

IEEE 802 Interim Meeting  
 May 2010, Geneva, Switzerland  
**802.1 Meeting Minutes, 24-28 May 2010**

**Attendees**

<u>SURNAME</u>	<u>First Name</u>	<u>Middle Name or Initial</u>	<u>Affiliation</u>
Alon	Zehavit		Nokia Siemens Networks
Belopolsky	Yakov		802.3
Boiger	Christian		University of Applied Sciences Deggendorf
BONNAMY	Jean-Michel		France Telecom Hewlett-Packard Development Company, L.P.
Bottorff	Paul		
Bragg	Nigel		Ciena Corporation
Carlson	Craig		QLogic Corporation
Cheng	Weiyang		Tellabs Hewlett-Packard Development Company, L.P.
Congdon	Paul		
Crupnicoff	Diego		Mellanox Technologies
DeSanti	Claudio		Cisco Systems, Inc.
Ding	Zheming		Telefon AB, LM Ericsson
Effenberger	Frank		Huawei Technologies Co., Ltd.
Farkas	Janos		Ericsson
Fedyk	Donald		ALCATEL-LUCENT
Finn	Norman		Cisco Systems, Inc.
Frattura	David		ALCATEL-LUCENT
Garner	Geoffrey		Samsung
Ghanwani	Anoop		Brocade
Goetz	Franz		Siemens
Gray	Eric		Ericsson HARMAN INTERNATIONAL INDUSTRIES, INCORPORATED
Gunther	Craig		
Haddock	Stephen		Extreme Networks
Jeffree	Anthony		hp, Broadcom
Jiang	Joy		JDS Uniphase Corporation
Kashyap	Prakash		Extreme Networks
Kilaru	Srikanth		WG802.1
Kim	Yongbum		Broadcom Corporation
Klein	Philippe		Broadcom Corporation
Kleineberg	Oliver		Hirschmann Automation & Control
Krause	Michael		Broadcom & HP
Lemon	John		ADTRAN Inc.
li	lin		ZTE Corporation
Mack-Crane	Thomas		Huawei Technologies Co., Ltd.
Merchant	Shehzad		Extreme Networks
Messenger	John		ADVA Optical Networking Ltd.
Mizutani	Masahiko		Hitachi Ltd.

Muller	Shimon		Oracle USA, Inc.
Oliver	Sam		Avalon Microelectronics
			HARMAN INTERNATIONAL INDUSTRIES, INCORPORATED
Olsen	David		Marvell Semiconductor
Pannell	Donald		Ericsson
Parsons	Glenn		Hewlett-Packard Company
Pearson	Mark		Cisco Systems, Inc.
Pelissier	Joseph		Brocade Communications
Peterson	David		Cisco Systems, Inc.
Raeber	Rene		Deutsche Telekom AG
Roese	Josef		ALCATEL-LUCENT
Rouyer	Jessy	V	WG802.1
Sabony	Mazda		Ericsson
Saltsidis	Panagiotis		Exar, inc
Savarda	Raymond		ZTE Corporation
Shao	Hong		Volex
Sharma	Atul		ZTE Corporation
song	xiaoli		
Sparrowhaw k	Bryan		Leviton Manufacturing Co.
Stanton	Kevin	B	Intel Corporation
Sultan	Robert		Huawei Technologies Co., Ltd.
Thaler	Patricia		Broadcom Corporation
Thompson	Geoffrey		GraCaSI
Turner	Edward	J	Gnodal Ltd
Unbehagen	Paul		WG802.1
Weber	Karl		Zurich University of Applied Sciences
Wei	Yuehua		ZTE Corporation

## Interworking Minutes

May 24, 2010 Interworking Task Group IEEE Interim, Geneva

Meeting called to order at 9:30am.

Presented patent policy slides. No response to the call for patents.

Stephen Haddock presented the preliminary agenda for the week.

(see <http://www.ieee802.org/1/files/public/docs2010/admin-interworking-agenda-0510-v1.pdf>)

**802.1Qbc RCSI:** Ben Mack-Crane conducted comment resolution of 802.1Qbc-d1.2 PB Remote Customer Service Interface working group ballot. The comment dispositions are available in the bc-drafts folder on the web site.

<http://ieee802.org/1/files/public/docs2010/bc-mackcrane-editor-report-0510.pdf>

<http://ieee802.org/1/files/private/bc-drafts/d1/802-1bc-d1-2-dis.pdf>

**Liaison:** Discussed two liaisons from the MEF. The one regarding RCSI is a response to our liaison. It provides the requested information and does not require

a response. The one regarding the MEF SOAM MIB project solicits comments from 802.1. There are no comments at this time, however several people were interested in reviewing the documents provided by the MEF and may have comments for a liaison response at the July plenary.

<http://www.ieee802.org/1/files/public/docs2010/liaison-mef-33128-000-Liaison-response-to-8021-RSCI-Haddock-0510.doc>

<http://www.ieee802.org/1/files/public/docs2010/liaison-mef-33105-001-soam-mib-status-mood-0510.ppt>

<http://www.ieee802.org/1/files/public/docs2010/liaison-mef-33131-000-soam-fm-mood-0510.doc>

Break for lunch at 11:25am.

Resume at 2:30pm.

**802.1Qbf SegProt:** Bob Sultan presented an editor's update and conducted comment resolution of 802.1Qbf-d0.2 PBB-TE Infrastructure Segment Protection task group ballot. Proposed comment dispositions are available in the bf-drafts folder on the web site.

<http://www.ieee802.org/1/files/public/docs2010/bf-sultan-editors-report-0510-v01.pdf>

<http://www.ieee802.org/1/files/private/bf-drafts/d0/802-1bf-d0-2-dis-v0.pdf>

Adjourn at 3:30pm.

May 25, 2010 Interworking Task Group

IEEE Interim, Geneva

Meeting called to order at 9:00am.

Presented patent policy slides. No response to the call for patents.

**802.1Qbe MIRP:** Norm Finn conducted comment resolution of 802.1Qbe Multiple I-SID Registration Protocol working group recirculation ballots. Two recirculations were conducted since the March meeting. The first, on draft 1.3, produced exactly one comment. Norm proposed accepting the comment and, with approval from the 802.1 chair, issued draft 1.4 with a second recirculation ballot. Proposed comment dispositions are available in the be-drafts folder on the web site.

<http://www.ieee802.org/1/files/private/be-drafts/d1/802-1be-d1-3-pdis-v1.pdf>

<http://www.ieee802.org/1/files/private/be-drafts/d1/802-1be-d1-4-dis.pdf>

**802.1aq SPB:** Don Fedyk presented an editor's status report on 802.1aq-d2.5 Shortest Path Bridging. Final comment dispositions on the d2.5 task group ballot are available in the aq-drafts folder on the web site.

<http://www.ieee802.org/1/files/private/contrib/aq-fedyk-SPB-Update-summary-0510-v1.pdf>

<http://www.ieee802.org/1/files/private/aq-drafts/d2/802-1aq-d2-5-pdis-v2.pdf>

**802.1AC-REV MAC Service Definitions:** John Messenger walked through the current draft of the MAC Service definition revision. This is about to be issued as draft 1.1 for working group ballot.

Adjourn at 12:45pm.

May 26, 2010 Interworking Task Group IEEE Interim, Geneva  
Joint meeting with Data Center Bridging task group called to order at 9:00am.  
Stephen Haddock presented patent policy slides. No response to the call for patents.

**802.1aq SPB:** Short discussion on plans to do a Shortest Path Bridging tutorial in a joint Interworking/DCB session on Wednesday morning during the July plenary in San Diego.

**New Work:** Bob Sultan presented a proposal to add support for a C-tagged service interface to PBB which has application in Data Center Networks. He also posted a proposed draft PAR and a strawman draft:

<http://www.ieee802.org/1/files/public/docs2010/new-sultan-spbm-in-data-center-0510-v03.pdf>

<http://www.ieee802.org/1/files/public/docs2010/new-sultan-cbb-draft-par-0510-v02-.pdf>

<http://www.ieee802.org/1/files/public/docs2010/new-sultan-cbb-sample-draft-0510-v01.pdf>

**802.1Qbg EVB:** Tony Jeffree gave an introduction to the first draft (d0.1) of 802.1Qbg Edge Virtual Bridging.

**Liaison:** Al Morton spoke about the liaison sent from the IETF Benchmarking Methodology Working Group. We plan on discussing this further in the July meeting and drafting a liaison response.

<http://www.ieee802.org/1/private/email2/msg15307.html>

**802.1Qbh BPE:** Joe Pelissier led a discussion on selected comments from the 802.1Qbh-d0.2 Bridge Port Extension task group ballot.

<http://www.ieee802.org/1/files/public/docs2010/bh-pelissier-editors-report-0510-v02.pdf>

Break for lunch at 12:35pm.

Resume joint Interworking/DCB session at 2:15pm.

**802.3bd:** Pat Thaler reviewed selected comments from the 802.3bd sponsor ballot.

Adjourn at 3:35pm.

May 27, 2010 Interworking Task Group

IEEE Interim, Geneva

Meeting called to order at 9:00am.

Presented patent policy slides. No response to the call for patents.

**802.1Qbe MIRP:** Norm Finn completed resolution of the final unresolved comment of the 802.1Qbe-d1.4 Multiple I-SID Registration Protocol working group recirculation ballot.

**New Work:** Zehavit Alon gave a presentation on Service Protection over External Interfaces:

<http://www.ieee802.org/1/files/public/docs2010/new-alon-Service-Protection-over-NNI-05-10-v01.pdf>

Break for lunch at 11:00am.

Resume at 2:30pm

**New Work:** A set of three presentations were given by members of the ITU related to the liaisons sent prior to the March plenary in Orlando. The presenters and links are:

Ghani Abbas: <http://ieee802.org/1/files/public/docs2010/new-itu-2-port-group-model-0510-v02.ppt>

Jia He: <http://ieee802.org/1/files/public/docs2010/new-itu-1-G-ptneq-IEEE-Final-0510-v1.ppt>

Maarten Vissers: <http://ieee802.org/1/files/public/docs2010/new-itu-3-Eth-services-over-otn-0510-v05.ppt>

Adjourn at 6:00pm.

## AVB Meeting Minutes

**None Provided.** For the information currently available, the following agenda was provided in E-Mail to the mailing list:

Tuesday, 25 May

- 8am-9am, sign in/get credentials from ITU staff
- 9am-noon, 802.1Qat (Craig)
- 1pm-6pm, 802.1BA status and contributions (Tony)

Wednesday, 26 May

- 8:30am-12:30, 802.1AS ballot review, part 1
- 1:30pm-3:30pm, Siemens presentation (Franz) / Hirschmann Automation (Oliver) / discuss future work
- 3:30pm-4pm, 802.1Qat discussion

Thursday, 27 May

- 8:30-12:30 and 1:30-5, 802.1AS ballot review, part 2 (Geoff)

- Possibly respond to ITU liaison to 802.1 regarding 1588 timestamp and layering

## DCB Meeting Minutes

**Monday, 24 May**

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Morning meeting started at ~ 8:30 AM.

Pat showed slides covering IEEE 802.1 patent policy and issued a call for patent information. There were no responses.

Pat also showed the slides on IEEE 802.1 policy with respect to anti-competitive behavior, discussions of pricing, etc.

At this point, Pat prepared the Agenda for the week.

### Data Center Bridging Agenda May 2010

(Note: times are approximate depending on the time needed for comment resolution items may move forward.)

Monday

Agenda Update and Approval.....	Pat Thaler
Patent slides.....	Pat Thaler
Qaz comment resolution.....	Craig Carlson
Qbb comment resolution.....	Claudio DeSanti
3bd comment resolution.....	Pat Thaler

Tuesday through Thursday

09:00

EVB (Qbg and Qbh)	
Qbg editor's report.....	Tony Jeffree
Qbh editor's report.....	Joe Pelissier
Qbg open issues	
Qbh ballot comment resolution and open issues	

IETF Benchmarking WG .....	Al Morton
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Wednesday

Joint meeting with Interworking on EVB

09:00

Editor's reports on status, drafts and open issues	
PBB in the data center.....	Bob Sultan

Afternoon:

14:30

Review ballot comments on Qaz, Qbb and Qbd	
Continue EVB	

Thursday

09:00

Continue EVB	
Next steps	

We worked on [comment resolution](#) for P802.1Qaz ([D1.3](#)) through to the break at ~ 10:30, and continued after the break until lunch (at ~12:30).

Open issue: do we get rid of TCGs?

We continued P802.1Qaz comment resolution after lunch until ~15:30.

We began [comment resolution](#) for P802.1Qbb ([D2.2](#)) at ~15:45, continuing until ~ 17:00.

We then worked on P802.3bd ([D2.0](#)) [comment resolution](#) until breaking for the day at ~ 20:00.

***Tuesday, 25 May***  
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Pat reminded people to register their attendance and about the IEEE 802.1 policies on patents and anti-trust/anti-competitive activities.

We started with Tony's editor's report on EVB (P802.1Qbg) at ~ 9:00. The report was completed at ~ 10:20 and we went on a break.

After the break, Joe gave his [editor's report](#) and we began [comment resolution](#) for P802.1Qbh ([D0.2](#)). This continued until lunch at ~ 12:30.

After lunch (starting at ~ 14:00) we completed the small number of remaining comment resolutions for P802.3bd and then continued comment resolution for P802.1bh.

Note: toward the end of Joe's discussion of comment resolutions for P802.1Qbh, there was a conversation between Joe and Renato Recio that Renato asked me to record. The conversation was as follows:

Renato

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The Qbh specification calls out using an opaque field for provisioning (associating) network state to a port, page 78, section 45.7.3  
Provisioning TLV.

Why not the proposed Qbg VDP (Virtual Station Interface Discovery and Configuration Protocol) instead?

Joe

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Will include the proposed Qbg VDP in the next version of the document.

On completion of comment resolution for P802.1Qbh, Pat went on to talk about next steps and the agenda for the remainder of the meeting. She displayed the liaison from Al Morton that Tony had posted on the IEEE 802.1 exploder on 29 April, 2010 and pointed out that people might want to take a look at it.

Al Morton and Pat arranged to have Al talk about his liaison toward the end of the joint (IWK/DCB) meeting at ~11:00 on Wednesday.

***Wednesday, 26 May (Joint DCB/IWK meeting)***  
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Steve started the meeting by reviewing the IEEE 802.1 policies on essential IPR and

anti-competition. In response to the call for patents, there were no responses.

Bob Sultan gave a [presentation](#) on the possibility of using a C-Tag-based I-component in the DCB environment.

There were several comments from the floor from people trying to determine the extent to which this is actually necessary. Suggestions included:

1) does there need to be a standard for this - it is being done "in the wild" already and the concept is simple, so what does a standard need to say?

Some new text around this would increase consistency.

2) there is a lot of text in the standard already that allows this to be done if - for example - the defined managed objects are implemented literally as defined; why not simply allow that such implementations already work and are "standard"?

3) the distinction between C-Tags and S-Tags is artificial based on an earlier decision to distinguish S-Tagged and C-Tagged frames by Ether-type how hard is it for existing implementations to do this without additional guidance from the standard?

4) there are a lot of other reasons why S-Tags would be needed in the DCB environment already; is this additional complexity actually required in the standard to support this corner-case?

5) one approach is to simply do a VID-and-Ethertype translation in an in-line (possibly virtual) component; wouldn't this be much simpler to specify?

This approach might make managing the solution more complicated. We should make some effort to evaluate the extent to which this is actually the case, given the constraints already in-place for management complexity for provider bridging.

There seems to be interest in investigating this further and there was some discussion of next steps and timing of possible work on a PAR and 5C. It was clear that there is a need for people to go off and look into this further.

Tony gave the same editor's report on EVB (P802.1Qbg) status that he gave earlier in the DCB meetings.

Al Morton talked about the liaison letter he had posted in April. We decided we would probably respond formally from the July Plenary meeting, but the informal response is that we are interested in liaising by correspondence and there is no current overlap in any IEEE projects with the proposed work in the IETF BMWG.

Al's liaison introduced the [draft](#) that his benchmarking working group is starting on and asked for comment from IEEE 802.1 and the DCB Task group in particular.

Pat asked for a show of hands as to who might be interested in starting to work on the response to the current draft. Glenn Parsons, Claudio DeSanti and Joy Jiang indicated interest in doing so and Pat said she too would like to be involved.

Joe Pelissier gave an updated editor's report on Bridge Port Extensions (P802.1Qbh).

Some of the open issues need to be discussed in the joint session and at least one of them touches on both EVB (P802.1Qbg) and BPE (P802.1Qbh).



Work to be discussed in the joint meeting:

- 1) in extending the C-VLAN component for both EVB and BPE, should these be cast as optional capabilities of existing C-components, or as a new component?

The answer (so far) appears to be that - as long as the filtering of addresses is as listed for a C-Component in the standard - then the work should be cast as optional capabilities of the existing C-Component.

- 2) we currently ignore S-Tags and Priority S-Tags in C-VLAN bridges. We may want to have the same behavior for an "Extended Bridge" (comprising port extenders and an EVB controlling bridge). Is it worth defining this new behavior for S-Components or should we just live with the associated strange behavior (where an extended bridge is offered S-Tagged frames)?

The answer appears to be that this will A) be easier to think about with a picture and B) we all need to look at this issue from a number of different perspectives.

Joe showed a slide with an appropriate picture (see E-VLAN Bridge Model of Operation).

Based on the discussion, there is a potential need to use a different Ethertype, but some people questioned whether or not this is needed to do this to deal with what is essentially only going to occur in a broken configuration.

It seems that we may not be able to draw a conclusion from the discussion today. We probably have some more investigation to do in the DCB group.

We broke for lunch at ~ 12:30.

***Wednesday Afternoon DCB meeting***

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Started at ~ 2 PM.

We had set this time aside for resolution of remaining open issues with ballot comments.

Pat started with comment resolution responses for 802.3bd. It seems that Bob was not happy with the fact that we chose his less-preferred alternative solution, and plans to remain unsatisfied with the resolution.

We then went on to open issues in comment resolution for 802.1az. We discussed changes required to remove the traffic class groups and just use traffic classes for this purpose. Details will be included in comment resolutions of the related comments.

Pat then asked if there were any other open issues. Currently Pat anticipates the remaining issues are all minor and may be resolved in Sponsor Ballot.