

The Case for an IEEE 802 Security TAG

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What is a TAG?

- According to the IEEE 802 Operating Rules - <http://www.ieee802.org/rules.pdf> – the primary responsibility of a Technical Advisory Group (TAG) is to provide assistance within its topical area, as specifically requested by one or more of the Working Groups
- A TAG may not write standards, but may write recommended practices or guidelines

What Is the Motivation?

- As the scope of the IEEE 802 networking standards extends to new markets, and as the awareness of security threats increases, the different Working Groups need to deal with security aspects
 - It is done today in a disparate and non-correlated manner in the different WGs
 - No coherent analysis and categorization of threats and vulnerabilities
 - In some cases security is ignored when the PAR is written and approved, and ‘remembered’ later when realities catch back
 - IEEE 802.3ah is an obvious example
 - Expertise is distributed and diluted
 - Opportunities to re-use solutions may be missed

What Other Standard Bodies Have Done?

- The IETF recognized that the Internet was not designed with security in mind, that security is a problem that needs to be dealt with at the level of the whole organization, and included it in the scope of the work
 - Security Area
 - Security Area Advisory Group
 - Develop specific frameworks and protocols
 - AAA, IPSec, PKI, EAP, etc
 - Review all Internet Protocols specifications
 - Mandatory Security Section

Possible Charter of an IEEE 802 TAG

- Guidance for all IEEE 802 WGs
 - Analysis of LAN and MAN security threats and vulnerabilities
 - Requirements for LAN and MAN security
 - Framework for LAN and MAN security
 - Layering Model
 - Re-use and recommend extensions of 802.10 where needed
 - Modifications to 802.10 should be done in 802.10
 - Enable re-use of technologies between the different WGs
- Review Security aspects in all IEEE standards
 - When PAR is approved
 - At LMSC ballots
- Interface, cooperate and integrate with similar activities in other standards bodies

Disclaimer

- The Author does not strongly advocate this procedural path. It looks like a better track to meet the needs of security in the current 802 framework, but other alternatives can be considered (e.g. resuscitated and re-chartered 801.10 WG).
- **WHAT IS IMPORTANT IS TO ACKNOWLEDGE THAT WE HAVE A PROBLEM AND TO FIND THE MEANS TO SOLVE IT**