



MRP Report to 3GPP

Sam Samra

CDMA Development Group

April 26, 2012



Global industry body representing the interests of:

331 CDMA2000 operators in **123** countries
as well as

30 LTE operators in **6** countries
and their suppliers worldwide

CDMA2000 and LTE Industry

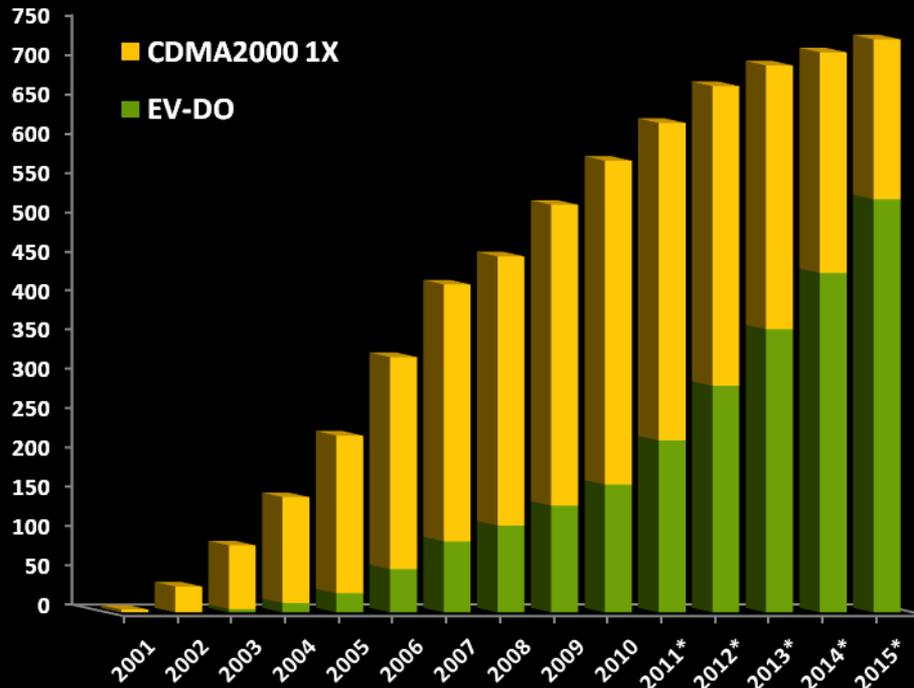
Today, there are **331** CDMA2000 operators in **123** countries
 More than **210** EV-DO operators; with more deployments planned
8 LTE operators in **3** countries

614M+ CDMA2000 subscribers worldwide as of Jun 2011

More than **15M** LTE subscribers worldwide Mar 2012

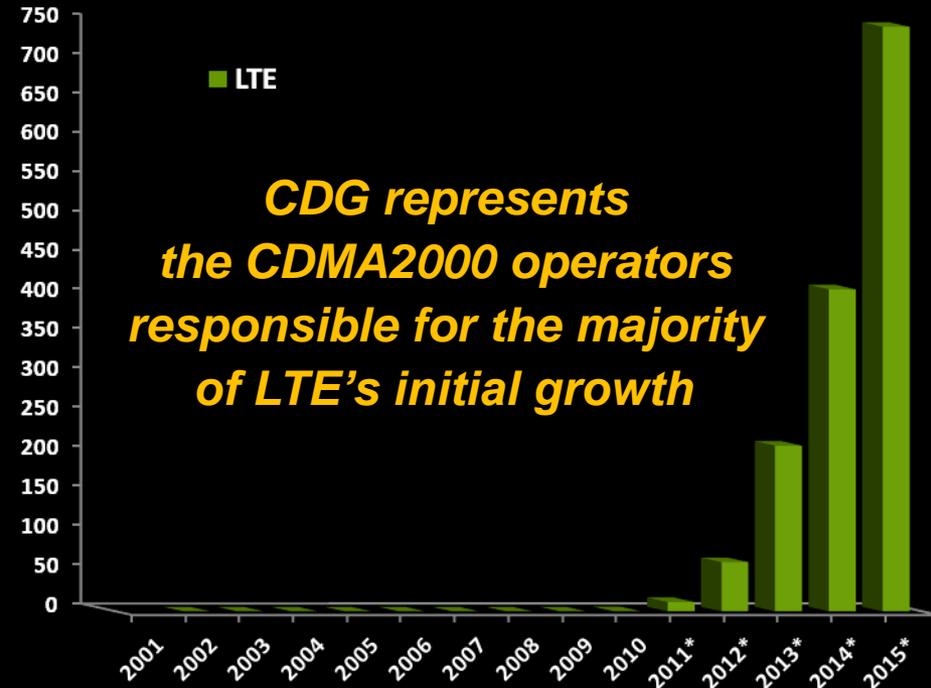
Cumulative
Subscribers
(Millions)

CDMA2000 Subscribers



Cumulative
Subscribers
(Millions)

LTE Subscribers



*CDG represents
the CDMA2000 operators
responsible for the majority
of LTE's initial growth*

Note: * Forecast

Sources: Informa WCIS+, Global Mobile Daily, CDG, Deutsche Bank, operator data

Source: IHS iSuppli Research, November 2011

Evolution Path

A long-term roadmap that includes CDMA and OFDM-based technologies

CDMA2000 Evolution Path



OFDMA-based Technologies



2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014+

Bridging the mutual interests of:



+



CDMA and LTE in the USA

Up to **70** CDMA2000 operators

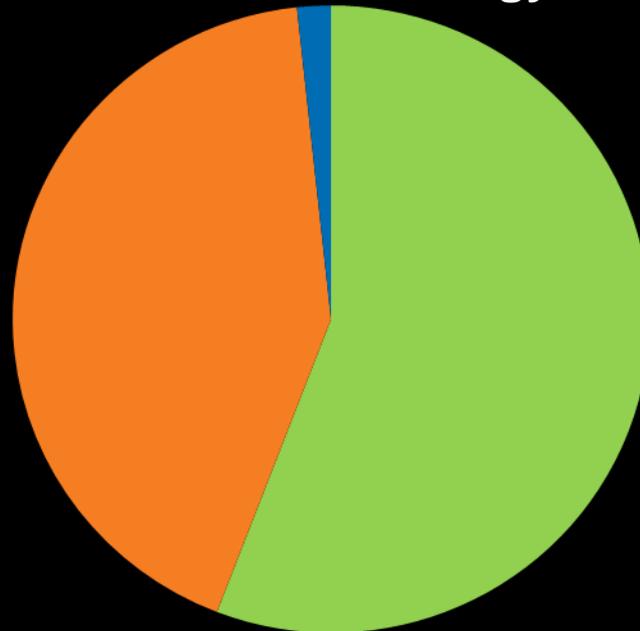
46 EV-DO Rev. A networks

4 LTE networks

184M+ CDMA2000 subscribers as of Jun 2011

More than **8.5M** LTE subscribers as of Mar 2012

U.S. Market: Wireless Technology Market Share



■ CDMA2000 1X/EV-DO ■ GSM/UMTS/HSPA ■ LTE

Plenty of C2K Devices

3,100+ commercial devices from 165 suppliers

- + Internet the way it's meant to be
- + Enterprise ready. Of course.
- + True multitasking
- + Fastest. Tablet. Ever.
- + Face-to-face conversations
- + Breathtaking multimedia



Apple iPhone 4



Rev. B



nexus S



Rev. B



ANDROID

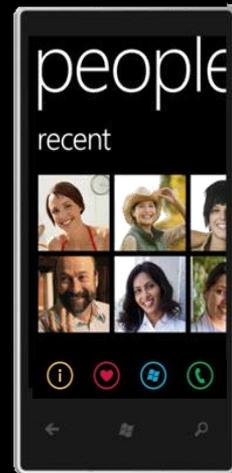


Apple new iPad



Rev. B

Windows® phone



Growing No. of LTE Operators

CDMA2000 operators around the globe that have or are deploying LTE

Commercial



Announced



Most of the other CDMA2000 operators do not yet have the requisite demand, spectrum or capital to deploy LTE

LTE Subscriber Base

The bulk of LTE subscriptions are being enabled on CDMA2000/LTE networks

CDMA2000/LTE Operators



Nearly 7 out of 10 LTE subscribers worldwide are using the services offered by the operators above

Growing No. of C2K/LTE Devices

CDMA2000 1X, EV-DO Rev. A and LTE multimode devices



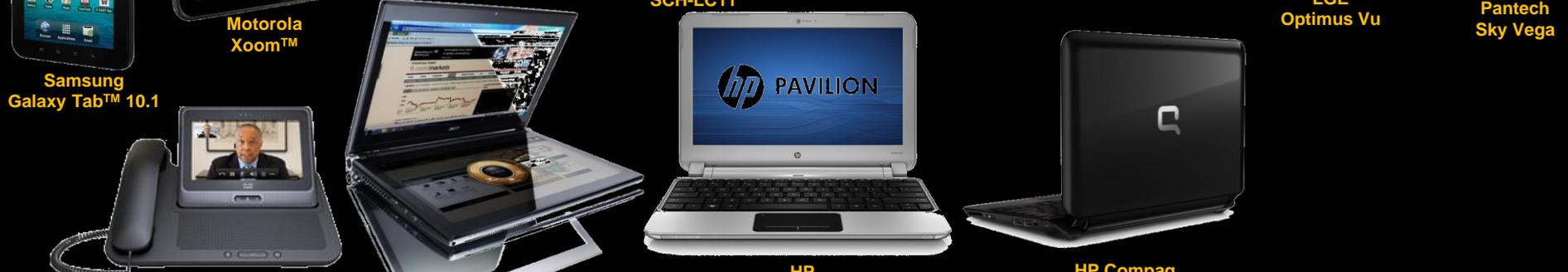
Samsung SCH-R900 Craft
HTC ADR6400 Thunderbolt
LG VS910 Revolution
Samsung Stratosphere
Samsung SCH-i520 Droid Charge
Motorola Atrix 4G
Motorola Droid Bionic
Pantech Breakout
Samsung SCH-R910 Indulge
LG LU6200 Optimus
Samsung Galaxy S II



Samsung SCH-i515 Galaxy Nexus
Samsung Galaxy Note
LG MS840 Connect
LG VS920 Spectrum
Motorola Droid Razor
Samsung Galaxy S Aviator
LGE Lucid
LGE Viper
Motorola Droid 3
Motorola Droid 4
Motorola Droid Razor Maxx
HTC Evo 4G LTE
Huawei M920



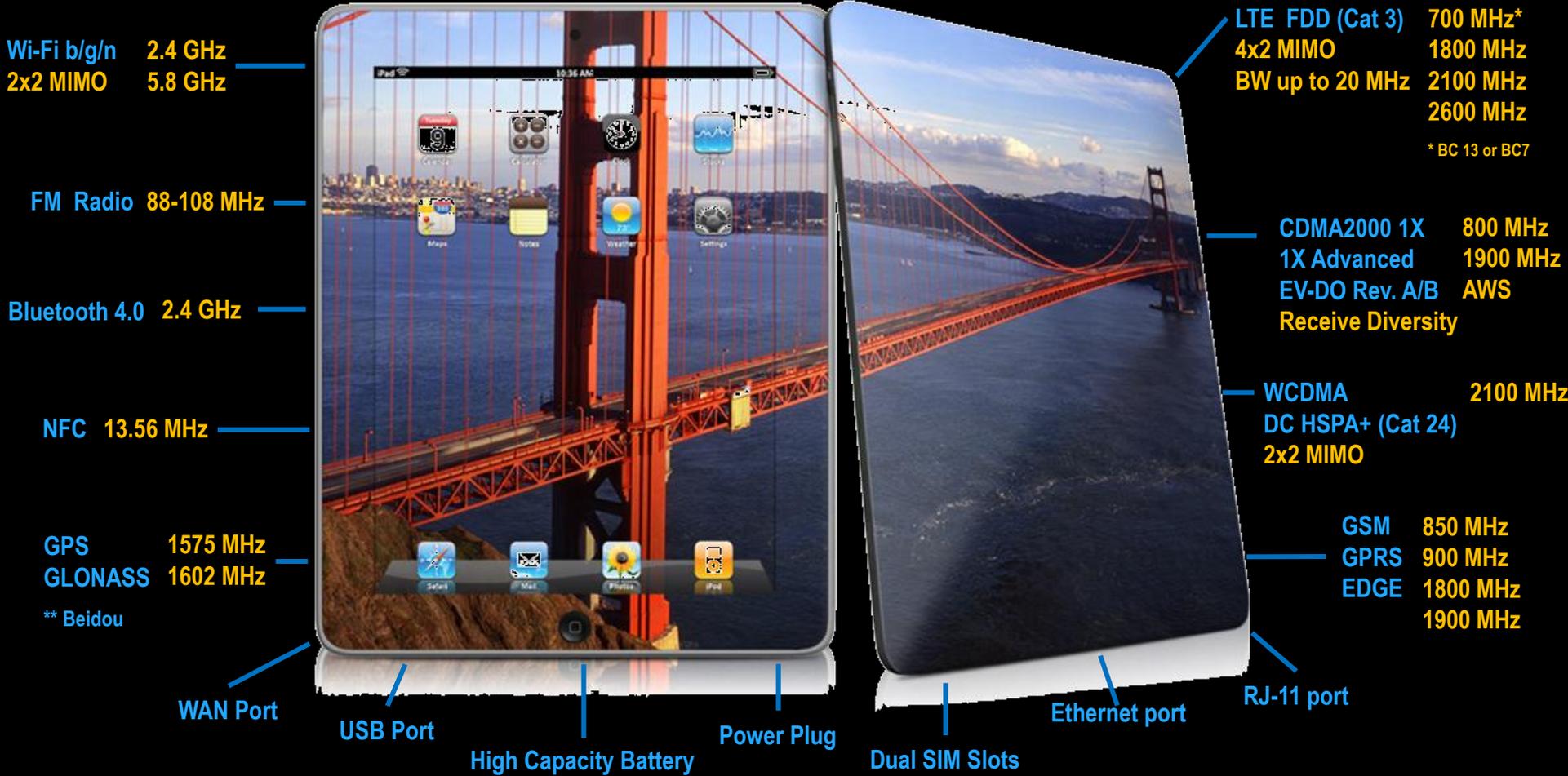
Samsung Galaxy Tab™ 10.1
Motorola Xoom™
Novatel MiFi 4510L Intelligent Mobile Hotspot
Samsung 3G 4G Dual-Mode LTE Mobile Hotspot SCH-LC11
Sierra Wireless MC7750
Novatel USB55iL
Pantech UML290
LG VL600
LGE Optimus Vu
Pantech Sky Vega



Cisco Cius
Acer ICONIA Tab A500
HP Pavilion DM1-3010NR
HP Compaq Mini CQ10-688nr

A Well Connected Device

The challenge is to support all of the 3GPP and 3GPP2 frequency assignments



Devices that operate across multiple networks to deliver most services



CDG is supporting and monitoring the submission of requirements to 3GPP and 3GPP2 to enable:

- **Seamless mobility** – to ensure service continuity between CDMA2000 and LTE networks
- **Voice service continuity** – between CDMA2000 and LTE access networks
- **System Determination** – to maximize revenue among different networks
- **Device Certification** – to ensure full compliance of 3GPP/3GPP2 standards
- **Mobility management** – among HRPD and LTE networks
- **Integration of small cells** – within heterogeneous CDMA2000 and LTE networks
- **Inter-standard signaling and protocol conformance testing**
- **Inter-standard global roaming** – between CDMA2000 and LTE networks
- **Carrier-grade authentication, billing, policy and security measures**



1H 2012 Events

CDMA2000 Evolution to LTE

CDG Webinar Series for North American Regional and Rural Operators, Jan. 24, 2012

Insight into CDMA2000 and LTE Device Availability

CDG Webinar Series for North American Regional and Rural Operators, Feb. 22, 2012

Maximizing Earnings while Connecting Communities in a 4G World

RCA Competitive Carriers Global Expo, Orlando, FL, Mar. 28, 2012

The Economics of M2M

CDG Webinar Series for Global CDM2000 Operators, Apr. 19, 2012

Maximizing ROI Today with CDMA2000 and LTE Networks

CTIA Wireless 2012 Partnership Event, May 8, 2012



Market Representation Partner

**Committed to ensuring the successful integration
of LTE with CDMA2000**