

DRAFT

**IEEE
802.16 Session #24
10th to 13th March 2003
Dallas, TX**

Source: Task Group d (TGd) Chair

Title: TGd minutes

Date: 13 Mar 2003

Document for:

Approval	X
Discussion	
Information	X

Agenda item: Minutes

<i>Registered Contributions</i>	2
<i>Session #24 Schedule</i>	2
<i>Monday 10 Mar 2003</i>	2
Review of Contributions	3
C80216d-03_12.pdf	3
C80216d-03_13.pdf	3
C80216d-03_14.pdf	3
C80216d-03_15.pdf	3
C80216d-03_16.pdf	3
C80216d-03_17.pdf	3
C80216d-03_18.pdf	3
C80216d-03_19.pdf	3
C80216d-03_20.pdf	4
C80216d-03_21r2.pdf	4
C80216d-03_22.pdf (OFDM Profiles)	4
C80216d-03_23.pdf (WIMAX OFDM Profiles)	4
<i>Tuesday 11 Mar 2003</i>	4
C80216d-03_18.pdf (cont'd)	4
C80216d-03_19.pdf (cont'd)	4
C80216d-03_20.pdf (cont'd)	4
C80216d-03_22r1.pdf	5
C80216d-03_24.pdf	5
C80216d-03_25.pdf	5
C80216d-03_26.pdf	5
C80216d-03_27.pdf	6
<i>Wednesday 12 Mar 2003</i>	6
<i>Thursday 13 Mar 2003</i>	6

Registered Contributions

The following is a list of registered contributions as of the publication of these minutes.

- C80216d-03_12.pdf (Errata Corrections related to terminology, REP/RSP TLV encodings and ARQ)
- C80216d-03_13.pdf (two problems in the section on data randomization)
- C80216d-03_14.pdf (Addition of IPv6 Flow Label Classifier in Classifier Rules)
- C80216d-03_15.pdf (The UL Allocation Start Time for the OFDM PHY mode as specified in IEEE 802.16a is too short. Proposal to increase this time)
- C80216d-03_16.pdf (This contribution identifies a problem in the section on data randomization and proposes a solution)
- C80216d-03_17.pdf (This contribution proposes an enhancement to the initial ranging procedure)
- C80216d-03_18.pdf (Connection Oriented Mesh proposal that scales for large deployments and supports end-to-end MAC-level QoS)
- C80216d-03_19.pdf (This document describes a problem with AAS Network Entry method and proposes a solution for the OFDM PHY mode)
- C80216d-03_20.pdf (Some of the parameters in the FEC and the transmitter constellation error test method need to be clarified)
- C80216d-03_21r2.pdf (This contribution presents some corrections to problems currently exists in the IEEE 802.16a OFDMA mode.)
- C80216d-03_22r1.pdf (802.16 OFDM Profiles – PHY and MAC Profiles)
- C80216d-03_23.pdf (Errata and Profiles for WirelessMAN-OFDM and WirelessHUMAN(-OFDM))
- C80216d-03_24.pdf (WirelessMAN-SCa Errata and System Profiles)
- C80216d-03_25.pdf (802.16a Errata – Pilot sequences in OFDM)
- C80216d-03_26.pdf (Editorial Changes)
- C80216d-03_27.pdf (Editorial Corrections for 802.16a)

Session #24 Schedule

All meetings are held in Comet

Subject (number of sessions)	Monday	Tuesday	Thursday
TGd sessions (4)	15:30-18:20	8:30-9:20	
		13:30-14:50	13:30-16:30

Monday 10 Mar 2003

Meeting called to order at 15:45.

Review of Contributions

C80216d-03_12.pdf

This contribution discusses several errata as described in sections 2.1, 2.2, and 2.3.

2.1 Discusses errata in differences in terminology in three areas. Agreement was to accept the proposed corrections in terminology.

2.2 Discusses errata in TLV construction. Table 11.1.6 of [1] is not constructed according to the TLV conventions. Agreement was to accept the proposed corrections.

2.3 Discusses certain errata in ARQ fragment lifetime definition. This part of the contribution was disputed and the erratum was withdrawn on 3/11/03.

C80216d-03_13.pdf

This contribution discusses errata with data randomization and proposes a correction. Agreement was to accept the contribution.

C80216d-03_14.pdf

This contribution discusses errata with missing information “IPv6 Flow Label Classifier”. Agreement was to accept the contribution.

C80216d-03_15.pdf

This contribution discusses errata with UL allocation start time in the OFDM PHY being too short. Agreement was to accept the contribution with a change from 200uSec to 1mSec.

C80216d-03_16.pdf

This contribution discusses errata regarding the term “relative to the beginning of the frame”. The term is ambiguous. Agreement was to accept the contribution.

C80216d-03_17.pdf

The contribution discusses a problem with initial ranging starting at the minimum power level. This could result in a successful initial ranging taking as long as 90 seconds. Proposal is to correct the algorithm that includes received power level at the SS to adjust the SS transmit power level on initial ranging request. Question is raised regarding the proposal being within the scope of the PAR for TGd. A show of hands was asked for: Question – is this contribution within the scope of the PAR? For: 5, Against: 0. Result of show of hands is that the contribution is within the scope of TGd PAR. Agreement was to accept the contribution.

C80216d-03_18.pdf

This contribution discusses Connection Oriented Mesh proposal that scales for large deployments and supports end-to-end MAC-level QoS. There was a question whether the proposal is within the scope of the PAR. Deferred until the next TGd session.

C80216d-03_19.pdf

The contribution discusses the entry of an AAS SS into a non-AAS network within the scope of the OFDM PHY. This was deferred until AAS proponents have an opportunity to review the contribution.

C80216d-03_20.pdf

This contribution discusses errata regarding constellation error and test methods. Decision deferred until values for N_f and L_p (8.4.8.1.2) can be provided.

C80216d-03_21r2.pdf

The contribution discusses errata in OFDMA UL and DL MAP information Elements missing some reserved bits for future enhancements. Agreement was to accept the contribution.

C80216d-03_22.pdf (OFDM Profiles)

Deferred to 3/11/03. Nico & Vladimir to try to merge the system profile proposals by end of this TGd session.

C80216d-03_23.pdf (WIMAX OFDM Profiles)

The contribution discusses errata in Frame Duration Codes, TX power level control, ARQ support/Enable, and System Profiles for the OFDM PHY. Agreement is to amend 11.4.1.10 so that a value = 255 indicates unlimited number of ARQ connections; 1-254 indicates the number of simultaneous ARQ connections; and 0 indicates no ARQ connections. Agreement is to accept errata with modifications identified above.

Within the System Profiles section there is an issue on frequency step size for the radio channel. Current view is that a step size of 250 KHz is required but there is uncertainty whether a step size of 125 KHz is necessary. Agreement is to defer this decision until the next 802.16 session.

Agreement was to accept the contribution with the changes identified above.

Nico & Vladimir to merge profile proposals by end of this TGd session

Meeting concluded at 18:20 hr.

Tuesday 11 Mar 2003

Morning session convened at 8:30am.

C80216d-03_18.pdf (cont'd)

This discussion was continued from 3/10/03. Agreement was that the contribution is outside the scope of the TGd PAR. Suggestion is that this contribution has merit and should continue to be discussed via an ad hoc process. This contribution may result in the creation of a new PAR.

C80216d-03_19.pdf (cont'd)

This discussion was continued from 3/10/03. Agreement was to accept the contribution within the scope of the OFDM PHY.

C80216d-03_20.pdf (cont'd)

This discussion was continued from 3/10/03. Agreement was to accept the contribution using the values of $N_f = 20$ and $L_p = 16$.

Morning session recessed at 9:20 hr until 13:30 hr.

Session reconvened at 13:30 hr.

C80216d-03_22r1.pdf

The contribution discusses errata and System Profiles for the OFDM PHY. Contribution C802.16d-03_22r1 was presented on 3/11/03. Several issues with contribution were expressed.

- No FDD for license exempt bands,
- Subchannelization is optional not required,
- All guard interval options shall be supported by SS,
- ARQ is not “required” (an option in the standard), and
- 64QAM is not “required” (an option in the standard)

No resolution after significant discussion. Vladimir puts forward a motion: “Accept C802.16d-03_22r1 as is”, seconded by Naftali Chayat.

Those in favour: 2

Those against: 3

Motion fails.

Naftali puts forward a motion: “Accept C802.16d-03_22r1 with the following changes”:

- Eliminate FDD as a requirement for Wireless HUMAN
- All guard interval options should be supported by the SS
- Delete mention of ARQ as “require”
- Delete 64QAM as “required”

Those in favour: 4

Those against: 3

Motion fails. Did not meet 75% majority as stated during the first meeting by the chair that all technical issues must meet a 75% approval to be successful.

C80216d-03_24.pdf

This contribution discusses suggested text for correction to errata in 80216a Clause 8.3 (WirelessMAN-SCa phy) and text for SCa system profiles.

Agreement is to accept errata. Note the formula “ $R = (W - .088) / (1 + _)$ ” in the contribution should be “ $R = (W - .088) / (1 + a)$ ”.

Agreement is to accept System Profiles with the caveat to fix the following:

1. All symbol rate formulas should have the formula $R = (W - .088) / (1 + a)$. This is addressed in contribution C80216d-03_24r1.
2. Is the modulation accuracy based on .16a or is it a carry over from .16? This is addressed in contribution C80216d-03_24r1.
3. The specification for power spectral density when transmitter is off reads “Local Regulation ≤ -80 dBm/MHz”. Should this be “Local Regulation OR ≤ -80 dBm/MHz”? This is addressed in contribution C80216d-03_24r1.

C80216d-03_25.pdf

This contribution discusses errata in Pilot sequences in the OFDM PHY. Agreement was to accept the contribution.

C80216d-03_26.pdf

This contribution discusses errata in terminology. Agreement was to accept the contribution.

C80216d-03_27.pdf

This contribution discusses errata in terminology. Agreement is to accept the contribution with the following further clarification for table 116a.

Change the term "4 subchannels" to be "No subchannelization"

Change the term "2 subchannels" to be "2 subchannels/user"

Change the term "1 subchannel" to be "1 subchannel/user"

Agreement is to accept the contribution as modified.

Afternoon session recessed at 14:50 hr.

Wednesday 12 Mar 2003

No Meeting convened

Thursday 13 Mar 2003

Meeting reconvened at 13:30 hr.

Minutes of meetings during the current TGd session up to this meeting were reviewed.

Discussed whether 802.16d-03_23 was accepted with changes during the 10 Mar pm Session. Based on minutes recorded during the session the decision is to letter ballot a working Group draft 802.16d-03/D1 based on 802.16d-03/01 and the accepted contributions identified above.

Review and approval of TGd Session #24 Closing Report

New business: Find a source authority on System Profiles and publish purposes of System Profiles for the benefit of contributors to TGd.

Motion to approve forwarding to the closing plenary the following motion:

"To adopt the merger of all accepted contributions during TGd session #24 and C802.16d-03/01 as draft P802.16d/D1 and initiate a Working Group Letter Ballot on forwarding that draft."

In favour: 9

Against: 1

Motion passes.

TGd Session #24 adjourned at 16:30 to Closing Plenary.