

C2.4 FREIGHT TRANSPORT AND INTERMODALITY

There has been increasing importance of freight transport for building sustainable transport systems from the viewpoint of the global supply chain. Efficiency of freight transport is required for providing a higher level of service to customers. However, there is concern about the negative impacts on the environment generated by existing freight transport systems. To overcome these complicated problems, new technologies including ICT (Information and Communication Technology) and ITS (Intelligent Transport Systems) as well as appropriate public policies are needed.

Freight transport is crucial for developing countries in terms of economic development and the creation of good quality of life. Experience and knowledge on transport and logistics in industrialised countries may be helpful for developing countries to promote freight transport initiatives

The research work by Committee 2.4 focused on the current status of freight transport in member countries and how the variety of challenges relating to freight transport and logistics should be tackled. These include, but are not limited to, the efficiency of logistics, the environment and safety, as well as the differing objectives of the stakeholders in freight transport such as shippers, freight carriers, administrators and residents.

Technical views

Our main areas of work and findings can be summarized as follows:

- Promoting intermodality in freight transport;
- Mitigating the negative impacts of freight transport growth; and,
- How developing countries can build a sustainable transport system.

Measures Promoting Intermodal Terminals and Alternatives to Road Transport

Promoting intermodality as an alternative to the use of roads in transporting freight can have a variety of benefits. The freight transport sector is growing, causing a number of environmental and societal problems, not to mention increasing the congestion on the road network. More collaboration between road and other transportation administrators, as well as government measures that supported intermodality would not only improve the efficiency and safety of the roads, but would have positive benefits on the environment and all freight transport.

Mitigation of Negative Impacts Caused by the Increase in Freight Transport

Due to their size, behaviour and routes taken, freight vehicles can have a negative impact on the environment, the society and the economy and as the amount of freight increases, so do these negative impacts. Therefore, strategies must be developed to mitigate these deleterious effects. Technology can play a role in mitigating these effects, as can improving the overall transport infrastructure and implementing measures that regulate freight access away from certain roads and areas.

Guidance for Developing Countries in Building a Sustainable Freight Transport System

Each country has a unique history and pattern of economic growth to which the transport system makes a distinct contribution. When an individual transport system is developed, necessary aspects of sustainable development must be considered; and yet it is also imperative to pay due attention to the individual characteristics and overall growth of the given economy and society. Developing countries, such as those in Africa and Asia, often

face the problem of inefficient freight transport systems that lack good infrastructure and freight management systems. The committee makes recommendations on the way to tackle these problems, as well as raising the issue of how international cooperation and support can be organised to promote sustainable freight transport systems in developing countries.

Future perspectives

Further research on following topics will be needed to fully understand the characteristics of freight transport and intermodality and build up appropriate public policies to promote sustainable freight transport systems for both developed and developing countries.

- 1) Reliability of freight transport on the road - understanding the reliability of freight transport on the road is needed in terms of connectivity of road network, travel times, safety and costs for freight carriers for promoting sustainable freight transport systems.
- 2) Behaviour characteristics of freight vehicles and carrier responsiveness for freight transport management - strategies for successful consensus building in implementing freight transport management schemes are needed for best practice of policy making and execution.
- 3) Measures to smoothen border-crossing freight transport - investigation on the international trunk network of freight transport is needed especially focusing on the smoothness of border-crossing of countries and regions.