

Comment Resolutions for Approval in IEEE 802.16 Recirculation Ballot #2b (2001-02-07 to 2001-02-17)

Comment #	2a-01	Comment submitted by:	Roger	Marks	Member
Type	Editorial	Starting Page Number		Starting Line Number	
				Section	Global

Balloter's Suggested Change:

In resolution of Comment 3, change "TS/Central Station (CS)" to "BTS/Central Station (CS)" and "TS/CS" to "BTS/CS"

Balloter's Reason:

This makes these two changes in the resolution to be identical to those proposed in Comment 3. I believe that this was the intent of the resolution, since the two terms used in the resolution never appear in the text except with the "B" before them. The resolution as written would result in a double letter B.

Decision: Accepted **Recommendation by:** TG2, Session #11

Proposed Resolution:**Reason for Recommendation:**

Comment #	2a-02	Comment submitted by:	Roger	Marks	Member
Type	Editorial	Starting Page Number		Starting Line Number	
				Section	Global

Balloter's Suggested Change:

Change "CS" to "BS" globally, as proposed in Comment 3

Balloter's Reason:

The explanation for leaving the term "CS" is inconsistent. The definition 3.1.3 indicates that they are equivalent. Page 28 line 5 does not truly distinguish the two; for example, Table 4-1 uses "CS" in reference to PMP. In any case, there is no strong reason to make a distinction.

Decision: Accepted - Modified **Recommendation by:** TG2, Session #11

Proposed Resolution:

Make change except where CS refers to channel separation or channel spacing or where CS is a term quoted from an external source.

Reason for Recommendation:

Comment #	2a-03	Comment submitted by:	Muya	Wachira	Member
Type	Editorial	Starting Page Number		Starting Line Number	Section

Balloter's Suggested Change:

Ballot 1 comment #1 changed "Mbps" to "Mbit/s" and was accepted. Amend the resolution to be: Change the units to "Mb/s". If possible search for symbols for other units for consistency with official IEEE usage.

Balloter's Reason:

According to ANSI/IEEE Std 260.1-1993, American National Standard letter Symbol for Measurement (SI Units, Customary Inch-Pound Units, and Certain Other Units, Table 3, the symbol for bit per second is b/s.

Decision: Rejected **Recommendation by:** TG2, Session #11

Proposed Resolution:**Reason for Recommendation:**

International definition is Mbit/s.

Comment #	2a-04	Comment submitted by:	Muya	Wachira	Member
Type	Editorial	Starting Page Number		Starting Line Number	Section
					Various editorial

Balloter's Suggested Change:

1.page 17 In 13 Replace the word "Radio"with "Radiocommunications Sector"

2.p 58 In 16 replace "&" with "add"

3. p 59 In 26 Replace "Refer to the next section" with "Refer to the section 7.1.2"

4 p 60 In 5 Use proper caption style. In the table, use the same font sizes in all cells for consistency, and center the text.

5. p 61 In2 In the column headings, move "(m)" to the end of the text to make clear that radio is not 2 meters above clutter

Balloter's Reason:

Correct term

Decision: Accepted - Clarified **Recommendation by:** TG2, Session #11

Proposed Resolution:

2; "add" assumed to mean "and"

3; "Refer to section 7.1.2"

5; also make similar change to "height of radio 1 above clutter (m)"

Reason for Recommendation:

Comment # **2a-05** Comment submitted by: Jose Costa Member
 Type **Editorial** Starting Page Number **16** Starting Line Number **6** Section **3.2**

Balloter's Suggested Change:

Replace "rate" by "ratio"

Balloter's Reason:

I disagree with the resolution of Comment No. 29. The IEEE Standard Dictionary of Electrical and Electronics Terms (IEEE Std. 100-1996) defines Bit Error Ratio (BER) as follows: "The ratio of the number of bit errors to the total number of bits transmitted in a given time interval. BER may be measured directly by detecting errors in a known signal, or approximated from code violations or framing bit errors. Numerical values of error ratio should be expressed in the form $n \cdot 10^{-p}$, where p is an integer greater than zero. When n is omitted, the implied value is 1". ITU-T Recommendation E.800 defines Bit Error Ratio (BER) as follows: "The ratio of the number of bit errors to the total number of bits transmitted in a given time interval." Recommendation ITU-R V.662-2 defines Bit Error Ratio (BER) as follows: "For a binary digital signal, the ratio of the number of errored bits received to the total number of bits received over a given time interval". Recommendation ITU-R V.663-1 explicitly deprecates the use of the term "rate" for expressing the proportion of errors in telecommunication and indicates that the term "ratio" should be used instead. hence, IEEE, ITU-T and ITU-R all coincide in Bit Error Ratio (BER).

Decision: **Accepted** **Recommendation by:** **TG2, Session #11**

Proposed Resolution:**Reason for Recommendation:**

Comment # **2a-06** Comment submitted by: Adrian Florea Member
 Type **Editorial** Starting Page Number **20** Starting Line Number **34** Section **4.2, Comment # 41**

Balloter's Suggested Change:

Remove recommendation #3

Balloter's Reason:

The recommendation is unclear and redundant. According with the modified text, the recommendation here is that careful consideration be given to recommendations #9, #10, #11 and Section 6.

Decision: **Accepted - Modified** **Recommendation by:** **TG2, Session #11**

Proposed Resolution:

Delete recommendation 3. Renumber subsequent recommendations. Insert new paragraph starting page 19, after line 39 :

"Implementing the measures suggested in Recommendations 8-10 using the suggested equipment parameters in Section 6 will, besides improving the coexistence conditions, generally have a positive effect on intra-system performance.

Similarly, simulations performed in the preparation of this practice suggest that most of the measures undertaken by an operator to promote intra-system performance will also promote coexistence."

Delete form beginning of line 40 the words "In support of this view" Capitalize next word and leave rest of sentence unaltered.

Reason for Recommendation:

Comment # [2a-07](#) Comment submitted by: [Muya](#) | [Wachira](#) | [Member](#)
Type [Editorial](#) Starting Page Number [21](#) Starting Line Number [24](#) Section [4.2](#)

Balloter's Suggested Change:

Make use of units for psfd consistent throughout the document. Currently we have dBW/MHz-m2 , dBW/MHz/m2, dBw/MHz-m2, and dBW/MHz/m2. [sorry, exponents are not registering] I suggest we use (dBW/m2)/MHz, noting that ANSI-IEEE Std 260.1-1993 (section 4.3) and IEEE Std 280-1985(section 3.3) recommend the use of parentheses if more than one slash is used.

Balloter's Reason:

[Consistency](#)

Decision: [Accepted](#) **Recommendation by:** [TG2, Session #11](#)

Proposed Resolution:

Reason for Recommendation:

Comment # 2a-08 Comment submitted by: Michael Hamilton Member
Type Technical, Binding Starting Page Number 24 Starting Line Number 1 Section 6.3.2.2

Balloter's Suggested Change:

D/U = -5dB for adjacent channel

D/U= -20 dB for second adjacent channel

Balloter's Reason:

If the wording of the new text really is intended to indicate that the Undesired carrier level is 20 dB stronger than the Desired carrier, then the new proposal is a dramatic change from the old (although confusing) spec of 0 dB. It is not apparent how the proposed -20 dB D/U ratio is justified and it is a major design consideration.

It is not clear how these levels are justified as "spillover" and if the proposed tolerance has been analyzed, or is intended to apply for all modulation types covered under the 802.16.1 proposal (e.g. 64 QAM).

Decision: Accepted - modified **Recommendation by:** TG2, Session #11

Proposed Resolution:

On page 58 line 5 to 13, delete current text and replace with "Where coordination between operators can not be guaranteed it is recommended that an operational receiver be capable of withstanding the exposure of relatively high power adjacent channel carriers.

The recommended numerical values, below, are based on the emission mask in section 6.1.3, QPSK modulation and single carrier operation. Where coordination between the victim and interfering operators is possible, the occasions where this kind of interference is experienced may be reduced.

This recommendation has a direct impact on coexistence referenced to the estimation of guard band requirements discussed extensively elsewhere in this Practice. The coexistence criteria assume that adjacent channel carrier interference, as defined by NFD, establish the requirements, and that interfering signals have not degraded the NFD. Thus, the following tests can only be indirectly related to the emission level masks and the guard band criteria recommended elsewhere in this Practice.

A possible test can be defined in terms of a Desired Carrier (D) to Undesired Carrier (U) ratio D/U. The D carrier emissions should correspond to the signal characteristics normally expected to be present at the victim receiver input port.

6.3.2.1 Base Station and Subscriber Station D/U Tolerance

This test should be performed with both D and U signals having the same modulation characteristics and equal transmission bandwidths.

With both the desired D and undesired signals U coupled to the input of the victim D receiver, set the input level of the D signal such that it is 3 dB above the nominally specified BER performance threshold.

6.3.2.1.1 First Adjacent Channel D/U

Set the U carrier frequency so that it corresponds to a one channel bandwidth frequency offset and at a D/U = -5 dB. The measured BER performance of the D receiver should not exceed that specified for nominal threshold performance.

6.3.2.1.2 Second Adjacent Channel D/U

Set the U carrier frequency so that it corresponds to a two channel bandwidth frequency offset and at a D/U = -35 dB

The measured BER performance of the D receiver should not exceed that specified for nominal threshold performance.

Examples of suitable test methods can be found, such as those in ETSI conformance testing procedures (see Annex A.3) Where coordination between operators can not be guaranteed it is recommended that an operational receiver be capable of withstanding the exposure of relatively high power adjacent channel carriers."

Reason for Recommendation:

Comment understood to refer to page 58 line 5, and to Round 1 Ballot comment # 81

Comment #	2a-09	Comment submitted by:	Muya	Wachira	Member		
Type	Editorial	Starting Page Number	24	Starting Line Number	21	Section	4.3

Balloter's Suggested Change:

Change table number from "Table 4-1" to "Table 1", and change all other table numbers in the document to remove hyphenated numbers.

Check also Figure headings and notes for consistency with IEEE Style usage.

Balloter's Reason:

According to IEEE Standards style manual, hyphenated numbers shall not be used except in standards of considerable length. At any rate, we have to be consistent with the figures numbering style, which does not use hyphens.

Decision: Accepted **Recommendation by:** TG2, Session #11

Proposed Resolution:**Reason for Recommendation:**

Comment # 2a-10 Comment submitted by: Roger Marks Member
Type Editorial Starting Page Number 28 Starting Line Number 4 Section 5.2

Balloter's Suggested Change:

Ensure that lines 3-15 include no definitions but simply refer to the introductory clauses.

Balloter's Reason:

To avoid the possibility of inconsistencies in with the definitions.

Decision: Accepted - Modified **Recommendation by:** TG2, Session #11

Proposed Resolution:

On page 28, delete lines 3-15. Add definition for TE and RS to document section 3 as : for RS, "A repeater station includes radio communication equipment facing two or more separate directions within a system. Traffic received from one direction may be partly or wholly re-transmitted in another direction. Traffic may also terminate and originate at the repeater station.", for TE, "Terminal Equipment encompasses a wide variety of apparatus at customer premises, providing end user services, and connecting to subscriber station equipment (SS) via one or more interfaces. Dependent on the end-user applications (which could include telephony, video and data) these interfaces may be standardized or custom-specific."

Reason for Recommendation:

Comment # 2a-11 Comment submitted by: Muya Wachira Member
Type Editorial Starting Page Number 30 Starting Line Number 23 Section 5.3.1.2

Balloter's Suggested Change:

Replace "section 5.2.1 with the correct reference.

Balloter's Reason:

Section 5.2.1 does not exist.

Decision: Accepted - Modified **Recommendation by:** TG2, Session #11

Proposed Resolution:

Delete page 30 sentence starting line 22.

Reason for Recommendation:

Comment # 2a-12 Comment submitted by: Barry Lewis Member
Type Editorial Starting Page Number 42 Starting Line Number 7 Section 6.1.3.1

Balloter's Suggested Change:

Delete "CEPT".

Balloter's Reason:

CEPT is a separate body to ETSI. Deletion improves accuracy of text.

Decision: Accepted **Recommendation by:** TG2, Session #11

Proposed Resolution:**Reason for Recommendation:**

Comment # 2a-13 Comment submitted by: Barry Lewis Member
Type Editorial Starting Page Number 42 Starting Line Number 7 Section 6.1.3.1

Balloter's Suggested Change:

Delete the word "Draft" on lines 7 and 14.

Balloter's Reason:

EN 301 390 has completed the ETSI processes and is therefore no longer a draft. Accuracy improved.

Decision: Accepted (line 7) **Recommendation by:** TG2, Session #11

Proposed Resolution:

Line 14 was deleted as a result of an earlier comment

Reason for Recommendation:

Comment # 2a-14 Comment submitted by: Robert Whiting Observer
Type Technical, Non-binding Starting Page Number 49 Starting Line Number 1 Section 6.2.2.1.2

Balloter's Suggested Change:

Modify figure 14 and Table 6-5 to end the BTS Elevation Copol Minimum curve at -90 degrees instead of -180 degrees.

Balloter's Reason:

The purpose of the minimum curve is to ensure adequate coverage in the illuminated sector. The region from -90 degrees to -180 degrees is in another sector, which should not be illuminated.

Decision: Accepted **Recommendation by:** TG2, Session #11

Proposed Resolution:**Reason for Recommendation:**

Comment # 2a-15 Comment submitted by: Walt Roehr Member
Type Technical, Binding Starting Page Number 67 Starting Line Number 2 Section Table 8-1

Balloter's Suggested Change:

Change Heading last column from "Spacing for acceptable performance" to "Seperation at which Coordination is Necessary"

Balloter's Reason:

60 km spacing is NOT "acceptable performance". This is the real essence of my NO vote in original round (comment 34) but unfortunately I tied it to first place 60 km was mentioned, in vain hope that change would ripple through document. It appears that did not happen. With this change I will (reluctantly, because I fear "tone" is wrong elsewhere) change my NO to an Accept.

Decision: Accepted - Modified **Recommendation by:** TG2, Session #11 and subsequent correspondence

Proposed Resolution:

Change heading of column to "Spacing at which interference is below target level (generally 6 dB below receiver noise floor)" Change heading in column 3 of table 4-1 to correspond with this change.

Reason for Recommendation:

Comment # 2a-16 Comment submitted by: Wait Roehr Member
Type Editorial Starting Page Number 67 Starting Line Number 2 Section Table 8-1

Balloter's Suggested Change:

Change "CS" to "Hub" throughout table (5th col).

Change "Co-channel" to "Adjacent Area, same frequency" throughout table (3rd col, rows 7,8,9)

Balloter's Reason:

Internal consistency within table. Terms "hub" and adjacent area, same freq " clearer."

Decision: 1. Superseded **Recommendation by:** TG2, Session #11

Proposed Resolution:

In Table 8-1 change "Co-channel" to "Adjacent Area, same Channel". Also in Row 6, insert, "Same area" before "adjacent channel"

Reason for Recommendation:

1. Refer to 2a-2

Comment # 2a-17 Comment submitted by: Muya Wachira Member
Type Editorial Starting Page Number 67 Starting Line Number 2 Section Table 8.1

Balloter's Suggested Change:

1)In rows 2, 7, and 8 insert "(note 1)"after CS-CS

2)Change the font in column 1 to be same as other columns

3)In rows 10-13 correct use the same format of "Monte Carlo"as used in rows 2-4

Balloter's Reason:

Item 1 will add clarity. Other items will add consistency

Decision: 1. Accepted - **Recommendation by:** TG2, Session #11

Proposed Resolution:

Instead of "note 1" insert "different systems"

Reason for Recommendation:

Comment # 2a-18 Comment submitted by: Muya Wachira Member
Type Editorial Starting Page Number 76 Starting Line Number 3 Section 9.10.2

Balloter's Suggested Change:

1)Place the figure caption below the figure. Make same change globally if applicable.

2)Line 23 Change number for equation from 5 to 7. In the Annexes start with new series of equation numbering e.g. page 82 line 7, equation 7 becomes equation B-1

If possible also use equation editor for equations.

Balloter's Reason:

1)Normal editing practice.

2)Equation 5 is misplaced. There is an eq 6 on page 60.

Decision: Accepted - Clarified **Recommendation by:** TG2, Session #11

Proposed Resolution:

Equation (5) should be Eq. (6), and on page 60, Eq (6) should be Eq (5)

Reason for Recommendation:

Comment # 2a-19 Comment submitted by: Muya Wachira Member
Type Editorial Starting Page Number 81 Starting Line Number 1 Section A.2

Balloter's Suggested Change:

Replace "section 3.1.3" with the correct refence.

Balloter's Reason:

Section 3.1.3 is a definition not discussion

Decision: Accepted **Recommendation by:** TG2, Session #11

Proposed Resolution:

correct reference is 6.1.2

Reason for Recommendation:

Comment # 2a-20 Comment submitted by: Barry Lewis Member
 Type Editorial Starting Page Number 81 Starting Line Number 17 Section Annex A

Balloter's Suggested Change:

Insert new sub-section:
 "A.3 European Conformance Test Standards

ETSI has published a standard, in a number of parts, that deals in detail with the conformance testing procedures for Fixed Wireless Access equipment. EN301-126-2-1 to -5, titled "Fixed Radio Systems; Conformance Testing;", has the following parts:
 Part 1: "Point to Multipoint equipment; Definitions and General Requirements"
 Part 2 covers FDMA equipment.
 Part 3 covers TDMA equipment.
 Part 4 covers Frequency Hopping CDMA equipment.
 Part 5 covers Direct Sequence CDMA equipment.
 Additionally drafting activity on a part 6 is complete catering for Multi-Carrier TDMA equipment.
 Copies of the published standards are available for download from the ETSI Web Site."

Balloter's Reason:

Useful supplementary information in the Annex relating to Conformance Testing

Decision: Accepted - Modified **Recommendation by:** TG2, Session #11

Proposed Resolution:

Insert new subsection on page 81 following line 17 as: A.3 European conformance test standards

ETSI has published a standard, in a number of parts, that deals in detail with the conformance testing procedures for Fixed Wireless Access equipment. EN 301 126-2-1 to -5, titled "Fixed Radio Systems; Conformance testing;", has the following sub-parts:

Part 2-1: Point-to-Multipoint equipment;Definitions and general requirements
 Part 2-2: Point-to-Multipoint equipment;Test procedures for FDMA systems
 Part 2-3: Point-to-Multipoint equipment;Test procedures for TDMA systems
 Part 2-4: Point-to-Multipoint equipment;Test procedures for FH-CDMA systems
 Part 2-5: Point-to-Multipoint equipment;Test procedures for DS-CDMA systems

Additionally drafting activity on a Part 2-6, catering for Multi-Carrier TDMA equipment, is complete.

Copies of the published standards are available for download from the ETSI Web Site."
 On page 78 line 4 delete the word "following" and add after "text" the words "in Annex A1 and Annex A2"

Reason for Recommendation:

Comment # 2a-21 Comment submitted by: Muya Wachira Member
Type Editorial Starting Page Number 94 Starting Line Number 7 Section C.8

Balloter's Suggested Change:

Replace "(derived in an earlier section of this document)" with "(derived in Annex B of this document)"

Balloter's Reason:

Precision of reference

Decision: Accepted

Recommendation by: TG2, Session #11

Proposed Resolution:**Reason for Recommendation:**

Comment # 2a-22 Comment submitted by: Muya Wachira Member
Type Technical, Non-binding Starting Page Number 95 Starting Line Number 27 Section C.9

Balloter's Suggested Change:

Add some clarifying text to explain the assumed antenna cross-section area in arriving at the value -144 dBW/MHz and explain that this is a power spectral density is to avoid misunderstanding.

Insert in section 3.1 a definition of power spectral density as:

power spectral density (psd): The average power per specified bandwidth. It is expressed in units [power/bandwidth] such as Watts/Hz, Watts/MHz, dBW/MHz, etc.

Balloter's Reason:

Since the numerical value of psfd and psd used on different pages is the same, it can lead to misunderstanding if not clarified. On page 84 ln12-13 we start with a trigger pfd (psfd) level of -114 dBW/MHz/m², which was derived in Annex B. When we come to p94 ln7, we use the same value of -114 dBW/MHz/m².

Decision: Accepted - Modified **Recommendation by:** TG2, Session #11

Proposed Resolution:

Change "-114dBm/MHz" to "-144dBW/MHz". Make same change on page 96 line 37, pg 97 ln 23, pg 98 ln 23

Do not add definition of psd.

Reason for Recommendation:

Comment # 2a-23 Comment submitted by: Barry Lewis Member
 Type Editorial Starting Page Number 106 Starting Line Number 15 Section D.16

Balloter's Suggested Change:

Replace the text in section D.16 (sic) with the following:
 "D.16 Radio Advisory Board of Canada (RABC)

The Radio Advisory Board of Canada (RABC) has also conducted technical studies dealing with operator-to-operator co-ordination issues. A paper was issued as an input to the Industry Canada regulation.

This paper entitled "RABC Pub. 99.2: RABC Study Leading to a Coordination Process for Systems in the 24, 28 and 38 GHz Bands recommends a coordination process using the distance as first trigger and two spectral pfd levels that trigger different actions by the operators.

If the boundary of two service areas is within 60 km of each other, then the co-ordination process is invoked. Two spectral pfd levels are proposed for co-ordination. The first one, level 'A', represents a minimal interference scenario where either licensed operator does not require co-ordination. A second level, 'B', typically 20 dB higher than 'A', represents a trigger for two possible categories: if the interference is above A but below B, then co-ordination is required with existing systems only. If the interference is greater than level B, then co-ordination is required for both existing and planned systems. The table below summarises spectral pfd levels A and B for the three frequency bands.

Frequency Band (GHz)	spectral pfd Level A (dBW/m ² in any 1 MHz)	spectral pfd Level B (dBW/m ² in any 1 MHz)
24	-114	-94
28	-114	-94
38	-125	-105

The much lower spectral pfd levels at 38 GHz are to ensure protection to point-to-point systems (allowed in this band in Canada). The coordination procedure is graphically summarized in the figure at the end of Annex F.

The paper can be found at <http://www.rabc.ottawa.on.ca/english/pubs.cfm> and shows how the values were derived."

Balloter's Reason:

Resolution of comment 132 did not agree to delete clause D.16 (sic) but to complete the section with appropriate text.

Decision: Accepted - Modified **Recommendation by:** TG2, Session #11

Proposed Resolution:

Modify proposed text as follows:

1. replace all occurrences of "spectral pfd" with "psfd"
2. In second paragraph delete "the" after "process using"
3. Check and correct paragraph numbering, as necessary.
4. Add table reference

Reason for Recommendation:

Comment # [EN-01](#) Comment submitted by: [Editor's Note](#)

Type	Starting Page Number	Starting Line Number	Section
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Balloter's Suggested Change:

Balloter's Reason:

Decision: [Accepted](#) Recommendation by: [TG2, Session #11](#)

Proposed Resolution:

[Fully define terms used in annexes, where undefined in main acronym section](#)

Reason for Recommendation:

Comment # [EN-02](#) Comment submitted by: [Editor's Note](#)

Type	Starting Page Number	Starting Line Number	Section
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Balloter's Suggested Change:

Balloter's Reason:

Decision: [Accepted](#) Recommendation by: [TG2, Session #11](#)

Proposed Resolution:

[Remove "-" from ETSI document references and replace with a space after the first 3 digits e.g. EN301 390. Ensure space after EN.](#)

Reason for Recommendation:

Comment # [EN-03](#) Comment submitted by: [Editor's Note](#)

Type	Starting Page Number	Starting Line Number	Section
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Balloter's Suggested Change:

Balloter's Reason:

Decision: [Accepted](#) Recommendation by: [TG2, Session #11](#)

Proposed Resolution:

[Add ref \[10\] to occurrences of EN301 390 e.g. in lines 7,14 of page 42](#)

Reason for Recommendation:

Comment # [EN-03](#)Comment submitted by: [Editor's Note](#)

Type	Starting Page Number	Starting Line Number	Section
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Balloter's Suggested Change:

Balloter's Reason:

Decision: [Accepted](#)Recommendation by: [TG2, Session #11](#)

Proposed Resolution:

["Immunity" on line 16, page 42. Search for correct title capitalization for ETSI documents \(see note 7\)](#)

Reason for Recommendation:

Comment # [EN-04](#)Comment submitted by: [Editor's Note](#)

Type	Starting Page Number	Starting Line Number	Section
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Balloter's Suggested Change:

Balloter's Reason:

Decision: [Accepted](#)Recommendation by: [TG2, Session #11](#)

Proposed Resolution:

[In table 8-1, harmonise to "FDD/TDD" in column 2. Harmonise entries in column 3 to "Same area, adjacent channel" instead of "Co-channel"](#)

Reason for Recommendation:

Comment # [EN-05](#)Comment submitted by: [Editor's Note](#)

Type	Starting Page Number	Starting Line Number	Section
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Balloter's Suggested Change:

Balloter's Reason:

Decision: [Accepted](#)Recommendation by: [editor](#)

Proposed Resolution:

[Correct reference to rain attenuation page 95, line 24 should be ITU-R P.838](#)

Reason for Recommendation:

Comment # EN-06

Comment submitted by: [Editor's Note](#)

Type	Starting Page Number	Starting Line Number	Section
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Balloter's Suggested Change:

Balloter's Reason:

Decision: **Accepted**Recommendation by: **TG2, Session #11**

Proposed Resolution:

Update annex G to correspond with correct version number and date for EN 301 390 on page 42

Reason for Recommendation:

Comment # EN-07

Comment submitted by: [Editor's Note](#)

Type	Starting Page Number	Starting Line Number	Section
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Balloter's Suggested Change:

Balloter's Reason:

Decision: **Accepted**Recommendation by: **TG2, Session #11**

Proposed Resolution:

On page 116 line 20 EN 301 390 title should be all lower case except first word and "Digital Fixed Radio Systems"

Reason for Recommendation:

Comment # EN-08

Comment submitted by: [Editor's Note](#)

Type	Starting Page Number	Starting Line Number	Section
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Balloter's Suggested Change:

Balloter's Reason:

Decision: **Accepted**Recommendation by: **TG2, Session #11**

Proposed Resolution:

On page 11 line 36, delete square brackets and text within

Reason for Recommendation:

Comment # EN-09

Comment submitted by: [Editor's Note](#)

Type	Starting Page Number	Starting Line Number	Section
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Balloter's Suggested Change:

Balloter's Reason:

Decision: **Accepted** Recommendation by: **editor**

Proposed Resolution:

[Editor to check whether single sub paragraph numbering is allowed and modify heading numbers as necessary. Delete the heading of sub clause 6.1.3.1](#)

Reason for Recommendation:

Comment # EN-10

Comment submitted by: [Editor's Note](#)

Type	Starting Page Number	Starting Line Number	Section
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Balloter's Suggested Change:

Balloter's Reason:

Decision: **Accepted** Recommendation by: **TG2, Session #11**

Proposed Resolution:

[In table 4-1 page 24, changes all occurrences of "frequency" to "channel" in order to be consistent with table 8-1](#)

Reason for Recommendation:

Comment # EN-11

Comment submitted by: [Editor's Note](#)

Type	Starting Page Number	Starting Line Number	Section
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Balloter's Suggested Change:

Balloter's Reason:

Decision: **Accepted** Recommendation by: **TG2, Session #11**

Proposed Resolution:

[Page 89, remove square brackets from "\[0.6\]" on line 22](#)

Reason for Recommendation:

Comment # EN-12

Comment submitted by: [Editor's Note](#)

Type	Starting Page Number	Starting Line Number	Section
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Balloter's Suggested Change:

Balloter's Reason:

Decision: **Accepted**Recommendation by: **TG2, Session #11**

Proposed Resolution:

[In Annex E, change all non heading bold text to normal](#)Reason for Recommendation:

Comment # EN-13

Comment submitted by: [Editor's Note](#)

Type	Starting Page Number	Starting Line Number	Section
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Balloter's Suggested Change:

Balloter's Reason:

Decision: **Accepted**Recommendation by: **TG2, Session #11**

Proposed Resolution:

[Page 117, line 2, date to be checked by editor and corrected, if necessary](#)Reason for Recommendation:

Comment # EN-14

Comment submitted by: [Editor's Note](#)

Type	Starting Page Number	Starting Line Number	Section
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Balloter's Suggested Change:

Balloter's Reason:

Decision: **Accepted**Recommendation by: **TG2, Session #11**

Proposed Resolution:

[Page 11, add bibliographical footnote to explain location of document references](#)Reason for Recommendation:

Comment # EN-15

Comment submitted by: Editor's Note

Type	Starting Page Number	Starting Line Number	Section
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Balloter's Suggested Change:

Balloter's Reason:

Decision: Accepted Recommendation by: editor

Proposed Resolution:

Editor to check Practice for correct document references and correct as necessary (e.g.errors in Annex D)

Reason for Recommendation:

Comment # EN-16

Comment submitted by: Editor's Note

Type	Starting Page Number	Starting Line Number	Section
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Balloter's Suggested Change:

Balloter's Reason:

Decision: Accepted Recommendation by: editor

Proposed Resolution:

Document reference numbers to be added to text as necessary (5,10,23,25 etc.) and references renumbered

Reason for Recommendation:

Comment # EN-17

Comment submitted by: Editor's Note

Type	Starting Page Number	Starting Line Number	Section
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Balloter's Suggested Change:

Balloter's Reason:

Decision: Accepted Recommendation by: TG2, Session #11

Proposed Resolution:

Page 45, line 33, specific figure numbers to be added

Reason for Recommendation:

Comment # EN-18

Comment submitted by: [Editor's Note](#)

Type	Starting Page Number	Starting Line Number	Section
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Balloter's Suggested Change:

Balloter's Reason:

Decision: **Accepted**Recommendation by: **editor**

Proposed Resolution:

Change all occurrences of "in the following figure" to "in figure (number)". Page 19 line 14 says "The following Recommendations...", but the recommendations don't appear until next section. Change this to read "The Recommendations in section 4.2..."

Reason for Recommendation:

Comment # EN-19

Comment submitted by: [Editor's Note](#)

Type	Starting Page Number	Starting Line Number	Section
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Balloter's Suggested Change:

Balloter's Reason:

Decision: **Accepted**Recommendation by: **TG2, Session #11**

Proposed Resolution:

Change all occurrences of "Note n" to conform to IEEE standard practice. Similarly for figures and headings

Reason for Recommendation:

Comment # EN-20

Comment submitted by: [Editor's Note](#)

Type	Starting Page Number	Starting Line Number	Section
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Balloter's Suggested Change:

Balloter's Reason:

Decision: **Accepted**Recommendation by: **TG2, Session #11**

Proposed Resolution:

Page 26 line 25. Due to changes resulting from 2a-1, the text is now incorrect. Change sentence starting "Hub..." to "BS provide connections to core networks on one side....."

Reason for Recommendation:

Comment # EN-22

Comment submitted by: Editor's Note

Type	Starting Page Number	Starting Line Number	Section
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Balloter's Suggested Change:

Balloter's Reason:

Decision: Accepted

Recommendation by: TG2, Session #11

Proposed Resolution:

As a result of the comment 62, some text has been incorrectly deleted. Reinsert the words "plus the specified signal-to-noise ratio of the receiver" that occurred on line 17.

Reason for Recommendation:

Comment # EN-23

Comment submitted by: Editor's Note

Type	Starting Page Number	Starting Line Number	Section
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Balloter's Suggested Change:

Balloter's Reason:

Decision: Accepted

Recommendation by: editor

Proposed Resolution:

As a consequence of comment #6 do a check throughout the document to see if we need to add "fixed" in front of all occurrences of "BWA" or "broadband wireless access". Exceptions are quoted text and page 25 line 20.

Reason for Recommendation:

Comment # EN-24

Comment submitted by: Editor's Note

Type	Starting Page Number	Starting Line Number	Section
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Balloter's Suggested Change:

Balloter's Reason:

Decision: Accepted

Recommendation by: editor

Proposed Resolution:

Gender neutral usage. Instead of "he" use "he or she" and instead of "his" use "his or her" (IEEE Style Manual clause 13.3)

Reason for Recommendation:

**IEEE 802.16 Letter Ballot #2: To approve Document IEEE 802.16.2/D2-2001 and forward it for Sponsor Ballot
Voting Report: 2001/02/07 including Recirculation Ballot 2a and followup discussions**

Approve

73

Approval Ratio

100.0%

Abstain

10

Return Ratio

61.9%

Motion Approved

Yes

Disapprove

0

Condition Met

Yes

Ballots

83

Condition Met

Yes

Votes

73

Member Total

134

Last Name

First Name

Current Vote

An	Song	Abstain for lack of time
Arefi	Reza	Approve with no comments
Arrakoski	Jori	Approve with no comments
Arunachalam	Arun V.	Approve with no comments
Avivi	Eli	Approve with no comments
Baragar	Ian	Approve with no comments
Baugh	C. R.	Approve with no comments
Belfiore	Carlos	Approve with no comments
Benyamin-Seeyar	Anader	Approve with no comments
Bilotta	Tom	Abstain for lack of time
Buskila	Baruch	Approve with no comments
Chang	Dean	Approve with no comments
Chayat	Naftali	Approve with no comments
Chayer	Rémi	Approve with no comments
Condie	Mary	Abstain for lack of technical expertise

Last Name	First Name	Vote
Costa	Jose	Approve with non-binding comments
Currivan	Bruce	Approve with no comments
Dotan	Amos	Approve with no comments
Eidson	Brian	Approve with no comments
Eklund	Carl	Approve with no comments
Falconer	David	Approve with no comments
Fishel	George	Approve with non-binding comments
Florea	Adrian	Approve with non-binding comments
Foster	Robert	Approve with no comments
Freedman	Avraham	Approve with no comments
Garrison	G. Jack	Approve with no comments
Germon	Richard	Approve with no comments
Guillemette	Phil	Abstain for lack of time
Hadad	Zion	Approve with no comments
Halachmi	Baruch	Abstain for lack of technical expertise
Hamilton	Michael	Approve with no comments
Hosur	Srinath	Approve with no comments
Hum	Coleman	Approve with no comments
Hunter	Wayne	Approve with no comments
Jacobsen	Eric	Approve with no comments
Jamali	Hamadi	Approve with no comments
Jorgensen	Jacob	Approve with no comments
Kang	Inchul	Approve with no comments

Last Name	First Name	Vote
Kasslin	Mika	Abstain for lack of time
Kiernan	Brian	Approve with no comments
Kitroser	Itzik	Abstain for lack of technical expertise
Klein	Allan	Approve with no comments
Klein	Jay	Approve with no comments
Kolze	Tom	Abstain for other reasons
Kostas	Demosthenes	Approve with no comments
Langley	John	Approve with no comments
Leiba	Yigal	Approve with no comments
Lewis	Barry	Approve with non-binding comments
Liebetreu	John	Approve with no comments
Lindh	Lars	Approve with non-binding comments
Lucas	Fred	Approve with no comments
Marin	Scott	Approve with no comments
Marks	Roger	Approve with non-binding comments
McGregor	Andy	Approve with no comments
Meyer	Ronald	Approve with no comments
Middleton	Andrew	Approve with no comments
Monk	Anton	Approve with no comments
Myers	William	Approve with no comments
Padan	Uzi	Approve with no comments
Park	Yunsang	Approve with no comments
Petry	Brian	Approve with no comments

Last Name	First Name	Vote
Petry	Brian	Approve with no comments
Ran	Moshe	Approve with non-binding comments
Reible	Stanley	Approve with no comments
Resheff	Guy	Approve with no comments
Ribner	David	Approve with no comments
Robinson	Eugene	Approve with no comments
Roehr	Walt	Approve with no comments
Satapathy	Durga	Approve with non-binding comments
Sater	Glen	Approve with no comments
Scaringi	Vito	Approve with no comments
Schafer	David	Approve with no comments
Shahar	Menashe	Approve with no comments
Shirali	Chet	Approve with no comments
Stamatelos	George	Approve with no comments
Stanwood	Ken	Abstain for lack of time
Thompson	Paul	Approve with no comments
Trinkwon	David	Abstain for lack of technical expertise
van Waes	Nico	Approve with no comments
Wachira	Muya	Approve with non-binding comments
Whitehead	Philip	Approve with non-binding comments
Zeng	Chaoming	Approve with no comments
Zuniga	Juan-Carlos	Approve with no comments