



## Safety recommendation no. 27

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| <b>Date of the publication</b>    | 07.09.2021  |
| <b>Number of the final report</b> | 2016042003  |
| <b>Safety deficit</b>             | <p>On 20 April 2016 at approx. 13:09, the motorvessel Albis (MS Albis) belonging to the Zürichsee-Schiffahrtsgesellschaft (ZSG) collided with the jetty while mooring in Küsnacht (ZH). Several people were injured in the collision. Extensive damage was caused to the ship and the jetty.</p> <p>The collision between MV Albis and the jetty in Küsnacht on 20 April 2016 can be attributed to the fact that it was not possible to take over driving control on the port bridge-wing control stand. As the records for some important parameters for the accident investigation are lacking, it cannot be said conclusively whether purely technical or purely human factors were the cause.</p> <p>The following contributed to the accident:</p> <ul style="list-style-type: none"><li>• Unfavourable decisions and prioritisation regarding<ul style="list-style-type: none"><li>- the time at which the switch was made from the main bridge to the bridge-wing control stand; this left little room to deal with unforeseen events;</li><li>- rapid acceleration shortly before the mooring manoeuvre from the main control stand, considering the distance and the approach angle to the mooring jetty as well as the given topology.</li></ul></li><li>• A lack of training on dealing with possible system failures.</li><li>• Inadequate or missing guidelines, controls and monitoring in the company with regard to<ul style="list-style-type: none"><li>- procedures, plans and training courses which raise awareness of system failures and the emergency procedures in response to them, and which also provide regular opportunities for shipmasters to address issues relevant to the safe navigation of passenger ships;</li><li>- applying lessons learned from safety-relevant notifications.</li></ul></li></ul> <p>The following associated risks were identified:</p> <ul style="list-style-type: none"><li>• The technical limits of the steering system are not sufficiently considered in the current operating processes.</li><li>• No 'Failure/Malfunction of motor steering' scenario exists.</li><li>• There is no gathering of data that is required to analyse causes and to improve the system long-term.</li><li>• The ZSG does not have a concept for developing and monitoring a safety management system. In particular, the company does not ensure that its shipmasters read, understand and apply appropriate instructions on all lessons learned regarding the safe navigation of its vessels.</li><li>• Safety-relevant and reportable incidents are not reported to the FOT as the ZSG does not have up-to-date instructions. As a result, the FOT cannot carry out some oversight functions that are vital to safety in the system.</li></ul> <p>Under certain circumstances (e.g. conditions such as the Küsnacht</p> |

landing stage), shipmasters may be encouraged to choose a more risky approach as the timetable only allows a few minutes between the berthing of two passing ships at the same jetty.

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**Safety recommendation**

Target group: Ship companies  
Ship companies should systematically examine their timetable design for risks that may arise from time pressure, topology or encounters between vessels, and implement measures to reduce the risks.

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**Investigation report concerning  
the safety recommendation**

Vorbericht  
Schlussbericht

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