IEEE P802.11
Wireless LANs

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| TGad Conference Call Minutes |
| Date: 2011-03-31 |
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Abstract

TGad conference call minutes for 2011.

# Conference Call Times

|  |  |  |
| --- | --- | --- |
| **Date** | **Start Time** | **End Time** |
| January 6, 2011 | 10 AM Eastern Time | 12 PM Eastern Time |
| January 13, 2011 | 8 PM Eastern Time | 10 PM Eastern Time |
| January 27, 2011 | 10 AM Eastern Time | 12 PM Eastern Time |
| February 3, 2011 | 8 PM Eastern Time | 10 PM Eastern Time |
| February 10, 2011 | 10 AM Eastern Time | 12 PM Eastern Time |
| February 17, 2011 | 8 PM Eastern Time | 10 PM Eastern Time |
| February 24, 2011 | 10 AM Eastern Time | 12 PM Eastern Time |
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# Minutes from January 5, 2011 Conference Call

## Agenda

* Check to see if anyone is not familiar with the IEEE patent policy <http://standards.ieee.org/board/pat/pat-slideset.pdf>
* Attendance by email
* D1.0 Relay Operation Related Comment Resolution, 11/0001r0, Kapseok Chang
* Comment resolution, 10/1220r10, Carlos Cordeiro

## Patent Policy

No one was not familiar with the IEEE patent policy.

No essential patent disclosure

## 11/0001r0

* Addressing CID 142
	+ No objection to resolution
* 648
	+ No objection to resolution
* 965
	+ Refer to CID 652, which will include all of clause 10 resolutions
	+ No objection to resolution
* 968
	+ No objection to resolution
* 969
	+ No objection to resolution
* 1076
	+ Change to agree in principle
	+ No objection to resolution
* 1078
	+ No objection to resolution
* 1134
	+ No objection to resolution
* 1135
	+ Request for example from 802.11
		- In DLS
	+ Defer, discuss next conference call
* 1136
	+ No objection to resolution
* 1137
	+ How is time predetermined?
	+ Is there mechanism to share this?
		- Defined as constant value
		- See CID 71
	+ No objection to resolution
* 1138
	+ Defer, discuss next conference call

Will post r1 to server

## 10/1220r10

* CID 32
	+ No objection to resolution
* 943
	+ No objection to resolution
* 1113
	+ No objection to resolution
* 531
	+ Brief discussion
	+ No objection to resolution
* 636
	+ No objection to resolution
* 959
	+ No objection to resolution
* 960
	+ No objection to resolution
* 962
	+ No objection to resolution
* 439
	+ Question regarding the suggested value of MCS is in field, why need to change to decrease or increase
	+ Remove modification for MCS, just for transmit power
	+ No objection to resolution
* 967
	+ No objection to resolution
* 18
	+ No objection to resolution
* 1216
	+ No objection to resolution
* 126
	+ Duplicate of 1216
	+ No objection to resolution
* 131
	+ No objection to resolution
* 130
	+ No objection to resolution
* 178
	+ No objection to resolution
* 179
	+ No objection to resolution
* 109
	+ No objection to resolution
* 110
	+ No objection to resolution
* 111
	+ No objection to resolution
* 642
	+ No objection to resolution
* 971
	+ No objection to resolution
* 973
	+ No objection to resolution
* 976
	+ No objection to resolution
* 146
	+ No objection to resolution
* 984
	+ No objection to resolution
* 462
	+ No objection to resolution
* 463
	+ No objection to resolution
* 464
	+ No objection to resolution
* 465
	+ No objection to resolution
* 466
	+ No objection to resolution
* 600
	+ No objection to resolution
* 474
	+ No objection to resolution
* 24
	+ No objection to resolution
* 479
	+ discussion whether SLS part of text should be a should or shall
	+ No objection to resolution

# Minutes from January 13, 2011 Conference Call

## Agenda

* Check to see if anyone is not familiar with the IEEE patent policy <http://standards.ieee.org/board/pat/pat-slideset.pdf>
* Attendance by email
* MAC-QAB comment resolution, 11/0038r0, Zhou Lan
* D1.0 Relay Operation Related Comment Resolution, 11/0001r2, Kapseok Chang
* Comment resolution, 10/1220r11, Carlos Cordeiro

## Patent Policy

No one was not familiar with the IEEE patent policy.

No essential patent disclosure

## 11/0038r0

* Addressing CID 966
	+ No objection to resolution
* 1125
	+ No objection to resolution
* 1126
	+ No objection to resolution
* 1127
	+ No objection to resolution
* 1128
	+ No objection to resolution
* 1129
	+ Discussion:
		- Can’t the token be used to distinguish between requester and responder AP? Not sure address is necessary.
	+ No objection to resolution

## 11/0001r2

* CID 1135
	+ No objection to resolution
* CID 1138
	+ No objection to resolution

## 10/1220r11

* CID 459
	+ No objection to resolution
* 1186
	+ No objection to resolution
* 949
	+ No objection to resolution
* 952
	+ No objection to resolution
* 103
	+ No objection to resolution
* 13
	+ No objection to resolution
* 1184
	+ No objection to resolution
* 409
	+ No objection to resolution
* 981
	+ No objection to resolution
* 477
	+ No objection to resolution
* 1003
	+ No objection to resolution
* 446
	+ No objection to resolution
* 449
	+ No objection to resolution
* 1181
	+ No objection to resolution
* 1013
	+ No objection to resolution
* 1017
	+ No objection to resolution
* 1020
	+ No objection to resolution
* 601
	+ No objection to resolution
* 425
	+ No objection to resolution
* 502
	+ No objection to resolution
* 1033
	+ No objection to resolution
* 283
	+ No objection to resolution
* 31
	+ No objection to resolution
* 207
	+ No objection to resolution
* 208
	+ No objection to resolution
* 222
	+ No objection to resolution
* 224
	+ No objection to resolution
* 226
	+ No objection to resolution
* 236
	+ No objection to resolution
* 241
	+ No objection to resolution
* 243
	+ No objection to resolution
* 244
	+ No objection to resolution
* 245
	+ No objection to resolution
* 629
	+ No objection to resolution
* 174
	+ No objection to resolution
* 162
	+ No objection to resolution
* 1041
	+ No objection to resolution
* 1052
	+ No objection to resolution
* 1058
	+ No objection to resolution
* 328
	+ No objection to resolution
* 329
	+ No objection to resolution
* 330
	+ No objection to resolution
* 331
	+ No objection to resolution
* 332
	+ No objection to resolution
* 333
	+ No objection to resolution
* 334
	+ No objection to resolution
* 335
	+ No objection to resolution
* 337
	+ No objection to resolution
* 338
	+ No objection to resolution

# Minutes from January 27, 2011 Conference Call

## Agenda

* Check to see if anyone is not familiar with the IEEE patent policy <http://standards.ieee.org/board/pat/pat-slideset.pdf>
* Attendance by email
* Comment resolution, 10/1220r16, Carlos Cordeiro

## Patent Policy

No one was not familiar with the IEEE patent policy.

No essential patent disclosure

## 10/1220r16

No objection to the resolution of the following CIDs: 1104, 633, 1224, 1112, 961, 15, 513, 963, 1117, 140, 141, 594, 596, 440, 993, 995, 996, 1000, 511, 1002, 480, 1004, 1005, 447, 1014, 1015, 1016, 495, 496, 1018, 414, 1019, 415, 438, 1023, 1024, 1025, 1026, 1027

# Minutes from February 3, 2011 Conference Call

## Agenda

* Check to see if anyone is not familiar with the IEEE patent policy <http://standards.ieee.org/board/pat/pat-slideset.pdf>
* Attendance by email
* CA Doc comment resolution, 11/0219r0, Eldad Perahia
* CA Doc modifications, 10/1025r4, Eldad Perahia
* Comment Resolution, 11/0212r0, Carlos Cordeiro
* Comment resolution, 10/1220r17, Carlos Cordeiro

## Patent Policy

No one was not familiar with the IEEE patent policy.

No essential patent disclosure

## 11/0219r0 & 10/1025r4

* 11/0219r0 addresses CID 134 and 627
	+ Discussion on link/power level analysis versus MAC mechanisms
	+ Modified resolution to reference 15-09/0022r9 section 3 page 12 line 31 “We expect that the impact on 802.11 TGad devices would be similar.”
	+ will be uploaded as r1
	+ No objection to resolution
* 10/1025r4
	+ No objection to changes to CA doc

## 11/0212r0

* CID 937
	+ No objection to resolution
* 1105
	+ No objection to resolution
* 7, 8, 1106
	+ No objection to resolution
* 588
	+ No objection to resolution
* 954
	+ No objection to resolution
* 11 (in r1, typo in CID # in r0)
	+ No objection to resolution
* Upload r1 to server

## 10/1220r17

* 426
	+ Modified resolution such that PBSS is a service
	+ No objection to resolution
* 491
	+ No objection to resolution
* 1031
	+ No objection to resolution
* 1032, 264
	+ No objection to resolution
* 267
	+ No objection to resolution
* 269
	+ No objection to resolution
* 270
	+ No objection to resolution
* 271
	+ No objection to resolution
* 272
	+ No objection to resolution
* 273
	+ Modified resolution to refer to 271
	+ No objection to resolution
* 274
	+ No objection to resolution
* 277
	+ No objection to resolution
* 278
	+ No objection to resolution
* 279
	+ No objection to resolution
* 280
	+ No objection to resolution
* 119
	+ No objection to resolution
* 184
	+ No objection to resolution

# Minutes from February 10, 2011 Conference Call

## Agenda

* Vinko Erceg chair
* Check to see if anyone is not familiar with the IEEE patent policy <http://standards.ieee.org/board/pat/pat-slideset.pdf>
* Attendance by email
* DTP, 11/0236r1, ChaoChun Wang
* Comment resolution, 10/1220r18, Carlos Cordeiro

## Patent Policy

No one was not familiar with the IEEE patent policy.

No essential patent disclosure

## 11/0236r1

* 11/0219r0 addresses CID 1030 and 421
* CID 421 Reject
* CID 1030 Agree in principle.
	+ Discussion regarding “should” or “shall” statement.
		- John Barr: if there is “should” why is specific time needed?
		- Carlos: time is needed to the transmitter state, regarding retransmission.
		- “Should” statement remains, with some text changes.
* Revision 2 of the document will be uploaded to the server.

## 10/1220r18

* CID 186 Agree in principle (see CID 189)
* CID 1034 Disagree
* CID 1035 Agree in Principle
* CID 188 Agree in Principle
* CID 525 Disagree
* CID 527 Disagree
* CID 526 Disagree
* CID 192 Agree in Principle
* CID 196 Disagree
* CID 1036 Agree in Principle
* CID 69 Disagree
* CID 203 Agree, modified resolution
* CID 240 Agree in principle
* CID 1061 Agree in principle
* CID 301 Agree
* CID 380 Agree in Principle
* CID 150 Disagree
* CID 395 Agree in Principle
* CID 388 Agree
* CID 389 Agree in Principle
* CID 392 Agree in Principle
* CID 400 Disagree
* CID 397 Disagree
* CID 1069 Disagree
* CID 1072 Agree

## Remaining CIDS

All CIDs but 6 are now addressed. Sai has a submission on one of them. 3 CIDs are assigned to Brian and 2 CIDs to James. All resolutions will be likely resolved by the Feb24 conference call.

Conference call adjourned at 8:50am PST.

# Minutes from February 17, 2011 Conference Call

## Agenda

* Vinko Erceg chair
* Check to see if anyone is not familiar with the IEEE patent policy <http://standards.ieee.org/board/pat/pat-slideset.pdf>
* Attendance by email
* 802.15 PSC PAR & 5C’s review, 15-10-0635r5 & 15-10-0636r5
* Comment resolution, 11/0250r0, Brian Hart
* Handover and SFS, 11/246r0, James Yee
* Comment resolution, 10/1220r19, Carlos Cordeiro

## Patent Policy

No one was not familiar with the IEEE patent policy.

No essential patent disclosure

## 802.15 PSC PAR & 5C’s review

* PAR comments
	+ Section 5.2, first sentence
		- 1) If the target data rate is less than 50Mbps, why not amend the 802.15.3 standard (or even upgrade the 802.15.4 standard) for this purpose?
		- 2) All the ongoing activities in 60GHz in the IEEE 802 as well as throughout the industry have focused on multi-Gbps wireless communication. As an example, this is the case with both 802.15.3c and 802.11ad. The reason for this is that the 60GHz band is ideally suited for such high performing networks due to the large swath of available spectrum worldwide. Therefore, creating a new standard in this band to provide data rates < 50Mbps would severely compromise QoS sensitive applications such as wireless display, wireless docking, sync&go, etc., that depend on the multi-Gbps speeds of 60GHz. We suggest to explicity exclude 60 GHz from the PAR, so as to not polute the spectrum with low data rate applications that are well suited by other bands.
		- 3) Even though 802.15.3c and 802.11ad are being developed in different WGs, a significant amount of work has been jontly done by both groups to ensure adequate coexistence between these technologies. For example, they use the same channelization, sampling frequency, similar preamble structure, and so on. If any new activity is to be formed under IEEE 802 in the 60GHz band, it must strongly consider adopting the same common parameters as to ensure proper coexistence between all the technologies in this band.
		- 4) The wording seems to imply that the scope covers ALL unlicensed bands. As one example, how does the task group plan on addressing 5 GHz radar detection with the type of applications it highlighted. Other examples include the TVWS bands, etc.
		- 5) Need to better explain how this is any different from 802.11and/or BT in 2.4 GHz, and why we need yet another interfering system in an already crowded band.
	+ 5.2, second sentence
		- 1) Apparently, all the features mentioned above can be provided by existing specifications such as 802.15.3c and 802.11ad in the 60GHz band, and 802.15.3 and 802.11 in the 2.4GHz band. It is not clear why a new task group is needed to address these commonly found features.]
		- 2) Coverage extension seems counter to “personal space” and would allow the task group to create a specification that covers any range, further overlapping with existing standards.
		- 3) It is not clear what “group communication” means, please explain.
	+ 5.4
		- 1. This is no different than a piconet in 802.15 terms and a PBSS in 802.11 terms. This can already be addressed by existing technologies.
		- 2. It is not clear what “automatically configured” has to do with a MAC/PHY Specification. Automatically configuring multiple devices surrounding a person would be handled by a higher layer in the protocol stack.
	+ 5.5, first two sentences
		- 1. This is not a convincing argument. The market and wireless industry today has already fully embraced the multi-radio era. Laptops, netbooks, smartphones, desktops, tablets, TVs, etc., they all come with a plethora of wireless technologies ranging from Bluetooth, 802.11, 2G, 3G, HSPA, 4G, etc. There is no evidence whatsoever that there is a need in the market to “to have a new solution with one technology” for the applications listed in this PAR. In fact, the PAR seems to be largely trying to “reinvent the wheel”, so to speak.]
		- 2. The best case scenario of this activity would be an extra radio appended to existing combo chips
	+ 5.6
		- These stakeholders are exactly the same that are well served by existing 802.11 and 802.15 technologies.
	+ 7.1
		- Yes, all of 802.11 and 802.15 already address these type of applications.
	+ 8.1a
		- 1. So far, this is no different than a piconet in 802.15 terms and a PBSS in 802.11 terms.
		- 2. Please explain what is meant by virtual space
	+ 8.1b
		- All these applications can be readily addressed by existing technologies such as 802.15.4, 802.15.3, 802.11, etc. Also, given their low throughput (< 50Mbps), there is no reasoning provided as to why they need to be done over the 60GHz band.
* 5C comments
	+ Section 1a, first three sentences
		- This PAR is limited to 50Mbps, how does this address the higher speed that is discussed
	+ 1a, fourth and fifth sentences
		- Seems to imply that the standard will address network connectivity (e.g. cellular, wifi), which is well beyond the apparent scope of personal space.
	+ 1a, sixth sentence
		- This is not true. As described, 802.11 and 802.15 address these applications.
	+ 1a, last sentence
		- All these features are addressed by existing standards. The issue of whether it needs to be addressed by a single standard is debatable since combo chips are very successful in the market place.
	+ 3a
		- This is not a convincing argument. The market and wireless industry today has already fully embraced the multi-radio era. Laptops, netbooks, smartphones, desktops, tablets, TVs, etc., they all come with a plethora of wireless technologies ranging from Bluetooth, 802.11, 2G, 3G, HSPA, 4G, etc. There is no evidence whatsoever that there is a need in the market to “to have a new solution with one technology” for the applications listed in this PAR. In fact, the PAR seems to be largely trying to “reinvent the wheel”, so to speak.
	+ 4a
		- No references are provided of a demonstration of this technology, however we believe any such simulations, test results, and demonstrations would be redundant because we believe BT and Wi-Fi already provide real world examples of feasibility.

## 11/0250r0

* CID 413
	+ No objection to resolution
* 416
	+ No objection to resolution
* 238
	+ No objection to resolution

## 11/0246r0

* CID 1066
	+ No objection to resolution
* 342
	+ Discussion about beacon and information in handover IE
	+ Proposal to add BSSID of previous PCP to handover IE
	+ Comment that Dot11MaxLostBeacons of 16 too large, change to 8
	+ Will update resolution and present next call

## 10/1220r19

* All editorial comments resolved
* People should review resolutions

# Minutes from February 24, 2011 Conference Call

## Agenda

* Check to see if anyone is not familiar with the IEEE patent policy <http://standards.ieee.org/board/pat/pat-slideset.pdf>
* Attendance by email
* GCMP, 11/0258r1, Sai Nandagopalan
* Handover and SFS, 11/246r1, James Yee

## Patent Policy

No one was not familiar with the IEEE patent policy.

No essential patent disclosure

## 11/0258r1

* addresses CID 1163
* no objection to resolution

## 11/0246r1

* Continuation of discussion of CID 342
* Couple corrections to resolution text, r2 will be uploaded to server
* no objection to resolution

-Completed comment resolution

-Cancel next two calls

-1220r20 will be ready tomorrow

-Speculative edit with have all resolutions, ready next week

-Plan to run motions for CIDs, CA doc, and recirculation ballot on Monday in Singapore

-Joint meeting with CWPAN confirmed, email will be sent with details (March 19, 9am – 1:30pm at IIR facility)

# Minutes from March 31, 2011 Conference Call

## Agenda

* Check to see if anyone is not familiar with the IEEE patent policy <http://standards.ieee.org/board/pat/pat-slideset.pdf>
* Attendance by email
* Fast Session Transfer Session Setup in TVWS, 11/0090r1, Ganesh Venkatesan

## Patent Policy

No one was not familiar with the IEEE patent policy.

No essential patent disclosure

## 11/0091r1

* Discussion
	+ Questions about roles of Mode 1/2 devices and DFS owner when switching to 5 GHz
	+ What happens when both devices are Mode 1?
		- Cannot operate in TVWS
	+ How to achieve “peer devices know of each other capabilities” in TDLS?
		- Need to augment TDLS capability exchange
	+ Can be used to switch from 11n/2.4ghz to 11ac/5ghz?
		- Yes. IE of new bamd/channel included to FST exchange
	+ Need to coordinate with 11af to make sure regulations are addressed
	+ TDLS needs to be investigated more
	+ Follow up with Normative text in comment resolution

# Attendance

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Participant** | **Jan 6** | **Jan 13** | **Jan 27** | **Feb 3** | **Feb 10** | **Feb 17** | **Feb 24** | **Mar 31** |  |  |  |  |  |  |  |  |  |
| John Barr (NICT) |  | **x** | **X** | **x** | **x** |  | **x** |  |  |  |  |  |  |  |  |  |  |
| Ted Booth (Sony) | **x** |  | **X** | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| George Bumiller (RIM) |  | **x** |  | **x** |  |  | **x** | **x** |  |  |  |  |  |  |  |  |  |
| Kapseok Chang (ETRI) | **x** | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Liwen Chen (ST) |  |  |  |  |  |  |  | **x** |  |  |  |  |  |  |  |  |  |
| Carlos Cordeiro (Intel) | **x** | **x** | **X** | **x** | **x** | **x** | **x** | **x** |  |  |  |  |  |  |  |  |  |
| Vinko Erceg (Broadcom) |  |  |  |  | **x** |  |  |  |  |  |  |  |  |  |  |  |  |
| Sudheer Grandhi (InterDigital) | **x** | **x** | **X** | **x** | **x** |  | **x** | **x** |  |  |  |  |  |  |  |  |  |
| Christopher Hansen (Broadcom) |  |  | **X** | **x** |  |  |  | **x** |  |  |  |  |  |  |  |  |  |
| Brian Hart (Cisco) |  |  | **X** |  |  | **x** |  | **x** |  |  |  |  |  |  |  |  |  |
| Assaf Kasher (Intel) |  |  |  |  |  |  | **x** |  |  |  |  |  |  |  |  |  |  |
| Yongsun Kim (ETRI) |  | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Eric Lindskog (CSR) |  |  |  |  |  |  |  | **x** |  |  |  |  |  |  |  |  |  |
| Brad Lynch (Peraso) |  |  |  |  |  |  |  | **x** |  |  |  |  |  |  |  |  |  |
| Jeff Marker () | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sai Nandagopalan (Tensorcom) | **x** |  | **X** | **x** | **x** |  | **x** |  |  |  |  |  |  |  |  |  |  |
| Eldad Perahia (Intel) | **x** | **x** |  | **x** |  | **x** | **x** |  |  |  |  |  |  |  |  |  |  |
| Changwoo Pyo (NICT) |  | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ichihiko Toyoda (NTT) | **x** | **x** | **X** | **x** |  | **x** |  |  |  |  |  |  |  |  |  |  |  |
| Ganesh Venkatesan (Intel) |  |  |  |  |  |  |  | **x** |  |  |  |  |  |  |  |  |  |
| Chao-Chun Wang (MediaTek) | **x** |  |  | **x** | **x** | **x** |  | **x** |  |  |  |  |  |  |  |  |  |
| James Yee (Mediatek) |  | **x** |  |  | **x** | **x** | **x** | **x** |  |  |  |  |  |  |  |  |  |