

# Agenda and General Information

IEEE P802.3bn EPoC PHY Task Force

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Victoria, BC, Canada

May 15th – 17th 2013

# Agenda

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- Welcome and Introductions
- Review and approve March 19-21, 2013 Minutes
- Goals for this meeting
- Reflector and Web, Task Force Private Area
- Ground Rules
- IEEE
  - Structure, Bylaws and Rules
  - Call for Patents
  - Affiliation
- Attendance
- Liaisons and Communications
- Business since last meeting and Status
- Presentations
- Approve Agenda
- Closing Business
- Future Meetings

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# **REVIEW / APPROVE MINUTES**

From: 19-21 March 2013 Orlando, Florida meeting

# Approve Minutes

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- Motion to approve minutes from 19-21 March 2013, Orlando meeting.
  - Moved:
  - Seconded:

# Task Force Decorum

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- Photography or recording by permission only (2010 SASB Op Manual 5.3.3.4)
- Cell phone ringers off
- Press (i.e., anyone reporting publicly on this meeting) are to announce their presence (5.3.3.5)
- Wear your badges at all times in meeting areas
  - Help the hotel security staff improve the general security of the meeting rooms
  - **PCs HAVE BEEN STOLEN** at previous meetings
  - **DO NOT** assume that meeting areas are secure
- Please observe proper decorum in meetings

# Goals for this meeting

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- Move along all work
- Review / approve Editor team work
- Approve additional Technical Decisions
- Approve additional Baseline proposals
- Exit meeting with Call for Topics and focus for next meeting

# Reflector and Web

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- Method 1: To subscribe to the EPoC reflector, send an email to:

[ListServ@ieee.org](mailto:ListServ@ieee.org)

with the following in the body of the message (do not include “<>”):

*subscribe* stds-802-3-epoc <yourfirstname> <yourlastname>  
*end*

- Method 2: Visit Task Force web page URL:
  - <http://www.ieee802.org/3/bn>
  - Follow link: “Subscribing and unsubscribing to the e-mail reflector”
  - Follow link: “ListServ web interface”
- Send EPoC email reflector messages To:
  - [stds-802-3-epoc@listserv.ieee.org](mailto:stds-802-3-epoc@listserv.ieee.org)

# Task Force Private Area

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- URL: <http://www.ieee802.org/3/bn/private>
  - Username: 802.3bn
  - Password: xxxx
- There are no private documents at this time
- Expected use: Task Force drafts

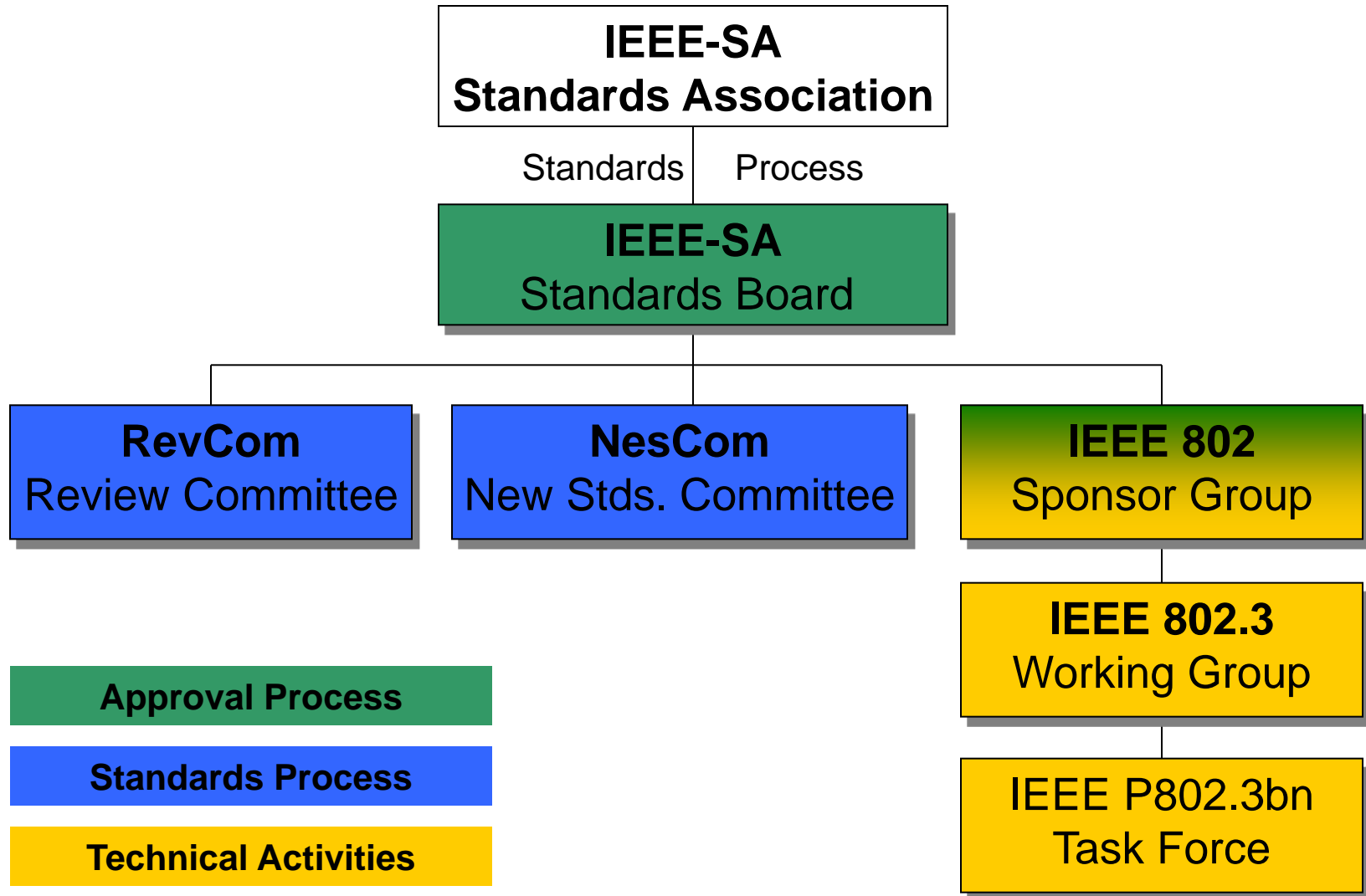


# Ground Rules

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- Based upon IEEE 802.3 Rules
  - Foundation based upon Robert's Rules of Order
  - Anyone in the room may speak
  - Anyone in the room may vote
- **RESPECT**... give it, get it
- NO product pitches
- NO corporate pitches
- NO prices!!!
  - This includes costs, ASPs, etc. no matter what the currency
- NO restrictive notices

# IEEE Structure



# Participants, Patents, and Duty to Inform

All participants in this meeting have certain obligations under the IEEE-SA Patent Policy.

- **Participants [Note: Quoted text excerpted from IEEE-SA Standards Board Bylaws subclause 6.2]:**
  - **“Shall inform the IEEE (or cause the IEEE to be informed)” of the identity of each “holder of any potential Essential Patent Claims of which they are personally aware” if the claims are owned or controlled by the participant or the entity the participant is from, employed by, or otherwise represents**
    - **“Personal awareness” means that the participant “is personally aware that the holder may have a potential Essential Patent Claim,” even if the participant is not personally aware of the specific patents or patent claims**
  - **“Should inform the IEEE (or cause the IEEE to be informed)” of the identity of “any other holders of such potential Essential Patent Claims” (that is, third parties that are not affiliated with the participant, with the participant’s employer, or with anyone else that the participant is from or otherwise represents)**
- **The above does not apply if the patent claim is already the subject of an Accepted Letter of Assurance that applies to the proposed standard(s) under consideration by this group**
- **Early identification of holders of potential Essential Patent Claims is strongly encouraged**
- **No duty to perform a patent search**

# Patent Related Links

All participants should be familiar with their obligations under the IEEE-SA Policies & Procedures for standards development.

Patent Policy is stated in these sources:

IEEE-SA Standards Boards Bylaws

*<http://standards.ieee.org/develop/policies/bylaws/sect6-7.html#6>*

IEEE-SA Standards Board Operations Manual

*<http://standards.ieee.org/develop/policies/opman/sect6.html#6.3>*

Material about the patent policy is available at

*<http://standards.ieee.org/about/sasb/patcom/materials.html>*

If you have questions, contact the IEEE-SA Standards Board Patent Committee Administrator at [patcom@ieee.org](mailto:patcom@ieee.org) or visit:

<http://standards.ieee.org/about/sasb/patcom/index.html>

This slide set is available at  
<https://development.standards.ieee.org/myproject/Public/mytools/mob/slideset.ppt>



# Call for Potentially Essential Patents

- If anyone in this meeting is personally aware of the holder of any patent claims that are potentially essential to implementation of the proposed standard(s) under consideration by this group and that are not already the subject of an Accepted Letter of Assurance:
  - Either speak up now or
  - Provide the chair of this group with the identity of the holder(s) of any and all such claims as soon as possible or
  - Cause an LOA to be submitted

# Other Guidelines for IEEE WG Meetings

- **All IEEE-SA standards meetings shall be conducted in compliance with all applicable laws, including antitrust and competition laws.**
  - **Don't discuss the interpretation, validity, or essentiality of patents/patent claims.**
  - **Don't discuss specific license rates, terms, or conditions.**
    - Relative costs, including licensing costs of essential patent claims, of different technical approaches may be discussed in standards development meetings.
      - Technical considerations remain primary focus
  - **Don't discuss or engage in the fixing of product prices, allocation of customers, or division of sales markets.**
  - **Don't discuss the status or substance of ongoing or threatened litigation.**
  - **Don't be silent if inappropriate topics are discussed ... do formally object.**

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See *IEEE-SA Standards Board Operations Manual*, clause 5.3.10 and “Promoting Competition and Innovation: What You Need to Know about the IEEE Standards Association's Antitrust and Competition Policy” for more details.



# Affiliation

- IEEE-SA Standards Board By-Laws, Section 5.2.1.5  
–(<http://standards.ieee.org/guides/bylaws/sect5.html>)
- Disclosure of Affiliation  
–“Every member and participant in a working group, Sponsor ballot, or other standards development activity shall disclose his or her affiliation.”
- What is “Affiliation”  
–“An individual is deemed "affiliated" with any individual or entity that has been, or will be, financially or materially supporting that individual's participation in a particular IEEE standards activity. This includes, but is not limited to, his or her employer and any individual or entity that has or will have, either directly or indirectly, requested, paid for, or otherwise sponsored his or her participation.”
- Affiliation and participation  
–“Failure to disclose every such affiliation may result in complete or partial loss of rights to participate in IEEE-SA activities. An individual is not excused from compliance with this policy by reason of any claim of a conflicting obligation (whether contractual or otherwise) that prohibits disclosure of affiliation.”

# Attendance

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- Tutorial Material on attendance tool
  - [http://ieee802.org/3/minutes/mar11/0311\\_imat.pdf](http://ieee802.org/3/minutes/mar11/0311_imat.pdf)
- URL: <https://imat.ieee.org>
  - IEEE account login and password required
  - Sign in to “Attendance Tool”



# Liaisons and Communications

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- None.

# New Activities Since Last Meeting

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- Evaluation Criteria and Requirements ad hoc committee:
  - Chinese conference call
  - Japanese conference call
  - Minutes, presentations on web site:  
[http://www.ieee802.org/3/bn/public/adhoc\\_eval/](http://www.ieee802.org/3/bn/public/adhoc_eval/)

# ePoll Straw Poll Trial

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- Goal: socialize sub-group work to Task Force
  - Question(s) that have ad hoc consensus
  - “Heads up” for building consensus going in to the next face to face meeting
- 3 trial question were run
  - 2 for rf spectrum ad hoc
  - 1 for channel model ad hoc
- Results:
  - Technically, trial was a good test
  - Only same participants as in ad hoc committee voted
    - No significant participation from other members of the TF!

# Heads up on Error Performance Objective

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- Expect some harmonization rework on stating error performance objectives: 802.3bj, 802.3bm, 802.3bn:
  - Move reference point from MAC/PLS to “FEC” service interface
  - Add statement for Mean Time To False Packet Acceptance (MTTFPA)
- Impact on EPoC Task Force
  - Complete FEC selection and run our numbers
    - Based on LDPC, soft decisions, UBLER (undetected block error rate), etc.
  - Expect mechanisms added to meet 802.3 MTTFPA expectations
    - Meeting customer service objectives and as well as MTTFPA
  - Expect Objective update discussions starting in July
- Thanks to Peter Anslow, Marek Hajduczenia for alerting
  - and Rich Prodan for initial socialization understanding

# Technical / Baseline Motions Approved to Date

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- 45 technical decisions
  - 28 added last meeting
- 1 baseline proposals
  - 1 added last meeting
- Decision history at:
  - <http://www.ieee802.org/3/bn/public/decisions/decisions.html>

# Task Force Productivity

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- **“Focus on Focus” discussed at last meeting**
  - Technical selection adoption of enabling decisions and baseline proposals permits the Editor Team to move forward with incremental draft work
  - The “devil is in the details” – deeper proposal work
- **Our challenge: we need to get the TF draft done**
- **Observations:**
  - Sub-group meetings for technical decision consensus
  - Baseline proposal consensus (e.g. deeper detail) are beginning to appear, how to accelerate detail & consensus?
  - Electronic socialization (e.g. ePoll trial) was not effective
    - Try again? Try different?
  - Hearing “too many conference calls” (not just EPoC...)

# Consensus Challenge Items

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- **RF Bandwidth (RF Spectrum) \***
- √ FDD Downstream is OFDM/OFDMA
- Bonding approach for downstream
- Rate adaptation, which layer and how
- **FEC / Interleaving (error performance) (req: channel model)**
- MPCP Changes
- Adaptive Bit Rate Loading
- **PHY Link \***
- Complexity of hardware scaling with “bandwidth”
- √ How we are going to do TDD
- Coding Efficiency gains vs cost
- Synchronization in terms of time / frequency (mobile backhaul)
- **OFDM Numerology / FFT Size / Symbol Size / CP size (req: channel model)**
- **Framing Structure**
- MAC layer efficiency
- PHY layer efficiency
- Energy Efficiency
- Subcarrier group

# Task Force Productivity?

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## Suggested Focus Items

- **Downstream and Upstream FEC, interleaving**
  - FDD and TDD
- **Framing, Burst Markers, Resource Block**
- **Pilots, Probing**
- **Remaining enabling OFDM numerology**
- **RF Spectrum “coverage” and other requirements**
  - FDD and TDD
  - Meeting international requirements

## De-Focus Items?

- **Begin identifying items, features, options, etc. that are not critical for the first draft – avoid spending time on them**



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# **DAILY AGENDA AND PRESENTATIONS**

# Time Management Suggestions For This Meeting

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- Presentation Q&A
  - At microphone: please try to limit to questions of clarification
  - Queue closes at end of presentation time
  - 1 question per go: 3 minutes per question and answer
  - May need to take discussions to hallway / email / ad hoc
  - Rebuttals / different approaches: consider a contribution for next meeting
- Motion / Straw Poll Question Discussions
  - 15 minutes discussion limit per question
    - Chair may reset/extend timer on substantive amendment to permit adequate discussion
  - 2 minutes per go person, 2 times max per question (including extensions)
  - TF can extend discussion time by vote
  - Want to keep decision pace, but not get dragged down in parliamentary procedures
- Issues on time management should be addressed to the Chair of that session

# Voting Suggestions

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- For hand votes
  - Raise your hand HIGH
  - Keep hand up until you are sure the appropriate counter has recognized you
  - Counters: if needed, recount your section.
- Please pay attention

# Agenda – Wednesday 15 May

(draft, subject to TF approval)

Wednesday, 15 May - Start of IEEE P802.3bn Task Force Meeting			Length	Time	Notes
Mark Laubach	Broadcom	Agenda and General Information	1:00	8:00 AM	
Steve Shellhammer	Qualcomm	Open report: TDD Sub-Task Force	0:15	9:00 AM	shellhammer_3bn_01_0513
Duane Remain	Huawei	Open report: Channel Model ad hoc	0:15	9:15 AM	remein_3bn_03_0513
Steve Shellhammer, Guangsheng Wu	Qualcomm, Huawei	Open report: Evaluation Criteria and Evaluation ad hoc	0:15	9:30 AM	shellhammer_3bn_03_0513
Jorge Salinger	Comcast	Open report: MMP ad hoc	0:15	9:45 AM	
Mark Laubach	Broadcom	Open report: PHY Link ad hoc	0:15	10:00 AM	boyd_3bn_01_0513
Break			0:15	10:15 AM	
Steve Shellhammer	Qualcomm	Open report: RF Spectrum ad hoc	0:15	10:30 AM	shellhammer_3bn_02_0513
Marek Hajduczenia	ZTE	EPoC PCS Status Update (Clause 101)	0:10	10:45 AM	hajduczenia_3bn_07_0513
Duane Remein	Huawei	Clause 102 preview	0:15	10:55 AM	remein_3bn_01_0513
Marek Hajduczenia	ZTE	Baseline proposal for RS for EPoC	0:25	11:10 AM	hajduczenia_3bn_03_0513
Marek Hajduczenia	ZTE	Baseline proposal for RS for Clause 101	0:30	11:35 AM	hajduczenia_3bn_06_0513
Marek Hajduczenia, Ed Boyd	ZTE, Broadcom	Baseline Proposal Addressing Technical Decision #20 (line code for EPoC)	0:15	12:05 PM	hajduczenia_3bn_04_0513 hajduczenia_3bn_05_0513
Lunch			1:00	12:20 PM	
Marek Hajduczenia, Andrea Garavaglia	ZTE, Qualcomm	Baseline Proposal Addressing Technical Decisions #45 and #43 (idle processing...)	0:30	1:20 PM	hajduczenia_3bn_02_0513 hajduczenia_3bn_01_0513
Andrea Garavaglia, Marek Hajduczenia	Qualcomm, ZTE	Baseline Proposal for technical decision #44 (part 1: presentation, part 2:text for adoption consideration)	0:20	1:50 PM	garavaglia_3bn_01_0513 garavaglia_3bn_02_0513
Christian Pietsch, Avi Kliger, Leo Montreuil, Ravi Rajagopal	Qualcomm, Broadcom	Downstream Continuous Pilot Proposal	0:20	2:10 PM	kliger_3bn_02_0513
Marek Hajduczenia, Ed Boyd, Eugene Dai	Broadcom, ZTE, Cox Communications	Framing for EPoC Continuous Downstream	0:30	2:30 PM	boyd_3bn_04_0513
Break			0:15	3:00 PM	
Syed Rahman	Huawei	Burst Markers in EPoC	0:30	3:15 PM	rahman_syed_3bn_01_0513
TDD sub-Task Force	start		0:00	3:45 PM	
Steve Shellhammer	Qualcomm	Opening	0:10	3:45 PM	
Andrea Garavaglia	Qualcomm	Local Grant Identification for EPOC TDD	0:30	3:55 PM	garavaglia_3bn_04_0513
Andrea Garavaglia, Patrick Stupar	Qualcomm	EPoC TDD – Data Detector and Downstream PCS Considerations	0:30	4:25 PM	garavaglia_3bn_03_0513 garavaglia_3bn_05_0513
ad hoc closing	discussion		0:30	4:55 PM	
Mark Laubach	Broadcom	Daily Summary	0:15	5:25 PM	
Recess IEEE TF meeting until 8AM Thursday				5:40 PM	

# Agenda – Thursday, 16 May

(draft, subject to TF approval)

Thursday, May 16			Length	Start Time	Notes
PHY Link ad hoc	start		0:00	8:00 AM	
Mark Laubach, Ed Boyd	Broadcom	Downstream PLC Baseline Proposal	0:30	8:00 AM	boyd_3bn_02_0513
Ed Boyd, Avi Kliger, Nicola Varanese	Broadcom, Qualcomm	EPOC Upstream PHY Link Channel and Channel Probing	0:30	8:30 AM	boyd_3bn_03_0513
Nicola Varanese	Qualcomm	Details on Downstream PLC for TDD mode	0:45	9:00 AM	varanese_3bn_01_0513
ad hoc closing	discussion		0:30	9:45 AM	
break			0:15	10:15 AM	
Avi Kliger, Christian Pietsch	Broadcom, Qualcomm	Details on Upstream Pilots and Resource Block Configuration for EPoC	0:30	10:30 AM	remein_3bn_02_0513
Duane Remein	Huawei	Coax Resource Allocation & Tone Reordering	0:30	11:00 AM	remein_3bn_02_0513
Avi Kliger, Leo Montreuil, Rich Prodan, Ravi Rajagopal, Nicola Varanese	Broadcom, Qualcomm	Upstream Ranging Proposal (Part 1) Wideband Probing (Part 2)	0:45	11:30 AM	kliger_3bn_01_0513 montreuil_3bn_01_0513
lunch			1:00	12:15 PM	
Syed Rahman	Huawei	Simulation results for Upstream probing in EPoC	0:30	1:15 PM	rahman_syed_3bn_02_0513
Rich Prodan, Ed Boyd	Broadcom	EPoC Upstream FEC Efficiency	0:30	1:45 PM	boyd_3bn_05_0513
Hesham Elbakoury	Huawei	EPOC Upstream FEC Code Auto-Detection	0:30	2:15 PM	elbakoury_3bn_01_0513
break			0:20	2:45 PM	
Rich Prodan (et al.)	Broadcom (et al.)	<del>Downstream</del> FEC U <sub>ca</sub> • A(placeholder)	0:45	3:05 PM	<awaiting consensus>
RF Spectrum ad hoc			0:00	3:50 PM	
Steve Shellhammer	Opening		0:10	3:50 PM	
Keiiji Tanaka, Naoki Agata	KDDI	Two Classes of Downstream Frequency Band	0:15	4:00 PM	tanaka_3bn_01_0513
ad hoc closing	discussion	discussion and straw polls	0:50	4:15 PM	
Channel Model ad hoc	start		0:00	5:05 PM	
ad hoc closing	discussion		0:30	5:05 PM	
Mark Laubach	Broadcom	Daily Summary, potential motions	0:30	5:35 PM	
Recess IEEE Task Force meeting until 8AM Friday			0:00	6:05 PM	

# Agenda – Friday, 17 May

**(draft, subject to TF approval)**

Friday, May 17			Length	Time
Sub-Group Closing Reports, their Polls and Motions				
Steve Shellhammer	Qualcomm	Closing: TDD Sub-Task Force	0:30	8:00 AM
Mark Laubach	Broadcom	Closing: Main / PHY Sub-Task Force	0:30	8:30 AM
Duane Remain	Huawei	Closing: Open report: Channel Model ad hoc	0:30	9:00 AM
Jorge Salinger	Comcast	Closing: Open report: MMP ad hoc	0:30	9:30 AM
Ed Boyd	Broadcom	Closing: Open report: PHY Link ad hoc	0:30	10:00 AM
Steve Shellhammer	Qualcomm	Closing: Open report: RF Spectrum ad hoc	0:30	10:30 AM
Planning Updates, Liaison response, other business, closing				
Mark Laubach	Broadcom	Call for Topics for next meeting	0:30	11:00 AM
Mark Laubach	Broadcom	Other business	0:15	12:00 AM
Mark Laubach	Broadcom	Closing	0:15	11:30 AM
Adjourn Meeting				12:15 AM

# Approve Agenda

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- Motion to approve the amended Agenda for this meeting
  - Moved:
  - Seconded:

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# **CLOSING SESSION**



# Future IEEE P802.3bn Meetings

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- See: <http://www.ieee802.org/3/interims/index.html>
- Week of July 15<sup>th</sup> - July 18<sup>th</sup> 2013 – 802 Plenary
  - ITU, Geneva, Switzerland
- Week of September 2<sup>nd</sup> 2013 – Joint P802.3/802.1 interim
  - York, United Kingdom
- Week of November 11<sup>th</sup> - July 15<sup>th</sup> 2013 – 802 Plenary
  - Dallas, Texas
  
- Anyone interested in hosting a interim meeting contact the Chair or the IEEE 802.3 Executive Secretary [Steve Carlson](#).

# Future Meeting Poll

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## **July Plenary – Geneva, CH:**

I will attend \_\_\_\_\_

I probably will attend \_\_\_\_\_

I probably will not attend \_\_\_\_\_

I will not attend \_\_\_\_\_

## **Sept Interim – York, England, UK:**

I will attend \_\_\_\_\_

I probably will attend \_\_\_\_\_

I probably will not attend \_\_\_\_\_

I will not attend \_\_\_\_\_

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# Thank You!