 383

Table 2.3.13-5: Agencies Have Control over Access and Permissions..... 383

Table 2.3.13-6: Ordering Made Easy..... 384

Table 2.3.13-7 Service Management System Architecture Components.... 390

Table 2.3.13-8: AT&T **BusinessDirect** Applications..... 398

Table 2.3.13-9: Worldwide Security Organizations Provide
Foundation for Agency Protections..... 400

Table 2.3.13-10: Appendix References..... 402

Table 2.3.13.1-1: Data and Interfaces Reflect Networx OSS..... 406

Table 2.3.13.1-2: Appendix References..... 406a

Table 2.3.13.2-1: Proactive Management Controls Aim for
Decreased Risk..... 413

Table 2.3.13.2-2: OSS Security Operational Controls..... 416

Table 2.3.13.2-3: Technical Controls Used to Protect Systems..... 417

Table 2.3.13.2-4: Appendix Reference..... 418

Table 2.3.13.2-5: Critical Access Controls Protect GSA and Agencies..... 421

Table 2.4-1: Transition Approach Objectives..... 432

Table 2.4-2: Features and Benefits of a Smooth Transition..... 436

Table 2.4-3: Top Networx Transition Risks..... 441



Table 2.4-4: Networkx Communication Matrix Outlines Who,
What, Where, When and How..... 444

Table 2.4.1-1: TIMO Organization Roles & Responsibilities: 447

Table 2.4.1-2: The Key Personnel Chart. 450

Table 2.4.1-3: Group Interaction..... 453

Table 2.4.1.3-1: ALTP Elements..... 461

Table 2.4.2-1: Communication is the Key. 465

Table 2.4.2-2: Logistical Support Sampling. 466

Table 2.4.2-3: Advantages and Disadvantages of Parallel Operations..... 467

Table 2.4.2-4: Top Networkx Cutover Risks. 469

Table 2.4.2.1-1: Agency Data Provided to Contractors..... 470

Table 2.4.2.1-2: Switched Access steps. 473

Table 2.4.2.2-1: Transition Action Notices. 476