



## **FY2015 Operations Plan**

Version 1.0.0

**15 July 2014**

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# 1 Introduction – The Wireless Innovation Forum FY2015 Objectives

The Wireless Innovation Forum (SDR Forum version 2.0) Board of Directors has established the following eight items as high level objectives for the Forum for the period from July 1, 2014 through June 30, 2015 in executing on the Forum’s Strategic Plan:

1. **Establish the Forum as the Multi-Stakeholder Group for Federal Spectrum Sharing** – The Forum will establish itself at the host for the Multi-Stakeholder group as proposed in the 5 December 2013 filing with the FCC<sup>1</sup>. Actions in support of objective will include hosting an open forum to discuss this group at an appropriate time, with follow on strategy to be developed based on the output of this meeting. In addition, the Spectrum Innovation Committee will review and update advocacy agenda to support this initiative.
2. **Revitalize Defense Communications Membership** – Develop a strategic plan for advancing the needs of the members of the Coordinating Committee on International SCA Standards.
3. **Establish Relevant Projects** – The Forum’s Spectrum Innovation Committee and Coordinating Committee on International SCA Standards will form both member driven projects addressing immediate needs and roadmap driven projects advancing supporting the Forum’s Advocacy Agenda or Top 10 Most Wanted Wireless Innovations list:
  - The Forum’s Spectrum Innovation Committee will maintain and advance the Advocacy Agenda.
    - The Forum’s Spectrum Innovation Committee shall publish revisions of the advocacy agenda as required in 2014. A roadmap of projects will be identified supporting positions within and promotion of the advocacy agenda as required.
    - The Forum’s Spectrum Innovation Committee shall coordinate activities with regulatory agencies and standards bodies to advance the Advocacy Agenda.
  - The Forum’s Coordinating Committee on International SCA Standards shall publish and maintain its own roadmap as defined in the Committee Charter<sup>2</sup>, and initiate projects developing extensions to the SCA standards that address any gaps between the defined SCA evolution roadmap and Forum accepted SCA specification variants.
  - Items on these roadmaps requiring investment in significant technical, business or regulatory innovation shall be added to a Forum wide “watch list”. This “watch list” will be periodically reviewed by the Spectrum Innovation Committee Steering Group to determine if items on the list should be promoted to the Forum’s Top 10 Most Wanted Innovations. Both the “watch list” and the “Top 10 Most Wanted

<sup>1</sup> <http://groups.winnforum.org/d/do/6963>

<sup>2</sup> <https://sdf.memberclicks.net/assets/documents/cc%20sca%20charter%20v3%200%200%20-%202023%20october%202012.pdf>

Innovations” shall include innovations at any levels of the SS7 stack as determined by the membership.

The success of this goal will be measured by evaluating the level of member participation in each project.

4. **Formalize Partnership Relationships with End User Community** – The Forum’s members and staff shall strive to establish the Forum as a venue for collaboration supporting the needs of wireless end users, their representatives and their research initiatives. As appropriate, these end user community relationships will be formalized through the establishment of contracts, research and development agreements, memoranda of understanding, etc. Agreements can include exchange of information, facilitated workshops, funded research, or other activities. In pursuing these relationships, the Forum will work to ensure it is not competing with its own members in working with the end user community, but rather fostering collaboration between members and that community.

Success in this goal will ensure that each project undertaken by the Forum’s members has relevant end user representative(s).

5. **Improve Regional Support** – The Forum will establish and execute a strategy for forming at least one regional committee following the Forum’s newly approved policy.
6. **Strengthen the Forum’s Brand** – The Forum shall aggressively promote its projects, partnerships and positions to collectively establish its members as thought leaders in advocating for the innovative utilization of spectrum, and advancing radio technologies that support essential or critical communications.

In this regard, the Forum shall leverage a key strategic asset: the Board of Directors (and their numerous industry contacts and attendance at relevant industry events). The members of the Board shall advocate on behalf of the Forum at every relevant industry event they attend.

Successful execution of this goal will be reflected in increased requests for information from the broader community, increased speaking opportunities to increase the awareness and influence of the Forum, increased thought leadership around the Forum and it’s advocacy agenda, increased activity on the Forum’s website and portal, and increased pickup of the Forum’s news releases.

7. **Grow Revenue** – Membership growth and active participation of member companies in Forum activities is a key goal. Successful execution in this goal will result in higher membership numbers year to year from FY2014 to FY2015. In addition, the Forum will define and pursue new opportunities for non-dues revenue.

8. **Harmonize Standards** - Harmonize as required, publish and popularize SDR & CR related open International standards worldwide. SDR & CR standards are now region specific and the world community looks towards our Forum for harmonization

This document presents specific plans for achieving these high level objectives in separate sections dedicated to the FY2015 Meeting Plan, and the respective work plans of the Spectrum Innovation Committee, the Coordinating Committee on International SCA Standards, the Board of Directors, and the Forum's Corporate Administration. The budget necessary to support these objectives is also addressed in the last section of this document.

## 2 Wireless Innovation Forum Organizational Overview

### 2.1 Forum Structure

The FY2015 Organizational Structure of The Wireless Innovation Forum is presented in Figure 1. The Forum is organized around two standing committees, whose responsibilities are summarized as follows:

- The role of the Spectrum Innovation Committee is to advocate for the innovative utilization of spectrum, and advancing radio technologies that support essential or critical communications:
  - Works with wireless end users and their representatives, including network operators, government acquisition authorities and research sponsors to validate concepts and requirements against technology readiness, to document domain specific requirements, use cases and business models.
  - Supports member organizations in identifying new opportunities for next generation products and services in each defined market domain.
  - Works with the regulatory and public policy community to establish a global regulatory framework promoting the adoption of emerging technologies for advanced wireless systems.
  - Provides a venue for the exchange of information on emerging radio technologies important in wireless networking and produces reports, specifications and recommendations supporting the development and deployment of advanced wireless system and next generation radio devices

Management and oversight of this committee is provided by a Steering Group working in collaboration with a [Regulatory Advisory Committee](#). The Steering Group is comprised of the [Forum's Officers](#), and is responsible for drafting the Forum's "Top 10 Most Wanted Wireless Innovations" list and setting the Forum's "Advocacy Agenda" based on member input. These documents will be distributed to the members of the Forum for ballot following the Forum's standard process.

- Coordinating Committee on International SCA Standards: supports the harmonization of SCA based standards at the international level for the mutual benefits of all stakeholders to include:
  - Defining an industry driven SCA evolution roadmap for the international community

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

Management and oversight of this committee is provided by a Steering Group working in collaboration with an [Advisory Council](#).

These committees are managed by the Forum’s elected officers, which include the Chair and Vice Chair of the Forum, the Chief Technology Officer, Chief Marketing Officer, Chief Regulatory Officer, the Secretary, and the Treasurer.

## Organizational Structure for The Wireless Innovation Forum

17 April 2013

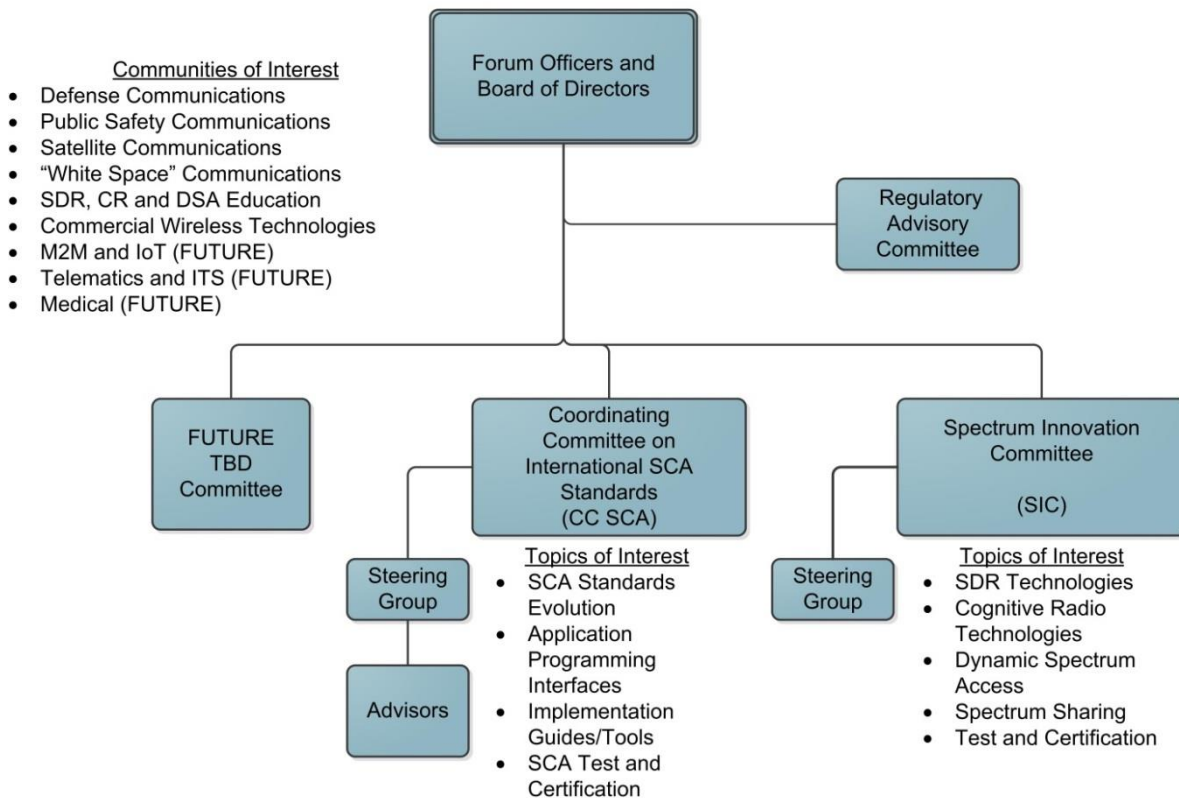


Figure 1: Wireless Innovation Forum FY2012 Organizational Structure



Management and oversight of the Forum as a whole, including the Forum’s corporate affairs, is performed by the Forum’s Board of Directors. These directors are elected on an annual basis, as defined in the [Bylaws](#). The elected slate of Directors for CY2013 is provided in Table 1.

| Name               | Member Organization                | Position  | Email  |
|--------------------|------------------------------------|---|--|
| John Glossner      | Optimum Semiconductor Technologies | Chair of the Board of Directors                                   | <a href="mailto:jglossner@optimumsemi.com">jglossner@optimumsemi.com</a>                       |
| James Neel         | Cognitive Radio Technologies       | Director, Small Company Representative                            | <a href="mailto:james.neel@crtwireless.com">james.neel@crtwireless.com</a>                     |
| R. Muralidharan    | Tata Power SED                     | Director, Medium Company Representative                           | <a href="mailto:r.muralidharan@TataPowerSED.com">r.muralidharan@TataPowerSED.com</a>           |
| David Renaudeau    | Thales Communications              | Director, Large Company Representative                            | <a href="mailto:david.renaudeau@fr.thalesgroup.com">david.renaudeau@fr.thalesgroup.com</a>     |
| Marc Adrat         | Fraunhofer Institut FKIE           | Director, Government and Non-profit Representative                | <a href="mailto:marc.adrat@fkie.fraunhofer.de">marc.adrat@fkie.fraunhofer.de</a>               |
| Jeffrey Reed       | Wireless Virginia Tech             | Director, Academic Institutions Representative                    | <a href="mailto:reedjh@vt.edu">reedjh@vt.edu</a>   |
| Claudio Armani     | Selex ES Communications            | Director, At Large Director                                       | <a href="mailto:claudio.armani@selex-comms.com">claudio.armani@selex-comms.com</a>             |
| Ken Dingmann       | Harris Corporation                 | Director, At Large Director                                       | kdingm01@hariis.com  |
| Preston Marshall   | Google                             | Director, At Large Director                                       | pres@google.com  |
| Bruce Oberlies     | Motorola Solutions                 | Officer and Director, President and Chair of the Forum, Secretary | <a href="mailto:bruce.oberlies@motorolasolutions.com">bruce.oberlies@motorolasolutions.com</a> |
| Ruediger Leschhorn | Rohde and Schwarz                  | Officer and Director, Vice President and Vice Chair of the Forum  | <a href="mailto:ruediger.leschhorn@rohde-schwarz.com">ruediger.leschhorn@rohde-schwarz.com</a> |
| Vince Kovarik      | PrismTech                          | Officer and Director, Treasurer and Chief Financial Officer       | <a href="mailto:vince.kovarik@prismtech.com">vince.kovarik@prismtech.com</a>                   |
| Alberto Quintana   | Indra                              | Officer and Director, Secretary                                   | aqocana@indra.es   |
| Manuel Uhm         | Coherent Logix                     | Officer and Director, Chief Marketing Officer,                    | <a href="mailto:manuel@coherentlogix.com">manuel@coherentlogix.com</a>                         |
| Bob Schutz         | Artisan Wireless                   | Officer and Director, Chief Technical Officer                     | bschutz@artisanwireless.com  |

**Table 1: CY2014 Board of Directors of The Software Defined Radio Forum Inc.**

## ***2.2 Forum Corporate Administration***

Corporate administration and member services are provided to the Forum through a combination of employees, consultants, and third party contractors. The Forum’s key personnel for FY2014 are as follows:

- Chief Executive Officer ([Lee Pucker](#)) – Reporting to the Board of Directors, the Chief Executive Officer’s primary responsibility is to maximize the value the Forum brings to its members. Accordingly, the CEO drives the development of the Forum’s Strategic Plan and supports the Forum’s other officers in executing on that plan. The CEO proactively identifies opportunities, solves the Forum’s critical problems, and makes an effort to anticipate future needs of the membership. The CEO assures that the organization and its mission, programs, products and services are consistently presented in a strong, positive image to relevant stakeholders, in particular to the Forum’s membership. The CEO, with the Treasurer, oversees the organization’s finances, ensuring the Forum's member’s needs are met to the maximum extent possible while maintaining financial stability as a not-for-profit organization.
- Director of Marketing and Communications ([Stephanie Hamill](#)). The Director of Marketing and Communications (MarCom) has primary responsibility for managing communications for the Forum, including internet presence and member communications, and supporting the CEO in establishing and maintaining the Forum’s leadership in advanced wireless markets, evangelizing the Forum’s programs and services, and supporting the organizational objectives of the Forum’s membership. Reporting to the Forum’s CEO, the Director of MarCom helps assure that the Forum and its mission, programs, products and services are consistently presented in a strong, positive image to relevant stakeholders, in particular to the Forum’s membership.

The slate of key consultants and contractors retained by the Forum to support its members in FY2014 are as follows:

- 1) [Drohan Management Group](#) – Manager of the Forum’s Headquarters Operations
- 2) [InfoEx World Services](#) – Representative for the Forum in China
- 3) [Bowling, Franklin & Company](#) – Audits and Finance
- 4) [Gesmer Updegrove LLP](#) – General Legal Counsel
- 5) [Hogan Lovells](#) – Communications Regulatory Counsel

In addition, the Forum retains a document editor on an as needed basis to support the creation of reports, specifications and recommendations by its members. Additional details on the Corporate Administration Work Plan for FY2014 can be found in Sections 6 through 10 of this plan.

### 3 Spectrum Innovation Committee (SIC) (Chair: Bruce Oberlies)

The following high level goals have been assigned to this committee:

- 1) Primary Goals:
  - a. Establish the Forum as a Multi-Stakeholder Group for Federal Spectrum Sharing
- 2) Shared Goals:
  - a. Establish Relevant Projects
  - b. Formalize Partnership Relationships with End User Communities
  - c. Grow Revenue

The project plan to support these goals is addressed in section 3.2.

#### 3.1 Structure

The Spectrum Innovation Committee is led by a steering group comprised of the Forum's Executive Committee along with Topic Sponsors nominated to participate as non-voting members by the Forum's volunteer CMO, CRO and CTO. Sponsors are as follows:

- Public Safety Sponsor – Daniel Devasirvatham, INL
- Tactical Radio Sponsor – Alberto Quintana, Indra
- Satellite Communications Sponsor – Vacant
- Spectrum Sharing Communications Sponsor – Preston Marshall, Google
- SDR Sponsor – Vince Kovarik, PrismTech
- CR/DSA Sponsor – James Neel, Cognitive Radio Technologies
- ITU Region 1 Regulatory Sponsor – Vacant
- ITU Region 2 Regulatory Sponsor – Vacant
- ITU Region 3 Regulatory Sponsor – Vacant

A representative from each commercialization committee will also be invited to participate as an ex-officio non-voting member. In addition, the Steering group may constitute a group of advisors on an ad-hoc basis to support their objectives at any given time.

The primary role of the Steering Group is to identify projects of strategic relevance to the committee membership, to prioritize and launch projects as appropriate, and to monitor those projects to ensure and support execution (see Figure 2). In addition, the Steering Group maintains the Forum's Top 10 Most Wanted Wireless Innovations list and Advocacy Agenda.

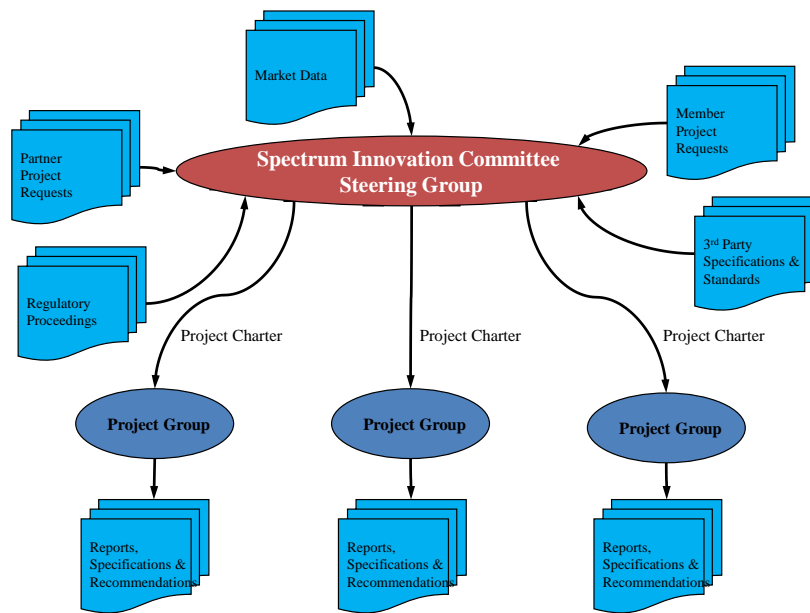


Figure 2: SIC Structure

### 3.2 FY2015 Objectives

The Spectrum Innovation Committee has established the following committee objectives for FY2015 to support the Forum’s High Level Objectives:

#### 3.2.1 Establish the Forum as the Multi-Stakeholder Group for Federal Spectrum Sharing

The Forum will establish itself at the host for the Multi-Stakeholder group as proposed in the 5 December 2013 filing with the FCC<sup>3</sup>. The Forum will actively advocate itself as an established multi-stakeholder group with a track record of success in supporting collaboration between government, industry and academia. The Forum will use the open FCC 3.55GHz FNPRM proceeding as a venue to advocate its capability to fill the FCC’s harm claim threshold multi-stakeholder group. In addition, the Forum will ask member organizations that are active in the proceedings to support the Forum as the multi-stakeholder group. We will also work to support NTIA in areas related to federal spectrum sharing, including providing education in relevant technologies, and facilitating discussions with the DSA community.

The multi-stakeholder group will be established as a US Regional Committee under the new Forum Policy 019<sup>4</sup>. The committee will have a steering group who will establish direction for the committee, set work items, and monitor progress. Although the Focus of the committee will be on spectrum sharing in the US, it is anticipated that committee projects will be open to all Forum Members, allowing global participation. Associate membership will be available for those wishing to participate as individuals versus representatives of their company.

<sup>3</sup> <http://groups.winnforum.org/d/do/6963>

<sup>4</sup> [http://www.wirelessinnovation.org/Policies\\_and\\_Procedures](http://www.wirelessinnovation.org/Policies_and_Procedures)

At an appropriate time the Forum will include hosting an open meeting to discuss this group, with follow on strategy to be developed based on the output of the meeting. It is anticipated that the US Regional Committee will hold one to two face to face meetings in Washington DC per quarter as part of formation and work product development.

In addition, the Spectrum Innovation Committee will review and update Advocacy Agenda to support this initiative. See Section 3.3.4 on the plan to update the Advocacy Agenda.

### **3.2.2 Establish Relevant Projects**

The members of the Spectrum Innovation Committee will deliver at least 5 reports in FY2015 through the projects defined in section 3.3 of this plan. In addition, the committee will explore initiating the following projects for the development of relevant work products in FY2015 and FY2016. The Forum's Spectrum Innovation Committee shall publish revisions of the advocacy agenda as required in 2015.

### **3.2.3 Formalize Partnership Relationships with End User Communities**

The Spectrum Innovation Committee will interact with end user communities following a three step approach:

- Identify the unfulfilled user needs (e.g. via advisory councils, podium discussions etc)
- Identify the technologies which have the potential to fulfil those needs (10 most wanted technologies)
- Commercialize those technologies (WInnF projects)

All three steps allow interactions with the end user community within partnership relationship.

### **3.2.4 Grow Revenue**

Membership growth and active participation of member companies in Forum activities is a key goal. Successful execution in this goal will result in higher membership numbers year to year from FY2014 to FY2015. Successful execution on goal 1, establishing the Forum as the Multi-Stakeholder Group for Federal Spectrum Sharing is a key component of strengthening the Forum's Brand, which in turn will result in increased membership, increased participation on Forum events, and ultimately grow revenue.

## ***3.3 FY2015 Project Plan***

The Spectrum Innovation Committee will extract roadmap requirements from use case, business model and market study reports developed by its members for consideration in the Forum's Top 10 Most Wanted Wireless Innovations List. Additionally a roadmap of projects will be identified supporting positions within and promotion of the advocacy agenda as required.

Topic Sponsors of the Spectrum Innovation Committee will assist in organizing projects focused on the specific needs identified in the Roadmap, Top 10 Most Wanted List, and Advocacy Agenda.

In support of the Forum's Top 10 Most Wanted Wireless Innovations List and to guide the Spectrum Innovation Committee's choice of projects, the Spectrum Innovation Committee shall convene a discussion at each face-to-face meeting for the purpose of defining and publishing a Spectrum Innovation Committee Roadmap and a Spectrum Innovation Committee Watch List.

### 3.3.1 Execution on Existing Projects

The SIC plans to continue work on the following projects in FY2015:

#### 1. *"Integrated Communications Systems Model"*

- **Objective:** The long-term objective of this project is to develop an integrated model for developers of SDR communications systems. It addresses multiple market and government segments providing an integrated systems model encompassing both hardware and software architecture perspectives within a single model. The model will serve as a reference architecture that can be used as a foundation for software-based communications systems across a variety of domains, hardware types and applications s. This model will be developed using a SysML/UML tool to represent and capture the architecture aspects of the communications system model. The model can then be applied as a starting baseline for communications system design.
- **Project Leads:**
  - Project Chair: Vince Kovarik ([PrismTech](#))
- **Milestones:**
  - The work product for this phase of the project is an comparative analysis of current SDR standards.
  - Expected Completion: December 2014

#### 2. *"Receiver Performance Guidelines and Evaluation Criteria"*

- **Objective:** This report is being developed for regulators, designers, manufacturers and users of wireless communications systems who are developing wireless policy and equipment to access shared spectrum or to coexist with adjacent spectrum uses while understanding impact to current spectrum users. The report will produce a set of actionable guidelines to design and evaluate the performance of receivers that will coexist in shared & adjacent spectrum bands that can be used as a foundation for future radio systems.
- **Project Lead:** Bruce Mueller (Motorola Solutions)
- **Milestones:**
  - Expected Completion: March 2015

### 3. *Spectrum Sharing Annual Report*

- **Objective:** This report is being created for Regulators, Policy Makers, Spectrum Managers, Network Planners, and Wireless Researchers who need to understand the state of technologies such as dynamic spectrum access and their ability to facilitate spectrum sharing. The report will act as a reference guide to clearly identify and synthesize a harmonized view of the results of spectrum sharing research and trials, identify what is in development, and articulate what issues are being addressed and what issues still need to be resolved.
- **Project Lead:** Lee Pucker (WInnF CEO)
  - **Milestones:** Expected Completion: October 2014

### 4. **Standard Spectrum Resource Format (SSRF)**

- **Objective:** This project is a joint industry-Government collaboration to study, propose and implement revisions to the Standard Spectrum Resource Format (SSRF) that may be required for Commercial applications. The Group will then develop and maintain an open source reference implementation of the resultant SSRF version.

SSRF defines standard data elements for automated exchange of radio-frequency (RF) spectrum-related data. Basic spectrum management transactions supported by this standard are useful for Commercial and Government spectrum administrators, network operators and consumers and include:

1. RF equipment and antenna parameters
2. Spectrum supportability requests and associated host nation replies
3. Temporary and permanent frequency proposals and assignments
4. Frequency allotments
5. Joint Restricted Frequency Lists (JRFL)
6. Interference reports

SSRF is a Government specification published by the Military Communications Electronics Board as MCEB PUB-8 and issued under the authority of DOD Directive 5100.35, Military Communications- Electronics Board (MCEB) with changes thereto.

SSRF is aligned with the National Telecommunications and Information Administration (NTIA) Office of Spectrum Managements Data Dictionary (OSMDD) and the North Atlantic Treaty Organization (NATO) Spectrum Management Allied Data Exchange Format – eXtensible Markup Language (SMADEF-XML). Continued interoperability (e.g. backward compatibility) is required.

The SSRF Project will proceed in five phases:

1. Analyze the current SSRF specification
2. Identify commercial needs and requirements not in the current specification
3. Industry / Government collaboration to implement identified needs and requirements
4. Finalize and publish a software reference implementation
5. Identify and publish API's between the reference implementation and industry databases such as the FCC TV Whitespace Database

- **Project Lead:** Jesse Caufield (KeyBridge)
- **Milestones:** Phases 1-4 complete Sept 2014

#### 5. Elements of Context for Cognitive Radio Based Public Safety Communications Systems

- **Objective:** This report is being created for public safety community leadership, researchers and product developers who are planning and developing improved capabilities for real-time management of public safety communications resources. The report will build on the Forum's ongoing work in Context Aware Cognitive radio and the existing body of knowledge from the Forum's Public Safety Special Interest Group to:
  - Examine the role, if any, of Dynamic Spectrum Arbitrage in Public Safety with respect to Context Aware Cognitive Radio
  - Provide an application-specific example for researchers developing concepts and tools for Context Aware Cognitive Radio technologies;
  - Provide input to researchers and developers addressing real-time communications network management (e.g., tools for Communications Unit Leaders and incident commanders) leveraging reconfigurable and cognitive radio capabilities.

The scope of this report will include a description of Context Aware Cognitive Radio (CACR), a summary of why CACR is relevant to public safety, and a listing of elements of context needed for effective public safety communications resource management.

- **Project Lead:** Daniel Devasirvatham (Idaho National Labs)
- **Milestones:**
  - Completion Dec 2014

### 3.3.2 Spectrum Innovation Committee Roadmap

The Spectrum Innovation Committee Roadmap is a document that outlines strategic projects the SiC desires to undertake in support of the Forum's Advocacy Agenda, the Forum's Top 10 Most Wanted Wireless Innovations List, and the SiC Watch List. The list does not restrict the



projects that Topic Sponsors may support but rather guides the Spectrum Innovation Committee to launch new projects that are aligned with the objectives of the Committee.

The Chair of the Spectrum Innovation Committee is responsible for the Roadmap.

### 3.3.3 The Forum's Top 10 Most Wanted Wireless Innovation List

The Spectrum Innovation Committee is responsible for the Wireless Innovation Forum Top 10 Most Wanted Wireless Innovation List.

The process that will be adopted by the Committee in FY2015 is as follows:

- Members of the Spectrum Innovation Committee will discuss at each Committee Meeting any prospective changes to the Watch List
- The Spectrum Innovation Committee will discuss in a Committee Plenary at all face-to-face meetings and update their Watch List
  - New candidates and their reason for inclusion shall be noted
  - Updates on progress for existing Top 10 List items shall be noted
  - Solved problems with references and reasons for removal shall be noted
- A Spectrum Innovation Committee Plenary shall be held prior to the Forum Closing Plenary at each face-to-face meeting for the purpose of voting out the Spectrum Innovation committee Top 10 List changes.
- The Chief Technical Officer of the Forum is responsible for consolidating Top 10 List inputs from all Forum Committees. The procedure shall be as follows:
  - At the opening plenary the CTO shall present the current Top 10 List and remind Committees to actively discuss the list during their working sessions.
  - Prior to the closing plenary the Chairs of each Committee are responsible for providing input to the CTO on any proposed changes to the Top 10 List or the Watch List.
  - At the closing plenary the CTO shall lead a discussion of the consolidated proposals. If changes to the watch list are presented by either Committee, a discussion of the merits of modifying the Forum's Top 10 List shall be conducted.
  - Any changes to the Forum's Top 10 List shall be balloted at the subsequent face-to-face meeting.

- In addition the CTO shall maintain a consolidated Forum “Watch List that is the union of the Committee watch lists

This Watch List and the Top 10 List shall be available to the public on the Forum’s website allowing for comments

- Any public requests for new entries to the watch list shall be reviewed by the CTO and sent to the appropriate Committee for consideration in the committee level watch list

The Chair of the Spectrum Innovation Committee is responsible for the Spectrum Innovation Committee’s Top 10 Most Wanted List and the Watch List.

The CTO of the Forum is responsible for the consolidated Top 10 Most Wanted List and the consolidated Watch List.

### 3.3.4 Advocacy Agenda

The Spectrum Innovation Committee of the Forum is responsible for the Advocacy Agenda and maintaining a consolidated list of proposed changes/additions to the Advocacy Agenda.

The process that will be adopted for updating the Advocacy Agenda in FY2015 is as follows:

- An Advocacy Committee shall be established. The officers of the Forum and the Chair of the Board shall be part of this committee.
- The committee shall meet quarterly or as needed to discuss changes to the Advocacy Agenda. Such meetings may be held in conjunction with the Spectrum Innovation Committee Steering Group Meetings.
- The Chief Regulatory Officer is responsible for consolidating all Advocacy Agenda inputs from all Forum Committees. The procedure shall be as follows:
  - At the opening plenary the CRO shall present the Advocacy Agenda and remind Committees to actively discuss the Agenda during their working sessions.
  - At each face-face Committee Plenary, members of the Forum shall discuss any prospective changes or additions to the Advocacy Agenda.
    - New Advocacy Agenda topics
    - Additions to existing Advocacy Agenda topics
    - Clarifications to existing Advocacy points

- Prior to the closing plenary the Chairs of each Committee are responsible for providing input to the CRO on any proposed changes to the Advocacy Agenda.
- At the closing plenary the CRO shall lead a discussion of the consolidated proposals. If changes to the Advocacy Agenda are presented by either Committee, a discussion of the merits of modifying the Advocacy Agenda shall be conducted.
- Any changes to the Advocacy Agenda shall be balloted at the subsequent face-to-face meeting.
- In addition the CRO shall maintain a consolidated Forum Advocacy Agenda proposed changes list based on inputs from all Forum committees.

The Advocacy Agenda shall be available to the public on the Forum's website allowing for comments

- Any public comments shall be reviewed by the CRO and sent to the appropriate Committee for consideration in the committee level Advocacy Agenda proposed changes list.

The proposed changes list shall only be available to Forum members on the Forum's website.

## 4 Coordinating Committee on International SCA Standards (CC SCA) (Chairs: Ken Dingman, *Harris* and Eric Nicollet, *Thales*)

The following high level goals have been assigned to the committee from the Board of Directors

- 1) Primary Goals:
  - a. Revitalize Defense Communications Membership
  - b. Harmonize Standards
- 2) Shared Goals
  - a. Establish Relevant Projects
  - b. Formalize Partnership Relationships with End User Community
  - c. Grow revenue

In support of achieving these goals, the CC SCA developed a 2014 Strategic Plan to guide its operations for the next 3 years<sup>5</sup>. The activities outlined within this Operation Plan for FY15 are consistent with and derivative from the Strategic Plan.

### 4.1 Charter

The current mission of the Coordinating Committee on International SCA Standards (CC SCA) is to “support international harmonization of the SCA through open standards with unlimited public access, while influencing the specification and development and verification of portable SCA based waveforms”.

As directed by the CC SCA Strategic Plan, the CC SCA will re-brand itself to address a broader market than the SCA based military tactical radio and develop a new mission statement. Specific activities that will be undertaken to support the rebranding effort are discussed below.

### 4.2 Committee Structure

The CC SCA is comprised of 3 major organizational elements. A Steering Group (SG) that is responsible for coordinating the different activities within the CC SCA and ensuring that liaisons with the stakeholders and the Forum’s Board of Directors are maintained. An Advisory Council that acts as an advisory body to the SG, representing various Government stakeholders in the identification of requirements and development of visions to support their operations. A set of Working Groups that focus on identifying needs/issues and providing solutions, executing approved projects. For FY2015, there seven Working Groups:

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<sup>5</sup> Available at [http://groups.winnforum.org/SCA\\_Committee](http://groups.winnforum.org/SCA_Committee)

- SCA Evolution Working Group
- SCA Advocacy Working Group
- Implementer’s Working Group
- Test & Evaluation Working Group
- International Radio Security Services (IRSS) Working Group
- Transceiver Working Group
- International Tactical Communications Working Group

The structure of the CC SCA organization is provided in Figure 3 below in conjunction with the relationship of the CC SCA to other WINNF organizational elements.

Structure for Coordinating Committee on International SCA Standards

17 April 2013

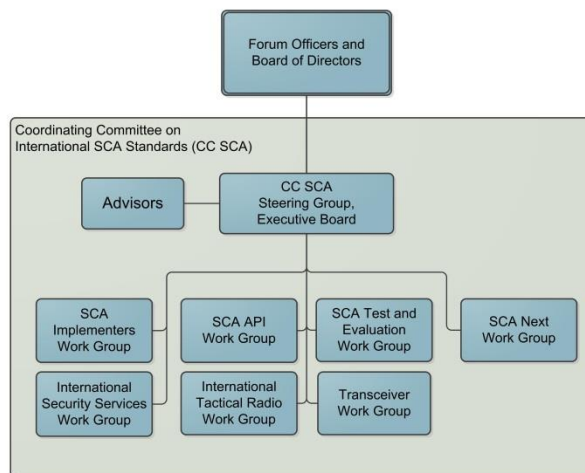


Figure 3: Coordinating Committee on International SCA Standards Organizational Structure

### 4.3 FY2015 Objectives

The CC SCA has established the following committee objectives for FY2015 to support the needs of the members and participants of the CC SCA in conjunction with the WINNF’s “High Level Objectives”.

#### 4.3.1 Increase Committee Participation and Revenue Generation

The activities laid out in this operational plan are critical to the continued success and existence of the Forum so it is imperative that the CC SCA is successful in meeting its objectives. In order to be able to do that, the active participation in the Committee must increase. There are two approaches in the plan to accomplish this.

- Increase the participation from current members: A problem currently affecting the CC SCA is a minimal active participation from the member organizations. Many of the

participants are members of multiple groups within the Forum and do not have the time available to ensure adequate effort it being put forth to guarantee success in all the endeavors they are participating in. Current CC SCA members will lobby and recruit within their organizations to bring in leaders and participants for projects. This will help ensure the projects have a critical mass to complete and allow the CC SCA leadership to perform their Committee and Forum leadership roles.

It is expected that the current member organizations work within their companies to increase the participation in committee activities.

- Expand the CC SCA Membership: The Board of Directors Executive Committee has set the goal to expand CC SCA membership by 4 large and 1 medium company in FY2015. Many of the objectives and activities defined in this plan are focused on meeting this goal.

In addition, from a staffing perspective, In order to provide expertise in the execution of the Operation Plan and assistance to the WINNF staff, utilizing a consultant will be considered.

To maximize the revenue generated the CCSCA Steering group will do a review of member pricing to ensure alignment with the market, and make recommendations for changes to the Board of Directors as appropriate.

#### **4.3.2 SCA Standards Custodian**

This objective relates to the Standards Harmonization foundational element of the Strategic Plan and maps to the “Revitalize Defense Communications Membership” and “Formalize Partnership Relationships with End User Community” goals assigned by the Board of Directors.

The CC SCA Steering Group will negotiate to obtain custodianship of the SCA and API standards as appropriate from organizations that include the JTNC. Based on discussions held with the JTNC during Advisory Councils, it appears the JTNC may be amenable to such an arrangement. Custodianship of the specification would provide the motivation for radio vendors to rejoin the Forum in order to be able to be involved in the advancement of the SCA.

#### **4.3.3 Rebrand the CC SCA**

This objective relates to the Structure foundational element of the Strategic Plan and maps to the “Revitalize Defense Communications Membership” and ‘Grow Revenue” goals assigned by the Board of Directors and in alignment with strategy defined in the Strategic Plan (<insert link>)

A working group will be formed reporting to the CC SCA Steering Group to determine a name and charter/mission of the CC SCA. The new mission will utilize the “essential and mission critical communications” element of the Forum Mission statement as the foundation of the focus of the new charter. The Rebranding Working Group will develop a plan for rolling out the

new Committee, including activities such as rollout events (inviting members of target growth areas), work groups, creating collateral, participating in industry seminars and conferences.

Care has to be taken not to alienate traditional defense industry vendors and tool suppliers by assuring the continued development of relevant standards (SCA and others) to those providers. In rebranding, the existing suite of standards that are relevant to the SDR market will be evaluated as well as new platforms. The rebranding will also evaluate emerging domains in which global coordination will be beneficial such as network provisioning and management.

#### **4.3.3.1 Committee Growth Plan**

As a result of and consistent with the new name and mission, a Committee Growth Plan will be developed. The primary goal of this is to define how to expand the CC SCA into markets beyond Tactical Military Radios. The goal is to provide standards input, harmonization and services targeted at platforms and standards not already addressed by the SCA (i.e. shipboard, space platforms, public safety, higher frequency ranges).

The Committee Growth Plan will be developed by a work group reporting to the CC SCA SG. It should include members with a diverse view of standards based communications systems from government and industry. It should target those areas in which current standards development organizations don't exist or are not effective in driving solutions.

#### **4.3.4 Drive SCA Standards Evolution through Needs Based Roadmaps**

This objective relates to the Standards Harmonization foundational element of the Strategic Plan and maps to the "Harmonize Standards" goal assigned by the Board of Directors.

The CC SCA Steering Group will develop and publish a suite of technology and operational roadmaps that can be used to facilitate a detailed understanding of user and systems needs that can be satisfied through continued SCA Standards and associated eco-system evolution. Roadmap solutions associated with defined needs will be expressed through a representative combination of suitable elements, which can include:

- Business cases and operating models
- Policies, guidelines, best practices and lessons learned
- Identification and establishment of supporting infrastructure (i.e., process, procedures, tools)
- Specifications, Standards (i.e., APIs) and Technical Reports
- Prototypes (proof of concept implementations)
- Services (i.e., Government support contracts)

The Advisory Council will be provided the opportunity to review, submit and discuss comments regarding these roadmaps to ensure alignment with Government objectives and requirements.

These roadmaps will be utilized to define, prioritize and establish relevant CC SCA projects. Candidate topics for FY2014 roadmap development may include one or more of the following:

- Communications interoperability and waveform portability
- Test, Evaluation and Certification
- Security
- Applications (HMI, Android bridge, etc.)
- Mission Planning and configuration (i.e., plug & play)
- Network management (i.e., Manet network solutions and beyond)
- System performance (i.e., throughput)
- Dynamic spectrum allocation
- Advanced wireless networking
- Situation awareness
- SCA component libraries and software reuse

Elements of these roadmaps that require significant technical, business or regulatory innovation will be submitted to the Forum's Roadmap Committee for inclusion in the Forum's "Top 10 Most Wanted Wireless Innovations" report as defined in Section 3.3.3 of this Operations Plan.

#### 4.3.5 Develop and Leverage End-User Community Partnerships

This objective relates to the Standards Harmonization foundational element of the Strategic Plan and maps to the "Formalize Partnership Relationships with End User Community" goal assigned by the Board of Directors.

The CC SCA Steering Group will develop and leverage End-User community partnerships as a foundational element to coordinate and harmonize SCA Standards for the benefit of all stakeholders. This will be accomplished by building on the Advisory Council (AC) model through the following:

1. Continued facilitation of information exchange with AC members.
2. Establishment of formal relationships, such as contracts, research and development agreements and memorandums of understanding where appropriate.
3. Strategic expansion of AC membership. The CCSCA shall work to extend invitations to become advisors to representatives from Brazil, India, Japan, Korea, Malaysia, Singapore, the UAE and other countries as appropriate. The update to the **Business Models for New Entrants in the SDR Tactical Radio Market** that is being performed by the ITR SIG will be used as inputs to target SCA SDR areas for AC expansion. The goal is to bring in 2 additional advisors from regions outside the US and Europe.



The CC SCA will increase the value of membership by making Report Out of Advisory Councils available to all members of the CC SCA. Non-Steering Group members still will not be able to participate in the AC meetings. Currently, only Steering Group members can participate in the meetings and have access to the information discussed.

#### **4.3.6 Promote SCA Standards and Technology World-wide**

This objective relates to the Outreach foundational element of the Strategic Plan and maps to the “Grow Revenue” goal assigned by the Board of Directors.

The CC SCA Steering Group will develop and execute a marketing campaign for the promotion and promulgation of SCA standards and technology solutions within world-wide defense markets and penetrating into other relevant SDR domains. The CC SCA will develop and broadly distribute SCA related marketing collateral in conjunction with sponsorship of technical workshops and webinars as methods to promote the values and benefits of SCA Standards technology and solutions. The purpose of this activity is to facilitate the growth of commercial investment in the SCA Standards eco-system providing cost and time-to-market benefits to all stakeholders in the SCA community. This activity is also intended to enable expansion of regional support for SCA Standards across the globe, provide strength for the WINNF brand, while expanding membership and participation with the CC SCA and the WINNF in general. In order to ensure sufficient focus is assigned this objective an SCA Advocacy Working Group will be created. See below for further information on its goals for the year.

#### **4.4 FY2015 Project Plans**

The CC SCA plans to deliver multiple work products through a series of projects in FY2015. Specific work products and milestones delivered from existing and planned projects are presented below. Note: the IRSS and Transceiver Working Groups are currently dormant and will evaluate the needs for project and develop appropriate project plans throughout the year.

1. Waveform Portability Guidelines: The SCA Implementer's Work Group will complete and publish a set of SCA waveform application portability guidelines started in FY2014.
2. SCA 4.1 Advocacy: There will be specific focus on the advocacy of the SCA 4.1 release. This will commence with a Rollout event held jointly with the JTNC. The SCA Advocacy Working Group will be formed to consult with the JTNC to identify the problems the SCA 4.0 was created to solve and develop collateral to support the advancement of the SCA 4.1. Collateral will consist of:

- A white paper that highlights the problems with SCA v2.2.2 that SCA 4.x resolve and how they benefit the SCA developer
- Material (presentation/white paper) to convince the technical buyer to make the recommendation to utilize SCA 4.x; to convince the economic buyer to allocate funds for SCA 4.x development and to address the concerns of the Policy owner to support standardization on SCA 4.x
- SCA v2.2.2 to v4.1 migration plan which results in a port by a radio manufacturer to v4.1. Develop and publish a use case of the describing the implementation of v4.1

Other activities the CC SCA will undertake in the promotion of SCA v4.1

- Creation of papers and presentations by member organizations promoting v4.1. A Technical track focused on v4.1 will be considered for a future conference.
  - Consider hosting a 'hack fest' in which vendors are invited to develop a solution of a 4.1 based system.
  - Establish a 'partnering' relationship with select vendors to provide technical and other assistance as feasible.
3. SCA Evolution: The SCA Evolution Working Group is a renaming of the SCA Next Working Group. This Working Group will focus in two areas
    - SCA and API's: The working group will evaluate extensions and modifications to the SCA and existing APIs based on recommendations that could come from other *Programs* (i.e., ESSOR Program, SVFuA Program), the results for the JTNC/WINNF SCA 4.x Workshop held in November of 2013 and the SCA Harmonization Roadmap. The results of this work group will be new standards specifications that can be utilized in their entirety by the JTNC or another standards body or modifications to an existing standards specification.
    - Dynamic Spectrum Allocation (DSA): Develop a Working Product defining a DSA facility specification in a similar way as the Transceiver Specification. This project could be backed by both the CC SCA and Spectrum Innovation Committees. The project would show the applicability of SCA products outside defense, so it should target both military tactical radio needs and commercial needs.

#### 4.4.1 Projects

The CC SCA plans to execute the following projects in FY2015 (see above for work product descriptions). The priority for executing the projects is

- Complete SCA 4.1 projects (should be done in FY2014) and begin advocacy
- Complete the “SCA Test Lab Recommendation”, “Waveform Portability Guidelines” and “Business Models” projects
- Start the SCA Evolution projects

##### 1. *“SCA Waveform Applications Portability Guidelines”*

- **Objective:** The SCA Implementer’s Work Group will complete the work started in FY2014 and publish a set of SCA waveform application portability guidelines for the waveform developers and radio platform manufacturers who require reducing the cost, effort and time needed to perform the development and porting of waveforms among different processing architectures (i.e: DSP, FPGA). The report will provide a compilation of portability recommendations, guidelines and best practices for waveform development with portability as the main target.
- **Work Group:** SCA Implementers
- **Project Lead:** Alberto Quintana, Indra
- **Milestones:**
  - Release 1 Work Group Ballot: September 2014
  - Release 1 Plenary Ballot: November 2014

##### 2. *“SCA Test Lab Recommendation”*

- **Objective:** Complete document started in FY2014 that provides an overview understanding of an SCA Test Lab. This document identifies artifacts that are the inner workings for an SCA Test Lab’s existence. This document identifies the business case as it pertains to the financial concerns as a business entity.
- **Work Group:** T&E Working Group
- **Project Lead:** James Ezick, Reservoir Labs
- **Milestones:**
  - Release 1 Working Group Ballot: September 2014
  - Release 1 Plenary Ballot: November 2014

##### 3. *“Business Models for New Entrants in the Tactical Radio Market”*

- **Objective:** Update the "Business Models for New Entrants in the SDR Tactical Radio Market" report, originally released in 2013. This updated report will review changes in existing programs, and add new programs that have emerged. The report will also provide additional examples and testimonials on business models, and include a market report on the different suppliers of waveform

engineering, tools and testing solutions for this market segment. The report may also extend into other adjacent market segments, including airborne and ground to air capabilities, as well as tactical data links.

- **Work Group:** International Tactical Radio Special Interest Group
- **Project Lead:** David Renaudeau, Thales
- **Milestones:**
  - Plenary Ballot: November 2014

#### 4. “SCA Harmonization Roadmap”

- **Objective:** The Roadmap project will identify areas of discrepancy between implementations and develop a prioritized list of APIs and segments of the SCA where harmonization is required. Based on this it will create a roadmap to drive convergence on a common set of SCA based standards.  
To address the lack of progress on the Roadmap in previous year, the effort will be run as a Project, with a defined plan, committed participation and reporting to the BoD.
- **Work Group:** CC SCA
- **Project Lead:** Ken Dingman, Harris/Eric Nicollet, Thales
- **Milestones:**
  - i. Approved Project Plan: September 2014

#### 5. “SCA Evolution”

- **Objective:** The **SCA Evolution Work Group** (Chair:) will drive the continued evolution of SCA Standards through the technical analysis, evaluation and recommendation of corrections, extensions and improvements, delivering formal recommendations and updated standards to the JTNC Standards Organization for consideration of incorporation into future versions of the specifications. The anticipated cadence for providing recommendations is every 6 to 9 months.
- **Work Group:** SCA Evolution
- **Project Lead:** TBD
- **Milestones:**
  - Approved Project Plan: November 2014

#### 6. “SCA Advocacy”

- **Objective:** The SCA Advocacy Work Group will be formed and will deliver a project plan for consideration by the SG to include the development of material, coordination, holding and participating in workshops and conferences, etc. to promote the SCA and in particular SCA v4.1. The developed material will provide information supporting the adoption and implementation of SCA v4.1

- **Work Group:** SCA Advocacy
- **Project Lead:** TBD
- **Milestones:**
  - SCA 4.1 Kickoff (joint w/ JTNC): Sept 2014
  - SCA 4.1 Adoption Collateral: Jan 2015

## 7. *“CC SCA Rebranding”*

- **Objective:** A task group will be formed to create a recommendation for a new name and mission statement for the Committee with the intent of expanding the membership of the Committee to beyond the military tactical radio market. At the completion of the rebranding they will create a Committee Growth Plan defining the target industries, technical domains and regions for expansion and the approaches that will be used to engage them.
- **Work Group:** CC SCA Rebranding
- **Project Lead:** TBD
- **Milestones:**
  - Committee Name and Mission Statement: June 2015
  - Committee Growth Complete: June 2015

## 5 Board of Directors FY2015 Work Plan (Chair: John Glossner, Optimum Semiconductor)

A primary responsibility of the Board of Directors in FY2015 is monitoring the operations of the Forum ensuring compliance with the 2014 to 2015 Strategic Plan and this Operations Plan. Meetings of the Board of Directors are planned for the following dates:

- Video Conferences the second Tuesday of each month at 10AM Eastern US Time
- Wednesday June 11<sup>th</sup>, 2014 in Florida (in conjunction with the CC-SCA F2F meeting)
- Wednesday November 5<sup>th</sup> 2014 in Rome (in conjunction with SDR-WinnComm-Europe)
- March 2015 in San Diego (in conjunction with SDR-WinnComm)

Additional interim Board Meetings may be scheduled as required.

An additional key role of the Board of Directors is monitoring the financial performance of the Forum. The CEO will send the status of membership and the updated FY2015 financial forecast to the Board monthly. In addition, the financial performance is reviewed following the schedule below:

- October 2014 Board Meeting – Review the audited financial results for FY2014 to be presented to the members at the Annual, and the Q1 FY2015 forecast with projections for the remainder of the year.
- Annual Meeting of the Members – Present FY2014 audited financial results to the members, present updated FY2015 projections
- March Board Meeting – Review Q1 and Q2 FY2015 unaudited financial results and projections for the remainder of the year.
- June Board Meeting – Review the FY2015 forecast and approve the FY2016 Operation Plan and Budget and submit to the membership for approval.

Additional work by the Board to monitor performance and explore strategy is undertaken by the following Board committees:

- **Audits Committee** – Provides board oversight of the organization’s annual financial audit, including reviewing the adequacy and reliability of the Forum’s internal controls and financial reporting, review the independence of and performance of the Forum’s external auditor, review alleged violations of the Forum’s stated policies, and reports to the board on recommendations. Chair: Assigned by the Chair of the Board
- **Finance Committee** – Provides board oversight of the Forum finances including recommending financial policies and internal controls, reviewing the annual budget prepared by staff and recommending it to the full board for approval, and monitoring financial reports prepared by the staff, including monitoring of investments, against the approved budget. Chair: Treasurer

- **Employee Compensation and Contractor Performance Committee (ECCP)** – as defined in the Forum’s [Bylaws](#)
- **Governance and Policy Committee** – provides oversight and assessment of the Board, identifies requirements for Board orientation and education. Reviews current best practices and governance trends and makes recommendations to the full board on bylaws and policies. Chair: Secretary
- **Nominating Committee** – As defined in the Forum’s [Bylaws](#). The 2015 Nominating Committee is formed by the Chair of the Board of Directors on or before the start of the June General Meeting, and presents the proposed slate of Directors to the Board at the October 2014 Board meeting.
- **Outreach Committee** – provides input to the Board on venues and events that the Forum should have representation in attendance.

## ***5.1 FY2015 Objectives***

### **5.1.1 Improve Regional Support**

A subcommittee of the Board of Directors shall be formed to generate an execution strategy to better support Regional Committees. The output of the subcommittee will be a set of plans and guidelines to assist member companies in forming regional committees.

### **5.1.2 Strengthen the Forum’s Brand**

An outreach committee of the Board of Directors shall be formed. With the cooperation of the Board, a calendar of events and Board member attendees can be identified as opportunities to leverage the presence of the Board.

### **5.1.3 Grow Revenue**

Members of the Board of Directors shall actively promote Forum activities to potential member companies with the intent of attracting new companies to the Forum. This may include representing the Forum at conferences and industry trade shows but can extend to private sector meetings.

## 6 Infrastructure and Support Services

The Forum's staff will work with Forum leadership to provide the facilities, infrastructure and services necessary for the members of the Forum's standing Committees to collaborate as required to achieve the objectives stated in this operations plan. Specific services defined for FY2015 as necessary in achieving the high level goals comes are:

- Remote Collaboration Services. Much of the work of the Forum's members is done using electronic utilizing the following tools provided by the Forum:
  - Webconferencing: A Go To Meeting account has been established for each committee. In addition, the Forum maintains a Go To Webinar account which can be used to host online workshops as required.
  - Online Communities: A collaboration area has been established for each work group, task group and special interest group on the Forum's "Groups Portal" (<http://groups.winnforum.org>). Each collaboration area can host multiple project specific file libraries, list servers and wikis.

Forum staff will support its members in making use of these services as required, including supporting group leaders in maintaining portal communities, scheduling and hosting web meetings, and organizing workshops.

- Face to Face Meeting and Event Services. The Forum will provide complete meeting and event services as required, including planning, registration management, site selection and facilities management, speaker management and agenda/program development for ad-hoc project meetings, committee meetings, workshops and conferences. Where possible, meetings will be hosted at the Forum's offices in Reston, Virginia or at member facilities.

Staff will create and maintain the supporting communication vehicles for the events including web presence and print publication as well as promotion through press releases, email campaigns, social media and sell sheet distribution when applicable.

- Project Facilitation and Management Services. Forum staff will provide services throughout the lifecycle of member projects as follows:
  - Project Initiation, including supporting the development of project proposals
  - Project Support, including schedule and budget management, tracking risks, soliciting contributions, following up on action items with volunteers and reporting
  - Editorial services, including graphics design, to ensure project reports, recommendations and specifications have a professional look and feel
  - Document Advancement and Electronic Balloting



- Project promotion, including press release announcement of approved projects and final work products, social media and email campaigns to inform the community of progress and grow participation, and direct editorial pitch when appropriate to promote activities and results.

In addition, staff will undertake an ongoing review of the Forum's communication vehicles to ensure a dynamic and efficient response to member needs and opportunities for member promotion using these vehicles, such as product announcements, event announcements, etc.

Plans for the application of these services in support of each of the stated high level goals are defined in the following sections:

### ***6.1 Establish the Forum as the Multi-Stakeholder Group for Federal Spectrum Sharing***

Forum staff will support the formation of one or more multi-stakeholder groups for federal spectrum sharing through the following services:

- Forum staff will work with Forum members to identify relevant stakeholders and stakeholder groups, and then develop an outreach plan to secure committed participation. Plan may include personal contacts via telephone and email, <marketing campaigns>, an online or face to face "formation meetings".
- Forum staff will work with the committed stakeholders to define a charter, operating procedures and work plan for each multi-stakeholder group.
- Forum staff will facilitate meetings and workshops as required, both online and face to face, as required to support the defined work plan.
- Forum staff will establish and maintain an online community and externally accessible promotional web page(s) for each multi-stakeholder group.
- Forum staff will conduct a marketing campaign for each stakeholder group to increase participation, including
  - Press release announcement
  - Social media announcement
  - Email announcement
  - Sell sheet design and distribution at relevant events as appropriate

## ***6.2 Revitalize Defense Communications Membership***

Forum staff will support the Coordinating Committee on International SCA Standards in achieving this objective by providing services as required for each of their major new initiatives. This includes supporting outreach increase participation per company from each of the existing member organizations, and supporting business development to attract new members. This latter will include developing and distributing marketing collateral, supporting the development and publication of white papers, hosting webinars and securing speaking roles at relevant events where the value of Forum membership can be demonstrated. Forum staff will also engage in “sales calls”, as required, or support Steering Group members in such engagements to recruit new members.

A key part of the value proposition used in these sales calls will be the ability of members to participate in roadmap activities the results of which may impact their ongoing operations, and so Forum staff will work to support these efforts (see section 6.8).

Should the committee succeed in being named custodian of the SCA Standards, Forum staff will undertake a marketing campaign to promote this new status to include:

- Press release, email and social media announcement
- Web site page design and maintenance
- Collateral production as required
- Story/Interview pitching to relevant publications

This will be followed up with outreach to representatives of member organizations targeted for membership that will be impacted by this via personal mail messages, email messages and phone calls.

Forum staff will also support rebranding activities, collecting and presenting data as required supporting brand analysis, including surveying members and developing focus groups to explore specific opportunities. As a part of the rebranding process, Forum staff will develop a marketing plan for the launch of the new brand in June of 2015 to include:

- Web site page design and maintenance
- Press Release, email and social media announcement
- Collateral production

### **6.3 Establish Relevant Projects**

Forum staff will support each steering group in the establishment and maintenance of project roadmaps, including identifying and presenting a “watch list” of strategic issues that must be evaluated and tracked to each steering group on a monthly basis. Staff will also collect additional data pertaining to each watch list issue, as required for follow up by the steering groups.

Staff will support the Chief Regulatory Officer and Chief Technical Officer in revising the Forum’s Advocacy Agenda and Most Wanted Wireless Innovations List as required. Once work on these revisions is complete, Forum staff will facilitate the balloting process. Approved revisions will be published and promoted via press release, email distribution, social media mention, mention and link on Forum home page and groups portal page.

For other roadmap projects, Forum Staff will facilitate project initiation as follows:

- Forum staff will work with Forum members to identify relevant stakeholders and stakeholder groups for each project, and then develop an outreach plan to secure committed participation. Plan may include personal contacts via telephone and email, <marketing campaigns>, an online or face to face “formation meetings”.
- Forum staff will work with the committed project participants to define a project proposal and operating procedures.
- Forum staff will facilitate meetings and workshops as required, both online and face to face, as required to support the defined project plan.
- Forum staff will establish and maintain an online community and externally accessible promotional web page(s) for each project group.
- Forum staff will conduct a marketing campaign for each stakeholder group to increase participation, including
  - Press release announcement
  - Social media announcement
  - Email announcement
  - Sell sheet design and distribution at relevant events as appropriate

### **6.4 Formalize Partnerships with the End User Community**

Forum staff will support the Spectrum Innovation Committee in their initiatives to establish relationships with end user communities, including facilitating a workshop focused on Spectrum Sharing with principal researchers from the National Science Foundation Enhancing Access to Radio Spectrum (EARS) program.

Forum staff will facilitate work by the Coordinating Committee on International SCA Standards in their efforts to formalize partnerships with the end-user community to include supporting the recruitment and management of additional AC members, and establishing memorandums of understanding, contracts or other agreements establishing partner relationships with target end user communities.

## ***6.5 Improve Regional Support***

Forum staff will follow a similar plan for the establishment of a regional committee as was outlined for the establishment of multi-stakeholder groups:

- Forum staff will work with Forum members to identify relevant charter members and potential associate members, and will then develop an outreach plan to secure committed participation from each group. Plan may include personal contacts via telephone and email, <marketing campaigns>, an online or face to face “formation meetings”.
- Forum staff will work with the identified charter members to define a charter, operating procedures and work plan for each regional committee.
- Forum staff will facilitate meetings and workshops as required, both online and face to face, as required to support the defined work plan.
- Forum staff will establish and maintain an online community and externally accessible promotional web page(s) for each regional committee.
- Forum staff will conduct a marketing campaign for each stakeholder group to increase participation, including
  - Press release announcement
  - Social media announcement
  - Email announcement
  - Sell sheet design and distribution at relevant events as appropriate

## ***6.6 Strengthen the Forum’s Brand***

Forum staff will work to strengthen the Forum’s Brand in 4 areas as outlined in this section.

### **6.6.1 Execution of Relevant Projects**

A key element of the Forum’s brand are the reports, recommendations and specifications developed by the members, and so Forum staff will support the various project groups to execute and deliver on their work plans. Once work completes, the Forum staff will provide editorial services, manage the ballot process to secure approval by all member organizations, and publish the work products once the balloting is complete.

Once a work product is approved, the document will be reviewed to ensure consistent branding and placed in the public document library and its download will be encouraged and promoted through the following methods:

- Press release announcement
- Social media announcement
- Email announcement
- Sell sheet design and distribution at relevant events as appropriate
- Direct article pitches as appropriate

In addition, in FY 2015 the Forum will work toward establishing a YouTube presence to further promote the Forum's activities. The YouTube site will host previous webinars as well as new webinars promoting involvement and membership in the Forum.

## 6.6.2 US and European Conferences

The US and European Conferences act as primary vehicles for the Forum's members to network with the community and gain insight into current trends in SDR, CR and DSA technology. These conferences are a key element of the Forum's brand, and so Forum staff will work to strengthen both the conference programs and participation.

Positioning of the Forum's conferences shall remain as follows:

*For Radio Manufacturers, System Integrators, Procurement Authorities and End User Representatives, **Who** need to understand technical, regulatory and business advances supporting the innovative utilization of spectrum and advanced radio technologies supporting essential or critical communications, SDR-WinnComm is a technical conference **That** provides a venue for members to network with and learn from the leading innovators in the advanced wireless market to gain a functional knowledge of relevant emerging opportunities and technologies.*

Plans for each conference are as follows:

### 6.6.2.1 European Conference

WinnComm-Europe 2014 will be held 4 to 6 November, 2014 in Rome, Italy. Important dates for this conference in FY2015 are as follows:

- Draft papers due: 27 June 2014

- Paper accepted notification: 12 September 2014
- Final, camera-ready manuscript due: 24 October 2014

Forum staff will support the technical program committee in defining conference and workshop topics, issuing the call for proposals, collecting and reviewing abstracts, reviewing papers and setting the program. For FY2015, this includes a poster session to be held in conjunction with the conference exhibition.

All operations of conference events from pre-conference services such as registration and exhibits management to onsite services will be conducted in to the highest degree of professionalism and membership service. Staff will look to maximize the meeting experience for all attendees while focusing on efficiency and economies.

The Product Exhibition at WInnComm-Europe will be on Wednesday, November 5<sup>th</sup>.

Satisfaction surveys by attendees will be used to determine attendee satisfaction, perceived problems, and potential improvements. The survey results will be used to guide plans for future conferences.

Forum staff will continue to place a priority on promoting the conference in order to increase attendance as well as brand recognition. The event web page, which is the primary public presence for the event will be updated frequently to ensure that it is dynamic, as well as reviewed often for accuracy and brand consistency. The web page and event will be promoted through press releases, email distribution and social media mentions. All communications vehicles will carry the same consistent branding presented on the web page. In addition, Forum staff will design and produce event proceedings for the conference, which will be distributed in an online store. The availability of the proceedings in a public marketplace will help advance the Forum's brand and help establish the Forum as a leader in producing technical publications.

In FY2013, the Forum reduced printing costs substantially by omitting a printed conference schedule for the US event and communicating to conference attendees that the show schedule and communication would be primarily electronic. This was received very favorably. Staff will continue to pursue this option for the European conference as well as explore avenues to cut cost without sacrificing effective communication and promotion.

WInnComm. Staff will employ a similar email schedule to that used in SDR-WInnComm 2014 to increase readership rates and conversions to attendance.

### **6.6.2.2 US Conference**

WInnComm 2015 will be held 24 to 26 March, 2015 in San Diego, California. Important dates for this conference in FY2015 are as follows:

- Paper, Poster and Presentation Abstracts Due: 26 September
- Paper Abstract Acceptance: 3 October
- Draft papers due: 5 December
- Workshop and Tutorial Abstracts due: 5 December
- Acceptance notifications: 6 February
- Final Papers Due: 27 February
- Presentations Due: 13 March

As with the European Conference, Forum staff will support the technical program committee in defining conference and workshop topics, issuing the call for proposals, collecting and reviewing abstracts, reviewing papers and setting the program. For FY2015, this includes a poster session to be held in conjunction with the conference exhibition.

All operations of conference events from pre-conference services such as registration and exhibits management to onsite services will be conducted in to the highest degree of professionalism and membership service. Staff will look to maximize the meeting experience for all attendees while focusing on efficiency and economies.

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Staff will employ a similar email schedule to that used in SDR-WInnComm 2014 to increase readership rates and conversions to attendance.

### **6.6.3 Support for Outreach Committee**

Forum staff will support the new Outreach Committee of the Board of Directors by leveraging and expanding its partner relationships around the world to help identify relevant third party events where the Forum should have representation. Forum staff will work to secure speaking roles for Board members at these events, and will support Board members in preparing for their speaking roles, including preparing presentations and co-authoring papers as required. Forum staff will also promote Board participation in designated outreach events through our calendar, email promotion, promotion in News & Opportunities Daily Digest and social media mention.

### **6.6.4 Annual Awards**

The Forum will launch the 2014 Awards program in November, with nominations pursued in emails, and on the web site. Finalists will be announced in December 2014, and will be encouraged to attend the March conference where winners will be announced and receive their awards. Technical Achievement nominees will be given the offer of a free booth in the exhibit hall to demo the technology.

## **6.7 Grow Revenue**

In addition to the items above, Forum Staff will undertake 5 additional projects to grow revenue in FY2015:

### **6.7.1 Daily News Feed**

Although not explicitly stated, the ability to grow revenue is directly tied to the Forum's ability to retain existing members. Feedback provided by members in satisfaction surveys and one on one interviews indicates that the daily news feed provided by the Forum is a key value provided by the Forum and so as a part of our member retention strategy, Forum staff will continue this service in FY2015 as well as explore ways to expand the value, such as, for example, including one banner ad per week (additional revenue) by sponsor.

In addition, Forum staff will continue to review and change our member communication tools as needed for optimum efficiency and use, including our web site, group collaboration services, database service. In FY2014, only minor changes were made to the Forum's page. In FY2015, the staff will research the possibility of a more extensive web page update as we feel it is now needed based on feedback from membership as well as the need to keep up with current design trends and the site behaviors of our target audience

### **6.7.2 Monetize the document Library**

The Forum currently support approximately 120,000 downloads of its conference proceedings and 15,000 downloads from its workshop proceedings each year. Downloads from this body of knowledge are free to both members and non-members, which has the effect of devaluing membership. To address this, the Forum intends to begin charging a nominal fee to non-



members to access papers in these proceedings. Members will continue to have full access to the proceedings for no additional charge. Abstracts for each paper will still be public, allowing reference by the community, and the Forum will continue to make the members work products public as directed in the Forum's bylaws.

### **6.7.3 Establishment of Training services**

Forum Staff will continue to pursue the establishment of a training course series to increase the value of the Forum to its members and provide an additional source of non-dues revenue. Such training course will be offered as remote services and in conjunction with already established face to face events. Activities will include surveying members for interest in training services, and solicitation of proposals from qualified vendors. Activities in this area will be performed on a time available basis.

### **6.7.4 Establish Additional Social Media Channels**

Social media engagement increased in FY2014, from 284 followers to 384 followers on Twitter and 210 to 253 likes on Facebook. Forum staff will continue to use these vehicles as necessary to strengthen the Forum's brand and promote participation in events and projects. In addition, staff will explore creating a presence on Google+ on a time available basis, which is growing in popularity with our target audience, and increasing our presence on LinkedIn, as it has been shown to be the primary social and professional network for our membership.

In order to further promote participation in FY2015, Forum staff will expand event promotion to include group pages in LinkedIn for our conferences. This will encourage engagement among attendees prior to the event as well as allow a vehicle for promotion of workshops, tutorials, etc., as the presenters can post information on their sessions, exhibitors can promote their booths, etc.

In FY2015, the Forum will also create a YouTube presence to better and more widely promote our webinar series as well as other videos which will be created to promote membership.

### **6.7.5 Promote SCA Technologies and Standards World Wide**

Forum staff will provide full support of CC SCA Steering Group marketing campaign for the promotion and promulgation of SCA standards and technology solutions within world-wide defense markets and penetrating into other relevant SDR domains through the following channels:

- Staff will develop and broadly distribute SCA related marketing collateral, per the direction of the group, via email announcement, press releases and social media,
- Staff will create an online presence for and promote technical workshops and webinars as methods to promote the values and benefits of SCA Standards technology and solutions. Forum staff will explore additional opportunities for promotion, such as article placements and interviews and speaking opportunities.

- Cultivate and grow a separate email list and create a periodic eNewsletter for distribution
- Explore banner placement on applicable sites

## **6.8 Harmonize Standards**

Forum staff will spend considerable time facilitating the development of needs based roadmaps by the CCSCA Steering group to harmonize standards worldwide, including gathering data and analyzing the data required to define these roadmaps, and provide project management services to facilitate development.

Forum staff will work to aggressively promote completed roadmaps, to include:

- Securing speaking slots at events to present the roadmap
- Collateral creation and distribution
- Promotion through email announcements, social media and press release
- Article placements/pitches

## **7 Other Corporate Administration**

### **7.1 Annual Meeting of the Members**

The Annual Meeting of the Members, as described in the Forum [Bylaws](#) will be held in conjunction with the European Conference being held November 4 to 6 in Rome, Italy.

### **7.2 Tools Review**

At the close of FY2014, Forum staff was conducting a review of the current communication vehicles and their cost effectiveness, with the ultimate goal of reducing cost dramatically while maintaining or improving tool results. Dependent on the results of the review, the Forum will undergo a migration of one or possibly all the tools.

### **7.3 Corporate Filings**

The Forum will continue to evaluate and improve internal office functions related to financial controls and reporting, archival storage of documents, and membership initiation and renewal. Finance and Accounting Procedures will be updated in Q1 FY2015 to reflect modifications of the membership renewal process as well as the process for managing Value Added Tax in our European Events.

In addition, the Forum shall ensure filings as follows:

- 990 filing with the IRS – 15 November 2014
- California Tax Exempt Return – 15 November 2014
- Canadian Information Return – 15 November 2014
- Canadian Extra-Provincial Annual Report – 2 January 2015
- 1099s to recipients – 31 January 2015
- 1099 and 990s to IRS – 28 February 2015
- Foreign Bank Account Form – 30 June 2015
- Fairfax County, VA Business, Professional, Occupational License-01 March 2015
- Fairfax County, VA Personal Property Tax-01 May 2015
- Virginia Corporate Commission Report-30 April 2015

#### **7.4 Insurance**

In addition, the Forum shall perform an insurance review (D&O, E&O, Liability, etc.) to be completed to be completed in advance of the renewal date.

#### **7.5 FY2016 Planning Cycle**

The FY2016 Operation Plan will be developed on the following schedule:

- Board Approval of High Level Goals for FY2016 – 13 March 2015
- High Level Goals and Ops Plan Process Presented to Group Leaders – 16 March 2015
- Draft Budget Presented to the Finance Committee – 27 April 2015
- Draft Plan Submitted to Officers – 11 May 2015
- Final Draft Approved by Forum Chair and CEO – 25 May 2015

The final plan will be presented to the Board of Directors for their approval during the June 2015 Board Meeting, and will be submitted to the membership for final approval immediately thereafter.