



Submission to the Review Panel
Rail Freight Service Review
Transport Canada

by

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Vancouver, British Columbia

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Executive Summary

TSI is Canada's largest container terminal operator and handles more than 75% of the containerized cargo moving through Port Metro Vancouver. In order to compete successfully in the global container trade, TSI and its supply chain partners must be able to sell door-to-door service, encompassing the arrival of containers at the port gateway to inland destination. Reliable rail service delivery is a key element of this service package.

TSI wishes to build on its good working relationship with CP and CN to maximize the trade traffic business and economic opportunities that lie ahead. The parties have a mutual interest in positioning the supply chain based on predictability, consistency and velocity to achieve desired asset utilization levels and corporate commercial objectives.

One of the primary rail service issues from TSI's perspective is that railcar supply at its port terminals is not synchronized with container demand on a consistent basis. This chronic undersupply of railcar equipment imposes costs and uncertainty on supply chain partners and customers whose cargo values and investments in the supply chain far outweigh those of the railways. The key to moving forward is to develop more specific and binding service standards and obligations among shipping lines, port terminals and railways based on reciprocal commercial incentives.

TSI's recommendations are based on a strong belief that a commercial approach is the most appropriate means to drive railway performance and accountability to defined standards. As a market leader, TSI is fully prepared to take a leadership role by adopting a fresh, innovative and mutually beneficial working relationship with the railways that will underpin sustained cargo growth and commercial success for all participants in the intermodal supply chain. To this end, TSI is willing to partner with CN and CP on a Service Level Agreement pilot project as an alternative to rail legislative amendments.

Recommendation 1 — Implement Service Level Agreements for Port Terminals

TSI recommends that Service Level Agreements (SLAs) be mandated and implemented between each railway and its container port terminals to establish more specific and commercially binding rail service standards and obligations regarding car supply, transit time performance and service frequency. The purpose is to improve overall customer service reliability and consistency, increase network fluidity and capacity and improve asset utilization for port terminals, railways and shipping line supply chain partners.

Recommendation 2 — Implement a Commercial Dispute Resolution Process

TSI recommends a commercial dispute resolution (CDR) process be established to support Recommendation 1. The objective is a commercial mechanism—committed to by each of the parties to the SLA—that would be available to resolve disputes in a timely, effective manner with the minimal involvement of regulatory agencies. Such a process would fill the void that currently exists due to the lack of an agreed upon commercial dispute model. This CDR model should be a contractual condition of entering into the SLA and encompass stand-alone mediation and arbitration that specifically addresses rates and terms and conditions of services covered.

1. Introduction

TSI Terminal Systems Inc. (TSI) is pleased to have the opportunity to respond to the call for submissions issued by the Rail Freight Service Review Panel in November 2009. The primary objective of this submission is to provide realistic and achievable recommendations that will assist the Panel as it prepares its report on the Review for the Minister of Transport, Infrastructure and Communities.

The remainder of this submission provides some background about TSI, a brief contextual description of today's global containerized shipping business, the role of port terminals, and the critical importance of rail service in the supply chain. This is followed by an assessment of the rail-based logistical system serving port terminals and Canada's international trade, key challenges and issues facing the system and recommendations.

2. TSI Profile: Growing with the Gateway

Established in 1907, **TSI is now the largest container port terminal operator in Canada.**¹ The company is synonymous with the development of Vancouver as Canada's largest container trading gateway. As an industry leader and innovator, TSI handles more than 75% of the containerized cargo moving through Port Metro Vancouver (PMV). The company is also the port's largest employer. It supports 1,500 person-years of employment, including longshore labour and generates more than \$150 million each year in wages and benefits for the local economy.

TSI operates two terminals at the Vancouver gateway—**Vanterm**, located on the inner harbour at Burrard Inlet and **Deltaport**, located at Roberts Bank (see Exhibit 1). Deltaport is Canada's largest container terminal and is operated under a long-term lease agreement with PMV. In January 2010, a new \$400 million third berth was officially opened, increasing Deltaport's annual capacity from 1.2 million twenty-foot-equivalent units (TEU) to 1.8 million TEU. This state-of-the-art terminal has the first quad cranes in North/South America and can handle the largest container ships on the market. Vanterm completed an expansion in 2005, bringing the terminal's annual capacity to 850,000 TEU and TSI's total gateway capacity to 2.65 million TEU.

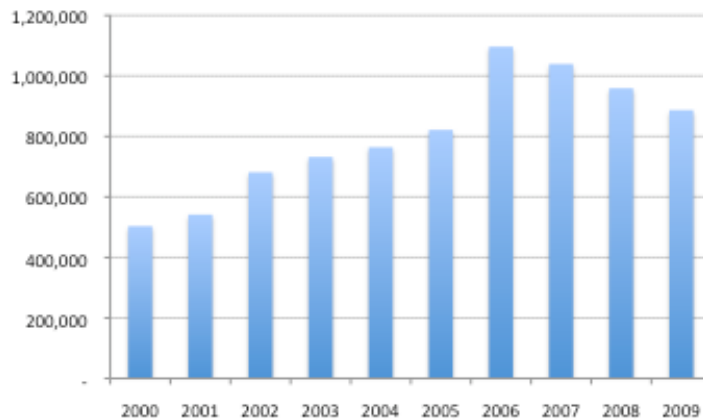
In 2009, TSI handled a combined total of 887,000 TEU at its PMV terminals (Exhibit 2). Although the company's container throughput was down 7.5% compared with 2008, the business has increased by 75% from about 500,000 TEU in 2000. Since 1999, TSI's container business has grown at an average rate of 6.3% a year and the company expects to handle about 1 million TEU in 2010.

¹ TSI is part of GCT Global Container Terminals Inc. that was established in 2007 as a wholly-owned subsidiary of the Ontario Teachers' Pension Plan, one of the largest financial institutions in Canada. GCT operates four container terminals in North America through three principal businesses – TSI Terminal Systems Inc., New York Container Terminal and Global Terminal and Container Services in New Jersey. The latter two businesses handle 20% of New York/New Jersey's total container volume.

Exhibit 1: TSI West Coast Terminal Facilities

	Deltaport		Vanterm	
Location	Roberts Bank, Delta		Burrard Inlet, Vancouver	
Terminal Working Hours (vessel and rail)	24		24	
Area of Terminal (acres)	210		76	
Number of Cranes	10		6	
Annual Capacity (TEU)	1,800,000		850,000	
Number of Berths	3		2	
Intermodal Rail	8 tracks - 3,350 ft each		6 tracks - 1,000 ft each 3 tracks - 1,200 ft each	
Rail Service (share based on railcar footage)	CN – 70%; CP – 30%		CN – 32%; CP – 68%	
Customers (service – carriers)	NWX	Grand Alliance (Hapag Lloyd, OOCL, NYK, Zim, PIL)	PNWN	Hanjin (Hanjin, Cosco, Yang Ming, “K” Line)
	PNW	China Shipping, Evergreen	PNWS	Cocso (Cosco, Yang Ming, “K” Line, Hanjin)
	PNX	Grand Alliance	KPNW	“K” Line, Hanjin, Cocso, Yang Ming, MOL
	TP9	Maersk, CMA-CGM		

Exhibit 2: TSI Port Metro Vancouver Throughput (TEU)



3. Containerized Shipping Environment

TSI operates in a world marketplace. The global container-shipping network is the backbone of intercontinental supply chains that support worldwide manufacturing and merchandise trade. Global manufacturers and other users of containerized shipping services increasingly operate within integrated global value chains and business networks. They are able to source from the best companies, the best technologies and the best skills from around the world. In this environment, the growth potential of Canada’s gateways and key supply chain partners such as TSI will be driven by innovation and the ability to respond to rapidly changing customer needs.

3.1 Industry Value Chain & Vancouver Gateway Role

Moving a container from a shipper to a consignee comprises five discrete industry segments (Exhibit 3).² The first value chain segment, shipment origination, represents the industry's retail level where customers contract and pay for transportation of their containers. At this level, shipping lines compete with freight forwarders for shippers' business. Both offer door-to-door transportation, but carriers use their own ships and forwarders rely on other companies to move containers from origin to final destination. The remaining four segments in the chain represent the industry's wholesale level at which transportation service providers purchase specific services from each other.

Global container shipping industry revenues are estimated at \$205 billion (2007). Of this total, about \$32 billion is associated with retail shipment origination activities and the remaining \$170 billion with downstream wholesale activities. It is interesting to note that the majority of industry revenues, accounting for \$102 billion, are related to vessel ownership and operation. This includes about 4,000 cellular vessels and 4.8 million forty-foot-equivalent units of slot capacity available at the start of 2007.

Exhibit 3: Global Container Shipping Industry Value Chain

	Shipment Origination	Provide Containers	Provide & Operate Vessels	Load & Unload Shipments	Inland Delivery
Key Activities	<ul style="list-style-type: none"> Customer sales Shipment routing Capacity procurement Billing & tracking 	<ul style="list-style-type: none"> Ownership of containers Storage & maintenance 	<ul style="list-style-type: none"> Ownership & operation of vessels 	<ul style="list-style-type: none"> Terminal control (own/lease) Terminal operations Container handling 	<ul style="list-style-type: none"> Ownership and operation of railways & trucks Container handling
Competitor Types	<ul style="list-style-type: none"> Shipping lines Freight forwarders 	<ul style="list-style-type: none"> Shipping lines & leasing firms 	<ul style="list-style-type: none"> Shipping lines Third party outsourcing firms 	<ul style="list-style-type: none"> Terminal operators Shipping lines (U.S.) 	<ul style="list-style-type: none"> Railways Truck carriers
Total Revenue	\$32 billion	\$8 billion	\$102 billion	\$35 billion	\$28 billion
Cost Drivers	<ul style="list-style-type: none"> Salesforce & IT cost per shipment Customer service 	<ul style="list-style-type: none"> Container & maintenance cost per TEU per day 	<ul style="list-style-type: none"> Bunker fuel Vessel ownership/leasing costs Port costs per sailing 	<ul style="list-style-type: none"> Terminal handling costs per TEU loaded/unloaded 	<ul style="list-style-type: none"> Rail costs per TEU Drayage costs per TEU

Canada has a relatively small role in the containerized shipping trades, representing 9.3% of North American container port traffic (in terms of TEU). Of the 4.7 million TEU handled by Canadian ports in 2008, PMV handled 2.5 million TEU, or 52.8%. Vancouver has also been one of the fastest growing container ports in North America since the mid-1980s, registering an average annual growth rate of 13.5% from 1995 to 2005. By comparison Long Beach grew at 9% a year, Los Angeles at 11.3%, Seattle at 3.9% and Tacoma at 3.6%.³ By the end of 2009, PMV's share of the Canada-U.S. west coast container port market was 11%.

² This classification and Exhibit 3 are adapted from *American Shipper*, July 2008 and research by MergeGlobal.

³ Source: *Preparing for Success, Forecasting Surface Freight Demand*, WESTAC, March 2006.

Vancouver's success is part of the broader increase in west coast container port traffic. The main driver has been Asia-Pacific trade traffic growth, supported by the rapid economic and manufacturing growth in China. In aggregate, the **transpacific trade is highly imbalanced** with considerably more laden containers entering west coast ports than leaving them. Although containerized exports from Vancouver once exceeded imports, inbound laden containers have been consistently setting the overall level of activity since 2002.

Rail service delivery is part of a complex, multi-stakeholder supply chain. The main implications of the containerized shipping environment with respect to the Rail Freight Service Review are:

- Continued intense competition among global supply chains means that service reliability and consistency will determine commercial success in the marketplace;
- Supply chains that focus on serving the customer—shippers and beneficial cargo owners—will see the returns in terms of cargo growth and profitability;
- While the railways are an important segment of container value chain, other industry segments and importers/exporters themselves have a far greater financial stake (see also Exhibit 4 below);
- A supply chain is only as good as its weakest link—therefore, all participants have a vested interest in collaborating efforts to grow the business and should share in the responsibility to develop operational improvements.

3.2 Container Terminal Operations Profile

Container port terminals comprise all activities that occur between the quay (vessel berth) and port gate, including:

- Providing vessel berthing capacity (TSI has a total of 5 berths in PMV);
- Loading and unloading laden and empty containers to/from vessels;
- Transferring containers to staging yards within the terminal area for pickup/delivery by rail and truck;
- Loading containers onto on-dock intermodal trains;
- Checking containers in and out of terminal gates.

The primary role of marine container terminals is to provide *throughput* of containers. This is important because the ultimate capacity of the terminal is inversely proportional to the dwell time. For example, if a terminal has an average container dwell of 6 days and is able to reduce that to 3 days, it can effectively double the capacity of the infrastructure asset, other factors being equal. Therefore, TSI has a sharp focus on reducing cargo dwell time and providing timely delivery.

Container terminals are part of a complex global logistical operation due to the scope of markets served and the many operational challenges. TSI serves several different long distance overseas markets as well as Canadian and U.S. markets. It is currently developing new services to the U.S. Midwest in conjunction with its railway and shipping line partners. The market environment is highly competitive. TSI must compete with other west coast terminals to satisfy shipper needs where there is a premium on speed to market, consistency and timely delivery from *end-to-end* in the supply chain.

A terminal such as Deltaport typically receives 2,500 containers at a time from each of five vessel calls per week. In this import-driven business it is important for the terminal to know what is coming at them and how fast it needs to move (i.e. there is an option for expedited rail service within 24 hours of vessel discharge). Shipping lines and freight forwarders provide information to the terminal such as inbound cargo volume and type of cargo, destination, consignee and ship arrival time using electronic data interchange (EDI). This information is normally received 16-24 hours prior to vessel arrival and the railways also maintain a 4-week rolling volume forecast that is about 90% accurate two weeks out from vessel arrival and about 95% accurate one week out.

Once the vessel arrives, the terminal discharges it and organizes the containers into as many as 50 different “separations” according to cargo types (e.g. refrigerated cargoes, automotive parts), shipments moving by either CN or CP, truck delivery to local destinations or off-dock transloading terminals, 20-foot and 40-foot container types and inland destination, etc.

With a working inventory of containers continuously arriving at port terminals, the **synchronization of empty railcar capacity with container demand is critical** in order to keep terminal operations and the entire supply chain fluid. The business operates in terms of ‘footage’ where 16.5-19 feet of railcar footage is required per TEU, depending on the railway. In simple terms therefore, a 6,000-foot train can accommodate about 310 to 360 TEU and a single vessel delivering 2,500 TEU would require about 8 trains. In order to meet it’s customer commitments and remain fluid at Deltaport, TSI requires a total railcar supply of up to 72,000 feet/day (36,000 feet inbound and 36,000 feet outbound).

The railways operate trains as a “conveyor belt” in order to balance the movement of containers between the port terminal and various inland intermodal terminals located in western Canada, Toronto, Montreal and U.S. terminals (e.g. Chicago, Memphis). Another important aspect of the system is repositioning of loaded and empty containers (and locomotive assets) from inland terminals back to the port terminals.

3.3 Importance of Rail to Intermodal Services

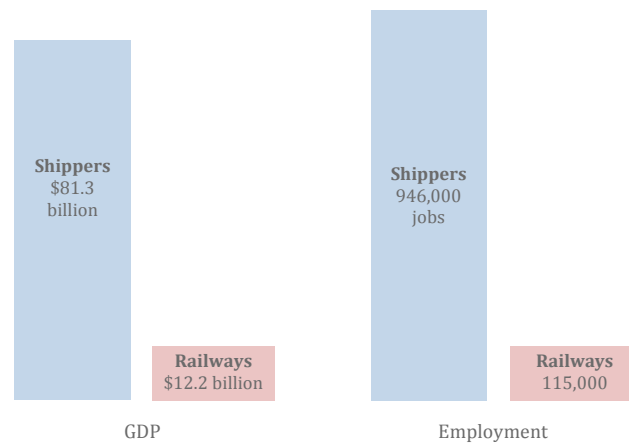
Container ships are mobile assets. They are not locked in to any one port or terminal. Therefore, gateway competitiveness and the ability to capture growth opportunities depends on shippers and freight forwarders having the confidence that a supply chain serving their gateway of choice is reliable and efficient.

About 70% of the containers arriving at PMV by ocean leave the marine terminals directly by rail. Of the remaining 30%, some is delivered by truck to local markets, but most of the cargo is trucked to off-dock terminals in the region and transloaded from 40-foot marine containers into 53-foot domestic containers. The containers are then moved by rail to various inland terminals. This is a common industry practice to make better utilization of equipment and improve efficiency. The net result: about 80-90% of the inbound containerized cargo leaves Greater Vancouver by rail, varying with terminal and customer needs. Rail is also important to the outbound side of the business. Export forest products, specialty grains and other products arrive in the region by rail, as well as a supply of empty containers being repositioned from inland terminals to port terminals.

In terms of the principal containerized commodities that depend on rail, consumer/household goods rank as the top import, representing about one-third of PMV's total containerized import tonnage. Manufactured parts and components rank second. A good example is imported auto parts that feed the manufacturing heartland in Ontario. In early 2007 when CN was on strike, Ford had to shut down production because the containers with the parts for the assembly line were sitting on the docks in Vancouver.

From a public policy perspective, it is important to remember that the demand for rail services is a derived demand. The contribution to the Canadian economy of shippers—the purchasers of rail services—far outweighs that of the railways. In terms of GDP, the economic contribution of shippers relative to the railways is approximately 6.7 to 1 and in terms of jobs 8.2 to 1 (see Exhibit 4).

Exhibit 4: Contributions to the Canadian Economy - Shippers & Railways (2007) ⁴



Another important factor is rail capacity that includes having appropriate contingency plans to be able to service the demand. This is equally important: 1) in the short term when unexpected service problems arise that significantly impact the entire supply chain (e.g. weather, derailments); and 2) in the long term when timely capacity expansion becomes critical to grow the business. Supply chains around the world are becoming leaner in the continuous effort to drive down costs. However, if transportation assets in the system are spread too thinly, there is limited flexibility to recover from service outages and extended recovery periods erode supply chain competitiveness.

⁴ Source: *A Comparison of Contributions to the Canadian Economy of Key Bulk Commodity Shippers and Rail Freight Carriers*, Rotman School of Management, University of Toronto, October 2009 prepared for the Western Canadian Shippers' Coalition. The figures are for oilseed and grain farming, coal mining and forest products manufacturing. If the retail sector is included, the GDP contribution is estimated to exceed \$110 billion.

4. Rail Service Delivery at TSI Terminals

The following discussion provides insights into the rail service performance record and key issues from TSI's perspective as the largest terminal operator in Canada. In keeping with the terms of reference for the Review, the focus is on identifying "problems and issues with respect to railway service including those stemming from other elements of the logistics chain." TSI has adopted a fact-based approach aimed at advancing constructive, practical and achievable recommendations.

4.1 Performance Assessment & Key Issues

a) Railcar Supply & Container Dwell Time

From a container terminal operators' perspective, the key rail service performance indicators (KPIs) are:⁵

- **Railcar supply** – indicates available intermodal car equipment capacity to transport inbound and outbound loaded and empty containers – measured in feet;
- **On-the-ground container count** –partial indicator of fluidity – measured in feet;
- **Container dwell time** –indicates one component of on-time delivery and gateway competitiveness– measured in hours/days specific to each container.⁶

Based on TSI's experience during the past five to seven years, **there has been a chronic undersupply of railcar equipment relative to demand** at its Vancouver terminals. Even during August 2009, a time of relatively low demand due to the global recession, the average daily demand at Deltaport was 29,000 feet versus car supply of 26,200 feet for CP and CN combined. This contributed to an inventory backlog at the terminal ranging from 60,000 feet to 113,000 feet a day, well above the current target level of 54,600 feet. When railcar supply is not synchronized with demand, as shown in Exhibit 5, terminal capacity, throughput capability and customer service are significantly compromised.

Exhibit 6 highlights container dwell performance from September 2006 to October 2007. For most of this period, the average monthly dwell times exceeded three days that is the interim target level PMV has been working towards. Over the longer term, the port must achieve a two-day dwell in order to be competitive with "best in class" North American container ports where success critically depends on day-to-day service reliability and consistency.

Exhibit 7 provides an example of the impacts of late arrival of trains in terms of the additional costs that are forced onto the terminal. As shown in the exhibit, the additional costs are estimated to be \$32,200 while the railway is able to save associated equipment costs at its own discretion. These terminal costs exclude the direct and indirect commercial costs of unreliable and inconsistent service (i.e. possible lost customers, slow working of vessels at \$50,000/day).

⁵ Other common KPIs are container moves per hour (vessel operations – loading/unloading) and container moves per gang (intermodal operations – loading/unloading of railcar equipment).

⁶ Total transit time is a key indicator for shippers and is measured as the elapsed time from discharging a vessel to unloading a container at destination ramp (e.g. Montreal, Toronto, Chicago); it is comprised of: a) terminal dwell time (i.e. at port terminals and local rail yards); and b) rail in-transit delivery time.

Exhibit 5: Deltaport Railcar Supply Performance

*Daily Allocation vs. Actual Car Supply
June - December 2009*

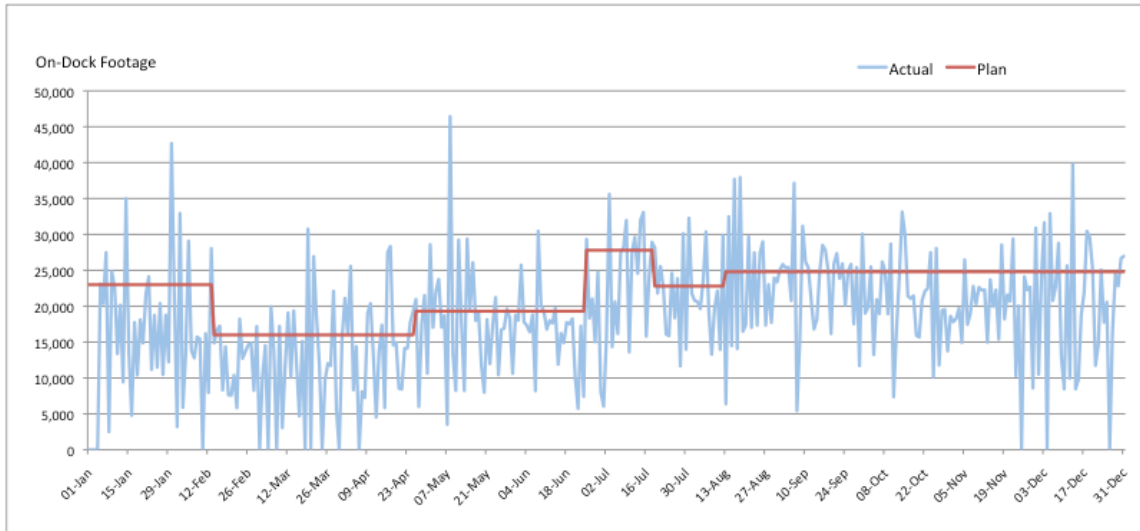


Exhibit 6: Deltaport Container Dwell Times & Benchmarks

*Average Dwell Time in Days
2006 - 2007*

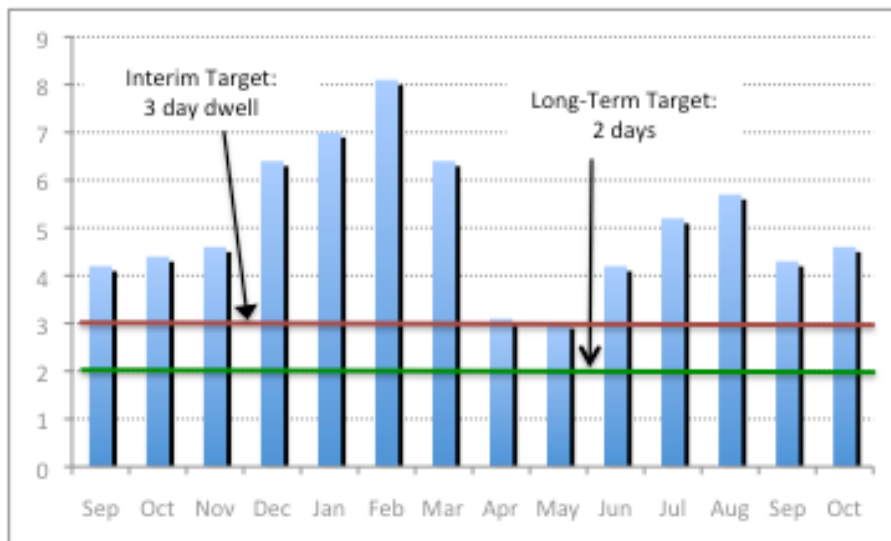
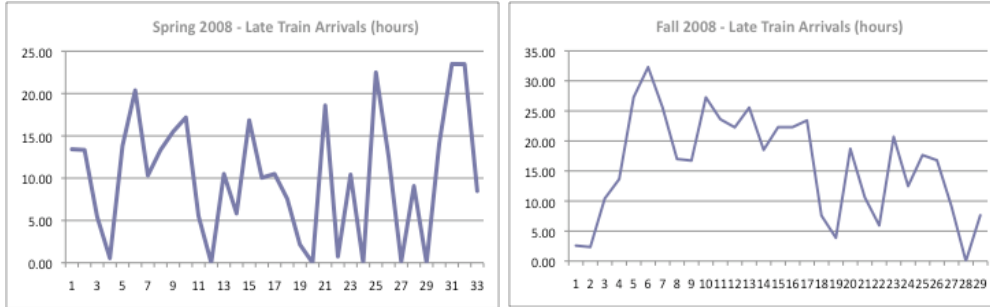


Exhibit 7: Cost Impacts of Late Train Arrivals

The charts below indicate container train arrivals at Deltaport for representative periods during reasonably strong demand in the early part of 2008 and during a period of declining demand with the onset of the global recession in late 2008. Each chart shows the variance in hours from the scheduled train arrival time. TSI has experienced similar wide variations in train arrivals during 2009 and in 2010, to date.



Late train arrivals have a significant impact on terminal operations because of the adverse impacts on labour costs and productivity. A typical rail gang consists of a 21-person decking gang and 16-person loading gang as shown below. Crews must be ordered with a 16-hour lead-time, for example by 1500 for the 0800 shift the next day. Based on the longshore labour collective agreement, crews must be guaranteed a minimum 8-hour shift.

Decking Gang			Loading Gang		
Type		Men	Type		Men
Foremen	1	1	Head Foreman	1	1
Tractor Trailer	8	8	Foremen	1	1
RMG	1	2	Tractor Trailer	7	7
RTG	2	3	RMG	1	2
Empty Handler	2	2	RTG	0	0
Reach Stacker	1	1	Empty Handler	0	0
Checker	2	2	Reach Stacker	2	2
Dockmen	2	2	Checker	1	1
Total		21	Dockmen	2	2
			Total		16

Late arrival of railcar equipment forces the terminal operator to absorb labour costs including unproductive and lost time. Typically, unproductive labour costs can be significant because it is difficult to reassign labour to perform other activities at the terminal once it has been ordered. The estimated cost effects of a train that arrives one day late are as follows. These are the real costs to the terminal to separate and create space to discharge containers due to high 'on the ground' counts.

TSI Estimated Cost Impacts of Late Train Arrivals & Insufficient Car Supply *

- Vessel discharge: unproductive/additional time for decking + loading personnel, 6 shifts = \$22,100
- Rail load-out and container storage: added labour cost due to congestion build-up, 6 shifts = \$10,100
- **Total additional costs to terminal operator = \$32,200**
- **Other costs:** reputation and potential lost business = unknown (e.g. could lose a shipping line customer)

* During periods when the terminal is not operating at/near practical capacity the congestion effect would be lower. The cost figures assume weekday operations. If the service disruption occurred on a weekend, the total cost impact would be about \$37,500.

A related car supply issue is the relatively high incidence of bad order cars that sometimes approaches 10% of the railcars supply provided by the railways. Bad order cars are not suitable for use in the intended purpose, thereby contributing to car supply problems, reducing productivity and potentially affecting workplace safety at the terminals.

The shipping lines must share in the operational responsibility to coordinate vessel arrivals with railcar supply. Vessels are operated on set itineraries that drive berth window schedules at the port. However, late vessel arrivals and ship bunching impact the flow of containers to/from the port and thus railcar ordering and fulfillment. Although there have been periods when demand and supply are reasonably aligned, railcar supply remains highly variable even when forecast demand and vessel arrivals approximate actual demand.

b) Service Standards & Commitments

Another key issue is that **rail service levels to container port terminals are not adequately defined**. Specific service commitments are needed regarding *transit time performance* and *frequency of service*. Improvements are also required for contingency services to address unplanned service problems (e.g. poor weather conditions, derailments). The existing situation where TSI and its customers have no assurance prior to shipping cargo as to the level of rail services that will be provided is unacceptable.

Rail transit time performance is a function of several factors including loading/unloading time at port and inland terminals, time spent in local/other rail yards and en-route transit time between terminals. While the issue of dwell time at port terminals was described above, there is no visibility from the terminal operator's perspective regarding delays at local rail yards that can significantly impact transit time performance. This represents an area where more data and information should be provided by the railways in the interests of monitoring and improving the reliability and performance of the supply chain—from *end-to-end*—to meet customer requirements and to enhance Canada's reputation as a reliable international trade partner and North American gateway.

With respect to the frequency of service, there are two recent examples. The first was CN's decision in July 2009 to suspend rail services to Vanterm, Centerm (DP World) and Fraser Surrey Docks. CN continued to meet its obligations to these terminals by trucking containers between the terminals and its off-dock intermodal facility, Vancouver Intermodal Terminal located in Surrey. The second example was CN's reduction in rail service to Deltaport from two trains to one train a day in October 2009.

Although the adverse impacts of these service level changes turned out to be minimal, the fact that any one participant in the supply chain is able to make unilateral operational changes with minimal consultation or agreement among stakeholders is of concern. In this case TSI was consulted, however, the rail service level changes had the potential to impact several aspects of its operations including the ability to market and manage on-dock rail service to its customers and the potential for increased pressure on the truck reservation system that affects terminal fluidity, throughput and overall supply chain performance.

c) **Accountability & Lack of Commercial Incentives**

Port terminal operators such as TSI have no formal contractual relationships with railways to define service obligations even though railway service levels have a major impact on their daily operations and commercial viability. In addition, there are no financial incentives in place that would allow port terminals to drive supply chain service performance and accountability. As a result, the risks, costs and rewards of doing business are not distributed fairly across the network. Therefore, the individual actions of supply chain participants do not optimize *system-wide* performance in a manner that meets customer requirements.

4.2 **Conclusions**

In order to compete in the global container trade, **TSI and its supply chain partners must be able to sell door-to-door service**, encompassing the arrival of containers at the port gateway to inland destination. Reliable rail service delivery is a key element of this service package. TSI wishes to build on its good working relationship with CP and CN to maximize the trade traffic business and economic opportunities ahead. The parties have a mutual interest in positioning the supply chain based on predictability, consistency and velocity to achieve desired asset utilization levels and corporate commercial objectives.

One of the primary rail service issues from TSI's perspective is that railcar supply at its port terminals is not synchronized with container demand on a consistent basis. This chronic undersupply of railcar equipment imposes costs and uncertainty on supply chain partners and customers whose cargo values and investments in the supply chain far outweigh those of the railways. Another issue is that rail service levels to container port terminals are not adequately defined. Specific service commitments are needed regarding *transit time performance* and *frequency of service*.

The key to moving forward is to develop more specific and binding service standards and obligations among shipping lines, port terminals and railways based on reciprocal commercial incentives to enforce service performance and accountability.

5. **Recommendations**

TSI's recommendations are based on our strong belief that a commercial approach is the most appropriate means to establish customer-centric rail service standards and drive accountability to those standards. **The primary objective is end-to-end supply chain service reliability and consistency** that will underpin sustained cargo growth and commercial success for all participants in the intermodal supply chain.

The effectiveness of this approach will depend on cooperation and close coordination among all supply chain participants in several areas including: developing and communicating accurate demand forecasts; matching railcar equipment supply with market requirements; and providing timely contingent capacity to deal with short-term cargo volume fluctuations. An appropriate suite of metrics is also needed to measure and monitor supply chain performance, primarily from the perspective of the shipper/cargo receiver in an objective, clear and visible manner.

Recommendation 1 — Implement Service Level Agreements for Port Terminals

TSI recommends that Service Level Agreements (SLAs) be mandated and implemented between each railway and its container port terminals to establish more specific and commercially binding rail service standards and obligations. SLAs should include the following commitments for the purpose of improving overall customer service reliability and consistency, increasing network fluidity and capacity and improving asset utilization for port terminals, railways and shipping line supply chain partners.

- ***Car Supply*** – the obligation to provide an agreed daily footage of intermodal railcar capacity each week, subject to adjustments for volume fluctuations that include the provision of reserve capacity and communications protocols in order to maintain a target “on the ground” daily count of containers;
- ***Transit Time Performance*** – the obligation for the railways to perform defined transit times on all loaded and empty container traffic moving to/from port terminals. Defined transit times should include obligations regarding dwell time targets as well as en-route travel time standards to/from inland points;
- ***Service Frequency*** – the obligation to provide an agreed number of trains per day with clearly defined departure and arrival times;
- ***Key Performance Indicators & Monitoring*** – specific, measurable and realistic KPIs that are straightforward, relatively few and that differentiate the performance of railways, shipping lines and port terminals to help identify specific opportunities to improve the network should be agreed upon and continuously monitored.

In many cases rail users are penalized for a variety of reasons relating to the inefficient use of railway assets (e.g. delays in loading or unloading cars). Financial penalties against the railways are largely non-existent. Therefore, TSI further recommends that each SLA contain reciprocal financial penalties in order to provide an effective means of aligning railway operating practices and service delivery performance with customer requirements (e.g. freight forwarders, beneficial cargo owners/shippers).

These commercial incentives should be designed to make the railways accountable for cases of sub-standard service, particularly where commercial harm results as a result of a service breakdown. The penalties would also apply to the port terminal in the case where a rail service failure is attributable to the terminal operator. The incentives should be set at levels that encourage all parties to perform to the agreed standards.

As Canada’s largest terminal operator with ownership representing significant investment potential in the Asia Pacific Gateway, TSI is fully prepared to take a leadership role in cooperation with the railways to advance this recommendation as an alternative to rail legislative amendments. Therefore, TSI is willing to partner with CN and CP on a ***Service Level Agreement pilot project*** to be implemented in 2010. The parameters of this pilot initiative would encompass the key elements outlined above, tested over an agreed time period and then reviewed at the end of the test period in order to identify aspects of the SLA that may require improvement.

**Recommendation 2 —
Implement a Commercial Dispute Resolution Process**

TSI recommends a commercial dispute resolution (CDR) process be established to support the SLA recommendation. The objective is to provide a commercial mechanism—committed to by each of the parties to the SLA—that would be available to resolve disputes in a timely, effective manner with the minimal involvement of regulatory agencies. Such a process would fill the void that currently exists due to the lack of an agreed upon commercial dispute model. This CDR model should be a contractual condition of entering into the SLA and encompass stand-alone mediation and arbitration that specifically addresses rates and the terms and conditions of services covered.