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SUBJECT	Digital Voice on 2m – change of 2m bandplan		
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Introduction

The 2m bandplan limits repeater operation in its MODE column to FM technique, whereas the 70cm bandplan defines there correspondingly ALL MODES. Such a limitation on 2m to a single modulation technique isn't to date anymore.

Background

Some user groups want to replace FM at their 2m repeater system by digital technique.

New developments make it possible to use digital techniques for voice communication via a repeater. Intense studies have been carried out by a group of amateurs in close cooperation with staff of the German Regulatory Authority (BNetzA) to investigate the compatibility of digital modulation techniques, especially in the respect of potential adjacent channel interference. The results are promising and will be presented in an additional information paper and on the homepage of the VHF branch of the DARC.

Since an additional new pair of 2m channels for digital voice repeaters cannot be identified, such technique can only be used on conventional FM repeater channels, keeping in mind that existing FM repeaters have been coordinated to prevent interference by adequate separation of their locations and provided that interference to adjacent channels is not higher than with FM signals, a replacement of FM by a digital communication technique should not harm the operation of other repeaters.

There is also interest in using digital technique on simplex-channels.

Key points and proposal

Using digital voice communication technique should be allowed on the 2 m band on previous FM repeater channels and on some previous FM simplex channels.

Recommendation

It is recommended to modify the 2 m bandplan to account for new digital voice communication techniques.