

2009 and 2010 Operations Plan

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Page 1

Table of Contents

1	INTE	RODUCTION – THE SDR FORUM FY 2009/2010 OBJECTIVES	3
2	SDR	FORUM ORGANIZATIONAL OVERVIEW	4
	2.1	SDR FORUM STRUCTURE	
	2.2	SDR FORUM CORPORATE ADMINISTRATION	
3	MAF	RETS COMMITTEE 2009/2010 WORK PLAN	7
4	REG	ULATORY COMMITTEE 2009/2010 WORK PLAN	10
5		HNICAL COMMITTEE 2009/2010 WORK PLAN	
6		RD OF DIRECTORS 2009/2010 WORK PLAN	
7		2010 MEETING AND EVENT PLAN	
'	2009/		
	7.1	2009/2010 MEETINGS AND WORKSHOPS	
	7.2	SDR '09 TECHNICAL CONFERENCE AND PRODUCT EXPOSITION	
	7.3	ANNUAL MEETING OF THE MEMBERS	
	7.4	SDR '10 TECHNICAL CONFERENCE AND PRODUCT EXPOSITION	
	7.5	EUROPEAN RECONFIGURABLE RADIO TECHNOLOGIES WORKSHOP AND PRODUCT EXPOSITION	
	7.6	SMART RADIO CHALLENGE	
8	SDR	FORUM CORPORATE ADMINISTRATION WORK PLAN	21
	8.1 MEE	TINGS AND EVENTS	
	8.1.1	Meeting Planning and Management	
	8.1.2	Electronic Meetings and Online Collaboration Tools	
	8.1.3	Meeting automation	22
	8.2	OTHER MEMBER SUPPORT AND SERVICES	
	8.2.1	Support for New Project Initiation	23
	8.2.2	Document Advancement and Electronic Balloting	
	8.2.3	Member Discounts	
	8.2.4	Product and Services Directory	
	8.2.5	"SDR in the News" eNewsletter	
	8.2.6	SDR Forum Awards	
	8.2.7	SDR Experts Program	
	8.2.8	SDR Forum eJournal	
	8.2.9	Resume Service	
	8.2.10		
	8.3	MARKETING AND BUSINESS DEVELOPMENT PLAN	
	8.3.1	High Level Marketing Plan	
	8.3.2		
	8.4	OTHER CORPORATE ADMINISTRATION	
	8.5	2009 PLANNING CYCLE	
9	SDR	FORUM FY2009/2010 BUDGET (MEMBERS ONLY) ERROR! BOOKMARK NOT DI	EFINED.

1 Introduction – The SDR Forum FY 2009/2010 Objectives

Starting in January 2009, The SDR Forum is changing its fiscal year to begin on July 1st of each year. This change was approved by the SDR Forum Board of Directors on 9 September 2008, and was made to improve SDR Forum efficiency by better aligning the Forum's operations and planning cycles. Under this new schedule, Fiscal Year (FY) 2009 will be a "stub year", beginning on January 1st 2009 and running to June 30th 2009. FY2010 will then begin on July 1st 2009 and run through June 30th, 2010.

This operations plan covers both FY2009 and FY2010. The SDR Forum Board of Directors has established the following six items as high level objectives for the Forum for this 18 month period in executing on the Forum's approved <u>Strategic Plan</u>:

- <u>Deliver Relevant Work Products</u> The SDR Forum shall ballot and release at least four new SDR Forum Specifications supporting the Forum's commercialization strategy. In addition, each committee within the SDR Forum shall ballot and release at least one SDR Forum Report and at least one SDR Forum Recommendation supporting the Forum's advocacy, business development and education strategies in the 18 month period starting January 1st, 2009. The Forum shall actively promote these work products as they are developed, to solicit contributions from members and partners towards their creation and to ensure that they accurately reflect the broader consensus views of the Forum.
- 2. <u>Evaluate Establishing a Certification Capability</u> As part of its commercialization strategy, The SDR Forum shall evaluate establishing a certification capability to promote interoperability testing of key technologies important to SDR Forum members.
- 3. **Define New Initiatives** The SDR Forum shall establish at least two new groups which will extend the SDR Forum into new market domains, increasing participation in the SDR Forum through both new member organizations and through new representatives from existing member organizations following the Forum's defined strategy on growth. In addition, as work on existing projects winds down in the first half of 2009, the members of the SDR Forum will identify and initiate new projects that will advance the Forum's strategies for supporting its members through advocacy, business development, commercialization and education. At least one of these new projects shall be a roadmap project focused on defining the grand challenges for reconfigurable radio through 2020, and proposing future projects that must be undertaken to support the long term needs of the SDR Forum's members.
- 4. **Explore Rebranding the SDR Forum** The SDR Forum shall explore rebranding the SDR Forum to better serve the needs of its members in pursuing activities such as cognitive radio that extend beyond "SDR". In parallel with this activity, the SDR Forum shall enhance the relevance of the existing SDR Forum brand where appropriate within the advanced wireless community through structured marketing that professionally promotes Forum events and activities, regulatory and market outreach programs and a continuing focus on cultivating collaborative relationships with partner organizations.
- 5. <u>Improve Regional Support</u> The SDR Forum will develop new mechanisms to better support the regional needs of its member organizations around the world. Among the mechanisms that will be evaluated will be stronger partnering with existing regional groups, opening regional offices of the SDR Forum staffed with personnel dedicated to growing participation in that region and supporting the specific needs of the local member

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organizations, chartering regional chapters of the SDR Forum and supporting those chapters in holding local meetings focused on regional issues, and establishing regional workshops and conferences including specific areas of local interest.

6. <u>Grow Participation</u> - The SDR Forum believes that executing on these high level objectives will inherently lead to increased participation in the Forum's meetings, increased attendance at the SDR '09 Technical Conference and Product Exposition, and ultimately grow the SDR Forum's membership. As such, the SDR Forum Board of Directors has established a metric of 10% growth across the board for participation in SDR Forum activities and events, and will use this metric to measure success in executing on the overall strategy.

This document presents specific plans for achieving these high level objectives in separate sections dedicated to the FY 2009/2010 Meeting Plan, and the respective work plans of the Markets Committee, The Regulatory Committee, the Technical Committee, the Board of Directors, and the SDR Forum Corporate Administration. The budget necessary to support these objectives is also addressed in the last section of this document.

2 SDR Forum Organizational Overview

2.1 SDR Forum Structure

The 2009 Organizational Structure of The SDR Forum is presented in Figure 1. The Forum is organized around three primary committees, whose primary responsibilities are summarized as follows:

- *The Markets Committee:* Defines domain specific requirements, use cases and business models that will drive the activities of the Regulatory and Technical committees. The Markets Committee also has responsibility for supporting member organizations in identifying new opportunities and developing new markets for reconfigurable radio products and services.
- *The Regulatory Committee:* Works with the regulatory and public policy community to establish a global regulatory framework promoting the adoption of reconfigurable radio technologies. The work of the Regulatory Committee is facilitated by a Regulatory Advisory Committee made up of regulatory and public policy officials and experts from around the world working on issues relevant to reconfigurable radio technologies.
- *The Technical Committee:* Produces technical documents defining the "state of the art" in reconfigurable radio technologies, and facilitating standards, certification and demonstration projects that will reduce the costs (development, production, operations) and time to market/time for deployment of reconfigurable radio technologies.

These committees are managed by the SDR Forum's elected officers, which include the Chair and Vice Chair of the SDR Forum, the Chairs of the three committees, the Secretary, and the Treasurer.



Figure 1: SDR Forum 2009 Organizational Structure

Management and oversight of the SDR Forum as a whole, including the SDR Forum's corporate affairs, is performed by the SDR Forum Board of Directors. These directors are elected on an annual basis, as defined in the <u>SDR Forum Bylaws</u>. The elected slate of SDR Forum Directors for 2009 is provided in Table 1.

Name	Member	Position	Email
	Organization		
Peter Cook	Hypres	Chair of the SDR Forum Board	pgcook@pgcook.com
		of Directors	
David	Thales	Director, ITU Region 1	david.renaudeau@fr.thalesgroup.com
Renaudeau	Communications	Representative	
Bruce	Motorola	Officer, ITU Region 2	bruce.oberlies@motorola.com
Oberlies		Representative	
Hiroshi	NICT	Director, ITU Region 3	harada@nict.go.jp
Harada		Representative	
David	SCA Technica	Director, Small Company	dmurotak@scatechnica.com
Murotake		Representative	
Pekka	Elektrobit	Director, Medium Company	Pekka.Heikkinen@elektrobit.com
Heikkinen		Representative	
Richard	Tyco Electronics	Director, Large Company	taylorri@tycoelectronics.com
Taylor		Representative	
Claude	Communications	Director, Government and Non-	claude.belisle@crc.ca
Belisle	Research Center	Profit Representative	
Seungwon	Hanyang	Director, Academic Institutions	choi@ieee.org
Choi	University	Representative	
Bernard Eydt	Booz Allen	Director, At-Large Director	eydt bernie@bah.com
	Hamilton		

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John Chapin	Vanu	Officer and Director, Chair of	jchapin@vanu.com
_		the SDR Forum	
Ruediger	Rohde and	Officer and Director, Vice Chair	ruediger.leschhorn@rohde-
Leschhorn	Schwarz	of the SDR Forum	schwarz.com
Manuel Uhm	Xilinx	Officer and Director, Chair of	manuel.uhm@xilinx.com
		the Markets Committee	
Peter Tenhula	Shared Spectrum	Officer and Director, Chair of	ptenhula@ieee.org
		the Regulatory Committee	
Bruce Fette	General	Officer and Director, Chair of	bruce.fette@gdc4s.com
	Dynamics	the Technical Committee	
Mark Turner	Harris	Officer and Director, SDR	mturner@harris.com
	Corporation	Forum Treasurer	
John Powell	NPSTC	Officer and Director, SDR	jpowell@berkeley.edu
		Forum Secretary	

 Table 1: 2009 SDR Forum Board of Directors

2.2 SDR Forum Corporate Administration

Corporate administration services are provided to the SDR Forum through a combination of employees, consultants, and third party contractors. Under the SDR Forum Bylaws, these activities are managed by the Chief Executive Officer. 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.

The SDR Forum also employs a Chief Operating Officer (COO). The COO's primary responsibility is to facilitate the operations of the SDR Forum, to advance the Forum's strategic plan and maximize the quality of services provided to its members. Reporting to the Forum's CEO, the COO facilitates meetings between members, and with other relevant parties, and establishes mechanisms and procedures to simplify the development by members of high quality reports, recommendations, specifications, and standards. The COO also manages day to day operations of the Forum as a corporation, ensuring compliance with all relevant laws and regulations while maintaining high ethical standards at all times.

Starting in 2008, the SDR Forum has retained a Director of Marketing and Communications. The Director of Marketing and Communications (MarCom) has primary responsibility for managing communications for the SDR 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 SDR 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.

In 2009, The SDR Forum's employees will be rounded out by the addition of an Office Manager. Reporting to the COO, the Office Manager manages the daily operation of the SDR Forum virtual office including sending and receiving mail and faxes, and collecting and maintaining documents and records. The Office Manager is responsible for all aspects of book keeping, including accounts payable, accounts receivable, general ledger, preparation of invoices and preparation of monthly reports for the CEO. The Office Manager also supervises the bi-monthly payroll run, supports tax preparation and year end audit, maintains the SDR Forum membership database, attendance lists and SDR Forum email lists. Finally, the Office Manager provides support for meetings and the annual technical conference as needed.

The complete slate of key employees, consultants and contractors retained by the SDR Forum to support its members in 2009 are as follows:

- 1) Lee Pucker Chief Executive Officer, <u>Lee.Pucker@sdrforum.org</u>
- 2) Al Margulies Chief Operating Officer, <u>asm@sdrforum.org</u>
- 3) Stephanie Hamill Director of Marketing and Communications, <u>StephanieHamill@sdrforum.org</u>
- 4) Karen Watkins Officer Manager, <u>office@sdrforum.org</u>
- 5) Joel Gluck Web Master, Web Maintenance Plus, jrgluck@verizon.net
- 6) Grass Coffey & Scharlau, CPAs Audits and Finance, Grass Coffey & Scharlau, CPAs
- 7) Gesmer Updegrove LLP Legal Counsel, <u>Gesmer Updegrove LLP</u>
- 8) Harris, Wiltshire & Grannis LLP Regulatory Counsel

In addition, the SDR 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 2009/2010 can be found in Section 8 of this plan.

3 Markets Committee 2009/2010 Work Plan

The organization of the SDR Forum Markets Committee for 2008 is presented in Figure 2. Included within the structure of this Committee are multiple Special Interest Groups, or SIGs, which are cross-disciplinary work groups comprising end users, operators, service providers, radio manufacturers, and regulators focused on the needs of a single market or market segment. The Markets Committee currently supports two special interest groups:

• **Public Safety Special Interest Group** – The Public Safety Special Interest Group (Chair: Fred Frantz (L3 Communications), Vice-Chair: Rick Taylor (Tyco Electronics)) is the interface of the Forum to the Public Safety Community (including both users and vendors), and is tasked with raising awareness of SDR, publicizing the activities of the Forum as they pertain to issues of interest and concern within this community and increasing participation of this community in the SDR Forum. The Public Safety SIG also interacts with other committees and work groups within the Forum to provide the

Public Safety Community's inputs into the publications and initiatives undertaken by the Forum.

• International Tactical Radio Special Interest Group – The charter of the International Tactical Radio SIG (Chair: Rafael Aguado Muñoz (Indra), Vice-Chair: Jimmie Marks (Raytheon)) is to forge strong relationships between the military tactical radio communities of the Americas, EMEA and Asia, to facilitate interoperable allied communications, to identify common industry requirements and drive to a common solution via the SDR Forum Technical Committee outputs, and to endorse activities and outputs from industry, government, and unions (e.g., NATO).

In addition, the Markets Committee has one chartered Task Group (Secondary Spectrum Access Testing Task Group, Chair: Pat Carson (TDK), Co-chair Joe Mitola (Stevens Institute)) that is initially focused on developing a set of use cases and test requirements to allow unlicensed secondary spectrum access of unused TV bands for "personal portable devices". This group may be converted to a full SIG in 2009 depending on member interest and identified next steps.



Figure 2: SDR Forum Markets Committee Structure

Through this organizational structure, the Markets Committee will undertake the following in 2009 in support of the SDR Forum's high level objectives:

- **Deliver Relevant Work Products** The Markets Committee plans to deliver the following work products in 2009 in support of this objective:
 - *"Public Safety Cost Model Study"*. This study is being done by the Public Safety SIG for the public safety community, with specific focus towards those who plan, procure, and use public safety radios systems who wish to assess life cycle cost versus benefit tradeoffs of incorporating new SDR and CR technologies into

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Page 8

existing or future public safety radio systems. The final report, database, and spreadsheet tools that are developed as a part of this study will describe and implement a framework for modelling life cycle costs for a complete public safety radio system to enable "what if" cost assessments *with* versus *without* incorporating new SDR and/or CR technologies. This document is expected to go to ballot in the first quarter of 2009.

- "Use Cases for Cognitive Radio Technology in Public Safety Systems Part 2 Chemical Plant Scenario" – This report is being produced by the Public Safety SIG and lays the groundwork for regulatory changes, policy and procedure changes, and technology research, development, test & evaluation to evolve and exploit CR technology. This document is being produced for public safety community leadership, researchers, and product developers who need to understand how cognitive radio technologies can be effectively used by public safety users. This document is also expected to go to ballot in the first quarter of 2009.
- "Issues in the International Tactical Radio Market Domain" The ITR-SIG will complete work on this report which identifies the trends and issues associated with the introduction and usage of SDR technologies in the international tactical radio market. The report is being prepared for tactical radio customers, primes, contractors and suppliers worldwide who need to understand the industry trends and barriers to achieving success using SDR concepts and technologies. This document is expected to go to ballot in the 3rd quarter of 2009.
- "SDR Forum Report on Test Guidelines and Requirements for Secondary Spectrum Access of Unused TV Spectrum, also referred to as TV White Space" which will define the usage models and test requirements for personal portable devices in that spectrum and the overlaying spectrum availability. The goal of this document is to provide a basis for test and certification for radio manufacturers and regulators who need to understand the usage scenarios and test requirements for devices that can dynamically access unused spectrum in the TV bands through the use of cognitive techniques. This document is expected to go to ballot in the 3rd quarter of 2009.
- *SDR Forum Recommendations* The SDR Forum Markets Committee will evaluate opportunities for SDR Recommendations throughout the year and will create project groups to deliver these recommendations when appropriate.
- **Define New Initiatives** The Markets Committee will undertake the following two activities in 2009 in support of this objective:
 - The **Public Safety Special Interest Group** will define and propose a new project following the completion of their current documents under development supporting the needs of the Public Safety community.
 - The International Tactical Radio Special Interest Group will work to strengthen relationship with other groups, especially the Test and Certification Work Group and the Security Work Group. The group also intends to initiate a project to gather and report on requirements for next generation radios, with inputs to come from the US Department of Defense, The European Defense Agency and civil radio providers.

- The **Secondary Spectrum Access Testing Task Group** intends to embark upon two paths once their initial project is complete:
 - The group plans to support the **Cognitive Radio Work Group** in advancing this development further towards standardization and certification
 - With the support of the **Regulatory Committee**, the group plans to begin evaluating secondary and unlicensed spectrum access in other frequency bands and platforms within the markets committee
- Formation and incubation of at least one Special Interest Group focused on a commercial wireless market. The initial activities of the Markets committee in this area will be to identify potential candidates from a list of strategic markets, including evaluating the formation of a Satellite Communications SIG and Intelligent Transportation Systems (ITS) SIG. The target completion of this activity will be in September, with interim milestones to include finalizing the list of candidate markets and potential SDR Forum member organizations by the April General Meeting, and soliciting and selecting a SIG leader by the June General Meeting.
- **"Show within a Show"** The Markets Committee will work with SDR Forum staff to investigate the participation of the SDR Forum in relevant trade shows, to include exploring the possibilities of SDR Forum pavilions, exhibitions, and liaisons. The identification of relevant tradeshows will occur at the January General Meeting, and a plan will be defined at that time for follow up.
- **Cognitive Radio Market Study** The Markets Committee will evaluate partnering with an accredited industry analyst to produce a market study focused on cognitive radio and white space communications to be delivered in calendar year 2010.
- Grow Participation
 - **Outreach** the Markets Committee will actively engage in outreach activities to bring new members to the Forum who are keenly interested in identifying new business opportunities and developing new opportunities for their products and services. This will be a primary activity for the Markets Committee in FY 2009, with at least 3 new member organizations brought into the SDR Forum by June of 2010 specifically to participate in Markets Committee activities.
 - SDR '09 Markets Workshop The Markets Committee will host a conference workshop during SDR '09 focused on outreach and education. This will bring industry and analysts together to explore the potential markets for SDR and CR technologies, the current state of applicable technology, regulations and business models, and technical regulatory and business issues hampering adoption.

4 Regulatory Committee 2009/2010 Work Plan

The organization of the Regulatory Committee will be evolving in 2009 and 2010 to increase member participation and value, to facilitate collaboration with other SDR Forum committees, to ensure excellent expert resources, and to further shape and promote the SDR Forum's regulatory agenda. Specifically, the Regulatory Committee will seek to establish a more formal committee

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structure, clarify the roles of active members, appoint liaisons for SDR Forum groups and regulatory regions/bodies, and institute regular conference calls and joint meetings. For example, monitoring and reporting responsibilities will be assigned to allow the Committee and the Forum to proactively track and participate in relevant regulatory proceedings and events.

The Regulatory Committee will also recommend to the Board of Directors revisions to the charter of the SDR Forum Regulatory Advisory Committee designed to expand participation and foster SDR Forum collaboration with regulatory and public policy officials and experts from around the globe. The proposed revised charter will be provided to the Board of Directors for approval at or before the April 2009 General Meeting.

As noted above, the SDR Forum has engaged the Washington, DC law firm of Harris, Wiltshire & Grannis LLP as its regulatory counsel for many years. The Regulatory Committee plans to evaluate the SDR Forum's objectives, requirements and options in connection with retaining new or existing outside regulatory counsel in light of the Forum's strategic and operational plans. Based on such evaluation, by the end of June 2009 the Regulatory Committee, working with the CEO, will develop and implement an engagement process and make a recommendation to the Board of Directors.

In addition to implementing changes to the Committee's organizational and operational aspects, the Regulatory Committee will pursue the following initiatives in fiscal years 2009 and 2010 in support of the SDR Forum's High Level Objectives:

• **Deliver Relevant Work Products --** The Regulatory Committee plans to deliver the following work products in 2009 and 2010 in support of this objective:

• Regulatory Recommendations and Advocacy

- The Regulatory Committee will finalize its draft regulatory recommendation on "Technology and Application Neutrality" and prepare it for Plenary Balloting for (or before) the April 2009 SDR Forum meeting.
- Based on its proactive tracking of relevant regulatory proceedings and events around the globe and working closely with the other Committees and the Board of Directors, the Regulatory Committee will, where and when appropriate, spawn ad-hoc projects or joint task groups to develop and provide information, guidance, comments or positions to regulatory bodies in response to specific requests, inquiries, consultations or other events.

• Support for Technical and Markets Committee Projects

- The Regulatory Committee will actively support the work of the Markets Committee that involves or would help eliminate regulatory barriers and misconceptions that may impact SDR Forum members' ability to pursue new business opportunities.
- The Regulatory Committee will actively support the work of the Technical Committee that involves or would help eliminate regulatory constraints that may impact the feasibility of potential technical options.

- The Regulatory Committee will actively support the Secondary Spectrum Access Testing Task Group.
- **Define New Initiatives** The Regulatory Committee will undertake the following new activities in 2009 and 2010 in support of this objective:
 - Strategy and Preparation for 2011 World Radio Conference The Regulatory Committee will work with the CEO along with the Technical and Markets Committees to craft and implement a strategy for participation in domestic and international preparatory activities for the 2011 World Radio Conference (WRC), especially in connection with WRC agenda items related to software defined and cognitive radio systems. A recommended strategy and implementation plan will include an evaluation of, and budgetary requirements for, expanding the SDR Forum's participation in the International Telecommunications Union Radio Sector (ITU-R) and hiring an expert consultant to represent the SDR Forum at ITU-R working group meetings. The proposed strategy and plan will be presented to the Board of Directors for approval at or before the April 2009 General Meeting.
 - *Education Modules* The Regulatory Committee will work with the Education Work Group to develop and implement education modules suitable for regulatory officials. This project will be initiated by June 2009, with work expected to complete by June of 2010.

Rebranding/Grow Participation/Regional Support

- Industry Outreach The Regulatory Committee will actively engage in outreach activities to bring new members to the SDR Forum who are keenly interested in regulatory issues affecting reconfigurable radio technologies, especially WRC 2011 activities and secondary spectrum access. The Regulatory Committee's goal is to bring in at least three new member organizations by June of 2010 primarily to participate in Regulatory Committee activities.
- Member Outreach The Regulatory Committee will solicit active participation from regulatory/governmental affairs departments and other relevant groups within member organizations from each ITU region. At least one Regulatory Committee member will be assigned to monitor regulatory activities in his/her respective ITU region and report relevant information to the Regulatory Committee and the respective ITU Region Representative on the Board of Directors.
- *Regulatory Outreach* The Regulatory Committee will work with the SDR Forum membership and staff to develop opportunities to interact with key regulatory officials in conjunction with SDR Forum meetings, the SDR '09 Technical Conference and Product Exposition, agency visits, receptions or other events.
- SDR '09 Regulatory Sessions/Workshop The Regulatory Committee will work with the SDR '09 program committee to develop a complimentary regulatory track and plenary sessions for invited papers, panels and keynotes from leading regulatory experts and regulatory officials. In addition or alternatively, the Regulatory Committee will host a conference workshop during SDR '09 focused

on regulatory outreach and education. These efforts will bring industry (technical and business) together with policymakers and regulatory experts (legal and technical) together to help both groups better understand the issues and constraints associated with deploying reconfigurable radio technology on a global scale.

5 Technical Committee 2009/2010 Work Plan

The organization of the Technical Committee is presented in Figure 3. Entering 2009, the Technical Committee has eight ongoing projects that are as follows:

- "SDR Forum Report on Programmable Baseband Processing Technologies" This report is being developed by the Commercial Baseband Processing Technologies Work Group (Chair: John Glossner (Sandbridge)) to provide an overview of technologies and tools available for programmable and reconfigurable baseband solutions, educating them on what is possible, and facilitating the incorporation of SDR technologies in commercial products. This report is being developed for Handset Manufacturers, Infrastructure Manufacturers and Operators needing a clear understanding of available programmable baseband processing technologies in order to define their own roadmaps and adoption of SDR technologies.
- "Modeling Languages for Mobility" This specification is being developed by the Metalanguage for Mobility Work Group (Chair: Bruce Fette (General Dynamics C4 Systems), Co-chair: Mitch Kokar (Vistology) for developers of next generation communication systems who want to develop flexible and efficient communication protocols between advanced radio systems to support next generation features of vertical and horizontal mobility, spectrum awareness and dynamic spectrum adaption, waveform optimization, capabilities, feature exchanges, and advanced applications. The final report will include use cases, corresponding signalling plan, requirements and technical analysis of the information exchanges that enable these next generation features. It is intended to lead to specifications/standards for languages and data exchange structures to support these capabilities.
- "Software Communications Architecture Interpretation Guide" This report is being prepared by the SCA Work Group (Chair: Claude Belisle (CRC)) for the participants in the international software defined radio community where the SCA and SCA derivatives are relevant to those who need clarity on the SCA to harmonize the development of embedded system software in order to lower development and maintenance cost as well as time to market.
- "SCA WG API Implementers Aids" The SCA API Task Group (Chair: Terry Anderson, ITT Industries) will continue to develop a set of implementation aids for use by SCA radio and software developers, including an "Implementers Guide" providing a common interpretation of published SCA APIs along with hints and examples on their implementation, and additional API specifications as necessary.

- "*Test and Certification Guide for SDRs based on SCA Part 1: SCA*" This report is being developed by **The SCA Test and Certification Task Group** (Chair: Ruediger Leschhorn, Rohde and Schwarz) to analyze the paradigms and prerequisites for SCA test and certification and proposes the process to certify SCA compliance. This document is being produced for procurement authorities other than JPEO as well as producers of radios, radio components and tools, who are active in markets where the standardised SCA is relevant and who need guidance on how to establish test and certification facilities and how to develop and implement procedures for their efficient operation,
- "Security Profiles for Public Safety Radios" This specification is being prepared by the Security Work Group (Chair: William Scott (General Dynamics C4S), Vice Chair: Tony Martin (SCA Technica)) to provide a security concept of operations (CONOPS) for public safety SDR and a security profile supporting the CONOPS for public safety SDR based on the document "Securing Software Reconfigurable Communications Devices" which was completed in 2008. This specification is being created for designers, developers and manufacturers of Public Safety SDR Devices who need guidance on the process that should be followed to determine which of the security services would be appropriate and give range of sample analyses. The Security Work Group will invite participation in pre-formation meeting in San Diego for a new sub-group focused on creating a standardized security services API, providing a common software interface for accessing authentication services, cryptographic devices, etc.
- *"Test and Measurement of Unique Features for Software-Defined/Cognitive Radios"* This report is being prepared by the **Test and Measurement Task Group** (Chair: Daljeet Singh (Anritsu)) to identify the unique test challenges created by systems with SDR/CR features and propose solutions for a manageable subset of the challenges identified. The document is being developed for equipment manufacturers, test & measurement vendors, test & evaluation departments, certification authorities and end-users dealing with radio systems supporting SDR/CR features who have to deal with SDR/CR technology-driven features such as dynamic waveform activation, opportunistic scheduling, and policy based operation; features that are not seen in traditional dedicated functionality radio systems.
- *"Transceiver Facility Specification"* This specification is being prepared by the **Transceiver System Interface Task Group (TSI-TG)** (Chair: Eric Nicollet (Thales Communications)) to capture the information needed for interoperability between waveform applications and transceiver subsystems, expressed as generic and abstract requirements for properties and programming interfaces, including the associated real-time issues. This specification is being prepared for radio system integrators, waveform providers, SDR platform providers and radio head manufacturers, who seek increased efficiency when integrating waveform applications with target platforms (incl. radio heads), and who seek increased portability for their waveform applications.



Figure 3: SDR Forum Technical Committee 2009 Orgaizational Structure

The Technical Committee has established the following objectives for 2009 to support the SDR Forum's high level objectives:

• **Deliver Relevant Work Products** – The Technical Committee plans to deliver the following work products in 2009/2010 in support of this objective:

o "SDR Forum Report on Programmable Baseband Processing Technologies"

- Initial Ballot: April 2009
- Plenary Ballot: June 2009
- "Modeling Languages for Mobility Use Cases"
 - Plenary Ballot: January 2009

- o "Software Communications Architecture Interpretation Guide"
 - Initial Ballot: April 2010
 - Plenary Ballot: September 2010
- "SCA WG API Implementers Aids"
 - Initial Ballot: March 2009. Ballots will be ongoing thereafter.
- "Test and Certification Guide for SDRs based on SCA Part 1: SCA"
 - Initial Ballot: April 2009
 - Plenary Ballot: June 2009
- "Security Profiles for Public Safety Radios"
 - Initial Ballot: December 2009
 - Plenary Ballot: June 2010
- "Test and Measurement of Unique Features for Software-Defined/Cognitive Radios"
 - Plenary Ballot: January 2009
- "Transceiver Facility Specification"
 - Plenary Ballot: January 2009
- **Define New Initiatives** The Technical Committee will undertake the following new activities in 2009 in support of this objective:
 - The **Cognitive Radio Work Group (CRWG)** (Chair: Bruce Fette (GD-C4S), Co-chair: James Neel (Cognitive Radio Technologies)) intends to formally initiate a new project surveying literature from conferences and journals to identify and present quantifiable metrics that objectively measure the benefits of cognitive radio technology. Initial work on this report is expected to complete by the June 2009 SDR Forum meeting, and plenary balloting is expected to conclude in September 2009
 - The **Education Working Group** (Chair: Carl Dietrich (Virginia Tech), Vice Chair: Tim Newman (Virginia Tech)). The Education Work Group will initiate two new projects in 2009. The first will explore the creation of a standard SDR curriculum for universities around the world. The second will work to establish standard requirements for SDR platforms used for education, with the hopes of improving the quality of research platforms available to students.
 - The Meta-language for Mobility Work Group (MLM-WG) (Chair: Bruce Fette (General Dynamics C4 Systems), Co-chair: Mitch Kokar (Vistology)) intends to formally initiate a new project in 2009 looking at ontologies. Work on this specification is anticipated to complete by September 2009.
 - The **RF Technologies Task Group** (Chair: Bob Normoyle (DRS)) intends to form a new project focused on providing design aids to radio manufacturers on RF technologies operating over a broad range of spectral bands and the anticipated roadmaps for these technologies.
 - The **Security Work Group** (Chair: William Scott (General Dynamics C4S), Vice Chair: Tony Martin (SCA Technica)) intends to initiate a new project to develop a security services API for use by the international tactical radio community.
 - The **Smart Antenna Work Group (SAWG)** (Chair: Seungwon Choi (Hanyang University), Co-Chair: Jeff Reed (Virginia Tech)) will work to define next steps following the successful ballot in October of the "*Smart Antenna Specification:*

PIM and PSM for Smart Antenna" which may include establishing a certification capability for the defined API specification.

- The **Space Work Group** (Chair: Rich Reinhart (NASA Glenn Research Center), Vice Chair: Sandra Johnson (NASA Glenn Research Center)) will reform this year and initiate a new project supporting the use of SDR technologies in for space based communications.
- Additional new projects: A key objective of the Technical Committee in 2009 and 2010 in promoting the SDR Forum's 2008 to 2011 Strategic Plan is to initiate new projects through the Project Approval Committee that will attract SDR Forum members in target wireless markets. Working with the CEO, the Technical Committee will define and promote these projects and recruit participation. The Technical Committee will choose from projects such as the following, based on the level of support from member organizations in developing the documents:
 - Certification of Cognitive Radio Technologies
 - Cognitive Radio Architecture Recommendations
 - Design Processes and Tools
 - Hardware Abstraction Layer Project
 - Non-SCA Based Software Frameworks
 - Power Optimization
 - Waveform Building Blocks

Additional details on the specific work plans of the Technical Committee's various subgroups can be obtained by contacting the Technical Chair or appropriate group leader.

6 Board of Directors 2009/2010 Work Plan

A primary responsibility of the Board of Directors in 2009/2010 will be to monitor the operations of the SDR Forum and to ensure compliance with the 2008 to 2011 Strategy and this Operations Plan. Meetings of the Board of Directors will occur on the following dates:

- January 13, 2009
- January 27, 2009 (in conjunction with the General Meeting)
- February 10, 2009
- March 10, 2009
- April 21, 2009 (in conjunction with the General Meeting)
- May 12, 2009
- June 16, 2009 (in conjunction with the General Meeting)
- July 14, 2009
- August 11, 2009
- September 15, 2009 (in conjunction with the General Meeting)
- October 13, 2009
- November 10, 2009
- December 3, 2009 (following the election of directors at the Annual meeting)

The board schedule for calendar year 2010 will be set during the December 3, 2009 Board meeting.

A key role of the Board of Directors is monitoring the financial performance of the SDR Forum. This will occur under the following schedule:

- January 2009 General Meeting Review unaudited financial results for FY2008 and FY2009/FY2010 budget for approval as part of this Operations Plan
- April 2009 General Meeting Review FY2009 Q3 financial results and projections for the remainder of the year.
- June 2009 General Meeting Review FY2009 forecast and FY2010 revised projections, modifying the FY2010 budget if necessary
- September 2009 General Meeting Review FY2008 and FY2009 audited results and FY2010 revised forecast
- Annual Meeting of the Members Present FY2008 and FY2009 audited financial results to the members, present updated FY2010 projections
- January 2010 General Meeting Review results for first half of FY2010 and forecast for the remainder of the year
- April 2010 General Meeting Review results for first half of FY2010 and forecast for the remainder of the year. Begin FY2011 planning.
- June 2010 General Meeting Approve FY2011 Operation Plan and Budget and submit to the membership for approval

Additional work by the Board to monitor performance and explore strategy will be 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
- **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 SDR Forum <u>Bylaws</u>
- **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

- **Planning Committee** Provides board oversight of strategic planning process, including participating in an annual strategic review. Reviews and matures recommendations from the CEO on updates/modifications to the strategic plan, directs the CEO in specific areas to explore, and makes recommendations to the full board. Chair: Chair of the Forum
- Nominating Committee As defined in the SDR Forum <u>Bylaws</u>. The 2009 Nominating Committee will be formed by the Chair of the Board of Directors on or before the start of the September General Meeting, and will present the proposed slate of Directors to the Board at the 10 November 2009 Board meeting.

7 2009/2010 Meeting and Event Plan

7.1 2009/2010 Meetings and Workshops

The SDR Forum will host four general meetings in calendar year 2009. These meetings will act as the primary venue for advancing the work items defined in this Operations Plan, and provide a venue for outreach to potential new communities, regulatory officials and members of strategic interest. The Forum will facilitate this latter objective through a significant increase in invited speakers and through the use of workshops as defined in the Strategic Plan. The current meeting and workshop schedule for 2008 is as follows:

- <u>January Meeting</u> January 26 to 30 in San Diego, California
 - Workshop: JTRS Science and Technology Forum
- April Meeting Apr 20 to 24 in Madrid, Spain
 - Workshop: "European Reconfigurable Radio Technologies and Product Exposition"
- June Meeting June 15 to 18 in Dearborn, Michigan
 - Workshop Option 1: SDR in Vehicle Telematics and Intelligent Transportation Systems
 - Workshop Option 2: SDR in Public Safety
- September Meeting September 14 to 17 in San Jose, California
 - Workshop: Waveform Intellectual Property for Rapid Application Development

The draft agenda for each of these meetings will be posted within one week of the completion of the previous meeting, following the SDR Forum's meeting policies and procedures. Meeting locations for Calendar Year 2010 will be announced at least 9 months in advance.

Satisfaction surveys taken at SDR Forum meetings in 2008 indicate an average overall experience rating of 7.51 out of 10. The SDR Forum's officers will continue to evaluate meeting feedback, and make adjustments in meeting format, facilities and services to improve satisfaction by at least 5 percent (8.01 out of 10) in FY2010.

7.2 SDR '09 Technical Conference and Product Exposition

The annual Technical Conference and Product Exposition will be held on 1-4 December in Arlington, VA. Key personnel supporting the operation of the SDR '09 Conference are as follows:

- General Conference Management: Lee Pucker
- General Program Chair: Bruce Fette
- Conference Logistics and Operations: Al Margulies
- Sponsorships and Exhibitions: Al Margulies
- Media Relations: Stephanie Hamill

The technical program will include technical paper presentations on Tuesday, Wednesday, and Thursday and tutorials on Friday. The schedule for the conference is as follows:

•	Call for Papers Issued:	05 Jan 2009
•	Abstract Submission Due for Papers:	20 Mar 2009
•	Abstract Review Complete and Requests for Full Papers Issued:	17 Apr 2009
•	Tutorial and Workshop Proposals Due:	17 Apr 2009
•	Notifications of Acceptance on Tutorials and Workshops:	12 Jun 2009
•	Demonstration Proposals Due:	12 Jun 2009
•	Full Papers Due:	17 Jul 2009
•	Final Notification of Acceptance of Demos:	17 Jul 2009
•	Paper Review Complete and Notification of Acceptance	01 Aug 2009
•	Final Papers, Presentations and Tutorials Due:	02 Oct 2009

The Product Exhibition at SDR '09 will be on Wednesday and Thursday, and there will be a reception in the exhibit area on Wednesday evening. The traditional welcome reception for SDR 09 will be on Tuesday night and a members-only reception will be held on Thursday evening in advance of the Forum's annual business meeting.

Several improvements will be made in SDR '09 based on feedback received in SDR '08 to improve the quality of the conference for SDR Forum members and guests. The average score for "Overall Conference Experience" at SDR 08 was 7.75 out of 10, and the goal of the SDR Forum is to raise this score by at least 5 percent (8.25 out of 10) at SDR '09. Improvements that will be made include:

- Expanded conference committee and paper review process to improve the quality of the technical program
- Simplified registration and paper submittal process
- Expanded use of workshops to focus on non-technical areas important to SDR Forum members, including a return of the market analysis and regulatory workshops
- Improved organization of the show guide and inclusion of a pocket session guide
- Better communication on schedule changes as they occur

The SDR Forum will also evaluate whether to move from a volunteer instructor to a paid instructor model for tutorials to improve their educational value.

Marketing plans for SDR '08 are discussed in Section 8.3.1.1 of this Operations Plan.

7.3 Annual Meeting of the Members

The Annual Meeting of the Members, as described in the SDR Forum <u>Bylaws</u> will be held on Thursday, December 3^{rd} 2009 in Crystal City, Virginia in conjunction with the SDR '09 Conference.

7.4 SDR '10 Technical Conference and Product Exposition

The SDR Forum will announce the location and schedule for SDR '10 during SDR '09.

7.5 European Reconfigurable Radio Technologies Workshop and Product Exposition

On 22-24 April 2009, a reconfigurable radio technologies workshop and product expo will be held at the Hotel Cuzco in Madrid Spain under the sponsorship of Indra Sistemas. This workshop will be held in conjunction with the Forum's 62^{nd} General Meeting which will occur from April 20th to 22^{nd} and will be similar in scope to the SDR Forum's annual technical conference but smaller in size.

7.6 Smart Radio Challenge

The SDR Forum intends to manage the next Smart Radio Challenge as a revenue neutral project. Toward that end, SDR Forum staff will work in the first quarter of calendar year 2009 to secure commitments for sponsorships, grants, and other funds in excess of the \$75,000 cost that are historically accrued by the SDR Forum for management, promotion and scholarship awards with each challenge. Should the SDR Forum be able to raise sufficient funds to offset these costs, the next smart radio challenge will be held under the following schedule:

•	Announcement of the next Challenge	2 March 2009
٠	Request for proposals issued	6 April 2009
٠	Proposals due	1 May 2009
٠	Announcement of contestants	17 June 2009
•	Judging	June 2010

8 SDR Forum Corporate Administration Work Plan

8.1 Meetings and Events

The successful operation of the SDR Forum is dependent upon having an effective infrastructure and set of tools to support the membership in collaborating to achieve their combined objectives. Accordingly, through FY2009 and 2010, The SDR Forum's operations staff will make continuing improvements in the Forum's support infrastructure to improve the efficiency in which our members operate at SDR Forum meetings and events.

8.1.1 Meeting Planning and Management

SDR Forum staff will fully support the SDR Forum's 2009/2010 Meeting and Event Plan, as defined in Section 7 of this operations plan, to include working with the Forum's officers and group leaders to craft and post meeting agendas within one week of the previous meeting and to maintain that agenda as changes occur. SDR Forum staff will also continue to conduct surveys of attendees during each meeting and workshop to help improve the overall value of each meeting to the SDR Forum's members. The results of these surveys are fed back to the SDR Forum's officers with recommendations as appropriate.

During the first quarter of 2009, The SDR Forum will establish the meeting schedule for 2010. Based on that schedule, SDR Forum staff will distribute requests for proposals to appropriate meeting venues, do site inspections and negotiate contracts with the goal of having firm commitments for meeting locations at least 9 months in advance of each meeting

8.1.2 Electronic Meetings and Online Collaboration Tools

Much of the work of the SDR Forum's members is done using electronic means, including teleconferences, web conferences, and online discussion forums. In 2008, the SDR Forum added a number of services to facilitate electronic meetings, including web conferencing services and a new group portal to share files and facilitate the development of documents. In FY2009/2010, The SDR Forum will build on these tools to improve their efficacy in supporting The SDR Forum's members' needs. In defining potential improvements, members of the SDR Forum staff will periodically contact the Committee chairs and work group leaders to review the utilization of the group portal, the SDR Forum teleconferencing services, and the SDR Forum web conferencing facilities, and then investigating new options that will make collaboration between members using these tools more efficient.

8.1.3 Meeting automation

The SDR Forum will evaluate, select, and implement web-based applications for attendee meeting registration and for technical conference paper submission processes in order to reduce response times and improve accuracy. Using these new tools, registration applications will automatically process credit card payments and generate receipts for attendees in real-time. The paper submission tools will automatically accept abstracts and papers and will facilitate tracking and review of papers. This will improve the efficiency of managing the program and will result in a better experience for conference attendees. The abstract and paper submission process utilizing these new tools will be in place in time for the SDR09 Call for Papers announcement, and the automated meeting registration application will be implemented by the end of January 2009 in support of the April General Meeting.

In addition, the SDR Forum will review the means for sharing documents at meetings (the "drop box") in order to have documents and presentations available in a more timely manner. This may mean a change in procedures, i.e., a different method of gathering files, and/or a change in technology, such as a local storage device for the files; this evaluation will be completed by the end of the first quarter of CY2009.

8.2 Other Member Support and Services

The SDR Forum will continue to improve the Member Services and Fulfillment Functions of the Forum in order to provide an environment that supports our members' activities. We will investigate methods to enhance our internal processes and procedures to increase efficiency and responsiveness to member requests. To that end, we will attempt to determine our members' expectations, and then we will evaluate our customer service functions and explore metrics to assess our effectiveness. These metrics might include such items as: timeliness, customer satisfaction, and effectiveness

8.2.1 Support for New Project Initiation

The SDR Forum staff will work with the Forum's group leaders and potential group leaders to speed the project initiation process. Activities in this area will include establishing a central "new project" repository which will hold draft project policies and procedures, document templates and style sheets, project proposal templates, and other tools that are required on the front end of any project. Forum staff will also work with group leaders to identify and secure committed contributors for their projects, including providing personal outreach to potential contributors and utilizing project promotional vehicles such as media releases and project flyers/datasheets to reach potential contributors in the broader community.

8.2.2 Document Advancement and Electronic Balloting

In 2008, the SDR Forum worked to streamline the document development process from inception through balloting. This included creating a transparent document tracking process to allow both the SDR Forum staff and group leaders to better manage documents as they move through the balloting process, and securing editorial support to improve the overall quality of the documents produced. In FY2009/2010, the SDR Forum will work to continually improve document development and advancement in support of its members. These efforts will include periodically contacting Committee chairs and work group leaders to discuss the adequacy of existing procedures and whether or not they need to be modified in order to make the document approval process more efficient. In addition, the SDR Forum will explore automated ballot applications/options to make the document approval process more efficient and user-friendly.

8.2.3 Member Discounts

The SDR Forum will expand its pursuit of member discounts on behalf of its members, to include Market Studies, Conference Fees, Educational Materials, Training, etc.

8.2.4 Product and Services Directory

In 2008 the SDR Forum launched an online Member Products and Services Directory centered around the SDR Value Chain (<u>http://sdrforum.org/pages/aboutSdrTech/product_directory.asp</u>). In FY2009/2010 The SDR Forum will work to expand participation in this program by promoting this free advertising service to our members and by building the ad content provided by and representative of our membership. The Forum will also work to increase the value of this service through search engine optimization (SEO) and other promotion vehicles.

8.2.5 "SDR in the News" eNewsletter

In 2008, the SDR Forum expanded the content of its members' only "SDR in the News" eNewsletter to include member opportunities, ballot announcements and other calls for participation. The SDR Forum will continue to expand and improve the content of its eNewsletter in FY2009/2010, including providing more relevant information for ITU Region 1 and ITU Region 3 members. The SDR Forum will also undertake a rebranding effort on the newsletter to reflect the expansion.

8.2.6 SDR Forum Awards

In FY2009, the SDR Forum will explore improvements in the SDR Achievement Awards program, to include streamlining the nomination process and establishing new awards categories such as "SDR Forum Product of the Year".

8.2.7 SDR Experts Program

In FY2009, the SDR Forum will establish an "SDR Experts" program, soliciting member representatives who will volunteer to act as "Subject Matter Experts" in a specific technical, business, or policy area of their choice. "SDR Experts" will be "go to" people for press interviews, and will be promoted in expert source placement services such as "ProfNet", leveraging their expertise to help legitimize Forum activities and positions. As a part of this program, the Forum may establish "Ask the Expert" discussion forums and SDR Experts blogs for education and support of SDR Forum members and the broader reconfigurable radio community.

8.2.8 SDR Forum eJournal

The SDR Forum will evaluate establishing a professional eJournal in FY2009 to showcase technical, business and policy papers developed by member representatives that are deemed to be of high value to the community. Included in this evaluation will be an exploration of the business model associated with the Journal and the requirements for editorial review. The goal in establishing this Journal would be to remain at least revenue neutral, meaning that the eJournal is self funding with no net impact on SDR Forum finances. A proposal for the SDR Forum eJournal will be made to the SDR Forum Board of Directors by no later than the June 2009 General Meeting, and should such a journal move forward, it will be launched in FY2010.

8.2.9 Resume Service

The SDR Forum will evaluate establishing a resume board for individuals seeking employment in the SDR community to post their resumes. Resumes may come from anywhere in the community, but will be available to SDR Forum members only.

8.2.10 Member Interviews

The SDR Forum will continue to conduct formal interviews with members, potential members and past members. This information will be used to refine the Forum's value proposition and will act as input to an update to the SDR Forum Strategic Plan to be presented to the Board of Directors for approval at the September General Meeting. The objective of the Forum will be to interview at least 10 members per quarter.

8.3 Marketing and Business Development Plan

8.3.1 High Level Marketing Plan

A detailed marketing plan has been developed to promote the SDR Forum's high level objectives in 2009. Highlights of this plan are provided in the following sections.

8.3.1.1 Technical Conference

SDR'08 had 30 percent higher registered attendance than SDR'07. The split between members and non-members was nearly 50-50, and several membership leads were achieved via the conference survey. To grow the conference further, The SDR Forum will expand conference marketing to include the following:

- Expand media and technical co-sponsorships to outreach in target markets. This includes obtaining at least one media sponsor in a relevant European market
- Evaluate and improve effectiveness of SDR'08 site and mould SDR'09 to incorporate improvements, ease of use, etc.
- Utilize SDR'08 survey results to improve marketing collateral, such as the Show Guide.
- Increase distribution of marketing collateral at trade shows and conferences.
- Evaluate and optimize electronic event marketing to improve reach without spamming, to include exploring the use of Google Ad words, etc.

8.3.1.2 Project Promotion

The SDR Forum will significantly expand its promotional efforts related to SDR Forum member activities in FY2009 and FY2010. This expansion will include exploring project promotion vehicles (media releases, flyers) that actively market member projects, soliciting and placing articles on member projects in relevant trade journals, and enhanced promotion of member projects through direct eMail campaigns.

8.3.1.3 Meeting Promotion

SDR Forum General Meetings are the Working Meeting of the SDR Forum, providing a primary venue for advancing the SDR Forum Operations Plan, for networking, and for information dissemination. Participation in these working meetings in 2008 was, on average, up by 10% year over year from 2007. In FY2009 and FY2010, the SDR Forum will work to continue this growth through expanded marketing communications that will include:

- Meeting promotion vehicles including releases and ads via media sponsors
- Direct email campaigns highlighting meeting activities and events
- Project promotion vehicles (media releases, flyers) that actively market highlights of member projects associated with each meeting and promote meetings where the new project groups are forming

8.3.1.4 Web Site Update

In 2008, The SDR Forum undertook a project update the SDR Forum's website to better align it with the new strategic plan and to better support the SDR Forum's members and customers. The goal of the SDR Forum in making these updates is to establish the Forum's website as the "go

to" resource for the SDR Forum's members and the community as a whole. In FY2009 and 2010, the SDR Forum will poll its members to evaluate the quality of the Forum web site and look for avenues of improvement. Other initiatives that will be undertaken in 2009 will include:

- Researching and employing effective search engine optimization (SEO) tactics to increase the effectiveness of the Forum site.
- Establishing and maintaining a current projects list on the website as a way of letting the community know the projects that the SDR Forum is working on and tracking their progress. This list will be updated following each General Meeting.

8.3.1.5 Other Collateral

The SDR Forum will also produce a number of other marketing materials throughout the FY2009/2010 period, including:

- Press kits highlighting SDR Forum member accomplishments
- Membership kits that can be used in recruiting new members
- Welcome kits for new members
- An updated corporate presentation that can be tailored for use by members in a variety of different venues
- Updated templates to allow members to produce more professional looking SDR Forum documents and presentations
- A new corporate brochure reflecting the updated strategic plan

8.3.2 Outreach and Business Development

8.3.2.1 Speaking Opportunities

The SDR Forum will pursue a number of speaking opportunities in 2009/2010. The Forum will use these engagements to promote the 2008 to 2011 Strategic Plan, the SDR Forum 2009 Operations Plan, as well as to explore new opportunities and to solicit new members.

8.3.2.2 Conferences and Tradeshow

The SDR Forum, working in conjunction with the Markets Committee, will explore participation in other tradeshows to promote the SDR Forum and its members. Participation may include exhibiting and/or establishing an SDR "Show within a Show" promoting the activities of the SDR Forum and supporting forum members in identifying new opportunities. Conferences and tradeshows that will be evaluated will include:

- IDGA Software Radio Summit (February 23 to 26 in Washington)
- Mobile World Congress (February 16 to 19 in Barcelona)
- CTIA Wireless 2009 (April 1st to 3rd in Las Vegas)
- IEEK Conference (May)
- SMi Software Radio Conference (June)
- IEICE Technical Conference (July)
- MILCOM 2009 (October 19 to 21 in Boston)
- IQPC SDR Europe Conference (December 2009)
- IEEE DySPAN (April 2010 in Singapore)

8.3.2.3 Partner Relationships

The SDR Forum will continue to foster and expand collaborative relationships with partner organizations and programs to promote its organizational objectives. This list of organizations will include the JTRS Program, the E3 Program, EDA, ETSI, NATO, IEICE, IEEE, OMG, and VITA. In 2009, the SDR Forum will also explore new relationships with organizations such as the DHS, ITS America, ITS UK, InnovITS, the Scope Alliance, the Service Availability Forum, and the Mobile Industry Processor Interface Alliance.

8.3.2.4 Market Segmentation

During Calendar Year 2009, the SDR Forum will undertake a market segmentation study to identify markets where SDR and CR technologies may provide significant benefit, to size those markets, and to identify market segments where the SDR Forum may provide benefit. Market segmentation may be based on both primary and secondary market research, and will identification potential member companies for the SDR Forum.

8.4 Other Corporate Administration

The SDR 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.

8.5 2009 Planning Cycle

The SDR Forum will develop and present a revised Strategic Plan to the Board of Directors for approval at the January 2010 General Meeting. This revised plan will compensate for any deficiencies found in the 2007 plan, and will include strategies under development in the 2009 time frame. Based on this revised strategy, the 2011 Operation Plan will be developed and presented to the Board of Directors for approval during the June 2010 Board Meeting, and will be submitted to the membership for final approval at the June 2010 General Meeting.