

Project	IEEE 802.20 Working Group on Mobile Broadband Wireless Access < http://grouper.ieee.org/groups/802/20/ >	
Title	Draft Meeting Minutes, 802.20 Interim Meeting - Session #8, Garden Grove, CA May 10-14, 2004	
Date Submitted	2004-5-22	
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Re:	802.20 Session#8	
Abstract	Draft of the Minutes of the Session #8;	
Purpose	Minutes of the Session.	
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Draft - Meeting Minutes of the 802.20 Session #8

May 10-14, 2004
Garden Grove, CA

Rao Yallapragada
Secretary

The eighth session of 802.20 was held at the May 2004 interim meeting of IEEE 802 in Garden Grove, CA.

The 802.20 WG had a joint opening interim session with 802.11, 802.15, 802.18, 802.19, 802.21 from 8:00 AM to 11:00 AM on Monday, May 10, 2004. (Appendix B)

Contributions and WG documents referenced in these minutes may be found at the 802.20 website, <http://www.ieee802.org/20/>

See Appendix A for the attendance list.

Minutes of 802.20 Monday May 10, 2004

Meeting started at 11:00 am.

The Chair made the opening remarks and went through the logistics for the current session (Appendix B).

The chair asked the WG participant to sign in and note their affiliations.

The vice chair distributed the voting tokens. After distributing the tokens, it was stated without objection that the group did not have a quorum.

Chair presented then the proposed detailed agenda (Appendix B).

Dan Gal withdrew his contribution on “SRD Comments V12”.

There was discussion on the Agenda. Chair collected various input from the participants.

There was discussion on the requirements review process. There were requests to clarify the review procedure that needs to be followed for the current meeting.

Chair also announced Rashmi Bajaj volunteered to replace John Humbert as the SRD editor.

Chair requested John Humbert, SRD Editor, to explain the process again later during the session.

Anna Tee requested to allow her to present her contribution (C802.20-04/55) when the relevant section of requirements document is reviewed.

As this contribution was not made in support or as a response of any comments made to the requirements document, the request was not accepted.

Based on the feedback from the WG participants, the chair modified the agenda. The modified agenda is approved by unanimous consent (Appendix C).

John Humbert discussed the usage of the commentary tool recommended to comment on the Requirements document.

Time: 11:45 am

There was discussion on the commentary tool as a means to resolve the comments on the requirements document.

Discussion on what we need to adopt for SRD Review process.

Different participant expressed different views on the current SRD review procedure that was adopted in session#7.

The chair then requested to review the various motions adopted in session #7 to determine if the review process is valid for all meetings or only for session #7.

Reviewed SRD review process (Documents C.802.20-04-42, 42 r1 & 48)

Chair announced that he propose a clarification of the process adopted in session #7 including how the process will work for the current session later in the afternoon.

Lunch Break: 12:30 pm - 1:35 pm

Presentation by Anna Tee on “A new option proposed for 802.20 requirements on latency and packet error rates” (C802.20-04/-55)

This is a contribution to the requirements on latency and packet error rate for the IEEE 802.20 system requirements document. A new, revised option is proposed with reference to similar requirements used in other wireless communication standards.

Discussion followed

Time: 3:10 pm

Presentation by Dan Gal on “IEEE 802.20 Common MAC” (C802.20-04/46)

Presenter requested to adopt the text be voted in July Plenary.

Break at 3:30 pm

Resume: 4:00 pm

Chair presented his conclusions in detail on what transpired on the SRD review process in Orlando.

Chair determined that the process adopted previously was defined only for session #7 and cannot be used for session#8.

Though some participants did not agree, Chair's conclusion was based upon the review of the motions approved in Orlando.

Requirements Document Review

The comments made on the requirement document were reviewed using the commentary tool.

Section 2.1, Line 10

Proposal to change line 10 to read: "The MBWA shall provide air interface support to enable VoIP Services. QoS Features shall provide the required performance of latency, jitter, and packet loss needed to support the use of industry standard codecs. Specific VOIP Codecs to be supported by the underlying QoS features include those specified by 3GPP, 3GPP2, and ITU-T."

Discussion followed. The group discussed adopting the following text

"The MBWA shall provide air interface support to enable VoIP Services. QoS feaures shall provide the required performance of latency, jitter and packet loss needed to support the use of industry standard codecs applicable to mobile networks."

Straw Poll

To adopt the above proposed text for Section 2.1, line 10.

Yes: 26

No: 1

Time: 5:15 pm

The proposed text was adopted by Straw Poll and will require an affirmative vote at the July Plenary.

Discussion on what we do with the requirement review process: Clarification was sought on how the changes to the requirements document will be handled. Questions were asked if the changes accepted will stay for or do they have to go through a quorum.

The Chair said that the changes adopted by Straw Poll in the current interim session will become the baseline text for Version 13 of the requirements document that will released right after the current session. The document and the various sections will still need approval at the July Plenary given no quorum at this session.

Time: 5:30 pm

Meeting recessed for the day.

Tuesday, May 11, 2004

Meeting began at 8:00 am

Section 2.2, Page 8, Line 12 of the Systems Requirements Document V12

The current text reads, "The AI shall support broadcast and multicast services."

There were several comments on how to word this section

Some proposals asked to change the word 'shall' to 'should' and one proposal suggested changing to the following text:

"IEEE 802.20-based systems shall support broadcast and multicast services using mechanisms that make efficient use of system resources. The minimum spectral efficiency provided by an 802.20 system while providing broadcast shall be (TBD).

Discussion followed.

No consensus reached. It was decided to take this for resolution to an Adhoc Group discussion on this subject.

Section 3.1, Page 8, Line 17 of the Systems Requirements Document V12

Discussion followed.

The following is proposed to replace the text:

“The 802.20 systems must be designed to provide ubiquitous mobile broadband wireless access in a cellular architecture (e.g. macro/micro/pico...)”

Straw Poll

Yes: 19

No: 3

The above text approved to adopted as baseline text for Section 3.1 in Systems Requirements document V13

Section 3.1 Page 9, Line 4

Proposal to change the text to read: “AI shall provide...”

Proposal withdrawn

Section 3.1 Page 9, Line 5

Current Text: The AI must efficiently convey bi-directional packetized, bursty IP traffic with packet lengths and packet train temporal behavior consistent with that of wired IP networks.

Discussion followed.

Proposal to change the text as follows:

“The AI shall support the efficient delivery of bi-directional packetized, bursty IP traffic with packet lengths and packet train temporal behavior consistent with that of wired IP networks.”

Straw Poll

Yes: 18

No: 0

The above text approved to adopted as baseline text for Section 3.1 in Systems Requirements document V13

Section 3.1.1 Page 9, Line 10

It was proposed to delete the first sentence of the section:

“Adopting current communications systems specification principles, 802.20 MBWA systems will be specified using a layered architecture.”

Discussion followed

The following text was agreed with no objections from the group:

“802.20 MBWA systems will be specified using a layered architecture.”

Section 3.1.1 page 9, line 13

Original Text: The 802.20 standards, in conjunction with other 802 standards, will specify the services to be delivered by layers 1 and 2 to an IP based layer 3 or a switching layer, e.g. PPP, MPLS.

It was proposed to remove the following text:

“...or to a switching layer(e.g. PPP, MPLS)...”

Discussion followed.

Comment Withdrawn

Break at 9:50 am

Resume: 10:25 am

Section 3.1.1 page 9, line 15

Original text: #1: The layered approach shall be generally (remove) consistent with other IEEE 802 standards and shall remain generally within the scope of other IEEE standards as shown in figures 1 &2.

Proposal: remove the word “generally”

Discussion followed.

Resolution: The layered approach should be consistent with other IEEE 802 standards and should remain generally within the scope of other IEEE standards as shown in figures 1 &2.

No objections to the proposal and therefore the above text is accepted as the baseline text for Ver. 13.

Section 3.1.1 page 10, Line 3

Comment: This figure is inconsistent with the previous text specifying a well-defined interface between PHY and MAC. Comment has been made before, but not resolved. Suggested Remedy: Add a PHY SAP to Figure 3.1

Discussion followed.

Resolution: Withdrawn

Section 3.2, page 11, line 4

Original Text: Any interfaces that may be implemented shall use IETF protocols as appropriate. Some of the possible interfaces are illustrated below.

Suggested Text: Any network interfaces that may be implemented shall use IETF protocols as appropriate. Some of the possible interfaces are illustrated below.

Time: 11:07 am

Resolution: Delete Section 3.2 altogether.

No objections were raised.

Section 4.1.1 Page 12, Line 10

Comment: This requirement specifies stringent spectral efficiencies without explicitly clarifying the conditions under which it should be achieved. For example, because cell size is not constrained by the requirements, the spectral efficiencies could be achieved with very small cells. Or, for example, operation at 120km/hr is very different depending

on the environment - certainly we are not interested in operation at 120km/hr in an urban setting, yet the requirement could be interpreted that it is applicable under all channel conditions. The separation of downlink versus uplink spectral efficiency unnecessarily complicates the requirement - a single spectral efficiency will allow proposals to sensibly make the split between uplink and downlink.

Proposal: Specify 2 bits/sec/Hz as the spectral efficiency and allow the evaluation criteria to determine the conditions under which this is achieved.

Discussion followed.

Comment unresolved.

Chair announced the formation of the following Ad-hoc group for further discussion.

a) Broadcast/ Multicast

Time: 11:48 pm

Section 4.1.10

Proposal: Delete the only sentence in the section (The system shall support the use of coverage enhancing technologies.)

Reason: The requirement is more of an equipment requirement than an air interface requirement.

Lunch Break: 12:00 - 1:00 pm

Presentation by Mithat C. Dogan on “On Security Issues in Wireless Systems” (C802.20-04/56r1)

Break: 2:55 pm

Resume: 3:30 pm

Section 4.1.13.5 Page 17, line 28

Based on contribution C802.20-04/56r1, it was proposed to add the following text at the end of section 4.1.13.5:

"The AI may use either a stream cipher (such as RC4 or AES in stream cipher mode) or a block cipher (such as AES in block mode). The use of AES shall not be mandatory."

Time: 3:57 pm

Discussion followed.

The following options are considered:

#1: "The AI may use either a stream cipher (such as RC4 or AES in stream cipher mode) or a block cipher (such as AES in block mode). The use of AES or RC4 shall be optional."

#2: "The AI may use either a stream cipher (such as RC4 or AES in stream cipher mode) or a block cipher (such as AES in block mode). Neither the use of AES nor RC4 shall be mandated."

#3: "No particular encryption algorithm is mandated by these requirements."

Resolution deferred till Thursday 5/13/04.

Time: 4: 17 pm

Section 4.1.10

Proposal: Delete the text in the section.

Discussion followed.

Comment Withdrawn – no text change.

Section 4.1.11, Page 17, Line 16

Comment: This requirement is an equipment requirement, not an air interface requirement. It may be appropriate to re-introduce in the specification drafting stage, as appropriate.

Suggestion: Delete section

Discussion followed.

Straw poll:

Yes 13

No: 2

Section 4.1.11 is deleted in Version 13

Time: 4:47 pm

Section 4.1.12

Comment: This section says the core network drives the QoS allowed. Reword so that the air interface conditions, the scarce resource in the end-to-end model can influence and drive the QoS, consistent with customer subscription and provisioning parameters.

Suggested Remedy: Modify 2nd sentence in the section as: "The resolution of QoS in the AI shall be consistent with the end-to-end QoS in the core network while taking into account AI utilization."

Discussion followed.

Resolution: "The resolution of QoS in the AI shall be consistent with the end-to-end QoS while taking into account AI utilization."

Straw Poll

Yes: 14

No: 3

The above text is accepted to replace the current text in the 2nd sentence of section 4.1.12 for Version 13.

Comment: QoS is mentioned in many places in the document. We recommend consolidation of these so that it is easier to interpret and comply with QoS provisions in the AI.

Resolution: Move section 4.1.12 and make it 4.1.7; and section 4.1.7 is made 4.1.7.1.

Comment Resolution accepted without objection.

Time: 4:30 pm

Meeting recessed for the day

Wednesday, May 12, 2004

Meeting began at 8:00 am.

Chair reviewed the working agenda for the remainder of the session.

After discussion with the group, Chair modified the agenda for the remainder of the current session (Appendix D).

Presentation by Farooq Khan on “802.20 Evaluation Criteria & Traffic Models Status Update” (C802.20-04-54)

Discussion followed

Time: 9:05 am

Presentation by Dan Gal on “RF Performance Criteria” (C802.20-04/51r1)

Discussion followed

Break at 10:00 am

Resume: 10:30 am

Presentation by David Huo on “Link Level simulations and evaluation criteria” (C802.20-04/53)

Time: 11:25 am

Presentation by Jim Tomcik on “VOIP Models – Update” (C802.20-04-37)

Discussion Followed

Lunch Break: 11:55 am – 1:00 pm

Presentation by Anna Tee “Evaluation of 802.20 proposals with adjacent channel interference considerations” (C802.20-04-58)

Time: 1:45 pm

The chair proposed to allow time at this point for the Ad-hoc Group to discuss Evaluation criteria.

Joanne Wilson objected to this.

Straw Poll

To have an ad-hoc discussion on Evaluation Criteria now

Yes: 9

No: 6

It was decided to allow time for the Ad-hoc group to discuss the link level simulations and Evaluation Criteria till 3:30 pm

Time: 3:30 pm

Chair reviewed the latest Requirements Document process

Chair proposed the process for the next steps to be followed on the Requirements document.

Discussion followed

Chair requested inputs on the requirement review process he presented.

Time: 4:10 pm.

Report from Mark Klerer on the Adhoc Meet on “Broadcast and Multicast services”

The ad-hoc group considered two options for further discussion.

Mark Klerer proposed to include both the options presented on requirements document V13.

No objections were raised.

Section 4.1.1.2, Page 12

Comment: Add the Joint Contribution Suggestion for section 4.1.1.2 here.

Discussion followed

Comment withdrawn

Section 4.1.3, Page 13, Line 7

Comment: Other competing air interfaces provide for a simplified design by including feature for Half Duplex FDD. We should discuss whether this is required in 802.20 so as to maintain technological parity in this forward-looking standard

Suggested Remedy: Change to read – Frequency Division Duplexing (FDD), Half Duplex Frequency Division Duplexing (HFDD), and Time Division Duplexing (TDD)

Discussion followed.

Proposed resolution: Add to section 4.1.3: "The AI should support a Half Duplex FDD subscriber station."

Straw Poll:

Yes 20

No: 1

The above text will be added to section 4.1.3 in Version 13.

Time: 5:00 pm

Meeting recessed for the day

Thursday, May 13, 2004

Meeting began at 8:00 am

Presentation by Qiang Guo on “Status of 802.20 Channel Models” (C802.20-04-52)

Discussion followed.

Review of Requirements Document

Section 4.1.4 Page 13, Line 11

Comment: Clarity that the top speeds are vehicular speeds.
Change to read: vehicular speeds

Accepted without objection for Version 13.

Section 4.1.5, Page13, line 13

Current Text:

OPTION 1: [

The aggregate data rate for downlink and uplink shall be consistent with the spectral efficiency. Example Aggregate Data Rates are shown in table 4-2.

Table 4.2

]

OPTION 2: [The aggregate data rate for downlink and uplink shall be consistent with the spectral efficiency.]

Comment: The concept of bandwidth must be clarified given that we are not requiring specific channel bandwidths. Option 2 is clear and specific and does not assume specific channel bandwidths.

Suggested Remedy: Adopt Option 2

No objections

Option 2 is adopted for Version 13.

Section 4.1.5.1, Page 14, line 1

Editors Note: There are two versions of text for this section to consider at the next WG meeting

OPTION 1: [

The AI shall support peak per-user data rates in excess of the values shown in table 4-3. These peak data rate targets are independent of channel conditions, traffic loading, and system architecture. The peak per user data rate targets are less than the peak aggregate per cell data rate to allow for design and operational choices.

Average user data rates in a loaded system shall be in excess of 512Kbps downlink and 128Kbps uplink. This shall be true for 90% of the cell coverage or greater.

Table 4 .3]

OPTION 2: [The AI shall support peak per-user data rates in excess of 1 Mbps on the downlink and in excess of 300 kbps on the uplink. These peak data rate targets are independent of channel conditions, traffic loading, and system architecture. The peak per user data rate targets are less than the peak aggregate per cell data rate to allow for design and operational choices.

Average user data rates in a loaded system shall be in excess of 512Kbps downlink and 128Kbps uplink. This shall be true for 90% of the cell coverage or greater.]

Comment: Option 1 peak rates result in a large user data rate peak to average ratio of the order of 10:1 and will rarely be seen in practice (see C802-20-04-33r1). We should therefore not artificially limit proposals to large peak data rates whose sole purpose is specs-manship and will rarely be seen in practice. The concept of bandwidth must be clarified given that we are not requiring specific channel bandwidths. Additionally, the concept of two phases is ill-defined.

Suggested remedy: Remove Option 1

Adopt option 2:

Yes: 7

No: 9

Adopt Option 3

Option 3 – Joint Contribution

The average aggregate data rate for downlink and uplink shall be consistent with the spectral efficiency. Example channel bandwidths and corresponding aggregate data rates are shown in table 4-2 for an FDD system, these same numbers apply to a TDD system with twice the channel bandwidth.

<i>Parameter</i>	<i>Channel Bandwidth- FDD System</i>							
	<i>1.25 MHz. @ 3km/hr</i>		<i>1.25 MHz. @ 120km/hr</i>		<i>5 MHz. @ 3km/hr</i>		<i>5 MHz. @ 120 km/hr</i>	
	DL	UL	DL	UL	DL	UL	DL	UL
Average Aggregate Data Throughput (Mbps/ Sector)	2.5	1.25	1.25	0.94	10.0	5.0	5.0	3.75

Table 4-1 Aggregate Data Rates

Straw Poll:

Yes: 10

No: 7

No change was adopted for the above section of the Requirements document.

Lunch Break: 11:40 am - 1:15 pm

Since Mark Klerer was late to present on scheduled item “Proposed Work Plan and Project”, the Chair requested Eshwar Pittampalli to switch the slot to present his material on “Liaison Relationships”

Presentation by Eshwar Pittampalli on “Liaison Relationships with External Organizations” (C802.20-04-25r2)

Eshwar P. requested for volunteers to help assist in establishing liaison relationships with various organizations. He also updated the group on a meeting with other wireless Working Group Chairs regarding how to work together on coordinating liaisons.

Time: 2:10 pm

Presentation by Mark Klerer on “Proposed Work Plan and Project Schedule” (C802.20-4/57)**Presentation by Gang Wu on “IEEE 802.20 Project Development Timeline” (C802.20-04/59)**

Discussion followed

The two different presenters tried to sort the differences in the schedule and try come to a consensus.

Break: 3:10 pm.

Resume: 3:40 pm

Discussion resumed on Section 4.1.13 of the Requirements document.

Joanne Wilson requested to minute Section 4.1.13.5 doesn't specifically mandate AES

It is understood AES is not mandatory for security requirements. No algorithm is mandated in the SRD.

Additional time was requested to study and comment on this section.

Discussion followed. There are three options for consideration

Straw Poll:

Option 1: 6 Yes, 9 No

Option 2: 5 Yes, 10 No

Option 3: 7 Yes, 11 No

No change was adopted for the Requirements document.

Nothing on New Business

Chair opened the discussion on Proposed Requirements Document Process Next Steps

With feedback from members, Chair made modifications to the Process (Appendix E)

Mark Klerer noted that in the absence of members responding to a ballot, they will risk losing the membership. He also noted his disagreement with the Chair's interpretation of the March motions.

Jim Ragsdale objected that it is not appropriate to enforce proprietary software to comment on a document or respond to a ballot.

The Chair stated, if an individual was prohibited by his company from using the software, the person should notify the Chair in writing and request an exception. The SRD Editor and the Chair would develop an exception process for commentary.

Gang Wu read out the selected rules.

Time: 5:00 pm

Chair presented the high level agenda for the Next Meeting (Plenary July 12-15) Portland, Oregon (Appendix F)

Time: 5:08 pm

Move to adjourn

No objections

Session #8 is adjourned

Appendix A**Attendee List of 802.20 Session #8 Interim Meeting**

Last Name	First Name	Middle	Affiliation	Status
Bajaj	Rashmi		France Telecom R&D	Y
Bernstein	Jeffrey	null	TMG Telecom	Y
Carson	Peter	A.	Qualcomm	Y
Chang	Soo-Young		CSUS	N
Chen	Shiuh		Hitachi	N
Chindapol	Aik		Siemens	Y
Cho	Juphil		ETRI	Y
Chun	Jin-Young		LG Electronics	Y
Chung	Kyuhyuk		LG Electronics	Y
Crowley	Steven		DoCoMo USA Labs	Y
Eilts	Henry	S	TI	N
Epstein	Mark		Qualcomm	Y
Gal	Dan		Lucent	Y
Guo	Qiang		Motrola	Y
Hanaoka	Seishi		Hitachi	Y
Hinsz	Christopher	S	Symbol	N
Humbert	John		Sprint	Y
Huo	David	D	Lucent	Y
Ihm	Bin-Chul		LG Electronics	Y
Imamura	Daichi		Panasonic	Y
James	David	S	Oak Global	Y
Khan	Farooq	null	Lucent	Y
Kim	Beomjoon		LG Electronics	N
Kim	Myoung	S	Shinhwa Corporation	N
Kimura	Shigeru		Kyocera	Y
Kitamura	Takuya		Fujitsu	Y
Klerer	Mark		Flarion	Y
Knisely	Douglas	N	Lucent	Y
Kuroda	Masahiro		NICT	Y
Laihonen	Kari	A	Teliasonera	Y
Lee	Kyoung Seok		ETRI	Y
Lee	Heesoo		ETRI	Y
Li	Jia-Ru		Extreme Networks	Y
Li	Jun		Nortel Networks	Y
Love	Robert	D	LAN Connect Consultants	N
Mai	De	D.	Cubic Corp	N
Mo	Shaomin	S	Panasonic	N
Nagai	Yukimasa		Mitsubishi	N
Naguib	Ayman	F	Qualcomm	Y
Ngo	Chiu		Samsung	N
Nguyen	Tuan	P	N/A	N
Nishio	Akihiko		Panasonic	Y
O'Brien	Francis	E	Lucent	Y

Oguma	Hiroshi		Institute Miyagi Pref.	N
Patel	Vijay		Motorola	N
Pittampalli	Eshwar		Lucent	Y
Ragsdale	James	H	Ericsson	Y
Rajkumar	Ajay		Lucent	Y
Sakakura	Takashi		Mitsubishi	Y
Scalise	Fabio	M	ST	N
Seagren	Chris		Sprint	Y
Shively	David		Cingular	Y
Sutivong	Arak		Qualcomm	Y
Tee	Lai-King Anna		Samsung	Y
Tomcik	James	D.	Qualcomm	N
Trerotola	Ron		Technocom Wireless	N
Upton	Jerry		J Upton Consulting	Y
Wieczorek	Alfred		Motorola	Y
Wilson	Joanne	C	ArrayComm	Y
Wu	Gang		DoCoMo USA Labs	Y
Yallapragada	Rao	V	Qualcomm	Y
Youssefmir	Mike		ArrayComm	Y
Yuza	Masaaki		NEC	Y
Zhou	Frank		Nokia	Y

Appendix B:
Joint Opening
May 2004 Interim
802.20 Session #8

Jerry Upton- Chair

jerry.upton@ieee.org

Gang Wu – Procedural Vice Chair

Eshwar Pittampalli – Liaison Vice Chair

Logistics

- Electronic sign-in www.802wirelessworld.com
- No manual attendance sign-in at this session. If you encounter problems send e-mail to Gang Wu g-wu@ieee.org
- 802.20 has 16 meeting slots you need to participate in 12 meeting slots to get participation credit.
- Local website: <http://neptune/mbwa/index.html>
- Meeting Room - - Pacific 2nd Floor North Tower

WG Policies and Procedures – Affiliation Statements

- All 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 Attendance Credit

- Members of 802.20 will receive credit for attending 802.21 meetings.
- Members of 802.21 will receive credit for attending 802.20 meetings.
- 802.16 & 802.21 granted reciprocal attendance credit rights in March.
- Chairs will cover specifics at their sessions

Proposed Detail Agenda

Proposed Detailed Meeting Agenda (May 10, 2004)

Monday, May 10, 2004 8:00AM - 10:30 AM

Joint Opening 802.11/15/18/19/20/21

- IEEE IPR rules and conduct
- Logistics for the session
- Proposed 802.20 Agenda

Monday, May 10, 2004 11:00AM - 12:30 PM Pacific Room

- Opening Session of 802.20
- Voting Tokens
- Approval of Agenda including modifications
- Review and approve March Minutes
- Other Session Logistics

11:00am - 12:30pm

Monday, May 10, 2004 1:30PM - 5:30 PM (Break 3:30 – 4:00PM)

Requirements:

- New Option-Latency & PER (Anna Tee)
- Common MAC (from March, Dan Gal)
- SRD v12 Comments (Dan Gal)
- Review Status of Requirements Doc. (John Humbert)
- Discussion of SRD Comments Received
- Proposed Topics for Drafting Ad-Hocs

1:30pm-2:00pm
2:00pm- 2:30pm
2:30pm- 3:30pm
4:00pm- 5:30pm

[C802.20-04/55](#)
[C802.20-04/46](#)

Monday, May 10, 2004 7:30PM - 9:00 PM (optional) - Ad-Hocs

Tuesday, May 11, 2004 8:00AM - 12:30 PM (Break 10:00 – 10:30AM)

- Requirements review and Voting on sections

8:00am – 12:30pm

Tuesday, May 11, 2004 1:30PM - 5:30 PM (Break 3:30 – 4:00PM)

- Contribution- Security Issues (John Dogon)
- Requirements Review and Voting continued
- Review of Proposed Topics for Ad-Hocs

1:30pm – 2:15pm
2:15 pm - 5:30pm

[C802.20-04/56](#)

Wednesday, May 12, 2004 8:00AM - 12:30 PM (Break 10:00 – 10:30AM)

Evaluation Criteria & Traffic Models:
- RF Performance Criteria (Dan Gal)
- Power & Thermal Dissipation Criteria (Ping Liu)
- VoIP Traffic Model (from March, Jim Tomcik)
- Fading Channel Models for Link Level Simulation (David Huo)
- Review Status of Document (Farooq Khan)

8:00am - 9:00am
9:30am - 10:00am
10:30am - 11:00am
11:00am - 11:30pm
11:30am - 12:30pm

[C802.20-04/51](#)
[C802.20-04/50](#)
[C802.20-04/37](#)
[C802.20-04/53](#)
[C802.20-04/54](#)

Wednesday, May 12, 2004 1:30PM - 5:00 PM (Break 3:30 – 4:00PM)

Evaluation Criteria & Traffic Models:
- Review Status of Document (Farooq Khan) cont.
- Review and Voting
- Proposed Topics for Drafting Ad-Hocs

1:30 pm - 5:00 pm

[C802.20-04/54](#)

Wednesday, May 12, 2004 6:00PM - 10:00 PM Social

Proposed Detail Agenda

Thursday, May 13, 2004 8:00AM - 12:30 PM (Break 10:00 – 10:30AM)

Channel Models

- Review Status of Document (Q. Guo)
- Review and Voting
- Requirements Drafting Ad-Hoc meetings Outputs or
- Continue Evaluation Criteria & Models, if needed

8:00am – 10:00am

[C802.20-04/52](#)

10:30am – 12:30pm

Thursday, May 13, 2004 1:30PM - 5:30PM (Break 3:30 – 4:00PM)

Work Plan & Project Schedule

- Proposed Workplan /Schedule(Klerer,Wilson,Dennett)
- Proposed Workplan /Schedule (Upton, Wu, Pittampalli)
- Liaison Plan Update (Eshwar Pittampalli)
- New Business
- Next Meeting Planning
- Close of the Meeting
- Adjourn

1:30pm – 2:45pm

[C802.20-04/57](#)

2:45pm – 3:30pm

[C802.20-04/59](#)

4:00pm – 4:30pm

[C802.20-04/25](#)

4:30pm – 5:00pm

5:00pm – 5:30pm

Requirements Document Process

1. The “in-meeting” process adopted by the group was only for the March Plenary.

However, given the results achieved with the modified process it did show usefulness for reaching agreement.

2. The Commentary tool & process adopted by the group was for use between meetings. However, we did agree as part of the adoption that comment resolution would occur in the face to face meetings.

Proposed Process for this meeting:

1. Limit the scope of the discussion inputs by requirement section to the Comments in the database and Alternative Contributions not resolved from March. Update Commentary based comment resolution and Alternative contributions.
2. Sections with Options and no Comments should be discussed. Commentary updated based upon this meeting discussion.
3. SRD version update will be based upon the above.
4. Then Comments will be taken against new version.
5. July Plenary closure process - - “use March voting.”

Appendix C: Proposed Detailed Agenda – May 2004 Interim

Monday, May 10, 2004 8:00AM - 10:30AM

Joint Opening 802.11/15/18/19/20/21
 IEEE IPR rules and conduct
 Logistics for the session
 Proposed 802.20 Agenda

Monday, May 10, 2004 11:00AM - 12:00PM

Opening Session of 802.20 - Voting Tokens - Approval of Agenda including modifications - Review and approve March Minutes - Other Session Logistics	11:00am –12:00pm	
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Monday, May 10, 2004 1:00PM – 5:30PM (Break 3:00 – 3:30PM)

Requirements: - New Option-Latency & PER (Anna Tee) - Common MAC (from March, Dan Gal) - SRD v12 Comments (Dan Gal) - Review Status of Requirements Doc. (John Humbert) - Discussion of SRD Comments Received - Proposed Topics for Drafting Ad-Hocs	1:00pm-1:30pm 1:30pm- 2:00pm 2:00pm- 3:00pm Break 3:30pm- 5:30pm	C802.20-04/46
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Monday, May 10, 2004 7:30PM - 9:00PM (optional Ad-Hocs)

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Tuesday, May 11, 2004 8:00AM - 12:00PM (Break 10:00 – 10:30AM)

- Requirements Review and Voting on Sections	8:00am – 12:00am	
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Tuesday, May 11, 2004 1:00PM – 5:30PM (Break 3:00 – 3:30PM)

- Contribution- Security Issues (John Dogon) - Requirements Review and Voting continued - Review of Proposed Topics for Ad-Hocs	1:00pm- 1:45pm 1:45pm- 5:30pm	
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Wednesday, May 12, 2004 8:00AM - 12:00PM (Break 10:00 – 10:30AM)

Evaluation Criteria & Traffic Models: - RF Performance Criteria (Dan Gal) - Power & Thermal Dissipation Criteria (Ping Liu) - VoIP Traffic Model (from March, Jim Tomcik) - Review Status of Document (Farooq Khan) - Review and Voting - Proposed Topics for Drafting Ad-Hocs	8:00am- 9:00am 9:30am- 10:00am Break 10:30am-11:00am 11:00am- 12:00pm	C802.20-04/37
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Wednesday, May 12, 2004 1:00PM - 5:00PM (Break 3:00 – 3:30PM)

Evaluation Criteria & Traffic Models: - Review Status of Document (Farooq Khan) cont. - Review and Voting - Proposed Topics for Drafting Ad-Hocs	1:00pm- 5:00pm	
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Thursday, May 13, 2004 8:00AM - 12:00PM (Break 10:00 – 10:30AM)

Channel Models - Review Status of Document (Q. Guo) - Review and Voting	8:00am – 10:00pm	
Requirements Drafting Ad-Hoc meetings Outputs or Continue Evaluation Criteria & Models, if needed	Break 10:30am- 12:00pm	

Thursday, May 13, 2004 1:00PM - 5:00PM (Break 3:00 – 3:30PM)

Work Plan & Project Schedule - Proposed Workplan /Schedule(Klerer,Wilson,Dennett) - Proposed Workplan /Schedule (Wu,Pittampalli,Upton)	1:00pm- 2:15pm	
Liaison Plan Update (Eshwar Pittampalli)	2:15pm- 3:00pm	
- New Business	Break 3:30pm- 4:00pm	
- Next Meeting Planning	4:00pm- 4:30pm	
- Close of the Meeting	4:30pm – 5:00pm	
- Adjourn		

Appendix D: Modified Working Agenda

Wednesday, May 12, 2004 1:00PM - 5:00 PM (Break 3:30 – 4:00PM)

Evaluation Criteria & Traffic Models: - Evaluation of 802.20 proposals with adjacent channel interference considerations - Ad-hoc Farooq - Requirements Adhoc report , proposed next steps, comment resolution	1:00 pm - 1:45pm	C802.20-04/58 C802.20-04/54
	1:45pm – 3:15 pm 3:45pm – 5:00pm	

Wednesday, May 12, 2004 6:30PM - 9:30 PM

- 802 Social Reception		
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Thursday, May 13, 2004 8:00AM - 12:00 PM (Break 10:00 – 10:30AM)

Channel Models - Review Status of Document (Q. Guo) - Next steps Ad-Hoc meetings Outputs and Requirements Comment/Next steps	8:00am – 10:00am	C802.20-04/52
	10:30am – 12:00pm	

Thursday, May 13, 2004 1:00PM - 5:00PM (Break 3:30 – 4:00PM)

Work Plan & Project Schedule - Proposed Workplan /Schedule(Klerer,Wilson,Dennett) - Proposed Workplan /Schedule (Upton, Wu, Pittampalli) Liaison Plan Update (Eshwar Pittampalli) - New Business - Next Meeting Planning - Close of the Meeting - Adjourn	1:00pm – 1:45pm	C802.20-04/57
	1:45pm – 2:30pm	C802.20-04/59
	2:30pm – 3:00pm	C802.20-04/25
	3:00pm – 3:30pm	
	4:00pm – 5:00pm	

Appendix E

Proposed Requirements Document Process Next Steps:

1. Update V12 based upon comment resolution results of Interim meeting and issued as V13.
2. People will need to re-entry their comments. We will tell people in the V13 Notification.
3. Notify all Members of V13 and ask for comments. Provide very clear instructions for entering comments and process next steps. Send out weekly reminder to all members - -status of # people commenting
4. After a Comment Cycle of three weeks, the new database will be posted for reply comments. We will remind people regarding creation of reply comments and how to create reply comments. People will be encouraged to work with others off-line. The Reply Comment cycle will be two weeks. Then a new database with the reply comments will be posted two weeks before the Plenary. A Comment may refer to a contribution(new or previous).
5. July Plenary process will be developed. Inputs:
 - Comment resolution and vote accept/reject; contributions proposing resolution of comments placed on a section
 - Vote to adopt the complete document ; Vote a baseline for Letter Ballot

Appendix F: High Level Agenda
Next Meeting
Plenary– July 12-15th Portland, Oregon

Agenda Priorities

1. Requirements - - “Closure” (75% of the time)
 1. Use evening sessions also
2. Evaluation Criteria/Traffic Model – Agree on Major items
3. Channel Models- update on “Outstanding List”- Closure
4. Other Items – very little time

September 13 – 16 Berlin, Germany Interim Session