 

IEEE P802.21 Media Independent Handover Services

Minutes of the IEEE P802.21 Working Group (DCN 21-14-0082-00-0000)

Session #61 Meeting, Beijing, China

Chair: Subir Das

Vice Chair: H Anthony Chan

Secretary: Charles E. Perkins

# First Day PM1 (1:30pm-3:30pm): Room DE ; March 17, 2014

## 802.21 WG Opening Plenary: Meeting is called to order at 1:35pm by Subir Das, Chair of IEEE 802.21WG with opening notes

## March, 2014 Meeting Agenda (DCN: 21-14-0031-01-0000-session-61-agenda)

### Agenda bashing:

#### 802.21m session on Friday was cancelled

#### 802.21.1 AM2 was changed to 802.21d

#### Revised agenda (DCN: 21-14-0031-01-0000) was approved without any objection.

### Will get meeting credit for Monday tutorial

### Will get meeting credit for Tuesday Nuts & Bolts of IoTs

## IEEE 802.21 Session #61 Opening Notes (21-14-0038-00-0000)

### Anthony Chan will not continue as vice-chair; a vice-chair is needed

### Meeting logistics: all meetings in Room DE.

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

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

### Attendance procedures, logistics, breaks

### Question on call for Intellectual Property declaration

#### No one declared any patent claims

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

### Discussion about sponsorship discussion at EC; member poll

#### Should get sponsors to help make a better network

### Session #60 minutes (21-14-0035-00-0000) were approved without objection.

### The May 2014 IEEE 802 Interim Session will take place during the week of May 11-16, 2014 at the Hilton Waikoloa Village, HI

* Registration Fees and deadlines:
	+ Early**:  Before 6pm Pacific Time, March 20, 2014**
		- US$650 for attendees staying at the Hilton Waikoloa
		- US$950 for all others including local attendees
	+ Full rate: **After 6pm Pacific Time, March 20, 2014**
		- US$800 for attendees staying at the Hilton Waikoloa
		- US$1100 for all others including local attendees
* Hotel Information
	+ Early reservation rooms already sold out
	+ Information available at <http://802world.org/plenary/ieee-802-group-hotel/>

## Working Group Status

### 802.21c: Single Radio Handovers

* + - * + Request for EC approval to forward to RevCom

### 802.21d : Group Management

### Completed WG Letter Ballot recirculation (#7b) on March 03, 2014

### Result announced on March 04, 2014

### http://www.ieee802.org/21/ballot\_7.html

### 19 ballots / 21 members. Return ratio 89.47%

### 11 approve / 06 disapprove / 01 abstain. Approval rate = 64.70%

### Have nearly 5 sessions here in Beijing for resolving comments

### 802.21m: Revision Project

#### Opening Note: 21-14-0042-01-REVP-802-21m-session-61-OpeningNote

#### Working on the document structure and existing issues

### 802.21.1: Media Independent Services

#### Opening Note: 21-14-0014-02-SAUC-802-21.1-OpeningNote

#### Use case presentation

#### Suggested to start revising 802.21d document

## Working Group Objectives for March meeting

### 802.21c: Single Radio Handovers

* + - * + No more meeting session is required; Sponsor Ballet has been approved

### 802.21d : Group Management

#### Resolve Letter Ballot recirculation comments

### 802.21m: Revision Project

#### Discuss the document structure and issues

### 802.21.1: Media Independent Services

#### 802.21.1 Use case and services discussion

# Day 1 PM2 (4:00pm-4:09pm): Room DE; Monday, March 17, 2014

## Election of 802.21 Chair; no candidate currently available for vice-chair.

### Paul Nikolich may appoint a temporary vice-chair

### Discussion about rules.

### No non-members were present in the room.

## Charlie Perkins (Secretary) conducts election for 802.21 chair. Subir Das has been nominated as candidate for the position. Results: 8 for / 0 against / 1 abstain. This results in the election of Subir Das as chair.

# Day 4 PM2 (1:30pm-3:30pm): Room DE; Thursday, March 20, 2014

## 802.21 WG Closing Plenary: Meeting is called to order by Subir Das, Chair of IEEE 802.21WG (21-14-0066-00-0000-session-61-closing-plenary).

## 802.11 Liaison Report – Clint Chaplin (DCN: 21-14-0070-00-0000-802-11-liaison-report-for-2014-03.ppt)

### Groups, 802.11 Standards Pipeline

### HEW is entering the fray, resolved issues around PAR

### TGaf published

### TGai addresses 1389 comments

### WNG

#### P2P Discovery System – Torleiv Maseng

#### not much discussion

### Regulatory SC

#### ECC consultation response, approved comments

#### Decided not to Globalstar

### Architecture Committee: OmniRAN overview

### 802.11 Chair election;

#### three candidates;

#### no one got 50% in the first round;

#### then Adrian Stevenson won;

#### Jon Rosdahl and Dorothy Stanley will be 1st and 2nd vice chairs, but order undetermined

## IETF Liaison report

### Authorization feature for coap

### 8 BoFs

## Discussion about 802.21c Submission to RevCom (DCN: 21-14-0069-0000)

### asking for unconditional approval

## WG Motions

### Motion to P802.21d BRC to resolve comments Moved by Yoshi, Seconded by Lily (6/0/0)

### Motion to authorize 802.21d editor to incorporate resolutions Moved by Yoshi, Seconded by Lily (6/0/0)

### Motion to P802.21d be forwarded to Sponsor Ballot and approve the CSD (CSD = Criteria for Standards Development) Moved by Yoshi, Seconded by Lily (6/0/0)

## Discussion about 802.16 - lack of participation

### Currently only 9 voters

### Only two voters attending this session

### Easier to put TG into hibernation instead of withdrawing the charter

## Discussion about appointment of 802.21 Vice Chair

### Subir asks if any candidates wish to run for the position

### Discussion about procedures

### Paul Nikolich asks if suggested candidate has support within 802.21 TG

### Subir polls WG group, finds some expression of support for suggested candidate, no opposition

### Candidate will be appointed by Paul Nikolich

## TGc SRHO (no meeting during Session #61; no report)

## 802.21.1 closing note (DCN 21-14-0066-00-SAUC-closing-notes)

### TG 802.21.1 had three sessions during his meeting

##### Tuesday AM1

##### Tuesday PM2

##### Thursday AM1

### There were four presentations on use cases

* https://mentor.ieee.org/802.21/dcn/14/...

### 802.21.1 Teleconference (tentative):

* April 24 (Thurs) 9am-10am EDT
* May 08 (Thurs) 9am-10am EDT

## TGd Multicast Management closing note (21-14-0063-00-MuGM-tgd-january-closing-note)

### Progress in March 2014 Meeting: LB7b comment resolutions

### Resolved all editorial comments and most technical comments

### Remaining technical comments are: #58, #79, #83

### LB7 Ballot Resolution Committee

### Motion to P802.21d BRC to resolve

### Motion to authorize 802.21d editor to incorporate resolutions

### Motion to P802.21d be forwarded to Sponsor Ballot and approve the CSD (CSD = Criteria for Standards Development)

### Next Step: Start next recirculation around April 21, 2014

### BRC Teleconference Schedule (Tentative)

* April 1 (Tue) 8am-10am EDT
* April 8 (Tue) 8am-10am EDT
* April 15 (Tue) 8am-10am EDT

## Teleconferences

### 802.21c BRC Teleconferences:

* (none)

### 802.21d BRC Teleconferences:

* April 1 (Tue) 8am-10am EDT
* April 8 (Tue) 8am-10am EDT
* April 15 (Tue) 8am-10am EDT

### 802.21m Teleconference:

* (none)

### 802.21.1 Teleconference:

* April 24 (Thurs) 9am-10am EDT
* May 08 (Thurs) 9am-10am EDT

## TGm 802.21-2008 Revision closing note (21-14-0065-00-REVP-802-21m-session-61-closing-report)

### Progress in meetings prior to Session #60

##### Initiated working group, determined purpose of the document revision project.

##### Collected proposals for revised Table of Contents for the new document as a way to envision organization for the new document

##### Agreement to pull Handover commands out of base document into a major component of 802.21.1

##### Populated issues spreadsheet, continuing with newer issues

##### Created documents for 802.21m and 802.21.1 handover use case, using document source for 802.21-2008 specification

##### Decided important terminology changes

##### Updated for base 802.21m document specification with text from 802.21a and 802.21b

##### Updated “exclude” document for 802.21.1 handover services specification

##### Determined that automatic conversion of framemaker (.tif) document figures to Microsoft Word or Visio is infeasible

##### Created new spreadsheet for editing Terminology and Acronym lists.

##### Updated base 802.21m document with numerous improvements and repairs to tables and lists.

### Progress since Los Angeles Session #60

##### Updated base 802.21m document specification according to recent action items

##### Issues added to spreadsheet based on problems encountered during document update.

##### Created new spreadsheet for transforming figures & equations

##### Agreement with IEEE editorial staff for figure transformation

#####  Sent spreadsheet to Lisa Perry and Michelle Turner

#####  Identified “high-value” figures to be transformed first

##### Updated base 802.21m document with numerous improvements and repairs to tables and lists.

##### Uploaded “clean” 802.21m base document

### Agenda for January 2014

##### Sessions: **Tuesday AM2 and Wednesday AM1**

##### Review 802.21m charter and mission, previous decisions, work plans

##### Review action items

##### Review base document modifications for acceptance / rejection

##### Propose that 802.21.1 TG explicitly examine gaps in 802.21m

##### Request IEEE editorial staff help with figure creation and modification

##### Minutes: DCN 21-14-0064-00-REVP

### Action Items

##### WG chair to prepare revised documents for consideration at session #62 during upcoming Interim meeting in May

##### Create spreadsheet for figures and equations

#####  identify which figures are highest priority for Lisa

#####  identify changes needed for each figure

#####  maintain status for each figure and modifications needed

#####  create and upload spreadsheet as 802.21m WG document

##### Get email to clarify David Cypher’s comment about undefined variable

##### Recommend 802.21.1 to carry out gap analysis on 802.21m features

##### WG chair / editor to prepare clean document for 802.21m base document, using revisions as modified and approved according to WG discussion from Tuesday AM2 and Wednesday AM1 consensus

##### Resubmit continuing 2013 documents to get 2014 document numbers

### Teleconference (Tentative)

##### (none)

### Plan for next meeting

##### Update issues spreadsheet with numerous recently found comments

##### Add text to planned submission for handover services to 802.21.1

##### Review updated and clean version (past revisions accepted) 802.21m base specification, continue with editorial improvements

##### Look for unused terms

##### Include new figures in text as they become available from IEEE editorial staff

# Future Sessions

## Future Sessions – 2014

* **Interim: 11-16 May 2014, Hilton Waikoloa Village, HI**
	+ Co-located with all wireless groups
* **Plenary: 13-18, July 2014, Manchester Grand Hyatt, San Diego, CA, USA**
	+ Co-located with all 802 groups
* **Interim: 14-19, September 2014, TBD (Athens likely)**
	+ Co-located with all 802 wireless groups
* **Plenary: 2-7 Nov 2014, Grand Hyatt, San Antonio, TX, USA**
	+ Co-located with all 802 groups

## Future Sessions – 2015

* **Interim: 18-23 January, 2015, Hyatt Regency, Atlanta, GA, USA**
	+ Co-located with all 802 groups
* **Plenary: 8-13/15-20 March, 2015, Berlin (TBD: Barcelona would be more expensive)**
	+ Co-located with all 802 groups
* **Interim: May 2015, Hyatt Regency Vancouver (TBD)**
	+ Co-located with all wireless groups
* **Plenary: 12-17 July 2015, Hilton Waikoloa Village, Hawaii, USA**
	+ Co-located with all 802 groups
* **Interim: September 2015 (TBD)**
	+ Co-located with all 802 wireless groups
* **Plenary: 8-13 Nov 2015, Hyatt Regency Dallas, TX, USA (TBC)**
	+ Co-located with all 802 groups

## Future Session notifications

* July, 2015 is in Waikoloa
* Athens looks near to be finalized for September, 2014 meeting, networking issue has been resolved.

## Discussion about China World Hotel venue

* Food has been very good
* Networking was often very bad
* Not recommended for return

# Attendance

|  |  |
| --- | --- |
| Chaplin Clint  | Samsung Electronics  |
| Bajko Gabor  | MediaTek |
| Das Subir  | Applied Communication Sciences |
| Chen, Lidong  | NIST  |
| Golmie Nada  | NIST |
| Yazu Hanatani Yoshikazu | Toshiba Corporation  |
| Kamibayashi Toru | Toshiba Corporation |
| Maseng Torleiv | University of Oslo |
| Ohba Yoshihiro  | Toshiba Corporation |
| Perkins Charles  | Futurewei Technologies  |

# The meeting was adjourned at 3:12pm

 

##

IEEE P802.21 Media Independent Handover Services

Meeting Minutes of the IEEE P802.21d Group Management Task Group

Chair: Yoshihiro Ohba

Editor: Antonio de la Oliva

# Monday, PM2 Meeting, March 17, 2014

## Meeting called to order by Chair at 4:25PM

Minutes are taken by Yoshihiro Ohba.

## Meeting Agenda (21-14-0041-01) is presented by the Chair

The IEEE 802.21d task group is scheduled to meet Monday PM2, Tuesday PM1, and Wednesday AM2 and Thursday AM1.

The agenda was approved with no objections.

## Meeting Minutes Approval

Minutes of January 2014 TGd session are included in the WG minutes that were already approved in the WG opening plenary. There is no additional minutes to approve.

## Opening Notes (21-14-0045-00) is presented by the Chair

Slides #1-#4 shown, Note Well, Duty to Inform.

Chair called for declaration of potentially essential IPR on 802.21d. There was no response to the call in the meeting.

There was a discussion if TGd PAR needs to be updated due schedule delay. It was mentioned that the PAR is valid until 12/31/2016.

Latest commentary file is DCN 033r2.

## 802.21d Comment Resolution

Comments resolution started by the Chair

Chair asked the group to provide review of Editorial comments by Tuesday PM1 session.

The following comments were discussed: #1, #4, #5, #8, #28, #29, #30 and #84.

Resolutions are captured in DCN 033r3.

Recess at: 5:45 PM

# Second Day PM1 Meeting: Tuesday, MARCH 18

## Meeting called to order by Chair at 1:30PM

The group decided to utilize additional three meeting slots Wednesday PM1 and PM2, and Thursday AM1 for LB7b discussion.

## 802.21d Comment Resolution

The group continued comment resolution.

Editorial comments #10, 20, 26, 29, 30 are changed to technical.

Other editorial comments were accepted.

Comments #31 through #45 were discussed.

Resolutions are captured in DCN 033r4.

Session recessed at 5:45pm.

# Third Day AM2 Meeting: Wednesday, March 19

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

## 802.21d Comment Resolution

The group continued comment resolution.

Comments #46 through #58 were discussed.

Toru Kambayashi presented DCN 51r0 for leave command.

Resolutions are captured in DCN 033r5.

Session recessed at 12:30pm.

# Third Day PM1 Meeting: Wednesday, March 19

## Meeting called to order by Chair at 1:30PM

## 802.21d Comment Resolution

The group continued comment resolution.

Comments #59 through #69 were discussed.

Resolutions are captured in DCN 033r5.

Session recessed at 3:30pm.

# Third Day PM2 Meeting: Wednesday, March 19

## Meeting called to order by Chair at 4:00PM

## 802.21d Comment Resolution

The group continued comment resolution.

Comments #70 through #82 were discussed.

Resolutions are captured in DCN 033r5.

Session recessed at 6pm.

# Fourth Day AM1 Meeting: Thursday, March 20

## Meeting called to order by Chair at 8:20AM

## 802.21d Comment Resolution

The group continued comment resolution.

Comments #84 through #89 were discussed.

Resolutions are captured in DCN 033r6.

Session recessed at 10am.

# Fourth Day AM2 Meeting: Thursday, March 20

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

## 802.21d Comment Resolution

The group continued comment resolution.

Comments #90 through #100, and #47, #55, #58 and #68 were discussed.

Resolutions are captured in DCN 033r6.

## Closing Note by Chair

TG closing note is captured in DCN 21-14-0063r0.

Chair mentioned three comments #58, #79, #83 are remaining to resolve.

The following three motions were mentioned that Chair intends to bring during WG closing plenary.

* Motion #1: Move to authorize the P802.21d Ballot Resolution Committee (BRC) to resolve WG LB#7b comments and approve the related contributions via teleconferences
* Motion #2: Move to authorize the P802.21d Editor to accept the resolution passed during March, 2014 plenary meeting and by the LB7 BRC during teleconferences and produce P802.21d/D04
* Motion #3: Move to authorize the P802.21 WG Chair to initiate a LB7 re-circulation ballot on the question “Should P802.21d/D04 be forwarded to Sponsor Ballot”

BRC teleconference schedule was discussed. The group agreed on the following tentative schedule.

* April 1 (Tue) 8am-10am EDT
* April 8 (Tue) 8am-10am EDT
* April 15 (Tue) 8am-10am EDT

The meeting was adjourned at 12:20pm.

 

IEEE P802.21m Revision Project Group

Chair: Charlie Perkins

Minutes by Charlie Perkins: DCN: 21-14-0064-00

# Meeting Minutes of the IEEE P802.21-2008 Revision Project Group during March 2014 Plenary

## Progress since Los Angeles Session #60

##### Updated base 802.21m document specification according to recent action items

##### Issues added to spreadsheet based on problems encountered during document update.

##### Created new spreadsheet for transforming figures & equations

##### Agreement with IEEE editorial staff for figure transformation

#####  Sent spreadsheet to Lisa Perry and Michelle Turner

#####  Identified “high-value” figures to be transformed first

##### Updated base 802.21m document with numerous improvements and repairs to tables and lists.

##### Uploaded “clean” 802.21m base document

## First Session: Tuesday AM2 March 18, 2014: 10:45-11:45

### Notes: Charlie

### Participation: Subir, Yoshi, Charlie, Lily, Toru, Yazu, Clint

### 802.21m meeting is governed by 802.21 IPR disclosure agreements, etc.

### Review agenda: 21-14-0043-00-REVP-802-21m-session-61-agenda.pptx

### 802.21-2008 issues update (summary in 21-13-0182-04-REVP-802-21m-issues-spreadsheet.xlsx)

### Review current split of 802.21-2008 specification, 802.21{c,d} not included

### Infeasible to transform figures from .tif format to Microsoft Word format

### May only be possible with specialized Adobe tools

### Plan to meet with Lisa Perry and Michelle Turner for next steps

## Second Session: Wednesday AM1 March 19, 2014: 8:15-10:00

### Notes: Charlie

### Participation: Subir, Yoshi, Charlie, Lily, Toru, Yazu, Clint

### Briefly review agenda: 21-14-0043-00-REVP-802-21m-session-61-agenda.pptx

### Detailed review of action items from Session #60 meeting

### Detailed review of modifications as captured by revision control in document DCN 21-13-0210-05-REVP-802-21-2008-text-to-be-included . Goal is to accept the changes and produce a “clean” document which is to be uploaded before initiating further revisions.

### All recent revisions have been purely editorial, largely formatting changes to tables and table entries.

### Agree to create spreadsheet to manage conversion of figures and equations

### Lisa Perry and Michelle Turner attended meeting, agreed to either help with conversion of selected figures, or outsource the work

### Equations can perhaps be reproduced using Microsoft Equation tool

## Action Items

##### WG chair to prepare revised documents for consideration at session #62 during upcoming Interim meeting in May

##### Create spreadsheet for figures and equations

#####  identify which figures are highest priority for Lisa

#####  identify changes needed for each figure

#####  maintain status for each figure and modifications needed

#####  create and upload spreadsheet as 802.21m WG document

##### Get email to clarify David Cypher’s comment about undefined variable

##### Recommend 802.21.1 to carry out gap analysis on 802.21m features

##### WG chair / editor to prepare clean document for 802.21m base document, using revisions as modified and approved according to WG discussion from Tuesday AM2 and Wednesday AM1 consensus

##### Resubmit continuing 2013 documents to get 2014 document numbers

## Teleconference (Tentative)

##### (none)

 

##

IEEE P802.21 Media Independent Handover Services

Meeting Minutes of the IEEE P802.21.1 Task Group

 Chair: Subir Das

Editor:

# Meeting Minutes of the IEEE P802.21.1 Task Group

## Tuesday, AM1 Meeting, March 18, 2014 (8:00-10:30 am)

## Meeting called to order by Chair at 8:15AM

Huynho Park presented DCN: 21-14-0039-00-SAUC

Title:UseCase and Requirements on Media Independent Service for D2D Communications

This is an extension of what was being presented in January meeting. Two cases are illustrated.

Network assisted and mobile assisted D2D communications. This document added the signaling call flows and primitives.

Comment: It would be good to have some clarifications of clause 2.8.2. It seems that the primitive and message are mixed together here.

Q: What is the purpose of changing the communication technologies?

A: Changing communication channel may be required due to the condition of the channel

Q: How the flows are maintained if channel is changed.

A: This is similar to handover

Q: If it is handover, things are already defined in 802.21 and 802.21c.

A: Yes, existing primitive and messages can be used.

Q: What do we need 802.21 services for establishing the D2D communication? We should just provide the discovery service.

A: Yes this is acceptable. This document is trying to capture similar notions.

It was suggested to separate the discovery service with communication channel establishment mechanisms.

Huynho Park also presented DCN:21-14-0040-00-SAUC

**Title:** Use Case and Requirements on Media Independent Service for Radio Resource Management in Heterogeneous Networks.

Q: Are PoA-A and PoB-B the same technology or different technologies?

A: It could be same and different.

Q: What is the relationship between PoA and PoS in Clause 8.3?

A: This will be clarified in future version.

Q: Do you require AC and PoAs have MIS functions?

A: Yes that is considered. However, not all PoAs need to have MISFs

Comments: Do we know how it is done in 802.11 networks? It would be good to have some understanding and comparisons with 802.11. It is suggested to have a presentation in next meeting.

## Tuesday, PM2 Meeting, March 18, 2014 (4:00-6:00 pm)

## Meeting called to order by Chair at 4:00PM

Torliev Maseng presented DCN:21-14-004-00-SAUC

Title: A P2P Discovery System

Q: What is the coordinate radius?

A: The range or radius by which it can communicate. It depends upon the transmit power.

Q: Is the discovery message flooded?

A: No, it requests a predetermined node

Q: If the known node is not available, how will it discover?

A: If the node is not available, it cannot help others to discover. However, it can designate someone else to respond on his/her behalf.

Q: How is the security between two nodes established is there is no authentication

A: No authentication is required. Trust is established a-priori.

Q: Is there any need to change 802.11 Standard?

A: There is no need but some implementations may not have support for ECSA capability that is defined in IEEE 802.11y-2008

Comments: Did you take this to 802.11 HEW?

Q: General system has only few discrete power levels. Is this simulation include discrete or continuous?

A: In this simulation we are not doing power, we are using frequency.

Q: For other use cases, do you define service discovery?

A: One can easily include the services and related things, for example, service oriented architecture. But this does not include that.

Q: If the node is moving, can the system achieve the similar performance?

A: If it moves, the performance will be poor. If it moves too fast, it will take a lot of BW required to get the neighbor list updated. However, this specific use case has not been investigated.

Q: In DSA use case, how is this different from IEEE 802.22?

A: Yes it is true. 802.22 is based on the database concept. However, it is limited to white space only and dependent to white space providers.

## Thursday, AM1 Meeting, March 20, 2014 (8:00- 10:30am)

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

Charlie presented DCN: 21-14-0060-00-MISU-OpenFlow\_PoA

Title: OpenFlow PoA proposal for SDN use case

Several scenarios are mentioned that can be enabled.

Q: Is there any interface defined between POA and Openflow switch?

A: No.

Q: Will there be any value to present this in ONF?

A: Yes it could be