

Summary

Executive summary

Mobile broadband based on HSPA/LTE and other mobile communication standards has taken off as an important technology for connecting mobile PCs to the Internet. The evolution is led by Europe where HSPA now accounts for 17.3 percent of the total number of broadband connections, compared to 8.0 percent in North America. The concept that was first launched as an exclusive business service is now a mass-market consumer product sold on an intensively competitive market. Consumers are utilizing their mobile broadband connections extensively, pushing the networks to their capacity limits. In fact the overwhelming majority of data traffic on mobile networks is today generated by notebook PC users that surf the Internet, not smartphone users. Fair use policies must be implemented to ensure network availability and pricing must be predictable. International roaming is still largely hindered by prohibitive pricing, making services utterly unattractive to use abroad.

Mobile broadband terminals are available in different forms and shapes. Four main types have emerged to satisfy different needs – PC-cards, USB-modems, embedded modules and gateways. Berg Insight estimates the total global number of shipped external mobile broadband devices in 2009 to 66 million, with Europe and North America accounting for 24.3 million units and 5.6 million units respectively. In addition, shipments of embedded modules reached an estimated number of 7 million units. Expectations on embedded solutions have been high during the past year, but the attach rate is still relatively low at less than 5 percent in 2009. The European device market grew by 34 percent in 2009. Growth is forecasted to continue with shipments reaching 70 million units in 2015, fuelled by strong demand for mobility and integration in notebook PCs. Also the North American device market will experience a rapid growth to reach 39 million shipments in 2015. The ASP in Europe was about € 46 in 2009. The US device market is still focused on business users and the Chinese vendors Huawei and ZTE have not managed to capture significant market shares, whereby the ASP remained as high as US\$ 123 in 2009. The EU 23+2 external device market generated an estimated € 1.1 billion in 2009 while the North American market generated estimated revenues of € 503 million.

The European mobile broadband market continues to grow rapidly, with demand fuelled by declining prices, improved user experience and massive marketing campaigns. Berg Insight estimates that the total number of mobile broadband subscribers in EU 23+2 grew by 73 percent to reach 25 million in 2009 while the estimated operator revenues reached € 4.7 billion. The European mobile broadband market is expected to grow at a compound annual growth rate of 10.8 percent to reach € 8.7 billion in 2015. Today, a majority of the users subscribe to data bundles for 12 or 24 months, but as the market matures and embedded modules become widely distributed a majority of new subscribers will only be occasional users generating lower network ARPU. Furthermore, multi-play propositions bundling mobile broadband with other services are likely to become prevalent.

Berg Insight estimates that the number of mobile broadband subscribers in North America was about 7 million at the end of 2009. The estimated service revenues were about US\$ 4.6 billion and are expected to grow at a compound annual growth rate of 14.0 percent, to reach US\$ 10.1 billion by 2015. The growth in North America will accelerate when operators start to target the consumer segment with attractively priced proposals. The introduction of LTE and the increasing number of notebooks featured with embedded modules will drive usage as consumers do not need to make the initial hardware investment.

Huawei has established itself as the world's largest supplier of mobile broadband terminals holding a market share of 53 percent and has a particularly strong foothold in Europe. ZTE is the second largest vendor with clear margins capturing a market share of 30 percent. In North America, the local vendors Sierra Wireless and Novatel Wireless still hold strong positions on a market where EVDO is an important network technology. Option was previously the main supplier in Europe, prior to the entrance of the two Chinese vendors and is now ranked third. A vast majority of the external modems shipped are USB modems, but mobile routers are gaining in popularity. Two of the largest telecom vendors – Ericsson and Qualcomm – entered the market for embedded solutions in 2008 and have managed to sign contracts with many of the major notebook vendors. The two companies captured a market share of almost 83 percent together on this market in 2009.