

# **IEEE 802.22 Status for IEEE TCCN at IEEE ICC 2018**

**May 2018**

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# 802.22 Completed Projects

802.22-2011- Flagship Standard on Cognitive Wireless Regional Area Networks – Commercial Name Wi-FAR®, Uses Television Band unused channels, so called WhiteSpaces to provide long and short distance broadband connectivity

802.22.1-2010 – Standard on Beaconing for co-existence. Uses beaconing technology from the primary users to alert the secondary users that the channel is being used

802.22.2 – Recommended practice for installation and deployment of IEEE 802.22 Networks

802.22a-2014 – Amendment to the IEEE 802.22 Standard on Management Information Base (MIB)s and Management Plane procedures

802.22b-2015 – Amendment to the IEEE 802.22 Standard for Enhancement for Broadband Enhancements for the Broadband Services and Monitoring Applications

# 802.22 Ongoing Projects

## IEEE 802.22 Revision:

- Merges in the 802.22a-2014 and 802.22b-2015 amendments
- Generally revises standard, e.g., correction or inconsistencies or areas lacking clarity, etc.
- New content, e.g., capturing new national TV white space regulations developed since baseline standard 802.22 standard published (e.g., UK, Singapore, South Africa, Colombia, others...)
- Has undergone second internal Letter Ballot, comments being resolved and a revised draft produced

## IEEE 802.22.3 Spectrum Characterization and Occupancy Sensing:

- Creates a new standard for spectrum sensing
- Applications include spectrum management, spectrum de-confliction, interference monitoring and awareness, on-demand spectrum survey and reporting, coverage analysis, shadowing and fading analysis, spectrum mapping and spectrum planning
- Undergone three internal Letter Ballots; comments being resolved based on third ballot towards producing a new draft
- **Updated (and extending) its PAR (next slide)**

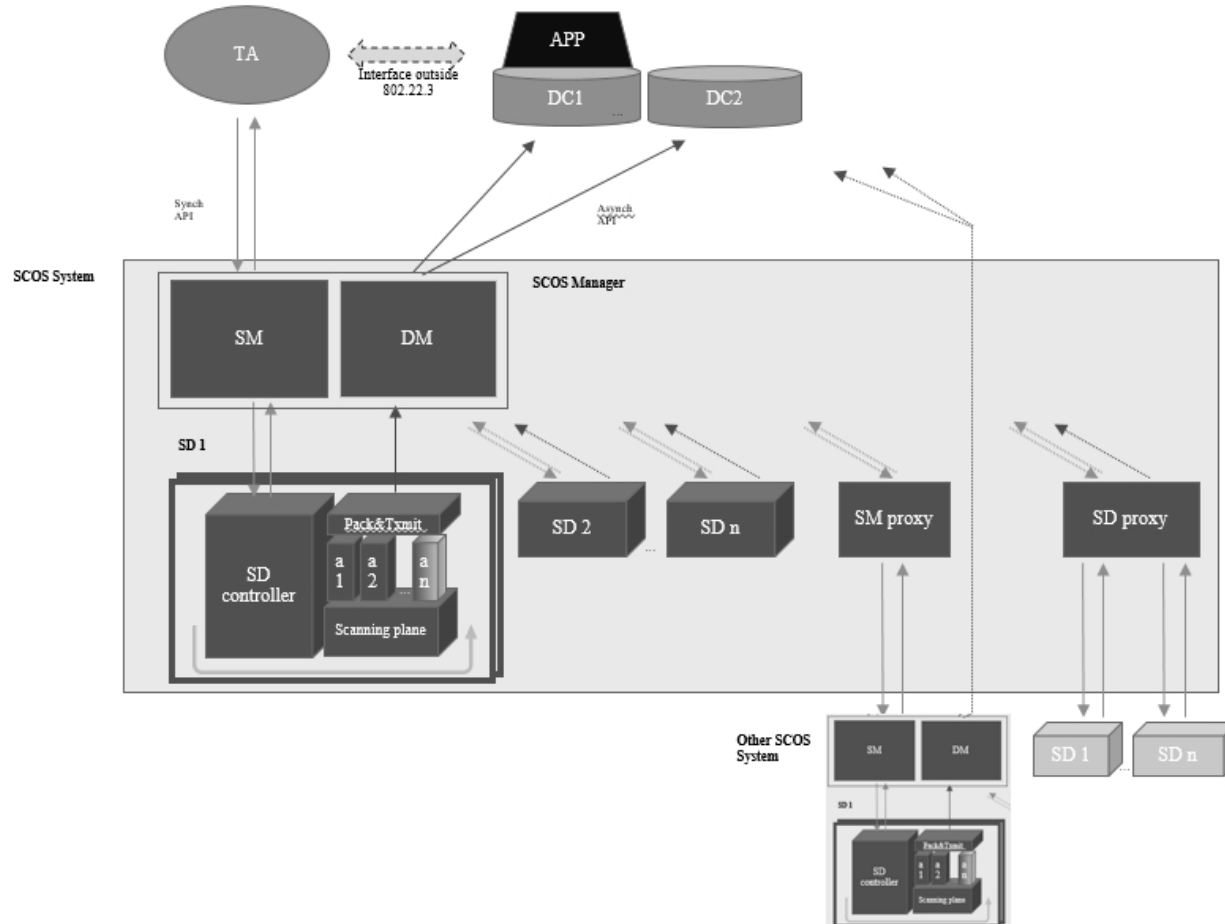
# 802.22 Ongoing Projects

## IEEE 802.22.3 (new/extended) PAR

- **Scope:** This Standard defines a Spectrum Characterization and Occupancy Sensing (SCOS) System. It defines the formats for system configuration and spectrum measurement parameters. It includes protocols for reporting measurement information that allow the coalescing of results from multiple systems. The standard leverages interfaces and primitives that are derived from IEEE Std. 802.22-2011. It uses any available transport mechanism to control and manage the system, and to share sensing data. The standard provides means for conveying value added sensing information to various spectrum database services.
- **Purpose:** The purpose is to specify operating characteristics of the components of the Spectrum Characterization and Occupancy Sensing System.
- Extending PAR so the work on development of the standard can continue until the end of 2019 (was previously end of 2018)

# IEEE 802.22.3

*(acronyms/details will be verbally explained!)*



# Projects for IEEE/ ISO/IEC PSDO process

802.22-2011 – Approved to become an ISO Standard in 2015

802.22a and 802.22b – Approved in 2017.

802	Last draft liaised		60-day pre-ballot		5-month FDIS ballot		Comments resolved
.22a	Std	Jul 15	Passed	Apr 16	Passed	25 Jul 17	n/a
.22b	Std	Jul 15	Passed	Apr 16	Passed	27 Jul 17	Waiting

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