Revised measures on transport with semi-trailers on pocket wagons in Denmark

The current measures, which came into force on 5 February 2021, introduced as a result of the incident on 13 January 2021, where a semi-trailer moved out of the hitch on its way across the Great Belt, have now been revised.

Work has been carried out in a working group under the European Railway Agency (JNS Urgent Procedure), with the aim to establish mitigating measures allowing safe transport of freight traffic after the incident on 13 January 2021. It is based on this work that the Danish NSA has now taken the initiative to update these measures.

The revised measures do not contain any longer a requirement for additional fastening of semi-trailers across the Great Belt. Instead, it contains a number of other safety measures, including a minimum requirement for the locking force of the hitch and a minimum weight requirement to ensure the safe handling of traffic.

What applies for the Danish railway network?

- Hitches used on the pocket wagons must be suitable as a secure and sufficient lock in relation to the attachment of semi-trailers on pocket wagons on the sections where they are to be transported.
- A third-party assessment stating that the above documentation is sufficient in relation to the hitch being able to function as a sufficient lock for the specific transport.
- Documentation of the competencies of the third-party.
- Documentation of how the above conditions regarding pocket wagons have been incorporated into the Railway Undertaking’s Safety Management System.

What applies for the Great Belt?

- The type of hitch used must have a vertical force $\geq 85\text{kN}$. 
• A third-party assessment stating that the type of hitch used is suitable as a secure and sufficient lock (vertical force ≥ 85kN).
• Documentation of the competencies of the third-party.
• Semi-trailers loaded on pocket wagons must have a gross weight of at least 14 tons.
• A procedure that ensures a gross weight of at least 14 tons must be described.
• Documentation of how the above conditions have been incorporated into the Railway Undertaking’s Safety Management System.
• The action plan from JNS Urgent Procedure of April 2019 on recommendations for procedures and control when loading semi-trailers on terminals must be complied with at terminals, regardless of hitch type.
• If loading and checking is conducted by a terminal, there must be an agreement with the terminal operator regarding requirements of loading procedure and check of this as well as competence requirements for staff.
• Cooperation with relevant terminals must be documented and incorporated into the Railway Undertaking’s Safety Management System.

What applies for Padborg?

From the Danish / German border to Padborg and from Padborg to the combined terminal in Padborg, transport of semi-trailers on pocket wagons can take place without submitting documentation, provided:

• Transport with semi-trailers on pocket wagons may not pass oncoming trains
• A speed limit of 40 km/h is applied.

What applies for MAZ80800?

Semi-trailers may not be transported on pocket wagons with the MAZ80800 hitch type, where the hitch is designed with an overload protection, which can result in a low locking effect.

Semi-trailers on pocket wagons with MAZ80800, where the hitch is not designed with an overload protection, can be transported on the Danish railway network (incl. Great Belt and Padborg), if the following documentation requirements are met:

• A third-party has assessed that the construction and design of the hitch is sufficiently strong in relation to the forces to which the hitch will be exposed during loading, unloading and during transport.
• A third-party must assess that any modification of the hitch does not in itself constitute a safety risk.
• Documentation of the third-party’s competencies must be submitted to the Danish Civil Aviation and Railway Authority

• Documentation of how the above conditions regarding pocket wagons have been incorporated into the Railway Undertaking’s Safety Management System must be submitted to the Danish Civil Aviation and Railway Authority