<table>
<thead>
<tr>
<th>Project</th>
<th>IEEE 802.20 Working Group on Mobile Broadband Wireless Access <a href="http://grouper.ieee.org/groups/802/20/">http://grouper.ieee.org/groups/802/20/</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
<td>DRAFT Minutes, 802.20 Session #5, Albuquerque, NM, November 10-14, 2003</td>
</tr>
<tr>
<td>Date Submitted</td>
<td>2003-11-20</td>
</tr>
<tr>
<td>Source(s)</td>
<td>Rao Yallapragada QUALCOMM, Incorporated 5775 Morehouse Drive San Diego, CA, 92121 Voice: +1 858 658 4540 Fax: +1 858 651 2880 Email: <a href="mailto:rao@qualcomm.com">rao@qualcomm.com</a></td>
</tr>
<tr>
<td>Re:</td>
<td>802.20 Session#5</td>
</tr>
<tr>
<td>Abstract</td>
<td>Minutes of the Session</td>
</tr>
<tr>
<td>Purpose</td>
<td>Minutes of the Session.</td>
</tr>
<tr>
<td>Notice</td>
<td>This document has been prepared to assist the IEEE 802.20 Working Group. It is offered as a basis for discussion and is not binding on the contributing individual(s) or organization(s). The material in this document is subject to change in form and content after further study. The contributor(s) reserve(s) the right to add, amend or withdraw material contained herein.</td>
</tr>
<tr>
<td>Release</td>
<td>The contributor grants a free, irrevocable license to the IEEE to incorporate material contained in this contribution, and any modifications thereof, in the creation of an IEEE Standards publication; to copyright in the IEEE’s name any IEEE Standards publication even though it may include portions of this contribution; and at the IEEE’s sole discretion to permit others to reproduce in whole or in part the resulting IEEE Standards publication. The contributor also acknowledges and accepts that this contribution may be made public by IEEE 802.20.</td>
</tr>
</tbody>
</table>
The fifth meeting of 802.20 was held at the November plenary meeting of IEEE 802 in Albuquerque, NM.

Following a brief announcement that in the morning the 802 Executive Committee had confirmed the three officers elected in the March, 2003 Plenary, the Chair Jerry Upton, Procedural Vice-Chair Gang Wu and Liaison Vice-Chair Eshwar Pittampalli led the WG session.

The 802.20 WG had a joint opening plenary session with 802.11, 802.15, 802.18, and 802.19 from 1:00 PM to 3:30 PM on Monday November 10, 2003.

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 November 10, 2003**

Meeting started at 4:00 pm.

Rao Yallapragada was appointed the Recording Secretary.

The Procedural Vice-Chair read the IEEE 802 rules regarding the patent policy, IPR disclosures, and topics inappropriate for discussion at IEEE working group meetings. The Procedural Vice-Chair instructed Recording Secretary to record in the minutes that all appropriate IEEE policies were covered.

Chair discussed the logistics with respect to Electronic Sign-in, local website and other WG information.

Participants and especially potential working group leaders were strongly encouraged to attend the tutorials on Education, Mentoring and Support.

Chair presented the agenda for the Monday afternoon’s meeting and the overall agenda for the whole session.

One of the contributions “Priority Access for 802.20” was withdrawn.

**Motion:**
Motion to approve the agenda (Appendix B)
Moved: Gang Wu
Seconded: Henry Ellis
Approved by unanimous consent.

Motion:

Motion to approve the minutes of the plenary session in San Francisco in July 2003 and the interim session in Singapore in September 2003
Moved: Eshwar Pittampalli
Seconded: Gang Wu
Approved by unanimous consent

Presentation by Khurram Sheikh on “System Requirements Update” (C802.20-03/15)

- Covered the current status of the update on system requirements
  - Version 9 of system requirements document is posted on IEEE 802.20 website
  - Consensus was reached on 31 out of 57 items

- Reviewed the objectives of 802.20

- Khurram Sheikh presented an overview of all the items that were discussed in Singapore for the benefit of the participants who did not attend the Singapore session

Motion:

Motion to recess
Moved: Eshwar Pittampalli
Seconded: Mark Klerer
Approved by unanimous consent
Time: 5:40 pm

Meeting recessed at 5:40 PM.
Minutes of 802.20 Tuesday November 11, 2003

Meeting started at 8:05 am.

Chair started the day by reviewing the working agenda (Appendix B) for the day.

Presentation by Joseph Cleveland on “Preparing for Convergence” (C802.20-03-97)

To meet the goal of 802.20, i.e., “Ubiquitous and seamless user experience”, it was recommended to build functional requirements to ensure interoperation with other cellular systems: GSM/EDGE, CDMA2000, WCDMA, 1xEV-DO etc.

The presentation recommended that a handoff between an 802.20 system to another 802.20 system be clearly defined. The presentation called for hooks in MAC/PHY specifications to support for handoffs and interworking with other systems.

There was a general discussion on the need to address MAC/PHY requirements for the interworking possible between two different systems.

There was also discussion on not converging all different technology air interfaces in MAC & PHY layers and the parameters essential to ensure interworking between different systems be defined clearly at the application layer.

Presentation by Nat Natarajan on “Support of Layer 2 Triggers for faster HOs” (C802.20-03-95)

Presentation called for a clear definition of L2 to L3 communications and optimization of network layer.

Presentation recommends that “helpful L2 to L3 communication of helpful hints (triggers) can facilitate faster handoff performance and other potential benefits based on the use of such hints”.

Nat requested explicit inclusion of the above statement in section 4.5.1.1. for IP level handoffs in the requirements document.

Presentation by Jim Tomcik on “Handoff for 802.20” (C802.20-03-92)

The discussion after the presentation called for a clear definition of the terms “Interworking” and “Handoff”.

A requirement was requested to include the number of Handoffs/sec that can be supported by the 802.20 systems.

Break between 9:40 am to 10:10 am

Presentation by Eshwar Pittampalli on “Status of Current Mobile Wireless Access System Standards” (C802.20-03-100)
The presentation summarized the status of some of the standards and performance of current mobile wireless access systems.

Specifically, the presentation proposed new performance target requirements for 802.20 systems.

**Presentation by Dan Gal on “Plurality of Technologies and Channel Bandwidths” (C802.20-03-105)**

The presentation dealt with the possible system requirements based upon a broad view of the scope of 802.20.

In the following discussion, it was agreed that text presented in Section 4.1.3 with respect to FDD and TDD frequency block assignments in the requirements document was needs to be further clarified.

**PM1 meeting started at 1:45 pm**

**Presentation by Anna Tee on “Implication of End-User QoS Requirements on PHY & MAC” (C802.20-03-106)**

This document gave a brief overview of the QoS classification and requirements by ITU and 3GPP, and used the information to derive the latency and error rate requirements for 802.20 in support of IETF DiffServ structure.

The presentation provided considerations for Latency and Packet Error Rate performance targets for IEEE 802.20 standard based on QoS requirements of 3GPP standards for different application classes.

**Presentation by John Humbert on “Detailed Discussion of SRD Issues” (C802.20-03/110)**

John Humbert (Systems Requirements Document Editor) discussed with the participants to reach an agreement on several open sections of the Systems Requirements Document.

a) The following new text was added to section 4.1.3 of the current requirements document:

“This section is not intended to specify a particular channel bandwidth. Proposals do not need to fit into all block assignment”.

The section was marked closed by unanimous consent.

b) Discussion on Section 4.1.2: Spectral Efficiency

A point was raised regarding if there should be different targets for different speeds.

It was agreed that there is a need for consensus on the definition of a “cell.”

It was decided to revisit the topic on Thursday, Nov 13, 2003.
Discussion was left with competing paragraphs for consideration. It was decided to have an Adhoc Drafting team work on revised text for this section.

c) Discussion on Section 4.1.6: Aggregate Data Rates – Downlink and Uplink

It was decided an Adhoc Drafting team would work on clarifying the text further.

d) Discussion Section 4.1.4: Duplexing

The following is the current text in the document.

“The AI shall support both Frequency Division Duplexing (FDD) and Time Division Duplexing (TDD)”

There was discussion regarding changing the above text.

**Motion:**

Motion to approve the following text for section 4.1.4,

Proposal: “An AI proposal may support either a Frequency Division Duplexing or Time Division Duplexing or both”

Moved: Dan Gal
Seconded: Jim Mollenauer
Time: 4:10 pm

**Motion:**

Motion to postpone the vote until Thursday at 10:00 am
Moved: Joanne Wilson
Seconded: Mark Klerer

Vote on motion to postpone:
In favor: 43 votes
Against: 6 votes
Abstentions: 0 votes
Motion passed
Time: 4:22 pm

e) Discussion on Section 4.1.7 (Number of Simultaneous Active Users)

It was generally agreed to change the wording of the current text. An Adhoc Drafting team was formed to work on the new text.

f) Discussion on Section 4.1.9 (Frame Error Rate)
Following a discussion on the correct value, it was decided to postpone the discussion till other related issues were discussed.

Anna Tee was requested to write a contribution for proposed text in Section 4.1.9.

g) Discussion on Section 4.2.3 (Performance under Mobility & Delay Spread)

There was substantial discussion on the content of the section but there was no general agreement.

It was decided to put the discussion back on the Requirements email reflector.

**Tuesday, Nov 11th meeting recessed at 6:01 pm.**
Minutes of 802.20 Wednesday November 12, 2003

Meeting started at 8:35 am.

Preceding the meeting, Requirements Adhoc Drafting teams met from 7:30 to 8:30 am.

Chair reviewed the working agenda for Wednesday, November 12 and Thursday, November 13 (Appendix C).

The morning meeting began with John Humbert (Systems Requirements Document Editor) continuing with the detailed discussion of SRD issues.

4.1.10 Support for Multi Antenna Capabilities (closed)

4.1.11 Antenna Diversity

- Latest proposal: At a minimum, the air interface shall provide support for receive diversity.

Option 1: The BS should provide antenna diversity, which may be an integral part of an advanced antenna solution. The standard shall neither require nor preclude the use of antenna diversity at the mobile stations.

Discussion: Suggestions were made not to mandate smart antenna technologies for the MS. A request was made to keep the subject open for the market to decide.

Chair requested an Adhoc Drafting team of interested members to develop proposed new text that converges to consensus.

802.1Q Tagging (4.5.2):

Most recent proposal:

- 802.1Q tagging shall be supported by the system
- (such that network egress traffic can be switched by a L2 device to the appropriate L2 termination device for managing backbone traffic authentication vlans and or captive portal redirection to enable purchase and provision retail models or distinguish traffic for wholesale partners in a wholesale environment)

- Discussion:

Issue was raised not to limit the architecture to a specific methodology at this time.

Chair suggested a more generic proposal maybe the best approach.

Topic was placed on email reflector for further discussion of proposals.

MAC Complexity Measures (4.5.5)
Option 1
- Delete Section

Option 2
- To make the MBWA technology commercially feasible, it is necessary the complexity is minimized at the MAC, consistent with the goals defined for the technologies. This section defines complexity

No objections to deleting this section.

This section was deleted.

**System Architecture (Section 3.1)**

- Discussion on guidelines:
  - The 802.20 systems must be designed to provide ubiquitous mobile broadband wireless access in a cellular architecture. The system architecture must be one of the following architectures:
    - Point to multipoint topology
    - Mesh network topology
    - Hybrid of both mesh and point to multipoint

- Discussion on content; different proposals of the text were voiced:
  - The 802.20 system must support non-line of sight outdoor to indoor scenarios. The system must be designed to enable a cellular architecture (macro/micro/Pico cells) with allowance for indoor penetration.

  - The 802.20 systems must be designed to provide ubiquitous mobile broadband wireless access in a cellular architecture. The 802.20 system must support non-line of sight outdoor to indoor scenarios. The system must be designed to enable a cellular architecture (macro/micro/Pico cells) with allowance for indoor coverage.

  - The 802.20 systems must be designed to provide ubiquitous mobile broadband wireless access in a cellular architecture (e.g., macro/micro/pico cells etc.). The 802.20 system must support non-line of sight outdoor to indoor scenarios and indoor coverage.

  - Chair suggested the group review these alternatives overnight and the group should revisit again on Thursday morning during the Adhoc Drafting teams readouts.

**Other Open Sections:**

These sections are currently open. No new activity had occurred on the email reflector.
- Multi-Carrier support
- Call blocking
- MAC/Phy measurements
Discussion on Section 4.5.4 (OA&M Support)

Discussion regarding whether the current text in brackets should be deleted
Suggestions: Separate the text that is specific to equipment requirements and the text that is traditional in 802 standards.

A consensus was reached on the last line of the section, as follows:

- “These statistics should be made available via an IEEE compliant MIB”.

Chair requested a small group of interested members develop a complete section proposal including defining what details are needed in this documents versus other documents.
There was a short discussion on the merits of adopting different architectures.

A request was made not to preclude any future contributions on this subject.

Multi-Carrier Support

A new section “Multi-Carrier Support” was proposed for incorporation:

There was a discussion on the topic of Multi-carrier Support. The following options for the text were suggested:

- The AI shall have the ability to support multiple carriers within the same scheduler so that carriers can be stacked within sectors and shall allow flexible augmentation of capacity
  Or
- The AI shall have the ability to support multiple independent channels within the same sector to allow flexible bandwidth utilization and augment capacity within a sector

Topic was placed on the email reflector. Interested members were encouraged to made further proposals on Thursday.

Morning meeting recessed at 10:30 am for a break.

Meeting started again at 10:50 am.

Presentation by Qiang Guo “Channel Models for IEEE 802.20 MBWA System Simulations – Rev 03” (C802.20-03-92, Rev. 03)
Qiang Guo, document editor, reviewed the current text on Channel Models and parameters for the 802.20 system simulations.

Discussion ensued on **Section 2.4: MBWA Channel Environments**

It was suggested to include Indoor Pico Cell channel model for the Section 2.4 on MBWA Channel environments. Agreed this should be studied for possible inclusion.

For any contributions and additions to this document, the Chair requested members first introduce the proposals on the email reflector for discussion.

12:00 – Break for Lunch and Adhoc Drafting teams meetings Meeting Resumed at 2:45 pm

**Presentation by Farooq Khan (Document Editor) on “Evaluation Criteria” (C802.20-03/94, Rev. 6)**

Discussion:

- The list of performance metrics used in the evaluation is viewed as incomplete.
- Input is needed from the Traffic Modeling CG on the list of applications supported before the application specific performance metrics can be defined.

New Issues

- The need for simulation and evaluation on various channel bandwidths was discussed. No conclusions were reached.

- Discussion on whether to simulate the technologies on one bandwidth or for multiple bandwidths. Further discussion regarding how to reach consensus on the test/evaluation criteria bandwidths.

It was noted that progress was slow given the lack of contributions and needed inputs from the other CGs.

Discussion regarding the needed inputs from the other Correspondence Groups (CGs)

Input from the Traffic Models CG

- Application specific performance metrics and higher layer protocols details cannot be finalized until the details on the traffic models are available.

Input from the Requirements CG:

- Great level of detail and specification in the SRD would help simplify the evaluation criteria task.

Chair encouraged the group to provide more clarification and contributions for the Evaluation Criteria. Chair also suggested the editor create a priority list of needed inputs from the other Correspondence Groups.
Review by Farooq Khan of 802.20 Evaluation Criteria Document Rev 6 (C802.20-03/94)

Time: 4:15 pm

There was discussion regarding whether members can have access to the channel model described in 3GPP2 for 1xEV-DV for 802.20 evaluations. There was no agreement. Discuss followed regarding the proposed fairness criteria with no consensus reached.

Chair requested members make contributions on this topic. The topic was also placed on the email reflector for further discussion.

Discussion ended at 5:35 pm.

Given lack of time for the remaining item of the agenda: “Presentation: Evaluation of 802.20 Proposals - Coexistence Affecting Characteristics” (C802.20-03-99), it was moved to Thursday Morning (11/13).

Chair reviewed a revised Thursday Working agenda (Appendix D). No objections were raised.

However, there was concern from a member that document number C802.20-03-100 was not completely discussed. Chair suggested if there were more inputs we could discuss on Thursday during the Requirements read-outs.

Meeting recessed at 5:51 pm.
Minutes of 802.20 Thursday November 13, 2003

Meeting started at 9:40 am.

Preceding the meeting, Requirements Adhoc Drafting team meetings were held from 7:30 am to 9:30 am.

Presentation by Dan Gal on “Presentation: Evaluation of 802.20 Proposals - Coexistence Affecting Characteristics” (C802.20-03-99)

Presenter recommended the group adopt and incorporate this contribution into the Evaluation Criteria document.

Discussion was interrupted due to standing orders on the postponed motion of Tuesday, Nov 11, 2003.

At 10:00 am, Nov 13, 2003, the group took up the following motion that was made on Tuesday, Nov 11, 2003 at 4:10 pm.

Motion to approve the wording on section 4.1.4 (Tuesday, Nov 11, 2003, Time: 4:10 pm)

Current Text: The AI shall support both Frequency Division Duplexing (FDD) and Time Division Duplexing (TDD).

Proposal: An AI proposal may support either a Frequency Division Duplexing or Time Division Duplexing or both.

Moved: Dan Gal
Seconded: Jim Mollenauer

Further debate on the wording occurred.

The following friendly amendment to the current proposal was made.

Amended Proposal: The AI standard shall support both Frequency Division Duplexing (FDD) and Time Division Duplexing (TDD). An AI proposal may support either a Frequency Division Duplexing or Time Division Duplexing or both.

The friendly amendment was accepted.
Time: 10:07 am.

Additional discussion and debate on further wording changes occurred.

Secondary Motion:

Move to remove the word “standard” in the Amended Proposal.
Moved: Dan Gal
No Second was received.
Time: 10:12 am

**Motion:**

Motion to “Call the Question”
Moved: Gang Wu
Second: Mark Klerer

Vote:
In Favor: 55
Against: 0
Abstentions: 0
Motion passed.
Time: 10:18 am

Vote to approve the wording of amended proposal:

In favor: 26
Against: 31
Abstentions: 3

Motion fails
Time: 10:30 am

Resumed discussion on Dan Gal’s Presentation on “Evaluation of 802.20 Proposals - Coexistence Affecting Characteristics” (C802.20-03-99)
Time: 10:32 am

Further discussion regarding defining a detailed evaluation methodology for assessing the coexistence capability (of proposals) in a well-defined representative RF environment and scenarios

Proposal was to add coexistence capability material to the text.

Agreed that interested members should write detailed proposals for inclusion in the evaluation criteria document

Time: 10:46 am

Chair reviewed the status of the working agenda. Minor changes were made to the Working Agenda.

Break at 10:48am

Meeting restarts at 11:05am
Presentation by Jim Tomcik on “Coexistence Inputs for 802.20 Project” (C.802.20-03/103)

This contribution is a continuation of the recent discussion on coexistence in 802.20. The contribution dealt with how coexistence should be handled in the project. The contribution suggested a series of steps to handle the issue of coexistence.

Suggested Incumbent Technologies/Bands and presented Coexistence scenarios

Suggested it is also important to understand how 802.20 affect intra-technology deployments in selecting technologies.

After selecting technology (ies), presenter suggested that 802.20 should develop a coexistence guidelines document for the selection(s).

Much discussion of the Pros & Cons. Agreed that concrete proposals are needed to properly evaluate.

Chair recommended the group further study the subject and encouraged members to develop proposals for converging different views.

Presentation by Reza Arefi “Coexistence CG’s Recommendation to IEEE 802.20 WG” (C802.20-03/96r2)

Presented the background on the formation and the activity of a study group and a task group

Proposed a charter to form a coexistence study group in 802.20

Discussion regarding the task of the Study Group and potential structure a document produced by the Task Group.

There was discussion with no consensus regarding how coexistence would be addressed in the Evaluation Criteria document and process.

Motion:

Move to approve the formation of a working group study group on coexistence, chartered through the end of March 2004 session with the following charter:

- To develop a PAR for a coexistence Task Group (CTG) that would produce a coexistence document with focus on performing coexistence analyses and deployment guidelines for coexistence between 802.20 systems as well as between 802.20 and non-802.20 systems. The PAR shall follow the recommendations of the Coexistence Corresponding Group’s output as reported to the 802.20 WG in the document C802.20-03-96r2.

Moved: Reza Arefi
Second: Eshwar Pittampalli
Friendly Amendment was suggested to change “shall follow” to “should build upon” – Not Accepted.

Friendly Amendment made to change “shall follow” to “shall build on” - Accepted.

**Amended Motion:**

Approve the formation of a working group study group on coexistence, chartered through the end of March 2004 session with the following charter:

- To develop a PAR for a coexistence Task Group (CTG) that would produce a coexistence document with focus on performing coexistence analyses and deployment guidelines for coexistence between 802.20 systems as well as between 802.20 and non-802.20 systems. The PAR shall build on the recommendations of the Coexistence Corresponding Group’s output as reported to the 802.20 WG in the document C802.20-03-96r2.

Moved: Reza Arefi  
Seconded: Eshwar Pittampalli

Discussion and debate on the motion:
There was support for starting now given steps required to go from study group to task group. There was a concern regarding the timing of the need and members resources to support the study group now.

**Motion:**

Motion to “Call the Question”
Moved: Mark Klerer  
Second: Gang Wu  
Motion approved by unanimous consent.  
Time: 1:20 pm

Vote on the Amended Motion to approve the formation of the Study Group on coexistence:

In favor: 29  
Against: 32  
Abstentions: 3  
Motion fails  
Time: 12:20 pm

**Recess till 1:30 pm**

Meeting resumed at 1:32 pm

**Requirements Adhoc Drafting Teams Readouts**
Section 4.1.2: System Spectral Efficiency readout led by
Michael Youssefmir.

The definition for System “Spectral Efficiency” is read out and agreed upon with some additional discussion. Also, definitions will be included for “Aggregate Throughput” and “Network Wide bandwidth”.
Open Action Item: The actual value(s) for spectral efficiency does not have consensus agreement.

Open Items for further discussion on the reflector are:
Single value vs. multiple for uplink and downlink
Actual values [note 1b/s/Hz or downlink > 2 b/s/Hz/cell or sector?] @ 3 km/hr; uplink > 1 b/s/Hz/(cell or sector?) @3 km/hr]
Higher Mobility
TDD/FDD

Read out on following topics led by Bob Love:

1) Handoff
2) Roaming
3) Interworking

Handoff Definition: - The act of switching the communications of a mobile station from one cell (or sector) to another cell (or sector), or between radio channels in the same cell (or sector).

Editors note: sub definitions to be dealt with separately.

**Motion:**

Motion to accept the definition of Handoff
Moved: Joanne Wilson
Second: Michael Youssefmir

Vote:

- In favor: 36
- Against: 7
- Abstentions: 12
Motion passes.
Time 2:30 pm

After discussion it was agreed the definitions of Active and Idle Handoff would be further addressed on the email reflector.

Intra-Technology Handoff Definition:
- A handoff between two cells employing the same air interface technology.

Inter-Technology Handoff Definition:
• A handoff between two cells employing different [air] interface technologies (e.g. between 802.11 and 802.20 cells).

Motion:

Motion to accept the above definitions of Intra-Technology and Inter-Technology Handoffs:
Moved: David James
Second: Jim Mollenauer
Motion passes by unanimous consent.
Time: 2:40 pm

Definition of Roaming: The use of a communications device outside a specified administrative domain (home domain) as defined by the service provider. A home domain may be defined as a geographic area.

Accepted by consensus
Time: 2:45 pm

Definition of Interworking:
Read out team recommended further discussion on the email reflector.

Readout from drafting team regarding “Number of Simultaneous Active Users (4.1.7)” led by Mark Klerer.

The following text was discussed for section 4.1.7:

The MAC layer [should][shall] be able to control > [100] simultaneous active sessions per sector. An active session is a time duration during which a user can receive and/or transmit data with potentially only minimal delay (i.e., in the absence of service level controls, e.g. QoS constraints). In this state the user should have a bearer channel available with a delay of less than [25ms].

Discussion regarding how certain applications will be given preferential treatment with respect to delay in order to work, e.g., VoIP.

No consensus on this text and further discussion planned for email reflector.

New Business:

Presentation by Qiang Ni on “Adaptation Interface for Seamless Handover between IEEE 802.20 MBWA/802.11/802.15” (C802.20-3-104)

Presentation suggested ideas on supporting seamless mobility between different wireless networks.

Presentation proposed new virtual interface architecture as a solution to the vertical handover problem.
Chair thanked the presenter and asked if there were any proposed next steps. No next steps were proposed.

**Continued Requirements readouts on contributions missed before new business:**

**Presentation by Anna Tee (C802.20-03-93)**

Proposed combining text for 4.1.8 and 4.1.9 as follows:

4.1.8 Latency and Packet Error Rate

A variety of traffic classes have different latency and PER requirements. There are Error Tolerant Applications and Intolerant Applications.

Follow up to contribution C802.20-03.106, which was discussed on 11/11/03.

Discussion:

Impact on the evaluation criterion and how would this be addressed.

A suggestion was made to have evaluation criteria group develop the criteria for this application dependent and channel dependent issue.

There was a concern that this is over specified.

No consensus agreement and further discussion on reflector.

**Walter Rausch: System Requirements document (C802.20-03/112)**

Presenter raised the importance of choosing a Channel Bandwidth.

Presenter made suggestions to the effect that “Per user performance needs to exceed 3G capabilities (with spectral efficiency, drives minimum BW requirements)”

Presenter proposed the following text for inclusion to the Requirement document:

“The AI shall use a 5 MHz channel size as the baseline (default) bandwidth
This 5 MHz may be sub-or super channelized as required by specific implementations (N x 5 MHz, where N may be an integer or fraction)
Evaluation criteria will use the 5 MHz channel size as the default bandwidth

For a FDD: It is paired BW of 5 MHz
For a TDD: It is a total of 5 MHz”

No agreement and discussion to continue on the reflector.

Time 4:15 pm
New Business:

Chair requested any further new business.

Mark Klerer requests time to discuss a proposal for Roll-Call Votes.

Motion:

Since 802.20 has not yet approved any operating rules it is proposed that 802.20 adopt the following rule for ordering a Roll-Call vote:

- Procedure for Ordering a Roll-Call Vote: Any individual member may make a motion to order a roll-call vote such a motion shall pass if one fifth of those present vote in favor of that motion.

Moved: Mark Klerer
Seconded: Joanne Wilson

The Chair ruled the motion out of order and questioned the appropriateness of voting a single procedural operating rule given the lack of an overall set of 802.20 rules. After feedback from several working group members that this motion was not out of order the chair allowed discussion on the motion to proceed.

Friendly amendment by Youngnam Han

- Procedure for Ordering a Roll-Call Vote: Any individual member may make a motion to order a roll-call vote. Such a motion shall pass if one fifth of those voting “Yes”, “No” or “Abstain”, vote in favor of that motion.

Friendly amendment to the motion was accepted.

Vote on the above motion:
In Favor: 26
Against: 39
Abstentions: 1
Motion fails.
Time: 4:42 pm

Motion:

Move to take a roll-call vote of the previous motion.

Moved: Mark Klerer
Second: Joanne Wilson
Time: 4:48 pm

Vote:
In favor: 25
Against: 44
Abstentions: 0
Motion fails
Time: 4:59 pm

**Next Meeting Planning:**

Bob Love requested time for a short contribution (“Moving Forward” – C802.20-03/113), which the Chair granted.

Chair conducted a poll of members present regarding planned attendance at the Vancouver, Jan. 11-16, 2004 Interim. Approximately 70 people planned to attend.

**Key Topics/Contributions Requested for Vancouver Agenda:** Chair suggested the group focus on values and measurable items in Requirements and Evaluation Criteria. Chair stated he would contact all the CG leaders and create a proposed priority list and circulate to the group. The agreed list would form the basis of the January agenda.

**Motion:**

Motion to adjourn the session
Mover: Eshwar Pittampalli
Second: Steve Crowley

Vote:
In Favor: 46
Against: 15
Motion passes

**Session Adjourned.**
Time: 5:15 pm
# Attendance List of Session #5

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>Middle Initial</th>
<th>Organization</th>
<th>Gain (%)</th>
<th>Credit (Y: &gt;75%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ahn</td>
<td>Jae-Young</td>
<td>null</td>
<td>ETRI</td>
<td>92</td>
<td>Y</td>
</tr>
<tr>
<td>Ahn</td>
<td>Sangkwan</td>
<td></td>
<td>Hanaro Telecom</td>
<td>50</td>
<td>N</td>
</tr>
<tr>
<td>Alfvin</td>
<td>Richard</td>
<td></td>
<td>Apparent Technologies, Inc.</td>
<td>14</td>
<td>N</td>
</tr>
<tr>
<td>Allen</td>
<td>Kenneth</td>
<td>C</td>
<td>NTIA</td>
<td>100</td>
<td>Y</td>
</tr>
<tr>
<td>Amer</td>
<td>Khaled</td>
<td></td>
<td>AmerNet, Inc.</td>
<td>85</td>
<td>Y</td>
</tr>
<tr>
<td>Ansari</td>
<td>Arif</td>
<td></td>
<td>Nextel</td>
<td>92</td>
<td>Y</td>
</tr>
<tr>
<td>Aoki</td>
<td>Hidenori</td>
<td></td>
<td>NTT DoCoMo</td>
<td>28</td>
<td>N</td>
</tr>
<tr>
<td>Arefi</td>
<td>Reza</td>
<td></td>
<td>BWTC</td>
<td>7</td>
<td>N</td>
</tr>
<tr>
<td>Bajaj</td>
<td>Rashmi</td>
<td></td>
<td>France Telecom R&amp;D</td>
<td>92</td>
<td>Y</td>
</tr>
<tr>
<td>Baum</td>
<td>Kevin</td>
<td></td>
<td>Motorola</td>
<td>92</td>
<td>Y</td>
</tr>
<tr>
<td>Bernstein</td>
<td>Jeffrey</td>
<td>null</td>
<td>TMG, Inc.</td>
<td>92</td>
<td>Y</td>
</tr>
<tr>
<td>Bussey</td>
<td>Chris</td>
<td>J</td>
<td>Bussey Consulting Services, Inc.</td>
<td>92</td>
<td>Y</td>
</tr>
<tr>
<td>CHOO ENG</td>
<td>Robert</td>
<td></td>
<td>Panasonic Singapore Labs</td>
<td>100</td>
<td>Y</td>
</tr>
<tr>
<td>CULLEN</td>
<td>Robert</td>
<td></td>
<td>DataConsult International</td>
<td>100</td>
<td>Y</td>
</tr>
<tr>
<td>Chang</td>
<td>Jin-Weon</td>
<td>L</td>
<td>Samsung</td>
<td>85</td>
<td>Y</td>
</tr>
<tr>
<td>Chang</td>
<td>Soo-Young</td>
<td>L</td>
<td>Univ. of California, Davis</td>
<td>28</td>
<td>N</td>
</tr>
<tr>
<td>Charron</td>
<td>Wendy</td>
<td></td>
<td>LCC International, Inc.</td>
<td>78</td>
<td>Y</td>
</tr>
<tr>
<td>Chauvin</td>
<td>Todd</td>
<td>H</td>
<td>ArrayComm</td>
<td>92</td>
<td>Y</td>
</tr>
<tr>
<td>Chickneas</td>
<td>Jim</td>
<td></td>
<td>Consultant</td>
<td>100</td>
<td>Y</td>
</tr>
<tr>
<td>Chindapol</td>
<td>Aik</td>
<td></td>
<td>Siemens</td>
<td>28</td>
<td>N</td>
</tr>
<tr>
<td>Choi</td>
<td>Hyoung-Jin</td>
<td></td>
<td>TTA</td>
<td>78</td>
<td>Y</td>
</tr>
<tr>
<td>Cleveland</td>
<td>Joseph</td>
<td>R</td>
<td>Samsung</td>
<td>100</td>
<td>Y</td>
</tr>
<tr>
<td>Cole</td>
<td>Terry</td>
<td>L</td>
<td>Advanced Micro Devices</td>
<td>14</td>
<td>N</td>
</tr>
<tr>
<td>Conkling</td>
<td>Craig</td>
<td></td>
<td>INPROCOMM</td>
<td>28</td>
<td>N</td>
</tr>
<tr>
<td>Crowley</td>
<td>Steven</td>
<td></td>
<td>DoCoMo USA Labs</td>
<td>100</td>
<td>Y</td>
</tr>
<tr>
<td>Cypher</td>
<td>David</td>
<td>E</td>
<td>NIST</td>
<td>14</td>
<td>N</td>
</tr>
<tr>
<td>Das</td>
<td>Arnab</td>
<td></td>
<td>Flarion Technologies</td>
<td>100</td>
<td>Y</td>
</tr>
<tr>
<td>Davis</td>
<td>Chantal</td>
<td></td>
<td>Industry Canada</td>
<td>28</td>
<td>N</td>
</tr>
<tr>
<td>Demel</td>
<td>Sabine</td>
<td></td>
<td>T-Mobile</td>
<td>92</td>
<td>Y</td>
</tr>
<tr>
<td>Dorenbosch</td>
<td>Jheroen</td>
<td>P</td>
<td>Motorola</td>
<td>100</td>
<td>Y</td>
</tr>
<tr>
<td>Dorward</td>
<td>Lynne</td>
<td>A</td>
<td>LADCOMM Corporation</td>
<td>100</td>
<td>Y</td>
</tr>
<tr>
<td>Elts</td>
<td>Henry</td>
<td>S</td>
<td>Texas Instruments, Inc.</td>
<td>100</td>
<td>Y</td>
</tr>
<tr>
<td>Entzminger</td>
<td>Lindell</td>
<td></td>
<td>Consultant</td>
<td>100</td>
<td>Y</td>
</tr>
<tr>
<td>Epstein</td>
<td>Mark</td>
<td></td>
<td>Qualcomm</td>
<td>100</td>
<td>Y</td>
</tr>
<tr>
<td>Falk</td>
<td>Lars</td>
<td>P</td>
<td>TeliaSonera</td>
<td>14</td>
<td>N</td>
</tr>
<tr>
<td>Famolari</td>
<td>David</td>
<td></td>
<td>teltcordia technologies</td>
<td>28</td>
<td>N</td>
</tr>
<tr>
<td>Ford</td>
<td>Brian</td>
<td></td>
<td>BellSouth</td>
<td>85</td>
<td>Y</td>
</tr>
<tr>
<td>Gal</td>
<td>Dan</td>
<td></td>
<td>Lucent Technologies</td>
<td>92</td>
<td>Y</td>
</tr>
<tr>
<td>Ganti</td>
<td>Hari</td>
<td>V</td>
<td>Flarion Technologies</td>
<td>100</td>
<td>Y</td>
</tr>
<tr>
<td>Goldhammer</td>
<td>Marianna</td>
<td>O</td>
<td>Alvarion</td>
<td>85</td>
<td>Y</td>
</tr>
<tr>
<td>Gomes</td>
<td>Eladio</td>
<td>R</td>
<td>Double E Enterprises</td>
<td>100</td>
<td>Y</td>
</tr>
<tr>
<td>Gowans</td>
<td>Andrew</td>
<td>J</td>
<td>UK Office Of Communications</td>
<td>7</td>
<td>N</td>
</tr>
<tr>
<td>Gu</td>
<td>Daqing</td>
<td></td>
<td>Mitsubishi Electric</td>
<td>21</td>
<td>N</td>
</tr>
<tr>
<td>Name</td>
<td>Affiliation</td>
<td>Year</td>
<td>Note</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------</td>
<td>------------------------------------</td>
<td>------</td>
<td>------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guo Qiang</td>
<td>Motorola</td>
<td>92</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hafid Abdel</td>
<td>telcordia technologies</td>
<td>92</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Han Youngnam</td>
<td>ICU</td>
<td>78</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>He Haixiang</td>
<td>Nortel Networks</td>
<td>92</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>He Xiaoning</td>
<td>DoCoMo USA Labs.</td>
<td>50</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humbert John</td>
<td>Sprint</td>
<td>92</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hunzinger Jason</td>
<td>DENSO International America</td>
<td>85</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ibbetson Luke</td>
<td>Vodafone Group</td>
<td>85</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Imamura Daichi</td>
<td>Panasonic</td>
<td>92</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>James David S</td>
<td>OAK B.V.</td>
<td>100</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jeannierod Laurent</td>
<td>Alcatel</td>
<td>21</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jones Dennis R.</td>
<td>Taliesen North Consulting</td>
<td>100</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KIM KiYOUNG</td>
<td>LG electronics inc.</td>
<td>14</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kakura Yoshikazu</td>
<td>NEC Corp.</td>
<td>100</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kawahara Toshiro</td>
<td>DoCoMo USA Labs.</td>
<td>100</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Khademi Majid</td>
<td>Khademi Consulting</td>
<td>92</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Khan Farooq</td>
<td>null Lucent Technologies</td>
<td>78</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Khatibi Farrokh</td>
<td>Qualcomm</td>
<td>92</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kim JaeHeung</td>
<td>ETRI</td>
<td>100</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kim Nak Myeong</td>
<td>Ewha Womens University</td>
<td>85</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kim Sang G</td>
<td>LG electronics inc.</td>
<td>100</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kimura Shigeru</td>
<td>Kyocera</td>
<td>100</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kitamura Takuya</td>
<td>Fujitsu Laboratories Ltd.</td>
<td>92</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Klerer Mark</td>
<td>Flarion Technologies</td>
<td>100</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knisely Douglas</td>
<td>N Lucent Technologies</td>
<td>92</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowles Skip</td>
<td>Bussey Consulting Services, Inc.</td>
<td>100</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kolze Thomas</td>
<td>Broadcom</td>
<td>100</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kuroda Masahiro</td>
<td>CRL(Communications Research)</td>
<td>92</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lalaguna Pablo</td>
<td>MedStar Systems, LLC</td>
<td>100</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Landon James</td>
<td>Sprint</td>
<td>100</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lawrence Lisa B</td>
<td>CTCI</td>
<td>100</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lee Heesoo</td>
<td>ETRI</td>
<td>92</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lee Kyoung Seok</td>
<td>ETRI</td>
<td>100</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liu I-Ru</td>
<td>Arcadyan Technology Corporation</td>
<td>7</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loc Peter</td>
<td>Marvell</td>
<td>7</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loewenstein Uwe</td>
<td>mmO2</td>
<td>14</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Love Newton</td>
<td>Alion Science &amp; Technology</td>
<td>85</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Love Robert D</td>
<td>LAN Connect Consultants</td>
<td>85</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lu Ben</td>
<td>NEC Labs. America Inc.</td>
<td>78</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lung Yi-Jen</td>
<td>III</td>
<td>7</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maez Dave</td>
<td>Navini Networks</td>
<td>100</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>McGinniss David S</td>
<td>Sprint</td>
<td>92</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>McMillan Donald C</td>
<td>Advanced Network Technical Solutions</td>
<td>100</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Migaldi Scott F</td>
<td>Motorola</td>
<td>85</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miyazono Max</td>
<td>Qualcomm</td>
<td>100</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mollenauer James F</td>
<td>Technical Strategy Associates</td>
<td>100</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mukai Manabu</td>
<td>TOSHIBA</td>
<td>100</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Murakami Kazuhiro</td>
<td>Kyocera</td>
<td>100</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Naguib Ayman F</td>
<td>Qualcomm</td>
<td>92</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>Affiliation</td>
<td>Year</td>
<td>Active</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------</td>
<td>------------------------------------</td>
<td>------</td>
<td>--------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Naidu Mullaguru</td>
<td>Qualcomm</td>
<td>92</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natarajan Nat</td>
<td>Motorola</td>
<td>92</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nguyen Tuan P</td>
<td>N/A</td>
<td>57</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ni Qiang</td>
<td>INRIA</td>
<td>21</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nishio Akihiko</td>
<td>Matsushita Electric Industrial Co. Ltd</td>
<td>92</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O'Connor Jim</td>
<td>IPWireless</td>
<td>85</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obara Kei</td>
<td>Siemens</td>
<td>28</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Odlyzko Paul</td>
<td>Motorola</td>
<td>100</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Okubo Akira</td>
<td>Mitsubishi Electric</td>
<td>100</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PARK SOON-JOON</td>
<td>LG electronics inc.</td>
<td>92</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patel Vijay</td>
<td>Axcelco LLC</td>
<td>14</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peng Xiaoming</td>
<td>Institute for Infocomm Research</td>
<td>21</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Petrick Al</td>
<td>IceFyre Semiconductor</td>
<td>14</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pirhonen Riku</td>
<td>Nokia</td>
<td>92</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pittampalli Eshwar</td>
<td>Lucent Technologies</td>
<td>92</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poisson Sebastien</td>
<td>Oasis Wireless Inc</td>
<td>85</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pulcin G Greg</td>
<td>Bussey Consulting Services, Inc.</td>
<td>92</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ragsdale James</td>
<td>H Ericsson</td>
<td>100</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rajkumar Ajay</td>
<td>Lucent Technologies</td>
<td>100</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rausch Walter</td>
<td>F Sprint</td>
<td>100</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rudolf Marian</td>
<td>X InterDigital Communications</td>
<td>100</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sakakura Takashi</td>
<td>Mitsubishi Electric</td>
<td>92</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sanchez Maria</td>
<td>British Telecom</td>
<td>100</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sangchoon Kim</td>
<td>LG electronics inc.</td>
<td>100</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saviotti Vanni</td>
<td>STMicroelectronics</td>
<td>78</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schein Brett</td>
<td>ArrayComm</td>
<td>92</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seagren Chris</td>
<td>Sprint</td>
<td>100</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shaver Donald</td>
<td>P Texas Instruments, Inc.</td>
<td>85</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sheikh Khurram</td>
<td>Sprint</td>
<td>78</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shin Byung C</td>
<td>CBNU(Chungbuk Nat. Univ.)</td>
<td>21</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shively David</td>
<td>Cingular Wireless</td>
<td>100</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sohn Insoo</td>
<td>ETRI</td>
<td>85</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Springer Warren</td>
<td>J SpringerSystems</td>
<td>92</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staver Doug</td>
<td>P N/A</td>
<td>92</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stone Mike</td>
<td>Independant</td>
<td>100</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sumanasena Abhaya</td>
<td>Mitsubishi Electric</td>
<td>100</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sutivong Arak</td>
<td>Qualcomm</td>
<td>100</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Takizawa Kenichi</td>
<td>CRL(Communications Research</td>
<td>14</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tanaka Hideki</td>
<td>Fujitsu Laboratories Ltd.</td>
<td>21</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taylor Leslie</td>
<td>Leslie Taylor Associates, Inc.</td>
<td>100</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tee Lai-King Anna</td>
<td>Samsung</td>
<td>92</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tomcik James D</td>
<td>Qualcomm</td>
<td>35</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trick John</td>
<td>A Bussey Consulting Services, Inc.</td>
<td>92</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Umehira Masahiro</td>
<td>NTT</td>
<td>28</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upton Jerry</td>
<td>J Upton Consulting</td>
<td>85</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valls Juan Carlos</td>
<td>TMG, Inc.</td>
<td>100</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Van Poucke Bart</td>
<td>IMEC</td>
<td>14</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vivanco Silvia</td>
<td>C TMG, Inc.</td>
<td>100</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vook Frederick W</td>
<td>Motorola</td>
<td>92</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>First Name</td>
<td>Last Name</td>
<td>Company</td>
<td>Score</td>
<td>Attendee</td>
</tr>
<tr>
<td>---------------</td>
<td>------------</td>
<td>-----------</td>
<td>-----------------------</td>
<td>-------</td>
<td>----------</td>
</tr>
<tr>
<td>Ward</td>
<td>Robert</td>
<td></td>
<td>SciCom, Inc.</td>
<td>92</td>
<td>Y</td>
</tr>
<tr>
<td>Wasilewski</td>
<td>Tom</td>
<td>V</td>
<td>TMG, Inc.</td>
<td>92</td>
<td>Y</td>
</tr>
<tr>
<td>Watanabe</td>
<td>Fujio</td>
<td></td>
<td>DoCoMo USA Labs</td>
<td>21</td>
<td>N</td>
</tr>
<tr>
<td>Wieczorek</td>
<td>Alfred</td>
<td></td>
<td>Motorola</td>
<td>100</td>
<td>Y</td>
</tr>
<tr>
<td>Wilson</td>
<td>Joanne</td>
<td>C</td>
<td>ArrayComm</td>
<td>100</td>
<td>Y</td>
</tr>
<tr>
<td>Wong</td>
<td>Jin Kue</td>
<td></td>
<td>Nortel Networks</td>
<td>78</td>
<td>Y</td>
</tr>
<tr>
<td>Woodyatt</td>
<td>James</td>
<td></td>
<td>Apple Computer</td>
<td>85</td>
<td>Y</td>
</tr>
<tr>
<td>Wu</td>
<td>Gang</td>
<td></td>
<td>DoCoMo USA Labs</td>
<td>100</td>
<td>Y</td>
</tr>
<tr>
<td>Wu</td>
<td>Geng</td>
<td></td>
<td>Nortel Networks</td>
<td>92</td>
<td>Y</td>
</tr>
<tr>
<td>Yaghoobi</td>
<td>Hassan</td>
<td></td>
<td>Intel Corporation</td>
<td>100</td>
<td>Y</td>
</tr>
<tr>
<td>Yallapragada</td>
<td>Rao</td>
<td>V</td>
<td>Qualcomm</td>
<td>100</td>
<td>Y</td>
</tr>
<tr>
<td>Youssefmir</td>
<td>Mike</td>
<td></td>
<td>ArrayComm</td>
<td>100</td>
<td>Y</td>
</tr>
<tr>
<td>Yuza</td>
<td>Masaaki</td>
<td></td>
<td>NEC infrontia Co.</td>
<td>100</td>
<td>Y</td>
</tr>
<tr>
<td>Imamura</td>
<td>Kimihiro</td>
<td></td>
<td>Sharp Corporation</td>
<td>21</td>
<td>N</td>
</tr>
</tbody>
</table>
# Appendix B

## Preliminary Proposed Agenda

**Monday, November 10, 2003 1:30PM - 3:30PM**

- Joint Plenary 802.11/15/18/19/20 (Attendance Optional)

**Monday, November 10, 2003 4:00PM - 5:30PM**

- Opening of Session
- Review and Approval of Agenda
- Review and Approval of Minutes
- Overview of Requirements CG Output and Issues

**Tuesday, November 11, 2003 8:00AM - 6:00PM**

- **Requirements Contributions and Discussion**
  - Preparing for Convergence
  - Support of Layer 2 Triggers for Faster Handoffs
  - Handoff for 802.20
  - Plurality of Technologies & Channel-bandwidths in the IEEE 802.20 Standard
  - Priority Access for 802.20
  - Review of 802.20 Requirements Document Rev 9

**Tuesday, November 11, 2003 8:00AM - 6:00PM**

- Joint Plenary 802.11/15/18/19/20 (Attendance Optional)
- Overview of Requirements CG Output and Issues

**Wednesday, November 12, 2003 8:00AM - 6:00PM**

- (Drafting Group readout)
- **Channel Modeling Contributions and Discussion**
- **Traffic Modeling Contributions and Discussion**
- **Evaluation Criteria Contributions and Discussion**
  - Evaluation of 802.20 Proposals - Coexistence Affecting Characteristics
- (Possible time for drafting groups (on above 3 topics))
<table>
<thead>
<tr>
<th>Preliminary Proposed Agenda, Contd.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thursday, November 13, 2003, 2003 8:00AM - 5:00PM</td>
</tr>
<tr>
<td>- Evaluation Criteria Contributions and Discussion (if needed)</td>
</tr>
<tr>
<td>- (Drafting group readouts)</td>
</tr>
<tr>
<td>- Coexistence CG Readout and Contributions</td>
</tr>
<tr>
<td>Review of 802.20 Coexistence CG Proposal</td>
</tr>
<tr>
<td>Coexistence for the 802.20 Project</td>
</tr>
<tr>
<td>- (Possible time for drafting groups &amp; readout)</td>
</tr>
<tr>
<td>- New Business</td>
</tr>
<tr>
<td>Adaptation Interface for Seamless Handover between</td>
</tr>
<tr>
<td>802.20MBWA/802.11/802.15</td>
</tr>
<tr>
<td>Status of Current Mobile Wireless Access System Standards</td>
</tr>
<tr>
<td>- Planning for next meeting</td>
</tr>
<tr>
<td>- Close of Meeting</td>
</tr>
</tbody>
</table>
Appendix C

Wednesday Working Agenda

8:30 – 10:30am Requirements Document Review Continued

10:30 – 10:45am Break

10:45 – 12:45pm Channel Modeling Review C802.20-03/92
Traffic Modeling Review

12:45 – 2:45pm Requirements Drafting Teams and Lunch Break

2:45 – 5:45pm Evaluation Criteria

   Evaluation of 802.20 Proposals – Coexistence Affecting Characteristics C802.20-03/99

5:45 – 6:00pm Thursday Working Agenda Review (see next slide for proposal)
Thursday Working Agenda

8:00 – 10:30am  Requirements Drafting Teams Readout  
Requirements Motion 10:00am

10:30 – 10:45am  Break

10:45 – 12:30pm  Co-Existence

Coexistence for 802.20 Project  C802.20-03/105
Review of 802.20 Coexistence CG Proposal  C802.20-03/96r2

12:30 – 1:30pm  Lunch Break

1:30 – 2:30pm  Possible Drafting Teams Time or other Readouts

2:30 – 2:45pm  Break

2:45 – 3:45pm  New Business

Adaptation for Seamless Handover between
802.20/MBWA/802.11/802.15  C802.20-03/104

3:45 – 4:45pm  Planning Next Meeting

4:45 – 5:00pm  Close Meeting and Adjourn
Appendix D

Thursday Working Agenda- (modified)

7:30 – 9:30am  Requirements Drafting Teams
9:30 –  Requirements Drafting Teams
10:00 – 10:15am  Evaluation Criteria Contribution-C802.20-03/99
10:00 – 10:15am  Requirements
10:15 – 10:30am
10:30 –  Requirements Drafting Teams
12:30 –  Lunch
1:30 –  Co-Existence
  Coexistence for 802.20 Project C802.20-03/105
  Review of 802.20 Coexistence CG Proposal C802.20-03/96r2
3:00 – 3:15pm
3:15 –  New Business
  Adaptation for Seamless Handover between
  802.20MBWA/802.11/802.15 C802.20-03/104
4:00 –  Planning Next
4:45 –  Close Meeting and Adjourn