 

IEEE P802.21 Media Independent Handover Services

Minutes of the IEEE P802.21 Working Group (DCN 21-14-0035-00-0000)

Session #60 Meeting, Los Angeles, CA

Chair: Subir Das

Vice Chair: H Anthony Chan

Secretary: Charles E. Perkins

# First Day PM1 (1:30pm-3:30pm): Governor’s I ; January 20, 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 (DCN: 21-14-0010-00-0000).

## January, 2014 Meeting Agenda (DCN: 21-13-0231-01-0000-session-59-agenda)

### Agenda bashing:

### 802.21d and 802.21m sessions on Friday were cancelled

### Reciprocal arrangement for credit with 802.24

### Revised agenda (DCN: 21-13-0231-01-0000) was approved without any objection.

## IEEE 802.21 Session #60 Opening Notes (21-14-0010-00-0000)

### Attendance procedures, logistics, breaks

### Meeting logistics: will not have all meetings in same room. Room 505 is not big enough

### Meeting logistics: IEEE Wi-Fi is for the first time a secure network, password required

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

### Meeting Logistics: “Plaza Pavilion” instead of “Pizza Pavilion”.

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

### Question on call for Intellectual Property declaration

#### No one declared any patent claims

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

### Session #59 minutes (21-14-0002-00-0000) were approved without objection.

### The March 2014 IEEE 802 Plenary Session will take place in March 16-21, 2014 at the China World and Traders Hotel Beijing (China World Trade Center) in Beijing, China

* Registration Fees and deadlines:
  + **Early:  Before 6pm Pacific Time, Friday, Feb 7, 2014** 
    - US$600 for attendees staying at the China World or Traders hotel
    - US$900 for all others including local attendees
  + Late/On-site: **After 6pm Pacific Time, Fri, Feb 7, 2014**
    - US$800 for attendees staying at the China World or Traders hotel
    - US$1100 for all others including local attendees
* Hotel Information
  + Available at <http://802world.org/plenary/ieee-802-group-hotel/>
* Issuance of Visa invitation letter will require 10 business days
  + <http://802world.org/plenary/files/2013/12/2014IEEEInvitationLetterSample-website.pdf>

## Working Group Objectives for January meeting

### 802.21c: Single Radio Handovers

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

### 802.21d : Group Management

#### 802.21d WG Letter Ballot comments resolution

### 802.21m: Revision Project

#### Discuss the document structure and issues

### 802.21.1: Media Independent Services

#### 802.21.1 Discuss the use cases; four use cases currently scheduled. Will also

#### Discuss about submission template

# Day 4 PM2 (1:35pm-3:30pm): Senator 1; Thursday, January 23, 2014

## 802.21 WG Closing Plenary: Meeting is called to order by Subir Das, Chair of IEEE 802.21WG (21-14-0027-00-0000-session-60-closing-plenary).

## Revised agenda 21-14-0011-02-REVP-Session#60-Agenda approved

## TGd Multicast Management closing note (21-14-0018-00-MuGM-tgd-january-closing-note)

### Progress in January 2014 Meeting

### LB7 Ballot Resolution Committee

### WG Motion: Move to authorize the P802.21d Editor to incorporate the resolution in DCN 21-13-0194-11 into P802.21d/D03: Passed (07/00/00)

### WG Motion: Move to authorize the P802.21 WG Chair to initiate a LB7 re-circulation ballot on the question “Should P802.21d/D03 be forwarded to Sponsor Ballot” : Passed (07/00/00)

### WG Motion: Move to authorize the P802.21d Ballot Resolution Committee (BRC) to resolve WG LB#7b comments and approve the related contributions via teleconferences : Passed (07/00/00)

### Next Step: Start next recirculation around February 7, 2014

### BRC Teleconference Schedule (Tentative)

* February 25 (Tue) 8am-10am ET
* March 11 (Tue) 8am-10am ET

## 802.11 liaison report presented by Clint Chaplain (21-14-0028-01-0000-802-11-liaison-report-for-2014-01)

### 802.11ac is published

### 802.11af is ready to publish

### 802.11ah only got 72.73% approval

### 802.11aj meets in China, working through proposal texts

### HEW has had a lot of submissions, but actually decreasing.

### Three presentations in WNG, based on 802.11ad at 60 GHz. Short-distance via phone (e.g., movie download)

### WNG can informally function as a study group until a formal study group is approved

### Rich Kennedy laid off, has to give up chair of Regulatory SC

### Chair of 802.11 is going to retire, who is also chair of Board of Directors

### Discussion about which 802.15 groups could use 802.21

### 802.15 Liaison report 802.11-13/1478r0

## IETF liaison report (none)

## Report from SDN BoF, Thursday AM1

## Discussion about how 802.21can impact SDN community, given the lack of deployment

## Teleconferences

### 802.21c BRC Teleconferences: (none)

### 802.21d BRC Teleconferences:

##### February 25 (Tue) 8am-10am ET

##### March 11 (Tue) 8am-10am ET

### 802.21m Teleconference:

##### Feb 04 (Tue), 8:00pm, ET

### 802.21.1 Teleconference:

##### None

## TGc SRHO closing note

### Draft is ready to be sent to RevCom

### WG motion: Approve document number DCN: 14/21-14-0023-00-srho-802-21c-csd.docx as the CSD for IEEE 802.21c and authorize the WG Chair to request the EC to forward draft D07 to RevCom; Passed (07/00/00)

## TGm 802.21-2008 Revision closing note (21-14-0026-00-REVP-802-21m-session-60-closing-report)

### Progress in meetings prior to Session #59

##### Initiated working group

##### Determined the 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 initial issues spreadsheet

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

##### Decided important terminology changes

##### Received document source for 802.21a and 802.21b specification

### Progress since Dallas Session #59

##### 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

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

##### Determined that framemaker (.tif) document figures do not work with Visio

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

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

### Agenda for January 2014

#### **Sessions:** Tuesday PM1, Wednesday AM1, Wednesday AM2

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

#### Introduce spreadsheet for managing terminology and acronyms

#### Review current split of 802.21-2008 specification, handling of 802.21a and 802.21b

#### Review submission of handover as use case to 802.21.1

#### Review suitability of 802.21m proposed document to serve accepted use cases for 802.21.1

#### Propose that 802.21.1 use cases explicitly examine gaps in 802.21m

#### Request help with figure creation and modification

#### Teleconference schedule, next steps

#### Minutes: DCN 21-14-0025-00-REVP

### Action Items

##### WG chair to request IEEE staff to translate Framemaker figures into Microsoft Word, using web-based tools for Framemaker

##### WG chair / editor to carefully indicate occurrences in document texts and figures

##### WG chair to prepare revised documents for consideration at session #61 during upcoming Plenary meeting in March

##### WG chair to update spreadsheet to indicate revisions as approved by WG

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

### Teleconference (Tentative)

##### February 4, 2014 8:00am

### Plan for next meeting

##### 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

##### Determine suitability of inclusion of new Link\_SAP primitives

## 802.21.1 closing note (DCN 21-14-0024-00-SAUC- closing-report)

### TG 802.21.1 had three sessions during his meeting

##### Tuesday AM1

##### Wednesday PM1

##### Thursday AM2

### There were five presentations on use cases

* https://mentor.ieee.org/802.21/dcn/14/21-14-0005-00-SAUC-use-cases-of-media-independent-service-for-d2d-communications.docx
* https://mentor.ieee.org/802.21/dcn/14/21-14-0005-00-SAUC-use-cases-of-media-independent-service-for-d2d-communications.docx
* https://mentor.ieee.org/802.21/dcn/14/21-14-0005-00-SAUC-use-cases-of-media-independent-service-for-d2d-communications.docx
* https://mentor.ieee.org/802.21/dcn/14/21-14-0005-00-SAUC-use-cases-of-media-independent-service-for-d2d-communications.docx
* https://mentor.ieee.org/802.21/dcn/14/21-14-0005-00-SAUC-use-cases-of-media-independent-service-for-d2d-communications.docx

## Motions passed

### P802.21 WG Motion: DCN 14/21-14-0023-00-srh0-802.21c-csd.docx as the CSD for 802.21c

### Seconded: Huynho Park (07/00/00)

### BRC members have not changed

### Move to authorize P802.21d BRC to resolve comments

### Seconded: Clint Chaplin (07/00/00)

### Move to authorize P802.21d Editor to incorporate all resolutions of the letter ballot #71a into P802.21d/D02 and produce P802.21d/D03

### Seconded: Clint Chaplin (07/00/00)

### Motion to authorize the Working Group chair to initiate LB#7b recirculation Letter Ballot on the questions “Should P802.21d/D03 be forwarded to Sponsor Ballot and approve the CSD”

### Seconded: Clint Chaplin (07/00/00)

## Future Sessions

• Athens looks near to be finalized for September, 2014 meeting, networking issue has been resolved.

• Beijing meeting, important to get visa ASAP since Chinese New Year is imminent.

• Discussion about Barcelona venue for March 2015 – Berlin under consideration as alternative

### • July, 2015 is in Waikoloa

## Discussion about Hyatt Century venue

* Expensive health center
* Bad wireless in rooms
* Some meeting rooms were too small
* Moving from room to room
* Food has been very good
* Social was very good

# Future Sessions – 2014

* **Plenary: 16-21 March, 2014, China World Hotel, Beijing PRC (Pending)** 
  + Co-located with all 802 groups
* **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, Barcelona (TBD)** 
  + 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

# Attendance

|  |  |
| --- | --- |
| Chaplin Clint | Samsung Electronics |
| Das Subir | Applied Communication Sciences |
| Hyunho Park | Electronics and Telecommunications Research Institute (ETRI) , Korea |
| Lee Hyeong Ho | Electronics and Telecommunications Research Institute (ETRI) , Korea |
| Jin Seek Choi | Hanyang University Korea |
| Farrokh Khatibi | Qualcomm Inc |
| Onishi Hirofumi | Alpine Electronics |
| Ohba Yoshihiro | TOSHIBA Corporation |
| Perkins Charles | Futurewei Technologies |
| Karen Randal | NSA/IAD |

# The meeting was adjourned at 3:08pm

 

## 

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, January 20, 2014

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

## Meeting Agenda (21-14-0007-01) is presented by the Chair

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

The agenda was approved with no objections.

## Meeting Minutes Approval

Minutes of November 2013 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 (21-14-0008-00) is presented by the Chair

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

Call for essential patents (No one responds)

Latest commentary file is DCN 194r9.

## 802.21d Comment Resolution

Comments resolution started by the Chair

Chair asked the group to provide review of Editorial comments by Wednesday morning.

Editorial comments #5, #6, #68, #75, #2, #22, #27, #125, #172, #173, #174 were discussed.

Technical comments up to section 8 were discussed.

Resolutions are captured in DCN 194r9.

## Recess at: 6:00 PM

# Second Day AM1 Meeting: Tuesday, January 21

## Meeting called to order by Chair at 8AM

## 802.21d Comment Resolution

The group continued comment resolution.

Cmt #2 is rejected.

Cmt #44 is accepted with DCN 0013r0.

Cmt #50 is accepted with DCN 0014r1.

Cmt #46 was revisited. Agreed to define group management tree.

Resolutions are captured in DCN 194r10.

Recess at 9:15am.

# Third Day AM2 Meeting: Wednesday, January 22

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

## 802.21d Comment Resolution

The group continued comment resolution.

Cmt #44 was revisited. DCN 0013r2 has been accepted as the resolution. Now group key verification code has been removed.

Revisited Cmt #46. DCN 0015r2 has been accepted as the resolution.

Resolutions are captured in DCN 194r11.

## Closing Note by Chair

TG closing note is captured in DCN 21-14-0018r0.

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

* Motion #1: Move to authorize the P802.21d Editor to incorporate the resolution in DCN 21-13-0194-11 into P802.21d/D03
* Motion #2: Move to authorize the P802.21 WG Chair to initiate a LB7 re-circulation ballot on the question “Should P802.21d/D03 be forwarded to Sponsor Ballot”
* Motion #3: Move to authorize the P802.21d Ballot Resolution Committee (BRC) to resolve WG LB#7b comments and approve the related contributions via teleconferences.

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

* February 25 (Tue) 8am-10am ET
* March 11 (Tue) 8am-10am ET

## The meeting was adjourned at 11:30am.

 

IEEE P802.21m Revision Project Group

Chair: Charlie Perkins

Minutes by Jin Seek Choi: DCN: 21-14-0025-00

# Meeting Minutes of the IEEE P802.21-2008 Revision Project Group in January 2014 Interim

## Sessions: Tuesday PM1 Wednesday AM1, and Wednesday AM2

## Progress so far

##### Created document for base 802.21m specification

##### Created document for 802.21.1 handover services specification

##### Issues added to spreadsheet based on comment rejections from 802.21c and 802.21d

##### Reviewed text included as part of base 802.21m specification

##### Received document source for 802.21a and 802.21b

##### Discussed inclusion of text from 802.21b and 802.21a in base (802.21m) specification

##### Received framemaker (.tif) source for document figures

##### Determined that framemaker (.tif) document figures do not work with Visio

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

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

##### Initiated change control for new documents

## Agenda for January 2014

### Review 802.21m charter and mission

### Review previous decisions, work plans

* 802.21-2008 will be reviewed (summary in 21-13-0182-03-REVP-802-21m-issues-spreadsheet.xlsx)
* Review current split of 802.21-2008 specification
* Include: 21a, 21b, 21c. 21d - 21-13-0210-02-REVP-802-21-2008-text-to-be-included.doc
* Exclude: handover - 21-13-0211-02-REVP-802-21-2008-text-to-be-excluded.doc
* Acronyms: include (21a, 21b)
* handover as use case to 802.21.1
* Review suitability of 802.21m proposed document to serve accepted use cases for 802.21.1
* Propose that 802.21.1 use cases explicitly examine gaps in 802.21m
* Request help with figure creation and modification
* Teleconference schedule, next steps

## First Session: Tuesday PM1 21 Jan. 2014: 1:30-3:30

### Explain Acronyms included in 21a & 21b

### Explain 21m include

* Some editorial works are needed
* Figure 29a was broken
  + Suggestions were made: to use Google tool (freeware) or take help from the IEEE Secretary
* in Fig. 29, MIS 🡪 MIH (translation example)
* do not able to automatically translate
* Part 21: Media Independent services (is it correct?) - 🡪 add Framework at the end of the phrase
* Suggestion was made to see the web site on <http://ieee802.org/21/TGm.html>
* About Section 6.4.2 in 21b: Change the 1st sentence. Add 2nd sentence.
  + Annex K, is approved or not?
    - * Comment: Everything was proved.
  + Annex K. (page 303) There is miss-match between index and Annex in 21b.
    - * Question so far? Or suggestion.
  + Issue) Change MIH to MIS or MIC
  + Need to change “handover” to “service” in definition section.
  + About mobile node
    - * Suggestion: use MN instead of mobile node (replace within whole text)
* In Fig. 2 MIH has not changed
* Suggestion: Find out “Keep in next paragraph” in order to show the Figure all together. (page layer, line and page breaks, keep next & Keep line together)
* MN is removed from Acronym section. -> move back MN

### 21m exclude document for handover related documents

* keep change and will show tomorrow

### Discuss submission of handover as use case to 802.21.1

### Discuss handling of 802.21a and 802.21b

## Second Session: Wednesday 22 Jan. 2014 AM1: 8:14-10:10

### Discussion points:

### After base version is stable, tracking changes is crucial

### Letter ballot and sponsor ballot for final 802.21m specification

### Farrokh will do a comparison for the Terminology and Acronyms

### Agreement to request 802.21.1 use cases for 802.21m gap analysis

### Discussion about submitting handover as 802.21.1 use case

### Need to exhibit retaining compatibility, or discuss why some compatibility has been lost

### Discussion about inclusion of Link Handover events, in Section 6.3.4

#### renamed to Link Switch events?

## Third Session: Wednesday 22 Jan. 2014 AM2: 11:30-12:20

### Consensus call was made on various points of terminology revisions:

* MIS replacing MIH? -- no objections
* MN replacing mobile node -- no objections
* dual-radio operation -- no objections
* handover definition to handover document -- no objections
* Media Independent point of service (MIS PoS) -- accepted
* Change MIS service --> MIS
* mobile node association --> removed entirely

## Action Items

##### WG chair to solicit help for converting figures

##### WG chair to request IEEE staff to translate Framemaker figures into Microsoft Word, using web-based tools for Framemaker

##### WG chair/editor to carefully indicate occurrences in document texts and figures

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

## Teleconference (Tentative)

##### Feb 04 (Tue), 8:00-10:00pm, ET 2014

## Plan for next meeting

* 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
* Determine suitability of inclusion of new Link\_SAP primitives

 

## 

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 in January 2014 Interim

## Tuesday, AM2 Meeting, January 21, 2014 (10:30-12:30 am)

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

Huynho Park presented DCN: 21-14-0006-00-SAUC

Title:Media Independent Service Use Cases for Resource Management in Heterogeneous Networks

This presentation extended the concept of channel allocation to resource management that is applicable to heterogeneous networks.

Comments:

It is good to have the ‘MN’ changed to ‘Device’ since MIH framework does not restrict to only mobile devices.

It was recommended to limit the scope of resource management.

Q: What is that we are trying to extend? Can we realize the scenario using existing specification?

A: There is no primitive defined in the specification.

There are commands for capability discovery.

It was emphasized that there may be existing primitives that can solve the problem but at this point we need to capture the use case appropriately.

Authors were given some guidance and asked to capture the use case appropriately in a word document.

Huynho Park also presented DCN:21-14-0005-00-SAUC

**Title:** Use Cases of Media Independent Service for D2D Communications

There were discussions on both on-net and off-net scenarios. Discovery services are available in respective technologies. We should only enable switching between heterogeneous D2D communications for off-net case. There is no new recommendation on on-net scenarios.

Comment: proposed 802 requirements are very high level and it needs to be expanded.

Authors were suggested to prepare another document that captures the essentials parts that will go to the draft document.

## Wednesday, PM2 Meeting, January 22, 2014 (4:00-6:00 pm)

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

Yoshihiro Ohba presented DCN: 21-14-0020-00-MISU

Use Case, Architecture and Requirements on Media-Independent Interworking Service

Suggestion was to see if the existing definitions in 802.21 base specification can cover the new definitions that are captured in this document. For example, is ‘ED’ is similar to a ‘MN’?

It was confirmed that ‘serving network’ definition is available in the base specification. Authors were suggested to align the dentition.

It was suggested to modify the figure 1. Representing 3G/LTE network as IN is confusing.

Charlie Perkins presented DCN: 21-14-0021-00-SAUC; Handover Use case

It was discussed that Network Discovery and Selection can go to base framework document. It was also discussed that both dual radio and single radio handover use cases should be captured under handover use case.

## Thursday, AM2 Meeting, January 22, 2014 (10:30- 12:30am)

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

Daniel Corujo presented DCN :21-14-0017-00-MISU: 802.21 for SDN-based flow handover in wireless environments

Farrokh Khatibi discussed the future activities discussions in 802.24. For example, M2M.

The idea was: can 802.24 be a focal point to outside communication for M2M? He mentioned pros and cons on having these activities. Folks have expressed their opinions, some has skepticisms and others have some interests to explore.