

# Longer and Heavier Vehicles

Assessing the impacts of introducing  
Longer and Heavier Vehicles in the  
EU

# Transport&Environment

- Sustainable transport group
  - Clean, safe and inclusive transport system
  - Federation with 50 members
  - EU legislation
- ➔cars, Trucks, Aviation, Maritime, Transport policy: eurovignette, infrastructure spending, ...
- ➔[www.transportenvironment.org](http://www.transportenvironment.org)

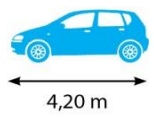
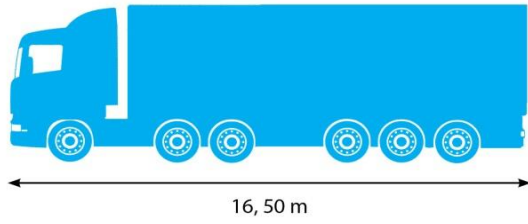
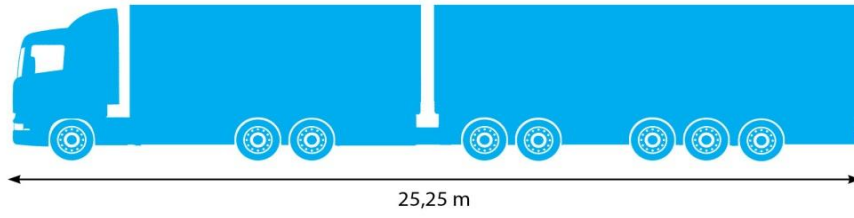
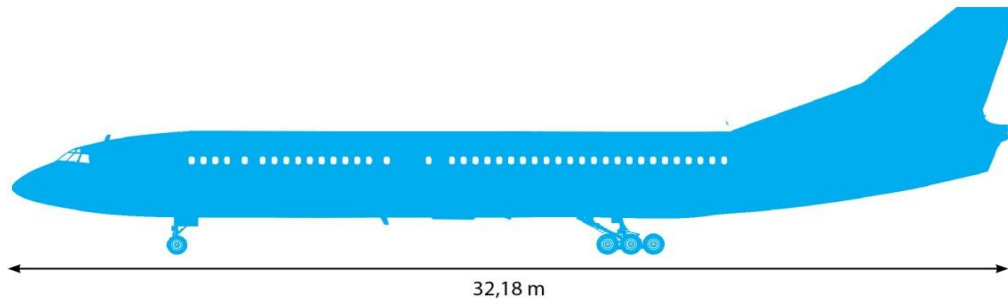
# Structure of the exposé

- What are LHVs?
- What is the impact of the use of LHVs on the freight market? 2 instead of 3 trucks?
- Impacts on
  - Environment
  - Safety
  - Infrastructure
- Revision of directive 96/53/EC
  - Risks
  - opportunities

# What are LHVs?

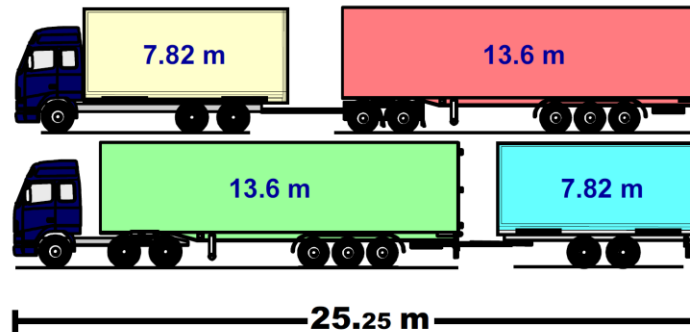
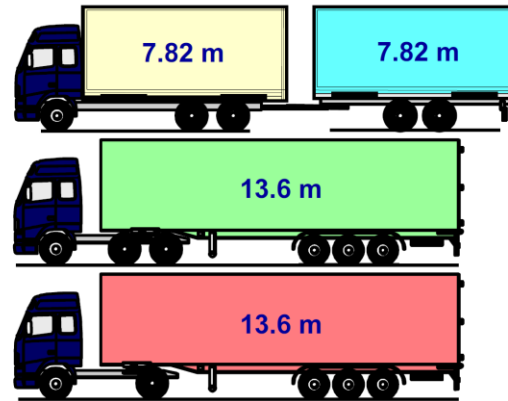
- Megatrucks/gigaliners/Eco-combi's/European Modular System
- 25,25m & 60 tonne
- Current legal situation
  - directive 96/53: maximum dimensions for international transport
    - 16,5-18,75m
    - 4m height
    - 40 tonne weight

# What are LHVs?



# Impact on the freight market?

## Assessing the “2 for 3” argument



# The freight market is not static

- LHV's reduce cost of road transport by 20-30%
- Lower costs → higher demand (Ryanair\*)
- Price elasticity of road transport -0,9
  - Prices fall by 1%, demand goes up by 0,9%
  - Prices fall by 20%, demands goes up by 18%
    - 1/3 of additional demand comes from rail (reverse modal shift)
    - 2/3 is induced (new) traffic

# Impact on environment

- No fewer vehicle kilometres
- Different vehicles
  - ➔ Road trains (heavier, more aerodynamic drag, stronger engine)
- Will not lead to an overall reduction of Fuel Consumption or emissions of CO<sub>2</sub> and pollutants
- Confirmed by trial in Denmark: -0,25%



# Impact on safety

- Manoevrability
- Additional blind spots
- Crash impacts
- Side winds
- Crash barriers
- Longer overtaking
- Secondary crashes



# Impact on infrastructure

- Road infrastructure not built for LHVs
- Length issues
  - junctions
  - Roundabouts
  - Parking spaces
  - Tunnels
- Weight issue:  
bridges!



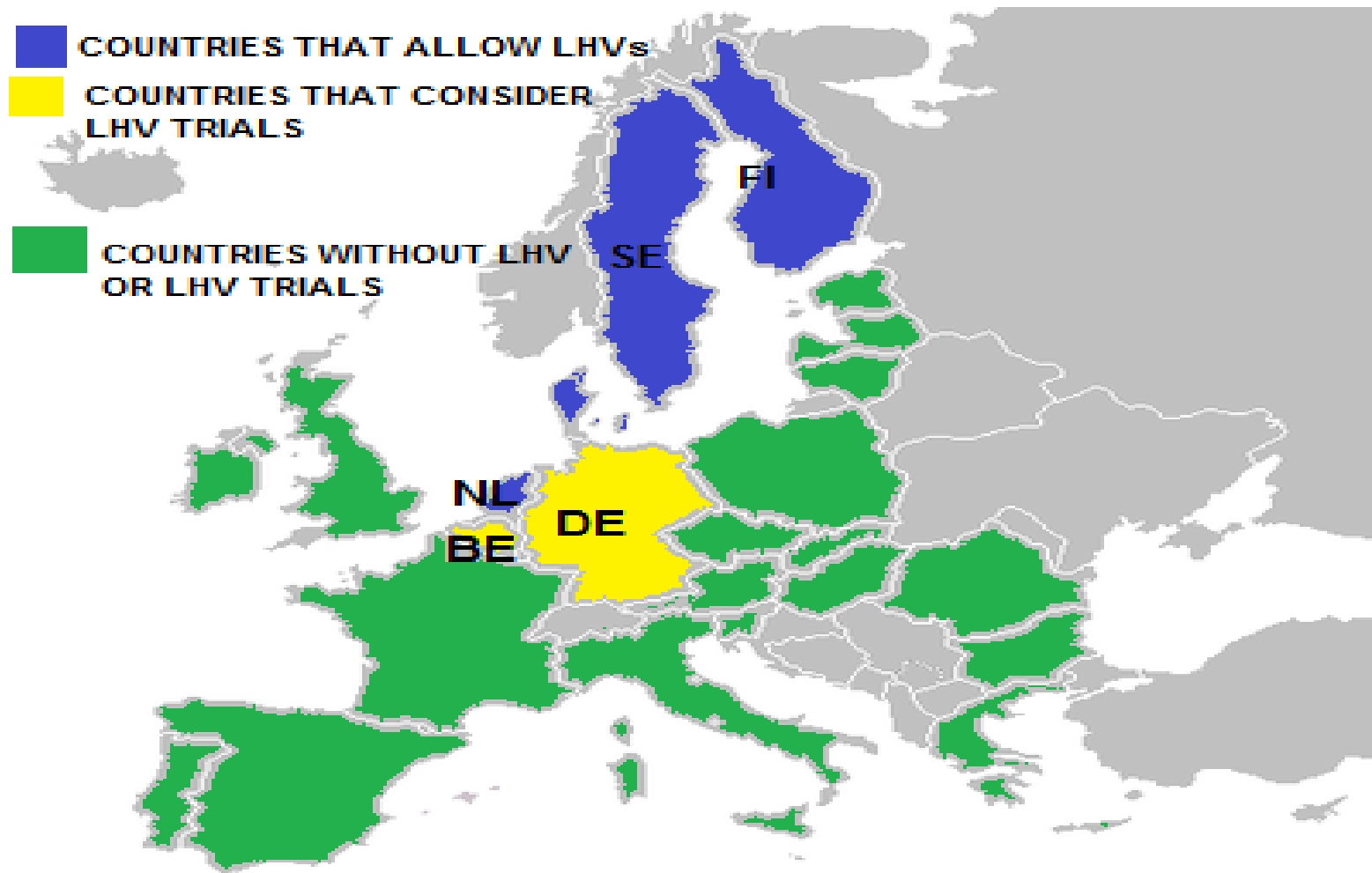
# Infrastructure cost assessments

- Sweden invested in total 5.65 billion SEK between 1988 and 1998 in bridges (**€650 million**)
- Germany: the cost of reconstructing bridges on the federal motorways **4 to 8 billion**
- The Estonian government estimates it would cost **€2 billion** to adapt roads and bridges.
- ASFINAG estimates that the adaptation of Austrian road infrastructure would cost **5.4 billion euro**.

# Review of directive 96/53

- Regulates weights&dimensions
- International transport prohibited
- intense pressure to change this (Danish Presidency)

# The consenting adults approach

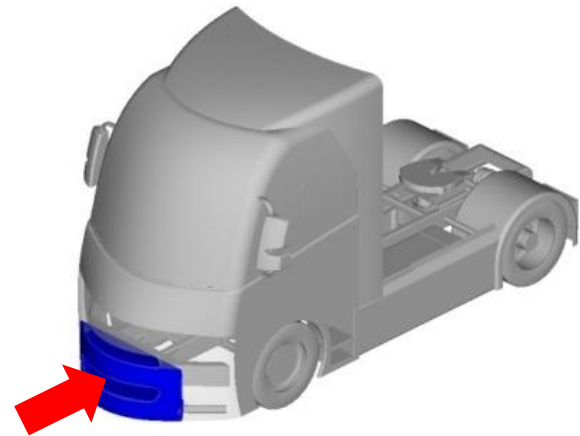
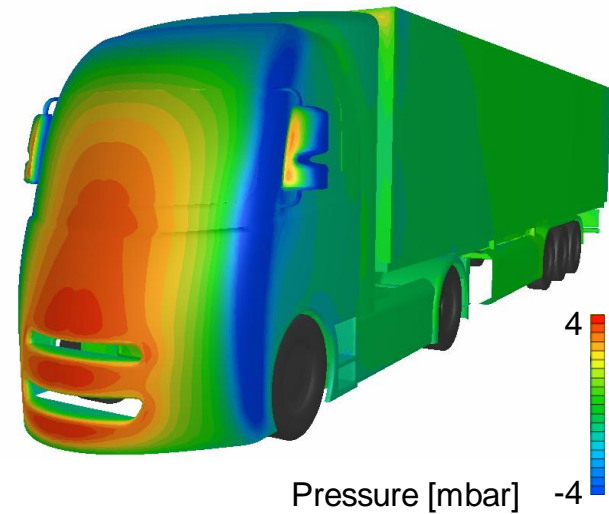


# What's the risk for the Czech Republic?



# A risk but also an opportunity

- Better cab design
- Improved fuel economy and lower emissions
  - < better aerodynamics
- Improved passive safety
  - < Energy absorption
  - < Deflecting shape
- Improved active safety: reduced blind spots



# Manufacturers can build these trucks





# What to do?

- Trucks need to be better, not bigger
- Allow for extra design space for aerodynamic and safety purposes
- Don't change trailer lengths
- Oppose changes to LHV cross border prohibition (= LHVs through the back door)

# Thanks for your attention

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