



International Amateur Radio Union Region 1

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| Subject | 50 MHz Information Update on Synchronised Beacons | | |
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Introduction

Information on the latest progress and deployment considerations for the 50 MHz synchronised beacon programme is given below.

Current Status

Two frequencies are currently in use and this has prompted some work on reception:

- 50.005: EI0SIX, GB3MCB, PI7SIX, GB3MCB, OZ4BHM
- 50.006: IW9GDC/B
- Some further enhancements are expected in the coming months
- Beacon spot has been enhanced with respect to the SBP and 50,4xx moves
- PI-4 MGM is proving popular but we need further developments in reception software
- GB3MCB has demonstrated that dual-frequency mode can be valuable

Deployment Considerations

The following is based on a discussion Chris Deacon, G4IFX, who is both Chair of the UK Six Metre Group and a member of the RSGB Propagation Studies Committee:

- 1) The primary focus should be on long-distance propagation, rather than routine sporadic-E, because the latter is catered for very well by the conventional beacons above 50,400
- 2) We should focus on two main audiences:
 - (a) DXers looking outside their own continent
 - (b) People doing systematic propagation monitoring
- 3) It seems that there are two main options when designing the layout of the clusters:
 - (a) Spread the beacons out as much as possible on any given channel, arranged perhaps along a roughly east-west line or a north-south line
 - (b) Group beacons together regionally within Region 1, i.e. Western Europe on the same channel, southern Europe on another, southern Africa on another, etc.
- 4) Recognise that we will have to be pragmatic - there are unlikely to be enough viable SBP candidates to get the coverage we want, especially if we choose option 3a
- 5) Even at sunspot minimum, as we are proving this year on 50 MHz, MGM opens the possibility of contacts that we would not have been able to achieve before. Monitoring MGM beacons at the bottom of the band could be a very useful way of spotting such weak-signal opportunities.
- 6) Given that with SDR technology it will be perfectly possible to monitor all the cluster frequencies at the same time if we put our minds to it, one view is that regional

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clustering is likely to be easier to achieve and will also be more useful for the casual observer i.e. if you're interested in propagation to southern Africa then there's only one place to look.

- 7) Liaise further afield – a line of beacons down the West Atlantic coast might be attractive