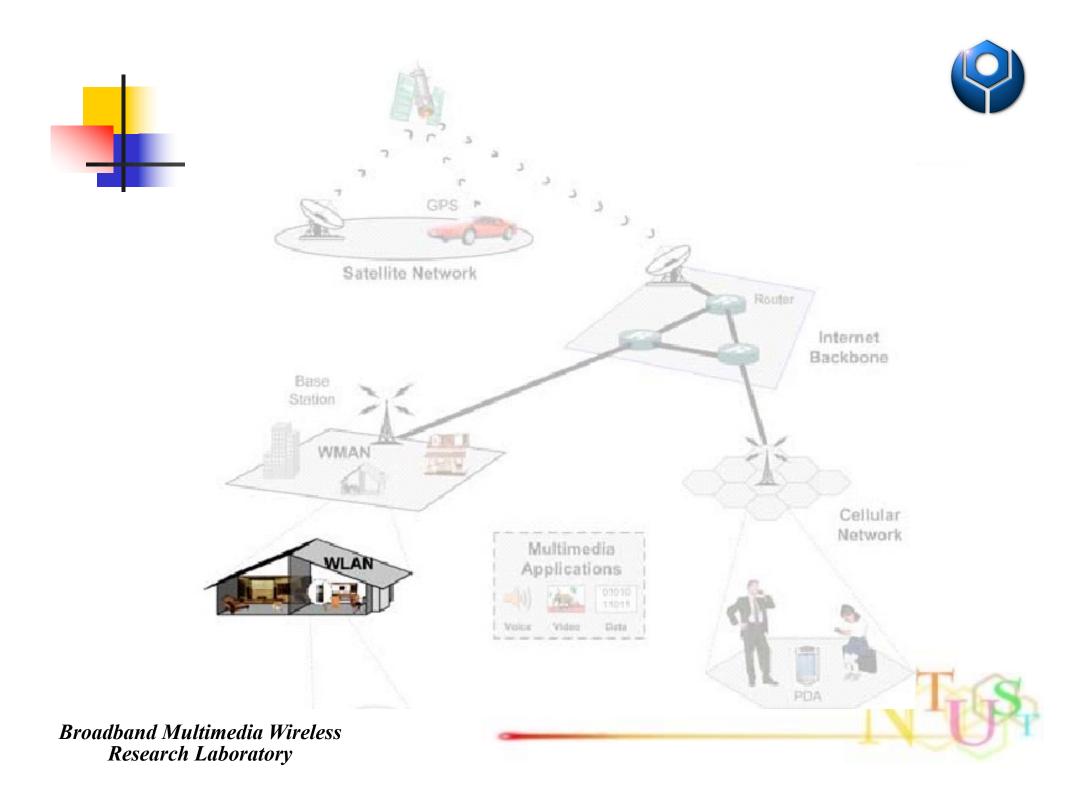


Wireless Local Area Networks (WLANs)

鄭瑞光

台灣科技大學電子系





Outlines

- Chapter 4. IEEE 802.11
 - IEEE 802.11
 - IEEE 802.11e (QoS Extension)
- Chapter 5. HiperLAN
- Chapter 6. HomeRF





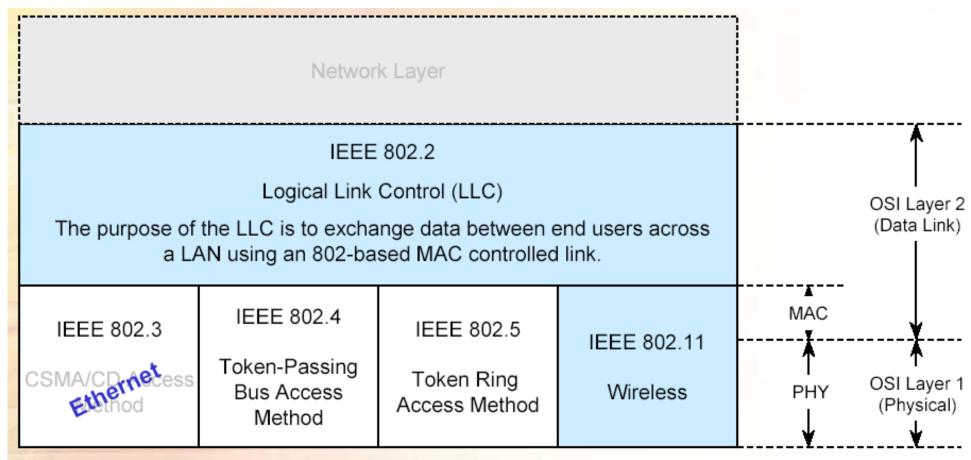


802.10 Security 802.2 Logical Link Control 802 Overview & Architecture Data Management 802.1 Bridging Link Layer 802.3 802.4 802.5 802.6 802.9 802.11 802.12 Medium Medium Medium Medium Medium Medium Medium 802.1 Access Access Access Access Access Access Access Physical 802.3 802.4 802.5 802.6 802.9 802.11 802.12 Layer Physical Physical Physical Physical Physical Physical Physical















- Wireless media differs from the wired media in the following aspects:
 - No clear physical boundaries in which users can transmit and receive data.
 - Users can sometimes be covered by multiple WLANs.
 - a resolution mechanism is required
 - Users are susceptive to radio interferences
 - wireless media to be significantly less reliable then the wired media







- Users are mobile
 - it causes a dynamic network topology
 - a user can be temporarily hidden from some other network members.
- The power limitation
 - a limited range for the effective geographical coverage
 - installation of overlapping wireless LANs is required to cover an area.
- Many, if not most, of the wireless devices are battery powered
 - power saving is essential
 - user will be temporarily without service





WLAN

- Overview of 802.11 Networks
- 802.11 MAC
- An Overview of 802.11e

本章節使用通訊教育改進計畫交大簡榮宏教授之教材





Reference

Matthew Gast, "802.11 Wireless Networks: The Definitive Guide," O'Reilly, April 2002, ISBN: 0-596-00183-5

