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Title	802.16m Frame Structure Rapporteur Group Report		
Date Submitted	2008-03-10		
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Re:	Charter and Scope of TGm Rapporteur Groups, Frame Structure Rapporteur Group, $802.16$ m- $08/006$		
Abstract			
Purpose	Report out on the activity of the TGm chartered Frame Structure Rapporteur Group		
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## 802.16m Frame Structure Rapporteur Group Report

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### **Summary Report**

Per requirement in the enabling document for the group, on March 5 the Frame Structure Rapporteur Group uploaded to the TGm upload server C802.16m-08/118r1 as the initial document contribution for use in the 802.16m System Description Document. The document is still under review and comment by the Group, with final comments expected for submittal by noon, March 17, 2008 EDT, with comments to accompany a final update to this report to be uploaded prior to the TGm opening session for Session #54.

Also, the Frame Structure Rapporteur Chairs are filing this preliminary final report in fulfillment of requirement in IEEE 802.16m-08/006. On March 17, after the close of the open comment period, this report will be updated to include comments made by the Group on C802.16m-08/118r1 as output of the Group, and the work of the Frame Structure Rapporteur Group will complete.

## Report

On January 24, 2008, the TGm task group issued a document IEEE 802.16m-08/006 in which the group announced the formation of two Rapporteur Groups, a Frame Structure Rapporteur Group and an Uplink Access Technique Rapporteur Group. The document identified the following organization, operation, timeline, and output for the Frame Structure Rapporteur Group:

(1) The Frame Structure ["frame"] Rapporteur Group is chartered to develop proposed baseline content regarding frame structure suitable for use in the 802.16m System Description Document (SDD). It shall be submitted by the Rapporteur Group as a Task Group m contribution by 10 March 2008, with the expectation that it could be accepted by Task Group m at Session #54. The Rapporteur Group shall also submit a report of its activities as a TGm contribution by the same deadline. Rapporteur Group Chairs are Sassan Ahmadi, Phil Barber, and Lei Wang.

#### 802.16m-08/006 further specified:

All Rapporteur Group discussions will take place on the TGm reflector, not by teleconference or other means. All input to the Rapporteur Group shall be copied to the TGm reflector. Message subjects will begin with the tags "[frame]" and "[uplink]" respectively.

The TGm reflector is established as:

<a href="http://groups.google.com/group/dot16m">http://groups.google.com/group/dot16m>.

On February 4 the Rapporteur Group Chairs agreed that the Google Group had been successfully established

and had achieved substantial and adequate participation to justify the initiation of the Frame Structure Rapporteur Group activity. The Chairs issued the following email to the Group reflector:

From: Lei Wang [mailto:LWang@nextwave.com] Sent: Monday, February 04, 2008 2:33 PM

To: dot16m@googlegroups.com

Cc: Ahmadi, Sassan; Phillip Barber; Lei Wang

Subject: 1st annoucement of 802.16m Frame Structure Rapporteur Group

Dear 16m Frame Structure Rapporteur Group participants:

This is the first announcement from the Rapporteur Group Chairs. Please be informed that:

- 1. You are invited to provide your inputs about 802.16m frame structures by filling in the spreadsheet as attached (C80216m-08\_096r5.xls). Please follow the instructions provided below. Please submit your completed spreadsheet by **Monday**, **Feb.**, **18**, **2008**, **AOE**. Please note that the consensus information in the spreadsheet will be used as the basis for creating an initial document for review and comment. The contemplated document is intended as a beginning point, not an endpoint to this process, so don't panic. Note that consensus is not unanimity and only items with substantial support will be included in the consensus starting document. However Members should not be overly concerned about the inclusion or exclusion of specific material. There will be ample opportunity through the process to present and include/remove material over the weeks and months ahead. The important thing is to have a beginning document based on those elements that we can agree upon with high confidence, so that we can have a focused debate on the elements of difference, within an identified context. Think of the document as a way to begin a dialogue with a common language. The specific timing and process for the document are still being considered and will be unveiled by Feb 18<sup>th</sup>.
- 2. The Rapporteur Group Chairs are currently working on a work plan for us to work out the 16m frame structure text in the 802.16m SDD to be proposed to the 802.16m TG by March 10, 2008. The work plan will be provided to you all by Monday, Feb. 18, 2008.

Here're the instructions for you to provide your inputs by filling the provided spreadsheet:

- a). Please rename the file by following this suggested convention C80216m-08\_096r5\_yourName\_yourCompnayName.xls.
- b). Please provide your inputs by appending a new column starting with your name+company name. Please Don't insert columns.
- c). You can also append a new row if you would like to propose a new topic/area that, you believe, impact on the 16m frame structure in the SDD. Please Don't insert rows.
- d). TBD or FFS or not-relevant is allowed.
- e). If you and your colleagues in this Rapporteur group happen to have the same inputs to the spreadsheet, you are encouraged to submit only one file to us and also tell us how many others support your inputs.
- f). If your inputs are already included in C80216m-08\_096r5.xls and you don't have any updates to provide at this time, please don't send us another copy of your previous submission.

Thanks for your inputs.

Regards,

Sassan, Phil, and Lei The 16m Frame Structure Rapporteur Group Chairs

The email posting included the document C80216m-08 096r5.xls as an attachment.

During the period to February 18, Group Members submitted a number of updates to the spreadsheet.

On February 18, the Chairs issued the following email posting detailing the process and timeline for the remainder of the Group work item:

-----Original Message-----

From: dot16m@googlegroups.com [mailto:dot16m@googlegroups.com] On Behalf Of Lei

Sent: Monday, February 18, 2008 9:46 PM

To: 802.16m

 $\label{lem:com:com:com:def} \textbf{Cc:} \ sassan.ahmadi@intel.com; pbarber@huawei.com; lwang@nextwave.com$ 

Subject: [802.16m] [frame] 2nd annoucement from the [frame] Rapporteur Group Chairs

Dear 802.16m Frame Structure Rapporteur Group participants:

This is the second announcement from the Rapporteur Group Chairs.

Please be informed that:

1. The objective of our work before the March meeting is to develop a contribution to be submitted to TGm by March 3, 2008, which proposes an initial document regarding frame structure suitable for inclusion in the 802.16m System Description Document (SDD). Such a contribution will be drafted by the Rapporteur Group Chairs based on the collected inputs including 16m frame structure related contributions submitted in Session #52 and Session #53 and the newly collected inputs in the spreadsheet.

The initial document is a beginning point only, a place to begin focused discussion on the meaningful content for frame structure, within a conceptual framework that provides context for evaluation of the material. Inclusion of initial content is purely based on consensus view, as determined by the Rapporteur Group Chairs, without any evaluation of the merits of the content or its relationship to other content. In such a method of inclusion, it is possible that portions of the included content may be internally inconsistent or contradictory. To the extent reasonably possible, the Rapporteur Group Chairs will make effort to identify and highlight such inconsistencies, should any be found, but will make no effort to correct or remove consensus material.

Members should not be overly concerned about the inclusion or exclusion of material into the initial document at this point. Members shall have substantial opportunity to present their views and justify inclusion or exclusion of material during regular 802.16m sessions.

The initial document contribution draft will be reviewed and commented by the Rapporteur Group participants, and then will be revised by the Chairs before the submission.

Members will have the opportunity to make arguments for/against the inclusion of content--in the form of comments and contributions—during the Orlando meeting in March. There will be a Call for Contributions to this effect upon the close of the initial document review and revision period.

- 2. The timeline of the work items is as follows:
  - \* Feb. 4: issue a call-for-inputs in the format of a spreadsheet based initially on C802.16m-08/096r5;
  - \* Feb. 4 to Feb. 18: the group members prepare inputs;
  - \* Feb. 18: inputs to spreadsheet format are due; chairs will post a consolidated version as soon as available;
  - \* Feb. 18 to Feb. 25: The chairs begin drafting the contribution. During this time, continued discussion of technical issues regarding frame structure is encouraged on the 802.16m reflector with the goal of developing a basis for consensus at Session #54;
  - \* Feb. 25(target): chairs release draft contribution. Call for Comments is issued on the 802.16m reflector, request specific change-request comments and remedies in Commentary format. These formal comments are limited to editorial and format issues. Critical analysis of content will be outside the scope of the Call for Comments. However, discussion of technical issues is welcome on the 802.16m reflector;
  - \* Feb. 29: editorial and formatting comments on the draft contribution are due; a consolidated Commentary database is posted as soon as available;
  - \* Feb. 29 to Mar. 3: the chairs propose resolutions to the received comments and revise the draft accordingly; reflector discussions remain open regarding the proposed comments;
  - \* Mar. 3: release the revised contribution to the group and also submit it to 802.16 TGm, request that TGm issue a formal Call for Contributions against that draft, with a deadline of March 17.
- 3. The 16m frame structure Rapporteur group contribution is intended to:
  - \* have the fundamental issues identified and written-up so that further SDD discussions can be started and carried on, with the understanding that we will revise and refine our frame structure section as needed down the road of 802.16m development;
  - \* have simple and precise descriptions for those issues with clear consensus;
  - \* have the inclusion of multiple choices in "brackets" for those issues without clear consensus, in order to organize further discussions.

Thanks for your participation.

Regards,

Sassan, Phil, and Lei

The 16m Frame Structure Rapporteur Group Chairs

On February 21 the Chairs issued the following email posting with the attached spreadsheet C802.16m-08/096r6.xls:

----Original Message-----

From: dot16m@googlegroups.com [mailto:dot16m@googlegroups.com] On Behalf Of Ahmadi, Sassan

Sent: Thursday, February 21, 2008 3:16 PM

To: 802.16m

Cc: pbarber@huawei.com; Lei; Ahmadi, Sassan

Subject: [802.16m] RE: [frame] 3rd announcement from the [frame] Rapporteur Group Chairs

Dear 802.16m Frame Structure Rapporteur Group participants,

Attached please find a consolidated Excel Sheet incorporating all inputs on 802.16m frame structure. The chairs are drafting a document containing generic texts to capture these proposals and will make it available for your review next week.

Since most entities only updated or provided input in the full comparison sheet, we removed the basic concepts sheet and only kept the full comparison sheet.

Thanks for your participation

Regards,

Sassan, Phil, and Lei

The 16m Frame Structure Rapporteur Group Chairs

Some number of errors and omissions were found in the combined spreadsheet, several improved iterations were issued, and on February 26 the Chairs issued the following email posting and associated spreadsheet C802.16m-08/096r9.xls:

From: dot16m@googlegroups.com [mailto:dot16m@googlegroups.com] On Behalf Of Phillip Barber

Sent: Tuesday, February 26, 2008 12:11 PM

To: dot16m@googlegroups.com

Subject: [802.16m] [FRAME] 4th announcement from the Rapporteur Group Chairs

Dear 802.16m Frame Structure Rapporteur Group participants,

The Rapporteur Group project plan had a deliverable for Frame spreadsheets on Feb. 18:

Feb. 18: inputs to spreadsheet format are due; chairs will post a consolidated version as soon as available;

Unfortunately there was some error and omission by the Rapporteur Chairs when combining the submitted Frame spreadsheet uploads into the common spreadsheet. Members should be assured that every single contribution submitted by the Monday, February 18, 2008 AOE will be included in the combined spreadsheet, and will be considered for the initial document.

The Rapporteur Chairs have uploaded the most updated consolidated spreadsheet at this time: C802.16m-08/096r9.xls

If any Member finds that their spreadsheet contribution contents have not been accurately rendered into the consolidated spreadsheet, they should contact the Rapporteur Chairs via this Group reflector service immediately.

The delay in preparation and upload of the spreadsheet shall also cause a delay in the preparation of the initial document, for consideration and editorial comment, per the Rapporteur Group project plan:

Feb. 25(target): chairs release draft contribution. Call for Comments is issued on the 802.16m reflector, request specific change-request comments and remedies in Commentary format. These formal comments are limited to editorial and format issues. Critical analysis of content will be outside the scope of the Call for Comments. However, discussion of technical issues is welcome on the 802.16m reflector;

The Rapporteur Chairs now expect to have the initial document available for editorial comment by Wednesday, February 27.

Given that comments on this initial document during the initial review are editorial and formatting only, the Chairs do not propose changing the review period on the initial document beyond the planned closing date of Friday, Feb. 29.

The Chairs apologize for this delay and hope that Members will have patience while we work through this process.

Regards,

Sassan, Phil, and Lei

The 16m Frame Structure Rapporteur Group Chairs

# On February 28 the Chairs issued the following email posting with identified attachments C802.16m-08/096r10.xls and C802.16m-08/118.zip, uploading both documents to the TGm upload server:

----Original Message-----

From: dot16m@googlegroups.com [mailto:dot16m@googlegroups.com] On Behalf Of Ahmadi, Sassan

Sent: Thursday, February 28, 2008 12:55 AM

To: 802.16m

Cc: pbarber@huawei.com; Lei; Ahmadi, Sassan

Subject: [802.16m] RE: [frame] 5th announcement from Rapporteur Group Chairs

Dear 802.16m Frame Structure Rapporteur Group participants,

Per the Group Plan (though delayed a couple of days, sorry), you will find attached the initial document for consideration, as well as the final combined spreadsheet.

This email also serves as a Call for Comments against the initial document. The Call for Comments is limited to editorial and formatting comments only. Please use the Commentary tool to create your comments and upload them to this Google list service by Friday, February 29 AOE.

A consolidated Commentary database shall be posted as soon as it is available.

Members are encouraged to begin discussing the initial document on this list service.

Regards,

Sassan, Phil, and Lei

The 16m Frame Structure Rapporteur Group Chairs

Note: The documents have been further uploaded to TGm upload server http://dot16.org/CSUpload/CSUpload.cgi?command=viewupload&database=TGm\_db&rnd=758.7200893123695

## On March 3 the Chairs issued the following email posting with identified attachment EditorialCommentsonC80216m-08\_118.cmt:

----Original Message-----

From: dot16m@googlegroups.com [mailto:dot16m@googlegroups.com] On Behalf Of Lei Wang

Sent: Monday, March 03, 2008 10:48 PM

To: 802.16m

Subject: [802.16m] [frame] 6th annoucement from the [frame] Rapporteur Group Chairs

Dear 802.16m [frame] Rapporteur Group participants:

Please be informed that the commentary file, EditorialCommentsonC80216m-08\_118.cmt, with all received comments on C80216m-08\_118, has been uploaded to the [frame] group file site.

Thanks to you all who reviewed and submitted comments.

The [frame] group chairs are currently discussing and resolving the received comments, as well as revise C80216m-08\_118 according to the comment resolutions. We are targeting to have the revised contribution and commentary file with the comment resolutions available on Tuesday, March 4th, 2008.

Thanks for your participation and patience.

Sassan, Phil, and Lei

The 802.16m [Frame] Group Chairs

And on March 4, the Chairs issued the following email posting, attached document C802.16m-08/118r1, and uploaded the document to the TGm upload server:

-----Original Message-----

From: dot16m@googlegroups.com [mailto:dot16m@googlegroups.com] On Behalf Of Ahmadi, Sassan

Sent: Tuesday, March 04, 2008 11:16 PM

To: Ahmadi, Sassan; 802.16m Cc: pbarber@huawei.com; Lei

Subject: [802.16m] RE: [frame] 7th announcement from Rapporteur Group Chairs

Dear 802.16m [frame] Rapporteur Group participants:

Attached please find

- 1- The updated frame structure initial text (118r1)
- 2- The comment file with resolutions by the Rapporteur group chairs, marked as reply comments of "Rapporteur Group Chairs" under the reply comment view.

Based on the previously published plan, we would like to issue a call for comments on contribution 118r1 with deadline of March 17, 2008 (by noon US Eastern Time). The received comments will be collated and published by the chairs prior to TGm meeting and the comments will be resolved by the group during the March meeting.

The chairs would also like to encourage the proponents to update the consolidated Excel Sheet and replace the TBD values with numbers as much as possible to facilitate the discussion and decision making on the proposals.

Thank you and see you all in Orlando!

Sassan, Phil, and Lei

The 802.16m [Frame] Group Chairs

#### Finally, on March 7 the Chairs issued the following email posting:

----Original Message-----

From: dot16m@googlegroups.com [mailto:dot16m@googlegroups.com] On Behalf Of Lei Wang

Sent: Friday, March 07, 2008 5:29 PM

To: 802.16m

Subject: [802.16m] [frame] 8th annoucement from the [frame] Rapporteur Group Chairs

Dear 802.16m [frame] Rapporteur Group participants:

Here are some clarifications about the call-for-comments on C802.16m-08/118r1:

- 1. The deadline of comments on C802.16m-08/118r1 is noon US Eastern Time, March 17, 2008;
- 2. Please prepare your comments in the format of 802.16 Commentary file with "16mFrame" in the "Ballot ID" field in .cmt file;
- 3. Please upload your Commentary file to the 802.16m Google Groups reflector http://dot16m-reflector.wirelessman.org by the deadline. Please note that no late Comments will be accepted;
- 4. If your comments have associated contributions, please prepare your contributions in the format of 802.16 TGm contribution and follow the appropriate naming/numbering rules;
- 5. Please upload your contributions to the TGm upload directory http://tgm.wirelessman.org by the deadline of the comment submission.

Our plan is to integrate and publish the received comments prior to TGm March meeting, and request TGm to address the comments during the March meeting.

Thank you and see you all in Orlando!

Sassan, Phil, and Lei

The 802.16m [Frame] Group Chairs

Completion of the mandated work for this Frame Structure Rapporteur Group remains open pending inclusion of comments made by the Group on C802.16m-08/118r1 as output of the Group, and update of this final report out.