

Software Defined Radio Forum April 11-13, 2000

The Eighteenth General Meeting of the SDR Forum was held on April 11-13, 2000 at the Lotte World Hotel in Seoul Korea.

Tuesday April 11, 2000

The first day of the meeting was a Software Radio Workshop sponsored by the Radio Communications Broadcasting Committee (RCBC) of the Korea Electromagnetic Engineering Society (KEE). This workshop consisted mostly of presentations by representatives from Japan, Korea, and the Republic of China discussing the state of the art in of software radio research in Asia.

Wednesday April 12, 2000

The meeting opened at 9:00 AM.

Stephen Blust thanked the local hosts (Dr. S.Y. Lee, Dr. H.P. Kim, and Dr. H.S. Yoo) for their support in planning the meeting. Following a review of the agenda for the meeting, he covered administrative issues and asked if there were contributions being submitted for consideration at this meeting-Antoine Delautre's suggestion for a formal definition of interfaces was assigned to the Download Working Group session.

Technical Committee Overview: In preparation for the subsequent discussions, Peter Cook introduced the Technical Committee's activities by presenting the charters for the working groups and task groups, and then describing the process for developing the Forum's technical recommendations.

Regulatory Advisory Committee: John Ralston presented background information on the growth of wireless internet activities and its impact on the Forum. He then talked about the need for future regulatory activity and specifically addressed the contents of the Notice of Inquiry (NOI) released by the Federal Communications Commission on 17 March and a timeline for responses to the NOI. A working group meeting will be held in Washington on 3,4 May to prepare the Forum's response.

Mobile Working Group: Pete Cook presented a list of 22 items that the Mobile Working Group is addressing. He also discussed the relationship between the core framework and the software architecture that the working group has adopted and is continuing to develop.

Yukitoshi Sanada then presented the activities of the Antenna Working Group, including an overview of the 3 smart antenna types defined by the group. Their immediate emphasis is on the most complex and sophisticated type which will be needed for IMT-2000 applications. Mr. Sanada discussed the performance characteristics of one example of multibeam agile antennas with interference suppression, and he then presented 3 use cases which define the behavior of antennas in specific scenarios. The group hopes to have UML definitions completed in time for the November meeting.

Download Working Group: John Ralston presented a status report on activities with the MExE working group. This subgroup of the 3G Partnership is defining specifications for software transfer to and from terminals. He reviewed the content of software agents, images, and Java Applets which could be downloaded into devices. He covered methods of download and possible extensions of MExE specifications, and the possibility of submitting new proposals to MExE if necessary. He then reviewed the contents of the revision to Chapter 6 of the Technical Report on Architecture and Elements of Software Defined radios in preparation for an acceptance vote.

Mr. Delautre then described his proposal for an activity to create a formal definition of the download process based on specifications, a mathematical model, and a defined set of variables.

The meeting closed at 5:00 PM.

Thursday April 13, 2000

The meeting opened at 9:00 AM.

Mr. Blust presented the revision to Chapter 6 of the Technical Report on Architecture and Elements of Software Defined radios for a vote. Allan Margulies read a list of members eligible to vote and, on a motion presented by John Ralston and seconded by John Watson, the text was accepted by a vote of 21 in favor, none opposed, and no abstentions.

Basestation Working Group: Christophe Moy presented an overview of the goals and schedule, for the working group. He showed two use case studies and supporting scenarios to define the system. One case focused on maintenance of handheld devices with three scenarios: download of application modules initiated by the network, download of air interface modules through the basestation, and download of air interface modules initiated by the user. The second use-case was that of basestation upgrade with two scenarios: installation of a new hardware module in the basestation, and software upgrade of the basestation by a software download initiated by the network. In response to a question, he noted that the activities are not specific to the public switched telephone network or a voice network, but it is general enough to apply to IP or other networks.

Handheld Working Group: Andy Feldstein and Mark Cummings discussed the role, function, and goals of the group. Although their eventual goal is to open the internal interfaces of handsets in order to accommodate technology evolution, they recognize that they are driven by carriers and that they have to be sensitive to proprietary concerns. In the near term, they will focus on standardizing external interfaces for download and software patches.

Markets Committee: John Watson described the charter for the committee and he talked about the Forum's revised web page that will be released soon. He and Nalini Uhrig reported on conferences and presentations that the committee has made, including CEBit 2000 and CTIA. They then showed more than 30 public relations contacts made in the last four months.

Closing Plenary: Mr. Blust asked the working committee and task group chairs what they would like to get from the Forum members. Mr. Ralston said that he would like inputs for the upcoming NOI workshop and inputs for a preliminary download structure prior to the Seattle meeting. Mr. Cummings asked for another co-chair for the Handheld Group and increased participation from the Forum membership in defining use-cases and scenarios. Mr. Cook said the Mobile Working Group needs help in developing the action items under consideration.

Mr. Margulies announced that the next meeting of the Forum will be held in Seattle Washington on June 20,21,22, 2000.

The meeting adjourned at 3:00 PM