

The WInnF Coordination Model for International SCA Standards

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on International SCA Standards

Workshop on International Tactical Radios
WInnCom'11 Europe, Brussels, 23 June 2011



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Document status

Document number: WINNF-10-R-0018

Approved by WInnF members on 22 Jun 2011

Deliverable of WInnF project SCA-2010-003

Elaboration timeline

- Dec 10: first early draft
- Apr 11: stable draft
- May 11
 - Final draft for Advisory Council check
 - Working group approval affirmed
- June 11
 - Committee approval affirmed
 - Final approval by Forum members

Document Overview

§1 Introduction incl. Problem Statement

§2 International SCA Standards

- Clarification on what is meant by “International SCA Standards”
- Status of International SCA Standards (e.g. SCA & JTRS APIs, ESSOR Architecture...)

§3 Coordination of International SCA Standards

- WInnF to serve as a Coordinating Body
- Organization through WInnF CC SCA Steering Group and Advisory Council
- Description of typical Coordination activities

§4 Production of International SCA Standards

- Description of typical Production activities
- Current and potential role of WInnF and Partner SDO (ETSI and OMG)

§5 Support to International SCA Standards

- Working Groups and Supporting Actions

Annexes

- Articulation with WInnF Strategy relative to Standards
- Summary of WInnF document process

Motivation

SDR Standards are multiplying

- SCA Standards for Defense market
 - SCA 2.2.2 / SCA Next
 - ESSOR Architecture
- For other purposes (GRA, STRS, ...)

Risk of global and local inefficiency

Moving towards a harmonized suite of international SCA standards



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Need for a specific Coordination Model

The most common model in Communications

- « 1 SDO + 1 Forum » paradigm
 - The SDO develops the base standard
 - The Forum, as an industry association, to ensures its effective usage
 - Meeting place among all market actors (e.g. manufacturers + operators)
 - Working place to define applicable profiles, address test & certification, ...
- Examples
 - ETSI TETRA / TETRA Association
 - IEEE 802.16 / WiMAX Forum
 - IEEE 802.11 / WiFi Alliance

SCA-based ecosystem is significantly different

- Acquisition programmes (JTRS, ESSOR) act as standard bodies
- Governments (→ NON-industry) are the customers of standard-based products

Need to define a way for Forum interactions among manufacturers and government stakeholders



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Advisory Council role in document preparation

Coordination with Advisory Council members

- Regular discussion rounds throughout document elaboration
- Last round check before the final draft entered WG approval

Some AC Members brought in statements on the coordination model from

- JTRS JPEO
- OCCAR-EA and ESSOR Nations

Summary of those statements

- Principe agreement on the need for coordination
- Interest to solicit participation from the international community
- However, no short term perspectives for ownership transfer
- Performance of the Coordinating Committee will be observed before making any decision to transition ownership

Notion of International SCA Standard

To be understood in a broad sense

« any publicly available technical specification inspired by SCA aiming to serve as common reference for definition of SDR architectures »

Some semantics clarifications

- « International » → to be understood from origin and usage perspective
- « SCA Standard » → much broader than the SCA itself (includes APIs, additional OE...)
- « Standard » → from de facto common reference and de facto recognition perspective within defense SDR ecosystem

Status of International SCA Standards

Encompasses different elaboration models

Provides detailed references

Programme-driven

- JTRS JPEO
- ESSOR Participating States
- US Army CERDEC
- NASA

Open elaboration

- OMG
- WInnF



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Coordination Model Approach

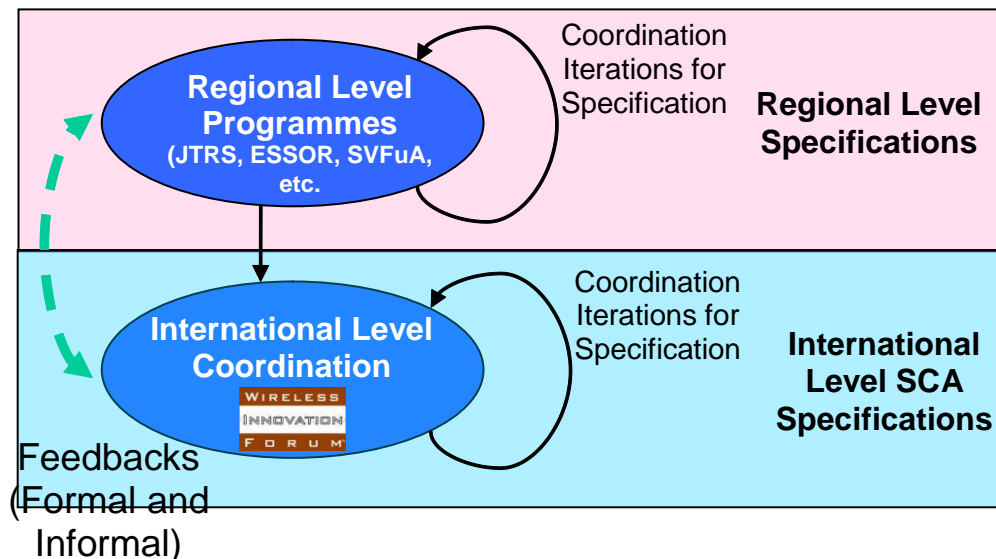
Based on 3 complementary aspects

- 1) Coordination as such
- 2) Production of coordinated international SCA Standards
- 3) Support to coordinated international SCA Standards

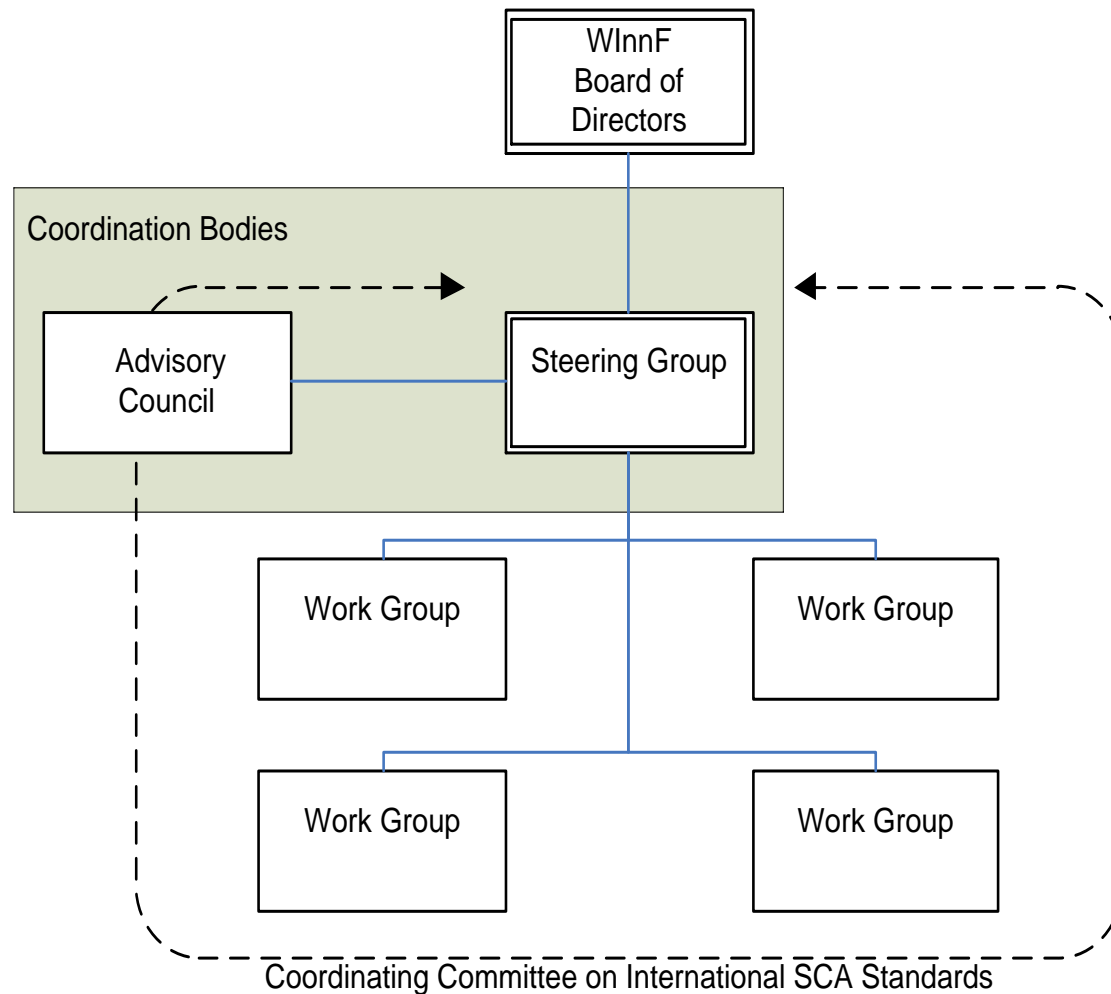
Each of them deserves a specific elaboration

WinnF as a Coordinating Body

- Delivering reports describing issues and proposing solutions
- Defining and maintaining a coordinated roadmap
- Encouraging/fostering technical collaboration
- Setting the basis for effective production of coordinated standards
- Working in partnership with partner Standard Development Organizations (SDOs)



Steering Group and Advisory Council



More on SG and AC

Steering Group

- Undertakes usual duties of Committee Chair
- Acts as Project Approval Committee for CC SCA
- Becoming voting member requires payment of enhanced WInnF membership fee
- A number of ex-officio members with no voting right

Advisory Council

- Composed of individuals affiliated with Government Stakeholders
- Requires no WInnF membership – Grants no voting rights
- Participants appointed under invitation from the Steering Group

Typical Coordination Activities

- Project approval for Coordinating Committee
- Reports on Status of International SCA Standards
- Elaboration of Roadmaps
- Initiating production of International SCA Standards

Identified models for Production of coordinated International SCA Standards (I)

Open custodianship

- Most open elaboration model
- Possibly conducted by any SDO (WinnF, Partner SDO, Joint endeavour, ...)
- Examples: OMG CORBA, WinnF Transceiver Facility and International Radio Security Services

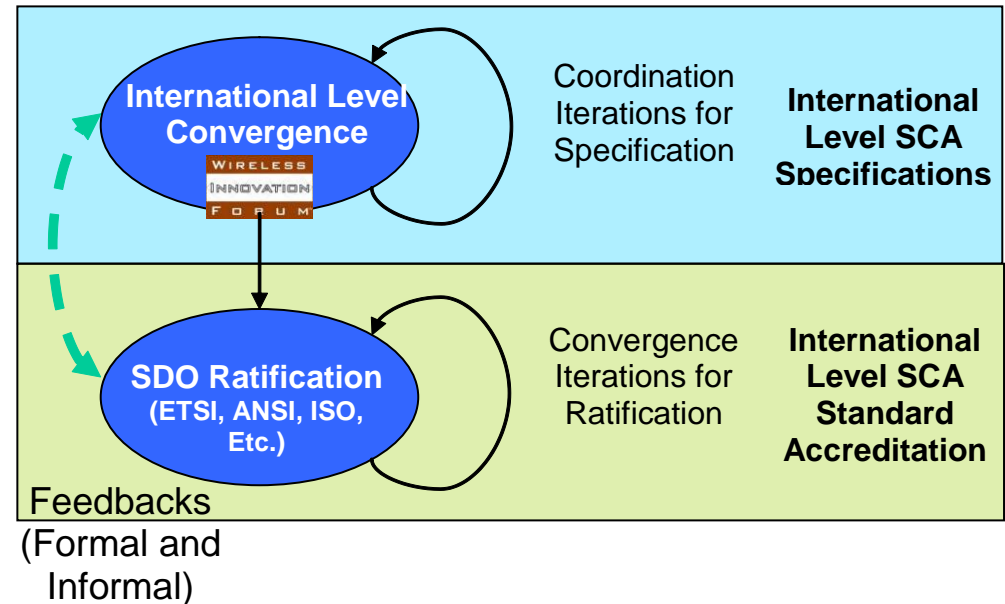
International liaison

- A reference procurement program
- Communication on achievements and collection of contributions through an international forum
- Example: SCA Next partnership between JPEO and WinnF

Identified models for Production of coordinated International SCA Standards (II)

Ratification

- Moving towards status of normative standards
- Requires partnership with ISO-affiliated SDO



Harmonization

- When a standardisation topic is addressed by at least 2 different specifications
- Proposing changes resulting in harmonized specifications
- Example: ESSOR contributions to SCA Next via WInnF

WinnF as producer of coordinated International SCA Standards

SCA Next WG

- International Liaison perspective
- Regularly delivering Change Proposals on SCA Next for consideration by JTRS working panel
- Over 50 recorded working sessions

Transceiver Facility Work Group*

- Open custodianship activity
- V1 published Jan 2009 – Inspires ESSOR and SVFuA
- V2 elaboration project under discussion

International Radio Security Services API*

- Open custodianship activity
- V1 under preparation

* hosted by Committee on Next Generation Radio Technologies



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Partner SDO for International SCA Standards

ETSI – European Telecommunications Standards Institute

- Addressing telecommunication standards
- Some achievements: GSM and TETRA
- Technical Committee on Reconfigurable Radio System (RRS) is addressing SDR and CR matters
- Memorandum of Understanding in place

OMG – Object Management Group

- Addressing computer industry standards
- Some achievements: UML and CORBA
- Cross-membership in place
- Joint achievement: Smart Antenna API

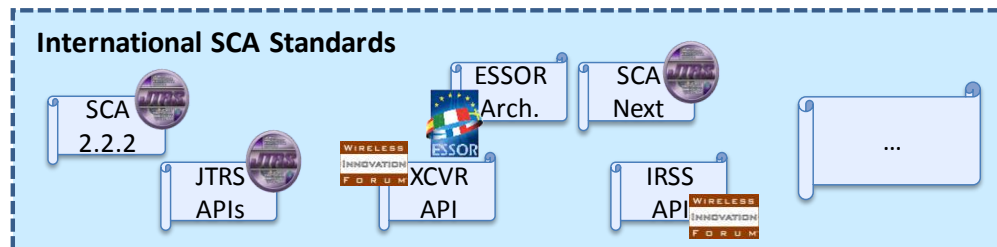
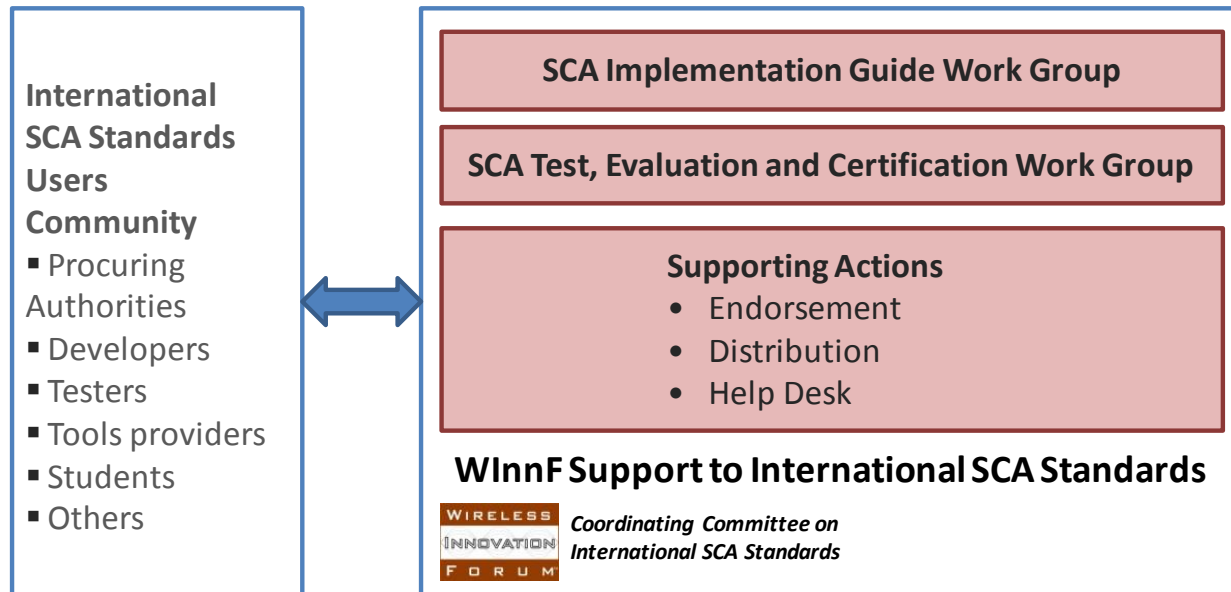


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Support to coordinated International SCA Standards



Conclusions

The Model in a Nutshell

- Coordination activities relying on WInnF, with a Steering Group interacting with an Advisory Council
- Production activities happening within appropriate bodies (WInnF and/or Partner SDO) under various elaboration models
- Support activities conducted by the WInnF

Early operation is very encouraging

- 3rd Meeting of the SG + AC took place on 22-Jun-11
 - 9 SG voting members
 - 3 key Government Stakeholders with affiliates in the AC
- Seems now a coherently fledged group
- On its way to define next Coordination activities