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INLAND TRANSPORT COMMITTEE

Joint ECMT/UNECE Working Party/Group on Intermodal Transport and Logistics ^{*/}

(24 and 25 March 2004)

Working Party on Intermodal Transport and Logistics

(Forty-first session, 25 March 2004,
agenda item 6)

**MONITORING OF WEIGHTS AND DIMENSIONS OF LOADING UNITS
IN INTERMODAL TRANSPORT**

Status of Inland Transport Committee Resolution No. 241 of 5 February 1993

Note by the secretariat

A. MANDATE AND BACKGROUND

1. At its fortieth session, the Working Party took note of the outcome of the Plenary session of the International Organization for Standardization (ISO) Technical Committee TC 104 that had considered the possible standardization of 45 ft containers. The representative of ISO requested the Working Party to clarify specifically the applicability of Inland Transport Committee (ITC) resolution No. 241 of 5 February 1993 on “Increasing Dimensions of Loading Units in Combined Transport” (TRANS/WP.24/101, paras. 20-23).

^{*/} As of 2004, the ECMT and the UNECE have adopted cooperative arrangements in establishing the “Joint ECMT/UNECE Working Party/Group on Intermodal Transport and Logistics” consisting of separate ECMT and UNECE segments, the UNECE segment consisting of its Working Party on Intermodal Transport and Logistics.

2. In accordance with its programme of work, the Working Party may wish to review resolution No. 241 in light of recent developments, including work on a European Directive on Intermodal Loading Units (ILU) and on the possible introduction of a European intermodal loading unit (EILU).

3. As a basis for its considerations, the secretariat is reproducing below the text of ITC resolution No. 241 of 5 February 1993 together with background information on the results of the second global Seminar on the Impact of Increasing Dimensions of Loading Units on Combined Transport (Geneva, 1-4 September 1992) that had been endorsed by the Working Party in September 1992 and the ITC in February 1993.

4. The secretariat is also reproducing below a document prepared by the Danish ISO delegation for consideration at the ISO/TC 104 Plenary meeting in St. Petersburg (USA) (15 and 16 May 2003) on the basis of which TC 104 decided to initiate work on including 45ft containers in the ISO series of container standards. The next Plenary meeting of ISO/TC 104 is scheduled to be held in May/June 2005 in the United Kingdom.

B. ITC RESOLUTION NO. 241 AND RELEVANT BACKGROUND INFORMATION

5. In November 1989 and in September 1992, the UNECE convened, with the assistance of UNCTAD, two Seminars on the impact of increasing dimensions of loading units on combined transport. The holding of these Seminars was triggered by proposals of ISO to introduce a new series 2 of containers whose outside dimensions went considerably beyond those of the standard ISO series 1 containers. The purpose of the Seminars was to consider a long-term strategy on maximum dimensions of loading units acceptable to all parties concerned and in line with existing and planned national inland regulations and infrastructure requirements.

6. Unfortunately, no general consensus on future maximum dimensions of loading units could be achieved at these Seminars. However, at the 1992 Seminar, the large majority of participants stressed that they were not in a position to support the ISO proposals towards standardization of ISO series 2 containers. In fact, many Government participants, including those of the European Community (EC) and its Member States, pointed out that the full-size (49 ft long) container proposed by ISO had major implications for the transport infrastructure. It was also pointed out that if such containers were unloaded from ships in ports of the EC, their transport within the EC would not be allowed under EC Directives or Regulations or on a regular basis by the use of special permits.

7. The 1992 Seminar adopted a resolution intended to provide guidance to Governments and the transport industry and to standardization organizations about the policy objectives of Governments in the field of combined transport. This resolution also established upper limits for maximum

acceptable dimensions of loading units that could, in the foreseeable future, be transported inland without conflicting with transport legislation and infrastructure requirements¹.

8. With regard to the maximum length of loading units, the 1992 Seminar resolution stipulated as follows: “While in North America the transport of 45 ft, 49 ft or 53 ft long containers would be possible, the transport of such loading units is not allowed on a regular basis on roads in Africa, Asia and Europe. Since the transport of such loading units would also create difficulties for the other inland modes in many countries, their use would be restricted or not permitted.”

9. Following the conclusion of the Seminar, the Working Party (WP.24) in September 1992 welcomed the resolution adopted by the Seminar and made a number of clarifications. With regard to length, some delegations pointed out that, since in some trades containers larger than the existing ISO series 1 containers were already used, it would be desirable if ISO continued to search for acceptable solutions for future containers larger than the existing ISO series 1 containers (TRANS/WP.24/55, paras. 4-12).

10. In February 1993, the ITC endorsed the resolution adopted at the 1992 Seminar as well as the comments and clarifications provided by the Working Party and adopted the following resolution:

“Increasing Dimensions of Loading Units in Combined Transport

Resolution No. 241

Adopted by the Inland Transport Committee on 5 February 1993

The Inland Transport Committee,

Bearing in mind the concern expressed in many transport circles, by many UNECE member Governments and by the European Community about the impact of increasing dimensions of loading units on the organization of the combined transport chain and on transport infrastructure,

Recalling resolution No. 237 adopted by the Committee on 2 February 1990 following the first global Geneva Seminar on the Impact of Increasing Dimensions of Loading Units on Combined Transport (13-16 November 1989),

¹ A limited number of hard copies of the proceedings of the 1992 Seminar is still available at the secretariat.

Expressing its appreciation to standardization organizations, Governments, UNCTAD and other competent international organizations as well as to the UNECE secretariat for the implementation of the provisions of resolution No. 237, in particular the preparation and organization of the second global Geneva Seminar on the Impact of Increasing Dimensions of Loading Units on Combined Transport (1-4 September 1992),

Endorses the report of the second Geneva Seminar summarizing the main conclusions which emerged from the discussion, including the resolution adopted by the Seminar on 4 September 1992 (TRANS/SEM.10/3),

Endorses also the clarifications and comments made by the Working Party on Combined Transport at its seventeenth session (7-8 September 1992) (TRANS/WP.24/55, para. 6),

Regrets that in spite of numerous studies undertaken and in spite of constructive and comprehensive discussions at the Seminar covering all relevant aspects linked to the possible standardization and introduction of larger than ISO Series 1 containers, a consensus on globally acceptable dimensional standards acceptable to both Governments and the transport industry could not be achieved,

Regrets further that while the cost element of the introduction of a new series of larger than present ISO Series 1 standard containers had been adequately analysed and discussed at the Seminar, the possible benefits for the industry and the economy at large had not been examined and quantified to any extent, either by the transport industry or by any other circles advocating the introduction of larger containers, both of which were invited to do so,

Underlines that any further studies on this subject should be undertaken by the industry concentrating on the benefits of a possible introduction of larger containers in order to enable Governments responsible for traffic safety and transport infrastructure to evaluate whether modifications that might be required in traffic regulations and/or transport infrastructure were justified,

Invites the International Organization for Standardization (ISO) to keep the UNECE informed on any further activities it might envisage concerning a new series of standard containers as well as related work in this field;

Requests the Working Party on Combined Transport to continue its monitoring of the developments in this field and to intensify its cooperation with standardization organizations worldwide with a view to advising these organizations on Governmental policy and infrastructure

planning and to keep UNECE member Governments informed of any emerging developments in dimensions of loading units;

Requests the UNECE secretariat to intensify its cooperation with the ISO Technical Committee 104 in order to ensure that the results of the Seminar as well as the views expressed by UNECE member Governments are taken into account in any further action ISO might wish to envisage towards a new series of standard containers.”

C. PROPOSAL FOR A 45-FOOT ISO CONTAINER

11. The document reproduced below is part of ISO document ISO/TC/104/SC.1 N 405. It has been prepared by the Danish ISO delegation for consideration at the Plenary meeting of ISO/TC 104 held in St. Petersburg (USA) on 15 and 16 May 2003. The document provides details on the scope of work undertaken by ISO to amend the existing container standards to include 45 ft containers.

“Proposal for a 45 foot (‘) ISO container

The 45’ x 8’ x 9’6” (L x W x H) marine container, as it is known and operated today, is a fairly new entrant in the marine container segment, having been built in significant quantities only since 1987/88. The estimated world fleet count reached around 30,000 units in 1990, over 50,000 in 1995 and around 100,000 in 2000. During 2003, it is estimated that the world fleet will reach 175,000 units, which is a figure and growth scenario unparalleled by any other existing dry freight container type.

The above counts exclude purpose built 45’ (and longer) containers for domestic markets, such as North America (typically with 8’6” wide bodies), and Europe (operating mainly pallet-wide 45’ with rounded corners, i.e. slightly wider than 8’, and often only 9’1 high to comply with tunnel restrictions combined with lack of gooseneck chassis, EU road restrictions, etc.).

Unlike other dry freight container types, the vessel operators typically own 45’ containers (including financial leases of all kinds) whereas ownership by shippers and leasing companies is insignificant.

The 45’ container was made available to shippers on specific demand rather than being invented by vessel operators. The first generation of 45’ containers had to be operated in closed flows and was subjected to rigid stowage requirements, etc. But vessels built over the last 10 years are all adapted and fit to carry 45’ containers without substantial stowage onboard issues or restrictions.

The 45' containers cater by design for light, yet voluminous cargoes such as toys, furniture, garments and clothing, shoes and similar goods, mainly on the large volume and capacity east/west trades, such as Pacific, Asia/Europe and Transatlantic. It offers significant advantages, featuring a 13% higher cubic capacity than ordinary 40' x 8' x 9'6" containers, and 28% more than a standard 40' x 8' x 8'6" containers. Assuming an average of 5 full loads per 45' per year, this increased cubic capacity translates into some 875,000 full loads annually or 114,000 less (or saved) loads and thereby also truck transports at both ends of the transport cycle had the cargo been carried in 40' x 8' x 8'6" containers. With an already congested and environmentally stressed infrastructure, a move towards larger transportation units seems obvious, and not least it also places a responsibility on the transportation industry and its related organs (including standardisation bodies, manufacturers, inland transportation companies, terminal handling equipment, etc.) to strive towards making available the best suited pieces of equipment.

Why has such a success story within container transportation not yet become an ISO standard? All parties within container transportation have adapted to handling 45' containers flawlessly; therefore it is unlikely that the industry as such would object. ISO standards relating to e.g. testing (ISO 1496), marking (ISO 6346) and other similar standards do take into account that the 45' containers exist and will continue to do so. The 45' marine containers outnumber other large containers, such as the North American and Europe 45' containers, which, at any rate, are not suitable for marine transportation due to excess widths, and mainly inadequate strength pertaining to stacking and racking.

On the above basis, Denmark proposed to adopt the 45' long and 8' wide container as an ISO standard dry freight container. Denmark is obviously prepared to participate in a Working Group formalising the adoption.

The following ISO standards need to be revised:

| | Title | Responsible |
|------------|--------------------------------------------------------------------------------------------------------------------|-------------|
| ISO 668 | Series 1 freight containers – Classification, dimensions and ratings | SC 1 |
| ISO 830 | Freight containers – Vocabulary | TC 104 |
| ISO 1161 | Series 1 freight containers – Corner fittings – Specification | TC 104 |
| ISO 1496-1 | Series 1 freight containers – Specification and testing – Part 1: General cargo containers for general purposes | SC 1 |
| ISO 3874 | Series 1 freight containers – Handling and securing | SC 1 |
| ISO 6346 | Freight containers – Coding, identification and marking | SC 4 |

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