

SIS "ITS Solutions for Road Freight Transport Compliance& Efficiency"

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Intergovernmental Organisation

- 57 member countries (23 non-OECD)
- Administratively integrated with OECD
- Only transport body with a mandate for all modes





Think Tank

- Policy research and analysis, statistics and data
- Collaborative projects with renowned experts on wide range of issues
- Some outputs: Publications, Policy Briefs, Statistics Briefs, background documents for annual summits





The Annual Summit

- Held every May in Leipzig, Germany, on a strategic theme
- Ministers are joined by business leaders, civil society, international organisations, research community
- Outputs help advance and guide transport policy for 21st Century



Related Work at the ITF



Moving Freight with Better Trucks



Research Report

Transport Forum

Moving Freight with Better Trucks

The purpose of this report is to identify potential improvements in terms of more effective safety and environmental regulation for trucks, backed by better systems of enforcement, and to identify opportunities for greater efficiency and higher productivity.

The report is based on a review of literature, consultation among stakeholders, and research and analysis from working group members. It also presents the results of a comprehensive benchmarking study of 39 truck configurations in operation around the world – from typical workhorse vehicles to very high capacity vehicles – and assesses their performance in terms of dynamic stability, productivity and impacts on infrastructure.

OECD publishing

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Key Messages 1/3

- The freight transport task is growing rapidly in most regions and requires effective utilisation of all modes of transport
- The safety and environmental impacts of road haulage require regulatory intervention for optimal outcomes
- Compliance can be improved greatly through legislation that assigns responsibility and by exploiting technological innovations
- A performance based approach to regulation offers the potential to meet community objectives for road freight transport more fully
- Many higher capacity vehicles have equivalent or even better intrinsic safety characteristics than most common workhorse trucks



Key Messages 2/3

- Truck crash energies mean safety regulation must pay particular attention to managing truck speeds and driver alertness
- Further research is needed into other safety aspects of trucks
- Higher capacity vehicles have potential to improve fuel efficiency and reduce emissions and can result in fewer vehicle-km travelled
- The lower unit costs offered by higher productivity trucks could result in increased overall demand for road freight transport and a transfer of freight from other modes



Key Messages 3/3

- Road pricing systems can be developed to manage use of the transport network more efficiently
- The capacity of the road network is not uniform
- Road infrastructure and trucks need to be developed in concert
- Further research and data is needed for solid, evidence-based decision making
- Significant opportunities for improvement of the regulation of heavy trucks have been identified



ITS Solutions for Road Freight Transport

- Examples
 - Weigh-in-motion systems
 - "Trusted Truck" to bypass inspections
 - Electronic documents and border crossings
 - Access control systems
 - Road pricing schemes
 - Vehicle automation/ platooning



Vehicle Automation/ Platooning

- Full automation or platoons with virtual tow-bars
- Concepts range from twinning of vehicles to road trains
- Part of wider discussion on vehicle automation
- Deployment scenarios and automation levels
- Regulation and liability issues to be adressed
- Ongoing testing and R&D programmes worldwide
- Improvements in road safety and emissions



Source: California PATH Programme



Wirelessly linking two trucks saves more than 7% at 65 mph, with the front truck saving 4.5% on fuel and the rear truck saving 10%



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