

Mobile subscriptions growth: 2004 – 2010

GSM and WCDMA technology



Mobile broadband network deployments

- ❑ **410 commercial HSPA operators launched in 162 countries**
 - ❑ **Over 70% support peak DL speed of at least 7.2 Mbps**

HSPA+ is mainstream

- ❑ **193 HSPA+ network commitments; 136 HSPA+ networks launched**
 - ❑ **GSA forecasts 170 commercial HSPA+ networks by end 2011**
 - ❑ **39 commercial 42 Mbps DC-HSPA+ networks now launched**

LTE is the industry direction

- ❑ **218 operators in 81 countries are investing in LTE**
166 network commitments in 62 countries + 52 pre-commitment trials

Mobile broadband business is profitable & growing

- ❑ **Strong wireless data traffic and revenue growth with HSPA systems consistently reported by operators around the world**
- ❑ **697m WCDMA subs incl. 405m HSPA (Q1 11), Informa Telecoms & Media)**

Global eco-system established

- ❑ **Thousands of GSM user devices; unprecedented economies of scale**
- ❑ **Being repeated for HSPA**
 - ❑ **3,227 devices launched (264 suppliers) - includes 182 HSPA+**
 - ❑ **62% devices support at least 7.2 Mbps peak DL**
 - ❑ **663 UMTS900 devices (supporting HSPA or HSPA+)**
 - ❑ **161 LTE devices launched**
 - ❑ **includes 100 dual-mode HSPA/LTE devices**

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100% of WCDMA operators have launched HSPA

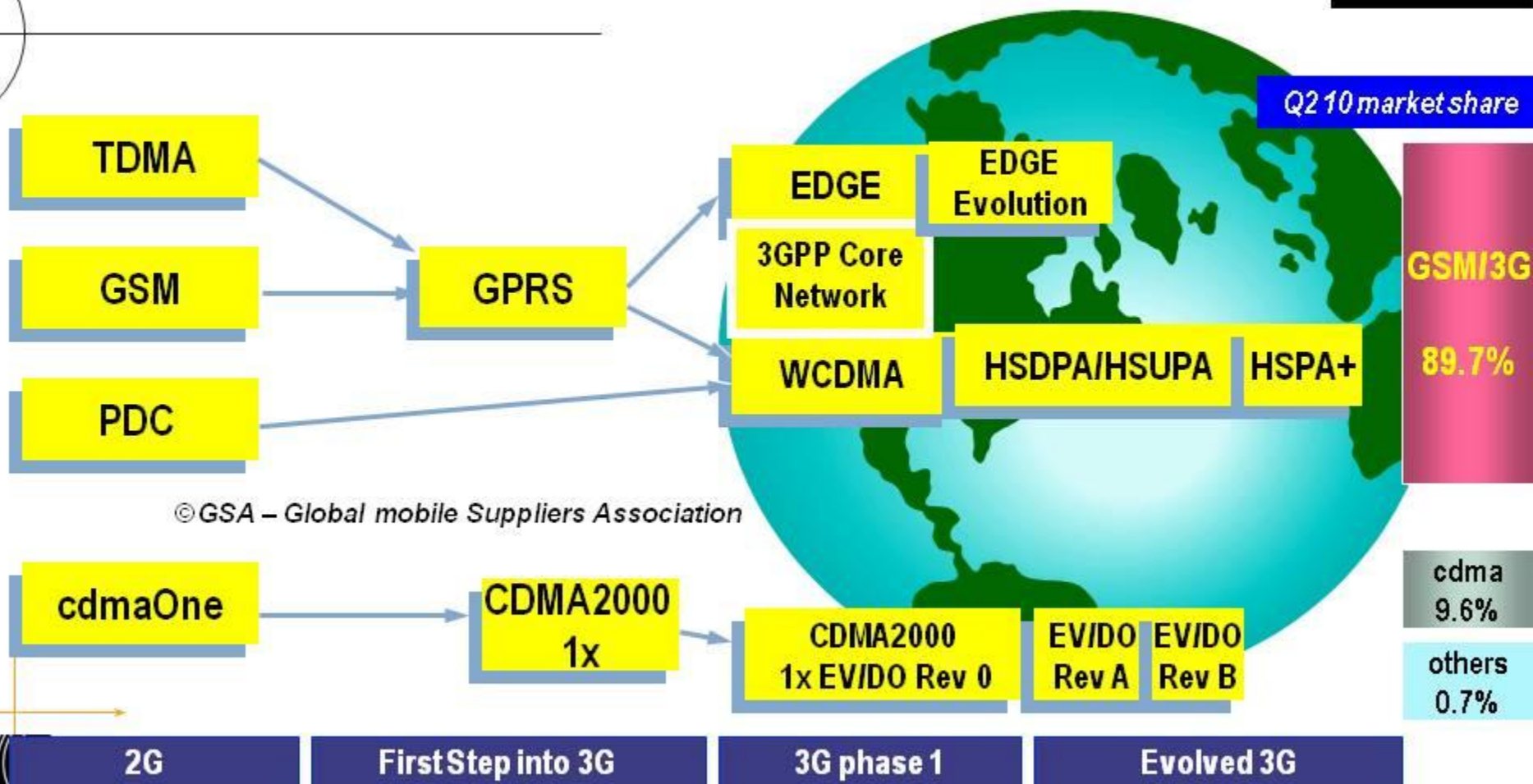
HSPA+ is mainstream. Its introduction continues as the main trend in 2011

Most operators coming into the mobile broadband market today launch with HSPA+

The number of firm LTE network deployment commitments has more than doubled since June 2010

Evolution of Mobile Systems to 3G

- Drivers: capacity, data speeds, lower cost of delivery -
for revenue growth



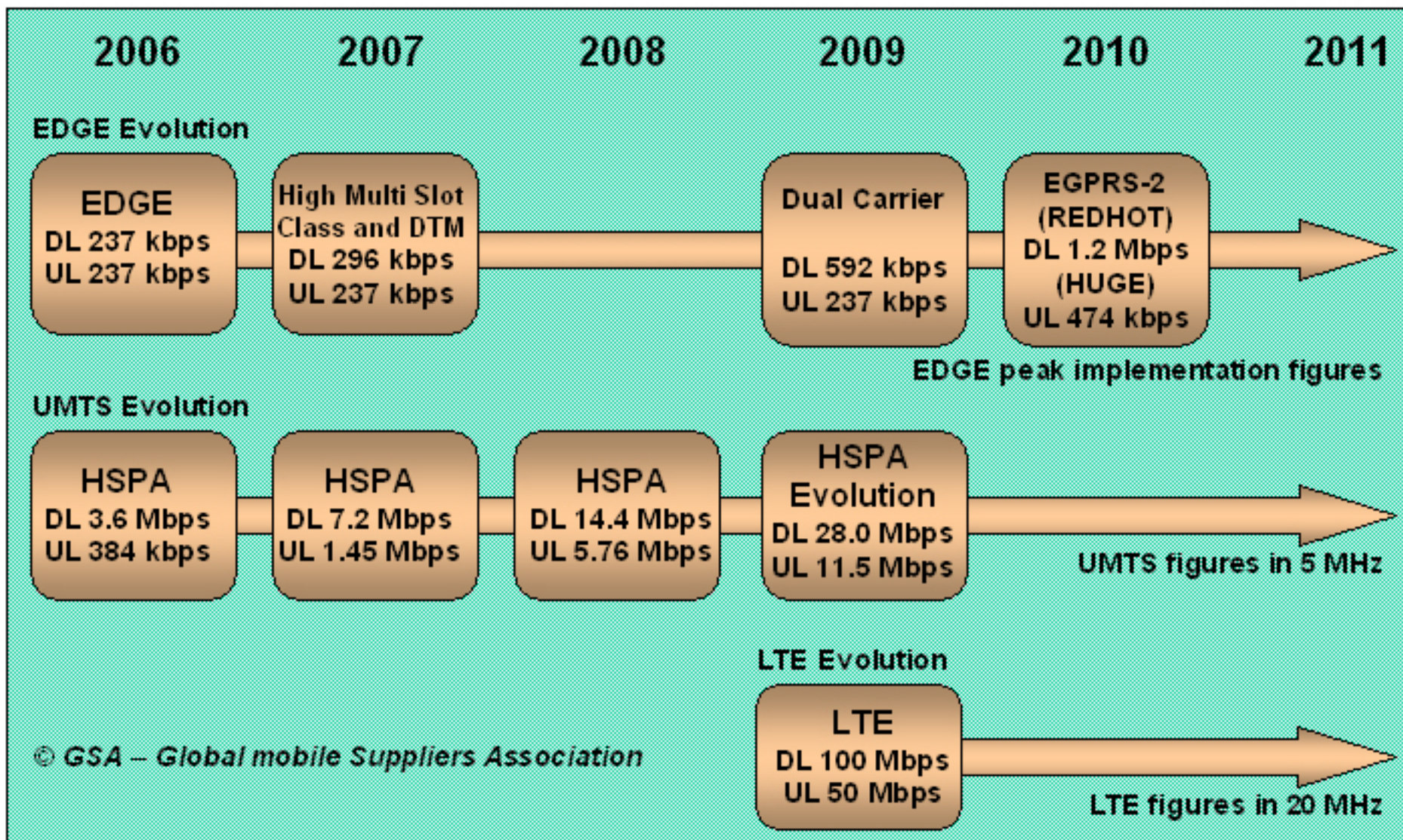
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Market share calculated according to subscriptions data provided by Informa Telecoms & Media

3GPP Evolution in Radio Access Networks



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Mobile subscriptions growth - India

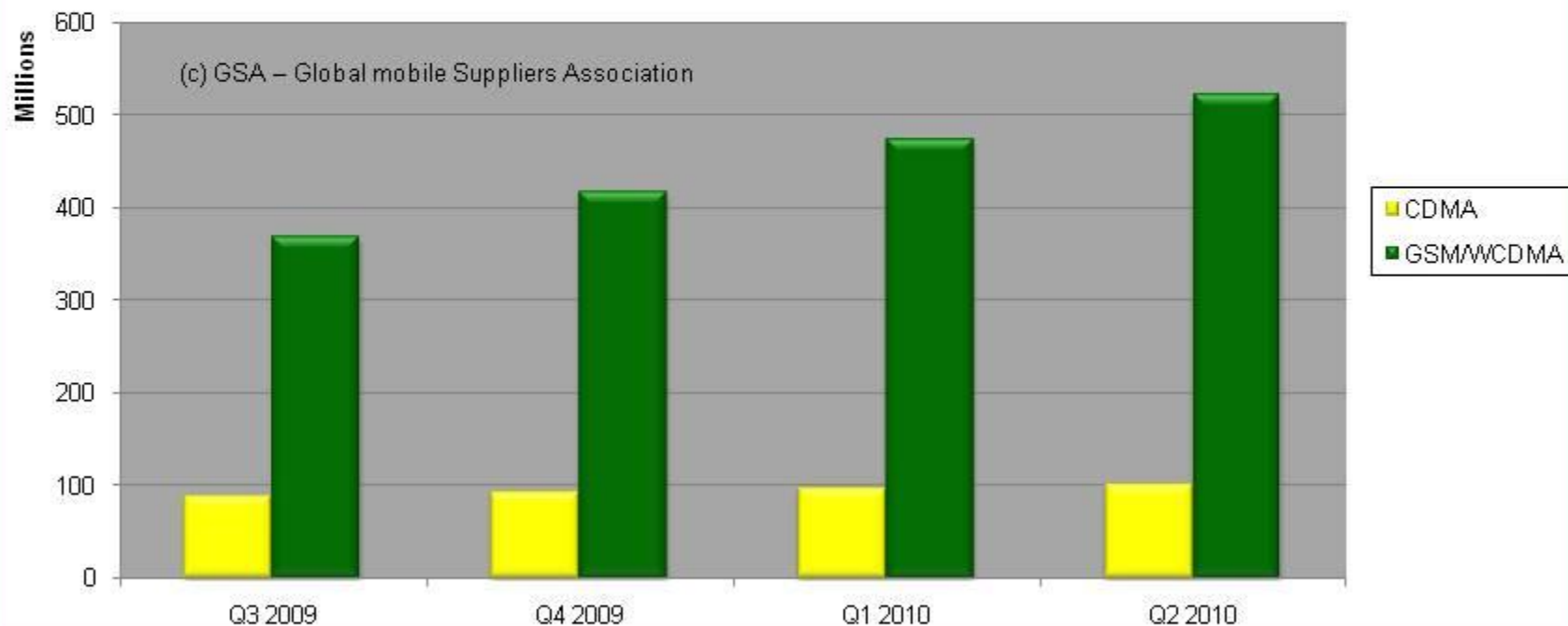


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500 mil. GSM/WCDMA subs milestone passed in May 2010

104 million subs added in first 6 months of 2010

Mobile subscriptions growth - India



Data Source
informa
telecoms & media

193.1 million new GSM/WCDMA subs = 58.9% annual growth

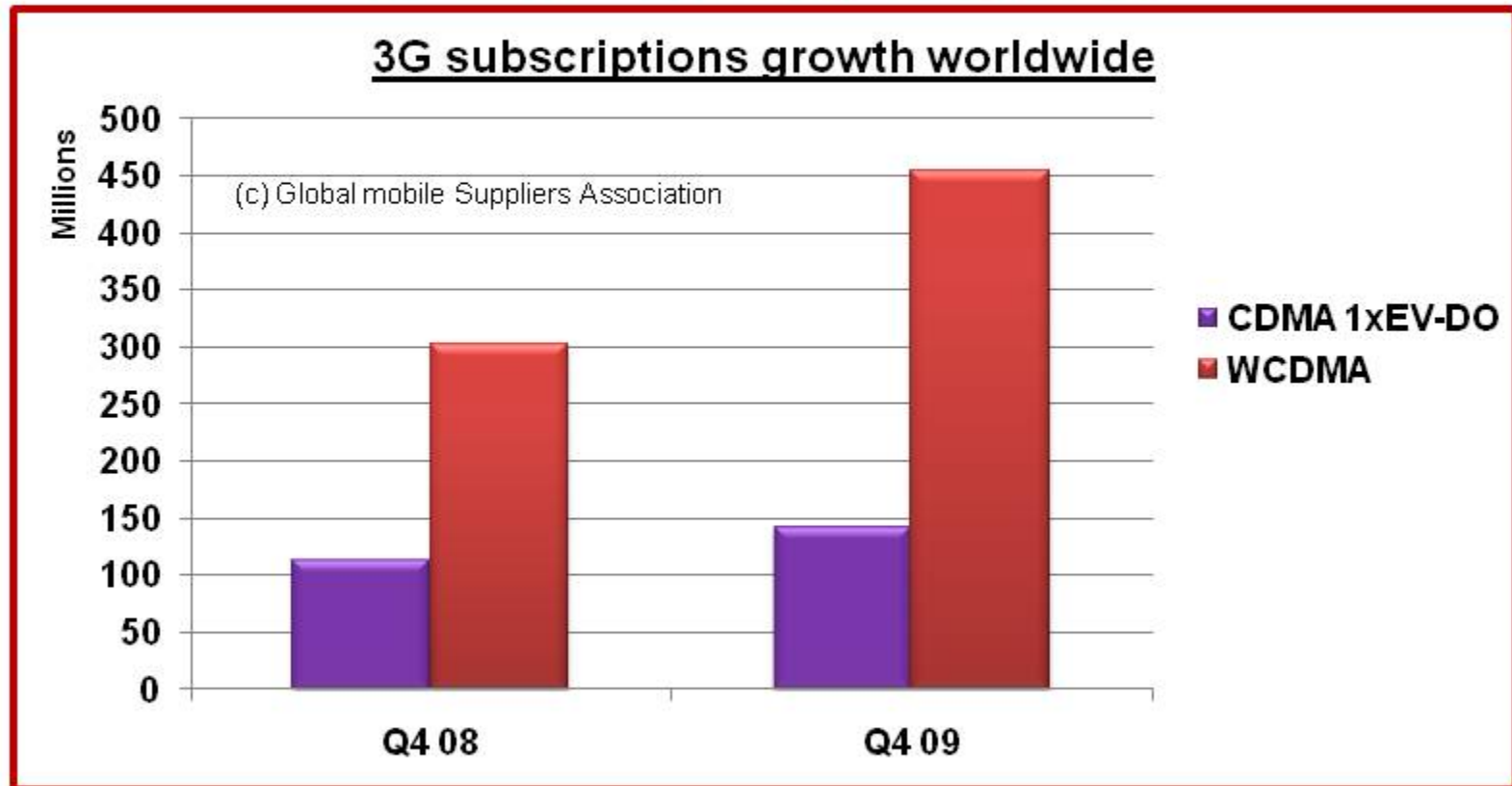
GSM subs = 83.6% market share

3G subscriptions growth worldwide



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WCDMA (inc HSPA) has 76% market share of 595.7 million 3G subscriptions globally



WCDMA (inc HSPA) growth YoY = 50%

WCDMA-HSPA subs: Informa Telecoms and Media
CDMA 1xEV-DO subs: CDG website

3G/WCDMA commercial deployments

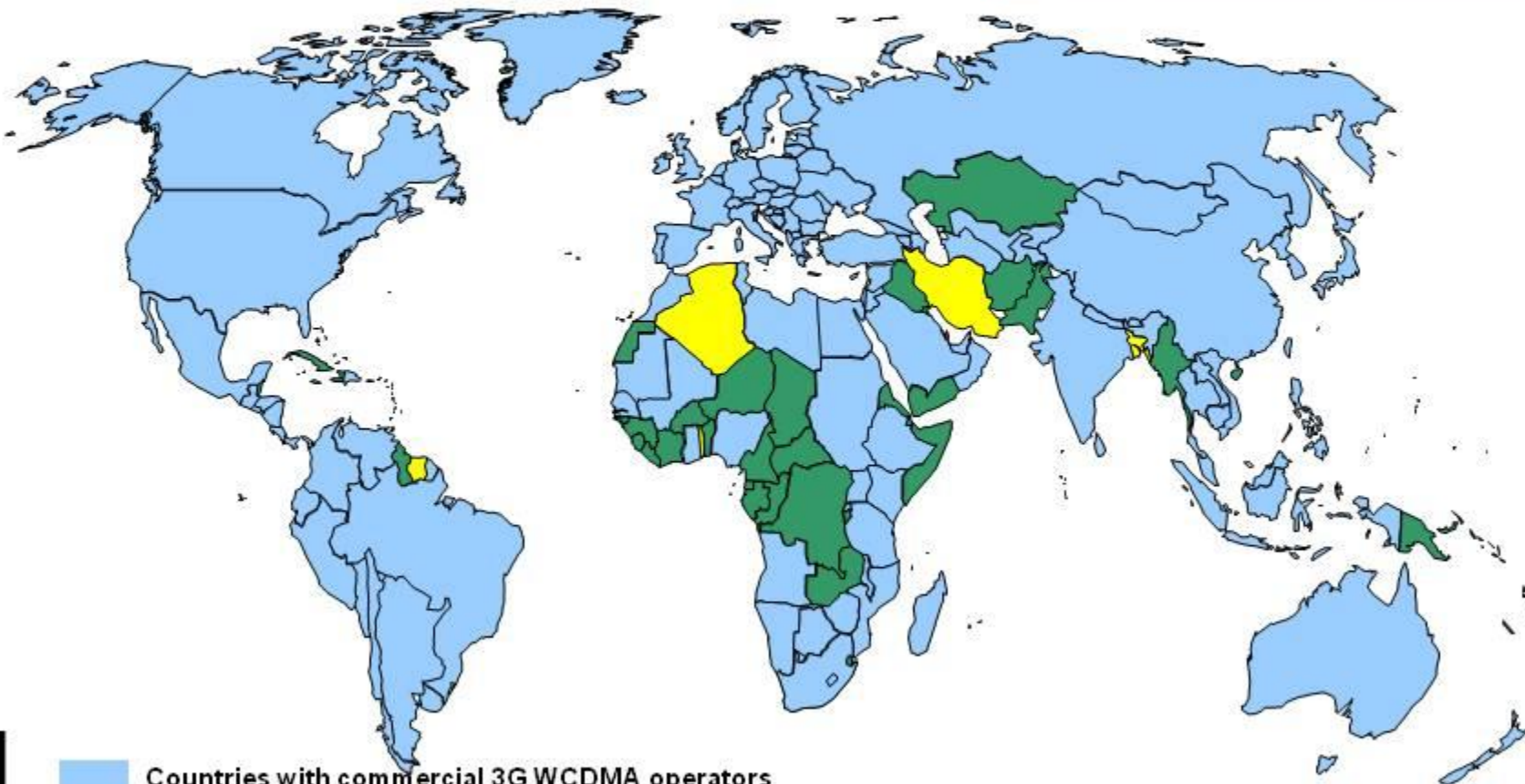
- 400 WCDMA networks are commercially launched in 161 countries
- excludes MVNOs; multi-band networks counted as single networks

□ 398 WCDMA operators launched HSPA in 160 countries; 123 networks are HSPA+
99.5% of commercial WCDMA operators have launched HSPA !



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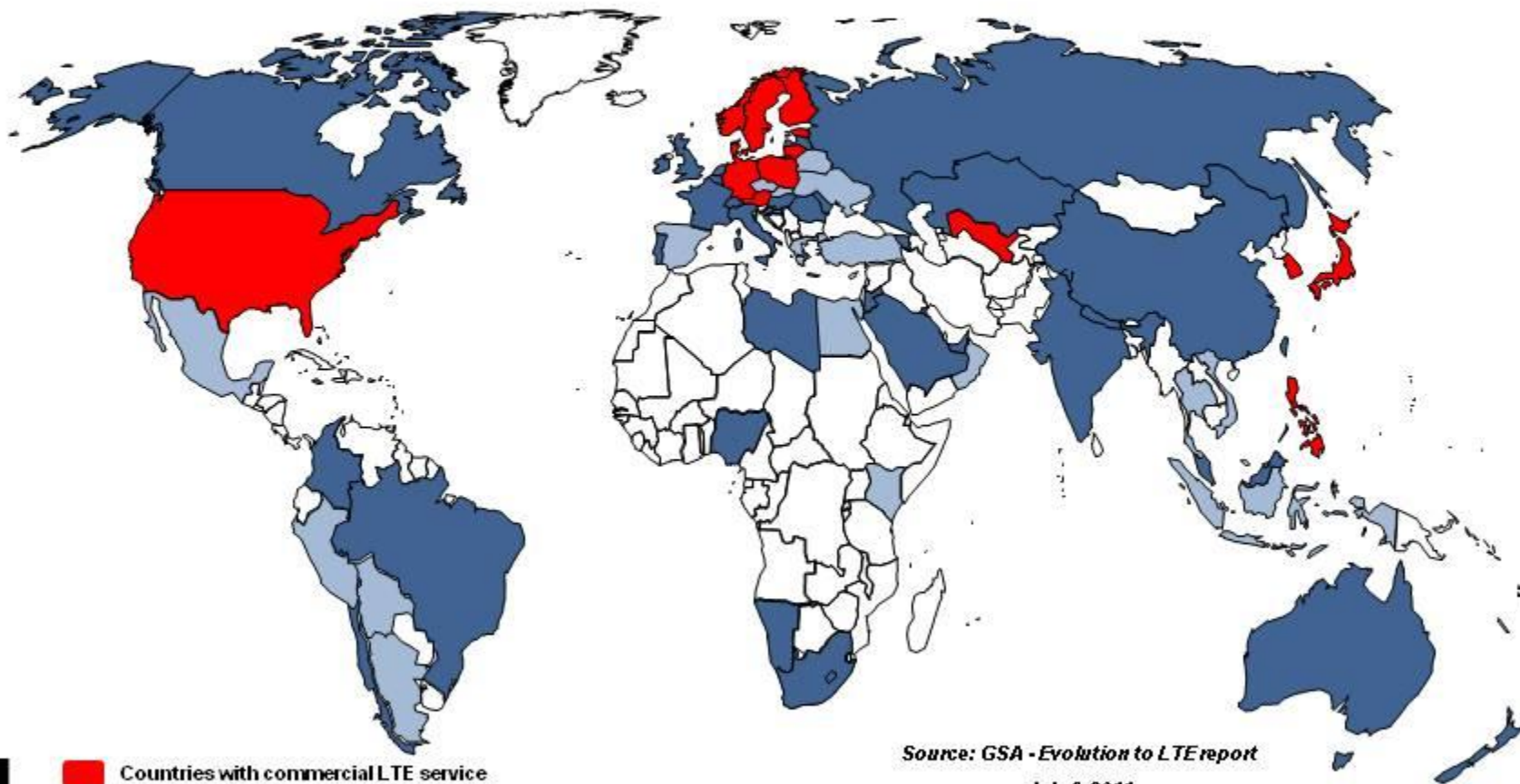
- Countries with commercial 3G WCDMA operators
- Countries with 3G WCDMA licenses & networks in deployment

218 operators in 81 countries investing in LTE

- 166 commercial LTE network commitments in 62 countries
- 52 pre-commitment trials in additional 19 countries
- 24 commercial LTE networks launched in 16 countries



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- Countries with commercial LTE service
- Countries with LTE commercial network deployments on-going or planned
- Countries with LTE trial systems (pre-commitment)

Source: GSA - Evolution to LTE report

July 6, 2011

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