

<http://www.pocket-lint.com/news/19517/quick-guide-to-hsdpa-technology>

A quick guide to HSDPA

What, why, who, how explained

by Stuart Miles published on 1 December 2008

What is it?

Standing for High-Speed Downlink Packet Access, HSDPA is the next stage on from 3G that allows you to surf the Internet at broadband-like speeds on the go. Available from all the major operators in the UK, the technology is used in a large number of phones and those mobile broadband dongles you see advertised everywhere.

It basically allows networks based on Universal Mobile Telecommunications System (UMTS) to have higher data transfer speeds and capacity than a standard GSM connection. Current HSDPA support down-link speeds of 1.8, 3.6, 7.2 and 14.4Mbps.

What are the variations of the technology?

HSDPA is all about download, whereas HSUPA is all about upload capabilities. As the majority of the time you are consuming data rather than uploading, it's the HSDPA speed that's the important bit. The average in the UK is 3.6Mbps, however newer handsets and mobile broadband dongles are starting to offer 7.2Mbps in certain geographical areas. Currently no-one in the UK offers a 14.4Mbps service although mobile operator 3 is planning on offering something by 2010.

Why should I care?

The faster you can connect to the Internet, the faster you can get information or send an email. From a mobile phone point of view it means you can access Google Maps that little bit quicker or check the Internet on the move more efficiently. From a mobile broadband perspective it means you'll actually be able to work online anywhere (as long as you are in coverage) as fast as you probably could in the office. That means getting stuff done on the train or out in the field quickly rather than trying to find an expensive Wi-Fi hotspot, or worse still, a telephone line to jack



...cont.

into.

What's a good example in practice?

The iPhone 3G, the BlackBerry Storm and the top end HTC handsets like the Touch HD and Diamond all have HSDPA connectivity allowing you to do a host of different things from getting the weather report, to checking on your Twitter feed. We are also seeing low end handsets now adding the technology. 3 offers the INQ1, a £90 pay as you go handset that offers HSDPA connectivity so you can benefit from its social networking features for example.

On the laptop front, more and more netbooks and laptops are starting to be launched that feature a HSDPA modem included in the design tucked away under the shell, so all you have to do is put in an enabled SIM card. Vodafone currently offer the Dell Mini Inspiron 9 on contract to save you the bother of getting a dongle separately, but there are netbooks from Asus and LG amongst others that offer the technology, without the contract as well.

Is there a competing technology that I should be aware of?

Countrywide, not at the moment, however for streaming data to your handset or computer in localised hotspots many manufacturers still prefer to offer Wi-Fi connectivity. You aren't then having to access the network to stream the data. While it's not a problem with websites or email (i.e., low data usage) once you start watching TV shows via the iPlayer, such as with the Nokia N96 for example, or sharing large files, that's a lot of data moving around and something that is likely to be easier and quicker over a wireless network.

What is in store for the future?

Faster speeds and more devices, of course. 3 is already working on upgrading its network to 14.4Mbps to enable even faster connectivity. The company, which appears to be shifting its focus to data over high-end handsets, has said that it plans to have a mobile broadband network in

place by Q3 2010 that will offer users 14.4Mbps download speeds and 5.7Mbps upload speeds via HSDPA and HSUPA connections. Currently the market offers speeds of 7.2Mbps.

Aside from faster connections, more devices on are the table. Not just content with offering mobile phones and netbooks, you are likely to see lots more "connected" devices being launched thanks to advancements in chip technologies from companies like Qualcomm.

Satnav devices that give you traffic updates on the fly or e-books that let you download more books on the go are just some of the products starting to appear. You can also no doubt expect a digital camera that allows you to upload images to Flickr at the press of a button in the not too distant future as well.