Future Wireless Standards Topics

The following provides a list of topics covered in the current version of the Future Wireless Standards Tutorial. Depth of coverage of each standard is a function of the time allotted and can be scaled between two hours and two days. Shorter versions focus on the major differentiating features of each standard; longer versions incorporate additional material on commercial status, technology comparisons, likely market players, and target applications. The two day version also reviews the progression of wireless technologies and speculates on the implications for future wireless standards.

Topic List

1. Cellular Systems
    1.1. Cellular Overview and Market Trends
    1.2. 3GPP
        1.2.1. EDGE Evolution
        1.2.2. HSPA
        1.2.3. TD-SCDMA
        1.2.4. LTE
    1.3. 3GPP2
        1.3.1. EVDO Rev B
        1.3.2. EVDO Rev C (UMB)
2. WiMAX
    2.1. WiMAX Overview
    2.2. Mobile WiMAX
    2.3. Mobile Multihop Relay
    2.4. 802.16h
3. 802.20
4. WLAN
    4.1. 802.11 Overview
    4.2. 802.11n
    4.3. 802.11p
    4.4. 802.11r
    4.5. 802.11s
    4.6. 802.11y
5. 802.22
6. WPAN

6.1. WPAN Overview
6.2. WiMedia
    6.2.1. Overview
    6.2.2. Bluetooth 3.0
    6.2.3. Wireless USB
    6.2.4. Wireless Firewire
    6.2.5. WiNET
6.3. Zigbee Updates
6.4. WiBree
6.5. 802.15.5 Mesh Networks
7. Interoperability Standards
    7.1. Generic Access Network
    7.2. 802.21
    7.3. 802.11u
    7.4. Industry standards
8. Technology Trends (2-day only)
    8.1. RF
    8.2. ADC
    8.3. Processors
    8.4. Software
    8.5. Algorithms (e.g., cognitive radio, collaborative MIMO)
    8.6. Implications for radio design
9. Summary and Possible Future Directions