Clarifications concerning

the obligation of equipment
with an Inland AIS
and an Inland ECDIS device
or a comparable electronic chart display device

Introduction

The CCNR has made it compulsory to possess and use an Inland AIS device connected to an Inland ECDIS device in information mode or to a comparable chart display device. This obligation applies to the Rhine with effect from 1st December 2014. This document, intended for crew members, aims to clarify this decision by answering concrete questions raised by users in everyday working life.

To improve clarity, henceforward the term “an Inland ECDIS or a comparable electronic chart display device” will be replaced in most cases by “electronic chart display system”.

CCNR
Central Commission for the Navigation of the Rhine
I. The AIS device

1.1 Advantage for a skipper in using an AIS device

The information displayed by the AIS device on electronic chart display systems does not exempt the skipper from monitoring traffic by means of the radar image and by looking out of the wheelhouse window. Indeed, only vessels equipped with an AIS device are visible on the display device screen. However, not all vessels are equipped with an AIS device.

An Inland AIS device connected to an Inland ECDIS device or to a comparable electronic chart display device thus enables the skipper to display the position of nearby vessels and their course clearly and accurately on an electronic chart. This information enables the skipper to modify his driving of the vessel.

Although the radar also enables other surrounding vessels to be located, and more accurately than by means of the AIS device, the radar’s range is nonetheless limited compared with that of the AIS device, especially in inland waters. Indeed, an Inland AIS device has a far greater range and enables vessels on the other side of an obstacle, such as a mountain, to be displayed.

The AIS device therefore provides the skipper with a navigational aid, but one which is not a navigation system in the same way as radar.

The skipper must acquaint himself with the information provided by the AIS device and use it to ensure safe navigation and good order. He must correctly use this information in a way consistent with his “duty of vigilance”.

1.2 The different types of AIS device

There are three types of AIS devices that can be used:

- Inland AIS devices
- Class A AIS devices
- Class B AIS devices

These devices must satisfy different requirements:

- Inland AIS devices must comply with the requirements of the “Vessel Tracking and Tracing Standard for Inland Navigation” and must be certified compliant with the “Test Standard for Inland AIS”.

- Inland AIS devices certified prior to 19 October 2012 must comply with the requirements of the CCNR’s Test Standard Edition 1.0 or 1.01 and devices certified after this date must comply with the requirements of the CCNR’s Test Standard Edition 2.0.

- Inland AIS equipment with a type approval in line with Edition 1.0 and 1.01 of the Test Standard may be installed on vessels until 30 November 2015. They may be used after this date.

- With effect from 1 December 2015, only devices with a type-approval in line with Edition 2.0 of the Test Standard may be installed.

- Class A AIS devices must satisfy IMO requirements (International Maritime Organization). These devices are used primarily in the maritime context.

- Class B AIS devices must comply with the relevant requirements of Recommendation ITU-R.M 1371, of Directive 1999/5/EC (RTTE), and the international standard IEC 62287-1 or 2 (including DSC channel management).
1.3 Obligation of equipment with an Inland AIS device

1.3.1 Vessels obliged to be equipped with an Inland AIS device

The obligation of possession of an Inland AIS device is described in detail in article 4.07 of the Rhine Vessel Inspection Regulations (RVIR).

This obligation of equipment with an Inland AIS device applies to all vessels, including seagoing vessels, ferries, small police crafts equipped with a radar and small crafts\(^1\) in possession of an inspection certificate in accordance with the Rhine Vessel Inspection Regulations or a certificate deemed to be the equivalent of these regulations.

Only the vessels referred to in 1.3.2 below are not subject to this requirement.

1.3.2 Exempt vessels

The following vessels are not subject to an obligation of equipment with an Inland AIS device:

a) Vessels in pushed convoys and side-by-side formations, except for the vessel providing the main means of propulsion,

b) small crafts\(^1\), except:
   - police crafts with radar equipment, and
   - vessels in possession of an inspection certificate in accordance with the Rhine Vessel Inspection Regulations or a certificate deemed to be the equivalent of these regulations,

c) barges without their own means of propulsion,

d) floating equipment without their own means of propulsion.

Mandatory use of the AIS device is explained in 1.5 of this document.

For the aforementioned vessels not subject to mandatory possession, it is recommended to use an approved Inland AIS device (and not a Class A or B device) as specified in the RVIR, as the Inland AIS device is designed to receive reports specifically intended for inland navigation.

However, for small recreational crafts, the CCNR recommends installing a class B AIS device.

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\(^1\) According to article 1.01, (m) of the Rhine Police Regulations, a small craft is a vessel whose maximum hull length, excluding rudder and bowsprit, is less than 20 m, unless it is:

- a vessel authorised to tow, push or propel side-by-side vessels that are not small crafts,
- a vessel authorised to carry more than 12 passengers,
- a ferry or,
- a barge.
1.3.3 The specificity of certain vessels

Like commercial navigation vessels, police vessels equipped with a radar also have to be in possession of an Inland AIS device although they are frequently “small crafts”.

Vessels belonging to the authorities usually possess an inspection certificate as required by the RVIR or a certificate deemed by these regulations to be equivalent. As such, they must also be equipped with an Inland AIS device.

1.3.4 “Frequency allocation certificate(s)” or “Ship station licence”

All vessels in possession of an Inland AIS device or radar equipment or radio-telephone installation must carry on board the “frequency allocation certificate(s)” or “ship station licence” pursuant to article 1.10 (l) of the Rhine Police Regulations.

This request for a certificate or licence is to be made to the competent authorities as soon as the AIS device has been acquired. The skipper must ensure that the vessel’s owner or operator has made this request. In all cases it is the responsibility of the skipper to check that this certificate or licence is on board the vessel.

Small crafts exempt from mandatory possession of an Inland AIS device must also, if they wish to install an AIS device, possess a radio-telephone system in good working order and switched to listening mode on the ship-to-ship network.
Clarifications concerning the obligation of equipment with an Inland AIS and an Inland ECDIS device or a comparable electronic chart display device

1.4 Requirements for the installation of the Inland AIS device

1.4.1 Installing an Inland AIS device

In accordance with Annex N, part I of the Rhine Vessel Inspection Regulations, Inland AIS devices may only be installed by a specialised firm approved by the competent authority.

The list of specialised firms certified to install Inland AIS devices can be found on the CCNR website (www.ccr-zkr.org).

Correct installation carried out by an approved specialised firm includes installing and configuring the Inland AIS device, testing its proper operation, documenting all the settings and training the skipper.

An operator’s manual, preferably in the skipper’s mother tongue, must be provided with the device to be kept on board. The installing company must also provide a certificate of installation as soon as it has been completed. This certificate must be kept on board.

The installation and functional testing requirements can be found in Annex N, part I, of the Rhine Vessel Inspection Regulations and in the Inland AIS device installation guidelines published by the CCNR (documents can be downloaded from www.ccr-zkr.org).

Vessels1 that are not subject to mandatory possession of an Inland AIS device are obliged, should they decide to acquire an Inland AIS device, to use an approved specialised firm to install this Inland AIS device.

Small crafts (and in particular recreational crafts) that are not subject to mandatory possession of an AIS device and which decide to acquire a class B AIS device are not obliged to use an approved specialised firm to install this device. However, the CCNR recommends using an approved specialised firm to reduce the risk of malfunction.

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1 Inland AIS devices and Class A AIS devices reserve slots in the communication bandwidth. Care must be taken to ensure that this process proceeds correctly, failing which there is a real risk of jeopardising the correct operation of the entire AIS system, including the neighbouring vessels and shore stations. This problem cannot occur with Class B AIS devices, which do not make such reservations within the communication bandwidth.

1.4.2 Installation on board vessels carrying dangerous goods and subject to the ADN

Tank vessels carrying dangerous goods and subject to the ADN

Inland AIS devices must be installed in the accommodation or in the wheelhouse. In addition, no part of an antenna for an electronic device must be situated above the cargo area and no part of a VHF antenna for an Inland AIS device is permitted to be within 2 m of the cargo area. These requirements are explained in the ADN2.

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2 The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN) contains regulations in an annex. These regulations explain all the technical requirements applicable to the carriage of dangerous goods.
Other vessels carrying dangerous goods and subject to the ADN

Unlike tank vessels, there are no particular requirements for installation of the AIS device antenna.

1.4.3 Installation of a second hand Inland AIS device

A specialised firm approved by a competent authority can also install second hand Inland AIS devices.

The installation of Inland AIS devices by approved specialised firms ensures that all the relevant data are correctly updated.

The Inland AIS device’s MMSI number is linked to the vessel. The competent authorities assign a new MMSI number when the AIS device is installed in another vessel.

It is the skipper’s responsibility to check that the AIS device possesses a new MMSI number assigned by the competent authorities and that this new MMSI number is correctly entered in the device.

1.4.4 Testing the AIS device

The correct installation of the AIS device is ensured by the final test. The test checks the reception and transmission by the AIS device of the required data detailed in section 1.6. The proper functioning of the AIS device is ensured by a functionality test explained in the “Guidelines on the Installation of the Inland Automatic Identification System”, which can be downloaded from www.ccr-zkr.org.

This test makes it possible to check both the accuracy of the information transmitted by the newly installed AIS device as well as the correct transmission of the data.
1.5 Mandatory use of the Inland AIS device

1.5.1 Principle: the Inland AIS device must be permanently switched on

Within the scope of the Rhine Police Regulations, the Inland AIS device must be permanently in operation. However, this obligation does not apply in a certain number of cases mentioned in 1.5.2. By the same token, particular regulations described in 1.5.3 apply for convoys.

VHF antennas, including AIS antennas, only operate correctly when vertical. They are occasionally fitted on a retractable mast owing to the limited clearance when passing under bridges. Care must be taken to ensure the antenna mast is raised immediately after clearing the obstacle (a bridge for example). Indeed, a horizontal position of the antenna causes VHF communication to be lost and prevents AIS data transmitted by other vessels from being received.

If a skipper refuses to operate the Inland AIS device, he is committing an offence and is liable to prosecution.

Vessels carrying dangerous goods and subject to the ADN must also keep their AIS device switched on at all times, including when stationary or during loading, unloading or degassing operations.

1.5.2 Derogations

The obligation to keep the Inland AIS device switched on at all times does not apply:
- to vessels and convoys in the overnight mooring ports of Haaften, IJzendoorn and Lobith;
- if the competent authority has granted a derogation for the bodies of water separated from the navigable channel by infrastructure;
- to police vessels, if the transmission of AIS data is likely to compromise policing tasks.

Vessels that are not subject to mandatory possession of an AIS device are not obliged, if they are in possession of one, to keep it permanently switched on. The CCNR does however recommend keeping the AIS device switched on permanently and not to switch it off while the vessel is underway.

Moreover, if the AIS device is switched on, the data entered in the device must at all times match the vessel's actual data.
1.5.3 Convoys

**Pushed convoys and side-by-side formations**

The vessel providing the main propulsion must have its Inland AIS device working and have the convoy data correctly entered in it. The other vessels belonging to the convoy must switch off their on-board Inland AIS devices.

**Towed convoys**

In accordance with article 4.07 of the Rhine Police Regulations, all vessels in towed convoys must possess functioning Inland AIS devices.

The “vessel or convoy type” code to be entered in the case of the tug depends on the situation:
- when a tug is proceeding on its own, it uses the vessel type code 8400 (tug single);
- when the tug is towing another vessel it typically uses code 8410 (tug, one or more tows) or 8420 (tug assisting a vessel or linked combination);
- the dimensions the tug’s skipper enters in the Inland AIS device are those of his tug and not those of the convoy.

The vessel type code used by the towed vessel is 8470 (Object, towed, not otherwise specified). The dimensions its skipper enters in the Inland AIS device are those of the towed vessel and not those of the convoy.

1.5.4 What to do if the AIS device is defective

When in use the AIS device must operate reliably and be in good working order.

A defective AIS device may cause misunderstandings and insecurity on the waterways.

This is why defective Inland AIS devices must be repaired immediately or replaced by devices in good working order. No voyage should be commenced without an Inland AIS device in good working order and switched on.

Should a vessel not subject to mandatory possession of an AIS device be equipped with one that is defective, it is recommended the device be switched off and repaired as soon as possible.

As a defective AIS device should be the exception to the rule, the CCNR recommends that the riparian states of the Rhine apply the following flexibility rules:
- Navigation may be continued for a maximum period of 48 hours with an AIS device not transmitting data. This flexibility enables the next port of loading or unloading to be reached or, failing that, if this port is too far away, a place where the defective devices can be repaired or replaced.
- No voyage may be commenced without an AIS device in good working order and operating, failing which the 48 hour grace period would lapse.
- Given the special nature of voyages undertaken by ferries and day-trip vessels, the two preceding paragraphs do not apply to these two types of vessel. For a ferry, navigation may be continued for a maximum period of 24 hours with an AIS device not transmitting data. For a day-trip vessel, navigation may be continued for a maximum period of 48 hours with an AIS device not transmitting data.
- If the AIS device is no longer transmitting data, the vessel’s skipper will immediately notify the sector traffic centre and will provide regular reports on the ship-to-ship channel until the AIS device is working again.
Clarifications concerning the obligation of equipment with an Inland AIS

1.6 Data transmitted by the AIS device

According to article 4.07 (2) of the Rhine Police Regulations, the data entered must at all times match the vessel’s or convoy’s actual data.

The skipper of a vessel not subject to mandatory possession of an AIS device but which is equipped with an Inland AIS device must also ensure that the data entered in the device is consistent at all times with the vessel’s actual data.

1.6.1 List of data that must be transmitted by the Inland AIS device

According to article 4.07 (4) of the Rhine Police Regulations, the AIS device must at a minimum transmit the following data in accordance with Chapter 2 of the Vessel Tracking and Tracing Standard for Inland Navigation:

a) user identity (Maritime Mobile Service Identity, MMSI);
b) vessel name;
c) vessel or convoy type;
d) unique European vessel Identification Number (ENI) or, for seagoing vessels that have not been given an ENI number, the IMO number;
e) length overall of the vessel or convoy accurate to 0.1 m;
f) breadth overall of the vessel or convoy accurate to 0.1 m;
g) position (using the WGS 84 coordinate system);
h) speed over ground;
i) course;
j) time of the electronic location device;
k) navigational status in accordance with Annex 1;
l) reference point for the positional information aboard the vessel accurate to 1 m, in accordance with Annex 2.

These various data items are either entered by an approved firm, or updated by the skipper, or automatically transmitted by an Inland AIS device. §1.6.2 explains these various scenarios.

As transmitting additional data has often proved to be a source of confusion, it is recommended that only the mandatory data listed above be transmitted and not to transmit additional data such as information on the vessel’s voyage.

A very useful check list containing tasks to be performed before, during and after the voyage can be found in Annex 3, ensuring that the Inland AIS device transmits data that is at all times consistent with the vessel’s or convoy’s actual data.

1.6.2 Entering data in the device

Data entry during installation of the device

The data listed below is initially entered when the Inland AIS device is installed. This initial entry (and any subsequent amendment of the data listed below) must be carried out by an approved specialised firm. However, the skipper must ensure that the approved specialised firm enters the data correctly.

These are the data associated with the vessel in question and with the Inland AIS device installed on it:

- user identity (MMSI),
- vessel name,
- unique European vessel Identification Number (ENI) or, failing that, for seagoing vessels, the IMO number.
Data that the skipper must check and amend at least partially prior to each voyage

The skipper is responsible for entering the following data, which must at all times match the vessel’s or convoy’s actual data:

- length overall of the vessel or convoy accurate to 0.1 m, in accordance with Annex 2,
- breadth overall of the vessel or convoy accurate to 0.1 m, in accordance with Annex 2,
- vessel or convoy type,
- navigational status in accordance with Annex 1,
- reference point for the positional information aboard the vessel or convoy (typically the GPS antenna) accurate to 1 m, in accordance with the sketch in Annex 1.

By way of an example, for a convoy with a breadth of 12.54 m, the skipper enters 12.6 m or 126 dm in the Inland AIS device, depending on the unit required by the device.

For vessels that never sail in a convoy, all the data listed above, except for “navigational status”, can be entered by the approved specialised firm when installing the device and do not need to be amended by the skipper.

In all cases the skipper must update the navigational status in accordance with Annex 1.

Data automatically determined and transmitted by the Inland AIS device

The skipper does not need to make any adjustments to the Inland AIS device for the data that are determined and transmitted automatically. These data are as follows:

- position (WGS84 coordinates) of the vessel or convoy on which the Inland AIS device is installed,
- speed over ground,
- heading relative to the ground,
- time indicated by the electronic position location device.

Amendment of the data following a modification of the vessel (example: lengthening of the vessel)

The Inland AIS vessel must transmit up-to-date data, which means that the AIS data must be amended in the event the vessel is modified (for example if its length is increased). The responsibility for the amendment of the data lies with the skipper, but the data referred to in 1.6.2 has to be modified by an approved specialised firm.

1.6.3. Entry of incorrect data in the Inland AIS device

An Inland AIS device can transmit incorrect data without the skipper being aware of it. Consequently the CCNR recommends that other skippers take the initiative in contacting the skipper of the vessel whose Inland AIS device is transmitting incorrect data to alert him to the fact.

The skipper must immediately enter the correct data. Failure to act on this request shall render him liable to prosecution.
1.7 Use of AIS data by third parties and data protection

1.7.1 Use of the data by the various administrative authorities

The various authorities, especially those responsible for the waterways, use the AIS data with care and abide by national data protection provisions. The authorities store and use AIS data solely in connection with the performance of their duties.

These authorities use the AIS data to

- gain an up-to-the-second snapshot of the traffic situation;
- improve traffic management and ensure traffic safety;
- improve incident management and accident prevention;
- improve lock management;
- generate statistics.

1.7.2 Passing of AIS data to third parties

The passing of AIS data to third parties is fundamentally subject to rigorous conditions.

Indeed, under the prevailing national legislation in the Rhine states, the passing of data attributable to physical persons (for example by reference to the vessel’s name or ENI number) to third parties is forbidden, unless the vessel operator has expressly consented to the transmitted data being passed on or unless this is permitted under the applicable legislation.

1.7.3 Data protection

Regulatory information

A compilation of the various national regulations governing the protection of personal data when using AIS devices is available for download from the CCNR website www.ccr-zkr.org. To summarise, arrangements for protecting the data transmitted by the AIS device exist in all CCNR member states even if they are very different and depend on individual states.

The CCNR also disapproves of the freely accessible publication of AIS data without the approval of the parties concerned.

To whom can one turn if one suspects that AIS data are being misused?

The skipper or any other individual concerned who suspects AIS data are being misused can turn to the following data protection authorities.

In the riparian states of the Rhine, these authorities are:
GERMANY

Responsible for complaints about activities by the Federal authorities (for example Federal Waterways and Shipping Administration):

Die Bundesbeauftragte für den Datenschutz und die Informationsfreiheit
Husarenstraße 30 - 53117 Bonn

Responsible for complaints about the activities of companies or individuals in Baden-Württemberg

Der Landesbeauftragte für den Datenschutz Baden-Württemberg
Königstraße 10a - 70173 Stuttgart

Responsible for complaints about the activities of companies or individuals in the Rhineland-Palatinate

Der Landesbeauftragte für den Datenschutz und die Informationsfreiheit Rheinland-Pfalz
Hintere Bleiche 34 - 55116 Mainz

Responsible for complaints about the activities of companies or individuals in Hesse

Der Hessische Datenschutzbeauftragte
Gustav-Stresemann-Ring 1 - 65189 Wiesbaden

Responsible for complaints about the activities of companies or individuals in North Rhine Westphalia

Landesbeauftragter für Datenschutz und Informationsfreiheit Nordrhein-Westfalen
Kavalleriestr. 2-4 - 40213 Düsseldorf

The contact details for other data protection authorities in the Länder are available from the following address:
https://www.ldi.nrw.de/mainmenu_Service/submenu_Links/Inhalt2/Aufsichtsbehörd.png/Aufsichtsbehörd.png.php

NETHERLANDS

College bescherming persoonsgegevens
Postbus 93374 - 2509 AJ DEN HAAG
+31 0900-2001 201
Web: http://www.mijnprivacy.nl/Contact_CBP/Pages/Contact+CBP.aspx

The “College bescherming persoonsgegevens” (Dutch Agency for Personal Data Protection) is the organisation that ensures personal data are handled in a careful and secure way.
A complaint about the disclosure of personal data must in the first instance always be made by the individual concerned to the organisation which disclosed this individual’s data. If the solution proposed by the organisation is not acceptable to the complainant, he or she may seek a remedy from the competent courts under personal data protection law.

SWITZERLAND

Aufsichtsstelle Datenschutz
Rathausstrasse 45 - 4410 Liestal
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datenschutz@bl.ch

The federal data protection and information commissioner (FDPIC) has authority over the processing of data by the federal authorities and private individuals. The processing of data by the cantonal and communal administrative authorities is governed by cantonal laws and thus falls under the authority of cantonal and communal officials. The latter have come together within the association “Privatim - the Swiss data protection commissioners”.
As the Swiss Rhine ports operate the AIS system in their capacity as an authority belonging to the canton of Basel-Country, responsibility resides with the competent data protection authority of the canton of Basel-Country.

FRANCE

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Web : http://www.cnil.fr
II. The Inland ECDIS device or comparable electronic chart display device

2.1 Advantage for a skipper in using electronic chart display systems in association with an AIS device

The AIS device improves navigational safety and good order. Using the AIS device and appropriate display systems enables the skipper to have an accurate picture of traffic conditions in the sector in which he is operating. The shore repeater stations enable him to extend the sector of coverage beyond the normal range of the onboard AIS device. The skipper has an extended view of the traffic. This is important, especially in mountainous sectors.

This is only possible by using the AIS device in conjunction with an electronic chart display system, enabling the skipper to see other vessels’ position and movements in the navigable channel. Indeed, the screen, occasionally integrated into the AIS device, is not large enough.

2.2 Obligation of equipment with an Inland ECDIS device or a comparable electronic chart display device

Vessels that are subject to the obligation of equipment with an Inland AIS device, pursuant to article 4.07 (1) of the Rhine Police Regulations, must also be equipped with an ECDIS device in information mode or a comparable electronic chart display device, connected with the Inland AIS device. Moreover, they are required to use it in conjunction with an up-to-date electronic inland navigation chart. That means that the skipper must have installed the latest available version of the chart.

This mandatory possession of the equipment does not apply to:
- vessels that are not subject to mandatory possession of an AIS device (see 1.3.1 and 1.3.2),
- ferries.¹

¹ According to article 1.01, (1) of the Rhine Police Regulations, a ferry is a vessel providing a service crossing the waterway and which is classified as a ferry by the competent authority.

2.3 Applicable requirements for electronic chart display systems

Minimum requirements to be complied with have been defined so as to ensure correct operation of the Inland ECDIS device in information mode or a comparable electronic chart display device. Recommendations have been draw up by way of addition.
2.3.1 Minimum requirements and recommendations for electronic inland navigation charts in use

Minimum requirements:
- Electronic inland navigation charts must accurately replicate the contours of the river and the navigable channel and must be based on the official inland navigation electronic charts.
- Inland navigation electronic charts must be saved in the display system on board the vessel.

Recommendation:
- It is recommended that the latest ENCs be used (Electronic Navigational Charts).

2.3.2 Minimum requirements and recommendations for electronic inland navigation chart display devices

Minimum requirements:
- Electronic chart display devices must be connected to the Inland AIS device by a reliable cable connection.
- When the vessel is underway, devices must be exclusively dedicated to displaying electronic inland navigation charts.
- The information displayed must be readily visible from the conning position.

Recommendations:
- The electronic chart display system must comply with the requirements of the Inland ECDIS system for navigation mode.
- If the vessel is equipped with an Inland ECDIS device in navigation mode it is recommended that an additional and separate electronic chart display system be used for information mode¹.

¹Inland ECDIS in navigation mode means that the device is connected to a radar system, which limits the range, unless one continuously switches over while navigating, which is not desirable either.

2.3.3 Minimum requirements and recommendations for electronic inland navigation chart display software

Minimum requirements:
- The software must display the vessel’s current and correct position on the electronic inland navigation chart.
- The software must display on the electronic inland navigation chart the vessel’s current and correct position.
- For a given vessel, the software must display the detailed list of AIS information in accordance with article 4.07(4) of the Police Regulations for the Navigation of the Rhine.

Recommendations:
- The electronic inland navigation chart display software should comply with current Inland ECDIS navigation mode requirements.
- The electronic inland navigation chart display software should orientate the chart such that the vessel follows the axis of the waterway.
2.4 Use of the blue panel

Connecting the blue panel to the AIS device is not prescribed.

The connection of the blue panel to the AIS device is handled very differently. When going about their navigational duties, skippers must be aware that certain vessels have connected the blue panel to the Inland AIS device and others not, with the result that the situation displayed on the electronic chart does not necessarily correspond to the actual situation.

2.5 What to do in the event of an electronic chart display system no longer able to display AIS device information

The electronic chart display system must operate reliably and be in good working order.

If the electronic chart display system is malfunctioning, this may cause misunderstandings and uncertainty on the waterway.

As a defective electronic chart display system should be the exception to the rule, the CCNR recommends that the riparian states of the Rhine apply the following flexibility rules:

- Navigation may be continued for a maximum period of 48 hours with an electronic chart display system that does not allow AIS device data to be displayed. This flexibility enables the next port of loading or unloading to be reached or, failing that, if this port is too far away, a place where repair or replacement of the defective devices can be effected.

- No voyage may be commenced without an electronic chart display system in good working order and operating, failing which the 48 hour grace period would lapse.

- Given the special nature of voyages undertaken by day-trip vessels, the two preceding paragraphs do not apply to these vessels. For a day-trip vessel, navigation may be continued for a maximum period of 48 hours with an electronic chart display system that does not allow AIS device data to be displayed.
Sources

1. Rhine Police Regulations, article 4.07
   1.12.2014 Edition

2. Rhine Vessel Inspection Regulations, article 7.06 and Annex N, Part I
   1.12.2014 Edition

3. Chapter 2 of the Vessel Tracking and Tracing Standard for Inland Navigation,
   Edition 1.2 dated 24.4.2013

4. Guidelines for the installation of the automatic identification system in inland navigation (Inland AIS -
guidelines for installation), Central Commission for the Navigation of the Rhine
   2014 Edition

5. Use of Inland AIS devices – Guidelines for use of the automatic identification system aboard inland
   navigation vessels - VTT Expert group
   2014 Edition

Explanation of abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>AIS</td>
<td>Automatic Identification System</td>
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<tr>
<td>ECDIS</td>
<td>Electronic Chart Display and Information System</td>
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<td>ENC</td>
<td>Electronic Navigational Chart is a database used for the ECDIS.</td>
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<td>ENI</td>
<td>The “unique European vessel Identification Number” is an identification number allocated once only to each vessel.</td>
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<td>GPS</td>
<td>The “Global Positioning System” is a satellite system enabling you to determine your own position.</td>
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<td>IMO</td>
<td>International Maritime Organization</td>
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<td>ITU</td>
<td>International Telecommunication Union</td>
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<td>MKD</td>
<td>The “Minimum Keyboard and Display” is the standard Inland AIS display and entry device.</td>
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<td>MMSI</td>
<td>The “Maritime Mobile Service Identity” is a number assigned by the authorities to a vessel and its Inland AIS device.</td>
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<td>WGS84</td>
<td>The “World Geodetic System of 1984” is a geodesic reference system used in particular with GPS.</td>
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Clarifications concerning the obligation of equipment with an Inland AIS and an Inland ECDIS device or a comparable electronic chart display device

Annex 1: Navigational status

<table>
<thead>
<tr>
<th>Number</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>under way using engine</td>
</tr>
<tr>
<td>1</td>
<td>at anchor</td>
</tr>
<tr>
<td>2</td>
<td>not under command</td>
</tr>
<tr>
<td>3</td>
<td>restricted manoeuvrability</td>
</tr>
<tr>
<td>4</td>
<td>constrained by her draught</td>
</tr>
<tr>
<td>5</td>
<td>moored</td>
</tr>
<tr>
<td>6</td>
<td>aground</td>
</tr>
<tr>
<td>7</td>
<td>engaged in fishing</td>
</tr>
<tr>
<td>8</td>
<td>under way sailing</td>
</tr>
<tr>
<td>9 to 13</td>
<td>reserved for future uses</td>
</tr>
<tr>
<td>14</td>
<td>AIS-SART (active)</td>
</tr>
<tr>
<td>15</td>
<td>Not defined</td>
</tr>
</tbody>
</table>

Annex 2: Reference point for the positional information aboard the vessel

The skipper must enter the values A, B, C and D with an accuracy of 1 m. Dimension A is pointing towards the bow.

Explanation of values W, L, A, B, C, D of a vessel

Explanation of values W, L, A, B, C, D of a convoy
Annex 3: Inland AIS device checklist

Before starting the voyage, check that the Inland AIS device is working:

**Before the voyage**
Usual procedure, i.e. for a vessel not sailing in a convoy, or for a convoy the composition of which is unchanged, check the data on one’s vessel (or one’s convoy) and transmitted periodically by the Inland AIS device in accordance with the Rhine Police Regulations:

- user identity (Maritime Mobile Service Identity, MMSI),
- vessel name,
- vessel or convoy type (the list of types is defined in the VTT Standard downloadable from www.ccr-zkr.org),
- unique European vessel Identification Number (ENI) or, for seagoing vessels that have not been given an ENI number, the IMO number,
- length overall of the vessel or convoy accurate to 0.1 m, in accordance with Annex 2,
- breadth overall of the vessel or convoy accurate to 0.1 m in accordance with Annex 2,
- reference point (location of the GPS antenna) for the positional information aboard the vessel or convoy with an accuracy of 1 m, in accordance with Annex 2, if the blue panel is connected, check that the status of the blue panel is correct,
- check whether data from other vessels (likely to be within direct line of sight) are displayed on the Inland ECDIS device or comparable chart display device.

If the convoy has just been formed or if the previous voyage was in convoy and the convoy has been modified or broken up, apply the data modifications featured below:

- convoy type,
- length overall accurate to 0.1 m, in accordance with Annex 2,
- breadth overall accurate to 0.1 m, in accordance with Annex 2,
- reference point (location of the GPS antenna) for the positional information aboard the vessel accurate to 1 m, in accordance with Annex 2.

**Just before the voyage begins**
Set the information on the vessel's navigational status to “underway” having regard to the relevant navigational status.

**During the voyage**
Keep the information on the vessel’s navigational status up-to-date. Check whether the data from other vessels (likely to be within direct line of sight) have been received.

**After the voyage**
Set the navigational status information to “moored” or “at anchor”. Amend the other voyage-related data if required. Use the Inland AIS device in accordance with the Rhine Police Regulations and the regulations of the port in which the vessel is located.