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ECONOMIC COMMISSION FOR EUROPE

INLAND TRANSPORT COMMITTEE

Working Party on Customs Questions affecting

Transport

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**CUSTOMS CONVENTION ON THE INTERNATIONAL TRANSPORT OF GOODS
UNDER COVER OF TIR CARNETS (TIR CONVENTION, 1975)**

Application of the Convention

Issues relating to technical provisions

Transmitted by the Government of Germany

Note: The secretariat reproduces below a communication transmitted by the Government of Germany.

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1. **Description of the fastening cable with fibre-optic protection**

The fastening cable is in one piece. It consists of the actual fastening cable equipped with a clamp at each end.

The actual fastening cable consists of the batches of fibre-optic lines, spirally wound steel and a transparent plastic sheath.

Each clamp has apertures measuring 5 x 13 mm to accommodate seals. Each clamp is also equipped with 3 optical lenses (one for each batch of fibre-optic lines), two on the long side and one at the end. Additionally, the optical lenses integrated in the long side of one clamp are coloured (red and green). The clamps are attached to the fastening cable by clinch fastenings.

2. **Principles for the approval of seals**

The requirements for the load compartments of sheeted vehicles to gain approval for the international transport of goods under customs seal are set out in Article 3 of Annex 2 of the 1975 TIR Convention.

Paragraph 1 of that Article stipulates that Articles 1 and 2 of the Annex apply to sheeted vehicles. Such vehicles must also conform to the provisions of Article 3.

The requirement for the fastening of the sheet are set out in paragraph 9 of Article 3.

This stipulates that the following fastenings shall be used:

- a) steel wire ropes of at least 3 mm diameter; or
- b) ropes of hemp or sisal of at least 8 mm diameter encased in a transparent sheath of unstretchable plastic.

Wire ropes may have a sheath of unstretchable plastic.

3. **Suitability for sealing**

The fastening cable with fibre-optic protection does not conform to the specific requirements of paragraph 9. As the examination has shown, however, it does meet the fundamental requirements of Article 1 a) and b).

The fastening cable can be manipulated by cutting through the steel housing, exposing the batches of fibre-optic lines, separating the three batches and re-connecting them correctly with shrinkable tubing. This does not interrupt the transmission of light, so that a light input check will not reveal the manipulation.

However, I consider such manipulation extremely unlikely under in situ conditions, especially in view of the fact that the manipulation will not be evident when light is directed into the cable ends only if the individual batches have been separated and reconnected with one hundred per cent accuracy. Such manipulation would also have to be carried out predominantly on the cable when attached. Moreover, the point of separation of the cable (even when located at the front, bulkhead) cannot be so disguised as to be undetectable on inspection.

4. **Conclusion**

The fastening cable with fibre-optic protection is tamper-proof for customs purposes.
