

# REPORT: Status of the LTE Ecosystem

*April 3, 2012*

This updated report, which was researched and published by GSA (Global mobile Suppliers Association), lists 347 LTE devices launched in the market by 63 suppliers, and confirms how a robust user device ecosystem has been established in support of LTE as the fastest developing mobile communications system technology ever

**GSA (Global mobile Suppliers Association)**  
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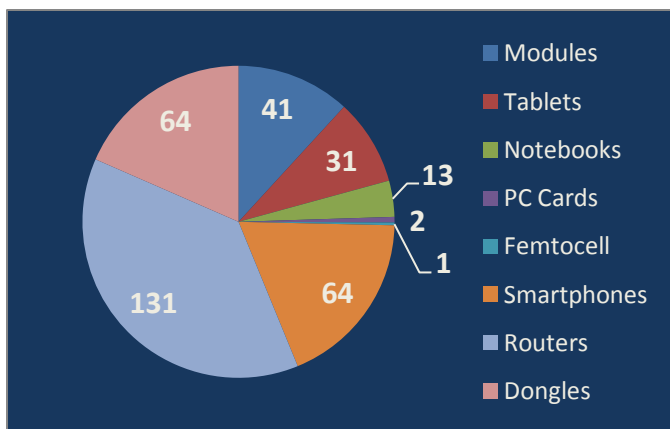
## 347 LTE User Devices Launched by 63 Manufacturers

GSA surveys worldwide mobile broadband market developments and trends, and publishes a regularly updated report "Evolution to LTE" confirming operator commitments to LTE, network deployments, launches, trials, regulatory and market developments. The Evolution to LTE report of March 13, 2012 confirmed 301 operators are investing in LTE, comprising 242 network build commitments and 59 pre-commitment trials. 57 commercial LTE systems had launched by that date. GSA forecasts 128 LTE networks will be in commercial service by end 2012 (check the GSA website [www.gsacom.com](http://www.gsacom.com) for updates). There were 6.7 million LTE subscriptions at December 31, 2011.

**The LTE devices ecosystem has rapidly grown to meet the needs of operators and customers. GSA confirms 347 LTE User Device product announcements by 63 manufacturers, including frequency and carrier variants, to April 3, 2012.**

The number of LTE devices, 347 as confirmed in this report, is 150 higher than the figure GSA reported on October 28, 2011, representing 76% growth. 53 LTE TDD capable devices are included. The number of manufacturers announcing LTE products increased by 31% in the same period.

LTE user devices address all market segments:



### 347 LTE User Devices - by form factor

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There are 64 LTE smartphones, i.e. one third higher than GSA stated on January 20, 2012 (the date of GSA's previous report). The number of LTE-capable tablets increased 72% in the same period.

Detailed analysis of each of the 347 LTE devices is supported in the **GAMBoD - LTE tool** ([www.gsacom.com/gambod](http://www.gsacom.com/gambod)). Access is restricted to logged-in registered site users from GSA member companies and network operators who supplied their corporate email address as their User ID.

### Operating frequencies

LTE networks are deployed globally in many bands. GSA's analysis of how the main LTE bands are supported by the devices ecosystem is as follows:

LTE FDD	
700 MHz	170 devices
800 MHz Band 20	72 devices
1800 MHz Band 3	75 devices
2600 MHz Band 7	94 devices
800/1800/2600 MHz	57 devices
AWS Band 4	72 devices

LTE TDD	
2300 MHz Band 40	43 devices
2600 MHz Band 38	45 devices
2600 MHz Band 41	5 devices

Note 1: manufacturers have not declared operating frequencies or fallback modes for some products

Note 2: 3GPP defines a number of bands in 700 MHz:  
 Band 12: (Lower 700 MHz) 699 MHz-716 MHz /729 MHz-746 MHz  
 Band 13: (Upper C 700 MHz) 777 MHz-787 MHz /746 MHz-756 MHz  
 Band 14: (Upper D 700 MHz) 788 MHz-798 MHz /758 MHz-768 MHz  
 Band 17: (Lower B, C 700 MHz) 704 MHz-716 MHz /734 MHz-746 MHz  
 APAC Digital Dividend (APAC700): 698 - 806 MHz

An LTE device confirmed by GSA as operating in "700 MHz" may operate in only one of these bands, and in some cases will operate in more than one of these bands

Note 3: Certain products are carrier or country specific and are not available in all markets

### Interworking/fallback

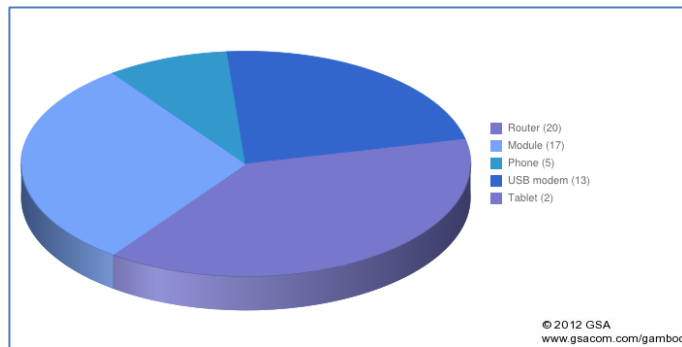
- 217 LTE devices operate on either HSPA, HSPA+ or 42 Mbps DC-HSPA+ networks
- 91 LTE devices support 42 Mbps DC-HSPA+
- 108 LTE devices support EV-DO networks

### LTE1800

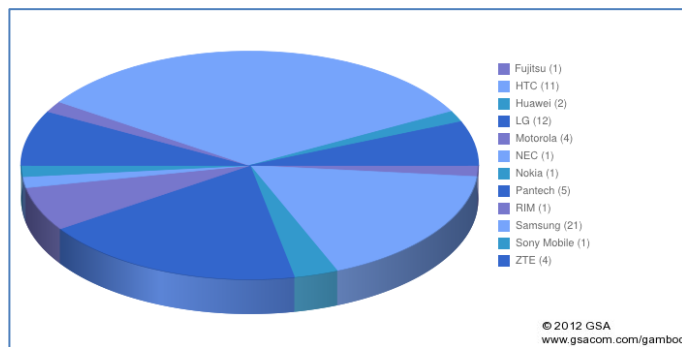
LTE network deployment in 1800 MHz spectrum (3GPP Band 3) is a crucial strategic option for many operators. Commercial LTE services using 1800 MHz have been launched in Europe, Middle East, and APAC. Re-farming of 1800 MHz spectrum, originally used for GSM, is increasingly being favored, especially where new spectrum in 2.6 GHz or digital dividend (700, 800 MHz) bands has not yet been allocated. A report by GSA "Embracing the 1800MHz opportunity: Driving mobile forward with LTE in the 1800MHz band" (free download at [www.gsacom.com](http://www.gsacom.com)) demonstrates the strong appeal of using 1800 MHz spectrum for mobile broadband, showing from practical, economic and business perspectives why 1800 MHz will emerge as a prime band for LTE deployments in virtually all regions of the world, and

will also be important for international roaming. There is an excellent choice of LTE1800 devices in the market today. 75 LTE1800 devices have been announced, an increase of 50% in under 3 months.

### Sample charts generated by GAMBoD:



**57 tri-band 800, 1800, 2600 MHz LTE devices - form factor** © GSA – Global mobile Suppliers Association



**64 LTE smartphones – models per vendor** © GSA – Global mobile Suppliers Association

*Reminder: to be authorized to use GAMBoD you must be an employee of a GSA member company or an employee of a network operator and have registered on the GSA website with your corporate email address.*

**GSA** (Global mobile Suppliers Association) represents GSM/EDGE/WCDMA-HSPA/HSPA+ and LTE suppliers. GSA brings together a global industry community of telecoms professionals through the website and practical activities. The GSA website [www.gsacom.com](http://www.gsacom.com) has over 47,000 registered users for knowledge gathering and information sharing of key facts, trends and analysis. Register for free downloads of reports, information papers, maps, charts, etc. [www.gsacom.com/php/register\\_form.php4](http://www.gsacom.com/php/register_form.php4)

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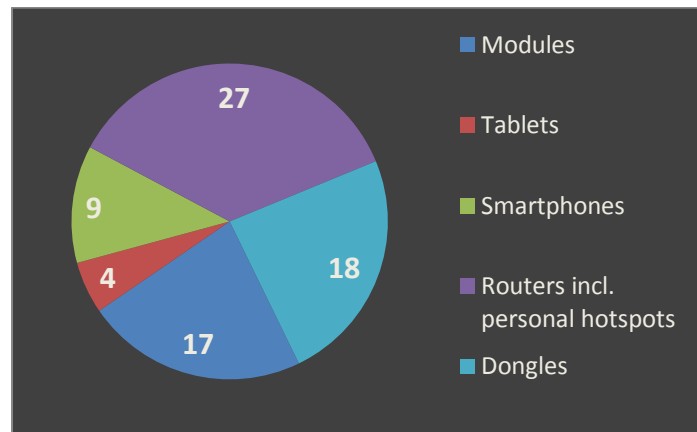
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**NOTES:**

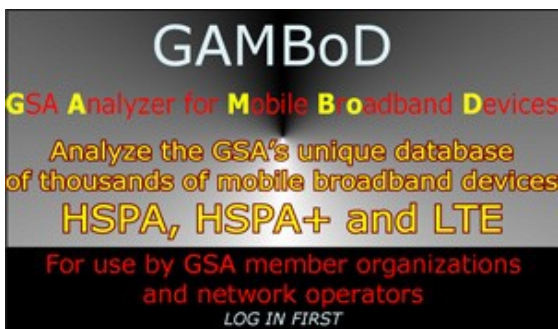
1. Errors & Omissions Excepted
2. General announcements relating e.g. to future product collaborations or launches are not included

**Send updates please to [info@gsacom.com](mailto:info@gsacom.com)**



**75 LTE1800 User Devices by form factor**

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GAMBoD is the **GSA Analyzer for Mobile Broadband Devices**, a unique search and analysis tool developed by GSA for mobile broadband devices, allowing searches by supplier, form factor, features, peak downlink and uplink speeds, and operating frequency. Results are presented as a list, or as a spreadsheet, or in charts. An RSS feed can be subscribed to for alerts as new devices of interest are added to the database. Charts may be inserted into documents or presentations, subject to accreditation of GSA as the source.

GAMBoD is available only to qualified site users, which GSA has defined as employees of GSA member companies who have registered using their corporate email address, or representatives of network operators who have registered using their corporate email address.

Two databases are available for personalized analysis – one is for HSPA, HSPA+ and DC-HSPA+ user devices. The second database references all the LTE devices confirmed for this report; this is called GAMBoD-LTE. Both databases, especially for LTE, are very popular and heavily visited and used.

Both GAMBoD databases are located at [www.gsacom.com/gambod](http://www.gsacom.com/gambod)