

## **Informal meeting on Code of Practice for Packing of Cargo Transport Units at the request of the United Nations Economic Commission for Europe Working Party on Intermodal Transport and Logistics**

Geneva and virtual, 29-30 March 2023

### **Record of the 2023 first informal meeting**

#### **I. Attendance**

1. The first informal meeting of 2023 on Code of Practice for Packing of Cargo Transport Units (CTU Code) was held on 29-30 March 2023. It was organised further to the decision of the United Nations Economic Commission for Europe (ECE) Working Party on Intermodal Transport and Logistics (WP.24) at its 65<sup>th</sup> session (Geneva, 19-21 October 2022) as contained in ECE/TRANS/WP.24/151, para 97. The aim of this meeting was to advance the discussion mandated for the informal pre-work to: (i) assess which areas of the CTU Code need to be prioritised in the updates, and (ii) consider text usage of CTU Code in the mobile application.
2. The meeting was attended by the following Economic Commission for Europe (ECE) member States: Austria, Germany, Finland and Russian Federation.
3. The following representatives from the non-governmental organisations, private and academia sectors attended: Association of Forwarding and Logistics CZ, International Chamber of Shipping (ICS), Global Shippers Forum, IUMI International Union of Marine Insurance, ICHCA International, TT Club, World Shipping Council (WSC), International Organization for Standardization (ISO), ETS Consulting, National Cargo Bureau (NCB), Exis Technologies Limited, MariTerm AB, and JSC NIIAS.
4. The meeting was moderated by the ECE secretariat.

#### **II. Agenda**

5. Participants endorsed the agenda for the informal meeting as contained in CTU-Code/2023/first-informal-meeting/1. Participants also agreed that a written record would be prepared from the meeting by the secretariat. This record, together with a record from the forthcoming meeting in July 2023, will serve as a basis for a preparation of a progress report to WP.24 at its 66<sup>th</sup> session in October 2023.

#### **III. Updates to the CTU Code**

6. Participants continued discussion on the specific elements/issues to be prioritised for updates in the CTU Code. The discussion was based on the following documents:
  - CTU-Code/2023/first-informal-meeting/3 – comments to changes to clauses 5.3 and 5.2
  - CTU-Code/2023/first-informal-meeting/4 – comments to changes to clause 2.3 and section 4

- CTU-Code/2023/first-informal-meeting/5 – comments to changes to new section 4.2 and to Chapter 10
- CTU-Code/2023/first-informal-meeting/6 – prevention of pest contamination
- CTU-Code/2023/first-informal-meeting/7 – consolidated definitions
- CTU-Code/2023/first-informal-meeting/8 – chains of responsibility and information
- CTU-Code/2023/first-informal-meeting/9 – use of terms
- CTU-Code/2023/first-informal-meeting/11 – comments to proposals in documents 4,5, 7 and 8
- CTU-Code/2023/first-informal-meeting/12 – Prevention of pest contamination of containers: Joint Industry Guidelines for Cleaning of Containers.

7. Participants considered comments provided in CTU-Code/2023/first-informal-meeting/3 on revised clauses reflected in ECE/TRANS/WP.24/2022/10 and agreed the following:

- Clause 5.3.2 on regulated solid dry bulk cargoes with sub-clauses 5.3.2.1 through 5.3.2.4 should be replaced with the following text as the new clause 5.3.2:  
*“5.3.2 Substances which meet the criteria for inclusion in a hazard class of the applicable dangerous goods regulations for relevant modes of transport are dangerous goods. Such goods... (to be continued as included in CTU-Code/2023/first-informal-meeting/3).”*
- The CTU Code should be reviewed when considering references to the IMDG Code. Unless there is a specific reason for the IMDG Code to be specifically referred to, other reference should be replaced with ‘*applicable dangerous goods regulations for relevant modes of transport*’.
- Clause 5.3.3.1 should be replaced with the following text:  
*“5.3.3.1 For the transport of solid bulk cargoes in containers, preferably non-pressurized containers for dry bulk, designed and tested in accordance with ISO 1496-4, should be used. When general cargo containers for general purpose according to ISO 1496-1 are used, applicable dangerous goods regulations require that the end walls are strengthened to the same level as provided in ISO 1496-4. In case of solid bulk cargoes which are not subject to the applicable dangerous goods regulations, a similar reinforcement of the end walls is recommended.*
- Clause 5.3.3.2 should read as below:  
*“5.3.3.2 Reinforcement can normally be fulfilled by fitting a partial height false bulkhead against the front wall (see figure 7.71). The front false bulkhead consists of two full-width plywood panels with horizontal softwood timber cross beams extending the whole width of the CTU and resting against the strong corner posts. The panels should be plywood (internal grade) and have a minimum thickness of 12mm. The height of the panels should be at least 200mm above the height of the cargo when packed but at least 1,800mm high with the lower panels as high as possible (preferably 1,200mm high). When the cargo is very fluid greater height may be required. Panels with a height less 600mm should have one full width 150 x 50 mm softwood timber cross beams and all other panel heights at least two full width beams. “*
- Clause 5.3.4.1 should be amended as follows:

*“5.3.4.1 A CTU intended to carry a bulk cargo should... It may be necessary to place plywood facing not only the front wall but also... A cargo specific siftproof liner (to be continued as in CTU-Code/2023/first-informal-meeting/3)”*

- The former Figures 7.53 and 7.54 should be retained.
  - The former clause 5.3.5 should be retained, and so the new text should be deleted except the new clauses 5.3.5.3 and 5.3.5.4, which were considered useful and should be incorporated within clause 5.3.5.
  - Proposed clauses 5.3.7, 5.3.8 and 5.3.9 should be deleted.
  - Clause 5.2.7.1.2 should be replaced with the following text for point 2:  
*“Dangerous Goods: Liquids meeting the classification requirements of the applicable dangerous goods regulations for relevant modes of transport are dangerous goods and are not allowed to be transported in flexitanks.”*
  - Proposed clause 5.2.8 should be deleted.
8. Participants considered comments provided in CTU-Code/2023/first-informal-meeting/4 as well as additional remarks in CTU-Code/2023/first-informal-meeting/11 on revised clauses reflected in ECE/TRANS/WP.24/2022/11 and agreed:
- The reference to “nails” instead of “fastener” in clause 2.3.5 should be retained.
  - Clause 2.3.8 should be further changed as per the text in CTU-Code/2023/first-informal-meeting/4.
  - Captions of the following figures should be amended as follows:
    - Figure 7.13 – *Irregular shaped packages without sharp edges blocked with dunnage bags, and*
    - Figure 7.15 – *Blocking cross beams with limited strength due to securing by friction applicable for low cargo mass*
  - New figures should be included, as follows:
    - Figure 7.16 – *Blocking cross beams with greater strength due to physical connection*
    - Figure 7.xx – *Tarpaulin used solely to prevent small and light packages from falling out when stowed close to the door (related to clause 4.1.7.3)*
    - Figure 7.xx - *Net-curtain used to prevent small and light packages from falling out when stowed close to the door (related to clause 4.1.7.3).*
  - Figure 7.40 should be removed.
  - Proposed clause 4.1.7.3 should read as follows:  
*“4.1.7.3 The CTU doors may be tested to withstand a force equivalent to a percentage of the CTU’s payload, however, for cargoes that are liable to collapse, such as small hand-packed packages and pallets with low integral stability, the doors should not be used as the only means... A possible falling out of cargo can be prevented by spring lashings (see Figure 7.59), a modular lashing system (see Figure 7.26), a tarpaulin (see Figure 7.xx) or nets or net-curtains (see Figure 7.xx).”*
  - The illustration for Figure 7.52 should be changed. An image with clearer illustration of the stanchions should be sourced.
  - Clause 4.5.3, the first sentence, should be changed as follows:

*“When dunnage bags are marked with Level 1 to 5 according to the Association of American Railroads criteria, these have the following minimum bursting pressure:”.*

- Clause 4.6, Table 7.14, the sentence should read as follows:

*“Blocking capacity in tonnes of various size dunnage bags having a bursting pressure of 1.7 bar at a gap of 30 cm.”*

- 9. Experts were requested to provide the secretariat with images depicting better the blocking methods. All images should be free of copyright restrictions.

10. Participants also considered comments provided in CTU-Code/2023/first-informal-meeting/5 as well as additional remarks in CTU-Code/2023/first-informal-meeting/11 on revised clauses reflected in ECE/TRANS/WP.24/2022/12 and concluded:

- The first paragraph in clause 4.2.1 should be deleted and so neither the term package nor unit load should be referred in this clause. The second paragraph in the same clause should read as follows:

*“Consignors should ensure that formed packages are capable... handling and transport. Overpacks should retain their integrity during transport... (to be continued as provided in ECE/TRANS/WP.24/2022/12).”*

- Table 7.9 should be replaced with the table provided in CTU-Code/2023/first-informal-meeting/5. The text in the last row of the table should read as follows:

*“The TSL values for the sea areas in longitudinal direction apply to internal friction  $\mu < 0.5$ ”*

- Caption for Figure 7.38 should be amended as follows:

*“Figure 7.38 During transport in sea area B in a vehicle complying with standard EN 12642-XL, packages marked with TSL 4 or better... (to be continued as proposed in ECE/TRANS/WP.24/2022/12)”*

- The typo on the yellow labels on top of the two vehicles in Figure 7.38 need rectification.

- Clause 4.2.4.3 should be deleted.

- The following remark after Table 7.15 should be added:

*“When testing in longitudinal direction for sea transport, the corresponding test angle obtained by Figure 7.98 for the transverse direction may be used, or the required inclination angle,  $\alpha$ , can be calculated by the following formula:*

$$\alpha = \arcsin\left(\frac{r + \gamma \cdot \sqrt{1 + \gamma^2 - r^2}}{1 + \gamma^2}\right), \text{ where } r = c_{x,y} - \gamma \cdot c_z$$

- The inclusion of a section in Chapter 10 on stabilizers should remain for further discussion and consideration of outcomes from the discussion on stabilizers at the 9<sup>th</sup> session of the IMO Subcommittee for Carriage of Cargoes and Containers (CCC 9). To this end, the clauses under 10.4 as provided in ECE/TRANS/WP.24/2022/12 should be kept in square bracket. Also, alternative text should be provided in square bracket to read as follows:

*“[For stabilised polymerising substances, specific information on stabilisation is required. The details are promulgated in the applicable dangerous goods regulations for the relevant mode of transport.]”*

11. WSC in its role as chair of a subgroup under the IPPC's Sea Container Focus Group (SCFG) introduced CTU-Code/2023/first-informal-meeting/6 and provided insights into the process managed under the International Plant Protection Convention (IPPC) for minimizing pest risks associated with the sea container pathways. WSC also referred the Joint Industry Guidelines for Cleaning of Containers as contained in CTU-Code/2023/first-informal-meeting/12.
12. WSC again speaking in its role as chair of a subgroup under the IPPC's SCFG noted that the subgroup recommended to include a new chapter early in the CTU Code on minimising pest risks associated with the sea container pathway. The content of this chapter should be based on the text provided in CTU-Code/2023/first-informal-meeting/6, part 1, noting however that the IPPC's contribution is likely to undergo changes to reflect developments on this matter within the organization; a stable version of the IPPC input would likely be available in late spring 2024 (after CPM-18).
13. Other participants did not fully favour this recommendation. They argued the pest risks are one of the many risks that require attention and a specific chapter on this subject may give it a disproportionate weighting in the CTU Code. They were of the opinion to keep the available structure and update sections and/or clauses within that structure as necessary and appropriate with new knowledge and practices pertaining to prevention of pest contamination. A suggestion was also made – inspired by current chapter 10 of the CTU Code – to create a new chapter 10*bis* to provide advice on the pest contamination risks in line with the IPPC contribution. That suggestion was received favourably by some participants.
14. Participants agreed therefore to pursue discussion on this subject in intersessional work among interested experts. IPPC secretariat should be also invited to contribute to this discussion. The following participants expressed their willingness to participate in the intersessional work on this subject: Germany, ETS Consulting, Exis, GSF, ICHCA, ICS, MariTerm AB, TT Club and WSC.
15. The secretariat was requested to organise online meetings on this subject in late April or May.
16. Participants briefly discussed then CTU-Code/2023/first-informal-meeting/7. In view of limited time at the meeting, they agreed to consider the definitions through intersessional work. The following experts volunteered to participate in the intersessional work: Germany, ETS Consulting, Exis, GSF, ICHCA, ICS, IUMI, MariTerm AB, TT Club and WSC.
17. The secretariat was requested to organise online meetings on this subject at the end of April or May.
18. As agreed at earlier meetings, participants would return to discussing the subject of chains of responsibilities as provided in CTU-Code/2023/first-informal-meeting/8 subject to the decision on the way forward on the definitions. Therefore, discussion on this document was postponed to the next meeting.
19. Participants also considered CTU-Code/2023/first-informal-meeting/9 which suggests standardisation of terms for warning used on cargo packages and CTUs. They agreed with the proposed adjustments of terms with the following comments:
  - the definition of label should also incorporate pictograms for transport of dangerous goods
  - The definition of mark should be revised as follows:

*“An applied decal, panel, or imprint that provides information concerning the cargo packed, dunnage blocking capacity or other packing equipment information.”*

- Clause 11.2.3 in Chapter 11 should read:

*“The applicable dangerous goods regulations may require specific marks for CTU... (to be continued as proposed in the document).”*

#### **IV. CTU Code mobile application**

20. The secretariat reported on the intersessional work undertaken by interested experts in late 2022 and early 2023 on the CTU Code mobile application. The work was focused on considering options for filtering information in the CTU Code. The outcomes of the intersessional work were contained in CTU-Code/2023/first-informal-meeting/10. It describes worked-out selection criteria for filtering CTU Code content. These selection criteria should assist in finding the relevant clauses in the CTU Code depending on the commodity for carriage, its packaging and CTU type used for carriage as well as the combinations thereof.
21. ETS Consulting explained the proposed selection criteria such as CTU type, commodity type, packaging type and the categories worked-out for each criterion. He further presented how the criteria can be combined in chains for filtering CTU Code content also taking into account functional roles, as follows:
  - (1) CTU Type – Packaging Type – Functional Role – CTU Code text,
  - (2) Commodity Type – Packaging Type – CTU Type – Functional Role – CTU Code text, and
  - (3) Packaging type – CTU Type – Functional Role – CTU Code text.
22. He also explained how flagging for dangerous goods could be made to provide relevant information on packing of dangerous goods. Finally, he presented mapping done for the filtering chains for all the criteria and categories until the CTU Code level, and a few examples presenting also the CTU Code text mapping.
23. The meeting appreciated the outcomes from the intersessional work and the mapping done by ETS Consulting. They were considered a good basis for further development of the app by any developer, including commercial developers.
24. The meeting discussed then the possibilities for development of the CTU Code apps by commercial developers. The secretariat informed the meeting that interested commercial developers would need to contact IMO Publishing which manages the copyright for the CTU Code. Commercial apps would not be validated as official CTU Code apps.
25. The meeting thanked the secretariat for this additional information. It wondered whether some kind of a factsheet could be developed which commercial developers could examine and use it to evaluate their interest in the CTU Code app development prior to contacting IMO Publishing. The secretariat confirmed that it would contact IMO Publishing on a possible factsheet and report back at the next meeting.

## V. Other Business

26. The secretariat reported on the decision of the Inland Transport Committee (ITC) on CTU Code taken at its 85<sup>th</sup> session on 21-24 February 2023. ITC took note of the progress made in updating the CTU Code done in informal pre-work requested by WP.24. It also took note of the fact that the International Labour Organisation's Sectoral Advisory Bodies would not be able to discuss the establishment of the joint Group of Experts on CTU Code at least until 2025. ITC further recognized the urgent need to update the CTU Code to improve the safety of workers handling CTUs and through it contribute to Sustainable Development Goal 8, target 8 on promoting safe and secure working environments for all workers. To this end, ITC requested that a process is initiated to review the proposed elaborated updates, and if and as appropriate to adopt them, in the framework of a Special session of WP.24 on the CTU Code to be held before the end of 2023. It requested the secretariat to invite IMO and ILO and, through them, their members to the Special session.
27. The secretariat informed the meeting that it was exploring a possibility to hold the special session in the week of 4 December 2023. The specific meeting date would be communicated once it is confirmed.
28. Participants took note of the information provided. They expressed appreciation to ITC for mandating a formal process for review and adoption of proposed changes to the CTU Code.

## VI. Date and Place of Next Meeting

29. Participants were informed of the next informal meeting to take place virtually from 12:30 to 16:30 on 5 July and from 12:00 to 16:00 on 6 July 2023. Two intersessional virtual meetings, one on definitions and another on prevention of pest contamination would be scheduled in late April or May 2023.
-