



Havarikommisjonen
Accident Investigation Board Denmark

Safety Alert 2021-24



Incident on the Great Belt Bridge (low bridge) on 13-1-2021

PUBLISHED JANUARY 2021

GENERAL

File number: 2021-24
Date: 13-1-2021
Time: Approximately at 15:00 hours
Location: The low bridge of the Great Belt Bridge
Occurrence type: Incident
Occurrence category: Other
Movement type: Freight train
Infrastructure manager: Banedanmark
Railway undertaking: DB Cargo Scandinavia

Notification

Banedanmark (IM) notified the Danish Accident Investigation Board (AIB) on 13-1-2021 at 15:20 hours.

On 13-1-2021 at approximately 15:50 hours, the AIB arrived at Nyborg Station, where the freight train had stopped, and launched a safety investigation.

SAFETY ALERT

Based on the results of the initial AIB safety investigation and conducted tests, the AIB issued the following safety alert to the Danish Transport, Construction and Housing Authority (NSA) and the European Union Agency for Railways (ERA):

Under circumstances very similar to the circumstances (strong wind and empty trailer) at the Great Belt accident on 2-1-2019, a semitrailer was pulled out of its position (up from the hitch) when crossing the low bridge on the Great Belt connection on 13-1-2021.

During the investigations and tests performed after the incident, the AIB found that the hitch lock in some of the tests carried out, had no or limited locking effect when pulled vertically, even though the lock was in the correct locking position and the lock was well functioning, maintained and lubricated as prescribed. The tests were performed on the incident hitch as well as several hitches of the same type.

The pocket wagon type was Sdggmrss and the hitch / lock type was a MAZ 80800 type.

In the current European legislation, The AIB has not been able to obtain information or identify any specific requirements for the function of a hitch in relation to the locking effect during vertical forces (unloading or during operation).

The AIB has not investigated other types of hitches than FW6170 (after the Great Belt accident on the 2-1-2019) and MAZ 80800 (incident on the Great Belt on 13-1-2021).

In view of the tests and the apparent lack of requirements for locking effect in vertical direction, at present time it can't be eliminated that a missing or limited locking effect due to vertical impact may occur with other types of hitches / locks in operation on the European railway network.