

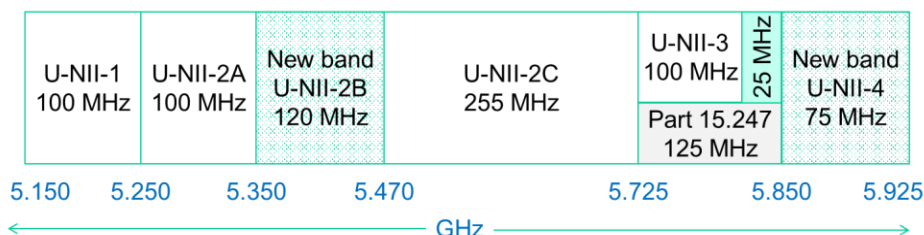
July-2014

IEEE 802 Wireless Summary – Amendments under Development

- **802.11ah** – *Sub 1 GHz* – long-range (1 mile), letter ballot comment resolution; competing standard 802.15.4g, Smart Utility Networks (SUN), appears to be ahead in terms of deployments and interoperability testing at the Wi-SUN alliance
- **802.11ai** – *Fast initialization* – letter ballot comment resolution is ongoing for Draft 2.0
- **802.11aj CMMW** – *China 60 GHz* – 60 GHz transmission in the Chinese regulatory domain comment resolution on draft 0.2; considering also 45 GHz band
- **802.11ak GLK** – *General Link* – mesh; working with 802.1 (bridge) group; comment resolution on draft 0.03
- **802.11aq PAD** – *Pre-association Discovery* – working to enable 802.11 stations to locate services (e.g. projector) prior to associating with an AP; comment resolution on draft 0.01
- **802.11ax HEW** – *High Efficiency Wireless LAN* – working on functional requirements and organization of the committee; area of very high focus for the 802.11 industry
- **802.11 WNG** – *Wireless Next Generation* – 1 presentation at this meeting on security and privacy at the MAC address level
- **802.11 ARC** – *Architecture* – tracking of the 802 updates; joint work with 802.1 on bridging
- **802.11mc** – *Maintenance* – responsible for integrating new amendments into new releases of the 802.11 standard
- **802.18 RR TAG** – *Radio Regulatory Technical Advisory Group (TAG)* – studying and
- **802.19 TAG** – *Coexistence TAG* – discussing coexistence issues between 802.11 and LTE-U (unlicensed) in the 5 GHz band; liaison between 3GPP and IEEE 802
- **802.24** – *IoT and Smart Grid* – SC (standing committee); formerly Smart Grid now considering splitting in to two task groups: IoT and Smart Grid

Hot topics

1. Coexistence in the UNII-4 band (DSRC) – industry needs to understand whether CCA (clear channel assessment mechanism will work effectively to protect mission-critical DSRC traffic



2. Coexistence with unlicensed LTE (LTE-U) being contemplated by 3GPP – work and liaison is ongoing under 802.19 group

Table 1: 802.11 Task Groups (TG) summary and schedule

	Overview	Key specifications	Expected completion
TGah	Operation in 900 MHz band	802.11n/ac rates scaled to channel	Mar 2016
TGai	Fast initial link setup	Fast initialization (target 100 ms); >200 km/hr	Mar 2016
TGaj	China Mili-Meter Wave	Channel bandwidth of 1.08 GHz in the 60 GHz band per Chinese regulatory requirements vs. 11ad channels of 2.16 GHz	Jun 2016
TGak	General Link		Sep 2016
TGaq	Pre-Association Discovery	Select AP that provides needed services	Jul 2016
TGax	High Efficiency WLAN (HEW)		Mar 2019
TGmc	Maintenance	802.11 standard release incorporating amendments completed to date	Mar 2016