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# INTERNATIONAL STANDARD

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**Mobile and portable DVB-T/H radio access –  
Part 1: Interface specification**

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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## CONTENTS

FOREWORD.....	6
1 Scope.....	8
2 Normative references .....	8
3 Abbreviations .....	9
4 Terminal categories .....	11
5 Definition of receiving conditions .....	12
5.1 Portable reception .....	12
5.2 Mobile reception.....	12
6 Frequencies and channel bandwidths .....	13
6.1 Channel frequencies .....	13
6.2 Supported frequency ranges.....	13
6.3 Supported bandwidths .....	14
7 DVB-T/H modes .....	14
7.1 Supported DVB-T/H modes .....	14
7.2 Change of modulation parameters .....	14
7.3 Tuning procedure .....	14
8 Transmitter performance .....	15
8.1 Transmitter noise-like impairments.....	15
8.1.1 Noise-like processes .....	15
8.2 Further transmitter impairments.....	16
8.2.1 Group delay errors .....	16
8.2.2 Phase noise in OFDM systems.....	17
8.2.3 OFDM clock frequency .....	17
8.3 Spectrum masks.....	17
8.3.1 DVB-T signals (general).....	17
8.3.2 DVB-T signals (critical cases).....	18
8.3.3 DVB-T signals (DVB-T in adjacent channel).....	18
9 Receiver antenna characteristics.....	18
9.1 Antennas for terminal category a.....	18
9.2 Antennas for terminal category b1.....	18
9.3 Antennas for terminal category b2 and c .....	19
9.4 External antennas .....	20
9.4.1 General .....	20
9.4.2 External antennas for terminal category b2 and c .....	20
9.4.3 External antenna connector .....	20
10 Receiver performance .....	21
10.1 Reference model.....	21
10.2 Noise model .....	22
10.3 Degradation criteria.....	24
10.4 Diversity receivers.....	25
10.5 DVB-H receivers.....	26
10.6 Channel models .....	27
10.6.1 DVB-T Rayleigh channel ( $P_1$ ).....	27
10.6.2 Portable indoor (PI) and outdoor (PO) channels .....	27
10.6.3 Mobile reception .....	29

10.7	<i>C/N</i> performance .....	34
10.7.1	<i>C/N</i> performance in Gaussian channel .....	34
10.7.2	<i>C/N</i> performance in DVB-T Rayleigh channel ( $P_1$ ) .....	34
10.7.3	<i>C/N</i> Performance in portable indoor (PI) and portable outdoor (PO) channels .....	35
10.7.4	DVB-T <i>C/N</i> performance in mobile channels for terminal class a .....	36
10.7.5	DVB-H <i>C/N</i> performance in mobile channels .....	37
10.8	Receiver minimum and maximum signal input levels .....	38
10.8.1	Noise floor .....	38
10.8.2	Minimum input levels (sensitivity) .....	39
10.8.3	Total maximum power for wanted and unwanted signals .....	39
10.8.4	Maximum input levels for wanted and unwanted signals .....	39
10.9	Immunity to analogue and/or digital signals in other channels .....	40
10.9.1	General .....	40
10.9.2	Interfering signal definitions .....	41
10.9.3	Selectivity patterns .....	42
10.9.4	Linearity patterns .....	42
10.9.5	Immunity to pattern S1 .....	43
10.9.6	Immunity to pattern S2 .....	44
10.9.7	Immunity to pattern L1 .....	45
10.9.8	Immunity to pattern L2 .....	46
10.9.9	Immunity to pattern L3 .....	47
10.9.10	Immunity to pattern L4 .....	48
10.10	Immunity to co-channel interference from analogue TV signals .....	49
10.11	Guard interval utilization .....	49
10.11.1	Performance with echo within guard interval .....	49
10.11.2	Performance with echo outside guard interval .....	50
10.12	Tolerance to impulse interference .....	52
10.12.1	General .....	52
10.12.2	Test patterns .....	52
10.13	EMC characteristics .....	54
10.13.1	Terminal category c .....	54
10.13.2	Terminal category a and b .....	54
11	Interoperability with other radio systems .....	54
11.1	Cellular radios .....	54
11.1.1	General .....	54
11.1.2	Cellular radio uplink wanted signal interference to DVB-T/H receiver .....	56
11.1.3	Cellular radio uplink unwanted signal interference to DVB-T/H receiver .....	57
11.2	DVB-RCT .....	58
Annex A (informative)	Active external antennas and system noise floor .....	59
Annex B (informative)	An example of <i>C/N</i> -performance with a practical transmitter .....	63
Annex C (informative)	Multipath reception in a DVB-T system .....	64
Bibliography	.....	68
Figure 1 – Reference model	.....	22
Figure 2 – Noise model	.....	23
Figure 3 – Antenna diversity receiver	.....	26

Figure 4 – Receiver behaviour in a mobile channel .....	30
Figure 5 – DVB-H reference receiver C/N behaviour in mobile channel .....	31
Figure 6 – Mobile SFN synchronisation test channel for weak long echo .....	32
Figure 7 – Mobile SFN synchronisation test channel for strong long echo .....	33
Figure 8 – Mobile SFN synchronisation test channel for strong short echo .....	33
Figure 9 – PAL interfering signals .....	41
Figure 10 – SECAM L interfering signal .....	42
Figure 11 – Pattern S1 in case of $N+1$ or $N-1$ .....	43
Figure 12 – Pattern S2 in case of $N + 1$ or $N - 1$ .....	44
Figure 13 – Pattern L1 .....	45
Figure 14 – Pattern L2 .....	46
Figure 15 – Pattern L3 .....	47
Figure 16 – Pattern L4 .....	49
Figure 17 – Echo outside guard interval mask.....	50
Figure 18 – Mask for echo outside $GI$ for $GI = 1/4$ .....	52
Figure 19 – Definition of the impulse interference test pattern.....	53
Figure 20 – Terminal architectures.....	55
Figure 21 – Frequency bands .....	56
Figure 22 – GSM Tx block diagram .....	57
Figure 23 – Tx PA-noise mask in DVB-T/H receiver input .....	58
Figure A.1 – System noise floor versus receiver noise figure for different levels of man-made-noise $F_a$ relative to $T_0$ .....	62
Figure C.1 – Theoretical limits of out of guard delay .....	64
Figure C.2 – DVB-T model – Splitting of the signal power into contributing and interfering components .....	65
Figure C.3 – Theoretical echo power profile for 8k, 64QAM, 2/3.....	67
Table 1 – Supported frequency ranges .....	14
Table 2 – Conversion of $MER$ to $END$ .....	16
Table 3 – Typical antenna gain for terminal category b2 and c .....	19
Table 4 – Specification for optional antenna supply .....	21
Table 5 – Modulation versus implementation margin .....	23
Table 6 – Delta values between picture failure point and reference $BER$ .....	25
Table 7 – Approximation of the DVB-T specified Rayleigh channel.....	27
Table 8 – Doppler spectrum definitions for PI and PO channels .....	28
Table 9 – Definition of PI channel .....	28
Table 10 – Definition of PO channel.....	28
Table 11 – Typical urban profile (TU6) constitution .....	29
Table 12 – Mobile SFN synchronisation test channel for weak long echo .....	31
Table 13 – Mobile SFN synchronisation test channel for strong long echo .....	32
Table 14 – Mobile SFN synchronisation test channel for strong short echo .....	33
Table 15 – DVB-T $C/N$ (dB) for reference $BER$ in Gaussian channel .....	34
Table 16 – DVB-H $C/N$ (dB) for 5% $MFER$ in Gaussian channel.....	34
Table 17 – $C/N$ (dB) for reference $BER$ in DVB-T Rayleigh channel ( $P_1$ ) .....	35

Table 18 – $C/N$ (dB) for 5 % $MFER$ in portable channel.....	35
Table 19 – $C/N$ (dB) for 5 % $ESR$ in PI and PO channel .....	35
Table 20 – $C/N$ (dB) for 5 % $MFER$ in PI and PO channel .....	36
Table 21 – $C/N$ (dB) for 5 % $ESR$ in mobile channels for single antenna receiver .....	37
Table 22 – $C/N$ (dB) for $ESR$ 5 % in mobile channels for diversity receiver.....	37
Table 23 – DVB-H $C/N$ (dB) in mobile channel for 5 % $MFER$ .....	38
Table 24 – Maximum input levels for terminal category a and b1.....	40
Table 25 – Maximum input levels for terminal category b2 and c.....	40
Table 26 – Immunity to pattern S1 for DVB-T.....	43
Table 27 – Immunity to pattern S1 for DVB-H.....	43
Table 28 – Immunity to pattern S2 for DVB-T.....	44
Table 29 – Immunity to pattern S2 for DVB-H.....	45
Table 30 – Immunity to pattern L1 for DVB-T .....	45
Table 31 – Immunity to pattern L1 for DVB-H.....	46
Table 32 – Immunity to pattern L2 for DVB-T .....	46
Table 33 – Immunity to pattern L2 for DVB-H.....	47
Table 34 – Immunity to pattern L3 for DVB-T .....	47
Table 35 – Immunity to pattern L3 for DVB-H.....	48
Table 36 – Immunity to Pattern L4 for DVB-T.....	48
Table 37 – Immunity to Pattern L4 for DVB-H.....	48
Table 38 – Immunity to co-channel interference from analogue signals for DVB-T .....	49
Table 39 – Immunity to co-channel interference from analogue signals for DVB-H .....	49
Table 40 – $C/N$ for echo within guard interval .....	50
Table 41 – Timing of the corner point $T_c$ .....	51
Table 42 – Definition of the value $\Delta$ .....	51
Table 43 – Definition of the inflection point .....	51
Table 44 – Impulse interference test patterns .....	53
Table 45 – Cellular interference frequency ranges.....	56
Table A.1 – Noise floor values .....	61
Table B.1 – $C/N$ (dB) for reference $BER$ .....	63

## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**MOBILE AND PORTABLE DVB-T/H RADIO ACCESS –****Part 1: Interface specification**

## FOREWORD

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International Standard IEC 62002-1 has been prepared by technical area 1: Terminals for audio, video and data services and content, of IEC technical committee 100: Audio, video and multimedia systems and equipment.

This second edition cancels and replaces the first edition, published in 2005 and constitutes a technical revision.

The main changes with respect to the previous edition are listed below.

- DVB-H has been included as a part of the main specification.
- All the performance figures have been revised as new simulation results have been made available as well as new reference receivers for DVB-H have been developed.
- DVB-H now includes all the different MPE-FEC code rates.
- New portable indoor and portable outdoor channel models have been included as well as performance figures for those.
- A new 2x TU-6 mobile SFN test channel has been included.

- A new L4 linearity pattern has been added.
- Dedicated performance figures for DVB-H for S1, S2, L1 to L4 interference patterns have been included.
- A new GSM-interference measurement method has been added.

The text of this standard is based on the following documents:

CDV	Report on voting
100/1289/CDV	100/1381/RVC

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts of the IEC 62002 series, under the general title *Mobile and portable DVB-T/H radio access*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.

The contents of the corrigendum of July 2009 have been included in this copy.

# MOBILE AND PORTABLE DVB-T/H RADIO ACCESS –

## Part 1: Interface specification

### 1 Scope

This part of IEC 62002 is a radio access specification for mobile, portable and hand-held portable devices capable of receiving DVB-T/H services. It includes informative system aspects as well as specifications for minimum RF-performance. It covers terminals in three main classes, namely integrated car terminals, portable digital TV sets and hand-held portable convergence terminals. Interoperability with integrated cellular radios is also considered. The specification covers the following areas.

- Frequency ranges
- Supported modes
- Definition of receiving conditions
- Definition of the receiver RF-reference model
- Definition of degradation criteria
- Antenna characteristics
- Channel models
- *C/N*-performance with different channels
- Minimum and maximum input levels
- Immunity to interfering signals
- Definition of an ensemble of interference patterns
- Tolerance to impulse interference
- SFN-performance
- Transmitter minimum performance
- Interoperability of cellular radios
- EMC aspects

### 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

CISPR 15, *Sound and television broadcast receivers and associated equipment – Radio disturbance characteristics – Limits and methods of measurement*

CISPR 20, *Sound and television broadcast receivers and associated equipment – Immunity characteristics – Limits and methods of measurement*

IEC 60169-2, *Radio-frequency connectors – Part 2: Coaxial unmatched connector*

ETSI EN 300 744:2007, *Digital Video Broadcasting (DVB); Framing structure, Channel coding and modulation for digital terrestrial television, V1.5.2*

ETSI ETS 300 342-1, *Radio Equipment and Systems (RES); ElectroMagnetic Compatibility (EMC) for European digital cellular telecommunications system (GSM 900 MHz and DCS 1 800 MHz); Part 1: Mobile and portable radio and ancillary equipment*

ETSI EN 300 607-1, *Digital cellular telecommunications system (Phase 2+) (GSM) – Mobile Station (MS) conformance specification – Part 1: Conformance specification*

ETSI EN 302 304:2004, *Digital Video Broadcasting (DVB); Transmission System for Handheld Terminals (DVB-H), V1.1.1*

ETSI TR 101 190 V1.2.2, *Digital Video Broadcasting (DVB); Implementation guidelines for DVB terrestrial services; Transmission aspects*

ITU-R BT.1701-1, *Characteristics of radiated signals of conventional analogue television systems*