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### ECONOMIC COMMISSION FOR EUROPE

INLAND TRANSPORT COMMITTEE

Principal Working Party on  
Inland Water Transport

Working Party on the Standardization  
of Technical and Safety Requirements  
in Inland Navigation

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#### MINIMUM MANNING REQUIREMENTS FOR INLAND NAVIGATION VESSELS

##### Addendum 1

Transmitted by the Governments of Austria and Germany

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## **AUSTRIA**

1. There are no minimum manning requirements set in force by a specific regulation. The minimum crew is named in the ship's certificate in accordance with international recommendations and regulations, especially the regulations for the Rhine and with regard to specific requirements of the Danube.

## **GERMANY**

2. The numbers and qualifications of crews for inland navigation vessels shall be governed by chapter 14 of the Rhine-going Vessels (Surveys and Certification) Ordinance (TRANS/SC.3/WP.3/R.25) or, alternatively, by chapter 13 of the Inland Navigation Vessels (Surveys and Certification) Ordinance (TRANS/SC.3/WP.3/R.38/Add.1).

3. In the light of the substantial differences between the provisions of these two instruments, work has been started to revise the national manning requirements embodied in the Inland Navigation Vessels (Surveys and Certification) Ordinance with the aim of unifying and harmonizing, respectively, the provisions of the two instruments.

4. The revised set of manning requirements is anticipated to enter into force by the end of 1995.

5. With this consideration in mind, the tables reproduced below indicate the crew numbers and qualifications as anticipated to be applicable as from the end of 1995.

6. Any vessel navigating with a minimum complement as indicated in one of the tables 1 to 3 shall comply with certain technical requirements. These are described in the annex attached.

7. In the event that one or more of these technical requirements are not complied with, the minimum complement shall be increased by one crewman in operating modes A<sub>1</sub> and A<sub>2</sub> whereas it shall be increased by two crewmen in operating mode B.

Table 1: Minimum crew for self-propelled vessels

Length of the vessel L in m	Crew members	Number of crew members for operating mode				Remarks on level of automation
		A <sub>1</sub>	A <sub>2</sub>	B	C	
L ≤ 70	Boatmaster	1	2	2		
	Steersman					
	Leading crewman					
	Able crewman	1		1		
	Ordinary crewman			1		
	Engineer					
	Engine-minder					
70 ≤ L ≤ 86	Boatmaster	1	2	2		
	Steersman					
	Leading crewman	1				
	Able crewman			2		
	Ordinary crewman		1			
	Engineer					
	Engine-minder					
L > 86	Boatmaster	1	2	2 or 2 1 or 1		
	Steersman					
	Leading crewman					
	Able crewman	1	1	2 or 1		
	Ordinary crewman					
	Engineer					
	Engine-minder					

Where A<sub>1</sub>, A<sub>2</sub>, B, and C are operating modes as follows:

A<sub>1</sub> - daytime navigation for maximum of 14 hours per 24-hour period;

A<sub>2</sub> - semi-continuous navigation for not more than 18 hours per 24-hour period;

B - continuous navigation for not more than 24 hours per 24-hour period;

C - another operating mode (where appropriate).

Table 2: Minimum crew for pushers, pushed convoys, abreast formations and other rigid formations

Type of convoys	Crew members	Number of crew members for operating mode				Remarks on level of automation
		A <sub>1</sub>	A <sub>2</sub>	B	C	
Pusher+one barge or formation with the dimensions: L ≤ 116.5 m B ≤ 15 m	Boatmaster Steersman Able crewman Ordinary crewman Engineer or Engine-minder	1 1 1 1	2  1 1	2 or 2 1 or 1 2 or 1		x)
Pusher+two barges or self-propelled vessel+ one barge	Boatmaster Steersman Able crewman Ordinary crewman Engineer or Engine-minder	1 1 1 1	2  2 1	2 or 2 1 or 1 2 or 2  1		
Pusher+three or four barges or self-propelled vessel+ two or three barges	Boatmaster Steersman Able crewman Ordinary crewman Engineer or Engine-minder	1 1 2 1 1	2  2 1 1	2 or 2 1 or 1 2 or 2 1 1 or 1		
Pusher+more than four barges	Boatmaster Steersman Able crewman Ordinary crewman Engineer or Engine-minder	1 1 3 1 1	2  3 1 1	2 or 2 1 or 1 3 or 3 1 1 or 1		

Where A<sub>1</sub>, A<sub>2</sub>, B and C are operating modes as follows:

A<sub>1</sub> - daytime navigation for maximum of 14 hours per 24-hour period;

A<sub>2</sub> - semi-continuous navigation for not more than 18 hours per 24-hour period;

B - continuous navigation for not more than 24 hours per 24-hour period;

C - another operating mode (where appropriate).

x) Formation with the dimensions (see table 2(a) on the next page)

L < 82 m

B < 11.45 m

Table 2(a): Minimum crew for formation with the dimensions  $L < 82$  m,  $B < 11.45$  m

Crew members	Number of crew members for operating mode			
	A <sub>1</sub>	A <sub>2</sub>	B	C
Boatmaster	1	2	2	
Steersman				
Able crewman	1		1	
Ordinary crewman		1	1	
Engineer or				
Engine-minder				

Table 3: Minimum crew for passenger vessels

Maximum permitted number of passengers	Crew members	Number of crew members for operating mode				Remarks on level of automation
		A <sub>1</sub>	A <sub>2</sub>	B	C	
Up to 75 persons	Boatmaster	1	2	2		
	Steersman	-	-	-		
	Leading crewman	-	-	-		
	Able crewman	1	1	2		
	Ordinary crewman	-	-	-		
	Engineer	-	-	-		
	Engine-minder	-	-	-		
Between 76 and 300 persons	Boatmaster	1	2	2		
	Steersman	-	-	-		
	Leading crewman	-	-	-		
	Able crewman	-	-	1		
	Ordinary crewman	-	-	-		
	Engineer	-	-	-		
	Engine-minder	1	1	1		
Between 301 and 400 persons	Boatmaster	1	2	2		
	Steersman	-	-	-		
	Leading crewman	-	-	-		
	Able crewman	-	-	2		
	Ordinary crewman	1	1	-		
	Engineer	-	-	1		
	Engine-minder	1	1	-		

<u>Table 3:</u> Minimum crew for passenger vessels (continued)						
Between 401 and 600 persons	Boatmaster	1	2	3		
	Steersman	-	-	-		
	Leading crewman	1	-	-		
	Able crewman	-	1	1		
	Ordinary crewman	-	-	-		
	Engineer	-	-	-		
	Engine-minder	1	1	1		
Between 601 and 800 persons	Boatmaster	1	2	3		
	Steersman	1	-	-		
	Leading crewman	-	-	-		
	Able crewman	1	1	1		
	Ordinary crewman	-	-	-		
	Engineer	-	-	-		
	Engine-minder	1	1	1		
Between 801 and 1,000 persons	Boatmaster	1	2	3		
	Steersman	1	-	-		
	Leading crewman	-	-	-		
	Able crewman	1	2	2		
	Ordinary crewman	1	-	-		
	Engineer	-	1	1		
	Engine-minder	1	-	-		
Between 1,001 and 2,000 persons	Boatmaster	2	2	3		
	Steersman	-	-	-		
	Leading crewman	-	-	-		
	Able crewman	3	3	3		
	Ordinary crewman	-	1	1		
	Engineer	1	1	1		
	Engine-minder	-	-	-		
More than 2,000 persons	Boatmaster	2	2	3		
	Steersman	-	-	-		
	Leading crewman	-	-	-		
	Able crewman	3	4	4		
	Ordinary crewman	1	-	1		
	Engineer	1	1	1		
	Engine-minder	-	-	-		
Steamboats with between 1,000 to 2,000 persons	Boatmaster	2	2	3		
	Steersman	-	-	-		
	Leading crewman	-	-	-		
	Able crewman	3	3	3		
	Ordinary crewman	-	1	1		
	Engineer	3	3	3		
	Engine-minder	-	-	-		

Where  $A_1$ ,  $A_2$ , B and C are operating modes as follows:

$A_1$  - daytime navigation for maximum of 14 hours per 24-hour period;

$A_2$  - semi-continuous navigation for not more than 18 hours per 24-hour period;

B - continuous navigation for not more than 24 hours per 24-hour period.

Annex

Equipment of vessels

1. Notwithstanding the other provisions of these Regulations, self-propelled barges, pushers, pushed convoys and passenger vessels operated with a minimum crew shall meet the following requirements:

(a) The propulsion equipment shall be so arranged as to enable the speed to be changed and the direction of propulsion reversed from the wheelhouse.

It must be possible to start and stop the auxiliary engines required to operate the vessel from the wheelhouse, unless they function automatically or continuously during each voyage.

(b) The critical levels of:

the temperature of the water for cooling the main engines;

the oil pressure of the main engines and transmission gear;

the oil and air pressure of the devices for reversing the main engines;

the reversible transmission gear or the propellers; and

the filling level of the engine room hold

shall be indicated by devices which set off sound and visual alarms in the wheelhouse. The sound alarms may be contained in a single sound apparatus and can be stopped once the breakdown has been noted. The visual alarms shall be extinguished only when the relevant problems they indicate have been eliminated.

(c) The fuel feed and the cooling of the main engines shall be automatic.

(d) It must be possible for one person to man the helm without special effort even at the maximum authorized draught.

(e) It must be possible to initiate the visual and sound signals prescribed by the Police Regulations for navigation on the Rhine for vessels under way from the wheelhouse.

(f) If direct communication between the wheelhouse and the bow of the vessel, the stern of the vessel, the living quarters and the engine room is not possible, a sound link shall be provided. For the engine room, the sound link may be replaced by visual and sound signals.

(g) It must be possible for a single crew member on his own to launch the required lifeboat with due dispatch.

(h) A spotlight which can be manipulated from the wheelhouse shall be installed on board.

(i) the effort required to manipulate cranks and similar pivoting devices for lifting equipment shall not be more than 16 kg.

(k) The towing winches referred to in the inspection certificate shall be motorized.

(l) the stripping-pumps and the deck swabbing pumps shall be motorized.

(m) The main control devices and monitoring instruments shall be arranged ergonomically.

(n) It shall be possible to control the equipment required under article 3.03 and 3.04, paragraph 1, from the wheelhouse.

(o) The vessel shall be equipped with a VHF radiotelephone for the ship-to-ship and shipping information networks.

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