# International Amateur Radio Union Region 1

Europe, Middle East, Africa and Northern Asia Founded 1950

## General Conference, Davos, 11 to 16 September 2005

| SUBJECT | BANDPLANS AND MGM | | |
|---|---|---|---|
| Society | EDR | Country: | Denmark |
| Committee: | C5 | Paper number: | 05 |
| Contact: | Ivan G. Stauning, OZ7IS | e-mail: | is@ihk.dk |

### Introduction

This document covers the issue of mode specific allocations within the bandplans, specifically the Machine Generated Modes (MGM).

### Background

The pace of MGM is in a rapid development. Thus stipulating a specific MGM techniques in the the bandplan at a specific frequency is prone to be obsolete soon after. New MGM techniques will replace older ones as they prove to be more efficient. Consequently radio amateurs' use of specific frequencies with a specific MGM changes just as rapidly.

The existing ways of doing the bandplans allocate several frequency spans with no users at all as the specific MGM has become obsolete for the specific purpose. E.g. today 50,230 MHz is used for MGM-JT6M random traffic, but nobody uses 50,270 MHz for MGM-FSK441.

The remainder MGMs may be used from time to time between a few individuals for very specific purposes but in very low numbers and time. The need to allocate spectrum for these may be of less importance in the big picture of the bandplans.

### Example - within the current bandplan

Today for 50 MHz

| Mode | Usage | |
|---|---|---|
| All band modes (Telegraphy, SSB, MGM etc.) | 50,100 - 50,130 | Intercontinental Telegraphy/SSB |
| | 50,110 | DX Calling (c) |
| | 50,150 | SSB Center of activity |
| | 50,185 | Crossband activity center |
| | 50,200 | MS center of activity |
| | 50,250 | PSK31 center of activity |
| | 50,255 | JT44 |
| | 50,260 - 50,280 | FSK441 |
| | 50,270 | FSK441 Calling freq. |

**Key points and proposal**

If keeping the existing ways of doing the bandplan several frequency spans can be found in the bandplans with no users at all as the specific MGM has become obsolete for the specific purpose. E.g. today 50,230 MHz is used for MGM-JT6M random traffic, but nobody uses 50,270 MHz for MGM-FSK441.

Therefore the bandplans should not stipulate specific a MGM, but let the "market forces rule" both when it comes to the specific MGM but also the MGM related propagation technique.

**Example - if proposal accepted**

For 50 MHz

| Mode | Usage | |
|---|---|---|
| All band modes (Telegraphy, SSB, MGM etc.) | 50,100 - 50,130 | Intercontinental Telegraphy/SSB |
| | 50,110 | DX Calling (c) |
| | 50,150 | SSB Center of activity |
| | 50,185 | Crossband activity center |
| | 50,200 | SSB/CW - MS center of activity |
| | 50,260 - 50,280 | MGM - Meteor Scatter |
| | 50,270 | MGM Calling freq. - Meteor Scatter |

Note: It might be wise to assign an allocation for both EME and MS, which is not the case in the current bandplan for 50 MHz.

**Recommendations**

1. *The bandplan, for any band should only stipulate MGM at specific frequencies, or frequency span, and the propagation mode associated.*

1. *An associated review of all the existing bandplans must be made fulfilling 1.*