



EUROPEAN COMMISSION

Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs
and
Communications Networks Content & Technology Directorate-General

Notification of radio interface specifications and radio equipment classes

Notification template and guidance

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RSCOM / TCAM RIS Template

[COUNTRY]		Radio Interface Specification		[TITLE]	[REFERENCE NUMBER]	[EDITION / DATE]
	Nr	Parameter	Description	Comments		
Normative part	1	Radiocommunication Service				
	2	Application				
	3	Frequency band				
	4	Channelling				
	5	Modulation / Occupied bandwidth				
	6	Direction / Separation				
	7	Transmit power / Power density				
	8	Channel access and occupation rules				
	9	Authorisation regime				
	10	Additional essential requirements				
	11	Frequency planning assumptions				
Informative part	12	Planned changes				
	13	Reference				
	14	Notification number				
	15	Remarks				

Guide for RSCOM / TCAM Radio Interface Specifications

Foreword

This guide lays down a common template for the publication of RSCOM / TCAM Radio Interface Specifications (RSCOM / TCAM RIS, further referred as RIS in this guide).

This guide has been developed in order to inform interested parties about the conditions for the use of radio spectrum in the countries of the EU and EFTA.).The content of RIS covers the needs of RED and radio spectrum harmonisation decisions. Other requirements coming from other legislation may apply to the radio equipment but not part of RIS.

Scope

This guide should be used by Member States and EFTA states when preparing and publishing RIS which they regulate.

The Commission should use the same model for RIS of equipment classified as Class 1 according to Commission Decision 2000/299/EC and for RSCOM / TCAM RIS of implementing measures under the Radio Spectrum Decision 676/2002/EC. Subclasses of Class 1 are published on [Radio Equipment Directive \(RED\) - European Commission](#)

This guide defines a number of parameters which can be used to regulate the conditions of use of radio spectrum.

This guide clarifies where (= under which item) the technical characteristics of a RIS are to be included in order to harmonise the presentation.

The template described in this guide consists of two parts:

- a normative part (Radio Interface), which contains the list of parameters which can be used to regulate the use of the radio spectrum;
- an informative part, which includes elements of information relevant to the Radio Interface.

The use of this template facilitates the publication of all the RIS on the common information platform EFIS (ECO Frequency Information System – www.efis.dk). This platform will form the basis for the spectrum information portal of the EU.

General requirements

Each regulated parameter must be justified by the need to ensure the efficient use of the radio spectrum and the avoidance of harmful interference or other public interest requirements.

The normative part should not contain other parameters than those that are contained in the table below. Any cross references to standards shall not be included in the normative part, but only in the informative part. The normative part may include contents from standards only if they do not relate with any of the requirements of the applicable EU legislation, including Directive 2014/53/EU and they do not constitute technical specifications providing a presumption of conformity with any of the essential requirements of the applicable EU legislation, including Directive 2014/53/EU.

Equipment should be so constructed that, as a minimum, the same level of protection is guaranteed as laid down in the applicable Harmonised Standard giving presumption of conformity with Directive 2014/53/EU.

Disclaimer

The template and this guidance are not binding in the sense of a legal act adopted by any of the EU institutions.

References

[Directive 2014/53/EU](#)¹,

[Framework Directive 2002/21/EC](#)²,

[Authorisation Directive 2002/20/EC](#)³;

[Radio Spectrum Decision 676/2002/EC](#)⁴,

Decision 2000/299/EC⁵ (R&TTE [classification decision](#)),

Decision 2007/344/EC⁶ ([Spectrum Information decision](#))

ERC [Report 25](#) on the European Common Allocation Table (ECA) ⁷

¹ Directive 2014/53/EU of the European Parliament and of the Council of 16 April 2014 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; OJEU L 153, 22.05.2014, p. 62-106.

² Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services (Framework Directive); OJ L 108, 24.4.2002, p. 33–50.

³ Directive 2002/20/EC of the European Parliament and of the Council of 7 March 2002 on the authorisation of electronic communications networks and services (Authorisation Directive); OJ L 108, 24.4.2002, p. 21–32

⁴ Decision No 676/2002/EC of the European Parliament and of the Council of 7 March 2002 on a regulatory framework for radio spectrum policy in the European Community (Radio Spectrum Decision); *OJ L 108, 24.4.2002, p. 1–6*

⁵ 2000/299/EC: Commission Decision of 6 April 2000 establishing the initial classification of radio equipment and telecommunications terminal equipment and associated identifiers (notified under document number C(2000) 938) (Text with EEA relevance); OJ L 97, 19.4.2000, p. 13–14.

⁶ 2007/344/EC: Commission Decision of 16 May 2007 on harmonised availability of information regarding spectrum use within the Community (notified under document number C(2007) 2085) (Text with EEA relevance); OJ L 129, 17.5.2007, p. 67–70.

⁷ The European Table of Frequency Allocations and Utilisations in the Frequency Range 9 kHz to 1000 GHz (Lisboa 02 – Dublin 03 – Kusadasi 04 – Copenhagen 04 – Nice 07)

[ECC/DEC/\(01\)03](#) on ECO Frequency Information System (EFIS) ⁸

ITU Radio Regulations ([RR](#))

⁸ ECC Decision of 15 November 2001 on ERO Frequency Information System (EFIS), amended 5 October 2007, (ECC/DEC/(01)03)

Normative part

Nr	Parameter	Description	Comments
1	Radiocommunication Service	Radiocommunication Service according to ECC/DEC/(01)03, Annex 1 if applicable.	
2	Application	Application according to ECC/DEC/(01)03, Annex 2. Description of allowed application(s) within the frequency band if applicable.	Application details. In particular cases specific provisions may be given to define the application (kind of use and assigned frequencies within the band etc.) or which user groups may get frequencies.
3	Frequency band	Lower and upper limits of the frequency band where the particular technical interface regulations are valid. The transmitting frequency band limits are given as channel edges rather than centre frequencies of lowest and highest channels within the band. Several transmitting frequency bands, using the same Radio Interface parameters, may be specified.	The transmit centre frequency may be specified or additional information regarding the receive frequencies may be given.
4	Channelling	Description of channelling or channel spacing.	In addition to the channel spacing, the centre or reference frequencies (e.g. min. / max. frequencies) to be used for the referred emissions may be defined for different channel spacing in some RIS. The method of multiplexing may be covered in relevant cases.
5	Modulation Occupied bandwidth /	Designation of emission in accordance with Article 2.7 (Appendix 1) of the ITU Radio Regulations (RR) or description of modulation using other terms.	
6	Direction Separation /	Duplex direction and separation if applicable.	
7	Transmit power / Power density	The maximum transmit power (upper power limit), is normally specified in radiated power or radiated power flux density (e.r.p, e.i.r.p., etc.) and direction (angle, polarization). Alternatively electromagnetic field strength can be given as a function of distance or area.	For applications authorised on an individual basis, the maximum radiated power, the radiated power flux density or the maximum conducted output power, and in some cases, also the lower power limit may be specified in the licence provisions only.

		<p>Where justified, the maximum conducted output power / conducted power density of the transmitter may be specified as an alternative.</p> <p>For certain applications the minimum transmit power / power flux density (lower power limit) may be specified.</p>	
8	Channel access and occupation rules	<p>Channel access and occupation rules specify the obligations to protect other applications in the same band or to facilitate sharing between the applications using the same band and when justified in adjacent bands. This is done by :</p> <ul style="list-style-type: none"> • requiring the level of protection and/or mitigation which results from the use of validated mitigation and spectrum access techniques in the Harmonised Standard. Pending the adoption of Harmonised Standards the RIS can specify or refer to spectrum access and mitigation techniques which is/are considered adequate. • defining the electromagnetic field strength value not to be exceeded at the location of the other (protected) user(s) or at the boundary of a certain geographical area (e.g. radio astronomy sites). 	<p>Channel occupation rules are imposed mostly on the equipment exempted from individual authorisation and in some cases on the equipment used on an individual authorisation basis, using shared channels.</p> <p>Equipment shall implement appropriate spectrum access and mitigation techniques on condition it achieves at least an equivalent level of protection and/or mitigation (taking in account the different potentially interfered applications) as achieved by compliance with the harmonised standard.</p>
9	Authorisation regime	<p>This field may be used by national regulatory authorities to indicate if an individual authorisation or a “general authorisation” is foreseen.</p>	<p>This field should specify the authorisation regime as much as necessary to ensure the proper functioning of the internal market.</p> <p>This field should be used to define special geographical area or time restrictions for the use of radio stations within a country (indoor use, radio astronomy sites, airports, etc.)</p> <p>The comments in this field, may also give additional information such as temporary authorisation or user registration requirements.</p> <p>Some authorisations may be issued entirely on non-interference / non-protected basis or exclusive/non-exclusive.</p> <p>Alternatives for authorisation are used. If individual frequency assignment is required for use, then an individual authorisation is always required. This may also be the case for some other</p>

			reasons, e.g. to issue call signs to radio stations, or where it is necessary at least to know the users (registration). In some countries, exemption from individual authorisation is called as “general authorisation” or “class licence”, if there is a need to establish general rules for the use of spectrum. In some other countries only the term “licence exemption” is used, even if this may also stipulate conditions for use. It can be foreseen that, in the future, also the authorisation method (first come first served, beauty contest etc.) and licence fees or spectrum pricing may need to be described.
10	Additional essential requirements according to Art. 3.3 of Directive 2014/53/EU	This field is used to indicate special requirements effective via Commission act (s) invoking Article 3.3 of Directive 2014/53/EU.	Additional information if appropriate. Typically Commission acts impose specific quality levels to be achieved for safety of life and other applications.
11	Frequency planning assumptions	The frequency planning assumptions may cover additional aspects such as receiver parameters, spurious emission and out of band emissions masks, assumed antenna characteristics and radio environment. These assumptions are taken into account for network planning purposes and in the case of harmful interference to the radio services.	The main reason of stating the frequency planning assumptions is that the relevant Harmonised Standard may not contain in all cases all the parameters used/needed: <ul style="list-style-type: none"> • in interference calculations for new frequency assignments, or; • in international co-ordination processes, or; • in compatibility analysis (e.g. deployment assumptions).

Informative Part

Nr	Parameter	Description	Comments
12	Planned changes	Any planned changes or indication of evolution	

13	Reference	EC Decisions Harmonised Standards CEPT / ECC Decisions or Recommendations National Frequency Allocation Table	Only the version(s) mentioned in the most recent publication of the list of Harmonised Standards give(s) presumption of conformity. It is common to foresee a transition period for the earlier versions. Only Harmonised Standards covering Article 3.2 and Article 3.3 requirements are mentioned.
14	Notification number	Identification number of RIS notification to EU and/or WTO.	
15	Remarks	Additional information may be given in this field.	