

May 2009

15-09-0441-00-003c

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**IEEE P802.15**  
**Wireless Personal Area Networks**

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Project	IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs)		
Title	<b>IEEE802.15 TG3c meeting minutes, Montreal</b>		
Date Submitted	May, 2009		
Source	Tuncer Baykas Chin Sean Sum	Voice: Fax: E-mail: []	
Re:	802.15.3c Meeting Montreal Canada		
Abstract	IEEE 802.15 Task Group TG3c Minutes		
Purpose	Official minutes of the TG3c Session		
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Release	The contributor acknowledges and accepts that this contribution becomes the property of IEEE and may be made publicly available by P802.15.		

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**Monday, May 11, 1<sup>st</sup> slot, 10:30**

Meeting called to order

10.30

Meeting called to order by S. Kato

Announcement and Introduction

09/0380r1, Opening introduction was presented. The summary is as below:

- PAR TG3c (<http://standards.ieee.org/board/nes/projects/802-15-3c.pdf>)
- Online attendance registration (<http://murphy.events.ieee.org/imat>)
- Disclosure of affiliation
- Highlights of the IEEE standard boards bylaws on patents in standards
- Standard ballot results Meeting objectives, timeline.

Approval of the Vancouver Meeting Minutes

Motion to approve Vancouver meeting minutes (09/0248r0) by J. Gilb seconded by Tuncer Baykas

Motion was passed by acclamation and the Vancouver meeting minutes were approved.

Approval of agenda

08/0269r3. Montreal meeting agenda opened for discussion. Motion J. Gilb seconded by C.S. Sum

Montreal meeting agenda approved by acclamation.

J. Gilb started comment Resolutions

09/273r1 Proposed resolutions for Comments 26 and 82, 83 are accepted by acclamation.

Proposed resolution for Comment 202 is accepted.

11.00

Recess called by J. Gilb

**Monday, May 11, 2009, 2<sup>nd</sup> slot, 13:30**

Meeting called to order by S. Kato.

J. Gilb continued comment resolutions.

09/386 is presented by T. Baykas

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Proposed resolutions in 09/273r2 for Comments 23 and 38, 134, 99, 109, 135 are accepted by acclamation.

09/387 is presented by C.S. Sum

Proposed resolutions in 09/273r2 for Comments 20, 21, 24, 39,28 ,94, 124, 130, 131, 124, 138, 162, 196, 201, 203, are accepted by acclamation.

Resolution for editorial comment 200 in 09/273r2 is accepted by acclamation.

Resolutions for 103, 104, 106, 199 in 09/273r2 are accepted by acclamation.

Resolutions for editorial comments 198, 197, 194, 190 in 09/273r2 accepted by acclamation.

Resolutions for technical comments 191, 188,185,186 in 09/273r2 are accepted by acclamation.

Recess called by J. Gilb

**Monday, May 11, 2009, 3<sup>th</sup> slot, 16:00**

Meeting called to order by J. Gilb.

Resolutions for comments 184, 183, 182, 180, 179, 178, 177, 176, 175, 174, 173,172, 171, 170, 169, 168, 167, 166, 165, 101, in 09/273r2 are accepted by acclamation.

09/390r0 is presented by J. Wang.

Resolutions for comments 62, 66, 68, 74 in 09/273r2 are accepted by acclamation.

Recess called by J. Gilb

**Tuesday, May 12, 4<sup>th</sup> slot, 13:30**

Meeting called to order by S. Kato

Resolutions for comments 192, 164, 126, 87, 86, 52, 49, 48, 41 in 09/273r3 are accepted by acclamation.

09/394r1 is presented by Z. Lan

Resolutions for comments 206, 89, 88, 85, 82, 65, 64, 63, 56, 55, 53, 50, 47, 31, in 09/273r3 are accepted by acclamation.

J. Gilb announced 10 minute break.

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09/395r0 is presented by H. Shao.

Resolutions for comments 207, 193, 148, 121, 100, 119, 115, in 09/273r3 are accepted by acclamation.

Recess called by J. Gilb

**Tuesday May 12, 5<sup>th</sup> slot, 16:00**

Meeting called to order by J. Gilb.

09/402r0 is presented by V. Bar.

Group has agreed not to send association requests back to back in S-CAP.

After long discussion V. Bar uploaded 09/402r1.

Resolutions for comments 90, 91, are accepted by acclamation.

J. Gilb presented 09/374r2

Resolutions for comment 127 in 09/273r3 are accepted by acclamation.

Recess called by J. Gilb.

**Wednesday May 13, 6<sup>th</sup> slot, 8:00**

Meeting called to order by S. Kato.

09/390r2 is presented by J. Wang.

Resolutions in 09/390r2 for comment 69, are approved by acclamation

Resolutions in 09/273r4 for comments 70, 71, 73, 187, 181, 120, 117, 51, 102, 58, 45, 44, 42, 35, 33, are approved by acclamation.

Recess called by J. Gilb.

**Wednesday May 13, 7<sup>th</sup> slot, 13:30**

Meeting called to order by S. Kato.

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Resolutions in 09/273r4 for comments 195, 33, 30, 11, 10, 37, 75, 72, 113, 114, 112, 98, 78, 77, are approved by acclamation.

Group approved to open a discussion on resolution for comment 162 in 09/273r3.

Resolution in 09/273r4 for comment 162 is approved by acclamation.

09/390r3 is presented by J. Wang.

Resolution in 09/273r4 for comment 122 is approved by acclamation.

Meeting recessed by S. Kato.

**Wednesday May 13, 8<sup>th</sup> slot, 13:30**

Joint 802.11ad / 802.15.3c meeting

Meeting called to order by Eldad Perahia.

Agenda is given by Eldad Perahia 802.11-09/540r2

802.11-09/568r0 by M. Gong

J. Gilb, Gilb Sibeam, Ismail Lakkis, Tensorcom, Vered Bar, Qualcomm, Lan Zhou, S.C. Sum, NICT, contributed to the discussion about the presentation.

J. Gilb pointed out that 15.3. addressing doesn't need to be supported by 802.11. M.Gong stated that it is necessary to know the PNC. J. Gilb Gilb stated that it is not supporting addressing it is understanding one field in addressing.

Lan Zhou explained that 802.15.3c is not pushing for distributing synchronization.

C.S. Sum asked how TGad intends to move on with the issue of coexistence between TG3c and TGad. The answer was there is none at the moment.

09/559. made by M.Park

Vered Bar, Qualcomm, explained Ecma 368 mandated that everyone sends a beacon. This had the disadvantage of very large PNCs. 802.15.3c made PNC select which DEVs should send syncframe or not.

S.C. Sum According to slide 5 is overpessimistic, since no devs have the synframe capability in the simulation. M. Park agreed that if DEVs has sync frame they have less interference.

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S. Shellhammer Qualcomm suggested that it is like that 802.11 rts cts system but some...

Sigh Qualcomm, Is there any scheduling in the simulation? The answer that there is none but scheduling will reduce the interference level.

H. Shao Samsung, What are the transmission range and interference range? No there is none, It looks for only for degradation.

Lan Zhou NICT, No throughput performance is given he asked fro throughput results.

J. Gilb Sibeam, Beamforming decreases interference do not increase it. M. Park suggested that the simulation does not look for it.

T. Baykas stated that traffic between PNC and DEVs should be considered as well.

M. Gong Intel indicated that they are open for contributions.

E. Perahia asked the status of 802.15.3c sponsor ballot.

S. Kato explained sponsor ballot is passed by 94%. 133 technical comments are received. 120 are resolved at the moment.

S. Kato explained that CMS concept suggested by NICT 2 years ago here.

J. Barr asked the status of 11-09/228 and 11-09/334, they are open for comments.

S. Kato, NICT asked if we will have a joint meeting or not. E. Perahia said Wed pm 2 is a good time.

E. Perahia recessed.

**Thursday May 14, 9<sup>th</sup> slot, 8:00**

Meeting called to order by S. Kato.

Resolutions in 09/273r5 for comments 24,25,39,40 are approved by acclamation.

09/419r0 by S. Kato about recirculation ballot and ballot resolution committee is discussed

Motion to approve to form a Ballot Resolution Committee as described in 09/419r0 and have a teleconference call on 23 June 2009 1 pm JST between its members by Shuzo Kato and seconded by Ismail Lakkis. Motion approved by acclamation.

Meeting recessed by J. Gilb.

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**Thursday May 14, 10<sup>th</sup> slot, 10:30**

Meeting called to order by S. Kato.

Resolutions in 09/273r5 for comments 204,96,97,98 are approved by acclamation.

09/428r0 is presented by I. Lakkis.

In slide 2 of 09/428r0 there is a mistake “left” should be “right”.

Ismail Lakkis indicated that in CAP only CMS and HR headers can be used.

All MCSs of HSI PHY in CAP uses MCS0 preamble. SFD indicates the data rate.

09/426r0 is presented by V. Bar

V. Bar indicated H. Shao contributed to 09/426r0.

Resolutions for comments number 67 and 69 in 09/273r5 are approved by acclamation.

09/428r1 is presented by I.Lakkis.

After discussion 09/428r2 is presented by I.Lakkis.

Resolutions for comments number 57, 116, 118, 133 in 09/273r5 are approved by acclamation.

09/429r1 is presented by T. Baykas

Resolution for comment number 111,67 in 09/273r5 are approved by acclamation.

Motion to approve resolutions stated in 09/273r5 as the resolution received during the sponsor ballot by C.S. Sum and Clint Chaplion. Approved by acclamation.

Motion to request permission from 802.15 working group to start recirculation ballot of Draft Standard P802-15-3c-D08 Draft Amendment.pdf with the condition that it is first amended with the resolutions 09/273r5 by S. Kato seconded J. Gilb. Approved by acclamation.

09/421r1, Closing report is presented by S. Kato

Meeting adjourned by S.Kato