



**Satellite Earth Stations and Systems (SES);  
Harmonised Standard for Mobile Earth Stations (MES)  
operating in the 1 980 MHz to 2 010 MHz (earth-to-space) and  
2 170 MHz to 2 200 MHz (space-to-earth) frequency bands  
covering the essential requirements  
of article 3.2 of the Directive 2014/53/EU;  
Part 2: User Equipment (UE) for wideband systems**

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# Contents

Intellectual Property Rights .....	11
Foreword.....	11
Modal verbs terminology.....	11
Introduction .....	12
1 Scope .....	13
2 References .....	14
2.1 Normative references .....	14
2.2 Informative references.....	14
3 Definitions, symbols and abbreviations .....	15
3.1 Definitions .....	15
3.2 Symbols.....	16
3.3 Abbreviations .....	16
4 Technical requirements specifications for UE .....	18
4.1 Environmental profile.....	18
4.2 Conformance requirements .....	18
4.2.1 Introduction.....	18
4.2.2 Control and monitoring functions .....	18
4.2.2.1 Definition .....	18
4.2.2.2 Limit.....	18
4.2.2.3 Conformance.....	19
4.2.3 Maximum output power.....	19
4.2.3.1 Definition .....	19
4.2.3.2 Limit.....	19
4.2.3.3 Conformance.....	19
4.2.4 Spectrum emissions mask .....	19
4.2.4.1 Definition .....	19
4.2.4.2 Limit.....	19
4.2.4.3 Conformance.....	20
4.2.5 Transmitter spurious emissions.....	20
4.2.5.1 Definition .....	20
4.2.5.2 Limits .....	20
4.2.5.3 Conformance.....	21
4.2.6 Minimum output power .....	21
4.2.6.1 Definition .....	21
4.2.6.2 Limits .....	21
4.2.6.3 Conformance.....	21
4.2.7 Adjacent Channel Leakage Power Ratio (ACLR) .....	21
4.2.7.1 Definition .....	21
4.2.7.2 Limits .....	21
4.2.7.3 Conformance.....	22
4.2.8 Out of synchronization handling of output power .....	22
4.2.8.1 Definition .....	22
4.2.8.2 Limits .....	22
4.2.8.3 Conformance.....	22
4.2.9 Receiver Adjacent Channel Selectivity (ACS) .....	23
4.2.9.1 Definition .....	23
4.2.9.2 Limits .....	23
4.2.9.3 Conformance.....	23
4.2.10 Blocking characteristics .....	23
4.2.10.1 Definition .....	23
4.2.10.2 Limits .....	24
4.2.10.3 Conformance.....	24
4.2.11 Receiver spurious response.....	24
4.2.11.1 Definition .....	24

4.2.11.2	Limits .....	24
4.2.11.3	Conformance .....	24
4.2.12	Receiver intermodulation characteristics .....	24
4.2.12.1	Definition .....	24
4.2.12.2	Limits .....	25
4.2.12.3	Conformance .....	25
4.2.13	Receiver spurious emissions .....	25
4.2.13.1	Definition .....	25
4.2.13.2	Limits .....	25
4.2.13.3	Conformance .....	26
5	Testing for compliance with technical requirements .....	26
5.1	Environmental conditions for testing .....	26
5.1.1	Specification of the environmental test conditions .....	26
5.1.2	Tests under extreme voltage conditions .....	26
5.2	Tests frequencies .....	26
5.3	Interpretation of the measurement results .....	27
5.4	Radio test suites .....	28
5.4.1	Control and monitoring functions .....	28
5.4.1.1	Test method .....	28
5.4.2	Maximum output power .....	28
5.4.2.1	Method of test .....	28
5.4.2.1.1	Initial conditions .....	28
5.4.2.1.2	Procedure .....	29
5.4.2.2	Test requirements .....	29
5.4.3	Spectrum emission mask .....	29
5.4.3.1	Method of test .....	29
5.4.3.1.1	Initial conditions .....	29
5.4.3.1.2	Procedure .....	29
5.4.3.2	Test requirements .....	29
5.4.4	Transmitter spurious emissions .....	29
5.4.4.1	Method of test .....	29
5.4.4.1.1	Initial conditions .....	29
5.4.4.1.2	Procedure .....	30
5.4.4.2	Test requirements .....	30
5.4.5	Minimum output power .....	30
5.4.5.1	Method of test .....	30
5.4.5.1.1	Initial conditions .....	30
5.4.5.1.2	Procedure .....	30
5.4.5.2	Test requirements .....	30
5.4.6	Adjacent Channel Leakage power Ratio (ACLR) .....	30
5.4.6.0	General .....	30
5.4.6.1	Method of test .....	30
5.4.6.1.1	Initial conditions .....	30
5.4.6.1.2	Procedure .....	31
5.4.6.2	Test requirements .....	31
5.4.7	Out of synchronization handling of output power .....	31
5.4.7.1	Method of test .....	31
5.4.7.1.1	Initial conditions .....	31
5.4.7.1.2	Procedure .....	31
5.4.7.2	Test requirements .....	31
5.4.8	Adjacent Channel Selectivity (ACS) .....	31
5.4.8.1	Method of test .....	31
5.4.8.1.1	Initial conditions .....	31
5.4.8.1.2	Procedure .....	32
5.4.8.2	Test requirements .....	32
5.4.9	Blocking characteristics .....	33
5.4.9.1	Method of test .....	33
5.4.9.1.1	Initial requirements .....	33
5.4.9.1.2	Procedure .....	33
5.4.9.2	Test requirements .....	33
5.4.10	Receiver spurious response .....	33

5.4.10.1	Method of test .....	33
5.4.10.1.1	Initial conditions .....	33
5.4.10.1.2	Procedure.....	33
5.4.10.2	Test requirements.....	34
5.4.11	Receiver intermodulation characteristics .....	34
5.4.11.1	Method of test .....	34
5.4.11.1.1	Initial conditions .....	34
5.4.11.1.2	Procedure.....	34
5.4.11.2	Test requirements .....	34
5.4.12	Receiver spurious emissions .....	34
5.4.12.1	Method of test .....	34
5.4.12.1.1	Initial conditions .....	34
5.4.12.1.2	Procedure.....	34
5.4.12.2	Test requirements .....	34
6	Technical requirements specifications for the UE mounted on aircraft (Aeronautical Terminals).....	35
6.1	Environmental profile.....	35
6.2	Conformance requirements .....	35
6.2.0	General.....	35
6.2.1	Introduction.....	35
6.2.2	Transmitter Maximum output power .....	35
6.2.2.1	Definition .....	35
6.2.2.2	Limit.....	36
6.2.2.3	Conformance.....	36
6.2.3	Transmitter Spectrum emissions mask .....	36
6.2.3.1	Definition .....	36
6.2.3.2	Limit.....	36
6.2.3.3	Conformance .....	36
6.2.4	Transmitter spurious emissions.....	36
6.2.4.1	Definition .....	36
6.2.4.2	Limits .....	37
6.2.4.3	Conformance.....	37
6.2.5	Transmitter Minimum output power.....	37
6.2.5.1	Definition .....	37
6.2.5.2	Limits .....	37
6.2.5.3	Conformance .....	38
6.2.6	Adjacent Channel Leakage Power Ratio (ACLR) .....	38
6.2.6.1	Definition .....	38
6.2.6.2	Limits .....	38
6.2.6.3	Conformance.....	38
6.2.7	Receiver Adjacent Channel Selectivity (ACS) .....	38
6.2.7.1	Definition .....	38
6.2.7.2	Limits .....	38
6.2.7.3	Conformance.....	39
6.2.8	Blocking characteristics .....	39
6.2.8.1	Definition .....	39
6.2.8.2	Limits .....	39
6.2.8.3	Conformance.....	41
6.2.9	Receiver spurious response.....	41
6.2.9.1	Definition .....	41
6.2.9.2	Limits .....	41
6.2.9.3	Conformance.....	41
6.2.10	Receiver intermodulation characteristics .....	42
6.2.10.1	Definition .....	42
6.2.10.2	Limits .....	42
6.2.10.3	Conformance.....	42
6.2.11	Receiver spurious emissions .....	42
6.2.11.1	Definition .....	42
6.2.11.2	Limits .....	42
6.2.11.3	Conformance.....	43
7	Testing for compliance with technical requirements for Aeronautical Terminal (AT).....	43

7.1	Environmental conditions for testing .....	43
7.1.0	General.....	43
7.1.1	Specification of the environmental test conditions .....	43
7.2	Void.....	43
7.3	Interpretation of the measurement results .....	43
7.4	Radio test suites.....	44
7.4.1	Void.....	44
7.4.2	Maximum output power.....	44
7.4.2.1	Method of test .....	44
7.4.2.1.1	Initial conditions .....	44
7.4.2.1.2	Procedure.....	45
7.4.2.2	Test requirements .....	45
7.4.3	Transmitter Spectrum emission mask.....	45
7.4.3.1	Method of test .....	45
7.4.3.1.1	initial conditions .....	45
7.4.3.1.2	Procedure.....	46
7.4.3.2	Test requirements.....	46
7.4.4	Transmitter spurious emissions.....	46
7.4.4.1	Method of test .....	46
7.4.4.1.1	Initial conditions .....	46
7.4.4.1.2	Procedure.....	46
7.4.4.2	Test requirements .....	47
7.4.5	Transmitter Minimum output power.....	47
7.4.5.1	Method of test .....	47
7.4.5.1.1	Initial conditions .....	47
7.4.5.1.2	Procedure.....	47
7.4.5.2	Test requirements.....	48
7.4.6	Adjacent Channel Leakage power Ratio (ACLR).....	48
7.4.6.1	Method of test .....	48
7.4.6.1.1	Initial conditions .....	48
7.4.6.1.2	Procedure.....	48
7.4.6.2	Test requirements.....	48
7.4.7	Void.....	49
7.4.8	Receiver Adjacent Channel Selectivity (ACS).....	49
7.4.8.1	Method of test .....	49
7.4.8.1.1	Initial conditions .....	49
7.4.8.1.2	Procedure.....	49
7.4.8.2	Test requirements.....	50
7.4.9	Blocking characteristics .....	50
7.4.9.1	Method of test .....	50
7.4.9.1.1	Initial requirements.....	50
7.4.9.1.2	In-Band Procedure.....	50
7.4.9.1.3	Out-Of-Band Procedure.....	51
7.4.9.1.4	Narrow-Band Procedure .....	51
7.4.9.2	Test requirements .....	52
7.4.10	Receiver spurious response.....	52
7.4.10.1	Method of test .....	52
7.4.10.1.1	Initial conditions .....	52
7.4.10.1.2	Procedure.....	52
7.4.10.2	Test requirements.....	52
7.4.11	Receiver intermodulation characteristics .....	52
7.4.11.1	Method of test .....	52
7.4.11.1.1	Initial conditions .....	52
7.4.11.1.2	Procedure.....	53
7.4.11.2	Test Requirements.....	53
7.4.12	Receiver spurious emissions .....	53
7.4.12.1	Method of test .....	53
7.4.12.1.1	Initial conditions .....	53
7.4.12.1.2	Procedure.....	54
7.4.12.2	Test requirements .....	54
8	Technical requirements specifications for non-aeronautical UE E-UTRA .....	54

8.0	General .....	54
8.1	Environmental profile.....	55
8.2	Conformance requirements .....	55
8.2.0	General.....	55
8.2.1	Introduction.....	55
8.2.2	Transmitter Maximum Output Power .....	56
8.2.2.1	Transmitter maximum output power for Single Carrier.....	56
8.2.2.1.1	Definition.....	56
8.2.2.1.2	Limits .....	56
8.2.2.1.3	Conformance .....	57
8.2.2.2	Transmitter output power for intra-band contiguous Carrier Aggregation (DL CA and UL CA).....	57
8.2.2.2.1	Definition.....	57
8.2.2.2.2	Limits .....	57
8.2.2.2.3	Conformance .....	57
8.2.2.3	Transmitter output power for UL-MIMO .....	58
8.2.2.3.1	Definition.....	58
8.2.2.3.2	Limits .....	58
8.2.2.3.3	Conformance .....	58
8.2.3	Transmitter Spectrum Emission Mask.....	59
8.2.3.1	Transmitter spectrum emission mask for Single Carrier.....	59
8.2.3.1.1	Definition.....	59
8.2.3.1.2	Limits .....	59
8.2.3.1.3	Conformance .....	60
8.2.3.2	Transmitter spectrum emission mask for intra-band contiguous Carrier Aggregation (DL CA and UL CA) .....	60
8.2.3.2.1	Definition.....	60
8.2.3.2.2	Limits .....	60
8.2.3.2.3	Conformance .....	61
8.2.3.3	Transmitter spectrum emission mask for UL-MIMO.....	61
8.2.3.3.1	Definition.....	61
8.2.3.3.2	Limits .....	61
8.2.3.3.3	Conformance .....	61
8.2.4	Transmitter Spurious Emissions .....	61
8.2.4.1	Transmitter spurious emissions for Single Carrier.....	61
8.2.4.1.1	Definition.....	61
8.2.4.1.2	Limits .....	61
8.2.4.1.3	Conformance .....	63
8.2.4.2	Transmitter spurious emissions for intra-band contiguous Carrier Aggregation (DL CA and UL CA).....	63
8.2.4.2.1	Definition.....	63
8.2.4.2.2	Limits .....	64
8.2.4.2.3	Conformance .....	65
8.2.4.3	Transmitter spurious emissions for UL-MIMO .....	65
8.2.4.3.1	Definition.....	65
8.2.4.3.2	Limits .....	65
8.2.4.3.3	Conformance .....	65
8.2.5	Transmitter Minimum Output Power.....	66
8.2.5.1	Transmitter minimum output power for Single Carrier.....	66
8.2.5.1.1	Definition.....	66
8.2.5.1.2	Limits .....	66
8.2.5.1.3	Conformance .....	66
8.2.5.2	Transmitter minimum output power for intra-band contiguous Carrier Aggregation (DL CA and UL CA) .....	66
8.2.5.2.1	Definition.....	66
8.2.5.2.2	Limits .....	66
8.2.5.2.3	Conformance .....	66
8.2.5.3	Transmitter minimum output power for UL-MIMO.....	67
8.2.5.3.1	Definition.....	67
8.2.5.3.2	Limits .....	67
8.2.5.3.3	Conformance .....	67
8.2.6	Receiver Adjacent Channel Selectivity (ACS) .....	67
8.2.6.1	Definition .....	67

8.2.6.2	Limits .....	67
8.2.6.3	Conformance .....	68
8.2.7	Receiver Blocking Characteristics .....	68
8.2.7.1	Definition .....	68
8.2.7.2	Limits .....	68
8.2.7.3	Conformance .....	70
8.2.8	Receiver Spurious Response .....	70
8.2.8.1	Definition .....	70
8.2.8.2	Limits .....	70
8.2.8.3	Conformance .....	71
8.2.9	Receiver Intermodulation Characteristics .....	71
8.2.9.1	Definition .....	71
8.2.9.2	Limits .....	71
8.2.9.3	Conformance .....	71
8.2.10	Receiver Spurious Emissions .....	72
8.2.10.1	Definition .....	72
8.2.10.2	Limits .....	72
8.2.10.3	Conformance .....	72
8.2.11	Transmitter Adjacent Channel Leakage Power Ratio .....	72
8.2.11.1	Transmitter adjacent channel leakage power ratio for Single Carrier .....	72
8.2.11.1.1	Definition .....	72
8.2.11.1.2	Limits .....	72
8.2.11.1.3	Conformance .....	73
8.2.11.2	Transmitter adjacent channel leakage power ratio for intra-band contiguous Carrier Aggregation (DL CA and UL CA) .....	73
8.2.11.2.1	Definition .....	73
8.2.11.2.2	Limits .....	74
8.2.11.2.3	Conformance .....	74
8.2.11.3	Transmitter adjacent channel leakage power ratio for UL-MIMO .....	74
8.2.11.3.1	Definition .....	74
8.2.11.3.2	Limits .....	75
8.2.11.3.3	Conformance .....	76
9	Testing for compliance with technical requirements for non-aeronautical UE E-UTRA .....	76
9.1	Environmental conditions for testing .....	76
9.2	Interpretation of the measurement results .....	76
9.3	Radio test suites .....	77
9.3.1	Transmitter Maximum Output Power .....	77
9.3.1.1	Transmitter maximum output power for Single Carrier .....	77
9.3.1.1.1	Method of test .....	77
9.3.1.1.2	Test requirements .....	78
9.3.1.2	Transmitter maximum output power for intra-band contiguous Carrier Aggregation (DL CA and UL CA) .....	78
9.3.1.2.1	Method of test .....	78
9.3.1.2.2	Test requirements .....	79
9.3.1.3	Transmitter maximum output power for UL-MIMO .....	79
9.3.1.3.1	Method of test .....	79
9.3.1.3.2	Test requirements .....	80
9.3.2	Transmitter Spectrum Emission Mask .....	80
9.3.2.1	Transmitter spectrum emission mask for Single Carrier .....	80
9.3.2.1.1	Method of test .....	80
9.3.2.1.2	Test requirements .....	81
9.3.2.2	Transmitter spectrum emission mask for intra-band contiguous Carrier Aggregation (DL CA and UL CA) .....	81
9.3.2.2.1	Method of test .....	81
9.3.2.2.2	Test requirements .....	82
9.3.2.3	Transmitter spectrum emission mask for UL-MIMO .....	82
9.3.2.3.1	Method of test .....	82
9.3.2.3.2	Test requirements .....	82
9.3.3	Transmitter Spurious Emissions .....	83
9.3.3.1	Transmitter spurious emissions for Single Carrier .....	83
9.3.3.1.1	Method of test .....	83



9.3.3.1.2	Test requirements .....	83
9.3.3.2	Transmitter spurious emissions for intra-band contiguous Carrier Aggregation (DL CA and UL CA).....	84
9.3.3.2.1	Method of test.....	84
9.3.3.2.2	Test requirements .....	84
9.3.3.3	Transmitter spurious emissions for UL-MIMO .....	85
9.3.3.3.1	Method of test.....	85
9.3.3.3.2	Test requirements .....	85
9.3.4	Transmitter Minimum Output Power.....	85
9.3.4.1	Transmitter minimum output power for Single Carrier.....	85
9.3.4.1.1	Method of test.....	85
9.3.4.1.2	Test requirements .....	86
9.3.4.2	Transmitter minimum output power for intra-band contiguous Carrier Aggregation (DL CA and UL CA) .....	86
9.3.4.2.1	Method of test.....	86
9.3.4.2.2	Test requirements .....	87
9.3.4.3	Transmitter minimum output power for UL-MIMO .....	87
9.3.4.3.1	Method of test.....	87
9.3.4.3.2	Test requirements .....	88
9.3.5	Receiver Adjacent Channel Selectivity (ACS) .....	88
9.3.5.1	Method of test .....	88
9.3.5.1.1	Initial conditions .....	88
9.3.5.1.2	Procedure.....	89
9.3.5.2	Test requirements .....	89
9.3.6	Receiver Blocking Characteristics .....	89
9.3.6.1	Method of test .....	89
9.3.6.1.1	Initial conditions .....	89
9.3.6.1.2	In-Band Procedure.....	90
9.3.6.1.3	Out-Of-Band Procedure.....	90
9.3.6.1.4	Narrow-Band Procedure.....	91
9.3.6.2	Test requirements .....	91
9.3.7	Receiver Spurious Response .....	91
9.3.7.1	Method of test .....	91
9.3.7.1.1	Initial conditions .....	91
9.3.7.1.2	Procedure.....	91
9.3.7.2	Test requirements .....	92
9.3.8	Receiver Intermodulation Characteristics .....	92
9.3.8.1	Method of test .....	92
9.3.8.1.1	Initial conditions .....	92
9.3.8.1.2	Procedure.....	92
9.3.8.2	Test requirements .....	93
9.3.9	Receiver Spurious Emissions.....	93
9.3.9.1	Method of test .....	93
9.3.9.1.0	General .....	93
9.3.9.1.1	Procedure.....	93
9.3.9.2	Test requirements .....	93
9.3.10	Transmitter Adjacent Channel Leakage Power Ratio .....	94
9.3.10.1	Transmitter adjacent channel leakage power ratio for Single Carrier .....	94
9.3.10.1.1	Method of test.....	94
9.3.10.1.2	Test requirements .....	95
9.3.10.2	Transmitter adjacent channel leakage power ratio for intra-band contiguous Carrier Aggregation (DL CA and UL CA).....	95
9.3.10.2.1	Method of test.....	95
9.3.10.2.2	Test requirements .....	96
9.3.10.3	Transmitter adjacent channel leakage power ratio for UL-MIMO.....	96
9.3.10.3.1	Method of test.....	96
9.3.10.3.2	Test requirements .....	97
<b>Annex A (normative):</b>	<b>Relationship between the present document and the essential requirements of Directive 2014/53/EU .....</b>	<b>98</b>
<b>Annex B (informative):</b>	<b>Environmental profile specification .....</b>	<b>100</b>

B.0	General .....	100
B.1	Introduction .....	100
B.2	Temperature .....	100
B.3	Voltage .....	100
B.4	Test environment.....	101
<b>Annex C (informative):</b>	<b>Bibliography.....</b>	<b>102</b>
History .....		103

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## Foreword

This Harmonised European Standard (EN) has been produced by ETSI Technical Committee Satellite Earth Stations and Systems (SES).

The present document has been prepared under the Commission's standardisation request C(2015) 5376 final [i.13] to provide one voluntary means of conforming to the essential requirements of Directive 2014/53/EU on the harmonisation of the laws of the Member States relating to the making available on the market of radio equipment and repealing Directive 1999/5/EC [9].

Once the present document is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of the present document given in Table A.1 confers, within the limits of the scope of the present document, a presumption of conformity with the corresponding essential requirements of that Directive, and associated EFTA regulations.

The present document is part 2 of a multi-part deliverable covering the Harmonised Standard for Mobile Earth Stations (MES) operating in the 1 980 MHz to 2 010 MHz (earth-to-space) and 2 170 MHz to 2 200 MHz (space-to-earth) frequency bands covering the essential requirements of article 3.2 of the Directive 2014/53/EU, as identified below:

Part 1: "Complementary Ground Component (CGC) for wideband systems";

**Part 2: "User Equipment (UE) for wideband systems";**

Part 3: "User Equipment (UE) for narrowband systems".

### National transposition dates

Date of adoption of this EN:	30 May 2016
Date of latest announcement of this EN (doa):	31 August 2016
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	28 February 2017
Date of withdrawal of any conflicting National Standard (dow):	28 February 2018

## Modal verbs terminology

In the present document "**shall**", "**shall not**", "**should**", "**should not**", "**may**", "**need not**", "**will**", "**will not**", "**can**" and "**cannot**" are to be interpreted as described in clause 3.2 of the [ETSI Drafting Rules](#) (Verbal forms for the expression of provisions).

"**must**" and "**must not**" are **NOT** allowed in ETSI deliverables except when used in direct citation.

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## 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 RE Directive [9]. The modular structure is shown in ETSI EG 201 399 [i.3].

**iTeh STANDARD PREVIEW**  
(standards.iteh.ai)

Full standard:  
<https://standards.iteh.ai/catalog/standards/sist/768386ba-bb2e-4b05-9c3e-41b40381305/etsi-en-302-574-2-v2.1.1-2016-06>

# 1 Scope

The present document applies to User Equipment (UE) radio equipment type which has the following characteristics:

- these UEs have both transmit and receive capabilities and operate in an hybrid Satellite/terrestrial network i.e. a satellite and/or Complementary Ground Component (CGC) network;
- the satellite component is based on GSO;
- these UEs operate with an assigned channel signal bandwidth (CBw) of 1 MHz or greater;
- these UEs may be handset, handheld, portable, vehicle-mounted, aircraft mounted device (in this case the present document refers to Aeronautical Terminal - AT) host connected, semi-fixed or fixed equipment, or may be an element in a multi-mode terminal. It may consist of a number of modules with associated connections and user interface, or may be a self contained single unit;
- if the UE is an element in a multi-mode terminal, unless otherwise stated in the present document, its requirements apply only to the UE element of the terminal operating in the Mobile Satellite Service (MSS) frequency bands given in Table 1;
- the present document applies for several class of UEs:
  - UE for terrestrial use Power Class 1 - clauses 4 and 5;
  - UE for terrestrial use Power Class 1bis - clauses 4 and 5;
  - UE for terrestrial use Power Class 2 - clauses 4 and 5;
  - UE for terrestrial use Power Class 3 - clauses 4 and 5;
  - UE for aeronautical use (Aeronautical Terminal - AT) - clauses 6 and 7;
  - UE for terrestrial use (non-aeronautical UE E-UTRA) - clauses 8 and 9;
- the Aeronautical Terminals (AT) operates at altitude of 1 000 m and higher above ground level.

This radio equipment type is capable of operating in all or any part of the frequency bands given in Table 1.

**Table 1: Mobile Satellite Service UE frequency bands**

Operating band	Direction of transmission	UE frequency bands
I	Transmit	1 980 MHz to 2 010 MHz
	Receive	2 170 MHz to 2 200 MHz

The present document is intended to cover the provisions of Directive 2014/53/EU [9] (RE Directive) article 3.2, which states that "*Radio equipment shall be so constructed that it both effectively uses and supports the efficient use of radio spectrum in order to avoid harmful interference*".

NOTE 1: In addition to the unwanted emission limits defined in clauses 4.2.4 and 4.2.5 of the present document, additional operational constraints may be required to prevent harmful interference into services operating in the neighbouring bands outside the operational band defined in Table 1.

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 RE Directive [9] may 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>.