Software Defined Systems (SDS) Committee

Charter and Working Policy

Version 4.0.0

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Preface

Under the Wireless Innovation Forum (SDR Forum version 2.0) 2010 to 2014 Strategic Plan, the SCA Work Group was promoted to Committee status, acting as one of several Technical Committees within the Forum.\(^1\) Given the advanced state of commercialization of the SCA and related technologies, the resulting “Coordinating Committee on International Software Communications Architecture (SCA) Standards” was given special status within the organization to grant member organizations interested in advancing those technologies additional autonomy in the commercialization process.

In 2015, the Steering Group of this Committee published its own strategic plan outlining the vision and direction for the committee through 2019. The strategies defined in this plan are intended to broaden the appeal of the SCA Committee beyond traditional defense industry vendors and tools suppliers. In doing so, it was clear to the Steering Group that the current name of the committee would become an impediment to success, and so in 2017 the SCA Committee rebranded itself as the Software Defined Systems Committee (SDS). This new brand remains in alignment with the Forum’s mission statement to address “essential and mission critical communications” while at the same time allowing the continued development of relevant standards (SCA and others) to the existing tactical radio communications market.

This document specifies the charter, structure, policies and procedures for this new Committee, including defining the procedures that will be used in governance of the committee and in the development of Reports, Recommendations and Specifications by the Committee’s various work groups.

\(^1\) “2010 to 2014 Strategic Plan” approved 3 December 2009, available at www.wirelessinnovation.org
1 Introduction

The Software Defined Systems (SDS) Committee is a Technical Committee of the Wireless Innovation Forum created to oversee the evolution and adoption, at the international level, of SDS standards for the development of essential and mission critical wireless systems. This suite of standards is developed to facilitate portability, interoperability and configurability of the software and hardware components used in the manufacturing of such systems. It is foreseen that an eco-system of off-the-shelf software and hardware components will be developed from which manufacturers could choose to build their equipment. Time-to-market may be reduced as well as development cost.

The various class of standards that are being considered at this time for development by this Committee encompass software architectures, application programming interfaces, test and certification, including, but not limited to:

- **SCA Base Specification** – This defines a set of rules and guiding principles for the deployment, management, interconnection, and intercommunication of software components in embedded, distributed-computing communication systems.

- **SCA Application Programming Interfaces (APIs)** – This defines a set of standard interfaces, compatible with the SCA Base certification, enabling the radio components to cooperate using a common set of instructions.

- **SCA Test and Certification** – This includes analyzing the needs from programs, program offices, and other development activities supporting the SCA worldwide to determine the feasibility of value added evaluation and/or certification services that the WInnForum can provide. Appropriate initiatives and projects within the scope of the this Charter will be developed as these opportunities are realized.

2 Hierarchy

The latest version of several documents takes precedence over the policies and procedures defined in this charter in the following order:

<table>
<thead>
<tr>
<th>Document Name</th>
<th>Policy Number</th>
<th>Date Adopted</th>
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<tbody>
<tr>
<td>Bylaws</td>
<td></td>
<td>29 October 2008</td>
</tr>
<tr>
<td>Document Approval Process</td>
<td>001</td>
<td>14 September 2018</td>
</tr>
<tr>
<td>Project Approval Committee</td>
<td>002</td>
<td>1 February 2008</td>
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<tr>
<td>Procedures</td>
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<tr>
<td>Partner Organization Document</td>
<td>003</td>
<td>22 February 2008</td>
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<tr>
<td>Sharing Policy</td>
<td></td>
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<tr>
<td>Member Rights, Privileges and</td>
<td>004</td>
<td>9 February 2017</td>
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Robert’s Rules of Order (Revised)\(^2\) is the recommended guide on questions of parliamentary procedure not addressed in these procedures.

## 3 Mandate

The Forum recognizes that the different stakeholders may have differing needs in developing SDS Standards for their specific usage and agrees that the Standards will be a combination of the following three categories:\(^3\)

1. Areas of open standards with unlimited public access, which are managed in the best interest of all stakeholders (U.S. DoD, EDA, radio providers, waveform applications developers and others) by an independent international organization like the Wireless Innovation Forum.

2. Areas of limited distribution for sensitive multi-national needs, such as for coalition interoperability, which are managed by a relevant multi-national body such as NATO or EDA.

3. Areas of highly restricted access for specific national and sovereign interests which are managed by national bodies.

The mandate of the SDS Committee is to support the harmonization of SDS standards in the first category 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

\(^2\) [http://robertsrules.com/](http://robertsrules.com/)

\(^3\) “Support for Three Category Approach for Software Communications Architecture Standards and Extensions”, Forum Document Number WINNF-09-R-0023-V1.0.0 available at [www.wirelessinnovation.org](http://www.wirelessinnovation.org)
The SDS Committee will limit its activities to the development and support of standards that can be made openly available to public. The Forum has adopted SCA Version 4.1 as a baseline specification and will leverage that where applicable. In addition, the SDS Committee will provide standards input, harmonization and services targeted at platforms and standards not already addressed by the SCA (e.g., shipboard, space platforms, public safety, higher frequency ranges). In doing so, the Forum will follow established policies on intellectual property and controlled information.

4 Committee Structure

The SDS Committee is composed of an architecture board and a number of work groups all managed by a Steering Group. The Committee will be member driven with general participation in the SDS Committee open to any member organization as per existing policy. As with all working committees of the Forum, the SDS Committee will report to the Forum Chair. The Forum’s Chief Technology Officer shall be an ex-officio member of the Committee’s Steering Group. An Advisory Council will also be formed by the SDS Committee to advise the Steering Group on user requirements.

4.1 Steering Group

The Steering Group of the SDS Committee shall have the responsibility for coordinating the different activities within the SDS Committee and ensuring that liaisons with the stakeholders and the Forum’s Chair and Chief Technology Officer are maintained.

Members participating in this Steering Group will have the ability to
- Influence the direction of the SDS Standards evolution by collaborating with the Advisory Council for the mutual benefits of the industry and stakeholders;
- Improve alignment of company products and industry roadmap with the SCA evolution;
- Define and approve the special activities to be funded by the Committee budget.

The responsibilities of the Steering Group shall include:
- Interfacing with external stakeholders, in particular the Advisory Council, as appropriate, to grow the influence of SDS standards and of the WINNF and approving any communications out of the Committee;
- Defining, approving, publishing and maintaining roadmaps describing the evolution of SDS standards;
- Acting as the Project Approval Committee for the SDS Committee, approving the activities proposed by the Working Groups;
- Managing the discretionary budget of the SDS Committee and approving funding of special activities that would support the mandate of the Committee. This could include,

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4 Forum Policy 004  
5 Sections 8.3 and 7.7.2 of the Forum’s Bylaws as amended on 3 December 2009  
6 See section 7.3 of the 2010 to 2014 Strategic Plan  
7 In accordance with Forum Policy 002

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if appropriate, working with Forum staff to contract out activities such as technical writing or reference implementations;

- Coordinating and monitoring the progress of the SDS Committee Work Groups in accordance with the Approved Project and in compliance of the Work Groups with committee policies and procedures and recommending realignment if required;
- Overseeing the election process of the Work Group Chairs;
- Supporting the Forum’s Document Approval Process, including acceptance of documents for committee ballot, coordination of document balloting at the committee level, and promotion of documents to the Forum Chair for Plenary level ballot\(^8\).

The Steering Group is responsible to the Forum Chair in the development of work products, following the Forum’s approved document process and as identified in the Forum’s annual operations plan.

The Steering Group shall report to the Forum Chair and the Chief Technology Officer new projects as they are approved.

The Steering Group shall support the Chief Technology Officer in carrying out the mandates of the Board, establishing the Forum’s overall technical roadmap, coordinating with other Technical Committee Chairs on projects of mutual interest, and establishing the annual technical operations plan and budget. Chief Technology Officer shall have approval authority for the SDS Committee annual operations plan prior to it being submitted to the Forum Chair and the Board of Directors and shall report to the Board on execution against that plan on a quarterly basis.

4.1.1 Membership and Fees

Membership in the Steering Group shall be open to any Forum member organization that pays a designated enhanced membership fee. This fee shall be established by the Wireless Innovation Forum Board of Directors on an annual basis, and will be billed during the membership renewal cycle. Initial membership for most steering group participants will be out of cycle, and as such those members wishing to participate in the steering group in advance of their renewal date will be required to submit a letter of intent to pay the enhanced fee during the next billing cycle to the Forum.

Membership on the Steering Group shall be limited to no more than one primary and one alternate member representative per paid organization. The Chief Technology Officer of the Forum shall be an ex officio member of the Steering Group and shall participate in the Steering Group without an enhanced membership fee.

4.1.2 Voting Rights

Each Steering Group member organization shall have one vote in the Steering Group.

The Steering Group will approve, by majority vote, issues related to the following topics:

\(^8\) Control Points 5 and 6 of the Forum’s Document Approval Policy (Policy 001)
• Correspondence with external stakeholders and press releases
• Committee roadmap
• Working Group projects through the Project Approval mechanism
• Spending of funds

4.1.3  *Steering Group Executive Board*

The Steering Group may, at its discretion, establish an Executive Board with specific responsibilities including the following:

• Leading Steering Group meetings and recording of Steering Group meeting minutes.
• Reviewing financial status of the Steering Group through the tracking of allocated funds and associated expenditures.
• Identification of pertinent strategies for achievement of Steering Group objectives and planning of corresponding new initiatives.
• Reviewing progress of the SDS Committee Working Groups against the roadmap.
• Considering inputs from the Advisory Council and/or other key Committee stakeholders.
• Consideration of other relevant topics.

4.1.3.1 Executive Board Election

Members of the Executive Board shall be elected by the Steering Group from the Steering Group membership. The election shall coincide with the election of the Wireless Innovation Forum Board of Directors.

4.1.3.2 Executive Board Term

The elected members of the Board shall have a one year term and may be elected to an unlimited number of subsequent terms. Should an Executive Board member vacate their position in advance of the end of their term, the Steering Group may choose to hold a special election (byelection) to fill the vacant post.

4.1.3.3 Executive Board Composition

The Executive Board shall be comprised of six elected members. The elected Executive Board members shall be responsible for organizing the structure and operation of the Executive Board in accordance with the following guidance:

• There shall be two separate leadership positions in the form of either Chair and Vice Chair positions or two Co-Chair positions. The purpose of these two positions is to provide leadership for the SDS Committee, the Steering Group and Executive Board. The Chair(s) of the Executive Board shall also be responsible for Chairing the Steering Group and the SDS Committee. Consideration should be given to leadership needs and abilities in conjunction with a balance of interests across international regions, user domains or
other pertinent dimensions. For the situation of leadership provided by two Co-Chairs, specific tasks shall be allocated and communicated accordingly to ensure that all necessary leadership responsibilities are adequately covered, including:

a. The Chair(s) report to the Chair of the Forum for day to day operations.
b. The Chair(s) report to the Chief Technology Officer related to interactions with other Technical Committees and the Forum Board of Directors.
c. The Chair(s) manage the balloting process at the Committee Level.
d. The Chair(s) oversee the meetings to ensure collaboration and manage contention.
e. The Chair(s) typically don’t vote on Committee matters unless there is a tie vote.
f. The Chair(s) ensure compliance with Forum directives and follow-up on action items.

- There shall be a Secretary position with the responsibility for maintaining minutes of Steering Group and Executive Board meetings.
- There shall be a Treasurer position for the purpose of tracking expenditure of funds specifically allocated to the Steering Group.
- Two “At Large” positions shall be established. Consideration for these positions should include the notion of balance across international regions. Specific responsibilities should be assigned by the Executive Board as appropriate. Considerations for these responsibilities should include liaison support for members of the Advisory Council, Forum vendors and partner organizations, unique regional interests or user domains.
- The Executive Board leadership (Chair/Vice Chair or Co-Chairs) should employ appropriate leadership approaches to conduct the business of the SDS Committee, Steering Group and Executive Board in a fair and timely manner. For the Executive Board this shall include achieving consensus or calling for a majority vote regarding any particular initiative before the Board.

In addition, the Forum Chief Technology Officer and SDS Committee Work Group chairs shall be *ex officio* members of the Executive Board and may attend Executive Board meetings but shall not be eligible to vote.

4.1.3.4 Executive Board Meetings
The Executive Board will meet at least bi-monthly and may meet independent of the Steering Group, bringing forward recommendations for ballot by the full Steering Group.

4.2 Advisors
Advisors to the SDS Committee represent various government stakeholders in the identification of requirements for International SDS Standards and the development of a vision to support their operations. The Advisors may meet on a regular or ad hoc basis by teleconference or face-to-face with the Steering Group in an Advisory Council. A separate charter shall be established for the Advisors.
4.3 Architecture Board

The SDS Committee shall establish an Architecture Board as required in the WInnForum Document Development Process (Policy 001).

4.4 Technical Work Groups

The SDS Committee shall have a number of Work Groups (WG) and Task Groups to help perform its mandate. A WG will have long term responsibilities and objectives while a TG will be more ad hoc responsibility for a specific project. A Task Group project may support multiple WGs when appropriate. WGs and Task Groups may be created or dissolved as needed, by the Steering Group of the SDS Committee.

4.4.1 Work Group Membership

Membership in a SDS Committee Work Group or Task Group is open to any representative of a Forum member organization interested in the mission of the group. Those wishing to actively participate as members must request access from the WG Chair through the Forum’s portal. All WG members may participate in the WG’s meetings, in discussions and in Task Group activities.

Participation by non-members in SDS Committee Work Groups and Task Groups shall be limited as defined in Forum Policy 014.

4.4.2 Work Group Chair and Vice-Chair

The WG will be lead by a Chair, assisted by a Vice-chair.

4.4.2.1 WG Chair Election

WG chair and vice-chair are nominated by the Steering Group from qualified and eligible member representatives for confirmation vote by the SDS Committee members. WG chairs need not belong to organizations that have paid enhanced membership fees.

Member representatives nominated by the Steering Group must accept the nomination prior to the vote proceeding. Voting shall be by email ballot, following the standard committee balloting process. The ballot options shall be “approve” or “disapprove” only, and the WG chair shall be confirmed is he or she receives approval from a majority of those who vote. If a nominee is rejected by the membership, the Steering Group shall submit a second nomination and repeat the vote until a WG chair is confirmed.

The WG chairs serve a one-year term and shall be reconfirmed on an annual basis.
4.4.2.2 WG Chair Responsibilities

The WG Chair shall coordinate the work of its WG. Duties of the Chair include:

- Chairing the working sessions during the Forum working meetings, ad-hoc meetings and conference call (telephones, webinar…), including taking minutes and maintaining attendance records of each meeting to determine voter eligibility
- Providing progress reports to the Chair of the Steering Group so that a presentation may be given at the closing plenary of the Forum working meetings
- Overseeing the generation of the WG reports, recommendation and specifications
- Preparing documentation required for the approval process
- Managing Work Group Ballot and promoting documents to the steering group for Committee ballot
- Maintaining an active presence on the Forum portal by posting any relevant information for its members

The Vice-chair will assist the WG Chair and will have the same responsibilities if delegated by the WG chair or if the WG Chair is absent during a Forum working session. A secretary may also be appointed to maintain minutes and attendance records at the Chairs discretion.

5 Work Group Policies and Procedures

The SDS Committee shall follow the baseline work group policies and procedures adopted by the Forum. Voting at the work group level shall be based on participation, with attendance at 3 of 5 working meeting required for an organization to be eligible to vote. Last call for work group ballots shall be two weeks unless otherwise agreed by the voting members.