

# IEEE 802.1 Interim Meeting

January 2012, Munich

## 802.1 Meeting Minutes, - January 2012

### Attendees

Last Name	First Name	Middle Name	Affiliation
Alon	Zehavit		Nokia Siemens Networks
An	Yafan		Juniper Networks, Inc.
Ashwood-Smith	Peter		Huawei Technologies Co. Ltd
Bahr	Michael		Siemens AG
Barrass	Hugh		Cisco Systems, Inc. Deggendorf University of Applied Sciences, Hirschmann Automation & Control
Boiger	Christian		
Booth	Brad		Dell
Bottorff	Paul		Hewlett-Packard Development Company, L.P.
Bragg	Nigel		ciena
Brandner	Rudolf		Nokia Siemens Networks
Chang	Xin		Huawei Technologies Co. Ltd
Congdon	Paul		Hewlett-Packard Development Company, L.P.
Cummings	Rodney		National Instruments Corporation
DeSanti	Claudio		Cisco Systems, Inc.
Eastlake, 3rd	Donald		Huawei R&D USA
Farkas	Janos		Ericsson
Fedyk	Donald		ALCATEL-LUCENT
Finn	Norman		Cisco Systems, Inc.
Garner	Geoffrey		Self Employed
Ghanwani	Anoop		Dell
Goetz	Franz		Siemens AG
GU	Yingjie		Huawei Technologies Co. Ltd
Haddock	Stephen		Stephen Haddock Consulting, LLC
Hogenmueller	Thomas		802.1 IEEE Working Group
Ibanez	Guillermo		Universidad de Alcala Madrid Spain
Jeffree	Anthony		Not Applicable (N/A)
Kicherer	Max		BMW Group
Kiessling	Marcel		Siemens AG
Kim	Yongbum		Broadcom Corporation
Klein	Philippe		Broadcom Corporation
Kleineberg	Oliver		Hirschmann Automation and Control, Inc.
Lapuh	Roger		Avaya Inc.
Li	Yizhou		Huawei Technologies Co. Ltd
Mack-Crane	Thomas		Huawei Technologies Co. Ltd
Martin	David		Ciena Corporation
Messenger	John		ADVA Optical Networking Ltd.
Moldovansky	Anatoly		Rockwell Automation
Multanen	Eric		Intel Corporation
Pannell	Donald		Marvell Semiconductor, Inc.
Parsons	Glenn		Ericsson AB

Pelissier	Joseph		Cisco Systems, Inc.
Plankensteiner	Markus		TTTech Computertechnik AG
Rouyer	Jessy		ALCATEL-LUCENT
Sabony	Mazda		Advanced Micro Devices (AMD)
Saltsidis	Panagiotis		Ericsson AB
Steiner	Wilfried		TTTech Computertechnik AG
Tanaka	Jun		FUJITSU LABORATORIES LIMITED
Teener	Michael	Johas	Broadcom Corporation
Thaler	Patricia		Broadcom Corporation
Ting	Ao		ZTE Corporation
Tretter	Albert		Siemens AG
Unbehagen	Paul		Avaya Inc.
Vissers	Maarten		Huawei Technologies Co. Ltd
Xiao	Min		ZTE Corporation

# Task Group Minutes

## Interworking minutes

### Monday, 16 January

Meeting called to order at 9:00am.

Stephen Haddock 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/docs1711/admin-interworking-agenda-0911-v01.pdf>

**802.1aq SPB:** Don Fedyk conducted comment resolution on the Sponsor ballot recirculation for 802.1aq-d4.4 Shortest Path Bridging. Also discussed six comments submitted off-line by a non-voter, some of which resulted in the addition of “rogue” comments to the sponsor ballot. Based on the comment resolution and subsequent changes, there will be a recirculation ballot.

- <http://ieee802.org/1/files/public/docs2012/aq-fedyk-SPB-summary-0112-v1.pdf>
- <http://ieee802.org/1/files/private/aq-drafts/d4/802-1aq-d4-4dis.pdf>

**802.1AXbq DRNI:** John Messenger presented an editor’s report and conducted comment resolution on the Sponsor ballot for 802.1AXbk-d2.0 LACP Addressing. The ballot passed with no disapprove votes.

- <http://ieee802.org/1/files/public/docs2012/axbk-messenger-editor-report-0112-v01.pdf>
- <http://ieee802.org/1/files/private/axbk-drafts/d2/802-1AXbk-d2-0-dis-v2.pdf>

Break at 12:10 PM for lunch.

Resume at 2:00 PM.

**802.1AC MAC Service Definition:** John Messenger walked through the 802.1AC-d1.4 MAC Service Definition. Plan is to issue a new draft (d1.5) removing subclause 12.2 for a Working Group recirculation ballot.

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

**802.1Qbp ECMP:** Ben Mack-Crane concluded comment resolution on the first task group ballot for 802.1Qbp-d0.1 SPBM Equal Cost Multi-Path (comment resolution began during the November 2011 plenary).

- <http://ieee802.org/1/files/public/docs2012/bp-mackcrane-editor-notes-0112.pdf>
- <http://ieee802.org/1/files/private/bp-drafts/d0/802-1bp-d0-1-dis.pdf>

Adjourn at 6:10 PM.

### Tuesday, 17 January

Maintenance Task Group met 9:00 to 10:30 AM.

Interworking Task Group meeting called to order at 11:00 AM.

Stephen Haddock gave the call for patents. There was no response to the call for patents.

**802.1Qbp ECMP:** Ben Mack-Crane and Peter Ashwood-Smith gave presentations:

- <http://iee802.org/1/files/public/docs2012/bp-mackcrane-multicast-mode-0112.pdf>
- <http://www.iee802.org/1/files/public/docs2011/bp-ashwood-one-slide-1215-v3.pdf>

Adjourn at 12:00 PM.

## Wednesday, 18 January

Joint AVB-DCB-IWK met from 9:00 AM to 12:45 PM. See AVB minutes below.

Interworking Task Group meeting called to order at 2:00pm.

Stephen Haddock presented patent policy slides. No response to the call for patents.

**802.1AXbq DRNI:** Steve Haddock and Maarten Vissers gave presentations on the differences in the DRNI models previously presented by Steve, by Norm, and by Maarten.

- <http://www.iee802.org/1/files/public/docs2012/axbq-haddock-state-of-the-war-0112-v01.pdf>
- <http://www.iee802.org/1/files/public/docs2012/axbq-vissers-drni-data-plane-summary-0112-v1.pptx>

Adjourn at 6:00 PM.

## Thursday, 19 January

Meeting called to order at 9:00am.

Stephen Haddock presented patent policy slides. No response to the call for patents.

**New Work:** Guillermo Ibanez presented an update of the All Path Bridging work. Following the presentation there was some discussion about whether to pursue this as an 802.1 project. There was a call for a show-of-hands for who would be interested in making this an 802.1 project, and no hands were raised.

- <http://iee802.org/1/files/public/docs2012/new-ibanez-all-path-bridging-update-0112-v1-fixed.pdf>

**802.1AX-REV:** Based on discussions in Interworking, DCB, and Maintenance Task Groups, it has been determined that the DRNI project should be changed to a 802.1AX-Revision project to correct some problems identified in the maintenance process. The procedure will be to withdraw the AXbq PAR and submit a PAR for the revision. Norm provided a draft of the revision PAR. This was edited by the Task Group and will be pre-circulated to the Executive Committee prior to the March plenary:

- <http://iee802.org/1/files/public/docs2012/ax-rev-nfinn-par-5c-0112-v01.pdf>

**802.1AXbg DRNI:** Steve and Maarten presented additional slides to try to work toward a converged DRNI model:

- <http://www.iee802.org/1/files/public/docs2012/axbg-vissers-drni-and-dnp-model-evolution-a3-0112-v1.pptx>
- <http://iee802.org/1/files/public/docs2012/axbg-haddock-another-IB-BEB-case-0112-v01.pdf>

Adjourn at 12:45 PM.

## DCB Minutes

### Monday, 16 January

Pat Thaler presented the patent slides and made the call for potentially essential patents.

There was no response to the call for patents.

P802.1Qbg/D2.0 Sponsor ballot comment resolution – editor Tony Jeffree

Most P802.1Qbg comments were dealt with (exception – MIB comments to be dealt with later in the week).

P802.1BR/D3.1 Sponsor ballot comment resolution – editor Joe Pelissier

Presentation by Erik Multanen “IEEE 802.1BR Bridge Port Extender Port Parameters Request” available at:

- <http://www.iee802.org/1/files/public/docs2012/br-multanen-i38-0112-v1.pdf>

All P802.1BR comments were dealt with.

### Tuesday, 17 January

Potential Sponsor ballot recirculation schedules:

- Hold a recirculation ballot for both P802.1Qbg and P802.1BR opening about 1 week following this interim
- Plan to review any Recirculation Sponsor ballot comments during the February 14<sup>th</sup> weekly EVB call
- Likely hold a 2<sup>nd</sup> Recirculation Sponsor ballot to close prior to the March 12<sup>th</sup> week 802 plenary
- Hopefully send both P802.1Qbg and P802.1BR to RevCom and the SASB out of the plenary

DCB TG adjourned at about 11:30 AM.

### Wednesday, 18 January

DCB TG reconvened at about 2 PM.

The DCB TG chair Pat Thaler reminded the group of the patent slides and made a call for potentially essential patents.

There were no responses to the call for patents.

P802.1Qbg/D2.0 Sponsor ballot comment resolution (continued) – editor Tony Jeffree

Residual MIB-related comments were dealt with.

DCB TG adjourned at about 2:45 PM.

## AVB Meeting Minutes

Presenter codes: CB/Christian Boiger, DP/Don Panell, GG/Geoff Garner, HB/Hugh Barrass, HZ/Helge Zinner, JR/Jonas Rox, MB/Michael Bahr, MJT/Michael Johas Teener, NF/Norm Finn, OK/Oliver Kleineberg, PK/Philippe Klein and WS/Wilfried Steiner.

Presentations and other documents below can be found at:

- <http://www.ieee802.org/1/files/public/docs2012/>

### Monday, 16 January, AM

Meeting started at 9:30 AM.

Meeting topic: **Time Aware Blocking/Preemption**

administrivia	MJT	30 min
IEEE patent policy and call for patents		
agenda review		
Introductions		
Time Aware Shaping and Preemption <a href="#">new-avb-boiger-tas-and-preemption-0112-v2.pdf</a>	CB	120 min
What is the Real Benefit of Preemptive Transmission? <a href="#">new-avb-nfenn-real-time-networks-1111-v05.pdf</a>	NF	60 min

Adjourned at 12:30 PM.

### Monday, 16 January, PM

Meeting started at 1:30 PM.

Meeting topic: **Time Aware Shaping/Preemption**

Time-aware blocking PAR review <a href="#">new-avb-pannell-time-aware-shaper-draft-par-1201-v2.pdf</a>	DP	90 min
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Formal Timing Analysis of Ethernet AVB for Industrial Automation	JR	60 min
<a href="#">new-avb-rox-formal-timing-analysis-0112.pdf</a>		
Preemption PAR & 5C review	YK	60 min
<a href="#">new-avb-kim-8021-Preemption-DRAFT-PAR-5C-0112-v06.pdf</a>		

Adjourned at 6:00 PM.

## Tuesday, 17 January, AM

Meeting started at 9:00 AM.

Meeting topic: **AS Corrigendum / ASbt**

802.1AS corrigendum	GG	60 min
802.1ASbt status	GG	20 min
Fault-Tolerant Clock Synchronization	WS	60 min
<a href="#">new-avb-wsteiner-fault-tolerant-clock-synchronization-0112-v01.pdf</a>		
Choices for Preemption	HB	40 min
<a href="#">new-avb-barrass-preemptionoptions-0112-v01.pdf</a>		

Adjourned at 12:00 PM.

## Tuesday, 17 January, PM

Meeting started at 1:00 PM.

Meeting topic: **(informative, not 802.1)**

Symposium on AVB and Industrial Applications		240 min
<a href="#">avb-mit-standards-status-for-symposium-0112.pdf</a>		
<a href="#">new-avb-nfinn-real-time-networks-1111-v05.pdf</a>		

Adjourned at 5:00 PM.

## Wednesday, 18 January, AM

Meeting started at 9:00 AM.

Meeting Topic: **Full 802.1 WG / Preemption**

Preemption requirements	NF	30 min
<a href="#">new-avb-nfinn-preempt-advantage-0112-v02.pdf</a>		
Time-aware shaper PAR review	DP	90 min
<a href="#">new-avb-pannell-time-aware-shaper-draft-par-1201-v2.pdf</a>		
Preemption PAR review	YK	60 min
<a href="#">new-avb-kim-8021-Preemption-DRAFT-PAR-5C-0112-v08.pdf</a>		

Adjourned at 12:00 PM.

## Wednesday, 18 January, PM

Meeting started at 1:00 PM.

Meeting topic: **Time Aware Shaping/Preemption**

Automotive Requirements and Definitions HZ/CB/OK 45 min  
[new-avb-zinner-boiger-kleineberg-automotive-requirements-0112-v01.pdf](#)

Multi-path Link-state Routing MB 60 min

802.3 CFI request for preemption support review and discussion YK/HB 60 min

Adjourned at 5:00 PM.

## Thursday, 19 January, AM

Meeting started at 9:00 AM.

Meeting Topic: **Assumptions / work plan**

Shortest Path Bridging NF 90 min  
[new-avb-nfinn-spb-tsn-0112-v01.pdf](#)

SRP in home networks PK 30 min  
Gen 2 assumptions review

Adjourned at 12:00 PM.

## Maintenance Task Group

The maintenance Task Group minutes are available via the maintenance site at:

- <http://www.ieee802.org/1/maint.html>

The January meeting notes are included below.

## Conference Call, Thursday, 12 January

The chair read the patent policy and made the call for patents. There were no responses to the call for patents

Review of status:

- a) 5 new maintenance items since November
- b) Sponsor ballots for Qbg and TG ballot for Q-cor-2 completed and several comments were addressed.



We discussed whether the items addressed in Qbg should be moved into Q-cor-2 in order to make it easier for people to find fixes to issues. We agreed that this is really the intention of the maintenance system and the status page has been updated with a reference of where to find fixes for particular items.

The AX-Rev PAR needs to be developed in Munich. The Interworking TG chair was reminded to put this on the agenda in Munich.

We discussed the philosophy for adding new items to Q-cor-2. The agreement was that as long as the document is in TG ballot, we can easily add new items. Once the document goes to WG ballot we do not want to add new items unless there is a critical bug that needs fixing.

Open items were reviewed and updated. See the slides for details and discussion.

The phone conference ended without enough time to address all open items. The remaining items will be discussed in Munich. Items to address in Munich include: 11, 13, all new items

## Tuesday, 17 January

The chair reminded the TG of the patent policy and made the call for patents. There were no responses to the call.

We continued process the status updates. All other items covered in q - cor - 2 had no comments against them.

New items:

- a) Maint\_0018 – incorrect figure reference will be addressed in d2 of q - cor - 2.
- b) Maint\_0019 – The diagram in AC will be included in the next q - cor - 2 draft
- c) Maint\_0020 – Discussed on the phone call and agreed to address in q - cor - 2.
- d) Maint\_0021 – Lots of discussion as to whether this is really an issue. Agreed that it isn't entirely clear how to allocate the left over bandwidth if some allocation is made to a non - ETS class. Suggestions on where to put the clarification was made, but there isn't a vehicle for fixing Qaz at this point
- e) Maint\_0022 – The MIB has DEFVAL bugs on a few parameters. This will be included in the next draft of q - cor - 2.

John Messenger and Maarten Vissers have new items to address, but these may need further clarification and will be addressed in March.

## Meeting Materials

**Contributions uploaded since November, 2011:**

**- December –**

<http://www.ieee802.org/1/files/public/docs2011/axbq-haddock-reconciling-models-1111-v01.pdf>

<http://www.ieee802.org/1/files/public/docs2011/axbq-nfinn-IBBEBs-1011-v6.pdf>

<http://www.ieee802.org/1/files/public/docs2011/bp-ashwood-one-slide-1215-v3.pdf>

**- January -**

<http://www.ieee802.org/1/files/public/docs2012/admin-messenger-may12-york-meeting-0112-v01.pdf>

<http://www.ieee802.org/1/files/public/docs2012/as-dolsen-neighborPropDelay-v2.pdf>

<http://www.ieee802.org/1/files/public/docs2012/axbq-vissers-dnp-architectures-0112-v5.pptx>

<http://www.ieee802.org/1/files/public/docs2012/maint-congdon-session-0112-v1.pdf>

<http://www.ieee802.org/1/files/public/docs2012/new-avb-barrass-preemptionoptions-0112-v01.pdf>

<http://www.ieee802.org/1/files/public/docs2012/new-avb-nfinn-preempt-advantage-0112-v01.pdf>

<http://www.ieee802.org/1/files/public/docs2012/new-avb-nfinn-real-time-networks-1111-v05.pdf>

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<http://www.ieee802.org/1/files/public/docs2012/new-avb-kim-8021-Preemption-DRAFT-PAR-5C-0112-v06.pdf>

<http://www.ieee802.org/1/files/public/docs2012/new-avb-nfinn-preempt-advantage-0112-v02.pdf>

<http://www.ieee802.org/1/files/public/docs2012/new-avb-pannell-time-aware-shaper-draft-par-1201-v2.pdf>

<http://www.ieee802.org/1/files/public/docs2012/new-avb-rox-formal-timing-analysis-0112.pdf>

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<http://www.ieee802.org/1/files/public/docs2012/axbq-vissers-drni-ec-sncp-in-802-1q-terms-0112.pptx>

<http://www.ieee802.org/1/files/public/docs2012/bp-mackcrane-editor-notes-0112.pdf>

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<http://www.ieee802.org/1/files/public/docs2012/new-ibanez-all-path-bridging-update-0112-v1-fixed.pdf>

<http://www.ieee802.org/1/files/public/docs2012/new-ibanez-all-path-bridging-update-0112-v1.pdf>