



International Amateur Radio Union Region 1 2011 Regional Conference – Sun City, South Africa 12 to 19 August 2011



Subject	Modification of 6 m Band Plan		
Society	DARC	Country:	Germany
Committee:	C5	Paper number:	SC11_C5_40
Author:	Jochen Berns, DL1YBL		

Introduction

After very long discussions about the 6 m Band plan during the Vienna interim meeting in 2010, nothing significant has happened. The difficulties with the current band plan are obvious and something should happen before the next sunspot maximum.

Background

During the Vienna C5 meeting, several papers were addressing isolated items of the band plan without considering the whole band plan.

a) Some countries in Region 1 are not allowed to operate below 50,080 MHz; they have no objections against beacons in the 50,000 – 50,080 MHz range. However, there are some good reasons for moving the beacon band above 50,300 MHz.

- 50,000 – 50,100 is the American CW segment
- The present CW portion is far too narrow especially during periods with a high number of sunspots.
- The regulations in some countries lead to the distracting situation that these countries installed beacons inside the narrow CW range of the 6 m band.

b) A larger CW segment is necessary, especially for periods of maximum activity and to avoid problems for countries without a permission to transmit below 50,080 MHz.

50,400 – 50,500 MHz for beacons as discussed in Vienna requires large antenna bandwidth, so 50,300 – 50,400 MHz should be preferable. There are already beacons above 50,300 MHz, e.g. in VK, F and 5B4.

WSPR usually needs one channel but not a 20 kHz segment, so 50,400 MHz for WSPR might be a suitable proposal.

Arguments for bad antenna VSWR above 50,300 MHz have no foundation. In addition, statements that the MUF might reach 50,000 MHz but not 50,300 MHz are not realistic considering the very spotty pipeline propagation we observe near the MUF.

c) Today EME is usually accomplished on any frequency between 50,170 to 50,230 MHz, mainly because of the QRM by SSB stations. SSB stations on the other hand do not want MGM (Machine Generated Mode) carriers in their segment. In some

countries, SSB is only allowed above 50,200 MHz. The compromise could be moving all MGM activities into an MGM segment above the SSB segment.

d) As experience has shown man made Meteor Scatter (MS), which is not MGM, does not need a dedicated frequency band.

Inside an MGM band segment specific digital modes do not need to be specified. MS by MGM can operate inside the MGM segment.

For EME operations, an exclusive 20 kHz segment should be reserved.

e) Band plans in IARU Regions 1, 2 and 3 are different. It is desirable to harmonize band plans for all regions to reduce the risk of mutual interference when using different modes if propagation allows intercontinental contacts.

Key points and proposal

The information above can be combined into a 6m band plan proposal:

50,000 – 50,130	CW exclusive (270 Hz)
50,130	CW, SSB Intercontinental DX Calling Frequency
50,130 – 50,150	SSB, CW Intercontinental QSO segment (2,7 kHz)
50,130 – 50,250	SSB, CW (2,7 kHz)
50,250 – 50,270	EME by MGM (Machine Generated Mode) (500 Hz)
50,270 – 50,300	MGM terrestrial including MS (500 Hz)
50,300 – 50,400	Beacons
50,400	WSPR

Recommendation

That the 6 m band plan is modified as described in the proposal above and C5 Chairman is asked to start an initiative for harmonizing the 6 m band plans in Regions 1, 2 and 3.