

# Give your customers an improved mobile broadband experience

Nokia Siemens Networks



High Speed Packet Access (HSPA) technology is evolving to bring 3G handset users longer talk times and faster, always-on data applications. Even better, with Nokia Siemens Networks infrastructure, the network upgrades required are software-based, making them easy and highly cost-effective to implement.

The new features are also all straightforward to implement in devices without significant additional cost.



## HSPA Evolution – the key upgrades for handset users

### **Discontinuous Transmission and Reception:**

Handset battery life can be doubled by shutting down the device's transmitter when there is no data to send or receive, saving power significantly. The device can be left connected constantly, a valuable benefit for business users relying on push email services, for instance.

**CS Voice over HSPA:** End users can enjoy longer talk time and faster call setup with voice calls being routed over HSPA packet-based transport channels instead of the reserved circuit-switched (CS) channel used by the WCDMA air interface. You can encourage customers to use 3G as the preferred network for making voice calls.

### **Shorter connection setup times:**

Eliminating the need for physical channels to be reconfigured during setup reduces setup times from the 1 s typical in WCDMA to less than 0.1 s. End users will get faster download starts and a much improved application experience.

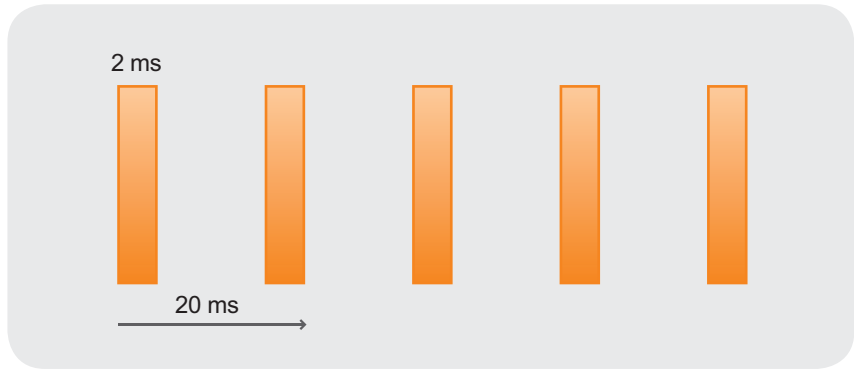


Figure 1. Discontinuous Transmission and Reception improves voice and data usage times.

### Win more revenue from more mobile broadband users

HSPA Evolution builds on the outstanding success of HSPA, which has been rolled out worldwide on more than 166 networks in 75 countries (at end of 2007). The advances will provide end users with a high quality, always-on Internet experience on their mobile devices.

Added to HSPA developments in the air interface and the move towards flat network architecture that makes flat-rate tariffs truly viable, HSPA Evolution will make Internet access over the handset increasingly inviting. Plus, HSPA over the 900 MHz band can triple coverage compared to original 2100 MHz WCDMA deployments, letting users enjoy Internet services in more locations.

All of which adds up to rising data revenue, with the bonus that HSPA Evolution achieves lower cost per bit. Combined, the features of HSPA Evolution described overleaf provide about 20% higher capacity using your existing spectrum and network hardware.

The highway to better returns on your network and spectrum investments is now open.

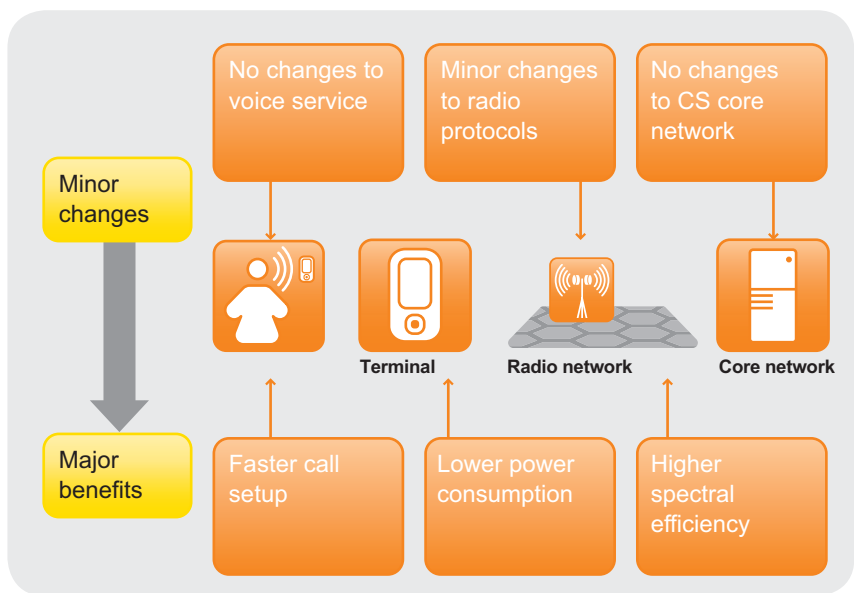


Figure 2. Circuit Switched Voice over HSPA.

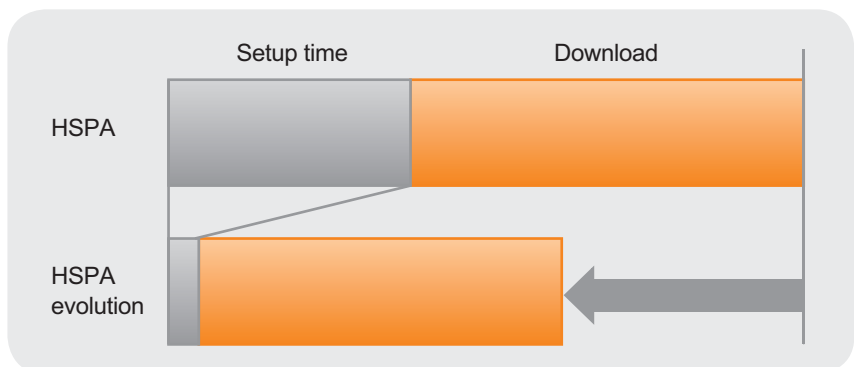


Figure 3. Shorter connection setup time improves end user performance.