



**Bundesstelle für Seeunfalluntersuchung**  
**Federal Bureau of Maritime Casualty Investigation**  
Federal Higher Authority subordinated to the Ministry  
of Transport and Digital Infrastructure

**Safety recommendations pertaining to the very  
serious marine casualty No 211/19**

**Collision involving CMV ASTROSPRINTER and  
traditional vessel No 5 Elbe on den river Elbe off  
Stadersand on 8 June 2019**

22/07/2019

Pursuant to the second sentence of Article 28(1) of the Law to improve safety of shipping by investigating marine casualties and other incidents (Maritime Safety Investigation Act – SUG) in conjunction with Article 14(2) of Directive 2009/18/EC of the European Parliament and of the Council of 23 April 2009 establishing the fundamental principles governing the investigation of accidents in the maritime transport sector, the Federal Bureau of Maritime Casualty Investigation publishes an interim report within a period of 12 months of a very serious or serious marine casualty if it is not possible to complete the corresponding investigation report within that period.

This interim report should not be used in court proceedings or proceedings of the Maritime Board. Reference is made to Article 34(4) SUG.

The German text shall prevail in the interpretation of this interim report.

Issued by:  
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## 1 FACTUAL INFORMATION

### 1.1 Course of the accident

At about 1430 on 8 June 2019, the Cyprus flagged container vessel ASTROSPRINTER and the German traditional vessel No. 5 Elbe collided on the river Elbe off Stadersand. The former pilot schooner sailing on the river was manned with 15 crewmembers and carried 28 passengers. Eight persons were injured. In the further course of the accident, the No. 5 Elbe was able to reach the Schwinge estuary without assistance. However, she foundered nearby the pier afterwards. Given the lucky circumstance, that rescue forces were already on the scene and the fact that the vessel was in sheltered waters, all people could be recovered on time.

### 1.2 Watertight integrity

The pilot schooner No. 5 Elbe was built with a continuous hull, which is not divided by bulkheads. There is no collision bulkhead. Even during extensive and essential conversions and renewals, the hull was not fitted with watertight bulkheads. Consequently, it was unavoidable that a leakage resulted in the complete flooding of the hull and inevitable that the hull foundered.

Under the terms of the currently valid safety requirements for the construction and the equipment of traditional vessels in accordance with No. 8, chapter 2, part 3 of the attachment 1a pertaining to the Ship Safety Ordinance (SchSV, the corresponding amendments entered into force in March 2018), these vessels must be divided by bulkheads up to the freeboard deck. At least one collision bulkhead must be fitted. Vessels with a length of 25 m or more that were originally constructed without bulkheads must additionally be fitted with an aft peak bulkhead if essential conversions were carried out. Traditional vessels sailing outside coastal sea waters shall be divided by watertight bulkheads preventing immersion of the freeboard deck in case of flooding of a division.

Different linear measures exist for the No. 5 Elbe, roughly ranging from 24 m to more than 27 m, depending on the method of measurement. However, this accident indicates that the length of a vessel does not constitute a suitable differentiation criterion for the decision whether bulkheads must be fitted or not. This corresponds to the classification rules of Germanischer Lloyd for wooden ships in merchant shipping dated 1964. No. 11.1 of these rules implies that watertight bulkheads must divide the engine room, the living space, the cargo hold, and the fish room, respectively, from each other. According to this, a collision bulkhead is necessary from a length of 18 m.

Similar applies for the range of trade. Foundering of a vessel with passengers on board within a fairway may be as dangerous as outside of coastal waters. Other vessel able to initiate rescue measures immediately might not always be in the vicinity. Therefore, the range of trade is not a suitable differentiation criterion either.

From the perspective of the BSU, the existence or subsequent installation of watertight bulkheads should depend on whether passengers are carried on board. In accordance

with the national and international provisions, respectively, this should be mandatory if more than 12 passengers are carried on board.

## **2 Safety recommendations**

Given the current state of the investigation, the BSU comes to realize that there is a need of urgent action in order to enhance the watertight integrity of traditional vessels carrying more than 12 passengers and prevent the risk of new accidents for the same reason.

The following safety recommendations do not attribute a presumption of blame or liability in respect of type, number or sequence.

### **2.1 Federal Bureau of Transport and Digital Infrastructure (BMVI)**

The Federal Bureau of Maritime Casualty Investigation recommends the BMVI to advocate for the amendment of the aforementioned legal status that all traditional vessels carrying more than 12 passengers irrespective of the range of trade and the length of the vessel, must be divided by watertight bulkheads to that effect that the freeboard deck is not immersed if one division is flooded (so-called 1-division-status).

### **2.2 Owner and operator of the pilot schooner No. 5 Elbe**

The Federal Bureau of Maritime Casualty Investigation recommends that the owner of the No. 5 Elbe installs watertight bulkheads to such an extent during the upcoming repair that the 1-division-status is provided for.

### **2.3 Owners and operators of traditional vessels**

The Federal Bureau of Maritime Casualty Investigation recommends that the owners of traditional vessels carrying more than 12 passengers examine if the watertight integrity is satisfied in case of a leakage for the 1-division-status and install watertight bulkheads, if necessary.