2008 to 2011 Strategic Plan

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Table of Contents

1 Introduction – The Need for a New Strategy

Software Defined Radio, also known as Software Radio or SDR, has been defined by the SDR Forum working in collaboration the IEEE P1900.1 project as [1]:

"Radio in which some or all of the physical layer functions are software defined"

What this definition means is that software defined radios deliver their physical layer or air interface functionality, in whole or in part, through software or firmware operating on programmable processing devices; devices such as field programmable gate arrays (FPGA), digital signal processors (DSP), or general purpose processors (GPP). The use of these technologies allows software defined radios to be reconfigured to support different waveforms and air interface standards and to allow new wireless features and capabilities to be added to existing radio systems without requiring new hardware. The vision for SDR technology has always been to reduce the various "costs" associated with providing end-users in the various commercial, defense and public domain markets with access to ubiquitous wireless communications, allowing these users to communicate with whomever they need whenever they need to and in whatever manner is appropriate.

In 2006, the SDR Forum commissioned a number of research reports evaluating the adoption of SDR technologies in various markets. The results of these market studies clearly show that in certain markets, SDR has moved beyond the innovators and early adopters as defined by Geoffrey Moore in "Crossing the Chasm" into the early majority phase defining the mainstream market (See Figure 1) [2]. In this phase, adopters select a technology not because it is innovative or visionary but because it has been shown to successfully solve a problem within their specific market. Examples of SDR adoption illustrating the transition to the mainstream are abundant:

- Thousands of software defined radios have been successfully deployed in defense applications

- Cellular infrastructure systems are increasingly using programmable processing devices to create "common platform" or "multiband-multiprotocol" base stations supporting multiple cellular infrastructure standards

- Cellular handsets are increasingly utilizing System on Chip (SoC) devices that incorporate programmable "DSP Cores" to support the baseband signal/modem processing

- Satellite "modems" in the commercial and defense markets make pervasive use of programmable processing devices for intermediate frequency and baseband signal processing

While these types of systems are often not marketed as "SDR's", they utilize SDR technologies to solve market specific problems; cost of development, cost of production, cost of upgrades and maintenance, time to market in supporting new and evolving air interface standards, or problems associated with network interoperability. In addition, the SDR Forum's market studies have shown that cost effective radio frequency technologies supporting the operation of software defined radios over a broad spectral range have begun to mature, allowing for the first time the use of software defined radio as an

enabling technology for dynamic spectrum access systems with cognitive or smart radio functionality. This trend is expected to continue over the next several years, allowing SDR to finally achieve the defined vision.
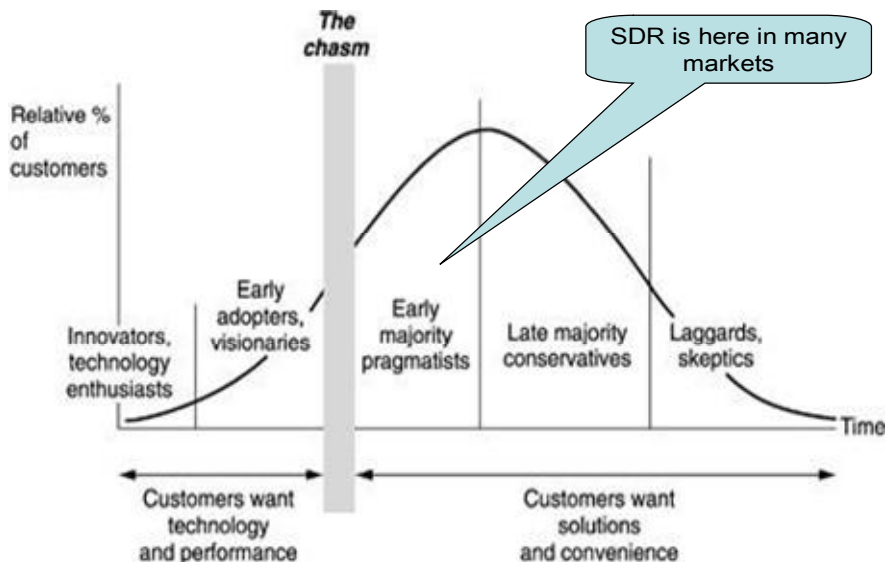

Figure 1: SDR appears to have entered the mainstream in many wireless markets (Source for Chasm Diagram: http://www.codeodor.com/images/crossing_the_chasm.png)

The question for the SDR Forum, then, is as this technology matures, how can the Forum maximize the value it brings to its members? To answer this question, in September of 2007 the SDR Forum Board of Directors commissioned a project to define the evolution of the SDR Forum over the next 4 years. This strategic plan is the result of that project. The plan begins by presenting the process that was followed in defining the SDR Forum's strategy, and then presents four "pillars of strategy" upon which the rest of the plan is based. The plan concludes by presenting metrics by which the success of the strategy can be measured, and proposes next steps that should be completed to evolve the strategy over the next several years.

2 Intended Audience

This document is intended for use by the SDR Forum, its member organizations and its partners to communicate the SDR Forum's Strategic Plan as approved by the SDR Forum Board of Directors in November of 2007. It is also intended for use by potential members and partners as tool for evaluating participation in the SDR Forum, and by the reconfigurable radio community as a whole to help to understand the SDR Forum's mission and objectives.

3 Strategic Planning Input and Process

The process followed by the SDR Forum in preparing this strategic plan was comprehensive and based on inputs derived from the following activities:

- Review of Organizational Metrics – This activity established a baseline from which the SDR Forum can evolve in executing on a new strategic plan. Specific items evaluated in this review included:

    - Membership Data – An analysis of the Forum's membership from 2003 to 2007, including a first and second order evaluation of membership by size, region, primary market, and position in the value chain.

    - Meeting Data – An analysis of member and non-member attendance at the SDR Forum General Meetings and Technical Conferences, including an analysis of attendee representation by region and an analysis of meeting attendance correlated against meeting location, workshop topic, and external events.

    - Finance – An analysis of the SDR Forum's financial results from 2005 to 2007, including an evaluation of any significant financial events that occurred.

    - Performance – An evaluation of how the SDR Forum has performed against stated objectives, including an analysis of what contributed to the Forum's successes, and what lessons could be learned in areas of non-performance

- Market Analysis – This activity evaluated the SDR Forum in the context of the broader advanced wireless market. As a part of this evaluation, a SWOT (Strength, Weaknesses, Opportunities, Threats) analysis was performed to position the SDR Forum with respect to other organizations, based on input from Forum members, including:

"Hard Core" Standards Bodies	"Trade Associations" and other Industry Consortia
International Telecommunications Union (ITU)	The WiMAX Forum
European Telecommunications Standards Institute (ETSI)	CTIA
IEEE SCC41/P1900	AFCEA
Object Management Group (OMG)	Scope Alliance and the Service Availability Forum
3GPP	The Multi-Core Association
Telecommunication Industry Association (TIA)	The Wireless Communications Association
VITA Standards Organization	Open Mobile Alliance

- Member Interviews – The SDR Forum conducted one-on-one interviews with representatives of over 30 member organizations to ascertain the value of the SDR Forum to their organization and to understand the areas that the Forum needs to address to remain relevant. While interviews could not be held with every member organization given the time frame involved, the organizations interviewed were selected as a representative sample to ensure proper coverage of markets, regions and value chain. These interviews highlighted specific critical needs that the SDR Forum needs to address in two areas:
    - Marketing and Business Development – The SDR Forum needs to provide mechanisms to support member organizations in:
        - Influencing customers and regulators
        - Understanding and expanding the market
        - Finding new business opportunities
        - Finding new partners
    - Technical Development – the SDR Forum needs to provide opportunities for our member organizations to:
        - Influence industry specifications and standards that are broadly adopted in order to reduce costs (development, production, operations) and time to market/time to deployment for reconfigurable radio technologies and products
        - Develop a working knowledge of relevant technologies and standards

The SDR Forum 2008 to 2011 Strategic Plan was developed by mapping these inputs against three defining questions, which acted as a framework for the overall strategy:

- Who are the SDR Forum's active members, and what are they passionate about?
- At what can the SDR Forum be the best in the world?
- What drives the SDR Forum's economic engine, and how can the Forum measure success?

The plan was also predicated on a need to be evolutionary in execution so as to minimize disruption to members and to allow for quick "wins" in advancing the overall strategy.

4 SDR Forum High Level Strategy

A graphic presenting the high level strategy for the SDR Forum resulting from this process is presented in Figure 2. The objective of the strategy is to establish the SDR Forum as the premier organization for ***"promoting the success of next generation radio technologies"*** with the implication that these next generation technologies will inherently support software defined and cognitive radio (CR) capabilities. In achieving this objective, the strategy builds from a target membership base comprised of world class technical, business and government leaders at all levels within the wireless value chain. These leaders are passionate about solving their customers' communications problems through families of radio devices that support a broad range of disparate wireless networks, evolving standards, and the addition of value added services. The strategy leverages the experience and expertise of these members in fully understanding the complex requirements inherent in developing and fielding advanced radio platforms through four "pillars of strategy" that have been defined to optimally support the SDR Forum's members' organizational objectives:

- **Advocacy** – Through this pillar, the SDR Forum will advocate for its members with governments, regulators, standards bodies, and research sponsors, acting as the voice of the reconfigurable radio community. In expanding its advocacy role, the SDR Forum will take steps to ensure that it stays within the legal boundaries of what is allowed for a non-profit organization, and may evaluate spinning-off an affiliated organization should this be found too constraining.

- **Opportunity Development** – Through this pillar, the SDR Forum will support its member organizations in identifying new opportunities and developing new markets for reconfigurable radio products and services. This includes defining use cases and business models illustrating the compelling value proposition of SDR and CR technologies in specific market segments. By facilitating opportunity development in this manner, the SDR Forum will promote a proliferation of reconfigurable wireless platforms and devices, ultimately benefiting the end user with lower cost and expansion of service.

- **Commercialization** – Through this pillar, the SDR Forum will facilitate the transition of SDR and CR technologies from the research labs into deployed radios. The SDR Forum will do this by promoting industry convergence on open specifications and standards for reconfigurable radio technologies and by enabling certifications that promote the interoperability of relevant technologies. The goal of this pillar is to help establish an ecosystem of vendors providing interoperable hardware and software radio components to drive economies of scale that will ultimately reduce the costs of development, production and maintenance of software defined and cognitive radio sets, while at the same time speeding time to market and time to deployment.

- **Education** – Through this pillar, the SDR Forum will educate and train the wireless community in "state of the art" technologies relevant in the creation of software defined and cognitive radio based systems. Such education serves two purposes; it promotes the use of these technologies across a wider base of radio development programs and it lowers the costs inherent in these programs by reducing the technology learning curve.
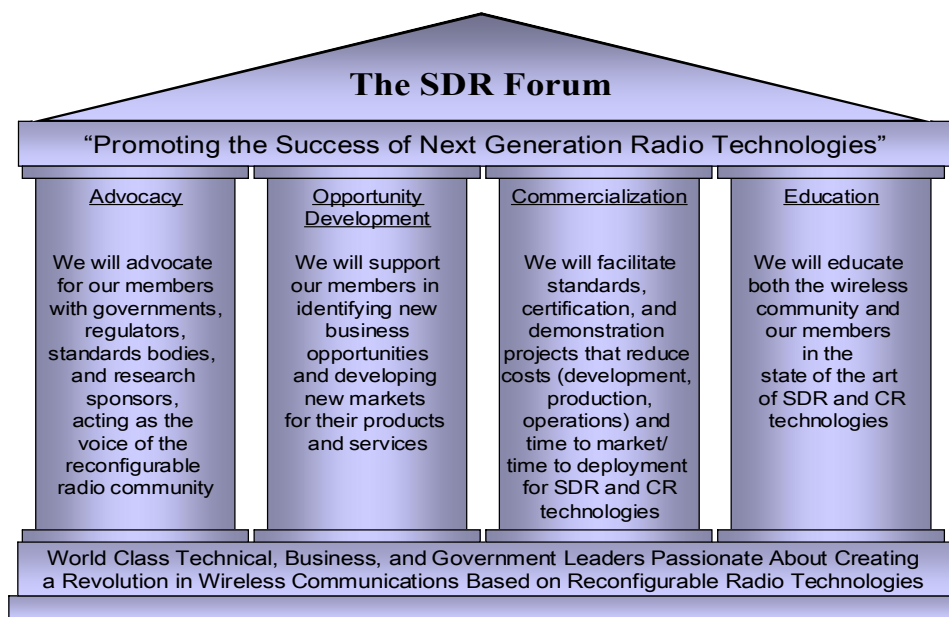
The SDR Forum

"Promoting the Success of Next Generation Radio Technologies"

Advocacy	Opportunity Development	Commercialization	Education
We will advocate for our members with governments, regulators, standards bodies, and research sponsors, acting as the voice of the reconfigurable radio community	We will support our members in identifying new business opportunities and developing new markets for their products and services	We will facilitate standards, certification, and demonstration projects that reduce costs (development, production, operations) and time to market/ time to deployment for SDR and CR technologies	We will educate both the wireless community and our members in the state of the art of SDR and CR technologies

World Class Technical, Business, and Government Leaders Passionate About Creating a Revolution in Wireless Communications Based on Reconfigurable Radio Technologies

Figure 2: The SDR Forum 2008 to 2011 Pillars of Strategy

5 Dimensions of Implementation

Inherent in this strategy is a transition by the SDR Forum from a technology driven focus to a market driven focus. This transition will be led by the SDR Forum's Special Interest Groups (SIGs). SDR Forum SIGs are cross-disciplinary teams comprising end users, operators, service providers, radio manufacturers, and regulators focused on the needs of a single market or market segment. Within the SDR Forum, SIGs are managed by the Markets Committee (see Figure 3), and while this transition does not require a reorganization of the Forum's structure, it does place an increased responsibility upon the SIGs to define the domain specific requirements, use cases and business models that will drive the activities of the Regulatory and Technical committees.
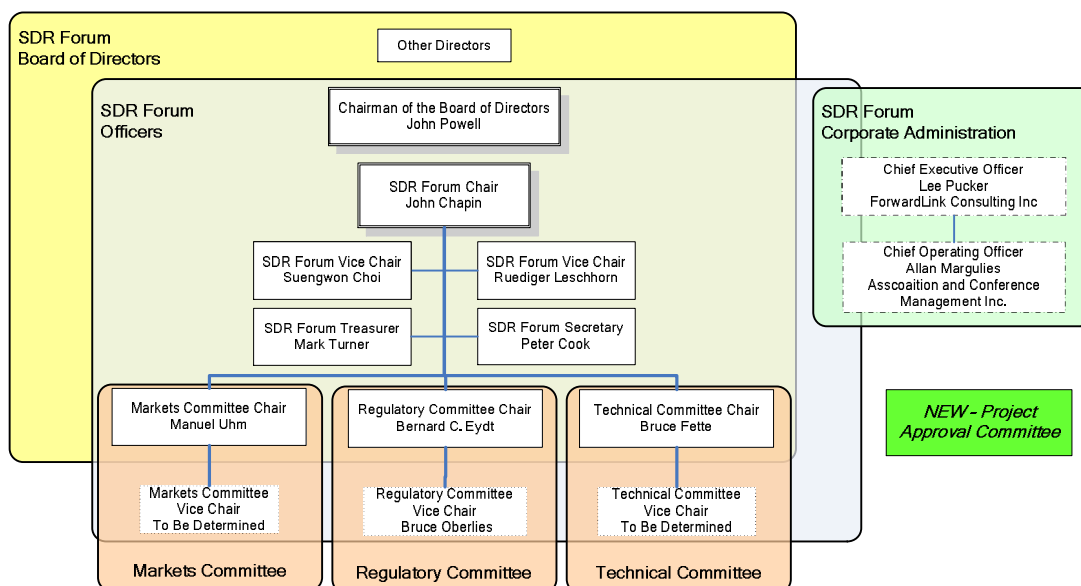

Figure 3: SDR Forum 2008 Organizational Structure

The impact of this transition drives various dimensions of implementation for each of the four pillars of strategy within each of the SDR Forum committees.

5.1 Markets Committee

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 supports member organizations in identifying new opportunities and developing new markets for reconfigurable radio products and services. The Markets Committee's charter supports the four pillars of strategy in the following ways:

- Advocacy
  - Through SIGs, the Markets Committee will proactively identify international regulatory objectives for the Forum's members and pass these objectives as formal inputs to the Regulatory Committee
  - Through SIGs, the Markets Committee will identify 3rd party specifications and standards that should be evaluated on behalf of the Forum's members, and pass these as formal inputs to the Technical Committee
  - Through SIGs, the Markets Committee will actively advise radio service providers and acquisition officials world wide on requirements to the benefit of the reconfigurable radio community
  - Through SIGs, the Markets Committee will actively influence national R&D agendas to provide funding opportunities supporting our members' technology requirements

- Opportunity Development (Primary Responsibility)
  - The Markets Committee work program, independent of SIGs, will center on helping to identify and promote opportunities for member organizations world wide

- Commercialization
  - Through SIGs, the Markets Committee will identify requirements, use cases and business models that must be addressed through the Forum's commercialization efforts, and provide these as formal inputs to the Technical Committee

- Education
  - The Markets Committee will facilitate the creation of tutorial material relevant to the Forum's membership
  - The Markets Committee will provide support in planning the SDR Forum Technical Conference and Product Exposition to include defining and soliciting participation in keynotes, presentation tracks, tutorials, and workshops that will educate attendees on the business models and case studies for SDR and CR technologies

5.2 Regulatory Committee

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 regulators from around the world working on issues relevant to reconfigurable radio technologies. The Regulatory Committee's charter supports the four pillars of strategy in the following ways:

- Advocacy (Primary Responsibility)
  - The Regulatory Committee will develop a public regulatory agenda that addresses our members needs, and will proactively promote that agenda in relevant bodies worldwide

- Opportunity Development
  - The Regulatory Committee will proactively identify regulatory barriers and misconceptions that may impact our members' ability to pursue new business opportunities or other objectives and provide them as formal input to the Markets Committee

- Commercialization
  - The Regulatory Committee will describe current regulatory constraints that may impact the feasibility of potential technical options pursued under the Forum's commercialization efforts as formal input to the Technical Committee

- Education
  - The Regulatory Committee will develop programs to educate members and the community on the regulatory landscape as it relates to reconfigurable radio technologies
  - The Regulatory Committee will provide support in planning the SDR Forum Technical Conference and Product Exposition to include defining and soliciting participation in keynotes, presentation tracks, tutorials, and workshops that will educate attendees on regulatory issues associated with SDR and CR technologies

5.3 Technical Committee

The Technical Committee produces SDR Forum Reports defining the "state of the art" in reconfigurable radio technologies, and facilitates standards, certification and demonstration projects that will reduce the costs (development, production, operations) and time to market/time to deployment for software defined and cognitive radio sets. The Technical Committee's charter supports the four pillars of strategy in the following ways:

- Advocacy
  - Through reports and recommendations, the Technical Committee will actively influence national R&D agendas to provide funding opportunities supporting our members technology objectives

- o Through reports and recommendations, the Technical Committee will advise radio service providers and acquisition officials on next generation requirements

- Opportunity Development

  - o The Technical Committee will identify key technical challenges that are relevant to the Forum's members, and provide a venue for them to present innovative solutions for addressing those challenges

  - o The Technical Committee will support the Markets Committee SIGs through technical reports defining state of the art in relevant areas

- Commercialization (Primary Responsibility)

  - o The Technical Committee will facilitate convergence on specifications and standards that build industry wide value chains conducive to efficiency and market growth

  - o The Technical Committee will enable certification processes for "standards", allowing products and technologies to be designated "SDR Forum Certified"

  - o The Technical Committee will be facilitate demonstration of "standards" while in development through "plug-fests", etc. held in conjunction with general meetings

- Education

  - o The Technical Committee shall provide tutorial materials on relevant radio topics, standards and specifications to promote their use

  - o The Technical Committee will provide support in planning the SDR Forum Technical Conference and Product Exposition, to include defining and soliciting participation in keynotes, presentation tracks, tutorials, and workshops that will educate attendees on SDR and CR technologies

6 Strategy for Expansion and Growth

Advancing the defined pillars of strategy through these implementation activities will allow the SDR Forum to grow in both membership and participation in the public safety and defense markets in which it has traditionally played a strong role. Long term growth, however, requires the SDR Forum to expand into adjacent markets, building economies of scale that span multiple market spaces and provide the SDR Forum's members with access to new opportunities for their technologies, products and services. The SDR Forum's strategy for expansion into these new domains is defined through three primary principles:

1. The SDR Forum Markets Committee will reach out to non-traditional, emerging and other secondary markets for which SDR and CR have a strong value proposition to form new Special Interest Groups. This strategy follows the principles of "The Innovators Solution" and will position the SDR Forum as a place for organizations to advance their objectives within these market spaces [3]. Potential markets that may be targeted following this strategy include:

   a. The telematics and intelligent transportation systems (ITS) markets

    b. The information technology value chain market (Google, Microsoft, Dell, etc.), which is approaching wireless as necessary direction (the "White Space" Market)

    c. The rural and developing countries commercial communications markets, including India, Africa and Latin America

    d. The satellite communications markets

    e. The RFID market

2. The SDR Forum will avoid targeting Tier 1 commercial markets directly, but instead will promote SDR Forum projects within the Technical Committee that complement other trade associations focused on Tier 1 technologies. As an example of this strategy, the SDR Forum could collaborate with organizations such as the Scope Alliance. This Alliance was formed in January of 2006 by a group of network equipment providers (NEP) that include Alcatel, Ericsson, Motorola, NEC, Nokia and Siemens, with the intent of developing profiles for and identifying gaps in existing open specifications supporting Carrier Grade Base Platforms (CGBP) [4]. The idea behind the Scope Alliance is to develop a "vibrant supply chain and ecosystem of commercial-off-the-shelf (COTS) and free/open source software (FOSS) from which NEPs can source a majority of their CGBP hardware and software" [5]. The initial focus of the Scope Alliance does not include the specialized processing engines and transceiver subsystems inherent in a reconfigurable radio set (see Figure 4), and as the SDR Forum offers specific expertise in these technologies, this is a logical area for collaboration. Other organizations the SDR Forum may approach to discuss areas of collaboration in the context of this strategy include the WiMAX Forum, the Service Availability Forum, the Multi-core Association and the Mobile Industry Processor Interface Alliance, and the Open Mobile Alliance.
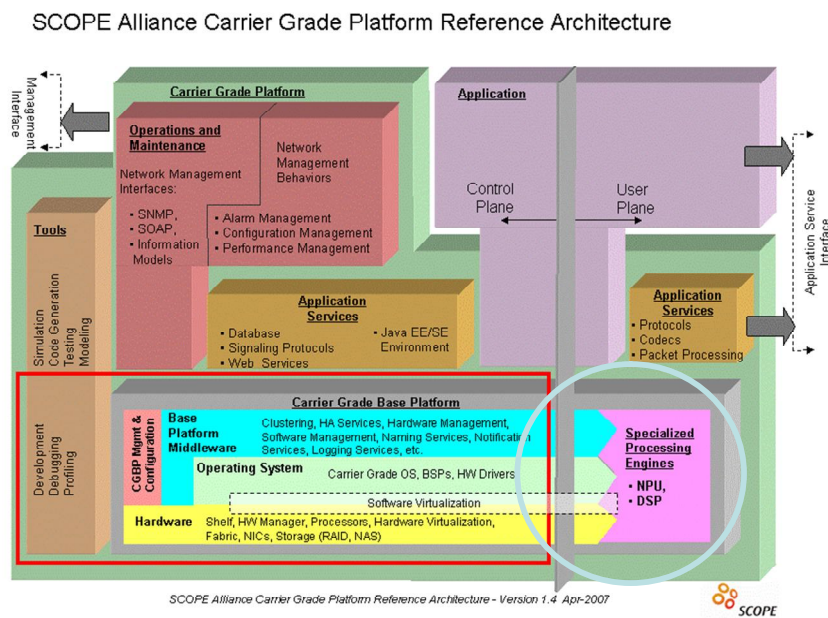

Figure 4: Scope Alliance Reference Architecture highlighting areas of possible collaboration with the SDR Forum (Source: The Scope Alliance, " Scoping the Scope – Closing the Gap on Open Carrier Grade Base Platforms", http://www.scope-alliance.org/scope-technical-position.pdf)

3. We will define mechanisms for growing in all three ITU regions. The success of the SDR Forum requires international participation and therefore, the SDR Forum's strategy for expansion and growth must include regional plans to reach out to and support members and potential members in Asia, Europe, and the Americas.

7 Strategy for Specifications and Standards

7.1 Standards Development Strategy

The commercialization pillar of this strategic plan defines an explicit role for the SDR Forum in facilitating the creation of standards and specifications that will reduce costs and time to market for SDR and CR based systems and products. However, in advancing this pillar of strategy, the SDR Forum realizes that it is often not in the best interest of our members to develop such standards "in-house". Relevant specifications and standards may already exist in other organizations that may address the defined needs of the Forum's member organizations either "as is" or through minor modification. In addition, the broad base of technologies and disciplines required in developing and fielding reconfigurable radio technologies may mean that other standards organizations and consortia with expertise in a unique technology area may be better suited to develop a required specification or standard in that area. As such, the SDR Forum will adopt the following strategy for promoting standards that support the interests of the Forum's member organizations:

- **First, we will ENDORSE 3rd party "standards" when possible.** Endorsements will occur under relevant licensing terms to allow the SDR Forum's members to leverage the work of other organizations to the greatest extent possible in supporting their specific needs.

- **We will PROFILE existing 3rd party "standards" when necessary.** As standards often incorporate a host of features and requirements that may not be relevant to the SDR Forum's members in their entirety, the SDR Forum will extract a subset of specifications under the appropriate licensing that are relevant to our members' needs.

- **We will INFLUENCE other standards bodies as appropriate to support our member's needs.** This strategy establishes the SDR Forum as a customer for these organizations, allow the SDR Forum to focus on requirements, use cases, and business models and coordinate as necessary across multiple standards bodies.

- **We will DEVELOP our own specifications and standards only when no one else can or will.** The SDR Forum's first choice in this instance will be to modify or extend an existing standard if possible, but the Forum realizes it may need to develop its own specifications and standards to address the needs of its member organizations. As such, the SDR Forum will retain its registration as a standards development organization and will work to mature its standards development processes to fully meet with the needs of its members.

7.2 Partnerships and Collaborations Strategy

This strategy obviously requires the SDR Forum to maintain strong relationships with "partner" organizations, including both standards bodies and other industry consortia, to support the needs

of our members. In advancing this strategy, the goal of the SDR Forum is to collaborate, not compete, with partner organizations having overlapping interests, establishing the SDR Forum as a single location where members can go to interact with a wide range of relevant third-party organizations.

7.3 Certification Strategy

A key role of specifications and standards is to promote interoperability of technologies. To support this role, as a part of its commercialization strategy the SDR Forum will enable certification processes for SDR Forum approved specifications and standards. Certifications may be performed by the SDR Forum or by a third party organization working in conjunction with the SDR Forum as appropriate. Certifications based on 3rd party standards will be performed following an appropriate profile and under the necessary trademark licenses.

8   The SDR Forum Project Approval Committee

Execution on this strategy will require closer coordination between the Markets, Regulatory and Technical committees in initiating and advancing "projects" within the Forum, with a project defined as an activity within a committee that develops an SDR Forum Report, an SDR Forum Recommendation or an SDR Forum Specification. To support this requirement, the SDR Forum will establish a project governance process that is facilitated through a Project Approval Committee. As is implied by its name, the primary purpose of the project approval committee is to approve projects. Projects will be evaluated by this committee against established decision criteria to ensure that they have a clearly defined objective, clearly defined requirements, and they support of a clearly defined set of customers.
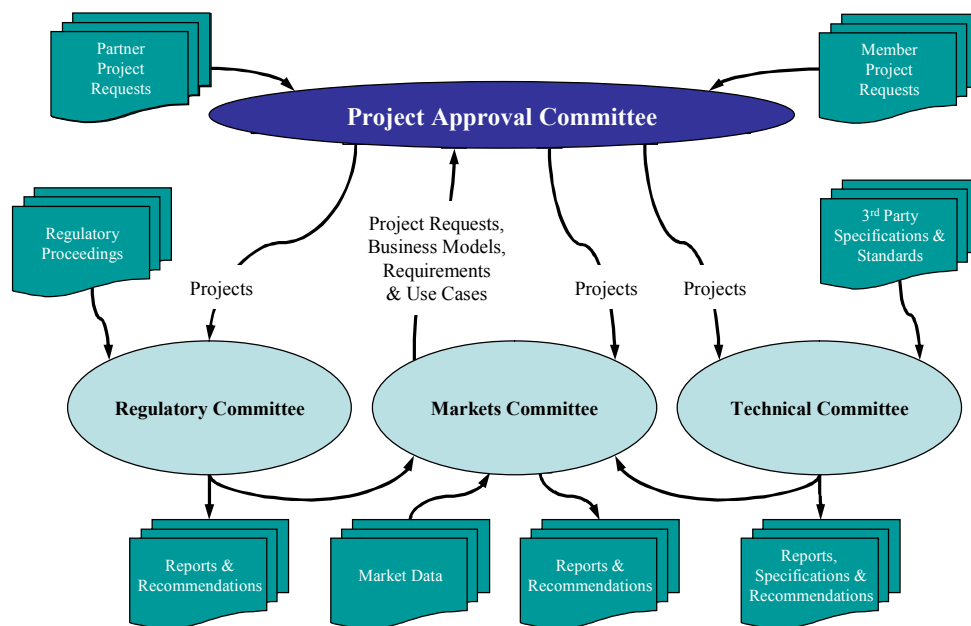

Figure 5: The SDR Forum Project Approval Committee

Under this strategy, it is anticipated that most projects within the SDR Forum will be initiated through the Markets Committee, although projects may also be initiated by member companies or partner organizations (see Figure 5). Projects will be prioritized against existing resources and strategic goals, and then assigned to committees as appropriate. A goal of the Project Approval Committee will be to encourage that projects be decomposed into deliverables that can be achieved in a single calendar year, with development agendas that can be completed in a single meeting.

While under this strategy the Markets Committee Special Interest Groups will continue to exist as long term standing bodies within the SDR Forum, this new emphasis on projects is anticipated to have a long term impact on Technical Committee Work Groups. Moving forward, the SDR Forum anticipates that the majority of new projects will be done in the context of a project or task group that exists separately from a work group as illustrated in Figure 6. Once the project is completed, the task group will dissolve, making way for other task groups to form. New SDR Forum Work Groups will only be established when multiple related projects are required to address a specific problem. In supporting this strategy, the Project Approval Committee will evaluate the progress and activities of existing work groups on a periodic a basis, and work groups without an active project will be disbanded.
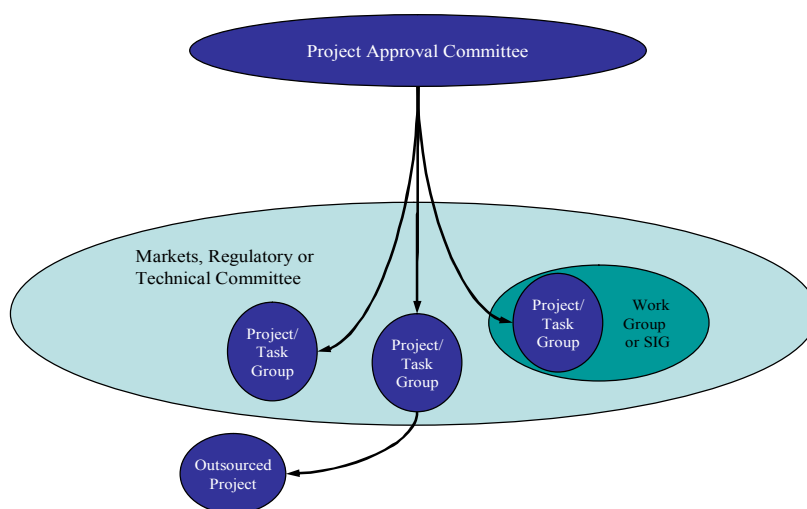

Figure 6: Relationship of Task Groups to SDR Forum Work Groups and SIGs

9   Meeting and Workshop Strategy

The SDR Forum's Workshops and General Meetings provide a primary venue for executing on the SDR Forum's pillars of strategy. Specific strategies for meetings and workshops are required, therefore, to ensure support of these pillars, which are summarized as follows:

- SDR Forum meetings and conferences will be located in recognized wireless clusters or places with a high concentration of members. This strategy encourages local members and non-members to participate with low effort, maximizing the ability of our members to network and maximizing the ability of the SDR Forum to reach out to potential new members and new markets.

- The SDR Forum General Meetings will be the primary location where work gets done in advancing SDR Forum Reports, Recommendations, and Specifications. This strategy recognizes that the Forum's members have other responsibilities within their respective organizations and allows them to optimize the use of their time in supporting their organizations objectives in participating in the SDR Forum. In promoting this strategy, it is understood that significant "homework" must often occur between meetings in preparation for the next general meeting, and as such, support for this strategy requires the SDR Forum to provide enhanced IT services supporting teleconferencing, web conferencing, and online collaboration.

- The SDR Forum will ensure that the agenda for the next meeting is set during the current meeting. This will allow members to better plan, and will help to drive completion of "homework".

- The SDR Forum will use "Workshops" that occur in conjunction with the General Meetings as a primary vehicle for outreach within the advanced wireless community; identifying new markets and new business opportunities for existing members and recruiting new members in relevant areas. These workshops will be structured to provide specific deliverables to the SDR Forum's members with a focus that may include:

  o Defining future R&D opportunities in reconfigurable radio technology, with presentations from government and commercial labs on their key problems and their R&D agendas for addressing these problems in future years.

  o Exploring the business models and use cases for reconfigurable radio technologies in specific markets. The outputs from these types of workshop could be used to define a basis for forming new special interest groups or could be used to help set the agenda of the Technical and Regulatory Committees

  o Defining state of the art of a technology within a specific market. These workshops should be used to create a new SDR Forum Report or Recommendation, or should act to provide primary input to an existing project

10 Pricing Strategy

Through these strategies, the SDR Forum's differentiation from other organizations comes not from a focus on standards or technologies, but rather from a focus on supporting our members in achieving their organizational objectives. The pricing of SDR Forum membership and events must be reflective of this value. Generally speaking, price positions these "products" in the market, and therefore the SDR Forum will develop a competitive pricing strategy following a value pricing model [6]. Under this model, the price of the Forum's membership and events will be adjusted on an annual basis to be at or below the price the market bears for similar value in other organizations.

11 Measuring Success

The SDR Forum believes that execution of this plan will result in increased participation in the SDR Forum's meetings and teleconferences, increased participation in the annual technical conference, and ultimately increased membership. In advancing this strategy, therefore, success

will be measured by average member attendance at the General Meetings and at the Technical Conference.

12 Next Steps

The SDR Forum realizes that for this strategic plan to succeed, it must evolve over time to best serve the needs of the Forum's member organizations. As such, the SDR Forum Board of Directors has commissioned an annual review of this Strategic Plan to address any deficiencies that might be found and to make necessary corrections in response to changes in the advanced wireless market. Specific elements that must be addressed in future iterations of the document include:

- Defining a strategy to better serve the needs of the SDR Forum's international members, including exploring the possibility of creating a European based Technical Conference starting in 2010

- Providing better segmentation analysis on members and attendees to adjust the Forum's overall objectives

- Exploring the possibility of converting the corporate administration from consultants to employees to better address the needs of the members

13 References

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