



# International Amateur Radio Union Region 1

## Interim Meeting – Vienna Austria

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**Subject:** Preservation of CW sub-bands on HF IARU band plans

**Committee:** C4

#### 1. Introduction

One of the activities that keeps growing among amateur radio is low power transmission, so called QRP. This practice allows radio amateur operators to develop their traffic capabilities by using the right frequencies as a function of radio wave propagation, by improving their station antenna system as well as their operating skills. In addition, the use of low power makes it more accessible because it simplifies the construction of transmitters by radio amateurs and is therefore a gateway for novice radio amateurs. Finally, the use of low power perfectly meets the IARU recommendations of using the minimum power required for a given radio contact between stations.

#### 2. Background

The very recent explosion of digital modes for contacts between amateurs in the HF bands, especially the new FT8 mode, often leads to intensive use of the frequency sub-bands recommended for 500Hz and 2700Hz bandwidth digital modes, or even their quasi-congestion during international contests,.

As a support to the growth of digital mode activities, the IARU recently (Vienna 2016 ratified in Landshut 2017) modified the HF band plans by extending the 80m and 30m frequency sub-bands recommended for digi modes.

Telegraphy (CW) has been historically the preferred mode for radio amateur contacts, recognized as a very efficient and simple modulation. Nevertheless this simplicity makes this mode very sensitive to interferences from other transmission modes and this is one of the reasons why IARU band plans always defines CW-only sub-bands in order to protect this mode.

Very recently, the evolution of HF band plans, with the aim of increasing the portions allocated to digital modes, saw the restriction (on the 30m and 80m band in 2016) or the suppression (on the 60m band) of CW-only segments. These decisions understandable by their purpose nevertheless strongly affect the activity of low-power telegraphy, especially in the 5351.5 – 5354.0 kHz sub-band recommended for 200 Hz bandwidth modes: CW, Narrow band modes – digimodes.

As all the digital modes are generated and decoded by a computer running at a given time a software configured for a single mode, a telegraphy / CW transmission, especially low power one, is generally not detected and decoded by this computer. The digital mode operator can then unknowingly transmit on a frequency already occupied by a CW transmission and thus disrupt a radio link in progress.

#### 3. Proposal:

It is recommended to guarantee on all the HF bands allocated to radio amateurs a portion of the band reserved for the sole practice of CW telegraphy.

Considering the high probability of future requests for extension of the sub-bands dedicated to digimodes, it is recommended that these extensions be shared between the different “traditional” CW and phone modes, reserving a portion for narrow bandwidth digital modes below the beacon frequencies and a new sub-band allowed to wider bandwidth digital modes above them.

Example:

CW	Low bandwidth digital modes	Beacons	Larger bandwidth digital modes	Phone
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**Financial Implications: NONE**