



The International Amateur Radio Union

World Radiocommunication Conference 2015

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ITUs Radio Regulations (RR)

- Defines all international use of radio frequencies
- Managed by ITU (The International Telecommunication Union)
- ITU is a UN agency
- RR is ratified by all ITU member states
- Only a WRC can make changes to the RR
- ITU have 3 sectors: Radiocommunication (ITU-R), Standardization (ITU-T) and Development (ITU-D)
- ITU have a number of Study Group (SG) and Working Parties (WP) that prepare the work for each WRC
- IARU is a sector member of ITU-R and participates in these SGs and WPs



ITUs Radio Regulations

The RR covers:

Definition of services

1.56 and 1.57 defines the amateur and amateur satellite service

General rules and limitations for the service)

Article 25 concerns amateur and amateur satellite

A complete list/tables of all allocations within the radio specter

Article 5 gives all details for all services in tables and with footnotes

A number of Resolutions and Recommendations

The ITU RR is now free for download from the [itu.org](http://www.itu.int) web:

<http://www.itu.int/pub/R-REG-RR-2012>



Examples from RR Article 5

Allocation to services		
Region 1	Region 2	Region 3
10-10.45 FIXED MOBILE RADIOLOCATION Amateur 5.479	10-10.45 RADIOLOCATION Amateur 5.479 5.480	10-10.45 FIXED MOBILE RADIOLOCATION Amateur 5.479
10.45-10.5	RADIOLOCATION Amateur Amateur-satellite 5.481	

24-24.05	AMATEUR AMATEUR-SATELLITE 5.150
24.05-24.25	RADIOLOCATION Amateur Earth exploration-satellite (active) 5.150



Preparations for WRC

Internal amateur radio preparations

Discussions within the amateur radio member society (MS)

Discussions at regional IARU Conferences (ex: IARU Region 1 in Albena 2014)

The IARU Administrative Council (AC) discusses and sets the official IARU position for all amateur related agenda items

Public preparations

National administrations listens and discusses with all relevant parties including SSA

National administrations takes a view on each WRC agenda item

All WRC agenda items are discussed in CEPT (Project teams (PTC) and at CPG level

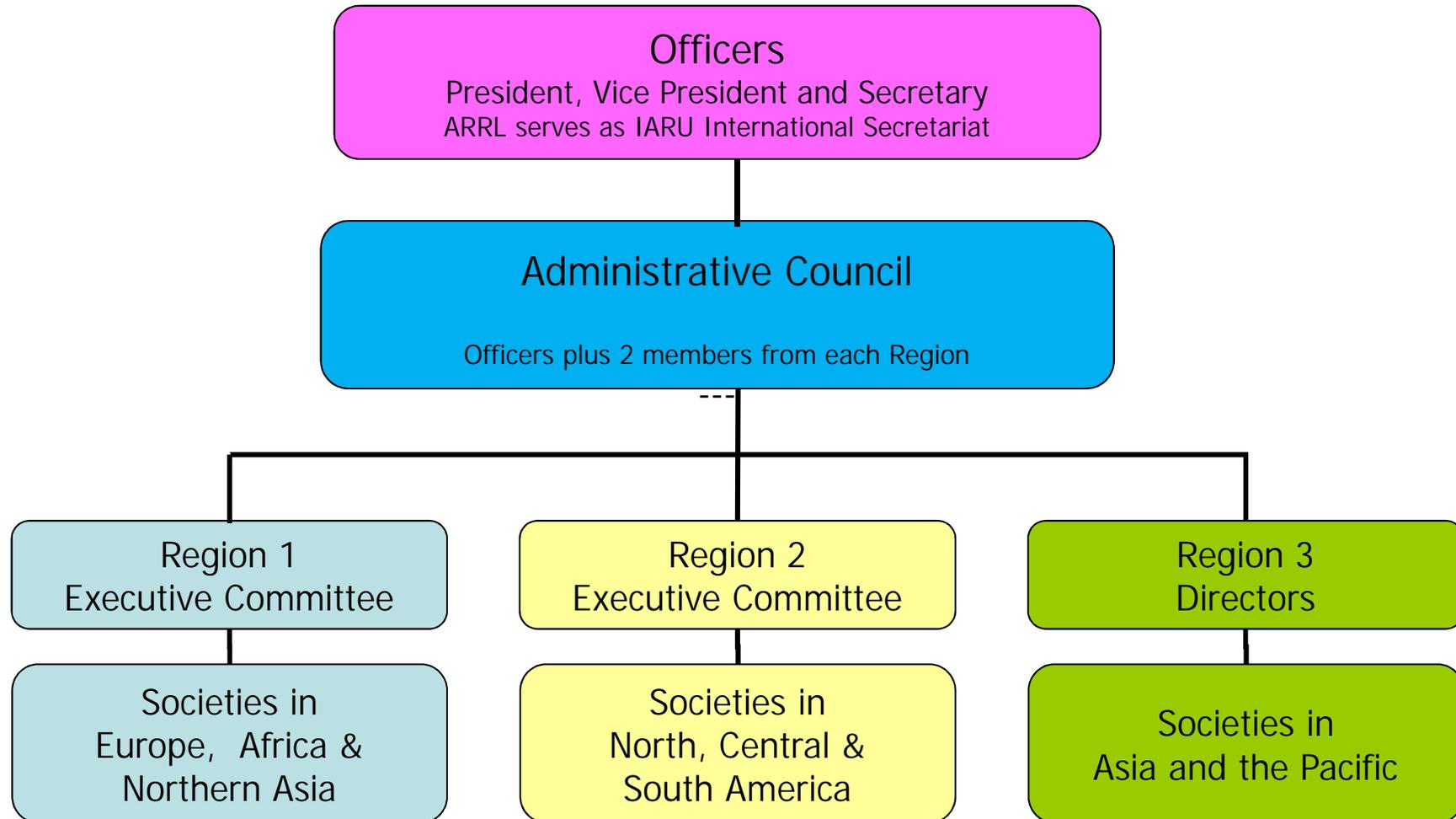
At ITU preparatory technical work is done in Working parties who normally meets for 2 weeks twice each year

The final list of methods (i.e. ways to solve each agenda item) is agreed at ITU approximately 6 months before the WRC

Each country/administration adjust its final view on each AI



IARUs Organisation





World Radiocommunication Conference

- Held every 3 year
- Only specific agenda items (the previous conference decides the agenda for the coming conference)
- Normally 4 weeks in Geneva,
- WRC-15: 2. – 27. of November 2015
- Only national administrations have voting rights
(we may have radio amateurs as part of a national administration allowed to speak on their behalf on amateur matters)
- IARU as a ITU-R sector member takes part without voting rights
- The «Final Acts» are signed by all administrations present
(it is possible for administrations not to sign specific part, but such disagreement is more often put into footnotes in the RR)



Agenda Item 1.4

- ❖ **to consider a possible new allocation to the amateur service on a secondary basis within the band 5 250 – 5 450 kHz**

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.

allocations to the amateur service in the HF bands allows radio amateurs to play an important role in delivery of communications in support of relief operations
radio communication in the HF bands is dependent on propagation factors
the need for an operating frequency close to the maximum usable frequency (MUF) for varying distances and time of day
current amateur radio allocations exist at 3 500 kHz and 7 000 kHz



Current amateur use near 5 MHz

A number of 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**

Countries in Europe:

Andorra, Croatia, Czech Rep., Denmark (incl OY), Finland, F. Y Rep of Macedonia (Z32), Greece, Iceland, Ireland, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland, United Kingdom.

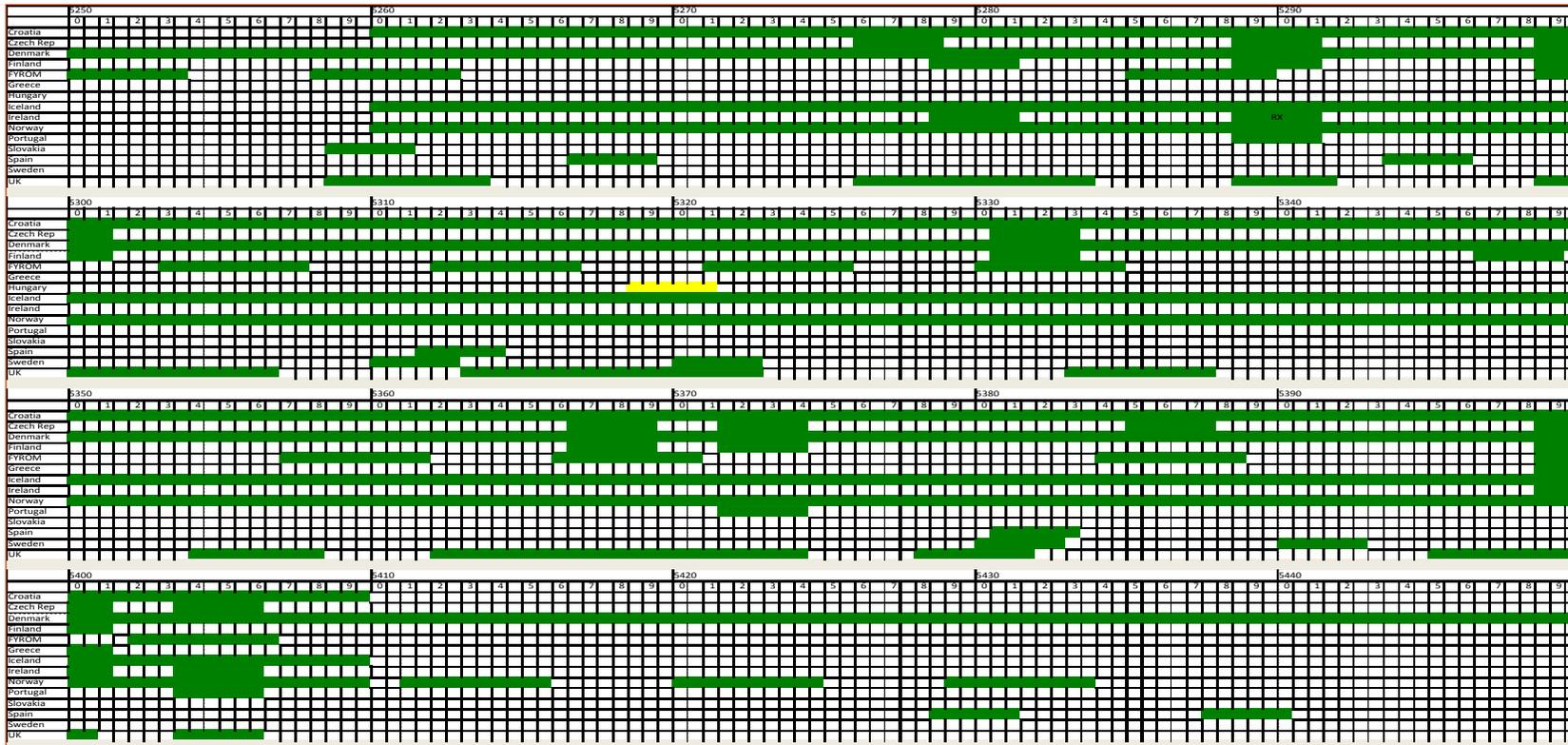
RR 4.4

Administrations of a member state may allocate frequencies to users not stated in the RR on the specific condition that:

“They shall not cause harmful interference to, and shall not claim protection from harmful interference caused by, a station operating in accordance with the provisions of the Constitution, the Convention and these Regulations.



Current amateur use near 5 MHz





RR Article 5: 5 060 – 5 680 kHz

5 060-5 250 FIXED Mobile except aeronautical mobile 5.133		
5 250-5 275 FIXED MOBILE except aeronautical mobile Radiolocation 5.132A 5.133A	5 250-5 275 FIXED MOBILE except aeronautical mobile RADIOLOCATION 5.132A	5 250-5 275 FIXED MOBILE except aeronautical mobile Radiolocation 5.132A
5 275-5 450 FIXED MOBILE except aeronautical mobile		
5 450-5 480 FIXED AERONAUTICAL MOBILE (OR) LAND MOBILE	5 450-5 480 AERONAUTICAL MOBILE (R)	5 450-5 480 FIXED AERONAUTICAL MOBILE (OR) LAND MOBILE
5 480-5 680 AERONAUTICAL MOBILE (R) 5.111 5.115		



AI 1.4 - 5,3 MHz

What are the issues:

Some countries (Russia, France, Hungary) do not want ANY allocation

Some countries can agree to a small allocation, one at 15 kHz, one at 25 and one at 2 x 25

Some countries want a wide allocation to allow each country to choose "their" segment (100 kHz up to 175 kHz)

Several of the "restricted" countries want some kind of limitation (mitigation) in addition to the secondary status like: max power, max antenna output/antenna gain, restriction zone from some countries borders.

The secondary status would mean no contests, no diplomas, no unmanned stations etc. (similar to 10 MHz)



Other AIs of interest to the amateurs

- AI 1.1** additional spectrum allocation to the mobile service and additional frequency bands for International Mobile Telecommunications (IMT) to facilitate development of terrestrial mobile broadband applications

- AI 1.6.1:** possible additional primary allocations to the fixed-satellite service of 250 MHz in the range between 10 GHz and 17 GHz in Region 1.

- AI 1.10** possible additional spectrum allocations for mobile-satellite service within 22 – 26 GHz.

- AI 1.12** a 600 MHz extension of the current worldwide allocation to Earth exploration-satellite service within 8 700-9 300 and/or 9 900 – 10 500 MHz.

- AI 1.18** primary allocation to the radiolocation service for automotive applications in the 77,5 – 78 GHz band.

- AI 9.1.8** Report on Regulatory aspects for nanosatellites and picosatellites



A way towards a new allocation

The idea agreed between the MS and the administration (PTS)

The administration (PTS) allows this use under RR 4.4

More countries allows this under 4.4

CEPT agrees to put it into the European Frequency allocation table

An administration or RTO manages to get it on the list for a future WRC

It becomes an agenda item at a WRC

Adm and IARU does preparatory work to justify the need

The WRC makes a decision



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