



# International Amateur Radio Union Region 1

Europe, Middle East, Africa and Northern Asia  
Region 1 Office: P.O. Box 12104, Brandhof 9324, Republic of South Africa  
Tel: +27 51 402 2093 Fax: +27 088 051 446 2039 Mobile: +27 82 770 9126  
e-mail: zs4bs@iaru\_r1.org

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Colleagues,

## POSSIBLE AMATEUR ALLOCATION AT 5 MHz

IARU has an opportunity at the forthcoming World Radiocommunications Conference in 2015 (WRC15) to gain additional spectrum for the amateur service around 5 MHz. But to achieve this we need the help of every Member Society in IARU. That is why I am writing to you.

The proposal is included in Agenda item 1.4 ("AI 1.4") at the Conference, and the attached brief explains why an allocation at around 5 MHz is being sought and should be used in discussions with your administrations.

In CEPT, Denmark, Finland, Norway, Spain, Sweden, Switzerland, The Netherlands and United Kingdom have already expressed support for a secondary amateur allocation. Austria, France and the Russian Federation have indicated that they are not in favor of an amateur allocation. In the case of France and Austria, it would be helpful if OeVSV and REF could find the opportunity to approach their administrations to seek to change their position. We continue to seek opportunities for a dialogue with RCC.

The Arab Spectrum Management Group is currently not in favor of an amateur allocation around 5 MHz. Our Vice President is coordinating actions here.

At the 2013 ATU meeting held in Dakar, Senegal, countries that belong to the African Telecommunications Union have expressed their support for an amateur allocation around 5 MHz. It would be advisable that African Member Societies maintain their good relationship with their administrations and remind them of this agreement.

It is fair to assume that countries already allowing amateur operations under article 4.4 of the ITU Radio Regulations will support an amateur allocation. These countries include Andorra, Bahrain, Croatia, Czech Republic, Greece, Iceland, Ireland, Israel, Portugal, Somalia, Slovak Republic and South Africa. However, confirmatory discussions should take place with these administrations to encourage them to support.

Please can you meet with the appropriate people in your administration (those who will be part of your national delegation to WRC 15) and explain why we are seeking this allocation, and ask for their support for the proposal.

I should add that, although as you will see from the above, there are already a significant number of administrations which are prepared to support us, we need many more to succeed. That is why **your** actions are so important. The next series of WRC preparatory meetings take place in January and February and so early action is important.

Please will you see what you can do to help by speaking with your administration?

73

**Don, G3BJ**  
**President IARU Region 1**

## **IARU Position for WRC-15 to be used by MS with their Administration**

***Agenda Item 1.4*** – “to consider possible new allocation to the amateur service on a secondary basis within the band 5 250 - 5 450 kHz in accordance with Resolution 649 (WRC-12);”

**The IARU requests that consideration be given to a secondary allocation for the amateur service from 5 275 to 5 450 kHz.**

***Justification*** (as given in Resolution 649 (WRC-12), see Annex 1):

- Communications in the HF bands allocated to the amateur service play a major role in work to mitigate catastrophes and in the delivery of communications in support of relief operations in areas where the telecommunication infrastructure is weak or has collapsed.
- Radiocommunication in the HF bands is dependent on propagation factors, with the result that frequencies in different bands have to be used.
- For amateur stations using typical antennas and power levels, it is important that the maximum usable frequency (MUF) not be excessively above the operating frequency.
- In the current allocations to the amateur service in the HF bands there is a significant gap between 4000 kHz (3800 kHz in Region 1 and 3900 kHz in Region 3) and 7000 kHz, which causes problems in maintaining communications when the MUF falls below 7 MHz.

***An allocation at 5 MHz will bridge the propagation gap between the 3 500 kHz and the 7 000 kHz amateur radio bands and enable the amateur service to maintain stable communication over various distances for the whole 24 hours, especially for use when providing communications in disaster situations and during relief operations.***

Further explanation:

- The segment from 5 250 to 5 275 kHz is not included in the requested allocation due to the difficulties in sharing with the oceanographic radars that are allocated to this segment.
- The amateur service requests the whole segment from 5 275 to 5 450 kHz in order to allow maximum flexibility for a secondary service to find a clear frequency and also to allow each administration maximum flexibility should they need to restrict part of the segment.
- Further, as amateur communication increasingly uses digital modes of emission, inter-symbol distortion caused by multipath propagation requires choice of an operating frequency as near as possible to the MUF.
- The use of 5 MHz for long range fixed links on a 24/7 basis is unlikely
- Monitoring results show that less than 20% of the band is used by stations in the fixed and mobile services, indicating that a secondary amateur allocation is feasible.
- Current practice, with amateur stations operating under the provisions of article 4.4 of the ITU Radio Regulations and experimental stations operating under the provisions of article 27 of the ITU Radio Regulations have not led to reports of harmful interference
- Follows standard practice of “Listen before transmit”
- No contest in HF bands where the amateur service has a secondary allocation

More than 50 administrations have allowed various use of frequencies in this band under RR 4.4 in order to

- *allow for propagation studies*
- *allow for communication during emergencies and natural disasters*
- *verify sharing/show lack of interference with incumbent services*

*For further information the preliminary CPM-text can be found in ITU document:*

***Annex 4 to Document 5A/543-E: Draft CPM Text for WRC-15 Agenda Item 1.4***

## **Annex 1**

### **Resolution 649 [COM6/12] (WRC-12)**

#### **Possible allocation to the amateur service on a secondary basis at around 5 300 kHz**

The World Radiocommunication Conference (Geneva, 2012),

*considering*

- a) that amateur stations are regularly used for emergency radiocommunications in the event of hurricanes, typhoons, floods, fires, volcanic eruptions, earthquakes and other disaster situations;
- b) that Recommendation ITU-R M.1042-3, on disaster communications in the amateur and amateur-satellite services, encourages the development of such services capable of providing radiocommunications in the event of natural disasters, and recommends that their networks be robust, flexible and independent of other telecommunication services and capable of operating from emergency power;
- c) that communications in the HF bands allocated to the amateur service play a major role in work to mitigate catastrophes and in the delivery of communications in support of relief operations in areas where the telecommunication infrastructure is weak or has collapsed;
- d) that the various frequency bands allocated to the amateur service are contained in the Table of Frequency Allocations in Article 5 of the Radio Regulations,

*recognizing*

- a) that radiocommunication in the HF bands is dependent on propagation factors, with the result that frequencies in different bands have to be used to maintain stable communication for a relatively sustained period of time, with frequency changes in the case of communications with different correspondents located at very different distances;
- b) that it is essential that, in all cases, the maximum usable frequency (MUF) should not be excessively far from the next band allocated to the amateur service, so as to permit the setting up of communications in this band using typical amateur service antennas and power levels;
- c) that, in the current allocations to the amateur service in the HF bands, there is a significant jump, which causes many problems in terms of communication when the MUF falls below 7 MHz and the lowest usable frequency (LUF) is above 4 MHz, with the result that amateur stations would need to be able to access spectrum at around 5 MHz in order to fulfill their communication functions, particularly when they are engaged in providing emergency communications in response to disaster situations,

*noting*

- a) that the band 5 250-5 450 kHz is allocated to the fixed and mobile services, except aeronautical mobile, on a primary basis;

- b) that an allocation of an appropriate amount of spectrum, not necessarily contiguous, to the amateur service at around 5 300 kHz would be adequate to better satisfy its needs associated with use for providing communications in disaster situations and during relief operations;
- c) that the band 10 100-10 150 kHz is already allocated to the fixed service on a primary basis and to the amateur service on a secondary basis, and that effective use of both services has been possible,

*resolves to invite WRC-15*

to consider, based on the results of the ITU-R studies referred to in *invites ITU-R* below, the possibility of making an allocation of an appropriate amount of spectrum, not necessarily contiguous, to the amateur service on a secondary basis within the band 5 250-5 450 kHz,

*invites ITU-R*

1. to study spectrum requirements for a secondary allocation to the amateur service within the band 5 250-5 450 kHz;
2. to carry out sharing studies on the impact to other services currently allocated in the band referred to in *invites ITU-R* 1 and in the adjacent bands;
3. to complete studies in time for WRC-15.