



## **FY2019 Operations Plan**

Version 1.0.0

**14 Aug 2018**

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# 1 Introduction – The Wireless Innovation Forum FY2019 Objectives

The Wireless Innovation Forum (WInnForum) Board of Directors has established the following six items as high level objectives for the Forum for the period from July 1, 2018 through June 30, 2019 in executing on the WInnForum’s Strategic Plan:

## ***1. Brand the WInnForum as the Preferred Venue for technical collaborative exchanges on innovative solutions for wireless systems***

The WInnForum’s Advanced Technology Committee (ATC) will execute on the “platform strategy” defined in FY2016 exploring potential new markets relevant to the Forum’s mission. In FY2019, the ATC will establish an advisory board and will work with the WInnForum’s members to identify new market areas where a community of practitioners could be gathered to initiate at least one new project. The committee will also work on advancing and formalizing partnerships with end user community in existing and new market areas.

## ***2. Position the WInnForum as the Preferred Venue for the International Spectrum Sharing Community***

The WInnForum will work to build on its success in forming and managing the Spectrum Sharing Committee (SSC), and strengthen that community to ensure continued success. In addition, the WInnForum will undertake the following:

- a. Broaden focus of standards, processes and regulatory frameworks developed for the Citizens Broadband Radio Service (CBRS, FCC Part 96) to other frequency bands.
- b. Leveraging the experience in the CBRS, position the WInnForum as the venue where licensed and unlicensed communities can collaborate on how to share spectrum.
- c. Identify international shared-spectrum opportunities and determine whether and how the WInnForum can participate.
- d. For those international shared-spectrum opportunities that WInnForum decides to participate in, work with stakeholders to determine how to position the WInnForum to offer maximum benefit.

### ***3. Execute on the Strategic Plan of the Software Defined Systems Committee (SDS)***

The WInnForum will focus on international harmonization of extensions to the SCA; advancement of related API's as developed within the US JTNC and programs such as ESSOR and SVFuA in Europe and the WInnForum; tactical radio interoperability and acceptance of the SCA 4.1. Specific goals to accomplish this include:

- Maintain its position as the international venue for SCA standards development and harmonization through the execution of projects focused on harmonizing the SCA extensions.
- Development and standardization of APIs and associated facilities relevant to software defined systems.
- Establish itself as a venue that industry can contribute to the international discussion on coalition operations with organizations such as NATO.
- Address SCA 4.1 certification to satisfy international SCA certification requirements.

Projects, relationships with key international programs and independent positioning will showcase the WInnForum as the leading organization to influence and direct the development of interoperable solutions based on industry developed open standards, providing the incentive to attract new members.

### ***4. Execute on Test and Certification Strategies for WInnForum Standards***

In FY2018, both the SDS and SSC identified mechanisms to support industry through WInnForum accreditation services targeted at their respective domains. In FY2019 these WInnForum Commercialization Committees shall work towards execution of these strategies.

### ***5. Establish Relevant Projects***

The Forum's Advanced Technologies Committee, Software Defined Systems Committee, and Spectrum Sharing Committee will form both member driven projects addressing immediate needs and roadmap driven projects advancing the Forum's Advocacy Agenda or supporting the Top 10 Most Wanted Wireless Innovations list:

- The Forum’s Software Defined Systems Committee shall publish and maintain its own roadmap as defined in the Committee Charter<sup>1</sup>, and initiate projects developing extensions to the SCA and domain related API standards that address any gaps between the defined evolution roadmap and Forum accepted specification variants.
- The Forum’s Spectrum Sharing Committee shall publish and maintain its own roadmap as defined in the Committee Charter<sup>2</sup>, and initiate projects supporting that charter focused on the development and advancement of spectrum sharing technologies required for interoperable systems in applicable bands of interest worldwide.
- The Advanced Technology Committee (ATC) will seek input from the Software Defined Systems Committee and the Spectrum Sharing Committee on the current listed innovations for its 2018 review of the Wireless Innovation Forum Top 10 Most Wanted Innovations. Members of the ATC will also be invited to submit contributions that could be promoted as new innovations. The ATC will review each innovation to determine if it should (1) remain unchanged; (2) be updated with newer information; (3) be deleted because no longer an issue; (4) be superseded with other more important innovations that are required to solve more important shortcomings. A project of the Advanced Technologies Committee will be to publish a revision of the “Top 10 Most Wanted Wireless Innovations” list in FY2019.
- The WinnForum’s Advanced Technologies Committee will also maintain the Advocacy Agenda of the Forum and will coordinate activities with the Software Defined System and the Shared Spectrum Committees as well as external stakeholders such as regulatory agencies, standards bodies and other government agencies worldwide.

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

## ***6. Improve Regional Support***

The Forum will continue to grow participation in its India Regional Committee. Towards this, advocacy for the International nature of SCA 4.x has to be carried out with Government of India and procurement agencies. Lectures by visiting Forum member representatives and Forum officers/volunteers will be arranged. Participation by regional committee members in work groups of Forum will be encouraged and advertised.

<sup>1</sup><https://workspace.winnforum.org/higherlogic/ws/public/download/5679/SDS%20Charter%20V4%200%200%20-%2029%20January%202018.pdf>

<sup>2</sup><https://winnf.memberclicks.net/assets/SSC/spectrum%20sharing%20committee%20scope%20and%20operations%20-%20v1.0.0.pdf>

Training /workshop to popularize SCA 4.x and establishment of Testing and validation centers for SCA will be explored.

The membership from the India Region is thinning out and hence the priority is to restore the same by motivating the lost members to join back. Towards, this Forum may have to share the benefits and value of membership and guidance for SDR, SCA and Spectrum related advocacy with Government.

This document presents specific plans for achieving these high-level objectives in separate sections dedicated to the FY2019 Meeting Plan, and the respective work plans of the Advanced Technologies Committee, the Software Defined Systems Committee, the Spectrum Sharing Committee, 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 FY2019 Organizational Structure

The FY2019 Organizational Structure of the Wireless Innovation Forum is presented in Figure 1. The Forum is organized around three standing committees, whose responsibilities are summarized as follows:

- The role of the Advanced Technologies Committee (ATC) 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.

- Software Defined Systems Committee (SDS): support the harmonization of SDS standards at the international level for the mutual benefits of all stakeholders to include:
  - Defining an industry driven SDS evolution roadmap for the international community
  - Profiling SDS specifications and related APIs to define internationally accepted variants that are hosted by the Forum

- Developing extensions to SDS standards that address any gaps between the defined SDS evolution roadmap and Forum accepted SDS 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](#).

- The role of the Spectrum Sharing Committee (SSC) is to serve as a common industry and government standards body to support the development and advancement of spectrum sharing technologies based on the three-tier architecture proposed for the 3.55 GHz rulemaking activities. While the 3.55 GHz band is the main focus on the initial activities, the Wireless Innovation Forum aims to advance this technology for all applicable spectrum bands that can benefit from it.

This Committee is intended to facilitate the interpretation and implementation of FCC rulemaking to a level that allows industry and government parties to collaborate on implementation of a common, efficient, well-functioning ecosystem around this technology.

The main activities that will be conducted in the committee include:

- Detailing common industry and government functionality and architecture for Spectrum Access Systems (SAS), sensors, and devices
- Interoperability requirements and protocol definition to allow for open competitive and well-functioning systems
- Common framework for testing and integration of components of spectrum sharing technologies to allow for rapid certification and deployment and predictability, thus expanding the ecosystem and increasing utility of the spectrum
- Details of requirements, processes, and methods for protection of incumbent users as required by the spectrum rules
- Operational procedures definition for the well-functioning of the system as it pertains to spectrum assignment, managements, and interoperability

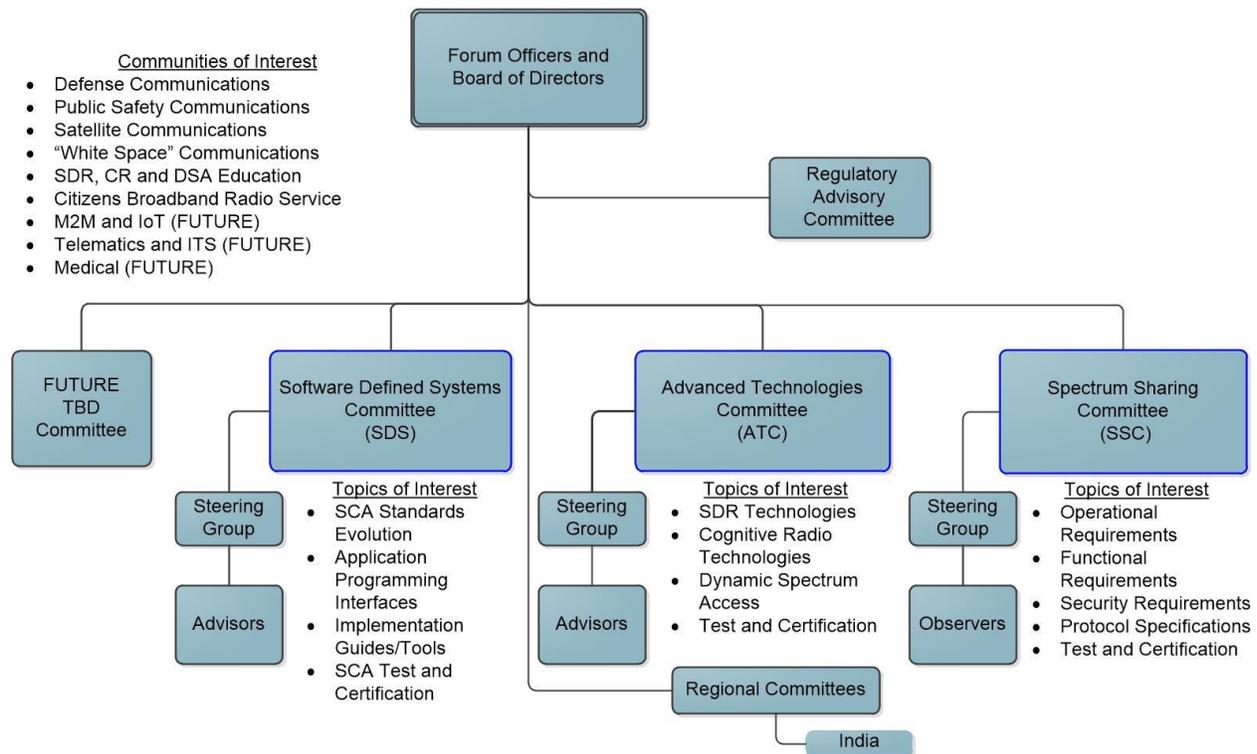
This committee is also managed by a [steering group](#), and includes observers necessary for the full operations and support of the system.

In addition to these standing committees, the Forum also has an India Regional Committee whose objective is to support the needs of the members in the India region and to create significant interest in the activities of WinnF in India.

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

14 June 2018



**Figure 1: Wireless Innovation Forum FY2019 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 CY2018 is provided in Table 1.

Name	Member Organization	Position
Bruce Oberlies	Motorola Solutions	Chair of the Board of Directors
David Hagood	Viavi Solutions	Director, Large Company Representative

Alberto Quintana	Indra	Director, Medium Company Representative
Kurt Schaubach	Federated Wireless	Director, Small Company Representative
Paul Anuszkiewicz	CTIA	Director, Government and Non-profit Representative
		Director, Academic Institutions Representative
Marc Adrat	Fraunhofer Institute	Director, At Large Director
Paul Challoner	Ericsson	Director, At Large Director
Jean-Philippe Delehay	DGA	Director, At Large Director
John Glossner	Optimum Semi-conductor	Director, At Large Director
Doug Knisely	Qualcomm	Director, At Large Director
Preston Marshall	Google	Director, At Large Director
Pierre-Jean Muller	RED Technologies	Director, At Large Director
Neeti Tandon	AT&T	Director, At Large Director
Claude Belisle	NordiaSoft	Officer and Director, President and Chair of the Forum, Secretary
R. Muralidharan	Tata Power SED	Officer and Director, Vice President and Vice Chair of the Forum
Ken Dingman	Harris Corporation	Officer and Director, Treasurer and Chief Financial Officer
Al Jette	Nokia	Officer and Director, Secretary
Louise Lamont	CRC	Officer and Director, Chief Technology Officer
Manuel Uhm	National Instruments	Officer and Director, Chief Marketing Officer
Mark Gibson	Comsearch	Officer and Director, Chief Regulatory Officer,

**Table 1: CY2017 Board of Directors of The Software Defined Radio Forum Inc. The position of Academic Representative is currently vacant.**

## 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 FY2018 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 FY2019 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) [BBD, LLP](#) – 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 FY2019 can be found in Sections 7 and 8 of this plan.

### **3 Advanced Technologies Committee (ATC) (Chair: Claude Belisle, NordiaSoft)**

The following high-level goals have been assigned to this committee by the Board of Directors:

- 1) Primary Goals:
  - a. Brand the WInnForum as the Preferred Venue for technical collaborative exchanges on innovative solutions for wireless systems
  - b. Publish the updated 2018 Wireless Innovation Forum Top 10 Most Wanted Innovations
  - c. Maintain the Advocacy Agenda of the Forum and will coordinate activities with the Software Defined System and the Shared Spectrum Committees as well as external stakeholders such as regulatory agencies, standards bodies and other government agencies worldwide.
  - d. Identify new Market Areas relevant to the Forum's mission
  
- 2) Shared Goals:
  - a. Establish Relevant Projects

The project plans to support these goals are addressed in Sections 3.2 and 3.3 below.

#### ***3.1 Charter and Structure***

The Advanced Technology Committee (ATC) is led by a Steering Group comprised of the Forum's Executive Committee and the Forum's Committee chairs. In FY2019, the ATC will expand its Steering Group with the addition of an Advisory Council composed of invited non-voting members.

The primary role of the Steering Group is to identify projects of strategic relevance to the Forum membership, to prioritize and launch projects as appropriate, and to monitor those projects to ensure and support execution.

The ATC has the responsibility to maintain and update, when appropriate, two Forum documents: the Forum's Top 10 Most Wanted Wireless Innovations list and the Advocacy Agenda.

#### ***3.2 FY2019 Objectives***

The Advanced Technology Committee has established the following committee objectives for FY2019 to support the Forum's High Level Objectives:

### **3.2.1 Brand the WInnForum as the Preferred Venue for technical collaborative exchanges on innovative solutions for wireless systems**

The WInnForum’s Advanced Technology Committee (ATC) will execute on the Forum “platform strategy” to expand the reach of the Forum’s into new market areas related to its mission. The aim will be to present the WInnForum as the preferred venue for technical collaborative exchanges on innovative solutions for wireless systems and to act as an incubator for exploring potential new markets relevant to the Forum’s mission.

An Advisory Council will be created to include thought leaders of market segments that could benefit from the Forum’s activities. The committee will also work on advancing and formalizing partnerships with end user community in existing and new market areas.

The ATC will work with its Advisory Council and the WInnForum’s members to select and develop at least one project in a new market area.

ATC will work with Forum staff on executing the “platform strategy” framework.

- a. Promotion Package: Support staff in developing a promotion package.
- b. Event Presence: Work with membership through a survey to identify potential trade shows/events. Prioritize one or two events where our target market is located and sign up to present/exhibit and/or co-sponsor for reduced exhibit/presentation fee.
- c. General Advertising: Work with membership to identify appropriate vehicles for paid advertising. Help staff prioritize the opportunities and work with BoD to fund. Support goal of monthly blog produced by Forum staff and membership.

### **3.2.2 Establish Relevant Projects**

The ATC will continue to maintain and update two of the Forum’s documents, the ‘Top 10 Most Wanted Wireless Innovations’ and the ‘Advocacy Agenda’.

In addition, the ATC will initiate a new project related to Spectrum Access in bands other than CBRS covered by the Share Spectrum Committee. As mentioned above, the ATC will also seek input from the Forum membership and it’s Advisory Council, to initiate at least one additional new project.

## **3.3 FY2019 Project Plan**

The following describes the projects the ATC is planning to undertake in FY2019. In addition to those described here, the ATC is planning to initiate at least one new project to be defined in collaboration of the Committee Chairs and its Advisory Council.

### 3.3.1 Advanced Technology Committee Watch List

The Advanced Technology Committee Watch List is a document that outlines strategic projects the ATC believes should be undertaken in support of the Forum’s Advocacy Agenda, the Forum’s Top 10 Most Wanted Wireless Innovations List or the Forum’s Platform Strategy. The list does not restrict the projects that Topic Sponsors may support but rather guides the Advanced Technology Committee to launch new projects that are aligned with the objectives of the Committee.

The Chair of the Advanced Technology Committee is responsible for the Watch List.

### 3.3.2 The Forum’s Top 10 Most Wanted Wireless Innovation List

The Advanced Technology Committee (ATC) is responsible for identifying/consolidating the 10 most wanted innovations in terms of technology, regulations, or business practices as identified by the Forum members. The ATC Committee will seek input from the Software Defined Systems Committee and the Spectrum Sharing Committee on the current listed innovations and members of the ATC will also be invited to submit contributions that could be promoted as new innovations. The process that will be adopted by the Committee in FY2019 is as follows:

The process will be:

1. Use the WInnF conferences (European and America) as events to gather and discuss innovations that are required to improve wireless systems performance and/or usage.
  - a. Keynote speakers (identified by Forum Committees) will be invited to present on their vision of future wireless systems and express their views on the required innovations
  - b. A Call for Presentations to the general public will also be made to target items on the 2018 Top 10 list or to propose new items the presenters would like to address.
  - c. Round table sessions will be organized gathering those presenters and a discussion will follow around the identified innovations. There could be multiple of those round tables.
2. The WInnF CTO will launch a campaign to WInnF members to propose new innovations topics.
3. The ATC Steering group will review the contributions gathered from each of the Committees and identify items on each of their roadmaps requiring investment in significant technical, business or regulatory innovation.
4. The Forum CTO, with the support of the ATC Steering group, will form a committee to review the 2018 list and reformulate or replace the innovation with input from the Innovation gathering process described above, to select the Top 10 that will make the 2019 list.

### 3.3.3 Advocacy Agenda

The Advanced Technology 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 FY2019 is as follows:

- The ATC Steering Group committee shall have a meeting agenda item quarterly or more frequently if needed to discuss changes to the Advocacy Agenda.
- The Chief Regulatory Officer is responsible for consolidating all Advocacy Agenda inputs from all Forum Committees. The procedure shall be as follows:
  - The CRO shall lead a discussion of the consolidated proposals. If changes to the Advocacy Agenda are presented by any 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 ATC Steering Group Meeting
  - In addition the CRO shall maintain a consolidated Forum Advocacy Agenda proposed changes list based on inputs from all Forum committees.

### **3.3.4 Technical Report on Application of Spectrum Access Systems**

The WInnForum's Advanced Technology Committee (ATC) will work at completing the technical report on Application of Spectrum Access Systems looking more broadly at the application of the SAS concept in other bands and spectrum sharing frameworks other than 3-tier. This project will expand the Forum brand as a venue for licensed and unlicensed communities beyond the US CBRS ecosystem.

## 4 Software defined Systems Committee (SDS) (Chairs: Ken Dingman, *Harris Corporation* and Eric Nicollet, *Thales*)

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

- 1) Primary Goals:
  - a. Execute on the Strategic Plan of the Software Defined Systems Committee
  - b. Execute on Test and Certification Strategies for WInnForum Standards
- 2) Shared Goals:
  - a. Establish Relevant Projects
  - b. Improve Regional Support

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

- 3) Primary Goals:
  - a. Execute on the Strategic Plan of the Software Defined Systems Committee
  - b. Execute on Test and Certification Strategies for WInnForum Standards
- 4) Shared Goals:
  - a. Establish Relevant Projects
  - b. Improve Regional Support

### 4.1 Charter and Structure

The current mission of the Software Defines Systems (SDS) Committee is to “oversee the evolution and adoption, at the international level, of SDS standards for the development of essential and mission critical wireless systems”.

The SDS is comprised of 3 major organizational elements. A Steering Group (SG) that is responsible for coordinating the different activities within the SDS 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 FY2019, there are five active Working Groups, with activities in the SCA API Work Group, International Tactical Radio SIG and International Radio Security Services Working Group suspended:

- Advocacy Working Group

- International Tactical Radio Special Interest Group
- International Radio Security Services Work Group: Not Active
- SCA API Working Group: Not Active
- SCA Evolution Working Group
- SCA Implementer's Working Group: Not Active
- SCA Test & Evaluation Working Group
- Transceiver Working Group

The structure of the SDS organization is provided in Figure 3 below in conjunction with the relationship of the SDS to other WINNF organizational elements. Steering Group Members include:

- A4ESSOR
- Harris Corporation
- Hitachi Kokusai Electric
- Indra
- Leonardo
- Raytheon
- Rockwell Collins
- Rohde & Schwarz
- Thales

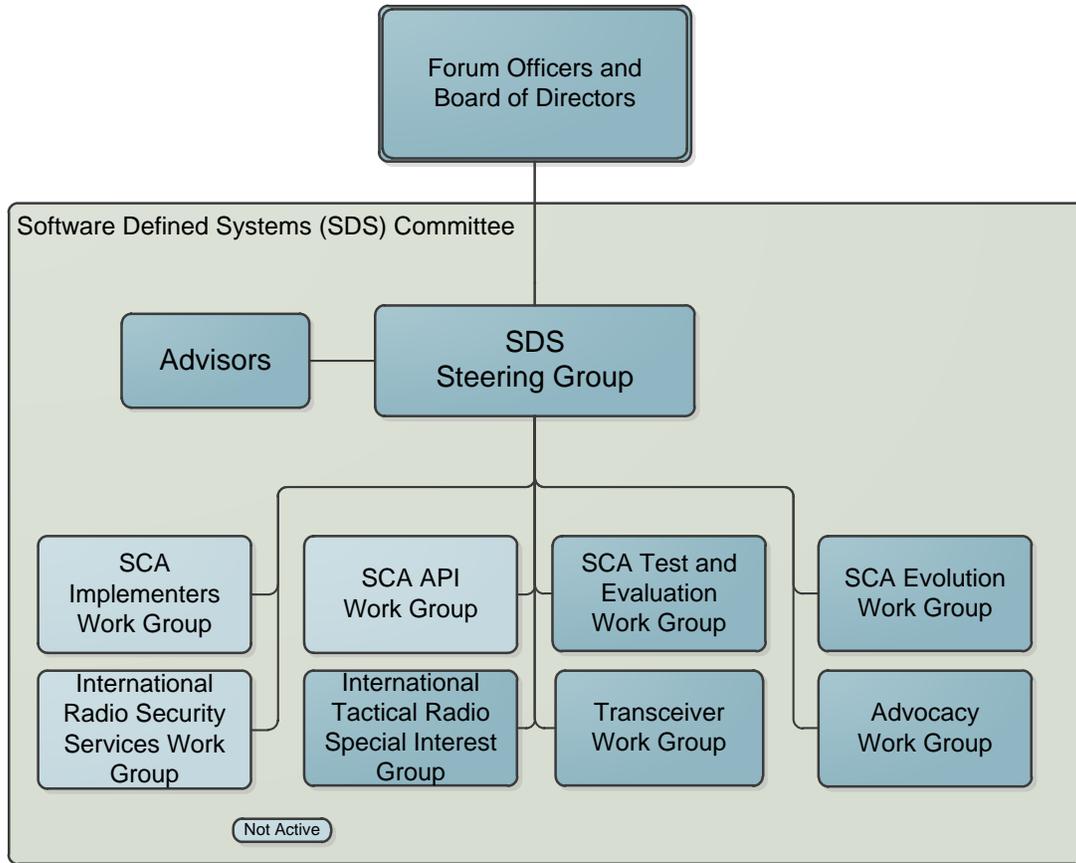


Figure 2: Software Defined Systems Committee Organizational Structure

## 4.2 FY2019 Objectives

### 4.2.1 Promote Software Defined Radio Standards and Technology World-wide

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

For the past few years, there has been a proliferation of Open Architecture solutions being formulated, such as FACE, MORA, SOSA, VITA 49, ECOA, Lavosar, accompanying the SCA. There is confusion in the market place about how these relate to each other and what specific problem they are addressing. Building on the rebranding of the committee to the Software Defined Systems Committee, the SDS Committee will look to address this explosion of Open Architecture Standards by providing a venue for the standards organizations to coordinate and collaborate,

looking to harmonize and optimize the standards to reduce redundancy and drive toward a minimal set of standards.

Support and advancement of the SCA will **continue to be a primary focus** of the committee (see the projects planned for this FY). Through the Advocacy WG, the Committee will continue to promote the SCA, through activities such as placing articles in magazines and supporting expansion of the SCA into domains such as EW, SigInt and Radar.

## 4.2.2 Drive worldwide convergence to a common suite of SDR standards

This objective relates to the Standards Harmonization foundational element of the Strategic Plan and maps to the “Execute on the Strategic Plan of the SDS Committee” goal assigned by the Board of Directors.

### 4.2.2.1 Standard specifications development

The SDS committee will carry on past efforts to drive convergence towards a common suite of SCA-based SDR standards enabling reconfiguration of the products, portability of the developed applications and requisite support in the developed platforms.

The efforts are based on harmonization of existing standards developed by national or multinational stakeholders, and development of standards when needed. Leveraging the Advisors, the SDS Steering Group will solicit existing SCA based programs to determine content they will be willing to share towards developing a singular SCA and SDR API standards definitions.

The standards of interest cover Execution Support capabilities with SCA and related heterogeneous real-time embedded development solutions, and Functional Support capabilities with existing APIs and WInnF-developed Facilities that complement the software interfaces specified by APIs with behavioral and performance engineering features.

### 4.2.2.2 Standard specifications usage

Recognizing that worldwide convergence on harmonized standards is not only a question of standards development and availability, but also a question of standards usage, the SDS committee will develop a new agenda focusing on developing usage recommendations and agreements for the WInnF SDR Standards.

In this respect, the committee will seek **development of standard profiles** oriented to vertical markets of interest (initially military tactical radios), that will specify, among the breadth of existing standards and the options or alternatives they allow, prescriptive requirements for conformant products, enabling the target market to actually benefit from the said standard.

The committee will seek **recognition of use of standard specifications or profiles** by as wide as possible national or multinational communities. Official recognition in policy setting registries

such as the US DISR or the EDA EDSTAR will be considered, and the once-expressed interest of NATO in SDR standards will be reinvestigated. Beyond, possibility for multinational endorsements of some SDR Standards will be discussed with Advisors.

### 4.2.3 Standards certification

The committee will pursue the ongoing activities related to standards certification, in **developing conformance evaluation plans and procedures** for SDR standard specifications or profiles. The spearhead standard in this respect is the SCA 4.1, and others may follow.

The committee will as well initiate efforts to establish a **multinational, industry led accreditation program** for SDR Standards certification centers.

#### 4.2.3.1 Roadmaps

Based on the active and planned activities, roadmaps related to the committee activities will be established.

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 3.3.2 of this Operations Plan.

## 4.3 FY2019 Project Plans

The CC SCA plans to deliver multiple work products through a series of projects in FY2019. Specific work products and milestones delivered from existing and planned projects are presented below.

### 4.3.1 SCA 4.1 Applications Verification (started 2017)

1. **Objective:** develop a Verification Plan and Verification Procedures for SCA 4.1 compliant applications.
2. **Work Group:** Test and Evaluation
3. **Project Lead:** Francois Levesque (Nordiasoft) and Eric Nicollet (Thales)
4. **Milestones**
  - Completion: Summer 2018

### 4.3.2 Energy Management API (started 2017)

1. **Objective:** develop a new standard API enabling more power efficient developments for development of SDR solutions.
2. **Work Group:** API
3. **Project Lead:** Bruce Fette
4. **Milestones**
  - Completion: Fall 2018.

#### 4.3.3 Federated Time Service (to be started)

1. **Objective:** harmonizing, completing and improving the JTNC Timing Service API into a WinnF Facility (= API + behavior + properties), based on multinational efforts and lessons learnt (namely encompassing the US, ESSOR Nations and Germany).
2. **Work Group:** API
3. **Project Lead:** TBD
4. **Milestones**
  - Plan Approved: May 2018
  - Duration: 18 months

#### 4.3.4 Transceiver Facility PSMs (to be started)

1. **Objective:** complement the Transceiver Facility 2.0 PIM Specification (Jul 2017) with PSMs for C, C++, FPGA and SCA.
2. **Work Group:** Transceiver
3. **Project Lead:** Claude Belisle (Nordiasoft)
4. **Milestones**
  - Plan Approved: May 2018
  - Completion: Dec 2018

#### 4.3.5 Multinational SDR Standards accreditation

1. **Objective: develop a report,** in close coordination with relevant governmental stakeholders, proposing a mechanism supported by the WinnF serving as an accreditation body for an eco-system of multinational certification centers to emerge
2. **Work Group:** Test and Evaluation
3. **Project Lead:** TBD
4. **Milestones**
  - Plan Approved: Nov 2018
  - Target Project Duration: 6 months

#### 4.3.6 SDR Standards Harmonization Roadmap

1. **Objective:** identify areas of discrepancy between implementations and develop a prioritized list of APIs and segments of the SDR Standards where harmonization is required. Based on this it will create a roadmap to drive convergence on a common set of SCA-based SDR Standards.
2. **Work Group:** SCA Evolution
3. **Activity Lead:** Ken Dingman (Harris) and Eric Nicollet (Thales)
4. **Milestones**
  - First consolidated roadmaps: end 2018.

## 5 Spectrum Sharing Committee (Chairs: Preston Marshall, Google and Kurt Schaubach, *Federated Wireless*)

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

- 1) Primary Goals:
  - a. Position the Forum as the preferred venue for the spectrum sharing community
  - b. Execute on test and certification strategy for WInnForum Standards
- 2) Shared Goals:
  - a. Establish relevant projects

The project plans to support these goals are addressed in section 5.2 and 5.3 below.

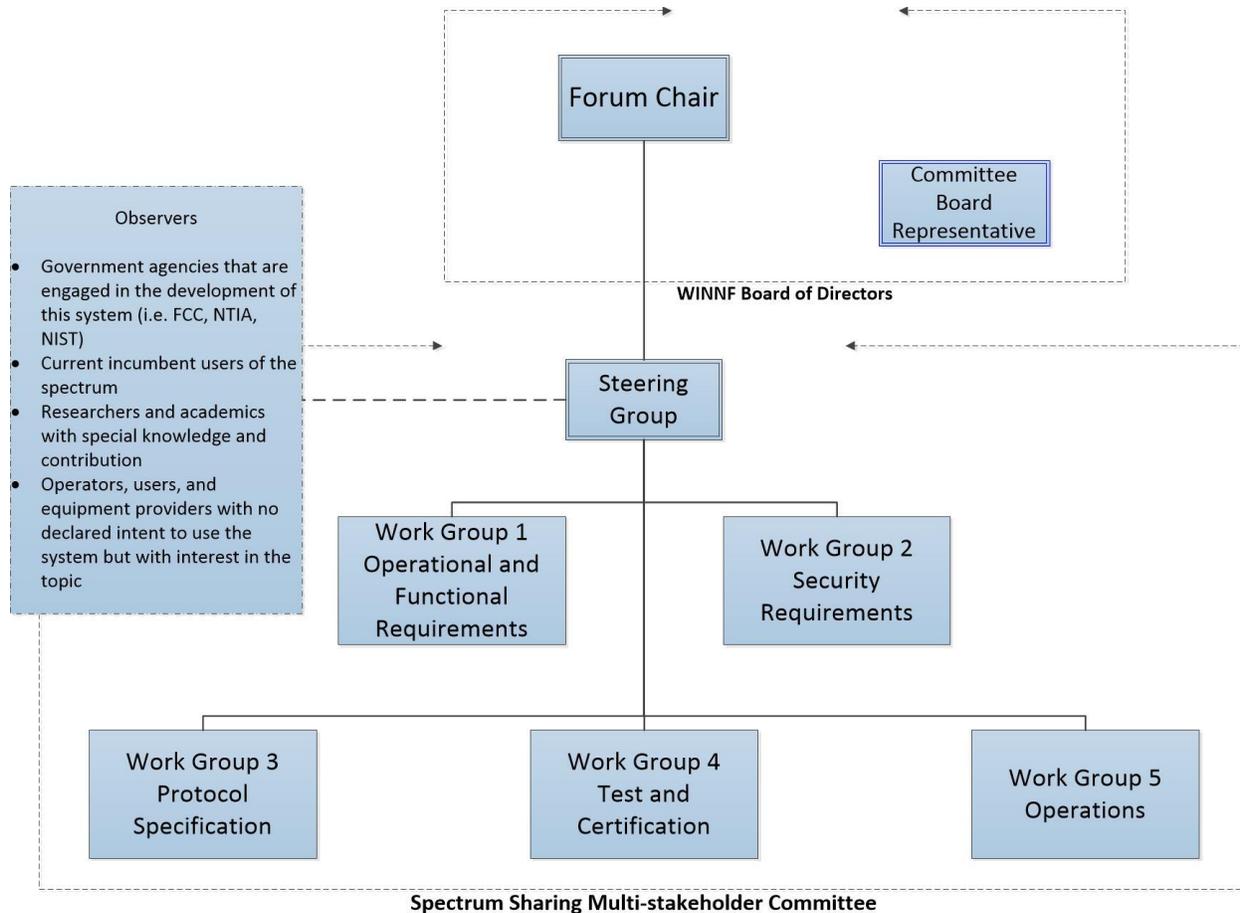
### 5.1 Charter and Structure

The Spectrum Sharing Committee (SSC) supports the development and advancement of spectrum sharing technologies based on the three-tier architecture proposed for the 3.55 GHz rulemaking activities. While the initial focus is on the 3.55 GHz Citizens Broadband Radio Service (CBRS), the Committee aims to advance this technology for all applicable spectrum bands that can benefit from it.

The charter for the Committee is to facilitate the interpretation and implementation of FCC rulemaking to a level that allows industry and government parties to collaborate on implementation of a common, efficient, well-functioning ecosystem around this technology. The primary activities of the Committee include:

- Detailing common industry and government functionality and architecture for Spectrum Access Systems (SAS), Environmental Sensing Capability (ESC), and CBRS devices
- Defining interoperability requirements and protocols to allow for open, competitive, and well-functioning systems
- Developing a common framework for testing and integration of components of spectrum sharing technologies to allow for rapid certification, deployment, and predictability, thereby expanding the ecosystem and increasing utility of the spectrum
- Establishing requirements, processes, and methods for protection of incumbent users as required by the spectrum rules
- Setting operational procedures definition for the well-functioning of the system as it pertains to spectrum assignment, managements, and interoperability

The approach to work activities by the Committee emphasizes system interoperability while achieving simplicity in interfaces and requirements. This is done to advance competitive and innovative approaches and to increase deployment speed of these systems.



The Committee is led by a Steering Group responsible for managing the overall activity flow and ensuring consensus and agreement with results from the discussions, such that progress can be made properly and timely to serve the interest of all the stakeholders. Membership of the Steering Group is comprised of the following:

- Committed SAS developers and operators (engaged in the development of the system and intend on participating in this market)
- Committed Sensor and/or Device developers and wireless equipment suppliers (engaged in the development of the system and intend on participating in this market)
- Committed users and service operators (engaged in the development of the system and intend on participating in this market)

Steering Group member companies include:

- Airspan
- AT&T
- CableLabs
- Comsearch
- CTIA
- Ericsson
- Federated Wireless
- Google
- Huawei
- Motorola Solutions
- Nokia
- Pathfinder Wireless
- Qualcomm
- RED Technologies
- Ruckus Wireless
- Sony
- T-Mobile
- Telrad
- Verizon
- WISPA

The Steering Group identifies projects of strategic relevance to the membership; assigns, prioritizes, and launches new projects within subcommittee Working Groups; sets desired outcomes and monitors projects within the Working Groups to ensure their support and timely execution; and approves Working Group recommendations.

Further, the Steering Group ensures that activities are not directed at policy-making or liability management. While the Committee may, from time to time, make formal technical recommendations to the FCC or other regulatory bodies, following the Forum's standard policies and procedures, it is nonetheless a standards and technical implementation forum.

## ***5.2 FY2019 Objectives***

### **5.2.1 Facilitate Commercial Deployment**

The committee will undertake activities to support commercial deployment of GAA Category A and Category B devices by December 2018.

## 5.2.2 Promote CBRS Standards Adoption

Adoption of standards approved and published by the Committee is vital to expanding the Forum's leadership and brand in the spectrum sharing community. In FY2018, the Committee established an Awareness Task Group, reporting to the Steering Group, to work with the Forum's Executive Committee and Forum Staff to further Committee activities to market CBRS Standards publications and helping in expanding the CBRS ecosystem. In FY2019, this Task Group will work towards the following in support of the Committee's Commercialization mandate:

- a) Basic to advanced understanding of the WInnForum Baseline Standards and their use in CBRS deployment.
- b) Technical understanding of the interaction between tiers, SASs, CBSDs, and the entire CBRS ecosystem.
- c) Differences in Part 96 mandatory rules based requirements and industry based best practices (as shown in WInnForum documents).
- d) Commercialization under Part 96, and applicable FCC rules and the WInnForum Baseline Standards. And, Use cases related to this area.
- e) Gate-keeping aspects of CBRS: CPI, PKI Root of Trust, SAS Operations and Administration, ESC deployment and administration, Quiet Zones, DPAs, CBSD Registration and Grants, and more.
- f) Promotion of new features, functions, and requirement changes (based on authorities such as the FCC, NTIA, DHS, DoH, etc.

Specific Tasks will include:

- a) One press release (out through commercial release on something like BusinessWire) per month.
- b) One to two speaking events per quarter at trade shows, industry conferences, trade associations, or other appropriate venues.
- c) One to two show / conference events a quarter - on location.
- d) Promotion online including advertising, SEO/SEM placement, ad or placement preference like AdWords, Facebook, Twitter, LinkedIn or other Social Media.
- e) Co-speaking or presence with other affiliated or related organizations (e.g. CBRS Alliance, etc.)
- f) Webinar(s) - one or two per quarter at the 500+ attendee level on GoToWebinar
- g) Flyers, collateral's, leave-behinds, cards, images, logos, pamphlets, signage, publishing and other physical promotion materials for the CBRS WInnForum Standards.

- h) Miscellaneous as may come up as important or urgent to advance the SSC WinnForum Standards and Specifications objectives.

### **5.3 FY2019 Project Plans**

The detailed Release Plan for the Spectrum Sharing Committee can be found here:

[https://workspace.winnforum.org/higherlogic/ws/public/document?document\\_id=4182&wg\\_a\\_bbreve=SSC](https://workspace.winnforum.org/higherlogic/ws/public/document?document_id=4182&wg_a_bbreve=SSC)

Plans for FY2019 by work group are as follows.

#### **5.3.1 SSC Work Group 1: Operational and Functional Requirements**

The objective of this Working Group is to work on further defining Spectrum Access Systems (SAS) functional requirements as they relate to creating an interoperable system across the various providers of systems and equipment within the industry. There is no intent in this Working Group to define a common architecture and design for SAS systems. This Working Group will further track and articulate common functional questions that require industry consensus for further clarification and definition.

##### **FY2019 Goal**

WG1's FY2019 goals are to continue to develop the standards and requirements that will allow the CBRS community to translate the FCC rules into implementable and interoperable functions, building upon current work product. The group will also define new additional requirements to improve efficiency and usage of the CBRS band. The WG will work with the government to refine or clarify certification requirements through the course of the first commercial CBRS certification processes.

##### **Standards Deliverables:**

The Group developed and approved the Operational and Functional Requirements Release 1.5 in April 2018. In FY2019, the group will continue to close issues related to Release 1 Certification Testing and continue complete requirements for Release 2. Below are listed some of the key requirements defined in Release 1:

- **Border Area Management**
- **CBSD Measurement Reporting**
- **CBSD Registration Processing**
- **Domain Proxy**
- **Dynamic Protection Zones**
- **Environmental Sensing Capability (ESC)**
- **Exception Management**
- **FSS Protection**

- **Grandfathered Wireless Device Protection**
- **Operations Security**
- **PAL Protection Area Definition**
- **Propagation Modeling**
- **SAS to SAS Information Sharing**
- **Spectrum Grant Request Processing**
- **Quiet Zone Management**

In FY 2019, the group will continue to work on Release 2, which plans to add the following functionality:

- **CBSD to CBSD Operation**
- **Channel Assignment Optimization**
- **GAA Coexistence**
- **PAL Leasing**
- **Enhancements from Release 1**

**Delivery Plan:**

Release 1 will continue to evolve based on issues identified in certification testing. Release 1 will continue to be a priority. WG 1 will continue to discuss and approve requirements for Release 2 capabilities and plans to have a Release 2 requirements document published in 2H2018.

Group member activity and participation are high and the group regularly receives contributions of very high quality. In the opinion of the Group Chairs the stated deliverables have a high likelihood of successful completion by the scheduled date.

### **5.3.2 SSC Work Group 2: Security Requirements**

Work on the security completed in FY2017 and so the group has recessed until such time as new requirements are identified.

### **5.3.3 SSC Work Group 3: Protocol Specifications**

The goal of this working group is to define the detailed protocols for data and communications across the various open interfaces within the system. The interfaces are limited to what is the minimum needed for implementation of an open and interoperable system. Other interfaces may be included later. The objective is to use common interfaces and as light of a protocol as possible to allow for innovation and development of the subsystems in a healthy competitive environment while preserving the openness of the system.

In FY2018 the group will work towards publication of release 2 specifications supporting new features defined in WG1.

### 5.3.4 SSC Work Group 4: Test and Certification

The goal of this working group is to define the test and certification standards for the SAS and across the various interfaces within the system. The certification should be limited to what is the minimum needed for the creation of a simple and standard certification process for an open and interoperable system. The objective is to implement a test architecture that enables a competitive, innovative, and open environment for the development of the SAS and other ecosystem elements.

#### **FY2018 Goal**

The FY2018 goal is to fully support certification against CBRS Release 1 Standards to allow for commercial deployment of GAA Category A and Category B devices by December 2018. The work group will then move forward to allow full support of certifications against CBRS Release 2 Standards later in the fiscal year.

#### **Standards Deliverables:**

The work group will address change requests for Version 1 of the CBRS SAS Test Specification as required to support Test and Certification of the SAS for Release 1. The work group will also address change requests for Version 1 CBRS CBD Test Specification to support the Test and Certification of the CBD for Release 1. The group will also update the test code for these two releases in parallel with the specification work. In addition, work will begin on release 2 test and certification specifications to be released in FY2020.

#### **Test Lab Authorization Deliverables:**

In FY2018, the work group established a CBD test lab authorization program with 4 test labs designated as “WInnForum CBRS Approved”. In FY2019, the group will continue to support this program and expand the list of approved test labs.

### 5.3.5 SSC Work Group 5: Operations

The charter of working group 5 is to support common operational needs for a vibrant CBRS ecosystem. Work in FY2018 focused on the following:

- a) Certification Authority (CA) Administration;
- b) Partnering with other organizations to implement a Training and Certification process for CBD Professional Installers;

#### **FY2019 Goal**

In FY2019, the group will continue support for the PKI Root of Trust Accreditation Program and the certify the initial CPI Training Program Administrators. In addition, the group will work to establish methods supporting the GAA Coexistence model established in WG1. These methods will be published in a Technical Report that may inform the work in WG1 and WG3 if appropriate.

Other projects may be initiated by the group as necessary to support operational elements required for commercialization.

**Standards Deliverables:**

None planned for FY2019.

**Delivery Plan:**

The Technical Report on GAA Coexistence Methods will be published in the first half of the fiscal year.

## 6 Board of Directors FY2018 Work Plan

### 6.1 General Governance

A primary responsibility of the Board of Directors in FY2019 is monitoring the operations of the Forum ensuring compliance with the 2018 to 2022 Strategic Plan and this Operations Plan. Meetings of the Board of Directors are planned for the following dates:

- Web conferences the second Thursday of each month at 10AM Eastern US Time
- November 2018 Melbourne, Florida (in conjunction with WinnComm)
- May 2019 in Germany (in conjunction with WinnComm-Europe)

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 FY2017 financial forecast to the Board monthly. In addition, the financial performance is reviewed following the schedule below:

- October 2018 Board Meeting – Review the audited financial results for FY2017 to be presented to the members at the Annual, and the Q1 FY2018 forecast with projections for the remainder of the year.
- Annual Meeting of the Members – Present FY2018 audited financial results to the members, present updated FY2019 projections
- January 2019 Board Meeting – Review Q1 FY2019 unaudited financial results and projections for the remainder of the year.
- March 2019 Board Meeting – Review Q2 FY2019 unaudited financial results and projections for the remainder of the year.
- June 2019 Board Meeting – Review the FY2019 forecast and approve the FY2020 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 CY2017 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 2017 Board meeting.
- **Outreach Committee** – provides input to the Board on venues and events that the Forum should have representation in attendance.

## 7 Infrastructure and Support Services

### 7.1 Executing on the Growth Strategy

High Level Objectives Supported:

- Brand the WInnForum as the Preferred Venue for Technical Collaborative Exchanges on Innovative Solutions for Wireless Systems
- Position the WInnForum as the Preferred Venue for the International Spectrum Sharing Community
- Establish Relevant Projects

At the time of this writing the third of a three stage Platform Strategy plan below was being executed:

- Stage 1: Research - completed FY2017
  - Outlined group case studies
  - Conducted member interviews
  - Re-segmented markets
- Stage 2: Product Strategy – completed FY2017
  - Defined platform elements/developed positioning statement
  - Identified marketing mix
- Stage 3: Product Execution – begun FY2018; continuing FY2019
  - Develop collateral
  - Develop storylines for group successes
  - Develop project support materials (templates, policies, etc.)
  - Distribute materials and create a WInnForum presence at events in support of the Platform Strategy

The positioning statement being supported in the Platform Strategy is:

*For individuals striving to set their organization apart and achieve their market goals in their particular wireless industry, **who** need an ideal setting for incubating and advancing new potentially disruptive technologies, specifications or guidelines, **the Wireless Innovation Forum is a member driven, standards development organization that brings together groups of leading organizations from across multiple market segments around the world and at all levels of the wireless value chain to collaborate in advocating for the innovative use of spectrum and advancing radio technologies that support essential or critical communications worldwide.***

***Unlike** other group collaboration organizations that are focused on lobbying for a specific segment of the wireless market, **the Forum will act as an honest broker in advancing technology supporting an ecosystem that spans multiple markets and bring you together with other thought leaders in a multi-stakeholder community to create highly recognized reports, specifications and recommendations.***

***Also unlike** other standards bodies focused on supporting the wireless market, **the Forum is agile, providing a venue for thought leaders to quickly build an ecosystem and rapidly advance projects under a***

*proven development model that can be tailored to your specific needs and under IPR terms aligned with Industry best practices.*

Additional elements of the platform strategy to be executed in FY2018 are outlined below.

### **7.1.1 Continued Product Execution**

Per the Platform Strategy, Forum staff will continue to work to complete the following in FY2019:

- The Forum will evaluate staff required to support the commercialization framework and make adjustments as required to meet member needs.
- Forum Staff will work with the Board of Director's Governance Committee to review relevant policies and make associated recommendations to the Board.
- Forum staff will strengthen the member experience by providing tools instructional webinar(s) and reference materials
- Forum staff will support the ATC in new project creation by preparing promotional literature and materials for use
- To better target readers (member and non-member) and increase email open and click through rates, Forum staff will perform a database scrub and segmentation

### **7.1.2 Marketing Strategy**

For FY2019, Forum staff will focus on developing promotional materials and executing a marketing mix that will most effectively and efficiently promote the Forum. Event presence and supporting materials plan will be provided by the end of Q1.

### **7.1.3 Member Retention**

Both new member marketing and current member retention are priority aspects in generating revenue. With the Forum's diverse and growing market segments (Spectrum Sharing, SCA, etc.) the audiences are quite different for each segment. As such, staff will produce separate promotion materials for each committee audience detailing outputs, benefits to members, current members specific to this group, etc. In addition, staff will update the membership benefits page to better reflect and highlight current benefits.

In addition, staff will personally contact member organizations that are forecasted at below 100% retention confidence to discuss what can be done to increase their satisfaction with their membership.

Also important to member retention is member onboarding. Forum staff will refine our onboarding procedure to welcome our members and train them on the groups collaboration site. Tools will include scheduled emails, training videos and supporting documentation.

### 7.1.4 Support Committee Outreach

For FY2019, Forum staff will support the SDS Outreach Work Group and SSC Awareness Task Group in their efforts to educate the community on the work products their committees have developed and to grow membership in support of planned work efforts.

## 7.2 *Expanding Accreditation Services*

High Level Objectives Supported:

- Execute on Test and Certifications Strategies for WINnForum Standards

Staff will continue work to develop and implement the business models necessary to support accreditation services required by the Forum’s membership as standards evolve. Such models will include flow and transfer the information required to manage the procedures of the accreditation services, such as: providing access to application materials and requirements; receiving application materials and maintaining database of applicants; maintaining schedule of re-accreditations needed; sending re-accreditation notices as needed.

## 7.3 *Member Services and Group Support*

### 7.3.1 Project Support

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.

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 FY2018 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://workspace.winnforum.org> ). Each collaboration area can host multiple project specific file libraries and list servers.

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

### **7.3.2 Project Promotion and Committee Brand Management**

Forum staff will support all three committees in outreach activities to grow participation and gain new members. Support items include:

- Maintaining an active external web page for each committee highlighting work products and committee goals
- Press release announcement of approved projects and final work products
- Social media and email campaigns to inform the community of progress and grow participation
- Hosting webinars providing a tutorial review of relevant work products and printing these webinars on You Tube
- Developing and editorial pitch when appropriate to promote activities and results.

- Print materials for distribution at partner conferences and events to include sell sheet and media packet.
- Support in revision of Top Ten Most Wanted Wireless Innovations, including document design, edit and publicity campaign
- Support in revision of WInnForum Advocacy Agenda, including document design, edit and publicity campaign

In providing these services, Forum staff will leverage the WInnForum Standards logo to establish a brand extension for each committee where required.

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.

### **7.3.3 Daily News Feed**

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 FY2019 as well as explore ways to expand the value, such as, for example, including one banner ad per week (additional revenue) by sponsor.

## **7.4 Summit Management and Promotion**

High Level Objectives Supported:

- Brand the WInnForum as the Preferred Venue for Technical Collaborative Exchanges on Innovative Solutions for Wireless Systems
- Position the WInnForum as the Preferred Venue for the International Spectrum Sharing Community

The US and European Summits 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. All conference content is to be largely driven by the Forum's individual committees, Forum staff will work to encourage the committees to participate and develop the content.

Positioning of the Forum's Summits shall be as set by the Board of Directors during the 9 March Board meeting:

***FOR** researchers, technology providers, system integrators, their customers, and government authorities, **WHO** seek to facilitate the development and adoption of technologies and standards supporting the innovative utilization of spectrum and the development of wireless communications systems, **WInnComm IS THE** event **THAT** provides a venue for facilitating discussion between stakeholders to establish or expand ecosystems in the wireless communications market, define and promote interoperability standards supporting those ecosystems, and educate regulators on associated issues.*

***UNLIKE** other conferences that have a more academic or large system trade show focus, **WInnComm** is focused on information exchanges between stakeholders to report and discuss the development, adoption, transfer and commercialization of technologies, standards, regulations and certification processes, and demonstrating new technologies that enhance value, reduce total life cost of ownership and allow timely delivery of products and services.*

Plans for each conference are as follows:

#### **7.4.1 WInnComm 2018**

WInnComm 2018 will be held in 12 to 16 November 2018 in Melbourne, Florida. Important dates for this conference in FY2019 are:

- Paper Abstracts Due: **15 July 2018**
- Abstract Acceptance: **1 August 2018**
- Program Announced: 15 August 2018
- Final Papers and Presentations Due: **1 November 2018**

Forum staff provides administrative support to the technical program committee in defining conference and workshop topics, which are to be largely driven by the committees, issuing the call for proposals, collecting and reviewing abstracts, reviewing papers and setting the program.

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.

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.

#### **7.4.2 WInnComm-Europe 2019**

WInnComm-Europe 2019 is planned to be held as a standalone event as was done in prior years through 2016. The meeting will be held 13-17 October 2019, in Berlin, Germany, with the assistance and support of Fraunhofer FKIE. Important dates for this conference in FY2019 are to be scheduled as follows:

- Abstracts due for presentation proposals (papers optional; no peer review): 4 months before conference dates
- Paper accepted notification: 3 months before conference dates
- Final Camera Ready Papers and Presentations due: 3 weeks before conference dates

Forum staff provides administrative support to the technical program committee in defining conference and workshop topics, which are to be largely driven by the committees, issuing the call for proposals, collecting and reviewing abstracts, reviewing papers and setting the program.

Operations of conference events from pre-conference services such as registration, logistics setup and exhibits management will be conducted in to the highest degree of professionalism and membership service. Forum staff will look to maximize the meeting experience for all attendees while focusing on efficiency and economies.

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 online by the same method used for WInnComm 2016, which was very successful.

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.

## **7.5 Awards**

The Forum will launch the 2018 Awards program in July, with nominations pursued in emails and on the web site. Finalists will be announced in September 2018, and will be encouraged to attend the November conference where winners will be announced and receive their awards.

## **8 Other Corporate Administration**

### **8.1 Annual Meeting of the Members**

The Annual Meeting of the Members, as described in the Forum [Bylaws](#) will be held in conjunction with WInnComm 2018.

### **8.2 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 FY2018 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 May 2019
- California Tax Exempt Return – 15 May 2019
- Canadian Information Return – 15 November 2017
- Canadian Extra-Provincial Annual Report – 2 January 2018
- 1099s to recipients – 31 January 2019
- 1099 and 990s to IRS – 28 February 2019
- Foreign Bank Account Report Form – 15 October 2018
- Fairfax County, VA Business, Professional, Occupational License-01 March 2018
- Fairfax County, VA Personal Property Tax-01 May 2018 – filing only; no tax paid
- Virginia Corporate Commission Report - 30 April 2019
- Virginia Corporate Commission Registration Fee -30 April 2019

### **8.3 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.

- Error and Omissions plus Certification Insurance: April 2019
- General Liability Insurance: August 2018
- Directors and Officers Insurance: January 2019

In addition, the Forum will secure cancellation insurance, as appropriate, for each major event.

### ***8.4 FY2019 Planning***

The FY2019 Operation Plan will be developed on the following schedule:

- Board Approval of High Level Goals for FY2020 – 14 March 2019
- High Level Goals and Ops Plan Process Presented to Group Leaders – 21 Mar 2019
- Draft Budget Presented to the Finance Committee – 1 May 2019
- Draft Plan Submitted to Officers – 28 May 2019
- Final Draft Approved by Forum Chair and CEO – 6 June 2019

The final plan will be presented to the Board of Directors for their approval during the June 2019 Board Meeting and will be submitted to the membership for final approval immediately thereafter.