

WinnF SDS Committee Projects Overview

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Co-chair of the Software Defined Systems committee

WinnComm Europe 2019

15-16 May 2019 – Berlin



Agenda

Introduction to the Wireless Innovation Forum

Introduction to Software Defined Systems Committee

Insights on current SDS happenings



Introduction to the Wireless Innovation Forum



What is WInnF

A nonprofit “mutual benefit corporation” dedicated to:

“advancing technologies supporting the innovative utilization of spectrum and the development of wireless communications systems, including essential or critical communications systems”



The Forum Is Its Members



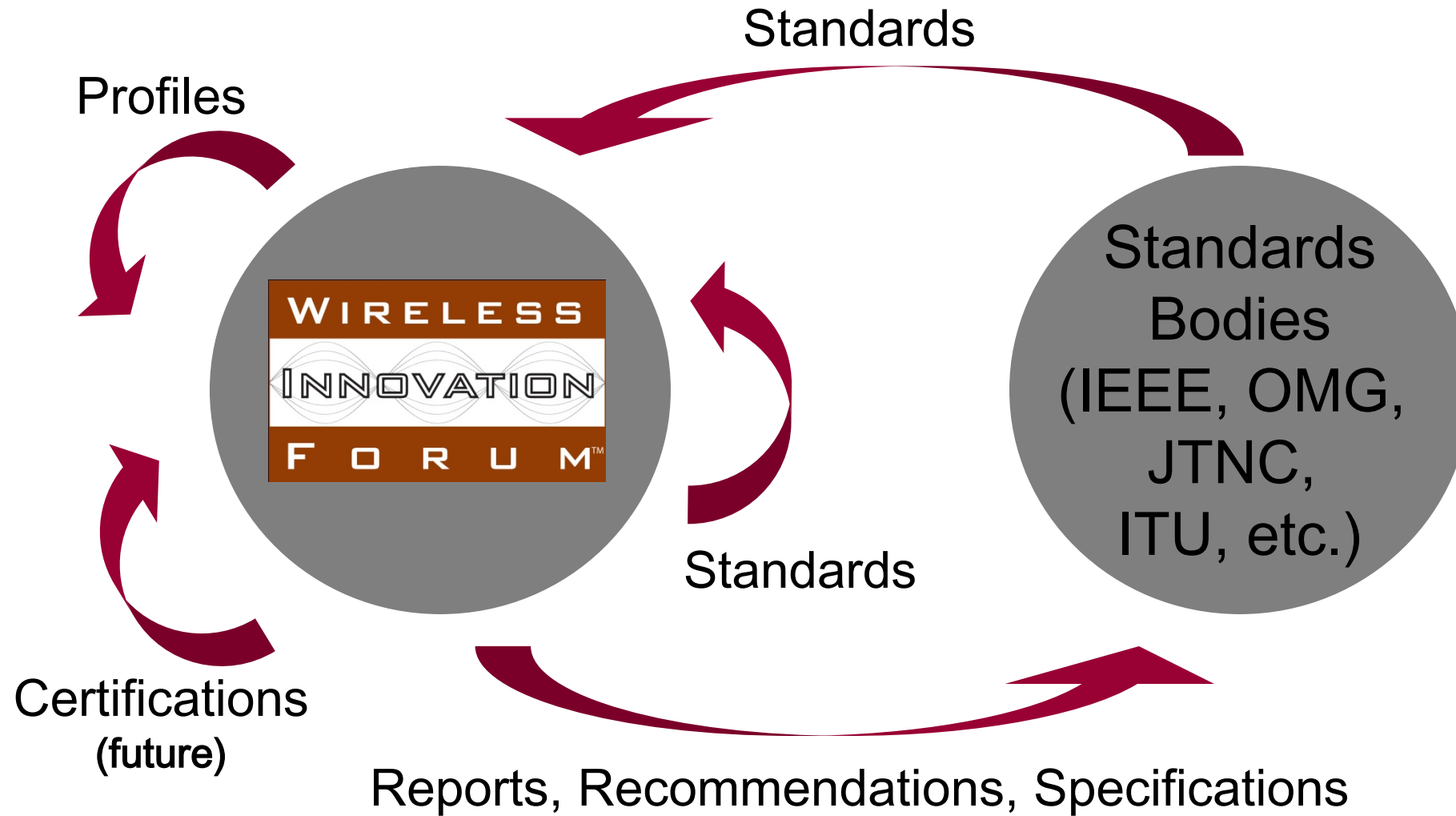
And many more...

Memberships and Partnerships



Wireless Innovation Forum Memberships and Partnerships

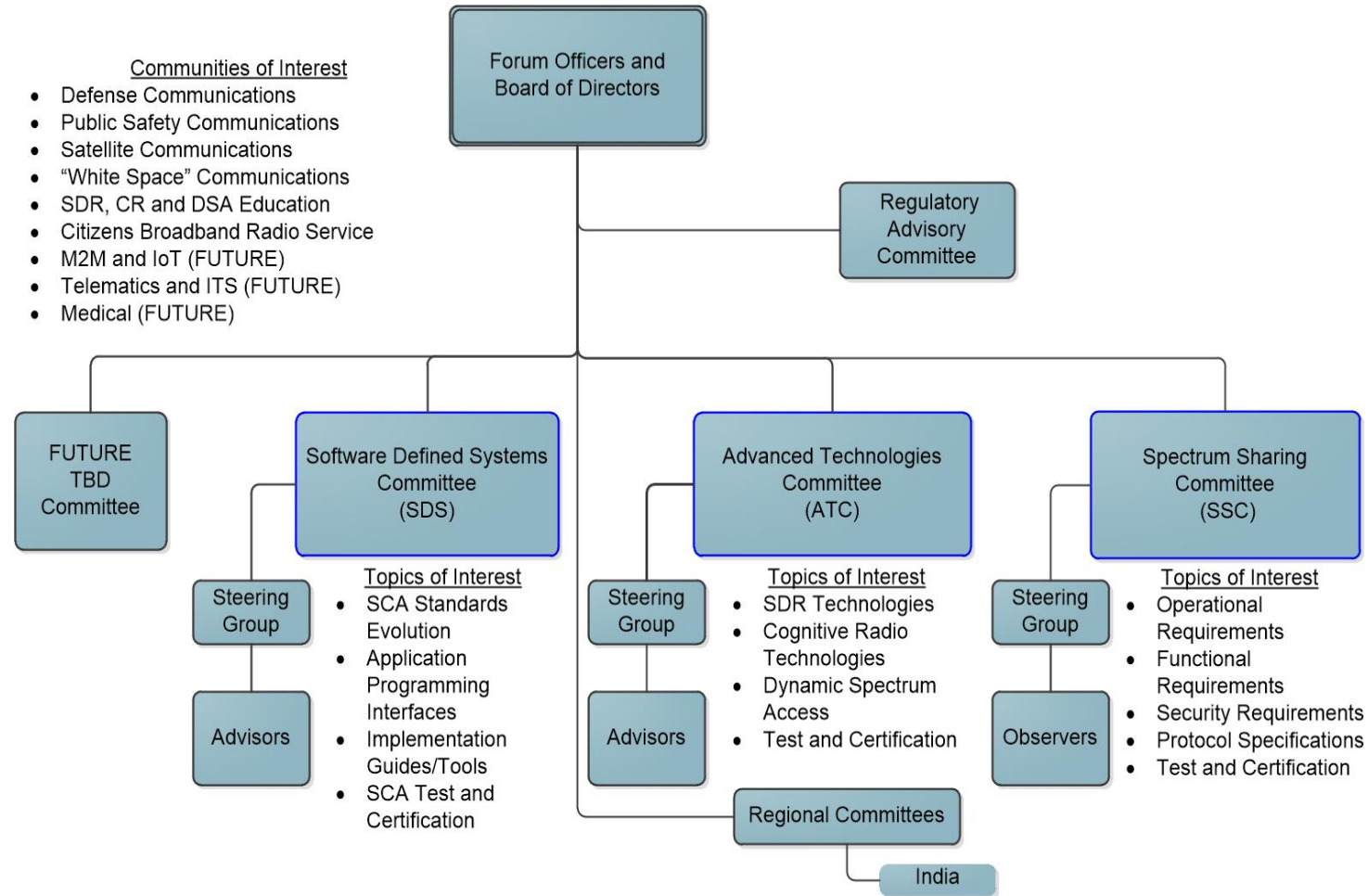
The Forum's Collaborative Model



Forum Structure

Organizational Structure for The Wireless Innovation Forum

14 June 2018



Introduction to Software Defined Systems Committee



SDS Committee Mandate

To oversee the evolution and adoption of Software Defined Systems (SDS) standards for the development of essential and mission critical wireless systems. Developed to facilitate portability, interoperability and configurability

To support the harmonization of the SDS standards for the mutual benefits of all stakeholders to include:

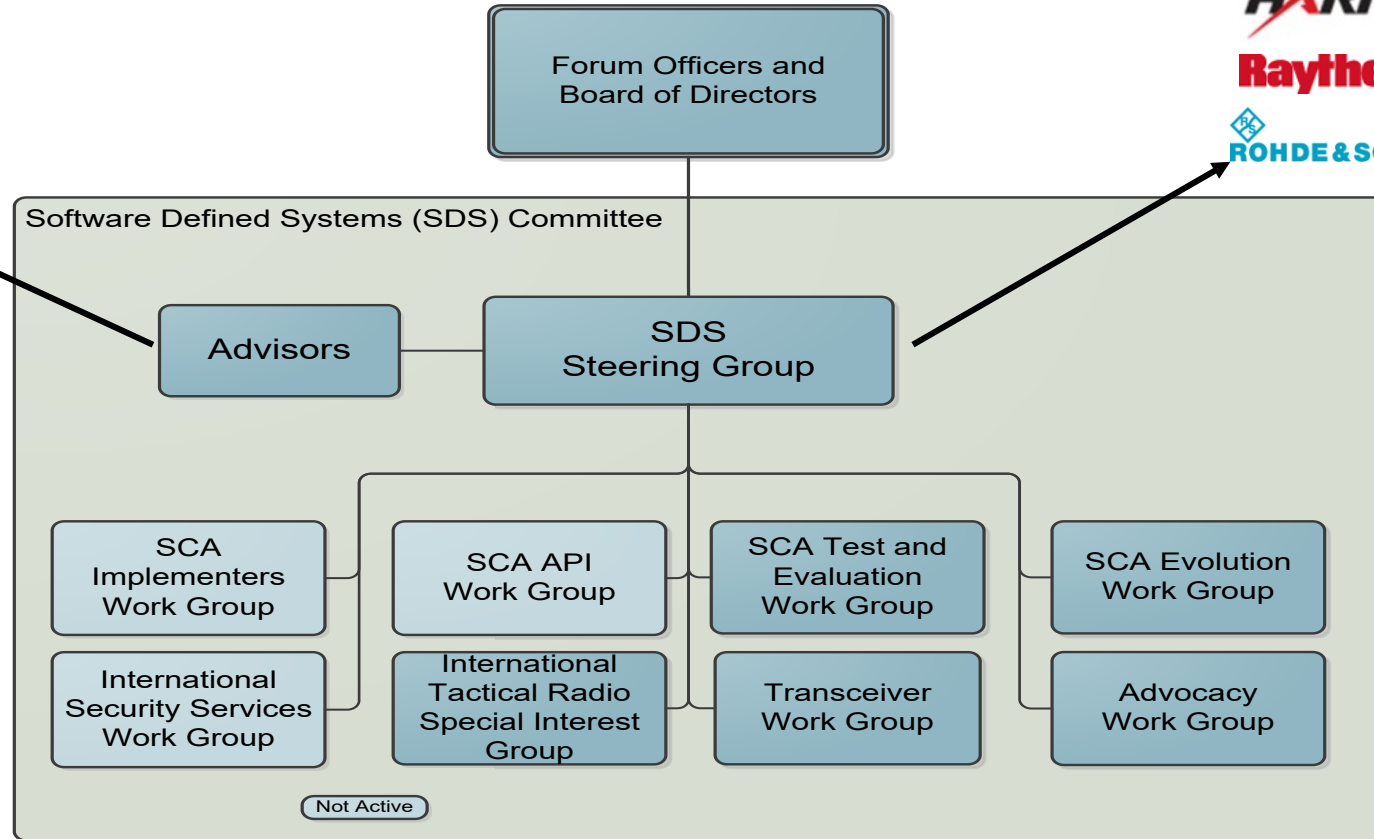
- Defining an industry driven SDS evolution
- Developing extensions to SDS standards that address any gaps between the defined evolution roadmap and Forum accepted SDS specification variants
- Profiling SDS specifications and related APIs to define internationally accepted variants that are hosted by the Forum
- Providing implementation and certification guides, tools etc. easing implementation and supporting proliferation
- Establishing and managing industry led certification programs where appropriate

SDS Structure

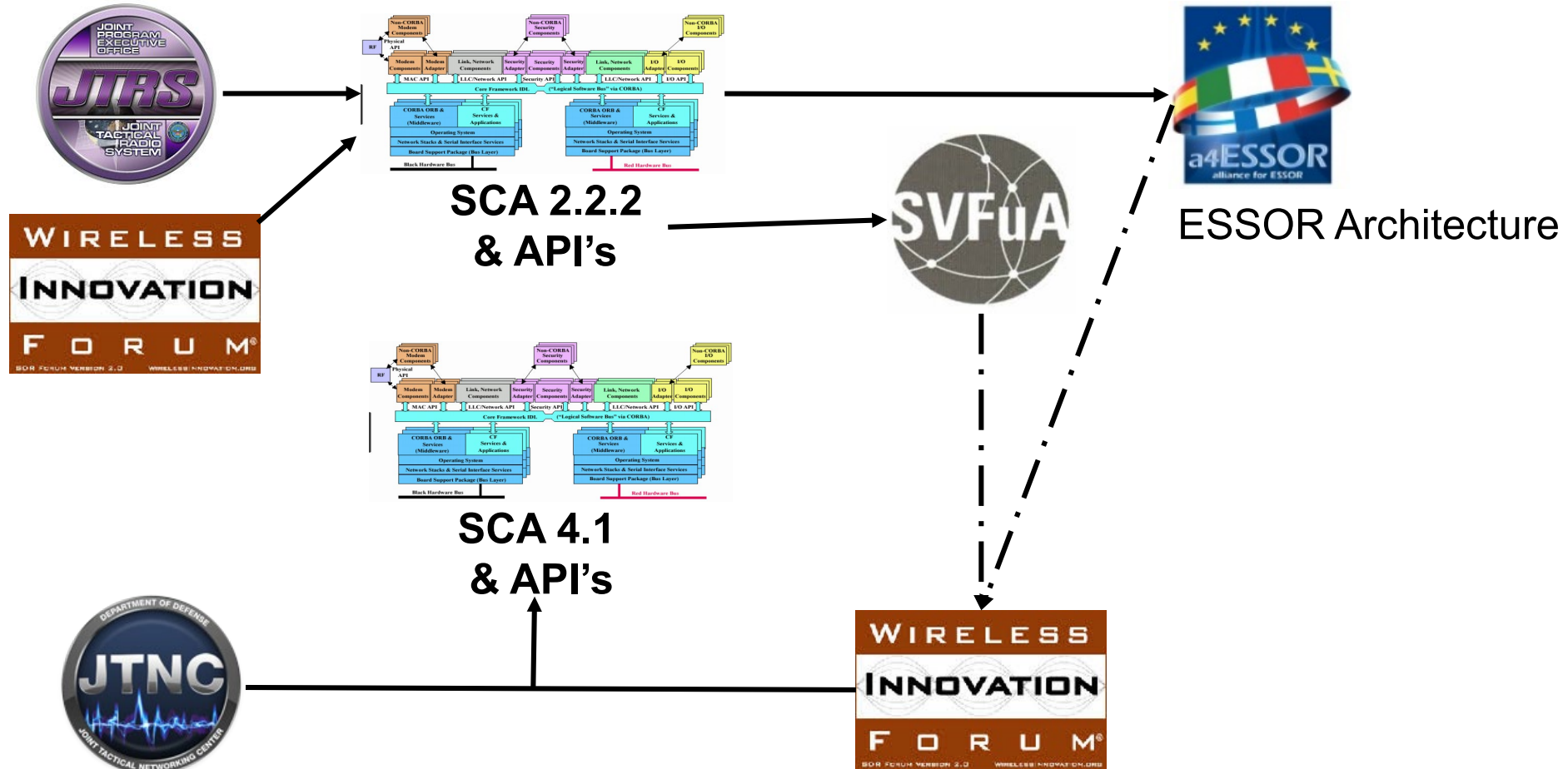
Software Defined Systems (SDS) Committee

15 November 2017

From JTNC, OCCAR-EA, FRA MoD, GER MoD, ITA MoD, SWE MoD, NOR MoD, FIN MoD, EDA, NATO



Collaborative Standards Development



SDR Standards Support

Partner-developed SDR Standards

- JTNC Standards: SCA and APIs
- ESSOR: ESSOR Architecture

WinnF-developed SDR Standards

- International Radio Security Services (IRSS) API
- Transceiver Facility
- (U)Lw AEPs
- PIM IDL Profiles
- Energy Management API
- Time Service Facility

WinnF-developed SCA 4.1 Support Specifications

- WINNF-16-P-0025 SCA 4.1 Requirements Allocation, Objectives, and Verification Criteria
- SCA 4.1 Application Vérification Test Plan and Procedures

Link to WinnF SDS standards (SCA, API's and WinnF standards)

<https://sds.wirelessinnovation.org/sca-based-standards-library>

Link to submit problems, suggestions on the SCA, APIs, and SDS standards

https://winnf.memberclicks.net/index.php?option=com_mc&view=mc&Itemid=250



Insights on current SDS happenings



Changing paradigm for SDR APIs: WInnF Facilities

WInnF Facilities are WInnF SDR Standards

Aimed at portability of *radio applications* and hospitality of *radio platforms*

Addressing *functional support capabilities* implemented by *radio platforms*

- Examples: Transceiver, Time Service, Radio Security Services, Audio...

Leveraging currently available APIs from

- JTNC Standards
- ESSOR Architecture

Eco-system benefits

- International harmonization
- Maximizing backwards compatibility
- Openly developed, maintained and accessible
- Free of charge

Portability benefits

- PIM/PSM paradigm
- Specifying standard Properties in addition to API

Activities overview

Recent SDR Standards releases

- SCA 4.1 Verification Plans Procedures – Fall 2018
- Transceiver Facility V2 PIM – Jul 2017

Planned SDR Standards releases

- Transceiver Facility V2.0.1 (PIM + 3 PSMs) – Fall 2019
- Time Service Facility V1 (PIM + 3 PSMs) – March 2020
- Credible candidates for DISR and EDSTAR referencing

White papers

- Modular Radio Architecture (MRA) – Dec 2019
- Waveforms Registries and Repositories – Being launched

Under consideration

- Audio and/or International Radio Security Service Facilities

End of the presentation
Thank you for your attention

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