

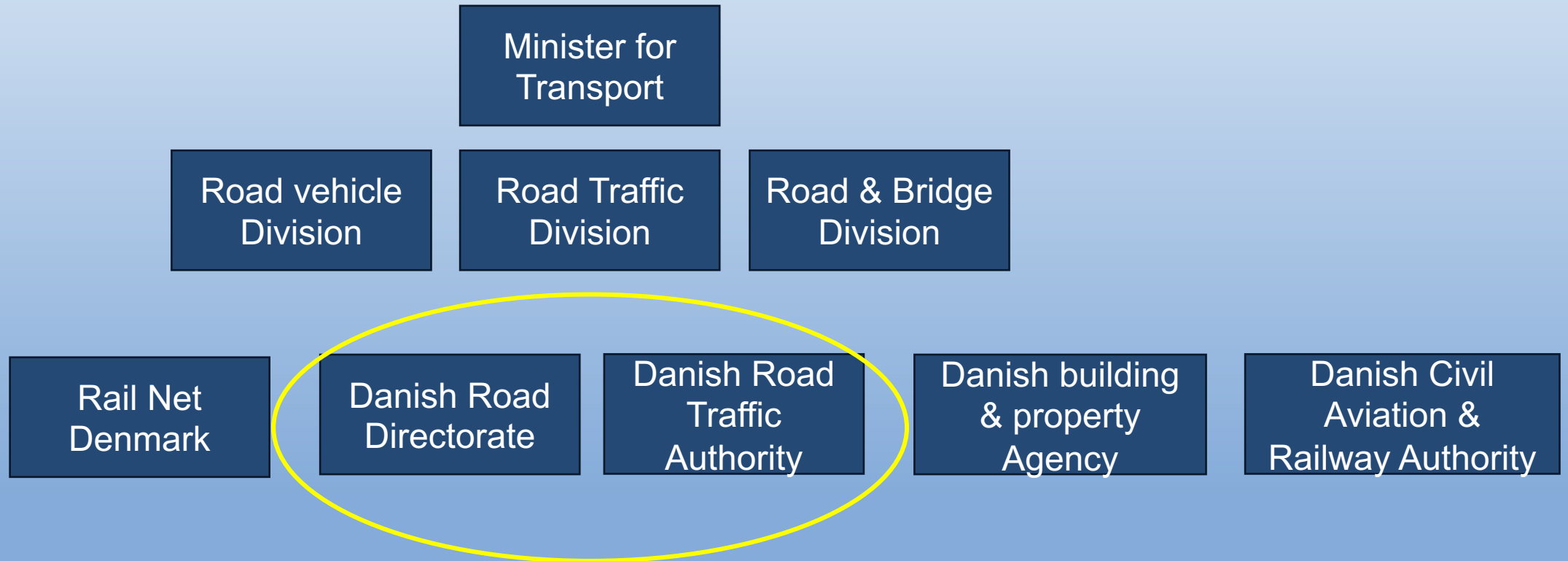
DOUBLE TRAILER TRIAL

DANISH ROAD TRAFFIC AUTHORITY

HCT Conference Göteborg 9th of October 2024



DANISH DEPARTMENT OF TRANSPORT



HISTORY EMS2 – REGULATORY FRAMEWORK

- Political decision for a trial of the EMS2 long vehicle combinations – may 2022
- Final draft for the regulation – marts 2023
- Hearing among other authorities – april 2023
- Public hearing – june 2023
- EU notification – october 2023
- Regulation in force for a 5 year trial period – December 2023

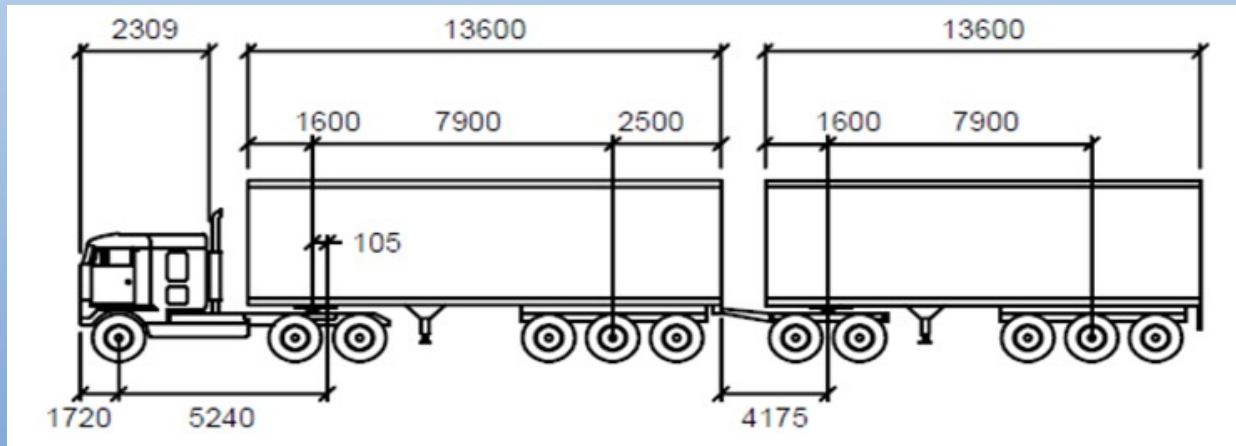
APPROACH FOR THE EMS2 TRIAL



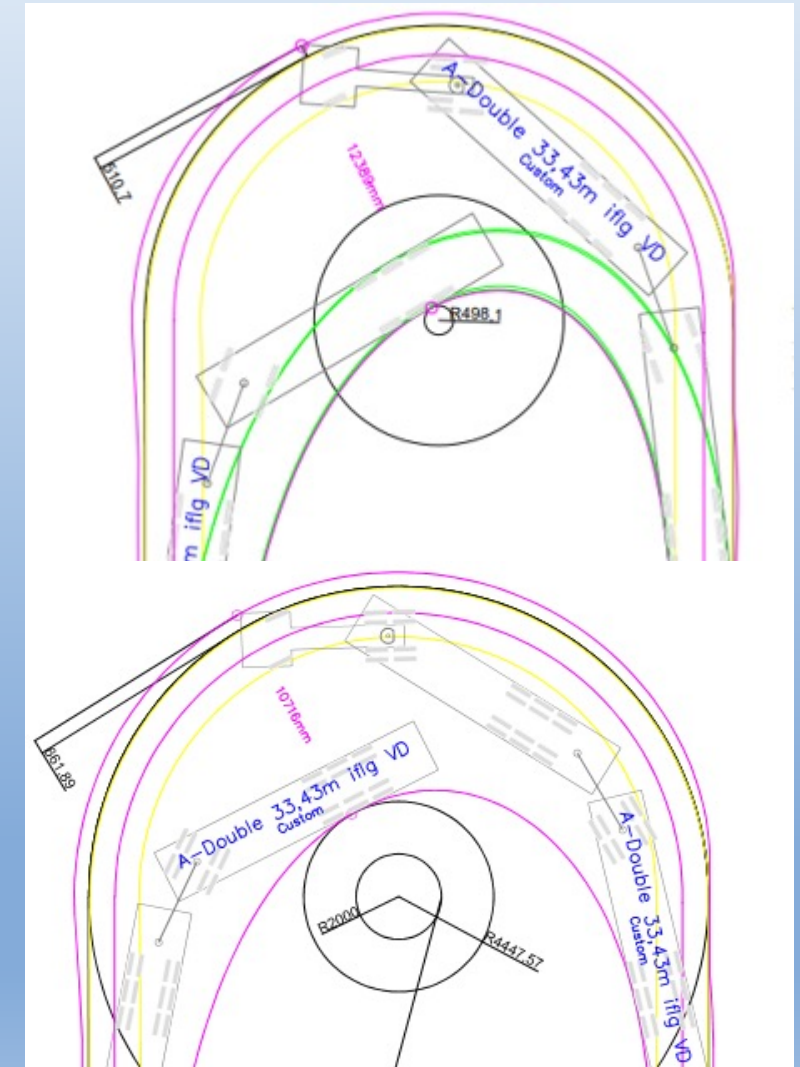
- Trial period valid for 5 years. (2024 to end of 2028).
- Basic goal has been to use standard vehicles already used by the industrie.
- A-double preferred combination by the industrie and chosen for the trial.
- Define road network for EMS2.

ANALYSES MADE FOR A-DOUBLE

- Our reference vehicle combination (A-double) has been used for the analysis.
- 33,43 meter length and 11 axles.
- 180 deg turning simulations made. No steering axles on trailers



- Turning area needed : Outer / Inner Radius : 12,50 / 0,50
- EMS2 road network defined : 14,50 / 4,48



TECHNICAL REQUIREMENTS AS A RESULT OF PREANALYSIS

REGULATION 1605 OF 12.12.2023

- Axle distance : Requirements for min length - first to last (27meter for 72 tons)
- Axles : Min 9 axles in total, and 3 axles for tractor.
- 5,2 kW/T engine power, and min 20% weight on pulling axles.
- Safety : ABS, EBS & ESC required. ECE Reg. 13
- Maximum 72 tons total weight
- 32 meter length (34 meter for EV, alternative fuel or elongated cab)
- No requirements for steering axles or fulfilment of defined turning circles.



FEED BACK FROM INDUSTRIE DURING START-UP OF TRAIL PERIOD (QUESTIONNAIRE)

Expectations

- Reduced number of vehicles doing line-haul transport
- Reduced number of drivers
- Making logistics more efficient
- Increased international transport

Necessary implementations to success

- Increased road network for EMS2
- Increased access to road network
- Increased numbers of decoupling areas – parking
- Start up Company arrangements for decoupling areas

EMS2 opfølgning: SPØRGESKEMA

Svarfrist 1. maj 2024

| SPØRGESKEMA | SVAR |
|---|------|
| 6. Hvilket konsekvenser (positive/negative) vurderer du at dobbelttraller får for jeres nuværende kapacitet samt sammensætning af jeres vognpark/fleet? | |
| 7. Forventer du, at dobbelttraller vil ændre jeres sammensætning af godstyper – og så fald på hvilken måde? | |
| 8. Hvordan vil dobbelttraller påvirke jeres logistik, især i forbindelse med omkostningsrelaterede og den tåknittede lert. løsninger? | |

PLANNED ACTIVITIES FOR EMS2

- Evaluation of the trail so far via feed back from industry 2024
- Evaluation of the possibility of harmonizing some regulations in neighbour countries 2025
- Investigation of harmonizing maximum weight and length in nordic countries 2025
- Actively participate in EU trials arranged by ZEFES increasing road network





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