Project	IEEE 802.16 Broadband Wireless Access Working Group http://ieee802.org/16 >
Title	Report of IEEE 802.16.3 Session #10 PHY Evaluation
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Re:	At 802.16 Working Group Session #10, Task Group 3 of the Working Group undertook an evaluation process for initial Physical Layer proposals. This evaluation process was concluded on Nov 20, 2000 when all votes were compiled and processed by Anader Benyamin-Seeyar, Chair of the 802.16.3 Evaluation Ad-Hoc, using an Excel program created by David Twinkwon.
Abstract	This document provides the summary results of the voting process. The scoring results reported here show those proposals that met and failed the evaluation criteria. It also shows some summary statistics for each proposal and their scores in each evaluation criteria.
Purpose	The purpose of this document is to inform all members and observers of 802.16 of the results of the evaluation process. Proposers may use this information to assist them in the next cycle of proposal preparation to improve upon their proposals, pursue mergers of proposals, etc.,
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	Early disclosure to the Working Group of patent information that might be relevant to the standard is essential to reduce the possibility for delays in the development process and increase the likelihood that the draft publication will be approved for publication. Please notify the Chair <mailto:r.b.marks@ieee.org> as early as possible, in written or electronic form, of any patents (granted or under application) that may cover technology that is under consideration by or has been approved by IEEE 802.16. The Chair will disclose this notification via the IEEE 802.16 web site http://ieee802.org/16/ipr/patents/letters.</mailto:r.b.marks@ieee.org>

Report of Session # 10 802.16.3 PHY Voting Results

Brian Kiernan, Chair 802.16.3

At 802.16 Working Group Session #10, Task Group 3 of the Working Group undertook an evaluation process for initial Physical Layer proposals as described in 802.16.3-00/14, Call for Contributions for Session #10 and 802.16.3-00/20r1, Voting instructions for TG3 Initial PHY proposals. This evaluation process was concluded on 20 November 2000 when all votes received were compiled and processed by Anader Benyamin-Seeyar, Chair of the 802.16.3 Evaluation Ad-Hoc, using an Excel program created by David Twinkwon. The results include scores from 51 802.16 Members; in addition, scores from 6 nonmembers are reported separately for information only.

This document provides the summary results of the voting process. The scoring results reported here show those proposals that met and failed the evaluation criteria. It also shows some summary statistics for each proposal and their scores in each evaluation criteria. This information is provided to assist proposers in formulating their proposals for the next cycle.

All proposals receiving a minimum score of 6 in any evaluation category will be invited to submit a more detailed proposal at the next 802.16 session. This will be addressed in a separate Call for Contributions.

This is the only information that will be made public. Individual voter records will be provided shortly on the 802.16 member s only web site.

For help in interpreting the individual proposal and criteria numbers, please use the following link: http://ieee802.org/16/tg3.

802.16.3 PHY Voting Results Summary

Presenter	Sequence #	802.16.3 Document #	Total "Member" Voters	Total "Non- Member" Voters	Highest Average Member Score	Highest Average Non- Member Score	Highest Average "All" Score	Session #11
Williams	1	45	51	6	6.97	9.33	7.18	invited
Sydor	2	46	51	6	5.63	9	6.05	not invited
Wang	3	42	51	6	5.53	6.17	5.61	not invited
Heise	4	29	51	6	7.36	7.4	7.31	invited
Chayat	5	30	51	6	7.35	6.6	7.22	invited
Seller	6	31	51	6	7.03	6.75	6.93	invited
Hall	7	32	51	6	5.95	7.2	6.04	not invited
Segal	8	33	51	6	7.73	8.5	7.76	invited
Manor	9	37	51	6	7.26	8.6	7.31	invited
Ye	10	35	51	6	7.29	7.67	7.34	invited
McCallister	11	36	51	6	7.28	6.6	7.11	invited
Hadad	12	34	51	6	7.69	8.5	7.73	invited
Ward	13	38	51	6	7.12	7.2	7.08	invited
Eidson	14	39	51	6	6.1	7.5	6.27	invited
Benyamin-Seeyar	15	40	51	6	6.85	6.33	6.73	invited
Van Waes	16	41	51	6	7.44	7.2	7.26	invited
Sellars	17	28	51	6	5.75	6.83	5.89	not invited
Hammons	18	43	51	6	7.42	7.2	7.39	invited
Quilez	19	44	51	6	7.07	6.4	6.92	invited
Ran	20	48	51	6	5.81	7	5.96	not invited

				Evaluation Category														
802.16.3 PHY	Votir	ıg		1	2	2	4	_		7	0	0	1.0	1.1	1.2	1.2		
Summary	. <u>e</u>	er	ore	5 1		3	4 >>	>	0	<u>></u>	8	9	10 10	11	12	13		
	Proposal Presenter Sequen	Seq t Ni	Maximum Score	System Requirements	Channel Efficiency Realization	Simplicity	Spectrum Flexibility	System Spect Effcy	Service Flexibility	Protocol Complexity	Reference Gain	Robustness	Channel Impairmen	Radio Impairments	Advanced Antenna	Regulatory	Average Score	Minimum Score

MEMBER SCORES

- AVERAGES

- AVERAGES																
Williams	1	45	6.97 5.16	6.45 5.1	2 6.03	6.28	4.91	4.00	6.04	6.91	6.97	5.31	4.09	4.47	5.52	4.00
Sydor	2	46	5.63 4.34	5.24 4.3	3 5.07	5.63	4.12	3.64	4.45	5.29	5.09	4.80	5.18	4.39	4.74	3.64
Wang	3	42	5.53 4.67	4.79 4.2	7 4.83	4.87	4.39	4.00	4.21	5.53	5.38	4.69	3.81	4.43	4.60	3.81
Heise	4	29	7.36 6.64	6.62 6.2	8 6.97	6.87	6.63	6.29	6.69	7.18	7.36	6.83	5.47	6.97	6.68	5.47
Chayat	5	30	7.35 6.96	6.88 6.5	5 7.30	6.89	6.89	6.22	6.97	7.30	7.35	6.59	6.34	7.23	6.88	6.22
Seller	6	31	7.03 6.11	6.78 6.0	6.91	6.58	6.25	5.42	6.10	6.89	7.03	6.22	6.12	6.19	6.35	5.42
Hall	7	32	5.95 4.84	5.28 4.5	4 5.55	5.58	4.78	3.91	4.87	5.95	5.64	5.28	5.06	4.73	5.08	3.91
Segal	8	33	7.73 7.19	7.07 6.2	8 7.39	6.98	6.64	6.06	6.83	7.48	7.73	6.64	5.75	7.00	6.85	5.75
Manor	9	37	7.26 6.90	6.96 6.8	7.24	6.76	6.60	6.44	6.41	7.07	7.26	6.63	6.49	7.03	6.81	6.41
Ye	10	35	7.29 6.00	6.54 5.3	6.81	6.49	5.79	5.06	6.88	6.89	7.00	6.42	7.29	6.19	6.36	5.06
McCallister	11	36	7.28 6.80	6.65 6.7	4 7.05	6.45	6.19	5.86	6.25	7.28	7.25	6.73	6.08	6.53	6.60	5.86
Hadad	12	34	7.69 7.02	7.04 6.1	7.26	7.00	6.76	6.26	6.74	7.49	7.69	6.44	5.62	6.90	6.80	5.62
Ward	13	38	7.12 6.88	6.93 6.4	1 6.93	6.75	6.37	5.89	6.20	6.84	7.12	6.37	5.73	6.33	6.52	5.73
Eidson	14	39	6.10 5.41	5.81 5.7	3 5.87	5.62	5.43	5.35	5.53	5.39	5.38	6.10	5.33	5.39	5.56	5.33
Benyamin-Seeyar	15	40	6.85 6.75	6.71 6.1	5 6.85	6.49	6.58	6.32	6.16	6.85	6.82	6.47	6.62	6.47	6.56	6.15
van Waes	16	41	7.44 6.90	7.05 6.7	8 7.44	7.03	6.82	6.13	6.46	7.30	7.30	6.84	6.11	6.79	6.84	6.11
Simmons	17	28	5.75 4.61	5.19 5.2	2 5.43	4.89	5.18	4.83	4.91	4.90	4.31	5.75	4.40	5.27	4.99	4.31
Hammons	18	43	7.42 6.11	6.49 5.3	3 6.28	6.38	6.11	4.94	5.97	7.03	7.42	6.68	7.30	6.04	6.31	4.94
Quilez	19	44	7.07 6.81	6.77 6.6	8 7.00	6.30	6.54	6.29	6.38	6.86	7.07	6.71	5.54	6.90	6.60	5.54
Ran	20	48	5.81 5.34	5.68 5.3	1 5.63	5.12	5.05	4.81	5.10	5.25	4.75	5.81	4.68	5.27	5.22	4.68

							Eval	uation	Catego	ry					
Presenter	Seq 1	Doc #	1	2	3	4	5	6	7	8	9	10	11	12	13
MEMBER SCORE				_		•	_								
Williams	1	45	1	1	1	1	1	1	1	1	1	1	1	1	1
Sydor	2	46	1	1	1	1	1	1	1	1	1	1	1	1	1
Wang	3	42	1	1	1	1	1	1	1	1	1	1	1	1	1
Heise	4	29	1	1	1	2	1	1	1	1	2	2	3	1	1
Chayat	5	30	2	1	2	3	1	1	1	1	2	2	1	1	1
Seller	6	31	1	1	1	3	1	1	1	1	1	2	1	1	1
Hall	7	32	1	1	1	1	1	1	1	1	1	1	1	1	1
Segal	8	33	1	1	1	1	1	1	1	1	1	1	1	1	1
Manor	9	37	2	1	1	4	1	1	1	1	1	1	1	1	1
Ye	10	35	1	1	1	1	1	1	1	1	1	1	1	1	1
McCallister	11	36	1	1	1	1	1	1	1	1	1	1	1	1	1
Hadad	12	34	1	1	1	1	1	1	1	1	1	1	1	1	1
Ward	13	38	1	1	1	1	1	1	1	1	1	1	1	1	1
Eidson	14	39	1	1	1	1	1	1	1	1	1	1	1	1	1
Benyamin-Seeyar	15	40	1	1	1	1	1	1	1	1	1	1	1	1	1
Van Waes	16	41	2	1	2	2	1	1	1	1	2	2	2	1	1
Simmons	17	28	1	1	1	1	1	1	1	1	1	1	1	1	1
Hammons	18	43	1	1	1	1	1	1	1	1	2	2	2	1	1
Quilez	19	44	2	1	2	1	1	1	1	1	2	2	2	1	1
Ran	20	48	1	1	1	1	1	1	1	1	1	1	1	1	1
MEMBER SCORE	S MAX	IMUMS	S												
Williams	1	45	8	10	10	10	10	10	9	10	10	10	10	10	8
Sydor	2	46	10	10	10	10	10	8	8	8	10	10	10	10	10
Wang	3	42	8	8	7	8	9	8	7	8	10	9	7	7	7
Heise	4	29	10	10	10	10	10	10	10	10	10	10	10	10	10
Chayat	5	30	10	10	10	10	10	10	10	10	10	10	10	10	10
Seller	6	31	10	10	10	10	10	10	10	10	10	10	10	10	10
Hall	7	32	8	9	8	9	10	9	7	8	10	9	8	10	7
Segal	8	33	10	10	10	10	10	10	10	10	10	10	10	10	10
Manor	9	37	10	10	10	10	10	10	10	10	10	10	10	10	10
Ye	10	35	10	10	10	10	10	10	10	10	10	10	10	10	10
McCallister	11	36	10	10	10	10	10	10	10	10	10	10	10	10	10
Hadad	12	34	10	10	10	10	10	10	10	10	10	10	10	10	10
Ward	13	38	10	10	10	10	10	10	10	10	10	10	10	10	10
Eidson	14	39	10	10	10	10	10	10	10	10	10	10	10	10	10
Benyamin-Seeyar	15	40	10	10	10	10	10	10	10	10	10	10	10	10	10
Van Waes	16	41	10	10	10	10	10	10	10	10	10	10	10	10	10
Simmons	17	28	10	10	10	10	10	10	10	10	9	9	10	9	10
Hammons	18	43	10	10	10	10	10	10	10	10	10	10	10	10	10
Quilez	19	44	10	10	10	10	10	10	10	10	10	10	10	10	10
Ran	20	48	10	10	10	10	10	10	10	10	10	10	10	10	10