

**1st ITU INTER-REGIONAL WORKSHOP
ON WRC-15 PREPARATION
(Geneva, 4 – 5 December 2013)**

Mobile and Amateur Issues

Panel-1 Discussions on WRC-15 agenda item 1.4

José Costa

Chairman, ITU-R WP 5A

**1ST ITU INTER-REGIONAL
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PREPARATION**

**GENEVA, SWITZERLAND
4-5 DECEMBER 2013**

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Outline

- WRC-15 agenda item 1.4
- Motivation
- Issues
- Organization and status of the work in WP 5A
- References

- 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)**;
 - Resolution 649 (WRC-12): Possible allocation to the amateur service on a secondary basis at around 5 300 kHz.
- Responsible Group: **WP 5A**
- Contributing Groups: **WP 5B, WP 5C**
- Interested Groups: (WP 3L).

Resolution 649 (WRC-12)

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

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

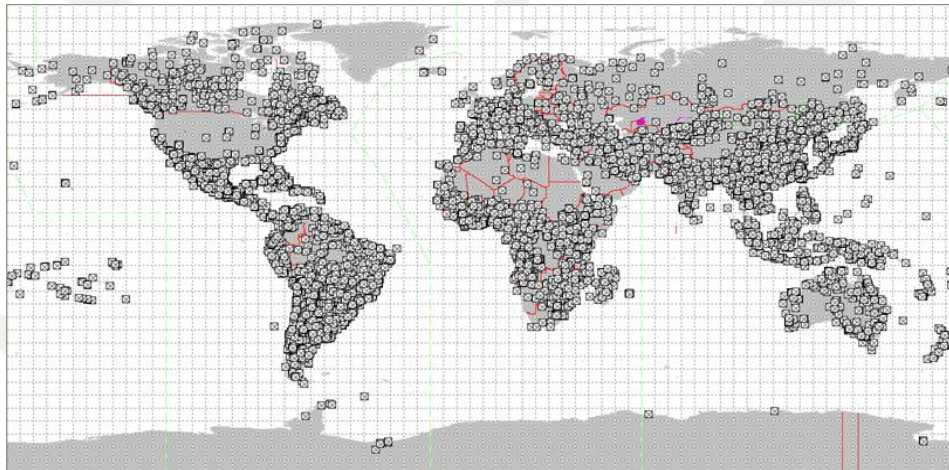
- 1 to study spectrum requirements for a secondary allocation to the amateur service within the band 5 250-5 450 kHz;
- 2 to carry out sharing studies on the impact to other services currently allocated in the band referred to in *invites ITU-R* 1 and in the adjacent bands;
- 3 to complete studies in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

Motivation

- An allocation on a secondary basis to the Amateur Radio Service would facilitate providing communications in disaster situations and during relief operations at times and for distances which might not be possible using existing amateur allocations.
- The amateur service needs to have access to a family of frequency bands such that communications can be maintained as propagation conditions change. There are current allocations in the vicinity of 3 500 and 7 000 kHz; however, there are frequent occasions when ionospheric conditions render either or both of these allocations unsatisfactory for communications over the distances which amateur radio operators are frequently requested to cover in the course of facilitating emergency and disaster relief operations.

Issues

- The frequency range 5 250-5 450 kHz is allocated to fixed and mobile (except aeronautical mobile) services in all three Regions on a primary basis. Radiolocation services are also allocated in the range 5 250 to 5 275 kHz as a secondary service in Regions 1 and 3 and Primary in Region 2.
- The frequency band 5 250-5 450 kHz is actively used by systems in the fixed, land mobile, and maritime mobile services.



Work in WP 5A

- Work being conducted within WG5A-1 chaired by Dale Hughes, Australia
- Work completed to-date:
 - Report ITU-R M.2281 (ex-[Doc. 5/54](#)) - Characteristics of amateur radio stations in the range 5 250-5 450 kHz for sharing studies
- The current main activity is the development of a new Report:
 - Working Document towards a preliminary draft new Report ITU-R M.[5MHz COMPAT] “Compatibility analysis of possible amateur systems with fixed, land mobile, maritime mobile and radiolocation services in the frequency band 5 250-5 450 kHz and the aeronautical mobile service in an adjacent band”
- WP 5A is developing draft CPM text and conducting sharing studies.
- Latest drafts:
 - Draft CPM text: [Annex 4](#) to [Doc. 5A/421](#)
 - Work plan: [Annex 5](#) to [Doc. 5A/421](#)
 - Working document on compatibility: [Annex 10](#) to [Doc. 5A/421](#)

Methods

- Method A: An allocation to the Amateur Radio Service, on a secondary basis, for one or more segments in the range 5 275 kHz to 5 450 kHz.
- Method B: No changes to Frequency Allocation Table of Radio Regulations (RR) in the frequency band 5 250-5 450 kHz.
 - Advantages: No interference
 - Disadvantages: Operation under RR No. 4.4 provisions

References

- Relevant ITU Recommendations:

- [ITU-R P.533-11](#), [ITU-R P.372-10](#), [ITU-R P.368-9](#), [ITU-R F.240-7](#), [ITU-R F.339-8](#), [ITU-R M.1677-1](#), [ITU-R M.1732-1](#), [ITU-R F.1761](#), [ITU-R F.1762](#), [ITU-R F.1821](#), [ITU-R M.1874-1](#), [ITU-R.SM.1541-4](#)

- Relevant ITU Reports:

- [Report ITU-R M.2080](#) – Consideration of sharing conditions and usage in the 4-10 MHz band.
- Report ITU-R M.2281 - Characteristics of amateur radio stations in the range 5 250 - 5 450 kHz for sharing studies (ex-[Doc. 5/54](#))
- Working document towards a preliminary draft new Report ITU-R M.[5 MHz COMPAT] - Compatibility analysis of possible amateur systems with fixed, land mobile, radiolocation and maritime mobile services in the frequency band 5 250-5 450 kHz ([Annex 10](#) to [Doc. 5A/421](#))
- [Report ITU-R M.2234](#) - The feasibility of sharing sub-bands between oceanographic radars operating in the radiolocation service and fixed and mobile services within the frequency band 3-50 MHz