

Minutes of the 66th General Meeting of the Wireless Innovation Forum 21 to 23 June 2010

The 66th General Meeting of The Wireless Innovation Forum (SDR Forum version 2.0) was held 21 to 23 June, 2010 in Mainz, Germany. The meeting was hosted by the German Federal Networks Agency. This document provides the minutes of the Forum's meeting.

The drop box for this meeting can be found at: http://groups.winnforum.org/p/do/si/topic=366

The drop box is accessible to Forum members only.

The feedback form for this meeting can be found at (feedback is still welcome): http://www.wirelessinnovation.org/page/66meetingsurvey

Opening Plenary: Monday 21 June 2010

The meeting was called to order at 12:00 PM by the Chair of the Forum, Mr. Bruce Oberlies. Meeting announcements were made and an introduction was given to the Security Work Group Document "Securing Software Reconfigurable Communications Devices" (document WINNF-08-S-0013) to be balloted at the Plenary level on Wednesday. Following this introduction, Mr. Oberlies initiated a review of the agenda for the 66th General Meeting and adjustments were made based on feedback received. Following this review, Mr. Oberlies recessed the Plenary until Wednesday at 08:30. The meeting was adjourned at 13:00.

Key Accomplishments in Mainz

The following defines the key decisions and milestones achieved in Mainz, organized by committee. Information on specific projects in development can be found at:

http://www.wirelessinnovation.org/page/Current Projects

User Requirements Committee Meeting Minutes

• *SDR'10 Workshops Planned* – The User Requirements Committee met in Plenary session on Tuesday, 22 June 2010. During this session, they continued to organize workshops to be held in conjunction with SDR'10 on Tactical Radio and Public Safety communications. They will also organize an Analyst workshop as they have done the following two years covering both existing and emerging markets. In addition, during the plenary session the User Requirements Committee discussed plans for the market sizing report on mature industries



- including commercial wireless infrastructure, MILCOM, public safety and SATCOM. A analysts has been found to perform the study and the next step is to develop a statement of work and put together a project proposal.
- *History of the Public Safety Special Interest Group Presented* Mr. Rick Taylor, representing Harris Corporation, provided an overview of the charter, scope, and history (including approved documents) of the PSSIG to the attendees of the meeting, most of which were not familiar with the group.
- *Technology Survey Project Matured* The Public Safety Special Interest Group worked on editing the functional requirements identified in the Request for Information to be distributed to industry.
- "Hybrid SATCOM Reference Architecture for Public Safety Applications" Project Proposal Approved The SATCOM Survey results were presented by Mr. Bob Schutz, representing Datron World Communications to the SATCOM Special Interest Group (SATCOM-SIG). Based on the results, the SIG finalized a proposal for the development of a Hybrid SATCOM Reference Architecture for Public Safety Applications. The proposal was reviewed and approved, with modification to narrow the scope, by the Project Approval Committee.
- "Issues in the International Tactical Radio Market Domain" matured The International Tactical Radio Special Interest Group (ITR-SIG) reviewed this document and agreed to split the document into three sections:
 - US and European market analysis, to be led by Randy Navarro representing SAIC
 - o Certification, to be led by Rafael Aguado representing Indra
 - Interoperable communications, to be led by Dave Murotake representing SCA Technica

Work plans to complete these documents by the September meeting were established, and plans began on a follow on projects.

Regulatory Committee Meeting Minutes

- *Plans for Q1 FY2011 Set* The Regulatory Committee reviewed the FY2011 Operations plan and discussed actions for the next quarter to include:
 - Submitting outlines for SDR'10 Workshop
 - Supporting the Committee on Advanced Wireless networking and Infrastructure in finalizing and hosting TVWS Workshop
 - o Issuing an RFP for regulatory counsel
 - Issuing Regulatory Survey to membership
 - o Issuing Regulatory alerts as appropriate
 - Supporting the Roadmap Committee
 - o Conducting Regular Conference Calls



Committee on Next Generation Radio Technology Meeting Minutes

- "Business Models for Open Source Air Interfaces" matured The Commercial Baseband Processing Technologies Workgroup (CBPT-WG) made significant progress on this report, providing updates that include:
 - Network Architecture overview
 - Market overview
 - o IP issues (patents) related to proliferation
 - o Types of open source licenses
 - Several business models
- Security Work Group
 - "Securing Software Reconfigurable Communications Devices-Part 2"project proposal presented – Revised PAC proposal concerning developing security requirements profiles for Public Safety Radios was presented to the Security Work Group by Mr. John Fitton, representing Harris Corporation.
 - International Security Services API (ISS-API) Project Plan Updated –
 Proposed updates to the project plans were presented to the ISS-API task
 group by Mr. Mark Turner, representing Harris Corporation. These
 updates include:
 - Incremental, parallel development (top-down and bottom-up)
 - Security service oriented work package structure focused on waveforms APIs (5 individual work packages)
 - Top-down: Use and requirements development (with ITR-SIG)
 - Bottom-Up: API development (with SCA API WG)

The draft project schedule was also reviewed, a multi-surface model that facilitates both open standardization (category 1) and protected interests (categories 2/3) was presented, candidate API guiding principles/best practices were reviewed, and the CICM specification summary was reviewed. Plans were set to continue development in a weekly teleconference to occur on Wednesdays.

• Transceiver Facility Work Group

Reference Implementations of the Specification explored –
Representatives from Hanyang University presented a reference
implementation on the transceiver facility specification to the Transceiver
Facility Specification Work Group that was developed in their labs.
Representatives from Thales offered that they were also working on a
reference implementation and is considering releasing it.

Its impact on maturing the Transceiver Facility Specification version 2.0 was evaluated.

- o *Detailed Implementation Feedback from EULER* An exhaustive presentation was made by representatives from THALES concerning the implementation feedback gathered from implementation realized for WiMax in the EULER project. Includes:
 - Spotting of ambiguities within the specification,
 - 9 detailed WiMAX use cases relative to Time management,



- Implementation approach.
- Discussion on Functional Configuration Profiles A discussion was also held by the work group on specification of "Functional Configuration profiles" describing how the Transceiver should behave in the case of standard waveforms being implemented following the Facility Paradigm.
- o *Plans regarding v2.0* Need to release in September a V1.3 document ready to enter ballot process was identified. This to maintain synchronisation with the developing interest reported (e.g. Korea).
- Need to establish liaison agreement with TTA Need to establish a liaison agreement with Korean national standardisation institute TTA was identified, based on the report that group PG705-1 dedicated to Smart Antenna for SDR was being created.

Committee on Advanced Wireless Networking and Infrastructure Meeting Minutes

- Voting process for Information Process Architecture Volume 1 set In a joint meeting between the Cognitive Radio Work Group and the Public Safety Special Interest Group, the joint voting process for this document at the group level was set. The groups agreed to include independent voting and joint approval of comment resolutions. The groups will work to clean up the document in the next few weeks and then begin the ballot process.
- "Test Guidelines for Secondary Spectrum Access" matured The document was reviewed by the Test and Measurement Work Group (TMWG) for new members, and work continued on finalizing the "completed" sections, on identifying tests required based on FCC rules and on documenting test implementation issues. During the meeting, the decision was made to define the test requirements, but delay writing the tests until after the first publication. Accordingly, the group will:
 - o Finish sections 1-6 and circulate within TMWG
 - When section 7 is complete, socialize with other groups and begin the ballot process
- *Modeling Language for Mobility (MLM) ontology matured* The Ontology document was reviewed by the MLM work group, and group read through and edited the document to prepare it for vote by the Forum

Coordinating Committee on International SCA Standards Meeting Minutes

• *Election Process for Executive Board Set* – In Plenary session of the Coordinating Committee on International SCA Standards agreed to proceed with



- the election of the Executive Board for the Steering Group as defined in the letter that was sent. The Committee further agreed to allow the elected members of the Executive Board to self organize once elected.
- Work on SCA Next to Resume The SCA Next Work decided to resume meeting on a bi-weekly basis to prepare for the SCA Next Roll Out meeting August 24 and 25 and to explore the Asynchronous Messaging proposal submitted by Mr. Eric Christensen representing General Dynamics.
- "SCA Certification Guide #2 SCA Test, Evaluation and Certification Model Realization" Project Proposal Finalized This recommendation is being developed by the SCA Test and Certification Work Group to define the realization aspects (including business models) of the role based, generic certification process of SCA based SDRs, as defined in "Test and Certification Guide for SDRs based on SCA, Part 1: SCA" (SDRF-08-P-0007-V1.0.0). The project proposal was approved by the work group and will be submitted to the CC SCA Steering Group for approval.

Roadmap Committee Minutes

• Wiki To Be Developed to define "Top 10 Most Wanted Wireless Innovations" — The Roadmap Committee agreed to "crowdsource" the development of the top 10 list through the use of a Wiki. This Wiki will have a standard template describing the domain the challenges or problems, and the solutions needed to address them. Technical WG and SIG chairs will provide contributions based on their groups work, and an RFI will be issued to allow contributions from the public.

Other Highlights of the 66th General Meeting

EU Project Review – A review of EU Cognitive Radio projects was given to the Cognitive Radio Work Group including the following 4 presentations:

- Cognitive Radio / Software Defined Radio Research Activities Overview at RTWH Aachen, presented by Venkatesh Ramakrishnan, RTWH Aachen
- Cognitive Radio Activities in SUPELEC SCEE team, presented by Patricia Kaiser, Supelec
- OneFIT project (Opportunistic networks and cognitive management systems for efficient application provision in the Future Internet), presented by Kamran Arshad, University of Surrey
- CTVR: The Telecommunications Research Centre, presented by James Neel, Cognitive Radio Technologies for Paul Sutton, Trinity College Dublin)

Policy Information Processing Exchange Systems (PIPES) Architecture – A presentation was made on the PIPES architecture by Mr. Bob Schutz representing Datron World Communications



European Project WOLF – A presentation was made on the European project Wolf, addressing military communications in an urban environment, by Mr. Eric Nicollet representing Thales Communications

COST IC0905 TERRA MoU – Mr. Keith Nolan, representing CTVR, presented an overview of the COST-TERRA Program. This program is funded under an the European Cooperation in Science and Technology program, which is an instrument of the European Science Foundation, and is focused on developing a "Techno-Economic Regulatory Framework for Radio Spectrum Access for Cognitive Radio/Software Defined Radio". Following the presentation by Mr. Nolan, a Memorandum of Understanding was signed between the COST-TERRA program and the Wireless Innovation program allowing collaboration in areas of benefit to both parties.

ETSI Technical Committee of Reconfigurable Radio Systems – a presentation was made by Paul Bender of the Federal Networks Agency on behalf of the ETSI-TC RRS presenting an overview of the Committee and potential collaboration with the Forum.

Regional reports were also presented from representatives from ITU regions 1, 2, and 3 as well as a liaison report on relevant activities from representatives of EDA during an open Plenary Session on Wednesday, 23 June 2010.

Closing Plenary – Wednesday, 23 June 2010

The meeting was recalled to order at 8:30 hours by Mr. Bruce Oberlies. It was determined at this time that a quorum was not present, so Mr. Oberlies announced that the Security Work Group Document would be managed via email ballot, and that other business would be deferred until the September meeting in Schaumburg, Illinois.

Out Briefs – Out briefs were given on the outcomes of the Mainz meeting by the chairs of the Technical Committees, the Roadmap Committee, the User Requirements Committee, and the Regulatory Committee.

IPR Policy Training – Training on the Forum's IPR Policy was given by Mr. Lee Pucker. It was agreed that this training would be repeated during plenary session in Schaumberg.

FY2011 Operations Plan – The FY2011 Operations Plan and Budget was presented by Mr. Lee Pucker. The plan will be sent to the members immediately following the 66th meeting for ballot approval of the proposed budget.

Close of the 66th General Meeting – Following presentation operations plan, Mr. Oberlies adjourned the meeting. The meet closed at 10:30 hours.