

ITUWORKSHOPS

1st ITU Inter-regional Workshop on WRC-19 Preparation

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1st ITU INTER-REGIONAL WORKSHOP ON WRC-19 PREPARATION (Geneva, 21-22 November 2017)

Session 2 – Terrestrial WRC-19 agenda item 1.1 Amateur services

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90th Anniversary
CCIR - ITU-R Study Groups
(1927-2017)

Organized by:





Outline

- WRC-19 agenda item 1.1
- Resolution 658 (WRC-15)
- Background and motivation
- Organization of the work in WP 5A
- Status of studies
- Methods (work in progress)
- References



WRC-19 agenda item 1.1

- to consider an allocation of the frequency band 50-54 MHz to the amateur service in Region 1, in accordance with [Resolution 658 \(WRC-15\)](#);
 - [Resolution 658 \(WRC 15\)](#) – Allocation of the frequency band 50-54 MHz to the amateur service in Region 1.
- Responsible Group: **WP 5A**
- Contributing Groups: **WP 5B, WP 5C, WP 6A**
- Interested Groups: (WP 1A), (WP 3K), (WP 3M).



Resolution 658 (WRC-15)

Allocation of the frequency band 50-54 MHz to the amateur service in Region 1

resolves to invite WRC-19

- to consider the results of the studies below and take appropriate actions, including spectrum allocation,

invites ITU-R

- 1 to study spectrum needs in Region 1 for the amateur service in the frequency band 50-54 MHz;
- 2 taking into account the results of the above studies, to study sharing between the amateur service and the mobile, fixed, radiolocation and broadcasting services, in order to ensure protection of these services.



Background and Motivation

- The frequency band 50-54 MHz is allocated to the amateur service on a primary basis in ITU Regions 2 and 3, with additional or alternative allocations to the broadcasting, fixed, mobile, and/or radiolocation (limited to wind profiler radars) services in some countries in Region 3. The frequency band is allocated to the broadcasting service on a primary basis in ITU Region 1, with additional or alternative allocations to the amateur, fixed, mobile, and/or radiolocation (limited to wind profiler radars) services in some countries.
- Full or partial worldwide harmonization of the allocation to the amateur service in the frequency band 50-54 MHz would promote global efficiency and economies of scale in radio amateurs' efforts to fulfil the purposes of the amateur service, which include self-training, technical investigations, and intercommunication for a variety of purposes, including communication needs in support of disaster relief.
- The transition to digital television broadcasting has significantly reduced, but not yet eliminated, the use of the 50-54 MHz frequency band by the broadcasting service in ITU Region 1. In some Region 1 countries, use of the frequency band by other services continues. The ITU-R studies below consider protection of these services.



Work in WP 5A

- Work being conducted in WG5A-1 chaired by Mr. HUGHES Dale, Australia
- The main activities are:
 - Development of draft CPM text for agenda item 1.1 and
 - Development of a draft new Report on Spectrum needs for the amateur service in the frequency band 50-54 MHz in Region 1 and sharing with mobile, fixed, radiolocation, and broadcasting services.
- Latest drafts:
 - Draft CPM text: [Annex 4](#) to [Doc. 5A/650](#)
 - Work plan: [Annex 5](#) to [Doc. 5A/650](#)
 - Working document toward preliminary draft new Report ITU-R M.[AMATEUR_50_MHz]: [Annex 14](#) to [Doc. 5A/650](#)



Status of studies

- General agreement of method to calculate spectrum needs of the amateur service. More work needed to finalize the spectrum needs section of the report.
- Contributions covering sharing with broadcasting, radiolocation and land-mobile services incorporated into draft sharing studies report. General agreement of methods, more work required on parameters for propagation models.
- Have included notes on previously and currently used methods of sharing between the amateur and broadcasting service.



Methods (work in progress)

- **Method A:** An allocation to the amateur service on a Primary basis in [all or part of the] band 50-54 MHz, with appropriate footnotes to provide protection to services which already have an allocation in the band.
- **Method B:** An allocation to the amateur service on a Secondary basis in [all or part of the] band 50-54 MHz, with appropriate footnotes to provide protection to services which already have an allocation in the band.
- **Method C:** An allocation to the amateur service on a partly Primary and partly Secondary basis in band 50-54 MHz, with appropriate footnotes to provide protection to services which already have an allocation in the band.
- **Method D:** No change.



References

Recommendations and Reports relevant to WRC-19 agenda item 1.1

- [Recommendation ITU-R M.1732](#) "Characteristics of systems operating in the amateur and amateur-satellite services for use in sharing studies"
- [Recommendation ITU-R P.1546](#) "Method for point-to-area predictions for terrestrial services in the frequency range 30 MHz to 3000 MHz"
- [Recommendation ITU-R BT.1368](#) "Planning criteria, including protection ratios, for digital terrestrial television services in the VHF/UHF bands."
- [Recommendation ITU-R BT.2033](#) "Planning criteria, including protection ratios, for second generation of digital terrestrial television broadcasting systems in the VHF/UHF bands."
- [Recommendation ITU-R SM.851](#) "Sharing between the broadcasting service and the fixed and/or mobile services in the VHF and UHF bands."
- [Recommendation ITU-R P.526](#) "Propagation by diffraction."
- [Recommendation ITU-R M.1651](#) "A method for assessing the required spectrum for broadband nomadic wireless access systems including radio local area networks using the 5 GHz band."
- [Recommendation ITU-R P.2001](#) "A general purpose wide-range terrestrial propagation model in the frequency range 30 MHz to 50 GHz."
- Working document towards a preliminary draft of the new Report ITU-R [AMATEUR_50_MHz] "Spectrum needs for the amateur service in the frequency band 50-54 MHz in Region 1 and sharing with mobile, fixed, radiolocation, and broadcasting services" - [Annex 14](#) to the Chairman's Report ([Doc. 5A/650](#)).