CESNI/PT (18) 78
4 September 2018
Or. de fr/de/nl/en

WORKING GROUP TECHNICAL REQUIREMENTS

Position paper
ES-TRIN Chapter15 “Accommodation”

Communication from the German delegation

Dear Mr Boyer,

The ES-TRIN’s accommodation requirements currently in force are based on national provisions dating from the 1970s and were overhauled in the 1990s for inclusion in RVIR 1995. Roughly speaking – this is two generations ago. Inland navigation has changed in the intervening period, as have the crews and their expectations.

Whereas back then it was still virtually unthinkable – except on owner-operated vessels – for there to be women crew members on-board, nowadays this is commonplace: more than one in five graduates of the Rhine sailors' vocational college in Duisburg is female. What crew members do in their leisure time is also completely different, as it is for the population at large: nowadays there is a focus on more individual leisure activities and fewer group activities, also influenced by the language difficulties associated with increased migration of foreign workers.

And technology has changed dramatically as well: what seemed pie in the sky back then is the norm – not just in ship technology but in leisure activities and creature comforts as well, just to mention the trouble-free supply of 230 V power, air-conditioning or food storage. Modern IT requirements also need to be taken into consideration, as crews are increasingly being called upon to attend to administrative tasks to do with vessel operation – including in accommodation areas.

Inland vessel crew members typically remain on board for several weeks at a stretch. Which is why it is even more important that the accommodation, but individual rooms in particular, which are their only retreat onboard, feature decent and modern equipment. Food storage and meal preparation requirements should also not be neglected.

Notwithstanding room conditions and amenities nowadays being considerably more comfortable and hygienic than a few decades ago, some modern inland vessels no longer comply sufficiently with basic shipbuilding rules, as enshrined in art. 3.01 ES-TRIN, owing to design requests. Just one example here is the location of floors relative to the waterline. But this also touches on points essential to the crew members’ well-being and thus efficiency, points which should be brought into line with modern technology and occupational health standards as a matter of urgency.

Finally it should also be pointed out that modern and well-equipped accommodation is a very important argument when recruiting qualified personnel.

The German delegation therefore submits a proposal in the **annex** containing priority areas that might be helpful in the discussions on revising Chapter 15 - Accommodation. The explanations are confined solely to the facts. They are not in any way to be understood as a wish or demand concerning required changes to the existing provisions - specific proposed amendments to the requirement texts were deliberately avoided. The facts referred to are intended purely as food for thought when considering which requirements might be included in Chapter 15 so that a consistent body of requirements governing the design of modern accommodation that is safe to use can be created.

Consideration of the individual priorities identified in the annex should be based on the following fundamental considerations:

a) A distinction needs to be made between owner-operator accommodation (private accommodation) on the one hand and employee accommodation (both on an owner-operated vessel and a shipping company vessel) on the other hand.

   Private accommodation is accommodation for individuals with a private/family affiliation. Some requirements, especially those the purpose of which is to protect crew members' privacy, should not apply to private accommodation.

b) A different attitude towards new vessels versus existing vessels (conversion or replacement of the accommodation) is also appropriate.

   Different treatment of newly built accommodation or vessels and existing accommodation is achieved by the tried and tested method of time-limited transitional periods.

c) All vessel owners must be treated equally.

   No derogations should be granted by the respective Inspection bodies; only Chapter 32 is to be used.

Yours faithfully,
for the German delegation

Dr. Friedrich Füngerlings

Annex to CESNI/PT (18) 78

Priorities that should be considered during discussion of the revision of ES-TRIN Chapter15 – Accommodation

1. Personal freedom, personal space

Opportunities for privacy
In the case of shipping company vessel crews, employees of both sexes are typically housed in one accommodation area and there is more than one bedroom per accommodation area. To create enough personal space, sleeping accommodation, bath and toilet should be segregated from the other rooms and accessible from them, for example, via a corridor or segregated area.
To that end, each room should be individually accessible, and the accommodation, with bathrooms, toilets and bedrooms being individually lockable.

Window panes
If there are windows in bathrooms and toilets care should be taken to ensure that these rooms cannot be looked into from outside, e.g. by means of suitable glazing or blinds.

2. Modern accommodation

Minimum room size
Accommodation must feature a minimum number of rooms. This can be a living room, an adequate number of bedrooms, a dining area, a kitchen, a bathroom and toilet in the bathroom or in a separate lavatory.
Contemporary accommodation on a shipping company vessel should also provide an individual bedroom for each person.

Connectivity and separation of rooms
In certain types of vessel, accommodation may be divided into several areas, but with the bedroom, bathroom and lavatory being accessible without leaving the accommodation.
The subdivision or use of the individual rooms need not be static and prescribed; living rooms, kitchen and dining area can instead be combined within one room.
Living rooms and bedrooms on the other hand may only be combined within single occupation accommodation.

Immersion
To protect the occupants in the event of possible flooding, but also to make it possible to see outside in the interests of well-being, the upper edge of the floor in living rooms and bedrooms should only be slightly (approx. 1,0 m) below the level of greatest immersion.

Size and headroom
The necessary headroom in all accessible areas of the accommodation should comply with the usual standards (e.g. greater than approx. 2,1 m).
Living rooms and bedrooms are already subject to requirements on free floor area and adequate air volume; the values in question should be reviewed.

Light, illumination
To comply with minimum ergonomic standards, rooms in which crew members spend extended periods of time (living rooms, dining areas, office areas and bedrooms) should feature an adequately sized window giving directly to the outside with an outside view.
To ensure a good rest, especially during daytime rest periods it should be possible to effectively darken bedrooms.

3. Side rooms and changing rooms

A side room, as part of the accommodation area, is a room which can facilitate residence and working on board when living on board for several days; they are useful when living rooms are no longer capable of fulfilling their function. These are primarily changing rooms (e.g. when trans-shipping dangerous goods or in the event of dirty work). Changing room requirements should be defined (e.g. access to a lavatory, outside living and engine rooms, accessible from the deck and the extent of the fittings, emergency exit, if accessible only via the engine room).

4. Passive safety

Entrances, exits, emergency exits
Especially during stays in port, one could imagine that the accommodation cannot be vacated using the normal entrance in the event of an incident. For this reason it should be accessible directly from deck via at least two doors as far apart from each other as possible. One of these entrances can of course be from the wheelhouse. One of these entrances can also be via an emergency exit (including a window that can be opened) if it is of an appropriate size (e.g. not less than approx. 0,6 x 0,9 m), leads onto the open deck and can be used at any time.

To avoid the risk of tripping, the door sill, having regard to various requirements such as safety clearance or ADN conditions) should not be too high (e.g. no higher than approx. 0,5 m). A staircase should be considered, e.g. in accordance with EN 13056, in the event of height differences between the deck and accommodation exceeding the height of two steps.

Fire protection
Certain requirements should be imposed on the insulation and cladding in entrances and companionways used as escape routes, e.g. they should be made of flame retardant materials.
Smoke alarms or heat detectors should be sited at a minimum in bedrooms and passageways as well as on escape routes to provide early warning of incipient fires.

Power supply
Safety in the dark goes without saying. However, each room should have sufficient general electric lighting, it being a good idea for there to be a light switch at each entrance. To avoid impaired vision as a result of dazzle, it should be possible to provide even illumination of longer passageways in particular.

Nowadays it is standard practice for each power circuit to be protected with circuit breakers and against overcurrent and short-circuit; the same should also apply to accommodation aboard inland vessels.

5. Night-time sleeping and reduction of noise-related stress

Restful night time sleeping, or rest periods is the basic prerequisite for safe and healthy work the next day. Noise penetration into all accommodation spaces should therefore be as low as possible as permitted by the state-of-the-art.
These noise protection requirements should also apply to noise protection between living rooms and bedrooms, as well as between bedrooms, so that the normal amount of noise generated by crew members who are not on their rest periods does not interfere with other crew members' sleep who are required to rest.

6. Hygiene requirements

Number of baths and toilets:
Their number is already regulated but the scope of provision should be reconsidered so that in the event of more than three individuals regularly residing in the accommodation, two bath and two toilets, for example, are available. To enable a toilet to be used if the bath is occupied, at least one of the toilets should be located in a separate lavatory.

It also needs to be considered whether on the few vessels with more than six employees (shipboard personnel and crew) even more baths and toilets, appropriate to the number of employees, can be provided.
Baths and lavatories should be sufficiently large to ensure their ease of use. For example, the minimum free floor area in front of the shower or in its immediate vicinity and in front of the wash basin should be defined.

Segregation of certain rooms
For obvious hygiene reasons, there should be no direct connection between kitchens and rooms with a dining area and lavatories or bathrooms with a toilet.

Ventilation, heating, air conditioning
Pleasant temperature and humidity levels are required not just for crew members' well-being but for their health as well. Enough ventilation of accommodation is therefore required with the door closed. It is important that any ventilation and venting systems should be adequately dimensioned. It should also be possible to adjust them individually in each room.
Fresh air inlets should be appropriately sited to prevent any negative effects or unacceptable unpleasant odours, dirt, dust or the effects of dangerous substances.
Likewise, to separate contaminated air flows, bathrooms and lavatories should have their own dedicated air extraction venting directly into the open air independently of other parts of the accommodation area, so that they do not vent into other rooms.
Accommodation areas are already equipped with heaters or a heating system. There should be consideration as to how a healthy temperature can be set for normally occurring weather conditions. To this end, the minimum temperatures to be achieved by heating are to be defined.
Similar considerations apply in the case of high outside temperatures: It should be possible to achieve a room environment (temperature and humidity) for normally occurring weather conditions in which the temperature in the living rooms can be kept at a level yet to be defined.

Sewage tank
For increased hygiene, especially when in port, ships should be equipped with an appropriately dimensioned sewage tank fitted with a discharge connection according to EN 1306, a ventilation opening on deck, a filling level indicator and an inspection opening.

7. Healthy nutrition

Drinking water
A requirement already exists for drinking water tank size but this size should be reviewed to determine whether it addresses modern lifestyles (washing machine, dishwasher, hygiene etc.) such that sufficient drinking and domestic water is available for all the accommodation's residents.
Drinking water should always be available . The systems should therefore possess a power-operated pump and pressure vessel. To prevent infection, drinking water pipes should not include any sections with no regular throughflow.

To prevent contamination of the drinking water through open pipes when filling the storage tank, drinking water tanks should be equipped with a filling spout according to EN 16865; this also includes a vent with a suitable filter, a filling level indicator and an inspection opening.
To prevent the undetectable penetration of contaminated water from outside the vessel because of minor damage to the hull, drinking water tanks should not be in physical contact with the hull.

Galley
The galley should be equipped with ergonomically located fittings such as, at a minimum, a cooker, adequate cupboard space etc. Suitable freezers should be provided for the storage of frozen foods or fridges with a three-star freezer compartment.
To prevent fuse failure or even damage caused by overloaded wiring, electrical appliances with a high-power requirement such as, for example, electric cooker, oven, washing machine, washer dryer etc. should be provided with separate power circuits.

8. IT and consumer electronics

Much of a boat master's working time nowadays is given over to administration. Which is why an office area for office work should be provided. If not located in the wheelhouse, it can be in the galley, in the living room or in a dedicated room.
In order to be able to operate today's IT devices and prevent tripping when connecting them by means of extension cables, the number, location and grouping of the electrical consumers should be borne in mind when dimensioning the number and location of power sockets.

9. Modern leisure activities

Crew members' leisure time frequently involves electric devices (230V, 50Hz, at least 16A). The accommodation should therefore be fully provided with this power.
This also means that accommodation areas - depending on size - should be equipped with several separate electrical circuits, with power sockets and lighting being split between different power circuits to prevent a blackout in the event of a short circuit in a consumer supply line.

***