



# International Amateur Radio Union Region 1

Europe, Middle East, Africa and Northern Asia

Founded 1950

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<b>SUBJECT</b>	IARU position for WRC-12		
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### Introduction

This paper presents the **IARU position for WRC-12** as of 18 October 2009.

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## **Agenda Item 1.1**

This Agenda Item invites administrations to request that their names be deleted from footnotes to the international Table of Frequency Allocations.

### **Background Info**

The examination of footnotes as expressed in agenda item 1.1 is a standing item on the agenda of WRCs. This item only comprises the deletion of country footnotes or country names from footnotes. Some countries attempt to use this agenda item to introduce new or modified country footnotes but this is only acceptable in exceptional cases.

### **FN 5.96**

5.96 In Germany, Armenia, Austria, Azerbaijan, Belarus, Denmark, Estonia, the Russian Federation, Finland, Georgia, Hungary, Ireland, Iceland, Israel, Kazakhstan, Latvia, Liechtenstein, Lithuania, Malta, Moldova, Norway, Uzbekistan, Poland, Kyrgyzstan, Slovakia, the Czech Rep., the United Kingdom, Sweden, Switzerland, Tajikistan, Turkmenistan and Ukraine, administrations may allocate up to 200 kHz to their amateur service in the bands 1 715-1 800 kHz and 1 850-2 000 kHz. However, when allocating the bands within this range to their amateur service, administrations shall, after prior consultation with administrations of neighbouring countries, take such steps as may be necessary to prevent harmful interference from their amateur service to the fixed and mobile services of other countries. The mean power of any amateur station shall not exceed 10 W. (WRC-03).

### **Preliminary IARU position**

Footnote 5.96 is useful in that it provides a means for administrations in Region 1 to allocate additional spectrum to the amateur service without resorting to RR 4.4. However, the 10 W power limit may not be necessary in view of diminished use of this spectrum by other services.

### **FN 5.98 and 5.99**

5.98 Alternative allocation: in Angola, Armenia, Azerbaijan, Belarus, Belgium, Cameroon, Congo (Rep. of the), Denmark, Egypt, Eritrea, Spain, Ethiopia, the Russian Federation, Georgia, Greece, Italy, Kazakhstan, Lebanon, Lithuania, Moldova, the Syrian Arab Republic, Kyrgyzstan, Somalia, Tajikistan, Tunisia, Turkmenistan, Turkey and Ukraine, the band 1 810-1 830 kHz is allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. (WRC-07)

5.99 Additional allocation: in Saudi Arabia, Austria, Iraq, the Libyan Arab Jamahiriya, Uzbekistan, Slovakia, Romania, Serbia, Slovenia, Chad, and Togo, the band 1 810-1 830 kHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. (WRC-07)

#### **Preliminary IARU position**

It is desirable for as many countries as possible to remove their names from both footnotes, especially 5.98. In principle it would be an improvement for country names to be moved from footnote 5.98 to 5.99, but this has been difficult to achieve procedurally at previous WRCs.

### **FN 5.100**

5.100 In Region 1, the authorization to use the band 1 810-1 830 kHz by the amateur service in countries situated totally or partially north of 40 degrees N shall be given only after consultation with the countries mentioned in Nos. 5.98 and 5.99 to define the necessary steps to be taken to prevent harmful interference between amateur stations and stations of other services operating in accordance with Nos. 5.98 and 5.99.

#### **Preliminary IARU position**

**This footnote has been overtaken by events, i.e. whatever consultation may have been required as a practical matter has already been accomplished. This footnote should be deleted.**

### **FN 5.101**

5.101 Alternative allocation: in Burundi and Lesotho, the band 1 810-1 850 kHz is allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis.

#### **Preliminary IARU position**

It is desirable for these two administrations to request deletion of footnote 5.101.

### **FN 5.141**

5.141A Additional allocation: in Uzbekistan and Kyrgyzstan, the bands 7 000-7 100 kHz and 7 100-7 200 kHz are also allocated to the fixed and land mobile services on a secondary basis. (WRC-03)

5.141B Additional allocation: after 29 March 2009, in Algeria, Saudi Arabia, Australia, Bahrain, Botswana, Brunei Darussalam, China, Comoros, Korea (Rep. of), Diego Garcia, Djibouti, Egypt, United Arab Emirates, Eritrea, Indonesia, Iran (Islamic Republic of), Japan, Jordan, Kuwait, the Libyan Arab Jamahiriya, Morocco, Mauritania, New Zealand, Oman, Papua New Guinea, Qatar, the Syrian Arab Republic, Singapore, Sudan, Tunisia, Vietnam and Yemen, the band 7 100-7 200 kHz is also allocated to the fixed and the mobile, except aeronautical mobile (R), services on a primary basis. (WRC-03)

5.141C In Regions 1 and 3, the band 7 100-7 200 kHz is allocated to the broadcasting service until 29 March 2009 on a primary basis. (WRC-03).

#### **Discussion**

Mainly Arab countries were not in favour of an amateur allocation between 7 100-7 200 kHz at WRC-03.

### **Preliminary IARU position**

In future, efforts should be made that these countries will remove their names from footnote 5.141B.

Dialogue should take place with the Arab Spectrum Management Group to raise their awareness of the benefits of the amateur radio services. In the meantime countries should be discouraged from attempting to add their names to either footnote, especially 5.141A.

Footnote 5.141C should disappear from the table more or less automatically.

## **Agenda Item 1.3**

*to consider spectrum requirements and possible regulatory actions, including allocations, in order to support the safe operation of unmanned aircraft systems (UAS), based on the results of ITU-R studies, in accordance with Resolution 421 (WRC-07);*

### **Issue**

*Resolution 421 (WRC-07): Consideration of appropriate regulatory provisions for the operation of unmanned aircraft systems (UAS).*

This AI covers that WRC-12, based on the results of ITU-R studies, will consider:

- the spectrum requirements and possible regulatory actions, including additional allocations, to support the remote pilot in commanding and controlling the unmanned aircraft systems and in relaying the air traffic control communications;
- the spectrum requirements and possible regulatory actions, including additional allocations, to support the safe operation of unmanned aircraft systems.
- Frequency Range/Bands: tbd

### **Preliminary IARU position**

Current discussions are centred on the Aeronautical Mobile (Route) Service - AM(R)S and the Aeronautical Mobile Satellite (Route) Service – AMS(R)S bands and should therefore not present any immediate threat to the Amateur Services. A watching brief should be kept on this A.I.

## **Agenda Item 1.4**

*to consider, based on the results of ITU-R studies, any further regulatory measures to facilitate introduction of new aeronautical mobile (R) service (AM(R)S) systems in the bands 112-117.975 MHz, 960-1 164 MHz and 5 000-5 030 MHz in accordance with Resolutions 413 (Rev. WRC-07), 417 (WRC-07) and 420 (WRC-07);*

### **Issue**

*Resolution 413 (Rev. WRC-07): Use of the band 108-117.975 MHz by the aeronautical mobile (R) service*

*Resolution 417 (WRC-07): Use of the band 960-1 164 MHz by the aeronautical mobile (R) service*

*Resolution 420 (WRC-07): Consideration of the frequency bands between 5 000 and 5 030 MHz for aeronautical mobile (R) service surface applications at airports.*

Based on the results of ITU-R studies, this AI takes account of the fact that WRC-11 will consider:

- compatibility issues between the broadcasting and AM(R) services that may arise from the introduction of AM(R)S systems in the band 112-117.975 MHz, and will develop new or revised ITU-R Recommendations as appropriate;
- compatibility issues between the broadcasting and AM(R) services in the band 108-117.975 MHz that may arise from the introduction of appropriate digital sound broadcasting systems and will develop new or revised ITU-R Recommendations as appropriate;
- operational and technical means to facilitate sharing between AM(R)S systems operating in the band 960-1 164 MHz and ARNS systems

- operational and technical means to facilitate sharing between AM(R)S systems operating in the band 960-1 164 MHz and the RNSS operating in the band 1 164-1 215 MHz;
- AM(R)S spectrum requirements for surface applications in the 5 GHz range, in order to determine if they can be fulfilled in the band 5 091-5 150 MHz;
- the feasibility of an allocation for AM(R)S for surface applications at airports, and will study the technical and operational issues relating to the protection of RNSS in the bands between 5 000 and 5 030 MHz and of the radio astronomy service in the band 4 990-5 000 MHz from AM(R)S, and will develop appropriate Recommendations.

#### **Preliminary IARU position**

There would not appear to be a threat to any amateur services bands. Maintain a watching brief.

### **Agenda Item 1.6**

Update the spectrum use by the passive services, 275-3000 GHz

#### **Issue**

AI to review and update, footnote 5.565 which lists bands used by the passive services.

#### **Background Info/Discussion**

No allocations. Identify certain spectral lines. A number of European administrations are in the process of making large segments of this band license exempt.

#### **Preliminary IARU position**

Ensure that the Amateur Services preferred bands set out in the IARU spectrum requirements document are taken into account.

### **Agenda Item 1.10**

to examine the frequency allocation requirements with regard to operation of safety systems for ships and ports and associated regulatory provisions, in accordance with Resolution **357 [COM6/10] (WRC-07)**.

#### **Background Info**

There is a global requirement for application of radiocommunications to enhance ships and ports security. Among the concerns are: management and identification of cargo; coordination of sensors and monitors; rapid detection of dangerous, unauthorized, or compromised shipments; and, enhanced interaction with both local and national public protection resources.

The International Maritime Organization (IMO) recognized this need by its adoption of the Code on International Ship and Port Facility Security (ISPS), implemented as treaty by amendment to the Safety of Life at Sea (SOLAS) Convention.

Also IMO's Maritime Safety Committee (MSC 81) approved new provisions in Chapter V (Safety of Navigation) of SOLAS for Long Range Identification and Tracking (LRIT) following the adoption of the ISPS Code which also introduced a requirement for Ship Security Alert System (SSAS) and carriage requirements. LRIT information can be used for both security and safety (including SAR activities) and protection of the marine environment. Frequencies, procedures and techniques used by the GMDSS will not be affected by any further developments of AI 1.10.

### **Preliminary IARU position**

As the development of this AI could have implications for AI 1.23 it will be necessary to monitor regional and national preparations. For example:

3. CEPT is supporting **studies** within ITU-R with regard to:

- the satellite detection of AIS, taking into account Resolution 357 as adopted by WRC-07;
- the possible harmonization of technology for cargo identification and tracking through ITU Recommendations;
- the broadcasting of security levels for ports and coastal waters in the band around 500 kHz;
  - the harmonized introduction of new technologies by the Maritime mobile service (in the VHF band) through possible regulatory measures (Resolution 342 Rev. WRC-2000)

and the preliminary IMO position –

4. The IMO supports the prospective studies currently undertaken to establish the requirement for the broadcasting of the port security levels in the band 495 kHz – 505 kHz.

However at the moment no input papers either at CEPT or ITU level mention the above frequency segment.

Vague claims of future maritime requirements in the vicinity of 500 kHz (495-505 kHz) should be challenged politely and on a technical basis. The existing maritime mobile allocations should be sufficient to meet any such requirements.

IMO position changed meanwhile:

***1.10 to examine the frequency allocation requirements with regard to operation of safety systems for ships and ports and associated regulatory provisions, in accordance with Resolution 357 [COM6/10] (WRC-07).***

In its preliminary position CEPT is supporting studies within ITU-R with regard to the broadcasting of security levels for ports and coastal waters in the band around 500 kHz.

The IMO position has been changed regarding MF:

CPG11-3 (Prague):

The IMO supports the prospective studies currently undertaken to establish requirement for broadcasting of port security levels in the band **495-505 kHz**.

CPG12-4 (Athens):

IMO supports the future use of band **415 kHz – 526.5 kHz** for safety and security related systems, recognizing that this band is allocated on a world-wide basis for the use by the maritime community.

## **Agenda Item 1.14**

to consider requirements for new applications in the radiolocation service and review allocations or regulatory provisions for implementation of the radiolocation service in the range 30 - 300 MHz, in accordance with resolution 611

### **Background Info/Discussion**

Development of new applications in the radiolocation service closely related to significant growth of the number of space objects including artificial debris. These applications have to be used for aerospace surveillance and tracking the launch and manoeuvring of spacecrafts. They are based on design of effective and economical radars that can be implemented in the VHF range. However, existing frequency allocations to the radiolocation service in the VHF range are not adequate for large-scale air and space surveillance operations, because the radiolocation service does not have any global frequency allocations in the VHF band. Therefore, the A.I. 1.14 comprises compatibility studies between radiolocation service and other services in different bands of VHF range and choice of the much appropriate ones for implementation of the new allocations of radiolocation service.

During the 2003-2007 study period the studies on protection criteria, technical characteristics of the radiolocation systems, operating in VHF frequency range were conducted in accordance with ITU-R Question 237/8. The studies resulted in preparation of Recommendation ITU-R M.1802 "Characteristics and protection criteria for radars operating in the band 30-300 MHz". In this Recommendation the typical characteristics of radars, operating in the VHF band and the examples of compatibility with the existing services are presented. An amendment of this recommendation may be necessary.

### **Preliminary IARU position**

IARU proposes an effective protection of the amateur and amateur-satellite service, especially in the 144-148 MHz band, from unwanted emissions of stations in the radiolocation service.

## **Agenda Item 1.15**

to consider possible allocations in the range 3-50 MHz to the radiolocation service for oceanographic radar applications, taking into account the results of ITU-R studies, in accordance with Resolution 612

### **Background Info/Discussion**

ITU-R WP 5B meeting identified the following bands to be studied under this Agenda Item: 3.5 – 5.5 MHz, 8 – 10 MHz, 12 – 14 MHz, 24 – 30 MHz, 39 – 45 MHz.

This has since been refined to particular sub-bands including 5 060-5 450 kHz, 13 870-14 000 kHz, 24 000-24 890 kHz and 29 700-30 000 kHz.

### **Preliminary IARU position**

Oceanographic radar applications are incompatible with the amateur and amateur satellite services in the range 3 to 50 MHz and should not be allocated in bands allocated to the amateur and amateur satellite service.

The IARU Monitoring System is to document interference reports in amateur bands and to assess the interference potential based on monitoring of existing surface wave radars in other bands.

## Agenda Item 1.19

### Issue

Regulatory measures for SDR and cognitive radio

### Preliminary IARU position

[Systems should protect amateur spectrum  
Participate in studies]

## Agenda item 1.20

### Issue

HAPS gateway links 5850 – 7075 MHz

### Background Info/Discussion

Our concern is the band 5850 – 5925 MHz

### Preliminary IARU position

Protect amateur spectrum in the band 5850 – 5925 MHz

## Agenda item 1.22

### Issue

Effects of SRDs

### Background Info/Discussion

RFIDs in particular are a potential threat to the amateur service. The provisional CEPT position is that no decision needs to be taken at WRC-12 while CITELE proposes –

*invites ITU-R*

1) to continue studying the regional and global harmonization of SRDs via the updating or creation of new ITU-R Recommendations and Reports; to conduct technical studies to evaluate the feasibility of potential candidate bands for SRDs and to document these studies in ITU-R Reports and Recommendations;

to identify specific regulatory action using the findings in these Recommendations and Reports;

### Preliminary IARU position

Protect spectrum allocated to the amateur and amateur satellite services.

## Agenda Item 1.23

to consider an allocation of about 15 kHz in parts of the band 415-526.5 kHz to the amateur service on a secondary basis, taking into account the need to protect existing services

### Discussion

Protection of NAVTEX channels at 490 and 518 kHz with a protection distance of 3 kHz and considering the current deployment of NDBs and their likely decommissioning timetable.

### Preliminary IARU position

IARU is in favour of an amateur allocation on a secondary basis of about 15 kHz in the range 415 to 526.5 kHz, preferably at 493-515 kHz or 472-487 kHz although other segments should not be ruled out. Aeronautical and maritime services have to be protected and IARU will take the lead in studies noting potential developments under A.I. 1.10.