



# Council of Deputy Ministers Responsible for Transportation and Highway Safety

## *Task Force on Vehicle Weights and Dimensions Policy*

### Minutes

(Draft December 4, 2014)

**Date:** November 26, 2014  
**Location:** Hotel Omni Mont-Royal, Montreal  
**Chair:** John Pearson  
**In Attendance:** see Attachment 1

#### 1. Welcome and Opening Remarks

Mr. Pearson opened the meeting and welcomed participants.

#### 2. Round Table Introductions and Adoption of the Agenda

Following round table introductions, Mr. Pearson drew attention to the agenda and invited additions; none were proposed and the agenda was adopted as circulated.

#### 3. Vehicle Weight and Dimension Regulations in Canada - Update on Issues and Developments

Mr. Pearson reminded participants that the meeting provides a forum for government and industry representatives to discuss issues pertaining to vehicle weight and dimension limits in Canada. He explained that, in most cases, decisions on proposals for changes in standards cannot be taken by the Task Force at the meeting and would require consideration and endorsement by each government individually and collectively by the Council of Deputy Ministers Responsible for Transportation and Highway Safety before being reflected in the national Memorandum of Understanding (MOU) on interprovincial vehicle weights and dimensions. Mr. Pearson noted that weights and dimensions policy is a complex regulatory environment and harmonization can take time to achieve. He emphasized that regular reports are provided to the Council of Deputy Ministers, which appreciates the advice and perspectives of stakeholder representatives on these issues.

##### a) National Developments and MOU Amendments

Mr. Pearson provided a presentation (Attachment 2) with background on the Task Force and the MOU. He noted that, in October 2014, the Council of Ministers Responsible for Transportation and Highway Safety had approved amendments to the MOU pertaining to:

- Addition of tridem drive tractor-semitrailer configurations as a new category,
- Increase in the allowable size of aerodynamic devices on the rear of trucks and trailers to 1.52 m (5 ft), and
- Increase in the overall length limit for B trains from 25 m to 27.5 m.

Mr. Pearson noted that each of the amendments had originated from proposals presented at annual meetings of the Task Force. He observed that amendments to the MOU have no immediate effect; implementation may require time for regulatory or policy changes to be made in each jurisdiction.

Mr. Pearson also noted that a number of issues and proposals remain under discussion by the Task Force, including:

- Acceptability of 6x2 tractors with or without load transfer technologies,
- Increased weight limits for new generation wide base single tires,

- Weight allowances for LNG powered tractors,
- Use of tractors with wheelbase up to 6.8 m in B train configurations, and
- Use of roll coupled hitches on truck-trailer combinations.

**b) Provincial and Territorial Developments**

In round table review the following reports were provided:

*Prince Edward Island*

Mr. MacEwen reported that the Province had revised routing for self-steer quad-axle trailer configurations, which are allowed by special permit on all roads between July 1<sup>st</sup> and October 31<sup>st</sup> and on Schedule 1 highways during the remaining months.

He noted that vehicles fitted with wide base single tires are required to hold a permit to carry loads in excess of 6000 kg per axle, whereas vehicles with 445 mm tires may carry loads up to 7700 kg.

Mr. MacEwen reported that the Department has embarked on consultations with the Federation of Agriculture to develop guidelines and regulations for the operation of over-dimensional farm vehicles on the highway. He noted that the process may result in a requirement for pilot vehicles to accompany vehicles of certain widths.

Finally, Mr. MacEwen noted that the Department has completed another phase in the Trans Canada Highway realignment project, to remove a curve in Tryon that previously had the propensity for commercial vehicle roll-over.

*Nova Scotia*

Mr. Balsom reported that the long combination vehicle (LCV) program is going well and that efforts continue to harmonize requirements among the Nova Scotia, New Brunswick, Quebec and Ontario.

He noted that amendments to the Province's vehicle weights and dimension regulations are being made to:

- Clarify the operation of quad axle semitrailers,
- Increase the allowable size of boat tails to 1.52 m,
- Increase the overall length limit for B trains to 27.5 m, and
- Add tridem drive tractor-semitrailer configurations, for which implementation options are being considered.

Mr. Balsom also reported that an assessment is being made of the Province's roll-coupled hitch program. He said the results to date have been positive and that drivers report such configurations are more stable in operation.

*Yukon*

Mr. Warkentin reported that work continues to update weights and dimensions regulations in the Yukon. He noted that the Territory has issued many permits in recent years and the intention is to update the regulations to eliminate the need for some permits.

He also reported that the Yukon is considering joining the International Registration Plan. He also noted that computerized interactive systems have been implemented at some weigh stations and that online permitting will be considered next.

### *Northwest Territories*

Mr. Bonnetrouge reported that a two-year trial is being conducted of two special permits to allow:

- Winter operation of eight-axle Super B trains at 67,000 kgs, and
- Nine-axle tridem drive configurations at 71,300 kgs.

He explained the operations are restricted to routes between Hay River and the diamond mines and that an assessment will be made of any resulting pavement damage over the two-year trial period.

### *Ontario*

Mr. Lynch noted that Ontario had deferred enforcement regarding longer boat tails during the summer. Ontario awaits the ability to put forth a regulatory amendment. Ontario has already seen boat tails in operation along primary highways, including US based carriers who have been deploying boat tails in the province for some time. Carriers previously were told to retract their boat tails, but moving forward there will be no further enforcement so long as they meet what is set out in Transport Canada's MVSA.

He reported that a legislative amendment has been introduced in Ontario legislature, through a road safety related Bill, to change the length limit for B trains to 27.5 m, including moose bumpers. Subsequently, a regulatory amendment would be put forward toward allowing extending tractor wheelbases to 6.8 m with a trade off the sum of double-trailer wheelbases on B-trains. He noted that a regulatory amendment will be required following the amendment to the Highway Traffic Act and that special permits might be made available in the meantime, if the Minister so chooses.

Mr. Lynch said that work on an MOU for LCV operations in the east is going well. He added that the Province has moved to allow winter operations of LCVs and that increased monitoring and enforcement will be implemented. He noted that a study of the environmental and economic benefits, in addition to a network capacity study, of LCV operations in Ontario will be launched early in 2015 and that it is expected to inform the long term outlook for the program in Ontario.

He reported on the extended 60 foot semi-trailer (Supercube) trial, noting that conditions of the trial had been amended and the trial period extended in order to increase the number of kilometres travelled by the new configuration. He explained that the additional data is necessary ensure the validity of the study of the impacts of the trial. He noted that, to date, no incidents have occurred and no complaints have been registered by the public or otherwise.

### *Manitoba*

Ms. McKee reported that:

- Canada's Premiers are undertaking a comprehensive renewal of the Agreement on Internal Trade. Manitoba's Premier will be the lead on initiatives to enhance harmonization of trucking regulations.
- Summer flooding in the province has had a significant impact on roads and bridges, particularly in the south west corner. Restoration is underway but will take quite some time.
- Legislation has passed giving the Minister ability to increase weight limits on highways, while regulatory amendments are being made.
- Amendments to the Vehicle Weights and Dimensions on Classes of Highways Regulation were enacted in early summer 2014, incorporating new vehicle configurations such as the tandem steer tandem straight trucks and tridem drive vehicles.
- The Province's spring weight restriction and winter premium weight programs have been reviewed and are now based on science rather than fixed calendar dates.
- Work is underway to amend regulations to address longer boat tails and increased length limits for B trains; Manitoba is planning on issuing permits in the interim.

- Manitoba continues to progress on the planned 2016 implementation of a new permitting and routing system, which includes updating weights and dimensions policies and regulations.

#### *Alberta*

Ms. Durdle highlighted:

- The multi-jurisdictional Transportation Routing and Vehicle Information System (TRAVIS MJ) was launched in April 2014.
- Work among the New West Partners (Alberta, British Columbia and Saskatchewan) and Manitoba continues on the LCV harmonization program. An MOU has been achieved with respect to operation of Rocky Mountain doubles.
- Tridem drive tractor semi-trailers can be operated under permit; an update to the Province's weights and dimensions regulations is expected later this year.
- A permit is being finalized to address hitch offsets for permanently mounted equipment.
- Weight limits for wide-base single tires continue to be reviewed in the Province.

Ms. Durdle also noted that the western jurisdictions and the Alberta Motor Transport Association are considering a training and certification program for escort vehicle operators. Mr. Delaney (Petroleum Services Association of Canada) asked for more information and Ms. Durdle explained that information is being gathered about what programs are available. She said that those involved in developing a new program are fully aware of training available from Enform. She indicated that there is no discussion at this time of making any program mandatory.

#### *Saskatchewan*

Mr. Cipywnyk reported that another expansion of Saskatchewan's high load corridor will open in the spring 2015. He explained that this phase of expansion had been funded by SaskPower, which has found the corridor enables savings for its crews.

Mr. Cipywnyk referenced ongoing work to integrate mapping into the Province's permitting system. He said the target launch date is December 2015.

He highlighted the ongoing work of the New West Partners and observed that many permit conditions have been harmonized which should be a benefit to industry. Mr. Cipywnyk noted the achievement of the MOU on Rocky Mountain doubles and added that development of an implementation strategy is underway.

Mr. Cipywnyk said that a regulatory amendment in Saskatchewan is expected in July 2015.

In response to a question, Mr. Cipywnyk indicated that an implementation strategy to accommodate longer boat tails has not yet been determined by the western provinces.

#### *New Brunswick*

Mr. White reported that the Province is currently issuing permits for 27.5 m B trains and tridem drive tractor-semitrailer configurations until such time as a regulatory amendment is made. He noted that no permit is required for vehicles using 1.52 m boat tails; that MOU amendment is effective immediately in the Province.

Mr. White said that the infrastructure deficit is a concern in New Brunswick and that asset management is a priority. He said that the Province is looking at its heavy haul routes and will consider allowing higher weights to be carried on specific roads in return for private industry working to reduce reliance on the network by constructing private facilities.

He also reported that work continues on:

- Weights that can be carried on vehicles equipped with wide base single tires,
- The spring weight restriction and winter premium weight program, and
- LCV operations and the Atlantic MOU.

*Québec:*

Mr. Janelle presented an overview of developments in Quebec, noting:

- There will be no extension beyond December 31, 2014 of the transitional measure that requires lift axles to be replaced by self-steering axles in a quad axle group, except for tank-semitrailers where the deadline is December 31 2019.
- The special permit for the wheelbase of a tractor (6.2 to 7.2 m) in configuration with a tractor-semitrailer has been modified to allow a wheelbase of a longer tractor (6.2 to 6.8 m WB) in B train configuration at 25 m overall length.
- Winter LCV operations are being planned for 2014-15.

In response to a question, Mr. Janelle noted that a regulatory amendment would be required to address longer boat tails and such an amendment would likely be undertaken next year. He added that there will be no more special permits issued.

*Transport Canada*

Mr. Rastogi provided information about initiatives under the Beyond the Border Action Plan, noting that:

- Work is in progress with respect to investments announced under the first Border Infrastructure Investment Plan (BIIP) (spring of 2013) at the four border crossings,
- The second BIIP is currently in the development and approvals processes,
- Border wait time measurement technology has been deployed at seven out of the planned twenty border crossings; work is progressing to deploy similar technologies at other crossings, and
- Earlier this year one-year cargo pre-inspection pilot project was launched at the Peace Bridge and data is being collected to monitor the impacts of pre-inspection on border crossing efficiency and reducing wait times.

With respect to Transport Canada's motor carrier safety work, Mr. Rastogi reported that the department is:

- Working with stakeholders to acquire data to undertake cost/benefit analyses of electronic logging devices; draft legislation on this has been published in the US, and
- Working with stakeholders and monitoring US action with respect to electronic stability control; assessing the costs and benefits of such measures if they were to be implemented in Canada and in alignment with the US.

#### **4. Regulatory Cooperation Council Update**

Mr. Leclerc (Transport Canada) provided a presentation (Attachment 3) about the Canada-US Regulatory Cooperation Council (RCC), which aims to better align regulatory approaches to protect health, safety and the environment while supporting growth, investment, innovation and market openness. He described three components of future work, including:

- Department-to-department commitments and work plans,
- Department-level regulatory partnerships, and
- Exploring cross-cutting issues.

Following the presentation, Mr. Neuheimer (Forest Products Association of Canada) remarked on the importance of harmonization on both sides of the border and encouraged the RCC to continue its work.

Mr. Robert (Robert Transport) also commended the efforts to seek harmonization; however, he expressed frustration with requirements to comply with EPA standards that apply to diesel engines in the US. He noted that vehicles that run largely on liquid natural gas, and that achieve considerable reductions in greenhouse gas emissions, must still comply with US diesel engine regulations. He suggested that an option could be to identify vehicles that are not eligible to operate in the US and then exempt them from US EPA standards.

Mr. Leclerc thanked the speakers for their comments and said he would convey them to his colleagues in the federal government.

## **5. Technical Issues and Presentations**

### **a) New Generation Wide Base Single Tires on Canadian Highways – Theoretical Perception and Practical Observations**

Mr. Adhikari (Michelin North America) provided a presentation (Attachment 4) about wide base single tires. He reviewed the impact of tire type and usage condition on the tire's footprint and discussed the dependence of pavement impacts on uptake rates, truck weights and loading distribution. He presented data about the distribution of truck traffic in various Canadian regions.

Mr. Ferguson (Michelin North America Canada) presented information about cost-benefit analyses of wide base single tires. He suggested that research conducted to date has several limitations and overestimates the real-world impacts of wide base single tires on Canadian roads. He concluded by saying that Canadian fleets need the flexibility to run on new generation wide base single tires with the same weight as vehicles fitted with dual tires.

In discussion following the presentation, Mr. White inquired about accounting for different pavement strengths when estimating pavement damage that may result from wide base single tire use. Mr. Adhikari acknowledged the complexity of modelling given the variety of factors involved and offered to follow up with Mr. White with more information after the meeting.

Mr. Laskowski (Canadian Trucking Alliance) asked jurisdictions for clarification of the impediments which exist to allowing equivalent weights to be carried on axles fitted with wide base single tires as dual tires. He encouraged parity to be an objective for all jurisdictions.

### **b) Lifiable Pusher 6x2 Drive Suspension**

Mr. McCleave (Hendrickson) provided a presentation (Attachment 5) about Hendrickson's 6x2 forward liftable tandem axle. He described the technology and associated fuel economy, mobility and traction improvements and he highlighted anticipated future developments.

### **c) Volvo 6x2 Suspension**

Mr. Lafon (Volvo Group North America) provided a presentation (Attachment 6) about Volvo/Mack technology 6x2 tractors. He observed that 6x2 configurations are becoming popular as a result of weight and fuel savings, reduced maintenance costs, technological advancements and the resolution of traction issues. He drew attention to a video, available at <http://truckingefficiency.org/chassis/6x2-axles>, about the technology.

**d) Advanced 6x2 Suspensions**

Mr. Pearson conveyed the regrets of Brad Hicks (Meritor, Inc.) who was unable to attend the meeting to address this item.

**e) Summary of Results from Recent Studies on HDV boat-tails, including potential for snow and ice accumulation and wake turbulence**

Mr. Belzile (Transport Canada) provided a presentation (Attachment 7) about recent studies conducted by Transport Canada and the National Research Council of the implications of changes to the aerodynamic wake characteristics for boat tail-equipped heavy duty vehicles. He described the first phase of the study which investigated, through wind tunnel and simulation testing, the effect of turbulent wake characteristics on pursuing passenger vehicles. He also described the second phase of the study which investigated snow accumulation through simulation testing.

**f) ATDynamics**

With the concurrence of attendees, Mr. Pearson added an item about boat tails to the agenda.

Mr. Grossman (ATDynamics) provided an update (Attachment 8) on ATDynamics' trailer tail technology. He summarized market adoption, the 3 ft long, three-sided Trident model, and the optional auto-deploy system.

In response to a question, Mr. Grossman noted that ATDynamics does not manufacture a 5ft long boat tail; he said that half its sales are of the 3ft long models and half are of the 4 ft long models.

**g) Process for Evaluating VWD Proposals in Quebec**

Mr. Janelle reported on a new process being adopted to evaluate proposals for changes to vehicle weights and dimensions policy in Quebec. He provided background about the regulatory context in the province, identified analyses and reports that are required to support a regulatory change and explained the forms, Internet site, register of applications and the decision process that have been developed in Quebec. He noted that issuing a special permit before a change is made to the regulation is no longer an option and that the target timeframe to change the regulation will be within two years.

**h) Canadian Natural Gas Vehicle Alliance**

Mr. Ker (Cummins Westport) provided a presentation (Attachment 9) about natural gas as a vehicle fuel, noting renewed interest is being driven by lower emissions and fuel cost savings compared to diesel fuel and ongoing technology improvements that are being made. He suggested that a weight allowance of 1,000 kg would offset the additional weight required for natural gas vehicles in most configurations and would remove the barrier to natural gas use for some fleets.

**i) ecoTECHNOLOGY for Vehicles: Program Update**

Ms. Belluz (Transport Canada) provided an update (Attachment 10) about Transport Canada's ecoTECHNOLOGY for Vehicles program. She noted testing and evaluation projects that are underway about electric vehicles, renewable fuels and light-duty power-train aerodynamics and emissions. She provided details about projects relating to heavy-duty power-train aerodynamics and emissions and connected vehicles.

**j) Heavy Duty Vehicle Greenhouse Gas Emissions Regulations Updates**

Ms. Deschatelets (Environment Canada) provided a update (Attachment 11) about Heavy Duty Vehicles and Engine Greenhouse Gas Emissions Regulations. She noted that the current regulations

have been aligned with US EPA standards and apply to manufacturers and importers in Canada of new on-road heavy duty vehicles or engines of 2014 and later model years. Ms. Deschatelets also reported that a second phase of regulations is planned and a consultation process has been initiated to discuss proposed regulations with stakeholders.

Mr. Robert suggested it would be helpful to have information about the difference in emissions resulting from trucks certified in accordance with US EPA standards and trucks certified in accordance with European environmental standards. He remarked that guidance from the federal government in this matter would be appreciated.

**k) Truck Size and Weight Developments in the United States**

Mr. Loy (US Department of Transportation Federal Motor Carrier Safety Administration) provided a report about size and weight regulations and initiatives in the US.

He noted that the MAP-21 (Moving Ahead for Progress in the 21<sup>st</sup> Century) legislation calls for a comprehensive truck size and weight limits study to assess differences in safety risks, infrastructure impacts, and the effect on levels of enforcement between trucks operating at or within federal truck size and weight limits and trucks legally operating in excess of federal limits. He noted that the final report of the study is currently under review.

Mr. Loy also drew attention to work on vehicle inspections and high out-of-service rates for axle weight, gross vehicle weight or brake violations. With respect to brake violations, he noted that stopping distance studies suggest that consideration should be given to reducing the allowable number of brakes that are not functioning. He offered to share data from the study and said that the objective is to assemble a body of knowledge in order to lay the groundwork for better inspection criteria.

It was noted that Canadian trucks are allowed to carry heavier loads on more axles and a question was raised about Canadian experience with out-of-service brake violations. Mr. Woodroffe (University of Michigan Transportation Research Institute) observed that additional axles also mean more braking potential. Mr. McAlister (ORCA Road Safety Consultants) added that studies have found inspections in Canada result in 18 or 19% out-of-service rates, of which approximately 50% are brake-related. Mr. MacEwen suggested that most brake violations should have been recognized by drivers based on their own vehicle inspections.

**h) International Vehicle Weight and Dimension Developments**

Mr. Billing (Consultant) provided a presentation (Attachment 12) about developments in New Zealand, Australia, South Africa, Europe, South America and China, following the 2013 conference on Heavy Vehicle Transport Technology. He observed that the process started by Canada in the mid-1980s has been endorsed around the world and implemented in various ways.

**6. Long Combination Vehicle Operations – Provincial and Territorial Updates**

**a) Western Regional Agreement on Rocky Mountain Double Configurations**

Mr. Pearson provided an overview (Attachment 13) about the harmonization of special permit conditions for LCVs in western Canada. He noted that an agreement on turnpike doubles had been reached in December 2012 and that the agreement on Rocky Mountain doubles had been signed in November 2014. He said that a condition of the agreement was ongoing collaboration and the establishment of a coordination committee with representatives from each transportation department and trucking association. He explained the committee's role will be to monitor the effectiveness of the agreement and to recommend changes or research as needed.

**7. Pilot Car/Escort Vehicle Sector Update**

Ms. Murray (Sparrow Piloting Service) provided a presentation (Attachment 14) about training for pilot car drivers. She suggested that a basic mandatory training course should be established in Canada.

Participants remarked on the importance of training for pilot car drivers but noted it could be challenging to determine minimum standards applicable for a national program. It was suggested that the need for pilot cars and associated training is being addressed regionally and within industries. Mr. Delaney reported that the oil and gas industry has developed a training program; he indicated they would not be opposed to a national program but should the industry's program exceed the national standard they would expect their training program to suffice.

**8. Vehicle Weights and Dimensions – Regulatory Harmonization Needs and Priorities in Canada**

Mr. Pearson informed participants that an annual report is submitted to the Council of Deputy Ministers on vehicle weights and dimensions harmonization issues. He invited participants to contact him if there are priorities they feel should be addressed to facilitate interprovincial movement of truck traffic.

Mr. Pearson also noted that the Agreement on Internal Trade is being discussed by the Council of the Federation. He remarked that, as has happened in the past, vehicle weights and dimensions issues may be identified as requiring action.

**9. Other Business**

No other business was raised.

**10. Adjournment**

It was noted that the next meeting would be convened in the fall of 2015, with dates and location to be confirmed. Ms. Murray asked that consideration be given to convening the meeting in Winnipeg, which would enable her to make a particular presentation she would like to deliver.

In closing, Mr. Pearson acknowledged the time and effort contributed by presenters and thanked all participants for their contributions to a productive meeting.

There being no further business, the meeting was adjourned.

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**Prepared by:** Sarah Wells  
**Date:** December 4, 2014

## **List of Attachments**

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- Attachment 1: List of Participants
- Attachment 2: Presentation – National Update
- Attachment 3: Presentation – Regulatory Cooperation Council Update (Transport Canada)
- Attachment 4: Presentation – Wide Base Single Tires (Michelin)
- Attachment 5: Presentation – Lifiable 6x2 Drive Suspension (Hendrickson)
- Attachment 6: Presentation – 6x2 Suspension (Volvo)
- Attachment 7: Presentation – Results from Recent Studies on Boat Tails (Transport Canada)
- Attachment 8: Presentation – Trailer Tail Technology (ATDynamics)
- Attachment 9: Presentation – Natural Gas Trucks Weights and Dimensions (Canadian Natural Gas Vehicle Alliance)
- Attachment 10: Presentation – ecoTECHNOLOGY for Vehicles Program (Transport Canada)
- Attachment 11: Presentation – Heavy Duty Vehicle Greenhouse Gas Regulations (Environment Canada)
- Attachment 12: Presentation – International Vehicle Weight and Dimension Developments (Billing)
- Attachment 13: Presentation – Western Regional LCV Harmonization
- Attachment 14: Presentation – Pilot Car/Escort Vehicle Driver Training (Sparrow Piloting Services)