ECC Decision (01)03

ECO Frequency Information System (EFIS)[1]

approved 15 November 2001

amended 17 November 2017

Annex 1 amended 9 October 2026

Annex 2 amended 31 March 2026

Annex 5 amended 9 October 2026

[1] Comparable technical specifications to those given in this ECC Decision are given in EC Decision 2007/344/EC. EU Member States and, if so approved by the EEA Joint Committee, Iceland, Liechtenstein and Norway are obliged to implement the EC Decision.

EXPLANATORY MEMORANDUM

1 INTRODUCTION

Understanding how frequencies are actually utilised is an important step in harmonising spectrum within Europe and beyond. Industry, the European Commission and administrations have expressed a strong interest in having a database containing frequency utilisation information that is comparable across Europe.

Its purpose would be

- to give the CEPT a tool to illustrate the extent of harmonisation within Europe,
- to allow administrations to quickly search for and compare spectrum utilisation information of other CEPT countries, and
- to meet the European Commission and industry requirements that have been made known to CEPT at many occasions.

The ERO made a proposal to develop the ERO Frequency Information System (EFIS), now ECO Frequency Information System that would fulfil this purpose. The development of EFIS takes place in close collaboration with those that have to input information into EFIS (i.e. administrations) and those that will use the information contained in EFIS (i.e. administrations, industry and other interested parties). Comments from EICTA (European Information and Communications Technology Industry association) and ETSI (European Telecommunications Standards Institute) have been received encouraging CEPT to develop EFIS and signalling that industry is willing to support this process with their expertise.

2 BACKGROUND

The issue of frequency databases has been discussed for some time and it is evident that there are many different approaches that have been taken on the national level in presenting frequency data. Discussions have also shown that administrations are reluctant to having all national frequency data collected in one central place and to providing additional resources beyond those needed on the national level.

EFIS can basically be described as a search engine that allows the user to search for a specific utilisation in one or more CEPT countries, thus enabling a comparison between the Radio Regulations, the European table (ERC Report 25) and current national utilisations. The result of the search is a list of frequency bands or a frequency range showing the relevant allocations and applications. Further details are not necessarily contained in EFIS, but can be accessed via a link to the relevant national table or to other important documents. The limitation of the actual database to concise information simplifies the task and the expected workload, while providing a commonly accessible search and comparison tool that complements and adds value to the national initiatives.

One of the main objectives of EFIS is to ensure that it provides good quality information, which is regularly updated and maintained. This ECC Decision is the mechanism for ensuring that this objective is met. Furthermore, this ECC Decision provides two lists of harmonised terms, which are essential for making an efficient and meaningful search for frequency information. Especially the List of Searchable Applications in Annex 2, is an important part of EFIS, because it describes the utilisation of a certain frequency band. This is key information that industry is interested in and the terms provide the starting point for a more detailed search in the national frequency tables, which are established and maintained by administrations.

Just like the List of Radio Services in the ITU RR in Annex 1, the List of Searchable Applications in Annex 2 has several layers of detail that allow administrations to choose the level of detail it would like to indicate within a certain frequency band. When searching for and comparing information EFIS makes use of these layers. For example, a search for a specific term in layer 2 will automatically start a search for all terms in layer 3 under that specific term. This functionality allows for an efficient and meaningful comparison, even though each administration has the flexibility to choose the level of detail it would like to indicate in a specific band. Annex 3 contains the list of parameters for radio interfaces in EFIS, developed on the basis of the template and the guide developed by TCAM RIG II and adopted by TCAM. The use of these parameters in EFIS allows an

efficient comparison of interfaces within Europe. In Annex 4 a standard for information on the right of use for frequency bands of high economic interest, where market mechanisms apply, is given.

3 REQUIREMENT FOR AN ECC DECISION

Administrations have developed different formats for presenting national frequency utilisation information. Furthermore, it is often difficult to compare the information contained in the numerous national tables, because of different expressions and languages being used. Consequently, there is a need for a tool that provides administrations, industry and the interested public with comparable spectrum information. This information will then lead the user to more detailed information on the national level or it will give a reliable picture of the spectrum harmonisation that has been achieved in Europe. For this tool to be successful administrations must agree upon a harmonised list of terms to be used as well as a procedure that will ensure that the information that has been collected is updated regularly and of good quality.

An ECC Decision will ensure that the harmonised terms and procedures, which are essential for the success of the system, are used by administrations and ECO when entering data into EFIS.

ECC DECISION OF 15 NOVEMBER 2001 ON ECO FREQUENCY INFORMATION SYSTEM (EFIS) (ECC/DEC/(01)03) AMENDED ON 17 NOVEMBER 2017

"The European Conference of Postal and Telecommunications Administrations,

considering

a) that administrations, industry, and the European Commission have expressed a strong interest in having a database containing frequency utilisation information that is comparable across Europe;

b) that EFIS is designed to fulfil this requirement;

c) that the data collected in EFIS is to be used for a meaningful search and comparison of spectrum information available within CEPT member countries;

d) that for EFIS to be successful administrations must agree upon a harmonised list of terms to be used as well as a procedure that will ensure that the information that has been collected is updated regularly and of good quality;

e) the decision taken at the 12th meeting of the ERO Council to make available the necessary resources within ERO in order to fulfil the tasks required under this Decision;

f) that the List of Searchable Applications aims to facilitate an efficient and meaningful search and not a legally binding description of the applications used on the national level;

g) there is a need to administer and further develop EFIS;

h) that there is a need to establish a contact person within each administration for the maintenance of the national frequency information;

i) that the future development of EFIS should take into account the RE Directive (2014/53/EU), the Decision 676/2002/EC of the European Parliament and Council on a regulatory framework for radio spectrum policy in the EC, the ECC/DEC/(03)05 and its future revisions on publication of National Tables of Frequency Allocations (NTFAs) and the publication of national frequency utilisation information;

j) that recital 24 of the RE Directive (2014/53/EU) states that Member States are to use the Frequency Information System (EFIS) of the European Communications Office (ECO) in order to make comparable information regarding the use of radio spectrum in each Member State available to the public via the internet;

k) that there is considerable difference in national licensing, laws and regulations;

l) that the EU Member States and Iceland, Liechtenstein and Norway adopted the EC Decision 2007/344/EC of 16 May 2007 which makes it mandatory for those countries to provide information on the radio interface specifications and rights of use of radio spectrum in accordance with Decides 2, however, the EC Decision does not apply to other CEPT countries which may provide the information on an optional basis;

m) that there is a need to limit the amount of resources needed to update and maintain EFIS as far as possible;

n) that the duplication of information should be avoided as far as possible;

o) that the availability of NTFAs in the English language and in PDF format would be preferable.

DECIDES

1. Administrations shall enter and maintain the following mandatory data into EFIS:
   a) Spectrum allocations on a national level according to the List of Radio Services in the ITU RR in Annex 1;
   b) Spectrum applications on a national level according to the List of Searchable Applications in Annex 2;
   c) A Contact Person within the Administration who will be responsible for the maintenance of the national frequency information related to EFIS.

2. Administrations should enter and maintain the following data into EFIS:
   a) Radio interface specifications on a national level according to the template in Annex 3;
   b) Right of use information on a national level only for frequency bands for electronic communication services, where spectrum trading is allowed or where comparative or competitive selection procedures are used according to the model in Annex 4.

3. Administrations may enter and maintain the following optional data into EFIS:
   a) Short comments related to an allocation or application;
   b) Documents or hyperlinks that can be filed within EFIS according to a frequency band, an application or both (e.g. related to Activities or RE interface information).

4. Administrations shall provide ECO with a copy of their most detailed public national frequency table (e.g. NTFA or frequency utilisation table) in a format acceptable to ECO. The table should be sent to ECO no later than one week after publication.

5. ECO shall[1] enter and maintain the data in EFIS related to the Radio Regulations (Region 1), the European Table of Frequency Allocations and Utilisations, and other appropriate tables that are not maintained by an administration.

6. ECO shall[1] administer EFIS and execute further developments of EFIS according to agreements reached in the ECC and the ECO Council.

7. For uploading or downloading data to or from EFIS by administrations, the Harmonised Interface in Annex 5 shall be used. Administrations with a national frequency database are encouraged to develop a software tool that will allow automatic transfer of relevant data from their database into EFIS. This will allow for easy updating and maintenance of allocations, applications, radio interfaces and right of use information.

8. The List of Radio Services in the ITU RR, the List of Searchable Applications and the Harmonised Interface are the valid versions when this Decision comes into force. Depending on regulatory and market developments, the ECC or a delegated subgroup may develop new versions of these annexes subject to positive acceptance by administrations that have committed themselves to this Decision without the need for Public Consultation. ECO shall[2] archive all versions and distribute any new versions to all Contact Persons stating when the new version will come into force. The List of Searchable Applications shall be reviewed at least once a year through a procedure initiated by ECO.

9. that this Decision shall enter into force on 15 May 2012;

10. that CEPT Member administrations shall communicate the national measures implementing this Decision to the ECC Chair and the European Communications Office when the Decision is nationally implemented."

Note:

Please check the ECO Documentation Database https://docdb.cept.org/ for the up to date position on the implementation of this and other ECC Decisions.

[2] Subject to approval by the ECO Council

ANNEX 1: LIST OF RADIO SERVICES IN THE ITU RADIO REGULATIONS (RR)

This is the list of services, which have an allocation in Article 5 of the RR.

For the purpose of this decision the List of Radio Services in the ITU RR is divided into three layers of detail in accordance with the definitions given in the RR. When searching for and comparing information EFIS makes use of these layers. For example, a search for a specific term in layer 2 will automatically start a search for all terms in layer 3 under that specific term. If nothing is found in either layer 2 or 3, EFIS also checks layer 1 and informs the user if there is a hit.

Table 1: Layer 1 to 3 structure in EFIS in the allocations

Layer 1	Layer 2	Layer 3
Amateur		
Amateur-satellite		
Broadcasting		
Broadcasting-satellite		
Earth exploration-satellite	Earth exploration-satellite (active) Earth exploration-satellite (passive) **Meteorological-satellite**	
Fixed		
Fixed-satellite		
Inter-satellite		
Mobile	Aeronautical mobile	Aeronautical mobile (R) Aeronautical mobile (OR)
	Land mobile	
	Maritime mobile	Maritime mobile (distress and calling) Maritime mobile (distress and calling via DSC)
	Mobile (distress and calling)	
	Mobile except aeronautical mobile	Mobile except aeronautical mobile (R)

Layer 1	Layer 2	Layer 3
Mobile-satellite	**Aeronautical mobile-satellite**	**Aeronautical mobile-satellite (R)** **Aeronautical mobile-satellite (OR)**
	Land mobile-satellite	
	Maritime mobile-satellite	
	Mobile-satellite except aeronautical mobile-satellite	**Mobile-satellite except aeronautical mobile-satellite (R)**
	Mobile-satellite except maritime mobile satellite	
Meteorological aids		
Radio astronomy		
Radiodetermination	Radionavigation	Aeronautical radionavigation Maritime radionavigation Maritime radionavigation (radiobeacons)
	Radiolocation	
Radiodetermination-satellite	**Radionavigation-satellite**	**Aeronautical radionavigation-satellite** **Maritime radionavigation-satellite**
	Radiolocation-satellite	
Space operation	Space operation (satellite identification)	
Space research	Space research (active) **Space research (deep space)** Space research (passive)	
Standard frequency and time signal		
Standard frequency and time signal-satellite		

Note:
For bolded services it is possible to give additions/attributes (space-to-Earth, Earth-to-space, space-to-space and frequencies for standard frequency and time signal).
An alphabetical list of services with all additions as used in the EFIS database, and existing combinations of additions/attributes for allocations is provided below.
Some allocation terms are specifically used in CEPT.

Table 2: List of searchable allocations in alphabetic order

Radiocommunication Service	Layer
Aeronautical mobile	2
Aeronautical mobile (OR)	3
Aeronautical mobile (R)	3
Aeronautical mobile-satellite	2
Aeronautical mobile-satellite (OR)	3
Aeronautical mobile-satellite (R)	3
Aeronautical mobile-satellite (R) (Earth-to-space)	3
Aeronautical radionavigation	3
Aeronautical radionavigation-satellite	3
Amateur	1
Amateur-satellite	1
Amateur-satellite (Earth-to-space)	2
Amateur-satellite (space-to-Earth)	2
Broadcasting	1
Broadcasting-satellite	1
Earth exploration-satellite	1
Earth exploration-satellite (active)	2
Earth exploration-satellite (Earth-to-space)	2
Earth exploration-satellite (Earth-to-space) (space-to-space)	2
Earth exploration-satellite (passive)	2
Earth exploration-satellite (space-to-Earth)	2
Earth exploration-satellite (space-to-Earth) (space-to-space)	2
Fixed	1
Fixed-satellite	1
Fixed-satellite (Earth-to-space)	2
Fixed-satellite (Earth-to-space) (space-to-Earth)	2
Fixed-satellite (space-to-Earth)	2
Fixed-satellite (space-to-Earth) (Earth-to-space)	2
Inter-satellite	1
Land mobile	2

Radiocommunication Service	Layer
Land mobile-satellite	2
Land mobile-satellite (Earth-to-space)	3
Land mobile-satellite (space-to-Earth)	3
Maritime mobile	2
Maritime mobile (distress and calling via DSC)	3
Maritime mobile (distress and calling)	3
Maritime mobile-satellite	2
Maritime mobile-satellite (Earth-to-space)	3
Maritime mobile-satellite (space-to-Earth)	3
Maritime radionavigation	3
Maritime radionavigation (radiobeacons)	3
Maritime radionavigation-satellite	3
Meteorological aids	1
Meteorological-satellite	2
Meteorological-satellite (Earth-to-space)	3
Meteorological-satellite (space-to-Earth)	3
Mobile	1
Mobile (distress and calling)	2
Mobile except aeronautical mobile	2
Mobile except aeronautical mobile (R)	3
Mobile-satellite	1
Mobile-satellite (Earth-to-space)	2
Mobile-satellite (space-to-Earth)	2
Mobile-satellite except aeronautical mobile-satellite	2
Mobile-satellite except aeronautical mobile-satellite (Earth-to-space)	3
Mobile-satellite except aeronautical mobile-satellite (R)	3
Mobile-satellite except maritime mobile-satellite	2
Mobile-satellite (space-to-Earth) except maritime mobile satellite (space-to-Earth)	3
Radio astronomy	1
Radiodetermination	1
Radiodetermination-satellite	1

Radiocommunication Service	Layer
Radiodetermination-satellite (Earth-to-space)	2
Radiodetermination-satellite (space-to-Earth)	2
Radiolocation	2
Radiolocation-satellite	2
Radiolocation-satellite (space-to-Earth)	3
Radionavigation	2
Radionavigation-satellite	2
Radionavigation-satellite (Earth-to-space)	3
Radionavigation-satellite (space-to-Earth)	3
Radionavigation-satellite (space-to-Earth) (space-to-space)	3
Radionavigation-satellite (space-to-space)	3
Space operation	1
Space operation (Earth-to-space)	2
Space operation (Earth-to-space) (space-to-space)	2
Space operation (space-to-Earth)	2
Space operation (space-to-Earth) (space-to-space)	2
Space operation (satellite identification)	2
Space research	1
Space research (active)	2
Space research (deep space)	2
Space research (deep space) (Earth-to-space)	3
Space research (deep space) (space-to-Earth)	3
Space research (Earth-to-space)	2
Space research (Earth-to-space) (space-to-space)	2
Space research (passive)	2
Space research (space-to-Earth)	2
Space research (space-to-Earth) (space-to-space)	2
Space research (space-to-space)	2
Standard frequency and time signal	1
Standard frequency and time signal (10 000 kHz)	2
Standard frequency and time signal (15 000 kHz)	2

Radiocommunication Service	Layer
Standard frequency and time signal (2 500 kHz)	2
Standard frequency and time signal (20 000 kHz)	2
Standard frequency and time signal (20 kHz)	2
Standard frequency and time signal (25 000 kHz)	2
Standard frequency and time signal (5 000 kHz)	2
Standard frequency and time signal-satellite	1
Standard frequency and time signal-satellite (400.1 MHz)	2
Standard frequency and time signal-satellite (Earth-to-space)	2
Standard frequency and time signal-satellite (space-to-Earth)	2
Note: Some allocation terms are specifically used in CEPT.	

ANNEX 2: LIST OF SEARCHABLE APPLICATIONS

Explanatory Note

The list of Searchable Applications has been developed in order to allow an efficient and meaningful search for frequency information within Europe. It is based on the following principles:

1. The list should facilitate an efficient and meaningful search and not a legally binding description of the Application terms used;

2. The list should only use unambiguous terms, which give clear guidance for data entry and retrieval;

3. The List of Searchable Applications is complementary to the List of Radio Services in the ITU RR and it is meant to describe the actual utilisation of the frequency bands. In other words, the List of Radio Services in the ITU RR gives the regulatory framework and the List of Searchable Applications gives the actual use;

4. The List of Searchable Applications should allow administrations to associate the terms used on a national level with the terms used in the list.

The List of Searchable Applications is divided into three layers of detail. This allows each administration to choose the level of detail it would like to indicate within a certain frequency band. When searching for and comparing information EFIS makes use of these layers. For example, a search for a specific term in layer 2 will automatically start a search for all terms in layer 3 under that specific term. If nothing is found in either layer 2 or 3, EFIS also checks layer 1 and informs the user if there is a hit. This functionality allows for an efficient and meaningful comparison, even though each administration has the flexibility to choose the level of detail it would like to indicate in a specific band.

Wherever possible administrations should use the highest detail possible (layer 3) when entering data into EFIS. In general, layer 3 only represents a few more specific expressions that do not necessarily cover all possible applications of the relevant term in layer 2. Those applications that are not covered by these more specific expressions are to be associated with the more general term in layer 2 or even in Layer 1, if necessary.

Due to the fact that some detailed applications can belong to 2 or even more general applications, e.g. the detailed application GPS can be regarded as an aeronautical, maritime or military application, they may show up several times in the list when presented in hierarchical mode. In alphabetical presentation mode each term in the list is only mentioned once.

The layer 1 term TRA-ECS is to be used under certain conditions; i.e. notably for EU Member States to be in line with common EU regulatory approaches or by CEPT administrations for frequency bands for which they find the term applicable. In such case and when more detailed information is available, administrations are urged to fill in information in layers 2 and 3 corresponding to the applications currently in use as listed for the layer 1 applications: e.g. Aeronautical, Broadcasting, Fixed, Land Mobile, and Maritime.

When an application term is deleted from this Annex, it is still possible to keep the term in the EFIS database for existing information, but the database will not accept new information with the deleted application term. This can be seen for the editor of the information with an asterisk (*) behind the application term in the EFIS database.

The abbreviations used in Table 3 are described in Table 5 at the end of this annex.

Table 3: Layer 1 to 3 structure in EFIS in the applications

Layer 1	Layer 2	Layer 3
Aeronautical	Aeronautical communications	Aeronautical satcoms AGA communications (civil) SAR (communications) WAIC
	Aeronautical emergency	ELT
	Aeronautical navigation	ASDE Airborne doppler navigation aids Airborne weather radar Altimeters Beacons (aeronautical) DME GBAS ILS Loran C MLS SAR (navigation) VOR
	Aeronautical surveillance	ADS ASDE Primary radar SSR
	Aeronautical telemetry/telecommand	Aeronautical telemetry Aeronautical telecommand
	Satellite navigation systems	GALILEO GLONASS GPS
Broadcasting	Broadcasting (terrestrial)	AM sound analogue DRM DVB-T DVB-T2 FM sound analogue MWS T-DAB T-DAB+ TV analogue (terrestrial)
	Broadcasting (satellite)	Satellite radio Satellite TV SIT/SUT
Defence systems	Aeronautical military systems	AGA communications (military) IFF JTIDS/MIDS TACAN-DME

Layer 1	Layer 2	Layer 3
	Land military systems	Fixed radio relay (military) Tactical mobile Tactical radio relay
	Maritime military systems	Sonobuoy
	Meteorological aids (military)	
	Radiolocation (military)	Air-defence radar Tactical radar
	Satellite systems (military)	Earth exploration-satellite (military) GLONASS GPS Satellite communications (military)
	Telemetry/Telecommand (military)	Telemetry (military) Telecommand (military)
Fixed	BWA	BFWA FWA
	Point-to-Multipoint	MWS Scanning telemetry FWA Unplanned, uncoordinated fixed links
	Point-to-Point	Private fixed networks Public fixed networks Audio links Video links Unplanned, uncoordinated fixed links
Land mobile	BWA	
	Cordless communications for voice and data	DECT
	D-GPS	
	RMR	GSM-R FRMCS
	Inland waterway communications	
	ITS	
	Paging	NP2M On-site paging POCSAG Talkback pocket unit Wide area paging
	PMR/PAMR	PAMR PMR PMR 446 TETRA

Layer 1	Layer 2	Layer 3
		TETRAPOL
	PPDR	BBDR LAES PLB
	Telemetry/Telecommand (civil)	Scanning telemetry Telemetry (civil)
	WBB LMP	
Maritime	GMDSS	DSC EPIRBs INMARSAT C MSI NAVTEX SAR (communications) SAR (navigation) AMRD Group A
	Maritime communications	AIS Inland waterway communications INMARSAT On-board communications AMRD Group B
	Maritime navigation	Beacons (maritime) Inland waterway radar Loran C Maritime radar RTE SAR (navigation)
	Satellite navigation systems	GALILEO GLONASS GPS
Meteorology	Lightning detection systems	
	Oceanographic buoys	
	Sondes	
	Weather radar	
	Weather satellites	
	Wind profilers	
MFCN	Digital cellular	GSM MCA MCV
	IMT	
Other	Amateur	

Layer 1	Layer 2	Layer 3
	CB radio	
	GNSS Pseudolites	
	GNSS Repeater	
	HAPS	
	ISM	
	Land radionavigation	
	LPD-S	
	MBR	
	Meteor scatter communications	
	Radiolocation (civil)	
	Standard frequency and time signal	
	Tracking systems	
	UAS	
PMSE	Audio PMSE	In-ear monitors Radio microphones Audio links
	Video PMSE	Airborne Video Links Cordless cameras Video links
	Service links	Talkback
Radio astronomy	Continuum measurements	
	Spectral line observations	
	VLBI observations	
Radiolocation (civil)	Aeronautical radar	Airborne weather radar Primary radar
	Maritime radar	Inland waterway radar RTE
	Weather radar	Airborne weather radar
Satellite systems (civil)	Aeronautical satcoms	INMARSAT
	Amateur-satellite	
	Broadcasting (satellite)	Satellite radio Satellite TV SIT/SUT
	Earth exploration-satellite	Active sensors (satellite) Passive sensors (satellite) Synthetic aperture radar Weather satellites

Layer 1	Layer 2	Layer 3
	Feeder links	
	FSS Earth stations	AES ESIM ESV GSO ESOMPs HEST LEST NGSO ESOMPs SIT/SUT SNG VSAT NGSO FSS
	Inter-satellite links	
	Meteorological satcoms	
	MSS Earth stations	AES CGC INMARSAT IMT-2000 satellite component S-PCS
	Satellite navigation systems	GALILEO GLONASS GPS
	Space operations	
	Space research	Active sensors (satellite) Deep space (satellite) Passive sensors (satellite)
	Standard frequency and time signal-satellite	
	Weather satellites	
Short Range Devices	Active medical implants	Cochlear implant systems LP-AMI ULP-AMI ULP-AID ULP-MMI
	Alarms	Social alarms
	Inductive applications	
	Medical Data Acquisition	MBANS ULP-WMCE
	Model control	Flying model control
	Non-specific SRDs	
	Radiodetermination applications	BMA

Layer 1	Layer 2	Layer 3
		Detection of movement and alert GBSAR GPR/WPR LPR Material Sensing NMR TLPR
	Radio microphones and ALD	ALD ALS Radio microphones
	Railway applications	Eurobalise Euroloop
	RFID	
	Tracking, tracing and data acquisition	Animal tracking Asset tracking and tracing Emergency detection LAES LT2 Meter reading WIA
	TTT	Automotive radar Obstacle detection radar Road tolling SRR Vehicle and infrastructure radar
	UWB applications	BMA GPR/WPR LAES LT2 Material Sensing SRR
	Wideband data transmission systems	RLAN
	Wireless audio/multimedia	Baby monitoring LP FM Transmitter Cordless headphones and loudspeakers Narrow band analogue voice devices
	Non-beam WPT	

Table 4: List of searchable applications in alphabetic order

List of searchable applications:	Layer	Comment: (in case of addition of new term, term deleted, indicating reason for change of term etc., example deliverable where used)
Active medical implants	2	ERC/DEC/(01)17
Active sensors (satellite)	3	ECA Table
ADS	3	ECA Table
Aeronautical	1	ECA Table
Aeronautical communications	2	ECA Table
Aeronautical emergency	2	ECA Table
Aeronautical military systems	2	ECA Table
Aeronautical navigation	2	ECA Table
Aeronautical radar	2	ECA Table
Aeronautical satcoms	3(2)	ECA Table
Aeronautical surveillance	2	ECA Table
Aeronautical telecommand	3	ECA Table
Aeronautical telemetry	3	ECA Table
Aeronautical telemetry/telecommand	2	ECA Table
AES	3	ECC/DEC/(05)11
AGA communications (civil)	3	ECC/DEC/(06)05
AGA communications (military)	3	ECC/DEC/(06)05
Airborne doppler navigation aids	3	ECA Table
Airborne Video Links	3	ERC/REC 25-10
Airborne weather radar	3	ECA Table
Air-defence radar	3	-
AIS	3	ECA Table
Alarms	2	ERC/REC 70-03
ALD	3	ERC/REC 70-03
ALS	3	ERC/REC 70-03
Altimeters	3	ECA Table
AM sound analogue	1	-
Amateur	2	ECA Table
Amateur-satellite	2	ECA Table
AMRD Group A	3	ECC/DEC/(22)02
AMRD Group B	3	ECC/DEC/(22)02

List of searchable applications:	Layer	Comment: (in case of addition of new term, term deleted, indicating reason for change of term etc., example deliverable where used)
Animal tracking	3	-
ASDE	3	ECA Table
Asset tracking and tracing	3	ERC/REC 70-03
Audio Links	3	ERC/REC 25-10
Audio PMSE	2	ERC/REC 25-10
Automotive radar	3	ERC/REC 70-03
Baby monitoring	3	ERC/REC 70-03
BBDR	3	ECC/REC/(08)04
Beacons (aeronautical)	3	ECA Table
Beacons (maritime)	3	ECA Table
BFWA	3	ECC/REC/(06)04
BMA	3	ECC/DEC/(07)01
Broadcasting	1	ECA Table
Broadcasting (terrestrial)	2	ECA Table
Broadcasting (satellite)	2	ERC/DEC/(00)08
BWA	2	
CB radio	2	ECC/DEC/(11)03
CGC	3	ECC/DEC/(06)09
Cochlear implant systems	3	ERC/REC 70-03
Continuum measurements	2	ECA Table
Cordless cameras	3	ECC/REC/(02)09
Cordless headphones and loudspeakers	3	ERC/REC 70-03
Cordless communications for voice and data	2	ERC/DEC/(94)03
DECT	3	ERC/DEC/(94)03
Deep space (satellite)	3	ECA Table
Defence systems	1	ECA Table
Detection of movement and alert	3	ERC/REC 70-03
D-GPS	2	ECA Table
Digital cellular	2	ECA Table
DME	3	ECA Table
DRM	3	ECA Table

List of searchable applications:	Layer	Comment: (in case of addition of new term, term deleted, indicating reason for change of term etc., example deliverable where used)
DSC	3	ECA Table
DVB-T	3	ECA Table
Earth exploration-satellite	2	ECA Table
Earth exploration-satellite (military)	3	ECA Table
ELT	3	ECA Table
Emergency detection	3	ERC/REC 70-03
EPIRBs	3	ECA Table
ESIM	3	ECC/DEC/(18)04, ECC/DEC/(18)05
ESV	3	ECC/DEC/(05)09, ECC/DEC/(05)10
Eurobalise	3	ERC/REC 70-03
Euroloop	3	ERC/REC 70-03
Feeder links	2	ECA Table
Fixed	1	T/R 13-01
Fixed radio relay (military)	3	ECA Table
Flying model control	3	ERC/REC 70-03
FM sound analogue	3	ECA Table
FRMCS	3	ECC/DEC/(20)02
FSS Earth stations	2	ERC/DEC/(00)07
FWA	3	ECA Table, ECC/REC/(01)04
GALILEO	3	ECA Table
GBAS	3	ECA Table
GBSAR	3	ERC/REC 70-03, ECC/DEC/(21)02
GLONASS	3	ECA Table
GMDSS	2	ECA Table
GNSS Pseudolites	2	ECC/REC/(11)08
GNSS Repeater	2	ECC/REC/(10)02
GPS	3	ECA Table
GPR/WPR	3	ECC/DEC/(06)08
GSM	3	ERC/DEC/(97)02

List of searchable applications:	Layer	Comment: (in case of addition of new term, term deleted, indicating reason for change of term etc., example deliverable where used)
GSM-R	3	ECC/DEC/(02)05
GSO ESOMPs	3	ECC/DEC/(13)01
HAPS	2	ECA Table
HEST	3	ECC/DEC/(06)03
IFF	3	-
ILS	3	ECA Table
IMT-2000 satellite component	3	ECA Table
IMT	3	ECC/DEC/(06)01, ECC/DEC/(06)13, ECA Table
Inductive applications	2	ERC/REC 70-03
In-ear monitors	3	ERC/REC 70-03
Inland waterway communications	2(3)	ECA Table
Inland waterway radar	3	ECA Table
INMARSAT	3	-
INMARSAT C	2	-
Inter-satellite links	2	ECA Table
ISM	2	ECA Table
ITS	2	ECC/DEC/(08)01
JTIDS/MIDS	3	ECA Table
LAES	3	ECC/REC/(11)10
Land military systems	2	-
Land mobile	1	ECA Table
Land radionavigation	3	-
LPD-S	2	ECC/DEC/(25)02, ECA Table
LEST	3	ECC/DEC/(06)02
Lightning detection systems	2	ECA Table
Loran C	3	-
LP-AMI	3	ERC/REC 70-03
LP FM Transmitter	3	ERC/REC 70-03
LPR	3	ECC/DEC/(11)02
LT2	3	ECC/REC/(11)09

List of searchable applications:	Layer	Comment: (in case of addition of new term, term deleted, indicating reason for change of term etc., example deliverable where used)
Maritime	1	ECA Table
Maritime communications	2	ECA Table
Maritime military systems	2	ECA Table
Maritime navigation	2	ECA Table
Maritime radar	2(3)	ECA Table
Material Sensing	3	ECC/DEC/(07)01
MBANS	3	ERC/REC 70-03
MBR	2	ECC/REC/(17)03
MCA	3	ECC/DEC/(06)07
MCV	3	ECC/DEC/(08)08
Medical Data Acquisition	2	ERC/REC 70-03
Meteor scatter communications	2	ECA Table
Meteorological aids (military)	2	ECA Table
Meteorology	1	ECA Table
Meteorological satcoms	2	ECA Table
Meter reading	3	ECC/DEC/(05)02, ERC/REC 70-03
MFCN	1	ECC/DEC/(09)03, ECC/DEC/(15)01
MLS	3	ECA Table
Model control	2	ERC/REC 70-03
MSI	3	ECA Table
MSS Earth stations	2	ECC/DEC/(04)09
MWS	3	ECC/REC/(01)04
Narrow band analogue voice devices	3	ERC/REC 70-03
NAVTEX	3	ECA Table
NGSO ESOMPs	3	ECC/DEC/(15)04
NGSO FSS	3	ECC/DEC/(17)04
NMR	3	ERC/REC 70-03
Non-beam WPT	2	ERC/REC 70-03 (new annex under development)
Non-specific SRDs	2	ERC/REC 70-03
NP2M	3	ECA Table and ECC/DEC/(19)02

List of searchable applications:	Layer	Comment: (in case of addition of new term, term deleted, indicating reason for change of term etc., example deliverable where used)
Obstacle detection radar	3	ERC/REC 70-03
Oceanographic buoys	2	ECA Table
On-board communications	3	ECA Table
On-site paging	3	ECA Table
Other	1	-
Paging	2	ECC/DEC/(19)02
PAMR	3	ECC/DEC/(19)02
Passive sensors (satellite)	3	ECA Table
PLB	3	ECA Table
PMR	3	ECC/DEC/(19)02
PMR 446	3	ECC/DEC/(15)05
PMR/PAMR	2	ECC/DEC/(19)02
PMSE	1	ERC/REC 70-03, ERC/REC 25-10
POCSAG	3	-
Point-to-Multipoint	2	ECA Table
Point-to-Point	2	ECA Table
PPDR	2	ECC/DEC/(08)05, ECC/DEC/(16)02, ECC/REC/(16)03
Primary radar	3	ECA Table
Private fixed networks	3	-
Public fixed networks	3	-
Radio astronomy	1	ECA Table
Radio microphones	3	ERC/REC 70-03
Radio microphones and ALD	2	ERC/REC 70-03
Radiodetermination applications	2	ERC/REC 70-03
Radiolocation (civil)	2	ECA Table
Radiolocation (military)	2	ECA Table
Railway applications	2	ERC/REC 70-03
RFID	2	ERC/REC 70-03
RLAN	3	ECC/DEC/(04)08

List of searchable applications:	Layer	Comment: (in case of addition of new term, term deleted, indicating reason for change of term etc., example deliverable where used)
RMR	2	ECC/DEC/(20)02
Road tolling	3	ERC/REC 70-03
RTE	3	ECA Table
SAP/SAB and ENG/OB		Not used anymore, replaced by PMSE to be in line with ERC/REC 25-10, existing entries in EFIS will be transferred by ECO to the application term PMSE with comment field entry 'SAP/SAB and ENG/OB'
SAR (communications)	3	ECA Table
SAR (navigation)	3	ECA Table
Satellite communications (military)	3	ECA Table
Satellite navigation systems	2	ECA Table
Satellite radio	3	-
Satellite systems (civil)	1	ECA Table
Satellite systems (military)	2	ECA Table
Satellite TV	3	-
Scanning telemetry	3	-
Service Links	2	ERC/REC 25-10
Short Range Devices	1	ERC/REC 70-03
SIT/SUT	3	ERC/DEC/(00)08
SNG	3	ERC/REC 13-03
Social alarms	3	ERC/REC 70-03
Sondes	2	ECA Table
Sonobuoy	3	ECA Table
Space operations	2	ECA Table
Space research	2	ECA Table
S-PCS	3	ERC/DEC/(99)06
Spectral line observations	2	ECA Table
SRR	3	ECC/DEC/(04)03, ECC/DEC/(04)10
SSR	3	ECA Table
Standard frequency and time signal	2	ERC/REC 70-03

List of searchable applications:	Layer	Comment: (in case of addition of new term, term deleted, indicating reason for change of term etc., example deliverable where used)
Standard frequency and time signal-satellite	2	ERC/REC 70-03
Subscriber access excluding MWS	3	-
Synthetic aperture radar	3	ECA Table
TACAN-DME	3	ECA Table
Tactical mobile	3	ECA Table
Tactical radar	3	ECA Table
Tactical radio relay	3	ECA Table
Talkback	3	-
Talkback pocket unit	3	-
T-DAB	3	ECA Table
Telecommand (military)	3	ECA Table
Telemetry (civil)	3	ECA Table
Telemetry (military)	3	ECA Table
Telemetry/Telecommand (civil)	2	ECA Table
Telemetry/Telecommand (military)	2	ECA Table
TETRA	3	-
TETRAPOL	3	-
TLPR	3	ERC/REC 70-03
Tracking systems	2	-
Tracking, tracing and data acquisition	2	ERC/REC 70-03
TTT	2	ERC/REC 70-03, ECC/DEC/(16)01
TV analogue (terrestrial)	3	-
UAS	2	-
ULP-AID	3	ERC/REC 70-03
ULP-AMI	3	ERC/DEC/(01)17
ULP-MMI	3	ERC/REC 70-03
ULP-WMCE	3	ERC/REC 70-03
Unplanned, uncoordinated fixed links	3	-
UWB applications	2	ECC/DEC/(06)04

List of searchable applications:	Layer	Comment: (in case of addition of new term, term deleted, indicating reason for change of term etc., example deliverable where used)
Vehicle and infrastructure radar	3	ERC/REC 70-03
Video Links	3	ERC/REC 25-10
Video PMSE	2	ERC/REC 25-10
VLBI observations	2	ECA Table
VOR	3	ECA Table
VSAT	3	ERC/REC 13-03
WAIC	3	ECA Table
WBB LMP	2	ECC/DEC/(24)01, ECC/REC/(25)03 and ECA Table
Weather radar	2	ECA Table
Weather satellites	2(3)	ECA Table
WIA	3	ERC/REC 70-03 Annex 2
Wide area paging	3	ECC/DEC/(19)02
Wideband data transmission systems	2	ERC/REC 70-03
Wind profilers	2	ECA Table
Wireless audio/multimedia	2	ERC/REC 70-03

Table 5: List of abbreviations

Abbreviations	
ADS	Automatic Dependant Surveillance (Aeronautical)
AES	Aircraft Earth Station
AGA	Air-Ground-Air
AIS	Universal Shipborne Automatic Identification System
ALS	Assistive Listening Systems
AM	Amplitude Modulation
AMRD	Autonomous Maritime Radio Device
ALD	Assistive Listening Devices
ASDE	Airport Surface Detection Equipment
BBDR	Broad Band Disaster Relief
BFWA	Broadband Fixed Wireless Access
BWA	Broadband Wireless Access
CB	Citizen's Band
CGC	Complementary Ground Component
CT	Cordless Telephone
DECT	Digital Enhanced Cordless Telecommunications
D-GPS	Differential Global Positioning System
DME	Distance Measuring Equipment
DRM	Digital Radio Mondiale
DSC	Digital Selective Calling
DVB-T	Digital Video Broadcasting – Terrestrial
ELT	Emergency locator transmitter
ENG/OB	Electronic News Gathering / Outside Broadcasting
EPIRBs	Emergency Position Indicating Radio Beacons
ESIM	Earth Stations In-Motion
ESOMPs	Earth Stations On Mobile Platforms
ESV	Earth Stations on-board Vessels
FM	Frequency Modulation
FRMCS	Future Railway Mobile Communication System
FSS	Fixed-Satellite Service
FWA	Fixed Wireless Access
GBAS	Ground Based Augmentation System
GBSAR	Ground Based Synthetic Aperture Radar
GLONASS	Globalnaya Navigatsionnaya Sputnikovaya Sistema

Abbreviations	
GMDSS	Global Maritime Distress and Safety System
GNSS	Global Navigation Satellite System
GNSS Pseudolites	Global Navigation Satellite System Pseudolites
GPR	Ground Probing Radar
GPS	Global Positioning System
GSM	Global System for Mobile Communications
GSM-R	Global System for Mobile Communications on Railways
GSO	GeoStationary Orbit
HAPS	High Altitude Platform Station
HEST	High e.i.r.p. Satellite Terminal
IFF	Identification Friend or Foe
ILS	Instrument Landing System
IMT-2000	International Mobile Telecommunications-2000
IMT-Advanced	Systems beyond IMT-2000
IMT	International Mobile Telecommunications (includes IMT-2000 and IMT-Advanced
ISM	Industrial, Scientific and Medical applications
ITS	Intelligent Transport Systems
JTIDS	Joint Tactical Information Distribution System
LAES	Location Application for Emergency Services
LANs	Local Area Networks
LEST	Low e.i.r.p. Satellite Terminal
LP-AMI	Low Power Active Medical Implants
LPD	Low Power Device
LPD-S	Low Power Device - Satellite
LPR	Level Probing Radar
LT2	Location Tracking Type 2
MBANS	Medical Body Area Network System
MBR	Maritime Broadband Radio
MCA	Mobile Communications on Board Aircraft
MCV	Mobile Communication Services on Board Vessels
MFCN	Mobile/Fixed Communications Networks
MIDS	Multifunctional Information Distribution System
MLS	Microwave Landing System
MSI	Maritime Safety Information

Abbreviations	
MSS	Mobile-Satellite Service
MWS	Multimedia Wireless System
NAVTEX	Narrow-band direct-printing telegraphy system for transmission of navigational and meteorological warnings and urgent information to ships
NGSO	Non-GeoStationary Orbit
NMR	Nuclear Magnetic Resonance applications
NP2M	Narrowband Point to Multipoint system
PAMR	Public Access Mobile Radio
PLB	Personal Locator Beacon
PMR	Private (Professional) Mobile Radio
PMSE	Programme Making and Special Events
POCSAG	Post Office Code Standards Advisory Group
PPDR	Public Protection & Disaster Relief
RFID	Radio Frequency Identification
RLAN	Radio Local Area Network
RMR	Railway Mobile Radio
RTE	Radar Target Enhancer
SAB	Service Ancillary to Broadcasting
SAP	Service Ancillary to Programme making
SAR	Search and Rescue
SATCOM	Satellite Communication
SIT/SUT	Satellite Interactive Terminal / Satellite User Terminal
SNG	Satellite News Gathering
S-PCS	Satellite - Personal Communications System
SRD	Short Range Devices
SRR	Short Range Radars
SSR	Secondary Surveillance Radar
TACAN	Tactical Air Navigation
T-DAB	Terrestrial Digital Audio Broadcasting
TETRA	Terrestrial Trunked Radio
TETRAPOL	Digital PMR technology
TLPR	Tank Level Probing Radar
TRA-ECS	Terrestrial radio applications capable of providing electronic communications services
TTT	Transport and Traffic Telematics
TV	Television

Abbreviations	
UAS	Unmanned Aircraft System
ULP-AMI	Ultra Low Power Active Medical Implants
ULP-AID	Ultra Low Power Animal Implants Devices
ULP-MMI	Ultra Low Power Medical Membrane Implants
ULP-WMCE	Ultra-Low Power Wireless Medical Capsule Endoscopy
VLBI	Very Long Baseline Interferometry
VOR	VHF Omnidirectional Radio Range
VSAT	Very Small Aperture Terminal
UWB	Ultra Wideband
WAIC	Wireless Avionics Intra-Communications systems
WIA	Wireless Industrial Applications
WBB LMP	Low and Medium Power terrestrial Wireless Broadband systems
WPR	Wall Probing Radar
WPT	Wireless Power Transmission

ANNEX 3: SEARCHABLE RADIO INTERFACE SPECIFICATION

Explanatory Note

The list of parameters for radio interfaces in EFIS is based on the template and the guide developed by TCAM RIG II and adopted by TCAM.

The use of these parameters for entering radio interface information into EFIS allows an efficient and meaningful comparison of interfaces within Europe.

The parameters are divided into normative and an informative parts.

The *normative* part consists of the following parameters:

- Frequency band
- Country
- Application (ref Annex 2 of this Decision)
- Radiocommunication service (Ref Annex 1 of this Decision)
- Channelling
- Modulation/occupied bandwidth
- Transmit power limit
- Channel access and occupation rules
- Direction/separation
- Authorisation regime
- Additional Article 3.3 requirements
- Frequency planning assumptions

The *informative* part consists of the following:

- Planned changes
- Reference
- Remarks
- Notification

.

ANNEX 4: STANDARD FOR RIGHT OF USE INFORMATION

Explanatory Note

At its 15th meeting (20 April 2006), the EFIS Maintenance Group concluded that providing information on the right of use was important for frequency bands of high economic interest where market mechanisms would apply, and that it was important to define a standard for the information required. At its 35th meeting (15-16 January 2015), the EFIS Maintenance Group concluded on a revision of this annex in line with the additions made in the EFIS database in the recent years.

The EFIS MG decided to define the standard for right of use information in EFIS as follows:

- Lower frequency (numeric, EFIS format)
- Upper frequency (numeric, EFIS format)
- Simplex/duplex
- License holder name and contact details (free text format)
- Technology in use
- Start and expiry date / duration of the license
- Information on location
  - National (tick box) or
  - Regional or local (free text field, link to national details) or
  - One transmitter (free text field, link to national details)
- Spectrum trading Yes/No (tick box)
- Relevance for ECO Report 03 (opt-out flag)

ANNEX 5: EFIS HARMONISED INTERFACE

The EFIS Harmonised Interface can be used for uploading or downloading data related to spectrum allocations and spectrum applications only. No other data is included from the start. However, if EFIS is developed further other types of data (e.g. radio interface parameters) might be added at a later stage.

The following Harmonised Interface shall be used:

1. The interface shall be an XML file;

2. The XML file has a defined structure, called the EFIS XML Format, which is defined by the Document Type Definition (DTD) given below;

3. The terms used for allocations and applications shall be taken from the List of Radio Services in the ITU RR (see Annex 1) and the List of Searchable Applications (see Annex 2);

4. All frequencies shall be written in Hertz, i.e. not in kHz, MHz or GHz;

5. Example for XML-file header:

<?xml version="1.0" encoding="UTF-8" ?>

<!DOCTYPE frequencyInformation SYSTEM "https://efis.cept.org/frequencyinformation.dtd">

<frequencyInformation><frequencyTable name="Germany">.

DTD defining the EFIS XML Format:
The DTD file can be downloaded from https://efis.cept.org/frequencyinformation.dtd

```
<?xml encoding="UTF-8"?>
<!-- This simple DTD defines the import/export interface for use with the EFIS system -->
<!-- Frequency values are to be specified in Hertz (1 - 999999999999 Hz) -->
<!ELEMENT frequencyInformation (frequencyTable*)>
<!ELEMENT frequencyTable (footnote | frequencyFootnote | allocation | application | document |
radioInterface | Rightofuseinfo)*>
<!ELEMENT footnote EMPTY>
<!ELEMENT footnoteref EMPTY>
<!ELEMENT frequencyFootnote EMPTY>
<!ELEMENT allocation (footnoteref)*>
<!ELEMENT application EMPTY>
<!ELEMENT document EMPTY>
<!ELEMENT radioInterface EMPTY>
<!ELEMENT Rightofuseinfo EMPTY>
<!ATTLIST frequencyTable
    name CDATA #REQUIRED
>
<!--Definition of Footnotes -->
<!--The attribute number is used as ID for referencing the footnote (should be unique) -->
<!ATTLIST footnote
    number CDATA #REQUIRED
    description CDATA #REQUIRED
>
<!--To reference a footnote in the specified frequency band. Appears in the allocation domain.  -->
<!ATTLIST frequencyFootnote
    number CDATA #REQUIRED
    lowerFrequency CDATA #REQUIRED
```

```
    higherFrequency CDATA #REQUIRED
>
<!ATTLIST allocation
    lowerFrequency CDATA #REQUIRED
    higherFrequency CDATA #REQUIRED
    term CDATA #REQUIRED
    status (primary | secondary) #REQUIRED
    shortComments CDATA #IMPLIED
>
<!-- This is a child element of allocation -->
<!-- To reference a footnote to an allocation entry -->
<!ATTLIST footnoteref
    number CDATA #REQUIRED
>
<!-- Application with the possibility to use a single term independent of the layerstructure -->
<!-- application IDnumber to ensure the right parent application, or -->
<!-- Layer 1 parent application term (if applicable) to ensure the right parent application -->
<!-- Layer 2 parent application term (if applicable) to ensure the right parent application -->
<!ATTLIST application
    lowerFrequency CDATA #REQUIRED
    higherFrequency CDATA #REQUIRED
    term CDATA #REQUIRED
    allocationTerm CDATA #IMPLIED
    shortComments CDATA #IMPLIED
    IDnumber CDATA #IMPLIED
    l1_parent_term CDATA #IMPLIED
    l2_parent_term CDATA#IMPLIED
>
<!ATTLIST document
    title CDATA #REQUIRED
    lowerFrequency CDATA #IMPLIED
    higherFrequency CDATA #IMPLIED
    term CDATA #IMPLIED
    comment CDATA #IMPLIED
    type (EC_DECISIONS | ECC_DECS_RECS | ECC_ECO | ETSI_DRAFT | ETSI | EU |
    LICENSING_INFO | NATIONAL | NTFA | OTHER | RIS_MODELS | RTTE |
    RTTE_SUBCLASS | THIRD_PARTY) #REQUIRED
    validfrom CDATA #IMPLIED
    expiry CDATA #IMPLIED
    hyperlink CDATA #IMPLIED
>
<!ATTLIST radioInterface
    lower_frequency CDATA #REQUIRED
    higher_frequency CDATA #REQUIRED
    Allocation_Term CDATA #IMPLIED
    Application_Term CDATA #IMPLIED
    Channeling CDATA #IMPLIED
    TransmitPowerLimit CDATA #IMPLIED
    ChannelOccupationRules CDATA #IMPLIED
    DuplexDirection CDATA #IMPLIED
    LicensingRegime CDATA #IMPLIED
    Art33Requirements CDATA #IMPLIED
    FrequencyPlanning CDATA #IMPLIED
    Reference CDATA #IMPLIED
    Remarks CDATA #IMPLIED
    NotificationNo CDATA #IMPLIED
    OccupiedBandwidth CDATA #IMPLIED
    PlannedChanges CDATA #IMPLIED
    Channeling_notes CDATA #IMPLIED
    TransmitPowerLimit_notes CDATA #IMPLIED
```

```
    ChannelOccupationRules_notes CDATA #IMPLIED
    DuplexDirection_notes CDATA #IMPLIED
    LicensingRegime_notes CDATA #IMPLIED
    Art33Requirements_notes CDATA #IMPLIED
    FrequencyPlanning_notes CDATA #IMPLIED
    Reference_notes CDATA #IMPLIED
    Remarks_notes CDATA #IMPLIED
    NotificationNo_notes CDATA #IMPLIED
    OccupiedBandwidth_notes CDATA #IMPLIED
    PlannedChanges_notes CDATA #IMPLIED
    FrequencyBand_notes CDATA #IMPLIED
    Allocation_notes CDATA #IMPLIED
    Application_notes CDATA #IMPLIED
>
<!ATTLIST Rightofuseinfo
    duplex (true | false) #IMPLIED
    LowerFrequency CDATA #IMPLIED
    HigherFrequency CDATA #IMPLIED
    DownlinkLowerFrequency CDATA #IMPLIED
    DownlinkHigherFrequency CDATA #IMPLIED
    UplinkLowerFrequency CDATA #IMPLIED
    UplinkHigherFrequency CDATA #IMPLIED
    Application CDATA #IMPLIED
    Company CDATA #IMPLIED
    Surname CDATA #IMPLIED
    Firstname CDATA #IMPLIED
    town CDATA #IMPLIED
    Address CDATA #IMPLIED
    postalcode CDATA #IMPLIED
    Faxno CDATA #IMPLIED
    Telephoneno CDATA #IMPLIED
    Email CDATA #IMPLIED
    Website CDATA #IMPLIED
    Country CDATA #IMPLIED
    StartDate CDATA #IMPLIED
    Expiry CDATA #IMPLIED
    Tradable (true | false) #IMPLIED
    Nationalcoverage (true | false) #IMPLIED
    Localcoverage CDATA #IMPLIED
    LONGITUDE CDATA #IMPLIED
    LATITUDE CDATA #IMPLIED
    shortComments CDATA #IMPLIED
    technology CDATA #IMPLIED
>
```