



Project List for the SDR Forum 63rd General Meeting 15 June 2009

The following defines the projects that will be worked by the SDR Forum's members through the 63rd General Meeting of the SDR Forum in Dearborn, Michigan. Projects are organized by committee:

Markets Committee – Chair: Manuel Uhm (Xilinx)

- **Public Safety Special Interest Group (PS-SIG)** – Chair: Fred Frantz ([L3 Communications](#)), Vice Chair: Richard Taylor ([Tyco Electronics](#)). The PS-SIG will continue to develop their report entitled “**Use Cases for Cognitive Radio Technology in Public Safety Systems Part 2 – Chemical Plant Scenario**” that 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. The PS-SIG will also meet jointly with the Cognitive Radio Work Group to collaborate on the development of a new project proposal exploring information process architectures and will independently explore other new areas for collaboration.
- **International Radio Special Interest Group (ITR-SIG)** – Chair: Rafael Aguado Muñoz, ([Indra Sistemas](#)), Vice Chair: Jimmie Marks ([Raytheon](#)). The ITR-SIG will continue work on their report entitled “**Issues in the International Tactical Radio Market Domain**”, 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.
- **SATCOM Special Interest Group** – Chair: Bob Schutz ([ViaSAT](#)): The SATCOM SIG will be finalizing proposals for two projects:
 - A “**SATCOM User Survey**”, which is being produced for SATCOM Service and Equipment Providers and will evaluate market trends and directions as they relate to users of Satellite communications, illustrating areas where current SATCOM systems fail to meet user needs and expectations, identifying user expectations for advanced SATCOM systems, and identifying market needs that can be uniquely addressed by employment (use) of SDR and CR technology.
 - A “**Study C-Band spectrum sharing techniques between SATCOM and Terrestrial users based on SDR and CR Technology**”, which is being produced for Terrestrial WiMAX Service Providers and Spectrum Regulators and evaluates the use of SDR and CR technology in WiMax and SATCOM terminals, allowing them to sense and avoid spectral interference with SATCOM and WiMax terminals and base station, facilitating shared use of C-Band spectrum in a non-interference basis.



**Regulatory Committee – Chair: Peter Tenhula ([Shared Spectrum Company](#)),
Vice Chair: Paul Kolodzy ([Kolodzy Consulting](#))**

- The regulatory committee will work to finalize the document entitled “**Regulatory Recommendation on Technology and Application Neutrality**” for SDR Forum Plenary Balloting
- The Regulatory Committee will coordinate with the Technical and Markets committees to define a strategy for WRC-2011 to be approved by the board of directors on or before the June General Meeting.

Technical Committee – Chair: Claude Belisle ([CRC](#)), Vice Chair: Eric Nicollet ([Thales](#))

- **Cognitive Radio Work Group (CRWG)** – Chair: James Neel ([Cognitive Radio Technologies](#)), Vice-chair: Ihsan Akbar ([Tyco Electronics](#)). The CRWG will continue to work on the report entitled “**Quantifying the Benefits of Cognitive Radio**”. This report is being developed for the world wide telecommunications and spectrum community who need to understand the benefits of using cognitive radio technologies in next generation wireless systems. The report will act as a contribution to the ITU-R and lays the groundwork for regulatory organizations to understand the benefits and system design choices associated with cognitive radio technologies. In addition, the CRWG will initiate work on the “**Cognitive Radio Database (CRDB) – a Radio Environment Map (REM) anticipating future CR needs**”. This specification is being produced for third party database providers and white space radio manufacturers to provide about database structures and standardized formats and functionalities that supports the flexibility necessary to accommodate current and future cognitive radio spectrum applications, such as mobility, spectrum economic transactions, dropouts, handovers, available networks, and services, etc.
- **Commercial Baseband Processing Technologies Work Group** – Chair: John Glossner ([Sandbridge](#)). This group will continue development of the report entitled “**SDR Forum Report on Programmable Baseband Processing Technologies**”, which is being developed 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 Language for Mobility Work Group (MLM-WG)** – Chair: Mitch Kokar ([Vistology](#)), Vice Chair: Vince Kovarik ([Harris](#)). The MLM-WG will continue work on their report entitled “**Modeling Languages for Mobility**”. This specification is being developed 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, an ontology for mobility, corresponding signalling plan, requirements and technical analysis of the information exchanges that enable these next generation features and is intended to lead to specifications/standards for languages and data exchange structures to support these capabilities. The main focus of the June meeting will be the ontology.

- **RF Technologies Task Group** – Chair: Bob Normoyle ([DRS](#)). The RF Technologies Task Group will hold a formation meeting to discuss proposed work items for 2009.
- **SCA Work Group** – Chair: Claude Belisle ([CRC](#)). The SCA Work Group will continue development of their document entitled “**Software Communications Architecture Interpretation Guide**”. This report is being prepared for the participants in the international software defined radio community where the SCA and SCA derivatives are of relevant 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. In addition, two subgroups of the SCA Work Group will be meeting:
 - The SCA API Task Group (Chair: Terry Anderson, [ITT Industries](#)) will continue to develop the “**SCA WG API Implementers Aids**”, which are being developed to give SCA radio and software developers an “*Implementers Guide*” providing a common interpretation of published SCA APIs along with hints and examples on their implementation, and filling in additional API specifications as necessary.
 - The SCA Test and Certification Task Group (Chair: Ruediger Leschhorn, [Rohde and Schwarz](#)) will evaluate their next steps after the successful ballot of their document entitled “**Test and Certification Guide for SDRs based on SCA Part 1: SCA**”. This report analyzes the paradigms and prerequisites 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 how to establish test and certification facilities and how to develop and implement procedures for their efficient operation,
- **Security Work Group (SecWG)** – Chair: William Scott ([GD-C4S](#)), Vice Chair: Tony Martin ([SCA Technica](#)). The Security Work Group will continue to work on their specification entitled “**Security Profiles for Public Safety Radios**” which will provide a security concept of operations (CONOPS) for public safety SDR and produce a security profile for public safety SDR based on the specification “**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 SecWG 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.
 - The International Security Services API Task Group of the Security Work Group (Chair: Tim Newman, [Virginia Tech](#), Co-Chair: Daniele Olmisani, [Selex](#)) will formally kick off their project to develop an “International Security Services API”. This specification is being developed for nations, international organizations and companies who need software interoperability and portability between international and independently developed software radios. The international radio security services API will specify how to interface and operate with a common set of radio security services improving interoperability and portability of software through the use of a common open software architecture.
- **Smart Antenna Work Group (SAWG)** – Chair: Seungwon Choi ([Hanyang University](#)). The SAWG will be meeting to define next steps following the successful ballot of the “**Smart Antenna Specification: PIM and PSM for Smart Antenna**”.



- **Test and Measurement Task Group (T&M-TG)** – Chair: Bob Cutler ([Agilent](#)) will evaluate next steps toward completing their document entitled “**Test and Measurement of Unique Features for Software-Defined/Cognitive Radios**” for balloting. This document identifies the unique test challenges created by systems with SDR/CR features and proposes solutions for a manageable subset of the challenges identified and 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 System Interface Task Group (TSI-TG)** – Chair: Eric Nicollet ([Thales Communications](#)). The TSI-TG will begin work on revisions to the “**Transceiver Facility Specification**”, which captures 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. The TSI-TG will also work with the SCA Work Group to create an SCA specific version of the transceiver specification.

Additional information on ongoing projects can be found at:

http://www.sdrforum.org/pages/aboutTheForum/SDRForum_2009_Operations_Plan-Public.pdf

The teleconference schedule for these groups can be found here:

<http://www.sdrforum.org/pages/aboutTheForum/teleconfSchedule.asp>