

WINTERGREEN RESEARCH, INC.

**Top Ten Telecommunications and Communications Market  
Opportunities, Strategies, and Forecasts, 2006 to 2012**

---

**Top Ten Telecommunications and Communications**

---



*Picture by Susie Eustis*

**MOUNTAINS OF OPPORTUNITY**

**WinterGreen Research, Inc.  
Lexington, Massachusetts**

[www.wintergreenresearch.com](http://www.wintergreenresearch.com)

---

**REPORT # SH29821477    430 PAGES    160 TABLES AND FIGURES    2006    \$2,800**

**CHECK OUT THESE KEY TOPICS**

TOP TEN TELECOMMUNICATIONS EQUIPMENT PROVIDER  
MARKET FORECASTS

TELECOMMUNICATION MARKET INDEX 2000 TO 2004  
Increasing Average Revenue Per User

Wireless Networks

Impact of Competition  
Market Growth Dynamics

MULTIMEDIA MARKETS

WEB SERVICES

MARKET MAKERS

MARKETING GLOBALLY

INTERNET TRAFFIC

IP TELEPHONY SERVICE SOLUTIONS

STRATEGIES TO IMPROVE PERFORMANCE

DEMAND FOR TOTAL SOLUTIONS

CUSTOMER FINANCING ARRANGEMENTS

CONVERGED VOICE AND DATA NETWORKS

***OPPORTUNITY ABOUNDS***

**WinterGreen Research, Inc.**

**Lexington, Massachusetts**

[www.wintergreenresearch.com](http://www.wintergreenresearch.com)

## **Top Ten Telecommunications and Communications Market Opportunities, Strategies, and Forecasts, 2006 to 2012**

The top ten telecommunications markets have shifted to become communications markets. This is the result of convergence of voice and data networks to digital transport of voice, video, and data signals on the same network. Transport over existing TDM infrastructure is being replaced with transport over IP infrastructure.

Service providers are actively moving towards IP-based next-generation networks. They need to protect their existing investment while upgrading to Internet protocol systems. The trunk gateway technology coupled with local technical support helps establish a stable NGN test bed, which is the first step toward a migration of traffic to IP based systems.

Network service needs relate to connectivity and bandwidth. Requirements are changing at a rate that is difficult to satisfy within budget constraints using traditional services. Consumer market for broadband leverage combined voice, video, gaming, voice over IP (VoIP), and entertainment signal transport.

Wireless networks are evolving increasing sophistication. WiMAX promises to be adopted by every community as a combined emergency and Internet access technology. There is a 1.8 billion wireless handset user community in 2005 that promises to grow to 3.8 billion users by 2012. Enterprises have a range of private networks. Each of the 11,000 mainframes in the world has a private network to support it.

A primary contributor to the paradigm of connectivity and bandwidth is the fact that the distribution of the work force in many business sectors has evolved to a point where most people work from remote locations much of the time. Redistribution has occurred to locate staff closer to customers, manufacture products closer to suppliers, and streamline the supply chain with just in time inventory control systems. Remote workers are sales people, services people, and general business workers.

50 percent of an enterprise's work force works away from the main office. Networks based on traffic flowing from a branch office to headquarters are no longer sufficient. Communication needs of the business relate to the ability to

**communicate with the remote sites and people working in remote locations including from home.**

**In health care applications the network may be required to support telemedicine and medical imaging from the clinic to the specialists.**

**In the redistribution of the work force, the services industries need to support sales and services consultants working at as many as ten different sites every day.**

**Applications used by enterprise are evolving. Enterprises across all sectors rely on collaborative tools.**

**Electronic messaging and electronic meetings are used to conduct daily business from any location. Applications focus on enterprise resource planning (ERP), customer relationship management (CRM) and supply chain management (SCM). These are critical to the running of the business, and must be accessible and perform equally well from all locations.**

#### **Network Service Solutions**

**Network services solutions match requirements in terms of making the workforce more productive by automating processes and providing access to information in a timelier manner. Network service solutions accommodate changing bandwidth requirements due to growth. The enterprise has a need to support ad-hoc, one-time events.**

**Networks need to implement cost effective point-to-point, hub-and-spoke and any-to-any topologies to match end point profiles of the enterprise.**

**Systems need to be flexible enough to allow evolution from one topology to another as the needs of the enterprise change. Service guarantees are being implemented for applications that are essential to the running of the business. Best effort is not an option. Service level guarantees offered could either be rigid and applied equally across all applications or flexible to provide tight coupling to enterprise application requirements.**

**Real time video and voice applications are sensitive to congestion. Congestion causes lower priority applications to disrupt higher priority or real time applications.**

**Offering service level guarantees is a step forward in satisfying enterprise needs. Metro Ethernet deployments or other best-effort services are being replaced by service level agreements (SLAs).**

**Supporting multiple service levels puts more levers of control in the hands of the service provider-enterprise partnership, enabling a more efficient use of the network while ensuring performance and priority levels appropriate to each application's requirements and business priorities.**

To ensure that the network service continues to satisfy requirements enterprises with a single service level are considering the emerging need for multiple service levels. The network service will evolve to continue increasing the bandwidth of their service as requirements grow. High speed services with a single service level can be achieved,

Worldwide telecommunications and communications equipment market forecasts, shipments in dollars analysis indicate strong growth in very large existing markets. Markets at \$267.2 billion in 2005 are anticipated to reach \$628.2 billion by 2012.

## Companies Profiled

### Market Leaders

Nokia  
Motorola  
Siemens

### Market Participants

Alcatel  
Cisco Systems  
Fujitsu  
Intel  
NEC  
Samsung

Avaya  
Ericsson  
Huawei Technologies  
Lucent Technologies  
Nortel  
UT Starcom

## **Top Ten Telecommunications and Communications Strategies and Forecasts, 2006- 2012**

### **REPORT METHODOLOGY**

THIS IS THE *TWO-HUNDRED AND THIRTY-SIXTH* REPORT IN A SERIES OF MARKET RESEARCH REPORTS THAT PROVIDE FORECASTS IN COMMUNICATIONS, TELECOMMUNICATIONS, THE INTERNET, COMPUTER, SOFTWARE, TELEPHONE EQUIPMENT, HEALTH EQUIPMENT, AND ENERGY. THE PROJECT LEADERS TAKE DIRECT RESPONSIBILITY FOR WRITING AND PREPARING EACH REPORT. THEY HAVE SIGNIFICANT EXPERIENCE PREPARING INDUSTRY STUDIES. FORECASTS ARE BASED ON PRIMARY RESEARCH AND PROPRIETARY DATA BASES. FORECASTS REFLECT ANALYSIS OF THE MARKET TRENDS IN THE SEGMENT AND RELATED SEGMENTS. UNIT AND DOLLAR SHIPMENTS ARE ANALYZED THROUGH CONSIDERATION OF DOLLAR VOLUME OF EACH MARKET PARTICIPATION IN THE SEGMENT. INSTALLED BASE ANALYSIS AND UNIT ANALYSIS IS BASED ON INTERVIEWS AND AN INFORMATION SEARCH. MARKET SHARE ANALYSIS INCLUDES CONVERSATIONS WITH KEY CUSTOMERS OF PRODUCTS, INDUSTRY SEGMENT LEADERS, MARKETING DIRECTORS, DISTRIBUTORS, LEADING MARKET PARTICIPANTS, OPINION LEADERS, AND COMPANIES SEEKING TO DEVELOP MEASURABLE MARKET SHARE. OVER 200 IN DEPTH INTERVIEWS ARE CONDUCTED FOR EACH REPORT WITH A BROAD RANGE OF KEY PARTICIPANTS AND INDUSTRY LEADERS IN THE MARKET SEGMENT. WE ESTABLISH ACCURATE MARKET FORECASTS BASED ON ECONOMIC AND MARKET CONDITIONS AS A BASE. USE INPUT/OUTPUT RATIOS, FLOW CHARTS, AND OTHER ECONOMIC METHODS TO QUANTIFY DATA. USE IN-HOUSE ANALYSTS WHO MEET STRINGENT QUALITY STANDARDS. INTERVIEWING KEY INDUSTRY PARTICIPANTS, EXPERTS AND END-USERS. OUR RESEARCH INCLUDES ACCESS TO LARGE PROPRIETARY DATABASES. LITERATURE SEARCH INCLUDES ANALYSIS OF TRADE PUBLICATIONS, GOVERNMENT REPORTS, AND CORPORATE LITERATURE.

# YOU MUST HAVE THIS STUDY

## Top Ten Telecommunications and Communications Market Opportunities, Strategies, and Forecasts, 2006 to 2012

### Table of Contents

TOP TEN TELECOMMUNICATIONS EXECUTIVE SUMMARY	1
Network Service Needs	1
Network Service Solutions	3
Enterprise Network Services Market Description	4
Top Ten Telecommunications Equipment Provider Market Shares	5
Worldwide Telecommunications and Communications Equipment Market Forecasts, Shipments	9
1. TOP TEN TELECOMMUNICATIONS AND COMMUNICATIONS MARKET DESCRIPTION AND MARKET DYNAMICS	1
1.1 Network Service Needs	1
1.1.1 Network Service Solutions	3
1.1.2 Enterprise Network Services Market Description	4
1.1.3 Converged Voice, Data, And Video Using Internet Protocol (IP) Standards Technologies: IP Telephony	5
1.1.4 Broadband Voice Next Generation Network (NGN)	6
1.1.5 Value-Added Services	6
1.1.6 Voice Over IP (VoIP) Service Providers	7
1.1.7 Web GUI	7
1.1.8 Charging Micro Payments	7
1.2 Increasing Average Revenue Per User (ARPU)	8
1.2.1 Improved Quality Of Service	8
1.2.2 Reduced Capital And Operational Costs	9
1.2.3 Enhanced Operability	10
1.3 Impact of Competition	11
1.4 Market Growth Dynamics	13
1.5 Converged Voice And Data Networks	16
1.6 Wireless Networks	16
1.6.1 New Generation Of Wireless Systems	21
1.6.2 Provides Flexibility	21
1.6.3 User Experience	22
1.6.4 Protects Investments	22
1.6.5 Increases Efficiency	22
1.6.6 Integrated Management Tools	24
1.6.7 Cost-Effective Capacity And Coverage	25
1.7 Multimedia Markets	25
1.8 IP Telephony Service Solutions	27
1.9 Web Services	27
1.10 Strategies To Improve Performance	29
1.11 Customer Financing Arrangements	31

1.12	Market Makers	32
1.13	Demand For Total Solutions	37
1.14	Marketing Globally	38
1.15	Internet Traffic	40
1.16	Multi-Protocol Telecommunications Systems	41
<b>2.</b>	<b>TOP TEN TELECOMMUNICATIONS COMPANY MARKET SHARES AND MARKETS FORECASTS</b>	<b>1</b>
2.1	Top Ten Telecommunications Company Market Driving Forces	1
2.2	Top 10 Telecommunications Provider Shipments	4
2.3	Top Ten Telecommunications and Communications Equipment Segment Analysis	10
2.4	Worldwide Telecommunications and Communications Equipment Market Forecasts, Shipments	15
2.4.1	Top Ten Telecommunications Equipment Provider Market Forecasts	18
2.5	Top Ten Telecommunications Equipment Provider Market Shares	20
2.5.1	Top Ten Telecommunications Equipment Provider Fixed Public Equipment Market Shares	24
2.5.2	Top Ten Telecommunications Equipment Provider Multimedia Equipment Market Shares	26
2.5.3	Top Ten Telecommunications Enterprise Equipment Market Shares	28
2.5.4	Top Ten Telecommunications Wireless Infrastructure Equipment Market Shares	30
2.5.5	Top Ten Telecommunications Wireless Handset Market Shares	32
2.6	Top Ten Telecommunications Provider Equipment Market Shares	34
2.6.1	Nokia	34
2.6.2	Motorola	36
2.6.3	Siemens	38
2.6.4	Alcatel	40
2.6.5	NEC	42
2.6.6	Ericsson	44
2.6.7	Nortel	46
2.6.8	Cisco	48
2.6.9	Lucent	50
2.6.10	Fujitsu	52
2.6.11	Huawei	54
2.6.12	Avaya	56
2.7	Top Ten Telecommunications Provider Equipment Regional Market Shares	59
2.7.1	Nokia	59
2.7.2	Motorola	61
2.7.3	Siemens	63
2.7.4	Alcatel	65
2.7.5	NEC	67
2.7.6	Ericsson	69
2.7.7	Nortel	71
2.7.8	Cisco	73
2.7.9	Lucent	75
2.7.10	Fujitsu	77
2.7.11	Huawei	79
2.7.12	Avaya	81
<b>3.</b>	<b>TOP TEN TELECOMMUNICATIONS AND COMMUNICATIONS PRODUCT DESCRIPTION</b>	<b>1</b>
3.1	Alcatel / Lucent	1
3.1.1	Alcatel 9 series	1
3.1.2	Alcatel e-Reflexes IP Phones	1
3.1.3	Alcatel IP Touch Series 8 Phones	2
3.1.4	Alcatel Mobile IP Touch	3
3.1.5	Alcatel Mobile Reflexes Phones	4
3.1.6	Alcatel Reflexes Phones	4
3.1.7	Alcatel UMTS Radio Network	4
3.1.8	Alcatel Evolium 9100 Multistandard Base Station	7
3.1.9	Alcatel 2842 WebTouch Easy Plug'n Surf Internet Station	8

3.1.10	Alcatel Audience Corded Telephones	8
3.1.11	Alcatel Biloba 250 CTO Cordless Phone with Numeric Screen	8
3.1.12	Alcatel Home and Office Telephony	9
3.1.13	Alcatel One Touch First DECT Cordless Phone	9
3.1.14	Alcatel Temporis Corded Telephones	10
3.1.15	Alcatel 3630 MainStreet Primary Rate Multiplexer	11
3.1.16	Alcatel OmniPCX Enterprise	12
3.1.17	Alcatel 5020 Call Session Controller	14
3.1.18	Alcatel 5023 Remote Tunneling Gateway	15
3.1.19	Alcatel Mobile Phones	16
3.1.20	Lucent's Mobility Access Solutions	16
3.1.21	Lucent's Applications Solutions	17
3.1.22	Lucent's Multimedia Network Solutions	18
3.1.23	Lucent's Converged Core Solutions	19
3.1.24	Lucent's CBX 3500 Multiservice Edge Switch	20
3.1.25	Lucent's UMTS/W-CDMA Solutions	23
3.1.26	Lucent Compact Switch	23
3.1.27	Lucent's Multiservice MPLS Solution	24
3.1.28	Lucent MPLS Virtual Private Networks	25
<b>3.2</b>	<b>Avaya DEFINITY Servers</b>	<b>26</b>
3.2.1	Avaya Communication Manager	28
3.2.2	Avaya S8710 Media Server	29
3.2.3	Avaya TDM/IP Telephony	30
3.2.4	Avaya MultiVantage™ Applications Everywhere	30
3.2.5	Avaya Phone Application Suite	30
<b>3.3</b>	<b>Cisco Products</b>	<b>31</b>
3.3.1	Cisco WiFi	31
3.3.2	Cisco Wireless Mesh Technologies	32
3.3.3	Cisco Airport WLAN in Hong Kong	33
3.3.4	Cisco 1000 Series Lightweight Access Point	34
3.3.5	The Cisco 4100 Series Wireless LAN Controllers	35
3.3.6	Cisco Aironet 1500 Series	35
3.3.7	Cisco Aironet 1400 Series Wireless Bridge	36
3.3.8	Cisco Wireless LAN Security Solution for Large Enterprise	37
3.3.9	Cisco Aironet Wireless LAN Client Adapters	38
3.3.10	Cisco Metropolitan Mobile Networks	39
<b>3.4</b>	<b>Ericsson</b>	<b>41</b>
3.4.1	Ericsson Mobile Core	42
3.4.2	Ericsson Circuit Core	42
3.4.3	Ericsson Packet Core	43
3.4.4	Ericsson IP Multimedia	45
3.4.5	Ericsson Cables and Interconnect Products	45
3.4.6	Ericsson Wireline	46
3.4.7	Ericsson Radio Access Network	48
3.4.8	Ericsson GSM (Global System for Mobile Communications)	48
3.4.9	Ericsson EDGE (Enhanced Data rates for Global Evolution)	48
3.4.10	Ericsson WCDMA (Wideband Code Division Multiple Access)	49
3.4.11	Ericsson Unlicensed Mobile Access/Generic Access Network	49
3.4.12	Ericsson WiMAX	50
3.4.13	Ericsson Network Management Products	50
3.4.14	Ericsson Broadband Networks OSS	50
3.4.15	Ericsson CDMA2000 OSS	53
3.4.16	Ericsson Mobile OSS	54
3.4.17	Ericsson Wireline OSS	54
<b>3.5</b>	<b>Fujitsu</b>	<b>55</b>
3.5.1	Fujitsu 3G	55
3.5.2	Fujitsu FRX Series	56
3.5.3	Fujitsu FACTR	58
3.5.4	Fujitsu FBX-Access	58

3.5.5	Fujitsu FDX DSL	59
3.5.6	Fujitsu FLASHWAVE 4010	59
3.5.7	Fujitsu FLASHWAVE 4100	59
3.5.8	Fujitsu FLASHWAVE 4300	60
3.5.9	Fujitsu FLM 600 ADM	60
3.5.10	Fujitsu FLX 150A	61
3.5.11	Fujitsu FLX 150T	61
3.5.12	Fujitsu FLX 600A	61
3.5.13	Fujitsu FSX 2000	61
3.5.14	Fujitsu SPEEDPORT	62
3.5.15	Fujitsu FLASHWAVE 4500	62
3.5.16	Fujitsu FLASHWAVE 7100	62
3.5.17	Fujitsu FLASHWAVE 7120	63
3.5.18	Fujitsu FLASHWAVE 7500	63
3.5.19	Fujitsu FLASHWAVE 7410	63
3.5.20	Fujitsu FLASHWAVE 5150	64
3.5.21	Fujitsu FLASHWAVE 7420	64
3.5.22	Fujitsu FLASHWAVE 4560	64
3.5.23	Fujitsu FLASHWAVE 7200	65
3.5.24	Fujitsu FLASHWAVE 7300	65
3.5.25	Fujitsu FLASHWAVE 7600	65
3.5.26	Fujitsu FLASHWAVE 7700	66
3.5.27	Fujitsu FETEX-150 E-CUBE	66
<b>3.6</b>	<b>Huawei UMTS/WCDMA</b>	<b>67</b>
3.6.1	Huawei CDMA2000	68
3.6.2	Huawei GSM Products	69
3.6.3	Huawei Mobile Core Network	70
3.6.4	Wireless Network Plan Products	73
3.6.5	Next Generation Networks Products	74
3.6.6	Huawei Switching Network Solutions and Products	75
3.6.7	Huawei Optical Network Products	76
3.6.8	Huawei Handset Products	77
<b>3.7</b>	<b>Intel's Cellular Processors</b>	<b>77</b>
3.7.1	Intel Handset Solutions	78
3.7.2	Intel Telecom Integrated Platforms	79
3.7.3	Intel WiMAX Broadband Wireless Technology Access	80
3.7.4	Intel PRO/Wireless 5116 Broadband Interface	80
3.7.5	Nokia / Intel together create WiMAX Broadband Wireless Technology	82
3.7.6	Intel Ethernet Switching	82
3.7.7	Intel StrataFlash Wireless Memory (L18/L30)	83
3.7.8	Intel Wireless Flash Memory (W18/W30)	83
3.7.9	Intel PRO/Wireless Network Connection	84
3.7.10	Intel Multi-Hop Mesh Networks	85
<b>3.8</b>	<b>Motorola</b>	<b>86</b>
3.8.1	Motorola Handsets	86
3.8.2	Motorola V3 Handset	86
3.8.3	Motorola MPx220 Handset	87
3.8.4	CDMA Network Solutions	88
3.8.5	Motorola Internet Protocol - Base Station Controller (IP-BSC)	90
3.8.6	Motorola Mobile Broadband Solution GSM Network Equipment	91
3.8.7	Motorola GSM Solutions	92
<b>3.9</b>	<b>NEC</b>	<b>93</b>
3.9.1	NEC W-CDMA Node B	94
3.9.2	NEC W-CDMA RNC	94
3.9.3	NEC Radio Network Controller RNCi	94
3.9.4	NEC Packet Core Node	95
3.9.5	NEC Radio Transport System	96
3.9.6	NEC Fixed Point-to-Point Wireless Access System	96
3.9.7	NEC PASOLINK NEO	97

3.9.8	NEC PASOLINK and NEC PASOLINK+	97
3.9.9	NEC PASOLINK Mx	97
3.9.10	NEC's NLite	97
3.9.11	NEC's Mobile Internet System	98
3.9.12	NEC NEAX IPSDM	98
3.9.13	NEC NEAX 2000 IPS	99
3.9.14	NEC NEAX 2400 Internet Protocol eXchange	100
<b>3.10</b>	<b>Nokia Siemens</b>	<b>101</b>
3.10.1	Nokia Products	101
3.10.2	Nokia Mobile Phones	101
3.10.3	Nokia Multimedia	103
3.10.4	Nokia Enterprise Solutions	105
3.10.5	Nokia Networks	107
3.10.6	Siemens	108
3.10.7	Siemens SURPASS Softswitch	109
3.10.8	Next-Generation Networks	110
3.10.9	Siemens Hicom 300 H	110
3.10.10	Siemens HiPath 4000	111
3.1.10	Siemens HiPath 5000	111
3.10.11	Siemens HiPath 8000	112
3.10.12	Siemens HiPath Wireless	112
<b>3.11</b>	<b>Nortel's Communication Products</b>	<b>113</b>
3.11.1	Nortel Voice over IP (VoIP), Voice & Multimedia	113
3.11.2	Nortel Local VoIP Solution	113
3.11.3	Nortel Long Distance VoIP Solution	114
3.11.4	Nortel Wireless VoIP Solution	114
3.11.5	Nortel Wireless VoIP Solutions	115
3.11.6	Nortel Multimedia Communications	115
3.11.7	Nortel TDM Voice	115
3.11.8	Nortel Broadband	116
3.11.9	Nortel Broadband Access	117
3.11.10	Nortel Metro Ethernet Services Unit 1850	118
3.11.11	Nortel Metro Ethernet Routing Switch 8600	119
3.11.12	Nortel Wireless Mesh Network	120
3.11.13	Nortel Wireless LAN	121
3.11.14	Nortel Enterprise Systems	122
3.11.15	Nortel Meridian 1 Option 81C	123
3.11.16	Nortel Meridian SL-100	124
3.11.17	Nortel Succession 3.0	125
<b>3.12</b>	<b>Samsung WCDMA FLEXELL</b>	<b>125</b>
3.12.1	Samsung Spot BTS	126
3.12.2	Samsung Standard BTS (V.5)	126
3.12.3	Samsung Standard BTS (V.4)	126
3.12.4	Samsung BSC(Base Station Controller)	127
3.12.5	Samsung Compact Node B	127
3.12.6	Samsung Slim BTS	128
3.12.7	Samsung Mini BTS	128
3.12.8	Samsung Pico BTS	128
3.12.9	Samsung RNC (Radio Network Controller)	129
3.12.10	Samsung RAS(Radio Access Station)	129
3.12.11	Samsung ACR(Access Control Router)	129
3.12.12	Samsung Softswitch SSX5000	130
3.12.13	Samsung MSC Server	130
3.12.14	Samsung MGW (Media Gateway)	130
3.12.15	Samsung GSN system (GGSN & SGSN)	131
3.12.16	Samsung MSC (Mobile Switching Center)	132
3.12.17	Samsung WIN (Wireless Intelligent Network)	132
3.12.18	Samsung HLR (Home Location Register)	132
3.12.19	Samsung PDSN(Packet Data Serving Node)	133

3.12.20	Samsung HA (Home Agent)	133
3.12.21	Samsung AN-AAA	134
3.12.22	Samsung AAA	134
3.12.23	Samsung DLR (Data Location Register)	134
3.13	UTStarcom iAN-8000 Multi-Service Access Node (MSAN)	135
3.13.1	UTStarcom IP-DSLAM	135
3.13.2	UTStarcomAN-2000 B100	136
3.13.3	UTStarcom AN-2000 B820	136
3.13.4	UTStarcom AN-2000 B1000 Advantage	136
3.13.5	UTStarcom Gigabit Ethernet Passive Optical Network	137
3.13.6	UTStarcom BBS 1000 / ONU 101	137
3.13.7	UTStarcom ATA(iAN-02EX)	138
3.13.8	UTStarcom iAN-08E-Series VoIP (SIP/MGCP) IAD	138
3.13.9	UTStarcom USB Bus-Powered (UT-300U)	140
3.13.10	UTStarcom ADSL 2/2+ Router/Bridge (UT-300R2)	141
3.13.11	UTStarcom ADSL 4 Ethernet port Router (UT-304R)	141
3.13.12	UTStarcom Multiport ADSL 2/2+ Router/Bridge (UT-304R2)	141
3.13.13	UTStarcom Multimode ADSL Modem (UT-300RA)	142
3.13.14	UTStarcom Wireless ADSL Modem/Router (WA3002-G4)	142
3.13.15	UTStarcom Handsets	142
3.13.16	UTStarcom MovingMedia 2000 (CDMA/CDMA2000)	143
3.13.17	UTStarcom RF	143
3.13.18	UTStarcom iCell Pico IP RAN	144
3.13.19	UTStarcom iCell Macro IP 1X and EVDO RAN	144
3.13.20	UTStarcom iCell Soft Base Station Controller (sBSC)	144
3.13.21	UTStarcom Core Voice Network	145
3.13.22	UTStarcom Intelligent Media Gateway (IMG)	145
3.13.23	UTStarcom Mobile Switching Center (MSC Server)	145
3.13.24	UTStarcom Signaling Gateway (SGW)	146
3.13.25	UTStarcom MovingMedia 6000 (TD-CDMA)	146
3.13.26	UTStarcom mSwitch Products	146
3.13.27	UTStarcom Call Server Pro (CS-P)	147
3.13.28	UTStarcom Trunk Gateway (TG)	147
3.13.29	UTStarcom Signaling Gateway (SG)	147
3.13.30	UTStarcom Business Operation Support System (mBOSS)	148
3.13.31	UTStarcom Subscriber Location Register Server (SLR)	148
3.13.32	UTStarcom Interactive IPTV - RollingStream	148
3.13.33	UTStarcom NetRing 600	149
3.13.34	UTStarcom NetRing 2500	149
3.13.35	UTStarcom NetRing 10000-I	149
3.13.36	UTStarcom Total Control 1000 Solutions	150

**4. SELECTED TOP TEN TELECOMMUNICATIONS AND COMMUNICATIONS COMPANY**

<b>ORGANIZATION AND STRATEGY</b>	<b>1</b>
4.1 Alcatel-Lucent	1
4.1.1 Company Management	4
4.1.2 Alcatel and Lucent Joint Integration Team	4
4.2 Avaya Operating Segments	5
4.3 Cisco's Employees	10
4.3.1 Cisco's Strategy	11
4.4 Ericsson's Strategy	12
4.5 Fujitsu's Strategy	14
4.6 Huawei's Strategy	15
4.7 Intel's Strategy	15
4.7.1 Intel's Operating Segments	16
4.8 Motorola's Strategy	20
4.9 NEC's Operating Segments	22
4.10 Nokia Siemens Networks	23

4.10.1	Executive Team	23
4.10.2	Location	24
4.10.3	Financial Information	24
4.11	Nortel's Segments	25
4.11.1	Nortel's Strategy	26
4.12	UT Starcom's Strategy	27
<b>5. TOP TEN TELECOMMUNICATIONS AND COMMUNICATIONS COMPANY PROFILES</b>		<b>1</b>
5.1	<b>Alcatel / Lucent</b>	<b>1</b>
5.1.1	Alcatel	1
5.1.2	Alcatel's Acquisitions	2
5.1.3	Alcatel's Fixed Communications	3
5.1.4	Alcatel's Mobile Communications	4
5.1.5	Alcatel's Private Communications	5
5.1.6	Alcatel's Financial Data	6
5.1.7	Alcatel / NTELOS	7
5.1.8	Lucent	8
5.1.9	Lucent's Mobility Access Solutions	9
5.1.10	Lucent's Applications Solutions	10
5.1.11	Lucent's Multimedia Network Solutions	10
5.1.12	Lucent's Converged Core Solutions	11
5.1.13	Lucent / LightSpeed / Terremark	12
5.1.14	Lucent's Financial Data	12
5.2	<b>Avaya</b>	<b>13</b>
5.2.1	Global Communications Solutions Segment	15
5.2.2	Communication Systems	16
5.2.3	Avaya's Acquisitions	16
5.2.4	Strategic Alliances	17
5.2.5	Avaya Customer Interaction Suite	18
5.2.6	Unified Communication	19
5.2.7	Small and Medium Business Solutions.	19
5.2.8	Avaya one-X Deskphone Edition IP Phones	20
5.2.9	Avaya / Extreme Networks	21
5.2.10	Avaya's Financial Data	22
5.3	<b>Cisco</b>	<b>23</b>
5.3.1	Products	23
5.3.2	Routing	24
5.3.3	Switching	24
5.3.4	Enterprise IP Communications	24
5.3.5	Home Networking	24
5.3.6	Optical Networking	25
5.3.7	Security	25
5.3.8	Storage Area Networking	25
5.3.9	Wireless Technology	25
5.3.10	Access	25
5.3.11	Network Management Software	26
5.3.12	Acquisitions	26
5.3.13	Cisco's Partners	26
5.3.14	Cisco Acquires Metreos and Audium	27
5.3.15	Cisco / Fujitsu	27
5.3.16	Cisco / T-Systems	28
5.3.17	Cisco Financial Data	28
5.4	<b>Ericsson</b>	<b>30</b>
5.4.1	Mobile Networks	31
5.4.2	Fixed Networks	32
5.4.3	Phones	32
5.4.4	Ericsson Microwave Systems	33
5.4.5	Ericsson Enterprise	33
5.4.6	Ericsson Network Technologies	33

5.4.7	Ericsson Mobile Platforms	33
5.4.8	Ericsson Power Modules	34
5.4.9	Ericsson's Financial Data	34
5.4.10	Ericsson's Partners	36
5.4.11	Ericsson Acquires Marconi	36
5.4.12	Ericsson / Vodafone	37
5.4.13	Ericsson / Telenor	38
<b>5.5</b>	<b>Fujitsu</b>	<b>38</b>
5.5.1	Services	38
5.5.2	Products	39
5.5.3	Fujitsu 2005 Financial Results	40
<b>5.6</b>	<b>Huawei Technologies</b>	<b>41</b>
5.6.1	Huawei / Perfectum Mobile	42
5.6.2	Huawei / DIGITEL	42
5.6.3	Huawei / Vodafone	43
5.6.4	Huawei Financial Data	43
<b>5.7</b>	<b>Intel</b>	<b>43</b>
5.7.1	Products	44
5.7.2	Intel Capital and PIPEX Create Broadband Wireless Company In The UK	45
5.7.3	ESPN and Intel Team Up to Create New Product	46
5.7.4	Intel's 2006 First Quarter Results	47
<b>5.8</b>	<b>Motorola</b>	<b>48</b>
5.8.1	Customers	48
5.8.2	Products	49
5.8.3	Motorola/ TTP Communications	50
5.8.4	Motorola / Orthogon Systems	50
<b>5.9</b>	<b>NEC</b>	<b>51</b>
5.9.1	Partners	51
5.9.2	Products and Services	51
5.9.3	Solutions	52
5.9.4	NEC's World's Thinnest 2.5G Fold-type Camera-phone	52
5.9.5	NEC Corporation Signed Contract with the Telecommunications Company Dhiraggu	53
<b>5.10</b>	<b>Nokia Siemens</b>	<b>54</b>
5.10.1	Products	54
5.10.2	Nokia's First Quarter Financial Results 2006	57
5.10.3	Acquisitions and Mergers	57
5.10.4	Nokia / Siemens	58
5.10.5	Siemens	59
5.10.6	Siemens' Products	59
5.10.7	Siemens' Acquisitions	61
5.10.8	Siemens Financial Results Second Quarter 2006	61
<b>5.11</b>	<b>Nortel</b>	<b>63</b>
5.11.1	Products	63
5.11.2	Solutions	65
5.11.3	Nortel Creates New Technology For Telecom Networks	65
5.11.4	Nortel's Advanced Converged Network Contract With HOT Telecom	66
5.11.5	Nortel's First Quarter 2006 Results	67
<b>5.12</b>	<b>SAMSUNG CORPORATION</b>	<b>69</b>
5.12.1	Samsung Electronics	69
5.12.2	Samsung SDI	70
5.12.3	SAMSUNG ELECTRO-MECHANICS CO., LTD.	70
5.12.4	SAMSUNG SDS CO., LTD.	70
5.12.5	SAMSUNG NETWORKS INC.	70
5.12.6	SAMSUNG TECHWIN CO., LTD.	71
5.12.7	S1 CORPORATION	71
5.12.8	Samsung Advanced Institute Of Technology	71
5.12.9	Samsung's Financial Data	72
5.12.10	Samsung / Time Warner Cable	72
5.12.11	Telecom Italia / Samsung	72

<b>5.13</b>	<b>UTStarcom</b>	<b>73</b>
5.13.1	Partners	73
5.13.2	Solutions	74
5.13.3	Products	75
5.13.4	UTStarcom's World's First Plug-In Cellular Phone Module	76
5.13.5	UTStarcom's Expansion Contract to Supply NetRing Optical Transport Solution to Chunghwa Telecom in Taiwan	76
5.13.6	UTStarcom First Quarter 2006 Financial Results	77

## Tables and Figures

Figure ES-1	6
Top Ten Telecommunications and Communications Equipment Provider Market Shares, 2005	6
Table ES-2	7
Worldwide Top Ten Telecommunications and Communications Equipment Provider Shipments By Segment, Percent, 2005	7
Table ES-3	8
Worldwide Top Ten Telecommunications and Communications Equipment Provider Shipments By Segment, Dollars, 2005	8
Figure ES-4	9
Worldwide Telecommunications and Communications Wireless Handsets, Wireless Infrastructure, Wireline, and Enterprise Telecommunications Shipment Forecast By Segment, Dollars, 2006-2012	9

Table 1-2	14
Telecommunications Market Shifts	14
Table 1-3	16
Change In Telecommunications Equipment Markets	16
Table 1-4	17
Response To Change In Telecommunications Equipment Markets	17
Table 1-9	28
Key Benefits Of Multimedia Solutions	28
Table 1-11	35
Top Ten Telecommunication Providers As Market Makers	35
Table 1-12	36
Top Ten Telecommunications Equipment Provider Market Strategies	36
Table 1-13	37
Top Ten Telecommunications Equipment Provider Strategies To Adapt To Changing Markets	37
Table 1-14	40
Marketing Globally	40

Figure 2-2	5
Top 10 Telecommunications Provider Shipments, 2000-2005	5
Table 2-3	6
Top Ten Communications Equipment Provider Shipments and Services, 2000 to 2005	6
Figure 2-4	7
Indexed Sales of Selected Leading Telecommunications Equipment Suppliers, 1993-2005	7
Figure 2-5	9

<b>Indexed Sales of Selected Leading Telecommunications Equipment Suppliers, 2000-2005</b>	<b>9</b>
<b>Table 2-6</b>	<b>10</b>
<b>Selected communications Company shipments, 1993-2005</b>	<b>10</b>
<b>Figure 2-7</b>	<b>11</b>
<b>Worldwide Top Ten Telecommunications and Communications Equipment Company Market Segments, Shipments, Dollars, 2005</b>	<b>11</b>
<b>Figure 2-8</b>	<b>12</b>
<b>Worldwide Top Ten Telecommunications and Communications Wireless Equipment Company Market Segments, 2005</b>	<b>12</b>
<b>Figure 2-9</b>	<b>13</b>
<b>Worldwide Enterprise Telecommunications and Communications Equipment Market Segments, 2005</b>	<b>13</b>
<b>Figure 2-10</b>	<b>14</b>
<b>Worldwide Top Ten Telecommunications and Communications Equipment Company Service Provider Core Infrastructure, Access, and Transmission Shipments, Dollars, 2005</b>	<b>14</b>
<b>Table 2-11</b>	<b>15</b>
<b>Worldwide Telecommunications and Communications Wireless Handsets, Wireless Infrastructure, Internet, and Enterprise Telecommunications Shipment Forecast By Segment, Dollars, 2006-2012</b>	<b>15</b>
<b>Figure 2-12</b>	<b>16</b>
<b>Worldwide Telecommunications and Communications Wireless Handsets, Wireless Infrastructure, Wireline, and Enterprise Telecommunications Shipment Forecast By Segment, Dollars, 2006-2012</b>	<b>16</b>
<b>Table 2-13</b>	<b>17</b>
<b>Worldwide Telecommunications and Communications Wireless Handsets, Wireless Infrastructure, Internet, and Enterprise Telecommunications Shipment Forecast By Segment, Dollars, 2006-2012</b>	<b>17</b>
<b>Figure 2-14</b>	<b>19</b>
<b>Worldwide Telecommunications and Communications Wireless Handsets, Wireless Infrastructure, Wireline, and Enterprise Telecommunications Shipment Forecast By Segment, Dollars, 2006-2012</b>	<b>19</b>
<b>Table 2-15</b>	<b>20</b>
<b>Worldwide Telecommunications and Communications Wireless Handsets, Wireless Infrastructure, Internet, and Enterprise Telecommunications Shipment Forecast By Segment, Dollars, 2006-2012</b>	<b>20</b>
<b>Figure 2-16</b>	<b>21</b>
<b>Top Ten Telecommunications and Communications Equipment Provider Market Shares, 2005</b>	<b>21</b>
<b>Table 2-17</b>	<b>22</b>
<b>Worldwide Top Ten Telecommunications and Communications Equipment Provider Shipments By Segment, Percent, 2005</b>	<b>22</b>
<b>Table 2-18</b>	<b>23</b>
<b>Worldwide Top Ten Telecommunications and Communications Equipment Provider Shipments By Segment, Dollars, 2005</b>	<b>23</b>
<b>Figure 2-19</b>	<b>25</b>
<b>Worldwide Top Ten Telecommunications and Communications Equipment Provider Fixed Public Equipment Market Share, 2005</b>	<b>25</b>
<b>Figure 2-20</b>	<b>27</b>
<b>Worldwide Top Ten Telecommunications and Communications Equipment Provider Multimedia Equipment Market Share, 2005</b>	<b>27</b>
<b>Figure 2-21</b>	<b>29</b>
<b>Worldwide Top Ten Telecommunications and Communications Equipment Provider Enterprise Equipment Market Share, 2005</b>	<b>29</b>
<b>Figure 2-22</b>	<b>31</b>
<b>Worldwide Top Ten Telecommunications and Communications Equipment Provider 3G / 4G Wireless Infrastructure Market Share, 2005</b>	<b>31</b>
<b>Figure 2-23</b>	<b>33</b>
<b>Worldwide Top Ten Telecommunications and Communications Equipment Provider Wireless Handset Products Market Share, 2005</b>	<b>33</b>

<b>Figure 2-24</b>	<b>35</b>
<b>Nokia Top Ten Telecommunications and Communications Equipment Company Description, 2005</b>	
35	
<b>Table 2-25</b>	<b>36</b>
<b>Nokia Top Ten Telecommunications and Communications Equipment Company Description, 2005</b>	
36	
<b>Figure 2-26</b>	<b>37</b>
<b>Motorola Top Ten Telecommunications and Communications Equipment Company Description, 2005</b>	
37	
<b>Table 2-27</b>	<b>38</b>
<b>Motorola Top Ten Telecommunications and Communications Equipment Company Description, 2005</b>	
38	
<b>Figure 2-28</b>	<b>39</b>
<b>Siemens Top Ten Telecommunications and Communications Equipment Company Description, 2005</b>	
39	
<b>Table 2-29</b>	<b>40</b>
<b>Siemens Top Ten Telecommunications and Communications Equipment Company Description, 2005</b>	
40	
<b>Figure 2-30</b>	<b>41</b>
<b>Alcatel Top Ten Telecommunications and Communications Equipment Company Description, 2005</b>	
41	
<b>Table 2-31</b>	<b>42</b>
<b>Alcatel Top Ten Telecommunications and Communications Equipment Company Description, 2005</b>	
42	
<b>Figure 2-32</b>	<b>43</b>
<b>NEC Top Ten Telecommunications and Communications Equipment Company Description, 2005</b>	
43	
<b>Table 2-33</b>	<b>44</b>
<b>NEC Top Ten Telecommunications and Communications Equipment Company Description, 2005</b>	
44	
<b>Figure 2-34</b>	<b>45</b>
<b>Ericsson Top Ten Telecommunications and Communications Equipment Company Description, 2005</b>	
45	
<b>Table 2-35</b>	<b>46</b>
<b>Ericsson Top Ten Telecommunications and Communications Equipment Company Description, 2005</b>	
46	
<b>Figure 2-36</b>	<b>47</b>
<b>Nortel Top Ten Telecommunications and Communications Equipment Company Description, 2005</b>	
47	
<b>Table 2-37</b>	<b>48</b>
<b>Nortel Top Ten Telecommunications and Communications Equipment Company Description, 2005</b>	
48	
<b>Figure 2-38</b>	<b>49</b>
<b>Cisco Top Ten Telecommunications and Communications Equipment Company Description, 2005</b>	
49	
<b>Table 2-39</b>	<b>50</b>
<b>Cisco Top Ten Telecommunications and Communications Equipment Company Description, 2005</b>	
50	
<b>Figure 2-40</b>	<b>51</b>
<b>Lucent Top Ten Telecommunications and Communications Equipment Company Description, 2005</b>	
51	
<b>Table 2-41</b>	<b>52</b>
<b>Lucent Top Ten Telecommunications and Communications Equipment Company Description, 2005</b>	
52	
<b>Figure 2-42</b>	<b>53</b>
<b>Fujitsu Top Ten Telecommunications and Communications Equipment Company Description, 2005</b>	
53	

Table 2-43	54
Fujitsu Top Ten Telecommunications and Communications Equipment Company Description, 2005	54
Figure 2-44	55
Huawei Top Ten Telecommunications and Communications Equipment Company Description, 2005	55
Table 2-45	56
Huawei Top Ten Telecommunications and Communications Equipment Company Description, 2005	56
Figure 2-46	57
Avaya Top Ten Telecommunications and Communications Equipment Company Description, 2005	57
Table 2-47	58
Avaya Top Ten Telecommunications and Communications Equipment Company Description, 2005	58
Figure 2-48	60
Nokia Shipments By Region, Dollars, 2005	60
Table 2-49	61
Nokia Shipments By Region, Dollars, 2005	61
Figure 2-50	62
Motorola Shipments By Region, Dollars, 2005	62
Table 2-51	63
Motorola Shipments By Region, Dollars, 2005	63
Figure 2-52	64
Siemens Shipments By Region, Dollars, 2005	64
Table 2-53	65
Siemens Shipments By Region, Dollars, 2005	65
Figure 2-54	66
Alcatel Shipments By Region, Dollars, 2005	66
Table 2-55	67
Alcatel Shipments By Region, Dollars, 2005	67
Figure 2-56	68
NEC Shipments By Region, Dollars, 2005	68
Table 2-57	69
NEC Shipments By Region, Dollars, 2005	69
Figure 2-58	70
Ericsson Shipments By Region, Dollars, 2005	70
Table 2-59	71
Ericsson Shipments By Region, Dollars, 2005	71
Figure 2-60	72
Nortel Shipments By Region, Dollars, 2005	72
Table 2-61	73
Nortel Shipments By Region, Dollars, 2005	73
Figure 2-62	74
Cisco Shipments By Region, Dollars, 2005	74
Table 2-63	75
Cisco Shipments By Region, Dollars, 2005	75
Figure 2-64	76
Lucent Shipments By Region, Dollars, 2005	76
Table 2-65	77
Lucent Shipments By Region, Dollars, 2005	77
Figure 2-66	78
Fujitsu Shipments By Region, Dollars, 2005	78

<b>Table 2-67</b>	<b>79</b>
<b>Fujitsu Shipments By Region, Dollars, 2005</b>	<b>79</b>
<b>Figure 2-68</b>	<b>80</b>
<b>Huawei Shipments By Region, Dollars, 2005</b>	<b>80</b>
<b>Table 2-69</b>	<b>81</b>
<b>Huawei Shipments By Region, Dollars, 2005</b>	<b>81</b>
<b>Figure 2-70</b>	<b>82</b>
<b>Avaya Shipments By Region, Dollars, 2005</b>	<b>82</b>
<b>Table 2-71</b>	<b>83</b>
<b>Avaya Shipments By Region, Dollars, 2005</b>	<b>83</b>

<b>Table 3-1</b>	<b>3</b>
<b>Alcatel IP Phones Features and Benifits</b>	<b>3</b>
<b>Table 3-2</b>	<b>6</b>
<b>Benefits Of The Alcatel UMTS Radio Network</b>	<b>6</b>
<b>Table 3-3</b>	<b>7</b>
<b>Alcatel Evolium 9100 MBS's Key Benefits</b>	<b>7</b>
<b>Table 3-4</b>	<b>10</b>
<b>Alcatel One Touch First Phones Key Features</b>	<b>10</b>
<b>Table 3-5</b>	<b>13</b>
<b>Alcatel OmniPCX Enterprise Key Features and Benifits</b>	<b>13</b>
<b>Table 3-6</b>	<b>15</b>
<b>Alcatel 5020 CSC</b>	<b>15</b>
<b>Table 3-7</b>	<b>21</b>
<b>Lucent CBX 3500 Key Benefits</b>	<b>21</b>
<b>Table 3-8</b>	<b>22</b>
<b>Lucent CBX 3500 Key Features</b>	<b>22</b>
<b>Table 3-9</b>	<b>25</b>
<b>Lucent's Multiservice MPLS Solution Key Benefits</b>	<b>25</b>
<b>Table 3-10</b>	<b>27</b>
<b>Avaya DEFINITY Server Benefits</b>	<b>27</b>
<b>Table 3-11</b>	<b>29</b>
<b>Avaya S8710 Media Server Benefits</b>	<b>29</b>
<b>Table 3-12</b>	<b>31</b>
<b>Benefits of Avaya Phone Application Suite</b>	<b>31</b>
<b>Table 3-13</b>	<b>37</b>
<b>Cisco Aironet 1400 Wirelss Bridge Features</b>	<b>37</b>
<b>Table 3-14</b>	<b>43</b>
<b>Ericsson Circuit Core Products</b>	<b>43</b>
<b>Table 3-15</b>	<b>44</b>
<b>Ericsson Packet Core Products</b>	<b>44</b>
<b>Table 3-16</b>	<b>46</b>
<b>Ericsson Cable and Interconnect Products</b>	<b>46</b>
<b>Table 3-17</b>	<b>47</b>
<b>Ericsson Wireline Product Lines</b>	<b>47</b>
<b>Table 3-18</b>	<b>51</b>
<b>Ericsson ServiceOne Components</b>	<b>51</b>
<b>Table 3-19</b>	<b>52</b>
<b>Ericsson ServiceOn Network Management Levels</b>	<b>52</b>
<b>Table 3-20</b>	<b>53</b>
<b>Major benefits of Ericsson CDMA2000 Solution</b>	<b>53</b>

<b>Table 3-21</b>	<b>56</b>
<b>3G Applications</b>	<b>56</b>
<b>Table 3-22</b>	<b>70</b>
<b>Huawei GSM BTS Family</b>	<b>70</b>
<b>Table 3-23</b>	<b>72</b>
<b>Mobile Core Network Products</b>	<b>72</b>
<b>Table 3-24</b>	<b>77</b>
<b>Huawei Handset Product Lines</b>	<b>77</b>
<b>Table 3-25</b>	<b>79</b>
<b>Benefits of Intel Handheld Solutions</b>	<b>79</b>
<b>Table 3-26</b>	<b>81</b>
<b>Features of Intel Pro/Wireless 5116 Broadband Interface</b>	<b>81</b>
<b>Table 3-27</b>	<b>84</b>
<b>Features of Wireless Memory (W18/W30)</b>	<b>84</b>
<b>Table 3-28</b>	<b>87</b>
<b>Features of V3 Razr</b>	<b>87</b>
<b>Figure 3-29</b>	<b>89</b>
<b>Motorola's CDMA Solution</b>	<b>89</b>
<b>Figure 3-30</b>	<b>90</b>
<b>Base Station Controller in CDMA</b>	<b>90</b>
<b>Table 3-31</b>	<b>91</b>
<b>Broadband Network Equipment</b>	<b>91</b>
<b>Table 3-32</b>	<b>92</b>
<b>GSM Network Solutions Benefits</b>	<b>92</b>
<b>Table 3-33</b>	<b>95</b>
<b>NEC's RNCi's Key Features</b>	<b>95</b>
<b>Table 3-34</b>	<b>104</b>
<b>Nokia Multimedia Computers Products</b>	<b>104</b>
<b>Table 3-35</b>	<b>106</b>
<b>Nokia Enterprise Solutions Products</b>	<b>106</b>
<b>Table 3-36</b>	<b>117</b>
<b>Nortel Broadband Access Portfolio</b>	<b>117</b>
<b>Table 3-37</b>	<b>119</b>
<b>Nortel Metro Ethernet Services Unit 1850</b>	<b>119</b>
<b>Table 3-38</b>	<b>123</b>
<b>Communication Server 1000 Features</b>	<b>123</b>
<b>Table 3-39</b>	<b>124</b>
<b>Meridian 1 Option 81 C's Features</b>	<b>124</b>
<b>Table 3-40</b>	<b>139</b>
<b>UTStarcom iAN-08E Series Supplementary Features</b>	<b>139</b>
<b>Table 3-41</b>	<b>140</b>
<b>UTStarcom iAN-08E Series Data Features</b>	<b>140</b>
<b>Table 4-1</b>	<b>2</b>
<b>Alcatel and Lucent Next-Generation Network Areas</b>	<b>2</b>
<b>Figure 4-3</b>	<b>5</b>
<b>Avaya's Product Categories</b>	<b>5</b>
<b>Table 4-5</b>	<b>12</b>
<b>Cisco Systems' Business Model</b>	<b>12</b>
<b>Figure 4-6</b>	<b>13</b>
<b>Ericsson's Business Model</b>	<b>13</b>

<b>Table 4-7</b>	<b>14</b>
<b>Fujitsu's Business structure</b>	<b>14</b>
<b>Table 4-8</b>	<b>28</b>
<b>UT Starcom's Business Strategy</b>	<b>28</b>
<b>Table 5-1</b>	<b>6</b>
<b>Alcatel's Statement of Operations</b>	<b>6</b>
<b>Table 5-2</b>	<b>7</b>
<b>Alcatel's Segment Breakdown</b>	<b>7</b>
<b>Table 5-3</b>	<b>15</b>
<b>Avaya Product Segmentation by Percentage of Revenue</b>	<b>15</b>
<b>Table 5-4</b>	<b>16</b>
<b>Avaya's Communications offering</b>	<b>16</b>
<b>Table 5-5</b>	<b>19</b>
<b>Avaya's Products</b>	<b>19</b>
<b>Table 5-6</b>	<b>22</b>
<b>Avaya Statement of Operations Information</b>	<b>22</b>
<b>Table 5-7</b>	<b>30</b>
<b>Cisco Revenues</b>	<b>30</b>
<b>Table 5-8</b>	<b>30</b>
<b>Cisco Selected Financial Data</b>	<b>30</b>
<b>Table 5-9</b>	<b>34</b>
<b>Ericsson Income Statement in Billions of SEK</b>	<b>34</b>
<b>Table 5-10</b>	<b>37</b>
<b>Ericsson's Statement Of Operations</b>	<b>37</b>
<b>Table 5-11</b>	<b>39</b>
<b>Fujitsu's Products Categories</b>	<b>39</b>
<b>Table 5-12</b>	<b>41</b>
<b>Fujitsu Earnings Forecast for Fiscal 2006</b>	<b>41</b>
<b>Table 5-13</b>	<b>41</b>
<b>Fujitsu Statements of Operations</b>	<b>41</b>
<b>Table 5-14</b>	<b>43</b>
<b>Huawei's Statement Of Operations</b>	<b>43</b>
<b>Table 5-15</b>	<b>47</b>
<b>Intel's Total Annual Revenue for 2003-2005</b>	<b>47</b>
<b>Table 5-16</b>	<b>48</b>
<b>Intel's Quarterly Revenue</b>	<b>48</b>
<b>Table 5-17</b>	<b>62</b>
<b>Siemens' Sales</b>	<b>62</b>
<b>Table 5-18</b>	<b>64</b>
<b>Nortel's Product Categories</b>	<b>64</b>
<b>Table 5-19</b>	<b>68</b>
<b>Nortel Quarterly Revenue in Millions of Dollars</b>	<b>68</b>
<b>Table 5-20</b>	<b>68</b>
<b>Nortel Annual Revenue 2003-2005</b>	<b>68</b>
<b>Table 5-21</b>	<b>72</b>
<b>Samsung 2004 Financial Overview</b>	<b>72</b>
<b>Table 5-22</b>	<b>74</b>
<b>UTStarcom's Solutions</b>	

## **ABOUT THE COMPANY**

**WINTERGREEN RESEARCH**, HAS A UNIQUE RESEARCH STRATEGY THAT RELATES TO IDENTIFYING MARKET TRENDS THROUGH READING AND INTERVIEWING OPINION LEADERS. BY READING THE ELECTRONIC EQUIVALENT OF 40 FEET OF PAPER, WINTERGREEN RESEARCH SENIOR ANALYSTS CAN LEARN A LOT MORE ABOUT MARKETS, A LOT FASTER THAN CAN BE LEARNED THROUGH EXPENSIVE SURVEYS AND FOCUS GROUPS. THINKING ABOUT MARKET TRENDS IS A HIGH PRIORITY AT WINTERGREEN RESEARCH. AS WITH ALL RESEARCH, THE VALUE PROPOSITION FOR COMPETITIVE ANALYSIS COMES FROM INTELLECTUAL INPUT.

IT IS A LUXURY REALLY, AVAILABLE TO ONLY A VERY FEW PEOPLE, TO BE ABLE TO GATHER INFORMATION, LOTS OF INFORMATION FROM READING MASSIVE AMOUNTS OF CONTENT, AND THEN TRYING TO MAKE SENSE OF THAT CONTENT. THE ABILITY TO THINK ABOUT MARKET TRENDS IS ENHANCED BY DOING IT OVER AND OVER FOR MANY DIFFERENT MARKETS. THAT IS WHAT WINTERGREEN RESEARCH IS ALL ABOUT: READING AND THINKING IS AN ESSENTIAL ASPECT OF COMPETITIVE ANALYSIS. TALKING TO OPINION LEADERS IS THE THIRD ESSENTIAL ASPECT OF PRODUCING GOOD, RELIABLE DATA.

**WINTERGREEN RESEARCH**, FOUNDED IN 1985, PROVIDES STRATEGIC MARKET ASSESSMENTS IN TELECOMMUNICATIONS, COMMUNICATIONS EQUIPMENT, HEALTH CARE, INTERNET AND ADVANCED COMPUTER TECHNOLOGY. INDUSTRY REPORTS FOCUS ON OPPORTUNITIES THAT EXPAND EXISTING MARKETS OR DEVELOP MAJOR NEW MARKETS. THE REPORTS ASSESS NEW PRODUCT AND SERVICE POSITIONING STRATEGIES, NEW AND EVOLVING TECHNOLOGIES, AND TECHNOLOGICAL IMPACT ON PRODUCTS, SERVICES, AND MARKETS. MARKET SHARES ARE PROVIDED. LEADING MARKET PARTICIPANTS ARE PROFILED, AND THEIR MARKETING STRATEGIES, ACQUISITIONS, AND STRATEGIC ALLIANCES ARE DISCUSSED. THE PRINCIPALS OF WINTERGREEN RESEARCH HAVE BEEN INVOLVED IN ANALYSIS AND FORECASTING OF INTERNATIONAL BUSINESS OPPORTUNITIES IN TELECOMMUNICATIONS AND ADVANCED COMPUTER TECHNOLOGY MARKETS FOR OVER 30 YEARS.

**ABOUT THE PRINCIPAL AUTHORS**

**ELLEN T. CURTISS**, TECHNICAL DIRECTOR, CO-FOUNDER OF WINTERGREEN RESEARCH, CONDUCTS STRATEGIC AND MARKET ASSESSMENTS IN TECHNOLOGY-BASED INDUSTRIES. PREVIOUSLY SHE WAS A MEMBER OF THE STAFF OF ARTHUR D. LITTLE, INC., FOR 23 YEARS, MOST RECENTLY AS VICE PRESIDENT OF ARTHUR D. LITTLE DECISION RESOURCES, SPECIALIZING IN STRATEGIC PLANNING AND MARKET DEVELOPMENT SERVICES. SHE IS A GRADUATE OF BOSTON UNIVERSITY AND THE PROGRAM FOR MANAGEMENT DEVELOPMENT AT HARVARD GRADUATE SCHOOL OF BUSINESS ADMINISTRATION. SHE IS THE AUTHOR OF RECENT STUDIES ON WORLDWIDE TELECOMMUNICATIONS MARKETS, THE TOP TEN INTERNET EQUIPMENT COMPANIES, THE TOP TEN CONTRACT MANUFACTURING COMPANIES, AND THE TOP TEN TELECOMMUNICATIONS MARKET ANALYSIS AND FORECASTS.

**SUSAN EUSTIS**, PRESIDENT, CO-FOUNDER OF WINTERGREEN RESEARCH, HAS DONE RESEARCH IN COMMUNICATIONS AND COMPUTER MARKETS AND APPLICATIONS. SHE HOLDS SEVERAL PATENTS IN MICROCOMPUTING AND PARALLEL PROCESSING. SHE HAS THE ORIGINAL PATENTS IN ELECTRONIC VOTING MACHINES. SHE HAS NEW PATENT APPLICATIONS IN FORMAT VARYING, MULTIPROCESSING, AND ELECTRONIC VOTING. SHE IS THE AUTHOR OF RECENT STUDIES OF THE REGIONAL BELL OPERATING COMPANIES' MARKETING STRATEGIES, INTERNET EQUIPMENT, BIOMETRICS, A STUDY OF INTERNET EQUIPMENT, WORLDWIDE TELECOMMUNICATIONS EQUIPMENT, TOP TEN TELECOMMUNICATIONS, DIGITAL LOOP CARRIER, WEB HOSTING, WEB SERVICES, AND APPLICATION INTEGRATION MARKETS. MS. EUSTIS IS A GRADUATE OF BARNARD COLLEGE.

WINTERGREEN RESEARCH, INC.

ORDER FORM

Return To: WinterGreen Research, Inc.  
6 Raymond Street  
Lexington, MA 02421 USA  
Phone: (781) 863-5078 --- Fax: (781) 863-1235 or (781) 860-0897

PLEASE ENTER MY ORDER FOR:

**Top Ten Telecommunications and  
Communications Market Opportunities,  
Strategies, and Forecasts 2006-2012**

*-ALL REPORTS ARE AVAILABLE IN EITHER PRINT OR PDF-*

\_\_\_\_\_ *PDF* \_\_\_\_\_ *PRINT*

\_\_\_ ENCLOSED IS MY CHECK FOR \$2,800 FOR SINGLE COPY, \$3,800 FOR WEB SITE POSTING

\_\_\_ PLEASE BILL MY COMPANY USING P.O. NUMBER \_\_\_\_\_

\_\_\_ PLEASE CHARGE MY MASTERCARD/VISA/AMERICAN EXPRESS \_\_\_

CARD NUMBER \_\_\_\_\_ EXP. DATE \_\_\_\_\_

If charging to a Credit card you may e-mail the order form, but not the card information

Fax or Call with credit card information - Do not send card number as e-mail - You may send the order as e-mail

\_\_\_ ADDITIONAL COPIES, @ \$375 (EXTRA COPY PRICE IN EFFECT ONLY WITH INITIAL ORDER)

NAME \_\_\_\_\_ TITLE \_\_\_\_\_

SIGNATURE \_\_\_\_\_

COMPANY \_\_\_\_\_ DIVISION \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE / ZIP \_\_\_\_\_

TELEPHONE \_\_\_\_\_

FAX \_\_\_\_\_

EMAIL \_\_\_\_\_

*PLEASE NOTE:* RESIDENTS OF MASSACHUSETTS AND CONNECTICUT MUST INCLUDE APPROPRIATE SALES TAX

SUBSCRIBERS OUTSIDE THE UNITED STATES MUST PROVIDE PREPAYMENT IN U.S. FUNDS

REPORT # SH29821477 430 PAGES 160 TABLES AND FIGURES 2006 \$2,800