



**BELGIAN INSTITUTE FOR POSTAL SERVICES
AND TELECOMMUNICATIONS**

**COMMUNICATION BY THE BIPT COUNCIL
OF 13 NOVEMBER 2018 REGARDING COMMUNICATION ON BOARD
SEAGOING VESSELS IN THE 457.5125-457.5875 MHZ AND
467.5125-467.5875 MHZ FREQUENCY BANDS**

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1. Background

This communication regards an update of the Communication by the BIPT Council of 24 January 2017.

The ITU¹ Radio Regulations stipulate in footnote RR5.287 that the 457.5125-457.5875 MHz and 467.5125-467.5875 MHz frequency bands may be used for communication on board seagoing vessels. According to that footnote the characteristics of this equipment correspond with Recommendation ITU-R M.1174-3. That footnote was changed at the 2015 World Radio Conference (WRC-'15).

That same footnote states that the use of these frequencies in territorial waters and in seaports is subject to the national regulations of the country in question to which these territorial waters or seaports belong.

The 450-470 MHz band is used in Belgium for landmobile applications, often for applications with a certain safety hazard (e.g. railways). In the past interferences on these landmobile applications have been observed on several occasions.

This communication aims to throw some light on which of the above-mentioned frequencies may be used in the Belgian territorial waters and in the Belgian seaports.

Moreover, this communication contains information on the licence required for this equipment when used for communication on board seagoing vessels.

BIPT recommends to only acquire digital equipment in the future to avoid interference. The possible interferences result from the introduction of LTE technology in the adjacent channels by certain countries. Belgium does not intend to introduce LTE in this band but Belgian seagoing vessels can indeed be confronted with this problem in foreign ports. Chances are high that analogue devices will suffer from interference in those cases.

In order to increase frequency efficiency it is also advised to apply a channel spacing of 6.25 KHz.

¹ International Telecommunication Union. This is a United Nations Organisation with headquarters in Geneva. Belgium is a member.

2. Use allowed in Belgium

The frequencies in the following table are allowed for communication purposes on board seagoing vessels in the Belgian territorial waters and in the Belgian seaports:

25 kHz channel		12.5 kHz channel		6.25 kHz channel		25 kHz channel		12.5 kHz channel		6.25 kHz channel	
CH	MHz	CH	MHz	CH	MHz	CH	MHz	CH	MHz	CH	MHz
1	457.525	11	457.5250	102	457.515625	4	467.525	21	467.5250	202	467.515625
				111	457.521875					211	467.521875
				112	457.528125					212	467.528125
2	457.550	12	457.5375	121	457.534375	5	467.550	22	467.5375	221	467.534375
				122	457.540625					222	467.540625
				131	457.546875					231	467.546875
3	457.575	13	457.5500	132	457.553125	6	467.575	23	467.5500	232	467.553125
				141	457.559375					241	467.559375
				142	457.565625					242	467.565625
		14	457.5625	151	457.571875			24	467.5625	251	467.571875
				152	457.578125					252	467.578125
				161	457.584375					261	467.584375
		15	457.5750					25	467.5750		

Table 1

6 channels are possible in case of a 25 kHz channeling arrangement, 10 channels in case of a 12.5 kHz channeling arrangement and 24 channels based on a 6.25 kHz channeling arrangement.

As this band is released for this application in Belgium from 1 July 2017, these communications can no longer cause direct interference with other radio services. Consequently, as from 1 July 2017, these frequencies may be used for communication purposes on board seagoing vessels in territorial waters, in the Belgian seaports and on waterways leading towards the seaports. In the future, none of these frequencies will be assigned to landmobile or other services that are liable to cause interference to or experience interference from communication on board seagoing vessels.

The power allowed does not exceed 2 watts of effective radiated power. In case the equipment is installed at a fixed location on a ship, the antenna height must not exceed 3.5 metres above the level of the upper deck.

Use of the frequencies is allowed for both simplex and duplex. In case a repeater station is used on board a vessel a 10 MHz duplex spacing needs to be observed and the terminal equipment needs to use the low channels for transmission.

This does not concern any exclusive use for a specific ship. Users should take account of the fact that other ships can also use those frequencies.

3. Technical standard

ETSI² has developed the ETSI EN 300 720 standard (UHF communication systems and equipment on board — Harmonised standard regarding the essential requirements of Article 3, paragraph 2, of the 2014/53/EU Directive). This standard is harmonised at European level as of 10 March 2017.

BIPT published radio interfaces C03-03 and C03-04 in which it mentions the essential requirements the equipment used has to meet. The technical requirements such as included in the ITU Recommendation, UIT-R M.1174-3, have to be complied with.

4. Licensing situation

Equipment on board ships is, in principle, subject to licence required according to Article 13/1, § 1, of the Act of 13 June 2005 on electronic communications:

“Art.13/1. § 1. Nobody in the Kingdom is allowed to hold a radio communications transmitter and/or transceiver, or to install and operate a radio communications station on board a sea-going vessel, an inland navigation vessel, an aircraft or any other bearer subject to Belgian law without a written licence by virtue of Article 39 or a user right based on Article 18.”

Foreign vessels are, as far as they hold a licence issued by the competent authority of the country where the ship is registered, exempt from licence in accordance with Annex 2 to the Royal Decree of 18 December 2009 on private radio communications and user rights for fixed networks and trunked networks. On that basis the following are exempt of licence:

1° radio stations installed on board foreign vessels and aircraft, provided these radio stations are covered by a licence issued by the government of the country where the vessel or aircraft is registered;

For ships sailing under the Belgian flag the UHF devices have to be mentioned on the BIPT licence. These licences can be obtained via the following e-mail address: maritime@bipt.be.

² ETSI: European Telecommunications Standards Institute