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| **Working Group Frequency Management** | | | | **FM(15)035**  **FM44(15)Temp1** | |
| **WG FM**  **Antalya, Turkey,**  **9-13 February 2015** | |  | | |
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| **Date issued:** | **30 January 2014** | | | |
| **Source:** | **ECO** | | | |
| **Subject:** | **ECO Summary of the WGFM Questionnaire to CEPT administrations to collect information about authorisations for the Iridium mobile satellite system and earth stations under control of the Iridium system in CEPT countries** | | | |
| N  Group membership required to read? (Y/N) | | | | |
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| **Summary:**  By 23 December 2014, a total of 34 administrations have provided an answer to the questionnaire. | | | | | |
| **Proposal:** WGFM and PT FM44 to consider the collected information.  **Note ECO: this document is the result after review in PT FM44.** | | | | | |
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# Questionnaire to be submitted to CEPT administrations to collect information about authorisations for the Iridium mobile satellite system and earth stations under control of the Iridium system in CEPT countries

**Group:** WG FM, FM 44   
**Submission dates:** 14-10-2014 - 19-12-2014   
**Introduction:**

ECC Decision (09)02 reflects the provisions already made by CEPT for a common approach to the mobile satellite service (MSS) allocations and to harmonise the use of spectrum within the bands 1610- 1626.5 MHz and 2483.5-2500 MHz for Mobile Earth Stations (MES’s).

The ECC/DEC/(09)02 inter alia includes in decides 4 (excerpt):

*that, after 1 January 2016, in order to protect the Radio Astronomy service in the frequency band 1610.6- 1613.8 MHz, administrations shall only authorise operation of mobile earth stations under the control of MSS systems provided the following conditions are met:*

*that in accordance with Recommendations ITU-R RA.769-2 and ITU-R RA.1513 the spfd-level at radio astronomy stations is limited to -238 dB(W/m²Hz)2,3 and the data loss resulting from exceeding this limit is ≤ 2% in one or more 20 kHz channels within the frequency band 1610.6-1613.8 MHz at the location of the radio astronomy station from the corresponding MSS system using downlinks in the frequency band 1613.8-1626.5 MHz (space-to-Earth).*

At its 78th meeting in Montegrotto, WGFM directed CRAF and Iridium to meet to discuss the technical aspects of the protection of radio astronomy measurements in the band 1610.6 – 1613.8 MHz from out-of-band emissions of the Iridium NEXT satellite constellation.

In this context, the 81st meeting of WGFM in Sophia Antipolis decided to launch this questionnaire to collect information about authorisations for the Iridium Mobile Satellite System and earth stations under control of the Iridium system in CEPT countries.

By 23 December 2014, a total of 34 administrations (in bold) have provided an answer to the questionnaire.

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| --- | --- |
| **Albania**  Andorra  **Austria**  Azerbaijan  Belarus  **Belgium**  Bosnia Herzegovina  **Bulgaria**  **Croatia**  **Cyprus**  **Czech Republic**  **Denmark**  **Estonia**  **Finland**  **France**  Georgia  **Germany**  **Greece**  **Hungary**  Iceland  **Ireland**  **Italy**  **Latvia**  Liechtenstein | **Lithuania**  Luxembourg  Former Yugoslavian Republic of Macedonia (FYROM)  Malta  Monaco  **Montenegro**  Moldova  **Norway**  **Poland**  **Portugal**  **Romania**  **Russian Federation**  San Marino  **Serbia**  **Slovak Republic**  **Slovenia**  **Spain**  **Sweden**  **Switzerland**  **The Netherlands**  **The United Kingdom**  **Turkey**  **Ukraine**  Vatican City |

**Questions:**

**Question 1:** Does your administration issue licences for satellite operations (for Iridium in this case) or do you follow a license exemption policy (for uplink, for downlink)?

Austria, Albania, and Poland refer to R&TTE equipment class 1, sub-class 14 (Class 1 equipment is equipment that can be placed on the market and be put into service without restrictions), see <http://www.efis.dk/sitecontent.jsp?sitecontent=RTTE_sub-classes>

In most of the countries, there is either no explicit license requirement specified for individual terminals, a license-exempt policy applies for all Iridium terminals, or there is an individual license requirement for the Iridium network.

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| Albania | Based on the Law No. 9918, dated 19.05.2008, amended with the law No 102, dated 24.10.2012, AKEP have the right to provide Individual Authorisation (“For the allocation and the usage of frequencies of the satellite station (uplink)” only for the satellite operators that have been registered at the National Registration Centre of the Republic of Albania or to Service providers registered under the General Authorisation regime in AKEP.  Iridium is not registered at the National Registration Centre of the Republic of Albania.  Albania refers to R&TTE equipment class 1, sub-class 14 (Class 1 equipment is equipment that can be placed on the market and be put into service without restrictions. |
| Austria | Licence exempt approach. Operation of S-PCS applications according to the parameters given in sub-class 14 according to 2000/299/EC (Version July 2014) in the frequency bands 1610 – 1613.5 MHz and 1613.5 – 1626.5 MHz. |
| Belgium | License exemption policy for both uplink and downlink |
| Bulgaria | Bulgarian administration follows license exemption policy.  The provision of electronic communications through Mobile Earth Stations (MES’s) shall be carried out on licence exempt basis. |
| Croatia | Answer: General licence is issued and covers Iridium S-PCS terminals (uplink and downlink). |
| Cyprus | We follow a license exemption policy in accordance to the ECC/DEC/(09)02 and ECC/DEC/(12)01. |
| Czech Republic | The Czech Republic does not authorise operation of space segment. Operation of User terminals is authorised through General licence. |
| Denmark | License exempt policy (1610-1660.5 MHz |
| Estonia | License exemption |
| Finland | Finland has exempt from licencing mobile satellite uplinks according to ECC Decision (12)01 |
| France | The French frequency regulator (ARCEP) issued an individual license to Iridium Italia S.r.l. on March 25, 2004 : “ Décision n° 04-311 de l’Autorité de régulation des télécommunications en date du 25 mars 2004 portant autorisation d’utilisation de fréquences radioélectriques à la société Iridium Italia S.r.l.”. |
| Germany | In Germany the operation of Iridium terminals is authorised through an individual authorisation which covers up-links. |
| Greece | Answer: ΕΕΤΤ, according to its Decision no 721/2/12-6-2014 “Regulation on Terms of frequency Usage (published at official gazette CMD 1713/Β/26-6-2014) has implemented the ECC DEC (12)/01 «Exemption from individual licensing and free circulation and use of terrestrial and satellite mobile terminals operating under the control of networks» (approved 01 June 2012) and individual licensing is not required for the provision of electronic communications services in the following frequency bands:    1610 – 1626,5 MHz (E-s)  1613,8 – 1626,5 MHz (s-E)  2483,5 – 2500 MHz (s-E)   The regulation and relevant info (Appendix A.6) are located in the following url link:   http://www.eett.gr/opencms/export/sites/default/EETT/Electronic\_Communications/Radio\_Communications/Rigths\_Of\_Use/FEK1713\_26-6-14.pdf |
| Hungary | There is no licence for satellite operation for Iridium in Hungary. The end-user stations are exempted from the obligation of individual licensing. |
| Ireland | A licence exemption policy is followed, with a “General Authorisation” requirement if a service is being provided in Ireland. |
| Italy | General authorisation |
| Latvia | No any licenses issued and no license required. |
| Lithuania | No license issued to Iridium. Currently license exemption policy applies for satellite terminals for both uplink and downlink. Only notification is required for the provision of public satellite services or networks. In Lithuania the satellite terminals may be used in 1610–1660.5 MHz frequency band without individual authorisation only if the company providing public satellite communication network and services notifies to our administration about the commencement of its activities. Therefore in case the Iridium plans to provide the services in Lithuania it is necessary to notify commencement of such activities. Till now Lithuania has not received such notification from the Iridium. |
| Montenegro | License exemption (ECC/DEC/(12)01) |
| Netherlands | No, In the Netherlands there exists no licence requirement for the space components/satellite(s). In case of a satellite earth station located in the Netherlands, a license is required for the uplink. The terminal equipment is license exempted. |
| Norway | Licence exemption – General authorisations regulations |
| Poland | Iridium earth stations can be used without licence as Class 1 equipment in the framework of the R&TTE Directive (sub-class 14) |
| Portugal | For satellite operations, the provision of service (for Iridium in this case) is subject to the general authorisation regime. Portugal follows a license exemption policy for satellite operations (i.e. terminals). |
| Romania | Network License for the provision of Satellite Personal Communications Services |
| Russian Federation | The 1621.35-1626.5 MHz band is designated by GRFC Decision for operation of Iridium user terminals (Earth-space, space-Earth) on license exemption basis.  In general, the Russian administration authorises operation of MSS ES subject to coordination between Russian satellite network and foreign satellite network according to the procedures of the ITU Radio Regulation |
| Serbia | Satellite operation in the mobile satellite service (MSS) within the bands 1610-1626.5 MHz and 2483.5-2500 MHz is subject to the licence regime (individual licence is required). |
| Slovakia | We have a General authorisation No. VPR 03/2014 for operation of radio equipment´s of Satellite Service in bands 1-3 GHz (including Iridium terminals). No individual license is issued. |
| Slovenia | Licences should be issued only for hubs (earth stations) on request. |
| Spain | Yes the administration of Spain has issued licenses for Iridium satellite operations |
| Sweden | Regarding downlinks: In Sweden satellite downlinks are only treated within the framework of ITU-R provisions, i.e. downlink reception is not nationally regulated.  Regarding uplinks: In Sweden satellite terminals, that operate downlink within 1613,8-1626,5 MHz (e.g. Iridium), are exempted from license requirement, subject to given set of conditions (see answer to question nr 4). |
| Switzerland | - Iridium is registered by BAKOM/OFCOM in Switzerland as telecommunications service provider (TSP) for the provision of mobile satellite services (MSS) since 1998.   - BAKOM/OFCOM has granted a radio communications license to Iridium for the use of frequency spectrum for the operation of the Iridium satellite network in Switzerland (uplink and downlink) since 1998. |
| Turkey | Pursuant to our relevant primary legislation, the Electronic Communications Law no. 5809 dated 11/5/2008, electronic communications services are subject to obtaining an authorization from our Authority, Information and Communication Technologies Authority (ICTA), the regulatory body for electronic communications sector in Turkey, as stated in the following provision:  “ARTICLE 8 – (1) Electronic communications services could be provided and/or electronic communications network or infrastructure could be constructed and operated by taking into consideration the strategies and policies of the Ministry, upon receiving authorization from the Authority.”  Taking into account the above mentioned provisions, satellite operations in Turkey (Either GMPCS or Satellite Communication Service) are considered as an electronic communications service subject to an authorization.  Our authorization regime and the relevant principles and procedures are defined in detail in the “By-Law on Authorization for Electronic Communications Sector” dated 5/28/2009 prepared in accordance with the Electronic Communications Law. In addition, relevant provisions regarding specific services (such as satellite communication service, GMPCS mobile telephony service, etc) were determined in the ICTA Board’s Decision dated 5/28/2009 under the name of “Definition, Scope and Periods of Electronic Communication Services, Networks and Infrastructure”.  In accordance with the above mentioned By-Law and Board’s Decision,  “GMPCS Mobile Phone Service”. Article 1.7 of “Section For Services Under The Scope Of Notification Not Requiring Resource Allocation” of the regulation of “Definition, Scope and Periods of Electronic Communication Services, Networks and Infrastructure” defines GMPCS Mobile Phone Service as follows:  “GMPCS Mobile Phone Service, covers providing direct voice, data, fax and similar services besides providing of services estimated under the framework of GMPCS-MoU for users/subscribers over a satellite group which its position and operating frequencies are determined or supplied by ITU, fixed or mobile, wide or narrow band, global or non-global, immobile or mobile, current or planned.”  In case it is necessary to allocate resources for GMPCS Mobile Phone Service provided under notification, in addition to provisions set out under the Section For Services Under The Scope Of Notification Not Requiring Resource Allocation, the following provisions are defined in Article 2.1 of “Section For Services Under The Scope Of Unlimited Number Of Rights Of Use” regulation of Definition, Scope and Periods of Electronic Communication Services, Networks and Infrastructure as follows:  “1. Number allocation is performed for the Operator under National Designation Plan.  2. Operator under the scope of GMPCS service may provide value added services for end users by utilizing satellite group and obeying regulation of the Authority relevant to designation and number portability.“  Additionally, Satellite Communication Service is defined in Article 1.1 of aforementioned regulation as follows:  “Satellite Communication Service covers providing simplex or duplex voice, data, video communication services to its subscribers/users excluding telephone services between geographically apart points via electromagnetic waves through satellites and satellite ground stations and/or satellite terminals and installation and operation of relevant infrastructure.”  In brief, we don’t authorize Iridium or other satellite systems. On the other hand, companies providing electronic communications services via those satellite systems need to be authorized.    On the other hand, pursuant to Article 19-1-n of By Law, an operator has right to supply satellite capacity requirements for service provision freely from relevant institutions (i.e Iridium, etc) |
| Ukraine | In accordance with the law of Ukraine «On radio frequency resource of Ukraine» and the Plan for the Use of the Radio Frequency Resource of Ukraine, Irridium satellite operations need licensing. License exemption policy for the Irridium operation band is currently not applicable in Ukraine. |
| United Kingdom | Licence Exemption |

**Question 2:** What is the allowed operation bandwidth for the Iridium satellites in your current license (for uplink, for downlink)?

Summary Table:

The following table summarizes the allowed operation bandwidth in countries that already authorized Iridium’s operations

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| --- | --- |
| 1610,0-1626,5 MHz (uplink), 1613,8-1626,5 MHz (downlink) | Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, Greece, Ireland, Latvia, Montenegro, Netherlands, Norway, Poland, Slovakia, Slovenia. |
| 1621.35-1626.5 MHz (uplink) | Sweden |
| 1621,35-1626,5 MHz (uplink and downlink) | France, Germany, Romania, Russian Federation, Switzerland, United Kingdom, Ukraine |
| 1621.35 – 1626.5 MHz , 1617.775 – 1618.25 MHz (uplink and downlink) | Italy |
| 1618.25 to 1626.5 MHz | Portugal (see full comment for details), Spain |
| 1616 - 1626.5 MHz (uplink)  1613.8 – 1626.5 MHz (downlink) | Turkey |

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| Albania | see answer 1. |
| Austria | See answer to question 1. |
| Belgium | In accordance with ECC Decision (12)01 |
| Bulgaria | n/a |
| Croatia | Answer: Allowed operation bandwidth for the Iridium S-PCS terminals is 1610 – 1626.5 MHz (uplink) and 1613.8 – 1626.5 MHz (downlink). |
| Cyprus | In accordance to the technical characteristics described in ECC/DEC/(09)02. |
| Czech Republic | There is not limit of bandwidth for Iridium for the time being. |
| Denmark | n/a |
| Estonia | 1610,0-1626,5 MHz (uplink), 1613,8-1626,5 MHz (downlink) and 2483.5-2500 MHz (downlink) |
| Finland | We do not licence Iridium satellites. |
| France | 1621,35-1626,5 MHz for both earth to space and space to earth transmissions. |
| Germany | The authorised bandwidth is 1621.35-1626.5 MHz. |
| Greece | No licenses have been issued. |
| Hungary | - |
| Ireland | Licences are not issued for Iridium satellites. However, on a licence exempt basis within Ireland (assuming that this question is asking for the size of the frequency band within which Iridium satellites are allowed to operate), operation is permitted within the entire band 1610-1626.5 MHz. |
| Italy | 1621.35 – 1626.5 MHz , 1617.775 – 1618.25 MHz |
| Latvia | N/A |
| Lithuania | No license issued. |
| Montenegro | - |
| Netherlands | Note ECO: NED has implemented ECC Decision (12)01 |
| Norway | General authorisations regulations - The whole band – 1610 – 1626.5 MHz |
| Poland | According to the sub-class 14’s definition, MSS are allowed to operate in the 1610-1613,5 MHz, 1613,8-1626,5 MHz and 2483,5-2500 MHz bands |
| Portugal | The current authorisation covers the 1621.35-1626.5 MHz frequency band. Temporary authorisations have been granted for the 1618.25-1621.35 MHz extended band. |
| Romania | 1621.35 – 1626.5 MHz uplink and downlink |
| Russian Federation | The user terminal operation bandwidth is 1621.35-1626.5 MHz (Earth-space, space-Earth) |
| Serbia | No current license for the Iridium satellites. |
| Slovakia | We do not have specified operation bandwidth. It is apparent from the system definition. |
| Slovenia | According to the ERC/DEC/(97)03;Iridium; TDMA; 1616.0-1626.5 MHz; 1621.35-1626.5 MHz |
| Spain | The license allows the use of the band from 1618.25 to 1626.5 MHz by Iridium for both uplink and downlink |
| Sweden | Please see the answer to question 1. |
| Switzerland | for Uplink and Downlink >> 5.15 MHz (1621.35-1626.5 MHz) |
| Turkey | User satellite link band : 1616 - 1626.5 MHz L band |
| Ukraine | In accordance with the Plan for the Use of the Radio Frequency Resource of Ukraine, both uplink and downlink Irridium operations can be performed only in the frequency band 1621.5 - 1626.5 MHz. |
| United Kingdom | 1621.35 - 1626.5 MHz for both uplink and downlink |

**Question 3:** What is the duration of the current license for Iridium and when will be the next reviewing session (for uplink, for downlink)?

A considerable number of administrations have not specified any duration but may be in a position to revise the current regulation when needed.

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| Expiration date specified | France: the license will expire on 24 March 2019;  Germany: toleration, former authorisation already expired  Italy: revision in 2022  Portugal: review at beginning of 2016  Romania: valid until 01 Oct. 2017  Russian Federation: until 02 Oct. 2022 for user terminals  Spain: review November 2018  Switzerland: until 31 Dec. 2018  Ukraine: 18 Mar. 2019 |

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| Albania | see answer 1.  In addition, the maximum duration of an Individual Authorisation (For the allocation and the usage of frequencies, uplink only) is 15 years. |
| Austria | No individual licences exist. |
| Belgium | License exemption without limitation concerning the duration |
| Bulgaria | n/a |
| Croatia | Answer: General licence is valid for an indefinite period. |
| Cyprus | n.a |
| Czech Republic | There is no limit for duration of General licence. Nevertheless, General licence is periodically upgraded. |
| Denmark | n/a |
| Estonia | No duration |
| Finland | We do not licence Iridium satellites. |
| France | The license will expire on 24 March 2019. |
| Germany | Currently the operation of the Iridium terminals is not authorised but tolerated under the conditions of the expired authorisation until a decision has been taken by the Bundesnetzagentur on the endorsement of the authorisation. |
| Greece | No licences have been issued. |
| Hungary | - |
| Ireland | n.a. |
| Italy | The duration is 20 years from 9 July 2002, so next revision will be on 2022. |
| Latvia | n.a. |
| Lithuania | No license issued. |
| Montenegro | - |
| Netherlands | n.a. |
| Norway | The regulation is revised when needed |
| Poland | n.a. |
| Portugal | There is not a specific duration for this case. However, as stipulated in Decision ECC/DEC/(09)02, some technical conditions allowing Iridium operation in order to offer the electronic communications services shall be reviewed before the 1st January 2016. |
| Romania | Valid until 01.10.2017 |
| Russian Federation | Until 02.10.2022 for user terminals |
| Serbia | No one has an existing license. |
| Slovakia | Date of next reviewing session is not specified. Validity of the General authorisation is not limited and we can to amend it any time. |
| Slovenia | n.a. |
| Spain | The duration is 20 years and the license must be reviewed in November 2018 |
| Sweden | n.a |
| Switzerland | the current license has been granted until 31.12.2018 |
| Turkey | We do not have a license for Iridium in Turkey. (Please see also the last two paragraphs of answer to the Question 1) |
| Ukraine | The duration of licenses for Irridium is no less than 5 years (issued by National Commission of Ukraine on Regulation of Telecommunications and Informatization). The last license was issued in 18.03.14. |
| United Kingdom | n.a. |

**Question 4:** Are there any specific conditions in the license or license exemption regulations requiring the protection of your national radio astronomy service and in neighbouring countries?

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| --- | --- |
| Albania | Not any specific conditions. |
| Austria | The provisions of the implemented ECC/DEC/(09)02 are in force to ensure the protection of the operation of the RAS, but no additional ones. |
| Belgium | No |
| Bulgaria | The mobile earth stations satellite terminals shall not produce a mean EIRP density exceeding -3 dB (W/4 kHz), (mean limit) and shall not produce a peak EIRP density exceeding -15 dB (W/4 kHz), (peak limit). All other parameters are defined by the operator of the satellite electronic communications network. |
| Croatia | Answer: EIRP is limited according to the Radio Regulations No. 5.364 and usage of terminals has to be in line with the provisions of ECC Decision (09)02. |
| Cyprus | No. In Cyprus so far we have no radio astronomy sites. |
| Czech Republic | NO  The Czech republic is of the view that level of protection shall be provided by ITU-R REC RA.769-2 and REC ITU-R RA.1513. The level of protection is also done by different category of service. While Radioastronomy service operates on category of primary service MSS operates in category of secondary service. |
| Denmark | n/a |
| Estonia | No |
| Finland | ECC Decision (09)02 apply |
| France | Specific Conditions:  Authorised Frequencies are used subject not to interfere with the systems operating in adjacent frequency bands  For emissions in the band from 1621.35 to 1626.5 MHz, the operator takes all steps to protect the uses of the Radioastronomy service in France, in accordance with the provisions of Radio Regulations.  Uplink:  So that the terminals’ emissions do not disturb the site of radio astronomy Nançay (Cher), the operator uses the geolocation techniques to identify terminals in a 10 km radius around the site and inhibits their function. in this exclusion zone, only the transmission of emergency calls is possible.  Specific measures of protection will be defined in case the operator wants to provide aeronautical satellite service for public correspondence defined by the Radio Regulations.  Downlink:  The operator shall use all reasonable steps to limit the consequences of OOB emissions not to disturb the RAS site of Nançay.  To this end, the operator shall take all technical provisions to comply with the harmful interference levels of recommendation ITU-R RA.769-1 concerning protection criteria for the Radioastronomy service.  Pursuant to the Framework Agreement (framework agreement between Iridium LLC and the European Science Foundation (European Science Foundation)), the operator complies with the harmful interference thresholds of ITU-R RA.769-1, permanently, after 1 January 2006.  Before 1 January 2006, the operator meets the harmful interference thresholds  fixed:  • By an agreement under section 4 of the Framework Agreement;  • Or, in the absence of such an agreement, after adoption of a recommendation from the Milestone Review Committee (created by the decision ERC/DEC/(97)03 from 30 June 1997 and the decision ECTRA/DEC(97)02 from 3 July 1997).  Concerning neighboring countries:  The operator follows the rules defined by the Convention of the ITU, the International Telecommunications Regulations, the Radio Regulations, the international agreements signed by France, and the regulations of the European Community. |
| Germany | With regard to the protection of the radio astronomy service the followings rules apply: The operation of Iridium shall not cause harmful interference to the radio astronomy service in the band 1610.6-1613.8 MHz (see D372 or RR 5.372). Iridium Terminals shall not operate within a radius of 35 km around the radio observatory in Effelsberg. For the use of Iridium terminals on board aircraft the Bundesnetzagentur may specify further limits. Until January 1st, 2006 the CRAF/Iridium framework agreement was a mandatory part of the authorisation. |
| Greece | No |
| Hungary | No such specific condition exists. |
| Ireland | N/A |
| Italy | no interference in the band 1617,775 – 1618,25 MHz |
| Latvia | No. But in the relevant law is defined radioemission silence zone – 8 km radius from RA station. |
| Lithuania | Currently there are no special conditions requiring the protection of radio astronomy service. |
| Montenegro | Yes, the conditions are in line with ECC Decision (09)02 |
| Netherlands | Not applicable since there is no licensing requirement for satellites. However the NL administration does follow the procedures and regulations of the ITU RR towards full protection of Radio Astronomy Services in conformity with the ITU RR. After implementing the relevant ECC decisions, the NL administration will follow the decides as given by such decisions. |
| Norway | No |
| Poland | Conditions given in the definition of the sub-class 14 shall be met |
| Portugal | Yes. The Iridium’s provision of service and the related frequency use shall not cause harmful interference (the level of interference shall not be greater than -238 dB(W/m2/Hz)) to the Radio Astronomy Service in the 1610.6-1613.8 MHz frequency band. |
| Romania | Only the provisions for RAS according to ECC Decision (09)02 |
| Russian Federation | Operation of MSS user terminals in the frequency band 1621.35-1626.5 MHz shall not cause harmful interference to stations operating according Russian National Table of Frequency Allocations (including RAS stations in the frequency band 1610.6-1613.8 MHz) |
| Serbia | Specific conditions will be taken from Recommendations ITU-R RA.769-2 and ITU-R RA. 1513 |
| Slovakia | Yes, General authorisation No. VPR 03/2014 for radio equipment’s of Satellite Service includes following requirement: “Radio devices operating in frequency band 1610,6 – 1613,8 MHz cannot cause harmful interference to radio astronomy service stations”. |
| Slovenia | No. |
| Spain | Yes, please find this specific conditions for use in the attached information below  (only in Spanish) |
| Sweden | The specific conditions for protection of RAS are:  • Limitation of the bandwidth for the Satellite terminals that operate downlink within 1613,8-1626,5  • Explicit requirement that the uplinks shall not interfere with the national RAS site of Onsala.  Below, for reference, is a transcript of the license exemption directive in question:  Satellite terminals that operate downlink within 1613,8-1626,5 MHz (e.g. Iridium) are subject to following license exemption conditions:  • Satellite terminal are allowed to transmit within 1621,35-1626,5 MHz  • Satellite terminal must be included in the notified satellite network with which communication is taking place.  • RAS site of Onsala shall not be cause harmful interference in 1610,6-1613,8 MHz.  Please note that the text above is non-binding transcript of §118 of the official license exemption directive (Current version is <http://www.pts.se/sv/Dokument/Foreskrifter/Spektrum/Post--och-telestyrelsens-foreskrifter-om-undantag-fran-tillstandsplikt-for-anvandning-av-vissa-radiosandare>). |
| Switzerland | Yes, Radio Interface (RIR0808-06) from OFCOM Switzerland  <http://www.ofcomnet.ch/cgi-bin/rir.pl?id=0808;nb=06> applies under the condition that  no harmful interference is caused by the licensee services to the radio astronomy service in the band 1610.6-1613.8 MHz. The licensee is obliged to undertake all feasible measures for this. Protection of the radio astronomy service must comply with  RR S5.372. |
| Turkey | No |
| Ukraine | Yes, specific conditions for protection of radio astronomy service in the 1610.6 – 1613.8 MHz band are defined in the footnote U025 of the National Frequency Allocation Table of Ukraine. |
| United Kingdom | No |

**Question 5:** Please provide information on the implementation of ECC Decision (09)02 in your country (Implemented / not implemented / under study / planned?).

This question greatly helped to update the implementation status in the documentation database:

See under: [Implementation Status ECC/DEC(09)02](http://www.erodocdb.dk/doks/implement_doc_adm.aspx?docid=2309)

Yes ... 27

Yes Partly ... 2

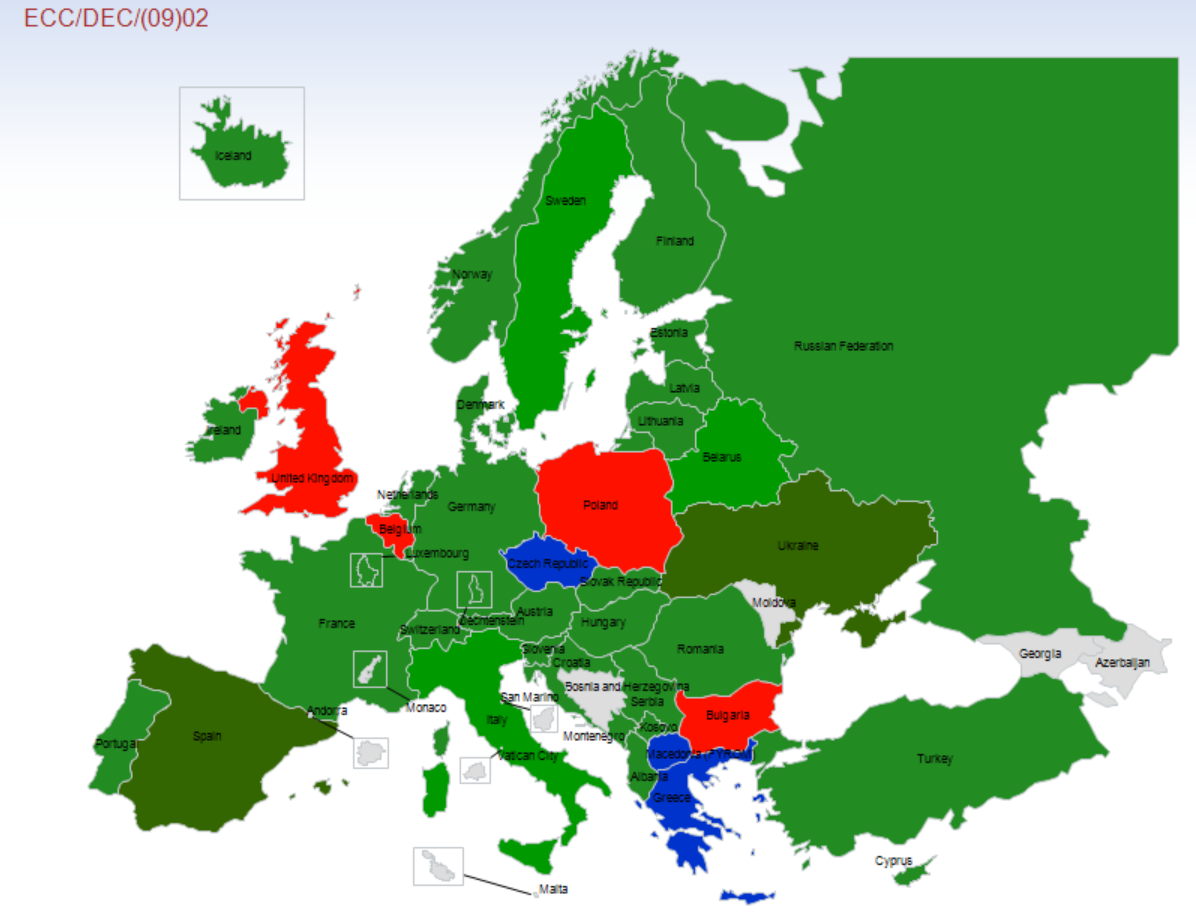
Committed ... 1

Planned ... 2

Under study ... 3 (in blue)

No ... 4 (in red)

No info ... 9 (in grey)



Information from the answers received:

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| --- | --- |
| Albania | Implemented |
| Austria | Implemented |
| Belgium | Not implemented |
| Bulgaria | Not implemented |
| Croatia | Implemented |
| Cyprus | Implemented |
| Czech Republic | Under study.  If there is no clear indication that radio astronomy service is protected from "Iridium Next", the Czech Republic will consider taking appropriate measures through changes in authorisation of MSS service |
| Denmark | Implemented |
| Estonia | Implemented |
| Finland | Implemented |
| France | Implemented |
| Germany | Implemented |
| Greece | Under study |
| Hungary | Implemented |
| Ireland | Implemented |
| Italy | Committed. The ECC Decision (09)02 will be implemented in the new National Frequency Allocation Table to be issued in the near future |
| Latvia | Implemented |
| Lithuania | Implemented |
| Montenegro | Implemented |
| Netherlands | Implemented |
| Norway | Implemented |
| Poland | Not implemented |
| Portugal | Implemented |
| Romania | Implemented |
| Russian Federation | Implemented  The ECC Decision (09)02 is implemented 11.11.2011 (the GRFC Decision № 10-06-03-3 dated 19.02.2010) in the frequency band 1610.115-1621.185 MHz (Earth-space) with respect to the Globalstar MSS system |
| Serbia | Implemented |
| Slovakia | Implemented |
| Slovenia | Implemented |
| Spain | Planned |
| Sweden | Patially Implemented |
| Switzerland | Implemented |
| Turkey | Implemented |
| Ukraine | Planned |
| United Kingdom | Not implemented |