10 April 2025

Summary of the differences between the 2023/1 and 2025/1 editions of the ES-RIS

1. Amendments that do not affect the content

1.1 New Part 0

A new part 0, common to the four RIS technologies, has been drafted. To create this part, a lot of content has been taken out (thus removed) from existing parts and annexes. Sometimes, the content of an entire chapter or article was removed from an existing part. When this was the case, these chapters and articles were emptied but not deleted, to avoid a full renumbering and limit as much as possible the impact of these changes for third party documents referencing ES-RIS.

Part 0 is divided into three chapters related to definitions, abbreviations, and references to relevant external sources and standards. The definitions and abbreviations are used throughout ES-RIS to ensure consistency in terminology across the different parts. The references are also used throughout ES-RIS to better identify external sources and ensure consistency of the edition of each external source. Of course, many editorial adjustments have been made to harmonize the definitions, the abbreviations and the references in the drafting process of this new part.

By centralizing these elements in a common part, it also simplifies updates for subsequent editions of ES-RIS and alignment of terminology with other CESNI standards.

1.2 Editorial and terminological amendments

As with every edition of ES-RIS, the Secretariat has carried out a thorough proofreading in the different languages in order to detect and correct errors, inconsistencies in terminology and other typographical errors. These changes have been made in close collaboration with the experts of the CESNI/TI temporary working groups and are part of a process of continuous improvement not only of the quality of the standard, but also of its clarity and comprehensibility.

1.3 Renumbering of Annexes and addition of void annexes

New annexes have been added to the ES-RIS. As the numbering system for annexes follows that of the parts to which they are associated, the introduction of a new annex associated with the first part means that all annexes in all other parts have to be renumbered. In order to avoid this inconvenience in the future, and to maintain as far as possible the numbering of existing annexes, unused annexes numbers have been reserved in the renumbering of annexes in ES-RIS 2025/1. In this way, for future editions, it will be possible to add an annex to any part, respecting the numbering system, but without possibly having to renumber all the existing annexes.

2. Amendments to specifications pertaining to the electronic chart display and information system for inland navigation (Inland ECDIS)

2.1 Amendments of Part I relative to ES-RIS 2025/1

Article 2.03 and 2.04 (“Presentation of information” and “Operation”) have been updated to harmonise the visualisation on Inland ECDIS devices for messages received from Application Specific Messages and other AIS stations, including AIS installed on Aids-to-Navigation (Article 2.03 (9), (14), (15) and (16) and Article 2.04 (1), (10), (11), (12)).

Article 4.05 « Validation checks » was added. It refers to the test procedures described in Annex 5.

2.2 Amendments to Part V relative to ES-RIS 2025/1

Part V has been amended to include the test for visualisation of AIS AtoN and AIS targets of other vessels on the inland ECDIS. This includes few modifications of Articles 5.08, Article 5.09, Chapter 9 (Table V-1) and the addition of three articles:

- Article 5.10 « Display of AIS Aids to Navigation » has been added to test the display of AIS AtoN on the inland ECDIS.
- Article 5.18 « Operation of AIS targets of other vessels » has been added to describe the test method for the visualisation of operation of AIS targets of other vessels on the inland ECDIS.
- Article 8.09 “AtoN protocol simulator” has been added to describe the simulator that shall be used to perform these tests.

Minor amendments have been made to Article 7.06 “Display of radar information” to clarify expected results when many colours are used for the radar picture.

Three test charts were added in Article 8.01 to support the testing of visualisation of AIS AtoN and AIS targets of other vessels on the inland ECDIS.

2.3 Amendments to annexes 1 to 8

2.3.1 Updating of existing annexes

The content of Annex 1, Annex 3 and Annex 5 (and their appendices) has not been altered.

Annex 2 has been completed with all AtoN AIS representations on Inland ECDIS. Each AIS AtoN has usually 4 representations (see 4.1.1 and 5.1):

- One representation when the AIS AtoN is a virtual AtoN
- And three representations when the AIS AtoN is either physical or synthetic. One representation is when the AtoN is actually where it is supposed to be. The two others are when it is not in its desired position, one symbol representing where it should be and the other one where it actually is.

References to CEVNI recommendation (European Code for Navigation on Inland Waterways) have been removed from Annex 2, to avoid possible conflicts with international, national or local applicable police regulations.

2.3.2 Addition of Annex 4: IENC Validation Checks

A new annex, Annex 4, has been added to ES-RIS 2025/1.

This Annex is based on IHO Special Publication N° S-58, “ENC Validation Checks”, Edition 6.1.0 of September 2018. It specifies the minimum checks that producers of inland ENC validation tools shall include in their validation software. This software will be used by chart producers to help ensure that their IENC data are compliant with Annex 1 (Product Specification for IENCs).

This annex should improve compatibility between inland ENC and inland ECDIS, meaning that all inland ENC should be displayed consistently on all inland ECDIS.

3. Amendments to specifications pertaining to the Vessel Tracking and Tracing for inland navigation (VTT)

3.1 Amendments to Part II relative to ES-RIS 2025/1

In Article 3.05 « Inland AIS Application Specific Messages », the definition of Inland AIS Application Specific Messages has been clarified.

In article 5.01, the term “Real AIS AtoN” was modified into “Physical AIS AtoN” to better reflect the terminology in use today.

3.2 Amendments to Part VI relative to ES-RIS 2025/1

Part VI has been amended to include test requirement for Inland AIS AtoNs Station. The scope of this part has been therefore updated (Chapter 1) to include not only shipborne AIS but also inland AIS AtoN stations. Two chapters have been added also for that purpose:

- Chapter 12 “Inland AIS AtoNs Stations – Requirements”
- Chapter 13 Inland AIS AtoN stations – Test of physical inland AIS AtoN station

The chapters have been renamed to make clear which are relative to shipborne AIS and which are relative to inland AIS AtoN stations.

3.3 Amendments to annexes 9 to 18

The content of the existing annexes has not been altered. However, several clarifications, not affecting the content, have been made in Annex 15 “Inland AIS messages”.

One of this clarification is about the fields related to the ISRS location codes in the various AIS messages. The value of these fields should remain the values used to generate the ISRS location code of the object in the ERDMS. Indeed, once created, the ISRS location code shall not change even if these values are and not to the actual value used to make the ISRS location code. Indeed, ISRS location codes for an object are created based on information such as the fairway hectometre of this object. However, once the ISRS location code of an object is created, it shall not change. Therefore, if the object is moved or if there was a mistake in the fairway hectometre when the ISRS location code was created, the ISRS location code does not change because of that, and the original value should be used for AIS messages related to this object.

4. Amendments to specifications pertaining to the Notices to Skippers (NtS)

4.1 Amendments of Part III relative to ES-RIS 2025/1

Part III has been amended to remove reference to “ice related messages”, which are now merged with “fairway and traffic related message” in order to simplify the messages.

4.2 Amendments to annexes 28 to 32

Several modifications were made in the two encoding guides (Annexes 28 and 29), including:

- The “ice related messages” (ICE) have been merged with “fairway and traffic related message” (FTM).
- New instructions for setting up and updating the date and time for the end of a FTM.
- A new limitation code, "ALLDIR”, has been introduced to address situations where bridge openings or waterway network sections designated for navigation in one direction only are temporarily allowed to be used in both directions.
- The former system to define time intervals for events in FTM messages has been replaced by the standardised iCal format.
- Target Groups codes have been modified (Annex 28, (5.7))
- New clarifications have been added for the elements in the “communication_section” (Annex 29, (8.15))
- A new mechanism has been specified for automatic translation of message content (Annex 29, (8.17))

The Annex 30 was simplified, removing all the detailed explanations of the appendix (XML file). Indeed, these explanations do not bring content to the standard. Therefore, it has been decided to remove them from ES-RIS, and keep only the appendix, so that no inconsistency or misunderstanding is possible between the appendix and the explanations of the appendix.

The content of Annex 30 and 31 (and their appendix) were also modified to reflect the changes detailed on the two encoding guides.

The reference table (Annex 32 and its appendix) has been updated for the translation of new codes introduced in Annex 30 and 31 of ES-RIS 2025/1.

5. Amendments to specifications pertaining to Electronic ship reporting in inland navigation (ERI)

5.1 Amendments of Part IV relative to ES-RIS 2025/1

No modification on the content of Part IV was made, although many modifications are noticeable due to the creation of Part 0 and other amendments not affecting the content.

5.2 Amendments to annexes 19 to 27

The content of the Annexes 21-24 (and its appendixes) has not been altered (except for adding the possibility of using a RIS ID to identify a location for PAXLST and ERIVOY, see below for more details).

However, Annex 19 and Annex 20 have been created out of the former Annex 12 “(Dangerous) Goods reporting – ERINOT” with the following logic:

- Annex 19 is an overarching annex to describe technical elements that are present or may be present in several ERI messages
- Annex 20 is the annex specific to the ERINOT message, containing elements that are only present in the ERINOT message

These two annexes are the starting point of a restructuring of all the ES-RIS Annexes describing the various ERI messages (ERINOT, PAXLST, ERIRSP, BERMAN and ERIVOY) independently from the format. Then, each annex describing an ERI message may have one or several appendixes, one for each supported format (like XML or UN/EDIFACT). This new structure facilitates adding or removing new formats for each message as this can be done by adding or removing an appendix.

In ES-RIS 2025/1, only the ERINOT Annex has been restructured this way. Therefore, the purpose of Annex 19 is not obvious, but it already contains elements that are used in other ERI messages such as PAXLST or ERIVOY. In future editions of ES-RIS, other annexes describing other ERI messages will be restructured, and the overarching role of Annex 19 will become more obvious.

It should be noted that Annex 20 has only one appendix, describing format XML for the ERINOT message. This means that UN/EDIFACT format is not supported anymore in ES-RIS 2025/1 for ERINOT messages. However, UN/EDIFACT remains a supported format for PAXLST, ERIRSP and BERMAN.

Regarding the content, the ERINOT message had a few modifications, the main ones being:

- A new optional field “Emergency Phone Number” for the vessel, to contact the boatmaster/owner in case of an emergency, even if there is no one on board
- A new optional field “Total Power (in kW)” for the propulsion system (corresponding to item 28 of the models of inland navigation vessel certificate as described in ES-TRIN, Annex 3, Section I)
- A new optional field “Type of Cargo” to indicate the simplified classification codes for types of cargo (UNECE Recommendation 21)
- The possibility to identify a location using a “RIS ID” instead or in addition to the UNECE location code.
- New optional fields to indicate whether there is a presence onboard of propulsion or auxiliary systems, which are intended to be used, with a number of alternative energy sources (LNG, Compressed Natural Gas, Methanol, Hydrogen, accumulators with a total capacity of 500 kWh or more).

The possibility to identify a location using a “RIS ID” instead or in addition to the UNECE location code has been done also for PAXLST and ERIVOY messages.

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