



HIPERLAN type 2: System Overview and Technical Challenges

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Abstract: Massive growth in wireless and mobile communications, the emergence of multimedia applications as well as high-speed Internet access and the deregulation of the telecommunications industry are the key drivers towards a new demand for such broadband radio access networks, that can support bandwidth hungry real-time and interactive multimedia services where user data rates higher than 2 Mbit/s are available per radio channel. High quality video distribution client/server applications and data bank access are examples of these services. The envisaged access networks shall provide high-speed wireless access to Internet Protocol (IP) core network as well as Asynchronous Transfer Mode (ATM) core network by both moving and stationary wireless terminals. Furthermore, they shall be capable of providing acceptable support for quality of service (QoS) in a cost-effective way. Different fora currently work on standardization of broadband multimedia systems. Whereas ATM Forum, Internet Engineering Task Force (IETF) and ITU define the fixed core network, the ETSI Project BRAN (Broadband Radio Access Networks) focuses on standards for the radio subsystem of different types of wireless broadband access networks. One of these systems called High Performance Radio Local Area Network type 2 (HIPERLAN-2) shall provide high-speed (20 Mbit/s typical rate) communications between portable as well as mobile terminals and different broadband infrastructure networks in geographically limited application environments. The operating frequency target is the 5 GHz band which is open in Europe, the United States and Japan.

The motivation of this presentation is to give an overview on the ETSI Project BRAN and in particular on HIPERLAN-2 system. In addition, technical issues like radio physical layer, radio medium access control (MAC) protocol and radio network aspects will be addressed.

Am **Dienstag, dem 8. Dezember**, 14⁰⁰ Uhr, **Raum 329** berichtet Dr. J. Khun-Jush, über Breitbandfunkzugriffsverfahren nach dem HIPERLAN 2 Standard. Dr. Khun-Jush ist Vice Chairman bei ETSI für das BRAN Projekt sowie innerhalb von Ericsson Koordinator des HIPERLAN type 2 Projektes. Die Dauer des Vortrags beträgt ca. 60 Minuten. Der Vortrag wird in Deutsch gehalten.

Alle Interessenten sind dazu herzlich eingeladen.