

IARU Region1's 2014 70 MHz European Initiative – Explanatory Document for IARU Executive Committee & Member Societies

1. Background

The European Conference of Postal and Telecommunications administrations (CEPT) is the body of European regulators which addresses radiocommunications spectrum management matters and harmonisation projects amongst its 48 member countries. These include EU and EFTA Member States. Details can be found at <http://www.cept.org>.

In 2008 Ireland submitted a proposal to CEPT's Frequency Management Working Group (WGFM), concerning the possibility of a secondary allocation to the amateur service in the band 70.0 - 70.5 MHz within Europe's Table of Frequency Allocations, the ECA. The prime goal for doing this was to secure regulatory recognition for the frequency allocation, which appeared to be a requirement before some countries would release the band to the amateur service.

Ten supporting Administrations were needed to automatically write a new allocation into the ECA. Unfortunately in 2008 the proposal was supported by only 6 Administrations. Obviously some countries whose amateurs were active on the band did not support the Irish proposal for one reason or another. This was despite strenuous efforts by the IRTS, the RSGB's then VHF Manager G4ASR and IARU to contact all member societies, in order that they would be in a position to discuss the Irish proposal with their national delegates prior to the CEPT meeting.

However despite the lack of a formal allocation in 2008, and because there was limited support for a 70 MHz secondary allocation to the amateur service the following note was approved to be included in the ECA:

- EU9 - In a growing number of CEPT countries, parts of the band 70.0-70.5 MHz are also allocated to the Amateur service on a secondary basis.

The IARU has now determined that it would be timely and appropriate to build on the 2008 initiative and seek to secure a secondary allocation to the amateur service in the 4 metre band. Obviously in any future 70 MHz initiative the IARU needs to take account of what happened in 2008 in respect of the lobbying of administrations by National Societies.

2. 70 MHz situation today

30 CEPT countries have had full or limited access to all or segments of the band 69.9 – 70.5 MHz since 2008 through a national allocation to the amateur service or assignment(s) to amateur stations, or by means of an assignment to a fixed service station in the case of some beacons, or by licensing experimental stations with special conditions in accordance with number 27.7 of the Radio Regulations to permit communications with amateur stations in other jurisdictions.

Several countries outside CEPT in ITU Region 1 located in the Middle East and Africa have access to the band and there are or have been propagation beacons located in One ITU Region 3 territory and one Region 2 country. and the United States.

3. How to Proceed

With 30 out of the 48 CEPT countries having offered amateur radio possibilities in one way or another within the band 69.9 – 70.5 MHz, it would at first sight appear reasonably straightforward to obtain a secondary allocation in the ECA. However IARU cannot be complacent and must learn the lesson of 2008 and develop a strategy which is capable of success in 2014 and in the future, when European radio amateurs require additional frequency bands or improved ECA status for radio frequency spectrum which might be attainable in Europe but is difficult to achieve on a global basis at a conference of the International Telecommunication Union (ITU).

In 2008 one administration made a proposal and National Societies were requested to seek support from their National Administrations. There are a number of reasons why such an approach could have been unsuccessful:

- National Societies did not lobby as requested,
- Sufficient time was not provided to enable National Societies to obtain agreement within their country to support the Irish proposal in 2008,
- National Societies believed there was little interest within their Society (or country) for operating in the 70 MHz band,
- Other matters had a greater national priority when meeting their administration,
- National Societies normally speak with their licensing or enforcement contacts in administrations. Spectrum questions are often dealt with by spectrum management experts. Different persons may need to be approached,
- Not all administrations attend meetings of CEPT WGFM, which is responsible for the ECA,
- Some administrations may have allowed access to the band but did not wish to see 70 MHz gain any status for general amateur usage in Europe,
- The 70 MHz band limits for amateur use are different in each country. This needs to be fully reflected in any future initiative,
- Administrations may not be fully aware of declining interest in bands below broadcasting band II (87.5 – 108 MHz) for mobile radio and broadcasting applications,
- Adequate spectrum must be available for defence requirements in the range 30 – 87.5 MHz.

4. Outline proposal

It is believed that the optimum method for securing a change to the ECA is to utilise a two pronged approach simultaneously to increase the chance of success. Firstly National Societies are requested to lobby their licensing authority requesting that frequency managers in their country consider a national 4 metre (70 MHz) allocation and support IARU R1's initiative in CEPT WGFM.

Secondly IARU R1 which has observer status in key CEPT committees and working groups will lobby participants in CEPT's WGFM from countries which have authorised the use of 4 metre spectrum directly in order to seek an amendment to the ECA.

At the recent May 2014 WGFM meeting in Trondheim, Norway, 21 frequency managers from countries which have a history of 4m activity were approached and all have agreed to consider an input from IARU proposing a secondary 4 metre amateur allocation in the ECA. A possible WGFM input document has therefore been prepared (subject to the views of contacted administrations) for a future meeting of CEPT's Frequency Management Working Group. This is attached as an appendix to this document. It is intended to utilise in a

simplified form one of CEPT's own processes developed to agree European Common Proposals (ECPs) to ITU World Radiocommunication Conferences (WRCs). In essence this would mean producing a multinational document with at least 10 CEPT member countries which regularly attend the WGFM, plus IARU R1 listed as sourcing the document.

IARU will also liaise closely with CEPT's European Communications Office (ECO) in Copenhagen, which provides considerable support to WGFM and the development of the ECA and the associated ECO Frequency Information System (EFIS).

In summary the requirement is to secure within the body of the ECA a secondary allocation to the amateur service in the band 69.9 – 70.5 MHz and in addition a modification to footnote EU9 as follows:

- EU9 - CEPT countries may authorize all or parts of the band 69.9-70.5 MHz to the Amateur service on a secondary basis.

National Societies and IARU delegates can use the Appendix to this document for negotiating with regulators at the national and international levels. IARU R1 will of course keep national societies informed as the situation evolves over the coming weeks and months.

5. Next steps

Subject to the approval of this document by the EC, Member Societies should be consulted via the C5 reflector. It is requested that feedback from C5 members should be provided prior to 30th June 2014. The two pronged approach should then be enacted with Member Societies discussing the matter with their licensing authority. In early July IARU-R1 will distribute the draft WGFM document (the Appendix) to the WGFM contact point of those countries which have provided any form of access for amateur type activities in the range 69.9 to 70.5 MHz.

It should be underlined when discussing the question of ECA amendment that IARU R1 and National Societies are not urging all CEPT administrations to release all or parts of the band 69.9 – 70.5 MHz to the amateur service, they simply believe that a regulatory mechanism should be adopted which recognises a change in spectrum usage which has been underway since the 1950s and is now gaining significant momentum.

For information the next meeting of WGFM is scheduled to be held between the 6th-10th October in France and it might be possible to table this document then. Since the May 2014 meeting of WGFM has just approved the ECA revision of 2014, it will be the meeting of WGFM to be held in May 2015 which will approve the next revision.

Working Group FM

**81st Meeting of the WG FM
Sophia Antipolis, France, 6-10th October 2014.**

FM(14)XXX

Date issued: 2nd June, 2014

Source: [IARU][Multiple Countries]

Subject: Revision of ECA concerning the band 69.9 - 70.5 MHz

Password protection required? (Y/N) *

Summary

The allocation of a band at 70 MHz to amateurs and experimenters is important to further knowledge of Sporadic E, Ionospheric and Trans Equatorial propagation in this part of the radio frequency spectrum. Following the introduction of footnote EU9 in the ECA in 2008, European radio amateurs and experimenters have continued to gain access to the band on a country by country basis. The administrations of the above mentioned CEPT countries now propose reflecting the growing use of this band by radio amateurs and experimenters across Europe and beyond, by the inclusion of a secondary allocation in the ECA and in addition a modification to footnote EU9 of the ECA.

Proposal

WGFM is invited to consider including a secondary allocation to the Amateur Service in the band 69.9 – 70.5 MHz with a modification to EU9 in the next revision of the ECA. See Annex.

Background

In March 1995 the DSI Phase II Report recommended, in the context of the European Table of Allocations, that a minimum of 100 kHz in the band 70-70.45 MHz be allocated to the amateur service on a secondary basis according to national considerations, if feasible, centred on 70.2 MHz.” In 2008 Ireland submitted a proposal to WGFM, concerning the possibility of a secondary allocation to the amateur service in the band 70.0 - 70.5 MHz within Europe's Table of Frequency Allocations, the ECA.

* ECC policy is that in general all documents should be publicly available unless the author of the document requires that it be restricted to ECC family participants only.

POSSIBLE ALLOCATION OF THE BAND 69.9 – 70.50 MHz TO THE AMATEUR SERVICE ON A SECONDARY BASIS IN CEPT COUNTRIES

1. Introduction

Following the introduction of EU9 in the ECA, European radio amateurs and experimenters have continued to gain access to the band on a country by country basis. A growing number of Administrations are now permitting amateur operation in all or parts of the 70 MHz band and it is proposed that this should be reflected appropriately in the ECA.

2. The DSI Process

The DSI Phase 2 Report (Ref 1) noted:

“In several CEPT countries the amateur service operates in this band on a secondary basis whilst in others it is used for sound broadcasting or mobile applications. From a propagation standpoint, 70 MHz is understood to be at the currently known extent of F2 ionospheric propagation. Sound broadcasting in Eastern Europe is likely to cease in this band within the next 15 years, and it is hoped the plan outlined in this document for the mobile services in the range 68-87.5 MHz will be acceptable to these administrations. This plan is based on 9.8 MHz transmitter-receiver spacing. The radio astronomy requirement at 79.75 to 80.25 MHz is also recognised and the band together with its 9.8 MHz complement 69.95-70.45 MHz are considered most appropriate for single frequency mobile applications, perhaps optimum for defence users with arrangements to protect radio astronomy. It would therefore seem possible to agree to a limited amateur transmitting facility of at least 100 kHz centred on 70.2 MHz in the band 70-70.45 MHz. It is also hoped that the existing beacon network between 70 and 70.150 MHz can be maintained and extended.”

A specific recommendation was made as in the same report as follows:

The DSI Management Team recommend in the context of the European Table of Allocations and in accordance with the foregoing, that a minimum of 100 kHz in the band 70-70.45 MHz be allocated to the amateur service on a secondary basis according to national considerations, if feasible, centred on 70.2 MHz.

In 1997 CEPT’s European Radiocommunications Committee came to the following conclusion (Ref 2) with respect to this recommendation:

The ERC accepts this recommendation in principle pending a possible harmonised secondary allocation to the amateur service for F2-layer ionospheric propagation experiments.

Since the DSI Phase 2 Report in March 1995 sound broadcasting has indeed declined in Eastern Europe and in addition commercial low-band PMR has also declined significantly mainly due to the widespread penetration of IMT and the popularity of UHF PMR. In addition the low wavelength circa 4 metres leads to

relatively large antenna sizes, significant impulsive noise, and harmful interference arising from sporadic E propagation events especially in summer months.

3. Recent Developments

In 2008 Ireland submitted a proposal (Ref 3) to CEPT's Frequency Management Working Group (WGFM), concerning the possibility of a secondary allocation to the amateur service in the band 70.0 - 70.5 MHz within Europe's Table of Frequency Allocations, the ECA (Ref 4).

The prime goal for doing this was to recognise that despite the lack of an allocation to the amateur service in either Article 5 of the ITU Radio Regulations or in the ECA, a growing number of administrations have authorized their amateurs to use the 70 MHz band on a permanent basis with some others permitting only very short term access to the band for experiments or the establishment of propagation beacons.

In addition there appeared to be a need to obtain regulatory recognition for the frequency allocation, which in some countries is a requirement before the band could be released to the amateur service. The Irish proposal in 2008 led to the adoption of footnote EU9 in the ECA.

Furthermore, some administrations have not been able to release frequencies in the band 70.0 – 70.5 MHz, however they have been able to release some spectrum in the band 69.9 – 70.0 MHz, hence the proposed extension of the proposed secondary allocation to 69.9 MHz.

It should also be noted that other countries in ITU R1 in Africa and the Middle East have also provided access to the band.

4. Proposal

In order to facilitate the growth in demand by the amateur service for use of this band, with 30 CEPT countries already having provided some form of regulatory access to the band for amateur usage or experimentation, on a temporary or permanent basis, it is now proposed that a secondary allocation for the amateur service should be included to the ECA within the range 69.9 – 70.5 MHz.

The proposed changes to the ECA are attached at Annex. It should be underlined that the administrations proposing this amendment to the ECA are not urging all CEPT administrations to release all or parts of the band 69.9 – 70.5 MHz to the amateur service, they simply believe that a regulatory mechanism should be adopted which recognises a change in spectrum usage which has been underway since the 1950s and is now gaining significant momentum.

5. References

1. DSI II (Detailed Spectrum Investigation 29.7 – 960 MHz) from March 1995:
<http://www.erodocdb.dk/docs/doc98/Official/Pdf/DSI2.pdf> - pages 114-115 and page 117
2. CEPT/ERC response to DSI II from December 1997:
http://www.itu.int/ITU-D/study_groups/SGP_1998-2002/JGRES09/004e.doc
- Response to DSI II from the ERC (European Radiocommunications Committee) reflected in an ITU report. See 37(c)
3. Proposal from Ireland to 62nd Meeting of the WG FM Athens, 11 – 15 February, FM(08)025: Revision of ECA concerning the band 70.0 - 70.5 MHz.
4. ECA (European Common Allocation table) started 1994, latest version 2013:
<http://www.erodocdb.dk/docs/doc98/official/pdf/ERCRep025.pdf>

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<i>RR Region 1 Allocation and RR footnotes applicable to CEPT</i>	<i>European Common Allocation</i>	<i>ECC/ERC harmonisation measure</i>	<i>Applications</i>	<i>European footnotes</i>	<i>Standard</i>	<i>Notes</i>
68 - 70.45 MHz						
FIXED	MOBILE		Defence systems	EU1		
MOBILE except aeronautical mobile	Amateur		Amateur Radio			Amateur within 69.9 – 70.45 MHz
		ECC/DEC/(06)06	PMR/PAMR		EN 300 086	ML paired with 77.8-80.25 MHz
5.175	EU2 EU4 EU9	T/R 25-08			EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471 EN 301 166 EN 302 561	
70.45 - 74.8 MHz						
FIXED	MOBILE except aeronautical mobile		Defence systems	EU1		Harmonised military band 73.3-74.1 MHz
MOBILE except aeronautical mobile	Radio astronomy		Amateur Radio			Amateur within 70.45 – 70.5 MHz
	Amateur		PMR/PAMR		EN 300 086	ML paired with 80.25-84.6 MHz
5.149	5.149 EU2	ECC/DEC/(06)06			EN 300 113	
5.175	EU4	T/R 25-08			EN 300 219	
5.177	EU9				EN 300 296	
5.178	EU27				EN 300 341	
5.179					EN 300 390 EN 300 471 EN 301 166 EN 302 561	
						Radio astronomy Continuum observations (inter-alia solar wind monitoring in 73-74.6 MHz)

Modification to footnote EU9 as follows:

- EU9 - CEPT countries may authorize all or parts of the band 69.9-70.5 MHz to the Amateur service on a secondary basis.