

# Presentation for FERRY SHIPPING CONFERENCE 2008

## The Future Transport Equipment Onboard Ferries

Spring, 2008



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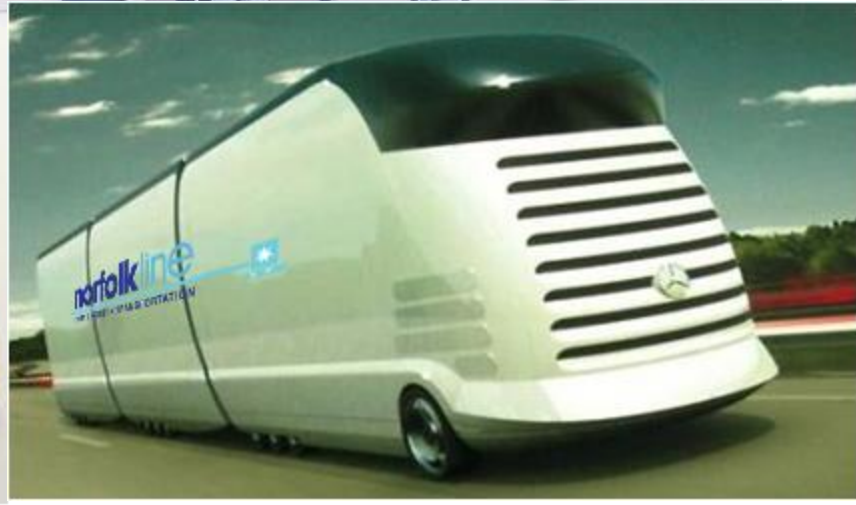
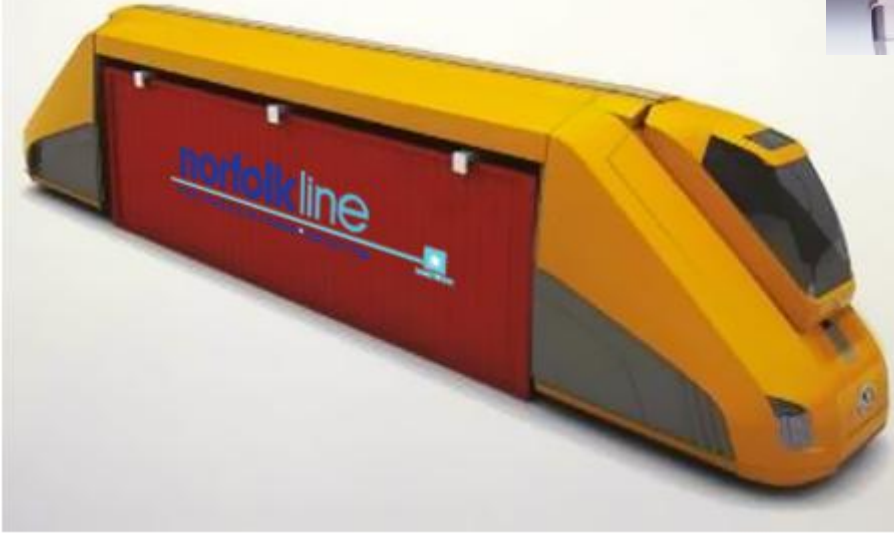
- **Top Issues**
- **Trailers in the Near & Long Future**
- **Impacts on Ferry Industry**
- **Conclusion**

# The Future Transport Equipment



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## Top Agenda of All Transportation Companies

- How to get more volume in the same transport movement, through larger capacity units by:-
  - increasing length e.g. using a combination of drawbar trailers
  - or redesigning the equipment to reduce its gross weight (thus increasing carrying capacity)
- How to reduce pollution in face of tighter environmental laws in Europe by:-
  - reducing CO<sup>2</sup> / ton, using more efficient transport mode

# Trailers in the Near & Long Future



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## Near Future – Next 5 Years: 14.92m Trailer



- Semi trailer with container of 14.92m compared to conventional 13.6m
- Total capacity increased by 10% or from 33 to 36 pallets
- Already used in Germany; Czech Republic granted unlimited permit to this type of trailers



## Not Too Long Future: the 25.25m, 60tons Model



- A truck pulling two trailers - two of these combinations could replace three existing trucks, thereby reducing traffic congestion
- The 82-footer (24.99m) combination is already used in Sweden and parts of the Netherlands near Rotterdam



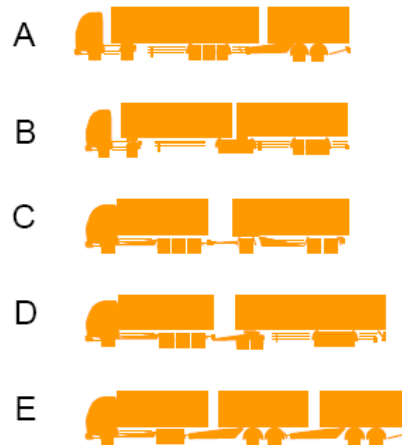


## Field Test in the Netherlands 1999, 2004

- Max. 2 turning points
- No dangerous goods
- Only 2 lane motorways & 10 exits for each participant
- No city centres, 30-km zone, pedestrian areas

## Results

- No serious accidents
- Decrease in fuel consumption & emission (per ton)
  - Increase efficiency (in ton km/l) of 33%
  - Optimal for port-distribution centre transportation



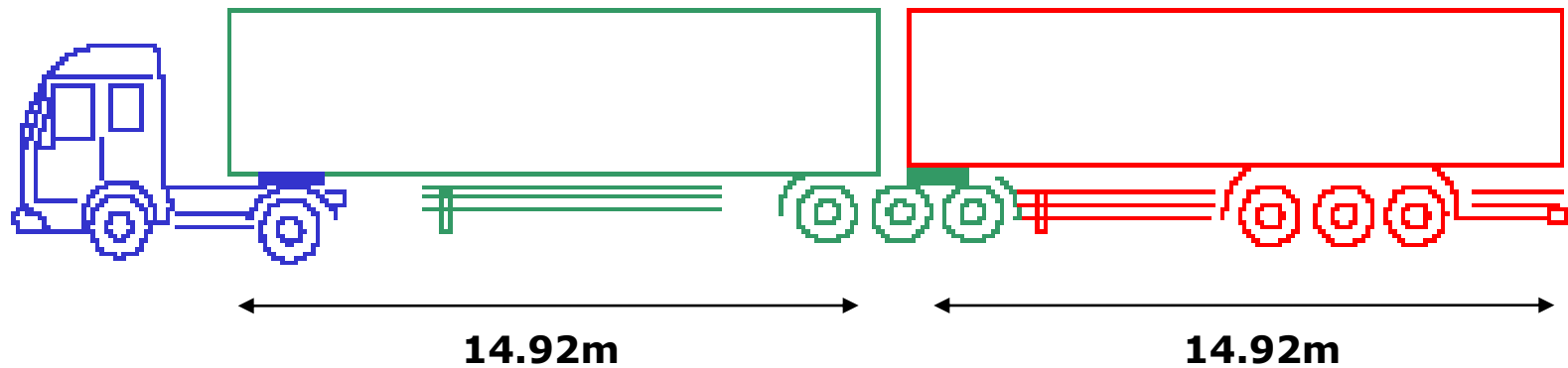
	A	B	C	D	E	Total
L	12	0	0	42	10	64
LH	21	21	3	49	1	95
	33	21	3	91	11	159

L = Longer, 25.25m, <50t

LH = Longer & Heavier 25.25m, 60t



## Long Future: Tractor + Semi Trailer + Semi Trailer



- Current size of trailer: 13.6m
- 1 tug-master to pull 2 semi trailers (of 14.92m, 80tons) in one go
- Before this can happen, legal and infrastructural framework must be in place – a 25.25m, 60tons model can serve as transition



## The need to accommodate

- more unaccompanied trailers on longer routes
- longer trailers (from conventional 13.6m to 14.92m)
- split trailer systems

## The need to provide terminal facilities, e.g.

- larger parking slots
- tug-masters and ramps to be ready to handle increased weights
- terminal systems to be able to handle split trailers



## The need to evaluate

- the most efficient terminal slots / layout
- how to make the automatic lashing system flexible enough to take in trailers of different length
- how stevedores carry their operations in moving trailers with 2 turning points
- what type of ferry can best accommodate the new designs
- what the best mix is for accompanied and unaccompanied trailers in the next 5 years
- what the impact to the number of passengers on Ro/Pax in face of increase in trailers' number & size



## **Joint Effort Warranted!**

**In order to make this happen, we need EU legislation to align future standard. Cost and environmental benefits can only be materialised if and when trailers can operate between individual member states.**

## **Opportunity for Ferry**

**Possible reverse modal shift from 45' pallet wide container (in Short Sea Lo/Lo Operation) back to longer trailer (in Short Sea Ro/Ro Operation) in Europe.**



# Thank You!

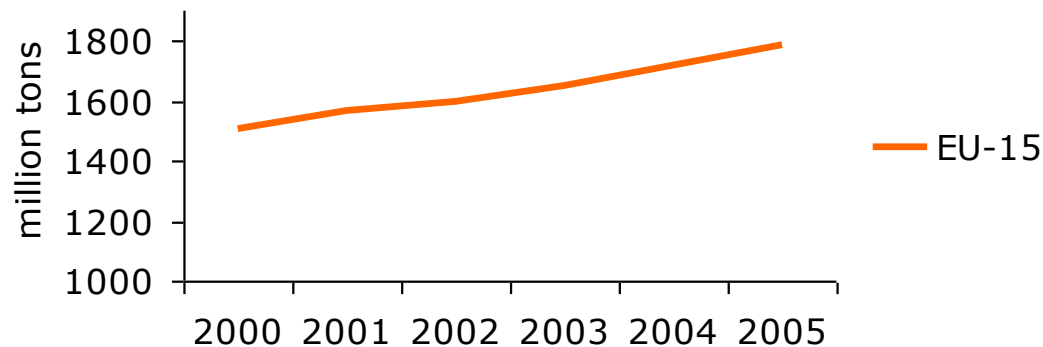
# Outlook of Trailer Transportation in Europe



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- The trailer market had a new sales record of 138,000 in 2006; number expected to grow in 2007 – 2009, especially in booming East European markets
- Freight transport activity in Europe is growing

**Increase in Short Sea Shipment of Goods  
(2000-2005)**



Source: Eurostat

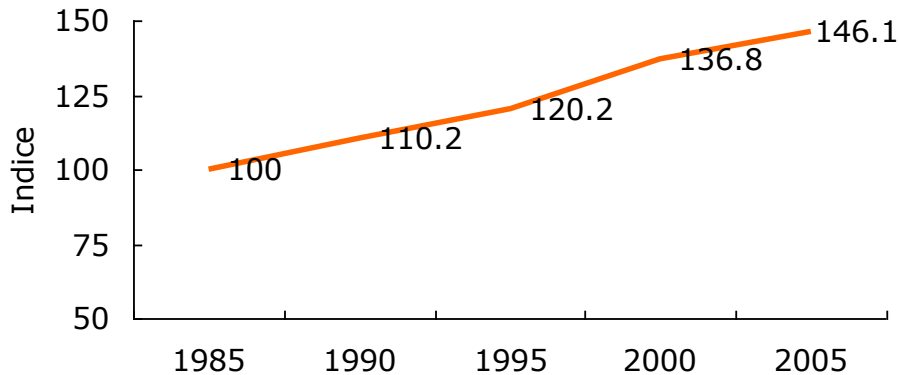


- Manufacturers and suppliers to observe environment requirements
  - Fuel consumption of an average of 42 litres/ 100km
  - 2005 Kyoto Protocol: EU environment ministers agreed that keeping greenhouse gases at 'manageable' levels would require a cut in emissions of 25% to 50% by 2050
  - EU Directive 2005/55/EC defines the emission standard currently in force, Euro IV, as well as the next stage (Euro V) which will enter into force in October 2008

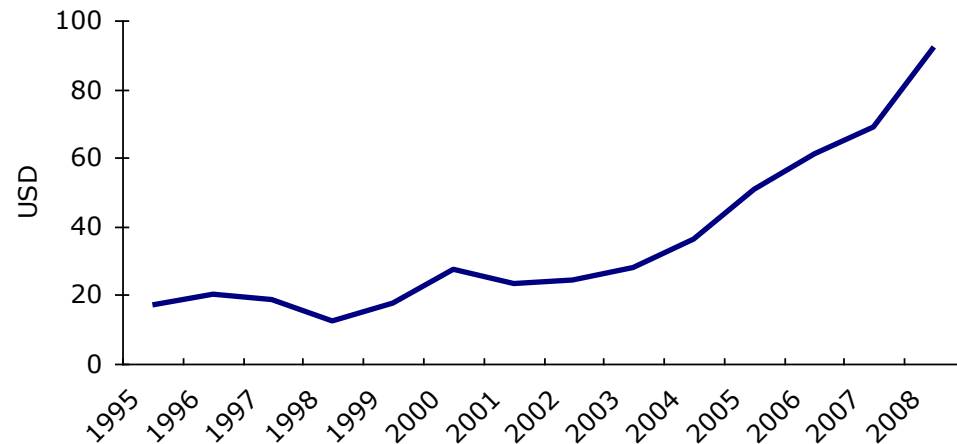


- Cost of haulage & fuel increasing drastically

Domestic haulage rate indices 1985 - 2006  
(as at 1 January 2006)  
Freight Transport Association, UK 2006



Oil - Yearly Basket Price in USD 1995 - 2008 OPEC



**All methods for removing freight from road use will increase,  
from a green and cost perspective**

# Norfolkline's Way Forward



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