

AGENDA & MINUTES (Unconfirmed) - IEEE 802 LMSC EXECUTIVE COMMITTEE MEETING

Monday, November 14, 2005 – 8:00 a.m.

Vancouver, B.C., Canada

- 5 Paul Nikolich - Chair, IEEE 802 LAN / MAN Standards Committee
- Mat Sherman - Vice Chair, IEEE 802 LAN / MAN Standards Committee
- Bob O'Hara - Recording Secretary, IEEE 802 LAN / MAN Standards Committee
- Buzz Rigsbee - Executive Secretary, IEEE 802 LAN / MAN Standards Committee
- John Hawkins - Treasurer, IEEE 802 LAN/MAN Standards Committee (absent)
- 10 Tony Jeffree - Chair, IEEE 802.1 – HILI Working Group
- Bob Grow - Chair, IEEE 802.3 – CSMA/CD Working Group
- Stuart Kerry - 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
- 15 Mike Takefman - 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 TAG
- Jerry Upton - Chair, IEEE 802.20 – Mobile Broadband Wireless Access
- Ajay Rajkumar - Chair, IEEE 802.21 – Media Independent Handover
- 20 Carl Stevenson - Chair, IEEE 802.22 – Wireless Regional Area Networks
- Geoff Thompson - Member Emeritus (non-voting)

1.00 MEETING CALLED TO ORDER - Nikolich 1 08:00 AM

Paul Nikolich opened the meeting, welcoming everyone to the 25th anniversary plenary session.

25

2.00 MI APPROVE OR MODIFY AGENDA - Nikolich 4 08:01 AM

r04 DRAFT AGENDA - IEEE 802 LMSC EXECUTIVE COMMITTEE MEETING

Monday 8:00AM -10:30AM

Start Time

1.00 MEETING CALLED TO ORDER - Nikolich 1 08:00 AM

2.00 MI APPROVE OR MODIFY AGENDA - Nikolich 4 08:01 AM

3.00 * APPROVE / MODIFY MINUTES OF PREVIOUS MEETING - Nikolich 0 08:05 AM

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4.00 II TREASURER'S REPORT - Hawkins 5 08:05 AM

4.01 - 08:10 AM

Category (* = consent agenda) 08:10 AM

Stds Board items	08:10 AM
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5.00 II Stds Board Actions (approved projects, standards, withdrawals) - Nikolich 2 08:10 AM

5.01 II - 08:12 AM

5.02 II PARS to NesCom - Nikolich 2 08:12 AM

5.03 II List of Drafts to Sponsor Ballot - Nikolich 2 08:14 AM

5.04 II List of Drafts to Revcom - Nikolich 2 08:16 AM

5.05 II - 08:18 AM

08:18 AM

SA items

08:18 AM

5.06	II	802 Task Force update	-	Nikolich	5	08:18 AM
5.07	II	Anti-Trust presentation follow-up	-	Kenney	5	08:23 AM
5.08	II	Get IEEE802 program update	-	Kenney	10	08:28 AM
5.09	II	Update on financial reporting requirements	-	Kenney	5	08:38 AM
5.10	II	Request from the European patent office	-	Mills	10	08:43 AM
5.11	II	Online Training Update	-	Vogel/Thaler	5	08:53 AM
5.12	II		-			08:58 AM
5.13	II		-			08:58 AM
5.14			-			08:58 AM
5.15						08:58 AM

LMSC items

08:58 AM

08:58 AM

5.16	II	Resolution of Arent-Fox legal invoice	-	Nikolich	3	08:58 AM
5.17	MI	LMSC Meeting Fee Waivers	-	Nikolich	2	09:01 AM
5.18	II	Tutorial schedule	-	Nikolich	5	09:03 AM
5.19	II	China Liaison Update	-	Marks	5	09:08 AM
5.20	II	JTC1/SC6 update	-	Thompson	5	09:13 AM
5.21	MI	Electronic Attendance and Documentation Systems	-	Heile	15	09:18 AM
5.22	II		-			09:33 AM
5.23	II	P&P update	-	Sherman	10	09:33 AM
5.24	II	Architecture Group update	-	Jeffree	5	09:43 AM
5.25	II	notice of PARs under consideration	-	WG chairs	5	09:48 AM
5.26	II	notice of Study Groups under consideration	-	WG chairs	5	09:53 AM
5.27	II	pending 802.20 appeal status	-	O'Hara	2	09:58 AM
5.28	II	Proposed revision to ITU-R Recommendation M.1450	-	Lynch	5	10:00 AM
5.29	II	March 2006 Meeting site and London Metropole update	-	Rigsbee	5	10:05 AM
5.30	II		-			10:10 AM
5.31	II		-			10:10 AM
5.32	II		-			10:10 AM
5.33	II		-			10:10 AM
5.34	II		-			10:10 AM
5.35	II		-			10:10 AM
5.36	II		-			10:10 AM
5.37	II		-			10:10 AM
5.38	II		-			10:10 AM
5.39	II		-			10:10 AM
5.40	II		-			10:10 AM
5.41	II		-			10:10 AM
5.42	II	IEEE/ITU-Relationships overview	-	Costa	10	10:10 AM
5.43	II	Announcement of March 2006 Elections	-	Nikolich	1	10:20 AM
5.44	DT	SEC meeting schedule (rules, SA, etc.)	-	Nikolich	3	10:21 AM
		ADJOURN SEC MEETING	-	Nikolich		10:24 AM
6.00	PL	IEEE 802 PLENARY MEETING STARTS	-	Nikolich	60	11:00 AM

ME - Motion, External MI - Motion, Internal

DT- Discussion Topic II - Information Item

Special Orders

Motion: to approve the agenda as modified.

Moved: Carl Stevenson/Jerry Upton

Passes: 14/0/0

5

3.00	*	APPROVE / MODIFY MINUTES OF PREVIOUS MEETING	-	Nikolich	0	08:05 AM
			-			08:05 AM
4.00	II	TREASURER'S REPORT	-	Hawkins	5	08:05 AM
Treasurer is unable to attend. His report will be presented at the end of the week.						
Buzz reported that we are currently approaching 1300 folks registered; expect 1400-1500 by the end of the day.						
4.01			-			08:10 AM
		Category (* = consent agenda)				08:10 AM
		Stds Board items				08:10 AM
5.00	II	Stds Board Actions (approved projects, standards, withdrawals)	-	Nikolich	2	08:10 AM

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Sept/Oct 2005

SA Standards Board Actions

Standards Approved

New:

P802.11e/D13.0 - Medium Access Method (MAC) Quality of Service Enhancements

P802.16f/D6 - Management Information Base

Revisions:

none

Reaffirmations:

none

Administrative Withdrawals:

none

Sept/Oct 2005

SA Standards Board Actions

Projects Approved

New:

P802.1ap - Virtual Bridged Local Area Networks – Amendment 9: Management Information Base (MIB) definitions for VLAN Bridges

P802.1aq - Virtual Bridged Local Area Networks – Amendment 8: Shortest Path Bridging

P802.1AR - Secure Device Identity

P802.3-2005/Cor 1 - CSMA/CD access method and physical layer specifications
Corrigendum 1

P802.3at - DTE Power via the MDI Enhancements

Revisions:

none

Reaffirmations:

none

New:

5.01	II		-			08:12 AM
5.02	II	PARS to NesCom	-	Nikolich	2	08:12 AM

Draft PARs to NesCom

- **P802.11y** 3600-3750 Operation
- **P802.16i** MIB for Mobility Management
- **P802.22.1** Enhanced Protection for Part 74 devices
- PARS of interest outside 802
 - Input from EC members?

5	<p>5.03 II List of Drafts to Sponsor Ballot</p> <p>802.1AE 802.3an 10GBASE-T, 802.3as Frame Extensions, 802.3aq, 802.3cor1 (possibly) 802.11k sponsor pool formation 802.15.4REVb 802.16/conformance04</p>	-	Nikolich	2	08:14 AM
	<p>5.04 II List of Drafts to Revcom</p>	-	Nikolich	2	08:16 AM

Drafts to RevCom

- **P802.1ad/D6.0** - Virtual Bridged Local Area Networks - Amendment 4: Provider Bridges
- **P802.1AE** - Security
- **P802.15.3b/D04** -Amendment to MAC Sublayer
- **P802.16e/D12** - Amendment for Physical and Medium Access Control Layers for Combined Fixed and Mobile Operation in Licensed Bands

IEEE Staff Introductions

- Karen Kenney,
 - Associate Managing Director, Business Administration
- Michelle Turner,
 - Project Editor
- Michael Fischer
 - Program Manager, Document Development
- Susan Vogel,
 - Manager, Technical Committee Programs
- Susan Tatiner
 - Associate Managing Director, Technical Program Development
- Michael Kipness,
 - Staff Liaison

08:18 AM

08:18 AM

08:18 AM

5.06 II

802 Task Force update

SA items

Nikolich

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IEEE-SA/802 Task Force

- Meeting held September Standards Board Session
 - Topics:
 - 1) 802/International Stds Items
 - a)ISO/IEC IEEE SA relationship (15 minutes)
 - a1)tactical impact on 802 (recent SC6/802.11i events):
Geoff Thompson
 - b)Project TAG SC6: Geoff chair of US TAG
 - 2)802 speaker at CAG Munich Conference: Jim Carlo presented
 - 3) Funded Services Project Updates (10 minutes)
 - a)Online training: Avilar contract executed, SA SOW pending
 - b)P&P:--was to be complete end OCT
 - 4) Complimentary Copies: Geoff Thompson—OBE--dead
 - 5) MyBallot feedback update: Bob Grow (10 minutes)
 - 6) Staff resignation—Ickowicz
 - 7) IPR disclosure update—Kenney
 - 8) ProCom issue—approval threshold--Sherman
 - Participants:
 - 802- Nikolich, Thompson, Law, Grow, Sherman
 - SA Staff-Kenney, Vogel, Tatiner
 - Schedule a follow up meeting this week:
 - Recommend Wednesday noon-2pm

Jim Carlo reported on the conference he attended on behalf of 802, patent policy being a significant topic for the conference. There are some issues regarding IPR policy that all the participating organizations will be examining and making changes.

5 Bob Grow clarified the issue of approval threshold that may affect email ballots. The bylaws currently require 50% of voting members for approval. This conflicts with how many working groups conduct email ballots.

Roger asked that someone from IEEE staff report on the status of myProject and how it will affect our work. Sue Vogel will address this in the 802 Task Force.

5.07 II Anti-Trust presentation follow-up - Kenney 5 08:23 AM

10 There was a good turnout at the last plenary for Mike Lindsay's presentation. There will be an item on the ProCom agenda to add language in the bylaws on this topic. The initial proposed language is the following.

Added to the end of 5.2.1 on participation in standards:

15 "A working group (or subgroup) can become imbalanced if an unduly high proportion of individual participants are from, employed by, or otherwise represent a single company (including its affiliates), particularly when the participants do not, or do not expect to, substantively participate in the group. Such imbalance is contrary to open and fair participation by all interested parties and is unacceptable."

20 Also add to 5.2.1.1 on openness:

Each individual participant in IEEE Standards activities shall disclose his or her affiliations when requested. An individual who knows or reasonably should know that another participant's disclosure is materially incomplete or incorrect should report that fact to IEEE-SA.

25 She is seeking feedback.

5.08 II Get IEEE802 program update - Kenney 10 08:28 AM

Get IEEE 802®

Update 13

For LMSC November Plenary

Karen Kenney, Associate Managing Director,
Business Administration

14 November 2005
Vancouver, B.C.



Downloads

- **Program to date** **2,173,839**
- **Year to date** **405,557**
- **Weekly average** **8,380**
- **Most requested**
 - **802.11™, .11a, .11b, .11i, .11g**
 - **802.3™**
 - **802.15.4**

User Type (Year to Date)

USER	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sep	Oct	YTD Total
Academic/Student:	18,326	6,522	22,635	20,406	17,747	15,902	14,332	15,926	18,372	19,174	169,342
Other:	6,651	2,058	7,079	6,511	6,367	6,728	5,947	6,246	6,646	6,769	61,002
Network equipment manufacturer:	4,803	1,270	4,542	4,813	4,164	4,657	4,403	4,706	4,402	4,279	42,039
Public network service provider:	2,863	814	2,806	3,337	2,674	3,105	2,792	2,893	2,878	2,978	27,140
Network Software Developer/Manufacture	3,419	1,103	3,683	2,991	3,357	3,200	2,804	3,082	2,945	3,047	29,631
Systems Administrator:	2,429	880	2,804	2,471	2,335	2,255	1,974	2,279	2,586	2,336	22,349
Standards Developer:	1,770	742	1,618	1,728	1,390	1,441	1,477	1,580	1,250	1,528	14,524
Network silicon manufacturer:	1,093	307	1,146	1,168	990	831	951	973	896	882	9,237
Private network service provider:	1,340	436	1,410	1,449	1,435	1,318	1,195	1,210	1,215	1,471	12,479
Government:	1,265	301	1,372	1,209	1,183	1,321	1,426	1,356	1,497	1,384	12,314
Journalist/Analyst/Author	743	311	603	651	555	473	478	556	597	533	5,500
Curious Citizen											-
Total	44,702	14,744	49,698	46,734	42,197	41,231	37,779	40,807	43,284	44,381	405,557

User Type (4/03-10/05)

USER	PTD Total
Academic/Student:	568,846
Other:	216,487
Network equipment manufacturer:	152,611
Public network service provider:	96,774
Network Software Developer/Manufacturer	93,250
Systems Administrator:	76,550
Standards Developer:	50,935
Network silicon manufacturer:	40,661
Private network service provider:	47,308
Government:	43,524
Journalist/Analyst/Author	17,380
Curious Citizen	74
Total	1,404,400

Program Entries

November 2005 – February 2006

- **Std On or about**
- 802.1ab™ 7 Nov 05
- 802.15.1™ 15 Dec 05

Approvals

<u>IEEE Std</u>	<u>Tentative Pub Date</u>
• 802.11e	11 Nov 2005
• 802.3	22 Nov 2005
• 802.16f	22 Nov 2005

Reminders/Updates

- **Develop 2007 budget for approval
March 2006 Plenary**

5.09 II Update on financial reporting requirements - Kenney 5 08:38 AM

5 At the last plenary an audit questionnaire was sent to all chairs. She thanked 802 for everyone getting all their response in by the deadline. Three checking accounts have been identified in 802 for additional reporting. Those involved will receive a form from IEEE in the next few weeks to be completed. Karen will ask John Hawkins to review the form before it is sent out.

5.10 II Request from the European patent office - Mills 10 08:43 AM

10 The EPO requests access to information that is not currently available to them through their IEL subscription. They desire access to submissions and other materials that will help them in their work. It was pointed out that the submissions are all available on the public part of the web site. Steve indicated that they may also need access to unpublished drafts.

5.11 II Online Training Update - Vogel/Thaler 5 08:53 AM



IEEE

On-line Training Update
14-November-2005

Vendor Contract

- Contract with Avilar has been signed covering:
 - development of the on-line class based on our classroom presentation
 - Learning software so we can host the class in the future
 - Avilar hosting for the initial year (\$3800)
- Thanks to Claudio Stanziola of IEEE staff for his aid in the final contract negotiations.

Final Contract

- When we had the initial estimate it was for us hosting.
- With the Avilar hosting, the final contract amount was \$33,267.
- Need approval for the additional \$3267

5.12	II		-			08:58 AM
5.13	II		-			08:58 AM
5.14			-			08:58 AM
5.15						08:58 AM
<div style="border: 1px solid black; padding: 5px; display: inline-block;"> LMSC items </div>						
						08:58 AM
5.16	II	Resolution of Arent-Fox legal invoice	-	Nikolich	3	08:58 AM

Resolution of Arent-Fox invoice

- The 802 Chair recommends the approval of \$11,365.52 of 802 funds to cover $\frac{1}{4}$ of the Arent-Fox invoice (remaining amount to be paid from 802.11, 802.15 and IEEE SA treasuries, $\frac{1}{4}$ each) resulting from IDEAL contractual disputes.

Meeting Fee Waivers

- The following individuals have had their registration fees waived for this plenary session by the LMSC chair.
 - IEEE-SA Staff Participants
 - Karen Kenney, Michelle Turner, Michael Kipness, Susan Vogel, Susan Tatiner
 - Invited Participants
 - none that I know of

Tutorial Schedule

Monday	Tuesday
1) 1Gbps WLAN (Kerry) 6:30-8:00PM	3) Open (possible EC ‘open office’ sponsored by Nikolich) 6:30-8:00PM
2) Detection of low power licensed devices (Stevenson) 8:00-9:30PM	4) Open 8:00-9:30PM

5.19 II China Liaison Update - Marks 5 09:08 AM

5 We approved a JTC1 liaison statement in July. We appointed a delegation to attend the Beijing meeting to reach consensus on proposals going into the fast track process in SC6. This delegation has been very active. A number of documents were submitted by the delegation. The goals of the Beijing meeting were not met (to arrive at a harmonized approach). The CCSA delegation will be visiting the U.S. Roger will arrange for them to meet with representatives of the IEEE (Paul Nikolich and Roger Marks).

5.20 II JTC1/SC6 update - Thompson 5 09:13 AM

10 At the SC6 meeting, Geoff was the U.S. delegate to WG3. The Chinese position was that the Geneva direction is to proceed immediately to a fast track ballot, without the contradiction period. There was no agreement at the meeting between on the conduct of the ballot. The Secretary General declared that the ballots for both WAPI and 802.11i would proceed immediately. One country filed a discrepancy report against 802.11i. Ten countries filed discrepancies against WAPI. The ballot will close on March 7, 2006 (Tuesday of our March plenary session). There will be a meeting of the U.S. TAG on Thursday evening to develop the U.S. position on these ballots.

15 Paul thanked Roger and Geoff, as well as the participants in the delegation for their dedication and hard work.

5.21 MI Electronic Attendance and Documentation Systems - Heile 15 09:18 AM

20 Bob pointed out that there are significant problems with both attendance and documentation, particularly in the largest of the working groups. There will be a meeting Wednesday 3-4pm to discuss topic. He will bring a motion on Friday to form a subcommittee to handle the RFP process.

5.22 II - 09:33 AM

5.23 II P&P update - Sherman 10 09:33 AM

EC

LMSC Policy and Procedures Update


Author:

Matthew Sherman
1st Vice Chair, IEEE 802
BAE Systems - CINR
Matthew.Sherman@BAESystems.com

Date: November 14th, 2005

Status on P&P Restructuring

Restructuring Process

- Reformat to match Sponsor Model (1 Cycle)
 - Editorial in Nature
- Modify for conformance (1 Cycle)
 - Identify where requirements of SA and CS SAB not met
 - Introduce changes to bring into conformance
- Streamline (~~1 2~~ 3 Cycles)  **YOU ARE HERE
IN 3ND CYCLE**
 - Implement “Less is More”
 - Fix any deficiencies specific to 802
 - Reduce backlog of P&P revisions
- Entire process to take roughly ~~16~~ 20 months
 - Extend ~~4~~ 8 months for streamlining

Current LMSC P&P Revision Ballots

- P&P are updated via EC letter ballots and votes
 - Process defined in the LMSC P&P
 - Can be monitored via EC Email Achieves
 - <http://grouper.ieee.org/groups/802/secmail/mail1.html>

- In Process streamlining ballots (Vote for approval Friday)
 - WG Membership & Meetings* (Matthew Sherman)
 - <http://grouper.ieee.org/groups/802/secmail/bin00234.bin>
 - Modification in gain / loss of membership
 - Strawpoll in WGs – Feedback by Wednesday
 - LMSC Organization* (Matthew Sherman)
 - <http://grouper.ieee.org/groups/802/secmail/bin00233.bin>

* - You must change the file extension from 'bin' to 'pdf' to view the file

Comment Resolution Conducted

- 5 hours total
 - 09/27 – Two hours Telecon (1 hour used)
 - 10/12 – Two hours Telecon (<1 hour used)
 - 10/27 – Two hours Telecon (Cancelled)
 - Last telecon not needed
 - 11/13 – 3 hour Sunday Night ‘Rules meeting’
 - Some updates to revisions in process
 - General discussion on what to do next

Status on Streamlining Ballots

- **WG Membership & Meetings**
 - Completed Balloting and Resolution
 - Requirement for WG P&P eliminated
 - New WG membership establishment straw poll
 - Updated against current P&P
- **LMSC Organization**
 - Completed Balloting and Resolution
 - Roger's comments of 10/17
 - Updated against current P&P

EC Straw poll

Will you vote to approve the P&P
Revision:

- WG Membership & Meetings
 - <http://grouper.ieee.org/groups/802/secmail/bin00231.bin>

Yes:

No:

Abstain:

EC Straw poll

Will you vote to approve the P&P
Revision:

- LMSC Organization
 - <http://grouper.ieee.org/groups/802/secmail/bin00232.bin>

Yes:

No:

Abstain:

Next Steps

- Current P&P Revision process
 - If you want a change – you do it
 - 1st VC will
 - Provide advice
 - Implement approved changes
- 1st VC's current focus
 - WG Appeals procedure
 - Ways to improve 802 standards process
 - Tuesday 6 PM Tutorial slot – Open Mike
 - Particularly looking for ways to accelerate the process
 - (Without compromising quality)
 - Will conduct session on this issue

SA Support

- Process completed
- Final payment requires EC approval
 - Will vote this week

	5.24	II	Architecture Group update	-	Jeffrey	5	09:43 AM
5	The group met on Sunday afternoon and worked on 802.3 issue list. One significant issue that came up is power management (power saving). The group also met at the wireless interim in September. It received a presentation on QoS architectures in 802.						
	5.25	II	notice of PARs under consideration	-	WG chairs	5	09:48 AM
	Roger, Stuart, Carl						
	5.26	II	notice of Study Groups under consideration	-	WG chairs	5	09:53 AM
10	802.11 extension of CDP (802.11y) 802.19 possible guide on coexistence 802.3 CFI Tuesday 8pm short haul 10 Gb/s interface 802.16 multihop relays						
	5.27	II	pending 802.20 appeal status	-	O'Hara	2	09:58 AM
15	Two appeals received regarding a decision at the 802.20 interim session. The appellants and appellees have been notified. The hearing will be held on Wednesday of the March 2006 plenary session.						
	5.28	II	Proposed revision to ITU-R Recommendation M.1450	-	Lynch	5	10:00 AM
	Clean up of "broadband radio local area networks" (M.1450-2) is desired. Mike is asking for input as soon as possible, to develop a position for the March 2006 ITU meeting.						
	5.29	II	March 2006 Meeting site and London Metropole update	-	Rigsbee	5	10:05 AM
20	The Hyatt Regency Denver at the Colorado Convention Center is now certain for the March 2006 plenary session. We have received final word that the contract from the London Metropole for January 2007 all-802 interim session is approved.						
	Buzz also reported that the network services RFP process is complete. We are finalizing the contract draft with Verilan. It is anticipated to be presented to the EC on Friday. There will be a review meeting on Thursday 1-2pm.						
25	5.30	II		-			10:10 AM
	5.31	II		-			10:10 AM
	5.32	II		-			10:10 AM
	5.33	II		-			10:10 AM
	5.34	II		-			10:10 AM
	5.35	II		-			10:10 AM
	5.36	II		-			10:10 AM
	5.37	II		-			10:10 AM
	5.38	II		-			10:10 AM
	5.39	II		-			10:10 AM
	5.40	II		-			10:10 AM
	5.41	II		-			10:10 AM
	5.42	II	IEEE/ITU-Relationships overview	-	Costa	10	10:10 AM

A Factual History of the IEEE – ITU-R Relationship

[José Costa](#)

IEEE 802.16 ITU-R Liaison Official

Presentation to IEEE 802 EC
Vancouver, 14 November 2005

Timeline – 20th century

Year	IEEE	ITU-R
1997	IEEE Std 802.11-1997	JRG 8A-9B was created to address wireless access standards and spectrum; Principal Rapporteurs: José Costa (WP 8A – Mobile) and Akira Hashimoto (WP 9B – Fixed)
1998		George Fishel (P802.11 Secretary at the time), in his role as Task 4 Rapporteur in JRG 8A-9B, proposed the initial draft for a Recommendation on RLANs, including 802.11 (a and b) (Docs. 8A-9B/47 and 8A-9B/61)
1999	Session #1 of P802.16 WG Appointed an ITU-R Liaison Official . All .16 PARs (§17) show ITU as the body for internationalization of the standards	Proposal to the RAG (RA2000-1/3) to create a series of ITU-R administrative recommendations (A-series) similar to those in ITU-T (no decision).
2000	IEEE became recognized by ITU-T as a qualified SDO in Recommendation A.5	<ul style="list-style-type: none"> - Rec. ITU-R M.1450-0 (RLANs), app. - Proposed to RA-2000 a draft Decision (Doc. RA2000/PLEN/45) on IEEE collaboration (no decision).

Timeline – 21st century

Year	IEEE	ITU-R
2001 2002	Industry-driven USA contribution to update Recommendation ITU-R M.1450 (8A-9B/49)	<ul style="list-style-type: none"> - Rec. ITU-R M.1450-1 approved - WRC-03 preparations on 5 GHz for RLANs (Summary of results, see: RLAN: ITU-R Developments)
2003	<ul style="list-style-type: none"> - IEEE becomes Sector Member of ITU-R (details on next chart) - First contribution to ITU-R (to JRG 8A-9B and WP 8A, 8A/45, on protection criteria for RLANs), now completed by WP 8A and submitted to SG 8 (8/72) 	<ul style="list-style-type: none"> - Rec. ITU-R M.1450-2 approved - ITU-D request (8A-9B/184) on BWA: ITU-R and IEEE initiate collaboration (IEEE L802.16-03/11, IEEE L802.16-03/16) - JRG 8A-9B disbanded (work continuing in WP 8A and WP 9B)
2004	<ul style="list-style-type: none"> - IEEE Std 802.16-2004 - Contributions to ITU-R: 4A/58, 6-8-9/21, 8A/112, and 9B/57. 	<ul style="list-style-type: none"> - WP 9B requested further work from IEEE and ETSI to show the harmonized standards.
2005	Contributions to ITU-R: 8A/178 , 8A/223 , 8F/356 , 8F/501 (P1900), 9B/100 , and 6-8-9/41 .	<ul style="list-style-type: none"> - Draft Rec. ITU-R F.[BWA] completed by WP 9B and submitted to SG 9 (9/51).

IEEE membership in ITU-R



October 2003 – the ITU Finance Committee approved IEEE’s request for Sector Membership in ITU-Radiocommunications with waiver of fees.

- Classification: REGINTORG (Regional or International Organization)
- *same as ISO!*
- The ITU Finance Committee noted that *“The IEEE is one of the most prestigious worldwide standardization organizations and its contributions to ITU-R through our membership have been quite significant.”*
- Allows IEEE to interact with ITU independent of any country
- Terry deCourcelle is the Administrative point of contact
- Technical point of contact:
 - Carl Stevenson (2003-2004)
 - Mike Lynch (2005-).

IEEE and ITU



- Preliminary study shows over 150 ITU-T Recommendations that have referenced IEEE standards, papers, transactions.
- IEEE acquired a site license in 2004 for the ITU Electronic Library
- ITU has similar privileges with the IEL on site in Geneva

Summary of IEEE 802 Participation in ITU-R

- **WP 8A (Land Mobile except IMT-2000)**
 - Presented contributions ([8A/45](#), [8A/112](#)) towards an ITU-R Recommendation on the appropriate protection criteria for RLAN systems (e.g. IEEE 802.11a) operating in the 5 GHz band. WP 8A completed the draft Recommendation at its April 2005 meeting and submitted the draft Recommendation to SG 8 ([8/72](#)). The IEEE contributions were well-received - expect the Draft New Recommendation to be adopted by SG 8 at its November 2005 meeting.
 - Presented contributions ([8A/178](#), [8A/223](#) , at sequential meetings) proposing an ITU-R Recommendation pointing to IEEE P802.16e – aimed at international acceptance of IEEE 802.16. Work is in progress.
- **WP 8F (IMT-2000 and systems beyond)**
 - Presented contribution ([8F/356](#)) providing forecasts on services and applications provided by IEEE 802.16 systems to assist WP 8F in their spectrum estimation for systems beyond IMT-2000.
- **WP 9B (Characteristics of systems in the Fixed service)**
 - Presented contributions ([9B/57](#) and [9B/100](#), at sequential meetings) proposing an ITU-R Recommendation pointing to IEEE Std 802.16-2004 – aimed at international acceptance of IEEE 802.16. Strong collaboration with ETSI during the development of the IEEE contributions and the work in WP 9B. WP 9B completed the draft Recommendation at its April 2005 meeting and submitted it to SG 9 for adoption ([9/51](#)).
- **JTG 6-8-9 (Spectrum sharing in 2500-2690 MHz between terrestrial and satellite; preparations for WRC-07 Agenda Item 1.9)**
 - Presented contributions ([6-8-9/21](#) and [6-8-9/41](#) at sequential meetings on the characteristics of IEEE 802.16 for sharing studies, as provided by industry. Further proposed a contribution expecting contributions from industry groups ([L80216-05_044r1.doc](#) or [6-8-9/52](#))
- **WP 4A (Fixed Satellite)**
 - Presented contribution ([4A/58](#)) to WP4A aimed at attempts from the satellite community that could result in the imposition of additional constraints on the use of the band 5150-5250 MHz by IEEE 802.11a systems. Work is in progress.

List of IEEE Contributions to ITU-R

Number	Date	Source	Title
4A/58	2004-04-07	IEEE	Comments on "a preliminary draft revision to Recommendation ITU-R S.1427" - Methodology and criterion to assess interference from radio local area (RLAN) transmitters to non-GSO MSS feeder links in the band 5 150-5 250 MHz
6-8-9/52	2005-08-09	IEEE	Characteristics of incumbent terrestrial systems in the 2 500-2 690 MHz band
6-8-9/41	2005-01-17	IEEE	Characteristics of IEEE 802.16 systems in 2 500-2 690 MHz
6-8-9/21	2004-03-19	IEEE	Characteristics of wireless metropolitan area networks
8A/242	2005-09-12	IEEE	Institute of electrical and electronics engineers (IEEE) - Working document towards a preliminary draft new report software defined radio in the Land Mobile Service
8A/223	2005-08-09	IEEE	Proposed amendments to Annex 15 to Doc. 8A/202
8A/178	2005-04-01	IEEE	Proposed working document towards a preliminary draft new Recommendation ITU-R M.[8A/BWA] - Radio interface standards for broadband wireless access systems in the mobile service operating below 6 GHz
8A/112	2004-08-31	IEEE	Proposed revision to working document toward a PDNR - Protection criteria for wireless access systems, including radio local area networks, operating in the mobile service in the bands 5 150-5 250 MHz, 5 250-5 350 MHz and 5 470-5 725 MHz
8A/109	2004-08-31	IEEE	Proposed amendments to working document towards PDNR ITU-R F.[9B/BWA] - Recommended standards for broadband wireless access
8A/45	2003-11-18	IEEE	Radio local area network protection criteria
8F/501	2005-05-30	IEEE	Information on IEEE P1900 purpose, plans, progress and relevance to the work of ITU-R WP 8F
8F/356	2005-01-04	IEEE	Response to ITU-R WP 8F Questionnaire on the services and market for the future development of IMT-2000 and systems beyond IMT-2000
9B/57	2004-08-31	IEEE	Proposed amendments to working document towards PDNR ITU-R F.[9B/BWA] - Recommended standards for broadband wireless access

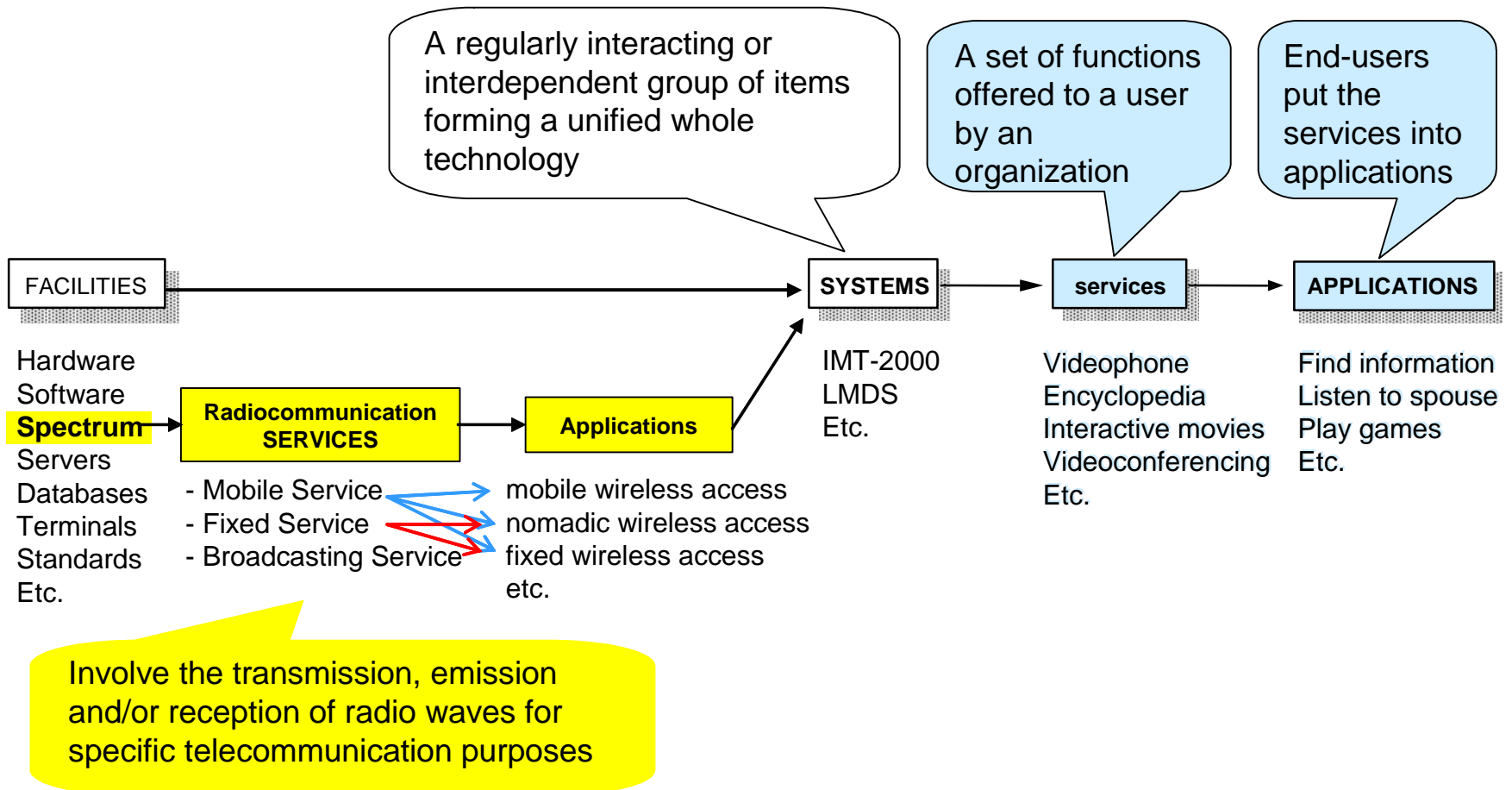
What is ITU-R?

The **ITU Radiocommunication Sector** specializes in facilitating international collaboration to ensure the rational, equitable, efficient and economical use of the radiofrequency spectrum and satellite orbits, by:

- Holding **World and Regional Radiocommunication Conferences** to expand and adopt **Radio Regulations** and **Regional Agreements** covering the use of the radio-frequency spectrum;
- Establishing **ITU-R Recommendations**, developed by **ITU-R Study Groups (SGs)** in the framework set by Radiocommunication Assemblies, on the technical characteristics and operational procedures for radiocommunication services and systems;
- Coordinating endeavours to eliminate harmful interference between radio stations of different countries;
- Maintaining the Master International Frequency Register, based on inputs from administrations; and
- Offering tools, information and seminars to assist national radio-frequency spectrum management.

The need for spectrum:

Radiocommunication Services enable wireless telecommunication services



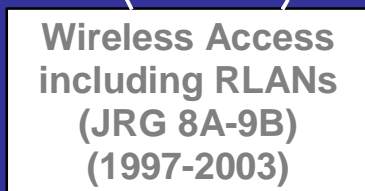
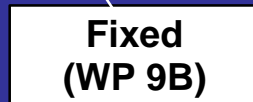
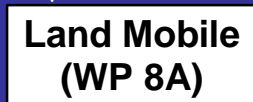
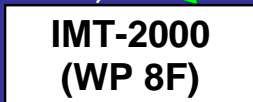
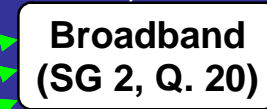
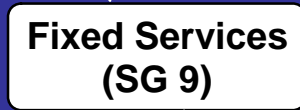
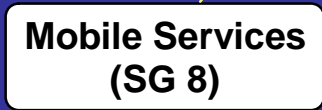
ITU-R Study Groups and equivalent

- SG 1 [Spectrum management](#) (Chair: T. Jeacock, UK)
- SG 3 [Radiowave propagation](#) (Chair: D.G. Cole, Australia)
- SG 4 [Fixed-satellite service](#) (Chair: V. Rawat, Canada)
- SG 6 [Broadcasting services](#) (Chair: A. Magenta, Italy)
- SG 7 [Science services](#) (Chair: R.M. Taylor, USA)
- SG 8 [Mobile, radiodetermination, amateur and related satellite services](#) (Chair: C. Van Diepenbeek, The Netherlands)
- SG 9 [Fixed service](#) (Chair: V.M. Minkin, Russia)
- CCV [Coordination Committee for Vocabulary](#) (Chair: J.-P. Huynh, France)
- CPM [Conference Preparatory Meeting](#) (Chair: K. Arasteh, Iran)
- SC [Special Committee on regulatory/procedural matters](#) (Chair: F. Rancy, France)
- RAG [Radiocommunication Advisory Group](#) (Chair: B. Gracie, Canada)
- CVC [Chairmen and Vice-Chairmen Meetings](#) (Chair: V. Timofeev, Director BR)

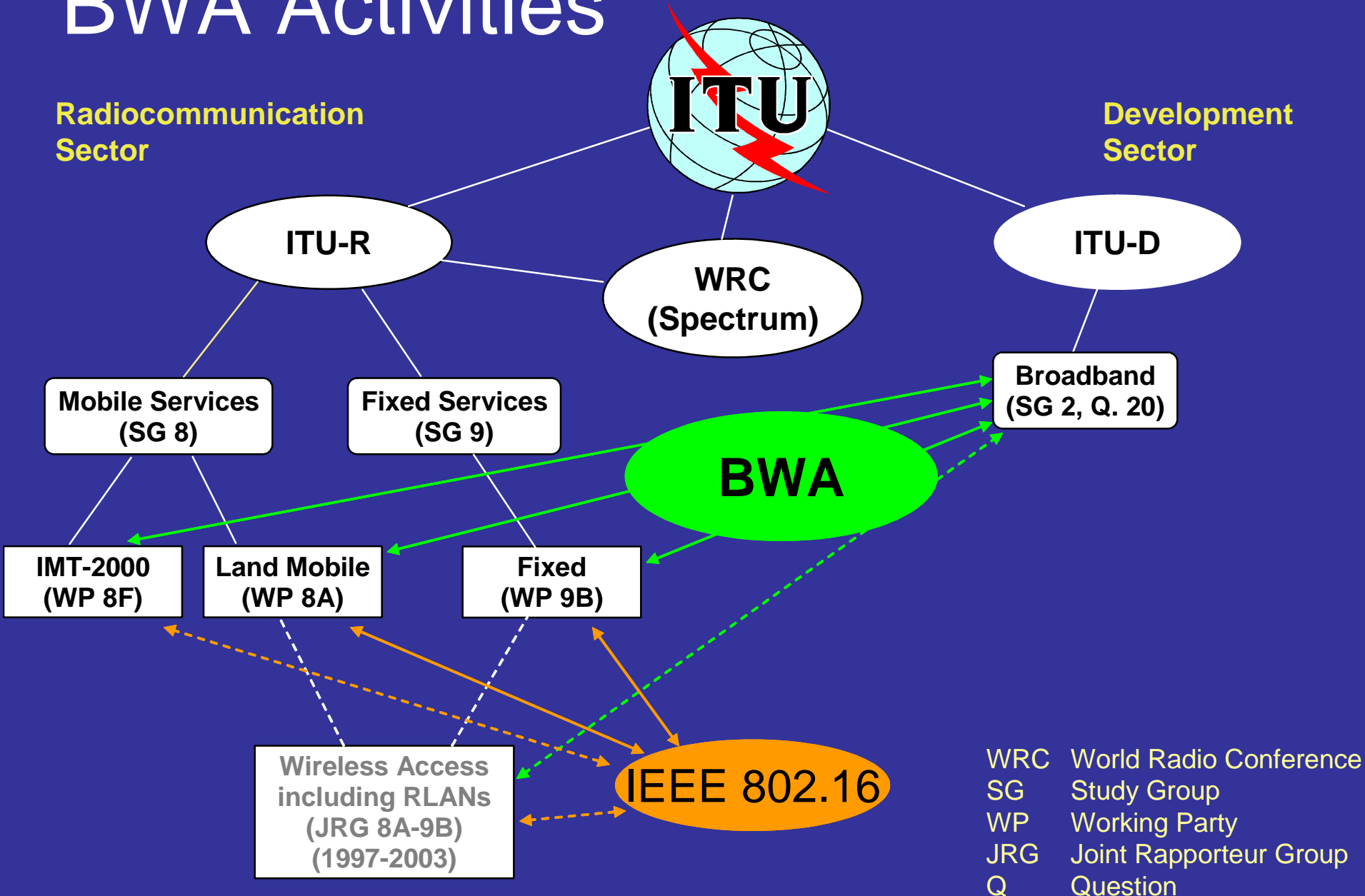
BWA Activities

Radiocommunication Sector

Development Sector



WRC World Radio Conference
SG Study Group
WP Working Party
JRG Joint Rapporteur Group
Q Question



Wireless Metropolitan Area Networks (WMAN)

- Ongoing relationship between ITU, IEEE and ETSI to incorporate the IEEE 802.16 and ETSI BRAN BWA standards in ITU Recommendations.
 - ITU-D requested assistance from the ITU-R Joint Rapporteur Group 8A-9B on access technologies for broadband communications.
 - Preliminary draft new Recommendation for WMANs originally developed in ITU-R Joint Rapporteur Group 8A-9B and now being continued in ITU-R Working Party 9B for the Fixed Service and ITU-R Working Party 8A for the Mobile Service.
 - There is another relationship between IEEE 802.16 and ITU-T Study Group 9 (broadband cable networks) to investigate the synergism between IEEE 802.16 and cable networks.

ITU-R WP 9B (Fixed Service)

- Preliminary Draft New Recommendation ITU-R F.[9B/BWA]:
 - “Radio interface standards for broadband wireless access systems in the fixed service operating below 66 GHz”
 - Includes the IEEE WirelessMAN standards (IEEE 802.16) and ETSI HiperMAN standards (ETSI BRAN).
- Developed mainly by contributions from ETSI and IEEE, showing the harmonized standards
- WP 9B approved the draft Recommendation for submission to Study Group 9 (1-2 December 2005).

ITU-R WP 8A (Land Mobile Service)

- Broadband Radio Local Area Networks (RLANs)
 - Standards: [Recommendation ITU-R M.1450](#)
 - Spectrum: 83.5 MHz at 2.4 GHz and 455 MHz at 5 GHz
- Proposed (IEEE) draft Recommendation “A broadband wireless metropolitan area network radio interface standard[s] for nomadic access systems in the mobile service operating below 6 GHz” ([Annex 12](#) to [Doc. 8A/277](#) and [Doc. 8A/223](#)):
 - enhancements to the IEEE Standard 802.16-2004 (P802.16e)
- Proposed (USA) draft Recommendation: “Radio interface standards for broadband wireless access systems in the mobile service operating below 6 GHz” ([Annex 13](#) to [Doc. 8A/277](#))
 - includes P802.16e and several other standards from ATIS and TIA.
- Next meeting of WP 8A: 21-30 March 2006, Geneva
(deadline for contributions 13 March 2006, 16:00 hours UTC)

5 Roger would like to hear from Mike or others in the future as to what other IEEE groups are contributing to ITU. Mike reported that IEEE P1900 has submitted documents to ITU-R WP8F (IMT-2000 and beyond) and WP8A (Mobile excluding IMT-2000). The WP8F meeting was in Quebec City in July, 2005 and Mansoor Shafi represented P1900. The WP8A meeting was in September and Jim Hoffmeyer represented P1900. While the WP8F input was more of an informational type the WP8A inputs suggested changes to a report on SDR, most of which were accepted. P1900 also made through me an input to a WP8A reflector on the SDR report.

10 We seem to have a good process for IEEE SA inputs to ITU-R. The U.S. Government is comfortable with IEEE SA having direct access to the ITU-R.

5.43 II Announcement of March 2006 Elections - Nikolich 1 10:20 AM

All WG and TAG chairs are up for reelection at the March 2006 plenary.

5.44 DT SEC meeting schedule (rules, SA, etc.) - Nikolich 3 10:21 AM

EC meetings for the week

Windsor

- Tuesday 9-11am reserved (Paul)
- Tuesday 11am-2pm open
- Tuesday 2-4pm open
- Tuesday 4-6pm open
- Tuesday 6:30-8:00 Member feedback on improving 802 efficiency (Sherman/Nikolich)

- Wed 8-10am open
- Wed 10-noon open
- Wed noon-2pm 802 Task Force (Paul)
- Wed 2-3pm Online training SOW review (Thaler)
- Wed 3-4pm Attendance and Documentation Systems (Heile)

- Thursday 10-11am alternatives to EC email ballot process (Roger)
- Thursday AM tbd open
- Thursday 1-2pm Network Services RFP review
- Thurs 5-7pm 'open office' (802 Chair Paul Nikolich, Stds Board Chair Steve Mills, IEEE SA Past President Jim Carlo and IEEE Staff Karen Kenney)
- Thurs 6-7pm Matt Sherman—rules discussion (different room)

IEEE-SA/802 Task Force

- Meeting held September Standards Board Session
 - Topics:
 - 1) MyBallot update: Grow/Vogel
 - 2) MyProject update: Grow/Vogel
 - 3) Declaration of Affiliation: Kenney
 - 4) European PTO: Mills
 - Schedule this week:
 - Wednesday noon-2pm

ADJOURN SEC MEETING

- **Nikolich** **10:24 AM**

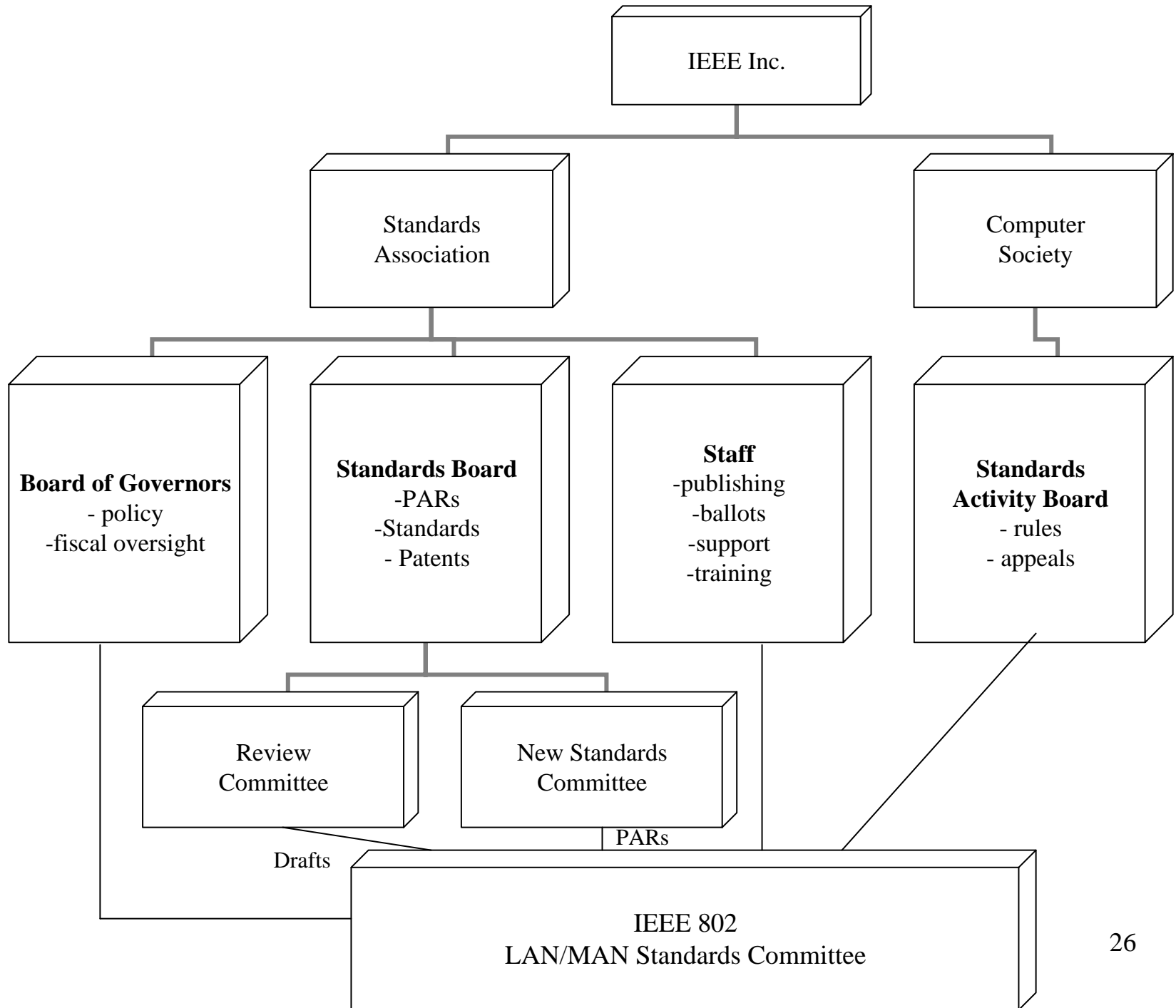
Meeting adjourned at 10:24am.

6.00 PL IEEE 802 PLENARY MEETING STARTS

- **Nikolich** **60** **11:00 AM**

IEEE802 Monday Plenary Agenda

- 11:00 Welcome Nikolich
- 11:02 Membership Rules, EMS update Thaler
- 11:04 IEEE 802 Policy and Procedure Update Sherman
- 11:06 Treasurer's Report Hawkins
- 11:08 Patent Policy Thompson
- 11:10
- 11:15 802.1 Architecture & Interworking Jeffree
- 11:20 802.3 CSMA/CD (Ethernet) Grow
- 11:25 802.11 WLAN (Wireless Local Area Network) Kerry
- 11:30 802.15 WPAN (Wireless Personal Area Network) Heile
- 11:35 802.16 BWA (Broadband Wireless Access) Marks
- 11:40 802.17 RPR (Resilient Packet Ring) Takefman
- 11:45 802.18 Radio Regulatory TAG Lynch
- 11:50 802.19 Coexistence TAG Shellhammer
- 11:55 802.20 Mobile BWA Upton
- 12:00 802.21 Handoff Rajkumar
- 12:05 802.22 Wireless Regional Area Networks Stevenson
- --- Tutorials Nikolich
- --- Meeting Arrangements Rigsbee
- 12:?? ADJOURN Plenary



IEEE 802 ORGANIZATION

EXECUTIVE COMMITTEE (EC)

CHAIR
Paul Nikolich

WORKING GROUP/TAG CHAIRS

802.1
BRIDGING/ARCH
Tony Jeffree

802.3
CSMA/CD
Bob Grow

802.11
WLAN
Stuart J. Kerry

802.18 TAG
Radio Regulatory
Mike Lynch

802.15
WPAN
Bob Heile

802.16
BWA
Roger Marks

802.17
ResPackRing
Mike Takefman

802.19 TAG
Coexistence
Shellhammer

802.20
MBWA
Jerry Upton

802.21
Handoff
AJ Rajkumar

802.22
WRAN
Stevenson

APPOINTED OFFICERS

1st VICE CHAIR
Mat Sherman

2nd VICE CHAIR
Pat Thaler

EXECUTIVE SECY
Buzz Rigsbee

RECORDING SECY
Bob O'Hara

TREASURER
John
Hawkins

**MEMBER
EMERITUS**
Geoff
Thompson

HIBERNATION

802.2 LLC (Dave Carlson)
802.5 Token Ring (Bob Love)
802.12 Demand Priority (Pat Thaler)

DISBANDED

802.4 Token Bus
802.7 Broadband TAG
802.9 ISLAN
802.14 CATV
802.6 DQDB
802.8 Fiber Optic TAG
802.10 Security

Awards

- IEEE Std 802.11e-2005 WLAN QoS
 - Stuart J. Kerry, John Fakatselis, Srinivas Kandala, Duncan Kitchin, Matthew Sherman, Tony Jeffree, Paul Congdon, Bill Lane
 - Keith Amann, Mathilde Benveniste, Greg Chesson, Sunghyun Choi, Wim Diepstraten, Michael Fischer, Jin-Meng Ho, David Hunter, John Kowalski, Thomas Kuehnel, Robert Miller, Floyd Simpson, Amjad Soomro, Al Petrick, Menzo Wentink, Harry R. Worstell

IEEE Staff Introductions

- Karen Kenney,
 - Associate Managing Director, Business Administration
- Michelle Turner,
 - Project Editor
- Michael Fischer
 - Program Manager, Document Development
- Susan Vogel,
 - Manager, Technical Committee Programs
- Susan Tatiner
 - Associate Managing Director, Technical Program Development
- Michael Kipness,
 - Staff Liaison

IEEE-SA Standards Board Bylaws on Patents in Standards

6. Patents

IEEE standards may include the known use of essential patents and patent applications provided the IEEE receives assurance from the patent holder or applicant with respect to patents whose infringement is, or in the case of patent applications, potential future infringement the applicant asserts will be, unavoidable in a compliant implementation of either mandatory or optional portions of the standard [essential patents]. This assurance shall be provided without coercion and prior to approval of the standard (or reaffirmation when a patent or patent application becomes known after initial approval of the standard). This assurance shall be a letter that is in the form of either:

- a) A general disclaimer to the effect that the patentee will not enforce any of its present or future patent(s) whose use would be required to implement either mandatory or optional portions of the proposed IEEE standard against any person or entity complying with the standard; or
- b) A statement that a license for such implementation will be made available without compensation or under reasonable rates, with reasonable terms and conditions that are demonstrably free of any unfair discrimination.

This assurance shall apply, at a minimum, from the date of the standard's approval to the date of the standard's withdrawal and is irrevocable during that period.

Inappropriate Topics for IEEE WG Meetings

- Don't discuss licensing terms or conditions
- Don't discuss product pricing, territorial restrictions or market share
- Don't discuss ongoing litigation or threatened litigation
- Don't be silent if inappropriate topics are discussed... do formally object.

If you have questions, contact the IEEE-SA Standards Board Patent Committee Administrator at patcom@ieee.org or visit <http://standards.ieee.org/board/pat/index.html>

Paul solicited participation at the Tuesday evening meeting to address improvement of the 802 process.

5

LMSC Policy and Procedures Update

Author:

Matthew Sherman
1st Vice Chair, IEEE 802
BAE Systems - CINR
Matthew.Sherman@BAESystems.com


Date: November 14th, 2005

What are the LMSC P&P?

- P&P is short hand for Policies and Procedures
- LMSC P&P are the ‘rules’ that govern the IEEE 802 LMSC
- LMSC P&P can be found at
 - <http://grouper.ieee.org/groups/802/policies-and-procedures.pdf>
- Working groups also have P&P
- Other ‘Governance’ documents from
 - IEEE Standards Association
 - IEEE Computer Society

Status on P&P Restructuring

Restructuring Process

- Reformat to match Sponsor Model (1 Cycle)
 - Editorial in Nature
- Modify for conformance (1 Cycle)
 - Identify where requirements of SA and CS SAB not met
 - Introduce changes to bring into conformance
- Streamline (~~1-2~~ 3 Cycles)  **YOU ARE HERE
IN 3ND CYCLE**
 - Implement “Less is More”
 - Fix any deficiencies specific to 802
 - Reduce backlog of P&P revisions
- Entire process to take roughly ~~16~~ 20 months
 - Extend 4 8 months for streamlining

Current LMSC P&P Revision Ballots

- P&P are updated via EC letter ballots and votes
 - Process defined in the LMSC P&P
 - Can be monitored via EC Email Achieves
 - <http://grouper.ieee.org/groups/802/secmail/mail1.html>
- In Process streamlining ballots (Vote for approval Friday)
 - WG Membership & Meetings* (Matthew Sherman)
 - <http://grouper.ieee.org/groups/802/secmail/bin00234.bin>
 - Modification in gain / loss of membership
 - Strawpoll in WGs – Feedback by Wednesday
 - LMSC Organization* (Matthew Sherman)
 - <http://grouper.ieee.org/groups/802/secmail/bin00233.bin>

* - You must change the file extension from 'bin' to 'pdf' to view the file

All P&P Revs Must be Approved by Vote of EC

- Current Revisions will all be voted at Closing EC meeting Friday 11/18/05
- Open to IEEE 802 Attendees

Next Steps

- Add WG Appeals process
 - Have 802 level appeals defined by not WG
 - Standard approach to appeals across 802 WG
- Ways to improve 802 standards process?
- Looking particularly to speed the process
 - (Without sacrificing quality)
- Open mike session Tuesday at 6:30 PM
 - Bring your ideas and brainstorm

Questions?

- Contact Matthew Sherman
 - matthew.sherman@baesystems.com

802.1 – Activities & status

Tony Jeffree, 802.1 WG Chair

14 November 2005

Areas of work

- 802 Architecture and interworking between 802 technologies
 - Cross-802 Architecture group
 - “Technical Plenary” if needed
 - Joint meetings this week with 802.3, 802.11
- MAC Bridging
 - “traditional” bridging
 - VLAN bridging
 - Provider bridging
- Security
 - Secure frame transmission
 - Key management
- LAN management
 - Discovery mechanisms

Officers

- Chair: Tony Jeffree
- Vice Chair: Paul Congdon
- Recording Secretary: Michael Wright
- Interworking and Link Sec TG Chair: Mick Seaman
- Link Sec TG Secretary: Allyn Romanow
- Maintenance of Email exploder: Hal Keen
- Maintenance of website: John Messenger
 - Website: <http://www.ieee802.org/1/>

Status of current projects - (1)

- Revision of 802.1Q - VLANs
 - Sponsor balloting completed
 - Submitted to RevCom

Status of current projects - (2)

- MAC Service revision (P802.1ac)
 - Initial input generated based on ISO/IEC JTC1 standard 15802-1 plus ISS, E-ISS from 802.1D and 802.1Q

Status of current projects - (3)

- P802.1ad Provider Bridges:
 - Sponsor balloting completed
 - Submitted to RevCom

Status of current projects - (4)

- P802.1AE – MAC Security
 - Initial Sponsor ballot completed
 - Comment resolution this week
 - At least 1 recirc needed before RevCom submission
- P802.1af – Key Agreement
 - Second draft generated
- P802.1ag Connectivity Fault Management
 - Second draft generated
 - WG ballot in November/December timeframe

Status of current projects - (5)

- P802.1ah – Provider Backbone Bridges
 - Proposed amendment to 802.1Q to provide further scaling characteristics in conjunction with P802.1ad in large provider networks
 - Second draft generated
 - Still at TG ballot stage
- P802.1aj – Two-port MAC Relay
 - Proposed amendment to 802.1Q to define a relay device, commonly known as a “media converter”, that will assist the integration of 802 LAN technologies with emulated LAN services in use in the provider networking space.
 - Second draft generated
 - TG ballot conducted
 - Comment resolution proceeding
- P802.1ak – Multiple Registration Protocol
 - Proposed amendment to 802.1Q to improve the performance/scalability of GARP-based applications (GVRP, GMRP) in provider networks
 - Second TG ballot completed
 - Comment resolution this week
 - Probably WG ballot in December timeframe

New PARs approved by NesCom

- P802.1AC – MAC Service
 - PAR revision to extend end dates
- P802.1AL – Secure Device Identity
- P802.1ao – Shortest Path Bridging
- P802.1ap - Management Information Base (MIB) definitions for VLAN Bridges

Interim meeting

- Will be one in January 2006 – location TBD

IEEE 802.3 Working Group

14 November 2005

Robert M. Grow
Chair, IEEE 802.3 Working Group
bob.grow@ieee.org

Current IEEE 802.3 activities

- P802.3an, 10GBASE-T
- P802.3ap, Backplane Ethernet
- P802.3aq, 10GBASE-LRM
- P802.3ar, Congestion Management
- P802.3as, Frame Format Extensions
- P802.3at, DTE Power Enhancements
- P802.3-2005/Cor1, Isolation corrigendum
- Residential Ethernet Study Group

P802.3an 10GBASE-T

- Extends Ethernet capabilities at 10 Gb/s
 - Operation over horizontal twisted pair (augmented Cat 6 or better)
 - New physical layer to run under 802.3ae specified XGMII
- In Working Group ballot, Sponsor ballot invitation
- Meeting plan (Tue, Wed)
 - Resolve comments on P802.3an/D2.4, 4th recirculation working group ballot
 - Forward (conditional) to Sponsor ballot

P802.3ap Backplane Ethernet

- Define Ethernet operation over electrical backplanes
 - 1Gb/s serial
 - 10Gb/s serial
 - 10Gb/s XAUI-based 4-lane
 - Autonegotiation
- In WG ballot
- Meeting plan (Tue, Wed, Thu morn.)
 - Technical presentations related to comments
 - Complete resolution of comments on P802.3ap/D2.0, initial working group ballot

P802.3aq 10GBASE-LRM

- Extends Ethernet capabilities at 10 Gb/s
 - New physical layer to run under 802.3ae specified XGMII
 - Extends Ethernet capabilities at 10 Gb/s
 - Operation over FDDI-grade multi-mode fiber
- In Working Group ballot, Sponsor ballot invitation
- Meeting plan (Tue, Wed, Thu morn)
 - Resolve comments on P802.3aq/D2.4, 4th recirculation working group ballot
 - Forward (conditional) to Sponsor ballot

P802.3ar Congestion Management

- Enhances Ethernet congestion management characteristics
 - Rate control
 - Support of cooperative IEEE 802 congestion management work
- Meeting plan (Tue)
 - Technical presentations
 - Review proposed P802.3as/D0.9, and authorize D1.0 for TF review

P802.3as Frame Format Extensions

- Increase the maximum Ethernet frame size for protocol header/trailer additions
 - Initiated at the request of 802.1 in support of protocols like MACSec and Provider Bridging
 - Preserve basic 1500 byte payload capacity, and increases maximum frame from 1522 bytes to 2000 bytes for protocol envelopes
- In Working Group ballot, Sponsor ballot invitation
- Meeting plan (Wed, Thu morn.)
 - Technical presentations
 - Resolve comments on P802.3as/D2.1, 1st recirculation working group ballot
 - Forward (conditional) to Sponsor ballot

P802.3at DTE Power Enhancements

- Increase the amount of power delivered over twisted pair copper from that specified by IEEE Std 802.3af-2003
 - At least 30 watts
 - Maintain compatibility with 802.3af
- PAR approved by Standards Board in September
- Meeting plan (Tue, Wed, Thu morn)
 - Technical presentations
 - Refine project objectives
 - Forward P802.3-2005/Cor1 to WG ballot

Residential Ethernet Study Group

- Develop Ethernet specifications for residential applications requiring time sensitive data delivery
 - Use existing 802.3 full-duplex PHYs
 - Provide predictable latency and low jitter
 - May include admission controls and clock synchronization
- Work will be moving to 802.1
 - Flexible meetings this week to enable work with 802.1

Other Activities

- Maintenance (Wed), interpretations (Wed), rules (Wed), liaison matters, etc.
- Call for Interest Tuesday 8:00pm on short-haul 10Gb/s copper interface

This Week's Meetings

- All meeting at the Fairmont Hotel Vancouver
- Opening WG plenary starts Monday, 1:00pm, Pacific ballroom
- TF and SG meetings, Tues morning through Thurs noon – check detailed schedule for meeting rooms
- Closing WG plenary, Thursday 1:00pm, Pacific ballroom
- 802.3 Web Site: www.ieee802.org/3

94th IEEE 802.11 WIRELESS LOCAL AREA NETWORKS SESSION

Hyatt Regency Vancouver, 655 Burrard Street, Vancouver, BC V6C 2R7, Canada

November 13th-18th, 2005



IEEE
802.11™

" Setting the Standards
for Wireless LANs ... "

www.ieee802.org/11

Stuart J. Kerry - Chair, IEEE 802.11 WLANs Working Group

stuart.kerry@philips.com

IEEE Std 802.11, 802.11a, 802.11b, 802.11b-Cor1, 802.11d, 802.11e, 802.11F, 802.11g, 802.11h, 802.11i, 802.11j, 802.11k, 802.11m, IEEE 802.11REV-ma, 802.11n, 802.11p, 802.11r, 802.11s, 802.11T, 802.11u, 802.11v, 802.11w, 802.11.1 and 802.11.2 are trademarks of the IEEE. All other names or product names are the trademarks, service marks or registered trademarks of their respective holders.

IEEE 802.11 WORKING GROUP OFFICERS

Name	Position	Work Phone	eMail
Stuart J. Kerry	IEEE 802.11 WG Chair	+1 (408) 474-7356	stuart.kerry@philips.com
	Philips Semiconductors, Inc., 1109 McKay Drive, M/S 48A SJ, San Jose, CA 95131-1706, USA		
	Fax: +1 (408) 474-5343		
Al Petrick	WG Vice-Chair / Treasurer	+1 (321) 725-1520 x204	apetrick@wifidfi.com
	Policies & Treasury		
Harry R. Worstell	WG Vice-Chair	+1 (973) 236-6915	hworstell@att.com
	Attendance, Ballots, Documentation & Voting		
Tim Godfrey	WG Secretary	+1 (913) 664-2544	tim.godfrey@conexant.com
	Minutes & Reports		
Terry Cole	WG Technical Editor	+1 (512) 602-2454	terry.cole@amd.com
	Standard & Amendment(s) Coordination		
Nanci Vogtli	Publicity Chair (P SC)	+1 (215) 340-2226	nancivogtli@concrete-logic.com
	Communications		
Teik-Kheong "TK" Tan	WNG SC Chair	+1 (408) 474-5193	tktan@ieee.org
John Fakatselis	TGe Chair	+1 (321) 327-6710	john.fakatselis@conexant.com
Duncan Kitchin	TGe Vice-Chair	+1 (503) 264-2727	duncan.kitchin@intel.com
Richard H. Paine	TGk Chair	+1 (206) 854-8199	richard.h.paine@boeing.com
Bob O'Hara	TGm Chair	+1 (408) 853-5513	bob.ohara@cisco.com
	Assigned Numbers Authority		
Bruce P. Kraemer	TGn Chair	+1 (321) 327-6704	bruce.kraemer@conexant.com
Sheung Li	TGn Vice-Chair	+1 (408) 773-5295	sheung@atheros.com
Lee Armstrong	TGp Chair	+1 (617) 244-9203	LRA@tiac.net
Clint Chaplin	TGr Chair	+1 (408) 528-2766	cchaplin@si.symbol.com
Donald E. Eastlake 3rd	TGs Chair	+1 (508) 786-7554	donald.eastlake@motorola.com
Charles R. Wright	TGT Chair	+1 (978) 268-9202	charles_wright@azimuthsystems.com
Stephen McCann	TGu Chair	+44 (1794) 833341	stephen.mccann@roke.co.uk
Pat R. Calhoun	TGv Chair	+1 (408) 635-2023	pcalhoun@cisco.com
Jesse Walker	TGw Chair	+1 (503) 712-1849	jesse.walker@intel.com
Peter Ecclesine	CBP SG Chair	+1 (408) 527-0815	petere@cisco.com

802.11 WORKING GROUP OBJECTIVES FOR THIS SESSION

CHAIR - STUART J. KERRY

1ST VICE-CHAIR - AL PETRICK / 2ND VICE-CHAIR - HARRY WORSTELL / SECRETARY - TIM GODFREY

- **Update timeline chart for all 802.11 WG PARs & Projections for Completion**
- **IEEE 802.11 & Other Standards Bodies or Alliances administrative issues & co-ordination**
- **CAC Co-ordination with WG Chair**

WNG STANDING COMMITTEE OBJECTIVES FOR THIS SESSION

IEEE 802.11 - Wireless LANs Next Generation

CHAIR - TEIK-KHEONG "TK" TAN

- **Update - Ambient Project**
- **802.11 for Video transmission**
- **Prepare for IEEE Interim January 2005**

TASK GROUP K OBJECTIVES FOR THIS SESSION

IEEE 802.11k Amendment - Radio Resource Measurements

CHAIR - RICHARD PAINE

- **Letter Ballot 78 Comment Resolution**

TASK GROUP M OBJECTIVES FOR THIS SESSION

IEEE 802.11REVma - Standard Maintenance

CHAIR - BOB O'HARA

- **Process any interpretation requests received**
- **Process comments from WG recirc ballot**
- **Issue new draft to sponsor ballot**

TASK GROUP N OBJECTIVES FOR THIS SESSION

IEEE 802.11n Amendment - High Throughput

CHAIR - BRUCE KRAEMER / VICE-CHAR - SHEUNG LI

- **Proposal Presentations**
- **Q & A**
- **Technical Clarification Presentations**
- **Confirmation vote**
- **Technical editor election**
- **Planning for January '06**

TASK GROUP P OBJECTIVES FOR THIS SESSION

IEEE 802.11p Amendment - Wireless Access for the Vehicular Environment

CHAIR - LEE ARMSTRONG

- **Resolve TG comments on 802.11p amendment**
- **Plan for next meeting, Working Group letter ballot**

TASK GROUP R OBJECTIVES FOR THIS SESSION

IEEE 802.11r Amendment - Fast Roaming

CHAIR - CLINT CHAPLIN

- **Address comments from internal draft review**
- **Prepare draft for letter ballot**

TASK GROUP S OBJECTIVES FOR THIS SESSION

IEEE 802.11s Amendment - ESS Mesh Networking

CHAIR - DONALD EASTLAKE 3RD

- **Presentation of Proposals and Down Select Ballot**
- **Presentations and Discussions on Other Mesh Networking Submissions**

TASK GROUP T OBJECTIVES FOR THIS SESSION

IEEE 802.11.2 Recommended Practice - Wireless Performance

CHAIR - CHARLES R. WRIGHT

- **Appoint permanent secretary**
- **Review of Draft D0.3 and approval of any changes to draft**
- **Technical presentations and proposals:**
 - RF test environments, metrics,**
 - definitions, application**

TASK GROUP U OBJECTIVES FOR THIS SESSION

IEEE 802.11u Amendment - InterWorking with External Networks

CHAIR - STEPHEN MCCANN

- **Call for Proposals discussion**
- **Technical submissions**
- **Down selection criteria**
- **Pre Proposal presentations**

TASK GROUP V OBJECTIVES FOR THIS SESSION

IEEE 802.11v Amendment - Wireless Network Management

CHAIR - PAT R. CALHOUN

- **Present last two objectives presentations (05/0629r0, 05/0630r0)**
- **Presentation for solutions to objectives (as per rules described in (05/0918r2))**
- **Finalize non-objectives**
- **Prepare for first merged based draft in January**

TASK GROUP W OBJECTIVES FOR THIS SESSION

IEEE 802.11 - PROTECTED MANAGEMENT FRAMES

CHAIR - JESSE WALKER

- **Hear Proposal Text**

CBP STUDY GROUP OBJECTIVES FOR THIS SESSION

IEEE 802.11 - CONTENTION BASED PROTOCOL

CHAIR - PETER ECCLESINE

- **Review WG, EC comments on PAR, 5 Criteria documents**
- **Develop plans for work after Plenary closes**

ISO JTC1-SC6 AHC OBJECTIVES FOR THIS SESSION

IEEE 802.11 - JTC1-SC6 AHC

CHAIR - JESSE WALKER

- **Address action items arising from JTC1 fast tracks on 1N7903 (802.11i) and 1N7904 (WAPI)**

IEEE 802.11 WLAN WORKING GROUP SESSIONS



All interested parties are welcome to attend our open Public meetings of the IEEE 802.11 Working Group, you do not have to be an IEEE member to attend. There is a registration fee, to defray the cost of the session. At Plenary sessions these are administered by the IEEE 802 LMSC organization. Whereas, the Interim sessions are normally managed by our sponsoring host. This is in-addition to your individual hotel accommodation, and travel expenses. Click here to view an [Example Plenary and Interim Session Agenda](#), or review the latest Combined Tentative Agenda for the next IEEE 802.11 WG Session below.

FUTURE SESSIONS

For Year 2005	<i>Interim Sessions to be Allocated if Required</i>	Session	Type
November 13th-18th	Hyatt Regency Vancouver, BC., Canada - General Hotel Information Only <div style="text-align: center;"> 802.11 WG, TGs, SGs, SC & AHC Combined Agenda includes the WG Objectives & WG Graphic Official WG PAR Projects & Timescales Session Registration, Hotel Booking & General Information </div> <div style="display: flex; justify-content: center; gap: 20px;"> <div style="text-align: center;"> XLS Rev.0 </div> <div style="text-align: center;"> Timeline Details Click Here </div> </div>	94	Plenary
For Year 2006	<i>Interim Sessions to be Allocated if Required</i>	Session	Type
January 15th-20th	Hilton Waikoloa Village, Big Island, HI USA - General Hotel Information Only <div style="text-align: center;"> 802.11 WG, TGs, SGs, SC & AHC Combined Agenda includes the WG Objectives & WG Graphic (The combined agenda for this session will be posted 30 days before the session) Official WG PAR Projects & Timescales Session Registration, Hotel Booking & General Information </div> <div style="display: flex; justify-content: center; gap: 20px;"> <div style="text-align: center;"> XLS Rev.TBD ⁽¹⁾ </div> <div style="text-align: center;"> Timeline Details Click Here </div> </div>	95	Interim*
March 5th-10th	Hyatt Regency Denver at CC Center, CO, USA - General Information - Booking TBD <div style="text-align: center;"> 802.11 WG, TGs, SGs, SC & AHC Combined Agenda includes the WG Objectives & WG Graphic (The combined agenda for this session will be posted 30 days before the session) Official WG PAR Projects & Timescales Session Registration, Hotel Booking & General Information </div> <div style="display: flex; justify-content: center; gap: 20px;"> <div style="text-align: center;"> XLS Rev.TBD ⁽¹⁾ </div> <div style="text-align: center;"> Timeline Details Click Here ⁽¹⁾ </div> </div>	96	Plenary
May 14th-19th	Hyatt Regency Jacksonville, FL, USA - General Information - Booking TBD	97	Interim*
July 16th-21st	Manchester Grand Hyatt, San Diego, CA, USA - General Information - Booking TBD	98	Plenary
September 10th-15th	<i>To Be Determined</i> ⁽¹⁾	99	Interim*
November 12th-17th	Hyatt Regency Dallas, TX, USA - General Information - Booking TBD	100	Plenary
For Year 2007	<i>Interim Sessions to be Allocated if Required</i>	Session	Type
January 14th-19th	Hilton London Metropole, London, UK (Hosted by 802) - General Info - Booking TBD	101	Interim*
March 11th-16th	Canbe Royale, Orlando Florida USA - General Information - Booking TBD	102	Plenary
May	<i>To Be Determined</i> ⁽²⁾	103	Interim*
July 15th-20th	Hyatt Regency San Francisco, CA, USA - General Information - Booking TBD	104	Plenary
September	<i>To Be Determined</i> ⁽²⁾	105	Interim*
November 11th-16th	Hyatt Regency Atlanta, GA, USA - General Information - Booking TBD	106	Plenary

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**" Setting the Standards
for Wireless LANs ... "**

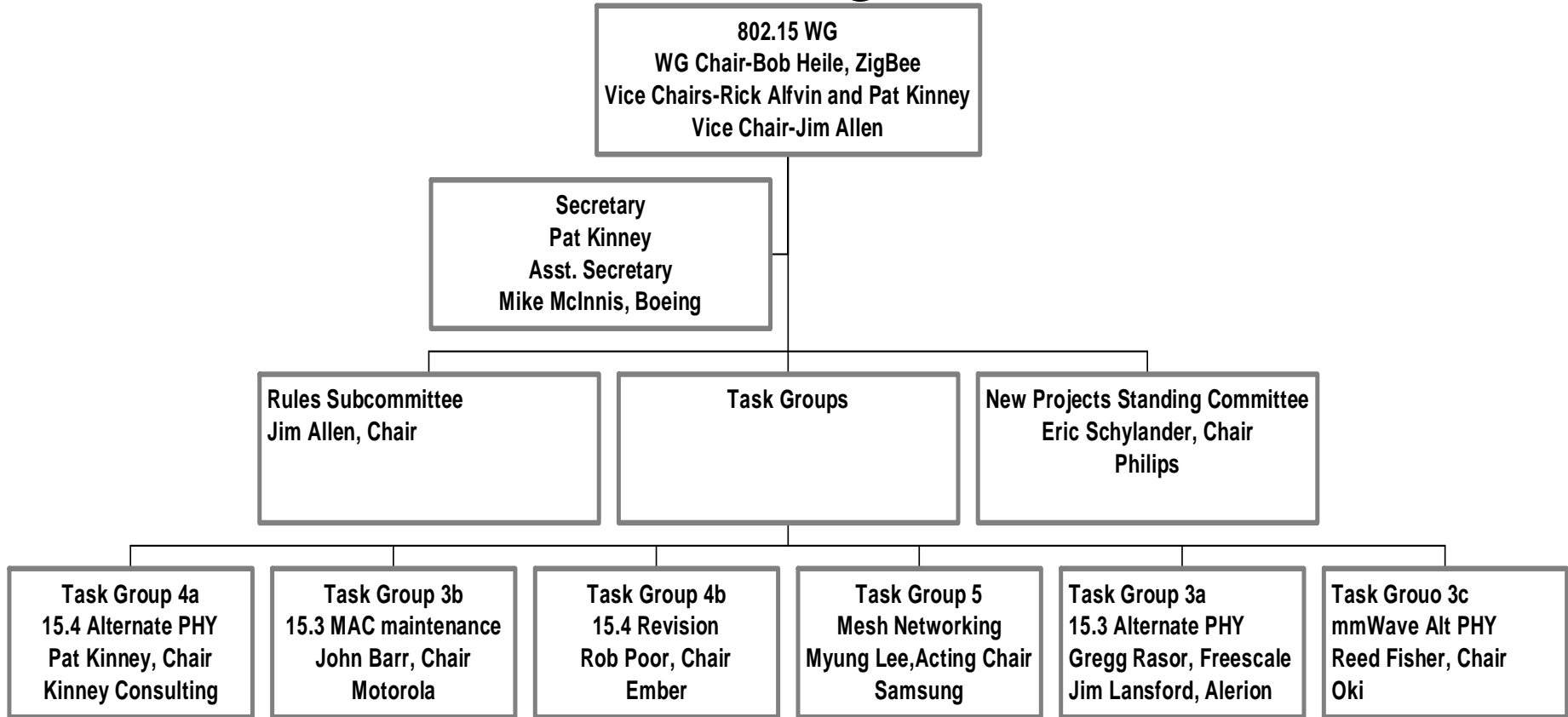


39th Session of meetings of the IEEE 802.15 Working Group for Wireless Personal Area Networks

November 13-18, 2005

**Hyatt Regency
Vancouver, BC, Canada**

802.15 Functional Organization Chart



To add your name to the WG/SG/TG reflectors
please go to www.ieee802.org/15

Objectives of the Vancouver Session

November 13-18, 2005

TASK GROUP 3a OBJECTIVES FOR THE MEETING

- 1. Conduct PHY proposal second confirmation vote**
- 2. UWB Regulatory update**
- 3. Other contributions**
- 4. Specification drafting if confirmation is successful**

TASK GROUP 3b OBJECTIVES FOR THIS MEETING:

- 1. Review sponsor ballot comments**
- 2. Edit draft if necessary**
- 3. Prepare for recirculation sponsor ballot OR**
- 4. Complete REVCOM submission**
- 5. Celebrate Completion**

Objectives of the Vancouver Session

November 13-18, 2005

TASK GROUP 3c OBJECTIVES FOR THIS MEETING:

- 1. Updates on Call for Intent, Channel Modeling, and Selection Criteria**
- 2. Discussion on Call for Proposals(CFP) and Downselection Process**
- 3. New contributions**

TASK GROUP 4a OBJECTIVES FOR THIS MEETING:

- 1. Review preliminary draft- UWB, Ranging, CSS/2.4 GHz, and MAC**
- 2. Presentations on draft and proposals to resolve issues**
- 3. Prepare draft for letter ballot**
- 4. Vote to request that the WG send the draft out for letter ballot**
- 5. Conclude Band Plan Review and if Necessary Modify Existing Band Plan**

Objectives of the Vancouver Session

November 13-18, 2005

TASK GROUP 4b OBJECTIVES FOR THIS MEETING:

- 1. Review letter ballot recirculation results**
- 2. Comment Resolution and Editing as required**
- 3. Motion for Sponsor Ballot or conditional approval**

TASK GROUP 5 OBJECTIVES FOR THIS MEETING:

- 1. Presentation of merged proposal**
- 2. Confirmation vote**
- 3. Define plans based on Confirmation vote**
- 4. Election of officers: Vice Chair, Co-editor, Secretary**

Objectives of the Vancouver Session

November 13-18, 2005

NEW PROJECTS SUBCOMMITTEE

- 1. Report on progress and work activity**
- 2. New presentations**
- 3. Identify potential work**

R1

39th IEEE 802.15 WPAN MEETING

Hyatt Regency Vancouver

November 13-18, 2005

The graphic below describes the weekly session of the IEEE P802.15 WG in graphic form

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY										
07:00-07:30				802.15 AC MEETING												
07:30-08:00																
08:00-08:30		802 EC MEETING	Wireless Architecture Sub Group	TG3c	TG4a	TG4b	TG5	TG3c	WNG	TG4a		WNG	TG4a	TG4b	802.15 WG CLOSING	
08:30-09:00																
09:00-09:30																
09:30-10:00																
10:00-10:30		Break		Break	Break	Break									Break	
10:30-11:00					TG3a											
11:00-11:30		802 PLENARY											TG3b	TG4a	TG4b	802.15 WG CLOSING
11:30-12:00																
12:00-12:30		Lunch on Your Own														
12:30-13:00				Lunch on Your Own	Lunch on Your Own	Lunch on Your Own	Lunch on Your Own								Lunch on Your Own	
13:00-13:30		802.15 Opening Plenary														
13:30-14:00																
14:00-14:30																
14:30-15:00																
15:00-15:30																
15:30-16:00		Break		Break	Break	Break	Break	Break	Break	Break	Break	Break	Break	Break	Break	
16:00-16:30	NEW MEMBERS ORIENTATION															
16:30-17:00		TG3a	TG3b	TG4a	TG3c	TG3c	TG4a	TG4b	TG5	TG3c	TG5	TG4a				
17:00-17:30	WIRELESS LEADERSHIP MEETING															
17:30-18:00																
18:00-18:30																
18:30-19:00	Dinner on your own	Dinner on your own		Dinner on your own												
19:00-19:30			Tut 1													
19:30-20:00																
20:00-20:30	Optional Meeting Time															
20:30-21:00			TG4a													
21:00-21:30	802.15 AC MEETING															
21:30-22:00																
22:00-22:30																

LEGEND

- TG3a Task Group 3a -High Rate Alt PHY
- TG3b Task Group 3b -HIGH RATE MAC maintenance
- TG3c Task Group 3c- millimeter wave alt PHY for 15.3
- TG4a Task Group 4a - Low Rate Alternative PHY
- TG4b Task Group 4b - 15.4 enhancements
- TG5 Task Group 5 - mesh networking

- WNG
- TUT
- SEC
- AC

- 802.15Wireless Next Generation Standing Committee
- IEEE 802 Tutorials 1, 2, 3 and 4
- 802 SPONSOR EXECUTIVE COMMITTEE
- 802.15 ADVISORY COMMITTEE

Upcoming Sessions

- January 15-20, 2006, Hyatt Waikoloa Village, Big Island, HI USA, *Interim*
- March 12-17, 2006, Hyatt Regency Denver, CO, USA, 802 *Plenary*
- May 14-19, 2006, Hyatt Regency Jacksonville, FL, USA, *Interim*
- July 16-21, 2006, Manchester Grand Hyatt, San Diego, CA, USA, *Plenary*

IEEE 802.16
Working Group on
Broadband Wireless Access
Roger Marks, Chair



IEEE 802.16
Working Group on
Broadband Wireless Access
(BWA)

802 LMSC Opening Plenary

14 November 2005

Vancouver, BC, Canada

802.16 WG Role

**Develops standards and
recommended practices to support
the development and deployment of**

Broadband

**Wireless Metropolitan Area Networks
(WirelessMAN®)**

802.16 Membership

- **304 Members [prior to session]**
- **121 Potential Members [eligible to become members in this session]**

802.16 Interim Sessions

- #37: May 2005
 - Sorrento, Italy
- #39: September 2005
 - Taipei, Taiwan
- #41: January 2006
 - New Delhi, India
- #43: May 2006
 - Israel
- #45: September 2006
 - To be determined this week

Recently Completed Projects

- **P802.16f**
 - MIB
 - Approved 22 September 2005
- **P802.16-2004/Cor1**
 - Corrigendum
 - Passed RevCom, 27 October
- **P802.16e**
 - Mobility enhancements
 - Awaiting RevCom, 6 December

NetMan Task Group

- **Phil Barber, Chair**
- **802.16f**
 - Complete and approved
 - Publication this month
- **802.16g: Management Plane Procedures and Services**
 - Call for comments on baseline doc
 - inputs to consider this week

Task Group C

- **Gordon Antonello, Chair**
- **Herbert Ruck: Editor**

- **Series of conformance standards**

- **Current activity:**
 - P802.16/Conformance 04 (PICS)
 - Working Group Letter Ballot
 - In recirculation
 - Comments to resolve this week

Licensed-Exempt Task Group

- **Mariana Goldhamer, Chair**
- **Barry Lewis, Vice Chair**
- **802.16h: *Improved Coexistence Mechanisms for License-Exempt Operation***
- **Input in response to Call for Contributions & Comments**

Mobile Multihop Relay Study Group

- **Mitsuo Nohara, Chair**
- **Chartered in July 2005**
- **First set of meetings: September 2005**
- **Second set of meetings this week**
- **Expect to request renewal through
March 2006 Plenary**
- **Expect to draft PAR by January 2006**

802.16 WG Officers

- **Chair: Roger Marks**
- **Vice Chair: Ken Stanwood**
- **Secretary: Dean Chang**

Resources

- **local server:**
 - **<http://onsite.WirelessMAN.org>**
- **permanently:**
 - **<http://WirelessMAN.org>**



IEEE 802.17 Resilient Packet Ring

Session # 31

Monday Plenary Start Time

1:30 pm

Purpose

802.17-2004 defines a Resilient Packet Ring Access Protocol for use in Local, Metropolitan and Wide Area Networks for transfer of data packets at rates scalable to many gigabits per second

802.17b amends 802.17-2004 and extends the class of frame types and device types that can achieve spatial reuse to significantly improve bandwidth efficiency on Resilient Packet Rings.



Work This Week

- 802.17b Spatially Aware Sublayer
 - Comments Resolution on WG Draft 1.1
- IETF Liaison
 - Review of draft from IPORPR WG



802.17 Meeting Schedule



	Mon	Tues	Wed	Thurs
8:00-10:00		802.17b	802.17b	IPORPR
10:00-12:00			802.17b	Plenary
13:00-16:00	Plenary Start 1:30pm	802.17b	802.17b	Plenary
16:00-18:00	802.17b	802.17b		



Proposed Interim Sessions

- January
 - 802.17b Interim Session or Conference Call
- February
 - 802.17b Conference Call

802.18 RR-TAG Opening Report

- Report on September 05 Interim Meeting
- Work to be accomplished at this Meeting

Report on September 05 Interim Meeting

- RR-TAG met in Geneva
 - Met in the ITU facilities
 - RR-TAG attendees also participated in ITU-R WP8A – Land Mobile Service Excluding IMT-2000
- Reviewed European Commission consultation on the 2.5 GHz band
- Further refined P&P



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Planned Objectives for This Meeting

- Joint session with 802.11 CBP SG
- Joint session with 802.15 SG 3c
- Begin drafting proposed revisions on ITU-R Recommendation M.1450
- Draft responses to ITU-R liaisons to IEEE
- Plan for 2006 interim with either ITU-R or CITELE
- Complete (hopefully) revision of 802.18 P&P

Please consider (active) participation in 802.18!

- **802.18 needs consistent participation from all wireless WGs**
 - Our charter is to provide balanced representation of the interests of all of the wireless WGs before the FCC and other regulatory bodies
 - WG chairs who have not yet done so are encouraged to appoint liaisons to 802.18 *who are able to and will actually attend 802.18 as their primary group*
 - Other members of wireless WGs who can attend 802.18 as their primary group, or at least substantially, are also encouraged to participate
 - Remember ... attendance in 802.18 meetings counts towards maintaining your voting rights in your “home WG”

IEEE 802.19 Wireless Coexistence TAG November 2005 Opening Report

Steve Shellhammer

TAG Officers

Office	Officer
Chair	Steve Shellhammer
Vice Chair	Tom Siep
Secretary	Steve Whitesell
Editor	David Cypher
802.11 Liaison	Sheung Li
802.15 Liaison	Tom Siep

Summary of September Session

- **Joint meeting 802.15.4a to review the preliminary coexistence assurance (CA) analysis.**
 - 19-05/38r0
 - 19-05/39r0
- **Liaison report from IEEE P1900.2**
 - 19-05/30r0
- **CA Methodology presentation on Estimation of packet error rate (PER) caused by interference using analytic techniques**
 - 19-05/29r0 (presentation)
 - 19-05/28r0 (document) – subsequently revise to 19-05/28r2
- **Detect and Avoid for MB-OFDM**
 - 19-05/34r0
- **Some clean-up of 802.19 P&P based on comments from Mat Sherman (802 vice chair)**

Plans for the November Session (1)

- **Liaison report from IEEE P1901 (Broadband over powerline)**
- **Liaison report from IEEE P1900.2**
- **Presentation on using 802.11k for coexistence**
- **Presentation on Coexistence protocol being developed in 802.16h**
- **Updated presentation on estimating PER using analytic techniques**
- **A presentation on curve fitting to BER data**

Plans for the November Session (2)

- **A review of the 802.15.4b CA document**
- **Review comments on CA methodology document**
- **Discuss whether we should convert the CA methodology document into an IEEE Guideline**
- **Review preliminary document on coexistence parameters and test cases**

Meeting Times for the Week

- **Tuesday**
 - 8:00 AM – 6:00 PM

802.20 Opening November 2005 Plenary Session #17

Jerry Upton- Chair

jerry.upton@ieee.org

Gang Wu – Procedural Vice Chair

Eshwar Pittampalli – Liaison Vice Chair

Rao Yallapragada – Recording Secretary

Logistics

- No Electronic sign-in - - Manual Sign In Books
- 802.20 has 14 meeting slots you need to participate in 11 meeting slots to get participation credit. Tutorials will be extra credit.
- Attendees shall state their Affiliation in the manual sign in book per Appendix B of the 802.0 Version 1.0 Policies & Procedures (802.20 PD-05). This is a requirement for obtaining a voting token.
- 802.20 and 802.21 Grant Reciprocal Maintenance Attendance Credit in addition to .18 & .19, please state your home group when signing in
- Meeting Room - - Regency AB

Objectives for the Session

1. Presentations and Reviews of Proposals
2. Technology Selection

Proposed Detail Agenda – November 2005 Plenary, Session #17

Monday, Nov. 14, 2005 11:00AM – 12:30PM

IEEE 802 Opening Plenary

Monday, Nov. 14, 2005 1:30PM – 5:30PM Hyatt (Break 3:30 – 4:00PM)

Opening Session of 802.20 - IEEE IPR rules and meeting conduct - Logistics for the session - Review of Proposed 802.20 Agenda - Approval of Agenda including modifications - Review and approve Sept. Minutes - Review Other WGs Activities - Update on 802.18 Activities	1:30-2:30pm	
Review of Technology Selection Process	2:30-3:30pm	
Start Proposal Presentations -Rotational OFDM Transmission Scheme (Hiroyasu Ishikawa)	4:00-5:30pm	C802.20-05/70

Monday, Nov. 14, 2005 7:30PM - 9:00PM 802 Tutorials

Tuesday, Nov. 15, 2005 8:00AM - 12:30PM Hyatt (Break 10:00 – 10:30AM)

Proposal Presentations: - ETRI Technology Presentation (Heesoo Lee)	8:00-10:30am	C802.20-05/71-74
- Multi-antenna Support for Air Interface Spec. (M. Youssefmir)	11:00-12:30pm	C802.20-05/80

Tuesday, Nov. 15, 2005 1:00PM – 6:30PM Hyatt (Break 3:30 – 4:00PM)

Proposal Presentations: - QFDD Technology Presentation (Jim Tomcik)	1:00-2:30pm	C802.20-05/58-62
- QTDD Technology Presentation (Jim Tomcik)	2:30-4:00pm	C802.20-05/63-67 C802.20-05/68-69
- BEST-WINE Technology Presentation (R. Canchi)	4:30-6:00pm	C802.20-0575/79

Tuesday, Nov. 15, 2005 7:30PM - 9:00PM 802 Tutorials

Wednesday, Nov. 16, 2005 8:00AM - 12:00PM Hyatt (Break 10:00 – 10:30AM)

Initial Technology Selection Voting
(5 minutes per proposal and Initial Voting)
Recess until 1:00pm

8:00-10:00am

Wednesday, Nov. 16, 2005 1:00PM - 6:30PM Hyatt (Break 3:30 – 4:00PM) 802 Social in the evening

Additional Proposal Presentations before 1st Elimination Vote
(45 minutes per Proposal remaining after Initial Selection)

1:00-3:30pm

First Elimination/Confirmation Vote for TDD and FDD

4:00-6:00pm

Thursday, Nov. 17, 2005 8:00AM - 12:00PM Hyatt (Break 10:00 – 10:30AM)

Technology Selection Process Elimination Voting or
Confirmation Voting

8:00am-12:00pm

Thursday, Nov. 17, 2005 1:00PM - 6:00PM Hyatt (Break 3:30 – 4:00PM)

Technology Selection Process-Voting continued if necessary
and Next steps
New Business
Next Meeting Planning
Close and Adjourn

1:00pm- 4:30pm

4:30pm- 5:00pm

5:00pm- 5:30pm

5:30pm -6:00pm



Joint Opening Plenary

IEEE 802.21 Session #11

Media Independent Handover Services Vancouver, Canada

Ajay Rajkumar

ajayrajkumar@lucent.com

WG Officers

- Chair Ajay Rajkumar
ajayraj Kumar@lucent.com
- Vice-Chair Michael Williams
Michael.G.Williams@nokia.com
- Secretary Xiaoyu Liu
xiaoyu.liu@samsung.com
- Editor Vivek G. Gupta
vivek.g.gupta@intel.com

IEEE 802.21

Meeting Server Details

Handover Server IP address: **10.0.1.21**

Host Name : **handover**

External website: <http://www.ieee802.org/21>

On site meeting website: <http://10.0.1.21>

On site alternate website name:

<http://handover/>

On site web portal:

<http://ieee802.facetoface-events.com/plenary/attendee>

Meeting Logistics

- No electronic attendance again
 - Manual attendance with signup sheets circulated during meetings
- Voting Members have 802.21 indication on their badges
 - For any VM badge problems, please send email to Michael Williams, Vice-Chair with a copy of the email to the Chair

Session Time and Location

- **Location: Hyatt Regency, Vancouver, Canada**
 - Regency F for all times unless otherwise noted
 - Fairmont Hotel, Hall “British” for Joint meeting with 802.16g on Tuesday 1-3.30 pm
- **Time:**
 - Monday:
 - Afternoon: 1.30 pm – 6.00 pm (2 meeting slots: PM1, PM2)
 - Tuesday to Thursday:
 - Morning: 8.00 am – 12.00 pm (2 meeting slots/morning: AM1, AM2)
 - Afternoon: 1.00 pm – 6.00 pm (2 meeting slots/evening: PM1, PM2)
- **Total of 14 meeting slots**
 - To get attendance credit towards voting membership for this Plenary, one would require 75% attendance in 11 meeting slots

802.21 WG Charter

- IEEE 802.21 is developing standards to enable handover and interoperability between heterogeneous network types including both 802 and non-802 networks

Summary Of Completed Work

- Requirements completed
- Call for Proposals
- Contribution accepted and evaluated by the WG
- A single harmonized draft proposal accepted by the WG to be the baseline draft
- Draft Specification version P802-21-D00.01 – confirmed by a WG vote of 25-1-1

Work In Progress

- Comment resolution before the official Letter Ballot process starts
- Currently contributions are being accepted to identify
 - Technical gaps in the baseline draft
 - Editorial shortcomings

Aims for the Session

- Review the draft specifications version 3 for Media Independent Handover Services – P802-21-D00-03.pdf
- Comment resolution based on received contributions
 - Technical
 - Editorial
- Discussion on Information Elements for Information Services
- Interaction with other 802 groups and external SDOs
 - Requirements to 802.3/802.11/802.16
 - L3 transport requirements for Information Services transport to IETF
 - 3GPP/3GPP2 next steps discussion

Future Sessions

- **Interim: January 15th – 20th, Hilton Waikoloa Village**
 - Big Island, HI USA. Meeting co-located with 802.11/15/18/19/20/22
- **Plenary: March 5th – 10th, Hyatt Regency**
 - Denver at CC Center, CO USA. Co-located with all 802 groups
- **Interim: May 14th – 19th, Hyatt Regency**
 - Jacksonville, FL, USA. Meeting co-located with 802.11/15/18/19/20/22
- **Plenary: July 16th – 21st, Manchester Grand Hyatt**
 - San Diego, CA USA. Co-located with all 802 groups

802.22 Opening Report – November 2005

IEEE P802.22 Wireless RANs

Date: 2005-11-14

Authors:

Name	Company	Address	Phone	email
Carl R. Stevenson	WK3C Wireless LLC	4991 Shimerville Rd., Emmaus, PA 18049-4955	+1 610-841-6180	carl.stevenson@ieee.org

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802.22 WG Opening Report

- **Report on July and September 2005 sessions**
- **Objectives for this Session**

Report on July 2005 Plenary and September 2005 Interim

- **Primary focus of both sessions was finishing our requirements document (including channel model)**
- **Both were finished and approved at the September 2005 interim session in Garden Grove, CA**
- **At the September 2005 interim, a PAR/5C were also crafted with a goal of developing standardized methods of improving the ability to detect and protect low power secondary licensed devices such as wireless microphones**

Objectives for this session

- **Have a full schedule of meetings**
 - 8:00 am – 6:00 pm Monday through Thursday
 - Tutorial on our PAR on Monday evening
 - 7:30-9:30 pm Tue evening
 - Chair's meeting with proposers 7:30-9:30 pm Thu evening
 - 8:00 am – 12:00 noon Friday
- **Ten proposals towards a baseline for the standard submitted for presentation**
 - Originally had 20 notices of intent to propose
 - Several withdrew
 - Others merged even before initial proposal presentations
- **This session will be initial presentations**
 - Show the WG members what proposers have in mind
 - Allow proposers to see where they have common ground to encourage further mergers
 - NO expectation of any sort of selection at this session
 - Expectation that questions from WG members will result in improved, more detailed proposals for our January interim in Hawaii

Tutorial Schedule

Monday	Tuesday
1) 1Gbps WLAN (Kerry) 6:30-8:00PM	3) Open (possible EC 'open office' sponsored by Nikolich) 6:30-8:00PM
2) Detection of low power licensed devices (Stevenson) 8:00-9:30PM	4) Open 8:00-9:30PM

Q: If IEEE is to be considered an international organization, why are no scheduled plenary sessions scheduled outside the U.S.?

A: 802 plans and contracts for meeting sites 2-3 years in advance. We will be planning joint interim sessions outside the U.S. as soon as possible.

5

6.01 PL IEEE 802 PLENARY MEETING ENDS

12:00 PM

10 The meeting was adjourned at 12:13pm

Respectfully submitted,
Bob O'Hara
Recording Secretary