

OTA BRIEFING NOTE



August 2014

Update on 6x2 Tractors

Background

In a May 2, 2014, briefing note to its members, OTA provided information on the legal status of "6X2" tractors in Ontario and North America. Since that time there have been several developments that warrant further consideration.

Current Status in Ontario

In Ontario, "Safe, Productive, Infrastructure-Friendly" (SPIF) vehicles are considered upper-tier and incorporate all vehicles contained in the national Memorandum of Understanding (MOU) on weights and dimensions as well as a number of additional configurations. Axle and gross weights of SPIF vehicles are generally more generous than specified in the MOU. However, any vehicle that does not meet SPIF standards is considered lower-tier and is restricted to lower gross weights than SPIF vehicles and semi-trailers of no longer than 48 feet. In the Highway Traffic Act (HTA) regulations, all 3-axle SPIF tractors must be equipped with a "tandem" drive axle. While this does not preclude a 6X2 configuration, the term 'tandem' requires that the weight be equally shared between the two axles and prevents inclusion of any sort of device that may alter the axle weights. As it currently stands, the mere existence of a 6X2 traction control system that is able to alter the axle weight disqualifies the vehicle as SPIF. Similarly, 6X2 tractors with weight altering traction control do not meet Ontario's Long Combination Vehicle (LCV) requirements and may not be used as part of that program. So far, nothing has changed in this regard since the May 2nd briefing note.

What OTA is Seeking

OTA fully understands the potential fuel economy benefits of 6X2 tractors and is working with carriers, manufacturers and MTO, to expand their application to the Ontario fleet. In the immediate term, OTA is seeking MTO's agreement on the development of a lower-tier SPIF category for 6X2 tractors equipped with axle weight altering technology for 53 foot trailers in the following configurations: (i) Tandem axle up to 36,500 kgs (80,000 lbs) GVW; and, (ii) Tridem and tri-axle up to 46,000 kgs (101,000 lbs) GVW. As part of this effort, OTA is recommending that a trial of these configurations be commenced as soon as possible. In the longer-term, and assuming the proposed 6X2's prove successful and if the manufacturers are willing to provide the necessary technical input and analysis, OTA would then seek to expand their use at full weights and with other multi-axle configurations.

MTO Response to Date on OTA Proposals

MTO appears receptive to working with OTA on this staged

approach. However, there are several issues that need to be addressed for this issue to move forward, including:

- Additional OEM technical data needs to be supplied to MTO to verify the safe operation of these vehicles at both reduced weights and full SPIF weights with 53 foot semi-trailers for a wider range of operating scenarios than has been addressed so far. Once received, MTO will determine what further testing, if any, is required.
- When bob-tailing, some of the 6X2 technology currently in operation may be considered out-of-service under the Commercial Motor Vehicle Safety Alliance (CVSA) criteria. It is reported that the suspension on the non-driving axle can deflate on some systems when not loaded. This is a North American wide issue and is not isolated to Ontario. Nevertheless, it must be addressed. (Systems that do not dump air out of suspension when not loaded are not likely to have this problem).
- MTO will require further clarification from all OEMs as to the operational characteristics of the different types of 6X2 axles with weight altering technology, including those that permit driver intervention or override.

The OEMs are best placed to provide this information.

Next Steps

In the coming weeks, MTO will provide a detailed Terms of Reference on the data it requires and the testing protocols both for the short-term and the longer-term analysis. At this stage no timeframe has been established for the development of a lower tier SPIF category for 6x2's in tandem and tridem configurations at reduced weights, or whether MTO is prepared to agree to a trial in the interim. However, OTA and MTO continue to discuss all options. CVSA is expected to commence investigation into the issues related to the out-of-service conditions in mid-September, but has given no indication of how long this might take.

Conclusions

Members are cautioned that even if these efforts are successful in Ontario, which could (in the short-term) lead to 6X2s with weight altering technology being allowed to operate with 53 foot trailers at reduced Ontario weights to and from the US, there are still other jurisdictions in Canada where this technology is or may become problematic. OTA will update the membership as additional information becomes available specific to Ontario operations.