

Feedback working group technical requirements CESNI/PT February 2022

It is our mission to be proactively involved in the creation and changes of the technical regulations for inland vessels. We therefore proactively participate in the meetings of the working group on technical requirements (CESNI/PT). In this document you can read a feedback of a selection of the many topics discussed on February 22 and 23, 2022.

1. [Low flashpoint fuels and fuel cells \(Chapter 30 and Annex 8\)](#)
2. [Results from the in-depth study on organisational human factors aspects in relation to accidents in inland navigation](#)
3. [Engines from previous phases that have already been put onto the market \(Articles 9.01 and 9.10\)](#)
4. [Retractable wheelhouses \(Article 7.14\)](#)
5. [Passenger vessels \(Chapter 19\)](#)



The CESNI/PT working group took an important step towards green inland navigation on 23 February 2022. The work on regulations for alternative fuels for inland navigation is an important contribution to emission-free inland navigation. The IWT Platform is pleased that the signal from the inland navigation sector - to evaluate the regulations as often as necessary due to practical experiences - has not only been heard but will also be followed up.



1. Low flashpoint fuels and fuel cells (Chapter 30 and Annex 8)

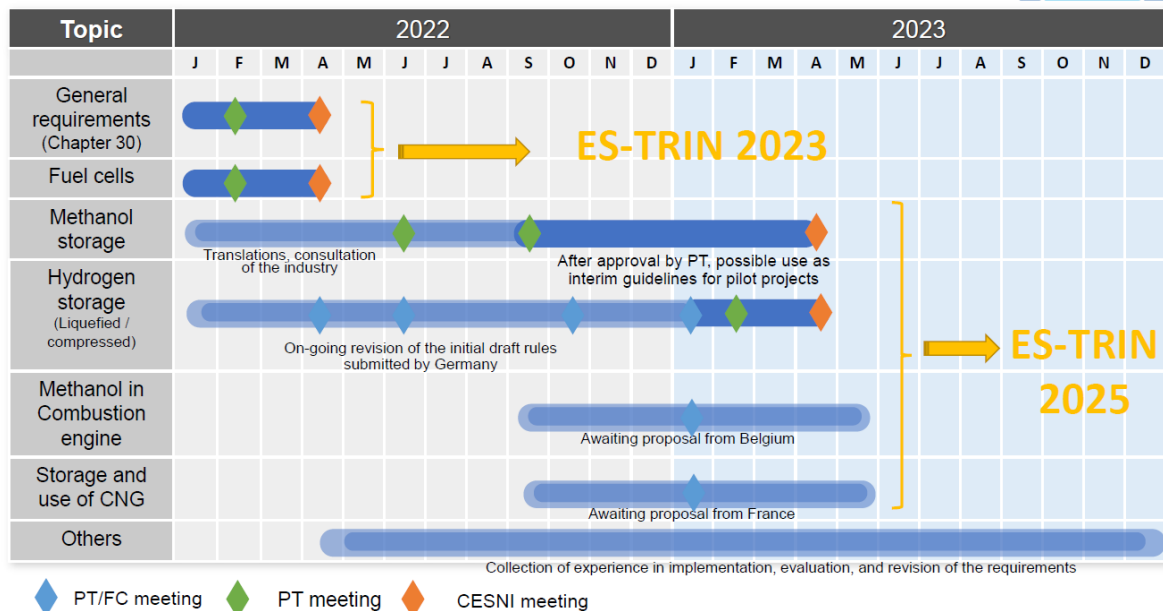
This is an important issue for inland navigation. Much preparatory work has been done in the temporary working group fuel cells (CESNI/PT/FC). First we will give you information on the draft text, followed by the IWT Platform's position and finally what was discussed by the CESNI/PT working group. Hereafter you will find links to the final draft of the regulations in four languages.

- [Definitieve ontwerpvereisten voor brandstoffen met een laag vlampunt met inbegrip van specifieke voorschriften voor brandstofcellen](#)
- [Final draft requirements for low flashpoint fuels including specific requirements for fuel cells](#)
- [Endgültiger Entwurf von Vorschriften für Brennstoffe mit niedrigem Flammpunkt, einschließlich besonderer Vorschriften für Brennstoffzellen](#)
- [Projet final de prescriptions pour les combustibles à faible point d'éclair, incluant des dispositions particulières pour les piles à combustible](#)

The relevant committees of the IWT Platform have been consulted. It concerns the following: Restructured and updated general requirements for all low flashpoint fuels (Chapter 30); Restructured requirements for storage and use of LNG (Annex 8, Section II, Chapter 1 and Section III, Chapter 1) and New requirements for fuel cells (Annex 8, Section III, Chapter 2). In the document, the grey marked places in the text in the Annex are the parts of the ES-TRIN 2021 which remain unchanged, such as in particular the regulations for ships using LNG as fuel.

Below is an illustration showing the intended timeline for developing regulations for alternative fuels.

Timeline alternative fuels in ES-TRIN



IWT Platform position

During the meeting of the working group CESNI/PT the IWT Platform took the following position: We thank the temporary working group CESNI/PT/FC very much for its hard work. A lot of work has been done to restructure Chapter 30 ES-TRIN so that it can be used for different fuels. New regulations have also been developed for fuel cells.

Inland navigation is at the beginning of a major transition regarding the propulsion of ships. There is an increasing need for clarity and regulations that facilitate innovation and the necessary transition. At the same time, there must be sufficient room for developments. Inland shipping entrepreneurs who want to invest in new technologies and sustainability must then be facilitated.

Because of the desired clarity, we understand that there is a desire to include these new regulations in ES-TRIN 2023, and thus to have them enter into force on 1 January 2024. However, we are aware that there is still very little practical experience. It cannot be ruled out that the regulations may turn out to be less workable in practice.

In addition, we received quite a few questions following our consultation with our committee earlier this year. This indicates uncertainty and even some resistance. We are aware that the IWT Platform was involved in the work of the temporary working group CESNI/PT/FC, with the valued contribution of Ms Dahlke. Nevertheless, we cannot ignore the questions and reactions of our members. After all, we are dealing with important new legislation. It is possible that the experts in the CESNI/PT/FC working group will be able to provide simple answers to the questions arising from our consultation. We greatly appreciate this. This would remove some of the ambiguity and uncertainty. We think that an FAQ document could be helpful.

The IWT Platform explicitly asks for a clear commitment to evaluate this draft regulation as frequently as necessary and to use the knowledge gained to improve the regulation. We understand that safety comes first. But beware: regulations that are too rigid can hamper innovation.

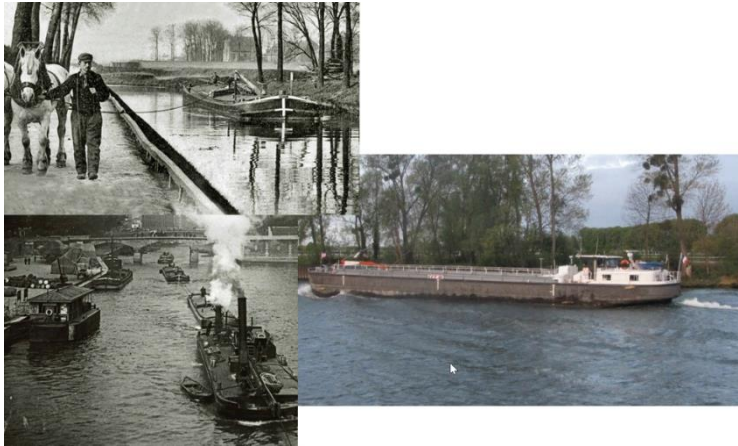
We stress that there should be ample room for pilot projects. The evaluation of existing and new regulations can be strengthened by the experience of such projects. The regulations provide room for this (Article 2.20 of the ROSR and Article 25 of Directive (EU) 2016/1629). The current procedure, certainly the European route, takes several years until a final decision is taken. Experience in recent years has shown that ship owners are therefore reluctant to invest in innovative technologies. The whole circle of supplying companies - where, after all, most of the R&D takes place - also benefits greatly from fast procedures. As already advocated in the evaluation of the Directive (EU) 2016/1629, a simplification or even complete revision of the procedures for granting exemptions or recognising the equivalence of technical solutions (Art. 25) is of great importance.

To summarise once more: the IWT Platform advocates: (1) the need for proper answers to questions asked, (2) suggestion to draw up a FAQ and (3) a commitment to evaluate these regulations and adjust them if necessary.



Discussion in the CESNI/PT working group

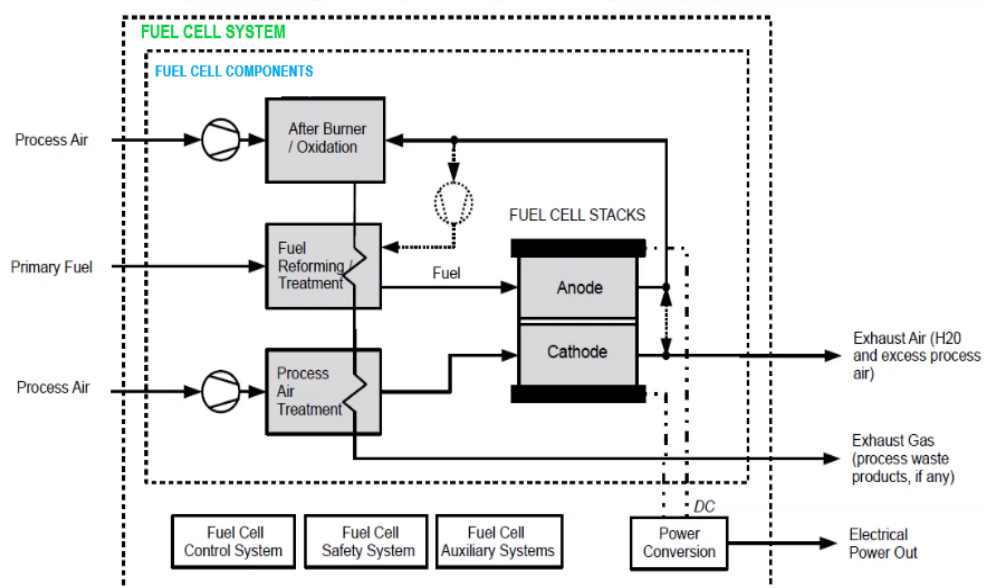
The chairman of the CESNI/PT working group introduced this important topic with some illustrations of developments in inland navigation.



We are at the beginning of a revolution with the switch to alternative fuels, such as hydrogen. The CESNI/PT working group considers it an honour and a responsibility to work on the necessary regulations. The CESNI/PT working group agrees with the inland navigation industry to use practical experience to evaluate these regulations. A number of issues will be elaborated by CESNI/PT/FC. Such as possible differences between existing exemptions and the intended regulations. A number of issues have deliberately been left open in order to use practical experiences to make adjustments. The CESNI/PT working group also discussed a risk analysis for ships using low flashpoint fuel and possible damage to land-based infrastructure in the vicinity of the vessel. It was decided not to include this in the regulations yet. Bodies concerned with traffic regulations will be involved. Marking of explosive areas was also discussed. The purpose is to warn the crew. An obligation to mark areas at risk of explosion and a new specific safety sign will be worked out.

The regulations will be submitted to the CESNI committee for decision-making. The inland shipping industry and the inspection bodies are called upon to share practical experiences.

Notes: 1) The boundaries show the groups of components as defined and do **not** reflect a spatial arrangement!
 2) Subject to FC technology, not all components are applicable and configuration may vary.



2. Results from study organisational human factors aspects in relation to accidents in inland navigation

After the earlier delivery of [the report](#) "Human factors root causes of accidents in inland navigation: HMI and wheelhouse design", [the report](#) "Human factors root causes of accidents in inland navigation - Organisational Aspects" has recently been published. We have provided a brief explanation to the working group CESNI/PT. We emphasised the importance of synchronising the recommendations from both studies. This subject is not only about technical regulations, but also about qualifications of crew members and the way things are organised and automated on board ships. A good approach requires a systemic assessment and an integrated approach. See here the CESNI/PT and CESNI/QP documents in four languages:

- [Results from the in-depth study on organisational human factors aspects in relation to accidents in inland navigation](#)
- [Ergebnisse der vertieften Studie über organisatorische Aspekte menschlicher Faktoren im Zusammenhang mit Unfällen in der Binnenschifffahrt](#)
- [Resultaten bekend van verdiepend onderzoek naar de organisatorische human factors oorzaken van ongevallen in de binnenvaart](#)
- [Résultats de l'étude approfondie sur les aspects organisationnels des facteurs humains en relation avec les accidents de la navigation intérieure](#)

3. Engines from previous phases that have already been put onto the market (Articles 9.01 and 9.10)

In June 2021, based on a proposal from the Belgian delegation, the Working group decided to supplement Chapter 9 as regards engine repair or maintenance.¹ In September and November 2021, the Working group undertook a detailed examination of the amendments to articles 9.01 and 9.10 ES-TRIN and of the associated transitional provisions.

Application range of new Article 9.10 ES-TRIN (repair of engines already in use)

Important is the application range of the new Article 9.10 ES-TRIN. Particular attention has been paid to the transitional provisions to restrict the application of article 9.10 to engines installed after 2003 when they are repaired from 2024 onwards. Article 9.10 does not apply for engines which are already installed onboard and aa) non-type-approved or bb) for which no installation test had to be carried out. In practice, this means that article 9.10 will only apply for repairs to CCNR I, CCNR II / IIIa, or stage V approved engines for which a minimum guaranteed documentation exists.

Written documentation

The written documentation for engines placed in service before 1 January 2024 cannot and will not be complete because it will not include the previous repairs. Therefore, it has been urged that the explanatory note to this article should make it clear that there is no requirement for complete documentation for existing engines.



Discussion by the CESNI/PT Working Group

The CESNI/PT working group discussed a certain part of the new Article 9.10 ES-TRIN in February 2022. This Article will be in line with [this](#) information on the CESNI website about Chapter 9, in particular Article 9.01 - Repair to an existing motor or to a replacement or exchange engine. As soon as a consolidated version of the new Article 9.10 ES-TRIN is available we will share it with you.

¹ See CESNI/PT (21) 5 rev. 1.

4. Retractable wheelhouses (Article 7.14)

An amendment to Article 1.01 and a new Article 7.14 ES-TRIN were agreed in 2021. It has been pointed out that transitional provisions are also needed, which should be drawn up on the basis of an impact assessment. As a first step towards such an impact assessment, the CESNI Secretariat has asked for the opinion of manufacturers/suppliers of wheelhouses on the draft text of Article 7.14 and the possible consequences for existing wheelhouses. Unfortunately, this did not elicit much response. Therefore, the CESNI secretariat proposes the following approach for the next steps:

- Introduce Article 7.14 in ES-TRIN 2023, while applying it only to newly built vessels (N.R.C. without end date).
- Continue discussions with the relevant companies, Sea Europe and the IWT platform to properly assess the impact of the requirements of Article 7.14 on existing vessels and provide the introduction of a transitional provision in ES-TRIN 2025.

Position IWT Platform

We regret that hardly any responses were received to the question of the CESNI-secretariat. We have sent the question to a number of inspection bodies that carry out many inspections of existing ships. Our question was whether an estimate could be made of the consequences of the new Article 7.14 ES-TRIN for the existing fleet. There were some reactions which could lead to a long transition period, at least for some parts of the new article 7.14 ES-TRIN. Considering: the fact that it is unknown what the technical condition is of this type of wheelhouses on the older European ships and the comments made by some Dutch inspection bodies, we propose to include article 7.14 in ES-TRIN 2023, but only for newly built ships. Of course, the IWT Platform is willing to cooperate in collecting more relevant information from the existing inland navigation fleet.



Text of new Article 7.14 ES-TRIN

For the sake of completeness here is the text of article 7.14 ES-TRIN:

Article 7.14 ***Retractable wheelhouses***

1. This article does not apply to:
 - a) dismantlable wheelhouses, and
 - b) wheelhouses which do not make use of a mechanism (e.g. chains, pulleys, cables, etc.), whether they are moved by human, electric, hydraulic or pneumatic force.
2. A retractable wheelhouse and its appliances shall be designed in such a way that the safety of persons on board is not endangered.
3. Operations carried out from the wheelhouse shall not be hindered during lifting and lowering. It shall be possible to enter and leave the wheelhouse safely, whatever its position. The emergency exit may be an opening in the roof, provided that it complies with the dimensions in Article 14.06(2).
4. The lifting mechanism shall enable the wheelhouse to stop in all positions. If the possibility exists to lock the wheelhouse in a certain position, the lifting mechanism shall be automatically disabled when locking takes place. Releasing the locks shall be possible under all operating conditions.
5. The lifting mechanism shall be designed in such a way that exceeding the terminal positions is not possible.
6. Arrangements shall be provided to avoid uncontrolled lowering of the retractable wheelhouse. Appropriate protection features shall be installed to prevent the risk of injury which may result from lowering.
When deemed necessary, the inspection body may require the triggering of an optical or acoustic warning signal during lowering operations.
7. Hydraulic hoses are
 - a) only permissible, if vibration absorption or freedom of movement of components makes their use inevitable;
 - b) to be designed for at least the maximum service pressure;
 - c) to be renewed at the latest every eight years.

Retractable wheelhouses and their appliances shall be inspected regularly, but at least once every twelve months, by a competent person. The safety of the installation is to be established by a visual check and a check on satisfactory operation.

5. Passenger vessels (Chapter 19)

From 2018 to 2021, the CESNI/PT/PAX working group worked on a revision of the technical requirements for passenger ships. This working group consisted of representatives from several European Member States, from class societies, the shipbuilding industry and, of course, the passenger shipping industry itself (EBU and IG Rivercruise). This working group has drawn up a large number of proposals for improving and amending the technical regulations for passenger ships and for common interpretations. A number of outstanding issues were discussed by the CESNI/PT working group in February 2022. The issues on which consensus has been reached in the last three years will be included in ES-TRIN 2023. As soon as a consolidated version of all amendments is available, we will share it with you.

An extensive discussion took place following a document submitted by some delegations. This document states that the implementation of Article 29 of Directive (EU) 2016/1629 has led to the stagnation of the state of the art for the ships concerned. Some delegations argue that in the future this will lead to an increasing gap between the state of the art required by ES-TRIN for newly built ships and the state of the art for the ships covered by Article 29 of the Directive. The IWT Platform agrees with the Dutch delegation that this requires a more overarching discussion on Article 29 of Directive (EU) 2016/1629. The discussion about the 'clear risk criterion' requires a broader discussion. After all, Article 29 of Directive (EU) 2016/1629 has been implemented by Member States, there are rights under European regulations and this is stated on the certificates of the ships. This subject could be included in the upcoming evaluation of Directive (EU) 2016/1629.



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