

Project: IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs)

Submission Title: [Comment Resolutions of Sponsor Ballot]

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Abstract: [Comment Resolutions of Sponsor Ballot]

Purpose: [Comment Resolutions of Sponsor Ballot]

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Summary:

This document presents resolutions for comments 28, 38, 134, 133,109, 99, 19, 125, 129, 34, 127, 135

Comment #	Name	Index #	Vote	Aff.	Cat.	Pg	Subclause	Line	Comment	File	Must Be Satisfied	Proposed Change	Resolution
23	Livneh, Noam		Approve	Qualcomm	Technical		12.1		to symplify RX implementation, RX should be able to force TX to transmit PCES and /or pilot word		No	add procedure to enable RX to force TX to transmit PCES and /or pilot word	Add one bit suggested PCES and one bit suggested Pilot word fields to receive status field in 12.1.8.3. Value 0 for pilot word indicates that no pilot word should be sent and 1 suggests using pilot words. Value 0 for pces indicates that no pces should be sent and 1 suggests to use pces bits.
38	bar, vered		Disapprove	Qualcomm	Technical		12.1		to symplify RX implementation, RX should be able to force TX to transmit PCES and /or pilot word		Yes	add procedure to enable RX to force TX to transmit PCES and /or pilot word	Add one bit suggested PCES and one bit suggested Pilot word fields to receive status field in 12.1.8.3. Value 0 for pilot word indicates that no pilot word should be sent and 1 suggests using pilot words. Value 0 for pces indicates that no pces should be sent and 1 suggests to use pces bits.
134	Kasher, Assaf	8	Disapprove	Intel Corporation	Technical	95	12.2.6	25	A SIFS of 0.2usec is too short. It will put a much to large burden on implementation		Yes	Set miminum SIFS to 2usec	Accept in principle 0.2 SIFS time is only an option and mandatory mode is 2 us.

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133	Kasher, Assaf	7	Disapprove	Intel Corporation	Technical	91	12.2.3.4.	38	Pilot word of length 0 should not be allowed. It mandates that the receiver will have to implement a time domain equalizer even if it can implement a frequency domain equalizer.		Yes	Disallow pilot word of length 0 or make its support optional	Accept in principle, For any MCS other than CMS, support for pilot word length 0 is optional. For CMS it is mandatory since spreading of 64 is used and no equalization is necessary.
109	Baykas, Tuncer	7	Approve	(NICT)	Technical	74	12.2.2.3	29	1728 Mchips/s was chosen based on popular cellphone crystals. However recent advanced cellphones deploy 40 Mhz crystals. Therefore we are suggesting to change the 1728 Mchips/s		No	Change chip rate from 1728 mchips/s to 1760 mchips/s	Accept, remove all repetitions of 1728 Mchp/s from the standard except 12.2.2.3. Change the timing related tables accordingly.
99	Perahia, Eldad	4	Approve	Intel Corporation	Technical	74	12.2.2.3	29	802.11 TGad will be building upon the 802.11n specification and products. It is highly likely that the sampling rate chosen will be a factor of 40 MHz. In order to best enable coexistence between 802.15.3c and 802.11 TGad, choose sampling rate that is a factor of 40 MHz.		No	choose sampling rate that is a factor of 40 MHz.	Accept, Change chip rate from 1728 mchips/s to 1760 mchips/s. remove all repetitions of 1728Mchp/s from the standard except 12.2.2.3. Change the timing related tables accordingly.

Com ment #	Name	Inde x #	Vote	Aff.	Cat.	Pg	Subclause	Line	Comment	File	Must Be Satisfi ed	Proposed Change	Resolution
19	Bosco, Bruce		Approve	Motorola Inc	Gen				This is a well written, technically correct document. I am approving this revision. The inclusion of low complexity PHY modes such as PI/2 BPSK and OOK is a strong point as this should allow for low cost, consumer-targeted products in the very near future. I would strongly suggest that on the next revision, a very hard look be made at either combining the HSI OFDM and the AV OFDM PHY modes or eliminating one. Further, a look at which single carrier (SC) modes are actually being implemented in commercial products should be made with the idea of eliminating unused ones - or possibly adding new ones as the requirement and market evolves. Finally, again keeping the real market in focus, a look at possibly streamlining the MAC might be a good option for the next revision.		No		About the Suggestion to combine OFDM modes: Although AV and HSI OFDM PHYs share the same modulation technique, their frame design and approach to communication is very different and they provide solutions to different market segments. Therefore neither combining them nor eliminating of them is good for the standard.
125	Trainin, Solomon		Disappr ove	Intel Corporat ion	Tech	99	12.3.2.1	26	The table 121 provides MCSs of the HIS PHY that well overlaps the MCSs provided by the AV PHY in the table 136. No reason for such a duplicatioin is justified.		Yes	Merge and unify the HRP and the HIS PHY	Reject, Although AV and HSI OFDM PHYs share the same modulation technique, their frame design and approach to communication is very different and they provide solutions to different market segments. Therefore neither combining them nor eliminating of them is good for the standard.
129	Kasher, Assaf		Disappr ove	Intel Corporat ion	Tech	59		12 9	Two OFDM PHYs are redundant. There is no need for two OFDM PHYs		Yes	Combine and unify the OFDM PHYs. Otherwise, show in each feature, why the equivalent feature offered by the other PHY cannot be used here (e.g. Preamble, number of SC, number of pilots etc.)	Reject, Although AV and HSI OFDM PHYs share the same modulation technique, their frame design and approach to communication is very different and they provide solutions to different market segments. Therefore neither combining them nor eliminating of them is good for the standard.
34	Hansen, C	7	Disappr ove	Broadco m	Tech	99	12.3	1	It doesn't make sense to have 2 complete OFDM PHY modes that are so similar.		Yes	Unify the two OFDM PHYs in 12.3 and 12.4.	Reject, Although AV and HSI OFDM PHYs share the same modulation technique, their frame design and approach to communication is very different and they provide solutions to different market segments. Therefore neither combining them nor eliminating of them is good for the standard.

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127	Kasher, Assaf		Disapprove	Intel Corporation	Technical	59	12	9	Having 3 different PHYs. None of mandatory, will create market confusion and impair interoperability and success of the standard.		Yes	Remove two of the PHY modes or make one of them mandatory	Reject, Different PHYs are a result of demands of different market segments, which are stated in the usage models, therefore eliminating some of them impair success of the standard. For interoperability CMS is mandated to all PNC's.
135	Kasher, Assaf	9	Disapprove	Intel Corporation	Technical	97	12.2.8.2	27	DAMI provides minor improvement over other (numerous) modes. Having so many modes creates confusion and market fragmentation		Yes	Remove DAMI	Reject, DAMI mode is optional and as the commenter states provides improvement.