

InterDigital, Inc.
Form 10-K
February 26, 2010

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**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549
FORM 10-K**

**ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES
EXCHANGE ACT OF 1934**
For the fiscal year ended December 31, 2009

OR

**TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES
EXCHANGE ACT OF 1934**

For the transition period from _____ to _____

Commission file number 1-11152

INTERDIGITAL, INC.

(Exact name of registrant as specified in its charter)

Pennsylvania
**(State or other jurisdiction of
incorporation or organization)**

23-1882087
**(IRS Employer
Identification No.)**

781 Third Avenue
King of Prussia, Pennsylvania
(Address of principal executive offices)

19406-1409
(Zip Code)

Registrant's telephone number, including area code (610) 878-7800

Securities registered pursuant to Section 12(b) of the Act:

Common Stock (par value \$.01 per share)
(title of class)

NASDAQ
(name of exchange on which registered)

Securities registered pursuant to Section 12(g) of the Act:

Series B Junior Participating Preferred Stock Rights
(title of class)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.
Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information

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statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.
Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer,
or a smaller reporting company. See the definitions of large accelerated filer, accelerated filer and smaller reporting
company in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting
company

(Do not check if a smaller
reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes No
The aggregate market value of the voting and non-voting common equity held by non-affiliates computed by
reference to the price at which the common equity was last sold, or the average bid and asked price of such common
equity, as of the last business day of the registrant's most recently completed second fiscal quarter: \$1,057,279,801 as
of June 30, 2009.

The number of shares outstanding of the registrant's common stock was 43,568,450 as of February 22, 2010.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive proxy statement to be filed pursuant to Regulation 14A in connection with the
registrant's 2010 annual meeting of shareholders are incorporated by reference into Items 10, 11, 12, 13 and 14 of
Part III of this Form 10-K.

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GLOSSARY OF TERMS

1xEV-DO

First Evolution Data Optimized. An evolution of cdma2000.

2G

Second Generation. A generic term usually used in reference to voice-oriented digital wireless products, primarily mobile handsets, that provide basic voice services.

2.5G

A generic term usually used in reference to fully integrated voice and data digital wireless devices offering higher data rate services and features compared to 2G.

3G

Third Generation. A generic term usually used in reference to the generation of digital mobile devices and networks after 2G and 2.5G, which provide high speed data communications capability along with voice services.

3GPP

3G Partnership Project. A partnership of worldwide accredited Standards organizations the purpose of which is to draft specifications for Third Generation mobile telephony.

802.11

An IEEE Standard for wireless LAN interoperability. Letter appendages (i.e., 802.11 a/b/g) identify various amendments to the Standards which denote different features and capabilities.

Air Interface

The wireless interface between a terminal unit and the base station or between wireless devices in a communication system.

ANSI

American National Standards Institute. The United States national standards accreditation and policy agency. ANSI monitors and provides oversight of all accredited U.S. Standards Development Organizations to ensure they follow an open public process.

ATIS

Alliance for Telecommunications Industry Solutions. An ANSI-accredited U.S.-based Standards association which concentrates on developing and promoting technical/operational standards for the communications and information technology industries worldwide.

Bandwidth

A range of frequencies that can carry a signal on a transmission medium, measured in Hertz and computed by subtracting the lower frequency limit from the upper frequency limit.

Base Station

The central radio transmitter/receiver, or group of central radio transmitters/receivers, that maintains communications with subscriber equipment sets within a given range (typically a cell site).

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CDMA

Code Division Multiple Access. A method of digital spread spectrum technology wireless transmission that allows a large number of users to share access to a single radio channel by assigning unique code sequences to each user.

cdmaOne

A wireless cellular system application based on 2G narrowband CDMA technologies (e.g., TIA/EIA-95).

cdma2000®

A Standard which evolved from narrowband CDMA technologies (i.e., TIA/EIA-95 and cdmaOne). The CDMA family includes, without limitation, CDMA2000 1x, CDMA 1xEV-DO, CDMA2000 1xEV-DV and CDMA2000 3x. Although CDMA2000 1x is included under the IMT-2000 family of 3G Standards, its functionality is similar to 2.5G technologies. CDMA2000 ® and cdma2000 ® are registered trademarks of the Telecommunications Industry Association (TIA USA).

Chip

An electronic circuit that consists of many individual circuit elements integrated onto a single substrate.

Chip Rate

The rate at which information signal bits are transmitted as a sequence of chips. The chip rate is usually several times the information bit rate.

Circuit

The connection of channels, conductors and equipment between two given points through which an electric current may be established.

Digital

Information transmission where the data is represented in discrete numerical form.

Digital Cellular

A cellular communications system that uses over-the-air digital transmission.

Duplex

A characteristic of data transmission; either full duplex or half duplex. Full duplex permits simultaneous transmission in both directions of a communications channel. Half duplex means only one transmission at a time.

EDGE

Enhanced Data rates for GSM Evolution. Technology designed to deliver data at rates up to 473.6 Kbps, triple the data rate of GSM wireless services, and built on the existing GSM Standard and core network infrastructure. EDGE systems built in Europe are considered a 2.5G technology.

ETSI

European Telecommunications Standards Institute. The Standards organization which drafts Standards for Europe.

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FDD

Frequency Division Duplex. A duplex operation using a pair of frequencies, one for transmission and one for reception.

FDMA

Frequency Division Multiple Access. A technique in which the available transmission bandwidth of a channel is divided into narrower frequency bands over fixed time intervals resulting in more efficient voice or data transmissions over a single channel.

Frequency

The rate at which an electrical current or signal alternates, usually measured in Hertz.

GHz

Gigahertz. One gigahertz is equal to one billion cycles per second.

GPRS

General Packet Radio Systems. A packet-based wireless communications service that enables high-speed wireless Internet and other data communications via GSM networks.

GSM

Global System for Mobile Communications. A digital cellular Standard, based on TDMA technology, specifically developed to provide system compatibility across country boundaries.

Hertz

The unit of measuring radio frequency (one cycle per second).

HSDPA

High Speed Downlink Packet Access. An enhancement to WCDMA/UMTS technology optimized for high speed packet-switched data and high-capacity circuit switched capabilities. A 3G technology enhancement.

HSUPA

High Speed Uplink Packet Access. An enhancement to WCDMA technology that improves the performance of the radio uplink to increase capacity and throughput, and to reduce delay.

iDEN[®]

Integrated Dispatch Enhanced Network. A proprietary TDMA Standards-based technology which allows access to phone calls, paging and data from a single device. iDEN is a registered trademark of Motorola, Inc.

IEEE

Institute of Electrical and Electronic Engineers. A membership organization of engineers that among its activities produces data communications standards.

IEEE 802

A Standards body within the IEEE that specifies communications protocols for both wired and wireless local area and wide area networks (LAN/WAN).

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IETF

Internet Engineering Task Force. A large open international community of networks designers, operators, vendors, and researchers concerned with the evolution of Internet architecture and the smooth operation of the Internet.

ITU

International Telecommunication Union. An international organization established by the United Nations with membership from virtually every government in the world. Publishes recommendations for engineers, designers, OEMs, and service providers through its three main activities: defining and adoption of telecommunications standards; regulating the use of the radio frequency spectrum; and furthering telecommunications development globally.

ITC

InterDigital Technology Corporation, one of our wholly-owned Delaware subsidiaries.

Kbps

Kilobits per Second. A measure of information-carrying capacity (i.e., the data transfer rate) of a circuit, in thousands of bits per second.

Know-How

Technical information, technical data and trade secrets that derive value from the fact that they are not generally known in the industry. Know-how can include, but is not limited to, designs, drawings, prints, specifications, semiconductor masks, technical data, software, net lists, documentation and manufacturing information.

LAN

Local Area Network. A private data communications network linking a variety of data devices located in the same geographical area and which share files, programs and various devices.

LTE

Long Term Evolution. Generic name for the 3GPP project addressing future improvements to the 3G Universal Terrestrial Radio Access Network (UTRAN).

MAC

Media Access Control. Part of the 802.3 (Ethernet LAN) standard which contains specifications and rules for accessing the physical portions of the network.

MAN

Metropolitan Area Network. A communication network which covers a geographic area such as a city or suburb.

Mbps

Megabits per Second. A measure of information carrying capacity of a circuit; millions of bits per second.

MIMO

Multiple Input Multiple Output. A method of digital wireless transmission where the transmitter and/or receiver uses multiple antennas to increase the achievable data rate or improve the reliability of a communication link.

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Modem

A combination of the words modulator and demodulator, referring to a device that modifies a signal (such as sound or digital data) to allow it to be carried over a medium such as wire or radio.

Multiple Access

A methodology (e.g., FDMA, TDMA, CDMA) by which multiple users share access to a transmission channel. Most modern systems accomplish this through demand assignment where the specific parameter (frequency, time slot or code) is automatically assigned when a subscriber requires it.

ODM

Original Design Manufacturer. Independent contractors that develop and manufacture equipment on behalf of another Company using another Company's brand name on the product.

OEM

Original Equipment Manufacturer. A manufacturer of equipment (e.g., base stations, terminals) that sells to operators.

OFDM

Orthogonal Frequency Division Multiplexing. A method of digital wireless transmission that distributes a signal across a large number of closely spaced carrier frequencies.

OFDMA

Orthogonal Frequency Division Multiple Access. A method of digital wireless transmission that allows a multiplicity of users to share access by assigning sets of narrowband carrier frequencies to each user. It is an extension of OFDM to multiple users.

PCMCIA

Personal Computer Memory Card International Association. An international industry group that promotes standards for credit card-sized memory card hardware that fits into computing devices such as laptops.

PDC

Personal Digital Cellular. The Standard developed in Japan for TDMA digital cellular mobile radio communications systems.

PHS

Personal Handyphone System. A digital cordless telephone system and digital network based on TDMA. This low-mobility microcell Standard was developed in Japan. Commonly known as PAS in China.

PHY

Physical Layer. The wires, cables, and interface hardware that connect devices on a wired or wireless network. It is the lowest layer of network processing that connects a device to a transmission medium.

Platform

A combination of hardware and software blocks implementing a complete set of functionalities that can be optimized to create an end product.

Protocol

A formal set of conventions governing the format and control of interaction among communicating functional units.

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Reference Platform

A reference platform consists of the baseband integrated circuit, related software and reference design.

Smartphone

A wireless handset with an advanced operating system.

Standards

Specifications that reflect agreements on products, practices or operations by nationally or internationally accredited industrial and professional associations or governmental bodies in order to allow for interoperability.

TDD

Time Division Duplexing. A duplex operation using a single frequency, divided by time, for transmission and reception.

TD/FDMA

Time Division/Frequency Division Multiple Access. A technique that combines TDMA and FDMA.

TDMA

Time Division Multiple Access. A method of digital wireless transmission that allows a multiplicity of users to share access (in a time ordered sequence) to a single channel without interference by assigning unique time segments to each user within the channel.

TD-SCDMA

Time Division Synchronous CDMA. A form of TDD utilizing a low Chip Rate.

Terminal/Terminal Unit

Equipment at the end of a wireless voice and/or data communications path. Often referred to as an end-user device or handset. Terminal units include mobile phone handsets, PCMCIA and other form factors of data cards, personal digital assistants, computer laptops and modules with embedded wireless communications capability and telephones.

TIA/EIA-54

The original TDMA digital cellular Standard in the United States. Implemented in 1992 and then upgraded to the TIA/EIA-136 digital Standard in 1996.

TIA/EIA-95

A 2G CDMA Standard.

TIA/EIA-136

A United States Standard for digital TDMA technology.

TIA (USA)

The Telecommunications Industry Association.

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UMB

UltraMobile Broadband. A generic term used to describe the next evolution of the 3GPP2 cdma2000 air interface standard. It is based on OFDMA technology.

WAN

Wide Area Network. A data network that extends a LAN outside of its coverage area, via telephone common carrier lines, to link to other LANs.

WCDMA

Wideband Code Division Multiple Access or Wideband CDMA. The next generation of CDMA technology optimized for high speed packet-switched data and high-capacity circuit switched capabilities. A 3G technology.

WiMAX™

A commercial brand associated with products and services using IEEE 802.16 Standard technologies for wide area networks broadband wireless.

Wireless

Radio-based systems that allow transmission of information without a physical connection, such as copper wire or optical fiber.

Wireless LAN (WLAN)

Wireless Local Area Network. A collection of devices (computers, networks, portables, mobile equipment, etc.) linked wirelessly over a limited local area.

In this Form 10-K, the words we, our, us, the Company and InterDigital refer to InterDigital, Inc. and/or its subsidiaries, individually and/or collectively, unless otherwise indicated. InterDigital® is a registered trademark and SlimChip™ is a trademark of InterDigital, Inc. All other trademarks, service marks and/or trade names appearing in this Form 10-K are the property of their respective holders.

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PART I

Item 1. BUSINESS

General

We design and develop advanced digital wireless technologies for use in digital cellular and wireless IEEE 802-related products and networks. We actively participate in and contribute our technology solutions to worldwide organizations responsible for the development and approval of Standards to which digital cellular and IEEE 802-compliant products are built and our contributions are often incorporated into such Standards. In addition, we develop solutions for improving bandwidth availability and network capacity, wireless security and seamless connectivity and mobility across networks and devices. We offer licenses to our patents to equipment producers that manufacture, use and sell digital cellular and IEEE 802-related products. In addition, we offer for license or sale our mobile broadband modem solutions (modem IP, know-how, and reference platforms) to mobile device manufacturers, semiconductor companies, and other equipment producers that manufacture, use and sell digital cellular products. We have built our suite of technology and patent offerings through independent development, joint development with other companies, and selected acquisitions. We have also assembled a number of leading technology partners that share our vision and complement our internal research and development efforts. Currently, we generate revenues primarily from royalties received under our patent license agreements. We also generate revenues by licensing our technology solutions and providing related development support.

As an early participant in the digital wireless market, we developed pioneering solutions for the two primary cellular air interface technologies in use today: TDMA and CDMA technologies. That early involvement, as well as our continued development of advanced digital wireless technologies, has enabled us to create our significant worldwide portfolio of patents and patent applications. Included in that portfolio are a number of patents and patent applications, which we believe are or may be essential or may become essential to 2G, 3G, and LTE cellular Standards and other wireless Standards such as IEEE 802. Accordingly, we believe that companies making, using or selling products compliant with these Standards require a license under our essential patents and will require licenses under essential patents that may issue from our pending patent applications. In conjunction with our participation in certain Standards bodies, we have filed declarations stating that we have patents which we believe are or may be essential or may become essential, and that we agree to make our essential patents available for use and license on fair, reasonable, and non-discriminatory terms or similar terms consistent with the requirements of the respective Standards organizations.

Third party products incorporating our patented inventions include, without limitation:

Mobile devices, including cellular phones, wireless personal digital assistants and notebook computers, data cards and similar products;

Base stations and other wireless infrastructure equipment; and

Components and modules for wireless devices.

We also incorporate our inventions into our own IP modem solutions. In addition to conforming to applicable Standards, our solutions also include proprietary implementations for which we seek patent protection. Our development areas include adjacent wireless technologies within the wireless ecosystems and across the broad array of converged devices, networks, and services.

Our investments in the development of advanced digital wireless technologies and related products and solutions include sustaining a highly specialized engineering team and providing that team with the equipment and advanced software platforms necessary to support the development of technologies. Over each of the last three years, cost of development has been our largest expense category, ranging between \$64.0 million and \$98.9 million. The largest portion of this cost has been personnel costs.

InterDigital's predecessor company incorporated in 1972 under the laws of the Commonwealth of Pennsylvania and conducted its initial public offering in November 1981. Following an internal corporate reorganization in July 2007, InterDigital Communications Corporation converted into a limited liability company and became the wholly-owned operating subsidiary of InterDigital, Inc. Our corporate headquarters and administrative offices are located in King of

Prussia, Pennsylvania, USA. Our research and technology development teams are located in the following locations: King of Prussia, Pennsylvania, USA; Melville, New York, USA; and Montreal, Quebec, Canada.

Our Internet address is www.interdigital.com, where, in the Investor Relations section, we make available, free of charge, our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, certain other reports required to be filed under the Securities Exchange Act of 1934 and all amendments to those reports as soon as reasonably practicable after such material is filed with or furnished to the United States Securities and Exchange Commission (SEC). The information contained on or connected to our website is not incorporated by reference into this Form 10-K.

Wireless Communications Industry Overview

Participants in the wireless communications industry include OEMs, semiconductor manufacturers, ODMs and a variety of technology suppliers, application developers and network operators that offer communication services and products to consumers and businesses. To achieve economies of scale and allow for interoperability, products for the wireless industry have typically been built to wireless Standards.

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These Standards have evolved in response to large demand for services and expanded capabilities of mobile devices. Although the cellular market initially delivered voice-oriented and basic data services (commonly referred to as Second Generation, or 2G), over the past five years the industry transitioned to providing voice and multimedia services that take advantage of the higher speeds offered by the newer technologies (commonly referred to as Third Generation, or 3G). Concurrently, non-cellular wireless technologies, such as IEEE 802.11, have emerged as a means to provide wireless Internet access for fixed and nomadic use. Industry participants anticipate a proliferation of converged devices that incorporate multiple air interface technologies and functionalities and provide seamless operation. As an example, many devices incorporate multiple air interface technologies and such converged devices may provide seamless operation between a variety of networks.

Over the course of the last ten years, the cellular communications industry has experienced rapid growth worldwide. Total worldwide cellular wireless communications subscriptions rose from approximately 500 million at the end of 1999 to approximately 4.6 billion at the end of 2009. In several countries, mobile telephones now outnumber fixed-line telephones. Market analysts expect that the aggregate number of global wireless subscriptions could exceed 5.6 billion in 2013. In fourth quarter 2009, iSuppli Corporation forecasted worldwide handset sales would grow approximately 12% in 2010 after the industry experienced a decline in sales in 2009. The following table presents iSuppli's estimates for worldwide handset sales by air interface technology in 2009 and the related forecast for 2010 through 2013.

(1) Source: iSuppli Corporation. Mobile Handset Q4 2009 Market Tracker.

(2) Includes: LTE and WiMax

(3) Includes: WCDMA/HSPA and TD-SCDMA.

(4) Includes: cdma2000 and its evolutions, such as EV-DO.

(5) Includes: GSM/GPRS/EDGE and Analog, iDEN, TDMA, PHS and PDC.

The growth in new cellular subscribers, combined with existing customers choosing to replace their mobile phones, helped fuel the growth of mobile phone sales from approximately 278 million units in 1999 to over 1.1 billion units in 2009. We believe the combination of a broad subscriber base, continued technological change and the growing dependence on the Internet, e-mail and other digital media sets the stage for continued growth in the sales of advanced wireless products and services over the next five years. While recent market forces and a global economic downturn contributed to a decline in total handset sales for 2009, analysts continue to predict that the shift to advanced 3G and, in particular, smartphone devices will continue to increase sales in those categories. For these same reasons, shipments of 3G-enabled phones, which represented approximately 38% of the market in 2009, are predicted to increase to approximately 60% of the market by 2013. Moreover, recent advances in 3G technologies that support devices offering higher data rates have met with rapid consumer uptake. Similarly, sales of smartphones have grown rapidly, increasing from less than 1% of handset sales in 1999 to 16% in 2009.

In addition to the advances in digital cellular technologies, the industry has also made significant advances in non-cellular wireless technologies. In particular, IEEE 802.11 WLAN has gained momentum in recent years as a wireless broadband solution in the home and office and in public areas. IEEE 802.11 technology offers high-speed data connectivity through unlicensed spectra within a relatively modest operating range. Since its introduction in 1998, semiconductor shipments of products built to the IEEE 802.11 Standard have shipped nearly

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1.2 billion units cumulatively through 2009. Analysts forecast that these cumulative shipments may reach 4 billion by 2013. In addition, the IEEE wireless Standards bodies are creating sets of Standards to enable higher data rates, provide coverage over longer distances, and enable roaming. These Standards are establishing technical specifications for high data rates, such as IEEE 802.16 (WiMAX), as well as technology specifications to enable seamless handoff between different air interfaces (IEEE 802.21).

Evolution of Wireless Standards

Wireless communications Standards are formal guidelines for engineers, designers, manufacturers, and service providers that regulate and define the use of the licensed radio frequency spectrum in conjunction with providing specifications for wireless communications products. A primary goal of the Standards is to assure interoperability of products, marketed by multiple companies, built to a common Standard. A number of international and regional wireless Standards Development Organizations (SDOs), including the ITU, ETSI, TTA (USA), IEEE, ATIS, and ANSI, have responsibility for the development and administration of wireless communications Standards. New Standards are typically adopted with each new generation of products, are often compatible with previous generations of the Standards, and are defined to ensure interoperability.

SDOs typically ask participating companies to declare formally whether they believe they hold patents or patent applications essential to a particular Standard and whether they are willing to license those patents on either a royalty-bearing basis on fair, reasonable, and nondiscriminatory terms or on a royalty-free basis. To manufacture, have made, sell, offer to sell, or use such products on a non-infringing basis, a manufacturer or other entity doing so must first obtain a license from the holder of essential patent rights. The SDOs do not have enforcement authority against entities that fail to obtain required licenses, nor do they have the ability to protect the intellectual property rights of holders of essential patents.

Digital Cellular Standards

The defined capabilities of the various technologies continue to evolve within the SDOs. Deployment of 3G services allows operators to take advantage of additional radio spectrum allocations and through the use of higher data speeds than 2.5G, deliver additional applications to their customers. Operators began to deploy 3G services in 2000. The five specifications under the 3G standard (generally regarded as being the ITU IMT-2000 Recommendation) include the following forms of CDMA technology: FDD and TDD (collectively referred to in the industry as WCDMA) and Multichannel CDMA (cdma2000 technology). In addition, TD-SCDMA, a Chinese variant of TDD technology, has been included in the Standard's specifications.

The principal Standardized digital cellular wireless products in use today are based on TDMA and CDMA technologies with 3G capable-products beginning to replace 2G-only products. The Standardized 2G TDMA-based technologies include GSM, TTA/EIA-54/136 (commonly known as AMPS-D, United States-based TDMA, which is currently being phased out in conjunction with the U.S. FCC-mandated conversion from analog-based cellular service), PDC, PHS, DECT and TETRA. Of the TDMA technologies, GSM is the most prevalent, having been deployed in Europe, Asia, Africa, the Middle East, the Americas, and other regions. In 2009, approximately 62% of total mobile device sales conform to the 2G and 2.5G TDMA-based Standards. WCDMA-enabled devices accounted for an additional 23% of total sales. Thus, the combined sales of GSM-enabled devices and devices with 3G WCDMA technology accounted for approximately 85% of worldwide handset sales.

Narrowband 2G CDMA-based technologies include TTA/EIA-95 (more commonly known as cdmaOne) and cdma2000 technologies and serve parts of the United States, Japan, South Korea and several other countries. Similar to the TDMA-based technologies, the CDMA-based technologies are migrating to 3G. In 2009, about 15% of worldwide handset sales were based on these 2G/2.5G CDMA technologies plus its 3G evolution.

The Standards groups continue to advance the performance and capabilities of their respective air interfaces. Chief among the enhancements are High Speed Downlink Packet Access and High Speed Uplink Packet Access (HSDPA/HSUPA, often collectively referred to as HSPA), an evolution of WCDMA, and 1xEV-DO. At year end 2009, over 300 operators had launched HSPA networks.

Further advances to the WCDMA cellular air interface standards are being made under 3GPP's LTE program. This evolution program is based on OFDM/OFDMA technology, similar to that used in the IEEE 802.16 Standard. LTE standards were completed in late 2009. Virtually all current mobile operators have indicated their intention to upgrade

their networks to LTE when it is commercially available. This selection had substantial negative impact on the proposed 3GPP2 UMB standard, which no current mobile operators indicated an intention to use. This has resulted in 3GPP2 stopping all work on the proposed UMB specification, thus facilitating a broader market for LTE. 3GPP also completed preliminary work on a follow-on to LTE, called LTE-Advanced (LTE-A), which is the 3GPP entry into the worldwide ITU-R IMT-Advanced project, a follow-on to the earlier IMT-2000 Recommendation mentioned above.

Table of Contents***IEEE 802-Based Standards***

The wireless Standard, IEEE 802.11 was first ratified in 1997. Since that time, the IEEE 802.11 Working Group has continued to update and expand the basic IEEE 802.11 Standard to achieve higher data rates, accommodate additional operating frequencies and provide additional capabilities and features. Equipment conforming to these Standards (i.e., IEEE 802.11a/b/g) is in the marketplace today. Intended primarily for short range applications, operating in unlicensed frequency bands and requiring minimal infrastructure, IEEE 802.11 Standards-based equipment has seen substantial market growth, especially in consumer home networking applications. Similar to 3G, this Standard also continues to evolve toward higher data rates and improved service capabilities, most recently with the approval and publication of the final IEEE 802.11n and other related Standards.

The wide area network community has also established the IEEE 802.16 Working Group to define air interface Standards for longer distance (2 to 50 kilometers) Metropolitan Area and Wide Area Networks (MAN/WAN). The first 802.16 Standard was published in 2002. Specifying operating frequencies from 10 to 66 GHz, it was primarily aimed toward very high-speed wide area point to multipoint fixed applications. In 2003, an amendment to the 802.16 Standard (802.16a) was published which added operation in the 2 to 11 GHz frequency bands. This addition made the Standard much more suitable for providing wireless broadband high-speed Internet access for residential and small office applications. In 2004, 802.16a and several other amendments to the base 802.16 Standard were combined into a single document which was published as 802.16-2004 and which was ultimately adopted by the WiMAX Business Forum for fixed use deployments. Equipment conforming to the 802.16-2004 fixed Standard was initially introduced in 2006. Concurrent with this revision of the fixed Standard, the 802.16 Working Group embarked on defining a mobile version of the Standard (referred to as 802.16e). The mobile version of the Standard was completed and published in February 2006 and initial equipment certification by the WiMAX Forum commenced in late 2007. Since that time, the Standard has continued to evolve and be improved, with a significant update, IEEE 802.16-2009, having been approved and published this past year.

The WiMAX Forum adopted a specific form of the 802.16e Standard for development and deployment as mobile WiMAX. In conjunction with the WiMAX Forum, the 802.16e mobile standard is being further improved upon as 802.16m to increase its performance and capabilities. IEEE 802.16m is specifically targeted to meet the ITU-R requirements for IMT-Advanced, the follow-on to the earlier ITU-R IMT-2000 Recommendation mentioned above and has been submitted to the ITU IMT-Advanced process, which should conclude in early 2011. It is anticipated that the WiMAX Forum will also adopt 802.16m when it is completed in 2010.

More recently, the IEEE 802 community has begun to address the questions related to networking and interoperability between the different IEEE 802 technologies, both wireline and wireless, as well as handover to external non-802 networks, such as cellular. The primary group addressing these issues, IEEE 802.21, entitled Media Independent Handover Services, has completed their initial Standard, and it was approved by the IEEE in 2008. The IEEE 802.21 technology is specifically oriented towards the future all-IP Next Generation Network that merges existing fixed and mobile networks into a single homogeneous integrated network capable of supporting all envisioned advanced fixed and mobile services including voice, data, and video. Aspects of 802.21 are now being incorporated into other network Standards, such as the IATF.

InterDigital's Strategy

A core component of our strategy is the ability to develop advanced digital wireless technologies. We will continue to develop those technologies that shape the future generations of wireless standards and contribute our ideas to the Standards bodies and bring those technologies to market, generating revenues from patent licensing as well as licensing and/or sales of our technology solutions. We seek to derive revenue from every 3G mobile device sold, either in the form of patent licensing revenues, technology solutions-related revenues or a combination of these elements. As of December 2009, we had entered into patent license agreements covering over one-half of all 3G mobile devices sold worldwide. In addition, our development of an array of technology solutions to address not only the evolution of wireless communications as it evolves to a network of networks, but also technologies to further improve the capabilities of wireless networks through

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connectivity, mobility, and advanced intelligent data delivery techniques. These solutions offer additional means to generate revenues and expand the addressable market for our innovations from primarily terminal units and infrastructure to a broader set of consumer electronics and data services.

To execute our strategy, we intend to support the following initiatives:

Continue to fund significant internal technology development;

Explore opportunities to partner to build or acquire related or complementary technologies and capabilities;

Maintain substantial involvement in key worldwide Standards bodies, contributing to the ongoing definition of wireless Standards and incorporating our inventions into those Standards;

License our patented technology to wireless equipment producers worldwide;

Defend vigorously our intellectual property and related contractual rights; and

Offer technology solutions to semiconductor producers, mobile device manufacturers, and other participants in the wireless ecosystem.

InterDigital's Technology Position

Cellular Technologies

We have a long history of developing cellular technologies including those related to CDMA and TDMA technologies, and more recently, OFDMA and MIMO technologies. A number of our TDMA-based and CDMA-based inventions are being used in all 2G, 2.5G, and 3G wireless networks and mobile terminal devices.

We led the industry in establishing TDMA-based TIA/EIA-54 as a digital wireless U.S. Standard in the 1980s. We developed a substantial portfolio of TDMA-based patented inventions. These inventions include or relate to fundamental elements of TDMA-based systems in use around the world. Some of our TDMA inventions include or relate to:

The fundamental architecture of commercial TD/FDMA systems;

Methods of synchronizing TD/FDMA systems;

A flexible approach to managing system capacity through the reassignment of online subscriber units to different time slots and/or frequencies in response to system conditions;

The design of a multi-component base station, utilizing distributed intelligence, which allows for more robust performance; and

Initializing procedures that enable roaming.

We also have developed and patented innovative CDMA technology solutions. Today, we hold a significant worldwide portfolio of CDMA patents and patent applications. Similar to our TDMA inventions, we believe that a number of our CDMA inventions are or may be essential or may become essential to the implementation of CDMA systems in use today. Some of our CDMA inventions include or relate to:

Global pilot: The use of a common pilot channel to synchronize sub-channels in a multiple access environment;

Bandwidth allocation: Techniques including multi-channel and multi-code mechanisms;

Power control: Highly efficient schemes for controlling the transmission output power of terminal and base station devices, a vital feature in a CDMA system;

Joint detection and interference cancellation techniques for reducing interference;

Soft handover enhancement techniques between designated cells;

Various sub-channel access and coding techniques;

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Packet data;

Fast handoff;

Geo-location for calculating the position of terminal users;

Multi-user detection;

High-speed packet data channel coding; and

High-speed packet data delivery in a mobile environment, including enhanced uplink.

The cellular industry has ongoing initiatives aimed at technology improvements. We have engineering development projects to build and enhance our technology portfolio in many of these areas, including the LTE project for 3GPP radio technology, further evolution of the 3GPP WCDMA Standard (including HSPA+), and continuing improvements to the legacy GSM-EDGE Radio Access Network (GERAN). The common goal is to improve the user experience and reduce the cost to operators via increased capacity, reduced cost per bit, increased data rates and reduced latency. Of the above technologies, LTE is the most advanced in that it uses the newer OFDMA/MIMO technologies. Some of our LTE inventions include or relate to:

Multi-Input Multi-Output (MIMO) technologies for reducing interference and increasing data rates;

OFDM/OFDMA/SC-FDMA;

Power control;

Hybrid-ARQ for fast error correction;

Discontinuous reception for improved battery life;

Control channel structures for efficient signaling;

Advanced resource scheduling/allocation (bandwidth on-demand);

Security;

Enhanced Home Node-B (femto cells);

Relay communications for improved cell edge performance;

LTE receiver implementations;

Carrier aggregation for LTE-Advanced; and

Coordinated Multi-Point Communications (CoMP) for LTE-Advanced.

IEEE 802-based Wireless Technologies

Our strong wireless background includes engineering and corporate development activities that focus on solutions that apply to other wireless market segments. These segments primarily fall within the continually expanding scope of the IEEE 802 family of Standards. We are building a portfolio of technology related to the WLAN, WMAN and digital cellular area that includes, for example, improvements to the IEEE 802.11 PHY and MAC to increase peak data rates (i.e., IEEE 802.11n), handover among radio access technologies (IEEE 802.21), mesh networks (IEEE 802.11s), radio resource measurements (IEEE 802.11k), wireless network management (IEEE 802.11v), wireless

network security, and broadband wireless (IEEE 802.16, including WiMAX wireless technology).

Business Activities

Patent Licensing

Our Patent Portfolio

As of December 31, 2009, our patent portfolio consisted of 1,242 U.S. patents (187 of which issued in 2009), and 5,996 non-U.S. patents (1,048 of which issued in 2009). We also have numerous patent applications pending worldwide. As of December 31, 2009 we had 1,340 pending applications in the U.S. and 8,873 pending non-U.S. patent applications. The patents and applications comprising our portfolio relate specifically to digital wireless radiotelephony technology (including, without limitation, TDMA and/or CDMA). Issued patents expire at differing times ranging from 2010 through 2030.

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The United States Patent and Trademark Office (USPTO) permits the filing of provisional applications for, among other reasons, preserving rights to an invention prior to filing a formal non-provisional application. Typically, the filing of a provisional application is followed with the filing of a non-provisional application, which may add content, such as claim language, to the provisional application, or may combine multiple provisional applications. The USPTO, along with other international patent offices, also permits the filing of continuation or divisional applications, which are based, in whole or in part, on a previously filed non-provisional patent application. Most of our foreign patent applications are single treaty application filings, which can lead to patents in all of the countries that are parties to a particular treaty. During 2009, we filed 595 U.S. patent applications consisting of 112 first filed, U.S. non-provisional, non-continuation patent applications, 352 U.S. provisional applications, and 131 U.S. continuation, continuation-in-part, divisional, reissue or reexamination applications and U.S. applications claiming priority from PCT or other non-U.S. applications. Typically, each new U.S. non-provisional application is used as the basis for the later filing of one or more foreign applications.

Patent Licenses

Currently, numerous manufacturers supply digital cellular equipment conforming to 2G, 3G, and WiMax Standards and are starting to supply digital cellular equipment conforming to LTE Standards. We believe that any of those companies that use our patented inventions will require licenses from us. While some companies seek licenses before they commence manufacturing and/or selling devices that use our patented inventions, most do not. Consequently, we approach companies and seek to establish license agreements. We expend significant effort identifying potential users of our inventions and negotiating patent license agreements with companies that may be reluctant to take licenses. We are in active discussions with a number of companies regarding the licensing of our patents on a worldwide basis. During negotiations, unlicensed companies may raise varying defenses and arguments as to their need to enter into a patent license with us, to which we respond. In the past year, these defenses and arguments have included positions by companies: (i) as to the essential nature of our patents, (ii) that our royalty rates are not fair, reasonable or nondiscriminatory, (iii) that their products do not infringe our patents and/or that our patents are invalid and/or unenforceable, (iv) that their products are already subject to a license, and (v) concerning the impact of litigation between us and other third parties. If we believe that a third party is required to take a license to our patents in order to manufacture and sell products, we might commence legal action against the third party if they refuse to enter into a patent license agreement.

We offer non-exclusive, royalty-bearing patent licenses to companies that manufacture, import, use or sell, or intend to manufacture, import, use or sell, equipment that implements the inventions covered by our portfolio of patents. We have entered into numerous non-exclusive, non-transferable (with limited exceptions) patent license agreements with companies around the world. When we enter into a new patent license agreement, the licensee typically agrees to pay consideration for sales made prior to the effective date of the license agreement and also agrees to pay royalties or license fees on covered products that it will sell or anticipates selling during the term of the agreement. We expect that, for the most part, new license agreements will follow this model. Our patent license agreements are structured on a royalty-bearing basis, paid-up basis or combination thereof. Most of our patent license agreements are royalty bearing. Almost all of these agreements provide for the payment of royalties based on sales of covered products built to particular Standards (convenience based licenses), as opposed to the payment of royalties if the manufacture, sale or use of the licensed product infringes one of our patents (infringement based licenses).

Our license agreements typically contain provisions which give us the right to audit our licensees' books and records to ensure compliance with the licensees' reporting and payment obligations under those agreements. From time to time, these audits reveal underreporting or underpayments under the applicable agreements. In such cases, we might enter into negotiations or dispute resolution proceedings with the licensee to resolve the discrepancy, either of which might lead to payment of all or a portion of the amount claimed due under the audit or termination of the license or to delays or failures to collect royalties and recognize revenues that we believe are otherwise due.

We recognize the revenue from per-unit royalties in the period when we receive royalty reports from licensees. In circumstances where we receive consideration for sales made prior to the effective date of a patent license, we may recognize such payments as revenue in the period in which the patent license agreement is signed. Some of these patent license agreements provide for the non-refundable prepayment of royalties which are usually made in exchange

for prepayment discounts. As the licensee reports sales of covered products, the royalties are calculated and either applied against any prepayment, or become payable in cash or other consideration. Additionally, royalties on sales of covered products under the license agreement become payable or applied against prepayments based on the royalty formula applicable to the particular license agreement. These formulas include flat dollar rates per-unit, a percentage of sales, percentage of sales with a per-unit cap and other similar measures. The formulas can also vary by other factors including territory, covered Standards, quantity, and dates sold.

Some of our patent licenses are paid-up, requiring no additional payments relating to designated sales under agreed upon conditions. Those conditions can include paid-up licenses for a period of time, for a class of products, under certain patents or patent claims, for sales in certain countries or a combination thereof. Licenses have become paid-up based on the payment of fixed amounts or after the payment of royalties for a term. We recognize revenues related to fixed amounts on a straight-line basis.

2009 Patent License Activity

On January 14, 2009, we entered into a patent license agreement (the 2009 Samsung PLA) with Samsung Electronics Co., Ltd. of Korea (Samsung) covering Samsung's affiliates, including Samsung Electronics America, Inc., superseding the binding term sheet signed in

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November 2008 by such parties. The 2009 Samsung PLA terminated the 1996 Samsung Agreement. Under the terms of the 2009 Samsung PLA, we granted Samsung a non-exclusive, worldwide, fixed fee royalty-bearing license covering the sale of single mode terminal units and infrastructure designed to operate in accordance with TDMA-based 2G Standards that is to become paid-up in 2010 and a non-exclusive, worldwide, fixed fee royalty-bearing license covering the sale of terminal units and infrastructure designed to operate in accordance with 3G Standards through 2012. Under the terms of the 2009 Samsung PLA, the parties moved to end all litigation and arbitration proceedings ongoing between them. Pursuant to the payment option selected by Samsung, Samsung has agreed to pay InterDigital \$400.0 million in four equal installments over an 18-month period. Samsung paid the first two of four \$100.0 million installments in 2009. We received the third \$100.0 million installment in January 2010.

In third quarter 2009, we entered into a non-exclusive, non-transferable, worldwide, royalty-bearing, convenience-based, patent license agreement with Cinterion Wireless Modules GmbH covering the sale of Machine-to-Machine (M2M) modules and PC Cards designed to operate in accordance with 2G and 3G Standards for the period January 1, 2009 through the end of 2012.

In third quarter 2009, we entered into a non-exclusive, non-transferable, worldwide, royalty-bearing, convenience-based, patent license agreement with Pantech Co., Ltd. (Pantech) (formally known separately as Pantech Co., Ltd. and Pantech & Curitel Communications, Inc.) covering the sale of terminal units designed to operate in accordance with 2G, 3G, LTE, LTE-Advanced, WiMax and WiBro, and certain other current and developing standards through the end of 2016. Pantech has agreed to pay the license fees and any other royalties under the agreement in installments over the life of the agreement. Additionally, we acquired a minority equity interest in Pantech.

Patent Licensees Generating 2009 Revenues Exceeding 10% of Total Revenues

Samsung, LG Electronics, Inc. (LG), and Sharp Corporation of Japan (Sharp) comprised approximately 33%, 19%, and 10% of our total 2009 revenues, respectively.

We are recognizing revenue associated with the 2009 Samsung PLA on a straight-line basis over the life of the agreement. During 2009 we recognized \$98.5 million of revenue associated with the 2009 Samsung PLA.

We are party to a worldwide, non-exclusive, royalty-bearing, convenience-based patent license agreement with LG covering the sale of (i) terminal units designed to operate in accordance with 2G and 2.5G TDMA-based and 3G Standards, and (ii) infrastructure designed to operate in accordance with cdma2000 technology and its extensions up to a limited threshold amount. Under the terms of the patent license agreement, LG paid us \$95.0 million in each of the first quarters of 2006, 2007, and 2008. The agreement expires at the end of 2010, at which time LG will receive a paid-up license to sell single-mode GSM/GPRS/EDGE terminal units under the patents included under the license, and become unlicensed as to all other products covered under the agreement. We are recognizing revenue associated with this agreement on a straight-line basis from the inception of the agreement until December 31, 2010.

We are party to a worldwide, non-exclusive, generally nontransferable, royalty-bearing, convenience-based patent license agreement with Sharp (Sharp PHS/PDC Agreement) covering sales of terminal devices designed to operate in accordance with TDMA-based PHS and PDC Standards. In fourth quarter 2006, we and Sharp entered into an Amendment which extended the term of the Sharp PHS/PDC Agreement from April 2008 to April 2011. Sharp is obligated to make royalty payments on sales of licensed products as covered products are sold. We recognize revenue associated with this agreement in the periods we receive the related royalty reports.

We and Sharp are also parties to a separate worldwide, non-exclusive, convenience-based, generally nontransferable, royalty-bearing patent license agreement (Sharp NCDMA/GSM/3G Agreement) covering sales of GSM, narrowband CDMA, and 3G products that expires upon the last to expire of the patents licensed under the agreement. Sharp is obligated to make royalty payments on sales of licensed products as covered products are sold. We recognized revenue associated with this agreement in the periods that the royalty reports were received. In 2009, we recorded revenues of \$28.8 million from Sharp of which approximately \$28.7 million is attributable to the Sharp NCDMA/GSM/3G Agreement and the balance is attributable to the Sharp PHS/PDC Agreement.

Patent Infringement and Declaratory Judgment Proceedings

From time to time, if we believe any party is required to license our patents in order to manufacture and sell certain digital cellular products and such party has not done so, we may institute legal action against them. This legal action

typically takes the form of a patent infringement lawsuit or an administrative proceeding such as a Section 337 proceeding before the U.S. International Trade Commission (USITC). In a patent infringement lawsuit, we would typically seek damages for past infringement and an injunction against future infringement. In a USITC proceeding, we would typically seek an exclusion order to bar infringing goods from entry into the United States, as well as a cease and desist order to bar further sales of infringing goods that have already been imported into the United States. The response from the subject party can come in the form of challenges to the validity, enforceability, essentiality and/or applicability of our patents to their products. In addition, a party might file a declaratory judgment action to seek a court s declaration that our patents are invalid, unenforceable, not infringed by the other party s product, or are not essential. Our response to such a declaratory judgment action may include claims of infringement. When we include claims of infringement in a patent infringement lawsuit, a favorable ruling for the Company can result in the payment of damages for past sales, the setting of a royalty for future sales or issuance by the court of an injunction enjoining the manufacturer from manufacturing and/or selling the infringing product. As part of a settlement of a patent infringement lawsuit against a third party, we could typically seek to recover consideration for past infringement, and grant a license under the patent(s) in suit (as well as other patents) for future sales. Such a license could take any of the forms discussed above.

Table of Contents***Contractual Arbitration Proceedings***

We and our licensees, in the normal course of business, may have disagreements as to the rights and obligations of the parties under the applicable license agreement. For example, we could have a disagreement with a licensee as to the amount of reported sales and royalties. Our license agreements typically provide for audit rights as well as private arbitration as the mechanism for resolving disputes. Arbitration proceedings can be resolved through an award rendered by the arbitrators or by settlement between the parties. Parties to arbitration might have the right to have the Award reviewed in a court of competent jurisdiction. However, based on public policy favoring the use of arbitration, it is generally difficult to have arbitration awards vacated or modified. The party securing an arbitration award may seek to have that award converted into a judgment through an enforcement proceeding. The purpose of such a proceeding is to secure a judgment that can be used for, if need be, seizing assets of the other party.

Technology Solutions Development

We have designed, developed and placed into operation a variety of advanced digital wireless technologies, systems, and products since our inception in the early 1970 s. Over the course of our history, our strength has been our ability to explore emerging technologies, identify needs created by the development of advanced wireless systems, and build technologies for those new requirements.

Today, our technology solutions development efforts support the development of advanced cellular technologies. This includes further development of WCDMA technologies, including HSDPA/HSUPA, and 3GPP LTE technology. Our development efforts also include adjacent wireless technologies within the wireless ecosystems and across the broad array of converged devices, networks and services. Many of our technologies conform to applicable Standards and may also include proprietary implementations for which we seek patent protection.

We also develop advanced IEEE 802 wireless technologies, in particular technology related to WLAN and digital cellular applications that include data rate and latency improvements to IEEE 802.11, handover among radio access technologies (IEEE 802.21) and wireless network management and security. For example, we have developed a mobility solution based on 802.21 that greatly improves handover performance between WiBro (a Korean version of mobile WiMAX) and UMTS networks.

We recorded expenses of \$64.0 million, \$98.9 million, and \$85.2 million during 2009, 2008, and 2007, respectively, related to our research and development efforts. These efforts foster inventions which are the basis for many of our patents. As a result of such patents and related patent license agreements, in 2009, 2008, and 2007, we recognized \$287.6 million, \$216.5 million, and \$230.8 million of patent licensing revenue, respectively. In addition, we offer technology solutions for inclusion into other products and services to support such technologies. In 2009, 2008, and 2007, we recognized technology solutions revenues totaling \$9.8 million, \$12.0 million, and \$3.4 million, respectively.

Continuing Technology and Standards Development

Recognizing the need continually to improve data rates, coverage and capacity, work is currently underway within 3GPP on further evolution of the WCDMA Standards, including evolution of HSPA (HSDPA/HSUPA) to downlink data rates of 80-160 Mbps and uplink data rates of approximately 20 Mbps. Releases 9 and 10 are expected to address incremental performance improvements to WCDMA and HSPA (HSDPA/HSUPA) including the incorporation of multi-carrier operation and other data throughput and latency improvements, power saving and coverage improvement features.

In addition, work continues on a longer term initiative, Evolved UTRA/UTRAN (UMTS Terrestrial Radio Access/UMTS Terrestrial Radio Access Network), also known as LTE (R8 and R9) and LTE-Advanced (R10 and beyond). The objectives of this initiative are more ambitious, targeting peak data rates of 1 Gbps in the downlink and 500 Mbps in the uplink, improved spectrum efficiency, significantly reduced data latency, and scalable bandwidths from as low as 1.25 MHz to as high as 100 MHz.

We are actively participating in the HSDPA/HSUPA and LTE Standards activities and have launched internal projects to develop the technology necessary to support the new performance requirements.

We are currently developing technology solutions to solve the industry s challenge of providing enough bandwidth for smart phones, connected consumer devices and netbooks. We have taken a broad approach to solve these challenges which includes spectrum optimization and intelligent a