

HSDPA or 'Super 3G' critical to success of mobile TV & video services, says Analysys

Submitted by: Martin Brooke Associates

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* HSDPA will typically more than double average 3G network downlink capacity and halve the cost per Mbyte of delivering data traffic

* Even with this, 3G network economics are still insufficient to support fixed broadband displacement

* Future W-CDMA enhancements must provide a step-change in cost and capabilities or risk losing out to alternatives such as WiMAX, W-CDMA TDD and Flash-OFDM

* Report evaluates the capabilities of HSDPA and other 3G enhancements, and identifies the business opportunities they enable

CAMBRIDGE, UK, 1 February 2005 - High-Speed Downlink Packet Access (HSDPA) , or 'Super 3G' as it is sometimes called, will be critical to the success of services such as mobile TV and video and high-speed Internet access, according to a new report Pushing Beyond the Limits of 3G with HSDPA and Other Enhancements published by Analysys Research, the global advisers on telecoms, IT and media (<http://research.analysys.com>).

HSDPA is the first major enhancement to the W-CDMA 3G standard to achieve higher data rates and lower delay on the radio downlink (from base stations to mobiles). "While HSDPA theoretically enables data rates up to a maximum of 14Mbit/sec, practical throughputs will be lower than this in wide-area networks," says co-author Dr Alastair Brydon. "The typical average user rate in a real implementation is likely to be in the region of 1Mbit/sec which, even at this lower rate, will more than double the capacity, halve the cost per Mbyte and halve the downlink delay when compared to basic W-CDMA."

However, the report's authors warn that these improvements in 3G network economics are far from enough to support more radical strategies aimed at displacing fixed broadband services.

"While some operators may be considering HSDPA to offer broadband to the home, the performance and costs just don't add up for such a radical step," says Alastair Brydon.

"We see the main opportunity for HSDPA being to support bandwidth-intensive but relatively profitable services, such as mobile video clips and premium-priced mobile Web browsing and intranet access. While these services can be supported to some extent by existing W-CDMA deployments, HSDPA will provide the necessary cost and performance improvements to fuel take-up and usage," adds Alastair Brydon.

“Furthermore, with the expected rise of 3G voice traffic, driven by fixed-mobile substitution, HSDPA will be essential to providing sufficient capacity to support growth in data services.”

Given that HSDPA will not deliver a radical step-change in capabilities and costs, there has been increasing interest by mobile operators in a number of alternative technologies, such as WiMAX and Flash-OFDM from Flarion. “Despite the emergence of alternatives, we expect most mobile operators to continue down the 3G standards path to HSDPA, as the business case for alternative technologies is not yet compelling,” says co-author Dr Mark Heath. “Compared with alternatives, upgrading to HSDPA should be relatively straightforward, with most vendors offering new base-station cards and/or software upgrades.”

Pushing Beyond the Limits of 3G with HSDPA and Other Enhancements presents the real facts on forthcoming enhancements to 3G, such as HSDPA, EUL and possible further developments (such as OFDM), and identifies practical capabilities and costs. The report assesses the business rationale for the deployment of these enhancements, identifying customer propositions and business models.

The report is available to purchase online at <http://research.analysys.com/store>, priced at GBP1700. For more information, telephone Analysys Research on +44 (0)1223 460600 or email research@analysys.com.

About Analysys (www.analysys.com)

Analysys provides strategy and management consultancy, information services and start-up support throughout the telecommunications, IT and media sector. Its grasp of market dynamics, coupled with creativity, rigour and renowned objectivity, enables Analysys to consistently exceed the high levels of quality and innovation that its clients expect. The company has over 130 staff in offices in Cambridge, London, Glasgow, Madrid, Milan, Paris, San Francisco and Washington DC, and works with associates in Auckland, Melbourne and Vancouver.

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