# Regional Arrangement on the Radiocommunication Service for Inland Waterways (RAINWAT)



# REGIONAL ARRANGEMENT ON THE RADIOCOMMUNICATION SERVICE FOR INLAND WATERWAYS

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### **Abbreviations**

AIS Automatic Identification System
ASM Application Specific Messages

ATIS Automatic Transmitter Identification System
CCNR Central Commission for the Navigation of the Rhine
CEPT European Conference of Postal and Telecommunications

Administrations

CEVNI European Code for Inland Waterways

DC Danube Commission
DSC Digital Selective Calling

EMC Electromagnetic Compatibility
ENI European Vessel Identification

ETSI European Telecommunications Standards Institute

IMO International Maritime Organization
ITU International Telecommunication Union

MC Moselle Commission

MID Maritime Identification Digit MMSI Maritime Mobile Service Identity

OP Output Power

RIS River Information Services

RR Radio Regulations

SOLAS International Convention for the Safety of Life at Sea (SOLAS, 1974),

as amended

SSL Ship Station License

VDES VHF Data Exchange System

WRC World Radiocommunication Conference

Meaning of some abbreviations is listed in Article 1 (Definitions) of the Arrangement.

# REGIONAL ARRANGEMENT ON THE RADIOCOMMUNICATION SERVICE FOR

### **INLAND WATERWAYS**

concluded between the Administrations of the following countries:

Austria, Belgium, Bulgaria, Croatia, the Czech Republic, France, Germany, Hungary, Luxembourg, Moldova, the Netherlands, Poland, Serbia, the Slovak Republic, Switzerland and Ukraine.

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### **PREAMBLE**

In accordance with Article 6 of the Radio Regulations (RR) of the International Telecommunication Union (ITU), the undersigned delegates of the Administrations of the above-mentioned countries, willing to implement common principles and rules for the safe carriage of people and goods on inland waterways, and considering that:

- the harmonisation of the radiocommunication service shall contribute to safer navigation on inland waterways,
- this harmonisation shall facilitate a more efficient and effective use of the radio spectrum,
- this harmonisation shall also contribute to a more efficient, economical and smooth execution of ship management,

adopted by mutual consent, subject to the approval of this Arrangement, the following provisions concerning the radiocommunication service for inland waterways within their territory.

A committee, named Committee RAINWAT, is established to administer, harmonise and optimise the Regional Arrangement.

### **CHAPTER I**

### **TERMINOLOGY**

# **Article 1** *Definitions*

In the present Arrangement, the terms not defined herein retain the meaning given to them in the Constitution, Convention and in the Radio Regulations (RR) of the International Telecommunication Union (ITU).

# A. Radiotelephone service on inland waterways and Automatic Transmitter Identification System (ATIS)

The radiotelephone service on inland waterways enables the establishment of radiocommunications for specific purposes by using agreed channels and an agreed operational procedure (service categories) using ATIS.

Service categories on inland waterways:

Ship-to-ship,

Radiocommunication between ship stations.

- Nautical information,

Radiocommunication between ship stations and stations of the competent authorities for the operational services on inland waterways. The stations of the above-mentioned authorities can be either land stations or mobile stations.

Ship-to-port authorities,

Radiocommunication between ship stations and stations of the competent authorities for the operational services in Inland Ports. The stations of the above-mentioned authorities shall be preferably land stations.

- On board communications,

Internal radiocommunication on board of a ship or radiocommunication within a group of vessels being towed or pushed, as well as for line handling and mooring instructions.

ATIS is a system for automatic identification of ship radiotelephone transmitters according to Annex B of the European Standard ETSI EN 300 698.

### B. Radar

A radiodetermination system based on the comparison of reference signals with radio signals reflected, or retransmitted, from the position to be determined.

Radar used on inland waterways is part of the radio navigation service and intended for the benefit and for the safe operation of ships.

### **C. VHF Data Exchange System (VDES)**

VDES is a radio communication system that operates between ships, shore stations and satellites on Automatic Identification System (AIS), Application Specific Messages (ASM) and VHF Data Exchange (VDE) frequencies in the Marine Mobile VHF band.

### D. Inland Automatic Identification System (AIS)

A communications system based on a protocol using the VHF maritime mobile band, for the exchange of navigation data.

Inland AIS is based on the maritime AIS according to the International Convention for the Safety of Life at Sea (SOLAS 1974), as amended, of the International Maritime Organization (IMO).

River Information Services (RIS) use the Inland AIS. AIS and radar complement each other.

Inland AIS enables the establishment of a vessel's' tracking and tracing system for specific purposes by using agreed channels and an agreed operational procedure.

### E. Application Specific Messages (ASM)

ASM are AIS messages where the data content is defined by the application.

### F. Maritime Mobile Service Identity (MMSI)

A nine-digit unique ship station identity assigned by Administrations. The first three digits represent the Maritime Identification Digits (MID) identifying that Administration.

A MMSI is mandatory for the usage of Inland AIS. For ships visiting the inland waters covered by the provisions of this Arrangement, an MMSI is required to generate their individual ATIS code.

### **G. Digital Selective Calling (DSC)**

A semi-automated method designated by the IMO as an international standard for establishing maritime MF, HF, and VHF radiocommunications.

### H. Ship station

A mobile station in the radiocommunication service on inland waterways located on board a ship, which is not permanently moored.

### I. Land station

A station in the mobile service not intended to be used while in motion.

### J. Handheld equipment

Radio equipment that is portable, including an antenna and power supply,

### K. Small ships

Ships shorter than 20 m, as defined in the European Code for Inland Waterways (CEVNI).

### L. Output power (OP)

The average output power of the transmitter during one radio frequency cycle taken under the condition of no modulation (carrier power).

### M. Contracting Administrations

- Administrations of the countries which have signed the Arrangement,
- Administrations of the countries which have acceded to the Arrangement (Article 8).

### N. Committee RAINWAT

The mission of the Committee RAINWAT is defined in Article 6.

### O. Administrative Contact Points

Persons competent for all questions concerning the radiocommunication service on inland waterways and designated by the contracting administrations.

### P. Ships' identification database Contact Points

Competent persons designated by the contracting administrations for all questions concerning the identification of the ships in their competence.

### Q. European Vessel Identification Number (ENI number)

The ENI number is a registration number for ships capable of navigating on inland European waters. It is a unique eight-digit number. It remains associated with a hull throughout its entire lifetime, irrespective of its name. The first three digits identify the competent authority assigning the number.

### **CHAPTER II**

### GENERAL PROVISIONS FOR THE OPERATION OF THE SERVICE

### **Article 2**

Administrative provisions for ship stations

The administrative provisions for ship stations are dealt with in Annex 1.

### Article 3

Use of frequencies

The radiotelephone equipment uses the VHF frequencies in accordance with Appendix 18 of the Radio Regulations (table of transmitting frequencies in the VHF maritime mobile band).

For radiocommunication on inland waterways, the use of the channels, the transmitting frequencies and service categories are shown in Annex 2. The channel designators are used in accordance with Appendix 18 of the Radio Regulations. The limitations of the Output power (OP) of equipment are shown in Annex 3.

The radar equipment on inland waterways uses the 9.2 - 9.5 GHz band.

The AIS equipment normally uses the channels AIS 1 and AIS 2.

### Article 4

### Operational and technical requirements of the radio equipment on board ships

The operational and technical requirements of the equipment on board ships are outlined in Annex 3.

The equipment shall be of a type that is in accordance with Annexes 2 and 3.

### **Article 5**

Operating procedures

Annex 4 contains provisions regarding the operating procedures.

### **CHAPTER III**

### APPLICATION OF THE ARRANGEMENT

### Article 6

Administrative handling of the Arrangement and competences of the Committee RAINWAT

The Committee RAINWAT was established in order to administer, harmonise and optimise this Regional Arrangement including all the Annexes, Resolutions and Recommendations.

The latest approved version of the Regional Arrangement is published on the website of the Committee RAINWAT.

The Committee RAINWAT is composed of the representatives from the signed contracting Administrations.

The Committee RAINWAT establishes the Rules of Procedure.

The Chairperson and the Vice-Chairperson are elected by and from the Committee RAINWAT for a period of four years, in accordance with the Rules of Procedure. The validation of the elections requires the majority of all the contracting Administrations.

The Chairperson and the Vice-Chairperson are responsible for the administrative handling of the Regional Arrangement, in accordance with the Rules of Procedure.

The Arrangement and the Rules of Procedure can be revised by the Committee RAINWAT. Contracting Administrations shall be entitled to submit proposals for a modification of

the Arrangement or the Rules of Procedure to the Committee RAINWAT via an input document.

The Central Commission for the Navigation of the Rhine (CCNR), the Danube Commission (DC) and the Moselle Commission (MC) may participate in the work of the Committee as observers.

### Article 7

### Execution of the Arrangement

The contracting Administrations declare that they adopt and will apply the provisions of the Arrangement, its Annexes, its Resolutions and, as far as possible, its Recommendations.

### **Article 8**

### Accession to the Arrangement

Any Administration which has not signed the Arrangement may at any time deposit an instrument of accession and approval to the Committee RAINWAT. The contracting Administrations will be informed at least one month ahead of the next meeting of the Committee RAINWAT.

Accession to the Arrangement, which will become effective at the date of deposit, shall be made without reservation, and shall apply to the Arrangement as it stands at the time of accession.

### Article 9

### Denunciation of the Arrangement

Any Administration shall have the right at any time to denounce the Arrangement by a notification sent to the Committee RAINWAT. Such denunciation shall take effect after a period of six months from the date of receipt of the notification by the Committee RAINWAT.

### Article 10

### Coordination of frequency assignments

Frequency assignments and their coordination should be made in accordance with the latest version of the HCM¹ Agreement. For the countries that are not part of the aforementioned Coordination Agreement, frequency assignments and their coordination should be made in accordance with the latest version of the Recommendation T/R 25-08 of the Conference of European Posts and Telecommunications Administrations (CEPT) or in accordance with bi- or multilateral agreements.

### Article 11

Notification of this Arrangement to the ITU and information to other organisations

In accordance with Article 6 of the Radio Regulations the Chairperson of the Committee RAINWAT shall notify the Secretary General of the ITU on the conclusion and content of this Arrangement and shall provide details of:

- any Administration which accedes to this Arrangement;
- any contracting Administration which denounces this Arrangement;
- the expiry of the Arrangement.

By decision of the Committee, the Chairperson shall inform other organisations as appropriate.

<sup>&</sup>lt;sup>1</sup> The **HCM Agreement** is the "Agreement between the Administrations of Austria, Belgium, Croatia, the Czech Republic, France, Germany, Hungary, the Netherlands, Italy, Liechtenstein, Lithuania, Luxembourg, Poland, Romania, the Slovak Republic, Slovenia and Switzerland on the co-ordination of frequencies between 29.7 MHz and 43.5 GHz for the fixed service and land mobile service".

### **CHAPTER IV**

### **FINAL PROVISIONS**

### Article 12 Languages of this Arrangement

The original language of this Arrangement is English. The Arrangement is translated into both French and German.

Article 13
Entry into force

This Arrangement shall enter into force on 1 January 2024.

### ADMINISTRATIVE PROVISIONS FOR SHIP STATIONS

### 1. GENERAL

### 1.1 Ship Station Licence

No ship station may be established or operated without a Ship Station Licence (hereinafter referred to as SSL), issued by the competent authority of the country where the ship is registered. The layout of the SSL should be in accordance with Recommendation 7 (Rev. WRC-97).

### 1.2 Operator's Certificate

The operation of a ship station shall be performed by a person holding a radio operator's certificate for the radiotelephone service on inland waterways. Requirements concerning the acquisition and the issue of a radio operator's certificate for the radiotelephone service on inland waterways are laid out in Annex 5. The harmonised examination syllabus to obtain a radio operator's certificate for the radiotelephone service is described in Recommendation No. 3 of this Arrangement.

The operator's certificate issued in accordance with the provisions of Article 47 of the Radio Regulations shall also entitle the holder to operate a ship station on inland waterways.

### 1.3 Ship station documents

The following documents must be carried on board:

- The SSL according to item 1.1;
- The operator's certificates according to item 1.2;
- The Radiocommunication guide for inland navigation (general part and relevant regional parts), as defined by Resolution No. 1 of this Arrangement.

### 1.4 Inspection of the ship station

Before being put into operation the ship station may be subject to an inspection by the competent authority which issued the SSL. Periodical inspections may subsequently be made by that competent authority.

The competent Administrations of countries that receive a ship may conduct the inspection of that station in accordance with Article 49 of the Radio Regulations. Those Administrations may require the production of the SSL for examination. The person responsible for the station shall facilitate this examination. When the SSL cannot be produced or when other manifest irregularities are observed, the competent Administrations may inspect the radio installations in order to satisfy themselves that these conform to the conditions imposed by this Arrangement. In addition, inspectors have the right to request that the person operating the station produces their operator's certificate, but proof of professional knowledge may not be demanded. When irregularities are found, the competent Administration may levy a charge to cover the cost of the inspection. The boatmaster shall be informed

accordingly.

When a competent Administration finds it necessary to adopt the course indicated above, the Administration of the country where the ship station is registered shall be so informed without delay. Further corrective measures, if needed, can be taken after consultation between the Administrations concerned.

### 2. IDENTIFICATION OF THE SHIP STATION

- 2.1 Each ship station participating in the radiocommunication service on inland waterways shall have a call sign, the official name of the ship, an ATIS code which must be in accordance with the technical requirements given in Annex B of ETSI EN 300 698-1 and, when fitted with AIS equipment, an MMSI. The formation of ship call signs shall be in accordance with Article 19 of the Radio Regulations.
- 2.2 In the service categories ship-to-ship, nautical information and ship-to-port authorities, the official name of the ship shall be used.
- **2.3** A call sign shall also be assigned to handheld equipment used for the service category on board communications.

### 3. ATIS code

The structure of the ATIS code is as follows (ETSI EN 300 698-1, Annex B):

Z MID X1 X2 X3 X4 X5 X6

Z	MID	X <sub>1</sub> X <sub>2</sub>	X <sub>3</sub> X <sub>4</sub> X <sub>5</sub> X <sub>6</sub>
represents the figure 9 (Z = always 9)	MID = Maritime Identification Digit of the country of registration of the ship (ITU-R)	representing the second or third letter of the call sign, wherein 01 represents A, 02 represents B, 03 represents C, etc.	the 4 digits of the call sign

### Examples of a conversion of a radio call sign into an ATIS code:

```
EXAMPLE 1(second letter):
call sign = FM8075;
the ship's ATIS code shall be formed as follows:
Z MID X<sub>1</sub>X<sub>2</sub>8 0 7 5;
Z = 9:
MID = for France 227;
second letter = M \Rightarrow X_1X_2 = 13;
ship's ATIS code:
9 227 13 8075
EXAMPLE 2 (third letter):
call sign = OED9999;
the ship's ATIS code shall be formed as follows:
Z MID X<sub>1</sub>X<sub>2</sub>9 9 9 9;
Z = 9:
MID = for Austria 203;
third letter = D \Rightarrow X_1X_2 = 04;
ship's ATIS code:
9 203 04 9999
```

# 4. PROCEDURE FOR SHIPS VISITING THE INLAND WATERWAYS COVERED BY THE PROVISIONS OF THE REGIONAL ARRANGEMENT

The usage of ATIS is mandatory for all such ships. Ship owners are responsible for equipping their ships with ATIS-capable equipment and a valid ATIS code.

For the ships mentioned in this paragraph the ATIS code shall be generated by complementing the MMSI and adding the figure "9" as the very first digit.

For example, if the MMSI is 220278025, the ATIS code will be 9220278025.

ANNEX 2

# TABLES OF CHANNELS, TRANSMITTING FREQUENCIES AND SERVICE CATEGORIES FOR INLAND WATERWAYS

	Channelli arrangem	_	Sort	vice c	atego	riac		
ator	Transr frequence	nitting ies (MHz)	Serv	vice ca	atego	1103	Country	
Channel designator	from ship stations	from land stations	ship-to-ship	nautical	ship-to-port	on board	with special regulations	Regulations
				Х				Regular usage
60	156.025	160.625					AUT, BUL, F, HNG, HRV, MDA, SRB, SVK, SUI	Usage not permitted
				X				Regular usage
01	156.050	160.650					AUT, BUL, CZE, F, HNG, HRV, MDA, SRB, SUI	Usage not permitted
				Х				Regular usage
61	156.075	160.675					AUT, BUL, CZE, F, HNG, HRV, MDA, SRB, SUI	Usage not permitted
				X				Regular usage
02	156.100	160.700					AUT, BUL, CZE, F, HNG, HRV, MDA, SRB, SUI	Usage not permitted
				Х				Regular usage
62	156.125	160.725					AUT, BUL, CZE, F, HNG, HRV, MDA, SRB, SUI	Usage not permitted
				Х				Regular usage
03	156.150	160.750					AUT, BUL, CZE, F, HNG, HRV, MDA,	Usage not permitted

	Channelli arrangem	ent	Seri	zice ca	ategni	riec		
ator		nitting ies (MHz)	Service categories				Country	
Channel designator	from ship stations	from land stations	ship-to-ship	nautical	ship-to-port	on board	with special regulations	Regulations
							SRB, SUI	
				X				Regular usage
63	156.175	160.775					AUT, BUL, CZE, F, HNG, HRV, MDA, SRB, SUI	Usage not permitted
				X				Regular usage
04	156.200	160.800					AUT, BUL, CZE, F, HNG, HRV, MDA, SRB, SUI	Usage not permitted
				X				Regular usage
64	156.225	160.825					AUT, BUL, CZE, F, HNG, HRV, MDA, SRB, SUI	Usage not permitted
				Х				Regular usage
05	156.250	160.850					AUT, BUL, CZE, F, HNG, HRV, MDA, SRB, SUI	Usage not permitted
				X				Regular usage
65	156.275	160.875					AUT, BUL, CZE, F, HRV, MDA, SRB, SVK, SUI	Usage not permitted
			Х					Regular usage
06	156.300	156.300					AUT, BUL, CZE, HNG, HRV, MDA, SRB, SUI	Usage not permitted
66	156.325	160.925		X				Regular usage
00	150.525	100.723					AUT, BUL,	Usage not permitted

	Channelli irrangem	_	Sorr	rico c	ategoi	riac		
ator		nitting ies (MHz)	Serv	rice ca	ategoi	165	Country	
Channel designator	from ship stations	from land stations	ship-to-ship	nautical	ship-to-port	on board	with special regulations	Regulations
							CZE, F, HNG, HRV, MDA, SRB, SUI	
				X				Regular usage
07	156.350	160.950					AUT, BUL, CZE, F, HRV, MDA, SRB, SUI	Usage not permitted
				X				Regular usage
							AUT, BUL, F, HNG, HRV, MDA, SRB, SUI	Usage not permitted
67	156.375	156.375					HOL	This channel is used for on- scene radiocommunication during search and rescue operations on large inland waterways (Waddenzee, IJsselmeer, Ooster- and Westerschelde and Eems- Dollard) and for on-scene radiocommunication during operations against oil pollution
			X					regular usage
08	156.400	156.400					BUL, HNG, HRV, MDA, SRB	Usage not permitted
				Х			CZE	This channel is used for service category nautical information.
				X				Regular usage
68	156.425	156.425					AUT, BUL, CZE, HNG, HRV, MDA, SRB, SUI	Usage not permitted
09	156.450	156.450		X				Regular usage

	Channelli arrangem	ent	Serv	vice c	atego	ries		
ator		mitting ies (MHz)	Service categories			105	Country	
Channel designator	from ship stations	from land stations	ship-to-ship	nautical	ship-to-port	on board	with special regulations	Regulations
			X					This channel may also be used for piloting, mooring, tugging and for other nautical purposes.
							AUT, BUL, F, HNG, HRV, MDA, SRB, SUI	Usage not permitted
				Х				Regular usage
69	156.475	156.475					AUT, BUL, HNG, HRV, MDA, SRB, SUI	Usage not permitted
							F	This channel is not allowed to be used within a distance of 40 km from the coast or estuaries.
10	156.500	156.500	Х					Regular usage Note: This channel is the first ship-to-ship channel, unless the competent authority has designated another channel.
					X		BEL	This channel is also used as "Ship-to-Port authorities" channel in different places.
			X				F	Channel also used for small ships with only handheld VHF
70	156.525	156.525	radio	The use of DSC is not allowed in radiocommunication on inland waterways.				
							D, ROU	In maritime mixed areas DSC may be used. The areas will be defined by national regulations and shall be published in the

	Channelli arrangem	_	Sori	Service categories				
ator	Transr frequence	nitting ies (MHz)	Serv	service categories			Country	
Channel designator	from ship stations	from land stations	ship-to-ship	nautical	ship-to-port	on board	with special regulations	Regulations
								regional part of the Guide.
							HOL	On large inland waterways of the Netherlands (Waddenzee, IJsselmeer, Eems-Dollard, Ooster- and Westerschelde), which fall under the responsibility of the Netherlands Coast Guard, DSC is allowed on these waterways on a voluntary basis.
11	156.550	156.550			X			Regular usage
	150.550	100.000					F	Usage not permitted
					X			Regular usage
7.1	156 575	156 575					SUI	Usage not permitted
71	156.575	156.575					F	This channel is not allowed to be used within a distance of 40 km from the coast or estuaries.
12	156.600	156.600			Х			Regular usage
12	150.000	150.000					SUI	Usage not permitted
			X					Regular usage Note: This channel may be used for radiocommunications with a social character.
							HNG, MDA	Usage not permitted
72	156.625	156.625			X		CZE	This channel is used for service category ship-to-port authorities.
			Х				HOL	This channel is primarily used for salvage and tugging operations and may also be used for radiocommunications with a social character.
13	156.650	156.650	X					Regular usage
13	130.030	130.030			X		AUT, BUL,	This channel is used for service

	Channelli arrangem	_	Sort	vice c	atogo	rios		
ator		mitting ies (MHz)	Serv	Service categories			Country	
Channel designator	from ship stations	from land stations	ship-to-ship	nautical	ship-to-port	on board	with special regulations	Regulations
							HNG, HRV, MDA, ROU, SRB, SVK	category ship-to-port authorities
				X				Regular usage
							BEL, CZE, F, SUI	Usage not permitted
					Х		AUT, BUL, HNG, HRV, MDA, ROU, SRB, SVK	This channel is used for service category ship-to-port authorities
73	156.675	156.675					HOL	This channel is used for onscene radiocommunication during search and rescue operations on large inland waterways (Waddenzee, IJsselmeer, Ooster- and Westerschelde and Eems-Dollard) and for on-scene radiocommunication during operations against oil pollution
					X			Regular usage
14	156.700	156.700					SUI	Usage not permitted
				Х			CZE	This channel is used for service category nautical information.
					X			Regular usage
74	156.725	156.725					AUT, BUL, F, HNG, HRV, MDA, SRB, SUI	Usage not permitted
15	156.750	156.750				х		This channel may be used only for service category on board communications, except on small ships (under 20 metres), as defined in the European Code for Inland Waterways

	Channelli arrangem	_	Sorr	rico c	ntogo	rios		
ator		nitting ies (MHz)	Service categories				Country	
Channel designator	from ship stations	from land stations	ship-to-ship	nautical	ship-to-port	on board	with special regulations	Regulations
								(CEVNI).
					X			Regular usage
							AUT, CZE, SUI	Usage not permitted
75	156.775	156.775	Х		Х		F	The use of this channel is reserved for the inland waterway authorities for management and maintenance purposes.
			dist cal	ised o ress, s ling w	nel ma nly for afety ithin t e mixe	and the		
16	156.800	156.800					AUT, LUX, SUI	Usage not permitted
			X		X		SRB	This channel may be used only for distress, safety and calling.
			X				BUL, HRV, MDA, ROU	This channel is used as the first ship-to-ship channel, instead of channel 10, only for calling purposes.
76	156.825	156.825		х				Regular usage Note: This channel may also be used for piloting, mooring, tugging and for other nautical purposes.
							AUT, CZE, F, SUI	Usage not permitted
17	156.850	156.850				х		This channel may be used only for service category on board communications, except on small ships (below 20 meters),

	Channelling arrangement Transmitting			rico c	ntogo	rios		
lator	Transr frequenci	_	<u> </u>	Service categories Co				
Channel designator	from ship stations	from land stations	ship-to-ship	nautical	ship-to-port	on board	with special regulations	Regulations
								as defined in the European Code for Inland Waterways (CEVNI).
77	156.875	156.875	х					Regular usage Note: This channel may be used for radiocommunications with a social character.
							BUL, HNG, HRV, MDA	Usage not permitted
				X				Regular usage
							CZE	Usage not permitted
18	156.900	161.500		X	X		BEL	This channel is also used as a "Ship-to-Port authorities" channel in different places.
78	156.925	161.525		X				Regular usage
70	130.923	101.323					CZE, F, SUI	Usage not permitted
19	156.950	161.550		X				Regular usage
19	130.930	101.550					CZE	Usage not permitted
				X				Regular usage
79	156.975	161.575					AUT, BUL, F, HRV, MDA, SRB	Usage not permitted
	188.978 181.878			Х	Х		BEL	This channel is also used as a "Ship-to-Port authorities" channel in different places.
				X				Regular usage
							CZE, SUI	Usage not permitted
20	157.000	161.600		Х	X		BEL	This channel is also used as a "Ship-to-Port authorities" channel in different places.
80	157.025	161 625		X				Regular usage
ου	157.025	161.625					F, SUI	Usage not permitted

	Channelli arrangem	_	Sorr	Service categories				
ator	Transr frequence	nitting ies (MHz)	361	vice ca	atego	1103	Country	
Channel designator	from ship stations	from land stations	ship-to-ship	nautical	ship-to-port	on board	with special regulations	Regulations
				X	Х		BEL	This channel is also used as a "Ship-to-Port authorities" channel in different places.
				X				Regular usage
21	157.050	161.650					AUT, BUL, CZE, F, HRV, MDA, SRB, SUI	Usage not permitted
				Х				Regular usage
81	157.075	161.675					AUT, BUL, CZE, F, HRV, MDA, SRB, SUI	Usage not permitted
				X				Regular usage
							CZE	Usage not permitted
22	157.100	161.700		X	Х		BEL	This channel is also used as a "Ship-to-Port authorities" channel in different places.
				X				Regular usage
							CZE, SUI	Usage not permitted
82	157.125	161.725	Х		х		BEL, HOL	This channel may be used for transmitting messages concerning bunkering and victualling. The output power must be reduced manually to a value between 0.5 and 1 W.
23	157.150	161.750		X				Regular usage
23	137.130	101./30					CZE, SUI	Usage not permitted

Channelling arrangement			Service categories			rios	Country	
ator	Transmitting frequencies (MHz)		Service categories					
Channel designator	from ship stations	from land stations	ship-to-ship	nautical	ship-to-port	on board	with special regulations	Regulations
			х		х		F	The use of this channel is reserved for the inland waterway authorities for management and maintenance purpose.
				X				Regular usage
83	157.175	161.775					AUT, BUL, F, HRV, MDA, SRB, SUI	Usage not permitted
24	157.200	161.800						Usage not permitted
1024	157.200	157.200						This channel is used for VDES only.
2024	161.800	161.800						This channel is used for VDES only.
84	157.225	161.825						Usage not permitted
1084	157.225	157.225						This channel is used for VDES only.
2084	161.825	161.825						This channel is used for VDES only.
25	157.250	161.850						Usage not permitted
1025	157.250	157.250						This channel is used for VDES only.
2025	161.850	161.850						This channel is used for VDES only.
85	157.275	161.875						Usage not permitted
1085	157.275	157.275						This channel is used for VDES only.
2085	161.875	161.875						This channel is used for VDES only.
26	157.300	161.900						Usage not permitted
1026	157.300	157.300						This channel is used for VDES

Channelling arrangement			Service categories					
ator	Transmitting frequencies (MHz)		Service categories				Country	
Channel designator	from ship stations	from land stations	ship-to-ship	nautical	ship-to-port	on board	with special regulations	Regulations
								only.
2026	161.900	161.900						This channel is used for VDES only.
86	157.325	161.925						Usage not permitted
1086	157.325	157.325						This channel is used for VDES only.
2086	161.925	161.925						This channel is used for VDES only.
27	157.350	161.950						Usage not permitted
1027	157.350	157.350			X			Regular usage
ASM1	161.950	161.950						This channel is used for Application Specific Messages (ASM)
				X				Regular usage
87	157.375	157.375	X					This channel may also be used for piloting, mooring, tugging and for other nautical purposes.
07							AUT, BUL, HNG, HRV, MDA, SRB, SUI	Usage not permitted
28	157.400	162.00						Usage not permitted
1028	157.400	157.400			X			Regular usage
ASM2	162.00	162.00						This channel is used for Application Specific Messages (ASM)
88	157.425	157.425		X				Regular usage
							AUT, BUL, F, HNG, HRV, MDA, SUI	Usage not permitted
							HOL	Subject to permission of the competent authority, this

Channelling arrangement			Service categories			ries	Country	
Channel designator	Transmitting frequencies (MHz)							
	from ship stations	from land stations	ship-to-ship	nautical	ship-to-port	on board	with special regulations	Regulations
								channel may be used only for special events on a temporary basis.
AIS1	161.975	161.975						Regular usage This channel is used for the automatic identification system (AIS)
AIS2	162.025	162.025						Regular usage This channel is used for of the automatic identification system (AIS)

### OPERATIONAL AND TECHNICAL REQUIREMENTS OF THE EQUIPMENT

### 1. GENERAL

- a) The ship station used in the radiotelephone service for inland waterways may consist of either separate equipment for each of the service categories or equipment for combinations of several of those.
- b) In addition, the ship station may be fitted with radar and/or an Inland AIS transponder.
- c) A ship, which is equipped with fixed VHF radiotelephone equipment installed in accordance with this Arrangement, is also allowed to use handheld equipment for the service category on board communication.
- d) If a ship station participates in several service categories and permanent watch is mandatory, simultaneous reception on all the channels actually used shall be ensured.
- e) Dual watch is not allowed.
- f) The use of DSC is not allowed in radiocommunication on inland waterways.
- g) The radiotelephone equipment operating on inland waterways on the channels indicated in Annex 2 to the Arrangement shall comply with the following ETSI standards:
  - EN 300 698 concerning fixed VHF equipment (channels mentioned in the table of Annex 2),
  - EN 301 178 concerning handheld VHF equipment (channels mentioned in the table of Annex 2).
- or for countries having implemented EU Directive 2014/53/EU comply at least with that Directive<sup>2</sup>.

In addition to these requirements, equipment shall conform to the relevant parts of the EN 60945, entitled "Maritime navigation and radiocommunication equipment and systems - General requirements - Methods of testing and required test results".

- h) To facilitate investigations on incidents regarding the safety of navigation it would be desirable to provide facilities for recording radiocommunications.
- i) In addition to the previous regulations, Administrations that so wishing to do so, may authorise, within national boundaries, the use of handheld equipment for safety purposes for the service category ship-to-ship, nautical information and ship-to-port authorities, on board small ships on inland waterways. Administrations permitting the use of such radios shall note down this

 $<sup>^2</sup>$  Equipment complying with these standards is presumed to comply with Directive 2014/53/EU. The standards EN 300 698 and EN 301 178 are harmonised standards covering essential requirements of Article 3.2 of the EU Directive 2014/53/EU.

information in the regional part annexed to the Radiocommunication guide for inland navigation.

By allowing this kind of use, Administrations are recommended to give due regard in their considerations of the following aspects:

- the handheld equipment shall be associated to a vessel and shall only be used on board that vessel;
- the handheld equipment shall be mentioned on the licence;
- the user shall hold an appropriate operating certificate.

# 2. ADDITIONAL REQUIREMENTS FOR FIXED VHF RADIOTELEPHONE EQUIPMENT

### 2.1 Push-to-talk switch

To operate the transmitter, a non-locking spring-loaded push-to-talk switch shall be used. This switch may be operated by hand or foot. Transmission time shall be limited by an internal timer to a maximum of 5 minutes.

### 2.2 Antennas

The antennas shall be omnidirectional in the horizontal plane.

Antennas with a gain >1.5 dB or < -3 dB related to a  $\lambda/2$  dipole are not allowed.

The antennas shall be isolated, i.e. they should be installed at least 4 m away from all important metal masses exceeding them in height.

Suitable measures shall be taken to ensure adequate decoupling of the antennas between the various sets of VHF equipment.

### 3. Additional requirements for handheld VHF equipment on board

### 3.1 General

The use of handheld equipment is limited to channels 15 and/or 17 unless national Administrations have permitted their use, inside their national boundaries, as stand-alone or additional equipment on small ships for all service categories according to paragraph 1-i) of this annex.

### 3.2 Batteries

The batteries may be an integral part of the equipment.

Primary and/or secondary batteries may be used.

If the equipment is fitted with secondary batteries, a suitable battery charger shall be recommended by the manufacturer.

### 3.3 Battery-charging devices

Battery-charging devices specifically designed for charging the equipment's batteries shall comply with the requirements for electromagnetic compatibility (EMC) in the relevant parts of EN 60945, or for countries having implemented Directive 2014/30/EU and which comply with that Directive.

### 4. EQUIPMENT POWER

### 4.1 OP for mobile VHF equipment used on inland waterways

The OP for mobile VHF radiotelephone equipment shall be set to a value between 0.5 and 25 W, however:

- a) the OP for frequencies designated for service categories ship-to-ship, ship-to-port authorities and on-board communications shall be limited automatically to a value between 0.5 and 1 W.
- b) for nautical information the Administrations may demand the reduction of the OP to a value between 0.5 and 1 W for vessels within their territory.
- c) The OP for AIS shall not exceed 12.5 W.

### 4.2 OP for handheld equipment used on inland waterways

The OP of the handheld equipment shall be set to a value between 0.5 and 6 W. The following exceptions apply:

- a) the OP for frequencies designated for service categories ship-to-ship, ship-to-port authorities and on-board communications shall be limited automatically to a value between 0.5 and 1 W.
- b) for nautical information the Administrations may demand the reduction of the OP to a value between 0.5 and 1 W for vessels within their territory.

### 5. ATIS

Administrations may allow radio equipment for stations where the reception of the ATIS signals on the loudspeaker or handset can be suppressed by suitable technical measures.

### PROVISIONS CONCERNING THE OPERATING PROCEDURES

### 1. GENERAL PROVISIONS

The radiotelephony procedures in the maritime mobile service provided in the Radio Regulations (Article 57) shall apply to radiotelephony communications and test transmissions of the radiotelephony service on inland waterways.

The relevant provisions of the Radio Regulations are to be found in the Radiocommunication guide for inland navigation mentioned in Resolution No. 1.

### 2. SPECIAL PROVISIONS

### 2.1 Languages

In communications between ship stations and land stations, the language of the country in which the land stations are situated should be used.

In communications between ship stations, the language of the country in which the vessels concerned are sailing shall be used. In case of difficulties of understanding, the language specified in the appropriate Police Navigation Regulations must be used.

Where no Police Navigation Regulation exists, the following provisions for communications are applicable:

- Ship-to-port authorities: primarily the English language should be used. As a fallback the language of the country in which the land stations are situated can be used.
- Ship-to-ship: primarily the English language should be used for navigational purposes.

### 2.2 Message content

In the service categories ship-to-ship, nautical information and ship-to-port authorities, the transmission of messages shall deal exclusively with the safety of human life, movement and the safety of ships except on the ship-to-ship channels specifically defined for the use for communications with a social character.

### 2.3 Receipt of messages

Ship stations are obliged to acknowledge the receipt of a message addressed to them.

When it is necessary to spell out call signs, service abbreviations, words, figures or marks, the tables given in Appendix 14 of the Radio Regulations shall be used.

## PROVISIONS FOR THE ACQUISITION, ISSUE AND MUTUAL RECOGNITION OF RADIO OPERATORS' CERTIFICATES

The operation of a ship station in the radiocommunication service on inland waterways may only be performed by an operator holding a valid radio operator's certificate.

The procedure to issue a radio operator's certificate shall be subject to the following conditions:

- 1. In an examination made in accordance with Recommendation No. 3, the applicant shall give proof of at least the knowledge enumerated below:
  - provisions concerning the radiotelephone service on inland waterways (and in particular the provisions of the Radiocommunication guide for inland navigation);
  - operation of a VHF station;
  - radiocommunication procedures for the safety of navigation on inland waterways;
  - transmission and reception of messages;
- 2. The certificate shall be issued in accordance with Nos. 47.9-47.17 of Article 47 of the Radio Regulations. To facilitate the verification of certificates, these shall carry a translation, preferably in English, in addition to the text in the national language. The certificate shall contain a statement in which the holder declares to preserve the secrecy of communications.
- 3. In order to facilitate mutual recognition, a certificate issued in accordance with Recommendation No. 3, should bear a reference to this Recommendation.

The operator's certificates issued in accordance with these conditions, or with the former Article 55 (edition 1990, revised 1994) or the former Article S47 of the Radio Regulations, shall be recognised by all contracting Administrations without further restrictions.

### SHIPS IDENTIFICATION DATABASE

### 1. GENERAL

A ship identification database has been created. For each ship, this contains: call sign, official name of the ship, ATIS code, and if available MMSI and ENI of the countries having signed the "Regional Arrangement on the Radiocommunication Service for inland waterways".

By using the call sign or the official name of the ship or the ATIS code or the MMSI or the ENI it is possible to retrieve additional information about the inland waterway ship concerned.

When using the official name of the ship, this can in some cases lead to more than one result, since the official name of the ship is not a unique identifier.

The inclusion of the ENI number in the ATIS database may improve the usefulness of the database, as the ENI number is valid for the whole life of the vessel and would enable a clear identification of a vessel even if it has been sold to a new owner in another country. The database and a search engine can be found on the Committee RAINWAT website, provided specifically for that purpose. The webmaster of the website of the Committee RAINWAT is responsible for keeping the database up to date and ensuring the facilities are in good order.

The ship identification database is only accessible by means of a user name and a password.

### **RESOLUTION No. 1**

# GUIDE CONCERNING THE RADIOCOMMUNICATION SERVICE ON INLAND WATERWAYS

The Committee RAINWAT,

### considering

that it is of the greatest importance to the users of the radiotelephone service to have at their disposal an up-to-date operational guide,

### resolves

- that the Central Commission for the navigation of the Rhine (CCNR), the Danube Commission (DC) and the Moselle Commission (MC) shall prepare a Radiocommunication guide for inland navigation consisting of a general part and regional parts, and publish the guide;
- that the competent Administrations shall submit to the CCNR, the DC and the MC the necessary contributions and supplements to the regional parts of the Radiocommunication guide for inland navigation as quickly as possible;
- that Administrations shall ensure that the Radiocommunication guide for inland navigation is carried on board ships.

### **RESOLUTION No. 2**

# MUTUAL RECOGNITION OF TYPE APPROVALS OF RADIO EQUIPMENT COVERED BY THIS ARRANGEMENT

The Committee RAINWAT,

### considering

- that the inland waterways are used by ships of the contracting Administrations and that such ships are normally provided with equipment complying with the technical requirements established by this Arrangement;
- that it would be of advantage if the appropriate type of approval or recognition in the framework of the Directive 2014/53/EU of one country were also recognised by other contracting administrations;
- that it appears reasonable to leave the radio equipment on board ships in case of changing the country of registration,

### resolves

that the Administrations shall mutually accept their recognised or approved types of equipment if the operational and technical characteristics of the equipment concerned are in accordance with this Arrangement or the established internationally applicable standards.

### **RECOMMENDATION No. 1**

### REDUCTION OF NATIONAL EXCEPTIONS

The Committee RAINWAT,

### considering

- a) that the Arrangement is intended to harmonise the use of radiotelephony service on inland waterways;
- b) that a fixed time limit for different national exceptions is not feasible;
- c) that the target is to reduce national exceptions in due time to realise a harmonised usage of radiotelephony service on all covered inland waterways;

### noting

- a) that the Regional Arrangement concerning the radiocommunication service on inland waterways covers inland waterway areas in which this service has developed in a different manner;
- b) that this results in a Regional Arrangement with a wide compromise and with a large number of national exceptions;

### recommends

- 1. that contracting Administrations should make every effort to modify their national regulations to conform with the basic conditions of the Regional Arrangement and to reduce their national exceptions as far as possible;
- 2. that contracting Administrations should indicate such deletion of national exceptions to the Committee RAINWAT which will proceed according to the rules of procedure.

### **RECOMMENDATION No. 2**

### SHIP INFORMATION DATABASE CONTAINING ATIS CODES AND MMSI

The Committee RAINWAT,

### considering

- a) that for the purpose of on-site inspection the identification by ATIS or MMSI does not provide sufficient information e.g. the ship name, so that an urgent necessary on-site inspection cannot take place in due time;
- b) that contracting Administrations shall identify contact points which are able to provide the necessary additional ship station information;
- c) that the List of Ship Stations of the ITU, which can also be accessed by the Internet/MARS system, contains only maritime mobile ship stations;

### noting

- a) that the Regional Arrangement contains compulsory provisions for the identification of emissions by the use of ATIS;
- b) that the reason for the introduction of this identification system is to provide identification of any emission of a ship station automatically;
- c) that this identification system provides, in most cases, a direct translation from the code to the call sign of a ship;
- d) that in some cases it is not possible to translate a call sign directly to the corresponding ATIS code or MMSI;

### recommends

- 1. that contracting Administrations should provide and facilitate the exchange of information on inland waterway ships covered by the Regional Arrangement;
- 2. that contracting Administrations should support the development of a common online database for inland waterway ships containing ship names, ATIS code and MMSI.

(Annex 6 contains further details concerning the ship identification database).

### **RECOMMENDATION No. 3**

# HARMONISED EXAMINATION SYLLABUS OF THE RADIO OPERATORS' CERTIFICATES FOR THE RADIOTELEPHONY SERVICE ON INLAND WATERWAYS

The Committee RAINWAT,

### considering

- a) that the operator's certificate to be dedicated for use on inland waterways is defined by the Regional Arrangement and governed by the provisions of the ITU Radio Regulations, as well as other national and international regulations;
- b) that the basic requirements for the content of the operator's certificate are laid down in Annex 5 of the Regional Arrangement;
- c) that it is desirable to establish common standards of competence for the personnel of stations of the radiotelephony service on inland waterways, which will facilitate the mutual recognition of the operators' certificates;
- d) that administrations are responsible for taking such measures as they consider necessary to verify the operational and technical qualifications of a person seeking a certificate for the radiotelephony service on inland waterways;

### recommends

that administrations issue an operator's certificate for the radiotelephony service on inland waterways for candidates passing the examination based on the syllabus described in the Annex below.

### ANNEX TO THE RECOMMENDATION No. 3

# HARMONISED EXAMINATION SYLLABUS FOR THE OPERATOR'S CERTIFICATE FOR THE RADIOTELEPHONY SERVICE ON INLAND WATERWAYS

The examination should consist of theoretical and practical tests and should include at least:

# A. KNOWLEDGE OF THE BASIC FEATURES OF THE RADIOTELEPHONY SERVICE ON INLAND WATERWAYS

- 1. Types of service categories:
  - ship-to-ship communications;
  - nautical information;
  - ship-to-port authorities;
  - on-board communications.
- 2. Types of communications:
  - distress, urgency and safety communications;
  - routine communications;
  - Digital Selective Calling (DSC).
- 3. Types of stations:
  - ship stations;
  - land stations;
  - handheld equipment.
- 4. Elementary knowledge of frequencies and frequency bands:
  - concept of frequency and radio channels; simplex, semi-duplex and duplex;
  - propagation of VHF frequencies.
- 5. Elementary knowledge of the purpose and formation of the ATIS code and its relationship with the call sign.
- 6. Allocation of channels:
  - channel arrangements for VHF telephony;
  - dual watch;
  - power limitations.
- 7. Elementary knowledge of existing regulations and publications:
  - responsibility for the use of radio equipment;
  - secrecy of communications;
  - compulsory documents;
  - Radiocommunication guide for inland navigation;
  - national and international regulations and arrangements governing the radiotelephony service;
  - other national publications.

# B. PRACTICAL KNOWLEDGE AND ABILITY TO USE THE BASIC EQUIPMENT OF A SHIP STATION

### 1. Radio equipment:

- controls;
- channel selection;
- power settings;
- other adjustments;
- interferences;
- maintenance.

### 2. Antennas:

- types;
- positioning;
- installation;
- connectors and feeders;
- maintenance.

### 3. Power supplies:

- different kinds of power supplies;
- characteristics;
- charging of batteries;
- maintenance.

### C. DETAILED KNOWLEDGE OF COMMUNICATION PROCEDURES

### Communication procedures:

- order of priorities;
- distress;
- urgency;
- safety;
- routine;
- methods of calling a station by radiotelephony;
- acknowledgement of the receipt of a message;
- special procedures for calls:
- standard communication phrases and international spelling methods as specified in the Radiocommunication guide for inland navigation (CCNR / DC / MC).