

# **Company/Industry Timeline**

# 2008

US telecom revenues to reach \$1.1 trillion in 2008

Google introduces the G Phone that runs on the Google-developed Android platform

- Telcordia wins Billing & OSS World 2008 Excellence Awards based on ability to power superior business performance and customer experience.
- Telcordia named top supplier at Northrop Grumman Excellence Awards.
- ATIS honors Telcordia for contributions to telecom industry advancement.
- Telcordia selected by DARPA to support U.S. Global Networking Infrastructure Initiative CORONET program created to dramatically increase performance and resilience of global IP and optical networks.
- Telcordia Pioneers self-healing battlefield networks for U.S.
- Telcordia develops provable security technology for emerging 100 Gb/s fiber optic networks.
- Nextel Mexico selects Telcordia for Number Portability.

# 2007

Apple introduces the iPhone

Total revenue for the U.S. telecommunications industry grew by around 8% to reach over \$1 trillion

- Telcordia names Mark Greenquist new President and CEO.
- Telcordia wins Leadership Award for outstanding real-time charging capabilities.
- OSS Observer ranks Telcordia #1 in Service Fulfillment for second consecutive year.
- Telcordia receives 2006 Stratecast Service Assurance Market Leader Award.
- Service Interconnection Community Honored for delivering exceptional IP communications solutions.
- Telcordia launches Service Interconnection Community Program to deliver on the promise of converged services.
- Telcordia launches Telcordia Service Management Suite, offering a key competitive differentiator that helps drive customer loyalty and increase service usage.
- Pakistan selects Telcordia for Mobile Number Portability.
- Cross Country and Telcordia to jointly deliver Next-Generation Telematics Service Network to automakers.

# 2006

Spending by businesses on wireless services accounted for over one-third of the corporate bill for telecommunication services in 2006

Worldwide telecom market reached \$3.9 trillion

- Frost & Sullivan Names Telcordia 2006 European Company of the Year analyst award acknowledges Telcordia as European market leader for innovation, delivery.
- Telcordia wins 2006 Northrop Grumman Supplier Excellence Award recognized for outstanding solutions delivery by defense lead.
- Telcordia executive appointed to Presidential Advisory.
- Telcordia turns Ford car into wireless communication center ground-breaking technology creates seamless communication between mobile phones, automobiles.
- Telcordia expands commitment to India market new India entity provides leading telecommunications software to local operators and demonstrates company's leadership in burgeoning region.

Spending in U.S.

telecommunications industry rises 8.9% in 2005 reaching \$856.9 billion

SBC merges with AT&T and adopts the AT&T logo

More than 2 billion mobile phone users worldwide

# 2004

Industry analysts predict that enterprises will spend more than \$17 billion per year on VoIP services worldwide, split between IP PBXs and Hosted IP Services, approximately \$12 billion of which will be in the U.S.

Spending in U.S. telecom industry rises 7.9% to \$784.5 billion in 2004

# 2003

Intel Corporation introduces Centrino<sup>™</sup> mobile technology

Total spending in the U.S. telecommunications industry rose 4.7 percent in 2003 to an estimated \$720.5 billion

Spending in the U.S. wireless market totaled \$134.5 billion in 2003, up 7.9 percent from 2002

- Telcordia broadens strategy to address carrier operation and services transformation.
- Telcordia advances IP calling services.
- Telcordia Converged Real-Time Charging Solution provides additional flexibility in pre- and post-paid wireless voice services; Underscores Telcordia's global leadership in wireless.
- Telcordia reveals new IMS Real-Time Charging capability Telcordia introduces diameter support for full IMS-compliant Online Charging System.
- Tata taps Telcordia Intelligent Network Evolution First major transformation deal in India inked.
- Telcordia awarded with a SUPERCOMM SUPERQuest Award for the Telcordia Service Management Gateway (SMG) software in support of Wireless Number Portability (WNP).
- SAIC sells Telcordia to Providence Equity and Warburg Pincus.
- Leading European mobile communications provider O2 Germany deploys Telcordia wireless software.
- Telcordia takes Elementive to new level. The company's go-to-market strategy, which is embodied in its open, flexible Elementive approach, helps to enable carriers to more rapidly and cost effectively create, activate, deliver and manage voice and high-bandwidth data services.
- Telcordia affirms OSS leadership with Granite acquisition The acquisition of Granite provides Telcordia with immediate market leadership in the critical next generation inventory management space and further advances its position in providing superior, standards-based technological OSS solutions to wireline and wireless carriers worldwide.
- Greece's EETT launches Telcordia Number Portability Clearinghouse Solution.
- Telcordia unveils new business model. The modularized Elementive Portfolio is the focal point of Telcordia's new customer-focused initiative, which includes open products, services and solutions as well as an expanded partnership strategy focused on further increasing service provider profitability.
- Greece's National Telecommunications and Post Commission, also known as EETT, selects Teleordia for number portability.
- Dr. W. David Sincoskie, Group Senior VP, Network Systems Research, received the 2003 Fred W. Ellersick Prize from the Institute of Electrical and Electronics Engineers (IEEE) Communications Society for Best Communications Magazine Paper of 2002.
- Telcordia and Jacobsrimell form alliance to deliver and deploy OSS solutions to the cable market. Telcordia selected as reseller and preferred integrator.
- Telcordia and Fujitsu Network Communications Inc., a leader in the optical telecommunications market, provide first available support of TMF 814. Service providers to benefit from successful interoperability of element and network management systems.
- Telcordia Technologies delivers MPLS Forum compatible LDP and RSVP-TE protocol conformance testing.
- Telcordia Technologies performed the first field demonstrations of dynamic, per-cell load shifting in response to near real-time traffic conditions for IS-95 CDMA and 1XRTT networks.

Global Crossing Ltd. files for Chapter 11 bankruptcy protection

WorldCom, Inc. files for Chapter 11 bankruptcy protection

- Telcordia launches Industry first: DSL Loop Qualification Testing Service for the ISP market.
- Telcordia Technologies receives R&D Magazine's 40th anniversary R&D 100 Award for the company's Asymmetric Hybrid Supercapacitor technology. Winners of this prestigious award are chosen each year by a panel of more than 70 industry experts. They identify the 100 most technologically significant products and processes introduced in the previous year. Telcordia Technologies is the recipient of 14 previous R&D Magazine top 100 awards.
- Telcordia Technologies appoints Matthew J. Desch as its new Chief Executive Officer.
- Telcordia Technologies forms alliance with Syspol Co. Ltd., a telecommunications company in Korea, to deliver softswitch capabilities to PT Telkom in Indonesia. The Telcordia Call Agent will be the first softswitch implemented in Indonesia.
- Telcordia Technologies delivers Managed IP Solution, the first offering for seamless end-to-end management of Internet Protocol (IP) networks and services.
- New York City Transit selects Telcordia<sup>™</sup> Network Engineer to support the management of the NYC Transit's communications network.
- Telcordia Technologies completed record-setting field demonstration of Multi-Input, Multi-Output (MIMO) array processing for high data rate tactical communications.

# 2001

Intel launches Pentium 4 Chip

3G launched in Japan. First commercial deployment of 3G services in Europe

Hewlett-Packard announces it will acquire Compaq in a \$25 billion deal

- Telcordia Technologies Network Configuration Manager awarded Infovision Award. Network Configuration Manager enables automated management of network, circuit, service and facility configurations.
- Swisscom Mobile selects Sicap ltd and Telcordia Technologies to provide enhanced CAMEL prepaid services. Sicap ltd and Telcordia Technologies to implement an advanced prepaid roaming solution that provides new and attractive services utilizing enhanced global system for mobile communications (GSM) functionality.
- Telcordia Softswitch becomes available with SIP (session initiation protocol) APIs (application programming interfaces) to enable carriers to deploy new services and applications. The Telcordia<sup>™</sup> Call Agent, a Class 5 softswitch, provides voice services over Internet Protocol (IP) and Asynchronous Transfer Mode (ATM) networks.
- Telcordia Technologies, Inc. awarded an Innovation Award from TMC Labs for the Telcordia<sup>™</sup> Call Agent, its CLASS 5 softswitch. TMC Labs Innovation Awards are granted to products that demonstrate raw innovation and uniqueness while significantly contributing to the telecommunications industry.
- Telcordia introduces Integrated Operations Infrastructure, an enabling software solutions platform for Operations Support Systems (OSS) designed to significantly improve operational efficiency and speed time to market.
- Telenor, Norway's largest telecommunications company, completes Phase 2 Carrier Preselection and Number Portability Requirements with Telcordia<sup>™</sup> ISCP<sup>®</sup> Platform.
- Telcordia Technologies, Inc. introduces the Telcordia<sup>™</sup> Standards Knowledgebase, a service combining web-based "knowledge navigation" and information delivery tools with live expert consulting.
- The Iowa Utilities Board, North Carolina Utilities Commission, California Public Utilities Commission and The Washington Utilities and Transportation Commission select Telcordia Technologies for Number Pooling Trial. Telcordia Technologies Center for Number Pooling Administration (TCNPA) to provide solutions for Mandatory State Trials.
- BellSouth selects Telcordia Technologies to provide Number Pooling Solutions. Telcordia Number Pooling Services to enhance BellSouth's operations environment and meet the FCC national standards addressing numbering resource optimization.
- Telcordia Technologies spins out Network Design Tools, Inc. to provide optical and wireless design software for next generation network simulation, modeling and economic forecasting.
- Telcordia Technologies selected by BellSouth to provide Service Control Point Functionality. BellSouth will use service for Toll-Free and Alternate Billing and other value-added services. With the BellSouth agreement, and others already executed this year, Telcordia will be processing more than 85 percent of the toll-free traffic and more than 80 percent of the ABS traffic in North America by December 2001.

- Swisscom chooses Telcordia to provide Automated Gateway for ordering. Telcordia deploys first OSS Interconnection Gateway in Europe.
- Telcordia acquires InterConnect Communications Ltd., a leading UK-based telecommunications consulting company, to augment its European consulting and engineering services.
- Telcordia Technologies names Harold C. Smith President and Chief Operating Officer.
- Telcordia and Sun Microsystems release JAIN<sup>™</sup> Call Control (JCC) Application Programming Interface (API) specification to the industry. As specification lead for the JCC Expert Group within the JAIN initiative, Telcordia played a key role in developing the JCC specification.
- Telcordia Launches End-to-End Next Generation Contact Center Solution, an IP-based, end-toend customer service center solution that provides real-time interactions with customers from virtually any device via virtually any network.
- Dutch service provider QS Communications Benelux BV selects Telcordia Technologies, Inc. to provide program management services for the rollout of a nationwide Symmetrical Digital Subscriber Line (SDSL) network in the Netherlands. QSC will be one of the first service providers to introduce SDSL services in the Netherlands.
- Telcordia Technologies co-developed, with OPNET, the most widely sold and most widely used UMTS digital event-driven simulation model in the world.

Internet hosts reach 100 million worldwide

Web size estimates surpass 1 billion indexable pages

Internet2 backbone network deploys IPv6

Intel begins shipping a 1 GHz processor

America Online (AOL) merges with Time Warner

By the end of the year, 7.1 million U.S. homes and businesses had high-speed Internet connections

## 1999

Intel launches Pentium III

- Telcordia delivers local number portability in Belgium for Belgium's Temporary Association for Number Portability (the Tijdelijke Vereniging voor Nummeroverdragbaarheid (TVN)), with a system comprising 11 Belgian national carriers.
- Telcordia introduces Number Pooling Solutions to support new FCC and state mandates to extend the availability of area codes and central office codes by allocating numbers to carriers in blocks of 1,000 rather than the traditional 10,000 number blocks.
- Telcordia and VeriSign launch global ENUM directory and open system trial based as part of the ENUM World Project. Based on the ENUM standard to establish the framework for a global numbering system, which can ultimately enable a people to use only one number to access all of their communication devices including cell phone, fax, phone, and e-mail.
- Telcordia<sup>™</sup> Service Level Manager is awarded the International Engineering Consortium's (IEC) InfoVision Award.
- BellSouth chooses Telcordia as preferred OSS solutions provider.
- Telcordia Technologies introduces Service Management Gateway For Wireless Number Portability enabling wireless providers to meet FCC mandate and port customers numbers more quickly.
- Telcordia and GE Information Services activate the telecom industry's first Internet-based interconnection clearinghouse to facilitate critical business transactions between telecom carriers and to facilitate national telecommunication interconnection.
- Telcordia introduces Telcordia<sup>™</sup> DSL Loop Qualification Service, offering an innovative webbased solution to help promote rapid and easy line qualification and registration services to accelerate DSL rollouts.
- Telcordia acquires systems integrator Mesa Solutions, Inc.
- Telcordia software development group achieves the highest level of software quality recognition Capability Maturity Model (CMM) Level 5, the largest organization to achieve this elite status.
- Launches Next Generation Network Initiative.
- Bell Communications Research Inc. changes name to Telcordia Technologies Inc.

Value of telecom mergers around the globe reaches \$255.6B

Sprint announces Integrated On-Demand Network (ION), voice and data services over ATM backbone network

U.S sales of digital wireless phones outpace sales of analog phones

# 1997

Value of telecom mergers around the globe at \$86.2B

## 1996

Telecom Act of 1996 opens to full competition market

40 millionth cellular subscriber

Cable modem introduced

Deutsche Telekom privatized

Multiple mergers:

- Time-Warner and Turner Broadcasting
- WorldCom and MFS
- BT and MCI create Concert
- SBC and Pacific Telesis
- Bell Atlantic and Nynex

- Richard Smith named CEO.
- Contract with Sprint to develop core software framework for ION Network.
- Alliance with Cisco Systems in support of Next Generation Networks.
- Helps the Automotive Industry Action Group create an extranet service the Automotive Network eXchange (ANX).
- Supplies the Toll-Free Service Management System for all of North America.

#### • Receives InfoVision 97 Award.

• CEO George H. Heilmeier wins John Scott Award.

- Participates in launch of digital TV for Tele-Communications, Inc (TCI).
- Receives Information Technology Association of America (ITAA) 2000 Certification, the industry's century date change certification program.
- Is acquired by SAIC, one of the world's leading providers of systems integration, information management, data security and network solutions.
- Software Systems achieves Level 3 of the Capability Maturity Model®.
- Science Applications International Corporation, SAIC announces intention to acquire Bellcore from the RBOCs.

EARS

- Launches "Certified Excellence" mark, an equipment certification program.
- Expands business to Australia with Telstra.
- Implementation of 15 new area codes and new "toll-free" 888 number.

25 millionth cellular subscriber

- Software Systems achieves ISO 9001 certification.
- TELEGATE 800 database processes its billionth call without a service interruption.

30 million Internet users worldwide

Orbcomm, first global, mobile, low-earth orbit satellite launched

AMSC, first space-based mobile communication satellite for USA

# 1994

• Our SCP add ISCP® Systems handle all 800 number calls in the U.S.

FCC awards three global mobile satellite network licenses

PCS auctions begin

# 1993

800 Number Portability begins

FCC allocates Personal Communication Network (PCS) spectrum

FCC approves RBOC participation in Cable TV companies

Investment approval of MCI & BT acquisition pending

World Wide Web (www) introduced to the public

Europe sets 1998 date for full liberalization of telecom markets

# 1992

The Cable Act of 1992 regulates CATV prices

10 millionth subscriber

Full color motion video introduced in USA

Contract with Telecom New Zealand to implement cost analysis tools.

• Our Line Information Database handles nearly all the calling card calls in the U.S.

- Receives IEEE Corporate Innovation Recognition Award.
- Receives BellSouth Trusted Advisor Award.
- Launches Collaboratory on Information Infrastructure.

- Delivers and deploys SONET Toolkit helping clients plan network facilities.
- Network Operations Forum (NOF) accepts baseline security guidelines derived from our guidelines.

ARS

• Collaborates with Bell Northern Research on video-on-demand system.

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Ban lifted from RBOC participation in Information Services (Electronic Publishing and Cable TV in LATAs

Congress passes Consumer Protection Act

AT&T buys NCR

GTE buys Contel

- George Heilmeier named President and CEO.
- Leads industry-wide effort to identify cause and correct problem of Common Channel Signaling (CCS) network outages and improve robustness of CCS networks.
- Completes Frame Relay Prospectus for fast packet data service.
- Completes customized interstate access model to help clients meet FCC requirements.

#### 1990

9th Circuit Court of Appeals strikes down Computer Inquiry III

Telmex privatized

Telecom New Zealand privatized

# 1989

FCC introduces "price cap" accounting regulating AT&T tariffs, RBOCs to follow

Fiber to home trials begins in Cerritos, CA

Judge Greene allows AT&T but denies RBOC entry into electronic publishing

# 1988

RBOCs permitted to enter voice and electronic mail services

FCC rules RBOCs and AT&T must implement Open Network Architecture (ONA)

First transatlantic fiber optic cable

Commercial ISDN longdistance in the USA

European Community opens terminal equipment to competition

- · Issues generic requirements for inter-networking making CLASS services more widely available.
- Develops and conducts trial of Intelligent Code Inspection for C language Environment.
- Memory Management Systems grows to support more than 3,000 switches at more than 100 different sites.
- Receives NJ Governor's Award for Pollution Prevention with it "Purple People eater" recycling program.
- Completes successful field trial of Technical Network for the Deaf.
- Clients implement digital switching systems.
- Data Communications training classes added to TEC curriculum.
- MIME, the Multipurpose Internet Mail Extensions protocol created.

- Develops the NMA® System for centralized, 24-hour network monitoring and analysis.
- National Association of Regulatory Utility Commissioners cites Bellcore's technical strength.
- Bellcore TEC hosts Telecommunications Industry Symposium.
- First CLEC signs up for COMMON LANGUAGE®.

One millionth cellular subscriber

ISDN trials in USA

AT&T proposes price cap regulations

- Over 50 million customer lines are using Bellcore's FACS.
- Sponsors seminars on Next Generation Switch for over 100 companies.
- Over 25,000 people go to Bellcore's Training and Education Center (TEC).
- Tests "Readiness 87" program for emergency radio communications.

Receives first patent as Bellcore for newly designed guy hook.

• Conducts first field trial of operating company 800-number service.

processing millions of interexchange-carrier requests for service. Hosts Technical Requirement Industry Forums with over 1200 vendors.

standard for high-speed transmission over a single optical wavelength.

- Invented and patented ATM/SONET (Asynchronous Transfer Mode) and key parts of SONET (Synchronous Optical Network) technology. ATM was the first viable broadband packet switching technology. It enabled integrated voice, data and video transport.
- First to describe and prototype the (A)DSL (Asynchronous Digital Subscriber Line) concept, which upgraded the analog copper network to deliver digital broadband access.

Nationally implements the Access Request Information System (ARIS) to assist companies in

Developed and standardized SONET, including SONET ring technology. SONET became a global

## 1986

Computer Inquiry III: AT&T recombines CPE and IXC subsidiaries

NTT shares sold to public

## 1985

Teleport, first competitive access provider is established in NYC • NJ Governor Thomas Kean dedicates Livingston Headquarters.

Coordinates national emergency exercise.

- Orchestrates successful communication between two of the industry's largest software systems, Bellcore's TIRKS® system and the Facilities Assignment and Control Systems (FACS).
- Discovers software development algorithm that is intended to help companies identify the optimum point at which software testing should stop from a cost-benefit standpoint.
- Invented and patented the VLAN (virtual local area network), a fundamental widely used technique for building large switched ethernet networks.

#### 1984

AT&T Divestiture

Seven Regional Bell Operating Companies (RBOCs) formed

Macintosh computer introduced

Motorola sells first portable cellular phone

British Telecom privatized

- Central Services Organization becomes Bell Communications Research, Inc.
- Begins to administer North American Numbering Plan, essential for national uniformity.
- Takes ownership of the COMMON LANGUAGE family of information products.
- Establishes leadership in promoting multi-supplier interoperability through its launch of Generic Requirements forums and in national and international standards activities.
- Acts as single point of contact with the federal government in matters dealing with national security.