Executive Summary

Introduction

Improving railway efficiencies and service is an ongoing concern for a major grain exporting country like Canada. Inadequate railway service prevents market growth, adds to downstream supply chain costs and limits domestic profitability. Rail inefficiency is a result of the lack of competition between rail firms since it is difficult to incentivize railways in areas where they have limited accountability for their actions.

Railways have a variety of measures that govern shipper efficiencies, some of which are known as asset use tariffs. These tariffs are used to penalize shipper failures through a monetary fine in order to gain shipper efficiencies but there are currently no reciprocal penalties or shipper tariffs in place to penalize railway failures. In order to create a fully efficient supply chain, railways need to be accountable for service failures.

Alberta Wheat Commission (AWC) proposes:

- *AWC proposes the development of language within the Canada Transportation Act Sections 117 and/or Section 126 surrounding standardized shipper reciprocal penalties in which grain shippers can impose accountability on railways to increase system efficiencies through one of two options*:
  1. *Standardized Shipper Asset Use Tariffs through the Canadian Transportation Agency*
  2. *Standardized Shipper/Carrier Service Level Agreements (SLA) between parties*

The notion of a shipper asset tariff or a SLA is to create an incentive for railways to focus on performance and invest in assets that can improve efficiencies. This recommendation is positioned to allow railways to act like competitive firms in order to drive efficiencies, lower shipper risks and ultimately develop foreign markets for Canadian exports through reliability and cost effectiveness.

Recommended Shipper Asset Use Tariff/SLA Charges

The focus of shipper tariffs or SLA charges is on empty railcar spotting delays and loaded railcar movement.

- *Charges between $100 and $250 per car per day are recommended for delayed empty car spots depending on seasonality and the severity of the delay.*
- *Recommended loaded rail car movement charges are between $100 and $150 per car per day and are dependent on seasonal empty hopper car demand.*

These proposed penalties are equivalent to tariffs currently imposed by the railways on shippers for system delays.

Interswitching

The improvement of interswitching is focused on increasing interchange capacities and placing a system that naturally monitors interchange movement through an interswitch tariff. While interswitching zones have recently been increased to 160 kilometers in Canada there is little incentive to utilize interchanges that have less than 100 car capacity.

AWC proposes:

- *Public funding to increase interchange capacity and reduce cost barriers for interswitching.*
- *The creation of an asset use tariff system that monitors movement of railcars during the interchange and loading process of interswitch traffic.*

Interswitching improvement is focused on increasing interchange capacity through public funding and monitored through an interswitch tariff system. Increasing interchange capacities allows shippers to ship at competitive freight rates to those of the originating carrier. *Low capacity interchanges can cost shippers upwards of $7.85 per tonne and $11.85 per tonne of additional freight which acts as a barrier to interswitching.* Reducing freight costs and monitoring the interswitch will enable shippers to freely use interswitching as a mode shipping competitiveness.

Summary

AWC supports shipper tariffs or SLAs to create an equalized playing field between shippers and railways. Without a standardized tariff or SLA system in place there is little incentive for railways to create efficiencies through adequate investment. In conjunction with reciprocal penalties, the AWC supports public interchange funding to create railway competition. With a sufficient tariff monitoring system in place, railways and shippers will have incentive to interswitch traffic and each entity will strive towards the common goal of having a second to none Canadian transportation system.

Alberta Wheat Commission: Mandatory Railway Reciprocal Penalties and Interswitching Recommendations

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Introduction

Since the deregulation of the Canadian Wheat Board (CWB) the focus has been on creating competition in the Canadian grain supply chain. Where investment is possible, new firms have entered the grain market through asset purchases or new builds. Canadian grain companies are expanding assets to become more efficient and competitive within the Canadian market place and multinational firms are reviewing new investment opportunities within Canada.

Competition between grain companies bodes well for farmers but there is still an issue of competition between Canadian railways. Canada is situated with two class one railways and market entry by another rail firm is highly unlikely because of the large startup costs involved with placing the necessary assets needed for a railway. The lack of competition between railroads leads to less or no accountability of delayed shipments and the capacity to set asset use tariffs to cover all shipper delay costs. The ability for grain companies to set tariffs is one way to cover costs of railway delays and create an equalized penalty system.

In many situations railways have the ability to exert monopoly like power upon shippers and when reviewing grain shipping facilities in Western Canada there are currently 4 facilities out of 370 with dual railway access. Interswitching is in place to create competition and allow shippers to simulate dual rail access but there is resistance from railways, and grain companies have concerns over cost effectiveness.

The purpose of this brief is to recommend reciprocal penalties in which grain shippers can impose accountability on railways to increase competition and also to recommend interswitching improvements to create compatible interchanges.

Weekly Car Allocation

Grain shippers must order empty hopper cars by Tuesday at 10:00 AM MT on Canadian Pacific (CP) and 12:00 noon MT on Canadian National (CN) each week. The grain shippers are then asked for a list of priority orders by the railroads in which they can make their allocation decisions. Friday morning, car allocation is set by the railways for the following week for a specific spot date and time[1]. Shippers then can confirm the product they are shipping depending on quality or product demand at destination. Car orders that are not allocated are shortfalled and added to the next week's pool of orders unless cancelled by the shipper or the maximum order threshold is met on CN or CP. If the maximum thresholds are met, excess orders will be cancelled by the railway.

[1] CP's dedicated train allocation methodology follows a shipper/carrier confidential contract and may differ from the above description.

Weekly Order Spot Changes
Shippers are informed of delays or advancements of their allocation by the railways as each week progresses. The spot time changes can cause shippers to alter products they are shipping to meet vessel or destination needs. Shippers do not always have the flexibility to change shipments and when cars are delayed, the entire supply chain is delayed. Delays cause end product users to wait for product which then in-turn they impose penalties on shippers and ultimately passed on to the producer. Penalties are imposed in many different forms including contract penalties, vessel demurrage and additional risk assessed in future purchasing bids.

Current Weekly Order Delay Penalties from CN and CP
CP has two tariffs in place that can be reciprocated by grain companies. The first is a last minute changes tariff (Item 30) where last minute changes to local service is charged out at $95 per car and the inability to place cars at a shipper facility is $100 per car plus switching fees (Item 31).

CN Tariff (Item 5600) covers reducing, cancelling or changing car orders. CN charges $100 per car for cars already planned for service up to the point of placement.

Shipper Delayed Spot Charge Recommendation
The recommendation is for CN and CP to identify and supply shippers with spot dates and times by noon MT Friday of each week[2]. The railways then can make changes to the spot time within 48 hours of the original time and any time greater than 48 hours a fee of $100 per car per day can be charged by the shipper for up to 7 days. If car allocation is delayed greater than 7 days, a charge of $250 per car per day can be charged until the allocated cars are received.

- *Empty car spot time changes greater than 48 hours can result in a fee of $100 per car per day up to 7 days thereafter a charge of $250 per car per day is chargeable until the empty car order is spotted.*

Spotted Car Allocation Demurrage Charges
CP states in their Asset Use (demurrage) Item 10 tariff that "Rail car dwell, either in railway yards or at loading facilities is inefficient, consumes capacity and is an area where improvements can be realized." In order to create these efficiencies, CP implements their demurrage tariff which is dependent on a number of factors including fleet status demand, hazardous materials and private or railway owned fleet. Currently CP uses non-hazardous railroad fleet cars in grain service. At the shipping origin, railway owned cars are given one credit day to load and thereafter a demurrage rate is charged depending on fleet demand.

CP recently changed their tariff to a demand based system where origin asset use charges are based on industry demand for fleet cars. In periods when demand is low there is a $90 per car per day charge, medium or balanced demand is set at $100, and high demand is $200 per car per day. CP recognizes that during peak periods and demand is high, it is in their best interest to have customers order cars that can be used. If demand is low, they discount the asset use time to promote slower turns by customers.

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[2] This tariff item covers open allocation only. CP Dedicated trains are under contract between shippers and railways and will not be covered under this tariff item. Shippers and railways can set agreed upon penalties within their confidential contract.

The CN loading asset use tariff differs from CP's since it is set on location based demand instead of overall fleet demand. CN set their tariff rate at $140 per car per day for the greater Vancouver and Chicago areas and $100 per car per day for all other areas.

It is known that often shippers load and release cars within the allotted period only to witness loaded cars dwelling on their track for days and even weeks. This begs the question as to why there are not reciprocal penalties for railroad lift delays.

Shipper Demurrage Charge Recommendation at Origin
Once cars are loaded at a shipper's facility and released back to the railway, the railway company must advance unit trains (traffic greater than 40 cars) within 24 hours and blocks less than 39 cars within 48 hours. Thereafter, the shipper can impose a demurrage rate of $100 per car per day from January to August and $150 per car per day from September to December (peak season).

- *Unit train traffic must be lifted within 24 hours and small blocks within 48 hours or a rate of $100 per car per day from January to August and $150 per car per day from September to December is chargeable to the carrier.*

Traffic Held In-Transit
Once cars are lifted from a shipper's facility the railways have a tariff in place for cars held en route or at the customer's request. For CN the charge is $100 per railcar per day excluding the greater Vancouver and Chicago area. Within the greater Vancouver and Chicago area the charge is $140 per car per day. CP charges are demand based at $90 per car per day during low demand, medium or balanced demand is set at $100, and high demand is $200 per car per day. Once the cars have been pulled from the shipper's facility, there is a chance they can be held en route due to inadequate supply of power and crews by the railway company or various other reasons that stop shipments.

Similar charges must be accounted for by shippers or there is a lack of incentive for railways to invest in adequate resources. A held en route shipper tariff may be one way to incentivize the railway to invest in the appropriate resources.

Shipper In-Transit Charge Recommendation

- *The shipper can impose a charge of $100 per car per day to the rail company for cars held en route in one location for greater than 24 hours until the time the cars are advanced.*

Loaded Cars for Spotting at Destination
Demurrage charges at destination or unloading work on a debit and credit system. CN allocates two free days and CP allocates one free day to unload cars at destination. After the free period expires the aforementioned asset use tariff comes in effect.

Shipper Traffic at Destination Charge Recommendation

- *If cars are not spotted within 24 hours of being ordered into the unload facility, the shipper can impose a demurrage rate of $100 per car per day from January to August and $150 per car per day from September to December (peak season) on the servicing carrier.*

Interswitching and Competition

Recently interswitching zones have been increased to 160 kilometers in Canada to increase the reachability and competition between railways and shippers. This is a step forward for increasing competition between Canada's national railways and can be used as a building block to improve upon. In specified locations grain companies have successfully used interswitching regulation but still cost and service concerns exist.

Railways resist interchange locations that have efficiency and capacity concerns which slow network velocity. One example of a high capacity interchange is Saskatoon where 100 cars can be interchanged from CN to CP or vice versa. Since the interchange capacity can handle 100 rail cars, the railways are more willing to complete interchanges and the interchange is cost effective for shippers. Compare this interchange to the one in Calgary where railways have indicated closer to 60 cars can be interchanged. There is a natural resistance by the railways to interchange a lesser efficient block size and a larger freight differential for shippers.

In the Calgary example, a shipper would lose the 100 car incentive since the capacity is just 60 cars. This cost is $3 to $4 per metric tonne depending on car capacity and product and on top of this would be the interchange fee of $0.53 per tonne to $4.35 per tonne depending on the interswitch zone, distance and car size. To ship 60 cars from a 100 car facility would cost a shipping company approximately $4.03 to $7.85 per tonne and when compared to an interswitch move of 100 cars where the cost is $.53 to $4.35 per tonne.

	Freight	*Interswitch Rate $/MT*		*Block Size Cost $/MT*		*86 MT/Car*		*100 Car Equivalent*	
Interswitch Block Size	**Incentive**	**Min**	**Max**	**Min**	**Max**	**Min**	**Max**	**Min**	**Max**
< 50 Cars	$ -	$ 0.53	$ 4.35	$ 8.03	$ 11.85	$ 691	$ 1,019	$ 69,058	$ 101,910
50 to 99 Cars	$ 3.50	$ 0.53	$ 4.35	$ 4.03	$ 7.85	$ 347	$ 675	$ 34,658	$ 67,510
100 + Cars	$ 7.50	$ 0.53	$ 4.35	$ 0.53	$ 4.35	$ 46	$ 374	$ 4,558	$ 37,410

The additional freight cost of shipping less than the 100 cars through an interchange is substantial. Using an 86 metric tonne car equivalent, shipping in blocks less than 50 can cost up to $645 more per car and in blocks of 50 to 99 can be up to $301 per car in additional freight.

Additional freight of $7.85 per tonne and $11.85 per tonne is a disincentive for shippers to interchange less than 100 hopper cars unless the railways are willing to combine cars which limits system velocity. In any case, if a shipper does choose to ship using interswitching in an area with poor rail service, the freight differential will be directed to the farmer in the shippers bid to purchase grain. Interchanges with a capacity of greater than 100 cars can help improve interswitching and competition. If competition is in place, railways will set competitive freight rates to capture business.

There is an apparent incentive for railways not to increase their interchange capacity and remove the barrier of inefficiency since it would be increasing competition. Low interchange capacities price shippers out of the movement and it is clear that investment in interchange capacity for Canadian rail is needed. Unless legislated or supportive funding is put into place to increase these capacities, railways have an incentive to keep interchange capacities at their current levels.

Interchange Governing Tariff

Both railways and shippers have concerns over how effective traffic will be moved over an interchange point to the shipper's location and back to interchange. According to Canadian interswitching regulations, "A terminal carrier shall at all times furnish to interswitched traffic a level of service equal to the level of service accorded the terminal carrier's line haul traffic." The regulation covers service but unless noted, poor service may not be recognized and complaints would go unheard. One way to govern interswitching is through asset use tariffs similar to those of which railways impose on shippers today.

Recommended Interswitching Asset Use Tariff

- *After traffic has been offered by the origin railway, the delivering carrier has 24 hours of free time to receive the traffic or will be subject to $150 per car per day by the origin railway until the traffic is accepted and placed in the delivering carrier's yard.*
- *After traffic is received in the delivering carrier's yard, they have 24 hours of free time to move the traffic to the shipper or are subject to a $150 per car per day fine until cars are placed actual in the shipper's yard.*
- *The shipper is subject to asset use tariff charges by the delivering carrier.*
- *The delivering carrier is subject to proposed shipper origin asset use charges.*
- *Once the cars are pulled from shipping origin, the delivering carrier has 24 hours to move the cars to their interchange yard or will be charged $150 per car per day by the origin railway.*
- *The origin railway has 24 hours to accept the cars once they have arrived in the delivering carrier's yard or are subject to a $150 per car per day fine from the delivering carrier*[3].

The Interswitch Asset Use Tariff would be in place as a mechanism to motivate all parties in the transaction to effectively transfer the traffic, limit loading delays and support a competitive environment. With no asset use tariff in place, there is little motivation for railways to move traffic timely. This creates a barrier or disincentive for shippers to order interswitch cars.

In summary, interswitching is a mechanism used to create competition but is rarely used today. Interchange limits create large costs for shippers to burden as well there is not a system in place to monitor how traffic is handled. Increasing interchange capacity along with efficiency monitoring tariffs can drive freight down and increase service and competition between railways.

AWC recommends public funding and investment into Western Canadian railway interchange capacities through the New Building Canada Fund: National Infrastructure Component. Railways currently have little incentive to increase competition between one another and prefer interchange capacities remain inefficient for interswitching. Public funding would benefit all shipping sectors since competition will promote effect supply chains and create efficiencies. Creating competition

[3] The Interswitching Asset Use Tariff represents the maximum time it should take for traffic to be interchanged and delivered and is not intended as a guide line for railway movement.

between Canada's major railways is essential in promoting Canada's economy and creating an effective, timely, supply chain network.

Conclusion

Competition is needed in the Canadian supply chain in order to improve efficiencies and level the playing field between shippers and the railways. AWC is putting forward recommendations for the Canadian Transportation Agency to:

- *Create shipper tariffs or a standardized service level agreement to create a level playing field and generate supply chain efficiencies through competition.*
- *Recommend public infrastructure funds towards expanding interchange capacities to promote the use of interswitching and create railway competition.*

Creating efficiencies and competition in the Canadian grain industry is a must for farmers to stay profitable and competitive. If shippers and railways realize an effective supply chain, farmers can reap the benefits of competition and international buyers will restore trust in the Canadian supply chain.