OECD WORKSHOP ON MARITIME TRANSPORT

MULTIMODAL POLICY IN THE EU AND IN THE NETHERLANDS

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1. RATIONALE AND APPROACHES FOR INTERMODAL TRANSPORT

1. The development of intermodal transport is not only one of the important objectives of transport policy in many (European) countries, it is an integral part of a sustainable transport policy. The increase in goods traffic in recent years and the growth rates which are forecast may lead to bottlenecks on the principal international and national roads. On certain links such bottlenecks already exist. Intermodal transport can contribute to solve those problems and to smoothen the international flow of goods.

Definition

2. Intermodalism is not limited to the promotion of a modal shift from road transport to other modes. It also stands for the promotion of improvements in the transport chain without modal shift. For the purpose of this discussion paper, we use the definition that was formulated by the OECD Intermodal Freight Transport Advisory Group.

“Intermodalism implies the use of at least two different modes of transport in an integrated manner in a door-to-door transport chain”.

3. Furthermore, we will start to quote in this chapter the most relevant findings and recommendations of the OECD report on the Institutional Aspects of Intermodal Freight Transport (OECD, 2001).

Aim and rationale for intermodal transport

4. Intermodal policies aim to improve the effectiveness and efficiency of the door-to-door integrated transport chain.

5. Key driving forces for promoting intermodal transport differ among countries and vary over time. The main rationale for promoting intermodalism ranges from the efficient use of infrastructure and the promotion of operational business efficiency to environmental concerns.

Modal approaches are necessary… but not sufficient

6. Intermodal transport is hampered if the performance of any of the key transport modes is inadequate or if the linkages between modes are not efficient and reliable.

7. Since the current level of performance of individual modes is not satisfactory in many countries, it is understandable that modal approaches continue to dominate in many cases. Modal approaches are needed to achieve efficiency gains as well as potential environmental and safety improvements in each mode’s operations.
8. Modal approaches are also appropriate in areas where regulatory reform is required (e.g. rail liberalisation in Europe).

9. Many of the policy measures considered likely to promote “intermodalism” include mode-specific actions. For example, the promotion of a modal shift away from road to rail or inland shipping focuses on improving the rail and waterway infrastructure in order to strengthen the competitive positions of these transport modes.

10. In most OECD-countries, there is emphasis in the policy frameworks on promoting transport efficiency and facilitating modal reform. While the approaches to achieving transport efficiency improvements differ, policy frameworks generally support competitive operating environments. In addition, there is increasing reliance on policies favouring more commercial approaches to the provision of transport infrastructure and transport operations (including competition in the pricing and provision of transport services) which can be valuable tools in improving modal transport efficiency.

11. The key question is whether pursuit of modal policies alone will suffice to deal with the challenges of the future, which include substantial growth in international and national goods transport and the development of individual business-to-business and business-to-consumer markets, facilitated by rapid growth in electronic commerce applications. While OECD-governments have tended to pursue modal policy approaches, industry has increasingly taken an intermodal approach to provision of the services required by users.

12. In order to achieve improvements in efficiency and environmental outcomes that go beyond those that can be realised by purely modal policies, many OECD-countries are now considering transport issues more from the perspective of the whole door-to-door transport chain. Such a "chain approach" leads most often to different measures and captures the benefits from use of the most appropriate modes that are being sought by transport users and operators as well as by governments. Such measures overlay modal policies, promote inter-operability and competition between modes and fall into the domain of true “intermodal policies” in their broadest sense. In many transport administrations, this type of intermodal thinking, which focuses on integrated transport, is already present in policy objectives; however, while the words are there, the deeds often lag behind.

13. It is difficult to design and implement "true" intermodal measures in a predominantly mode-specific world and it has to be recognised that the costs can often be considerable (and beyond the resources of individual users) and relate to different transport operations (with different ownership structures), while the benefits can be widely dispersed across a range of users and difficult to recover under current pricing systems. This is an area for policy development which may require a new type of logistical knowledge in government organisations. Government organisations know a great deal about road, rail, waterways and sea-going shipping, but are generally less knowledgeable about logistical chains, and tend to focus less on the operational efficiency of the transport system as a whole than on modal issues.

**Different approaches can be taken, depending on governmental involvement in transport ownership/provision and transport operations**

14. The extent of government involvement in transport infrastructure and operations is another factor which influences the policy approach and priority assigned to intermodal policy development and implementation. In recent years, environmental concerns have placed greater focus on the role of intermodal transport.
15. OECD-governments having a high level of involvement in transport infrastructure ownership/provision and transport operations, need to be actively involved in intermodal policy development and the intermodal actions taken by their transport operations. This recognises that many of the intermodal issues which need to be addressed by government and private sector organisations are likely to be related to facilities (such as ports and intermodal terminals) or operations (such as combined transport involving rail services) which involve government ownership.

16. In OECD-countries where there is increasing private ownership and/or operation of transport infrastructure as governments have withdrawn from involvement in commercial transport operations, intermodal transport improvements are largely driven by industry interests (shippers and carriers) seeking to provide value-added services and find least-cost solutions to transportation problems.

17. In OECD-countries with a high level of reliance on market forces and private infrastructure ownership and operations, there are nevertheless a number of policy issues relating to matters such as the efficiency of transport services, charging and taxing regimes and environmental aspects of transport infrastructure and operations that require intermodal policy consideration. Moreover, governments play an important role in creating the regulatory framework in which intermodal transport can develop, encompassing such diverse factors as safety and environmental regulations, customs procedures and electronic data interchange (EDI).

Policy instruments

18. Transport administrations with established and dedicated intermodal transport programmes and resources -such as a special action programme, a special task force, an intermodal transport policy unit or other similar organisational provisions -have developed more explicit and more focused intermodal transport policies than have transport administrations with purely "mono"-modal units. Dedicated intermodal transport programmes also tend to adopt different types of instruments and develop different external relations than typical "mono"-modal units, thus contributing to variety in the policy mix. Since there is seldom a silver bullet guaranteeing policy effectiveness, variety can be beneficial.

19. The relative weight of the key elements in the policy objectives is reflected in the types of instruments which are being applied in practice. In some countries, the justification for promoting intermodal policies and the type of instruments used focus on environmental issues and modal split while in others the centre of gravity is on efficiency and pricing instruments.

20. The main policy instruments currently in use are:

− Strategic planning to integrate freight distribution infrastructure with land-use plans.
− Regulatory and legislative initiatives, including regulation of vehicle weights and dimensions.
− Economic instruments, such as taxes and charges.
− Financial assistance to government transport operations (e.g. ports and railways) to stimulate the development of terminals and transfer points and support the purchase of intermodal equipment.
− Initiation, leadership and support for intermodal demonstration projects involving the private sector.
− Financial incentives, including support for research and development.
21. Governments that are more interventionist or more directly involved in ownership of transport operations are also likely to use regulatory measures such as licensing exemptions and driving bans at specified times to favour intermodal transport. In countries with greater reliance on market forces, use of such regulatory instruments by government is limited.

22. A number of detailed country responses which can assist other countries interested in intermodal policy development provide examples of additional measures which go beyond the traditional administrative focus on transport infrastructure and regulations. These include:

- Development of longer-term visions and policy directions encompassing intermodal transport.
- Promotion of regional and urban intermodal transport and plans and land use planning measures favouring intermodal transport efficiency (e.g. on multimodal connectivity and location of business parks and ports).
- Measures to ensure adequate co-ordination (such as bringing all modes under one administrative umbrella).
- Intermodal corridor analyses.
- Policies aimed at standardisation of loading units and other actions favouring interoperability.
- Policies promoting logistical efficiency analyses by shippers and improvement in efficiency through goods stream analysis.
- Monitoring of the economic and environmental performance of multimodal chains.

**Communication between intermodal transport policy units and other actors**

23. Intermodal policy development requires co-operative arrangements between government and the private sector. This is in part because intermodal services generally involve freight transfers between transport operations and infrastructure with different ownership structures. Major transport infrastructure was originally publicly owned and it is only relatively recently that governments in some countries have divested themselves of operational responsibilities for major infrastructure such as motorways, airports and ports. However, road, aviation and maritime transport services are generally undertaken by the private sector and there is an increasing trend towards commercial rail operations and private sector management of rail infrastructure.

24. Intermodal transport policies and improvements need to be developed co-operatively with modal approaches to ensure that they are targeted at existing impediments and aimed at getting the linkages right. Co-operative arrangements can help to maintain a focus on the improvements sought by governments, such as: intermodal infrastructure at airports and ports; environmental benefits from improved intermodal services; harmonisation of operational practices and standards; and interoperability in technology. They can also highlight the improvements sought by users, such as: a wider range of transport options and therefore greater choice for users; increased reliability; and improved transport services at reasonable cost.

25. The likelihood of intermodal transport policy being successful depends on the relationship between intermodal transport policy units (or other policy structures), industry advisory bodies and other stakeholders, including:
The formation of industry advisory groups/government consultancy boards, with a clear role and function, increases the probability of intermodal transport policies targeting the key issues; such industry advisory groups are more effective if they have clearly defined tasks and report directly to the minister responsible for transport.

Intermodal transport policies stand a greater chance of being implemented if the industry bodies and intermodal transport policy units or other structures have clear lines of communication with other government ministries, such as Finance, Environment, Trade, etc.

Performance-based outcomes

26. The extent to which the emphasis on combined transport and intermodal transport policy (particularly in Europe) has resulted in improved performance of non-road transport is not clear. There is a lack of data on which an overall assessment could be made. Aggregate estimates of freight movement output (e.g. freight transport by rail in Europe) are not reliable indicators. For example, increases in intermodal transport volume may not show up in aggregate rail-freight data if the increase in intermodal tonnage is offset by decreases in the volume of bulk freight and vice versa. Nevertheless, the emerging picture is that market share may not have changed significantly in aggregate terms, although in some specific cases it has. However, in a growing overall transport market, even a stable market share would mean an increase in intermodal volumes.

27. The probability of better information becoming generally available in the future is quite low, given that the private sector will be increasingly involved in intermodal transport (with related commercial confidentiality concerns). In addition, changes in border controls may reduce some existing data collections, and budget constraints in most countries will limit new collections to issues with the highest priority.

28. Intermodal projects should be evaluated on a "case-by-case" basis, working with the private and public sector organisations involved. Such an approach is similar to that adopted in many other aspects of transport (such as safety) where macro indicators may not provide a reliable guide to the effectiveness of individual programmes.
2. INTERMODAL TRANSPORT IN INTERNATIONAL ORGANISATIONS

29. Intermodal transport is dealt with in several international organisations. This paper will treat the OECD, the European Union, the European Conference of Ministers of Transport and the UN/Economic Commission for Europe.

Organisation for Economic Co-operation and Development (OECD)

30. The Intermodal Freight Transport Advisory Group (IFTAG) is part of the Road Transport Research Programme. The IFTAG is attended by representatives of (Western) European countries, USA, Canada and Japan. It has conducted several studies in the field of intermodal transport.

31. The first study was a study on institutional aspects (published in 2001). The conclusions of this study are contained in chapter 1 of this paper. The report provides a ‘toolkit’ for setting up intermodal arrangements or evaluating organisational structures on intermodal transport.

32. The second study is called ‘Benchmarking Intermodal Freight Transport’ (published in 2002). The overall focus of the work on ‘benchmarking’ is centred on comparing the relative efficiency of modes, modal combinations and modal interfaces. The focus is on organisational aspects from a government public policy perspective, rather than on the performance of industry players.

33. The third study is on ‘urban freight logistics’. The study has not been published yet; publication is expected in 2003. The study identifies what could improve the efficiency of urban goods transport systems (including making optimal use of innovative measures), while ensuring the environmental sustainability and liveability of urban areas.

United Nations/Economic Commission for Europe (UN/ECE)

34. The UN/ECE Working Party on Combined Transport aims to contribute to the development and promotion of combined and multimodal transport in the countries of the UN/ECE region. It provides a pan-European forum to consider and to undertake inter-governmental activities of a legal, administrative, documentary, technical, economic and environmental nature. The Working Party is attended by European countries and international organisations. The Working Party produced the European Agreement on Important International Combined Transport Lines and Related Installations, which lays down a coordinated plan for the development of combined transport services and the infrastructure necessary for their operation based on internationally agreed performance parameters and standards.

35. The Working Party also serves as a forum to exchange new developments in the field of combined transport in member countries and international organisations.

36. Current topics are the role of the railways in combined transport and the harmonisation of civil liability regimes in the intermodal transport chain. On the first topic two informal ad hoc expert groups have been mandated to make recommendations in the field of ‘efficiency of terminals for combined
transport’ and ‘partnership models and best practices’. On the second topic an informal ad hoc expert group is examining the possibilities of a harmonised European regime for inland transport.

European Conference of Ministers of Transport (ECMT)

37. The ECMT is an intergovernmental organisation that determines – at a pan-European level – the outlines of the (future) traffic and transport policy. The ECMT is a kind of think tank for the strategic traffic and transport policy.

38. The Working Party on Combined Transport is attended by European countries and international organisations. Recent activities in the ECMT Working Party include producing a consolidated resolution that summarises the most important ECMT resolutions of the past years. It contains an overview of bottlenecks in the development of intermodal transport and recommendations to governments to overcome those bottlenecks. Together with the European Commission and the UN/ECE Working Party on Combined Transport, the ECMT Working Party on Combined Transport published a glossary with intermodal terms in English, French, German and Russian. This glossary is very useful in daily practice.

European Union: White Paper

39. In September 2001 the European Commission published its White Paper “European Transport Policy for 2010: Time to decide”. A revision of the 1992 White Paper on Common Transport Policy was urgent in the light of the growing transport demand that will probably continue to grow with the expansion of the EU. The new White Paper focuses on the demands and needs of the European citizens. It proposes measures to ensure that the development of transport in Europe goes hand in hand with an efficient, high-quality and safe service for citizens. The first of these measures is designed to shift the balance between modes of transport by 2010 by revitalising the railways, promoting maritime and inland waterway transport and linking up the different modes of transport.

40. If nothing is done, Europe will rapidly be threatened with “apoplexy at the centre and paralysis at the extremities”. The European Commission is proposing to put an end to current trends and shift the balance between the different modes of transport through a proactive policy to encourage the linking-up of the different modes and promote rail, maritime and inland waterway transport. Therefore, the Commission has proposed a new programme to promote intermodality, called Marco Polo. The main goal of Marco Polo is to reduce road congestion and improve the environmental performance of the whole transport system by shifting freight from road transport to short sea, rail and inland waterway transport.
3. CASE STUDY: INTERMODAL TRANSPORT IN THE NETHERLANDS

Freight Transport in the Netherlands

41. The Netherlands has a highly developed logistical and distribution network, connecting intercontinental flows of goods through our seaports to the European hinterland. One of the drawbacks of this network is congestion: in the densely populated parts of the country, we are confronted with huge congestion problems, which brings about emissions, accidents, noise and health problems.

42. Freight transport will be doubled in 2010 compared to 1995 which will be a tremendous burden for the Netherlands road transport network, as it will lead to more congestion on the roads and therefore to a reduced accessibility of our economic centres. This might eventually worsen the competitive position of our main ports and thus make the Netherlands less attractive to international companies. Besides an increased congestion, the growth in freight transport also leads to more pollution, more pressure on land and higher safety risks.

43. This has urged us to find a way to cope with this growth while improving accessibility, safety and the quality of life.

Directorate-General for Freight Transport

44. Freight transport is dealt with in an integrated manner in the Directorate-General (DG) for Freight Transport, which is a part of The Ministry of Transport, Public Works and Water Management. This DG is divided into three policy departments: transport safety, transport and infrastructure and general freight transport policy. The mission of this Directorate-General for Freight Transport is to contribute to a safe and competitive freight transport system that leads to a sustainable economic development.

45. Therefore, our policy aims at promoting a coherent logistic network of main ports, terminals, corridors and links. This network should be used in an optimal way and meet high standards of safety and environment. This way, we believe that we can accommodate the expected growth in a sustainable manner. That is, in a way that does not decrease but increase accessibility, safety and the quality of life.

Sustainable transport growth

46. The question is then: How do we achieve sustainable transport growth? In pursuing this goal, a lot of similarities between the Dutch policy and the new White Paper of the Commission can be found: the ideas of accessibility, safety and quality of the living environment are central notions in both policies. But although the Netherlands supports the problem analysis in the White Paper, it is critical towards the solutions that are chosen, in particular towards the modal shift objectives.
47. We believe that the modal shift objectives are not realistic and insufficient to realise a sustainable transport policy for both passengers and goods. This is based on our experience, that showed us that a modal shift as such did not work sufficiently. To find a solution for the problems concerning accessibility and environment, we aim at a common approach for freight transport and passenger transport at the same time.

48. Our sustainable transport policy is aimed at outcome instead of output. The emphasis lays on the results, not on the way the results are achieved. Besides that a central issue in our policy is an enhanced use of infrastructure. The White Paper does not pay much attention to this topic.

49. To achieve a sustainable transport growth, we use three instruments. Our first instrument to achieve this goal is an enhanced use of existing infrastructure of roads, rail and waterways. On the roads, this can be achieved by, for example, a ban on overtaking for trucks, by flexible sign posting and by using the hard shoulder as normal lane. Utilisation of the railroad system is also open to improvement. Minor adjustments to the infrastructure, like a passing track and the use of more modern equipment, can yield relatively substantial capacity gains. Meanwhile, inland waterways can be better utilised for freight. There are relatively few bottlenecks in the inland waterways and the bottlenecks that do exist can be removed by enlarging the operating times of locks and bridges and by widening some locks and bridges. To cope with the expected growth, we need all modes to perform in an optimal way. Besides an optimisation of the different modes, a stimulation of the modal shift should lead to better utilisation of the whole multimodal infrastructure network.

50. Should bottlenecks persist despite improved utilisation, we come to our second instrument: expansion of infrastructure. This will be done with respect for the environment which means that, for example, emissions, noise and safety will be taken into account.

51. Our third instrument is price policy based on variable and differentiated costs. The principle of the user pays will eventually lead to less congestion, depending on the place and the time of the day. The goal of internalising external costs of infrastructure, environment and safety to the user is to have every shipper and every carrier make a more realistic choice between the social costs and benefits of transporting goods and the way the transport takes place. This will lead to a more efficient use of infrastructure, more safety and fairer competition within and between the different modes of transport. In the Netherlands, price policy is still under discussion. The new cabinet has stated that pricing policy on the Dutch roads may be an option after accessibility of the road network and public transport have improved.

Transport-efficient economy

52. Our final goal is to achieve a transport-efficient economy. A transport-efficient economy means that there is a positive balance between the economic benefits of freight transport and the expenses of transport for the environment. The most important elements of transport-efficient economy are:

- A reduction of transport trips. This can be reached through better land use planning, so that suppliers and consumers are closer together or the clustering of various economic activities in one transport-corridor. Avoiding empty hauls is another important means to achieve a reduction of transport trips. Intelligent production also plays a role in reducing transport trips. Think about the development of products that takes up less room, like compact washing-powders and computers with flat screens. You could also take air or water from products before transporting them. Think about vacuum-packed diapers or concentrated orange juice.
The second element in achieving a transport-efficient economy is the stimulation of innovations in transport and logistics. Research and development in this field is stimulated through subsidisation schemes and national and international research programmes. Research is done, amongst others, in the field of better transhipment technologies for combined transport and new vehicle technologies.

The third element in achieving a transport efficient economy is intermodal transport.

Intermodal transport

53. Intermodal transport is a means to guarantee the accessibility of economic centres, to make better use of the existing infrastructure and to diminish the burden on the environment. It also offers greater flexibility and more choices for shippers. Transport should use the most appropriate mode with respect to efficiency, safety and accessibility. In many cases rail, inland waterways or short sea shipping still offer space and are viable and commercial alternatives for road-transport.

54. The intermodal policy is part of the integrated freight transport policy of the Dutch government. The present intermodal transport policy has two goals:

- Firstly, the improvement and integration of the different links in the transport chain.
- Secondly, the promotion of a modal shift from road transport to railways, inland waterways and short sea. The promotion of a modal shift is not a goal in itself, but is promoted if this leads to a better economic and safety performance of the whole door-to-door transport chain.

Instruments to promote intermodal transport

55. To achieve the two aforementioned goals, a network of multimodal infrastructure and terminals for combined transport is needed. The Ministry is working on the development and optimisation of both the public and the private infrastructure network. To develop the private infrastructure network, subsidisation schemes for terminals were developed. Besides a well-developed multimodal network of infrastructure and nodes, shippers and transporters need to be aware of the possibilities of combined transport, as they play an important role in the choice of modes of transport.

56. Three conditions for the development of intermodal transport are:

1. Development of the public infrastructure network
2. Development of the private infrastructure network – subsidisation schemes
3. Raising the awareness and intermodal knowledge

I. Development of the public infrastructure network

57. Waterway investment aims at optimal utilisation of inland shipping as part of the transport industry and as part of the logistical transport chain. Through the years the quality of the waterway system within the Netherlands is fairly good and satisfies the needs of the shipping industry today. But, as vessel dimensions steadily expand, substantial investment is needed now and in future to adapt the system to the rapidly changing fleet composition. Apart from spacious locks and fairways, sufficient headroom under
bridges is important especially to accommodate large scale container traffic. After all it is the container market where competition with road transport is fiercest and where inland shipping can gain the bulk of modal shift.

58. International main waterways which connect the seaports of Antwerp, Rotterdam and Amsterdam to the German hinterland are a first priority. Maintaining or improving the quality of the international waterways between the North Sea and the European hinterland is regarded as essential for economic development in general and especially for the port of Rotterdam. The international main system has to be suitable for four barge push convoys and at least four layer container traffic. Dimensions should at least meet CEMT-classification VI.

59. Second priority for investments are national through waterways connecting the coastal region of the Netherlands with the north, south and east of the country and with adjacent parts of Germany and Belgium. These waterways have to be suitable for at least one and maximal two barge push convoys and at least three layer container transport. Dimensions at least have to meet CEMT-classification Va.

60. The third priority category of main waterways is the more important branches of the national grid in terms of transport volume. They have to be suitable for at least two layer container transport and dimensions should meet at least CEMT-classification IV.

61. On the railways the most important infrastructure project is the building of the so called Betuweline. This is a 160 km long double-track railway line constructed especially for freight rail transport. It connects the port of Rotterdam to the European hinterland. The Betuweroute is of strategic importance for the sustainable economic development of the Netherlands; it will consolidate the Netherlands’ position as a distribution and transport country without imposing too great a burden on the environment. The Betuweroute comprises the largest infrastructure project in the Netherlands up to date. With the construction of the Betuweroute, the Dutch government wants to give priority to rail freight transport as an environmentally friendly mode of transport and wants to promote the through-flow of goods by striking a better balance between transport of goods by road, rail and water.

62. On the roads, measures to aid the freer flow of traffic are undertaken. Some highways are broadened and new connections between existing highways are constructed. The building of special lanes that can be used in peak hours is also a means to improve the flow of traffic. Besides building new infrastructure, measures are taken to make a better use of the existing infrastructure. Using traffic lights at the end of the approach road that allows only one car to pass at a time, a ban on overtaking for trucks, gearing the work on the roads to one another are examples of such measures.

II. Development of the private infrastructure network

63. Of course, the different modes should be linked up to each other to allow for the choice of modes of transport, depending on which one(s) lead(s) to the best economic and safety performance of the transport chain. To this end, we strive towards an adequate inland terminal network. The Netherlands has two subsidisation schemes that serve this goal: a subsidisation scheme for waterway-connections and a subsidisation scheme on public inland terminals.

Subsidisation scheme for private waterway-connections

64. To promote the modal shift from road to water, a Temporary Policy Regulation on Subsidies for Waterway Links was in force from January 1996 to December 2000. The scheme turned out to be a great success. In 5 years time, more than 10 million tons of modal shift from road transport to inland navigation
took place and 81 of the 99 applications were granted. Because of this success, the ministry decided to extend the scheme. A few changes were made in the new scheme, in order to bring the regulation more in line with practice. This has resulted in a new subsidisation scheme for private waterway-connections, which entered into force in January 2001.

65. This scheme aims to promote the transport of goods by water by reducing the investment-costs that companies face in establishing waterway-links. Subsidies are granted for both infrastructure and transhipment-facilities. This way the threshold for companies to invest in a waterway-connection is lowered and the modal shift to inland navigation is facilitated. A subsidy can be given for new waterway-connections, the expansion of existing waterway-connections and the renewed use of waterway-connections that has passed into disuse. The target group of this regulation are shippers that have their company near the water. The waterway-connection may only be used by this company for the transhipment of goods of only one shipper. The subsidisation scheme will end in December 2003.

Subsidisation scheme for private railway-connections

66. A similar subsidisation scheme for private rail-connections was less successful and therefore terminated in 2000. The decision to stop this subsidisation scheme was made because the Ministry had the impression that the most important companies that could make use of this scheme already had a railway-link, which meant that not many applications in the next years were expected. In a few years, the aforementioned Betuwe-line will be in service, which will lead to more capacity on the railway-network. Then the need for a new subsidisation scheme for railway connections will be reconsidered.

Subsidisation Scheme on Public-Use Inland Terminals

67. Complementary to the subsidisation scheme for private waterway-connections, there is a subsidisation scheme for public-use inland terminals that serve combined transport.

68. This subsidisation scheme entered into force in November 2000. Investments in terminals are, in principle, a normal economic activity. The initiative to invest should come from a company. The role of the government is to test the initiatives against social preconditions like environment and safety. However, the government plays a stimulating role in the development of an adequate inland terminal network to try to keep up the transhipment capacity with growing demand. Investments in terminals are large and the development of the turnover is quite slow. Therefore the business risk and initial losses are higher than average. This is why it was decided to subsidise the building and expansion of public inland terminals. In the belief that the best guarantee for economic viability of an initiative is the commitment of investors and operators of the terminal, a risk-bearing capital of at least 50% is required to receive a subsidy from our part. The initiative to invest should come from an entrepreneur. As a consequence, the location-decision is left to market forces as well, however an initiative should fit well within the framework of existing physical planning policies.

69. The Subsidisation Scheme for Public Inland Terminals is very successful: the building of three new terminals and the expansion of four others was subsidised. Only in two cases a subsidy could not be granted. Two applications are under consideration and even more applications are expected. Just as the subsidisation scheme for waterway-connections, this scheme will end in December 2003.
III. Promotion of awareness and intermodal knowledge

70. An adequate multimodal infrastructure network that is well connected to the European network of rail- and waterway-links is necessary, but not sufficient. Shippers and transport operators need to be aware of the possibilities and advantages of combined transport to be able to make a choice between the different modes and choose the mode or combination of modes that is most efficient and has the best economic and safety performance.

Modal shift Scan Project

71. In 1998 and 1999 research was carried out among one hundred shippers and their logistic chain was analysed in detail to assess the possibilities of the use of inland waterways, railways, and short sea. The aim of this project was to make shippers aware of the possibilities of combined transport.

72. Of the total 200 goods flows that were analysed, it was considered that 120 flows could be shifted to combined transport, but that 80 goods flows could not be shifted either because the tariffs were too high, or it took too much time, or the service level on certain routes was too low.

73. The most important results of the research are:

- **Intermodal transport is also interesting for smaller enterprises and for less voluminous flows of goods.** The success of a modal shift for these companies, as well as for smaller flows of goods depends especially on whether it can be linked up with existing supplies of services.

- **The project showed that also relatively high quality goods with a faster turn-around time can use combined transport.** This means that intermodal transport is not only interesting for e.g. the chemical industry and the nutrition industry, but also for the electronic industry.

74. Another result is that even on relatively short distances in the Netherlands, a modal shift can be achieved. This relates particularly to pre- and endhaulage of maritime containerised cargo. Especially inland shipping is very successful on these short distances.

75. In many cases, combined transport can be carried out within the same turn-around time as road transport. The average storage and waiting time of a maritime container in a sea port is three days. This time can be used for transport to the hinterland. The shipper can subsequently place orders from the terminal in the hinterland and in this way have the goods at his disposal even faster.

76. Combined transport can be cheaper than road transport. Even taking into account the “extra” costs for organisation and pre- and endhaulage, the cost savings can amount to 12%.

77. The results for inland shipping and short sea are very good. Inland shipping is a good alternative to road transport in 76% of the cases. Short sea shipping offered a good alternative in 67% of the examined cases.

78. **Rail is less successful than the other modes.** It shows a mixed picture: At some destinations, rail offers a very good alternative to road transport. At other destinations either the quality was too low or the tariffs were too high.

79. The follow-up of this modal shift scan project is a project called “Transactie Modal Shift” (TMS), which was set up in May 1999 for a period of five years. The aim of this programme is to promote efficiency in freight transport. This is to be achieved by supporting business efforts that lead to modal shift,
fuel economy and a concrete reduction of kilometres per trip. The TMS project agency supports participating companies by granting subsidies and by making available logistical expertise. The approach of the project is market oriented and is aimed at increasing and supporting the effort of business activity. Per 30th September 2002 subsidising of projects has ended.

80. The TMS program will enter the phase of transfer of knowledge from 2003 onward. The industry associations EVO, TLN and KNV will also play an important role in this process. The goal of this feature is to offer the gained knowledge without subsidies to companies, that are interested. This knowledge is already now (partly) available in writing, but in future will also be available in digital format. The project organisation TMS will remain active till 2006 to streamline the transfer of knowledge in a workable way. The address of the site is: www.transactie-modalshift.nl

Regional organisations

81. The utilisation of different modes means a greater flexibility and more choices for shippers. Although there is a need for combined transport and although there are clear commercial advantages, shippers hesitate to actually shift to intermodal transport. Apparently, the awareness amongst shippers needs to be increased to counter the existing prejudices towards intermodal transport that many shippers have. A mental shift is needed.

82. To increase the awareness of the industry of the possibilities and advantages of intermodal transport, there are two regional organisations that advise on intermodal transport. Those organisations can play an important role in the promotion of intermodal transport. They have been established through co-operation between national and regional authorities and the industry. The organisations introduce local and regional industry and authorities to each other, provide an exchange of information and contribute to the awareness of industry on the possibilities of intermodal transport. This way, they contribute to the success of intermodal transport.

International aspects

83. Besides our activities at the national level we are, of course, also active at an international level. We are represented in several working parties on combined transport of international organisations such as the United Nations, the European Conference of Ministers of Transport, the OECD and the European Union. Some of the main subjects in these international organisations are the harmonisation of civil liability regimes in the intermodal transport chain, the role of railways in combined transport, standardisation of loading units, benchmarking and the exchange of information on new developments in the field of combined transport.

84. Besides active participation in those international organisations, we also have bilateral contacts with numerous countries. There are regular contacts with our neighbouring countries Germany and Belgium, to discuss our policy, to co-operate in the development of our policies and where possible to gear our policies to one another.

85. We have regular contacts with South-Africa in our South-African Netherlands Transport Forum, which aims at the strengthening of the relationship with South Africa in the field of transport, ports, infrastructure and safety. We are responsible for the Yangtze project, which is aimed at improving the total multimodal transport chain in the Yangtze-corridor in China. The implementation of the master plan is being realised by the Dutch and Chinese industry. We co-operate with Egypt in the field of ports and logistics.
86. Besides that we are involved in several pre-accession projects with Middle- and Eastern European countries. We also have several bilateral treaties and MoU’s, that mostly deal with one mode. In that framework expert meetings and mixed commissions take place.

Summary

87. The Dutch freight transport policy is aimed at promoting a coherent logistic network of main ports, terminals, corridors and links, that is used in an optimal way and that meets high standards of safety and environment. Intermodal transport plays an important role in achieving this goal. The main driving force nowadays for promoting intermodal transport is accessibility and an optimal use of the existing infrastructure. This is absolutely necessary to meet the expected growth of freight transport in an efficient and socially acceptable way.

88. Considering the crucial distribution function of the Netherlands, we cannot successfully develop intermodal transport on our own. We have to improve the connections through harmonisation of rules, regulations and standards in international organisations.

89. This all brings us closer to our final goal: a transport-efficient economy, where there is a positive balance between the economic benefits of freight transport and the expenses of transport for the environment.
4. RECOMMANDATIONS / THEMES FOR DISCUSSION

What steps could be taken to promote intermodal transport?

Strengthening the network of multimodal infrastructure and nodal points.

90. A chain is as weak as its weakest link. For the development of intermodal transport it is therefore important that the different modes have a high level of quality. The different transport sectors need to be economically healthy. This implies that a modal approach is necessary. But it is not sufficient. Quite apart from the modes of transport and routes, account should be taken of the other components of the transport chain which contribute to the quality of the services offered, in particular terminal facilities and equipment, interoperability between and within transport modes (including the dimension of intermodal transport units), existing intermodal techniques and those at the experimental stage, overall journey times and punctuality, administrative formalities and rules, and border crossing operations.

91. A free and open access to the railway networks and the inland waterway/maritime networks under non-discriminatory terms should be ensured.

Adopting and implementing international standards for international routes

92. A prerequisite for an unhampered international flow of goods is a good infrastructure network. The UN/ECE Agreement on Important International Combined Transport Lines and Related Installation gives standards and parameters that international itineraries should comply with. Governments should implement those standards to ensure a certain minimum level of quality on international routes.

Land use planning policy

93. As terminals are an essential element in the intermodal transport chain, it could be useful to ensure that regional land use planning integrates terminal facilities for intermodal transport into the planning of commercial freight traffic activities and logistic centres. Better land use planning could result in the grouping of various economic activities in one transport-corridor. A transport corridor could bring together economic activities, transport flows and intermodal facilities. As more companies are grouped together, this increases the possibility of providing intermodal transport.

Promotion of awareness and intermodal knowledge

94. Intermodal transport is not limited to road/rail transport. Inland waterways and short sea shipping can also play an important role. Therefore, the setting up of promotion centres / information offices for inland waterways as well as short sea shipping could be encouraged. Besides such information offices, national and international shippers organisations, national and international carriers organisations and regional organisations that promote intermodal transport, can also play an important role in the development of intermodal transport.
Financial incentives

95. A financial incentive in the promotion of intermodal transport is granting part or total exemption from taxes, tolls and fees to vehicles engaged in combined transport operations, especially for the pre- and end-haulage to and from terminals. Exemptions could also be granted from certain restrictions and traffic bans usually applied in the international road haulage sector.

96. The external costs of transport are not yet internalised. Failure to set up and charge for true costs distorts competition in favour of road transport at the expense of intermodal transport. Under these circumstances, financial assistance for e.g. certain operational costs, for the initial phase of new intermodal services and the upgrading of existing services, for the building of terminals or the initial purchase of transport equipment could be granted.

97. In this framework, consideration could be given to whether a price policy should be limited to internalising the external and infrastructure costs via charges and standards or whether road transport could be charged extra for the purpose of influencing the modal split.

Public-private partnership

98. Public-private partnership (PPP) could be considered in e.g. large infrastructure projects. PPP involves co-operation between government and industry to realise a project together. Each party keeps its own identity and responsibility and there is a clear division of tasks and risk. The result of this co-operation is an added value: a qualitatively better product for the same money or the same quality for less money.

Organisational structures

99. Only few countries have a specific intermodal transport policy unit within their transport organisation. These separately established units can exercise programme management, budget and legislative development functions, in addition to providing a co-ordination and/or advisory role. Overall, it appears that countries with dedicated intermodal policy units have more explicit and focused intermodal policies than those with purely mono-modal approaches.

Identify gaps in intermodal knowledge, legislation and/or policy

100. If there are important gaps in intermodal knowledge and/or intermodal legislation, these need to be filled. Sufficient intermodal knowledge within the transport authorities is a prerequisite for a successful promotion of intermodal transport. Then a well-thought out intermodal policy can be developed. Legislation in any form might be required to implement this policy.