

Joint Meeting of the Inspection Bodies



PRESENTATION OF THE RESULTS OF THE SMALL WORKING GROUPS

Zagreb, 26-28 September 2023



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This presentation is for documentary purposes only.

Final answers to the questions and the conclusions will be developed and published accordingly by CESNI competent bodies.



Members of the group III agree with answer of Belgium.

- Addition into point 52 of Rhine/Union certificate to make the reference to the approved stability calculation.
- Case by case, the Inspection body can decide which other Calculations and Drawings need to be provided.

The group IV concludes that the definitions as such do not contradict each other. With a view to Article 19.11

“electrical service rooms” are assigned to the category of rooms with a “moderate fire risk”.

“engine rooms” are assigned to the category of rooms with a “major fire risk”.

As a main engine room with an electric propulsion motor is neither an “electrical service room” (explicitly excluded from the definition) nor an “engine room” (as there is no combustion engine present) a harmonized interpretation of the requires protection is desirable.

The group IV recommends to **assign main engine rooms with an electric propulsion engine to the categories “Rooms protected for functional needs” and “Rooms with moderate fire risk”**.

The issue should be added to the FAQ data base in order to accommodate future interpretations for rooms not referred to directly in the matrix in Art. 19.11.

Conclusion: Group II suggests to invite CESNI/PT to check the definitions for 'main engine room', 'engine room' and 'electrical service room'.

Remark Secretariat:

Maybe opportune to do that with the revision of Chapter 11

Eng: Main engine room -> engine is used to power a vehicle. (not necessarily an internal combustion engine. (the part of a vehicle that produces power to make the vehicle move - Oxford dictionary)

Ger: Hauptmaschinenraum -> Antriebsmaschinen include electric motors.

Nl: Hoofdmachinekamer -> voortstuwingsmotoren include electric motors.

Fr: Salle de Machine principales -> Moteurs de propulsion include electric motors.

All members of Group III agree with option 2.

=> Suggestion is to put the question/answer into ES-TRINfaq

GROUP II: CESNI/PT has already an ongoing discussion.

Problem: Are sensors such as radars, camera's necessary for safe navigation? In case of installing navigational aid, further automatization of vessels or other, this will cause problems in the future.

Solution: Add exemptions in the sentence of Art. 3.03(2), allowing navigational aid items/sensors. → the location of which for technical, operational and safety reasons is the most useful to be forward of the collision bulkhead and aft of the aft peak bulkhead.

=> Advice to CESNI/PT to rewrite the Art. 3.03 (2)

GROUP V: The first question cannot be listed conclusively due to the different types of vessels and designs. The second question was already discussed in Vienna by two groups and given to CESNI/PT with the request to clarify the requirements. The question was discussed at CESNI/PT and an entry was made in ES-TRINfaq. Group V considers that the question related to radar installations has been answered sufficiently. **No task to CESNI/PT. No amendment/supplement to ES-TRINfaq necessary.**

Advice Group IV (extra question):

The existing entry in ES-TRINfaq seems to be reasonable and clear [...] An editorial amendment of the FAQ (updating the references to ES-TRIN) would be desirable.

Proposal Chair: Next steps? Mandate ESO to submit a problem analysis for the work programme ?

Reminder of question: « Vessels approved before 01.04.1976 shall be required to provide evidence of freeboard calculation upon renewal of the vessel certificate after 01.01.2015.

The German inspection bodies check these as a matter of principle. As a result a freeboard of 0 cm on the Rhine can only be retained on a case-by-case basis. For the vast majority of vessels, a higher freeboard needs to be stipulated. [...]»

Conclusion: It is likely that the vessel certificates for those vessels were issued prior to 01.01.2015.

If no compliant vessels are encountered, the inspection body who issued the certificate should be notified.

Group V recommends to keep the existing requirement in Art. 4.04(1) and to include it for all types of vessels (also passenger vessels and floating equipment).

No task for CESNI/PT. No entry in ES-TRIN-FAQ required.

Group IV studied it as extra question:

Same conclusion as Group V. An exemption from the provision for passenger vessels would require an amendment of ES-TRIN.

BE would prefer to introduce an exemption for passenger vessels and would kindly ask for feedback from the delegations on this idea.

Proposal Chair: Next steps? Mandate BE to contact other delegations

„Vessels and convoys shall achieve a speed in relation to the water of at least 13 km/h. That condition is not mandatory where pushers are operating solo.“

Reminder of proposal from Austria: For some Lower Danube regions with convoys of up to 13 barges, the minimum speed for convoys of more than 6 barges with width of 11 m and a maximum length of 75 m could be lowered to 10 km/h.

Conclusion: Deviations should be left to the national regulations, limited to the waters of that country and entered into the vessel certificate.

Remark Sec: to be clarified if the legal basis is already in Directive EU 2016/1629 or if an amendment of ES-TRIN is needed

Q: In certain French inland navigation basins, there is no sufficiently wide test area to enable the evasive action and turning capacity manoeuvres described in ESI-II-4 to be performed.

Conclusion: The navigation test has to be performed **but it is not necessary to perform the river trials during the navigation**. It can be entered into the deficiency list and performed on a later date when conditions for the test are achieved.

Provisional certificate may be issued.

Deviations can be permitted within national waterways under national regulations.

According to Article 6.02(1), a second independent drive unit or an additional manual drive is required for a conventional steering gear.

A deviation is only formulated for rudder-propeller, cycloidal-propeller and water jet systems according to Article 6.06. For 2 separate steering gear, separate main and emergency controls are therefore required in each case.

If redundancy by 2 separate installations is to be permitted, an amendment of ES-TRIN is required.

=> CESNI/PT is asked to discuss an amendment. The group V is of the opinion that the aim of the regulation is to ensure full redundancy of maneuvering functions. In the case of the systems in question, it would be appropriate to adopt a requirement giving the inspection body the power to verify them.

Task for CESNI/PT: Amend ES-TRIN and new ESI for framework conditions to verify such installation. No entry in the FAQ required.

Group IV studied it as extra question:

Article 6.02 does not refer to the entire steering system but to the individual steering apparatus drive unit. Therefore a second steering apparatus independent from the first steering apparatus (as presented in the diagram) would not fulfil the redundancy requirement of Art. 6.02.

The Group considers it highly questionable that the manoeuvrability required in accordance with 6.02 (3) can be achieved for example when one steering apparatus fails in a situation with the rudder at a high angle

Difference between safety glass and pre-stressed or laminated glass:
No difference. The latter two variants are subgroups of safety glass.
The strength requirements for glass surfaces result from the application.

Skylights: Whether the skylights can be walked on or are protected with railings.

Railings: For glass railings, the strength requirements from EN 711:2016 are to be applied.

Watertight windows: For strength requirements see ESI-III-3.

Certificates: According to standard, manufacturer's certificate or classification rules.

No task for CESNI/PT. No entry in ES-TRINfaq

Group IV concludes that it should be made sure that the VHF can be operated even if at the same time the controls of the engine and the steering system need to be operated. This means that in case there is a combined control of engine speed and thrust/rudder direction which can be operated by one hand (e.g. rudder propeller) a push button operated by hand would be acceptable while in the case of separate controls (or in case of multiple propulsion units) a push button operated by foot would be necessary.

There are two regulatory options from the group's perspective:

- Amendment of Article 7.07 (1) of ES-TRIN with a more detailed provision along the lines as described above
- Interpretation of the existing requirement in the ES-TRIN FAQ

Discussion was raised if other countries check this during inspection. It was said that there were some problems in the beginning of the implementation of this provision but that it is now being enforced for all vessels strictly.

No specific question => no solution needed. (It was more a reminder of the content of ES-TRIN!)

A shipowner can always request an international exemption (RVIR/Directive)

„Vessels requiring a crew shall be equipped with two independent bilge pumps which shall not be installed within the same space. At least one of these shall be motor driven. However, for vessels with a power of less than 225 kW or with a deadweight of less than 350 t, or where vessels not intended for the carriage of goods have a displacement of less than 250 m³, one pump will suffice which can be either manually-operated or motor-driven. “

Q: If both pumps are electric motor driven should they be supplied by different switchboard, main and emergency?

Conclusion: « **Independent pumps** » means « **pumps with independent drive and electrical system** » which means that they should be supplied by different switchboards.

Recommendation to CESNI/PT: Clarification in ES-TRIN FAQ

All members of the group I agree with the proposed answer.

All internal combustion engines installed (with or without Type Approval) on board shall be entered in item 52 of Rhine/Union Certificate.

Group I studied it as extra question:

Information about the engines is already provided in the vessel certificates issued by member states. The Netherlands will be in line with this issue as from January 2024

Today the Inspection bodies apply Option 1 or Option 2.

The group III agrees with Option 2 in general.

Suggestion to amend option 2 as follows:

- Option 2

The inspection body examines **thoroughly** the schematic diagrams and plans and checks whether they comply with the requirements in ES-TRIN **in plausibility**. If there is an inconsistency with ES-TRIN, it is flagged and communicated to the owner who, in turn, asks the installation company to bring it into line with the requirements. There is a chance that the electrical diagram will be modified, but the on-board installation will not be changed.

- **The group agrees not to have an ESI**

- **The group suggests further harmonisation should be discussed in CESNI/PT.**

In addition to the items mentioned under aa) – cc) the fire protection concept should at least address appropriate fire extinguishing installations, ventilation, emergency circuit breakers, safety information for the crew and the provision of information to external emergency response services (e.g. fire departments).

The room in which the lithium-ion accumulators are stored in a fireproof enclosure, in accordance with 17(a), second sentence, needs not be isolated by A60 partitions.

However, the group considers a **more precise definition of “fireproof” desirable**, a possible option could be to refer to “at least conforming to A60 characteristics”.

According to the knowledge of the group there are so far no battery packs available with a fireproof enclosure equipped with an internal fire-extinguishing system.

It should be clarified (perhaps in the form of an entry in the ES-TRIN-FAQ) that in the case of a fireproof enclosure (which are gastight in normal operation) the relief valve has to be connected to a pipeline discharging to the outside by mechanical ventilation. If the fireproof enclosure discharges directly to the surrounding room, the room needs to be mechanically ventilated.

Ventilation arrangements have to be in compliance with Article 10.11 (10) taking into account explosion protection depending on the ventilation concept (suction/pressure) and on the actual accumulator chemistry.

The wording of the last sentence of Article 10.11 (17) seems to permit splitting accumulator packs in a way that in no single room the limit of 20 kWh is exceeded, dispensing with any additional requirement regarding partitions of these rooms.

The group IV considers this as a possible loophole with regard to the original intention for ensuring an appropriate level of fire safety. The group recommends CESNI/PT to consider amending the provision in a way that takes into account the cumulative capacity stored in groups of adjacent rooms.

Minimum airflow or air exchange rates should be defined by the fire protection concept.

Group V suspects that this is a difference in translations.

In the German and Dutch language versions the term 'schalten' (switch) is used, in the French version 'trennen' (disconnect) is used. In the French version the term 'couper' (to cut) is used.

A switch must switch all connected circuits off/on simultaneously.

This implies a cutting of the stranded wires and not a switching of the electrical circuit.

It must be clarified what is meant by switching and disconnecting circuits.

Task CESNI/PT: Check and clarify language versions. No entry in FAQ necessary.

Remark Sec: Group V did not take a stand on the proposal to add “For batteries, this switch must be a bipolar battery switch”.

Members of group III agree on proposed answer.

- Reduced anchor mass can only be accepted if it is published on the CESNI website (<https://listes.cesni.eu/>)
- If anchors of reduced mass are not listed, anchors can be also accepted but with regular mass (not reduced).

No need of amendment or entry in ES-TRINfaq.

The group IV observes that the FR language version deviates slightly from the DE, EN and NL language versions (no reference to “swivel” in brackets). The group IV agrees that a swivel is an essential part of the anchor equipment for at least two reasons:

- Without a swivel there is an increased risk of breaking the anchor out of the ground when the vessel is swaying
- Without a swivel a twist in the anchor chain reduces the breaking load of the anchor chain

Furthermore, for practical reasons, at least one shackle seems to be necessary.

Suggestion to CESNI/PT=> split the current requirement in two separate requirements:

- The connection between anchor and chain has to contain at least one swivel
- All connecting pieces (swivels, shackles) between anchor and chain shall withstand a tensile load 20 % higher than the breaking load of the corresponding chain.

If a transitional provision should be deemed necessary at all, a transition period until the next renewal of the vessel certificate is considered as sufficient.

Side edges of the gangway according to Ch13

=> brightly coloured strip/couleur clair/helle Streifen

Can CESN/PT make the definition clearer in all translations and eliminate differences ?

Visible at night and day solution.

Proposal: Amend ES-TRIN

=> brightly coloured and reflective on horizontal plane of the edges of the gangway in order to guide the user.

„Protected rooms shall have a facility for extracting the extinguishing agent and the combustion gases. Such facilities shall be capable of being operated from positions outside the protected rooms and which must not be made inaccessible by a fire within such spaces. If there are permanently installed extractors, it shall not be possible for these to be switched on while the fire is being extinguished.“

Q: Are portable extractors accepted? Is pressurisation of the engine room and extraction of the gas by flushing permitted?

Conclusion: Possibility to ventilate via portable ventilation device should be demonstrated and openings on opposite sides of the engine room should be available. The portable ventilators don't have to be carried on board permanently.

Remark: Space should not be entered before the gases are evacuated.

Recommendation to CESNI/PT: Clarification in ES-TRIN FAQ

„The warning system shall be set off automatically as soon as the fire-fighting system is first triggered. The warning signal shall sound for an appropriate time before the extinguishing agent is released and it shall not be possible to switch it off. “

Q: The provision contains the following words: „shall not be possible to switch it off“. This creates confusion about how the alarm should be switched off during a test. Currently, recognised classification societies in Belgium provide a reset button in the room to be protected.

Conclusion: Possibility of resetting the alarm does not provide any improvement in safety, however it does increase the risks related to the real emergency situation. It should not be allowed to have a reset button for the alarm.

Recommendation to CESNI/PT: Clarification in ES-TRIN FAQ

Problem:

Is it correct to conclude that ESI-II-12 applies to permanent fire-fighting for protecting objects?

(the difference is

in ES-TRIN 2021 -> forbidden and

in ES-TRIN 2023 -> allowed but not obligatory)

Conclusion: **ESI-II-12 should be applied**. There should be a link from Art. 13.06 to ESI-II-12 (vice versa). ESI shall be amended.

In practice: Add an extra loop on the existing fire detection system.

„The following craft shall be equipped with a ship's boat according to European Standard

EN 1914 : 2016:

- a) motor cargo vessels, motor tankers and barges exceeding 150 t deadweight
- b) tugs and pushers with a water displacement of more than 150 m³
- c) floating equipment
- d) passenger vessels. “

Conclusion: Articles 32.04. and 32.06 provide possibilities to recertify the ship's boat. Difference between the old and new norm EN 1914 is in fire safety. It is allowed to apply the old norm for 20 years after it comes into force. This is more of an issue for manufacturers than for the shipowners. If a certain ship's boat is listed it can be used.

Criteria for ventilation systems

Chapter 15: The occupational health and safety provisions of ES-TRIN apply as special legislation to the general occupational health and safety provisions. In the areas for which ES-TRIN does not regulate any specific information, the general occupational health and safety provisions can be used as a basis.

Article 19.06(18): Here, too, the general occupational health and safety provisions can be used. It should be examined whether the ISO 7547:2022 can be applied to inland navigation.

In addition, the criteria of EN 1864:2008 Requirements for wheelhouses could be used. This formulates values for air conditioning (temperature, humidity and air velocity), see ESI-III-10.

Task to CESNI/PT: Check whether regulation is required.

FAQ: Alternatively, insert explanation in FAQ.

Question:

Should the potable water tank filling apertures be standardized?

Proposal: **Amend ES-TRIN**

Make use of international standard for potable water connection
= ISO 5620-1:1992.

Check with possible ongoing discussion in CESNI/PT. Taking into account the size of the reception tank.

Implication being that the existing potable water supply terminals need to modify their connections.

Members of group III discussed the subject.

There is an interpretation published on ES TRIN FAQs to article 19.01(4) that relies document RV/G (07) 71 and RV/G (07) 90.

The discussion ended open on the question of the modification period.

Remark Sec. ES-TRIN includes a transitional provisions for existing vessels (until 2064 for vessels laid down before 2006). « However, cabin vessel which have been laid down after 1.1.2006 must have a minimum of one cabin designed for persons with reduced mobility.»

The group IV agrees on the following answers:

- a) The requirement is satisfied by an entry in the vessel certificate, specifying the approved version of the stability booklet.
- b) A similar provision should also be added to Article 19.03 (7) on damage stability.
- c) No, an additional memorandum (“Prüfvermerk”) is not necessary.
- d) For purposes of clarification, it would be desirable to add a **specific transitional provision for the approval of the stability calculation by the inspection body to Chapters 32 and 33.** N.R.C. is regarded as sufficient by the group, as for those vessels already built under the requirements of ES-TRIN (or the former Annex II and RVIR as of 2005) the substance of the intact stability requirements can be deemed to be fulfilled.

Members of the group III agree that Art. 19.11.9(d) could be removed from ES- TRIN

There are available products on the market.

Proposal of amendment to be forwarded to CESNI/PT

It seems that in Art. 19.12 (10) and Art. 19.15 (10) the term “smoke-hood” is used for different purposes.

While in Art. 19.15 (10) it is clear that these smoke-hoods are provided to passengers in order to enable them to escape from a smoke-contaminated area, for Art. 19.12 (10) there seem to be at least two possible interpretations:

- the smoke-hoods are intended for the crew with a view to active intervention (rescuing people, fire-fighting) in smoke-contaminated, but not oxygen depleted areas
- the smoke-hoods are intended as escape masks intended for passengers accompanied out of dangerous areas by crew using the breathing apparatus

Depending on the intended purpose the standards referred to by the French delegation would therefore need to be checked whether they would be appropriate for the respective purpose.

It would be desirable to add a concrete reference to appropriate standards in Article 19.12 (10) or at least in the ES-TRIN FAQ

CESNI/PT is kindly asked for interpretation of the purposes of Art. 19.12 (10) and Art. 19.15 (10).

19.15(12) "For day-trip vessels operating limited journeys of local interest or in harbour areas, the inspection body may waive the application of Article 19.06(17). However, the absence of toilets shall be entered in item 52 of the inland navigation vessel certificate. The journeys or areas for which the derogation is valid shall be specified in the inland navigation vessel certificate."

Q: The inspection body can waive compliance with (1) for passenger vessels that do not generate any domestic wastewater. This derogation is to be entered in item 52 of the inland navigation vessel certificate. This wording can only apply for passenger vessels regulated according to article 19.15(12).

Conclusion: Article 19.15(12) regarding toilets should only be applied for national waters and is considered to be a special exemption.

Article 19.14 (regarding all waste water) is considered to be a general rule and is applied internationally.

In Dutch and German it means « maximal immersed cross section ».

In English they refer to « maximum wetted area ».

The difference could affect the anchor weights.

Conclusion: **Amend ES-TRIN**

English version shall be corrected into « maximum immersed cross section »

As a matter of principle, the worst case damage is to be assumed when assessing risk.

As a matter of principle, the risk is to be eliminated in the first instance by technical measures, or minimised to such an extent that the failure of any additional organisational measure poses no danger to personnel aboard or to the general public.

Group III: The general approach of the answer proposed by DE seems to be reasonable, however, the group considers that a final answer cannot be given without detailed knowledge of the ISO 31010.

Group IV: Agree with the proposed answer. Suggestion to amend Article 30.04

Chair: Next steps? Mandate to DE to further assess ISO 31010?

Group V can agree in principle to the proposed response.

Detailed solutions are to be worked out by CESNI/PT or CESNI/PT/FC depending on the fuels used.

Task CESNI/PT: Declare fuel cell rooms as engine rooms and further elaborate for other fuels.

No entry in FAQ required

The group IV has reached a common understanding that the practice described in the question seems – from a very formalistic point of view – to be covered by the current ES-TRIN:

- In item 14 of the model of the vessel certificate there is a reference to item 15 and to item 52 for recording restrictions for the authorised convoy formations.
- Paragraph 4 (15) of ESI-I-1 states that the table in item 15 shall only be completed for craft with an entry under item 14, 1 – 3, of the vessel certificate

So it seems that it is at least not forbidden to skip table 15 and only have an entry under item 52 for craft which are authorised to propel convoys.

The group IV therefore concludes that there seems to be a “missing link” as there is no requirement that the table in item 15 has to be completed for craft with an entry under item 14, 1 – 3.

Independent of the above considerations the requirements of Article 21.06 have to be observed as a prerequisite for an authorisation to propel a rigid convoy as recorded under item 14, 1 – 3, of the vessel certificate.

It should further be clarified that the vessel certificate only refers to regular operation and is not intended to cover exceptional circumstances or emergency situations. Such situations should be dealt with in cooperation with the local authorities and in accordance with the applicable navigational police regulations.

Problem: Lack of experts/knowledge in certain subjects, specifically art. 10.11(17) (Lithium Battery/Fire risk).

Initial proposal by FR : Replacing « expert » by « competent person ».

Remark: Manufacturers are only taking their system and its extinguishing as their responsibility but will not take it for the (entire) protected electrical service room.

Potential Solution: Amend ES-TRIN by adding « competent firm » in the same sentence of art. 10.11(17) in addition to expert. + Amend ESI-I-2.

Follow-up: Bringing casus' to be discussed by other inspection bodies. -> sharing experience. -> amend/supplement article relating to batteries and its installation accordingly. Inspection bodies have to accept design concept at their discretion because of lack of experts and the higher costs for the shipowner until a solution has been put forward.

Guidelines, matrix' or other solutions needed for different type of technologies because different type of extinguishing agents/procedures are needed.

Harmonisation is currently not possible.

The recognition procedures and criteria are very different.

The national administrative procedures/jurisdictions do not allow for a European solution.

Therefore, the existing national procedures should be continued.

This issue was discussed in Vienna in 2018 and led to the same result.

No task for CESNI/PT.

No entry in FAQ required.

Group I studied it as extra question:

We would like to emphasise the importance of harmonisation of the rules for recognition of experts between member states to be researched and developed by CESNI/PT.



THANK YOU FOR YOUR ATTENTION