High capacity vehicle combinations

Technical regulations

SWEDISH TRANSPORT AGENCY

Swedish traffic regulation (1998:1276)

4 kap. 17 f § states the following prerequisites for vehicle combinations over 25,25 meter.

1. Maximum length for motor vehicle: 12 meter
2. Max. length for full trailers: 12 meter
3. Max. length from kinpin to back of semitrailer: 12 meter
4. Fulfills the regulations decided by Swedish Transport Agengy (Transpoertstyrelsen)

Objectives of the regulation

- Longitudinal stability (rearward amplification and damping).
  - Mitigate trailer swing issues and handling on winterroads
- Startability and gradeability
  - Improve handling on winterroad, especially uphill.
- Manouverability
  - Not all roads are straight and wide….
- Indirect field of view of the side of the combinations
  - Especially important during hard right hand turns and crossings.

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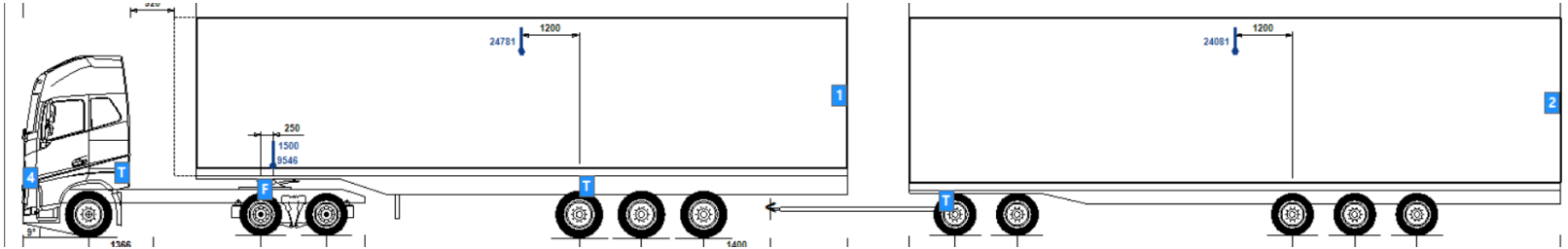
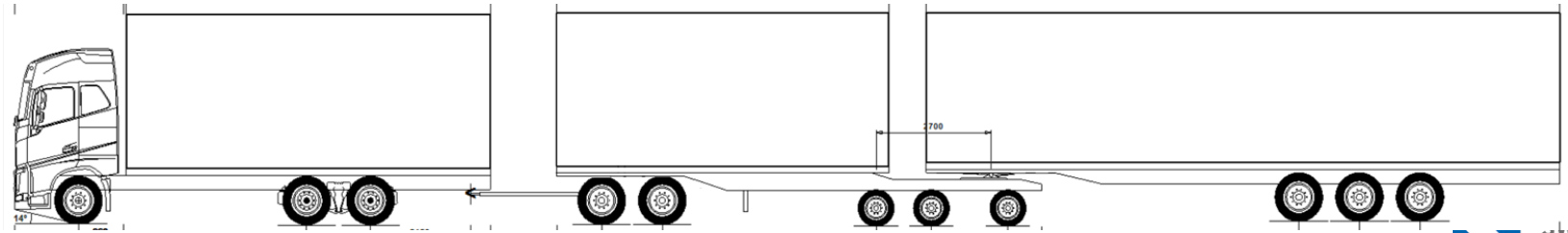
Vehicle combinations

Tractor + semitrailer + dolly + 2:nd semitrailer



Truck + dolly + link-trailer + semitrailer



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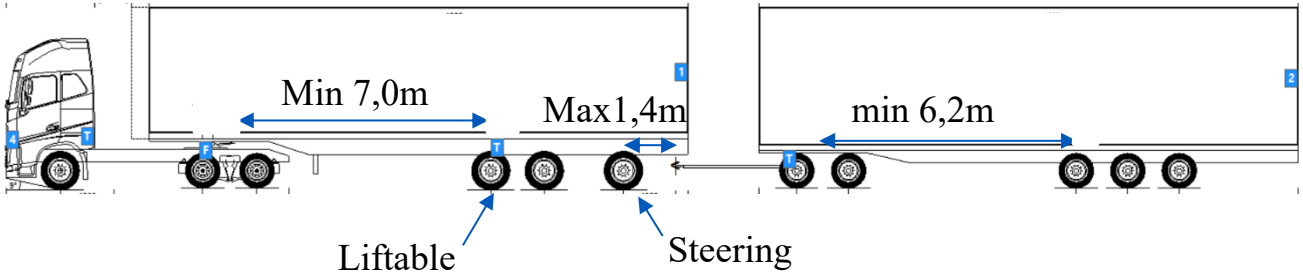
General requirements

- Truck and tractors need at least three axles
- Stability systems (ECE R-13)
- Electronic brake systems (ECE R-13)
- Equipmend for extended indirect field of view
- Minimum requirements on couplings

A-double combination

- Min. distance between front coupling and first axle on trailers
- Max. distance from last axle and rear coupling
- Liftable first axle on first trailer (> 2 axle trailers)
- Steerable last axle on first trailer (> 2 axle trailers)



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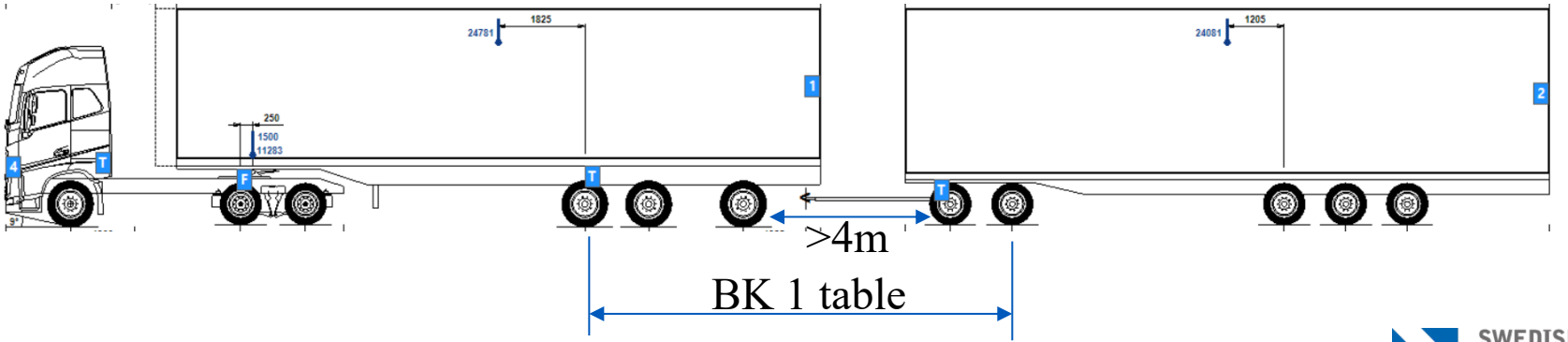
Exemption 4 kap. 13 § 4 trafikförordningen

- Distance from last axle to first axle may be less than 5 meter but no less than 4 meter
- If the corrsponding maximum weight is not exceeded



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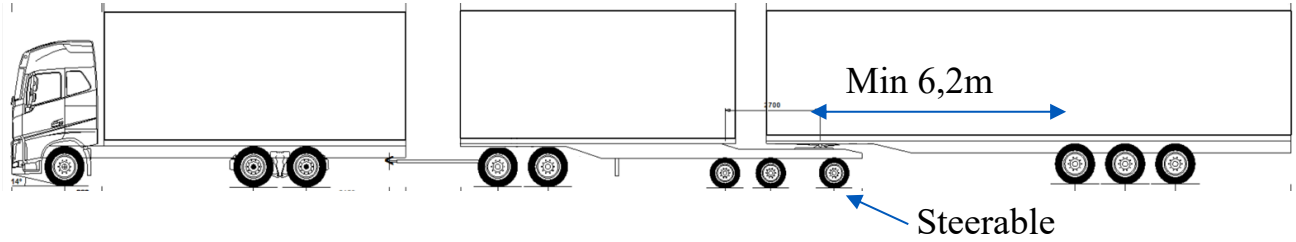
AB-double combination

- Steerable last axle on the link-trailer
- Min. distance between front coupling and first axle on the semi trailer



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Additional requirements > 64 tonne

- Two drive axles
- Power: min. 310 kW

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Sign

- Placed in the front and back of the combination

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