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# HSDPA

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HSDPA (High Speed Downlink Packet Access)HSDPA is a technology for improving the downlink performance of W-CDMA networks and is part of the evolutionary path of 3G enhancements to the GSM technology family. This well-defined path will result in higher data transfer speeds, improved spectral efficiency and greater system capacity for GSM operators. For users, HSDPA will unlock a world of mobile broadband multimedia services.

What does HSDPA deliverHSDPA is part of 3GPP/UTRAN-FDD Release 5 W-CDMA specifications. HSDPA is a software-based enhancement that boosts the air interface capacity of W-CDMA networks by 2 times and delivers a 4-5 fold increase in downlink data speeds. It shortens round-trip time between network and terminals and reduces variance in downlink transmission delay. The combination of faster data rates - typically of the order of 1 Mb/s and with theoretical peak rates of up to 14.4Mb/s - along with the increased spectral efficiency should result in a lower cost per data bit transmitted. Alternative access technologies cannot offer the benefits integral to the 3GSM family and may, at best, be considered by operators as complementary to the 3GSM network.

BenefitsIncreased data rates provide the opportunity for operators to launch a wide range of new, added-value and media-rich applications and services. Business users can look forward to high-speed Internet access and rapid download of emails with attachments as well as access to wireless audio and video services. Consumer services could include rapid downloading of high-resolution digital images, DVD quality music downloads, full-motion video and advanced multi-player games.