GSA REPORT TO 3GPP PCG #20

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Scope of report

- **Market snapshot, statistics**
- **WCDMA-HSPA mobile broadband success**
- **LTE**
- **How GSA is promoting 3GPP systems**

GSA promotes 3GPP Systems and Standards Worldwide

GSA is a Market Representation Partner of 3GPP

A GLOBAL INITIATIVE

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Market snapshot

GSM/EDGE, WCDMA-HSPA achieving continuing & increasing market success, with strongly expanding eco-systems

- **Mobile broadband is driven globally by WCDMA-HSPA**
  - **WCDMA is in use by over 72% of commercial 3G operators worldwide**
  - **80 million WCDMA subscriptions added in 2007 i.e. over 81% growth**
- **Operators report data traffic growth, revenue/profit growth with HSPA**
  - **Emphasis is on services & applications for subscriber/revenue growth**
- **Network peak data speeds are evolving: downlink & uplink**
- **3GPP GSM-family systems have increased market share**
  - **2.7% gain in market share in 2007; 3 billion subscribers milestone reach in March 2008**
- **Future evolution to LTE attracting important and growing industry support**

Networks, devices, services surveys, and analysis by GSA
Subscriber numbers from Informa Telecoms & Media

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Market statistics

3 billion GSM-family subscribers milestone passed Q1 2008

Fast Facts – April 8, 2008

Over 1.1 billion GSM, WCDMA and HSPA subs in commercial HSPA-enabled networks globally

The GSM technology family embraces GPRS, EDGE, WCDMA-HSPA – all open 3GPP standards

3.050 billion GSM, WCDMA subs (April 1, 2008)
586 million subscriptions added in 2007

GSM, WCDMA has 86.6% market share Q4 07

(2.7% gain in market share in 2007)

179 million WCDMA subs including HSPA end 2007

Over 75% of 450 + commercial GPRS operators globally committed to EDGE

345 GSM/EDGE network commitments in 158 countries; 290 network launches, 136 countries

900 + GSM/EDGE devices launched (April 2008)

Most WCDMA-HSPA networks combine with EDGE for service continuity, best user experience

Network deployments, devices data source: GSA surveys
Mobile subscribers data source: Informa Telecoms & Media

211 3G/WCDMA operators launched in 91 countries = 72% share of 293 commercial 3G networks

1100 + WCDMA devices launched, 110 + suppliers

220 HSDPA network commitments in 92 countries, including 185 commercial launches in 80 countries

103 HSDPA networks launched in Europe

87.6% i.e. 7 out of 8 live WCDMA operators also launched HSDPA

637 HSDPA devices launched; 110 suppliers (Apr 2008)
- *145 devices support tri-band 850/1900/2100 MHz*

116 HSDPA operators launched 3.6 Mbps (peak) or higher in 58 countries = 62.7% of live HSDPA operators. 190 HSDPA devices support 3.6 Mbps

38 operators launched 7.2 Mbps (peak); 128 devices

34 HSUPA network launches; 24 more HSUPA network commitments; 66 HSUPA devices launched

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Regular market updates, surveys and results, analysis, etc. available at www.gsacom.com

46 charts, graphs, maps etc. for use (subject to accreditation to the source)

Fast Facts, charts, maps, etc. downloadable at http://www.gsacom.com/news/statistics.php4

WCDMA-HSPA mobile broadband success

Surveys by GSA confirm HSPA is mainstream

- 7 out of 8 commercial 3G/WCDMA operators also launched HSDPA
- 57.8% of commercial HSDPA operators also launched GSM/EDGE
- HSPA network peak data speed evolution:
  - Over 62% of commercial HSDPA operators support 3.6 Mbps or higher
  - Over 20% of commercial HSDPA operators support 7.2 Mbps or higher
  - Almost 20% of HSPA operators have launched HSUPA
- 637 HSDPA devices launched in the market
  - 150% annual growth
  - Addressing all segments
  - Increasing speeds
  - Multiple frequency bands
  - More embedded functionalities including WLAN, GPS

Source and copyright - GSA

HSPA devices growth

"Our latest survey confirms the rapidly expanding eco-system for HSPA and underlines how the HSPA market has developed much faster than other technologies. HSDPA networks entered commercial service 30 months ago; the number of HSDPA devices launched worldwide is over twice the number of GSM/EDGE devices and over six times the number of 3G/WCDMA devices had at the same point in their service development."
GSA press release – April 6, 2008

Source and copyright - GSA

LTE

- Hot topic in discussions, forums, reporting, media
- Major operator players have signalled support/interest in deploying LTE, including AT&T Mobility, Verizon Wireless, Vodafone, China Mobile, NTT DoCoMo, Telstra
- LTE is emerging as an enabler for network convergence, as some cdma operators are choosing LTE as their evolution path
- Several more LTE commitment announcements will follow

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How GSA is promoting 3GPP Systems

Some practical examples (1)

- Regular surveys of commercialization of 3GPP systems: GSM/EDGE, WCDMA-HSPA; devices; services, success stories
- Regular updating/expansion of stats/charts/maps section
- Presentations at selected key conferences
- Press releases: survey results, key milestones
  - 7 press releases published so far in 2008
  - 370+ reports (to mid-April)
- Articles/editorials
- Information Papers:
  - LTE
  - UMTS 900
  - EDGE Evolution
  - Mobile Broadband Spectrum
  - NGMN
  - DTM
  - Common IMS

collectively achieve thousands of downloads. More topics being added

How GSA is promoting 3GPP Systems

Some practical examples (2)

http://www.gsacom.com/gsm_3g/surveys.php4

NEW SURVEYS:
3G Applications and Services

Delivers results of research to highlight & make public, good examples of 3G services from 3G operators around the world in a number of categories: mobile broadband, mobile advertising, social networking, place shifting, mobile search

- ❑ **Europe** **published**
- ❑ **Asia** **published**
- ❑ **Latin America** **} imminent**
- ❑ **Middle East/Africa** **} imminent**

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How GSA is promoting 3GPP Systems

Some practical examples (3)

GSA Mobile Broadband Forum

By-invitation program for mobile network operators, and GSA member companies

Focuses on mobile broadband success stories, business models, services, applications, application of technologies and evolution, growing traffic and ARPU, how to prepare the market, market experiences

Launched in Hong Kong in December 2007

3 MBF events announced for 2008

GSA Mobile Broadband Forum
Berlin, May 20th
Amsterdam, Sept 16th
Cape Town, November

GSA working with the 3GPP community

- Developing the messaging
- Extending reach globally

GSA website is used by industry professionals from 187 countries – targeting media, analysts, fixed and mobile network operators, suppliers, regulators, services/applications developers

Increasing media coverage growth -most reported topics are HSPA-enabled mobile broadband, evolution, LTE

Links in place to 3GPP website where appropriate

http://www.gsacom.com/rss/gsanews.php4

.mobi http://gsacom.mobi

GSA welcomes a beneficial co-operation with 3GPP's newly-appointed Marketing & Communications Officer

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