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| Minutes of IEEE 802.1 OmniRAN TG Meeting in Atlanta, TX |
| **Date: January 18th – 21st, 2016** |
| **Author(s):** |
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## Abstract

Minutes of the IEEE 802.1 OmniRAN TG meeting at the IEEE 802 Interim Meeting in Atlanta, GA on January 18-21, 2016

# Monday, January 18th, 2016

Chair: Max Riegel

Recording secretary: Walter Pienciak

## Call to order

* Meeting called to order by Max Riegel at 16:08 hrs.
* Meeting was guided by the slides uploaded and maintained by the chair:
<https://mentor.ieee.org/omniran/dcn/16/omniran-16-0001-01-00TG-jan-2016-f2f-meeting-slides.pptx>

## Minutes

* Walter Pienciak volunteered to take notes.

## Attendance

* IEEE 802.1 meeting IMAT page was used for recording of attendance
* IEEE 802.1 provides reciprocal attendance credits to members of IEEE 802.11.
* Roll call

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| **Name** | **Affiliation** |
| Max Riegel | Nokia Networks |
| Walter Pienciak | IEEE |
| Juan Carlos Zuniga | Interdigital  |
| Yonggang Fang | ZTE |
| Liang Jin | Spirent Comm. |
| Roger Marks | EtherAirNet Assoc. |
| Fulei Liu | ZTE |
| Wang Hao | Fujitsu |
| Hesham ElBakoury | Huawei |
| Paul Bottorff | HP |

## IEEE WG Guidelines

* The chair presented the mandatory IEEE SA guideline slides and asked for anybody willing to make an IPR announcement.
* No IPR declarations were brought up.

## Agenda approval

* Agenda as proposed in the chair’s meeting slides:
* Review of minutes
* <https://mentor.ieee.org/omniran/dcn/15/omniran-15-0059-00-00TG-nov-2015-f2f-meeting-minutes.docx>
* <https://mentor.ieee.org/omniran/dcn/15/omniran-15-0062-00-00TG-dec-2015-confcall-minutes.docx>
* Reports
* Wi-Fi as 5G component discussions
* Document templates
* <https://mentor.ieee.org/omniran/bp/StartPage>
* Review of 802.1CF editor’s draft
* <http://www.ieee802.org/1/files/private/cf-drafts/d0/802-1cf-d0-0.pdf>
* Comment resolution
* <https://mentor.ieee.org/omniran/dcn/16/omniran-16-0004-00-CF00-zte-comments-on-omniran-draft.xls>
* <https://mentor.ieee.org/omniran/dcn/15/omniran-15-0042-03-CF00-an-setup-over-unlicensed-band.docx>
* <https://mentor.ieee.org/omniran/dcn/16/omniran-16-0005-00-CF00-16019-802-1cf-d0-0-comments.xls>
* New P802.1CF contributions
* Functional design and decomposition
* Fault diagnostics and maintenance
* <https://mentor.ieee.org/omniran/dcn/15/omniran-15-0060-01-CF00-key-concepts-of-fault-diagnosis-and-maintenance.pptx>
* Authentication and trust establishment
* <https://mentor.ieee.org/omniran/dcn/16/omniran-16-0007-00-CF00-key-concepts-of-authentication-and-trust-establishment.pptx>
* Backhaul representation
* Deployment models
* <https://mentor.ieee.org/omniran/dcn/15/omniran-15-0057-01-00TG-distributed-ccap-architectures.docx>
* <https://mentor.ieee.org/omniran/dcn/16/omniran-16-0003-00-CF00-outline-annex-non-ieee802-phy.pptx>
* Wi-Fi as component of 5G within the scope of P802.1CF
* Project planning, upcoming meetings
* Status report to IEEE 802 WGs
* AOB
* Agenda approved without comments.
* No contribution on Wi-Fi as component of 5G within the scope of P802.1CF was submitted, but the item was kept on the agenda in case something came up during the week.

## Schedule of the topics during the week

* Group agreed to arrange the discussion topics according to the following plan over the week.

***Monday***

* Review of minutes
* <https://mentor.ieee.org/omniran/dcn/15/omniran-15-0059-00-00TG-nov-2015-f2f-meeting-minutes.docx>
* <https://mentor.ieee.org/omniran/dcn/15/omniran-15-0062-00-00TG-dec-2015-confcall-minutes.docx>
* Reports
* Wi-Fi as 5G component discussions
* Document templates
* <https://mentor.ieee.org/omniran/bp/StartPage>
* New P802.1CF contributions
* Functional design and decomposition
* Fault diagnostics and maintenance (Wang Hao)
* <https://mentor.ieee.org/omniran/dcn/15/omniran-15-0060-01-CF00-key-concepts-of-fault-diagnosis-and-maintenance.pptx>

***Tuesday***

* Review of 802.1CF editor’s draft
* <http://www.ieee802.org/1/files/private/cf-drafts/d0/802-1cf-d0-0.pdf>
* Comment resolution
* <https://mentor.ieee.org/omniran/dcn/16/omniran-16-0004-00-CF00-zte-comments-on-omniran-draft.xls>
* <https://mentor.ieee.org/omniran/dcn/15/omniran-15-0042-03-CF00-an-setup-over-unlicensed-band.docx>
* <https://mentor.ieee.org/omniran/dcn/16/omniran-16-0005-00-CF00-16019-802-1cf-d0-0-comments.xls>

 ***Wednesday***

* New P802.1CF contributions
* Functional design and decomposition
* Authentication and trust establishment
* <https://mentor.ieee.org/omniran/dcn/16/omniran-16-0007-00-CF00-key-concepts-of-authentication-and-trust-establishment.pptx>
* Deployment models
* <https://mentor.ieee.org/omniran/dcn/15/omniran-15-0057-01-00TG-distributed-ccap-architectures.docx>
* <https://mentor.ieee.org/omniran/dcn/16/omniran-16-0003-00-CF00-outline-annex-non-ieee802-phy.pptx>

 ***Thursday***

* New P802.1CF contributions
* Functional design and decomposition
* Revision of Fault diagnostics and maintenance (Wang Hao)
* <https://mentor.ieee.org/omniran/dcn/16/omniran-16-0008-00-CF00-text-proposal-for-fdm.docx>
* Project planning, upcoming meetings
* Status report to IEEE 802 WGs
* AOB

##  Review of minutes

* <https://mentor.ieee.org/omniran/dcn/15/omniran-15-0059-00-00TG-nov-2015-f2f-meeting-minutes.docx>
* No comments raised.
* <https://mentor.ieee.org/omniran/dcn/15/omniran-15-0062-00-00TG-dec-2015-confcall-minutes.docx>
* No comments raised.

##  Reports

* Wi-Fi as 5G component discussions
* Discussions during the week in 802.11 and in particular in the EC workshop on Friday. IEEE has set up a 5G program and Roger Marks is consulting for IEEE regarding the scope and outcome of the 5G program.
* Document templates
* <https://mentor.ieee.org/omniran/bp/StartPage>
* Chair explained that more document templates are made available by way of the OmniRAN Wiki.
* On the page on Working Documents and Contributions, templates are available for P802.1CF for:
* Comments: <https://mentor.ieee.org/omniran/dcn/15/omniran-15-0041-00-00TG-commenting-xls-template.xls>
* Presentations: <https://mentor.ieee.org/omniran/dcn/16/omniran-16-0002-00-CF00-pptx-template-functional-description.potx>
* Text contributions: <https://mentor.ieee.org/omniran/dcn/15/omniran-15-0056-00-00TG-docx-template-functional-design.docx>

## New P802.1CF contributions

* Functional design and decomposition
* Fault diagnostics and maintenance (Wang Hao)
* <https://mentor.ieee.org/omniran/dcn/15/omniran-15-0060-01-CF00-key-concepts-of-fault-diagnosis-and-maintenance.pptx>
* Presented concepts for the text contribution were well received.
* Chair invited Wang Hao to submit a text contribution for discussion in the Thursday session.

Recessed by chair at 18:00

# Tuesday, January 19th, 2016

Reconvened at 16:05

* Call for IPR: No response

## Review of P802.1CF editor’s draft

* P802.1CF within the scope of 5G
* <http://www.ieee802.org/1/files/private/cf-drafts/d0/802-1cf-d0-0.pdf>
* Walter presented the first edition in the 802.1CF draft directory and resolved in discussion with the group the editorial comments inserted in the document.
* Comment resolution
* <https://mentor.ieee.org/omniran/dcn/16/omniran-16-0004-00-CF00-zte-comments-on-omniran-draft.xls>
* <https://mentor.ieee.org/omniran/dcn/15/omniran-15-0042-03-CF00-an-setup-over-unlicensed-band.docx>
* <https://mentor.ieee.org/omniran/dcn/16/omniran-16-0005-00-CF00-16019-802-1cf-d0-0-comments.xls>
* Discussions and resolutions took place with presence of the commenters.
* Most of the comments got unanimous acceptance, however the comments and text contribution on AN setup did not find agreements.
* Main issue of disagreement was the representation of virtualized access networks and the role of the NRM
* Comments on AN setup were postponed and the chair proposed to hold a special session in the upcoming F2F meeting in Macau to discuss the various views and approaches on access network virtualization.
* The results of the comment resolution is captured in the combined spreadsheet, uploaded to mentor after the session:
* <https://mentor.ieee.org/omniran/dcn/16/omniran-16-0006-00-CF00-jan-2016-d0-0-comment-resolution.xls>
* It was agreed to postpone the release of the next edition of the draft until after the Macau meeting in order to show much more content by the contributions on authentication and trust establishment, as well as on fault discovery and maintenance, which may be ready for inclusion after the Macau meeting.

Recessed by chair at 18:00

# Wednesday, January 20th, 2016

Reconvened at 16:02

* Call for IPR: No response

## New P802.1CF contributions

* Functional design and decomposition
* Authentication and trust establishment
* <https://mentor.ieee.org/omniran/dcn/16/omniran-16-0007-00-CF00-key-concepts-of-authentication-and-trust-establishment.pptx>
* Max presented the outline and basic concepts for the text on authentication and trust establishment.
* Main discussion point was the role of the user and service provider, and the relation of such roles to the NRM.
* Conclusion was reached that neither user nor service provider have to be reflected in the NRM, as they are not termination points of technical communication exchanges.
* The content of the presentation was regarded as good starting point for creation of the text contribution. Max will work on the text contribution and will potentially provide a first version for review for the upcoming conference call.
* Deployment models
* <https://mentor.ieee.org/omniran/dcn/15/omniran-15-0057-01-00TG-distributed-ccap-architectures.docx>
* Hesham introduced the various architectural approaches of CCAP. Multiple different possibilities for mapping of the CCAP architecture to the P802.1CF NRM were discussed without gaining final conclusions.
* Main issue is the mapping of the TE either to the Cable Modem or the User Device connected to the Cable Modem.
* <https://mentor.ieee.org/omniran/dcn/16/omniran-16-0003-00-CF00-outline-annex-non-ieee802-phy.pptx>
* Max presented thoughts on the content structure of annexes explaining the deployment of P802.1CF for non-IEEE 802 technologies.
* The proposed outline was well received by the group, and the application of the proposed outline to the description of CCAP was recommended.
* Hesham will create a revision of his contribution by restructuring the content according to the proposed outline.

Recessed by chair at 18:10

# Thursday, January 21st, 2016

Reconvened at 10:30

* Call for IPR: No response

## New P802.1CF contributions

* Functional design and decomposition
* Revision of Fault diagnostics and maintenance (Wang Hao)
* <https://mentor.ieee.org/omniran/dcn/16/omniran-16-0008-00-CF00-text-proposal-for-fdm.docx>
* Discussion led to recommendation to introduce ‘management plane’ exposing management station and management agents in network elements.
* Wang Hao will create separate contribution on management system and will update contribution for upcoming conference call.

## Project planning, upcoming meetings

* Max explained that TG can create revisions of the draft without entering the TG balloting process.
* Agreed to postpone TG balloting until draft has text in all major sections.
* TG balloting may be started after Jul 2016 plenary when sufficient contributions are received.
* Macao meeting will have special session on network instantiation to clarify understanding for P802.1CF.
* Next conference call can’t be rescheduled, but Max will arrange for calls earlier in the day for the calls after Macao meeting.

### Next conference call:

* February 23rd, 2016, 10:00AM ET
* Dial-in details on OmniRAN TG Wiki page on mentor
<https://mentor.ieee.org/omniran/bp/StartPage>
* Review contributions invited in Jan meeting and plans for Macau meeting

## Status report to IEEE 802 WGs

* Chair drafted report and presented proposal for review and approval. Several comments on wording received and adopted to proposed text.
* <https://mentor.ieee.org/omniran/dcn/16/omniran-16-0009-00-00TG-1601-status-report-to-802-wgs.pptx>
* Approved by group.

##  AOB

* None

### Meeting adjourned by chair at 12:35