

Guide for IEEE 802.15.4

Background

- IEEE-SA allows three types of documents to be created: (IEEE SASB OM1.2)
 - Standards: documents with mandatory requirements.[1]
 - Recommended practices: documents in which procedures and positions preferred by the IEEE are presented.
 - Guides: documents in which alternative approaches to good practice are suggested but no clear-cut recommendations are made.
 - Trial-Use documents: publications in effect for not more than three years (See 5.7.). They can be any of the categories of standards publications listed above.

Informative text no longer in 15.4

- Applications of IEEE Std 802.15.4, 15-14-0226-00-0000
- Chang, S.-Y., and C. Seibert, 15-13-0166-03-004m-tg-15-4m-coexistence-assurance-documentcad.pdf
- Coexistence analysis of IEEE Std 802.15.4 with other IEEE standards and proposed standards, 15-10-0808-00-0000.
- Examples of IEEE Std 802.15.4 PHY encodings, 15-14-0225-00-0000.
- Lu, L., K. Mizutani, C.-S. Sum, F. Kojima, and H. Harada, “15-13-0565-02-004m-tvws-nb-ofdmframe-example.doc,”
- Kivinen, T., “Security Section Pictures,” 15-15-0106-02-0mag-security-section-pictures.
- Seibert, C., “15-13-0131-01-004m-example-encoding-for-tvws-fsk-phy.pdf,”
- Shin, C., B.H. Kim, S. Choi, and S.-Y. Chang, “15-13-0287-01-004m-tvws-ofdm-frame-example.doc,”
- TG4f Coexistence Assurance Document, Doc. IEEE 15-10-0918-01-004f, November 2010.

Guide, pros and cons

- Options are
 - Leave as is
 - Combine into a single (or few) mentor documents
 - Start PAR for a guide
- Advantage of a guide vs. 802.15 document
 - Official IEEE document, goes through full standardization process and review
- Disadvantage
 - Lengthy process to make changes

Discussion

- Is it a problem?
- If so, which option do you prefer
 - Consolidated 802.15 document?
 - Guide?

Potential Scope

- This guide provides information on the use of IEEE Std. 802.15.4. Sample encodings of PHY frames are provided. The guide also details methods to implement precision ranging using features in the standard. Configurations of compliant devices are presented that address the following applications
 - SUN
 - TVWS
 - RCC
 - ???