

HIPERLAN

FOR INTER-COMMUNITY NETWORKS

- ◆ Communicating entities have a Node Identifier (NI) while the sub-networks have **HIPERLAN** Identifier (HI).
- ◆ A node may establish a communication path to its **HIPERLAN** through another **HIPERLAN**
- ◆ Different **HIPERLANS** may cooperate on a temporary or on a permanent basis
- ◆ The **HIPERLAN** ref. model is a subset of the OSI ref. model. **HIPERLANS** can interwork with the following networks:
 - ISO 8802 (LANs)
 - ISDN
 - PSTN
 - PSPDN
 - FDDI

HI*GH ***PERFORMANCE ***R***ADIO ***L***OCAL ***A***REA ***N***ETWORK
(HIPERLAN)**

FUNCTIONAL SPECIFICATIONS

Source = ETSI prETS 300 652, July 1995

TELECOMMUNICATIONS
TIA
INDUSTRY ASSOCIATION

TRANSMIT CHARACTERISTICS

- ◆ **HIPERLAN** band is 5150-5300 MHz (ref. CEPT rec. T/R 22-06)
- ◆ 5 nominal carrier frequencies, 3 of them designated as “default”
- ◆ 10ppm (0.001%) frequency stability
- ◆ Acceptable TX powers (+10,20 or 30 dBm) are associated with permissible Rcv sensitivity (-50, -60, -70 dBm)
- ◆ Max. EIRP (peak envelope power) is 1W

OTHER SYSTEM CHARACTERISTICS

- ◆ When external antennas are used, method of connection to HIPERLAN prevents use of unauthorised antennas
- ◆ Modulation is GMSK (Gaussian Minimum Shift Keying) or FSK
- ◆ HIPERLAN high-rate transmission is 23,529 Mb/s
low-rate transmission is 1,470 Mb/s

SPURIOUS EMISSIONS LIMITS

Frequency range	Maximum power	Bandwidth
30 MHz to 1GHz	-57 dBm	100 kHz
1GHz to 26,5 GHz	-47 dBm	1 MHz

Unwanted emissions outside the HIPERLAN bands: (Maximum absolute power)

Frequency range	Maximum power	Bandwidth
30 MHz to 1 GHz	- 36 dBm	100 kHz
1 GHz to 5 GHz	- 30 dBm	1 MHz
5 GHz to 5,15 GHz	- 33 dBm	100 kHz
5,30 to 5,45 GHz	- 33 dBm	100 kHz
5,45 to 26,5 GHz	- 30 dBm	1 MHz

For operation in countries where the use of the band 5,25 to 5,30 GHz is forbidden, the following shall also be met:

Frequency range	Maximum power	Bandwidth
5,25 to 5,30 GHz	- 33 dBm	100 kHz