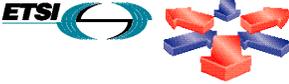


September 1999 doc.: IEEE 802.11-98/194



**Proposed Agenda item
for WRC 2002/3,
Spectrum for high performance
RLANs
(i.c. ETSI HIPERLAN/2)**

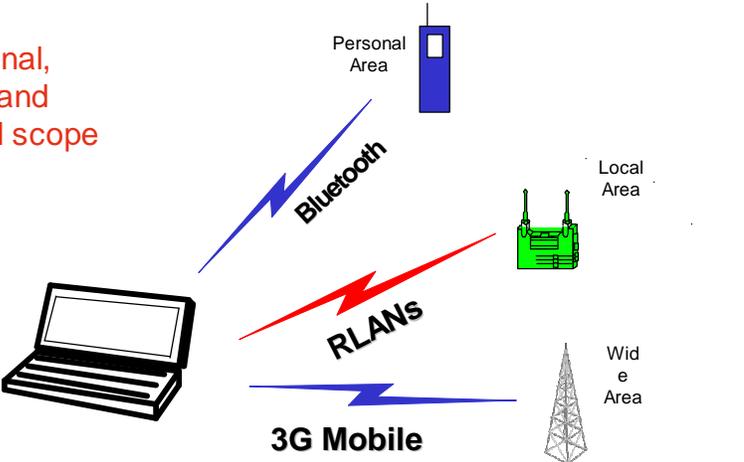
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Slide 1

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Complementing Wireless Technologies

with
personal,
local and
global scope



Personal Area

Local Area

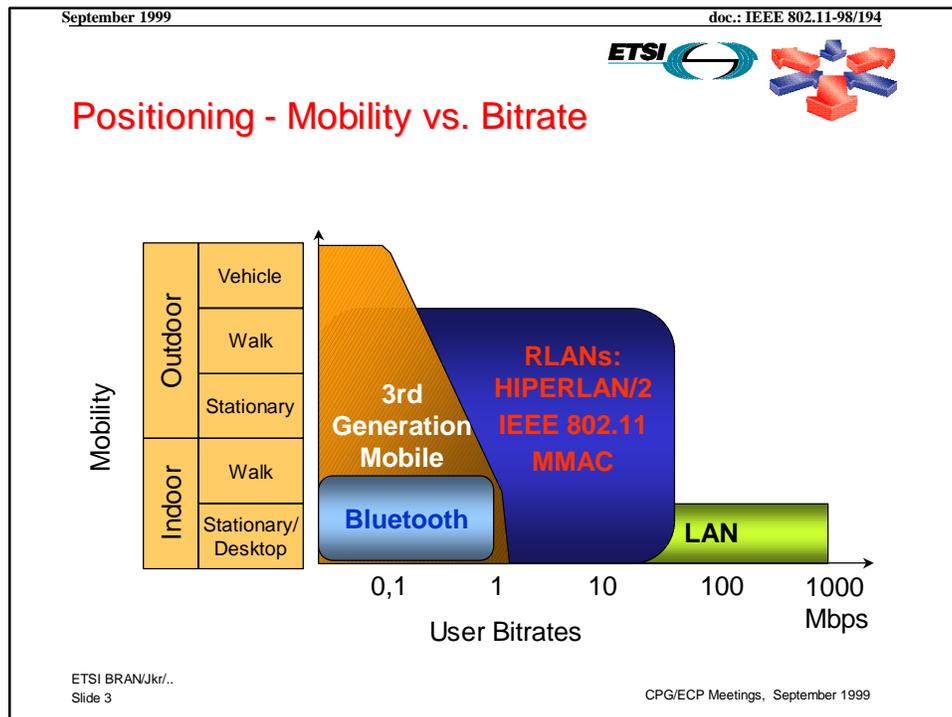
Wide Area

Bluetooth

RLANs

3G Mobile

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Slide 2



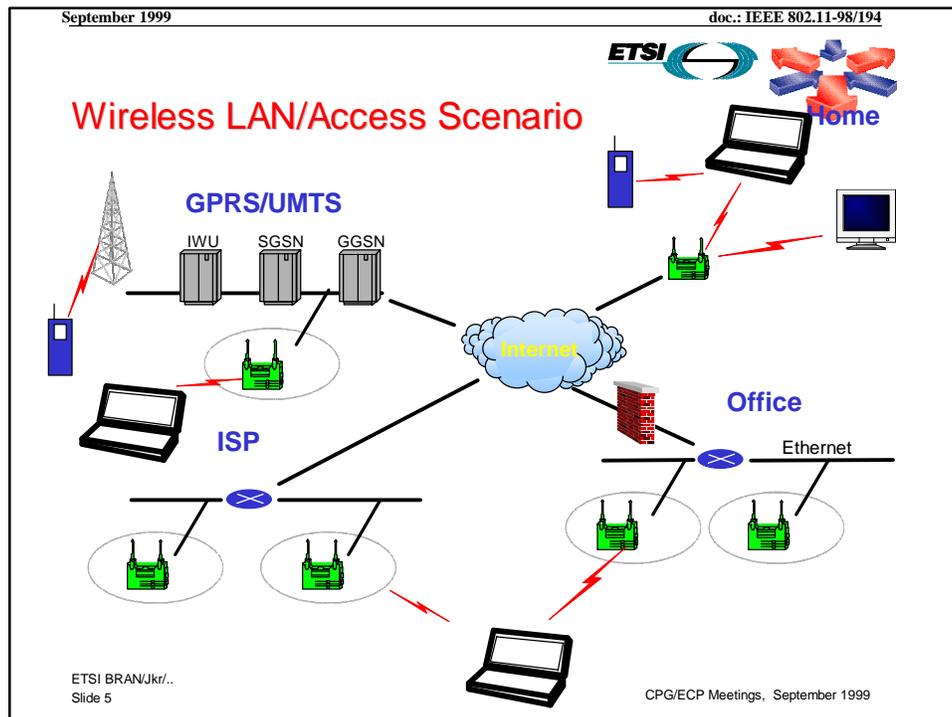
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ETSI  

Wireless LAN Driving Factors

- Huge growth in need for access to Internet & Intranet with bandwidth hungry multimedia applications
- Predicted growth in “Mobile Computing” and “Wireless Office” due to a change in working behavior
- Massive growth in “wide range” wireless and mobile communications
- Strong demand for LAN-like performance - users do not like a compromise
- World-wide portability

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HIPERLAN/2 Standard

- Radio Physical layer: 6 - 54 Mbit/s
 - ⇒ same as IEEE 802.11a and MMAC-HS
- DLC Layer: Packet Service with controlled QoS for multimedia support
- Convergence Layers for Ethernet, IP, UMTS, ATM, IEEE1394
- Conformance Test specifications
- Status:
 - ⇒ full drafts of Radio Physical Layer, DLC Layer and Ethernet convergence near completion
 - ⇒ Conformance Test specification in preparation
- All planned to be completed in year 2000

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Slide 6

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Emerging Industry Consensus on 5 GHz RLANs

- Based on regional spectrum decisions
 - ⇒ FCC: U-NII, CEPT: HIPERLAN
- 5 GHz RLAN standards by ETSI, IEEE and MMAC
 - ⇒ Same radio specification
 - ⇒ IEEE 802.11 focuses on wireless LAN applications
 - ⇒ ETSI (HIPERLAN) focuses on high rate access applications with Quality of Service
 - ⇒ MMAC-HS addresses both types of applications and works closely with ETSI and IEEE

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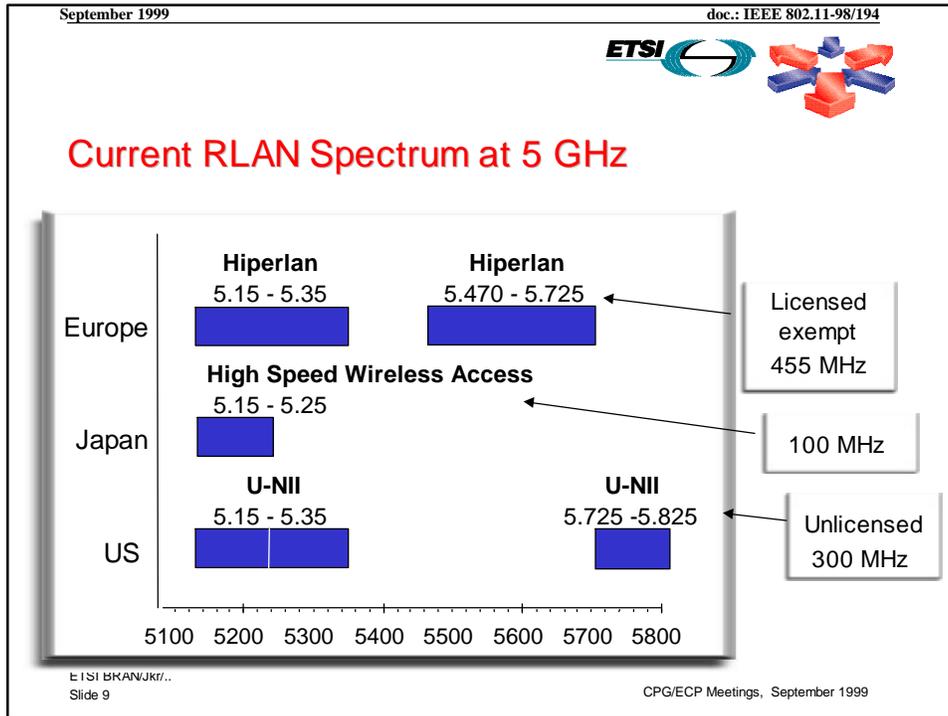
September 1999 doc.: IEEE 802.11-98/194

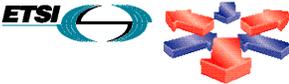
 

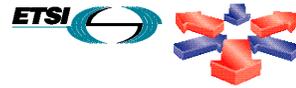
Required Regulatory action at WRC level

- A world-wide allocation to facilitate cross-border/international usage is needed
- Compatibility studies are underway in the ITU-R (JRB 8A-9B)
 - ⇒ based on earlier work by FCC (U-NII) and CEPT (HIPERLAN/2)
 - ⇒ should be concluded well before 2002
- WRC 2002 should make the necessary decisions
- Europe is in a leading position:
 - ⇒ ERC DEC 99(NN) and ETSI HIPERLAN standards

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- September 1999 doc.: IEEE 802.11-98/194
- 
- ### ITU-R Work on RLANs
- SG8 and SG9
 - JRG 8a-9B:
 - ⇒ DNR on MSS / RLAN sharing to be approved October 1999
 - ⇒ PDNR on RLAN Characteristics
 - ⇒ PDNR on Spectrum Requirements for Nomadic Access Devices
- ETSI BRAN/Jkr/...
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Summary

- HIPERLANs are a major opportunity for the European industry
- World-wide, harmonised spectrum is needed to reap the benefits
- With proper backing of the European Administrations at WRC 2002, a world-wide allocation is feasible
- Sharing with other incumbents in the 5 GHz band has been studied extensively and is considered feasible (see Draft ERC Decision 99(NN))
- The groundwork is being prepared by ITU-R JRG 8a-9B
- The ETSI BRAN project members will support the preparations for WRC 2002