

Final draft **ETSI EN 301 908-10** V4.1.0 (2009-03)

Harmonized European Standard (Telecommunications series)

**Electromagnetic compatibility
and Radio spectrum Matters (ERM);
Base Stations (BS), Repeaters and User Equipment (UE) for
IMT-2000 Third-Generation cellular networks;
Part 10: Harmonized EN for IMT-2000,
FDMA/TDMA (DECT)
covering essential requirements
of article 3.2 of the R&TTE Directive**

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Full standard:
<https://standards.iteh.ai/catalog/standards/sist/637d012-bea2-4e24-8a70-20d3d2d6b3e/etsi-en-301-908-10-v4.1.1-2009-07>



ReferenceREN/DECT-000253

Keywords3G, DECT, digital, generic, IMT-2000, radio,
regulation, testing

ETSI650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - NAF 742 C
Association à but non lucratif enregistrée à la
Sous-Préfecture de Grasse (06) N° 7803/88

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Contents

| | |
|---|----|
| Intellectual Property Rights | 10 |
| Foreword..... | 10 |
| Introduction | 11 |
| 1 Scope | 12 |
| 2 References | 13 |
| 2.1 Normative references | 13 |
| 2.2 Informative references | 14 |
| 3 Definitions, symbols and abbreviations | 15 |
| 3.1 Definitions | 15 |
| 3.2 Symbols | 17 |
| 3.3 Abbreviations | 17 |
| 4 Technical requirements specifications | 18 |
| 4.1 Environmental profile..... | 18 |
| 4.2 Document layout | 18 |
| 4.2.1 Test suites | 19 |
| 4.2.2 Test groups..... | 19 |
| 4.2.3 Test cases | 20 |
| 4.3 Applicant's declaration | 20 |
| 4.4 Applicability of essential test suites | 20 |
| 4.4.1 Introduction..... | 20 |
| 4.4.2 Equipment that includes only a DECT RF receiver..... | 21 |
| 4.4.3 Equipment that includes a radio transmitter | 21 |
| 4.4.4 CTAs..... | 21 |
| 4.4.5 Equipment with a synchronization port | 21 |
| 4.4.6 Equipment incorporating the IPEI (PPs only)..... | 21 |
| 4.4.7 All FP equipment | 21 |
| 4.4.8 Equipment with combined FT and PT functionality..... | 21 |
| 4.4.8.1 Introduction..... | 21 |
| 4.4.8.2 Wireless Relay Station | 21 |
| 4.4.8.3 Direct PP to PP communication | 22 |
| 4.4.8.4 Distributed communications | 22 |
| 4.4.9 Provision of 4 Mbit/s services Equipment that is capable of using 4-level, 8-level, 16 level and/or 64-level modulation | 22 |
| 4.4.10 Dual mode handsets | 22 |
| 4.5 Conformance requirements | 22 |
| 4.5.1 General..... | 22 |
| 4.5.2 Accuracy and stability of RF carriers | 23 |
| 4.5.2.1 Definition of nominal position of RF carriers | 23 |
| 4.5.2.2 Limits | 23 |
| 4.5.2.3 Conformance..... | 23 |
| 4.5.3 Accuracy and stability of timing parameters | 23 |
| 4.5.3.1 Definitions..... | 23 |
| 4.5.3.1.1 Slot structure..... | 23 |
| 4.5.3.1.2 Definition of the position of p0 | 25 |
| 4.5.3.2 Limits | 25 |
| 4.5.3.2.1 Reference timer accuracy and stability | 25 |
| 4.5.3.2.2 RFP transmission jitter | 25 |
| 4.5.3.2.3 PP reference timer synchronization | 26 |
| 4.5.3.3 Conformance..... | 26 |
| 4.5.4 Transmission burst..... | 26 |
| 4.5.4.1 Definitions..... | 26 |
| 4.5.4.1.1 Introduction | 26 |
| 4.5.4.1.2 Physical packets..... | 27 |

| | | |
|------------|--|----|
| 4.5.4.1.3 | Transmitted power | 27 |
| 4.5.4.1.4 | Normal Transmitted Power (NTP) | 27 |
| 4.5.4.1.5 | Transmitter attack time | 27 |
| 4.5.4.1.6 | Transmitter release time | 27 |
| 4.5.4.1.7 | Minimum power | 27 |
| 4.5.4.1.8 | Maximum power | 27 |
| 4.5.4.1.9 | Maintenance of transmission after packet end | 27 |
| 4.5.4.1.10 | Transmitter idle power output | 27 |
| 4.5.4.2 | Limits | 27 |
| 4.5.4.2.1 | Transmitter attack time | 27 |
| 4.5.4.2.2 | Transmitter release time | 27 |
| 4.5.4.2.3 | Minimum power | 27 |
| 4.5.4.2.4 | Maximum power | 28 |
| 4.5.4.2.5 | Maintenance of transmission after packet end | 28 |
| 4.5.4.2.6 | Transmitter idle power output | 28 |
| 4.5.4.3 | Conformance | 28 |
| 4.5.5 | Transmitted power | 28 |
| 4.5.5.1 | Definitions | 28 |
| 4.5.5.1.1 | PP and RFP with an integral antenna | 28 |
| 4.5.5.1.2 | PP and RFP with external connections for all antennas | 28 |
| 4.5.5.1.3 | PP and RFP with both integral and external antennas | 28 |
| 4.5.5.2 | Limits | 28 |
| 4.5.5.3 | Conformance | 28 |
| 4.5.6 | RF carrier modulation | 29 |
| 4.5.6.1 | Definition | 29 |
| 4.5.6.2 | Limits | 29 |
| 4.5.6.3 | Conformance | 29 |
| 4.5.7 | Unwanted RF power radiation | 29 |
| 4.5.7.1 | General | 29 |
| 4.5.7.2 | Emissions due to modulation | 29 |
| 4.5.7.2.1 | Definition | 29 |
| 4.5.7.2.2 | Limits | 30 |
| 4.5.7.2.3 | Conformance | 30 |
| 4.5.7.3 | Emissions due to transmitter transients | 30 |
| 4.5.7.3.1 | Definition | 30 |
| 4.5.7.3.2 | Limits | 30 |
| 4.5.7.3.3 | Conformance | 30 |
| 4.5.7.4 | Emissions due to intermodulation | 31 |
| 4.5.7.4.1 | Definition | 31 |
| 4.5.7.4.2 | Limits | 31 |
| 4.5.7.4.3 | Conformance | 31 |
| 4.5.7.5 | Spurious emissions when allocated a transmit channel | 31 |
| 4.5.7.5.1 | Definition | 31 |
| 4.5.7.5.2 | Limits | 31 |
| 4.5.7.5.3 | Conformance | 31 |
| 4.5.8 | Radio receiver testing | 31 |
| 4.5.8.1 | Radio receiver sensitivity | 31 |
| 4.5.8.1.1 | Definition | 31 |
| 4.5.8.1.2 | Limits | 32 |
| 4.5.8.1.3 | Conformance | 32 |
| 4.5.8.2 | Radio receiver reference BER and FER | 32 |
| 4.5.8.2.1 | Definition | 32 |
| 4.5.8.2.2 | Limits | 32 |
| 4.5.8.2.3 | Conformance | 32 |
| 4.5.8.3 | Radio receiver interference performance | 32 |
| 4.5.8.3.1 | Definition | 32 |
| 4.5.8.3.2 | Limits | 33 |
| 4.5.8.3.3 | Conformance | 33 |
| 4.5.8.4 | Radio receiver blocking case 1: owing to signals occurring at the same time but on other frequencies | 33 |
| 4.5.8.4.1 | Definition | 33 |
| 4.5.8.4.2 | Limits | 33 |

| | | |
|------------|---|----|
| 4.5.8.4.3 | Conformance | 34 |
| 4.5.8.5 | Radio receiver blocking case 2: owing to signals occurring at a different time | 34 |
| 4.5.8.5.1 | Definition..... | 34 |
| 4.5.8.5.2 | Limits | 34 |
| 4.5.8.5.3 | Conformance | 34 |
| 4.5.8.6 | Receiver intermodulation performance | 34 |
| 4.5.8.6.1 | Definition..... | 34 |
| 4.5.8.6.2 | Limits | 34 |
| 4.5.8.6.3 | Conformance | 34 |
| 4.5.8.7 | Spurious emissions when the PP has no allocated transmit channel | 34 |
| 4.5.8.7.1 | Definition..... | 34 |
| 4.5.8.7.2 | Limits | 35 |
| 4.5.8.7.3 | Conformance | 35 |
| 4.5.9 | Intersystem synchronization (FP only) | 35 |
| 4.5.9.1 | Description | 35 |
| 4.5.9.2 | Wired synchronization ports | 35 |
| 4.5.9.2.1 | FP as a master..... | 35 |
| 4.5.9.2.2 | FP as a slave | 36 |
| 4.5.9.3 | GPS synchronization..... | 36 |
| 4.5.9.3.1 | FP with integrated Global Positioning System (GPS) synchronization..... | 36 |
| 4.5.9.3.2 | External GPS synchronization device | 37 |
| 4.5.10 | Equipment identity testing | 37 |
| 4.5.10.1 | PP | 37 |
| 4.5.10.2 | FP | 37 |
| 4.5.11 | Efficient use of the radio spectrum | 38 |
| 4.5.11.1 | Channel selection | 38 |
| 4.5.11.2 | Channel confirmation..... | 38 |
| 4.5.11.2.1 | For the PT..... | 38 |
| 4.5.11.2.2 | For the FT..... | 38 |
| 4.5.11.3 | Channel release | 38 |
| 4.5.11.4 | General | 39 |
| 4.5.12 | WRS testing..... | 39 |
| 4.5.12.1 | General requirements | 39 |
| 4.5.12.2 | Testing as a PP | 39 |
| 4.5.12.3 | Testing as an RFP | 39 |
| 4.5.12.4 | Additional requirements..... | 40 |
| 4.5.12.5 | Conformance..... | 43 |
| 4.5.13 | Requirements for PPs with direct PP to PP communication mode | 44 |
| 4.5.13.1 | General requirements | 44 |
| 4.5.13.2 | Setting the EUT in direct communications mode..... | 44 |
| 4.5.13.3 | When the EUT has not initiated a call..... | 44 |
| 4.5.13.4 | When the EUT initiates a call | 44 |
| 4.5.13.5 | Conformance..... | 45 |
| 4.5.14 | Distributed communications | 45 |
| 4.5.14.1 | General requirements | 45 |
| 4.5.14.2 | Testing as a PP | 45 |
| 4.5.14.3 | Testing as an RFP | 45 |
| 4.5.14.4 | Conformance..... | 46 |
| 4.5.15 | Higher level modulation options..... | 46 |
| 4.5.15.1 | Requirements | 46 |
| 4.5.15.2 | Conformance..... | 46 |
| 5 | Testing for compliance with technical requirements..... | 47 |
| 5.1 | General test requirements | 47 |
| 5.1.1 | Test philosophy..... | 47 |
| 5.1.2 | Standard position | 48 |
| 5.1.3 | Test antenna of the LT | 48 |
| 5.1.4 | Substitution antenna..... | 48 |
| 5.1.5 | Test fixture..... | 49 |
| 5.1.5.1 | Description | 49 |
| 5.1.5.2 | Calibration of the test fixture for the measurement of transmitter characteristics..... | 49 |
| 5.1.5.3 | Calibration of the test fixture for the measurement of receiver characteristics | 50 |

| | | |
|------------|---|----|
| 5.1.5.4 | Mode of use..... | 50 |
| 5.1.6 | Equipment with a temporary or internal permanent antenna connector..... | 50 |
| 5.1.6.1 | General..... | 50 |
| 5.1.6.2 | Equipment with a temporary antenna connector..... | 51 |
| 5.1.7 | Lower Tester (LT)..... | 51 |
| 5.1.7.1 | Description..... | 51 |
| 5.1.7.2 | Connections between the EUT and the LT..... | 51 |
| 5.1.7.3 | Functions and abilities..... | 52 |
| 5.1.7.4 | Signal generation uncertainty..... | 52 |
| 5.1.7.5 | Modulated DECT-like carrier..... | 52 |
| 5.1.7.6 | CW interferers..... | 52 |
| 5.1.7.7 | DECT RF signal..... | 52 |
| 5.1.7.8 | Test modulation signals..... | 53 |
| 5.1.8 | Upper Tester (UT)..... | 53 |
| 5.1.8.1 | Description of the UT..... | 53 |
| 5.1.8.2 | The test standby mode..... | 53 |
| 5.1.8.3 | Test messages..... | 53 |
| 5.1.8.4 | Dummy setting when EUT is a RFP and it is in Test Standby Mode (TSM)..... | 54 |
| 5.1.9 | Description of the Lower Tester FT and PT..... | 54 |
| 5.1.10 | General test methods..... | 54 |
| 5.1.10.1 | General..... | 54 |
| 5.1.10.2 | Sampling the RF signal..... | 54 |
| 5.1.10.2.1 | Introduction..... | 54 |
| 5.1.10.2.2 | Sampling method..... | 54 |
| 5.1.10.3 | Determining the reference position..... | 55 |
| 5.1.10.3.1 | Case 1: EUTs that cannot transmit..... | 55 |
| 5.1.10.3.2 | Case 2: EUTs that can transmit..... | 55 |
| 5.1.10.4 | Bit error rate (BER) and Frame Error Ratio (FER) measurements..... | 55 |
| 5.1.11 | Test setup..... | 55 |
| 5.1.11.1 | General..... | 55 |
| 5.1.11.2 | Test setup 1..... | 55 |
| 5.1.11.3 | Test setup 2..... | 56 |
| 5.1.11.4 | Test setup 3..... | 56 |
| 5.1.11.5 | Test setup 4..... | 57 |
| 5.1.11.6 | Test setup 5..... | 57 |
| 5.1.12 | Test arrangements for intermodulation measurements..... | 58 |
| 5.1.12.1 | PT to PT arrangement..... | 58 |
| 5.1.12.2 | FT to FT arrangement..... | 58 |
| 5.1.12.3 | FT to PT arrangement..... | 59 |
| 5.1.13 | Test conditions, power supply and ambient temperatures..... | 59 |
| 5.1.13.1 | General..... | 59 |
| 5.1.13.2 | Nominal test conditions..... | 60 |
| 5.1.13.3 | Extreme test conditions..... | 60 |
| 5.1.13.4 | Test power source - general requirements..... | 61 |
| 5.1.13.5 | Nominal test power source..... | 61 |
| 5.1.13.5.1 | Mains voltage..... | 61 |
| 5.1.13.5.2 | Regulated lead acid battery power sources..... | 61 |
| 5.1.13.5.3 | Nickel cadmium battery..... | 61 |
| 5.1.13.5.4 | Other power sources..... | 62 |
| 5.1.13.6 | Extreme test power source..... | 62 |
| 5.1.13.6.1 | Mains voltage..... | 62 |
| 5.1.13.6.2 | Regulated lead acid battery power sources..... | 62 |
| 5.1.13.6.3 | Nickel cadmium battery..... | 62 |
| 5.1.13.6.4 | Other power sources..... | 62 |
| 5.1.13.7 | Testing of host connected equipment and plug-in cards..... | 62 |
| 5.1.13.7.1 | Permitted approaches..... | 62 |
| 5.1.13.7.2 | Alternative A: composite equipment..... | 62 |
| 5.1.13.7.3 | Alternative B: use of a test jig and three hosts..... | 63 |
| 5.2 | Interpretation of the measurement results..... | 63 |
| 5.3 | Essential radio test suites..... | 64 |
| 5.3.1 | General..... | 64 |
| 5.3.2 | Accuracy and stability of RF carriers..... | 64 |

| | | |
|-----------|---|----|
| 5.3.2.1 | Test environment..... | 64 |
| 5.3.2.2 | Method of measurement..... | 64 |
| 5.3.2.3 | Verdict criteria when the EUT is a RFP..... | 65 |
| 5.3.2.4 | Verdict criteria when the EUT is a PP..... | 65 |
| 5.3.3 | Accuracy and stability of timing parameters..... | 65 |
| 5.3.3.1 | Measurement of packet timing jitter..... | 65 |
| 5.3.3.1.1 | Test environment..... | 65 |
| 5.3.3.1.2 | Method of measurement..... | 66 |
| 5.3.3.1.3 | Verdict criteria..... | 66 |
| 5.3.3.2 | Measurement of the reference timing accuracy of a RFP..... | 66 |
| 5.3.3.2.1 | Test environment..... | 66 |
| 5.3.3.2.2 | Method of measurement..... | 66 |
| 5.3.3.2.3 | Verdict criteria..... | 67 |
| 5.3.3.3 | Measurement of packet transmission accuracy of a PP..... | 67 |
| 5.3.3.3.1 | Test environment..... | 67 |
| 5.3.3.3.2 | Method of measurement..... | 67 |
| 5.3.3.3.3 | Verdict criteria..... | 68 |
| 5.3.4 | Transmission burst..... | 68 |
| 5.3.4.1 | Test environment..... | 68 |
| 5.3.4.2 | Method of measurement..... | 68 |
| 5.3.4.3 | Verdict criteria..... | 69 |
| 5.3.5 | Transmitted power..... | 69 |
| 5.3.5.1 | PP and RFP with an integral antenna..... | 69 |
| 5.3.5.1.1 | Test environment..... | 69 |
| 5.3.5.1.2 | Method of measurement..... | 69 |
| 5.3.5.1.3 | Verdict criteria for all EUTs..... | 70 |
| 5.3.5.2 | PP and RFP with external antenna connection(s)..... | 70 |
| 5.3.5.2.1 | Test environment..... | 70 |
| 5.3.5.2.2 | Method of measurement..... | 71 |
| 5.3.5.2.3 | Verdict criteria for all EUTs..... | 71 |
| 5.3.6 | RF carrier modulation..... | 71 |
| 5.3.6.1 | Test environment..... | 71 |
| 5.3.6.2 | Method of measurement, parts 1 and 2..... | 71 |
| 5.3.6.2.1 | Introduction..... | 71 |
| 5.3.6.2.2 | Part 1..... | 72 |
| 5.3.6.2.3 | Part 2..... | 72 |
| 5.3.6.3 | Method of measurement, parts 3 and 4..... | 72 |
| 5.3.6.3.1 | General..... | 72 |
| 5.3.6.3.2 | Part 3..... | 73 |
| 5.3.6.3.3 | Part 4..... | 73 |
| 5.3.6.4 | Verdict criteria for Part 1..... | 73 |
| 5.3.6.5 | Verdict criteria for Part 2..... | 73 |
| 5.3.6.6 | Verdict criteria for Part 3..... | 74 |
| 5.3.6.7 | Verdict criteria for Part 4..... | 74 |
| 5.3.7 | Unwanted RF power radiation..... | 75 |
| 5.3.7.1 | General test conditions..... | 75 |
| 5.3.7.2 | Emissions due to modulation..... | 75 |
| 5.3.7.2.1 | Test environment..... | 75 |
| 5.3.7.2.2 | Method of measurement..... | 76 |
| 5.3.7.2.3 | Verdict criteria..... | 77 |
| 5.3.7.3 | Emissions due to transmitter transients..... | 77 |
| 5.3.7.3.1 | Test environment..... | 77 |
| 5.3.7.3.2 | Method of measurement..... | 77 |
| 5.3.7.3.3 | Verdict criteria..... | 78 |
| 5.3.7.4 | Emissions due to intermodulation..... | 78 |
| 5.3.7.4.1 | Test environment..... | 78 |
| 5.3.7.4.2 | Method of measurement..... | 78 |
| 5.3.7.4.3 | Verdict criteria..... | 79 |
| 5.3.7.5 | Spurious emissions when allocated a transmit channel..... | 79 |
| 5.3.7.5.1 | Radiated emissions..... | 79 |
| 5.3.7.5.2 | Conducted spurious emissions when the EUT has a permanent external antenna connector..... | 80 |
| 5.3.8 | Radio receiver testing..... | 81 |

| | | |
|-----------|--|----|
| 5.3.8.1 | Radio receiver sensitivity | 81 |
| 5.3.8.1.1 | Test environment | 81 |
| 5.3.8.1.2 | Method of measurement | 81 |
| 5.3.8.1.3 | Verdict criteria | 81 |
| 5.3.8.2 | Radio receiver reference BER and FER | 82 |
| 5.3.8.2.1 | Test environment | 82 |
| 5.3.8.2.2 | Method of measurement | 82 |
| 5.3.8.2.3 | Verdict criteria | 82 |
| 5.3.8.3 | Radio receiver interference performance | 82 |
| 5.3.8.3.1 | Test environment | 82 |
| 5.3.8.3.2 | Method of measurement | 82 |
| 5.3.8.3.3 | Verdict criteria | 83 |
| 5.3.8.4 | Radio receiver blocking case 1: owing to signals occurring at the same time but on other frequencies | 83 |
| 5.3.8.4.1 | Test environment | 83 |
| 5.3.8.4.2 | Method of measurement | 83 |
| 5.3.8.4.3 | Verdict criteria | 84 |
| 5.3.8.5 | Radio receiver blocking case 2: owing to signals occurring at a different time | 85 |
| 5.3.8.5.1 | Test environment | 85 |
| 5.3.8.5.2 | Method of measurement | 85 |
| 5.3.8.5.3 | Verdict criteria | 85 |
| 5.3.8.6 | Receiver intermodulation performance | 86 |
| 5.3.8.6.1 | Test environment | 86 |
| 5.3.8.6.2 | Method of measurement | 86 |
| 5.3.8.6.3 | Verdict criteria | 86 |
| 5.3.8.7 | Spurious emissions when the PP has no allocated transmit channel | 86 |
| 5.3.8.7.1 | Test environment | 86 |
| 5.3.8.7.2 | Method of measurement | 87 |
| 5.3.8.7.3 | Verdict criteria (outside the DECT band) | 87 |
| 5.3.8.7.4 | Verdict criteria (inside the DECT band) | 87 |
| 5.3.9 | Intersystem synchronization (FP only) | 87 |
| 5.3.9.1 | Test environment | 87 |
| 5.3.9.2 | Wired synchronization ports | 88 |
| 5.3.9.2.1 | FP as a master | 88 |
| 5.3.9.2.2 | FP as a slave | 89 |
| 5.3.9.3 | GPS synchronization | 90 |
| 5.3.9.3.1 | FP with integrated Global Positioning System (GPS) synchronization | 90 |
| 5.3.9.3.2 | External GPS synchronization device | 90 |
| 5.3.10 | Equipment identity testing | 91 |
| 5.3.11 | Efficient use of the radio spectrum | 91 |
| 5.3.12 | WRS testing | 91 |
| 5.3.12.1 | General | 91 |
| 5.3.12.2 | Testing as a PP | 91 |
| 5.3.12.3 | Testing as an RFP | 92 |
| 5.3.12.4 | Additional requirements | 92 |
| 5.3.13 | Requirements for PPs with direct PP to PP communication mode | 92 |
| 5.3.13.1 | General | 92 |
| 5.3.13.2 | Setting the EUT in direct communications mode | 92 |
| 5.3.13.3 | When the EUT has not initiated a call | 93 |
| 5.3.13.4 | When the EUT initiates a call | 93 |
| 5.3.13.5 | Applicants declarations | 93 |
| 5.3.14 | Distributed Communications | 93 |
| 5.3.14.1 | General | 93 |
| 5.3.14.2 | Testing as a PP | 94 |
| 5.3.14.3 | Testing as an RFP | 94 |
| 5.3.14.4 | Applicants declaration | 94 |
| 5.3.15 | Higher level modulation options | 94 |
| 5.3.15.1 | General | 94 |
| 5.3.15.2 | Activation of higher level modulations when EUT is in Test Standby Mode | 95 |
| 5.3.15.3 | Applicants declaration | 95 |

| | | |
|-------------------------------|---|------------|
| Annex A (normative): | HS Requirements and conformance Test specifications Table (HS-RTT)..... | 96 |
| Annex B (normative): | Procedures for test fixture calibration..... | 99 |
| B.1 | Calibration of test fixture for receiver measurements | 99 |
| B.1.1 | Procedure..... | 99 |
| B.1.2 | Method of measurement | 99 |
| Annex C (normative): | Test Support Profile (TSP)..... | 101 |
| C.1 | Introduction | 101 |
| C.2 | Standardized symbols for the status column | 101 |
| C.3 | Capabilities of PP (EUT) under test | 102 |
| C.3.1 | Services | 102 |
| C.3.2 | Messages | 102 |
| C.3.3 | Message parameters | 104 |
| C.3.4 | Procedure support..... | 108 |
| C.3.5 | CSF multiplexing functions..... | 108 |
| C.3.6 | Timer and counter support..... | 109 |
| C.4 | Capabilities of FP (EUT) under test | 110 |
| C.4.1 | Services | 110 |
| C.4.2 | Messages | 110 |
| C.4.3 | Message parameters | 112 |
| C.4.4 | Procedure support..... | 116 |
| C.4.5 | CSF multiplexing functions..... | 116 |
| C.4.6 | Timer and counter support..... | 117 |
| Annex D (normative): | Measurement of BER and FER..... | 118 |
| Annex E (informative): | Procedures for the measurement of synchronization loss at the EUT by the LT | 119 |
| E.1 | Description | 119 |
| E.2 | Method | 119 |
| Annex F (informative): | DECT carrier numbers and carrier positions in the range 1 880 MHz to 2 025 MHz | 120 |
| F.1 | Introduction | 120 |
| F.2 | 1 880 MHz to 1 978 MHz and 2 010 MHz to 2 025 MHz RF band 00001..... | 121 |
| F.3 | 1 880 MHz to 1 925 MHz and 2 010 MHz to 2 025 MHz RF band 00010..... | 122 |
| Annex G (informative): | The EN title in the official languages | 123 |
| Annex H (informative): | Bibliography..... | 124 |
| History | | 125 |

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Foreword

This Harmonized European Standard (Telecommunications series) has been produced by ETSI Technical Committee Digital Enhanced Cordless Telecommunications (DECT), and is now submitted for the ETSI standards One-step Approval Procedure.

The present document has been produced by ETSI in response to a mandate from the European Commission issued under Council Directive 98/34/EC [4] (as amended) laying down a procedure for the provision of information in the field of technical standards and regulations.

The present document is intended to become a Harmonized standard, the reference of which will be published in the Official Journal of the European Communities referencing the Directive 1999/5/EC [1] of the European Parliament and of the Council of 9 March 1999 on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity ("the R&TTE Directive") [1].

Technical specifications relevant to Directive 1999/5/EC [1] are given in annex A.

The present document is part 10 of a multi-part deliverable covering the Base Stations (BS), Repeaters and User Equipment (UE) for IMT-2000 Third-Generation cellular networks, as identified below:

- Part 1: "Harmonized EN for IMT-2000, introduction and common requirements, covering essential requirements of article 3.2 of the R&TTE Directive";
- Part 2: "Harmonized EN for IMT-2000, CDMA Direct Spread (UTRA FDD) (UE) covering essential requirements of article 3.2 of the R&TTE Directive";
- Part 3: "Harmonized EN for IMT-2000, CDMA Direct Spread (UTRA FDD) (BS) covering essential requirements of article 3.2 of the R&TTE Directive";
- Part 4: "Harmonized EN for IMT-2000, CDMA Multi-Carrier (cdma2000) (UE) covering essential requirements of article 3.2 of the R&TTE Directive";
- Part 5: "Harmonized EN for IMT-2000, CDMA Multi-Carrier (cdma2000) (BS) covering essential requirements of article 3.2 of the R&TTE Directive";
- Part 6: "Harmonized EN for IMT-2000, CDMA TDD (UTRA TDD) (UE) covering essential requirements of article 3.2 of the R&TTE Directive";
- Part 7: "Harmonized EN for IMT-2000, CDMA TDD (UTRA TDD) (BS) covering essential requirements of article 3.2 of the R&TTE Directive";
- Part 8: "Harmonized EN for IMT-2000, TDMA Single-Carrier (UWC 136) (UE) covering essential requirements of article 3.2 of the R&TTE Directive";
- Part 9: "Harmonized EN for IMT-2000, TDMA Single-Carrier (UWC 136) (BS) covering essential requirements of article 3.2 of the R&TTE Directive";
- Part 10: "Harmonized EN for IMT-2000, FDMA/TDMA (DECT) covering essential requirements of article 3.2 of the R&TTE Directive";**

- Part 11: "Harmonized EN for IMT-2000, CDMA Direct Spread (UTRA FDD) (Repeaters) covering essential requirements of article 3.2 of the R&TTE Directive";
- Part 12: "Harmonized EN for IMT-2000, CDMA Multi-Carrier (cdma2000) (Repeaters) covering essential requirements of article 3.2 of the R&TTE Directive";
- Part 13: "Harmonized EN for IMT-2000, Evolved Universal Terrestrial Radio Access (E-UTRA) (UE) covering essential requirements of article 3.2 of the R&TTE Directive";
- Part 14: "Harmonized EN for IMT-2000, Evolved Universal Terrestrial Radio Access (E-UTRA) (BS) covering essential requirements of article 3.2 of the R&TTE Directive";
- Part 15: "Harmonized EN for IMT-2000, Evolved Universal Terrestrial Radio Access (E-UTRA) (Repeater) covering essential requirements of article 3.2 of the R&TTE Directive";
- Part 16: "Harmonized EN for IMT-2000, Evolved CDMA Multi-Carrier Ultra Mobile Broadband (UMB) (UE) covering essential requirements of article 3.2 of the R&TTE Directive";
- Part 17: "Harmonized EN for IMT-2000, Evolved CDMA Multi-Carrier Ultra Mobile Broadband (UMB) (BS) covering essential requirements of article 3.2 of the R&TTE Directive".

| Proposed national transposition dates | |
|--|---------------------------------|
| Date of latest announcement of this EN (doa): | 3 months after ETSI publication |
| Date of latest publication of new National Standard or endorsement of this EN (dop/e): | 6 months after doa |
| Date of withdrawal of any conflicting National Standard (dow): | 18 months after doa |

Introduction

The present document is part of a set of standards developed by ETSI and is designed to fit in a modular structure to cover all radio and telecommunications terminal equipment within the scope of the R&TTE Directive. The modular structure is shown in EG 201 399 [i.9].

Figure 1: Void

1 Scope

The present document applies to terminal equipment for IMT-FT. IMT-FT is the Digital Enhanced Cordless Telecommunications (DECT) system being a member of the ITU IMT-2000 family. DECT terminal equipment consists of the following elements:

- a) Fixed Part (FP);
- b) Portable Part (PP);
- c) Cordless Terminal Adapter (CTA);
- d) Wireless Relay Station (WRS) (FP and PP combined with repeater functionality);
- e) Hybrid Part (HyP) (a PP with capability to act as a FP to provide PP to PP communication).

These radio equipment types are capable of operating in all or any part of the frequency bands given in table 1.

Table 1: Radiocommunications service frequency bands

| | Radiocommunications service frequency bands |
|----------|---|
| Transmit | 1 900 MHz to 1 980 MHz |
| Receive | 1 900 MHz to 1 980 MHz |
| Transmit | 2 010 MHz to 2 025 MHz |
| Receive | 2 010 MHz to 2 025 MHz |

The IMT-FT (DECT) service frequency bands for transmitting and receiving for all elements are the parts of the European UMTS spectrum applicable for TDD operation, 1 900 MHz to 1 980 MHz and 2 010 MHz to 2 025 MHz, (see ERC/DEC(99)25 [18] and ERC/DEC(00)01 [19]).

NOTE 1: IMT-FT equipment may have a second mode for providing operation also in the DECT band 1 880 MHz to 1 900 MHz. Application of DECT in the band 1 880 MHz to 1 900 MHz is covered by EN 301 406 [i.7].

Details of the DECT Common Interface may be found in EN 300 175 parts 1 to 8 [5] to [12]. Further details of the DECT system may be found in the ETSI Technical Reports, TR 101 178 [i.1] and ETR 043 [i.2].

The present document is intended to cover the provisions of Directive 1999/5/EC (R&TTE Directive) [1] article 3.2, which states that "[...] radio equipment shall be so constructed that it effectively uses the spectrum allocated to terrestrial/space radio communications and orbital resources so as to avoid harmful interference".

In addition to the present document, other ENs that specify technical requirements in respect of essential requirements under other parts of article 3 of the R&TTE Directive [1] will apply to equipment within the scope of the present document.

NOTE 2: A list of such ENs is included on the web site: <http://www.newapproach.org/>.

2 References

References are either specific (identified by date of publication and/or edition number or version number) or non-specific.

- For a specific reference, subsequent revisions do not apply.
- Non-specific reference may be made only to a complete document or a part thereof and only in the following cases:
 - if it is accepted that it will be possible to use all future changes of the referenced document for the purposes of the referring document;
 - for informative references.

Referenced documents which are not found to be publicly available in the expected location might be found at <http://docbox.etsi.org/Reference>.

NOTE: While any hyperlinks included in this clause were valid at the time of publication ETSI cannot guarantee their long term validity.

2.1 Normative references

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

- [1] Directive 1999/5/EC of the European Parliament and of the Council of 9 March 1999 on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity (R&TTE Directive).
- [2] Void.
- [3] Void.
- [4] Directive 98/34/EC of the European Parliament and of the Council of 22 June 1998 laying down a procedure for the provision of information in the field of technical standards and regulations.
- [5] ETSI EN 300 175-1 (V2.2.1): "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 1: Overview".
- [6] ETSI EN 300 175-2 (V2.2.1): "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 2: Physical layer (PHL)".
- [7] ETSI EN 300 175-3 (V2.2.1): "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 3: Medium Access Control (MAC) layer".
- [8] ETSI EN 300 175-4 (V2.2.1): "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 4: Data Link Control (DLC) Layer".
- [9] ETSI EN 300 175-5 (V2.2.1): "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 5: Network (NWK) layer".
- [10] ETSI EN 300 175-6 (V2.2.1): "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 6: Identities and Addressing".
- [11] ETSI EN 300 175-7 (V2.2.1): "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 7: Security features".
- [12] ETSI EN 300 175-8 (V2.2.1): "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 8: Speech and audio coding and transmission".
- [13] ISO/IEC 9646-1 (1994): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 1: General concepts".