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NAFTA and Short Sea Shipping Corridors

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In both the Canada-US Trade Agreement and the North American Free Trade Agreement negotiations, maritime transport was not on the table. US negotiators had made it clear from quite near the beginning that this aspect of the trade and transport network was not available for consideration, and attention was turned to negotiating a deal that focused primarily on the road transport sector. While this was most politically expedient within the US, as the maritime transport lobby was very strong, it has meant that the maritime transport sector has received less attention within NAFTA than other modes in the transport system. It has also meant that trade irritants in the sector have not had the forum for discussion and resolution.

The trucking elements of NAFTA have not been fully implemented and there are a number of outstanding issues remaining for this sector (Brooks, 2001). Rail has gradually worked through what the industry needs to provide as integrated a network possible, given existing physical capacity constraints and the private ownership nature of the network, and the air sector has addressed many of its concerns through the Canada-US Open Skies Agreement of 1995. Although there are still issues in this sector (Janda et al. 2005), the institutions are in place to address this heavily regulated sector outside the vehicle NAFTA provides. In the maritime transport sector, it is reasonable to say that the interests of each country are not well understood by the others, and the opportunities of co-operation within NAFTA on maritime transport have not been seriously examined.

There are very few institutions or fora for advancement of the trade and transport relationship on the maritime side. Without such vehicles, integration can only be advanced through private sector initiatives such as mergers and acquisitions. The single light in the darkness is the agreement signed by the three NAFTA countries to examine maritime transport in the context of short sea shipping. In July 2003, Canada and the United States signed a Memorandum of Cooperation on Sharing Short Sea Shipping Information and Experience (MOC) and the agreement was extended to Mexico shortly after. While this agreement does not pretend to open the regulation for discussion, it does at least permit the three countries to share research findings and advance knowledge in areas like new technologies.

Shortly after signing the agreement, the Canadian government embarked on an assessment of short sea shipping through a series of workshops. (Findings are detailed in Brooks and Frost, 2004.) The US has explored short sea domestically through SCOOP (the Maritime Administration's Short Sea Shipping Cooperative Program), through the US Department of Transportation support for other initiatives, such as those of the Whatcom Council of Governments (discussed later), and regionally through the Gulf of Mexico States Accord. While there is progress on this issue at the regional level, that progress has taken different forms across North America and the issues remain both complex and politically charged within NAFTA.

This article explores the key issues with respect to further development of short sea shipping. It identifies some of the critical limitations and impediments to further growth of short sea services in Canada and in transborder trade with the USA, and identifies a number of questions policymakers need to answer. As little is known about short sea shipping in Mexico, that region is sadly not included.

Existing marine services within NAFTA

The North American market in shipping is composed of 4 parts:

- **US domestic marine transportation.** This market is quite large, totaling a little more than 1 billion short tons in 2000, in a total US foreign and domestic market of approximately 2.5 billion short tons. The size of the market is a product of an extensive inland waterway system (in particular the Mississippi) and a number of overseas territories. The separation of Hawaii and Alaska from the continental US adds considerably to the size of the market. Carriers in the market are heavily regulated, but subsidized by numerous Maritime Administration programs and protected by the cabotage rules[1] that require the use of a US flagged, built and crewed vessel between two US ports. Despite the protection of the market, US operations are sufficiently costly that the market is depressed and much of what could travel by vessel moves on rail or road where the cargo interests are not captive to marine options. The existence of an aging fleet is testimony to the problems of earning sufficient capital for fleet renewal given the US-build requirements. The cost of this protection to the US taxpayer is well-documented by the US International Trade Commission (2002).
- **Canadian domestic marine transportation.** Compared with the US, this market is considerably smaller but, like the US, it too is a protected market and supplied by aging vessels. Existing service in Atlantic Canada to service Newfoundland is provided by Oceanex and Marine Atlantic, and the log trade on the West Coast. The primary deterrent in Canada to fleet renewal is not a "build in Canada" requirement but rather a punitive tariff on imported ships (25%) and the Canadian Coast Guard's unique vessel regulatory regime that requires an operator to convert the vessel to meet unique Canadian regulations (Hodgson and Brooks, 2004).
- **Mexican domestic marine transportation.** Here too the market is closed and it has been very difficult to find information on the industry and its characteristics. Off the record discussions with industry watchers indicate that the Mexican industry is also not healthy.
- **Foreign flag international shipping.** Foreign flag carriers have the ability to operate within NAFTA as long as they meet the restrictions imposed by the cabotage regulations of each country. This means that a non-national flag vessel cannot carry cargoes between two domestic ports but all moves must be international. This usually results in a one call per country network. Excellent examples include the transborder ferry operations between Victoria and Port Angeles (WA) or Yarmouth (NS) and Bar Harbor (ME) and the Detroit-Windsor Truck Ferry. If more than one port is called, ballast legs2 become a feature of the service and result in lower asset utilization and diminished profitability.

To illustrate, a Canadian- or US-owned foreign-flag vessel could carry cargo from Halifax NS to Portland ME and Boston MA (without the ability to pick up cargo in Portland for Boston) and pick up cargo in either of those two ports bound for Bermuda or Canada; given the imbalance of trading patterns resulting in unused capacity coupled with the inability to fill the space between Portland

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1 Cabotage rules are found in many shipping markets; they require the use of a national flag vessel to carry cargo between two national ports. In the EU, with market liberalization, cabotage rules apply within the EU but not at the national level, so a Greek flag vessel is allowed carry cargoes between two ports in Italy but a Panamanian flag vessel could not.

2 Ballast legs are those segments of the overall trading pattern where the vessel does not carry cargo but must remain empty or partly empty (e.g., travel in ballast).

Table 1: *The Relative State of NAFTA Shipping*

Country	Rank in Goods Trade [1]	DWT Owned [2]	Share of World Fleet	% Domestic Flag
US	1	45.8 M	5.3%	23.1%
Canada	9	5.9 M	0.7%	43.7%
Mexico	14	NA	NA	NA

Note: 1 As ranked for merchandise exports and imports.
2 Total cargo carrying capacity (DWT) of the number of vessels over 1000 gross registered tons owned. 1.2 million DWT are registered under the Mexican flag; how much is owned is not known. Mexico's circumstances as beneficial owners of shipping are not available as UNCTAD tracks only the Top 35 owning nations.

Source: Calculated from data provided by World Trade Organization *International Trade Statistics 2004* (share of trade), and UNCTAD (2005), *Review of Maritime Transport 2004*, Table 16.

and Boston, the vessel struggles to make a profit on the total route. Needless to say, the cargo is more likely to travel over the road (for all but Bermuda legs) or not at all. Currently most cargo bound for Bermuda travels over the road to New York (and then on by sea) or by air freight.

The state of the existing maritime market can be seen in its small transport share accruing to each of the NAFTA countries compared with their position in global trading circles (Table 1). The NAFTA region is a key global trading area yet maritime transport is not a beneficiary. It could be argued that this is a result of the large land mass that comprises North America. Yet, short sea shipping is the second most common mode of transport in that large land mass called the European Union; 43% of its internal trade moves by sea. In NAFTA, maritime transport is a forgotten option.

Neither the Canadian government nor the American government has maritime transportation high on the funding priorities list. There was no SEA-21 money in the latest budget authorization process in the US and the marine mode in Canada receives less financial support than either road or rail activities (Transport Canada, 2005: Table 3-3).

Both Canada and the US face a situation where the capital cost of a new vessel makes many service possibilities uncompetitive, there is a looming crew shortage, and the regulatory climate erects a firewall between domestic and international shipping (the rest of the world does not have such a firewall). As a result, operators are, with only a few exceptions, focused on retaining protectionism and subsidies. It is also likely that the situation in Mexico mirrors that in Canada and the US. Among developed countries, there is currently nowhere in the maritime transport world more dysfunctional than North America.[3]

CANADA AND THE UNITED STATES HAVE BEGUN TO EXAMINE THE POTENTIAL OF SHORT SEA SHIPPING, PRIMARILY BECAUSE IT AFFORDS A MEANS TO REMOVE TRUCKS FROM CONGESTED HIGHWAYS AND IS SEEN AS AN ENVIRONMENTALLY-FRIENDLY OPTION.

Potential marine services within NAFTA

Since 2003 and the signing of the MOC, Canada and the United States have begun to examine the potential of short sea shipping, primarily because it affords a means to remove trucks from congested highways and is seen as an environmentally-friendly option.

Transport Canada has provided financial support to cross-Canada workshops (the findings are detailed in Brooks and Frost, 2004) as well as studies on the two coasts.

On the west coast, the International Mobility and Trade Corridor Project has undertaken a study of short sea shipping with funding from the U.S. Department of Transportation and Transport Canada, managed by the Whatcom Council of Governments. The purpose of the study is to determine the potential of short sea shipping in west coast cross-border freight traffic, describe the most feasible service type(s), and suggest supporting actions that governments could take. Phase 1 examining existing services is complete and phase 2 is due to report soon. More information is available at http://www.wcog.org/.

On the east coast, funding for a North American study has been provided under the Strategic Highway Infrastructure Partnership program to Dalhousie University and the study is currently in progress with a report date of March 2006.

In the Great Lakes, domestic shipping studies are the primary focus. As most Ontario origin/destination cargo currently moves by rail and given prevailing rail rates between Halifax and Toronto, there is interest in a short sea service into the Great Lakes to Hamilton. A study is currently underway to examine the potential of this Canadian domestic move, funded by the Transport Development Centre.

In the US, the US Department of Transportation has hired Global Insight for a study due in the fall of 2005 but its focus is for domestic short sea services only and the consultation process required that the consultant must include shipbuilding stakeholders, which ultimately indicates that the build provisions in the US will remain protected.

The Gulf of Mexico States Accord is trying to get Gulf of Mexico routes on the radar screen in Washington and elsewhere but faces an uphill battle. The regional grouping clearly have a point: 89% of total US-Mexico trade goes through the land border ports and Gulf shipping would alleviate environmental problems, trade congestion, and disperse NAFTA trade while growing the total trade volume.

The same can be said of Canada-US trade; the bottlenecks at the border and on the major land arterial corridors carrying Canada-US freight are becoming severely congested, indicating it is time to begin discussing the forgotten mode and how it is managed and regulated. It is too early to tell if any of these studies will uncover a business case to support regulatory change but the business case to date has indicated that regulation is one of the barriers to further development of the transport network within NAFTA.

The key regulatory barriers to short sea NAFTA corridor development

NAFTA international short sea has a number of regulatory barriers or inhibitors to development:

3 This is not intended to be inflammatory. It is a statement of fact that other developed countries have assessed their regulatory climate for domestic shipping and made adjustments to reflect the modern reality of trade and transport in the 21st century; Canada and the US have essentially retained their post-World War II policies for far too long.

- **Domestic cabotage regulation** (US Jones Act, Canada Coasting Trade Act, similar Mexican legislation). The by-product is that domestic services are possible but at higher costs than would exist in a less protectionist environment and shuttle services are the only international network structure possible and these are only viable on a limited number of routes.
- **The US Harbor Maintenance Tax** (HMT) applies to marine cargo arriving from NAFTA partners as well as those from overseas.
  - The HMT doesn't apply to passenger vessels so the vessel operator can't really mix passenger and freight (if this were desired).
  - The tax is not related to the type of vessel and therefore it applies to shallow draft vessels as well as deep-draft ones (a rather ironic situation).
  - The HMT penalizes cargo owners who choose short sea shipping over truck even though truck may be less environmentally friendly.
  - As the tax is paid by the cargo owner on the value of the cargo ($125 per $100,000 of cargo), it discourages auto parts manufacturers from using the Detroit-Windsor Truck Ferry even though the Ambassador Bridge is gridlocked and LTL truckers returning from Canada would need to contact every shipper for permission to use the marine option.
  - As a result, the short sea-eligible cargoes southbound (the high volume leg from Canada) use truck instead of the marine option putting additional pressure on the all-surface route infrastructure.
- **US-build provisions** for vessels are not mirrored in Canada; Canadian tariffs are not mirrored in the US. Institutional barriers exist in both directions.
- **Seasonality and weather** pose challenges to year-round service. (This is a Great Lakes issue.) Canada charges a $3,100 flat fee for ice-breaking in the Lakes whether the vessel goes 10 miles or across the Lakes. This discourages new route development.
- **Customs cost recovery** in Canada applies to any new routing option but not to existing ones, which also discourages development of any new services.
- **Social costs** have not been addressed. Who should bear the costs of road congestion and air pollution if the existing situation continues?

Where is NAFTA going?

Canadian, US and Mexican maritime transport interests are politically divergent. While the MOC is a statement of cooperation, it does not provide an institution or fora for discussion of the issues. The key beneficiaries of that discussion will be the manufacturers, suppliers and retailers trying to get freight to market; they have no venue to voice their concerns.

This issue is not a high priority for the transport industry as a whole. Marine carriers are currently focused more on security issues and the high cost of fuel, with most seeking to maintain protection of their existing market. This is no wonder as they have invested heavily and have that investment to protect, but all this implies is that regulatory change needs to be phased-in. Other transport interests are more concerned about infrastructure, China trade and the effects of Hurricane Katrina. Political will does not seem to exist in the current US administration to address this and, without the largest player able to see the opportunities for all players in the market, the discussion will not gain traction in the immediate future.

References

Brooks, Mary R. (2001), "NAFTA and Transportation: A Canadian Scorecard," *Transportation Research Record* 1763, 35-41.

Brooks, Mary R. and Jim Frost (2004), "Short Sea Shipping: A Canadian Perspective," *Maritime Policy and Management*, 31, 4, 393-407.

Hodgson, J.R.F. and Mary R. Brooks (2004), *Canada's Maritime Cabotage Policy: A Report for Transport Canada*, Halifax: Marine Affairs Program.

Janda, Richard, Triant Flouris and Tae H. Oum (2005), International Air Transport Policy Issues for Canada: Views from the "Air Currents" Conference of January 2004, *Canadian Journal of Administrative Sciences*, 22, 1, 73-91.

Transport Canada (2004), *Transportation in Canada: Annual Report 2004* (TP-13198), Ottawa: Public Works and Government Services.

US International Trade Commission (2002), *The Economic Effects of Significant U.S. Import Restraints: Third Update*, Pub. 3519, Washington, DC: US International Trade Commission.

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