



International Amateur Radio Union Region 1

Europe, Middle East, Africa and Northern Asia

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SUBJECT	The future of the 30 m (10 MHz) band		
Society	NRRL	Country:	Norway
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Introduction

NRRL invites to a discussion of the future of the 30 m band at the IARU Region 1 Interim Meeting 2013.

Background

The 30 m (10 MHz) band was assigned to amateur radio *on a secondary basis* by WARC-79 (World Allocation Radio Conference 1979). The radio amateurs were permitted to use 50 kHz (10100 - 10150 kHz). The present IARU Region 1 bandplan (as of Sun City, August 2011) is 10100 - 10140 CW with max. bandwidth 200 Hz, and 10140 - 10150 kHz digimodes with max. bandwidth 500 Hz (narrow band modes). 10116 kHz is assigned to CW QRP center of activity.

It should be noted that *IARU Region 2* permits 500 Hz maximum bandwidth in 10130 - 10140 kHz, and 2.7 kHz maximum bandwidth in 10140 - 10150 kHz. *IARU Region 3* has no maximum bandwidth specified in the 30 m band.

Considerations

30 m is a day + night world-wide propagation band, and will therefore also spread signals internationally, not only domestically.

There is now quite some unattended automated computer use of the 30 m band, where we (radio amateurs) have secondary status, giving many chances of interfering with primary users of the band.

We are concerned about that too many automatic (unattended) amateur radio services are active in the 30 m band, when the band is so narrow (only 50 kHz wide), giving less space for ordinary amateur-to-amateur contacts, when the bandplan is not obeyed by a number of automated digital station users.

We experience that especially the digital activities in the 30 m band are expanding beyond the IARU Region 1 bandplan regulation. This was not intended by IARU Region 1 during bandplanning. The bandplan calls for CW only in the lower 40 kHz of

the 30 m band, and that the upper 10 kHz be used for narrow band modes - digimodes, with bandwidth less than 500 Hz.

What is the use of fixed frequencies in the 30 m band today within IARU Region 1?
Note: The frequencies (in kHz) listed below are USB dial frequencies (and I cannot guarantee that the list is correct or complete).

10135.4 & 10136.9 Pactor PA3DUV
10138.0 & 10139.5 Pactor LZ1PKS
10139.5 & 10141.0 Pactor PA3DUV
10138 WSPR
10140-10142 PSK
10142.5 & 10144.0 Pactor S51SLO
10144.0 & 10145.5 Pactor ON0FS
10144.1 & 10145.6 Pactor EA8RCT
10144.4 & 10145.9 Pactor HB9AK
10144.9 & 10145.9 Pactor-3 LZ1PKS
10145.0 & 10146.5 Pactor OE3XEC
10146.0 & 10147.5 Pactor ON0FS
10146 & 10147 PSKMail <http://pskmail.wikispaces.com/PSKmailservers>
10147.8 APRS.

Our point is to show that the upper 15 kHz (30%) of our narrow 10100-10150 kHz 30 m band is now completely filled by automatic digital services (plus some manual digital activity frequencies) in IARU Region 1. And that the 10 kHz wide digital segment is so filled, that the automatic digital services now have expanded into the 10100-10140 kHz CW-only portion of the band.

We observe that at least one automatic station is using PACTOR-3, which will with its approx. 2.4 kHz wide bandwidth (on two frequencies) be in serious conflict with the IARU Region 1 bandplan call for maximum 500 Hz bandwidth in the 10 kHz narrow digimode segment. (PACTOR and PACTOR-2 have 300 and 450 Hz bandwidth, respectively, and should comply with the IARU Region 1 bandplan's bandwidth for digital modes in the upper 10 kHz of the 30 m band).

There is now no room for the casual RTTY chat in the upper 10 kHz (or even 15 kHz) of the 30 m band. And definitely no room for RTTY DXing, like we now see when DX stations are trying to operate RTTY at 10140 kHz listening for the pile-up in the 10 kHz segment above. Where RTTY stations should operate, according to the IARU Region 1 bandplan.

We therefore see that RTTY is now forced to operate below 10135 kHz, making even less space for CW-only communication.

Existing recommendations

IARU Region 1 recommendation of De Haan 1993 - C4.3:

It is recommended that:

Transmission modes which are inefficient in their use of spectrum or which have potential to cause serious interference problems to normal HF operations should be strongly discouraged on bands below 30 MHz.

Therefore we ask: is it really necessary to have such a high number of automatic computer operated digital mode stations in the 30 m (10 MHz) band, when limiting "normal HF operations"?

We see that the automatic (unattended) computer activities flourish on 30 m.

"Automatically controlled data stations" have been assigned special frequency segment *in other bands* -- but intentionally NOT in the 30 m band. There has until recently been a footnote in the IARU Region 1 bandplan that even news bulletins should *not* be transmitted in the 30 m band.

The present IARU bandplan says in general about *unmanned transmitting stations*:

IARU member societies are requested to limit this activity on the HF bands. It is recommended that any unmanned transmitting stations on HF shall only be activated under operator control except for beacons agreed with the IARU Region 1 beacon coordinator, or specially licensed experimental stations. The term "automatically controlled data stations" includes Store and Forward stations.

At the IARU Region 1 Interim Meeting in Friedrichshafen 2006 it was stated by the IARU Region 1 President that we should be careful in using unattended transmissions in the 10 MHz band. With reference to the Resolution DV05 C4 Rec 08, where **beacons in the 7 and 10 MHz bands are discouraged**. The main reason is that "**it was imperative not to cause interference to the primary user**" (cited from minutes of the Friedrichshafen 2006 IARU Region 1 Interim Meeting). For the same reason contests are discouraged in the 30 m band (HF Managers' Handbook, Ch. 8.1, Subchapter 8).

What to do?

1) Should we discourage all automatic stations in the 30 m band, so that it will again be possible to use its upper 10 kHz narrow-band digital segment for keyboard-to-keyboard digital QSOs?

2) Or is this now a lost case, so that we must modify the IARU Region 1 bandplan to allow for both manual and automatic digital transmissions at different frequency segments?

3) Should we keep the present bandwidths in the IARU Region 1 bandplan (10110 - 10140 kHz @ 200 Hz CW; 10140 - 10150 @ 500 Hz digital); or should we adopt the IARU Region 2 bandplan for the 30 m band (10110 - 10130 kHz @ 200 Hz CW; 10130 - 10140 kHz @ 500 Hz digital; 10140 - 10150 @ 2.7 kHz digital)?

4) This matters the placement of Winlink/WINMORE in the 30 m band. This technique has shown to be a robust way of communicating emergency messages worldwide. Should its use be restricted to the 10140 - 10150 kHz segment, without using PACTOR-3, to be in compliance with the present IARU Region 1 bandplan? For this to be successful, all other automatic stations should be discouraged in the 30 m band.

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Based on the background, considerations, and recommendations for the 30 m band (cited above), NRRL wants to *propose* the following recommendation, which can be discussed or modified at the Interim Meeting:

Recommendation

All member societies are requested to make actions in order to adhere to the IARU Region 1 bandplan including its notes (especially to limit unmanned transmitting stations) especially in the 30 m band. Automatic Winlink/WINMORE stations are permitted in the digimode segment for emergency use, and should adhere to the IARU Region 1 bandplan also with respect to bandwidth limitations.

But then we need to decide if the present 30 m bandplan is good, or if it should be changed?

Appendix

G3NRW provides updated usage of the 30 m band on his web pages:

http://homepage.ntlworld.com/wadei/30m_band_utilization.htm

http://homepage.ntlworld.com/wadei/121122_30m_Band_Utilization_Chart.pdf