BENEFITS

01

Helping Europe meet growing transport demand

Economic development is expected to increase freight transport activity **by 82% between 2005 and 2050**[2].

To absorb this demand, even if rail and inland waterway transport were to double their capacity, an increase of **40% for road transport appears to be inevitable**[3].

2. Impact Assessment, Future of Transport White Paper, 2011
3. EMS Paper, NEA, 2010

02

Reducing fuel consumption

As two EMS can substitute three regular road train trucks, the introduction of EMS on European roads comes with significant energy savings. They are deemed to require some **10 - 15% less energy per tonne-km of freight transport**, in comparison to normal Heavy-Duty Vehicles[4].

4. FINAL REPORT, Effects of adapting the rules on weights and dimensions of heavy commercial vehicles as established within Directive 96/53/EC, Transport & Mobility Leuven, 2008

03

Reducing emissions

EMS can help the EU meet its 20% CO_2 reduction targets by 2020, as demonstrated by precise data from the Dutch trial:

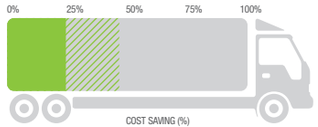
- CO_2 emissions per transported tonne can be lowered **by 11%**[5].
- NOx emissions can be reduced **by 14%**.
- If market potential for EMS in the Netherlands is fully used, a reduction of 4% for CO_2 emissions and 6% for NOx emissions can be achieved.

5. Longer and Heavier Vehicles in the Netherlands, March 2010

04

Reducing transport costs for operators

Based on experience in the Netherlands, cost savings can range **between 25% and 40%** for specific routes.



KEY FACTS ABOUT EMS

No impact on road safety

In the Netherlands, where EMS have been in use since 1995, experts have not noticed **any deterioration of traffic safety** when longer trucks are admitted. There is no additional risk for vulnerable road users. To ensure a high safety level, specific requirements exist for the vehicles, the training of the drivers and the use of infrastructure. For example, in Denmark, EMS is primarily allowed on larger roads such as motorways and other main corridors.

Little effect on road wear

The weight of an EMS is spread over more axles. The NEA report states that "the actual reduction of the axle loads will preserve the streets more than conventional vehicles"[6]. Additionally, the EMS trial in Denmark has demonstrated that EMS did not have a significant effect on the wear and tear of the roads, because EMS are used for their volume capacity rather than their tonnage: 60% of the goods transported by EMS are light, individual goods, whereas for regular trucks this is only 10%[7].

6. EMS Paper, NEA, 2010
7. Evaluation of Trial with European Modular System, December 2011

Less traffic, less congestion

As noted by the Danish Transport Ministry in their report[8], the EMS vehicle trial has resulted in fewer driven kilometers because of the replaced goods transport, with a positive impact on congestion reduction. More specifically, the use of EMS leads to more goods transported (between 3% and 11%), while at the same time there are fewer vehicle kilometres (6% to 14%), in other words **less traffic and less congestion**[9].

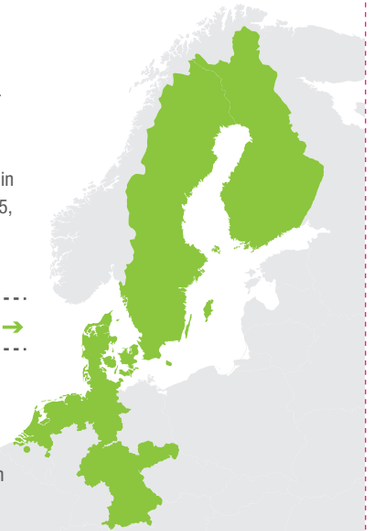
No shift from rail to road

The choice of mode is determined by a number of factors, such as the distance travelled, the value of goods transported or their volume. Rail is favoured for low-value goods, whereas road transport reigns supreme for higher value goods. Rail and road are only competing on specific distances (300-500 km) and for certain types of freight (low/average-value goods). Experience in the Netherlands shows that EMS is mainly replacing conventional trucks, not substituting transport by rail or inland waterways.

8. Evaluation of Trial with European Modular System, December 2011
9. FINAL REPORT, Effects of adapting the rules on weights and dimensions of heavy commercial vehicles as established within Directive 96/53/EC, Transport & Mobility Leuven, 2008

Where is it used?

EMS have been in use in Sweden and Finland for decades. Trials have also been conducted in other Member States, such as Denmark (since 2008), Germany (in some landers since 2012) and Belgium, where a pilot project started in Flanders in July 2013. After several testing periods since 1995, the use of EMS is now permitted by law in The Netherlands since 2011.



■ Countries/regions where trials have been conducted →

If neighbouring countries or regions already allow EMS, it makes no sense for transporters to decouple before the border and then to couple again. This is why the members of the EMS Forum **support the cross-border use of EMS**, as provided in the Commission proposal on Vehicles' Weights and Dimensions.

EUROPEAN MODULAR SYSTEMS (EMS)

What is EMS?

EMS is a flexible concept whereby existing loading units (modules) of trucks are re-arranged into longer and sometime heavier vehicles – depending on the volume to be transported and roads to be travelled. EMS is one solution to optimise road transport capacity.

Multiple combinations can exist:[1]

EMS CAN BE:

UP TO 25,25 METERS LONG

MAX 60 TONNES

WITH A MAXIMUM WEIGHT OF 60 TONNES

1. Les systèmes modulaires européens pour le transport routier des marchandises - Etat de la situation et perspectives de développement en Europe, 2011

EMS, THE INNOVATIVE WAY

The members of the EMS Forum continuously seek to make road transport more efficient. The EMS is an innovative solution and the right response to reduce the impact of road transport on the environment.

The EMS Forum's position on the current revision of the Weights & Dimensions Directive:

The EMS Forum supports the cross-border use of European Modular Systems between neighbouring and consenting Member States:

- Subsidiarity should be respected. Member States are best placed to decide on transport solutions fit for their road transport network.
- Impact assessments and on-the-road-experience have demonstrated the benefits of EMS and how they can help meet key policy objectives, such as the reduction of emissions and congestion.

EMS Forum | Join us at www.modularsystem.eu

EMS
EUROPEAN MODULAR SYSTEM
GREEN & LEAN TRANSPORT

EMS Forum Members:

European Shippers Council | Eurocommerce | DTL | TLN | TNT | CLECAT | Michelin | CEPI | European Express Association | Sveriges Akeriforetag | EVO | Danske Speditoerer | O.T.M. | AUTF | ACEA | FEBETRA | BWVL | PACTON | TRACON | Eye Octopus | BURG | AB Logistica | Imperial Logistics | FNTR | Vos Logistics | Van der Wal | Middlebos | G. Snel Belgium Group | TLF | European Transport Board | BCA | D-TEC | ITD | Ecocombi | Groenewegen | Verhoeven | Wim Bosman | Flora Holland | VDT | WABCO | HTAS | IRU | DPD | TLV | KOV | FVG | BIL Sweden | Truck & Milieu | ECG | Uniline | Nordic Logistics Association | SKAL | Kuypers Neer