



Annual Report

for

The Software Defined Radio Forum Inc.,
doing business as
The Wireless Innovation Forum

for the Year Ending
30 June 2010



ABOUT THE WIRELESS INNOVATION FORUM

Established in 1996, the Wireless Innovation Forum™ is a non-profit “mutual benefit corporation” dedicated to driving technology innovation in commercial, civil, and defense communications around the world. Forum members bring a broad base of experience in Software Defined Radio (SDR), Cognitive Radio (CR) and Dynamic Spectrum Access (DSA) technologies in diverse markets and at all levels of the wireless value chain to address emerging wireless communications requirements through enhanced value, reduced total life cost of ownership, and accelerated deployment of standardized families of products, technologies, and services. The Forum acts as the premier venue for its members to collaborate to achieve these objectives, providing opportunities to network with customers, partners and competitors, educate decision makers, develop and expand markets and advance relevant technologies.

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FORWARD BY THE CHAIR OF THE FORUM

As I look back over the past year I am impressed at the accomplishments of the members and stakeholders of the Forum. 2010 has really been an exciting and productive year. We ended last year with the Forum's members embracing and approving the new strategy rebranding the Forum as the Wireless Innovation Forum. The Coordinating Committee on International SCA standards was formed and hit the ground running. Major steps were taken to improve the regional support of our members around the world. In addition to our general meetings and conferences the Forum hosted three ad hoc events and seven documents were balloted and approved by our members. All of these are evidence that the Forum is truly driving technology innovation in commercial, civil and defense communications worldwide.

As part of the new strategy that was approved by the members The Coordinating Committee on International SCA standards was formed; a charter was developed and they immediately began influencing the SCA community. The members of the Coordinating Committee on International SCA Standards balloted and released five requests for comment related to the JTRS Program's SCA Next Initiative:

- Request for Comment on CORBA Profile for SCA Next Document (WINNF-10-RFI-0002)
- Request for Comment on SCA Implementers Work Group Change Proposals for SCA Next (WINNF-10-RFI-0003)
- Request for Comment on Generalization of the Resource Factory Concept (WINNF-10-RFI-0005)
- Request for Comment on Amendment to CORBA Profile for SCA Next Adding Lightweight (WINNF-10-RFI-0004)
- Request for Comment on Amendment to CORBA Profile for SCA Next Adding ORB_init parameters (WINNF-10-RFI-0006)

The Forum continued to take major steps forward on its objective to improve regional support of our members around the world. An Asia Pacific Regional meeting and workshop was held in Beijing, China the first week of June. Later that month, the second annual European Reconfigurable Radio Technologies Workshop and Product Exposition was held in Mainz, Germany. In August, we announced the opening of a European office located in Brussels. The new office will provide stronger support of our European membership and the growing advanced wireless markets in Europe. In October, we held a European Regional Meeting in Antalya Turkey with a workshop on SCA.

Beyond the general meetings, the Forum organized and hosted several major and highly successful events. The SDR09 Technical Conference and Product Exposition in Washington DC, the European Reconfigurable Radio Technologies Workshop and Product Exposition in Mainz, and the joint meeting between the Forum and US Joint Tactical Radio System Science and Technology Forum provided valuable opportunities for our members and potential members to exchange information on the future of wireless communications. In addition, the Forum organized three ad-hoc events that supported the Forum's 2010 work plan. A SCA Next Working meeting was held in February aligning to the goals of the new CC SCA. We held an Asia Pacific Regional meeting in Beijing in June with a workshop on "What's Next in Wireless Innovation: SDR, CR and Beyond" which has led to the formation of the TD-LTE in Whitespace Communications project. A TV White Spaces Summit was held in June in Washington DC; a workshop at the September general meeting in Schaumburg and a workshop at SDR10 is being developed demonstrates the value the Forum has brought to our members and the industry to orchestrate meaningful dialogue on the opportunity and solutions for TV Whitespace. Thank you to the Forum staff which has put in significant time and effort to make these ad-hoc events successful.

The members of the Forum balloted and approved seven documents in 2010:

- "Use Cases for Cognitive Applications in Public Safety Communications Systems Volume 2, Chemical Plant Explosion Scenario" (Document WINNF-09-P-0015-V1.0.0)
- "Support for the Three Category Approach for Software Communications Architecture (SCA) Standards and Extensions" (Document WINNF-09-R-0023-V1.0.0)

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FORWARD BY THE CHAIR OF THE FORUM (CONTINUED)

- "Comments of the SDR Forum on the FCC's Innovation Notice of Inquiry" (Document SDRF-09-R-0019-V1.0.0)
- "Commercial Baseband Technology Overview" (Document WINNF-09-P-0009-V1.0.0)
- "Description of the Cognitive Radio Ontology" (Document WINNF-10-S-0007-V1.0.0)
- Securing Software Reconfigurable Communications Devices (Document WINNF-08-P-0013-V1.0.0)
- IPA Information Process Architecture Volume I (Document WINNF-09-P-0020-V1.0.0)

Continuing a productive 2010 the Forum's membership are working on fifteen documents targeted to be balloted in 2011 and has also established a Roadmap Committee that will work to develop the Forum's "Top 10 Most Wanted Wireless Innovations" in Fiscal Year 2011.

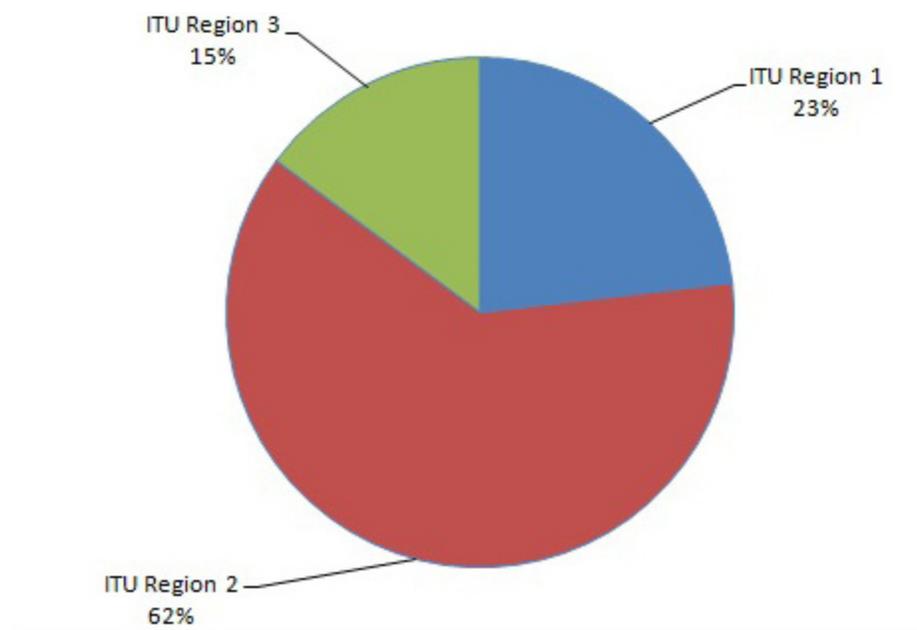
This long list of Forum accomplishments were made possible by the significant contributions of time and resources from our member organizations, the technical and business expertise of the volunteer participants, and the dedicated work of the staff. On behalf of the Forum's leadership, I would like to express our deep appreciation for all of your efforts during the past year and thank you in advance for continuing this effort in 2011 and beyond.

Bruce Oberlies
Chair of the Wireless Innovation Forum

2010 MEMBERSHIP

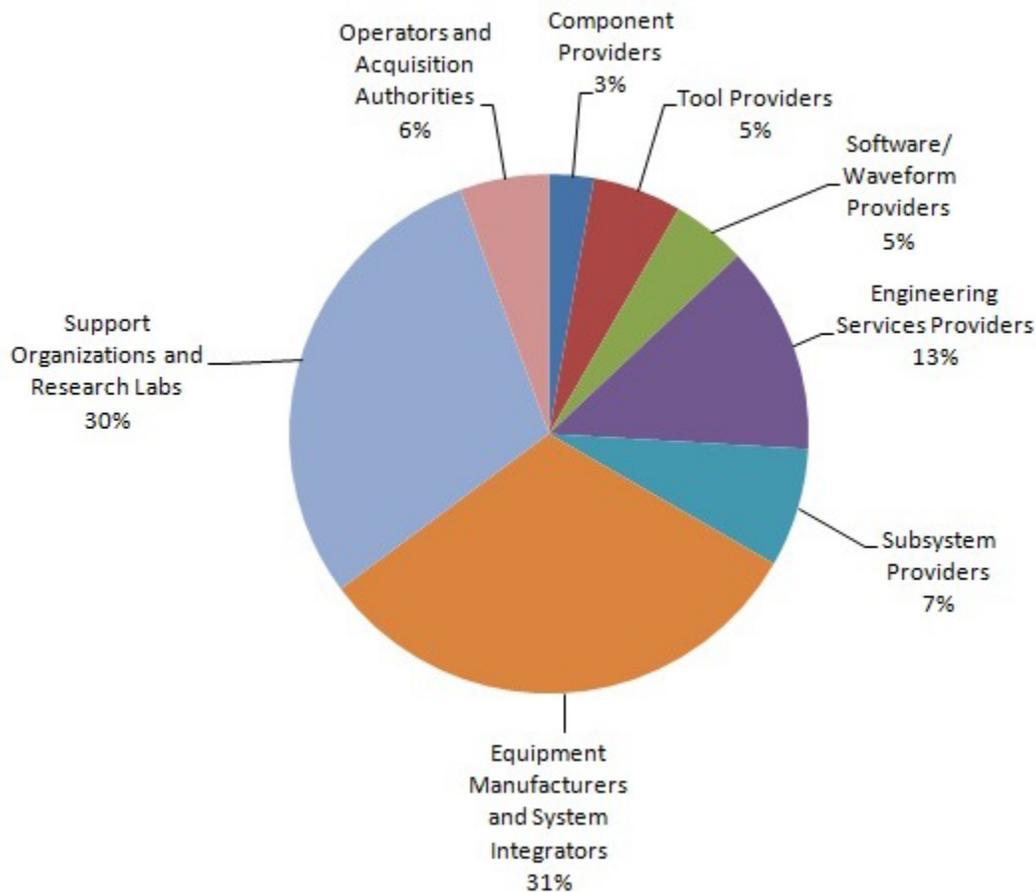
The membership of the Wireless Innovation Forum (SDR Forum Version 2.0) consists of commercial, defense, and civil government organizations including wireless service providers, network operators, component and equipment manufacturers, hardware and software developers, regulatory agencies, and academia. Individual representatives from these organizations include decision makers, planners, policy makers, technologists, educators, and program/product managers. Presently numbering more than 115 organizations, the Forum's membership spans Asia-Pacific, Europe, and North America.

Membership by Region – 30 June 2010



2010 MEMBERSHIP (CONTINUED)

Membership by Value Chain – 30 June 2010



FY2010 PROGRAM REVIEW (1 JULY 2009 - 30 JUNE 2010)

Organizational Structure

The Organizational Structure of The Wireless Innovation Forum as of 30 June 2010 is presented in the diagram below. The Forum is organized around five primary committees and a Roadmap Committee, whose responsibilities are summarized as follows:

- The User Requirements Committee: The User Requirements Committee acts as the primary interface for requirements with the wireless end-users and the representatives of wireless end-users in their segment, including, as appropriate, network operators, government acquisition authorities and research sponsors. Through Special Interest Groups (SIGs), the Committee works with these key stakeholders to validate concepts and requirements against technology readiness and standardization and to document domain specific requirements, use cases and business models that will drive the activities of the Regulatory and Technical committees. The User Requirements Committee also supports member organizations in identifying new opportunities for next generation products and services in each defined market domain.
- The Regulatory Committee: The Regulatory Committee works with the regulatory and public policy community to establish a global regulatory framework promoting the adoption of emerging technologies for advanced wireless systems. 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 relevant issues.

- The Technical Committees:
 - Committee on Next Generation Radio Technologies: provides a venue for the exchange of information on emerging radio technologies and produces reports, specifications and recommendations supporting the use of next generation technologies in radio devices.
 - Committee on Advanced Wireless Networking and Infrastructure: provides a venue for the exchange of information on emerging technologies important in wireless networking and produces reports, specifications and recommendations supporting the development and deployment of advanced wireless systems.
 - Coordinating Committee on International SCA Standards: supports the harmonization of SCA based standards at the international level for the mutual benefits of all stakeholders to include:
 - Defining an industry driven SCA evolution roadmap for the international community
 - Profiling the SCA specification and related APIs to define internationally accepted variants that are hosted by the Forum
 - Developing extensions to the SCA standards that address any gaps between the defined SCA evolution roadmap and Forum accepted SCA specification variants
 - Providing implementation and certification guides, tools etc. easing implementation and supporting proliferation
 - Establishing and managing industry led certification programs where appropriate
- The Roadmap Committee: Defines and publishes the Forum's "Top 10 Most Wanted Wireless Innovations" list.

Organizational Structure for The Wireless Innovation Forum

6/14/2010

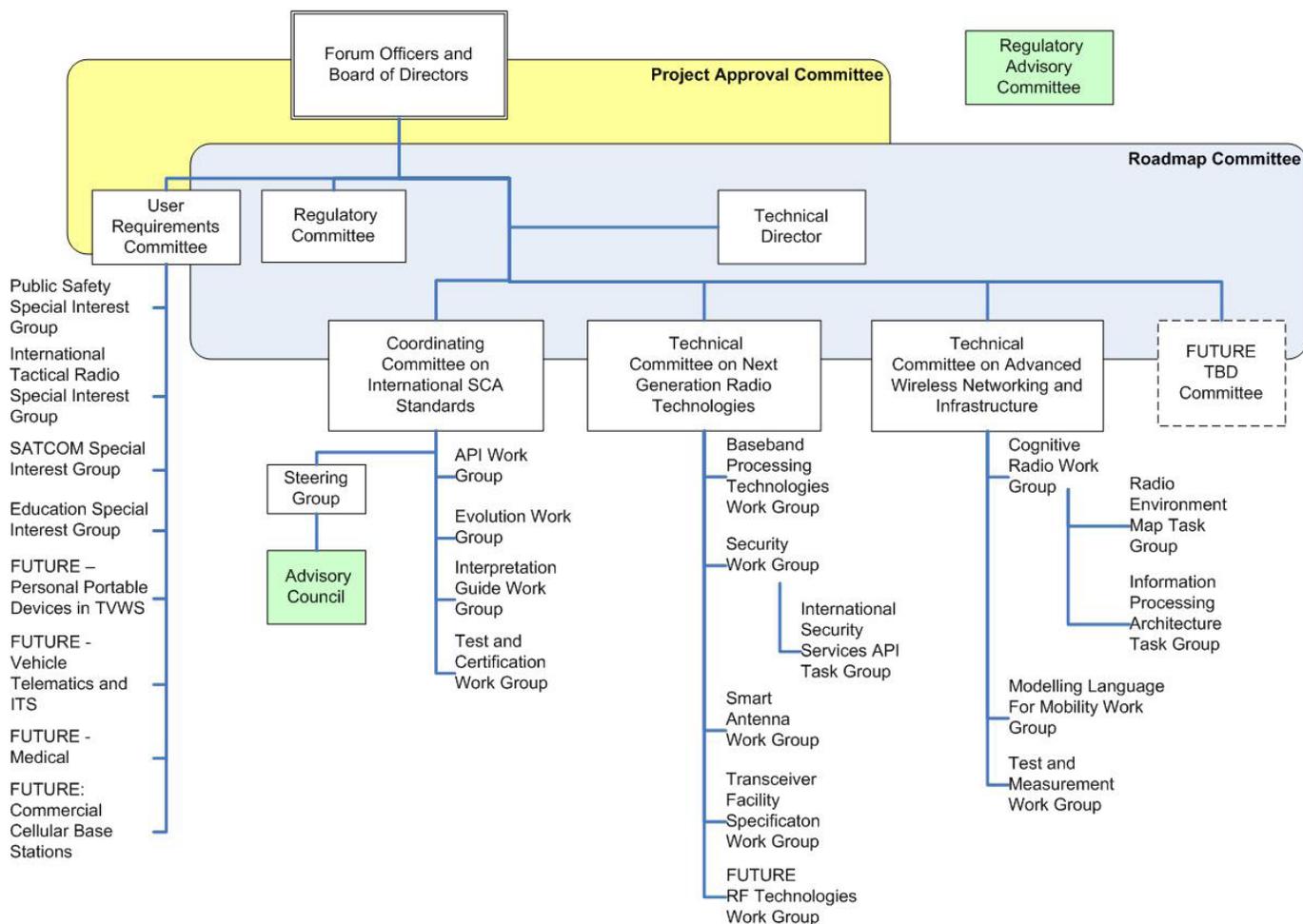


Figure 1: Wireless Innovation Forum FY2011 Organizational Structure

Key deliverables for 2010 from each element of the organization are provided in sections that follow.

Collaboration on Reports, Recommendations and Specifications

A primary purpose of the organization is to facilitate collaboration between members and the broader community to promote the advancement of software defined radio, cognitive radio and dynamic spectrum access technologies. To support this objective, the Forum held three General Meetings in fiscal year 2010. These meetings are the face-to-face working meetings of the Forum membership, providing them a venue to explore the reconfigurable radio market and to advance the Forum's work plan in support of the commercial, public safety, and international tactical radio communities. Each General Meeting also includes a one day workshop exploring a specific topic relevant in the members in supporting the organizations objectives. The general meetings held in 2010 and the associated workshops are as follows:

- 64th General Meeting, September 15 to 18, 2009 in San Jose, California
 - o Workshop on Rapid FPGA Development for Wireless Applications
- 65th General Meeting, March 8 to 11, 2010 in San Diego, California
 - o Collocated with the JTRS Science and Technology Forum
- 66th General Meeting, June 21 to 24, 2010 in Mainz, Germany
 - o Workshop on Reconfigurable Radio Technologies

Three ad-hoc events were also held in FY2010 supporting the Forum's 2010 work plan:

- SCA Next Working Meeting, February 2 to 4, 2010 in Washington DC
- Asia Pacific Regional Meeting, June 8, 2010 in Beijing, China (photo, right)
 - o Workshop on "What's Next in Wireless Innovation: SDR, CR and Beyond"
- TV White Spaces Summit, June 15, 2010 in Washington DC



In addition to these meetings, the Forum also provides teleconferencing and web conferencing services to facilitate collaboration between meetings, and maintains a group portal supporting file libraries, document management and discussion forums.

Through these services, the members of the Forum balloted and approved the following work products in FY2010, which have been made publicly available through the Forum's document library (http://www.wirelessinnovation.org/page/Document_Library):

- "Support for the Three Category Approach for Software Communications Architecture (SCA) Standards and Extensions" (Document WINNF-09-R-0023-V1.0.0) – This recommendation endorsed the approach proposed by the European Defence Agency (EDA) during SDR'09, the Forum's annual Technical Conference held in Washington DC to provide for the evolution of SCA standards, including the SCA base specification, SCA Application Programming Interfaces, and other necessary extensions in a coordinated manner across the international community.
- "Comments of the SDR Forum on the FCC's Innovation Notice of Inquiry" (Document SDRF-09-R-0019-V1.0.0) – This recommendation to the FCC was submitted in response to the Commission's

Notice of Inquiry in which the Commission sought comment on a wide range of important spectrum policy and other issues to gain a better understanding of the factors that encourage innovation and investment in wireless so that it may take concrete steps to support and encourage further innovation and investment.

- “Commercial Baseband Technology Overview” (Document WINNF-09-P-0009-V1.0.0) – This report was developed by the Commercial Baseband Processing Technologies Work Group 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. The report was 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.
- “Use Cases for Cognitive Applications in Public Safety Communications Systems Volume 2, Chemical Plant Explosion Scenario” (Document WINNF-09-P-0015-V1.0.0) – This document was developed by the Public Safety Special Interest Group and lays the groundwork for regulatory changes, policy and procedure changes, and technology research, development, test & evaluation to evolve and exploit CR technology. The document was 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.

Members of the Coordinating Committee on International SCA Standards also balloted and releases five requests for comment related to the JTRS Program's SCA Next Initiative:

- Request for Comment on CORBA Profile for SCA Next Document (Document WINNF-10-RFI-0002)
- Request for Comment on SCA Implementers Work Group Change Proposals for SCA Next (Document WINNF-10-RFI-0003)
- Request for Comment on Generalization of the Resource Factory Concept (Document WINNF-10-RFI-0005)
- Request for Comment on Amendment to CORBA Profile for SCA Next Adding Lightweight (Document WINNF-10-RFI-0004)
- Request for Comment on Amendment to CORBA Profile for SCA Next Adding ORB_init parameters (Document WINNF-10-RFI-0006)

Members also collaborated on the development of a number of other work products that are expected to be balloted in FY2011:

- “Business Models for Open Source Air Interfaces” – This report is being developed by the Commercial Baseband Processing Technologies Work Group for baseband providers, computer manufactures (MIDS), automotive electronics suppliers, handset manufacturers, infrastructure manufacturers, software services companies, and operators who need access to air interfaces for new platforms being developed or who may want a competitive baseband environment and access. The report will provide a description of open source licenses, potential business models, languages and development environments (C, python, Matlab), potential customers and markets for open source air interfaces, potential developers, and currently available open source projects.
- “Cognitive Radio Database (CRDB) – a Radio Environment Map (REM) anticipating future CR needs” – This specification is being produced by the Cognitive Radio Work Group for third party database providers and white space radio manufacturers to provide database structures and standardized formats and functionalities that support 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.

- “Cognitive Radio Technology Survey for Public Safety Applications” – This survey is being developed by the Public Safety Special Interest Group for the public safety community leadership, researchers, product developers, regulatory, and standards developers who are planning the evolution of communication capabilities and/or can benefit from awareness of future technology developments. The survey is based on the technology requirements identified in the Cognitive Use Case documents published by the Public Safety SIG and the Quantification Document under development by the Cognitive Radio WG to identify both current and projected maturity and also availability of technology to fulfill those requirements to:
 - o Help public safety agencies plan communications system life cycle
 - o Inform public safety standards and regulatory bodies regarding evolving systems capabilities
 - o “De-mystify” cognitive radio for public safety leaders and users
 - o Identify for researchers technology gaps and dependencies, and
 - o Support roadmap development efforts of the Wireless Innovation Forum.
- “Hybrid SATCOM Reference Architecture for Public Safety Applications” – This report is being prepared by the Satellite Communications (SATCOM) Special Interest Group for use by organizations such as the US Department of Homeland Security (DHS), Federal Emergency Management Agency (FEMA) and first responder providers who require the use of SATCOM systems to support emergency services during natural and/or man-made disasters . The report will document use cases where disruption of traditional terrestrial emergency services is expected, and explore the market need for integration of commercial and military satellite systems with terrestrial communications, highlighting areas where satellite communications provides both primary and back-up communications. The report will also propose a notional architecture for a hybrid LOS/BLOS platform compliant with the Forum's Information Processing Architecture. .
- “Information Process Architecture” – This report is being produced by the Cognitive Radio Work Group for stakeholders in Complex Information Systems and their associated Communications Subsystems who need to represent the current state of their systems, consider how to expand and enhance them from a process perspective, and analyze opportunities to interact with other systems with similar characteristics, but developed independently. The Information Process Architecture provides a general top-down model and a series of tools for depicting Operational, Systems, and Technical Standards Views of the structure of complex systems. The report will aid in defining, designing and selecting Cognitive Radio processes relevant and useful to Communication System stakeholders and, via a top-down approach, facilitate an improved understanding of the structure and relationships between Information Systems that span user domains, and allow users to assess the role of their systems with these architectural products.
- “International Security Services API” – This specification is being developed by the International Security Services API Task Group 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.
- “Issues in the International Tactical Radio Market Domain” – This study is being performed by the International Tactical Radio Special Interest Group and 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.
- “Modeling Languages for Mobility” – This specification is being developed by the Modeling Language for Mobility Work Group for developers of next generation communication systems who want to create 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 and is intended to lead to specifications/standards for languages and data exchange structures to support these capabilities.

- “Quantifying the Benefits of Cognitive Radio”. This report is being developed by the Cognitive Radio Work Group 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.
- “Security Profiles for Public Safety Radios” – This report is being prepared by the Security Work Group to provide a security concept of operations (CONOPS) for public safety SDR and produce a security profile 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.
- “Securing Software Reconfigurable Communications Devices” – This report is being developed by the Security Work Group to provide guidance, key considerations and recommendations for SDR developers and manufacturers regarding the design and manufacturing processes essential to producing appropriate security solutions for software reconfigurable radio platforms. It spans a comprehensive range of security topics such as considerations for stakeholders and other roles and their security needs as well as potential vulnerabilities, threats, attacks/exploits, and associated risk analyses.
- “SCA Certification Guide #2 - SCA Test, Evaluation and Certification Model Realization”. This Recommendation is being developed by the SCA Test and Certification Work Group for procurement authorities, producers of radios, radio components and tools who are active in markets where the standardised SCA is relevant and compliance is required to provide guidance on establishing test and certification capabilities for “category 1” standards to ensure that compliance is met in an efficient way including time to market and cost. The recommendation will aim to define the realization aspects (including business models) of the role based, generic certification process of SCA based SDRs, as defined in the Report “Test and Certification Guide for SDRs based on SCA Part 1: SCA” and will define and analyze candidate approaches and give recommendations to satisfy the responsibilities of the roles identified in that document.
- “SCA WG API Implementers Aids” – This report is also being developed by the SCA API Work Group 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.
- “Software Communications Architecture Interpretation Guide” – This report is being prepared by the SCA Implementers Work Group 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.
- “Test Guidelines and Requirements for Television Band Devices (TVBDs) Designed to Operate on Available Channels in the Broadcast Television Frequency Bands” – This report is being developed by the Test and Measurement Work Group for equipment designers and manufacturers, test & measurement vendors, test & evaluation departments, certification authorities, spectrum stakeholders, wireless service providers and end-users who are impacted by software defined

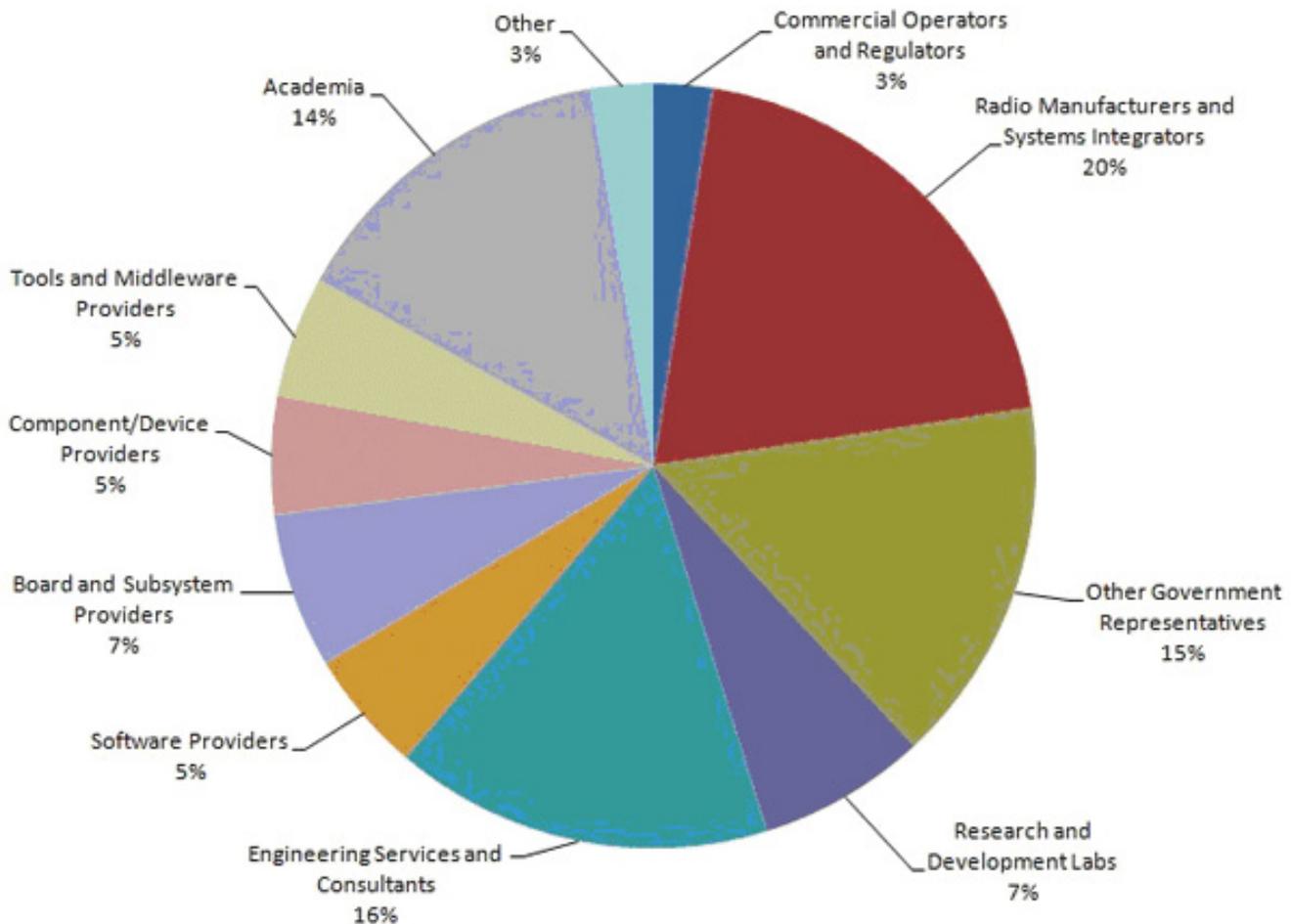
radio and cognitive radio (SDR/CR) system technology developments such as dynamic waveform activation, opportunistic scheduling, dynamic spectrum access, secondary and unlicensed spectrum access (e.g. by TVBDs) and policy based operation which are features not implemented in traditional radio systems. The report will identify unique test challenges created by SDR/CR radio system technology used for TVBDs and will provide a basis for test and certification.

- "Transceiver Facility Specification – Version 2.0" (Document SDRF-08-S-0008-V1.0.0) – This revised specification is being developed by the Transceiver System Interface Work Group and 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. The 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.

In addition, the Forum's membership has established a Roadmap Committee that will work to develop the Forum's "Top 10 Most Wanted Wireless Innovations" in Fiscal Year 2011.

Technical Conference

The Forum held its annual technical conference and product exposition December 1st to 4th, 2009 at the Hyatt regency in Crystal City, Virginia. This event acts as the primary vehicle for the organization to fulfill its education mandate, and featured more than 100 papers focusing on software defined and cognitive



Attendees by position on the value chain

radio technologies, standards, regulatory issues and business activities - presented by an international array of researchers and organizations in the commercial, civil and defense communications markets to attendees from over 26 countries. The event provides an international perspective on the current state of the art for advanced wireless communications and included keynotes, workshops, panels, tutorials and product demonstrations from over 35 exhibitors.

In support of this event, in 2009 the Forum arranged a travel grant with the US National Science Foundation to provide support to students at US Universities active in software defined radio and cognitive radio in attending the conference. The goal of this grant was to provide students with exposure to industry and the real problems they will face when entering the workforce in the design, development, manufacture and deployment of advanced wireless systems. Such exposure will help them to better understand how their course work at university applies in a real world setting, and will accelerate the pace at which they become productive upon graduation. At the conference they will meet and interact the leading researchers and practitioners in this field. 19 travel grant awards were made by the conference's program committee, with grants of up to \$500 made to students living within 300 miles of the event, and grants of up to \$1000 made for students living more than 300 miles away. Grants were made against actual expenses, and receipts were required before payment was made. The Forum also provided lodging at the conference hotel for a fixed number of nights as a matching contribution.

The Forum is scheduled to hold its next annual technical conference and product exposition November 30th to December 4, 2010 at the Hyatt regency in Crystal City, Virginia. Early in 2010, the Forum formed a Technical Program Committee, issued the call for papers, tutorials, demonstrations and workshops for this event, and began soliciting for sponsors and exhibitors.

Smart Radio Challenge

The Forum's Smart Radio Challenge is a worldwide competition in which student engineering teams design, develop and test software defined radio (SDR) or cognitive radio technologies that address relevant problems in the advanced wireless market. The goal of this challenge is to foster interaction between industry and academia and to expose students to the type of real-world problems they will face upon graduation. Solutions presented by student teams are evaluated by a panel of industry judges, and one time scholarships are awarded to teams based on the results.

In 2009, the SDR Forum announced the 3rd Smart Radio Challenge. Proposals were received from teams from seven teams who qualified to advance in the competition: Notre Dame, Penn State, Tokyo Institute of Technology, the University of Calgary, The Stevens Institute, Virginia Tech and Worcester Polytechnic Institute. Sponsorships were also secured, the proceeds of which will be used to promote the event and to provide scholarships to the winning teams in FY2010. Winners were:

- First place and a scholarship prize of \$4000: University of Calgary team
- Second place and a scholarship prize of \$3000: Tokyo Institute of Technology team
- Best Design and a scholarship prize of \$2000: University of Calgary team
- Best Presentation and a scholarship prize of \$2000: WPI team
- Best Report and a scholarship prize of \$1000: WPI team

Achievement Awards

Each year, the Forum presents awards in three categories:

- Wireless Innovation Forum International Achievement Award – This award is presented to an individual, group of individuals, or organization that made especially significant contributions to international furtherance or acceptance of Software Defined or Cognitive Radio.

- Wireless Innovation Forum President's Award – This award is presented to individuals in recognition of their sustained outstanding contributions in support of the Wireless Innovation Forum and its activities.
- Wireless Innovation Forum Technology of the Year – This award is presented to an individual or organization for a breakthrough product or technology in the field of software defined or cognitive radio as selected by the members.

In 2009, Eric Nicollet (pictured, right), SDR Architecture Specialist at Thales Communications was awarded the International Achievement Award, Dr. Bruce Fette of DARPA (pictured, below)



Dr. Bruce Fette of DARPA (pictured, below) was awarded the President's Award, and the Unity XG-100 Full Spectrum Multiband Radio by Harris Corporation was awarded the Technology of the Year.



Other Member Services

The Forum manages a number of other smaller programs for its members that are collectively referred to as "other member services". These include the following:

- Linked-In Group – The Forum manages a members-only Linked-In group to facilitate networking among representatives of its member organizations.
- Member Newsletter – The Forum provides up to date information on opportunities and news within the advanced wireless community through the Forum's bi-weekly "SDR News and Opportunities" reports
- Member Discounts – The Forum negotiates discounts for its members for relevant market studies, events and other items. In 2010, the Forum secured discounts as follows:
 - o 50% discount for members interested in purchasing Frost and Sullivan's report "U.S. Military Software Defined Radio Markets"
 - o 10% discount for members interested in purchasing Forward Concepts Markets Study market research study number 8030 entitled – "Cellular Handset and Chip Markets '08, An In-Depth, Global Analysis of Cellphones, Chips & Subscribers" and market research study number 7020 entitled – "Cellular Handset and Chip Markets 07, An In-Depth, Global Analysis of Cellphones, Chips and Subscribers."
 - o 10% discount for Wireless Innovation Forum members on the applicable "North American Price" for all Elsevier Communications Engineering print books that are in-stock.
 - o One hard copy version at a discount of 25% off the then applicable "North American Price" or "International Price" or one electronic version of the Report (in .pdf format) and an "Enterprise License" to distribute copies thereof to the eligible Forum Member's employees on a worldwide basis, at a discount of 25% off the then applicable "Enterprise License" price discount for Wireless Innovation Forum members interested in purchasing ARCchart Market Research Report entitled "Software-Defined Radios in Mobile Phones, an Analysis of the Maturing Wireless Technology Set to Disrupt the Mobile Ecosystem.

- o 25% discount on the "Single User" or "Multi-User" price as shown on their report website for Pioneer Consulting to provide a discount for members interested in purchasing their market research study entitled "Commercial Software Defined Radio - The Emergence of Multiprotocol Multiband Support in Base Stations".
- o Avis is offering a year-round link for rental discounts for Wireless Innovation Forum members.
- o 20% discount for member representatives attending the 8th Annual Software Radio Communications Summit Feb 9, 2010- Feb 11, 2010.
- o 100£ discount for member representatives attending International Software Radio, June 7-8 2010, Crowne Plaza Hotel - St James, London.
- o 25% discount for member representatives attending IWCE, March 8-12, 2010, Las Vegas, Nevada.
- o 20% discount for member representatives attending LTE Forum 2010, April 27-28, 2010, Stockholm, Sweden.
- o 100£ discount for member representatives attending Mobile Deployable Communications, Feb 24-25, 2010, Prague.
- o 15% discount for member representatives attending NGN and Basestations, April 19-21, 2010, Bath, UK
- o 15% discount for member representatives attending the CRC's SCA Introduction Course, Feb. 9-11, 2010, San Diego, California.
- o 20% discount for member representatives attending MAEF, June 1-2, 2009 San Diego.
- o 100£ discount for member representatives attending International SDR, June 8-9, London.
- o 15% discount for member representatives attending NGN Europe, April 20-24, 2009, Bath, UK.
- o 15% discount for member representatives attending NCW Europe, May 25-29, 2009, Cologne, Germany
- o 20% discount for member representatives attending Mobile Broadband LTE, Sept. 24-25, 2009.
- Product and Services Directory – This directory provides insight into products and services offered by Forum member organizations to help individuals operating at all levels of the wireless value chain to quickly find partners that can help address their specific requirements. There is no cost for members to participate in this directory.

Resume Service – The Forum's Resume Referral Service was established in FY2009 as a place where anyone seeking employment with experience in the advanced wireless market is permitted to submit a resume. Representatives from member organizations can review these resumes and if they have a matching opening available they can contact the applicant personally for further information or an interview. This service failed to gain acceptance in the advanced wireless community and was discontinued in FY2010.

CURRENT MEMBERS

Aeronix, Inc.
Aerospace Corporation
Division: Communications
Systems Subdivision
Agilent Technologies
Air Force Research Lab - IFGC
Alliance for ESSOR (a4ESSOR)
Alpha Design Technologies Pvt.
Limited
Aselsan A.S.
Astrium, Ltd.
AT&T Labs
Bharat Electronics Limited
(Central Research Lab)
Boeing
Booz Allen Hamilton
CDAC
Center of Excellence
Cinterion Wireless Modules
GmbH (was Siemens AG)
Cognitive Radio Technologies,
LLC
Communications Research
Centre (CRC)
CTVR
DataSoft Corporation
Datron World Communications
Inc.
DEAL-DRDO
Defense Group Inc.
Diversified Technology, Inc.
DJH Consulting, Inc.
DSO National Laboratories
EID, SA
Elektrobit Wireless
Communications Ltd
Etherstack
ETRI
Ettus Research LLC
FMV
Fraunhofer-Institut
GateHouse A/S
General Dynamics C4 Systems
Hanyang University
Harris Corporation
Hitachi Kokusai Electric Inc.
Huawei Technologies Co., Ltd
Hypres Inc
IDA (Institute for Defense
Analyses)
IMEC
Indra Sistemas
Innovative Integration
Institute for Infocomm Research
Institute for Telecommunications
Research
ISR Technologies
ITT Communications Systems
(CS)
Karlsruhe Institute of Technology
(KIT)
Kolodzy Consulting, LLC
L-3 Communications
Government Services Inc.
Mathworks
Mercury Federal Systems, Inc.
MIT Lincoln Laboratory
MITRE Corp (Washington C3
Operations)
Motorola
NASA Glenn Research Center
NAVSYS Corporation
NCOIC
NEC Corporation
NICT
NPSTC
Oak Ridge National Laboratory
Objective Interface Systems,
Inc.
OMG
Optimum Semiconductor
Technologies, Inc.
Pentek Inc
PrismTech
QinetiQ
QuantumTrace
QuickFlex
Radmor SA
Itzhak Fuchs
Raytheon
Reservoir Labs
Rockwell Collins
Rohde & Schwarz
Royal Institute of Technology
(KTH)
RWTH Aachen University
SAIC
Sandbridge Technologies
SCA Technica
Selex Communications
Shared Spectrum Company
Sigmatix, Inc.
Southwest Research Institute
Space Coast Communication
Systems, Inc.
SPAWAR JPEO JTRS
Spectrum Bridge, Inc.
Spectrum Signal Processing by
Vecima
ST Microelectronics
Stevens Institute of Technology
Sunair Electronics
Synopsis
Tata Power SED
TDK Corporation
Telefunken RACOMS
Thales Communications
TNO
Tubitak Uekae
TV Band Service, LLC
UC San Diego
Ultra Electronics Inc
Universitat Politecnica de
Catalunya
University of Oulu
ViaSat, Inc.
Viettel Technologies, JSC
Virginia Tech
VISTology, Inc.
Lee Pucker
xG Technology Inc.
Xilinx
Yokohama National University
ZTE Corporation



MESSAGE FROM THE TREASURER

I am pleased to present the audited financial report for the Wireless Innovation Forum, indicating that the overall financial health of the organization continues to be strong. The Forum's Statement of Financial Position showed total assets of \$ 631,898 as of June 30, 2010.

Fiscal year 2010 financial performance exceeded plans with a net income of \$45,781 against a planned net loss of \$ 19,978, primarily through employment of specific expense controls and increased operational efficiencies during this period of global economic turbulence. Other key Fiscal Year 2010 financial performance parameters include:

- Total Revenue of \$ 1,004,059
- Total Expenses of \$ 958,278

The Wireless Innovation Forum is a tax exempt organization under Section 510(c)(6) of the Internal Revenue Code and operates on a modified cash accounting basis in accordance with Statement of Financial Accounting Standard (SFAS) No 117, Financial Statements of Not-for-Profit Organizations.

I submit this report with the certainty that the Wireless Innovation Forum continues to be a financially sound organization.

Mark Turner
Wireless Innovation Forum Treasurer

Summary Statement of Forum Assets, Liabilities, and Net Assets (Modified Cash Basis) for Years Ending 20 June 2010, 30 June 2009 and 31 December 2008¹

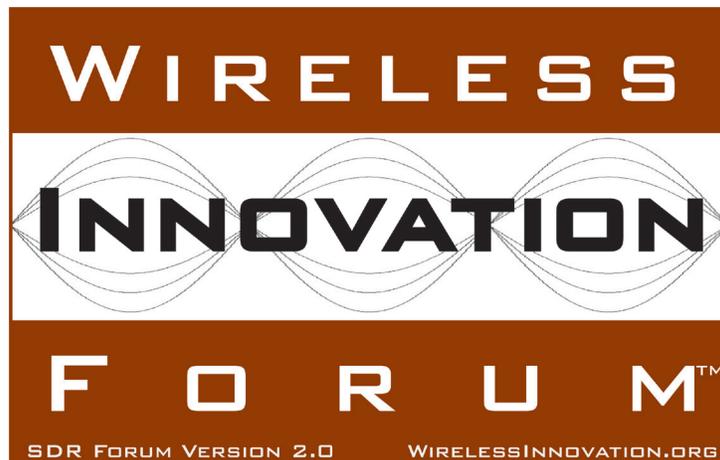
	30 June 2010 (12 months)	30 June 2009 (6 months)	31 December 2008 (12 months)
Assets			
Current Assets			
Cash and Cash Equivalents	\$631,898	\$236,371	\$238,693
Short Term Investments	-	299,726	298,821
<i>Total Current Assets</i>	<i>631,898</i>	<i>536,097</i>	<i>537,514</i>
Long Term Investments	-	50,020	-
<i>Total Other Assets</i>	<i>-</i>	<i>50,020</i>	<i>-</i>
Total Assets	\$631,898	\$586,117	\$537,514
Liabilities and Net Assets			
Net Assets			
Unrestricted Net Assets	631,898	586,117	537,514
<i>Total Net Assets</i>	<i>631,898</i>	<i>586,117</i>	<i>537,514</i>
Total Liabilities and Net Assets	631,898	\$586,117	\$537,514

¹Summary statement is based on the report from the independent auditor, and should not be considered complete. Full audited financial statements, including notes, are available for review upon request. The Software Defined Radio Forum Inc.'s Form 990 filings with the US Internal Revenue Service are publicly available at <http://www2.guidestar.org>.

Summary Statement of Forum Revenues, Expenses, and Change in Net Assets (Modified Cash Basis) for Years Ending 30 June 2010, 30 June 2009 and 31 December 2008²

	30 June 2010 (12 months)	30 June 2009 (6 months)	31 Dec. 2008 (12 months)
Unrestricted Net Assets			
Revenue			
Membership Fees	\$450,320	\$269,214	\$488,454
Facility Fees	421,598	66,528	394,768
Program Fees	112,850	65,250	127,792
Interest and Other Revenue	11,261	5,185	19,833
<i>Total Revenue</i>	<i>1,004,059</i>	<i>406,177</i>	<i>1,030,847</i>
Program Expenses			
Advertising	24,599	8,956	8,007
Facilities and Event Food	243,165	24,511	319,455
Professional Fees	15,254	4,328	37,773
Legal	2,947	85	16,254
Other Program Expenses	20,161	15	12,835
<i>Total Program Expenses</i>	<i>306,126</i>	<i>37,895</i>	<i>394,284</i>
General and Administrative Expenses			
Payroll Expenses	461,764	230,199	173,158
Bank Charges	18,715	7,590	27,688
Consulting	-	-	220,827
Dues and Subscriptions	13,774	10,473	11,890
Insurance	6,484	2,552	6,975
Miscellaneous and Other Expenses	45,893	6,818	97,141
Office Management	-	8,316	18,923
Office Rent and Expense	28,910	12,902	22,390
Promotional Items	-	-	20,840
Public Relations	695	4,214	44,062
Telephone	11,863	5,966	9,172
Travel and Transportation	39,412	21,398	61,422
Website	24,642	9,251	21,321
<i>Total General and Admin. Expenses</i>	<i>\$652,152</i>	<i>\$319,679</i>	<i>\$735,809</i>
Change in Net Assets	45,781	48,603	(99,246)
<i>Net Assets Beginning of the Period</i>	<i>386,117</i>	<i>537,514</i>	<i>636,760</i>
Net Assets End of the Period	\$631,898	\$586,117	\$537,514

²Summary statement is based on the report from the independent auditor, and should not be considered complete. Full audited financial statements, including notes, are available for review upon request. The Software Defined Radio Forum Inc.'s Form 990 filings with the US Internal Revenue Service are publicly available at <http://www2.guidestar.org>



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