MINUTES (Unconfirmed) - IEEE 802 LMSC
EXECUTIVE COMMITTEE MEETING, Revision 0

Friday, March 18, 2011, 1:00 pm – 6:00 p.m.
All times Singapore Standard Time (SST)

Singapore, Singapore

EC members present:
Paul Nikolich – Chair, IEEE 802 LAN / MAN Standards Committee
Pat Thaler – Vice Chair, IEEE 802 LAN / MAN Standards Committee
Mat Sherman – Vice Chair, IEEE 802 LAN / MAN Standards Committee
Bob Grow – Treasurer, IEEE 802 LAN/MAN Standards Committee
James Gilb – Recording Secretary, IEEE 802 LAN / MAN Standards Committee
Jon Rosdahl – Executive Secretary, IEEE 802 LAN / MAN Standards Committee
Tony Jeffree – Chair, IEEE 802.1 – HILI Working Group
David Law – Chair, IEEE 802.3 – CSMA/CD Working Group
Bruce Kraemer – Chair, IEEE 802.11 – Wireless LANs Working Group
Bob Heile – Chair, IEEE 802.15 – Wireless PAN Working Group
Roger Marks – Chair, IEEE 802.16 – Broadband Wireless Access Working Group
John Lemon – Chair, IEEE 802.17 – Resilient Packet Ring Working Group
Mike Lynch – Chair, IEEE 802.18 – Regulatory TAG
Steve Shellhammer – Chair, IEEE 802.19 – Wireless Coexistence Working Group
Subir Das – Chair, IEEE 802.21 – Media Independent Handover Working Group
Apurva Mody – Chair, IEEE 802.22 – Wireless RANs Working Group
Geoff Thompson – Chair, IEEE 802.23 Emergency Services Working Group

Non-voting members present:
Buzz Rigsbee – Meeting Planner, Member Emeritus

Members absent:
Mark Klerer – (non-voting) Chair, IEEE 802.20 – Mobile Broadband Wireless Access Working Group

v01 **DRAFT AGENDA - IEEE 802 LMSC EXECUTIVE COMMITTEE MEETING**

Friday 1:00PM-6:00PM

Key: **ME - Motion, External, MI - Motion, Internal, DT- Discussion Topic, II - Information Item**

Special Orders

Category (* = consent agenda)

1.00		**MEETING CALLED TO ORDER**	**Nikolich**	**1**	**01:00 PM**

Meeting called to order at 1:00 pm

2.00	**MI**	**APPROVE OR MODIFY AGENDA**	**Nikolich**	**9**	**01:01 PM**

Agenda is revision 01.

Modifications to agenda were discussed, numbering for 5 restarted, 7.15 and 7.16 are associated with Kraemer, item 5.15 should be Qbc, additional items added. Revision 02 is now current.

Moved by Jeffree, seconded by Law

Vote is 16/0/0, agenda is approved.

v02 **DRAFT AGENDA - IEEE 802 LMSC EXECUTIVE COMMITTEE MEETING**

Friday 1:00PM-6:00PM

Key: ME - Motion, External, MI - Motion, Internal, DT- Discussion Topic, II - Information Item

Special Orders

Category (* = consent agenda)

1.00		MEETING CALLED TO ORDER	Nikolich	1	01:00 PM
2.00	MI	APPROVE OR MODIFY AGENDA	Nikolich	9	01:01 PM
3.00	II	Announcements from the Chair	Nikolich	5	01:10 PM
3.01	II	Recognition of exceptional effort	Gilb	3	01:15 PM
3.02					01:18 PM
					01:18 PM
4.00		LMSC Internal business			01:18 PM
4.01	MI	March 2012 -- Melbourne vs. Hawaii	Rosdahl	15	01:18 PM
4.02	MI	Meeting planner contract extension	Rosdahl	5	01:33 PM
4.03	II	Treasurer's report	Grow	15	01:38 PM
4.04	DT	802.23 status and future plans	Thompson	15	01:53 PM
4.05	DT	802 Overview and Architecture report	Gib	5	02:08 PM
4.06	II	IEEE 802 EC Interim Teleconference – June 7, 2011, 1 pm ET	Rosdahl	5	02:13 PM
4.07					02:18 PM
					02:18 PM
5.00		IEEE Standards Board and Sponsor Ballot Items			02:18 PM
5.01	ME	802.16 revision PAR forward to NesCom	Marks	5	02:18 PM
5.02					02:23 PM
5.03	ME	802.17 revision forward to RevCom and future plans	Lemon	5	02:23 PM
5.04					02:28 PM
5.05					02:28 PM
5.06	ME	802.22 forward to RevCom (conditional)	Mody	10	02:28 PM
5.07					02:38 PM
5.08	ME	802.1AEbn forward to Sponsor ballot	Jeffree	5	02:38 PM
5.09	ME	802.1BA forward to Sponsor ballot	Jeffree	5	02:43 PM
5.10	MI	802.1Qbf forward to Sponsor ballot	Jeffree	5	02:48 PM
5.11	MI	802.1Q-REV forward to RevCom (conditional)	Jeffree	10	02:53 PM
5.12	MI	802.1Qaz forward to RevCom (conditional)	Jeffree	10	03:03 PM
5.13	ME	802.1Qbb forward to RevCom (conditional)	Jeffree	10	03:13 PM
5.14	ME	802.3bd forward to RevCom (conditional)	Jeffree	10	03:23 PM
5.15	ME	802.1Qbc forward to RevCom (conditional)	Jeffree	10	03:33 PM
5.16	ME	802.1Qbe forward to Revcom (conditional)	Jeffree	10	03:43 PM
5.17	ME	802.1Qbp PAR forward to NesCom	Jeffree	5	03:53 PM
5.18					03:58 PM
5.19	Break			15	03:58 PM
5.20					04:13 PM
5.21	ME	802.3.1 PAR revision forward to NesCom	Law	5	04:13 PM
5.22	ME	802.3.1 Etherner MIBs forward to RevCom	Law	5	04:18 PM
5.23	ME	802.3bf Time synchronization forward to RevCom (conditional)	Law	10	04:23 PM
5.24	ME	802.3bg 40 Gb/s Ethernet single-mode fiber PMD forward to RevCom	Law	5	04:33 PM
5.25					04:38 PM
5.26					04:38 PM

5.27					04:38 PM
5.28	ME*	802.15.7 PAR modification for editorial issues in scope and purpose forward to NesCom	Heile	0	04:38 PM
5.29					04:38 PM
5.30	ME	802.15.4 revision forward to RevCom (conditional)	Heile	10	04:38 PM
5.31	ME	802.15.7 new standard forward to RevCom (conditional)	Heile	10	04:48 PM
6.00		Executive Committee Study Groups, Working Groups, TAGs			04:58 PM
6.01	MI*	802.3 100 Gb/s Ethernet electrical backplane and copper cable assemblies (1st extension)	Law	0	04:58 PM
6.02	MI*	802.15 TV white space (1st extension)	Heile	0	04:58 PM
6.03	MI	802.15 Personal space communications (3rd extension)	Heile	5	04:58 PM
6.04					05:03 PM
6.05					05:03 PM
7.00		LMSC Liaisons and External Interface			05:03 PM
7.01	MI	802 representation at June 2011 ISO JTC1 SC6 meeting	Kraemer	10	05:03 PM
7.02	ME*	IEEE 802.3 Interpretation 1-3/11 response	Law	0	05:13 PM
7.03	ME*	IEEE 802.3 Interpretation 2-3/11 response	Law	0	05:13 PM
7.04	ME*	Liaison letter to ITU-T Study Group 15 'Documents from IEEE P802.3bf'	Law	0	05:13 PM
7.05	ME*	Liaison letter to ITU-T Study Group 15 'Copper 10 Gbit/s PHY asymmetry'	Law	0	05:13 PM
7.06	ME*	Liaison letter to ITU-T Study Group 15 'Ethernet bandwidth assessment'	Law	0	05:13 PM
7.07	II	Liaison letter responding to the ITU-T Q9/15 liaison.	Jeffree	2	05:13 PM
7.08	II	Liaison letter responding to the IETF/TRILL liaison.	Jeffree	2	05:15 PM
7.09	ME*	802.16m press release, document IEEE 802.16-11/0013	Marks	0	05:17 PM
7.10	ME*	802.18 update of sub-clause 5.6, 18-11-0031-00-0000	Lynch	0	05:17 PM
7.11	ME*	802.18 Proposed modifcation to PDNR (IMT-RSPEC) 18-11-0024-0000	Lynch	0	05:17 PM
7.12	ME*	802.18 Contribution onWP1A PDNR on Smart Grid (18-11-0024-02-0000)	Lynch	0	05:17 PM
7.13	ME*	802.18 Cover letter for the input ITU-R WP1A (18-11-0035-00-0000)	Lynch	0	05:17 PM
7.14	ME	JTC1 HoD Appointment to SC6 June 2011 Meeting	Rosdahl	3	05:17 PM
7.15	ME	JTC1 Identifier conflict liaison to SC6	Kraemer	3	05:20 PM
7.16	ME	JTC1 1X/1AE Liaison to SC6	Kraemer	3	05:23 PM
7.17	ME	802.18 Motion to empower document review and relase	Lynch	5	05:26 PM
8.00		IEEE SA items			05:31 PM
8.01	II	802 Task force report	Nikolich	15	05:31 PM
8.02	ME*	Forward comments to AudCom	Sherman	0	05:46 PM
8.03	II	Status of 802 feedback 1o 1900.7	Mody	10	05:46 PM
9.00		Information Items			05:56 PM
9.01					05:56 PM
9.02	II	Update on upcoming venues	Rigsbee	5	05:56 PM
9.03					06:01 PM
9.04					06:01 PM
9.05					06:01 PM
9.06	II	Regulatory report	Lynch	10	06:01 PM
9.07					06:11 PM
9.08	II	Executive secretary report	Rosdahl	5	06:11 PM
9.09	DT	Lack of IEEE SA support	Nikolich	5	06:16 PM
9.10	II	Appeals report	Gilb	1	06:21 PM
9.11	II	Network Services report	Alfvin	2	06:22 PM
10.00		ADJOURN SEC MEETING	Nikolich		06:00 PM

3.00	**II**	**Announcements from the Chair**	**Nikolich**	**5**	**01:09 PM**

Nikolich stated that this meeting was very nice and that the hosts were great to work with.

3.01	**II**	**Recognition of exceptional effort**	**Gilb**	**3**	**01:13 PM**

Gilb recognized the considerable efforts of Rigsbee and Slykhouse in making the meeting possible, in particular, Rigsbee's effort at keeping the meeting costs down for the attendees. Both received a round of applause in recognition. In addition, Rigsbee was presented with $2 SGD.

4.00		**LMSC Internal business**			**01:18 PM**
4.01	**MI**	**March 2012 -- Melbourne vs. Hawaii**	**Rosdahl**	**15**	**01:14 PM**

Rosdahl went around the table to ask the members of the EC for their view on Melbourne vs. Hawaii.

Rigsbee said that Waikoloa is cheaper, but that Melbourne will work out as well.

Sherman said that he supported more expensive meetings if it attracts new attendees.

Shellhammer said that he was not able to speak with his WG regarding the locations. He is supportive of Melbourne

Mody did not run a straw poll but most in his group favored Waikoloa due to the cost of the hotel

Heile said that non-US venues will be more expensive, but that the pricing for Melbourne is in line with the expected prices for a non-US venue. He took the straw poll at the end of the 802.15 plenary, the result was 1 for Melbourne, 4 for Waikoloa, 7 don't care.

Das said that his meeting had closed before the email with the cost comparison arrived. The straw poll in his group was that Melbourne was OK if the cost difference is not too much.

Lynch said that 802.18 favored Waikoloa.

Marks said that in his group the straw poll was 13 Hawaii, 13 Melbourne.

Kraemer asked if the pricing was in US dollars (USD) or Australian dollars (ASD), Heile indicated that $1 USD = $1 ASD now. The result of the straw poll in 802.11 was 30 Melbourne, 14 Waikoloa.

Thaler said that it was important for us to have non-US meetings. Favors Melbourne unless the cost is prohibitive.

Jeffree said the straw poll in 802.1 was 21 Melbourne, 7 Waikoloa. One reason for the result may be that his group is going to Kauai in January of that year.

Thompson said that going off-shore is disastrous for his group. He has been to Waikoloa with his group before. He favors Waikoloa

Law said the straw poll in 802.3 was 32 Melbourne, 21 Hawaii

Lemon had no comment.

Grow said that either was fine.

Gilb spoke for Melbourne.

Rosdahl said that his count was 4/4/5 (Melbourne, Waikoloa, either).

Jeffree made a motion to approve Melbourne, Australia as the location for the March 2012 Plenary.

Seconded by Rosdahl

Nikolich asked for further discussion.

Das said that someone in their group checked hotel prices in Melbourne and found that there were much cheaper prices for hotels than those quoted in the price comparison.

Heile said that the price was a target. He also said that since the hotel is not associated with the convention center, we would not need to have a discount for staying in a particular hotel.

No further discussion

Vote is 11/1/4, motion carries.

Nikolich asked Rigsbee how long it would take to get firm numbers.

Rigsbee said that they could have an answer by April 18.

Heile said that 4 weeks should be OK to get a result.

Nikolich said that Rigsbee and Heile have an action item to have the terms mostly defined by April 18, 2011.

4.02	**MI**	**Meeting planner contract extension**	**Rosdahl**	**5**	**01:34 PM**

Motion is as provided in the "Meeting Planner - Master Services Agreement", move to extend it for a period of 3 years, and authorize the Executive Secretary and Treasurer to oversee finalization of the extension details.

Moved by Rosdahl, seconded by Grow

Vote is 16/0/0, motion carriers

4.03	**II**	**Treasurer's report**	**Grow**	**15**	**01:37 PM**

Grow presented “2011_03 TreasClosing v2.pdf”.

Grow asked if the members of 802 EC preferred to have the closing report presented in the closing plenary. Many indicated that it is useful.

Law suggested that we could allow it to be posted 1 week afterward.

Grow said that a delay in posting would help because then the numbers would be more accurate as they would be based on actuals rather than estimates.

Grow said that for the current meeting, the registrations were down due to the natural disaster. Despite that, the estimate is a $22,343 surplus. Credit for this goes to Rigsbee and Slykhouse for keeping costs down. He said that cancellations for this meeting were 46. Slykhouse said that typical number of cancellations is around 20. Grow indicated that the current estimates use only a single exchange rate, it will change when the actual exchange rate is put in for each of the transactions.

Grow related the result on the informal poll on lunches. He said that the feedback was not to have lunches provided.

Law said his group's straw poll as 0 for, 63 against.

Jeffree said that no one in his group was in favor of paid lunches.

Thompson said their group preferred $10 grab and go vs. $25 prepaid.

Shellhammer said his group liked the lunches. It depends on the venue, for some venues there are plenty of restaurants nearby, for other venues it is difficult to go out to get lunch.

Das said that his group indicated that it depended on the venue.

Draft

IEEE Project 802
Estimated Statement of Operations
Mar 2011 Plenary Session
Singapore

As of Mar 13, 2011

Income				*Act/Est*						Budget					Var
Paid Registration Summary (dB)	Fee	Cxl	LCxl	Gross	Cxl	LCxl	Net	Net Amt	%	Gross	Cxl	Net	Net Amount	%	
Pre-registration	$ 800	$ (800)	$ (750)	18	0	0	18	$ 14,400	3%	36				4%	
Pre-registration (with discount)	$ 500	$ (500)	$ (450)	494	39	0	455	$ 227,500	65%	630				70%	
Web-registration	$ 1,000	$ (1,000)	$ (950)	8	1	0	7	$ 7,000	1%	27				3%	
Web-registration (with discount)	$ 700	$ (700)	$ (650)	165	6	0	159	$ 111,300	23%	135				15%	
Onsite-registration	$ 1,200	$ (1,200)	$ (1,150)	20	0	0	20	$ 24,000	3%	18				2%	
Onsite-registration (with discount)	$ 900	$ (900)	$ (850)	36	0	0	36	$ 32,400	5%	54				6%	
Student-registration	$ 150			0	0	0	0	$ -	0%	0				0%	
		Total Registration		**741**	46	0	**695**	$ 416,600	100%	900	27	873	$519,435	100%	($102,835)
								$ 416,600	64%					66%	
Non-registration Income															
Deadbeat collections								$ -	0%				$ -	0%	$0
Bank interest								$ 300	0%				$ 300	0%	$0
Comps & Commissions								$ 64,347	10%				$ 92,285	12%	($27,938)
Other								$ 170,313	0.2614				$ 170,313	22%	$0
Total Session Income								**$ 651,559**	100%				**$ 782,333**	100%	($130,773)
Expenses															
Audio Visual								$ 1,000	0%				pkg		
Audit								$ 6,000	1%				$ 6,000	1%	$0
Bank Charges								$ 350	0%				$ 350	0%	$0
Copying								$ 500	0%				$ 4,500	1%	($4,000)
Credit Card Discounts & Fees								$ 22,065	4%				$ 25,972	3%	($3,907)
Equipment Expenses								$ -	0%				$ -	0%	$0
Get IEEE 802 Conttribution								$ 52,125	8%				$ 65,475	9%	($13,350)
Insurance								$ -	0%				$ -	0%	$0
Meeting Administration								$ 97,974	16%				$ 103,881	14%	($5,907)
Misc Expenses*								$ 8,000	1%				$ 4,500	1%	$3,500
Networking								$ 75,087	12%				$ 120,000	16%	($44,913)
Other Expenses								$ -	0%				$ -	0%	$0
Phone & Electrical								$ 500	0%				$ 500	0%	$0
Refreshments								$ -	0%				pkg		
Shipping								$ 22,000	3%				$ 25,000	3%	($3,000)
Social								$ 58,750	9%				$ 62,500	8%	($3,750)
Singapore Package (a/v,breaks, breakfast, lunch)								$ 284,365					$ 324,316		($39,951)
Supplies								$ 500	0%				$ 1,500	0%	($1,000)
Total Session Expense								**$ 629,216**	55%				**$ 744,494**	56%	($116,278)

* reg counters, grats, CDs

Net Session Surplus/(Loss)	**$ 22,343**	**$ 37,838**

4.04 DT 802.23 status and future plans Thompson 15 01:48 PM

Thompson presented “23-11-0009-00-ESWG-802-23-report-to-EC-Singapore.ppt”.

He said that the attendance was low at this meeting and that they had the same experience at the Geneva meeting in which his regular attendees were not able to make the meeting.

Grow asked if they considered trial use due to the low attendance.

Thompson said they are not that far along enough.

Thaler said that she is concerned about the lack of interest at this time. Not clear that a few more meetings would help.

Thompson said that while it is small for a WG, it is not that small for a TG.

Thaler asked about interaction with IETF.

Thompson said that he will be going to IETF the week after next to get feedback on 802.23 work. The IETF liaison has not attended any meetings yet.

Kraemer said that in 802.11 is mildly positively supportive. 802.11 wants the work to continue until at least July. Another way to work around low membership is to make it an 802 wide project and request comments from all 802 WGs.

Shellhammer asked where the people who started this went?

Thompson said that one of the initiators has had health problems.

Shellhammer wanted to know the length of the extension for which Thompson was asking.

Thompson said that it should be on a meeting-by-meeting basis.

802.23 EMERGENCY SERVICES REPORT TO 802 EC FRIDAY CLOSING MEETING SINGAPORE MARCH 2011

Geoff Thompson, 802.23 Working Group Chair
<thompson@ieee.org>

23-11-0009-00-ESWG-802-23-report-to-EC-Singapore.ppt

802.23 Singapore Mtg Report

- Attendance this week
  - None of our regulars able to make it here
  - One “drop-in” on topic
- Work is progressing
  - Concepts/Architecture complete
  - Draft skeleton started this week
  - Fill-in of draft text has started

802.23 Participation History

- July Charter Plenary (Establish m'ship): 12
- Sept (HI) Interim: 9
- November (Dallas) Plenary: 6
- Jan (LA) Interim: 4
- March (Singapore) Plenary: 1 (+1)

802.23 Technical Areas

- Location:
  - Uniform location support for EUT from any 802 infrastructure (not just dot 11)
- Unauthorized Access:
  - Controversial topic in NENA and IETF
  - We are convinced in must be included in our standard
  - We believe we have a reasonable technical approach to do it
- Security:
  - Don't believe any special measures required

802.23 Moving Forward

- Change in development approach
- No longer waiting for contributions
- Moving forward on draft development
- Believe there is enough material for (at least) a Recommended Practice
- Will provide target (dangerous or otherwise) for critics and apathetics to shoot at.
- Believe this is likely to spark interest.

802.23 Moving Forward

- Seek approval to keep working
- Chair's funding support is still in place
- Soft commitment for additional technical resources
- Plan (not fully developed) is for an interim in Philadelphia area in May
- Expect to have sharable early draft @ July

802.23 Resources

- Chair
  - Geoff Thompson <thompson@ieee.org>
- Web Page
  - http://www.ieee802.org/23/
- Document Server
  - https://mentor.ieee.org/802.23/documents
- Reflector
  - STDS-802-23-emergencyservices@listserve.ieee...

4.05 DT 802 Overview and Architecture report Gib 5 02:09 PM

Gilb spoke about the status of the 802 Overview and Architecture. Letter ballot finished, but failed. Most of the comments have been assigned. Resolution will take place over email reflector and via conference calls.

Jeffree said that the PAR expires at the end of this year.

4.06 II IEEE 802 EC Interim Teleconference – June 7, 2011, 1 pm ET Rosdahl 5 02:11 PM

Rosdahl presented ec-11-07-0007-00-00EC-executive-secretary-agenda-items-for-march-2011.ppt, slide 7, reminding the EC members of the conference call and agenda.

4.06: IEEE 802 EC Interim Teleconference -- June 7, 2011, 1pm ET

- **The tentative agenda for the Telecon is expected to be determined during our closing session.**
- **Current Agenda includes:**
  1. Single Sales Channel Update -- Paul
  2. Update on March 2012 venue Plan -- Buzz/Heile
  3. Status report on Meeting Planner Extension -- Rosdahl/Grow
  4. AOB

5.00 **IEEE Standards Board and Sponsor Ballot Items**

5.01 **ME** **802.16 revision PAR forward to NesCom** **Marks** **5** **02:12 PM**

Marks presented 80216-11_0014.ppt.

Law said that 802.1d and 802.1D led to confusion. IEEE shop makes everything uppercase. Ultimately, it will be up to the Standards board to decide.

Marks said that the WG thinks a capital M is a good suggestion. It would be published as 802.16M-2012, the next one would be 802.16M-2013.

Law thinks that the uppercase M will make it look like a revision of the lower case M.

Thompson said that not long after 802.1D, 802.1F the standards board decided not to allow the use of letters anymore. 802.1 retains this only because it was grandfathered in.

Jeffree said that it is a bad idea to name two projects with the same letter, regardless of the case. He said that if he had the choice, he would have done it differently. He strongly suggests that he does not do this.

Thaler agreed with Thompson and Jeffree.

Kraemer asked if any of the other amendments to 802.16 had content that would be moving into 802.16m. Also what is happening with 802.16p and 802.16n.

Marks said that almost all the source for 802.16M is in Clause 16. The other parts that are included are the terms and acronyms. In the existing 802.16m, there are cross references to the architecture in the base standard. These would change to be a reference to the 802.16 standard. There are two current amendments, both of which would apply to 802.16-2012.

Das asked if new projects would have to amend only one of the two standards.

Marks said that the amendment PARs would have to target a single standard, if the group wanted to modify both standards, the would need two PARs.

Thompson protested that the discussion was being shut down.

Nikolich said that we should disconnect the work to be done from the numbering scheme.

Motion is to forward to NesCom the two draft PARs IEEE 802.16-11/0010 and IEEE 802.16-11/0011, subject to the discretion of NesCom and the IEEE-SA Standards board regarding the project numbering.

Moved by Marks, seconded by Kraemer

Thompson said that there are rules on the book that prohibit the numbering proposed in the PAR. He said that the motion does not reflect the discussion or the direction of the chair. Thompson suggested deleting the last two lines “, subject to the discretion of NesCom and the IEEE-SA Standards board regarding the project numbering.”

Grow said that within the PARs there are references to the numbers that would need to be changed if the numbering is changed.

Rosdahl said that on NesCom he has seen people bring in numbering schemes with which others were not happy. The get approved and in some cases it turns out well, in other cases it turns out bad. He does not think it will be as devastating as others think.

Vote is 7/7/2, Nikolich votes yes, total is 8/7/2, motion passes.

Outline of Proposed 802.16 Revision PARs

[IEEE 802.16 Presentation Submission Template (Rev. 9.2)]

Document Number:

IEEE 802.16-0014

Date Submitted:

2011-03-18

Source:

Roger Marks

WiMAX Forum*

*<http://standards.ieee.org/faqs/affiliationFAQ.html>

Re:

IEEE 802.16-11/0010 and IEEE 802.16-11/0011

Base Contribution:

See IEEE C802.16-11/0001

Purpose:

To explain the proposed 802.16 revision PARs

Notice:

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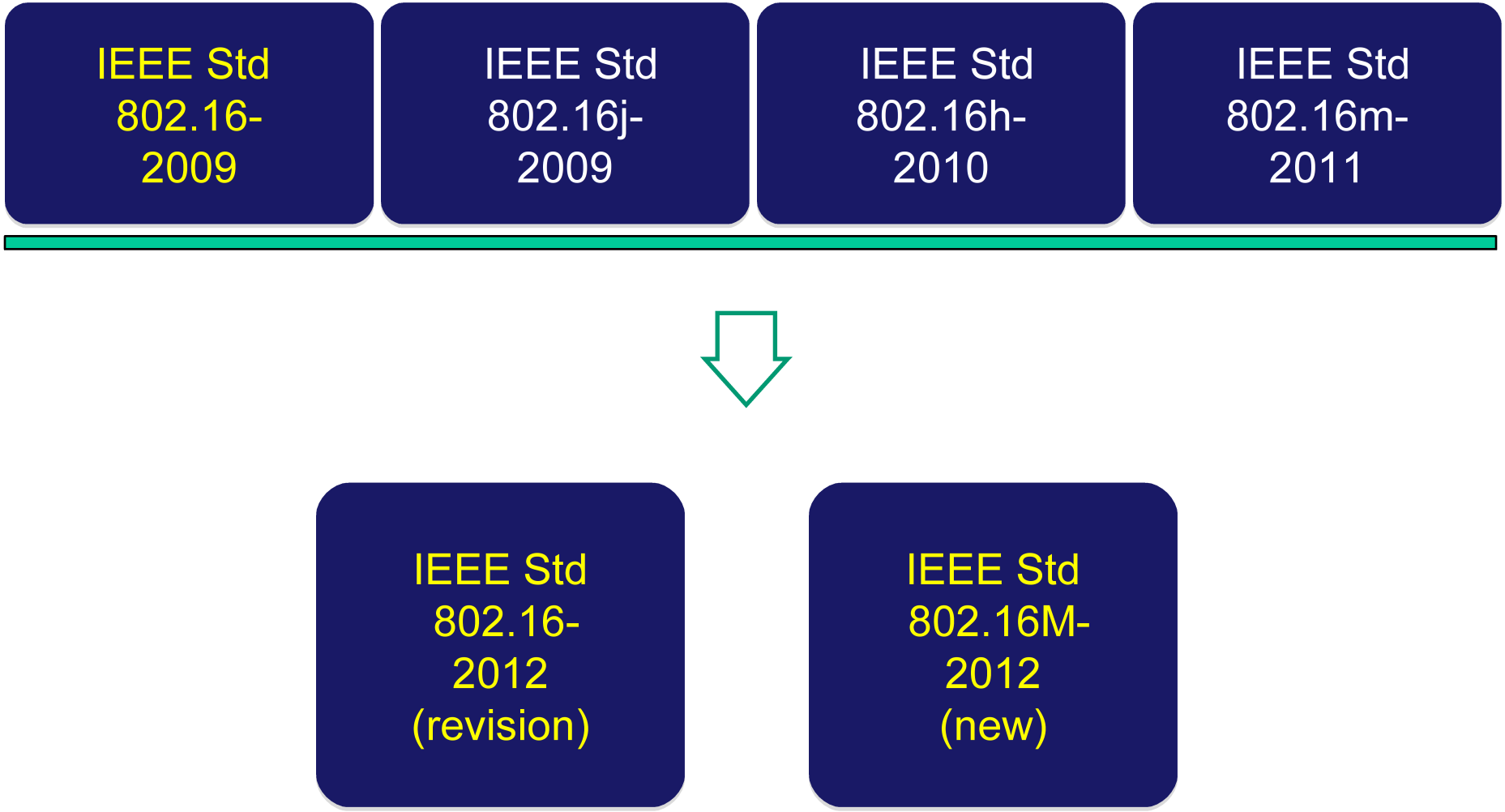
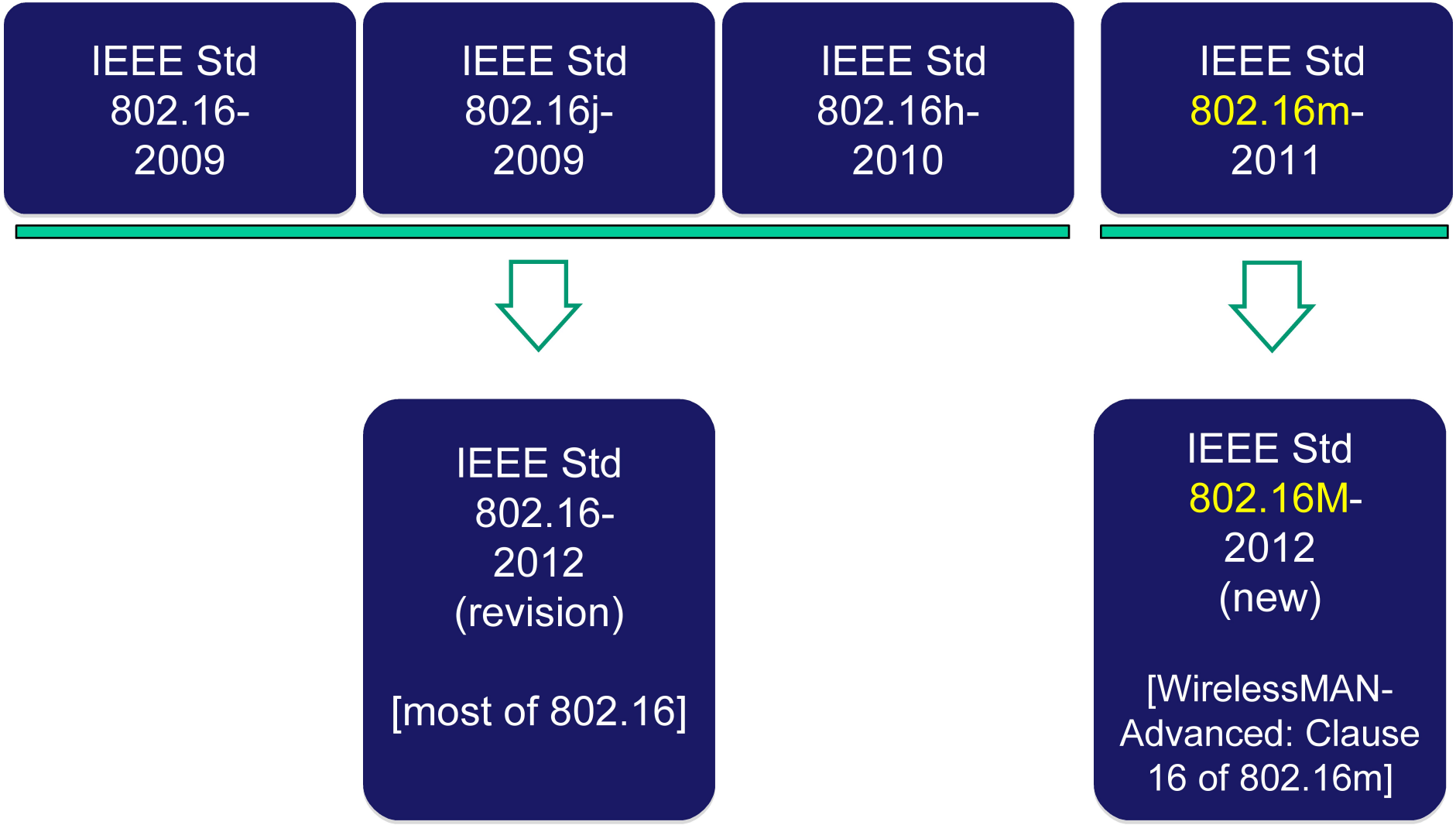
Further information is located at <http://standards.ieee.org/board/pat/pat-material.html> and <http://standards.ieee.org/board/pat >.

IEEE 802.16 Revision Plan (theoretical view)



IEEE 802.16 Revision Plan (practical view)



IEEE-SA Project Numbering Policy

https://development.standards.ieee.org/myproject/Public/mytools/init/parnum.pdf

- *Related or subordinate projects that will exist as free-standing publications will have a unique decimal-numbered extension, e.g., P1905.1 and P1905.2.*
- *If there is no base standard (the documents in the family of standards are equally related), the numbering of projects in that family will start with the decimal-numbered extension, e.g., P1905.1 and P1905.2, with no initial whole number assigned.*
- *Different project numbering taxonomies may also be considered by NesCom at the recommendation of staff under special circumstances.*
- Note: IEEE Std 802.16.2 is active.

5.03 ME 802.17 revision forward to RevCom and future plans Lemon 5 02:43 PM

Lemon presented “802.17d to RevCom.ppt”.

Motion is to grant approval to forward 802.17d to RevCom

Nikolich noted that the Recording Secretary was complaining

Vote is 16/0/0, motion passes

Request For Approval To Send 802.17d To RevCom

Details

- *One full Sponsor ballot, one recirc ballot*
- *Date recirc ballot closed*: 20 Feb 2011
- *Vote tally*: App:50, Dis:0, Abs:1
- *Comments or Dis votes carried forward*: 0
- *WG vote to forward*: App:3, Dis:0, Abs:0

Motion

- Grant approval to forward 802.17d to RevCom

  Moved: John Lemon
  Seconded:
  Y: N: A:

5.06 ME 802.22 forward to RevCom (conditional) Mody 10 02:47 PM

Mody presented “22-11-0042-01-0000-motion-march-2011-ec-meeting.ppt”.

Thaler asked about the unsatisfied comments from the no voters from the first round.

Mody said that these comments are in the references.

Motion is to grant conditional approval as per the IEEE 802 Operations Manual to forward IEEE P802.22 to the IEEE Standards Review Committee.

Moved by Mody, seconded by Helie

Vote is 14/0/0, motion passes

IEEE P802.22 Motions at the March Plenary EC Meeting

IEEE P802.22 Wireless RANs **Date:** 2011-03-17

Authors:

Name	Company	Address	Phone	email
Apurva N. Mody	BAE Systems	P. O. Box 868, MER 15-2350, Nashua, NH 03061	1-404-819-0314, 1-603-885-2621	apurva.mody@baesystems.com, apurva_mody@yahoo.com
Gerald Chouinard	Communications Research Center, Canada		1-613-998-2500	Gerald.chouinard@crc.ca

Motion

Motion for a Conditional Approval to forward the IEEE P802.22 to the IEEE SA RevCom

Motion for a Conditional Approval to forward the IEEE P802.22 to the IEEE SA RevCom

Rules

Motions requesting conditional approval to forward when the prior ballot has closed shall be accompanied by:

- **Date the ballot closed**
- **Vote tally including Approve, Disapprove and Abstain votes**
- **Comments that support the remaining disapprove votes and Working Group responses.**
- **Schedule for confirmation ballot and resolution meeting.**

Motion for a Conditional Approval to forward the IEEE P802.22 to the IEEE SA RevCom

Number of People in the Sponsor Ballot Pool = 155

IEEE Sponsor / Re-circ Ballot	Response Ratio	Approval Ratio	Negative Votes	Number of Negative Comments Received	Comment Resolution Status	Draft Status
Sponsor Ballot #1 Open – Dec 16 2010, Closed – Jan 15, 2011	**83%** (10% abstain)	**92%**	9 negative votes with comments	64	Comments addressed & resolved - 22-11-0040r5	P802.22 /D 2.0 prepared
Sponsor Ballot Re-circ #1 Open – Feb. 25th, 2011, Closed – March 12, 2011	**84%** (9% abstain)	**94%**	5 negative votes with **no** comments,1 negative vote with 3 TR comments	3	Comments addressed & resolved – 22-11-0040r5	P802.22 /D3.0 being prepared

References

- **P802.22 - Negative Comments from SB that were resolved but where the commentors have maintained their negative vote during SB Re-circ #1**

Commentor	# of TR/ ER Comments during SB #1 and SB Re-circ #1	Status After Sponsor Ballot Re-circ #1
Diamond, Patrick	2 and 0	Approve (Vote Change)
Ecclesine, Peter	4 and 0	Disapprove (No New Comments)
Gurley, Tom	2 and 0	Approve (Vote Change)
Hu, Wendong	5 and 0	Disapprove (No New Comments)
Kennedy, Richard	5 and 0	Disapprove (No New Comments)
Mccann, Stephen	13 and 0	Disapprove (No New Comments)
Methley, Steven	1 and 0	Approve (Vote Change)
Riegel, Maximilian	5 and 0	Disapprove (No New Comments)
Struik, Rene	27 and 3	Abstain

Negative Comments and Commentor Details

- 3 TR Comments were received from Rene Struik during the P802.22/D2.0 Sponsor Ballot Re-circ #1
- Remaining 5 Negative Voters did not submit any comments during Re-circ #1
- Two of the three comments from Rene Struik were the same as the comments from Sponsor Ballot #1 (Hence these were not new issues).
- Based on the telecon during AM1 on March 15th, in Singapore, the Commentor was willing to withdraw all the three of his TR comments, however, the Comment Resolution Committee decided to address and resolve Comment #63 (New Comment based on a New Issue) and go for another round of re-circulation.
- The comment resolutions are incorporated here-in entirely and can also be found at
- https://mentor.ieee.org/802.22/dcn/11/22-11-0040-05-0000-p802-22-d2-sponsor-ballot-com
- Negative comments resolved but carried forward from the SB and the comment resolutions are also included in the reference section at the end of this presentation.
- Rene Struik has agreed to change his Dis-approve vote to APPROVE/ ABSTAIN, based on the comment resolutions and the changes to the draft during SB and Re-circ #2.

Negative Comments and Resolution Details

Comment #61 – Document 22-11-40 Rev5

Commenter: Rene Struik

Comment: (TR) Clause 2, p. 4, l. 43: RFC 2437 (PKCS#1, v2.0), if so, this would allow RSA MultiPrime and, thereby, RSA schemes with different cryptographic properties than the original scheme. It is unclear whether this is intended. Moreover, NIST SP 800-56 explicitly rules out support for MultiPrime, thus making it a less suitable choice to support in case this standard would also be used by US Government agencies.

Suggested remedy: Refer to a specific version of PKCS#1 - early enough version without support for RSA MultiPrime.

Resolution Status: Out of Scope (Withdraw)

Resolution Detail: Comment is the same as the previous comment #100 submitted by Rene Struik during the Sponsor Ballot #1 for P802.22/D1.0 so this comment is not related to a new Issue based on the changes made to the Draft during the Sponsor Ballot Comment Resolution. The Comment Resolution Committee had a telecon with the commentor on Tuesday, March 15th, during the AM1 session in Singapore, where the commentor decided to 'Withdraw' this comment.
Rene: The version of the RFC 2437 referred to in the 802.22 Draft should not allow support for the MultiPrime feature. Based on the Comment #100 during Sponsor Ballot #1, P802.22/D2 was modified to refer to Version 2.0 (October 1998) of the RFC 2437. It was confirmed that this version does not include the MultiPrime support. Rene agreed that this was the case.
Rene Struik (email: 13 March 2011, 19:09:06 -0400):
"Those are indeed the correct references and I confirm I will withdraw #1 you quoted below." This sentence referred to this comment #61.

Negative Comments and Resolution Details

Negative Comments and Commentor Details - Comment #62 – Document 22-11-40 Rev5

Commenter: Rene Struik

Comment: (TR) Clause 2, p. 5, l-12: To my knowledge, the SEC4 specification is only a draft specification and, thereby, may be subject to change. A standard should not reference external specifications as normative references, it the latter are only draft standards. Suggested remedy: Create an Annex that specifies the full details of the SEC4 scheme as used in the IEEE 802.22 standard, so as to be independent of any changes made by an external standards body. Please note here that the latest draft on the SECG website is v0.91 (dated November 18, 2008) and, although the final specification was supposed to be published prior to end of February 2011, this did not happen. Note: Please note also IACR ePrint 2009-620. Is it known that the composition of ECQV and ECPVS is secure (I have seen convincing papers on these individually, but not a compositional proof).

Suggested remedy: Create an Annex that specifies the full details of the SEC4 scheme as used in the IEEE 802.22 standard, so as to be independent of any changes made by an external standards body. Please note here that the latest draft on the SECG website is v0.91 (dated November 18, 2008) and, although the final specification was supposed to be published prior to end of February 2011, this did not happen.

Resolution Status: Out of Scope (Withdraw)

Resolution Detail: Comment is the same as Comment #125 from the Sponsor Ballot #1 for P802.22/D1.0, so this is Not a New Issue based on the changes made to the Draft. The commentor has decided to 'Withdraw' this comment for the following reasons. The comment resolution committee had a telecon with the commentor on Tuesday, March 15th, during the AM1 meeting in Singapore, and asked the commentor the nature of this comment. The commentor clarified that this should really be an Editorial comment. In response, the chair asked for clarification from Michelle Turner (IEEE-SA chief editor):"IEEE 802.22 is planning to refer to the SEC4 Standard which is a Draft Standard under development as a normative reference.“ Micheller Turner's response: "The reference to the draft is fine. However, please make sure when it's referenced it includes the date and version of the draft. Also, please make sure the draft is readily available, because we will need to footnote how the draft can be obtained." The CRC wanted further clarification on whether the IEEE SA can store the draft SEC4 standard being referred - Michelle provided this further clarification as follows: "The draft will be placed on file with the IEEE. So the issue of the possibility of it not being at the website years from now, doesn't matter because we will have it. During publication prep, we would include the appropriate footnotes, so the user will know how to obtain the draft. Hopefully this was helpful.“ As a further clarification, the Chair asked the IEEE -SA Sr. Program Manager if the IEEE -SA will take care of keeping this Draft Standard in their repository and will provide it to whoever asks for it. Please find the e-mail exchange below: Based on this, the commentor agreed to Withdraw his comment.

Negative Comments and Resolution Details

Comment #63 – Document 22-11-40 Rev5

Commenter: Rene Struik

Comment: (TR) Clause 8.6.2.3, p. 299, Table 135: This table suggests the use of elliptic curves of bit-size 163-bits, thus offering a cryptographic strength of just 80-bits. This would not be allowed according to key management guidelines of NIST SP 800-57, since 80-bit crypto strength is not to be endorsed from 2011 onwards.

Suggested remedy: specify an elliptic curve with higher cryptographic bit strength.

Resolution Status: Princilple

Resolution Detail: On Tuesday, March 15th, AM1 Session in Singapore, the comment resolution committee had a telecon with the commentor. During the telecon, the commentor elaborated his reasons for submitting this comment: In certain applications, one is no longer allowed to use crypto strength of 80 bits (e.g., US Gov't requires a crypto strength of more than 80 bits for government's applications (NIST SP 800-57)). While the cryptographic construct strength used in this specification is deemed to be adequate for industrial/commercial applications right now, it is realized that in the future, more flexibility and higher-crypto bit strengths may be warranted. The commentor is okay if this issue is addressed in a future amendment of the 802.22 specification and he was willing to withdraw this comment. However, the Comment Resolution Committee decided to accept this comment in principle and provided the resolution to this comment, which can be found in contribution (22-22-0041r1). Higher strength crypto elliptical curve was selected: K-233 or B-233 elliptic curves defined in FIPS 186-3 will be used rather than the K-163 and B-163. Necessary changes were made to the Draft as indicated in document 22-11-0041r1.

E-mail Exchange with Commenter Rene Struik

Re: Rene: Confirmation for your Comment Resolutions
From:Rene Struik <rstruik.ext@gmail.com>
View ContactTo:apurva mody <apurva_mody@yahoo.com>Cc:Gerald Chouinard <gerald.chouinard@crc.ca>; apurva mody <apurva.mody@baesystems.com>
Hi Apurva:
As previously indicated, I hereby confirm that I withdraw all technical ("TR") comments I submitted during the 802.22 sponsor ballot recirculation that ended Sat March 12, 2011, 11:59pm EST. Please record my corresponding vote as Abstain.
Best regards, Rene

On 15/03/2011 7:33 PM, apurva mody wrote:
Dear Rene,
Thank you very much for all your comments to improve the quality of the IEEE 802.22 Draft Standard as well as participating in the comment resolution process.We know that you have re-iterated your wish to 'Withdraw' your comments over our past e-mail exchanges as well as during our telecon that was held on Tuesday, March 15th AM1 session in Singapore.
However, the IEEE-SA staff wants us to get a clear confirmation from you that you have indeed withdrawn all the 3 of your submitted comments during the Sponsor Ballot Re-circulation #1 for the P802.22/D2 Standard. Especially Comment #63 since that pertains to a new issue based on the changes made to the draft.
So,
1. Can you please confirm that you wish to 'Withdraw' all the three of your TR comments submitted during the Sponsor Ballot Re-circulation #1 for the P802.22/D2 Standard: as a result of the telecon that was held on Tues. March 15th, AM 1 Session in Singapore and based on the Comment Resolutions as proposed in the following spreadsheet:
https://mentor.ieee.org/802.22/dcn/11/22-11-0040-03-0000-p802-22-d2-sponsor-ballot-comments-database.xls
2. Can you also let us know how you wish your vote to be counted for the P802.22/D2 Draft Standard - Approve / Disapprove / Abstain?
Many thanks
Apurva

Apurva N. Mody, Ph. D.
Chair, IEEE 802.22 Standard Working Group
Cell: 404-819-0314
E-mail: apurva_mody@yahoo.com

Motion for a Conditional Approval to forward the IEEE P802.22 Draft Standard to the IEEE SA RevCom

Time-line for the Launch of IEEE SB Re-circ #2

- March 24th - Issue IEEE P802.22/D3.0
- March 24th – April 7th – Re-circulation #2

P802.22 WG Motions

WG Motion #2 Document – 22-11-0043 Rev0
Motion #2
Request that the IEEE P802.22 Working Group Chair issue the P802.22/ D3.0 on or before March 24th and launch a 15 day Sponsor Ballot Recirculation #2 based on the modifications to P802.22/D 2.0 as a result of the comment resolutions as contained in 22-11-0040 v6.0.
Move: Ivan Reede
Second: Jerry Kalke
For: 8
Against: 0
Abstain: 0
Motion passes unanimously

WG Motion #3 Document – 22-11-0043 Rev0

The IEEE 802.22 Working Group authorizes the WG Chair to seek Conditional Approval from the IEEE 802 Executive Committee to forward P802.22/D3.0 to the IEEE SA RevCom.
Move: Ivan Reede
Second: Dr. Hiroshi Harada
For: 9
Against: 0
Abstain: 0
Motion passes unanimously

Motion for a Conditional Approval to forward the IEEE P802.22 Draft Standard to the IEEE SA RevCom

Motion to grant conditional approval as per the IEEE 802 Operations Manual to forward IEEE P802.22 to the IEEE Standards Review Committee.

Move: Apurva N. Mody,

Second: _____

For: _____

Against: _____

Abstain: _____

Motion Passes / Fails

References

References

P802.22 - Negative Comments from SB that were addressed and resolved but where the commentors have maintained their negative vote during SB Re-circ #1: Document 22-11-0040 Rev5

Comment #	Name	Category	Comment	Must Be Satisfied	Proposed Change	Resolution Status	Resolution Detail
1	Mccann, Stephen	Technical	I think its necessary to define the word"professional" in the context of this specification. On one hand it could mean installation by a specialist company charging fees, and on the other someone who is mearly competant to do this. I'm concerned that the use of this word in an IEEE 802 standard is potentially leading the market for such devises in a certain direction for certification purposes, i.e. only certified products can be installed by a professional company joe-bloggs who charges $xxxx.	Yes	A footnote to clarify the word "professional" would be useful, e.g. (professional as defined by "FCC 10-174 clause 3").	Principle	The Comment Resolution Committee agreed in principle with the commentor and initially decided to change the sentence to "a professionally installed fixed base station". Add: "(see Annex A" at the end of the paragraph. However, the IEEE SA staff asked the Comment Resolution Committee that the title, scope and purpose in the draft need to be exactly specified as that in the PAR with no changes to the words. So the end result was that we could not make the change as proposed by the commentor. However, the Comment Resolution Committee decided to create the following table in Annex A. Create a new Table xx in Annex A containing 3 columns: "Regulatory domain", "Professional installation required", and a definition of "professional installer" for the USA regulatory domain as follows: "A professional installer is a competent individual or team of individuals with experience in installing radio communications equipment and who normally provides service on a fee basis – such an individual or team can generally be expected to be capable of ascertaining the geographic coordinates of a site and entering them into the device for communication to a database." Add a reference to Annex A, Table xx every time professional installation is mentioned in the text.

References

P802.22 - Negative Comments from SB that were addressed and resolved but where the commentors have maintained their negative vote during SB Re-circ #1: Document 22-11-0040 Rev5

2	Mccann, Stephen	Technical	There is no definition of "Cognitive Plane"	Yes	Please provide a definition for this term	Principle	Add the following definition to section 3: "Cognitive plane: The cognitive plane consists of all the entities in the 802.22 reference architecture that relate to cognitive functions. These cognitive functions are the spectrum manager/spectrum automaton, spectrum sensing function, the geolocation function and the security sub-layer 2. The spectrum manager/spectrum automaton reside at the same level as the MAC common part sub-layer in the data plane whereas the SSF and the geolocation function reside at the same level as the PHY in the data plane.
4	Mccann, Stephen	Technical	Within Figure 2 there are two representations of WLAN technology, i.e. IEEE 802.11 and IEEE 802.11a. I think this is an outdated view of WLAN technology, as IEEE 802.11y covers the 3.5 GHz band, whilst IEEE 802.11ad covers 60 GHz. I think a single mention of "IEEE 802.11" somewhere between the 2.4 and 5 GHz annuli will be more appropriate.	Yes	As per comment	Principle	Remove the last paragraph of page 2 and Figure 2.

References

P802.22 - Negative Comments from SB that were addressed and resolved but where the commentors have maintained their negative vote during SB Re-circ #1: Document 22-11-0040 Rev5

5	Mccann, Stephen	Technical	On first seeing Figure 5, I assumed that "US Classification Rules" actuallly meant "United States Classification Rules" as opposed to "Up Stream." In addition US is used extensively in Annex A to mean "United States." Also see "BS, CPE" towards the bottom of Table 271.	Yes	You may want to disambiguate "US" from "U.S." and also the use of "US" in Annex A. You could adopt the terms downlink (DL) and uplink (UL) instead.	Principle	Change 2-character ISO country codes to 3-character ISO country codes in Annex A. Change US to USA, UK to GBR and CA to CAN in Annex A.
6	Mccann, Stephen	Technical	I think Clause 5 requires more of an introduction. It's quite a shock to read it following the definitions. Clause 6 is a better example of an introduction to what the standard is trying to do.	Yes	Soften the impact of Clause 5 on non-IEEE 802.22 readers by providing an architectural overview and some guidance as to how the purpose (in clause 1.2) is met. "Say what you're going to say, say it, then say what you said".	Principle	It was decided to insert sections 6.2 and 6.3 on Architecture as a new section 5 and renumber the later sections (see resolution of comment #126). Note that there is an inversion of the references to Figures 6 and 7. Inserting 6.2 and 6.3 and modify the first two sentences of clause 5 as follows: "The packet Convergence Sublayer (CS) resides on top of the MAC Common Part Sublayer (CPS). The CS shall perform the following functions utilizing classification (see 5.3.2) governed by rules (see 5.3.3 or 5.3.4) defined by the implementer/operator to process higher layer SDUs so they can be sent and received by the 802.22 BS and CPE. This process can be broken down into four steps, each utilizing the services of the MAC:" 5) Move Clause 5 to clause 6. 6) Renumber Figure 3-9 (if need be) and update any references to them.

References

P802.22 - Negative Comments from SB that were addressed and resolved but where the commentors have maintained their negative vote during SB Re-circ #1: Document 22-11-0040 Rev5

7	Mccann, Stephen	Technical	Figure 7 looks like a "poster paper" for IEEE 802.22. Please break it down into smaller parts.	Yes	Split the two diagrams within Figure 7 into two new figures. Remove the abbreviation key at the bottom and move those terms into clause 4.	Agree	
8	Mccann, Stephen	Technical	The values N-1 and N+1 are only appropriate for a constrained set of N. Does N-1 make sense when N=0?	Yes	Consider a range for N, e.g. N-1 when N > 0	Disagree	Usage of N-1 and N+1 is well understood in normal broadcast operating parlance and used also by the regulators. Special cases at the extremities of the ranges of channels are well understood and do not need to be explicitely described in the definition. Note that the TV band is constituted of many segments (e.g., channels 2-6, 7-13, 14-36, 38-51 in the USA and condition N>0 may not work.
11	Mccann, Stephen	Technical	There appear to be two definitions of channel used in the document. "Channel" refers to a frequency set used by an IEEE 802.22 device, whilst "TV Channel" refers to a frequency set used by an incumbent TV service. However, in some places these definitions become muddled, for example in 6.2.3.1, the in-band sensing should be using "TV" Channels N and N+-1. There is a similar issue with "database service" and "TV bands database service"; are these the same entity?	Yes	If my assumption is correct about the two definitions of channel, then I suggest that every occurance of the word "channel" in the document be checked for its correct context (e.g. "Channel" or "TV Channel". Otherwise, the definition of "TV Channel" should be removed. Additionally the use of "database service" needs to be checked.	Principle	Agree to remove "TV" Action: Update def 3.31 to remove "TV" "3.66 channel: Refers to a specific physical channel, a contiguous segment of spectrum in the TV broadcast frequency bands which may be 6, 7 or 8 MHz wide, depending on the relevant regulatory domains . See also: Logical channel." Action: scan "database service" and remove "TV band". The relationship between the " sub-channel" and the "logical channel" has to be clarified. The definition of "sub-channel " needs to be updated as follows: "Sub-channel: The basic unit of the logical channel used for subcarrier allocation in both downstream and upstream. A sub-channel is composed of 28 subcarriers (24 data and 4 pilot subcarriers).

References

P802.22 - Negative Comments from SB that were addressed and resolved but where the commentors have maintained their negative vote during SB Re-circ #1: Document 22-11-0040 Rev5

12	Mccann, Stephen	Technical	What is an "official database service"? By whom is it officiated?	Yes	Change the phrase to read "regulators database service"	Principle	Remove all occurences (5) of the word "official" in front of "database service". Copy the definition of "database service" from section 3 to section 9.2.2, page 359, line 17.
13	Mccann, Stephen	Technical	What use is the "Database Service IPx Address" within this primitive? If "higher layers such as IP (P359L17)" are used to access the database, then why does the primitive need to know the IP source (Base Station) and destination (Database) addresses. Surely this information is already present in the IP transport datagram for this primitive?	Yes	Either remove or clarify why the IP source and destination have to be present in this primitive?	Principle	The current text has been improved for clarity. The Comment Resolution Committee has decided that the MIB will include the destination URL (i.e., Database Service URL) because it will allow remote management of this information in the BS via SNMP. If not needed, a null address could be put. The CRC decided that the BS URL field should be contained in the MIB table to give the option to specify the inbound address. If not needed, a null address could be put. The BS URL is needed because, if the connection to the Database service has been quiet long enough, the routers may have flushed the IP address/port back to the BS. For the Database service to contact the BS once the BS has provided its inbound URL a first time (e.g., push technology), the Database service needs this BS URL which is to be provided in the payload. For example, it is needed for "push" technology. For this purpose, the BS URL will need to be a public IP address with a specific port by which the BS is accessible. Furthermore, there is a need to declare an inbound URL for station management. Action: Remove the "IF"structures for the Database Service and BS URL's (see attached document). Keep the 5 first rows, 9 and 10, 21-22, 31-32. On row 7, make the following modification: " Database Service URL Length". Add the following sentence to row 7: "This is used to set the Locator for the Database service." Modify row 21 as follows: 1st column: "Base Station

References

P802.22 - Negative Comments from SB that were addressed and resolved but where the commentors have maintained their negative vote during SB Re-circ #1: Document 22-11-0040 Rev5

15	Mccann, Stephen	Technical	The "Status" field is only 2 bits long, so that hex "0x" encoding of the values is incorrect.	Yes	Change the value/description to: 00: INVALID_REQUEST 01: INVALID_SIGNAL_TYPES 10: Reserved 11: SUCCESS	Agree	
16	Mccann, Stephen	Editorial	In Figure 33, what does "DTV" refer to.	Yes	The definition for "Digital Television" needs to be added somewhere in the document.	Principle	In Figure 33, change DTV for "Television". Add the following definition in section 3: "Digital Television: RF transmission of audio and video by digital signals (e.g., ATSC, DVB-T, ISDB-T...)" Add the following definition in section 3: "Analog Television: RF transmission of audio and video by analog signals (e.g., NTSC, PAL, SECAM, ...)
22	Mccann, Stephen	Technical	In Table 78, it's not clear what value is being specified.	Yes	Explain what value is being defined here.	Principle	Table 78 is an enumeration of all the combinations of 3 bits and how they correspond to the application of the QoS parameter set. Modify the sentence in section 6.9.8.9.4 as follows: "The format of the QoS parameter set type is defined in Table 77 as the 3 first bits of the octet, and Table 78 enumerates all the combinations for these 3 bits that define controls for how QoS parameter sets are applied to the service flow that is

References

P802.22 - Negative Comments from SB that were addressed and resolved but where the commentors have maintained their negative vote during SB Re-circ #1: Document 22-11-0040 Rev5

25	Diamond, Patrick	Technical	This excludes other proven methods of delivering the UTC coorelated pps instant such as ieee 1588-2008 from being implemented.	Yes	eliminate lines 10 - 12. This allows the BS to use any delivery mechanism for the coorelated gps derived clock that meets the time and frequency requirements noted, +/- 2ppm & +/- 2uS pps.	Principle	Remove the title of the sub-section 6.25.1. Add the following sentence at the end of the second paragraph: "Although 802.22 specification requires the presence of a GPS receiver, other techniques (e.g., IEEE 1588-2008) may be considered as long as they meet the required tolerance."
26	Diamond, Patrick	Editorial	sub-clause 6.26.1 does not exist	Yes	change to 6.25.1	Principle	Remove the title of the sub-section 6.25.1.
27	Methley, Steven	Technical	Location accuracy is normally stated as 50m@95%, for example. In other words a confidence level is required. I realise the FCC R&O does not do this either but other FCC docs do, such as the E911 spec. Confidence in location is important as it is the basis for confidence in not causing interference. Simply relying on 'GPS accuracy' is not sufficient as this will vary in multipath conditions such as dense urban. GPS can be several hundred meters out in these cases - and the standard GPS receiver cannot detect such multipath errors. Furthermore neither GPS nor cell ranging accuracy have been characterised at high confidence levels in non-ideal environments yet in the literature - This is because until now there has been no need.	Yes	No consumer location system is capable of confirming location to +/-50m at the 100% confidence under all conditions as implied in the draft the way it is written. Better to specify a realistic confidence level - which ideally ought to be derived from the non-interference confidence level required of the application. See the FCC E911 specs for examples of how to do this.	Principle	The WG agrees in principle with the commentor. However, as the commentor has indicated, the FCC ruling (2nd MO&O) specifies the accuracy but not the confidence level. As a result, the WG has decided to add an additional Table in Annex A specifying the location accuracy and confidence for various regulatory domains. In case of the USA domain, the location accuracy shall be 50 m radius and no value will be specified for the confidence level. As a result of this comment, some further changes have been identified and need to be made to harmonize the content of the Draft as follows: Section 9.5: "The geolocation technology shall detect if any device in the network moves by a distance greater than the values specified in Table xy in Annex A." In section 6.16.2.10, the current wording which came from E911 should be modified as follows: "The BS shall determine the location of the transmitting antenna of each associated CPE with the accuracy as specified in Table xy in Annex A for the specific regulatory domain-." In Table 229, policy 8, change "default +/-25 m" to "default 50 m radius". A new Table needs to be inserted in Annex A specifying the "regulatory domain", "location accuracy", "confidence level" and "distance threshold for the portable device". Note that the distance threshold is smaller than the specified location

References

P802.22 - Negative Comments from SB that were addressed and resolved but where the commentors have maintained their negative vote during SB Re-circ #1: Document 22-11-0040 Rev5

65	hu, wendong	Technical	The text of IEEE 802.22.1 states that the IEEE 802.22.1 superframe shall always have a period equal to (8*124) bits/9609.1 Hz = 103.24 ms. In order to receive the IEEE 802.22.1 superframe in full it requires that a receiving IEEE 802.22 WRAN system stops its data transmission for a least 103.24ms whenever a beacon is detected. Such lengthy interruption of WRAN services is harmful to the timing sensitive WRAN application such as VoIP and video services which require a maximum (MAC-to-MAC) delay of 20ms. Without an appropriate solution for this problem in the 802.22 standard, having a superframe size of 103.24ms renders the timeing sensitive applications (VoIP, video, etc.) not being able to be supported by the 802.22 WRAN systems.	Yes	Please clarify how the QoS problem mentioned above can be resolved given the 802.22.1 beacon superframes in 103.24ms are required to be received by the 802.22 systems. An corresponding solution in 802.22 standard should be designed appropriately to resolve this problem if the size of each continous transmission burst of the superframe can not be reduced to less than 20ms. Dynamic Frequency Hopping protocol as adopted in IEEE 802.22 Draft 0.1, which allows an IEEE 802.22 device to perform out-of-band channel sensing while conducting in-band data transmision and seamlessly switch to a candidate clean channel from an in-band operating channel, may be a feasible solution.	Disagree	The P802.22.1 beacon standard was developed to allow asynchronous detection of the beacon over different timeframes, for example 8-chip PN sequence can be detected asynchronously in a period of 2.8 ms and the sync burst and the index can be detected with a period of 5.1 ms. Only when additional information is desired to be decoded to further verify the presence, location, and validity of a beacon is it necessary for a system using the P802.22.1 beacon to open a longer quiet period to decode that information. The system was designed this way to minimize its impact on QoS for time/jitter sensitive services. (To further understand these sequential decoding options, see the relevant P802.22 Annex currently embodied in document 22-07-0491r6)." Additional Comments: If a P802.22.1 beacon is detected then the communications system needs to vacate the channel. Decoding the payload is not necessary. Note that P802.22.1 requires a receiver that is different from a P802.22 receiver. P802.22.1 beacon was not intended to be decoded by an OFDM / OFDMA based receiver such as the one used in 802.22 . Please see Document 22-09-0093 Rev0. If "Dynamic Frequency Hopping" means that the BS would move to a different channel after detected a TG1 sync burst
66	hu, wendong	Technical	Specifications for On-demand Frame Contention (ODFC) are incomplete and may be problematic.	Yes	(A) Adopt the specifications for On-demand Frame Contention (ODFC) as adopted in IEEE 802.22 Draft v2.1. (B) In addition to text as suggested in A), more specifications will be needed to fully define the ODFC protocol.	Disagree	The scheme as specified in the current Draft has been developed based on the version that the commentor suggests and has built upon it. The group feels that the current scheme as specified in the Draft is complete and does not need any further change.
67	hu, wendong	Technical	SCW scheduling shall be designed to enable reliable and efficient communications among the coexisting network cells in order to facilitate effective coexistence operations	Yes	To access the SCWs (collectively as a shared resource) among the coexistence networks for a variety of coexistence communication purposes: a) SCW access should be independent of data frame access, i.e. SCWs should be considered as an independent logical "Control Channel", whereas data frames function as an independent logical "Data Channel". b) Access methods of SCWs should be a hybrid Reservation-Contention SCW access for achieving the best from the two.	Disagree	The current mechanism covers the requirement. It is functionally equivalent (see section 6.7.1 on SCH, Table 1, SCW section and 6.22.1.2. The SCW can only be used for control channel. The contention-based SCW is independent from the data transmission. The reservation-based SCW means that the SCW belongs to the BS using the same frame. There is no need for further action.

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68	hu, wendong	Technical	SCW scheduling shall be designed to enable reliable and efficient communications among the coexisting network cells in order to facilitate effective coexistence operations: SCW classification.	Yes	Classify SCW slots in a super-frame into different types: 1) Reservation (R) Slots, which are reserved (in a distributed manner) for a "In-band" network cell to perform "contention-free" CBP transmissions; A "in-band" network cell may "own" one or multiple reservation SCW slots in a super-frame (enabling periodic reservation). 2) Free-to-use (F) Slots, which are accessible to all "in-band" network cells, employing a contention-based medium access mechanism (e.g., CSMA). One or multiple "F" slot can be available in a super-frame. 3) Joining (J) Slots, which are accessible to all "out-of-band" network cells and "newly starting" network cells to communicate with the "in-band" network cells, employing a contention-based medium access mechanism (e.g., CSMA). One or multiple "J" slots can be deterministically available in each super-frame (e.g. the last SCW slot in a super-frame). All network cells not transmitting in a "J" slot shall monitor such "J" slot.	Principle	Wendong: It would be a good idea to differentiate the F and J slots. This would provide better performance. The joining slot could be used by anybody. One way to cover the concern, we could add the policy for the slot on the last frame, we could have a higher priority for joining out-of-channel networks compared to in-channel networks. Higher priority should be given to the out-of-channel contending BSs. Such priority would be adjusted by the parameter of the back-off mechanism. Jianfeng: It would seem better (nice to have) to adjust the back-off parameters to differentiate the priority between the in-band network and a new network if we want to give higher priority to a new network. Action: Jianfeng to propose a sentence adjusting the back-off parameters to differentiate the priority between the in-band network and a new network coming on the channel, the latter requiring a higher priority thus a shorter backoff range. Action: In section 6.22.1.2, page 224, line 55, at the end the paragraph ending with: " ... the sixth available contention based SCWs from the transmission of the US-MAP IE.", append the following sentence: "A new base station shall have higher priority to access contention-based SCWs by using smaller backoff window. When a new BS attempts to transmit CBPs via contention-
69	hu, wendong	Technical	SCW scheduling shall be designed to enable reliable and efficient communications among the coexisting network cells in order to facilitate effective coexistence operations: Announcement of the allocation of SCW slots.	Yes	Allocation of SCW slots (SCW-MAP) is announced by each of the network cells using coexistence beacons. SCW slots should include R, F, J types.	Principle	Jianfeng: The current mechanism includes the reservation-based and contention-based slots but there is no J type slot. We announce the reservation-based and contention-based slots in the SCH, also transmitted in the CBP. The contention-based slots can be used by in-channel networks and out-of-channel networks. The current specification covers the needs. At least one contention-based slot has to be scheduled per super-frame in the last frame. See resolution of comment #68.

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84	Gurley, Thomas	Technical	In order for users of this standard to build an interface between a non-integrated antenna and the CPE that will be interoperable among different vendors, the digital storage means and the electrical and timing parameters of the digital signal must be specified. The data elements, their corresponding storage addresses, and the protocol for communicating these data between the antenna and the CPE must also be specified. See also 9.7.6.	Yes	Specify electrical and timing parameters of the digital signal.	Principle	Ivan proposed to develop a generic interface based on RS-232. Gerald, Tom, Ivan, Ranga worked to propose the resolution to this comment as specified in doc. 22-11-23r3 and 22-11-32r1
85	Gurley, Thomas	Technical	It is not at all clear how this essential antenna information is provided. Does the antenna possess intelligence to parse requests from the CPE and generate appropriate responses, or does it contain merely data storage (e.g., an EEPROM)? If the latter, then the data must be mapped to specific addresses, so the CPE knows where to access it in the antenna EEPROM. For the interface between a non-integrated antenna and the CPE to be interoperable among different vendors, this mapping must be part of the standard.	Yes	Provide mapping between antenna data and storage addresses.	Principle	See resolution of Comment #84. Reading the memory, it would be simpler to make an entire dump to the CPE or a specified dump related to the regulatory domain requested by the CPE. UART (RS-232) interfaces are known and well understood. Winston: Not convinced that there is no need to know how the antenna gain will be provided. We just need to define the primitives. A micro-controller can be programmed to check the validity of the data, for example adding a CRC at the end of the data burst. With the micro-controller approach, we don't need to specify the memory map. We need to define some instructions. See doc. 22-11-32r1.

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88	Kennedy, Richard	Technical	Why is Professional Installation in a section on MAC Common Part Sublayer	Yes	I don't believe that installation, professional or amateur, belongs in a standard, and certainly not as part of the MAC description. The section should probably be part of a Recommended Practice, or in an annex dedicated to regulatory requirements, if professional installation is a regulatory requirement.	Principle	Include "(see Annex A, Table xx)" after the word "regulations" in the first paragraph. Remove the second paragraph of section 6.16.1.1. Create a new Table xx in Annex A containing 3 columns: "Regulatory domain", "Professional installation required", and a definition of "professional installer" for the USA regulatory domain as follows: "A professional installer is a competent individual or team of individuals with experience in installing radio communications equipment and who normally provides service on a fee basis – such an individual or team can generally be expected to be capable of ascertaining the geographic coordinates of a site and entering them into the device for communication to a database." Add a reference to Annex A, Table xx every time professional installation is mentioned in the text.
89	Kennedy, Richard	Technical	"...shall be professionally installed" may be a regulatory requirement, but does should not bew a MAC Common Sublayer normative statement.	Yes	I don't believe that installation, professional or amateur, belongs in a standard, and certainly not as part of the MAC description. The section should probably be part of a Recommended Practice, or in an annex dedicated to regulatory requirements, if professional installation is a regulatory requirement.	Principle	See resolution of Comment #88. Include "(see Annex A, Table xx)" after the word "regulations" in the first paragraph. Remove the second paragraph of section 6.16.1.1. Create a new Table xx in Annex A conrtaining 3 columns: "Regulatory domain", "Professional installation required", and a definition of "professional installer" for the USA regulatory domain as follows: "A professional installer is a competent individual or team of individuals with experience in installing radio communications equipment and who normally provides service on a fee basis – such an individual or team can generally be expected to be capable of ascertaining the geographic coordinates of a site and entering them into the device for communication to a database." Add a reference to Annex A, Table xx every time professional installation is mentioned in the text.

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90	Kennedy, Richard	Technical	For the most part, the Cognitive Radio Capability section is more like a whitepaper on cognitive radio than a standard, and as its requirement is regulatory domain dependent, should be delegated to a regulatory annex or recommended practice.	Yes	Regulatory domain dependent functions should be clearly separated from general requirements in the standard.	Unresolvable	This comment does not have an actionable proposed change and is more of a style question. Hence we disagree but we are prepared to consider specific changes, acceptable to the chair, that the commentor may be willing to provide by February 4th 2011. Action: Apurva to contact the commentor on Jan 22nd. Apurva sent an e-mail below to the commentor on Jan 22nd 2011, but no response was received:
91	Kennedy, Richard	Technical	"Satellite-based geolocation is mandatory" is based on regulatory requirements.	Yes	Regulatory domain dependent functions should be clearly separated from general requirements in the standard.	Disagree	Having satellite geolocation is an internal 802.22 requirement.
92	Kennedy, Richard	General	Throughout the standard, functions that are dependent upon the regulatory domain in which the devices are operated are mixed in with general requirements: the standard fails to separate these requirements from the general requirements. As additional regulatory domains define their requirements for operation in the TVWS, this standard will require wholesale rewrites to keep it viable.	Yes	Separate all regulatory domain dependent functions from the general requirements so that as TVWS usage is allowed in more and more countries around the world, the entire document does not have to be rewritten.	Unresolvable	The 802.22 Comment resolution committee disagrees with this comment. The 802.22 WG devised Annex A to cover the diffferent regulatory domains requirements and the main body of the standard refers to this Annex. Only Annex A is expected to be modified to include additional regulatory requirements. As it stands, the comment is not actionable. Hence we disagree but we are prepared to consider specific changes, acceptable to the chair, that the commentor may be willing to provide by February 4th 2011. Action: Apurva to contact the commentor by January 22nd. Apurva sent an e-mail below to the commentor on Jan 22nd

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93	Ecclesine, Peter	General	I object to the phrase "The BS shall be professionally installed by a professional" without qualification. There are many qualified individuals that may perform pro bono installations, and that should not be precluded by this standard. The BS might be charitably installed or installed for a religious use by qualified installers who receive no money or professional compensation.	Yes	Change to "The BS shall be installed by a professional installer"	Principle	See resolution of Comment #88.Include "(see Annex A, Table xx)" after the word "regulations" in the first paragraph. Remove the second paragraph of section 6.16.1.1. Create a new Table xx in Annex A containing 3 columns: "Regulatory domain", "Professional installation required", and a definition of "professional installer" for the USA regulatory
94	Ecclesine, Peter	General	I object to the title "Professional Installation". The BS might be charitably installed or installed for a religious use by qualified installers who receive no money or professional compensation.	Yes	Change to "Installation to required standards" here, in Figure 32 above.	Disagree	See resolution of Comment #89. Note that the definition of "Professional Installer" is consistent with that given by the FCC in the R&O 10-174, clause 3, para. 150. Part 15.711 (b 1 1) indicates that it should be installed professionally."
95	Ecclesine, Peter	General	Considering the reference application to low population density regions, I object to the characterization "a professional fixed base station", as the fixed base station may be for educational or religious use.	Yes	Delete the word "professional"	Disagree	The Comment Resolution Committee agreed in principle with the commentor and initially decided to change the sentence to "a professionally installed fixed base station". Add: "(see Annex A" at the end of the paragraph. However, the IEEE SA staff asked the Comment Resolution Committee that the title, scope and purpose in the draft need to be exactly specified as that in the PAR with no changes to the words. So the end result was that we could not make the change as proposed by the commentor. However, the Comment Resolution

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96	Ecclesine, Peter	Technical	The figure depicts "IEEE 802.11a", but after the 802.11REVma rollup to IEEE Std 802.11-2007, the proper reference is to the clause 17 OFDM PHY of IEEE 802.11-2007. Needless to say, all versions of the 802.11 clause 17 OFDM PHY have range greater than 33 meters. In the IEEE 802.11-2007 standard, a half-clocked version is specified with twice the cyclic prefix, for use in 4.9 GHz band, and subsequently by 802.11j, 802.11p and 802.11y approved amendments to IEEE 802.11-2007. 802.11y-2008 added quarter-clocked 5 MHz version with four times the cyclic prefix protection that is also used by 802.11p-2009. IEEE 802.11n-2009 uses 40 MHz bandwidth as well as 20 MHz bandwidth in 2.4 GHz, and achieves datarates up to 600 Mbps. Check the stores for 11n 3 x 2, 3 x 3 and 4 x 4 are coming this year.	Yes	Remove the IEEE 802.11a and 802.11 elements from the figure, or fix the bandwidth, range, rate and approved cyclic prefix protections and supply a normative reference in Clause 2.	Principle	Remove the last paragraph of page 2 and Figure 2.
97	Riegel, Maximilian	Technical	It is not appropriate for a new standard to be released after the exhausting of the IPv4 address space to make IPv6 support optional.	Yes	Remove line 20	Principle	Modify the sentence on line 20 of page 16 as follows: "IPv6 CS requirements are only applicable~~y~~ if IPv6 support is enabled during registration." The WG intends to investigate IPv6 support during the maintenance PAR.
98	Riegel, Maximilian	General	The last sentence of the paragraph starting with 'For IP packets with ...' is out of scope for this section. IEEE802.3 and VLAN parameters belong to section 5.3.2	Yes	Remove last sentence of 5.4.2 starting with 'For IP packets with...'	Principle	Delete the sentence but move the references: "(6.9.8.9.18.3.8 through 6.9.8.9.18.3.12)" to page 16, line 16.

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99	Struik, Rene	Technical	(T) Clause 2, p. 4, l. 2-4: It seems imprudent to refer to undated standards, since while a referenced standard may be suitable at time of publication of an IEEE 802.22, this may not longer hold for updates hereof (since these may have created incompatibilities in behavior of other inadvertent side-effects that may impact usefulness). Suggested remedy: Only refer to specific standards (such as to avoid ambiguity altogether), while adding language to the extent that "At the time of publication, the editions indicated were valid. All standards and specifications are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the references listed below.	Yes	Suggested remedy: Only refer to specific standards (such as to avoid ambiguity altogether), while adding language to the extent that "At the time of publication, the editions indicated were valid. All standards and specifications are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the references listed below."	Principle	Need to date every Standard listed. Replace the last sentence of the first paragraph by the proposed sentence. Same sentence to be added to the Bibliography. "At the time of publication, the editions indicated were valid. All standards and specifications are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the references listed below." See doc. 22-11-0012r4. These sentences also need to be included at the beginning of the Bibliography. A few other corrections were identified and are to be included in revision 1 of the document.
100	Struik, Rene	Technical	(TR) Clause 2, p. 4, l. 42: With the PKCS1 reference, it is unclear (to me) whether, e.g., v1.5 is allowed (witness the crystal ball remark in l. 2-4): if so, this would allow RSA MultiPrime and, thereby, RSA schemes with different cryptographic properties than the original scheme. It is unclear whether this is intended. Suggested remedy: Refer to a specific version of PKCS1 (i.e., including version number).	Yes	Suggested remedy: Refer to a specific version of PKCS#1 (i.e., including version number).	Principle	Suggest to use Version 2.0 if Multiprime is needed.. If Multiprime is not used, refer to the most recent version. RSA Multiprime is not needed, thus referring to the most current version. Not using RSA Multiprime allows aligning with NIST. Ranga is to specify the version of RFC that does not support Multiprime and revise doc. 22-11-0012r3 t rev4. See resolution in doc. 22-11/0012r4

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101	Struik, Rene	Technical	(TR Clause 2, p. 4, l. 50-51: To my knowledge, the Key Wrap Specification (November 2001) has never been published as an official NIST standard (official standards usually have the denomer FIPS, NIST SP x-y, etc.). BTW - the NIST Key Wrap web link is broken. More importantly, the NIST key wrap has been criticized by crypto community, e.g., in the paper Key Wrap - Provable Security Treatment of (Phil Rogaway, Thomas Shrimpton, IACR ePrint 2006-221). This calls into question whether this scheme should be used at all. Suggested remedy: Refer to an official (non draft) NIST document that specifies NIST Key Wrap (unfortunately, I could not find this and the NIST CSRC website also does not give conclusive evidence here); Consider replacing the NIST key wrap by another crypto construct.)	Yes	Suggested remedy: Refer to an official (non draft) NIST document that specifies NIST Key Wrap (unfortunately, I could not find this and the NIST CSRC website also does not give conclusive evidence here); Consider replacing the NIST key wrap by another crypto construct.	Principle	Action: Ranga to identify an official version for this key wrap. Action: Rene to send an email to NIST whether there is a number associated with the key wrap and the reference document, and to get the URL for this document. Considering another key wrap would involve changing a portion of section 7. See do for the resolution to this comment: 22-11-0012r4.
102	Struik, Rene	Editorial	(E) Clause 2, p. 5, l. 44-45: The FIPS 180-1 reference is really out of date. Suggested remedy: Replace this reference by FIPS Pub 180-3 (October 2008).	Yes	Suggested remedy: Replace this reference by FIPS Pub 180-3 (October 2008).	Agree	
103	Struik, Rene	Technical	(TR) Clause 7: The specification uses SHA-1, which is a hash function that was found to be much less secure against collisions than previously thought in 2005. By now, it is supposed to be phased out and no longer used at all in new applications. The same should apply to a standard that has not been finalized yet, me thinks! Suggested remedy: Abandon SHA-1 throughout the specification and replace by, e.g., another member of the SHA-2 hash function family, with security level consistent with that of the signature algorithm used (SHA-256 with 256-bit prime curve, etc.).	Yes	Suggested remedy: Abandon SHA-1 throughout the specification and replace by, e.g., another member of the SHA-2 hash function family, with security level consistent with that of the signature algorithm used (SHA-256 with 256-bit prime curve, etc.).	Agree	Replace all 7 references to SHA1 to SHA-256 in section 7.5. Add a reference to: (FIPS Pub 180-3)

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104	Struik, Rene	Editorial	(E) Clause 7.4.3, p. 285, l. 23-26: The referenced RFC documents seem to be partially out of date or may become so in the course of sponsor ballot. Considering Clause 2, p. 5, l. 2-4, does this now also mean that authentication services shall be based on subsequent versions here? Suggested remedy: make references up-to-date (this comment thus more serves as a reminder; however, be aware of potential inconsistencies with old versions introduced by newer versions).	Yes	Suggested remedy: make references up-to-date (this comment thus more serves as a reminder; however, be aware of potential inconsistencies with old versions introduced by newer versions).	Principle	Rene: This RFC 5246 has been updated by another RFC. This is then not the latest version. Doc 12r1 did not address this reference. Action: Ranga provided the correct references to the RFC's in doc. 22-11-0012r2. The 4 RFCs in section should stay in section 2 unlike indicated in resolution of Comment #10. See resolution in doc 22-11-12r4.
105	Struik, Rene	Editorial	(E) Clause 7.5.1, p. 286, l. 2: Replace "RSA of ECC" by "RSA or ECC". Suggested remedy: Implemented as suggested.	Yes	Suggested remedy: Implemented as suggested.	Agree	
106	Struik, Rene	Technical	(TR) Clause 7.5.1, p. 286, l. 6-9: This paragraph suggests that "almost any elliptic curve domain parameter set goes". This seems to be a recipe for incompatibilities and too many options. Moreover, how is one to provide support for efficient implementations if one does not even know yet whether the curve in question would be a prime curve, binary curve? Why not pick a small set of domain parameters (e.g., NIST P-256, P-384, P-521) instead? Suggested remedy: Specify a very limited set of curves to be used here (e.g., Suite B NIST prime curves corresponding to crypto bit strength 128, 192, 256).	Yes	Suggested remedy: Specify a very limited set of curves to be used here (e.g., Suite B NIST prime curves corresponding to crypto bit strength 128, 192, 256).	Principle	Action: Ranga will narrow down the list of possible elliptic curves and enumerate the short list of curves that will be used to reduce the options and compatibility. Prime number versus binary based ECC. Binary is computationally efficient whereas prime number is more secure. Concern expressed about complexity and the impact on the cost of the CPEs. ECC is not that demanding in memory and computing cycles. The binary approach is preferred by the group to reduce the complexity. Action: Ranga to produce text to update this paragraph to reduce the number of curves to also cover comment # 110, 227 and 228. See resolution in doc. 22-11-28r1.

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107	Struik, Rene	Technical	(TR) Clause 7.5.1, p. 286, l. 8-9: It is suggested that domain parameters produce keys of between 160-256 bits in length. This language is highly ambiguous, since it is not clear whether private keys or public keys are meant here. Assuming private keys and prime curves, this limits the crypto bit strength of the resulting ECC scheme to between 80-128 bits; with binary curves a little bit less. (With public keys, the crypto bit strength would be completely inadequate, since at most 64 bits.) Moreover, why this 256-bit upper limit? Suggested remedy: Rewrite this paragraph, so as to make this more precise.	Yes	Suggested remedy: Rewrite this paragraph, so as to make this more precise.	Principle	Remove the following sentence: "Domain parameters sets that are selected will produce keys of no less than 160 and no greater than 256 bits in length."
108	Struik, Rene	Technical	(T) Clause 7.5.1, p. 286, l. 11: This sentence seems to be a circular reference (since referring to the Clause it is at the end of). Suggested: Fix accordingly.	Yes	Suggested: Fix accordingly.	Principle	Remove the following sentence: "Restrictions posed on the certificate values are described in 7.5.1."
109	Struik, Rene	Technical	(TR) Clause 7.5.1.3.2, p. 287, l. 23-25: With ECDSA, one can considerably speed-up signature verification for prime curves and binary non-Koblitz curves. For those curves speed-ups of the incremental cost of ECDSA signature verification of 40% are possible (SAC 2005 result). Cf. also IETF-78 meetings. To reap these benefits, simply add the following sentence at l. 29: "When the ephemeral public key R:=(x1,y1):=kG that is generated during the ECDSA signature generation algorithm has an odd valued y-coordinate y1,the ECDSA signature component s SHALL be changed towards the integer -s (modulo n), where n is the prime order of the cyclic subgroup of the elliptic curve in question." Note that this extra post-processing step can be executed by any party and that using accelerated methods for signature verification is (of course) entirely optional. Note also that this does not jeopardize compliance with any existing ECDSA formats. Suggested remedy: Add this sentence, as suggested.	Yes	Suggested remedy: Add this sentence, as suggested.	Principle	Add the following sentence after line 29, page 287: "When the ephemeral public key R:=(x1,y1):=kG that is generated during the ECDSA signature generation algorithm has an odd valued "y-" coordinate "y1", the ECDSA signature component "s" SHALL be changed towards the integer "-s" (modulo n), where "n" is the prime order of the cyclic subgroup of the elliptic curve in question. Note that this extra post-processing step can be executed by any party and that using accelerated methods for signature verification is (of course) entirely optional."

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110	Struik, Rene	Technical	(TR) Clause 7.5.1.5.2, p. 290, l. 17-19: This seems to suggest that any implementation has to support compressed elliptic curve points. If so, this may present a burden to some implementers. Why not offer less choice and always mandate affine representation of elliptic curve points (or, generate points so that the y-coordinate is always uniquely determined from knowledge of the x-coordinate only). Suggested remedy: Reduce choice here, as suggested.	Yes	Suggested remedy: Reduce choice here, as suggested.	Principle	Action: Modify the following sentence: "ECPoint represents the base point of an elliptic curve and can take on two forms, compressed and uncompressed [defined in ANSI X9.62-2005]. For certificates the encoding of ECPoint shall be supported by the uncompressed form. The compressed form may (optionally) be used instead." See resolution of Comment #106 and 107. Action: Ranga to provide the same list of specific parameters specified for the two previous comments Action: Ranga to produce text to update this paragraph to reduce the number of curves to also cover comment # 106, 227 and 228. See resolution in doc. 22-11-28r1.
111	Struik, Rene	Technical	(TR) Clause 7.6.2, Figure 125, p. 295: This figure is highly unclear and suggests that private keying material is communicated during protocol flows. Why would this be secure? What is the benefit of using an implicit certificate scheme if one has to ship private keys to devices as part of this? Suggested remedy: Please carefully explain. I should be able to help (since I know the implicit certificate scheme itself by heart).	Yes	Suggested remedy: Please carefully explain. I should be able to help (since I know the implicit certificate scheme itself by heart).	Principle	This comment is related to Comment #113 and 114. The commentor participated during the 802.22 interim meeting in Los Angeles as well as over the telecons. We appreciate the help from the commentor to resolve the comments. Rene: Figure 125 is unclear. Ranga: Figure is not intended to demonstrate the security of the protocol but how the certificates are distributed. Rene: There is not enough information at the BS to generate the necessary keys and certificates for the CA. There is a need for authentication as well. Does it imply a private key on a public key? Ranga: Private key re-construction would be more appropriate but there are missing informations. Action: Rene to look at the text and propose modifications. Discuss over email. Figure 125 may need to be changed as well as the text preceding it.

References

P802.22 - Negative Comments from SB that were addressed and resolved but where the commentors have maintained their negative vote during SB Re-circ #1: Document 22-11-0040 Rev5

112	Struik, Rene	Technical	(TR) Clause 7.6.2, p. 294, l. 25-26: This statement seems incorrect: One can view implicit certificates (as specified in draft SEC4), as certificates where the public key and the signature are "super-imposed", thus removing all redundancy. As a result, one cannot verify the correctness of an implicit certificate by itself (since there is no redundancy, in constrast to, e.g., ECDSA certs); one has to find out by using the reconstructed public key in an application instead. Suggested remedy: Please modify this description accordingly. I would be happy to help.	Yes	Suggested remedy: Please modify this description accordingly. I would be happy to help.	Principle	The commentor participated during the 802.22 interim meeting in Los Angeles as well as over the telecons. We appreciate the help from the commentor to resolve the comments. Resolution: Modify the one-before-last sentence as follows: "If the receiving BS supports the CBP protection, and has the key that can be used to verify the signature, the signature verification process is started." See resolution in doc. 22-11-28r1.
113	Struik, Rene	Technical	(TR) Clause 7.6.2, p. 294, l. 28-32: It is unclear how this scheme works and what the benefits of using implicit certificates over "explicit" certificates are. Once again, it is not possible to verify implicit certificates by themselves, so the language needs to be cleaned up here. Suggested remedy: Correct incorrect description and clarify the use case. I would be happy to help.	Yes	Suggested remedy: Correct incorrect description and clarify the use case. I would be happy to help.	Principle	The commentor participated during the 802.22 interim meeting in Los Angeles as well as over the telecons. We appreciate the help from the commentor to resolve the comments.Action: Rene to investigate this more and report to the WG during telecons.
114	Struik, Rene	Technical	(TR) Clause 7.6.2.1, p. 295, l. 7: The format of BS certificates in Table 192 seems to be highly inconsistent with that for ECDSA and RSA certificates (which are all specified in X509 format - cf., e.g., Clause 7.5.1.5). Suggested remedy: Make the certificate formats in the specification consistent. I would be happy to help.	Yes	Suggested remedy: Make the certificate formats in the specification consistent. I would be happy to help.	Disagree	The commentor participated during the 802.22 interim meeting in Los Angeles as well as over the telecons. We appreciate the help from the commentor to resolve the comments.The format of the current implicit certificate is inconsistent with the ECDSA and RSA certifcates (which are all specified in X509 format - cf., e.g., Clause 7.5.1.5) because of the serious size constraint that needs to be imposed on these certificates to reduce the overhead and avoid unnecessary transmissions. At this time the Comment Resolution Committee does not see any need to adhere to the X509 format and reduced size of the certificate as specified in the Draft is preferred.

References

P802.22 - Negative Comments from SB that were addressed and resolved but where the commentors have maintained their negative vote during SB Re-circ #1: Document 22-11-0040 Rev5

115	Struik, Rene	Technical	(TR) Clause 7.6.2.1, p. 296, Step 3), l. 4: The specification is incomplete, if only because it is not clear what representation is used to specify the Implicit Certificate Public Key. Suggested remedy: Clarify.	Yes	Suggested remedy: Clarify.	Principle	The commentor participated during the 802.22 interim meeting in Los Angeles as well as over the telecons. We appreciate the help from the commentor to resolve the comments.Section 7.6.2.5.2 describe the signature generation process. A reference should be added.In NIST Sec4, section 2.2 of v0.91, there is a set of requisites. There is a need to refer to item 6 in this section. Action: Ranga to include appropriate text and reference to the SECG document: SEC 4: Elliptic Curve Qu-Vanstone Implicit
116	Struik, Rene	Technical	(TR) Clause 7.6.2.1, p. 296, Step 3): It is completely unclear why the public key is fed through a kdf function here. It seems that the result of the latter is used in a symmetric-key cryptographic mode of operation (GCM mode). If so, this suggests that anyone can "sign", since the "signature" does only require access to public information (thereby, breaking the entire security). Suggested remedy: Provide evidence that this construct is secure!	Yes	Suggested remedy: Provide evidence that this construct is secure!	Principle	The commentor participated during the 802.22 interim meeting in Los Angeles as well as over the telecons. We appreciate the help from the commentor to resolve the comments.See resolution in doc. 22-11-28r1.
117	Struik, Rene	Technical	(TR) Clause 7.6.2, p. 296: With Mode 2, the CA generates public/private key pairs for the base stations. If so, the advantage of implicit certificates over many other schemes (namely, that the CA does not learn anything about the base stations's private key) goes away. Suggested remedy: Please clarify the use case.	Yes	Suggested remedy: Please clarify the use case.	Principle	The commentor participated during the 802.22 interim meeting in Los Angeles as well as over the telecons. We appreciate the help from the commentor to resolve the comments.Resolution: The difference is how the device is loaded with the certificate. The ultimate goal is to have a small certificate. It is not known at this time if these are other schemes that can use as small certificate. There are 2 entities initiating the transactions that seem to be collapsed. Another entity besides the CA should be identified

References

P802.22 - Negative Comments from SB that were addressed and resolved but where the commentors have maintained their negative vote during SB Re-circ #1: Document 22-11-0040 Rev5

118	Struik, Rene	Technical	(TR) Clause 7.6.2, p. 296, l. 18: With Mode 2, it is suggested that the public-private key pair is distributed via an out-of-band channel ("SIM card"). If so, key distribution seems to be left as an exercise to implementers. Does this now require implementers to come up with a plethora of mutually incompatible "key inject" solutions (USB slot, PINs, wire, etc.)? Again, not clear how this would fit the use case then. Suggested remedy: Provide specification of key distribution scheme in this case that does not create these incompatibility problems noted above.	Yes	Suggested remedy: Provide specification of key distribution scheme in this case that does not create these incompatibility problems noted above.	Principle	The commentor participated during the 802.22 interim meeting in Los Angeles as well as over the telecons. We appreciate the help from the commentor to resolve the comments.Resolution: There is a need to describe the procedure for key distribution and to generate the certificates. Rene: Solution 1: leave the mechanism outside the Standard. However, different solutions will be developed. Solution 2: Only allow this to be distributed by wireless means between base stations. However different communications means may be used. Solution 3: preclude Mode 2 because it cannot be communicated by the wireless link. Action: Ranga to prepare some text to cover this concern and circulate by email. Since this is only BS-to-BS, it should not be that difficult. General procedure can be descrivbed in the Standard and more details would be made available from the Recommended Practice. See resolution in doc. 22-11-28r1.
119	Struik, Rene	Technical	(TR) Clause 7.6.2.2, p. 296, Step 5: The use of the word "signature" is misleading, since one uses a symmetric-key construct for this and it is unclear which security properties (if any) are provided here. Suggested remedy: Use nomenclature that is well-defined.	Yes	Suggested remedy: Use nomenclature that is well-defined.	Principle	The commentor participated during the 802.22 interim meeting in Los Angeles as well as over the telecons. We appreciate the help from the commentor to resolve the comments. Resolution: The word "signature " is inappropriate. It should be "message integrity code" (MIC). Action: Ranga to identify the IE's that need to be modified to align with this new name as well as to scan section 7 for the changes. 14 Feb: Ranga: received Rene's input. There is an issue with mode 1. Signature is rather long for the small data field. Can the signature truncated? Can it be hashed to make it shorter? Could 8 octets be used rather than 32? Text is needed to clarify how this works. Action: Ranga to update the text in the section and verify with Rene off line.

References

P802.22 - Negative Comments from SB that were addressed and resolved but where the commentors have maintained their negative vote during SB Re-circ #1: Document 22-11-0040 Rev5

120	Struik, Rene	Technical	(TR) Clause 7.6.2.3, p. 297, Table 192: Why not use an offset for the Key Validity Date? This would allow shaving off at least 8 bits (1 year is roughly 25-bit seconds, so 33 bits are sufficient to describe 256 years here, with base year 2011. Suggested remedy: Compress representation accordingly.	Yes	Suggested remedy: Compress representation accordingly.	Principle	The commentor participated during the 802.22 interim meeting in Los Angeles as well as over the telecons. We appreciate the help from the commentor to resolve the comments. Resolution: Same Table appears in section 6 as well. A way to shave off bits in the representation, one can use a different start year, e.g., 2011 could be used as the first year. Counting seconds in a year needs 25 bits counter. Action: Make the field "Key Validity Data" 32 bits. Modify the first indent in the description as follows: "• 2000 + x where x encoded by 7bits Add a new 4th row as follows: "Version number flag: 1 bit. 0: Current version 1: reserved for future use."
121	Struik, Rene	Technical	(TR) Clause 7.6.2.3, p. 297, Table 192: It does not seem to make sense to have validity periods with granularity of 1/2 year, whereas key validity start-time with granularity of seconds. Suggested remedy: Better align granularity of different elements of the certificate policy fields.	Yes	Suggested remedy: Better align granularity of different elements of the certificate policy fields.	Out of Scope	Is there a need for a smaller validity period for the certificate? It has to do with the time to re-use a certificate, i.e., the number of certificates that are in reserve. Ranga: 6 months seem to be a good balance. Comment was withdrawn. No further action needed.
122	Struik, Rene	Technical	(TR) Clause 7.6.2.4.1, p. 298, Step 5, l. 21-23: It is unclear how one could limit the key validity period of operator CA root certificates. Suggested remedy: Please specify.	Yes	Suggested remedy: Please specify.	Principle	The format of the CA root certificate has not been specified. This is needed. If an operator has behaved badly, there is a need to revoque his certificate. Action: Ranga to consider defining it based on Table 192. See resolution in doc. 22-11-28r1.

References

P802.22 - Negative Comments from SB that were addressed and resolved but where the commentors have maintained their negative vote during SB Re-circ #1: Document 22-11-0040 Rev5

123	Struik, Rene	Technical	(TR) Clause 7.6.2.4.2, p. 298, Step 1, l. 25-32: It is unclear whether the initiator is allowed the reuse ephemeral keying material (e.g., in case the protocol aborts prematurely). If not, this may impose a considerable burden on the initiator device, due to expense of public key generation and, more importantly, prospect of DoS attacks that could trigger premature abortion of the protocol. Suggested remedy: Please specify clearly.	Yes	Suggested remedy: Please specify clearly.	Principle	On page 298, at the end of line 30, insert the following sentence: "An ephemeral key pair shall never be re-used." Also add periods to both bullets. See resolution in doc. 22-11-28r1.
124	Struik, Rene	Technical	(TR) Clause 7.6.2.4.3, p. 299, Step 4: This suggests that shooting-in a CA root key is out of scope and presumably done out-of-band. This seems to be a recipe for incompatibility and inflexibility (who would ever install another root CA key if the procedures are different or non-existent, depending on vendor?). Suggested remedy: Provide over-the-air method that securely installs a root CA key into a device. I would be happy to help here.	Yes	Suggested remedy: Provide over-the-air method that securely installs a root CA key into a device. I would be happy to help here.	Out of Scope	Rene Struik joined the IEEE 802.22 session during the Los Angeles interim and also multiple telecons. We are greatful to Rene for his assistance. Ranga: This is going to the BS, not to the individual CPEs. The suggested over-the-air method would not be appropriate. Rene: Is there a way to update the root CA otherwise? Ranga: It is done over the NCMS. This comment was

References

P802.22 - Negative Comments from SB that were addressed and resolved but where the commentors have maintained their negative vote during SB Re-circ #1: Document 22-11-0040 Rev5

125	Struik, Rene	Technical	(TR) Clause 2, p. 5, l-12: To my knowledge, the SEC4 specification is only a draft specification and, thereby, may be subject to change. A standard should not reference external specifications as normative references, it the latter are only draft standards. Suggested remedy: Create an Annex that specifies the full details of the SEC4 scheme as used in the IEEE 802.22 standard, so as to be independent of any changes made by an external standards body. Please note here that the latest draft on the SECG website is v0.91 (dated November 18, 2008), with prior version dated November 15, 2006. The version referenced in 802.22 (from June 2006) is neither of these.	Yes	Suggested remedy: Create an Annex that specifies the full details of the SEC4 scheme as used in the IEEE 802.22 standard, so as to be independent of any changes made by an external standards body. Please note here that the latest draft on the SECG website is v0.91 (dated November 18, 2008), with prior version dated November 15, 2006. The version referenced in 802.22 (from June 2006) is neither of these.	Principle	Need to refer to the right version of the Standard: November 15, 2006 Could refer to the Web site re. version of November 15, 2006 Send a note to the SECG to clarify. We are referring to a Draft document from SECG to be issued in a few weeks. The choice is to include the material as an annex or assume that that draft will be formally adopted by SECG and the reference can be updated as an editorial change. The Comment Resolution Committee decided to keep the reference to the draft document. See the final resolution in doc. 22-11-13r4.
126	Riegel, Maximilian	Technical	The chapter 6.2 Reference Architecture and 6.3 Management Reference Architecture are exceeding the scope of Chapter 6, MAC Common Part Sublayer	Yes	Section 6.2 and 6.3 should be moved out of Chapter 6 into section 1 or a new section before section 5.	Principle	Insert 6.2 and 6.3 under a new section 5 entitled: "System Architecture", Renumber sections 5 to 12 to 6 to 13.
127	Riegel, Maximilian	Technical	Concurrent support of IP-CS and ETH-CS violates the design principles of RFC4830. When a CPE supports both ETH-CS and IP-CS, it should be ensured that concurrent operation is not allowed.	Yes	Add note to Table 50: 'Concurrent operation of ETH-CS and IP-CS in the same CPE is not supported'.	Principle	Remove option "0x02: Both Ethernet and IP CS" from Table 50. Change 0x00 to 0x02. Add 0x00:reserved. Make changes in the previous paragraph accordingly: change IE=0 to IE=2.

References

P802.22 - Negative Comments from SB that were addressed and resolved but where the commentors have maintained their negative vote during SB Re-circ #1: Document 22-11-0040 Rev5

128	Riegel, Maximilian	Technical	The CS Parameter Encodings are overly redundant and complex; Three encodings are fully sufficient.	Yes	Only 3 encodings are required: no CS, IP-CS, ETH-CS. Remove all encodings and introduce 2 new parameters for ETH-CS (802.3/VLAN w/ IPv4, IPv6) and IP-CS (IPv4, IPv6)	Agree	Make the following changes to Table 99: 0x00: No CS 0x01: IP CS (IPv4, IPv6) 0x02: ETH-CS (802.3/VLAN with IPv4, IPv6) 0x03-0xFF: Reserved

Contingency Motion

802.22 WG Motion #4 – Document 22-11-0043 Rev 0
In case another round of re-circulation is needed after the Sponsor Ballot Re-circulation #2 for Draft P802.22/D3.0

- **The IEEE 802.22 Working Group authorizes the WG Chair to conduct telecons to address and resolve the comments, prepare the new Draft P802.22/D4.0 and launch the Sponsor Ballot Re-circulation.**
- **The IEEE 802.22 WG also authorizes the WG Chair to forward P802.22/ D4.0 to the IEEE SA RevCom and conduct any business that the Chair may require to progress the approval of the standard.**

Move: Gwangzeen Ko
Second: Sasaki Shigenobu
For: 9
Against: 0
Abstain: 0
Motion passes unanimously

5.08 ME 802.1AEbn forward to Sponsor ballot Jeffree 5 02:56 PM

Jeffree presented “2011-03-exec-motions.pptx”, slides 2-3.

Motion is 802.1 requests EC approval to forward P802.1AEbn (MAC Security: Amendment— GCM-AES-256 Cipher Suite) to Sponsor ballot.

Moved by Jeffree, seconded by Thaler

Vote is 15/0/0, motion passes.

MOTION

- 802.1 requests EC approval to forward P802.1AEbn (MAC Security: Amendment— GCM-AES-256 Cipher Suite) to Sponsor ballot.
- Proposed: Congdon Second: Eastlake
- For: 21 Against: 0 Abstain: 6
- EC proposed: Jeffree Second: Thaler
- For: Against: Abstain:

Supporting material – P802.1AEbn

- Working Group balloting completed 5th March 2011
  - Results: Approve 6 (100%), Disapprove 0 (0%) Abstain 21 (41%), Responders 37 (72%)
  - No outstanding negatives or comments
  - Last balloted draft (D0.6) will go to SB.

5.09 ME 802.1BA forward to Sponsor ballot Jeffree 5 02:59 PM

Jeffree presented “2011-03-exec-motions.pptx”, slides 4-5.

Motion is 802.1 requests EC approval to forward P802.1BA to Sponsor ballot.

Moved by Jeffree, seconded by Thaler,

Thompson asked about the high abstain ratio, isn't this an architecture document.

Jeffree said that it was a profile document.

Vote is 15/0/0, motion passes

Motion

- 802.1 requests EC approval to forward P802.1BA to Sponsor ballot.
- Proposed: Teener Second: Gunther
- For: 27 Against: 1 Abstain: 4
- EC proposed: Jeffree Second: Thaler
- For: XX Against: XX Abstain: XX

Supporting material – P802.1BA

- Working Group balloting completed 1st March 2011
  - Results: Approve 20 (100%), Disapprove 0 (0%) Abstain 34 (60%), Responders 56 (64%)
  - No outstanding negatives or comments
  - Last balloted draft (D2.3) will go to SB.

5.10 MI 802.1Qbf forward to Sponsor ballot Jeffree 5 03:02 PM

Jeffree presented “2011-03-exec-motions.pptx”, slides 6-7.

Motion is 802.1 requests EC approval to submit 802.1Qbf to Sponsor Ballot.

Moved by Jeffree, seconded by Thaler

Votes 15/0/0, motion passes

MOTION

- 802.1 requests EC approval to submit 802.1Qbf to Sponsor Ballot.

- Proposed: Haddock Second: Sultan
- For: 23 Against: 0 Abstain: 4

- EC proposed: Jeffree Second: Thaler
- For: XX Against: XXAbstain: XX

Supporting material – P802.1Qbf

- Working Group balloting completed 14th February 2011
  - Results: Approve 16 (100%), Disapprove 0 (0%) Abstain 26 (62%), Responders 42 (66%)
  - No outstanding negatives or comments
  - Last balloted draft (D1.3) will go to SB.

5.11 MI 802.1Q-REV forward to RevCom (conditional) Jeffree 10 03:03 PM

Jeffree presented “2011-03-exec-motions.pptx”, slides 8-9.

Motion is 802.1 requests conditional approval from the EC to submit 802.1Q-Rev to RevCom.

Moved by Jeffree, seconded by Thaler

Vote is 15/0/0, motion passes

MOTION

- 802.1 requests conditional approval from the EC to submit 802.1Q-Rev to RevCom.

- Proposed: Haddock Second: mack-crane
- For: 38 Against: 0 Abstain: 1

- EC proposed: Jeffree Second: Thaler
- For: XX Against: XXAbstain: XX

Supporting material – P802.1Q-REV

- Sponsor recirc ballot completed 16th March 2011
  - Results: Approve 77 (100%), Disapprove 0 (0%) Abstain 4 (4%), Responders 81 (84%)
  - No outstanding negatives
  - Small number of comments that need to be addressed; we expect a clean recirculation
  - Recirculation ballot in March/April timeframe
  - Comment resolution if necessary at May interim meeting; possible need for a final recirc but very unlikely.

5.12 MI 802.1Qaz forward to RevCom (conditional) Jeffree 10 03:06 PM

Jeffree presented “2011-03-exec-motions.pptx”, slides 10-11.

Motion is 802.1 requests conditional approval from the EC to submit 802.1Qaz to RevCom.

– Conditional on success of both the 802.1QRev and 802.1Qaz recirculations

Moved by Jeffree, seconded by Thaler

Thompson said that all these amendments at RevCom are viewed differently and so some of these may require another recirculation.

Thaler said that they have been very careful to make sure that the amendments are in step with the 802.1Q-REV.

Vote is 15/0/0, motion passes

MOTION

- 802.1 requests conditional approval from the EC to submit 802.1Qaz to RevCom.
  - Conditional on success of both the 802.1Q-Rev and 802.1Qaz recirculations
- Proposed: thaler
- Second: desanti
  - For: 34 Against: 1 Abstain: 0
- EC proposed: Jeffree Second: Thaler
- For: XX Against: XXAbstain: XX

Supporting material – P802.1Qaz

- Sponsor recirc ballot completed 6th March 2011
  - Results: Approve 59 (96%), Disapprove 2 (4%) Abstain 4 (6%), Responders 81 (84%)
  - 2 outstanding disapproves/comments:
    - 1 comment (Haddock) requires alignment with final Q-REV text
    - 1 comment (Ghanwani)

    Comment Type TR: This clause needs to have an associated PFC Defense mechanism. The need for this is covered in: az-ghanwani-pfc-defense-0909-v02.pdf.

    SuggestedRemedy: Add a defense mechanism for PFC. The mechanism would be similar to that specified for CN.

    REJECT. Group consensus has been that this is not a solution that DCB wishes to persue. This has not changed from pervious ballots.
  - Small number of changes for final alignment with Q-REV; we expect a clean recirculation
  - Recirculation ballot in March/April timeframe
  - Comment resolution if necessary at May interim meeting; possible need for a final recirc but very unlikely.

5.13 ME 802.1Qbb forward to RevCom (conditional) Jeffree 10 03:11 PM

Jeffree presented “2011-03-exec-motions.pptx”, slides 12-13.

Motion is 802.1 requests conditional approval from the EC to submit 802.1Qbb to RevCom.

– Conditional on success of the 802.1Q-Rev and 802.1Qaz recirculations

Moved by Jeffree, seconded by Thaler

Grow asked if all the amendments can appear at the same time as the revision. He said that there have been problems in the past.

Law said that more recently, this is not the case.

Vote is 15/0/0, motion passes

MOTION

- 802.1 requests conditional approval from the EC to submit 802.1Qbb to RevCom.
  - Conditional on success of the 802.1Q-Rev and 802.1Qaz recirculations
- Proposed: thaler
- Second: desanti
  - For: 37 Against: 0 Abstain: 1
- EC proposed: Jeffree Second: Thaler
- For: XX Against: XX Abstain: XX

Supporting material – P802.1Qbb

- Sponsor recirc ballot completed 3rd July 2010
  - Results: Approve 75 (98%), Disapprove 1 (2%) Abstain 5 (6%), Responders 81 (85%)
  - 1 outstanding negative (Parsons)
    - Comment: 802.1Qaz is only in WG ballot ... how do we progress this with a conformance requirement on that document?
    - Proposed Change: remove conformance to 802.1Qaz ... or wait until 802.1Qaz catches up before RevCom submittal
    - Resolution Status: Agree
    - Resolution Detail:
    - ACCEPT. \nForward to revcom of Qbb is contingent to the completion of Qaz, as documented in the PAR.
  - No further work needed on this draft

5.14 ME 802.3bd forward to RevCom (conditional) Jeffree 10 03:15 PM

Jeffree presented “2011-03-exec-motions.pptx”, slides 14-15.

Motion is 802.1 requests conditional approval from the EC to submit 802.3bd to RevCom.

– Conditional on success of the 802.1Q-Rev and 802.1Qaz recirculations

Moved by Jeffree, seconded by Thaler

Grow remains a no voter because we are rewarding people that go out an violate the rules and then standardize the result.

Jeffree indicated that the comment had been recirculated twice.

Vote is 15/0/0, motion passes

MOTION

- 802.1 requests conditional approval from the EC to submit 802.3bd to RevCom.
  - Conditional on success of the 802.1Q-Rev and 802.1Qaz recirculations
- Proposed: thaler
- Second: desanti
  - For: 31 Against: 0 Abstain:1
- EC proposed: Jeffree Second: Thaler
- For: XX Against: XX Abstain: XX

Supporting material – P802.3bd

- Sponsor recirc ballot completed 11th September 2010
  - Results: Approve 92 (98%), Disapprove 1 (2%) Abstain 5 (5%), Responders 98 (85%)
  - 1 outstanding disapprove/comment:
    - 1 comment (Grow)
    - Comment: This is a restatement of my disatisfaction recorded in the resolution to initial ballot comment #26 (my only unresolved disapprove comment). This case is just the latest example, we simply need to stop rewarding folk that go out and violate the rules by using reserved code points, by accomodating their illegitimate use of a code point.
    - Proposed Change: Code points should have been allocated sequentially.
    - Resolution Status: Disagree
    - Resolution Detail: REJECT. See the response to comment 26 on the initial sponsor ballot.
  - No further work needed on the draft
  - Contingent on Q-REV and Qaz completing successfully

5.15 ME 802.1Qbc forward to RevCom (conditional) Jeffree 10 03:18 PM

Jeffree presented “2011-03-exec-motions.pptx”, slides 16-17.

Motion is 802.1 requests conditional approval from the EC to submit 802.1Qbc to RevCom.

– Conditional on success of the 802.1Q-Rev recirculation and the 802.1Qbc recirculation.

Moved by Jeffree, seconded by Thaler

Vote is 15/0/0, motion passes

MOTION

- 802.1 requests conditional approval from the EC to submit 802.1Qbc to RevCom.
  - Conditional on success of the 802.1Q-Rev recirculation and the 802.1Qbc recirculation.
- Proposed: Haddock Second: Mack-Crane
- For: 29 Against: 0 Abstain: 1
- EC proposed: Jeffree Second: Thaler
- For: XX Against: XX Abstain: XX
-

Supporting material – P802.1Qbc

- Sponsor recirc ballot completed 21st October 2010
  - Results: Approve 54 (98%), Disapprove 1 (2%) Abstain 4 (6%), Responders 59 (80%)
  - 1 outstanding negative (Haddock)
    - Align the draft with latest Q-REV
  - Needs recirc following alignment with Q-REV; we expect a clean recirculation
  - Recirculation ballot in March/April timeframe
  - Comment resolution if necessary at May interim meeting; possible need for a final recirc but very unlikely.

5.16 ME 802.1Qbe forward to Revcom (conditional) Jeffree 10 03:20 PM

Jeffree presented “2011-03-exec-motions.pptx”, slides 18-19.

Motion is 802.1 requests conditional approval from the EC to submit 802.1Qbe to RevCom.

– Conditional on success of the 802.1Q-Rev recirculation and the 802.1Qbe recirculation if necessary.

Moved by Jeffree, seconded by Thaler

Thaler said that it says “if necessary” because they do not know if a recirculation will be required.

Vote is 15/0/0, motion passes.

MOTION

- 802.1 requests conditional approval from the EC to submit 802.1Qbe to RevCom.
  - Conditional on success of the 802.1Q-Rev recirculation and the 802.1Qbe recirculation if necessary.
- Proposed: Haddock Second: finn
- For: 25 Against: 0 Abstain: 3
- EC proposed: Jeffree Second: Thaler
- For: XX Against: XX Abstain: XX

Supporting material – P802.1Qbe

- Sponsor recirc ballot completed 1st December 2010
  - Results: Approve 55 (98%), Disapprove 1 (2%) Abstain 5 (8%), Responders 61 (88%)
  - 1 outstanding negative (Haddock)
    - Align the draft with latest Q-REV
  - Needs recirc following alignment with Q-REV; we expect a clean recirculation (if this proves necessary)
  - Recirculation ballot in March/April timeframe
  - Comment resolution if necessary at May interim meeting; possible need for a final recirc but very unlikely.

5.17 ME 802.1Qbp PAR forward to NesCom Jeffree 5 03:20 PM

Jeffree presented “2011-03-exec-motions.pptx”, slides 20-21.

Motion is 802.1 requests approval from the EC to submit the P802.1Qbp draft PAR to NesCom.

Moved by Jeffree, seconded by Thaler

Vote is 15/0/0, motion passes

MOTION

- 802.1 requests approval from the EC to submit the P802.1Qbp draft PAR to NesCom.

- Proposed: Haddock Second: mack-crane
- For: 29 Against: 1 Abstain: 5

- EC proposed: Jeffree Second: Thaler
- For: XX Against: XXAbstain: XX

Supporting material – P802.1Qbp

- Comments from 2 EC members received & responded to
- Final text of draft PAR and 5C here:

http://ieee802.org/1/files/public/docs2011/new-ashwood-sajassi-ecmp-5c-0111-v05.pdf

http://ieee802.org/1/files/public/docs2011/new-ashwood-sajassi-ecmp-5c-0111-v04.pdf

5.19 Break **15 03:22 PM**

Meeting recessed at 3:22 pm.

Meeting called to order at 3:40 pm

5.21 ME 802.3.1 PAR revision forward to NesCom **Law** **5 03:40 PM**

Law presented “802d3_0311_closing_EC.pdf” slides 3-5.

Motion is to forward the IEEE P802.3.1 revision PAR information contained from P802.3.1REV_PAR_r1.pdf subject to the changes reflected in P802.3.1REV_PAR_r2.pdf to NesCom.

Law said that the base standard needs to be approved before the revision PAR can be approved.

Moved by Law, seconded by Thompson

Vote is 16/0/0, motion passes

IEEE P802.3.1 Ethernet MIBs revision PAR

- Title

  Standard for Management Information Base (MIB) definitions for Ethernet

- Draft PAR
  - Circulated under 48 hour rules as ‘P802.3.1REV_PAR_r1.pdf
    - Changes made at IEEE 802.3 closing plenary
  - Final draft PAR
    - See attached file ‘P802.3.1REV_PAR_r2.pdf’
- Note
  - myProject will not allow submission of a Revision PAR until the base standard has been approved. If approved this PAR can’t be submitted until IEEE P802.3.1 is approved as a standard
- Changes from pre-circulated version
  - Corrected spelling of Ethernet in item 5.6 ‘Stakeholders for the Standard’.

IEEE P802.3.1 Ethernet MIBs revision PAR

- Changes from pre-circulated version (con't)

Scope: This standard contains the Management Information Base (MIB) module specifications for IEEE Std 802.3, also known as Ethernet. It includes ~~Structure of Management Information version 2 (SMIv2) MIB module specifications and Guidelines for~~ the ~~Definition of Managed Objects (GDMO) MIB modules. The SMIv2 MIB modules are intended for use with the Simple Network Management Protocol (SNMP), commonly used to manage Ethernet. The~~ Structure of Management Information version 2 (SMIv2) MIB module specifications ~~were~~ formerly produced and published by the Internet Engineering Task Force (IETF), and the Guidelines for the Definition of Managed Objects (GDMO) MIB modules ~~were~~ formerly specified within IEEE Std 802.3~~. This standard includes~~, as well as extensions resulting from amendments to IEEE Std 802.3 that ~~were~~ are not reflected in IETF specifications. The SMIv2 MIB modules are intended for use with the Simple Network Management Protocol (SNMP), commonly used to manage Ethernet.

IEEE P802.3.1 Ethernet MIBs revision PAR

- Move to forward the IEEE P802.3.1 revision PAR information contained from P802.3.1REV_PAR_r1.pdf subject to the changes reflected in P802.3.1REV_PAR_r2.pdf to NesCom.

M: D Law, S: ???

Y: ??, N: ??, A: ??

Working Group vote:

Y: 51, N: 0, A: 0

5.22 ME 802.3.1 Etherner MIBs forward to RevCom Law 5 03:45 PM

Law presented “802d3d1_results_update.pdf” and “802d3_0311_closing_EC.pdf” slides 8-9 .

Motion is The LMSC Executive Committee grants approval to submit IEEE P802.3.1 to RevCom

Moved by Law, seconded by Thompson

Vote is 16/0/0, motion passes

IEEE P802.3.1 Ethernet MIBs forward to RevCom

- Item 1 - Date the Sponsor ballot closed:
  - IEEE 802.3.1 1st Sponsor recirculation ballot closed 11th Mar 2011
  - 98% approval, no comments received
- Item 2 - Vote tally:

Comments: 0	Initial Draft D3.0			1st Recirculation Draft D3.1			Req %
	#	%	Status	#	%	Status	
Abstain	5	7	PASS	4	6	PASS	< 30
Disapprove with comment	3	-	-	1	-	-	-
Disapprove without comment	0	-	-	0	-	-	-
Approve	56	94	PASS	60	98	PASS	≥ 75
Ballots returned	64	77	PASS	65	78	PASS	≥ 75
Voters	83	-	-	83	-	-	-

IEEE P802.3.1 Ethernet MIBs forward to RevCom

- Item 3 - Comments that support the remaining disapprove votes and WG responses
  - 7 unresolved negative comments from 1 balloter
  - See attached file ‘IEEE802d3d1_unsatisfied_comments.pdf’

IEEE P802.3.1 Ethernet MIBs forward to RevCom

- The LMSC Executive Committee grants approval to submit IEEE P802.3.1 to RevCom

  M: D Law, S: ????

  Y: ??, N: ??, A: ??

  Working Group vote:

  Y: 47, N: 0, A: 1

5.23 ME 802.3bf Time synchronization forward to RevCom (conditional) Law 10 03:49 PM

Law presented “802d3_0311_closing_EC.pdf” slides 11-15.

Motion is The LMSC Executive Committee grant conditional approval to submit IEEE P802.3bf to RevCom

Moved by Law, seconded by Thompson

Vote is 16/0/0, motion passes

IEEE P802.3bf Time synchronization Conditional to RevCom

- Item 1 - Date the ballot closed:
  - The 1st Sponsor recirculation ballot on IEEE P802.3bf draft D3.1 closed on 5th February 2011 at 11:59pm EST
- Item 2 - Vote tally:

Comments: 10	1st Recirculation Draft D3.1			Req %
	#	%	Status	
Abstain	7	6	PASS	< 30
Disapprove with comment	4	-	-	-
Disapprove without comment	0	-	-	-
Approve	91	95	PASS	≥ 75
Ballots returned	102	88	PASS	≥ 75
Voters	115	-	-	-

IEEE P802.3bf Time synchronization Conditional to RevCom

- Update in Disapprove votes
  - 4 Disapprove Votes
- At time of this report
  - 3 Voters have no unsatisfied comments
  - Email from 2 voter received indicating they will vote “APPROVE” on next draft

IEEE P802.3bf Time synchronization Conditional to RevCom

- Item 3 - Comments that support the remaining disapprove votes and WG responses
  - 1 unresolved negative comments from 1 balloter

Cl **90** *SC* **90.7** *P* **41** *L* **30** # 35

Frazier, Howard M — Broadcom Corporation

Comment Type TR *Comment Status* R

As the data delay values are reported in units of ns (as stated in Clause 45), there is an implied precision to the measurement, and this should be stated.

SuggestedRemedy

Add the following sentence to the end of 90.7: "The data delay measurements are reported with an implied precision of one ns."

Response *Response Status* W

REJECT.

We are only specyfing the delays are reported in the units of ns. There are no implied requirements for the precision of the measurements of such delay values.

IEEE P802.3bf Time synchronization Conditional to RevCom

- Item 4 - Schedule for recirculation ballot and resolution meeting
  - 2nd Recirculation
    - Estimated recirculation ballot open date – 21st March
    - Estimated recirculation ballot close date – 4th April
    - Proposed interim meeting date – 20th April
  - 3rd Recirculation (if necessary)
    - Estimated recirculation ballot open date – 28th April
    - Estimated recirculation ballot close date – 12th May
    - Proposed interim meeting date – 24th May

IEEE P802.3bf Time synchronization Conditional to RevCom

- The LMSC Executive Committee grant conditional approval to submit IEEE P802.3bf to RevCom

M: D Law, S: ????

Y: ??, N: ??, A: ??

Working Group vote:

Y: 47, N: 0, A: 0

5.24 ME 802.3bg 40 Gb/s Ethernet single-mode fiber PMD forward to RevCom Law 5 03:50 PM

Law presented “802d3_0311_closing_EC.pdf” slides 17-18.

Motion is The LMSC Executive Committee approves IEEE P802.3bg Draft D3.1 remaining on the March 2011 RevCom agenda.

Moved by Law, seconded by Thompson

Vote is 16/0/0, motion passes

IEEE P802.3bg Ethernet single-mode fiber PMD remain on RevCom agenda

- Item 1 - Date the Sponsor ballot closed:
  - IEEE 802.3bg 1st Sponsor recirculation ballot closed 28th Jan 2011
  - 100% approval, no comments received
- Item 2 - Vote tally:

Comments: 0	Initial Draft D3.0			1st Recirculation Draft D3.1			Req %
	#	%	Status	#	%	Status	
Abstain	4	4	PASS	4	4	PASS	< 30
Disapprove with comment	0	-	-	0	-	-	-
Disapprove without comment	1	-	-	0	-	-	-
Approve	89	100	PASS	94	100	PASS	≥ 75
Ballots returned	94	87	PASS	98	90	PASS	≥ 75
Voters	108	-	-	108	-	-	-

IEEE P802.3bg Ethernet single-mode fiber PMD remain on RevCom agenda

Motion

The LMSC Executive Committee approves IEEE P802.3bg Draft D3.1 remaining on the March 2011 RevCom agenda.

M: D Law, S:

Y: ??, N: ??, A: ??

Working Group vote:

Y: 45, N: 0, A: 0

5.28	**ME***	**802.15.7 PAR modification for editorial issues in scope and purpose forward to NesCom**	**Heile**	**0**	

Approved as part of the consent agenda.

5.30	**ME**	**802.15.4 revision forward to RevCom (conditional)**	**Heile**	**10**	**03:52 PM**

Heile presented “15-11-0313-00-0000-Closing EC-package-2011-03.ppt, slides 7-11.

Motion is 802.15 requests conditional approval from the EC to submit 802.15.4 revision draft to RevCom.

Moved by Heile, seconded by Gilb

Vote is 16/0/0, motion passes

802.15.4 Sponsor Ballot Information

- Ballot closed 10 March 2011
- Vote results (pool of 139 voters)
  - 139 responses (82% response ratio)
  - 105 yes, 3 no (97% approval ratio)
  - 6 abstain (5% abstain ratio)
  - Ballot passes
- 30 comments from 6 commenters
  - 21 Technical and General
  - 9 Editorial

Comments supporting no votes

- No voter #1 (Struik, 12 comments)
  - A variety of comments, some on security, some on adding new MAC features
    - 9 principle, 1 agree, 2 disagree
- No voter #2 (Chaplin, 8 comments), has accepted the resolution of his comment
- No voter #3 (Bhupender, 1 comments), has accepted the resolution of his comment
- Comments from voter 1 are in document at:
  - https://mentor.ieee.org/802.15/dcn/11/15-11-0272-01-0000-TG4i-Sponsor-comments-supporting-no-votes.ods

No voter #1 comments

- 8 security related comments
  - Areas of concern: Steps in wrong order, missing check, mistake in description of calculation field, structure needs to be re-done, etc.
  - Response: Rewrite the subclause, fixing the errors, but not using the exact text submitted by the commenter
- Group addressing referenced but not supported
  - Principle, remove reference to allowing group addressing.
- Add ability to simultaneously join multiple PANs
  - Disagree, MAC is not designed for this, but can be done by instantiating parallel MAC process.
- Add MAC source filtering
  - Disagree, not needed for security, upper layer has information needed to do this if necessary
- Editorial comment (missing ‘as’) – accepted

Schedule for ballot and meetings

- 1st recirculation
  - 4 April 2011 to 15 April 2011
- BRC comment resolution teleconference
  - 19 April, 2011, 9:00-11:00 PST
- 2nd recirculation (if necessary)
  - 25 April 2011 to 5 May 2011
- Comment resolution at May interim meeting

EC motion

- 802.15 requests conditional approval from the EC to submit 802.15.4 revision draft to RevCom.
- WG vote
  - Moved Gilb, seconded Alfvin
  - Yes: 37, No: 0, Abstain: 0
- EC vote
  - Moved Heile, seconded Gilb
  - Yes: , No:, Abstain:

5.31 ME 802.15.7 new standard forward to RevCom (conditional) Heile 10 03:55 PM

Heile presented “15-11-0313-00-0000-Closing EC-package-2011-03.ppt, slides 12-15.

Motion is 802.15 requests conditional approval from the EC to submit 802.15.7 draft to RevCom.

Moved by Heile, seconded by Gilb

Vote is 16/0/0, motion passes

802.15.7 Sponsor Ballot information

- Initial Ballot closed 30 December 2010
  - Vote results (pool of 125 voters)
    - 103 responses (82.40% response ratio)
    - 91 yes, 3 no (96.81% approval ratio)
    - 7 abstain (6.80% abstain ratio)
    - Ballot passes
- Recirculation Ballot closed 5 March 2011
  - Vote results (pool of 125 voters)
    - 106 responses (84.80% response ratio)
    - 94 yes, 3 no (96.91% approval ratio)
    - 7 abstain (6.60% abstain ratio)
    - Ballot passes

Comments supporting no votes

- 327 total comments received, 294 comments from three negative voters, 276 “Must Be Satisfied” comments
- 239 of the 276 were editorial, 37 were technical
- Five “Must Be Satisfied” comments from one voter that were rejected
- Three comments that pointed out that some annexes were normative; voter thought that was disallowed.
  - Comments rejected; resolution quotes IEEE style guide that allows normative annexes.
- Two comments asking that a feature of the standard be replaced with a different solution.
  - Request was not raised in initial ballot, only in recirculation.
  - Proposed solution did not add any better functionality than existing solution.
- 15-11-0169-11-0007-sponsor-ballot-2-comments.xls

Schedule for ballot and meetings

- 1st recirculation
  - 4 April 2011 to 15 April 2011
- BRC comment resolution teleconference
  - 20 April, 2011, 21:00-22:00 PDT
- 2nd recirculation (if necessary)
  - 25 April 2011 to 5 May 2011

EC motion

- 802.15 requests conditional approval from the EC to submit 802.15.7 draft to RevCom.
- WG vote
  - Yes: 34, No: 0, Abstain: 0
- EC vote
  - Moved Heile, seconded Gilb
  - Yes: , No:, Abstain:

6.00		**Executive Committee Study Groups, Working Groups, TAGs**			
6.01	**MI***	**802.3 100 Gb/s Ethernet electrical backplane and copper cable assemblies (1st extension)**	**Law**	**0**	

Approved as part of the consent agenda.

6.02	**MI***	**802.15 TV white space (1st extension)**	**Heile**	**0**	

Approved as part of the consent agenda.

6.03	**MI**	**802.15 Personal space communications (3rd extension)**	**Heile**	**5**	**03:57 PM**

Heile presented “15-11-0313-00-0000-Closing EC-package-2011-03.ppt, slide 16.

Motion is to renew the personal space communications study group.

Moved by Heile, seconded by Gilb

Vote is 16/0/0

Study Group Renewals

- 15.4 TV White Spaces (4TV) 1st renewal
  - Consent Agenda

- Personal Space Communication (PSC) 2nd renewal (WG vote: 45-0-0)
  - Move the EC renew the PSC Study Group

  Moved: Heile Second: Gilb

7.00		**LMSC Liaisons and External Interface**			
7.01	**MI**	**802 representation at June 2011 ISO JTC1 SC6 meeting**	**Kraemer**	**10**	

Skipped because it is on the agenda later.

7.02	**ME***	**IEEE 802.3 Interpretation 1-3/11 response**	**Law**	**0**	

Approved as part of the consent agenda.

7.03	**ME***	**IEEE 802.3 Interpretation 2-3/11 response**	**Law**	**0**	

Approved as part of the consent agenda.

7.04	**ME***	**Liaison letter to ITU-T Study Group 15 'Documents from IEEE P802.3bf'**	**Law**	**0**	

Approved as part of the consent agenda.

7.05	**ME***	**Liaison letter to ITU-T Study Group 15 'Copper 10 Gbit/s PHY asymmetry'**	**Law**	**0**	

Approved as part of the consent agenda.

7.06	**ME***	**Liaison letter to ITU-T Study Group 15 'Ethernet bandwidth assessment'**	**Law**	**0**	

Approved as part of the consent agenda.

7.07	**II**	**Liaison letter responding to the ITU-T Q9/15 liaison.**	**Jeffree**	**2**	**03:59 PM**
7.08	**II**	**Liaison letter responding to the IETF/TRILL liaison.**	**Jeffree**	**2**	**03:59 PM**

Jeffree spoke regarding the liaison letters. There were no questions or comments.

7.09	**ME***	**802.16m press release, document IEEE 802.16-11/0013**	**Marks**	**0**	

Approved as part of the consent agenda.

7.10	**ME***	**802.18 update of sub-clause 5.6, 18-11-0031-00-0000**	**Lynch**	**0**	

Approved as part of the consent agenda.

7.11	**ME***	**802.18 Proposed modifcation to PDNR (IMT-RSPEC) 18-11-0024-0000**	**Lynch**	**0**	

Approved as part of the consent agenda.

7.12	**ME***	**802.18 Contribution onWP1A PDNR on Smart Grid (18-11-0024-02-0000)**	**Lynch**	**0**	

Approved as part of the consent agenda.

7.13	**ME***	**802.18 Cover letter for the input ITU-R WP1A (18-11-0035-00-0000)**	**Lynch**	**0**	

Approved as part of the consent agenda.

7.14	**ME**	**JTC1 HoD Appointment to SC6 June 2011 Meeting**	**Rosdahl**	**3**	**04:01PM**

Rosdahl presented 11-11-0476-00-0000-802-11-motions-for-march-2011-closing-ec-meeting.ppt, slides 3-4.

Motion is to appoint Bruce Kraemer as Head of Delegation of the IEEE 802 delegation to the SC6 meeting in San Diego in June 2011 and grant authority to add other interested parties to the delegation.

Thompson asked if it was possible for 802 to participate in SC6 plenary.

Law said that this cannot be an IEEE delegation as it would require going the external representative process.

Kraemer said it could be changed to specifically list it as working group 1.

Andrew Myles (Cisco Systems) says that we have a formal liaison with SC6.

Thompson said that it would be different if we participated as a liaison delegation.

Myles said that we were certainly not going as an O or a P.

Thompson suggested that it be changed to say: “to appoint Bruce Kraemer as Head of IEEE 802 Liaison Delegation to the SC6/WG1 meeting in San Diego in June 2011 and grant authority to Bruce Kraemer to add other interested parties to the delegation.”

Motion is now: “to appoint Bruce Kraemer as Head of IEEE 802 Liaison Delegation to the SC6/WG1 meeting in San Diego in June 2011 and grant authority to Bruce Kraemer to add other interested parties to the delegation.”

Marks asked if we have a connection through IEEE Computer Society. He suggested that Kraemer contact Bruce More to coordinate.

Myles confirmed that IEEE 802 LMSC has a liaison with SC6/WG1.

Moved by Rosdahl, seconded by Heile

Vote is 16/0/0, motion passes

Law said that he had done some research and that the owning board committee for SC6 is 802 LMSC and the external representative is Jeffree. Therefore we have the authority so set IEEE position. We can also appoint a new ER, but that there is a conflict of interest process that must be gone through.

Thompson said that we can recommend, but that it is confirmed by the SA.

Grow suggested that it might be BoG that needs to confirm the appointment.

Law suggested that we take this off-line and potentially use an email ballot.

WG11 Motion:
Appoint HoD to SC6 meeting

- **The IEEE 802.11 WG recommends to IEEE 802 ExCom that Bruce Kraemer be appointed Head of Delegation of the IEEE 802 delegation to the SC6 meeting in San Diego in June 2011.**
- **The WG also recommends that as Head of Delegation that he have the authority to add other interested parties to the delegation**

- **Moved by Andrew Myles**
- **Seconded:Ian Sherlock**
- **Result: 45/0/0**

802 EC Motion: Appoint HoD to SC6 meeting

- **Move to appoint Bruce Kraemer as Head of Delegation of the IEEE 802 delegation to the SC6 meeting in San Diego in June 2011 and grant authority to add other interested parties to the delegation.**

- **Moved: Jon Rosdahl;**
- **2nd**

7.15 ME JTC1 Identifier conflict liaison to SC6 Kraemer 3 04:15 PM

Kraemer presented “11-11-0476-00-0000-802-11-motions-for-march-2011-closing-ec-meeting.ppt”, slides 5-7.

Motion is to send the content of 11-11-404r0 to ISO/IEC JTC1/SC6. Bruce Kraemer is granted authority to make editorial changes including an appropriate cover letter and the insertion of allocated ANA values.

Moved by Kraemer, seconded by Rosdahl

Vote is 16/0/0, motion passes

WG11 Motion:
Allocate an IE identifier and two status codes

- **The IEEE 802.11 WG approves the IEEE 802.11 ANA allocating two status codes and an IE identifier for use by ISO/IEC JTC1/SC6/WG1 in the proposed WAPI standard**

- **Moved by Andrew Myles**
- **Seconded:Richard Kennedy**
- **Result: 41/0/0**

WG11 Motion: Identifier conflict liaison to SC6

- **IEEE 802.11 WG recommends to IEEE 802 ExCom and IEEE International ad hoc that:**
  - The content of 11-11-404r0 be sent to ISO/IEC JTC1/SC6 with an appropriate cover letter
  - Bruce Kraemer be given authority to make editorial changes, including the insertion of allocated ANA values

- **Moved by Andrew Myles**
- **Seconded: Michael Montemurro**
- **Result: 45-0-1**

802 EC Motion: Identifier conflict liaison to SC6

Move to send the content of 11-11-404r0 to ISO/IEC JTC1/SC6.

- Bruce Kraemer is granted authority to make editorial changes including an appropriate cover letter and the insertion of allocated ANA values.

- **Move Bruce Kraemer;**
- **2nd Jon Rosdahl**

Kraemer presented “11-11-0476-00-0000-802-11-motions-for-march-2011-closing-ec-meeting.ppt”, slides 8-9.

Motion is to send the content of 11-11-442r1 to ISO/IEC JTC1/SC6

- Paul Nikolich is granted authority to make editorial changes including an appropriate cover letter. (due before 15 May 2011)

Moved by Kraemer, seconded by Rosdahl

Vote is 16/0/0, motion passes

WG11 Motion: 1X/1AE liaison to SC6

- **The IEEE 802.11 WG recommends to IEEE 802 ExCom and IEEE International ad hoc that:**
  - The content of 11-11-442r1 be sent to ISO/IEC JTC1/SC6 with an appropriate cover letter
  - Paul Nikolich be given authority to make editorial changes

- **Moved by Andrew Myles**
- **Seconded: Ian Sherlock**
- **Result: 43/0/1**

802 EC Motion: 1X/1AE liaison to SC6

Move to send the content of 11-11-442r1 to ISO/IEC JTC1/SC6

- Paul Nikolich is granted authority to make editorial changes including an appropriate cover letter.

Moved: Bruce Kraemer

2nd: Jon Rosdahl

7.17	**ME**	**802.18 Motion to empower document review and relase**	**Lynch**	**5**	**04:22 PM**

Item is postponed due to laptop to projector issues.

8.00		**IEEE SA items**			
8.01	**II**	**802 Task force report**	**Nikolich**	**15**	**04:24 PM**

Nikolich discussed the 802 Task Force meeting.

Nikolich said

- that the IEEE SA would like a few volunteers to participate.
- Still working on the Get IEEE 802 budget, may be available for the EC conference call
- Turner is going to continue with the fast publishing trial. However, the editorial staff is already very fast and so it may not require any special process..

Grow said that John Messenger would be qualified to be an ER to ITU-T. He also said that OBC (i.e., 802 LMSC for SC6) appoints the ER.

John Messenger (ADVA Optical networking) said that it may be possible for 802 to be the OBC for ITU-T.

Grow clarified that OBC is owning board/committee, ER is external representative, which is someone authorized to speak for the IEEE.

Nikolich continued with items from the meeting. They discussed the P1900.7 PAR, but decided that an 802 wide position on the PAR was not needed.

8.02	**ME***	**Forward comments to AudCom**	**Sherman**	**0**	

Approved as part of the consent agenda.

8.03	**II**	**Status of 802 feedback 1o 1900.7**	**Mody**	**10**	**04:30 PM**

Mody wanted to know the feedback from the groups regarding the PAR.

Rosdahl said that the feedback from 802.11 is contained in document 11-11-0433-01.

Shellhammer said that 802.19 held a joint meeting. Results are in 19-11-0030-00. Members attended from 802.11, 802.15, 802.16, 802.19 and 802.22. The results were sent to the author of the PAR.

Mody said that 802.22 comments are contained in the 802.19 document.

Heile said that 802.15 comments were aggregated in the 802.19 document.

Marks said that 802.16 developed comments and attended the joint meeting. 802.16 sent their comments directly to the committee. The results were sent to the EC reflector.

Item 7.17 is now taken up.

Lynch presented 18-11-0038-00-0000-rr-tag-ec-motions.ppt.

Motion is to authorize the Chair of 802.18 to do the necessary editorial and formatting changes to Doc. 18-11-0033 and, contingent on approval by 802.18, submit it to ITU-R WP5D as an 802 document.

Moved by Lynch, seconded by Marks

Kraemer said it was unusual for 802 to approve a document that 802.18 has not yet approved.

Marks said that the document was simple and the only task is to insert terms, definitions and acronyms from the standard.

Nikolich asked if Kraemer had an objection to the motion.

Kraemer said that it was OK this time as it is a simple document.

Vote is 15/0/1, motion passes

802.18 Motion to SEC

Agenda: 7.17
Date: 03/18/2011
Time: 5:26 p.m.

Motion by: Lynch **Seconded by:** Marks

Moved:

To authorize the Chair of 802.18 to do the necessary editorial and formatting changes to Doc. 18-11-0033 and, contingent on approval by 802.18, submit it to ITU-R WP5D as an 802 document.

Informative: This document provides vocabulary and definitions taken from the 802.16 standard to be used in the update of Recommendation ITU-R M.1224 "Vocabulary of terms for International Mobile Telecommunications-2000 (IMT-2000)"

Approve: 0 **Do Not Approve:** 0 **Abstain:** 0 **Motion: Approved**

9.00		**Information Items**			
9.02	**II**	**Update on upcoming venues**	**Rigsbee**	**5**	**04:46 PM**

Rigsbee displayed the web page for future meetings, http://ieee802.facetoface-events.com/future.

Nikolich asked how many people would be in favor of Heile continuing to explore China for July 2014. 12 were in favor.

Straw poll: Who would be in favor of returning to this venue, 12 were in favor.

Rigsbee clarified that the next opportunity would be in 2015.

Rigsbee said that to do nNA venues we need a host.

Rosdahl said that we had discussed self-hosting as well.

Rigsbee said that there are venues where we could be self hosted, but it helps to have a sponsor locally to help out. We already have commitments from our hosting organizations for this meeting for up to 2 more meetings in Singapore, the next of which could be in 2015.

Thaler said that we should differentiate between a host and sponsor. A sponsor makes a financial contribution, a host provides on-site assistance.

Login

IEEE 802 LAN/MAN Standards Committee

Sunday, March 20, 2011 07:36:39 PDT

Future IEEE 802 Plenary Sessions

2011

March 13-18	**Marina Bay Sands Singapore**
July 17-22	**Hyatt Regency San Francisco at Embarcadero Center San Francisco, California USA**
November 6-11	**Hyatt Regency Atlanta Atlanta, Georgia USA**

2012

March 11-16	**a non-North American venue: to be determined**
July 15-20	**Grand Hyatt Manchester San Diego, California USA**
November 11-16	**Grand Hyatt San Antonio San Antonio, TX USA**

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9.06	**II**	**Regulatory report**	**Lynch**	**10**	**04:53PM**

Lynch said that they approved a document as an initial response for Smart Grid in ITU-R.

9.08	**II**	**Executive secretary report**	**Rosdahl**	**5**	**04: 54 PM**

Rosdahl presented ec-11-0007-00-00EC-executive-secretary-agenda-items-for-march-2011.ppt slide 8.

Rosdahl discussed the responsibilities and results of his time as executive secretary.

Nikolich said that he would like Rosdahl to provide highest quality audio bridge experience for EC teleconference.

Marks said that it is important to be able to mute lines that are poor quality.

Rosdahl said that there are tools, but that we need to learn how to use it.

Thaler said that it would be good to have tool for web presentation for new member orientation the week before.

Rick Alfvin (VeriLAN) said that they facilitate conferencing for ICANN and the have experience and he would be happy to discuss the services that they provide.

Nikolich said that there was a tremendous amount of good content in the slides as well as with the words that go along with the presentation.

Bob LaBelle (IEEE) said that there is a portion of second life that has the ability to create a video using an avatar with the dialog from the meeting.

Shellhammer asked if the 802 workshop slides had been posted.

Gilb said that they had, but the EC members should check to make sure they are the most recent.

9.06 - Executive Secretary report

- **Job description report:**
  - **Oversee the Meeting Manager and assist in LMSC sponsored activities and services.**
    - Have worked with Buzz and assisted in meeting logistics and services.
  - **Test, Evaluate and explore tools, methods and means to improve the efficiency of LMSC meetings**.
    - Logistic improvements
      - Evaluation of Phone bridge
      - Evaluation of remote sharing
    - Technology can solve some but not all problems.
  - **Oversee maintenance of Sponsor Registration Database.**
    - No reported problems.

Nikolich said that this is an opportunity for the EC to air their concerns regarding SA support.

Thompson said that at our workshop we came up with a list of deficiencies, but very little has changed in almost 2 years.

Marks said that on the 802 Task Force meeting the SA acted as if they had just learned that there is a problem buying drafts, despite 10 years of telling them that there are issues.

Rigsbee said that he is still waiting for $1 downloads of standards. We deserve better than that.

Law said that buying drafts is better, even if there are still problems.

Thaler said that she had problems getting finished standards from IEEE IEL, the search feature was not able to find them. From the drop-down list of 802, many 802.1Q standards did not show up. When it was redesigned, they broke the listing capability. Thaler sent an email but has not received a response to the problem.

Marks is still having problems navigating the standards publishing system. For example, it was his understanding that 802.16m would be published at approval time. He had started working on this in November, but now the publication date will be later by 6 weeks.

Nikolich said that the way is to elevate these issues to the highest level.

Thompson said that myBallot is user hostile. It has been broken for many years.

Thaler said that when you go in to get the ballot results, there is no way to get the comments of disapprove voters from previous ballots. They do not roll up the disapprove comments from previous recirculations.

Marks said that you cannot even download the raw data so that you can process it off-line.

Thompson said that it treats it as a collection of spreadsheets rather than as a database.

Nikolich asked how we submit these to the SA and then get feedback.

Thompson said that merely feeding back criticism is not useful.

Heile has total disdain for working with myProject and his feedback is totally ignored.

Rosdahl wanted to address the question on how to get the feedback back, we should use our liaisons from the IEEE.

Law said that they do prioritize the tickets that are received. He has not seen tickets stating the problems.

Gilb said that he got response to a problem with the myProject PAR form that said "The process would flow smoothly except that we run into amendments being started before base standards are approved." In essence, the response was that the problem is with groups that move rapidly, not that the tool is broken.

Grow said that his response from people working with the tools is better. When he has had problems with the tool, he gets a fast response. However, requests for new features are not as successful. For example, adding the ability for commenters to indicate comments for which they are satisfied is not possible.

Das said that IETF uses a tool that shows the status of the document and the progress.

Nikolich asked for a volunteer to be the point of collection for comments.

Thaler volunteered for myBallot.

Thompson said that the problem is not the management does not know about the problem, but that the management does not have the will to fix the problems.

Nikolich said that we now have a process for macro issues, send them to Thaler.

Marks said that reporting comments that were satisfied was part of the original design, but it was never implemented.

Nikolich brought up a non myBallot item. Trish and Michelle were stuck at Narita and Terry deCourcelle decided not to attend, despite needing a senior staff member at the meeting.

Nikolich acknowledged that LaBelle did come at the last minute to attend the meeting so that we could have senior staff representation at the meeting. LaBelle was acknowledged by applause.

Thompson said that his view is that staff in Piscataway did do what they could to provide representation at the meeting.

Gilb suggested that we have outside backup of our data.

Nikolich asked for a straw poll of if we should have outside IEEE backup of our data. 11 said yes.

Gilb was assigned to look at this.

Thaler said that this should cover all documents, not just mentor.

Gilb said that it should cover all the documents and our web site.

9.10	**II**	**Appeals report**	**Gilb**	**1**	**05:34 PM**

Gilb had no appeals to report.

9.11	**II**	**Network Services report**	**Alfvin**	**2**	**05:35 PM**

Alfvin discussed the network services for the week.

There was an issue with the earthquake disturbing a major internet connection.

There was an issue with mentor and scripts slowing down the server.

Thompson said that he is well know for his ability to gripe. However he was extremely pleased with the attitude and quality of service from VeriLAN.

Grow said that he will be doing finances differently than Hawkins. He will be using a bookkeeping service. He said that we will be discuss renewing VeriLAN's contract at the next meeting.

Nikolich recognized Trica Gerdon for her work at the her first plenary and Michelle Turner as well. Both were recognized with applause.

10.00	**ADJOURN SEC MEETING**	**Nikolich**		**06:00 PM**

Meeting adjourned at 5:38 pm

Respectfully submitted
James Gilb
IEEE 802 LMSC Recording Secretary