IEEE 802ECSG
OmniRAN

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| Open mobile network interface for omni-Range Area Networks (OmniRAN) Executive Committee Study Group Meeting Minutes for January 2013 Interim MeetingVancouver, BC, Canada |
| Date: 15-Jan-2013 |
| Author(s): |
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Abstract

Minutes for the ECSG meeting held in Vancouver, British Columbia, Canada in January 2013.

**Tuesday, January 15, 2013, 13:30 to 15:30**

Chair: Max Riegel

Recording secretary: Charles Perkins

**Call to order and agenda**

Meeting called to order on Tuesday, January 15th 2013 by Max Riegel at 13:33 (PST). The chair then reviewed the following topics from the agenda:

* The agenda is DCN omniran-13-0002-02-ecsg
* The chair noted the affiliation, anti-trust, ethics code, and IEEE SA policies and procedures as well as IEEE WG guidelines and meeting etiquette
	+ No one expressed awareness of patent claims.
* The chair covered the voting rules for study groups, as per the IEEE 802 LMSC operations manual and IEEE 802 WG P&P
* The agenda was approved without objections
* The chair reminded attendees to record attendance in both imat.ieee.org and paper sheets

**Introduction of Study Group chair**

* + Max Riegel presented himself and declared affiliation with Nokia Siemens Networks

**Introduction of participants**

* + All participants present in the room introduced themselves and declared their affiliation

**Vice-chair position**

* + Max Riegel explained that he would like to have a vice-chair, as he is planning to make technical presentations and will need someone to run the meeting during these presentations
	+ Stephen McCann spoke in favour of having a vice-chair
	+ Motion to have a Vice-chair in OmniRAN:
		- Moved by Charles Perkins; seconded by: Roger Marks
		- 26 yes/0 no/0 abstentions.
		- Motion passed
	+ One nomination received: Juan Carlos Zuniga
	+ Juan Carlos Zuniga declared his affiliation with InterDigital Communications and introduced himself
	+ Motion to elect Juan Carlos Zuniga as vice-chair:
		- Moved by Charles Perkins; seconded by: Roger Marks
		- 25 yes/0 no/1 abstentions.
		- Motion passed

**Secretary position**

* + No candidacies were received and no one volunteered at the meeting
	+ The position will remain open

**Review of EC decision and history of OmniRAN**

**Link:** [**https://mentor.ieee.org/omniran/dcn/12/omniran-12-0001-01-ecsg-proposal-for-an-ieee-802-ec-omniran-study-group.pdf**](https://mentor.ieee.org/omniran/dcn/12/omniran-12-0001-01-ecsg-proposal-for-an-ieee-802-ec-omniran-study-group.pdf)

**Organization**

* Group started in March 2012 as part of 802.16’s HetNet SG discussions
* Expecting to continue the OmniRAN ECSG through July 2013
	+ Website: <http://www.ieee802.org/OmniRANsg/>
		- Email reflector: ecsg-802-omniran@listserv.ieee.org
		- Email archive: <http://grouper.ieee.org/groups/802/OmniRANsg/email/>
	+ Mentor: <https://mentor.ieee.org/omniran/documents>
		- Registration under myProject required: <https://development.standards.ieee.org/my-site/home>

**Review of OmniRAN overview and status presentation**

**Link:** [**https://mentor.ieee.org/omniran/dcn/12/omniran-12-0002-02-ecsg-omniran-overview-and-status.pdf**](https://mentor.ieee.org/omniran/dcn/12/omniran-12-0002-02-ecsg-omniran-overview-and-status.pdf)

* Questions
	+ Charlie Perkins: Is OmniRAN going to help a distributed control structure?
		- Max: The idea is to provide the tools to operate networks in a reasonable fashion, regardless of the size of the network: small or big.
	+ Observation: So is this a checklist of required network functions?
		- A: Yes
	+ Q: Is this the main contribution from OmniRAN?
		- The group will decide. We will not define the home router.
	+ Q: Will handover be considered?
		- There are different interpretations of handover, from nomadic to seamless. The main benefit should be to access service over different RANs
	+ Q: Can you handover without coordination?
		- I see multiple issues in pre-authentication, authentication and link setup, even before data path transfer is established on the new link.
	+ Q: Seamless is difficult and handover should be considered.
		- Response: I see more issues in the link setup, although the group will have the final say on the problems to solve.
	+ Charlie Perkins: How does subscription management relate to RAN?
		- Max: These are required functions for performing authentication
	+ Roger Marks: Just a highlight, that R1 has a subscript specifying the actual group and showing that each one is different. However, the other interfaces are identical.
	+ Subir Das: What do you mean by multiple subscriptions for same interface?
		- Max: This could be having multiple credentials to connect with the same radio interface

**Agenda continuation**

Use cases discussions to take place on Wednesday.

**Recess**

The meeting was recessed, without objection, at 15:23 (PST)

**Wednesday, January 16, 2013, 13:30 to 15:30**

Chair: Max Riegel

Recording secretary: Juan Carlos Zuniga

Meeting called to order by Max Riegel at 13:33 (PST). The chair then reviewed the following topics from the agenda:

**Proposal of OmniRAN architecture for Data Offload Service through Wireless P2P Networks presentation, Hyunho Park, ETRI**

**Link:** [**https://mentor.ieee.org/omniran/dcn/13/omniran-13-0001-00-0000-proposal-of-omniran-architecture-for-data-offload-service-through-wireless-p2p-networks.pptx**](https://mentor.ieee.org/omniran/dcn/13/omniran-13-0001-00-0000-proposal-of-omniran-architecture-for-data-offload-service-through-wireless-p2p-networks.pptx)

* Questions
	+ Juan Carlos Zuniga (InterDigital): Are you suggesting to include R1 in the scope
		- Hyunho Park: It would be beneficial to facilitate communication between peers. We concentrate on requirements for R4 and R3.
	+ Roger Marks (Consensii): Probably better to explain how the OmniRAN architecture can facilitate the communication between these nodes as proposed in the presentation
	+ Phil Barber (Huawei): Functionalities to a common Core could be useful, but OmniRAN cannot facilitate communications if these don’t exist already, for instance in 802.11. These would not necessarily be links in OmniRAN.
	+ Charlie Perkins (Futurewei): Is it then feasible to consider the air interface out of scope for OmniRAN?
	+ Jordan Melzer (Telus), Max Riegel (NSN): Is the P2P interface intended to be the same interface as R1 or is it a different one?
		- The mobile station would use the same technology
	+ Stephen Rayment (Ericsson): There are amendments done in other standards, like 802.11s to communicate station to station communication. If there are issues, probably they should be highlighted in the different 802 working groups. For instance, for making Donor Nodes available, there could be some material in 802.11s.
		- Data transmission offload can be addressed by OmniRAN
	+ Phil Barber (Huawei): Since slide 11 states 802.XX, it hints to me PHY/MAC changes. OmniRAN cannot make modifications to those specs. On the other hand, we could define a L2.5 or similar layer to communicate these stations.
		- Hyehong-Ho (ETRI): We are not proposing a new interface. We are proposing a common platform to communicate between stations.
		- PB: Control and data channels?
		- HH: Mainly control
		- PB: How about the multicast you mentioned?
		- HH: Yes, this could be considered
	+ Max: Topic looks interesting. The group does not seem to agree with considering a new reference point. We need more details to understand the proposal about the P2P communication. Hence, authors are encouraged to work on a concrete example and show what belongs to the specific radio access technology and what belongs in the OmniRAN network architecture.

**OmniRAN Smart Grid use case presentation, Max Riegel, NSN**

**Link:** [**https://mentor.ieee.org/omniran/dcn/13/omniran-13-0003-00-0000-smart-grid-use-case.pptx**](https://mentor.ieee.org/omniran/dcn/13/omniran-13-0003-00-0000-smart-grid-use-case.pptx)

* Questions
	+ Subir Das (ACS): What is the smart grid application that you are showing?
		- Max: It could be the remote control of the heater, like remote shut down
		- SD: Do you anticipate every device running the functionality, or a controller at home?
		- Max: I believe a peer to peer is more likely for an open market
		- SD: I believe the controller is more likely
		- MR: The controller can also be available in the device
	+ Phil Barber (Huawei): I liked the presentation and the instance of the use case to OmniRAN. It helps showing where OmniRAN helps or adds a value.
	+ Nada Golmie (NIST): You mentioned the ESI. Is OmniRAN a type of ESI for various technologies?
		- Max: ESI is a full stack. Here we provide only the lower layer, specific to 802.
		- So if I want to look at other technologies like 3GPP, would I need an OmniRAN as well?
		- MR: It could be feasible, but our scope is only in 802. Doing something for 802 is already a big task.
		- NG: So if they want to use other technologies, they would need something like this.
		- MR: Yes
	+ NG: How do you compare to 802.21?
		- MR: 802.21 addresses some functions that are required but not all. OmniRAN would need to look at the missing pieces
	+ Roger Marks: This is a good presentation showing the extent of solutions OmniRAN can provide. In slide 7, perhaps R4 is the weakest point. However, the purple boxes show other technologies and they can benefit from these other interfaces.
	+ Steve Shelhammer (Qualcomm): There is 1905.1 doing something similar. How does this compare?
		- MR: Access to the 1905.1 specification is limited. However, 1905.1 is meant for home networks and OmniRAN can be used for industrial or enterprise environments. The same use case can easily be extrapolated. We will need to take a concrete look at 1905.1, but we need to solve the whole puzzle.
	+ SS: Will you write a PAR?
		- MR: Yes, the plan is to create a PAR for July, not March. We need to find out the parts we want to address first.
	+ Stephen Rayment (Ericsson): Seems like a nice application that shows a different application compared to the WiFi 3GPP that was discussed.
		- MR: I wanted to show that 802 technologies are used in other applications beyond mobile communications. This is a growing market and we should address it as well.
	+ Subir Das (ACS): Are you trying to show an off-the-shelf heater automated?
		- MR: The heater would signal that it has a subscription and the distribution/utility provider would provide this functionality.
		- SD: but we are not talking about this functionality.
		- MR: we can enable this functionality. If we allow communications, we can locate the meter collocated with the device. We have the advantage in 802 to have a view of different technologies.

**OmniRAN use cases document, including the proposals from 16HET discussions**

* Max Riegel (NSN): Text document or slide set? Who would take the editor roll?
	+ Juan Carlos Zuniga (InterDigital): I would propose encouraging authors of the different use cases to resubmit their use cases using the smart grid use case as template.
	+ MR: Some text can help and it is easier for authors to provide it.
	+ JCZ: in that case both should be submitted
* Charlie Perkins (Futurewei): How many use cases do you think we need?
	+ MR: it is up to the group
	+ CP: current use cases do not highlight the value of R4.
	+ MR: I would encourage you to bring up a use case to show the value. Use case is just an example. Please bring them forward and convince the group of the value.
* Roger Marks: Use cases are useful and in order to be effective they need to show a realistic application. However, ultimately we are not going to design a standard per use case but a standard for solving these issues.
* CP: What are the odds that we want to solve too much?
* MR: This is a discussion for tomorrow.
* Demir (U-box): In the complete picture we need multiplexer and demultiplexer for these networks that we show in the pictures.
	+ MR: R3 is the multiplexer, multiple R1 and multiple providers are the demultiplexer
	+ D: But what happens in which layer?
	+ MR: Perhaps a protocol stack would help
* Max Riegel: Suggested structure is
	+ Application domain
	+ Textual description
	+ Architectural view
	+ Requirements derived
* C. Perkins volunteered as technical editor
* Moved by: Juan Carlos Zuniga, seconded: Michael Montemurro
* Discussion:
	+ Charlie P: Are we discussing the SaMOG use case?
* MR: we can put it on the agenda for tomorrow
* Motion passed without objection

**Recess**

The meeting was recessed, without objection, at 15:25 (PST)

**Thursday, January 17, 2013, 13:30 to 15:30**

Chair: Max Riegel

Recording secretary: Charles E. Perkins

**Call to order and agenda**

Meeting called to order on by Max Riegel at 13:32 (PST). The chair then reviewed the topics from the updated agenda:

* The updated agenda is document number omniran-13-0002-03-ecsg

The updated agenda was presented and no comments were made.

**OmniRAN 3GPP SaMOG, [presented by Juan Carlos Zuniga (InterDigital), on behalf of the authors]**

**Link:** [**https://mentor.ieee.org/802.16/dcn/12/16-12-0660-00-Shet-omniran-3gpp-samog.pptx**](https://mentor.ieee.org/802.16/dcn/12/16-12-0660-00-Shet-omniran-3gpp-samog.pptx)

* Questions
	+ Charlie: Is SaMOG considering GTP and PMIP or only GTP?
		- JCZ: at the moment it is addressing GTP only, but PMIP is also defined in S2a and can be considered
	+ Stephen Rayment (Ericsson): Would it be possible for the authors to specify what is missing from existing specifications that should be addressed by OmniRAN?
		- JCZ: I think this is a fair request to make to the authors
	+ Charlie: In the slide it is written 802.11 and 802.16. Is SaMOG considering 802.16?
		- Stephen Rayment: Only WLAN is considered at the moment in SaMOG
		- Charlie: Is there then something OmniRAN can do or should it be 802.11?
		- JCZ: OmniRAN would provide the added value of extending the solution to multiple 802 technologies
	+ Max: Can Juan Carlos ask the authors to resubmit the proposal including clearer requirements and in the format required as per the call for contributions?
		- JCZ: Yes, I will communicate this request to the authors

**Specification structuring and phasing, Max Riegel (NSN)**

**Link:** <https://mentor.ieee.org/omniran/dcn/13/omniran-13-0004-00-0000-structuring-specification-effort.pptx>

* What is the best approach for phasing the work in OmniRAN?
	+ Charlie (Huawei): Besides the options in slide 8, we should also consider basing the work on the use cases and priorities defined in the use case document.
	+ Stephen Rayment (Ericsson): I agree the use cases are important. We also would need to know what is the “Omni” part that allows multiple accesses. For instance, network selection is something that has been addressed in multiple areas and could be reused. Mobility could be tricky, but could you apply those to the smart grid.
	+ Demir (uBox): It could be dangerous to focus too much on one use case
	+ Juan Carlos Zuniga (InterDigital): We should probably look at all use cases and make priorities based on them.
* Juan Carlos Zuniga (InterDigital): are phases going to be done in sequence only or can they be also done in parallel?
	+ Max: I would not rule out the option of working them in parallel. However, this would depend on the amount of recourses and participation in the group.
* Pat Kinney (Kinney consulting): I would probably submit another use case, as I have other industrial use cases in mind that I would like to be considered. I expect submitting a use case in the future
	+ Max: We welcome more use case submissions

**PAR and 5C templates**

* + <https://mentor.ieee.org/omniran/dcn/13/omniran-13-0005-00-0000-par-5c-table-of-content.docx>
* Roger Marks (consensii): Very focused PARs help doing good projects, similar to the 802.1 model. I would suggest adding as much information as possible in the PAR so that it is less open ended and more defined. This is in general a good recipe for success in IEEE 802.

**Way forward**

* Call for contributions
	+ <https://mentor.ieee.org/omniran/dcn/13/omniran-13-0006-00-ecsg-call-for-contributions.docx>
* Deadline March 16, 2013, AOE
* Motion: To approve the call for contributions omniran-13/0006r0 as ecsg document.
	+ Mover: Juan Carlos Zuniga (InterDigital), Seconded: Michael Montemurro (RIM)
	+ Questions
		- Charlie Perkins (Futurewei): Does it mean that there cannot be contributions past the deadline?
		- Max: There is no such a restriction. However, we need the material now to derive and compile the requirements in an official document.
	+ Motion passes without objections
* Liaisons
	+ Better to send a LS to SA2 once we have the use case clearly defined and asking for review of description and requirements
	+ Since the next OmniRAN meeting is in March, SA2 meets in April, and OmniRAN again in May, it would allow OmniRAN to work the potential response from SA2 at the May meeting.
* Further announcements
	+ Kenny: What is the best way?
	+ Max: please send it to the reflector
* IETF/IEEE cooperation
	+ Max: Is there any specific communication required?
	+ Paul Nikolich: Pat Thaler should be the point of contact for this meeting.
	+ Juan Carlos Zuniga: A short summary would be beneficial
	+ Roger: The main focus is on the issues, but an updated summary would certainly be appreciated
	+ Roger: The past communication was somewhat informal, as the group did not exist at the time. However, some communication about this first meeting, including the past information and the current call for contributions would be useful.
* Document uploaded to the server as omniran-13/07r0
	+ Motion: to approve document omniran-13-0007-00-ecsg, allowing the chair to apply editorial corrections. The liaison letter should be sent out to the SDOs listed in the letter and other SDOs as brought up on the OmniRAN reflector.
	+ Moved by Charlie Perkins (Futurewei), seconded by Juan Carlos Zuniga (InterDigital).
		- Comments:
			* Roger: Sometimes groups in the SDOs can also be recipients
			* Charlie: IETF is meeting in March and you will have to send before the meeting
			* Paul: I don’t see in the letter a pointer to what it was accomplished in this meeting
			* Roger: You can add a sentence saying that it contains an update in the letter.
		- Motion approved without objections
	+ Paul: What are you doing to communicate internally with other 802 groups?
		- Max: Michael Montemurro (RIM) will be the liaison officer with 802.11, so we can also assign liaison officers for other 802 groups.

**Next meetings**

* Teleconference
	+ Thur Feb 28th, 2013, 5pm-6pm, EST
* IEEE 802 Plenary meeting
	+ March 18-22, 2013, Orlando, FL

**AOB**

* Paul: Is there a draft agenda for the March meeting?
* Max: No, but it is something that we can do at the teleconference
* Roger: From participant point of view, I want to appreciate the chair and the good meeting.

**Adjournment**

The meeting was adjourned, without objection, at 15:40 (PST)