

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

Friday, January 22, 2016 – 13:00.
All times Eastern Standard Time (EST)

Atlanta, GA, USA

EC members present:

Paul Nikolich – Chair, IEEE 802 LAN/MAN Standards Committee
Pat Thaler – 1st Vice Chair, IEEE 802 LAN/MAN Standards Committee
James Gilb – 2nd Vice Chair, IEEE 802 LAN/MAN Standards Committee
Clint Chaplin – Treasurer, IEEE 802 LAN/MAN Standards Committee
Jon Rosdahl – Executive Secretary, IEEE 802 LAN/MAN Standards Committee
Glenn Parsons – Chair, IEEE 802.1 – HILI Working Group
David Law – Chair, IEEE 802.3 – Ethernet Working Group
Adrian Stephens – Chair, IEEE 802.11 – Wireless LAN Working Group
Bob Heile – Chair, IEEE 802.15 – Wireless PAN Working Group
Roger Marks – Chair, IEEE 802.16 – Broadband Wireless Access 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
Tim Godfrey – Chair, IEEE 802.24 – Vertical Applications TAG

Non-voting members present:

Geoff Thompson – Member Emeritus

EC members absent:

John D'Ambrosia – Recording Secretary, IEEE 802 LAN/MAN Standards Committee
Apurva Mody – Chair, IEEE 802.22 – Wireless RANs Working Group

Non-voting EC members absent:

John Lemon – Chair, IEEE 802.17 – Resilient Packet Ring Working Group
Radhakrishna Canchi – Chair, IEEE 802.20 – Mobile Broadband Wireless Access Working Group

Other attendees:

Rich Kennedy – Unlicensed Spectrum Advocates.
Peter Ecclesine – Cisco Systems
Walter Pieniak – IEEE
Osama Aboul-Magd – Huawei
Micael Mayer – Huawei Technologies Canada, Ltd.
Hesham Elbakoury – Huawei
Baewon Lee – Newracom
Jeonghwan Park – Newracom
Dimitri Kirimis – Newracom
Sean Coffey – Realtek Semiconductor
Jonathan Golderg – IEEE-SA
Guido Heirtz – Ericsson
Edward Au – Huawei
Bob Grow – RMG Consulting
Juan Carlos Zuniga – Interdigital Labs
John Messenger – Adva Optical Networking Ltd.
Kome Oteri – Interdigital Communications, Inc.
Dorothy Stanley – Hewlett Packard Enterprise
Rolf De Vegt – Qualcomm

Junichi Iwatani – NTT
 Stephen McCann - Blackberry
 Dimitry Cheriansky – SiBEAM
 Prabodh Varshney – Nokia
 Hyeong-Ho Lee – ETRI
 Shusaku Shimada – Schubiquist Technologies Guild
 Yasu Inoue - NTT

Meeting called to order at 13:00

V2		AGENDA - IEEE 802 LMSC EXECUTIVE COMMITTEE LEADERSHIP CONFERENCE			
		Friday 1:00PM-5:00PM ET, 22 Jan 2016			
		Special Orders			
1.00		MEETING CALLED TO ORDER	Nikolich	0	01:00 PM

James Gilb was appointed acting Recording Secretary by the Chair as the Recording Secretary pro-tem.

Nikolich is the acting Chair in the absence of Law, who is in an 802.3 meeting.

Gilb recorded two EC affiliation changes.

EC affiliation changes:
 Jon Rosdahl – Qualcomm
 James Gilb – Self

Gilb called the roll, 13 voting members present.

2.00		Review / approve agenda, administration items	Nikolich	5	01:00 PM
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Motion is to approve the agenda ec-16-0004-02-00EC
 Moved by Das, second Rosdahl
 12/0/0 – Motion passes.

V2		AGENDA - IEEE 802 LMSC EXECUTIVE COMMITTEE LEADERSHIP CONFERENCE			
		Friday 1:00PM-5:00PM ET, 22 Jan 2016			
		Special Orders			
1.00		MEETING CALLED TO ORDER	Nikolich	0	01:00 PM
2.00		Review / approve agenda, administration items	Nikolich	5	01:00 PM
3.00		5G and IMT-2020: What it is, its relevance, and ways to participate	Stephens / Marks	90	01:05 PM
4.00		Discussion of the impact of updated patent policy on IEEE 802	Nikolich	30	02:35 PM
5.00		Break		15	03:05 PM
6.00		Attendance requirements for obtaining membership	Stephens	30	03:20 PM
7.00		Radio regulatory (RR) process plan - discuss results of ad hoc	Thaler	45	03:50 PM
8.00		End of Day Wrap up	Nikolich	15	04:35 PM
9.00		Break for Day			05:00 PM

Saturday 8:00AM-5:00PM ET, 23 Jan 2016

10.00		MEETING RECONVENED	Law	0	08:00 AM
11.00		Review / approve agenda, administration items	Law	15	08:00 AM
12.00		Clarification on 'affiliated block' text	Thompson	60	08:15 AM
13.00		Final clarification of the indemnification policy	Nikolich	60	09:15 AM
14.00		Break		15	10:15 AM
15.00		A single sentence tag line for 802 projects, press releases, and similar	Gilb	15	10:30 AM
16.00		Discussions on the development of YANG models	Law	30	10:45 AM
17.00		Can a Study Group develop more than one PAR?	Law	45	11:15 AM
18.00		Lunch		60	12:00 PM
19.00		2 year backward (actuals) and 2 year forward looking (budgetary estimates) for the 802 treasury	Nikolich	60	01:00 PM
20.00		IEEE 802 plans for IMT-2020	Stephens / Marks	60	02:00 PM
21.00		Break		15	03:00 PM
22.00		Draft distribution and USPTO	Thompson	30	03:15 PM
23.00		End of Day Wrap up	Law	15	03:45 PM
24.00		**802 EC Executive Session** Get program, Treasury	Marks / Chaplin	60	04:00 PM
25.00		ADJOURN			05:00 PM

3.00		5G and IMT-2020: What it is, its relevance, and ways to participate	Stephens / Marks	90	01:04 PM
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Marks presents ec-16-0010-00

IEEE is a sector member (not IEEE-SA)

IEEE is represented by Michael Lynch in ITU-R.

Question: How does IEEE tell ML what is IEEE's position? Lynch says that his charter is to only present non-conflicted positions. If he can't get consensus, he is to go to the BoG.

Question: Is Lynch speaking with the IEEE-SA 5G steering committee? Discussion on how IEEE positions would be formed. Discussion regarding individual WGs submitting liaison statements directly.

Discussion regarding 802.16's submission to IMT-Advanced.

Discussion on ITU Radio Regulations and WRC.

Can we introduce 802 as unlicensed IMT?

802.11 is an RLAN in other ITU specifications.

ITU-T is looking to be a big player in non-radio IMT technologies, e.g., backhaul. This could lead to new standards work.

Items:

IEEE 802 participants should be engaged in ITU-R Task Group 5/1 for WRC 19

We could put in IEEE 802 standards as an amendment to the existing IEEE radio interface (802.16 WirelessMAN-Advanced).

Discussion on ways to get into IMT.

Stephens presents 11-15-1528-02

Nikolich gave the results of the straw poll in IEEE 802.11 WNG

Yes 55, No 6, Need more information 27

Are you interested in participating

Yes 37, No 24, Need more information 25

Will your Sponsor support participation

Yes 12, No 29, Need more information 34

Stephens reported on other straw polls in 802.11.

Nikolich works on getting consensus on actions:

1. Should 802 establish a "5G" 802 EC Standing committee?
2. What would the scope and purpose?
3. What are the success criteria?

Suggestion that the standing committee be tasked with writing a report that identifies the costs, benefits, and the level of support.

AI: 2016-01-1: Parsons will track ITU-T FG 13 and ill update on it in March 2016 during the IEEE 802 ITU-T SC.

AI: 2016-01-2: All EC members are to formulate ideas for the three questions for the item 20 on Saturday.

5G and IMT-2020: What it is, its relevance, and ways to participate

Document Number: IEEE 802-ec-16-0010-00-00EC

Date Submitted:

2016-01-22

Source:

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Venue:

IEEE 802 EC Workshop

2016-01-22, Atlanta, GA, USA

Purpose:

To elucidate issues related to 5G and IMT-2020, raising points regarding the participation of IEEE 802.

Notice:

This document represents the views of the author and is offered as a basis for discussion.

5G and IMT-2020: What it is, its relevance, and ways to participate

Roger B. Marks
EthAirNet Associates

Disclaimer

1. These are my personal views, not necessarily representative of any organization.
2. There is a lot of material to review, and this presentation is far from optimal.
 - Way too many words; no figures.
 - I didn't have time to make it better.
 - Sorry about that.

Previous IEEE 802 Tutorials

- <http://ieee802.org/Tutorials.shtml>:
 - *IEEE 802.16 and IMT-Advanced* (2006-11-10)
 - *IEEE 802.16 in IMT-Advanced* (2011-03-14)
 - *802.11 as a Component* (2015-07-13)
 - *Perspectives on IEEE 802.11 in NGMN/5G* (2015-09-11)
- Also, see the many presentations this week in 802.11 WG.
 - IEEE 802.11-15/0004, IEEE 802.11-16/0127

IMT

- Standards developed in ITU
 - ITU-R Working Party 8D (originally 5F)
- Recommendation ITU-R M.1457
 - *Detailed specifications of the terrestrial radio interfaces of International Mobile Telecommunications-2000 (IMT-2000)*
 - First version: year 2000; currently at rev. 12
- Recommendation ITU-R M.2012
 - *Detailed specifications of the terrestrial radio interfaces of International Mobile Telecommunications-Advanced (IMT-Advanced)*
 - First version: year 2012; currently at rev. 2
- Many related recommendations (standards) and reports
- Foresees new versions of IMT, around every 10 years.
 - The informal name “IMT-2020” for the next one seems to have stuck.

ITU Sectors

- ITU-R: ITU Radiocommunication Sector
- ITU-T: ITU Telecommunication Standardization Sector
- ITU-D: ITU Telecommunication Development Sector
- IEEE is a “sector member” of all sectors
- contributions come from members; e.g. IEEE
- IEEE’s ITU-R Technical Liaison: Mike Lynch

ITU-R Working Party 5D

- generally meets 3 times per year
- throughout the world
- usual schedule is Wednesday-Wednesday, so essentially a two-week meeting
- several hundred people, many from governments, cellular operators, and large vendors
- heavily bureaucratic, tradition-bound, and culture-sensitive
 - everything should be done as it has been done before
- no voting

IMT's unique documentation

- Historically, standards are based around special “external organizations,” driven by 3GPPs
- M.1457 and M.2012 include:
 - summary descriptions of technologies
 - reference to “Global Core Specifications” (GCS)
 - e.g. specifications of 3GPP, 3GPP2, IEEE, etc. stored at ITU web site
 - “transpositions”: standards based on GCS, published by (e.g.) 3GPP partners (SDOs)

IEEE Standards in IMT

- On 19 October 2007, IEEE 802.16's WirelessMAN-OFDMA was adopted into Recommendation ITU-R M.1457, the IMT-2000 standard.
 - following intensive IEEE 802.16 effort starting in 2006
- On 18 January 2012, IEEE's 802.16's WirelessMAN-Advanced was adopted into the initial Recommendation ITU-R M.2012, the IMT-Advanced standard.
 - following intensive IEEE 802.16 effort starting in 2006
 - P802.16m Scope: *This standard amends the IEEE 802.16 WirelessMAN-OFDMA specification to provide an advanced air interface for operation in licensed bands. It meets the cellular layer requirements of IMT-Advanced next generation mobile networks. This amendment provides continuing support for legacy WirelessMAN-OFDMA equipment.*
 - notified WP 5D, Dec. 2006

IMT-Advanced Requirements

- Requirements in four “test environments”
 - Indoor
 - Urban microcell
 - Base coverage urban
 - High speed (350 km/h)
- radio interface technology (RIT)
- set of radio interface technologies (SRIT)
- *RIT or SRIT will be accepted for inclusion in the standardization phase if, as the result of deliberation by ITU-R, it is determined that the RIT or SRIT meets the requirements... for three of the four test environments ...*
- IEEE 802.16 members participated intensively in setting the requirements.
 - Others too, including 802.11 Chair for a time
 - even indoor was a challenge for 802.11 to meet
- The requirements demand a model of a broader network above Layer 2.

Scale of IMT-Advanced Contributions

- When IEEE 802.16 was active in IMT-Advanced, it had ~500 members
- Initial IEEE WirelessMAN-Advanced proposal: 161 pages
 - with references to other documents developed within the 802.16 Working Group as part of the 802.16m development, which was based around the intent to submit for IMT-Advanced.
 - IEEE 802.16m System Requirements Document (SRD): 31 pp.
 - IEEE 802.16m System Description Document (SDD): 170 pp.
 - IEEE 802.16m Evaluation Methodology Document (EMD): 199 pp.
 - System Evaluation Details for IEEE 802.16 IMT-Advanced Proposal (SED): 240 pp.
- extensive simulation effort underlay the results

WATO

- IEEE coordinated formation of a “WirelessMAN-Advanced Transposing Organizations” (WATO) group
 - included ARIB (Japan), TTA (Korea), WiMAX Forum, IEEE
 - negotiated terms in a formal meeting
 - later ITRI (Taiwan)
 - because SDOs wanted to transpose IEEE standards and wanted to do so under a formalized cooperation, parallel to 3GPP

ITU Radio Regulations (2012)

- Technology-specific language is rare however:
- *The band 450-470 MHz is identified for use by administrations wishing to implement International Mobile Telecommunications (IMT)... This identification does not preclude the use of this band by any application of the services to which it is allocated and does not establish priority in the Radio Regulations.*
- Similar language appears 8 times.
- Also, “*The bands 1 885-2 025 MHz and 2 110-2 200 MHz are intended for use, on a worldwide basis, by administrations wishing to implement IMT.*”
- *International Mobile Telecommunications (IMT) includes IMT-2000 and IMT-Advanced*

WRC2015 and IMT

- World Radio Conference (WRC) establishes radio regulations
 - Met in November 2015 (WRC2015); Planning for WRC2010
- WRC2015 press release refers to future work toward new spectrum for “mobile broadband”
- WRC does not use the term “mobile broadband”. It identifies bands for “IMT”, which narrowly refers to a particular set of ITU standards, not to general mobile broadband technologies.
 - “IMT” appears 247 times in the WRC2015 Final Acts
 - “IMT is the root name that encompasses IMT-2000, IMT-Advanced and IMT-2020 collectively”
- Historically IMT would probably be considered “mobile broadband.” However, WRC2015 adopts WP 5D view that “IMT systems are now being evolved to provide diverse usage scenarios and applications such as enhanced mobile broadband, massive machine-type communications and ultra-reliable and low-latency communications.”
- Threats: spectrum being limited to IMT technologies and being identified for a broad set of application.

Working Party 5D, for WRC 2019

- *Studies on the technical and operational aspects of radio networks and systems, as well as spectrum needed, including possible harmonized use of spectrum to support the implementation of narrowband and broadband machine-type communication infrastructures, in order to develop Recommendations, Reports and/or Handbooks...*

New ITU-R Task Group 5/1, for WRC 19

- *to conduct and complete in time for WRC19 the appropriate studies to determine the spectrum needs for the terrestrial component of IMT in the frequency range between 24.25 GHz and 86 GHz, taking into account:*
 - *technical and operational characteristics of terrestrial IMT systems that would operate in this frequency range, including the evolution of IMT through advances in technology and spectrally efficient techniques;*
 - *the deployment scenarios envisaged for IMT-2020 systems and the related requirements of high data traffic such as in dense urban areas and/or in peak times; ...*
- *to conduct and complete in time for WRC19 the appropriate sharing and compatibility studies, taking into account the protection of services to which the band is allocated on a primary basis, for the frequency bands:*
 - *24.25-27.5 GHz, 37-40.5 GHz, 42.5-43.5 GHz, 45.5-47 GHz, 47.2-50.2 GHz, 50.4-52.6 GHz, 66-76 GHz and 81-86 GHz, which have allocations to the mobile service on a primary basis; and*
 - *31.8-33.4 GHz, 40.5-42.5 GHz and 47-47.2 GHz, which may require additional allocations to the mobile service on a primary basis*
- IEEE 802 participants should be engaged

Licensed/Unlicensed

- It is generally presumed that IMT radios are licensed.
- The radio regulations do not talk about licensing; that is up to administrations to decide.
- REPORT ITU-R M.2320 (“Future technology trends of terrestrial IMT systems”, 2014) says:
 - *The trend to integrate multiple radio access technologies seamlessly will accelerate due to the need to integrate new spectrum bands, licensed and unlicensed to meet capacity demands, and to support usages such as IoT wherein IoT devices with non-cellular radio may connect to cellular network through a multi-radio gateway.*
- Is the door open for WRC to “identify” spectrum for IMT with the expectation that the usage will be license-exempt?
 - May be useful to get some expert views on this.

ITU-T Focus Group on IMT-2020

- Part of ITU-T SG 13
- networking aspects of IMT-2020

Advantages of IMT: Spectrum

- more spectrum will probably be identified in the radio regulations for IMT, therefore approved IMT technologies
 - mostly >24 GHz in the near future
- many governments will favor the identifications in the radio regulations
- it may be sufficient to get into *any* IMT
 - e.g., IMT-2000 & IMT-Advanced updated biennially
 - even those requirements may be challenging
 - could join with existing IEEE radio interface

Advantages of IMT: Hype

- IMT-2020 recognition would bring hype value.
- Who would really care?
- IEEE 802.16 participants were very focussed on access to spectrum; hype was secondary.
- IMT was targeted to cellular operators, and they, as a group, chose LTE
 - WirelessMAN-Advanced was abandoned

What's in a G?

- To explain, I'll summarize 3G and 4G.
- 3G and 4G were significant because:
 - They represented significantly new radio technologies with important new capability.
 - They were major, 10-year upgrades to the cellular network.
 - They represented global agreement by an industry led by a countable number of major operators, vendors, and governments to roll out defined, backward-compatible technology in a controlled timeframe.
 - Consumers receive direct visibility into the technology, including by an icon on their phone.

5G Background: 1G, 2G, 3G

- Historically, no contemporaneous hype for 1G; very little for 2G
- In the 1990s, massive hype behind 3G cellular
 - 1G (First generation): analog cellular
 - 2G: digital cellular voice
 - 3G: digital cellular with data

3G Hype

- Two large global consortia were rivals for the 3G title:
 - “Third Generation Partnership Program (3GPP)”
 - “Organizational Partners” (OPs): ARIB, ATIS, CCSA, ETSI, TSDSI, TTA, TTC
 - 3GPP2
 - “Organizational Partners” (OPs): ARIB, TTA, CCSA, TTA, TTC
- Both supported a version of CDMA technology for cellular operators
 - paired with complex core networks with backward compatibility
- Both adopted into a new ITU-R standard, nicknamed “IMT-2000”
 - in around the year 2000, and operating at around 2000 MHz
- 3G became associated with IMT-2000, and vice versa

4G

- 4G was pioneered by IEEE 802.16e, which introduced OFDMA mobile cellular networks.
- The association of the name “4G” with ITU’s IMT-Advanced was controversial.
- Working Party 5D had specifically decided to avoid that usage, since it had slippery commercial connotations.
- In a press release announcing IMT-Advanced, ITU-R said “LTE-Advanced” and “WirelessMAN-Advanced” were “accorded the official designation of IMT-Advanced, qualifying them as true 4G technologies.”
- Many complaints resulted; IEEE 802 wrote to ITU-R (IEEE L802.16-10/0120r1).
- ITU-R quietly backed off, somewhat.
- Now “ITU and its partners, sharing a common community of interest, have recognized the relationship between IMT — International Mobile Telecommunication system — and ‘5G’ and are working towards realizing the future vision of mobile broadband communications.” It’s not clear whether ITU claims be designated the “true 5G.”



What makes 5G?

- Impossible to answer unambiguously
- Some technical factors, according to some people:
 - millimeter wave, very broadband
 - narrowband IoT
 - massive MIMO
 - Cloud RAN
 - SDN
 - on and on and on

What makes 5G?

- Impossible to answer unambiguously
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 - millimeter wave, very broadband
 - narrowband IoT
 - massive MIMO
 - Cloud RAN
 - SDN
 - on and on and on

5G Proposition 1

- No one owns the right to specify the requirements or details of “5G”
 - 5G is in the eye of the beholder.
 - A technology that is perceived by the beholder to be 5G will be, in effect, 5G.
 - The “5G” tag will derive from the credibility of the claims.
 - But the user will care more about the capabilities than the label.

5G Proposition 2

- A “G” is a big, integrated technology pitched at a big industry.
 - otherwise, you don't need to dedicate a ten-year effort
 - it's not a great fit for nimble technology elements that serve multiple purposes and evolve quickly

5G Proposition 3

- A successful IEEE-based “5G” should represent an integrated network specification set that could support a large operator deployment.
 - the full network needs to be stable for the long haul, and support multiple applications and access technologies
 - elements of that network could evolve nimbly and be used in other deployments

5G Proposition 4

- If IEEE coordinates a unified network, with multiple access technologies, then it will be well placed to promulgate a world-class 5G network.
- such a network could (optionally) become an IMT-2020 network

5G Proposition 5

- IEEE is capable of coordinating a unified network.
- IEEE-SA can work in many ways, but it's strength is in making standards.
- If IEEE coordinates a unified 5G network, it should consider doing so by standardization

5G Proposition 6

- IMT-2020 approval is a sure way to acquire an authoritative “5G” label
 - but it is not a shortcut
 - it is a very arduous process requiring extensive investment
 - the effort can fail in many ways
 - failure could have negative implications
 - even success can lead to failure
 - draws resources away from other endeavors
 - focusses the industry on a narrow target

IMT Issues for 802

- Do Working Groups go it alone on IMT decisions and proposals?
 - IEEE is the ITU-R member
 - participation should be as a member
 - contributions should come from IEEE
 - No project is currently “authorized” to participate
 - IEEE 802.16 had an authorized PAR dedicated to IMT-Advanced
 - 802 may want to consider the opportunity for a unified proposal

How to get into IMT

- as a RIT in a SRIT
 - join current IEEE RIT in IMT-Advanced, to make a SRIT
 - cooperate with 3GPP to contribute a RIT to their IMT-2020 SRIT
- create a new standalone IMT-2020 RIT
 - from a single IEEE 802 technology
- create a new standalone IMT-2020 SRIT
 - from a set of IEEE 802 technologies

IMT Issues to Consider

- Do technology groups in 802 want to be part of IMT?
 - Have they fully considered the options and committed the resources?
 - Are participants ready to become active in WP 5D in 2016-17, during requirements development?
- Do multiple technology groups want to be part of IMT?
 - Will these be coordinated? Into a SRIT?
 - Will access technologies be stitched together in a network specification?
- Is the intention of some groups to join a 3GPP proposal?
 - Should they join with 3GPP? Should IEEE become a 3GPP OP?

Conclusion

- Many complex issues
- Discussion should ensue

4.00		Discussion of the impact of updated patent policy on IEEE 802	Nikolich	30	02:41 PM
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Nikolich read a statement from Lisa Yacone

The purpose of this session is to discuss operational issues that may have arisen since the adoption of the updated Patent Policy. Specifically, this session can focus on any issues that the Working Groups may be facing and how the IEEE 802 EC can provide guidance and resources to address them. During the session, the discussion will not address any individual participant's or any participant's employer's implementation of the Patent Policy nor will there be discussion on the merits of the Patent Policy itself. Governance matters are best suited for the appropriate IEEE-SA bodies. The 802 EC will forward to IEEE-SA governance any issues it believes is appropriate for consideration by those bodies.

The IEEE-SA also provides a wealth of information, including a tutorial and a comprehensive set of FAQs located on the PatCom materials webpage.

Should you have any questions about the information on the PatCom materials webpage please feel free to contact the PatCom Administrator. I would be glad to provide you with either the link to the materials page or the contact information for the Administrator if needed.

Gilb asked that the text "Governance matters are best suited for the appropriate IEEE-SA bodies. The 802 EC will forward to IEEE-SA governance any issues it believes is appropriate for consideration by those bodies."

Comment that the governance boards are representative bodies, hence it is appropriate for members of 802 to discuss governance matters.

Comment that PatCom doesn't answer questions that are presented to them. There seems to be no process to getting an interpretation.

There was no objection to Gilb's request to strike the text.

Nikolich went around the table asking for input on the impact.

- Input to PatCom does not seem to have a response. This is, however, not a change in behavior.
- Directed questions to Standards Board do not seem to get a response.
- Considerable debate in 802.11ah and a negative LoA has been submitted.
- Delay in progress of 802.11ah, 4-6 months.
- Concern that there will be missing LoAs when it reaches Standards Board and there is uncertainty if the Standards Board will approve the standard with missing LoAs.
- One WG has seen more LoAs requested.
- A couple of instances where individuals need to be told to cease speaking about patents. But too few data points to say it is a trend.
- The number of the executive sessions at the SB level, many of which are patent related. There is legal review of everything IPR policy related. This takes time and may lead to the lack of response.
- There has been an evolution of PatCom. Its task is to accept LoAs. Questions about Patent Policy should be sent to the Standards Board and if non-responsive, then an Appeal for Inaction should be filed.
- An LoA doesn't tell you very much as it is only an assertion that patent reads on a standard.
- The flow chart of approval for an IEEE standard, a negative LoA or absence of a response to a request to an LoA is referred to the Standards Board, but they don't know what to do.

Comments from the group

- The policy appears to be not enforceable or implementable.
- It changed the dynamic on how people collaborate on new technology development. IPR is now a major consideration.
- There was loss of momentum for 802.11ah due to the issue.
- It appears that negative LoAs are not being made available in the LoA database. It may be due to the form not

being filled out correctly.

- There has been delay and chaos in 802.11ah as the engineers involved are not trained in these areas, particularly for smaller companies.
- The process seems to be a bit broken in educating engineers who are doing the work, this delays work. Education is required for the engineers in the Task Group who are developing the standard.
- Disagreement on the effect on 802.11ah. IPR has always been an issue and this is simply one of the times it bubbled up. It is a manifestation of the importance IPR is to companies. It was a necessary delay.
- It was the absence of clarification that delayed the process.
- This is an issue at the TG as well and a lack of information is not helping.

AI: 2016-01-3: Nikolich will take pictures of the flip chart and email them to the EC, Lisa Yacone and PatCom administrator

5.00		Break		15	03:35 PM
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David Law strolled in casually at 3:45 pm and announced that he was Mr. Fun.

Nikolich handed over the Chair's duty to Law.

6.00		Attendance requirements for obtaining membership	Stephens	30	03:48 PM
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Stephens presents 11-16-0005-00

Discussion:

- In one WG they will perform a check on some meetings and confront individuals.
- With reciprocal credit the differences between 2 slots a day and 4 slots a day make things difficult.
- Credit for slots could be based on number of hours, then it would match better.
- The new tool from IEEE-SA will separate attendance and presence, which may help.
- 802.3 has specific times that individuals must attend in order to get credit for the day.
- Too much time is spent by participants dealing with attendance, but can't see an easier method.
- 75% of 75% is 56%, which is basically the AudCom guidelines.

Stephens runs a straw poll [EC count – Chicago rules]

1. Do nothing - 14
2. Tweak the parameters of the existing rules - 0
3. More trust/less attendee overhead – 8.5
4. More accuracy – 2

AI: 2016-01-4: Stephens will do nothing.

Item for IEEE 802 EC workshop: Attendance requirements

Date: 2016-01-22

Authors:

Name	Company	Address	Phone	email
Adrian Stephens	Intel Corporation			adrian.p.stephens@intel.com

Purpose

- **This submission is intended to accompany the agenda item “Attendance requirements for obtaining membership ” on the IEEE 802 EC workshop to be held on Friday 22nd January at 2:30pm.**

History

- **802.11 performed a survey of attendance in Sept 2015, comparing a count of apparently live bodies in the room at the mid-point of a slot with the electronic attendance claimed on IMAT.**
- **On average the IMAT figures are 20% higher. Detail is provided on following slides.**
- **While some of this might be explained by the methodology, it remains that some fraction of attendance is being falsely claimed.**
- **The 802.11 chair promoted discussion of this topic in the 802.11 WG plenary meetings. This resulted in a motion from the floor. Detail of the discussion and the text of the motion also follow.**
- **The 802.11 chair was actioned by the EC to bring this topic to the workshop.**

F6.2 - Recorded counts from the minutes

	Monday					Tuesday						Wednesday				Thursday				Friday	Totals
	am1	am2	pm1	pm2	eve	am0	am1	am2	pm1	pm2	eve	am1	am2	pm1	pm2	am1	am2	pm1	pm2	am1/2	
WG	175												151							40	366
ARC								18				12									30
REG								18								22					40
WNG							114														114
LRLP			38																70		108
TGmc				22	15				17	12				15	30			17	17		145
TGah				75													70				145
TGaj			7					8							10						25
TGaq				8			5			8		9		8			6				44
TGak		6			5		4				6					9	5		7		42
TGax		150	153					166	130			130			120	150		150			
TGay		45		62			60														167
TGaz										30		30					46				106
Totals	175	201	198	167	20	0	183	210	147	50	6	181	151	23	160	181	127	167	94	40	2481

F6.2 - Counts from IMAT

	Monday					Tuesday						Wednesday				Thursday				Friday	Totals
	am1	am2	pm1	pm2	eve	am0	am1	am2	pm1	pm2	eve	am1	am2	pm1	pm2	am1	am2	pm1	pm2	am1/2	
WG+	213												221							47	481
ARC								18				12									30
REG								19								23					42
WNG							132														132
LRLP			38																	64	102
TGmc			22	15					20	15				17	27			18	24		158
TGah				96													114				210
TGaj			7					7							10						24
TGaq				8			6			9		10		6			7				46
TGak		6			5		6				6					8	9		13		53
TGax		174	168					187	197			180			176	181		180			1443
TGay		45		77			58														180
TGaz										31		32					45				108
Total	213	225	235	196	5	0	202	231	217	55	6	234	221	23	213	212	175	198	101	47	3009

F6.2 - Ratio: IMAT/physical (where physical was recorded)

	Monday					Tuesday						Wednesday				Thursday				Friday	Ave
	am1	am2	pm1	pm2	eve	am0	am1	am2	pm1	pm2	eve	am1	am2	pm1	pm2	am1	am2	pm1	pm2	am1/2	
WG+	1.2												1.5							1.175	1.31
ARC								1				1									1.00
REG								1.1								1					1.05
WNG							1.2														1.16
LRLP			1																0.9		0.94
TGmc			1	1					1.2	1.3				1.1	0.9			1.1	1.4		1.09
TGah				1.3													1.6				1.45
TGaj			1					0.9							1						0.96
TGaq				1			1.2			1.1		1.1		0.8			1.2				1.05
TGak		1			1		1.5				1					0.9	1.8		1.9		1.26
TGax		1.2	1.1					1.1	1.5			1.4			1.5	1.2		1.2			
TGay		1		1.2			1														1.08
TGaz										1		1.1					1				1.02
Average	1.2	1.1	1.1	1.2	1		1.1	1.1	1.5	1.1	1	1.3	1.5	1	1.3	1.2	1.4	1.2	1.1	1.175	1.21

Comments from WG members

- We're wrong about the rules
- We're wrong about interpretation of the statistics
- We should be more "collegial". Focus more on getting the work done
- Trade attendance at plenaries vs missing a ballot
- Rules are imperfect, and it's clear some are cheating
- Attendance for registration has its own problems "buying votes". Don't put too much effort into addressing this - fix obvious abuses.

- Discussion is itself borderline offensive. We are here to develop standards. We are giving up time and money. We are the customers. Should completely disconnect voting rights from attendance.
- It is reasonable that voting membership should be based on attendance. Current requirements are not onerous. But it's an annoyance to record attendance. Perhaps less granular attendance.
- Should not restrict voting membership to attendees at f2f meetings. Too high a bar. We shouldn't waste time, but only address egregious offense. People are imperfect.

- Attendance for picking up your badge.
- Attendance as a proxy for skill-set / expertise. Not sure this works well.
- Voting in a WG letter ballot does not allow abstain except for lack of expertise -> excessive "yes" voters. Should support "abstain - don't care". Skewed letter ballot results.
- Need to keep track of active participation. Some people have difficulty achieving 75% due to other commitments, e.g. ad-hoc meetings. Contributors should be given flexibility. Perhaps a 1 per day recording of attendance.

- Recording attendance by TG and slot determines level of participation and interest. Our standards don't get improved by tracking more closely. Coarser granularity good enough for voting status.
- 2 conflicting requirements for recording: voting status and participation in any particular TG. Should keep recording per slot for participation. Should allow shared attendance in one slot.
- We currently have a request to IEEE-SA staff to modify tools to track both attendance and presence. Attendance should be by WG, not TG. Presence by TG.
- Motion: Attendance requirements shall be considered satisfied by attendee who has registered for 802.11 as primary group, when the badge is picked up.

Motion approved in WG11

- **Direct the WG leadership to investigate the necessary changes in rules and procedures to enable “Attendance requirements shall be considered satisfied by attendee who has registered for 802.11 as primary group, when the badge is picked up”, and report back to the WG in the January 2016 session.**

Moved: Knut Odman

Seconded: Paul Lambert

Result: 41-2-8 Passes

Findings (Doc 11-16/25r1)

- **Summary of rules and procedure documents examined:**
 - LMSC P&P – No applicable text or changes required
 - LMSC Operations Manual – Applicable text describes required registration fee and participation credit, expect no changes would be required
 - LMSC WG P&P – applicable text defines WG membership 2/4 plenary requirement and defines participation credit; changes required: *”Participation credit at a meeting is granted for at least 75% presence at that meeting. Participation credit at a session is defined as participating in meetings during at least 75% of the meetings slots (designated as required) for participation credit at that session. Membership starts at the third plenary session attended by the participant”*

Findings 2

- IEEE 802.11 Operations manual – Applicable text and changes required
- IEEE Audit Committee (AudCom) baseline WG P&P document section 4.1.1: “*Attendance credit is granted to those who attend at least 50% of a meeting’s duration.*”

Findings 3

- **Observations:**
 - Proposed change (to registration only) not viable under current AudCom WG P&P baseline (AudCom approval, and prior EC approval required for changes).
 - AudCom rules require participation level of at least 50%.
 - Current 802 LMSC rules require participation *in at least 75% of meeting slots designated as required*. “Meeting slots designated as required” can be modified.
- **A change from “75%” to “at least 50%” requires changes at 802 level (in LMSC WG P&P, use existing EC LMSC process for modification) and at 802.11 level (802.11 Operations Manual)**

Applicable Rules

- The IEEE Standards Board operating manual says nothing related
- The AudCom Template WG P&P includes the following (modifiable) text:
 - “..voting membership shall be granted after the participant attends two consecutive meetings of an existing Working Group, and also requests voting membership status.
 - Each voting member is expected to attend meetings as required by these procedures. The Secretary records attendance at meetings. ... A participant shall be considered attending the meeting who attends at least 50% of a meeting's duration. Attendance at a meeting via teleconferencing and/or electronic means, e.g., Internet conferencing, shall count towards the attendance requirements.
 - The Secretary shall make reasonable efforts to maintain a current Working Group roster. ... A copy of the Working Group roster shall be supplied to the IEEE-SA at least annually by a Working Group officer or designee.
 - Duties of Secretary: Recording attendance of all attendees.

Where is IMAT over-zealous?

- **There is no requirement in the rules to track attendance or affiliation by project**
- **Perhaps in interpretation of the word “attendance” – which is used, but not defined in the AudCom template.**

Where does IMAT fail?

- **Cannot ensure attendance record is made by somebody who is**
 - physically present
 - mentally and emotionally engaged in the meeting content
 - there for any period of time
- **An individual cannot record “presence” in more than one meeting slot simultaneously**

What could we hope to improve?

- **Attendee overhead – “don’t forget to record your attendance”**
- **Aberrant behaviour – a room full of people doing nothing but their email / surfing the web / facebook**
- **Management overhead – “I forgot to record slot x, can you allow me it?”**
- **Accuracy of records by using alternate/redundant methods**

What could we not hope to improve?

- **Human behaviour. Some fraction of members will routinely make false claims if this benefits them.**

We can take one of these directions

- **Do nothing – the sky hasn’t fallen yet, and probably won’t if we do nothing.**
- **Modify the parameters of the existing rules – e.g. 50% rather than 75%**
- **More trust - Try and reduce “jumping through hoops” burden on members and appeal more to their trust. Reduce the number of their interactions with the attendance system.**
 - Zero interactions – via registration only
 - One interaction per WG attended
 - One interaction per WG per day
- **More accuracy – require attendees to sign a paper copy and correlate with IMAT record. Sanction those who appear on the latter, but not the former.**

Straw poll

- **Which of the following do you prefer (802.11 CAC count)**
- **1. Do nothing (13)**
- **2. Tweak the parameters of the existing rules (2)**
- **3. More trust / less attendee overhead (11)**
- **4. More accuracy (2)**

7.00		Radio regulatory (RR) process plan - discuss results of ad hoc	Thaler	45	03:50 PM
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Thaler presents ec-16-0008-00

Comments

- Suggest Monday 13:30-5:30 instead of Tuesday 0800-1000. Change is made
- Prefers SC versus TAG.
- Concern about the ability of the TAG to act quickly
- Suggestion that there is flexibility in the scheduling.
- Comment that the EC can vote on Monday (or during a conference call). However the requirements for these need to be sent in advance to the Executive Secretary.
- Seems that one person requested a time change and then the time flipped. Ask for a more formal check for why the Tuesday slot was selected.

Law asks for people to express a preference. Result is 8 for Monday, 2 for Tuesday.

Thaler asks how many people would like to just go to motion on the mission statement: 4. There were 6 in favor of an email discussion prior to the motion.

2016-01-5: D'Ambrosia will create a schedule for a plenary week that shows EC meetings, standing committees slot and 802.18 slot

2016-01-6: Thaler to lead the discussion to hone mission statement.

2016-01-7: Thaler to do a motion in March to cover the operation changes of the TAG.

Draft IEEE 802 Radio Regulatory Mission statement:

1. Internal communication
 - a. notify Working Groups of relevant regulatory inquiries, activities and timelines
 - i. notification should be made as information becomes available rather than based on meeting schedule
 - b. provide expert advice to improve Working Group positions during review
2. Represent IEEE 802 as the leader in wireless access networking development
 - a. Provide regulators with roadmap and rationale for new standards work
 - b. Develop a relationship with regulators that encourages dialogs, both formal and informal
 - c. develop common 802 positions, accommodating differences among 802 subgroups, as feasible in accordance with deadlines
 - d. draft regulatory inputs on topics involving multiple Working Groups

8.00		End of Day Wrap up	Nikolich	15	04:35 PM
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Gilb reviewed the action items.

Law recessed the meeting until Saturday, 23 January, 08:00

9.00		Break for Day			05:00 PM
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Saturday 8:00AM-5:00PM ET, 23 Jan 2016

10.00		MEETING RECONVENED	Law	0	08:00 AM
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Nikolich reconvened the meeting at 8:15 am.

Non EC participants present:

Guido Heirtz – Ericsson

Jonathan Goldeberg – IEEE

Juan Carlos Zuniga – Interdigital Labs

Law had a personal issue and is not present in the morning.

11.00		Review / approve agenda, administration items	Law	15	08:00 AM
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Nikolich reviewed the agenda noting that there is a time specific item, 13.00 which will be in executive session.

Parsons will lead item 11.00, Thaler will lead item 12.00, Chaplin will lead item 19.00.

12.00		Clarification on 'affiliated block' text	Thompson	60	08:15 AM
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Thompson presented "GOT for Sat.pdf"

Discussion is regarding how to determine when there is block voting rather than acting as an individual.

Comments:

- Responsibility is on the participant, not the individual that sent them.
- Before a big project, SIGs form and attract support from multiple companies and the proposals are merged. When the SIGs merge and agree on a single proposal, they have 80% of the votes. Is this a dominance position?
- Consensus is a goal, so agreement is what we seek. Is this agreement on technical merits or on collusion? This is very difficult to determine.
- In one case, there were rumors that a company exerted commercial pressure on other companies to vote a certain way.
- Another example is individuals showing up at the back of the room only for the vote. The Chair at the time indicated that if there was a problem, there would be a roll call vote.
- In other instances, a standard was produced that relied on an alliance specification. This was done in the open and was therefore OK.
- Issue is when individuals are pressured to vote a certain.
- "When you are the winning side of a vote, it is consensus. When you are on the losing side of a vote, it is block voting."
- To get your idea adopted, a participant will need to encourage people to attend to vote. This can look like room packing.
- How will does a leader determine that people entering the room are there under pressure or because they agree technically.
- A roll call vote is one method that a Chair can use.
- The SIG process is OK if it is to improve consensus and to get work done ahead of time, then it is OK. If the terms

of the SIG require support of the members, then it is coercive.

- The difficulty is that the Chair needs to extrapolate from what is visible to what is happening behind the scenes.
- Block voting is voting when voting is coerced or via agreement.
- Affiliation rules don't apply to SIGs. Affiliation with a SIG is not reported, only with the entity that is providing financial support.
- From the WG P&P ““Working Group members shall participate in the consensus process in a manner consistent with their professional expert opinion as individuals, and not as organizational representatives.”
- Many SIGs include language that indicate that participants act as individuals in the IEEE process and are not bound by the SIGs decision.
- In the Standards Board Bylaws “Dominance is normally defined as the exercise of authority, leadership, or influence by reason of superior leverage, strength, or representation to the exclusion of fair and equitable consideration of other viewpoints. Dominance can also be defined as the exercise of authority, leadership, or influence by reason of sufficient leverage, strength, or representation to hinder the progress of the standards development activity. Such dominance is contrary to open and fair participation by all interested parties and is unacceptable.”
- How do we determine that a SIG is not operating in an acceptable manner? What evidence do we use to determine that there is a problem?
- 802 needs a set of actions as remedies.
- Gilb presents ec-16-0011-00, slides 1-3
- Suggest as actions
 - Develop suggestions for Chairs to use when block voting is suspected.
 - Create language to be included in SIG agreements that conforms with our policies
 - Encourage SIGs to state publicly that they adhere to these rules
- If a SIGs rules and membership are open, then it is likely OK. If it meets in secret and votes as a block, then it is likely not OK.

AI 2016-01-16: Gilb to distribute suggested updates for affiliated block to the EC for considerations.

Discussion is paused at 9:15 am.

802 EC Workshop – Atlanta 2016-01

Assigned topic:

“Clarification on 'affiliated block' text”

Geoff Thompson
GraCaSI S.A.

802 EC Workshop – Atlanta 2016-01

802 OM:

6.1 Voting guidance

It is expected that Sponsor members will vote as both professionals and as individual experts, except under the Directed Position provisions, as defined in 6.2, and *not* as a member of any **affiliate block** (organization, alliance, company, consortium, special interest group, etc.). If substantive evidence is presented to the Sponsor Chair that this provision is violated, the Sponsor will meet to consider what, if any, action to take on the presented evidence up to and including suspension of the Sponsor members' voting rights and/or removal from office.

802 EC Workshop – Atlanta 2016-01

- What is an “affiliate block”?

...is like asking

- What is “porn”

In the obscenity case of *Jacobellis v. Ohio* (1964), U.S. Supreme Court Justice Potter Stewart wrote in his short concurrence that "hard-core pornography" was hard to define, but that "I know it when I see it,

802 EC Workshop – Atlanta 2016-01

When I have seen it, I saw:

- Collusion between EC members from 2 companies who employed a majority of the voting body.
- Closed session called in violation of the rules to conduct open session business.
- Phoned-in votes in violation of the rules.
- Meeting extended in violation of the rules.

802 EC Workshop – Atlanta 2016-01

When I have seen it, I saw (continued 2):

- Heavy arm twisting coordinated at the executive level.
- Significant number of “new attendees” hired from a local temp agency.
- Significant number of “consultants” who didn't contribute, were slow to vote and all voted the same.
- A bunch of people coming into the room just for the vote.

What is OK

Doing your normal job for your company:

- Supporting the needs of your product.
- Exercising good engineering judgment including consideration of current products.

What is NOT ok

- ANYTHING illegal under anti-trust.
- Sending extra (non-contributing) people just to vote.
- Hiring people just to vote.
- Directed corporate (or multi-corporate or trade association or alliance) voting.

802 EC Workshop – Atlanta 2016-01

Discussion...

Actions for Affiliated Block

- Actions a Chair can take (add to CG)
 - Take a roll call vote, but a series of votes is required to show a pattern.
 - A TG chair can take a vote to the WG
 - Ask participant to state if they have a relationship with an external organization
 - Concern that this may not get all external organization listed
 - This may not be an appropriate question.

-

SIG activities

- Offer guidance to external organizations who have individuals who are participants in IEEE should have an independence clause
 - Participants act as individuals in the IEEE process and are not bound by the SIGs decision
- Add WG P&P rule that states that it is the responsibility of the participant to ensure that they are not part of an external organization, other than a Liaison officer of Liaison SDO, that does not allow them to act in an individual fashion or if they are members that they should recuse themselves.

Potential issues

- 802 is required to monitor and archive information regarding SIGs
- A Liaison SDO needs to be differentiated from a SIG.
- Deleted: IEEE 802 asks that SIGs publicly state their policy so that the WG Chairs can take it into account.
 - This is potentially outside of IEEE.

13.00		Final clarification of the indemnification policy	Nikolich	60	09:15 AM
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Nikolich declares start of the Executive Session, and excuses non-EC members.

The individuals allowed to attend are members of the EC and Jonathan Goldberg, IEEE

Report out of session is as follows:

IEEE 802 EC specifically requested that the material that was presented be released publicly. The request was not allowed, but that Agassi and Wiggins would try to provide derivative material by the end of February for public release.

AI: 2016-01-8: Thompson will draft language for duly authorized activities.

14.00		Break		15	10:15 AM
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Break is taken at 10:25 am

Law takes over as Chair and calls the session to order at 10:45 am

Discussion continues on item 12.00

Are sessions for consensus building open? If they are using meeting rooms, it should be an open meeting.

Should we write a method to gather evidence? The 802 rules are that the WG Chair is to bring evidence to the EC for consideration.

15.00		A single sentence tag line for 802 projects, press releases, and similar	Gilb	15	10:30 AM
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Gilb presented ec-16-0011-00, slides 4-6

Discussion regarding the tag line and logo.

Straw poll on tag line:

- IEEE 802, (network) standards that connect the world. (16)
- The premier transnational (global?) forum for wired and wireless network standardization. (0)
- IEEE 802, building network standards for the benefit of humanity. (4)

Straw poll on having the word “network” in the logo: 6 for, 5 against, no consensus.

Tag line ideas for 802.

- IEEE 802 is a leading consensus-based standards body that produces high-quality, market relevant standards that connect the world.
- About IEEE 802: IEEE 802 is a leading consensus-based industry standards body that produces high quality, market relevant standards for bridging, link security, wired (optical and copper) and wireless networking. IEEE 802 standards cover data rates from kb/s to 100's of Gb/s and ranges from 1 cm to 100 km.
- For more information contact 802Chair@ieee.org

Tag line for 802.

- IEEE 802, (network) standards that connect the world. (16)
- The premier transnational (global?) forum for wired and wireless network standardization. (0)
- IEEE 802, building network standards for the benefit of humanity. (4)

Tag line for 802.

- Allocate money to develop recommendations?
- Ask members to submit ideas and select.
- IEEE 802, seeing the world one meeting at a time.

16.00		Discussions on the development of YANG models	Law	30	11:35 AM
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Law discusses YANG models verbally.

Comments:

- Should IEEE 802 define the model or should network management experts who may not understand the underlying protocols as well.
- It may depend on the type of standard, PHYs may be easier for an external body than would be for a bridge.
- Both internal and external are fine.
- Part of the problem is the barrier to entry of IEEE 802, IETF may be considered to be easier.
- We need to create a process for network experts to create network models for IEEE 802.
- Suggestion for a more continuous maintenance process.
- First YANG project should be a new PAR, subsequent ones could be fast-tracked.

Meeting recessed at 12:10 for Lunch

17.00		Can a Study Group develop more than one PAR?	Law	45	11:15 AM
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Items skipped over unless there is time at the end.

18.00		Lunch		60	12:00 PM
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19.00		2 year backward (actuals) and 2 year forward looking (budgetary estimates) for the 802 treasury	Nikolich	60	01:00 PM
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Chaplin discussed our actuals and future estimates.

Comments:

- The loss of the reserve is not too much
- Can we cut back on expenses to prevent loss in the reserve.
- Why is the reserve \$1.2 M
- Reserve is used in part to pay deposits
- Numbers in the reserve includes deposits that have been paid.
- The purpose of the reserve is to cover deposits, risks and cash flow.

20.00		IEEE 802 plans for IMT-2020	Stephens / Marks	60	01:30 PM
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Stephens leads the discussions on 802 plans for IMT-2020

Suggestion is phased approach

- EC standing committee tasked with writing a report on the costs and benefits of writing a proposal to ITU-R
- Invite WGs to participate.
- Determine support based on the number of people in the room.

Comments

- Need to determine what is the result for which 802 is looking.
- How many groups should be part of this? Does it include non 802 technologies?
- Do we do 5G or IMT 2020?
- Standing committee or an Industry Connections?
- Should not do a liaison to WP 5D as they are not given much notice. Contributions from members, like IEEE are noticed.

- One task of the group should be if we can assemble an 802 proposal

IEEE BoD has initiated 5G as a future directions activity. There is a 5G steering committee, but members have not been identified. IEEE-SA was given responsibility for the standards portion.

Proposed:

The scope of the IEEE 802 5G/IMT-2020 standing committee (Type 2)

To provide a report on the following items to the EC:

- Costs and benefits of creating an IEEE 5G specification
- Costs and benefits of providing a proposal for IMT-2020, considering possible models of a proposal:
 - as a single technology,
 - as a set of technologies,
 - or as one or more technologies within a proposal from external bodies (e.g., 3GPP)

During its lifetime, to act as the communication point with other IEEE organizations on this topic.

Organization:

The committee is chartered for 6 months as an EC SC (i.e., due at the July 2016 plenary session). Any 802 WG voting member of the committee.

Marks will be in Beijing near the end of February for ITU-R WP 5D, he can take issues

AI: 2016-01-9: Parsons will start an EC email ballot of the scope and duties for an IEEE 802 5G/IMT-2020 Standing Committee.

AI: 2016-01-10: Nikolich will appoint a chair of the new IEEE 802 5G/IMT-2020 Standing Committee if it is created.

Return to item: 17.00

17.00		Can a Study Group develop more than one PAR?	Law	45	11:15 AM
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Law begins discussion.

Comments:

- SG is for a single PAR as assigned by the EC.
- An SG can determine in its deliberation that two PARs, not one are required.
- Can you take an existing SG and put in new work.
- Can an SG have staggered output, i.e., one PAR in a plenary and another a second plenary.
- The SG is the group that has the experts who can determine if more than one PAR is needed.
- For staggered output of PARs, a new SG can be formed after the first PAR is formed.
- SG should be focused on a single topic. If the PARs are not similar, then they should be in separate SGs.

Key takeaways:

- Within the scope of the SG, the SG can create as many PARs as required to address the topic as determined by the SG participants.
- Once an SG has created a PAR that is approved by the EC, if it still has more work in a different area, a new SG should be formed to continue the work.

AI: 2016-01-11: Gilb to write Chair's Guidelines submission for multiple PARs in an SG.

21.00		Break		15	03:00 PM
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Meeting recessed at 2:50 pm

Meeting called to order at 3:15 pm.

22.00		Draft distribution and USPTO	Thompson	30	03:15 PM
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Thompson presents "Draft isn Public Presentation.pdf"

Discussion indicated that all contributions should be posted publicly first.



United States: Draft Available Only As A Password-Protected Download Is Not A Printed Publication

Samsung Electronics Co. Ltd. v. Rembrandt Wireless Techs., LP

Addressing a petition to institute an inter partes review of a patent for communicating between different modem types, the U.S. Patent and Trademark Office's Patent Trial and Appeal Board (PTAB or Board) declined to institute a review, **finding that the key document used for all invalidity grounds did not constitute a printed publication** and thus there was not a reasonable likelihood that the petitioner would prevail. Samsung Electronics Co. Ltd. v. Rembrandt Wireless Techs., LP, Case No. IPR2014-00891 (PTAB Dec. 10, 2014) (Busch, APJ).

Rembrandt Wireless asserted two patents against various Samsung entities in district court litigation, and Samsung responded by filing four inter partes review petitions against the first patent and six petitions against the second. Three of the petitions against the second patent relied on a draft version of a wireless standard that was being considered by a working group of an industry association. The question addressed by the Board was whether that draft constituted prior art as a printed publication.

According to a declaration by an editor of the standard, the draft in question was available to members of the working group as a password-protected download. The availability of the draft was announced, along with the password, to an email distribution list sent to the working group as well as anyone from the public who provided their email to be included in the distribution. The draft was also distributed at a meeting of the working group.

The Board concluded that the draft was **not sufficient** accessible to the public interested in the art. The Board pointed to the lack of evidence that the meeting was advertised or even announced to the public. As to the download, the Board concluded that the fact that individuals from the public would have to contact the working group to obtain the password, and know to do so, weighed against accessibility. The Board thus concluded that the draft did not constitute § 102 prior art and declined to institute reviews for the petitions that relied on it.

Last Updated: February 10 2015
Article by **Alexander P. Ott**
McDermott Will & Emery



23.00		End of Day Wrap up	Law	15	03:35 PM
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Law held the wrap up session.

Text adopted:

Duly authorized activity includes but is not limited to: activity approved by the Institute, standards development activity for an approved PAR, an activity authorized by an ICAID, IEEE-SA managing director approved initiatives and other activity provided for and/or authorized by IEEE Standards Association Standards Board approved procedures.

Suggest that this is added as a ProCom submission.

AI: 2016-01-12: Nikolich will send the information to Agassi and Wiggins

AI: 2016-01-13: Rosdahl will fill out a ProCom submission based on this text.

AI: 2016-01-14: Paul will monitor Agassi, Lach and Wiggins action to provide public information.

24.00		**802 EC Executive Session** Get program, Treasury	Marks / Chaplin	60	04:00 PM
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Non-EC members were excused.

Executive session called to order at 3:55 pm.

Attendees are EC members listed above.

Output from the session:

A straw poll was held on the question “To approve the Get IEEE 802 Program Guidelines and confidential attachment as amended during the workshop.”

The straw poll results were 14 yes, 0 no, 0 abstain.

AI: 2016-01-15: Rosdahl: Add a consent agenda item to approve the Get IEEE 802 Program Guidelines and confidential attachment as the last item on the agenda for the February conference call. Prepare a second conference ID for the potential executive session.

25.00		ADJOURN			05:00 PM
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Respectfully submitted

James Gilb

IEEE 802 Second Vice Chair