



**Council of Deputy Ministers Responsible for
Transportation and Highway Safety**

Task Force on Vehicle Weights and Dimensions Policy

Minutes

Date: December 3, 2003
Location: Delta Centre-Ville Hotel, Montreal
Chair: John Pearson
In Attendance: (See Attachment 1)

1. Welcome and Opening Remarks

Mr. Pearson opened the meeting and welcomed participants. He provided a brief overview of the role of the Task Force, noting that its meetings are intended to provide a forum for government and industry representatives to discuss issues related to weight and dimension regulations, and to identify priorities for resolution of regulatory differences between jurisdictions. He then provided a brief overview of developments that had occurred since the last national meeting in the fall of 2001.

2. Round Table Introductions and Adoption of the Agenda

Following round table introductions, Mr. Pearson drew attention to the agenda which had been circulated prior to the meeting, and invited comments or corrections. There being none, the agenda was adopted.

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

a) National MOU on Vehicle Weights and Dimensions

i) Status of outstanding recommendations (1997)

Mr. Pearson noted that there were seven remaining recommendations that had been developed in 1997 but which had not yet been adopted as amendments to the national MOU. These were reviewed, along with the positions of jurisdictions on each (Attachment 2).

Spring Weight Restrictions in Québec

Messrs. Corbin and St. Laurent from Transports Québec provided presentations on the findings of a recently completed study of the potential impacts of removing spring weight restrictions within the province (Attachments 3 & 4). Mr. Corbin noted that the study had estimated that the additional annual trucking costs associated with reducing weights during the spring thaw period were in the order of \$40 million. In his presentation, Mr. St. Laurent noted that the annual savings in pavement damage due to spring weight restrictions were estimated to be in the order of \$50 million. He also presented an analysis of trucking flows within the province, noting the operational and enforcement problems which would be faced if weight restrictions were to be applied to only parts of the network. In concluding the presentation, it was noted that the study had recommended continuing the current spring weight restriction policies within Québec.

In discussion, Mr. Boyd asked whether the study had addressed the additional transportation costs faced by Atlantic Canada due to Quebec's spring weight restrictions. Mr. Corbin indicated that this aspect had not been included in the study. Mr. Pearson noted that the Atlantic Provinces

Transportation Commission had undertaken an analysis of that kind in 1997, and offered to circulate a copy of the report.

Mr. Nix asked whether consideration had been given to use of central tire inflation technology (CTI), and reducing tire pressures during the spring period. Mr. Corbin indicated that this approach had not been addressed in the study.

In concluding the discussion of the outstanding recommendations, **it was agreed** that the report of the Task Force to the Council of Deputy Ministers should indicate that these recommendations remained relevant to, and supported by, stakeholders.

It was further agreed that continued relevance of the recommendation respecting a weight limit increase for C Train Doubles would be reviewed by the trucking association representatives with their respective memberships.

Action: Trucking Associations

ii) Performance criteria

Mr. Pearson noted that the national standards developed in 1988 were based in part on the application of a series of performance criteria related to vehicle stability, control and manoeuvring, and that target thresholds of acceptability had been selected for each. He noted that these thresholds had been used to establish some of the weight and dimension limits contained in the MOU, most notably the limits placed on internal vehicle dimensions such as tractor and trailer wheelbases, overhangs and hitch locations.

He reported that the current workplan for the Task Force included a review of the continued relevance of the performance criteria and thresholds. He drew attention to the background report "Recommended Regulatory Principles for Interprovincial Vehicle Weights and Dimensions" which contained descriptions of the criteria and thresholds, and indicated that comments would be welcomed.

b) Provincial and Territorial Developments

In round table review the following reports were provided:

Prince Edward Island

Mr. MacDonald noted that work was progressing on an initiative to harmonize conditions for oversize and overweight permits within Atlantic Canada, following on the introduction of uniform weight and dimension limits within the region. He reported that work was also underway to harmonize enforcement procedures within the region.

Nova Scotia

In addition to Atlantic regional harmonization efforts, Mr. Stonehouse reported that Nova Scotia had developed and launched an internet based on-line application process for special permits, which allowed 24 hour access and automated permit issuance.

New Brunswick

Mr. Goguen reported that New Brunswick was working with the other Atlantic Provinces on harmonization of special permits. He reported that plans had been announced to four-lane the remaining section of the Trans-Canada highway through New Brunswick to the Quebec border by 2007. He noted that special permits were being issued for quad axle semitrailers at weights up to

55,500 kg for transportation of raw forest products. He also reported on a review being conducted of the weight and dimension restrictions applicable to movement of agricultural equipment.

Quebec:

Mr. Corbin reported that Quebec had recently concluded a research project on the impacts of new single tire designs on pavements. He also reported that a working group had been established to look at self-steering axle technologies, in part to address premature tire wear being experienced by some quad axle configurations. He noted that issuance of special permits over the internet had been launched in 2002, with the goal of being able to automate issuance of all types of permits. He reported that weight limit reductions had been introduced for dump trucks, and that reviews were being undertaken of shipper liability issues and LCV operations.

Ontario

Mr. Madill provided a short presentation on Phase 3 of Ontario's Weight Reform Project (Attachment 5). In addition, he reported that Ontario had adopted the Task Force standards for permits applicable to stinger steer auto carriers, along with the recommended approach to treatment of overall width limits, in particular for sliding tarp systems. He indicated that the new policy includes the recommended treatment of exclusion of non-cargo carrying equipment within 10 cm of the side of the vehicle.

Manitoba

Mr. Catteuw indicated that there was nothing new to report from Manitoba.

Saskatchewan

Mr. Billington reported that the provinces weight and dimension regulations were currently being reviewed and redrafted for "clarity", as part of a broader regulatory review initiative. He noted that the policy on movement of mobile homes had been revised, with widths up to 6.1 metres now allowed on major highways, and up to 5 metres wide on highways with wide shoulders (after 3 AM). He also reported that:

- new regulations were being developed for lighting of agricultural equipment
- a review of allowing RV's longer than 12.5 metres was underway
- tridem drive tractors were being permitted in the oil field sector and for movement of non-divisible loads

Alberta

Mr. Moroz reported that Alberta had encountered difficulties with a sunset clause provision for older trailers, due in part to remanufacturing of older non-conforming equipment. He reported that special permits were now being issued for this type of equipment, although the preference in the longer term was to see non-conforming trailers replaced by new equipment which meets the current regulations.

British Columbia

Mr. Elliot reported that weight and dimension limits for tridem drive tractors had been included in new regulations. He noted that permits were being issued for operation of straight trucks with tridem drives. He reported on a project being undertaken with FERIC on use of CTI, and also indicated that a new permit system had been implemented, including identification of corridors for movement of mobile homes.

c) **Industry Perspectives and Issues**

i) **National harmonization issues and priorities**

In view of the discussion under Item 3 a) i), no further issues were raised.

ii) **Overall Axle/Tire Assembly Width Minimum**

Mr. Begin introduced this item on behalf of CTEA, asking for clarification of which jurisdictions allow 96 inch track width on trailers, and under what conditions.

iii) **Harmonized Approach to overall length and width dimensions**

Mr. Begin also spoke to this item on behalf of CTEA, asking for clarification of provincial and territorial policies and practices regarding exclusion of devices from measurement of width and length limit regulations.

In discussion it was agreed a survey of jurisdiction's policies and practices would be undertaken to obtain answers to the two issues raised by CTEA.

**Action: Secretary
All jurisdictions**

To assist in developing the survey, Mr. Begin agreed to provide a listing of specific items and devices which are used or found on the front, rear or sides of vehicles, for which clarification of policies from each jurisdiction would be helpful.

Action: Begin/CTEA

iv) **Stinger steer truck trailer combinations for Canadian boat manufacturing industry**

Mr. Billing spoke to this item on behalf of CTEA and provided a short presentation (Attachment 6) outlining a request for development of special permit conditions for use in Canada which would mirror the US regulations regarding transportation of boats and camper trailers on stinger steer truck combinations.

In concluding the discussion **it was moved** (Billing/Montague) that jurisdictions consider adding stinger steer configurations to the MOU as a new, commodity specific category, with the same overall length limits applicable to stinger steer car carriers.

Carried

(Note: Jurisdictional representatives abstained)

v) **Wheelbase limits on semitrailers**

Mr. Montague introduced this item, drawing attention to the correspondence provided to the Secretary prior to the meeting (Attachment 7). He indicated that the wheelbases of drop deck and float trailers often exceed the MOU limit of 12.5 metres, due to the operational requirement to locate the axles at the rear of the trailer to maximize the available deck space. He noted that problems had recently arisen with enforcement of wheelbase limits on this type of equipment and asked that consideration be given to an exemption for specialized trailers such as drop decks and floats.

Mr. Dolyniuk expressed support for this proposal, noting that all other dimensions on these trailers comply with the regulated limits. He noted that not all jurisdictions are enforcing the 12.5 metre wheelbase limit on this type of equipment.

In discussion **it was moved** (Dolyniuk/Boyd) that the wheelbase limit for specialized trailers such as double drop decks, step decks and floats be increased to 14.2 metres

Carried

(Note: Jurisdictional representatives abstained)

In round table review, current practices were reported as follows:

BC - permits are issued for trailers where the kingpin to last axle dimension does not exceed 18.3 metres

AB - wheelbases are not limited for trailers used in heavy haul operations under permit

SK - permits are available for movement of trailers with wheelbases longer than 12.5 metres

MB - wheelbases are not limited for trailers used in heavy haul operations under permit

ON - no wheelbase limits apply on trailers up to 48 feet long

QC - exemptions are provided from wheelbase limit for low bed trailers and trailers with removable goose necks

NB - permits are available for longer wheelbase trailers used in movement of oversize or overweight indivisible loads, and for return trips without loads

NS - same as NB

PEI - wheelbase limit on low bed trailers not enforced

4. Weight Limits on Single Tires

Mr. Pearson introduced this item, noting that a research program had been undertaken by the University of Laval in 2002, under the sponsorship of MTQ, on the impact of different tire types on pavements, including the new generation of wide single tires developed by Michelin. He noted that the report from Laval had been translated into English and made available with the agenda materials prior to the meeting.

A presentation was then provided by representatives of Transports Quebec on the research program undertaken by Laval, the findings of the testing, and the preliminary conclusions regarding the impact of the single tires on pavement wear (Attachment 8). It was reported that further work and analysis was needed in this area, but that the initial conclusions were that the weight carried by single tires would have to be reduced by ~16% to maintain the same impact on pavement as dual tires.

In discussion, Mr. Rennie commented that the weight carried on axles with dual tires is not usually shared equally between the tires, and asked whether this factor was considered in the study. Mr. Beaveridge supported these comments, and added that the strain measurement data collected by the Laval study was static, noting that the testing done by Virginia Tech measured strain dynamically, which yielded quite different results.

Mr. Beaveridge reviewed the safety and environmental benefits associated with the new generation single tires, suggesting that a broader view of the benefits and costs should be taken in consideration of appropriate weight limits for these tires. He proposed that standards be developed for these tires which would identify and mark single tires which could be allowed to carry the same weight as dual tires.

Mr. Madill then provided a brief overview of a paper prepared by the Ontario Ministry of Transportation on the impacts of single tires (Attachment 9). He noted that the review had concluded that at axle weights greater than 7300 kg, axles equipped with dual tires appeared to be less damaging to pavements than those equipped with single tires.

Mr. Billing commented that a major research report had recently been published in Europe on this subject (COST 334). He noted that the conclusions suggested that there was little difference between the impacts of dual or single tires on strong pavements, but that single tires had higher impacts on weaker roads.

In concluding the discussion **it was moved** (Beaveridge/Seeley) that the weight limit in the MOU for single tires be increased from 3000 kg to 4500 kg.

Carried

(Note: Jurisdictional representatives abstained)

5. Tridem Drive Tractors

Mr. Amlin from the Forest Engineering Research Institute provided an overview presentation on the research, testing and operational experience with tridem drive tractors in western Canada. (Attachment 10).

In discussion, Mr. Bond commented on his company's interest and experience with the tridem drive tractor, noting that there were significant improvements in traction, offset in part by slightly higher fuel consumption. He noted that a proposal had previously been provided by Manitoulin Transport to adopt common specifications for use of the tridem drive tractor, ideally across Canada, but at least on regional bases.

In concluding the discussion, **it was moved** (Sokil/Albrechtsen) that specifications for the tridem drive tractor be developed which would be acceptable for use across Canada.

Carried

(Note: Jurisdictional representatives abstained)

6. Quad Axle Semitrailers

Mr. Pearson introduced this subject, noting that common standards for the quad axle semitrailer had been developed and implemented in Quebec and Ontario in recent years, and that New Brunswick had begun issuing special permits for specific types of commodities. He asked whether there was broader based interest in this configuration, in the context of national standards.

In discussion Mr. Dolyniuk commented that growing concerns for the state of highway infrastructure in western Canada would not make the quad axle trailer and accompanying higher axle weights an attractive configuration. Mr. Seeley commented that there is interest in seeing broader usage of the configuration in eastern Canada, particularly for the pulp (wood chip) transportation sector.

7. Lifiable Axles

Mr. Yakimishyn and Mr. Goriuk from KC Components were introduced, and provided a presentation on the "empty assist" device which had been developed by the company. The design features and operational characteristics were reviewed. It was noted that the device was specifically designed to allow axles to be raised only when the trailer was empty. The advantages and economic benefits of operating empty trailers with fewer axles on the ground were outlined and discussed.

Following a brief discussion, it was agreed that the presentation materials would be reviewed and discussed by the jurisdictional representatives.

8. Trailer Wheelbase Limits

This item was discussed under agenda item 3 above.

9. Other Issues

a. Longer Combination Vehicles

Mr. Moroz noted that a report on the safety performance of LCV operations in Alberta had recently been released, and was available through the Alberta Transportation web page.

b. Box Length Limit on B Trains

It was noted that there was continued interest from some sectors in increasing the box length limit on B Train double combinations beyond 20 metres. In discussion, it was noted there would likely be considerable resistance to any changes which would require an increase in the overall length limit beyond 25 metres.

c. North American Cargo Securement Standard

Mr. Pearson provided a brief status presentation (Attachment 12) on the implementation of new cargo securement regulations resulting from the joint Canada/US effort on a North American Cargo Securement Standard. He reported that the new regulations would come into effect in the US on January 1, 2004 and that steps were being taken by jurisdictions in Canada to implement the standard by July 2004. He reported that a training program was being developed to accompany the standard, and would be available before the end of December.

10. Other Business

a. Shipper Liability

Mr. Sokil commented that steps were needed make shippers responsible for ensuring that containers are loaded properly and do not exceed the weight limits. Mr. Boyd supported this view, and suggested that effective shipper liability legislation was required which had real consequences for violations.

11. Adjournment

There being no further business, participants were thanked for their contributions to a productive meeting.

Secretary: John Pearson

Date Distributed: January 28, 2004

List of Attachments

- Attachment 1 - List of Participants
- Attachment 2 - Status of 1997 Recommendations for Changes to MOU Standards
- Attachment 3 - Presentation: Reevaluation of the Load Restrictions in the Spring Thaw Period
- Attachment 4 - Presentation: Evaluation of Spring Load Restriction Effects on Pavements
- Attachment 5 - Presentation - Ontario Vehicle Weight and Dimension Reforms Phase 3
- Attachment 6 - Presentation - Stinger Steer Truck Trailer Configurations
- Attachment 7 - Correspondence - Trailer Wheelbase Limits
- Attachment 8 - Presentation - Type of Tires: Impact on Pavements
- Attachment 9 - Paper - Use of New Technology Single Wide Base Tires: Impact on Pavements
- Attachment 10 - Presentation - Tridem Drive Tractors: Research and Operational Experience
- Attachment 12 - Presentation - North American Cargo Securement Standard

Attachment 1:

**Task Force on Vehicle Weights and Dimensions Policy
Meeting - December 3, 2004 Montreal**

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Attachment 2 - Status of Recommendations Developed Through Task Force Deliberations in 1997

Proposals Endorsed or Addressed - MOU Amended June 1997 (effective July '98)	Endorsed or Addressed
Vehicles which are fitted with lift axles be recognized as meeting the "national standards", provided that when the lift axles are raised, all other requirements are met	Endorsed
The fifth wheel position on the lead trailer of a B Train not be located more than 0.3 meters behind the center of the last axle on the lead semitrailer	Endorsed
The minimum wheelbase requirement for all semitrailers, pony trailers and full trailers be standardized at 6.25 m	Endorsed
The weight limit caps on the second trailer of A and C train double trailer combinations be eliminated (currently 16,000 kg & 21,000 kg)	Endorsed
The national standard for steering axle weight limit on straight trucks should be increased to 7250 kg	Endorsed
The maximum hitch offset be standardized for all configurations at 1.8 meters	Endorsed
A weight limit cap of 18,000 kg apply to the sum of the lead trailer axle and the converter dolly axle in an A Train.	Addressed (cap removed)
The box length limit for truck-pony trailer and truck-full trailer configurations be eliminated	Addressed (20 m adopted)
The minimum interaxle spacing between the lead trailer axle and the converter dolly axle be reduced to 2.6 meters for A & C Trains	Addressed (minimum removed)
Proposals Under Review	Notes
The designated highway system in the national agreement not be subject to weight limit reductions in the spring thaw period.	Study in Québec
The box length limit for A Train Doubles be increased to 20 metres (from 18.5 m)	Ontario & Québec opposed
The gross weight limit for eight (or nine) axle B Trains be increased to 63,500 kg	
The national standard for the weight limit of all tandem axle configurations with spreads between 1.2 and 1.85 metres should be increased to 18,000 kg.	B.C., Sask. & Manitoba opposed
The national standard for the weight limit of tridem axle groups with spreads from 3.0 m to < 3.6 m should be increased to 24,000 kg	Sask. & Manitoba opposed
The national standard for the weight limit of tridem axle groups with spreads from 3.6 to 3.7 meters should be increased to 26,000 kg	B.C, Alta, Sask., & Man opposed
The national standard for the gross vehicle weight limit of 8 axle C Trains should be increased (Range: 60,500 kg to same as B Train)	
Proposals Withdrawn	Notes
The metric length limit for 53' trailers be set at 16.15 m (instead of the current 16.2 m)	U.S Standard to be 16.2 m
The minimum interaxle spacing be reduced from 3.0 metres to 2.7 metres for tractors coupled to tandem axle semitrailers	
The national standard for weight limit of tridem axle groups with spreads between 2.4 to < 3.0 m should be increased to 24,000 kg.	
The length limit for straight trucks be increased to 14.0 metres (from 12.5 m)	
The overall length limit for truck - full trailer combinations be increased to 25 metres	
The national standard for steering axle weight limit on highway tractors should be increased (Options: 7250 kg or 9100 kg)	
The national standard for the maximum gross vehicle weight limit of truck-full trailer combinations should be based on the sum of allowable axle weights.	