 

IEEE P802.21 Media Independent Services

Minutes of the IEEE P802.21 Working Group (DCN 21-18-0056-00-0000)

Session #87 Meeting, Big Island, HI, USA

Chair: Subir Das

Vice Chair: Hyeong Ho Lee

Meeting minutes are scribed by Hyeong Ho Lee

# Day 1 PM1 (1:30pm-3:30pm), September 10, 2018: Room Waikoloa 3

## IEEE 802.21 WG Opening Plenary: Meeting is called to order at 1:30pm by Subir Das, Chair of IEEE 802.21 WG with opening notes

## September, 2018 Meeting Agenda (DCN: 21-18-0045-00-0000)

### Agenda bashing:

#### Agenda was modified by adding AM1 slot on both Tuesday and Thursday and canceling PM1 slot on Tuesday for IG sessions.

#### The revised agenda (DCN: 21-18-0045-01-0000) was approved without any objection.

## IEEE 802.21 Session #87 Opening Plenary Notes (21-18-0051-01-0000)

### Meeting logistics: Meeting room Waikoloa 3 including JTC1/SC6 Ad hoc

### <http://mentor.ieee.org/802.21/documents>

### Attendance procedures, logistics, breaks: useful website <http://ieee802.linespeed.io/>

### Duty to inform slides 1-4, etc.

### Request to make Intellectual Property declaration.

#### No one declared any patent claims in this session.

### LMSC Chair’s Guidelines on Commercialism at meetings.

## Working Group Status

### ISO/IEC/JTC1 SC6 DCOR ballot on IEEE-802.21-2017/Cor1 is approved with comments

### Response on the comments was sent to ISO/IEC/JTC1 SC6 on July 13, 2018

### Ongoing discussions in Interest Group on Network Enablers for Seamless HMD based VR Content Service.

## Working Group Objectives for September meeting

### Update on IEEE 802.21-2017/Cor1 in ISO/IEC/JTC1.

### IG discussion on Network Enablers for Seamless HMD based VR Content Service.

### Discussion on network requirements w.r.t. to liaison from IEEE P3079.

### Next Steps

## Session #86 minutes (DCN: 21-18-0043-00-0000) was approved without any objections.

## Teleconference minutes (DCN: 21-18-0046-00-0000) was approved without any objections.

## Working Group Chair reported 802 wireless chairs’ meeting updates (DCN: ec-18-0171-01-WCSC).

* + - * + The meeting discussed logistics of this interim meeting, treasurer’s report, future interim meeting’s venue selection, and status updates of IEEE 802.18, 802.19, and 802.24 WGs.

## Plan for Interest Group (IG) on Network Enablers for Seamless HMD based VR Content Service (DCN: 21-18-0049-01-0000)

#### The IG Chair mentioned that the goal of the IG sessions this week is to make progress in drafting the white paper. The detailed plan for the IG sessions was reported in DCN 21-18-0049-01-0000.

#### Comments from Subir and Hanatani have been reflected in Draft v0.6 of the White paper.

## Report on IEEE P3079 (DCN: 21-18-0048-00-0000)

#### Jeong Sangkwon Peter, the liaison officer of IEEE 3079 for IEEE 802.21, reported current status of IEEE P3079 (DCN 21-18-0048-00-0000).

## Meeting was adjourned at 3:03pm.

# Day 3 PM1 (1:30pm-3:30pm), September 12, 2018: Room Waikoloa 3

## Meeting is called to order at 1:38pm by Subir Das, Chair of IEEE 802.21 WG.

## Discussions on activities of IEEE 802.11 RTA TIG

#### Hyeong Ho Lee presented a contribution (DCN: 21-18-0054-00-0000) introducing activities of IEEE 802.11 RTA (Real Time Applications) TIG (Technical Interest Group).

#### WG briefly reviewed 802.11 RTA documents and other relevant documents which are in the document list of the contribution.

#### WG Chair encouraged IG members to follow what happens in the RTA TIG and to update the white paper accordingly, if needed.

#### The revised contribution (DCN: 21-18-0054-01-0000) with editorial corrections is uploaded on the mentor.

## Meeting was adjourned at 2:20pm, and the remaining time was assigned to IG.

# Day 4 AM2 (10:30am-12:30pm), September 13, 2018: Room Waikoloa 3

## 802.21 WG Closing Plenary: Meeting is called to order at 10:40am by Subir Das, Chair of IEEE 802.21WG

## IEEE 802.21 Session #87 Closing Plenary Report (DCN: 21-18-0055-00-0000)

## Interest Group Report

* + - * + IG on Network Enablers for seamless HMD based VR Content Service had five sessions.
        + IG Chair, Jeong Sangkwon Peter, presented the IG report (DCN: 21-18-0052-00-0000) and revised the IG report based on the WG discussion (DCN: 21-18-0052-01-0000).
        + During this meeting, IG reviewed draft v0.6 (DCN: 21-18-0047-00-0000) of the white paper on Network Enablers for seamless HMD based VR Content Service, and produced the draft v0.7 (DCN: 21-18-0053-00-0000).

## Work Update

* + - * + Interest Group on Network Enablers for seamless HMD based VR Content Service had five sessions and the report is available at:
  + <https://mentor.ieee.org/802.21/dcn/18/21-18-0052-01-0000-vr-ig-meeting-summary.ppt>
    - * + Status update on IEEE-2017/Cor1 in ISO/JTC1/SC6 and joint meeting with IEEE 802 ISO/JTC1/SC6 ad hoc
        + Report on IEEE P3079
  + <https://mentor.ieee.org/802.21/dcn/18/21-18-0048-00-0000-status-of-ieee-3079.docx>
    - * + Report on 802.11 Real Time Applications TIG
  + <https://mentor.ieee.org/802.21/dcn/18/21-18-0054-01-0000-activities-of-ieee-802-11-rta-tig.ppt>

## Teleconferences

#### Thursday, October 04, 2018, 8-9 am, US EDT (9-10 pm, JST/KST)

#### Thursday, October 25, 2018, 8-9 am, US EDT (9-10 pm, JST/KST)

## WG Motions (None)

## Future Sessions – 2018

### Plenary: November 11-16, 2017, Marriott Marquis Queen’s Park, Bangkok, Thailand

* + Co-located with all 802 groups

## November 2018 Plenary Meeting Logistics

### IEEE 802 Plenary Meeting: November 10-15, 2018

* + Meeting Venue: Bangkok, Thailand in Bangkok Marriott Marquis Queen’s Park
  + Event Information: http://802world.org/Plenary/

### Registration Fees and Deadlines

* + Registration Website: https://www.regonline.com/ieee802plenaryNovember2018
  + Standard Registration: Before 6:00 PM PDT, Friday, September 28, 2018
    - $US 600.00 for attendees at the conference hotel (>= 1 night) otherwise $US900.00
  + Before 6:00 PM PDT, Friday, October 27, 2018
    - $US 700.00 for attendees at the conference hotel (>= 1 night) otherwise $US1000.00
  + Late/On-site registration: After 6:00 PM PDT, Friday, October 27, 2018
    - $US 900.00 for attendees at the conference hotel (>= 1 night) otherwise $US1200.00

### Hotel ROOM RATES:

* + SINGLE OCCUPANCY: 5100.00 THB per night; DOUBLE OCCUPANCY: 5500.00 THB per night
  + EXTRA ADULT: 2500.00 THB per night
  + IEEE 802 GROUP RATE DEADLINE: Friday October 19, 2018, 5:00 PM, PDT

### If visa is required, please indicate it during registration

### Request Letter After Registration: Contact 802info@facetoface-events.com

## Future Sessions – 2019

### Interim: January 13-18, 2019, Hilton St. Louis at the Ballpark

* + Co-located with all 802 groups

### Plenary: March 10-15, 2019, Hyatt Regency Vancouver and Fairmont Hotel Vancouver, Vancouver, Canada

* + Co-located with all 802 groups

### Interim: May 12-17, 2019, Grand Hyatt Atlanta in Buckhead, Atlanta, Georgia, USA

* + Co-located with all wireless groups

### Plenary: July 14-19, 2019, Austria Congress Centre, Vienna, Austria

* + Co-located with all 802 groups

### Interim: September 15-20, 2019 - Marriott Hanoi, Hanoi Vietnam (TBC)

* + Co-located with all 802 wireless groups

### Plenary: November 10-15, 2019, Hilton Waikoloa Village, Kona, HI, USA,

* + Co-located with all 802 groups

## WG members discussed next steps and available options of the WG.

## The meeting was adjourned at 11:45am

# Attendance

|  |  |
| --- | --- |
| Das Subir | Perspectra Labs |
| Jeong Sangkwon Peter | JoyFun Inc. |
| Kim Namgi | Kyonggi University |
| Lee Gookhwan | JoyFun Inc. |
| Lee Hyeong Ho | Netvision Telecom Inc. |
| Seo Dongil Dillon | VoleR Creative |

 

IEEE P802.21 Interest Group on Network Enablers for Seamless HMD based VR Content Service

Meeting Minutes of the IEEE P802.21 Interest Group

Chair: Sangkwon Jeong

Editor: Dong Il Dillon Seo

# Meeting Minutes of the IEEE P802.21 Interest Group

## Tuesday, AM1 Meeting, September 11, 2018 (8:00 AM-10:00 AM)

Meeting called to order by IG Chair at 8:00 AM

Dillon Seo presented DCN 21-18-0047-00-0000

Title: White Paper Draft 0.6

Reviewed the white paper and discussed the steps on meeting the timeline for circulating the paper before November 2018 plenary meeting.

Comments from Dillon

* Worked on the comments made on the white paper draft by both Subir and Hanatani during the conference call meeting in August 2018.
* Asked the questions on the comments made by Subir to clarify his intent.

Comments from Subir

* Explained the meaning of his comments on the white paper to Dillon and Namki.
* Asked Dillon to work on the introduction section on the white paper after the main content is filled in.
* Pointed out that the content on the network requirements are contradicting itself.Comments from Namki
* Took the comments from Subir and agreed to make the necessary changes.

Meeting was adjourned at 10:00 AM

## Tuesday, AM2 Meeting, September 11, 2018 (10:30 AM-12:30 PM)

Meeting called to order by IG Chair at 10:30 AM

Reviewed the comments made by Subir and worked on the white paper draft.

Comments from Dillon

* Although it was discussed in July plenary meeting that the network handover use case should be treated separately from the rest of the use cases, categorizing it as a new case was difficult so wrote the use case scenario under use case 5
* Suggest making the structural change after group discusses on next IG session.
* Discussed how the use case 4 on the white paper should be written with Peter.
* Discussed how the network session should be re-written using the comment from Subir with Namki

Comments from Chair

* Commented that the use case 4 on the white paper should provide a situation where two or more virtual avatars are watching streamed video content in a VR cinema.

Comments from Namki

* The network session on the white paper should be closely re-examined with the rest of the IG members in the afternoon today.

Meeting was adjourned at 12:00 PM.

## Wednesday, AM1 Meeting, September 12, 2018 (8:30 AM-10:00 AM)

Meeting called to order by Chair at 8:30 AM

Comments from Peter

* Hanatani’s recommendation on merging Cybersickness and VR sickness.
* VR sickness definition should be modified and IEEE 3079 should modify the current definition of VR sickness as it may create unnecessary confusion.
* Current definition of VR sickness is written as “VR sickness is same as Cybersickness”
* A revised version of VR sickness definition is needed for the white paper.

Comments from Dillon

* The revised version of VR sickness for the purpose of white paper should be “VR sickness is a subset of Cybersickness.”
* It is correct to say that VR sickness is Cybersickness but it is not correct to say Cybersickness is VR sickness.

The meeting was adjourned at 10:00 PM.

## Wednesday, AM2 Meeting, September 12, 2018 (10:30 AM-12:30 PM)

Meeting called to order by Chair at 10:30 AM

Comments from Subir

* For use case scenario, it should be describing the situation not the issues.
* If you want to include the issues for a particular use case, you may want to create a subsection to describe them.
* For use case 1, try not to introduce the problems or issues.
* Be more descriptive on the diagram – suggests to use “logical network connectivity diagram”
* For use case 5, is this a standalone use case? The title says it is an extension but it seems like a standalone use case. Please discuss and clarify.
* Where is the content server? Remote? Local?
* Describe why the data cliff happens. Describe the smoother transition.
* Better user experience, minimum data packet loss and minimum data transmission latency need to be mentioned as requirements.
* Describe the data packet diagram in a small paragraph or delete it.
* Do not assume that the reader of this paper has the same level of knowledge as the writer.
* Explained what the required procedures are to create a Study Group (SG) within a Working Group.

Meeting was adjourned at 3:00 PM.

## Wednesday, PM2 Meeting, September 12, 2018 (3:15 PM-6:00 PM)

Meeting called to order by Chair at 3:15 PM

Comments from Subir:

* Make sure the reference is properly sited for any technical claims.
* If one claim is done by one specific organization, be specific.
* The title for Section 4 should be “Network Requirements” instead of “Considerations”
* The statement where it says, “the network professionals should also understand that the quality of…” should be rephrased so that it is clear that QoE (Quality of Experience) is an important matrix to measure.
* For section 4, the table provided at the end of the section needs to be clarified whether it is for QoS (Quality of Service) or QoE.
* Since the user case 5 talks about the network of mobility, it is recommended to have more content on QoE perspective.
* ‘Standardization Considerations’ should be added as another section after section 5 to describe what is needed in the future development as it will serve as a starting point to determine the objectives for the future SG.

Comments from Namki

* The title for Section 4 should be remained as “Considerations” as this is a white paper level proposal, not standard document proposal.

Additional Comments

* The table provided at the end of section 4 was created based on Minseok’s own judgement and did not consider neither QoE nor QoS
* He will be working on the revision based on the comments.

Meeting was adjourned at 6:00 PM.