Joint Network Secretariat Normal Procedure Task Force

Great Belt bridge Accident/Incident

Final report

Annex 2 : Terminal Instructions - Operational rules for semi-trailers in combined transport terminals
Terminal Instructions

OPERATIONAL RULES FOR SEMI-TRAILERS IN CT TERMINALS
Scope

• Set of working rules related to the safe operations of craneable semi-trailers in a CT Terminal

• Focus only on vertical lifting capabilities (gantry cranes, mobile equipment)

• Focus on terminal checkers, crane operators and ground staff
Processes

- **Check-in**
  - Visual inspection of semi-trailers

- **Loading**
  - (planning)
    - Compatibility checks
  - (preparation)
    - Wagon elements

- **Loading**
  - (operations)
    - Before loading
    - During loading
Check-in gates (1)

• Codification plates visible and correct (double codifications are permitted)

• If available, check of total weight (based on manufacturer’s indications or weight equipment of the terminal)

• Valid ILU-Code (and plate number)

• Visible damages

• TIR cord (e.g. sealed on the doors)

• Locking of doors / tarpaulins

• Lighting pictogram (in case of ladders)

• In case of negative = refusal to enter the terminal
Check-in gates (2)

• The load cannot protrude in any directions
• In case of uncertainties => contact the technical responsible

• Control of correct distribution of goods (balanced repartition of the goods)
• Control of the cargo loading securing (if lacking or bad = semi-trailer is refused)
Selection of the right pocket wagon

- Semi-trailers with normal envelope
- Semi-trailers with higher envelope

- See attached matrix for all possible combinations
- See possible loading schemes
Selection of the right pocket wagon
Semi-trailers with normal envelope

- Pocket wagons marked with a yellow triangle with black letter P

- Only possible to load on wagons marked without compatibility letters

- Height of the hitch = always 113 cm
Selection of the right pocket wagon
Semi-trailers with higher envelope

• Pocket wagons marked with a yellow/white triangle + at least one compatibility letter (with/without corrective figure)

• Only possible to load if codes are the same of the semi-trailer and on the wagons

• Height of the hitch = indicated on the codification plate – if no indication = 113 cm

Means that height of the hitch = 98 cm
Preparation of the pocket-wagon before loading

1. Fold and secure all intermediate supports and spigots (both lateral sides)
2. Position the hitch at the right position (as indicated on the codification plate of the semi-trailer)
Preparation of the pocket-wagon before loading

3. Position the hitch in the longitudinal direction of the semi-trailer and secure the handwheel
Preparation of the pocket-wagon before loading

4. If necessary, position the wheel scotches (for certain types of pocket wagons)
Tasks of the truck drivers

- Semi-trailer placed in parallel of the railway track and wagon
- Fold up and secure the lateral and back underrun protection (at check-in normally or underneath the crane)
- Release air pressure
- In case of non direct loading: (1) crank down of the support legs, (2) semi-trailer in brake position
Tasks of the terminal staff (before loading)

- Check the status of the hitch (no visible damages)
- Check of the lowered position
- Crank the supporting legs
- Verify the exact positioning of the grapple arms
- Lift until spring relief (‘Federentlastung’)
- Release of the semi trailer’s brake
Tasks of the terminal staff (during loading)

- Performed by the crane operator supported by a ground staff
- If necessary: repositioning of the hitch in longitudinal direction
- Check correct position of the semi-trailer in the pocket wagon
- Verify the position of the kingpin into the hitch – a clear sound will be a proof of correct positioning and locking of the kingpin – no gap should be visible between the hitch and the semi-trailer
- Verify (and secure if necessary) all related control elements (hand wheel for the hitch, cranks...)
- Control of the level of the air suspension
- Control the connecting points: semi-trailer can touch the wagon only at the hitch and wheel levels

• If one of the control is negative = communication with relevant actors (CT operators or RUs)
Tasks of the terminal staff (during unloading)

- Performed by the crane operator supported by a ground staff
- Unlock the kingpin from the hitch
- Control if the brake of the semi-trailer is released
- Control the positioning of the grapple arms
- Proceed with lifting and unloading
- Crank off the support legs (performed before lift or just before putting on the ground – depending on the types of wagons)

• The unloading with locked kingpin is strictly forbidden
END