

## **International Scan on Freight Transportation: Europe May 28-June 10, 2001**

### **Introduction**

One of the important trends in international commerce over the past decades has been the creation of common economic markets through the relaxation and elimination of barriers to passenger and freight movements across borders. The North American Free Trade Agreement (NAFTA) is an example of how several nations are developing such a market. The European Union (EU), another such example, has more years of experience in developing governmental and private sector strategies for transitioning to an open boundaries policy toward international commerce. The purpose of this international scan was to investigate the issues, constraints, opportunities, and challenges faced by the European Union in developing an open boundaries policy, and the strategies used in implementing this policy. Lessons from this experience could be very relevant to the U.S., Canada and Mexico in developing a common North American market. In addition, these lessons are important for national and sub-national investment decisions as they relate to enhanced freight movement within individual countries, serving primarily the domestic market. For example, case studies of public/private sector freight investment initiatives can provide useful lessons on how such initiatives could be undertaken in North America.

### **Scan Context and Panel Composition**

Freight logistics and governmental strategies to foster international commerce involve very complex and specialized processes. Understanding the motivation for logistics decisions and their response to different economic influences is an important point of departure for investigating how multi-national freight flows will reflect the characteristics of economic markets. This scan thus purposely focused not only on governmental policies and the steps in their development, but also on how freight terminal operators and users of the transportation system have responded to economic incentives/disincentives.

The panel itself reflected a diverse set of interests and concerns for both national and international freight movement. The Federal Highway Administration (FHWA) and the American Association of State Highway and Transportation Officials (AASHTO) jointly sponsored this scan. In addition to FHWA and AASHTO officials, the panel included representatives from the national ministries of transportation for Canada and Mexico, the departments of transportation for the states of Florida, Minnesota, and Ohio; the metropolitan planning organization for the Chicago metropolitan area, the Foundation for Intermodal Research, and a university professor in transportation planning and policy. These panel members represented a diverse set of interests and expertise in the areas of policy, planning, regulatory enforcement, freight logistics and economic development.

The panel targeted selected government agencies, terminal operators, logistics providers and shippers to gain a broad understanding of how the EU has been attempting to develop a common market, and how the private sector has been responding. The panel met with representatives from the national ministry of transportation for the Netherlands and from the European Commission; intermodal rail terminal operators in the Netherlands, Italy, and Switzerland; port officials in the Netherlands and Italy; managers of the Frankfurt, Germany airport; freight logistics companies in the Netherlands and Germany; and the president of an Austrian trucking company. Given the limited time of the scan, the panel did not meet with other governmental agencies and private companies that could have provided a broader perspective on the issues facing the development of a common European market, groups such as national railways, inland water or coastal shipping firms, and the ministries of transportation for other countries. In addition, the panel did not meet with non-government organizations representing environmental protection/sustainability issues.

### **General Observations**

Globalization of the supply and distribution chain has created new opportunities and challenges to the European Union. The strategy of developing open borders, combined with generally favorable economic conditions, has resulted in substantial increases in passenger and freight movements in Europe. This increased economic activity has resulted in increasing traffic volumes, especially in truck movements. Not surprisingly, congestion on the road network and access to intermodal terminals/ports has become a critical issue, especially in urban areas and at critical natural geographic barriers such as the Alps and the English Channel. Given the historical context of having many different national transportation systems (often designed purposely to limit cross border movement for national defense purposes), the interoperability within and between modal systems in Europe has also been, and will continue to be, a major challenge to the European Community. Importantly, transportation policy at the EU level, as well as in the Netherlands (and reportedly in other European countries), is linked to environmental/sustainability/energy issues. However, the importance of economic competition, especially in a global market, has raised economic development/productivity/accessibility to a comparable level of importance

Europe has responded to the challenges of developing a continental economic market and a supportive transportation infrastructure in a variety of ways. The panel examined four levels of such response.

*Private sector (shippers/truckers/logistics companies/terminal operators):* The private sector (as broadly defined above) has responded to the market conditions created by the EU/national government regulatory context. They have focused on rationalizing services and operations with strategies to increase economies of scale, e.g., larger ships and ports, block trains/unit trains/shuttles, freight villages, intermodal consolidation terminals, etc. Because many freight operations are capital intensive, there seems to be a trend toward more hub operations, which require large investments in infrastructure and information technology. Intermodal freight movement (which currently has a very small market

share) has been an increasingly important strategy in handling increased freight movement, and is expected to achieve even more. Private firms have supported and lobbied for greater relaxation of government obstructions in the general market context, e.g., customs regulations, but have sought to keep government out of areas that directly affect their own operations.

**Public sector—European Union:** The EU was established to form a common economic market and to deal with history of conflict on the continent. Coordination of the continental transportation system was one of the most important and first areas of attention. The EU has several roles; it:

- ⚡ Advocates common principles and interests
- ⚡ Facilitates multi-country activities
- ⚡ Coordinates multi-country planning, policy and research activities
- ⚡ Establishes EU vision and policy for EU/member state action
- ⚡ Provides varying levels of funding support for EU priority projects
- ⚡ Targets human resource development/training in transportation projects
- ⚡ Establishes legally binding rules and regulations for such things as safety and vehicle characteristics (e.g., infrastructure manager for railroads should be different from operator)
- ⚡ Monitors member nation actions and, if necessary, takes to European Court

Importantly, however, in many policy issue areas, the implementation of EU policies, guidelines and regulations are the responsibility of member states

The major focus of initial EU efforts were on developing free competition and interoperability of transportation systems, including promoting the development of necessary infrastructure and consistency in member nation laws. In addition, the EU identified priority investment projects that would best enhance the connectivity and interoperability of the European transportation system. These projects originally focused on infrastructure development, but has more recently included system management and ITS integration

The EU has developed a “Common Transport Policy” that emphasizes a goal of sustainable mobility. There is considerable current debate, however, on how to link transport goals and sustainability/energy goals. The major policy approach has been to establish target market shares for modes, e.g., the mode share will be what it was in 1998. In particular, there is a high level of expectations attached to the ability of the national rail systems to shift freight movements away from trucks, with support from the coastal shipping industry (and in the case of The Netherlands, the inland waterway system).

The EU provides some funding for projects and feasibility studies, in particular to leverage contributions from other sources. The EU investment projects are prioritized from the perspective of how important the projects are to a coordinated European transportation system. Many of these projects have important benefits to freight movement. The EU transportation funding is part of the total EU budget, which comes from customs revenues and value added tax (VAT) revenues (which were in addition to what was raised before the EU was created).

The panel was told that the buy-in on the EU priority projects from member governments and from the private sector has been slower than expected because of a slowdown in the economy, an overestimation of private investment interest, and environmental concerns with some of the projects. However, in some cases, EU member nations have used governmental funding to reduce the risk to private investment. The future role of EU governance is a key issue currently being debated; the respective roles of the EU versus member nation is not agreed upon. As noted above, member states must agree to implement EU policies, which constrains EU-wide implementation of policies that are controversial (e.g. road pricing). Perhaps of most importance, however, the EU has been advantageous for transportation in its collective efforts to reduce cross border obstacles, and in raising transportation issues to international and national political levels.

***Public sector—Member EU nations:*** The panel did not meet with representatives of national governments, except for those of the Netherlands. The following observations were obtained from discussions with the other groups the panel met with during the scan. EU member nations are responsible for implementing EU policies and directives. There are differences of opinion on what is appropriate for a common “European” purpose. Member states are often concerned about the position of their own industries in the context of the EU, and thus it is often difficult to support change because of institutional issues characteristic of each individual country (e.g. unions and national railway prerogatives). Some member nations seem to use the same policy approach as the EU of targeting market shares in national transport policy. In the case of the Netherlands, this approach is designed to increase market share for inland water transportation and railroads. Public/private partnerships have also been used to decrease the market share for trucks. In most cases, the public role in these partnerships has been to invest in freight infrastructure—intermodal terminals, ports, and rail corridors—and to provide loans for operations. There seems to be a trend, encouraged by EU policy positions, of separating the ownership of the freight infrastructure from those responsible for operations. The mode split and pricing approach to transportation policy is a tacit recognition that governments can not “build their way out” of the transportation problems they are facing.

***Public sector--Local governments:*** Several examples were found where local governments have financially supported the development of freight infrastructure. Although several of these examples were unique to the situations local officials found themselves in (e.g., Rotterdam as the gateway to Europe or decommissioned acreage at a U.S. Air Force base in Frankfurt becoming a major economic generator for the city), local officials were successfully able to link economic development objectives with broader community goals. The region’s competitive advantage in a global, or at least a European, market was a key driving force in several of the examples seen.

## **Lessons for North America and Role of Domestic Freight Transportation Investment in International Freight Movement**

The following lessons for the North American and U.S. context result from this scan.

1. Global market and logistics relies heavily on the performance of infrastructure owned and operated by the public sector. Understanding the motivation of logistics decisions and their local implications is a critical point of departure for a national or multinational effort on fostering trade. Identifying freight bottlenecks, “solving them”, and establishing market conditions that provide “free access” should be an important focus of regional, state, national, and international planning/policy efforts.
2. Public investment targeted at freight movement should adopt a framework in which private sector is provided incentives to choose what is best for their business within context of achieving public goals (e.g., economic development, sustainability, etc.). This was portrayed by the Europeans as making market-driven policy decisions within a “public good” context. In addition, the focus of the overall policy was to make best use of existing transportation options (e.g., rail and inland water transportation) before developing new transport networks. Interestingly, a “long-term” public policy focus in this context was at most 10 years; private sector focus was at most five years.
3. Most important role for multinational efforts is to foster open competition and open borders. Free access allows the market to take advantage of productivity economies and results in market-placed decisions. However, the Europe experience suggests that there might have to be different market incentives and rules for different segments of the transportation system (e.g., intermodal terminals, national rail service, inland water, etc.).
4. The EU has served as an important forum for establishing consensus on strategies for establishing an openly competitive market in Europe. Such a forum provides the institutional framework for developing a common message among government agencies and among important stakeholders as it relates to economic competitiveness. In addition, such a forum has raised transportation issues to the level of national political discourse.
5. Interoperability and consistency in national laws and regulations are important areas for multinational concern. This leads to a concern for consistent application of information technology strategies across borders. Although important, however, these issues should not overshadow much broader concerns for market-driven policy and decision making. In addition, the EU experience suggested that issues such as language compatibility, signage consistency, and handling of paperwork precede information technology concerns. It seemed that in the case of European freight movement, the trucking industry has dealt with these problems much ahead of the rail industry.
6. The EU illustrates the importance of having an international and national policy on investment in freight transportation. Public and private investment in freight facilities has occurred, and continues to occur, in Europe. Public investment is designed to act as a catalyst for private investment in services and facilities could provide important

public benefits. In some cases, such investment is being considered from a true “systems” perspective (i.e., improvements are being made in infrastructure that is outside of a nation’s boundaries, but that will clearly benefit that nation’s industry).

7. The EU has incorporated human resource development/training as an important component of any public/private initiative aimed at improving freight movements. This has been done primarily to raise the quality of life of the communities that are affected by freight facilities and operations.

### **Implementation Strategies, Dissemination and Recommendation for Further Studies**

The timing of this scan is most conducive to implementation of the scan results. The U.S., Canada and Mexico are sponsoring “roll-out” sessions in Brownsville, TX and Toronto, ONT starting Fall 2001 and continuing to Summer, 2002 to discuss issues relating to NAFTA implementation. Scan results will be presented at both roll-outs with discussions focused on what can be learned and applied to the North American context. European representatives will be sponsored to participate in these roll-outs. The scan results will be reported to several AASHTO committees during 2001, including the road transportation subcommittee, the water transportation committee, the rail transportation committee, and the intermodal transportation and economic expansion committee. The results will also be reported at the AASHTO annual meeting, and used as appropriate in the update of the AASHTO strategic plan and in the discussions of TEA-21 reauthorization with regard to freight policy. The FHWA will similarly use the scan results in its formulation of freight policy proposals for TEA-21 reauthorization. Contacts will be made with the Association of Metropolitan Planning Organizations, the National Governors’ Association, the National League of Cities, and trade/commerce groups to present results at relevant meetings. One panel member who participates in the Steering Committee for the Latin American Transportation and Trade Study and as the National Federal Coordinator to advance project development and National Environmental Policy Act (NEPA) studies and decision making for Interstate 69 will use the report for deliberations with these groups. Transport Canada will use the results to reach out to trade groups and to influence initiatives relating to the Department’s strategy renewal exercise, in which one subject is integrated transportation.

The panel identified many prospective studies that should be undertaken to further understand the characteristics of international freight movement, and the market response to changes in the institutional and regulatory environment. In particular, the panel feels that many of the examples and initiatives found in Europe warrant follow-up examination, perhaps every two to three years, so that the longer term market response to open markets can be followed. Some specific studies of interest include:

1. Collaboration with the Intermodal Transport Research Center in Hamburg to monitor the response of intermodal freight to national and EU policies.
2. Examination of the results of EU “rationalization” of transportation infrastructure. For example, what happens to ports or terminals when the EU’s transport plan suggests a smaller number of such facilities will better serve EU purposes?

3. Comparison of North American and EU productivity in freight transportation, and the differing criteria for investment.
4. Review of existing forums/mechanisms for NAFTA discussions to see if there are more effective means of tri-lateral cooperation in regard to transportation decisions. For example, how should improved water transportation opportunities be incorporated into on-going discussions? Are there different models for institutional decisions in North America? How do we get trade/commerce groups involved in these discussions?
5. Continued monitoring of EU experience with road pricing and relative success in fostering mode shifts.
6. Investigation of the role of the MPO in freight transportation, especially those issues that have national implications. What are the expectations of the MPOs with regard to such issues?
7. Investigation of public/private partnerships for freight improvement projects. How can public investment be related to public benefits?
8. Examination of adopting a systems perspective on freight transportation. This includes not only a conceptual model, but also reflects performance measurement..
9. Consideration of the role that technology innovation can play in international and national trade markets. This includes not only physical modifications to vehicles or networks, but also the increasingly important role for information technologies.
10. Description of global freight flows, and the importance of an east-west axis for trade instead of the north-south axis.