

# VHF Radios: VDES, IRR 2020, and BIPT Requirements

Marine VHF radio operators and owners need to be aware of the following regulations restricting the use of certain VHF channels / frequencies in certain regions, from 1 January 2024.

- **VDES** (VHF Digital Data Exchange System)
- **IRR 2020** (International Radio Regulations)
- **BIPT** (Belgian Institute for Postal Services and Telecommunications)

## VDES OVERVIEW

VDES refers to a (relatively) recent development in VHF communications, which allows certain VHF channels to be used for the sending and receiving of digital data, instead of voice communications. As VDES combines multiple existing VHF channels, a number of changes are required to existing VHF channels, in order to prevent interference. However, while the changes implemented in the software update described in this document make your Class D VHF radio VDES-compliant (in the **Europe CEPT** band), the radio does not gain any new VDES functionality as a result of this update.

In terms of VDES implementation, in 2015, the ITU World Radio Communication Conference (WRC-15) decided to re-allocate VHF channels which had previously been in use for analogue voice communications, for VDES. At this time, only European CEPT regions have agreed to implement this change, which is **mandatory from 1 January 2024**, following the *CEPT ECC Decision (19)03*. For more information, refer to: <https://docdb.cept.org/download/1452>

## VDES APPLICABILITY

The VDES implementation has mixed applicability, **depending on the region in which your Radio operator license applies**:

Region	VDES Applicability	Frequency band to use
European CEPT countries	Anyone using a VHF radio in these European seaways <b>MUST</b> adhere to the channel usage regulations described below, <b>by 1 January 2024</b> .	EUR (Europe CEPT)
USA & Canada	NOT adopting VDES at this time. Anyone using a VHF radio exclusively in <u>these regions only</u> does not need to comply with the VDES, IRR 2020, or BIPT regulations, at this time.	· USA · CAN (Canada)
Other countries (incl. UK)	Not yet formally adopted VDES. VHF radio users in these regions should follow developments published on the respective Government websites.	INT (International)

To ensure your VHF radio is compliant to these requirements, new channel configurations are required, available via a software update:

**Ray53/63/73:** v2.06 (app) / v2.27 (boot)      **Ray90/91:** v1.59 (app) / v1.09 (boot)

To obtain the new software, visit the Raymarine website:

<https://www.raymarine.com/en-us/support/software-updates-and-documents>

## IMPORTANT NOTE FOR RADIOS CONFIGURED IN MARCOM-C MODE

If your VHF Radio is currently configured in **MARCOM-C** mode, the software in your Radio **MUST** be updated by a Raymarine Service Dealer.

This is because any Radio in MARCOM-C mode, once updated to the latest software, will use channels in the INT (International) Channel set, in a non-compliant configuration.

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## VDES AND IRR 2020 REQUIREMENTS

To comply with the VDES & IRR 2020 Regulations, a software update will provide a new channel configuration:

Channel(s)	New Configuration
24, 25, 26, 84, 85, 86	<ul style="list-style-type: none"><li>· These channels are NOT selectable in the <b>EUR</b> frequency band.</li><li>· These channels must NOT be used in the <b>INT</b> frequency band, in regions that have adopted VDES.</li></ul>
27, 28	<ul style="list-style-type: none"><li>· These channels <b>are disabled</b> in the <b>INT</b> and <b>EUR</b> frequency bands (all ATIS modes).</li></ul>
1027, 1028	<ul style="list-style-type: none"><li>· These channels <b>have been added</b>, for use in the <b>INT</b> and <b>EUR</b> frequency bands.</li></ul>

## BIPT REQUIREMENTS (BELGIUM ONLY)

To comply with the latest BIPT Regulations, a software update will provide a new channel configuration:

Channel(s)	New Configuration
96	<ul style="list-style-type: none"><li>· This private channel <b>is disabled</b>.</li></ul>
(Private channel) 31 ("Holland")	<ul style="list-style-type: none"><li>· This channel <b>has been renamed "MARINA"</b>, and added as Belgium Private Channel in the <b>INT</b> and <b>EUR</b> frequency bands, and will also remain private in Holland.</li></ul>

**NOTE:** If your VHF radio is set to the EUR (*Europe CEPT*) Frequency band and ATIS is set to **ON**, you cannot change to the INT (*International*) Frequency band until ATIS is set to **OFF**.