

OECD/ITF STUDY ON HIGH CAPACITY TRANSPORT (HCT) – FINAL REPORT



JERKER SJÖGREN

Chairman of the OECD/ITF working group on High Capacity Transport (HCT).
Economist, Umeå University, 1972.
Currently independent consultant. Earlier positions e.g. Senior Adviser at the Swedish Ministry of Transport and Programme Manager for CLOSER, a Swedish institute for innovation and research within transport efficiency

Abstract

The OECD/ITF working group on High Capacity Transport (HCT) will deliver its final report in September 2018. The presentation at HVT15 will include the essence and highlights from the report.

Focus areas are e.g. the potential of HCT to contribute to CO₂ reduction, HCT and impact on traffic safety, Modal choice and Performance Based Standards. The report will include facts & figures, reviews and analysis. The last chapter will be a toolbox for policy makers with concrete recommendations on a balanced implementation of HCT.

Key words: Freight Transport, Performance Based Standards, Modal choice, CO₂, Safety, Bridges, Policies, Toolbox,

1. Introduction

The OECD/ITF working group that started its work in February 2016 will deliver the final report in September 2018. The presentation at HVT15 in Rotterdam will include the essence and highlights from the report.

The working group on HCT was initiated by Sweden and formalised by the OECD/ITF in 2015. Participating funding countries of this short cycle project include Australia, Denmark, Finland and Norway. Governments or institutes in China, South Africa, France, and the UK are also actively supporting the project.

2. Background

By HCT we mean allowing longer and/or heavier vehicles than are currently allowed for general access. Other terms for the concept are HCV (High Capacity Vehicles), HPV (High Productivity Vehicles). Such vehicles are normally only allowed on certain parts of the road network and there are special requirements on both the vehicles and the operation thereof.

There has been significant progress during the past few years with regards wider acceptance of the idea of longer and heavier vehicles.

Most important is perhaps the wider adoption of the Performance Based Standards (PBS) approach for heavy vehicle design and operation – not as a new standard to replace the European Modular System (EMS) - but as a complementary tool – which has made it possible to better match the vehicle to the road by differentiating the road network into several classes depending on the mass and length of vehicle combinations.

Furthermore, the rapid advancement in information and communication technologies has made it more cost effective to advise, monitor and enforce HCT compliance to access conditions and traffic regulations. The Australian National Telematics Framework with the applications IAP (Intelligent Access Program) and EWD (Electronic Work Diary) is a good example.

According to OECD/ITF forecast, trade and demand for transportation will continue to grow in all countries, and it will not be possible to increase the capacity to accommodate that growth by investment in new infrastructure only. Freight transport demand is expected to increase by a factor of three by 2050; most growth is expected in Africa, Asia and South America, where transport infrastructure is poor, and funding of new infrastructure is limited. (ITF Transport Outlook 2017, OECD/ITF, 2017)

Smarter, greener and safer transport and a more efficient use of infrastructure is a necessity – HCT is an option with huge potential e.g. to save money and reduce CO2 emissions.

3. Working group – countries, members etc

The working group has been composed of representatives from countries financially contributing to the project.

Participating countries and members of the working group have been following:

Australia	Chris Koniditsiotis, TCA
Denmark	Erik Søjbjerg, The Danish Road Directorate
Finland	Vesa Männistö, Finnish Transport Agency
Norway	Saba Rabbira Garba, Norway Public Roads Administration

Sweden Thomas Asp, Swedish Transport Administration

Chairman: Jerker Sjögren, Jesjo Konsult, Sweden

Other involved countries, institutes etc. are:

China (Dong Jinsong, RIOH, Ministry of Transport)
New Zealand (John de Pont, TERNZ)
South Africa (Paul Nordengen, CSIR)
France (Bernard Jacob, IFSTTAR)
England (David Cebon, Cambridge University)

The working group has been supported by Raimonds Aronietis and Tom Voege at the ITF Secretariat. Professor John Woodrooffe, University of Michigan, USA, and professor Alan McKinnon, Kühne Logistics University, Germany, have been involved on consultancy basis.

4. Focus areas of the study

The ongoing developments and discussion on HCT covers a wide span of issues both on national and international levels. For this study the participating countries and the working group have decided to concentrate on following focus areas, considering limited time and budget and the aim to deliver within the final report a real useful package to policy makers.

- Market and impact assessment (potential, business cases)
- Modal shift
- Performance Based Standards
- Infrastructure (impact on roads and bridges, network access)
- Safety
- Compliance (monitoring and enforcement, ITS and telematics)
- ITS as an enabler and trigger

Within these focus areas ongoing or recently finalised research activities and pilot projects have been examined and assessed.

5. Organisation of the work

The study has been carried out within a two-year project with few physical meetings and between these telcos and videoconferences. Based on shared responsibility the work has been divided between countries and persons taking advantage of existing national research, studies and pilots.

A close collaboration was established from the beginning with ACEA (The European Automobile Manufacturers' Association) due to their activity in the HCT area, especially on Performance Based Standards (PBS).

Close collaboration has also been established with the CEDR financed project FALCON which has provided the OECD/ITF working group with results and recommendations on PBS.

5.1 Seminars and workshops

Workshops and seminars as presented below have been organised by the working group to invite and involve experts for discussions of crucial issues and to present preliminary result of our work to a wider audience of stakeholders.

December 2016.	A workshop on “Modal choice and modal shift” at Cambridge University
May 2017.	A half-time seminar with focus on decarbonisation and the toolbox for policy makers at ITF Summit in Leipzig
January 2018.	A workshop on “HCT and bridges” at OECD, Paris
May 2018.	A seminar on “HCT and traffic safety” at ITF Summit in Leipzig
May 2018.	A seminar on “HCT – Access, Monitoring, Compliance and Smart Mobility solutions” in Helsinki; close cooperation with the Finnish Transport Agency and the Finnish Safety Transport Agency

Results and conclusions from the seminars and workshops will be integrated in the final report.

6. Final report

The final report will give a global picture of the actual and expected use of HCT – volume, type of transports and vehicle combinations, trends and ongoing research and development as well as existing regulatory framework, strategies and road maps in different regions and countries. There will be a special focus on ITS and the links between HCT and other important trends in road freight transport e.g. platooning, selfdriving trucks, electrification and new fuels.

Each of the focus areas mentioned above will include results from ongoing or recently finalised research and pilot projects/case studies.

6.1 Toolbox for policy makers

Based on the summary of analyses on productivity, energy savings, CO2 reduction, safety, modal shift etc. the last chapter of the final report will be a package for policy makers – a toolbox - that allows for an objective and transparent analysis of HCT program performance giving concrete advise and recommendations on how to implement HCT in a smart and balanced way.

The toolbox will include a set of internationally vetted performance measures, metrics and protocols that will provide policy options and data for the development, implementation and monitoring of HCT. It will also contain information on methods of political and public messaging to better communicate the benefits of using HCT to improve transport efficiency.

There is, for good reason, great variation in HGV and HCT policies among nations. But models, methods and tools to tackle the challenges could be similar. One of the aims with this study has been to facilitate international acceptance of analysis methods, metrics and criteria definitions. These tools will provide an opportunity for common assessment using standardized data and methods on which to base policy decisions.