Vehicles and containers with sliding sheets

Submitted by the International Association of the Body and Trailer Building Industry

I. Introduction

1. At its 131st to 134rd and its 136th sessions, the Working Party on Customs Questions affecting Transport (WP.30) considered document ECE/TRANS/WP.30/2012/6 and its revisions, submitted by the International Association of the Body and Trailer Building Industry (CLCCR), containing amendment proposals to add a new design of a vehicle and container to the TIR Convention. WP.30 found its construction to be generally customs secure and agreed that this new design of vehicles and containers with a sliding roof could be incorporated into Annexes 2 and 7 of the Convention. During the 136th session, WP.30 considered a revised document ECE/TRANS/WP.30/2012/6/Rev.4 as well as Informal document No. 2(2014), from the State Customs Committee of the Republic of Belarus, transmitting comments to the aforementioned amendment proposals.

2. The Working Party welcomed a presentation by CLCCR which addressed in detail the concerns raised by Belarus. The delegation of Belarus requested to include some of the descriptions, photographs and sketches from the presentation in the proposals to amend Annexes 2 and 7. In addition, Belarus was of the view that the amendments required a uniform use of terminology. The delegation of Germany indicated that the proposals to amend Annexes 2 and 7 should be flexible enough to accommodate the introduction of new technologies in the future. The Working Party invited CLCCR, Belarus, Germany and the secretariat to agree on the exact content and terminology used in the amendment proposals,
and to submit a revised version of document ECE/TRANS/WP.30/2012/6/Rev.4 for discussion at its next session.

3. The present document has been prepared by the customs authorities of Belarus and Germany, CLCCCR and the secretariat in line with the request of the Working Party. The proposed modifications to the current text of the Convention are marked in bold and strikethrough. The Working Party may wish to note that the customs authorities of Belarus and Germany have not reached an agreement on whether the patented system as shown in one drawing of sketch No. 10.3 should be included or deleted from the final amendment proposal. The secretariat is of the opinion that a patent could not become part of the legal text. The Working Party is invited to decide on this question. Once WP.30 has decided reached a decision, the images in this document must — for legal reasons — be replaced by sketches before the Working Party can recommend to AC.2 to adopt these amendment proposals.

II. Amendment proposals

4. For Annex 2, Article 4, paragraph 2, point (i) read

"(i) The sliding sheets, floor, doors and all other constituent parts of the load compartment shall be assembled in such a way that they cannot be opened or closed either by means of devices which cannot be removed and replaced from the outside without leaving obvious traces, or by such methods as will produce a structure which cannot be modified without leaving obvious traces".

5. For Annex 2, Article 4, paragraph 2, point (iii) read

"(iii) The sliding sheet guidance, sliding sheet tension devices and other movable parts shall be assembled in such a way that when closed, and Customs sealed, doors and other movable parts cannot be opened or closed from the outside without leaving obvious traces. The sliding sheet guidance, sliding sheet tension devices and other movable parts shall be assembled in such a way that it is impossible to gain access to the load compartment without leaving obvious traces once the closing devices have been secured. An example of such a system of construction is given in sketch No. 9 appended to these Regulations."

6. Annex 2, after Article 4 insert a new Article 5 to read

"Article 5

Vehicles with a sheeted sliding roof

1. Where applicable, the provisions of Articles 1, 2, 3 and 4 of these Regulations shall apply to vehicles with a sheeted sliding roof. In addition, these vehicles shall conform to the provisions of this Article.

2. The sheeted sliding roof shall fulfil requirements set out in (i) to (iii) below.

   (i) The sheeted sliding roof shall be assembled either by means of devices which cannot be removed and replaced from the outside without leaving obvious traces, or by such methods as will produce a structure which cannot be modified without leaving obvious traces.

   (ii) The sliding roof sheet shall overlap with the solid part of the roof at the side of the vehicle, so that the roof sheet cannot be pulled over the top
edge of the upper cantrail. In the length of the load compartment, at both sides, in the hem of the roof sheet, a pre-stressed steel cable shall be inserted in such a way that it cannot be removed and re-inserted without leaving obvious traces. The roof sheet shall be secured to the sliding carriage in such a way that it cannot be removed and re-secured without leaving obvious traces.

(iii) The sliding roof guidance, the sliding roof tension devices and other movable parts shall be assembled in such a way that when closed, and Customs sealed, doors, roof and other movable parts cannot be opened or closed from the outside without leaving obvious traces. The sliding roof guidance, sliding roof tension devices and other movable parts shall be assembled in such a way that it is impossible to gain access to the load compartment without leaving obvious traces once the closing devices have been secured.

An example of a possible system of construction is shown in sketch No. 10, appended to these Regulations.
7. For the existing sketch No. 9 substitute

Sketch No. 9

EXAMPLE OF A CONSTRUCTION OF A VEHICLE WITH SLIDING SHEETS

Sketch No.9.1

Sketch No.9.2

Sketch No.9.3

Sketch No.9.4

Sketch No.9.5

SHEET GUIDANCE AND OVERLAP-TOP

SHEET OVERLAP-BOTTOM

The sheet overlap shall be at least \( \frac{3}{4} \) of the distance between the tensioning straps.
Sketch No.9 continued

Sketch No. 9.4.
To tighten the sliding sheets in the horizontal direction, a ratchet gear is used (normally at the rear end of the vehicle). This sketch shows two examples, (a) and (b), of how the ratchet or gearbox may be secured.

(a) Ratchet securing

When closed, the cover metal (depicted transparently) shall be secured by the fastening rope.

(b) Gearbox securing

Hand crank protection with three discs.

Fastening Rope
One disc welded to the chassis.
Axle
Spring pin welded both ends.
Two discs welded to the axle.
Sketch No. 9 continued

Sketch No. 9.5

To fix the sliding sheet on the other side (normally the front of the vehicle), the following systems, (a) or (b), may be used.

(a) Cover metal

When closed, the cover metal (depicted transparently) shall be secured by the fastening rope.

(b) Narrow oval eyelet, anti-lifting system for the tensioning tube
8. Add the following new sketch to the existing sketches appended to Annex 2

**Sketch No. 10**

**EXAMPLE OF A CONSTRUCTION OF A VEHICLE WITH A SHEETED SLIDING ROOF**

This sketch shows an example of a vehicle and the important requirements described in Article 5 of these Regulations.

**Sketch No. 10.1**

Two pre-stressed steel cables, embedded in a hem, are fixed on each side of the load compartment. This pre-stressed steel cable is fixed to the front (see sketch 10.2) and rear of the body (see sketch 10.3). The tractive force as well as the connecting disc on each sliding carriage makes it impossible to lift up the hem with the pre-stressed steel cable above the upper cantrail.
Sketch No. 10 continued

**Sketch No. 10.2**

The roof sheet overlaps with the solid part of the roof so that the roof sheet cannot be pulled over the top edge of the upper cantrail.

- The fixing point of the pre-stressed steel cable is completely covered and secured by the roof sheet.
- Fixing point of pre-stressed steel cable, Secured by riveting (full rivet) or welding
- Pre-stressed steel cable
- Fastening rope
- The roof sheet is secured at the front side e.g. by a sheet thong, as mentioned in Article 3, paragraph 11
Sketch No 10.3

At the rear, a special device, such as a baffle plate, is fitted to the roof, preventing access to the load compartment, without leaving obvious traces when the doors are closed and sealed.

Remark to this example:
It is patented.
9. **For Annex 7, Part I, Article 5, paragraph 2, point (i) read**

"(i) The sliding sheets, floor, doors and all other constituent parts of the container shall be assembled in such a way that they cannot be opened or closed either by means of devices which cannot be removed and replaced from the outside without leaving obvious traces, or by such methods as will produce a structure which cannot be modified without leaving obvious traces”.

10. **For Annex 7, Part I, Article 5, paragraph 2, point (iii) read**

"(iii) The sliding sheet guidance, **sliding sheet tension devices** and other movable parts shall be assembled in such a way that when closed, and Customs sealed, doors and other movable parts cannot be opened or closed from the outside without leaving obvious traces. The sliding sheet guidance, **sliding sheet tension devices** and other movable parts shall be assembled in such a way that it is impossible to gain access to the container without leaving obvious traces once the closing devices has been secured. The system is described in An example of such a system of construction is given in sketch No. 9 appended to these Regulations.”

11. **Annex 7, Part I, after Article 5 insert a new Article 6 to read**

"**Article 6**

**Containers with a sheeted sliding roof**

1. Where applicable, the provisions of Articles 1, 2, 3, 4 and 5 of these Regulations shall apply to containers with a sheeted sliding roof. In addition, these containers shall conform to the provisions of this Article.

2. The sheeted sliding roof shall fulfil the requirements set out in (i) to (iii) below.

   (i) The sheeted sliding roof shall be assembled either by means of devices which cannot be removed and replaced from the outside without leaving obvious traces, or by such methods as will produce a structure which cannot be modified without leaving obvious traces.

   (ii) The sliding roof sheet shall overlap with the solid part of the roof at the side of the front side of the container, so that the roof sheet cannot be pulled over the top edge of the upper cantrail. In the length of the container, at both sides, in the hem of the roof sheet, a pre-stressed steel cable shall be inserted in such a way that it cannot be removed and re-inserted without leaving obvious traces. The roof sheet shall be secured to the sliding carriage in such a way that it cannot be removed and re-secured without leaving obvious traces.

   (iii) The sliding roof guidance, the sliding roof tension devices and other movable parts shall be assembled in such a way that when closed, and Customs sealed, doors, roof and other movable parts cannot be opened or closed from the outside without leaving obvious traces. The sliding roof guidance, sliding roof tension devices and other movable parts shall be assembled in such a way that it is impossible to gain access to the container without leaving obvious traces once the closing devices have been secured.

   An example of a possible system of construction is shown in sketch No. 10, appended to these Regulations.”
12. For the existing sketch No. 9 substitute

Sketch No. 9

EXAMPLE OF A CONSTRUCTION OF A CONTAINER WITH SLIDING SHEETS

Sketch No.9.5
Sketch No.9.2
Pelmet
Tensioning straps
Sketch No.9.4
Sketch No.9.3
Distance between tensioning straps
Sketch No.9.1
Load compartment floor
Securing ring
Fastening rope
Sketch No.9.2
SHEET GUIDANCE AND OVERLAP-TOP
Pelmet
Tensioning strap runner
Upper cantrail
Upright runner
Sliding sheet
Upright
Sketch No.9.3
SHEET OVERLAP-BOTTOM
Roof
Tensioning strap runner
Upper cantrail
Tensioning device
Sliding sheet
Tensioning strap
The sheet overlap shall be at least ¾ of the distance between the tensioning straps
The sheet overlap shall be at least 50mm
Curtain eyelet
Fastening rope
Ring on lower cantrail
Load compartment floor
Lower cantrail
Upright
Tensioning strap hook
Sketch No. 9 continued

Sketch No. 9.4.
To tighten the sliding sheets in the horizontal direction, a ratchet gear is used (normally at the rear end of the vehicle). This sketch shows two examples, (a) and (b), of how the ratchet or gearbox may be secured.

(a) **Ratchet securing**

(b) **Gearbox securing**
Sketch No. 9 continued

Sketch No. 9.5

To fix the sliding sheet at the other side (normally the front of the vehicle), the following systems, (a) or (b), may be used.

(a) Cover metal

When closed, the cover metal (depicted transparently) shall be secured by the fastening rope.

(b) Narrow oval eyelet, anti-lifting system for the tensioning tube

When closed, the cover metal (depicted transparently) shall be secured by the fastening rope.
8. *Add* the following new sketch to the existing sketches appended to Annex 7, Part I

**Sketch No. 10**

**EXAMPLE OF A CONSTRUCTION OF A VEHICLE WITH A SHEETED SLIDING ROOF**

This sketch shows an example of a vehicle and the important requirements described in Article 6 of these Regulations.

**Pre-stressed steel cable, each side one cable**

**Fastening rope around the bottom of the load compartment.**

**Sketch No. 10.1**

Two pre-stressed steel cables, embedded in a hem, are fixed at each side of the load compartment. This pre-stressed steel cable is fixed to the front (see sketch 10.2) and rear of the body (see sketch 10.3). The tractive force as well as the connecting disc on each sliding carriage makes it impossible to lift up the hem with the pre-stressed steel cable above the upper cantrail.

**Pre-stressed steel cable in a hem.** The tractive force as well as the connecting disc on each sliding carriage makes it impossible to lift it up above the upper cantrail.
Sketch No. 10 continued

**Sketch No.10.2**

The roof sheet overlaps with the solid part of the roof so that the roof sheet cannot be pulled over the top edge of the upper cantrail.

- The roof sheet is secured at the front side e.g. by a sheet thong, as mentioned in Article 3, paragraph 11
- Fixing point of pre-stressed steel cable, Secured by riveting (full rivet) or welding
- Pre-stressed steel cable
- Fastening rope
- The fixing point of the pre-stressed steel cable is completely covered and secured by the roof sheet
Sketch No. 10 continued

Sketch No 10.3
At the rear, a special device, such as a baffle plate, is fitted to the roof which prevents access to the load compartment, without leaving obvious traces when the doors are closed and sealed.

The fixing point of the pre-stressed steel cable is completely covered, and the metal cover is secured by welding or riveting (full rivet)

Pre-stressed steel rope inserted in a hem

Pre-stressed steel rope

Remark to this example: It is patented.

Tensioning device on the lever mechanism. By folding down the part of the roof with the tensioning device, the pre-stressed steel rope will be under tension

Sliding carriage from the roof sheet (closed) with lock system (inside)

By closing and sealing the doors, the systems are customs secure