This document contains supplemental information referenced by the European Rolling Plan for ICT Standardisation

IEEE Standards Activities in the Network and Information Security (NIS) Space

Overview

IEEE has standardization activities in the network and information security space, and in anti-malware technologies, including in the encryption, fixed and removable storage, and hard copy devices areas, as well as applications of these technologies in smart grids.

IEEE’s largest technical society, the IEEE Computer Society, is very well equipped to provide technical expertise in network and information security efforts. For over thirty years, the IEEE Computer Society has had a technical committee focused on computer security and privacy. It publishes the well-respected IEEE Security & Privacy magazine, which offers articles by top thinkers in the information security industry, and sponsors two long-established premier technical meetings: the IEEE Security and Privacy Symposium and the Computer Security Foundation Workshop.

IEEE’s Industry Connections Security Group is another important activity, providing a flexible and nimble platform for stakeholders to respond to the new malware environment. It has three key activities:

- IEEE Anti-Malware Support Service (AMSS), a set of shared support services that enables the individual security companies and the industry as a whole to respond more effectively and efficiently to the rapidly mutating universe of contemporary malware threats. AMSS currently consists of two main services: the Clean file Metadata eXchange (CMX), and the Taggant System.
- The Malware Working Group, which develops better ways of sharing malware information, enabling the computer security industry to more effectively respond to malware threats.
- The Encrypted Traffic Inspection (ETI) Working Group, which is helping to develop an accepted way to inspect network traffic, on top of encrypted transport standards.
Relevant Standards Activities

Encryption
Approved Standards
- IEEE Std 1363.2-2008 IEEE Standard Specification for Password-Based Public Key Cryptographic Techniques
- IEEE Std 1363.3-2013 IEEE Standard for Identity-Based Cryptographic Techniques using Pairings

Fixed and Removable Storage
Approved Standards
- IEEE Std 1619-2007 IEEE Standard for Cryptographic Protection of Data on Block-Oriented Storage Devices
- IEEE Std 1619.2-2010 IEEE Standard for Wide-Block Encryption for Shared Storage Media

Security for Software Defined Networking and Network Function Virtualization
Projects under Development

Security for Hardcopy Devices
Approved Standards
- IEEE Std 2600.1-2009 IEEE Standard for a Protection Profile in Operational Environment A
• IEEE Std 2600.4-2010 IEEE Standard Protection Profile for Hardcopy Devices in IEEE Std 2600-2008 Operational Environment D

**NIS for Smart Grid**

Approved Standards

• IEEE Std 1686-2013 IEEE Standard for Intelligent Electronic Devices (IED) Cyber Security Capabilities

Projects under Development

• IEEE P1711 Draft Standard for a Cryptographic Protocol for Cyber Security of Substation Serial Links

*An active revision project is underway for this standard.*