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#### **ECONOMIC COMMISSION FOR EUROPE**

INLAND TRANSPORT COMMITTEE

Working Party on Customs Questions affecting Transport

(One-hundred-and-twelfth session, 31 January – 3 February 2006, agenda item 4)

### ACTIVITIES OF OTHER ORGANIZATIONS OF INTEREST TO THE WORKING PARTY

<u>Transmitted by the World Customs Organization (WCO)</u>

#### Report on the ISO/TC 104 and ISO/TC122 Activities

#### 1. INTRODUCTION

The technical committee TC 104 "Freight containers" is engaged in a number of standardization activities that are of potential interest to the Working Party on Customs Questions affecting Transport (WP30). The purpose of this report is to provide to date information.

#### 2. 45 FOOT CONTAINERS

TC104 is actively developing amendments to the TC104 series of standards that will recognize and standardize this widely used intermodal freight container size. The design being included in the standards is 45 feet long, 8 feet wide and 9 and a half feet high with end frames and corner fittings at both the extreme ends of the container and at the 40 foot points (2.5 feet in from each end). The container will be capable of stacking on top of 40 foot containers or 45 foot containers and of having either 40 or 45 foot containers stacked on top of it. Its other structural capabilities will be similar to those of all ISO freight containers.

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Changes to the various standards are being made to incorporate this new container size in pertinent ISO standards

The following amendment is now published:

ISO 668:1995/Amd 1:2005 "Series 1 freight containers -- Classification, dimensions and rating -- Amendment 1"

Further drafts are:

ISO 1496-1:1990/DAmd 4 "Series 1 freight containers --Specification and testing--Part 1: General cargo containers for general purposes -- Amendment 4 (Approved for FDIS formal vote)

ISO3874:1997/CD Amd 4 (Approved for submission as ISO/DIS)

#### 3. MECHANICAL SEALS

Work was completed in 2004 and PAS (Publicly Available Specification) 17712 on mechanical seals for freight containers was published. This PAS set the standard for mechanical seals, including high security seals, for use in transportation. Work is now underway to convert this PAS to a full ISO standard. One important addition that is being made as part of this conversion process is a new annex that details quality control procedures for seal manufacturers to ensure seals produced meet the standard and that they are properly controlled during manufacture and distribution to prevent theft, copying or other fraudulent use of the seals or seal numbers

We expect to publish the second edition of ISO/PAS 17712 in the coming months. An ISO/DIS 17712 (identical to the second edition of the ISO/PAS) will also be submitted for ISO member body enquiry in parallel. That last enquiry is aimed to transform the ISO/PAS 17712 into a full ISO standard (ISO 17712).

#### 4. CONTAINER DOOR END SECURITY

TC104 is currently examining the design of the door end of the container from the aspect of improving security and making undetected entry into the container more difficult. The current activity in this regard is focused on current industry provisions for sealing freight containers and the apparent ease in which knowledgeable individuals can defeat these provisions. TC104 is considering including sealing provisions into the standards and in particular, moving location of these provisions to a more secure location such as the locking rod cam and keeper.

The following draft has been submitted to ISO member bodies for voting:

ISO 1496-1.1990/DAmd 5 "Series 1 freight containers-- Specification and testing -- Part 1. General cargo containers for general purposes -- Amendment 5 Door end security. (under enquiry until 2005-12-14)

The draft is approved for final publication. Subject to a few minor changes it will be issued in the coming months.

#### 5. ELECTRONIC SEALS

Significant progress is now being made in developing a series of standards that will jointly establish the standard for electronic seals for freight containers. Specifically the work has been divided into its component elements:

ISO/CD 18185-1: "Freight containers – Electronic seals – Part 1: Radio-frequency communication protocol" (to be submitted as ISO/DIS for ISO member body enquiry)

ISO/DIS 18185-2: "Freight containers -- Electronic seals -- Part 2: Application requirements" (ISO/DIS approved. To be submitted as ISO/FDIS for formal approval) ISO/PRF 18185-3: Freight containers -- Electronic seals -- Part 3: Environmental characteristics (ISO/DIS approved. Under preparation for its final publication as ISO standard)

ISO/CD18185-4: Freight containers -- Electronic seals -- Part 4: Data protection (Committee draft under ISO/TC104/SC4 member enquiry)

ISO/AWI 18185-5: Freight containers -- Electronic seals -- Part 5: Sensor interface (Withdrawn, insofar as the user community has requested that this application be constrained to a read-only RF tag. A read-only RF tag would be unable to record sensor data)

ISO/AWI 18185-6: Freight containers -- Electronic seals -- Part 6: Message sets for transfer between seal reader and host computer (under preparation)

ISO/CD 18185-7: Freight containers -- Electronic seals -- Part 7: Physical layer (Approved for submission as ISO/DIS for member body enquiry)

This approach of addressing the specific aspects individually is facilitating agreement on the requirements amongst the experts involved. One important issue that has been agreed amongst the experts and included in their work is that all electronic seals will meet the requirements laid down in PAS 17712 for mechanical seals.

Comments on forthcoming ISO/DIS 18185-1 and 7 are being requested by end of April for their review by the pertinent ISO/TC104/SC4/WG2 working group at a meeting to be held on

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6 May 2006.

## 6. TC122 – TC104 JOINT WORKING GROUP ON SUPPLY CHAIN APPLICATION OF RFID

Recognizing their overlying areas of responsibility, TCs 104 and 122 have established a joint working group to look specifically at the application of radio frequency identification technology (RFID) to transportation issues. Specific work is underway in the JWG to develop a series of related standards using RFID in the areas of:

ISO/AWI 17358 - Application Requirements (Withdrawn, insofar as the application requirements are now resident with each of the standards 17363 through 17367). ISO/DIS 17363 - Freight Containers (Submitted as ISO/DIS for the ISO member body enquiry)

ISO/DIS 17364 - Returnable Transport Items (submitted as ISO/DIS for the ISO member body enquiry)

ISO/DIS 17365 - Transport Units (submitted as ISO/DIS for the ISO member body enquiry)

ISO/DIS 17366 - Product Packaging (submitted as ISO/DIS for the ISO member body enquiry)

ISO/DIS 17367 - Product Tagging (submitted as ISO/DIS for the ISO member body enquiry)

Comments on the above drafts are to be submitted to ISO member bodies by 2006-06-26.

### 7. CONCLUSION

The meeting is invited to take note of the advancement of the ISO/TC104 and ISO/TC122 work and to submit any possible comments in connection with its pertinent work.

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