### 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, 12-13 July 2022

## CTU Code – Mobile App

This document was prepared by ETS Consulting in conjunction with the UNECE secretariat

#### Introduction

Following a meeting between the UNECE secretariat and the Cargo Integrity Group (CIG) to discuss the requirement and format of a questionnaire to identify the needs and expectations of the functional parties identified in the CTU Code, particularly Packers and Shippers, it was concluded that such a questionnaire may not provide statistical relevant information that would aid the development of any application. Therefore, development and circulation of a questionnaire should be discarded.

Instead, effort should be made to elaborate on a simple solution that should focus, to start with, on annex 7 of the Code, as the annex 7 contains the most critical information directed to Packers. At the same time, it should be remembered that the structure of the App must be so designed that it can be developed to cover all aspects of the Code.

This document is prepared to show a possible idea with two simple examples on how to possibly present specific content of annex 7 in the App that is related to packing of different type of cargoes. It is noted that the examples have not been elaborated in every detail.

These examples and the overall approach to the development of the App build up on earlier work which resulted in the elaboration of a draft framework for the App. The simple App would cover boxes of the framework referred to as Entry screen (000-00) and Cargo Types screen (002-00) as highlighted in Figure 1.

The development of a simple App would require an agreement between experts on the Cargo Types it should cover. The Cargo Types presented in example 1 should serve as a basis for discussion.

Once the Cargo Types for use in the App are agreed, the next natural step would be a development of a script for the simple App, which would elaborate in every detail on packing methods, based on the information contained in annex 7, for the agreed Cargo Types.

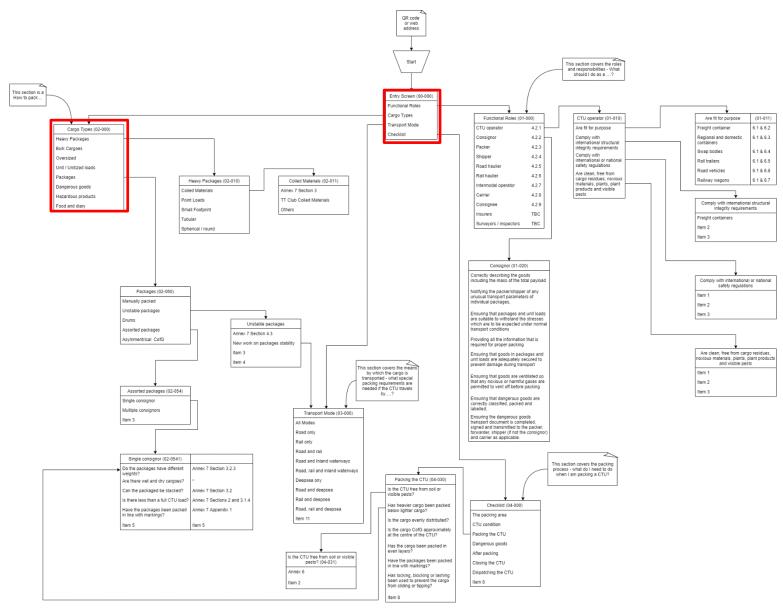
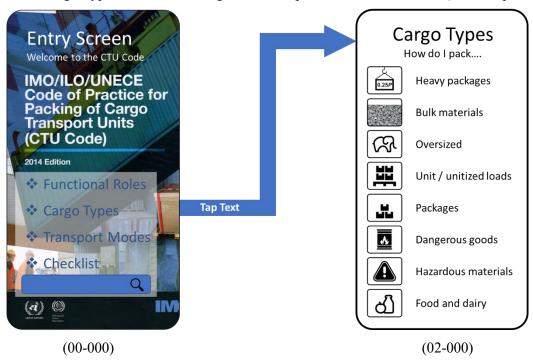


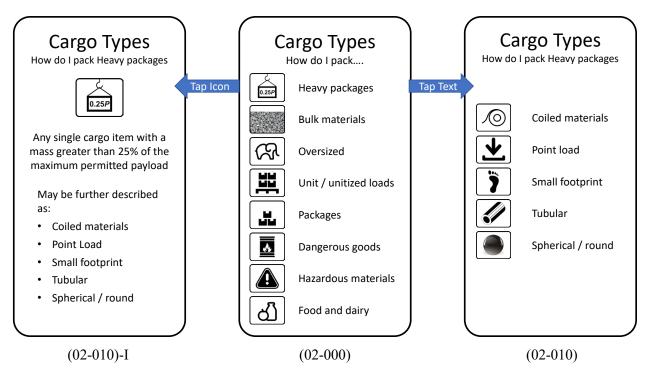
Figure 1 - Draft Framework

#### Example 1 to demonstrate Bedding Arrangements for heavy cargos

The Entry Screen (00-000) is shown with four specific entry types (for the simple App, only the Cargo Types button will be activated), allowing the user to select how they wish to access the code: In this example the user can select "Cargo Types" or enter the cargo to be transported in the search filed (for example "Marble").

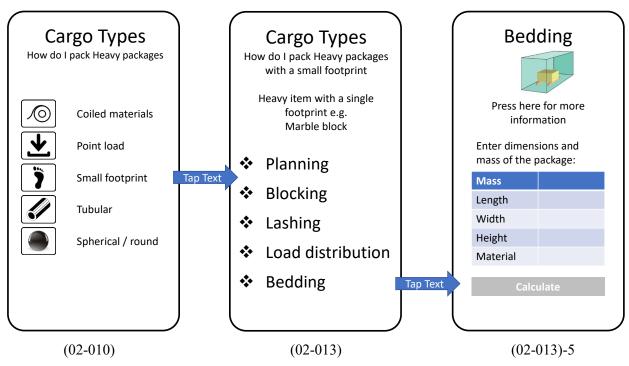


Tapping the text "Cargo Types" will bring up the "Cargo Type – How do I pack ..." screen (02-000) listing the (currently) 8 identified groups of cargo.



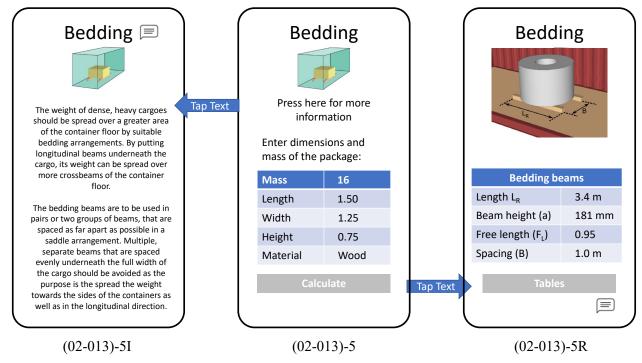
Each of the 8 cargo groups may have two outputs – tap the Icon and an information page will come up. Tap the text and the screen with the cargo group sub-divisions screen comes up (02-010).

Tapping the cargo sub-division text, in this example "small footprint" will bring up the various packing elements related to the cargo subgroup (02-013). It may be that these five categories are common to all subgroups.



Each subgroup may have a list of keywords for cargos – such as marble, granite or machinery and entering these into the search field on the Entry Screen (00-000) will also bring the user to the packing screen (02-013).

Finally tapping "Bedding" text will bring up the "Bedding" Screen (02-013)-5.

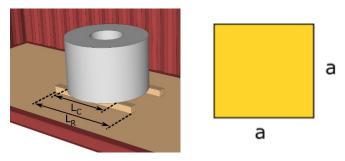


In this example the Bedding screen<sup>1</sup> allows the user to enter the information about the cargo to be transported. To assist the user there is an information page associated (02-013)-5I.

The user enters the mass and dimensions of the cargo and presses the calculate button which brings up the results screen (02-013)-5R.

The image presented on screen (02-013)-5R is to be made into an animation that will also display:

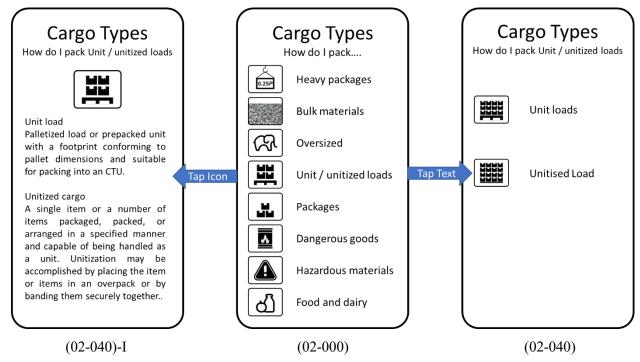
<sup>&</sup>lt;sup>1</sup> This example is based on newly proposed clauses on bedding arrangements.

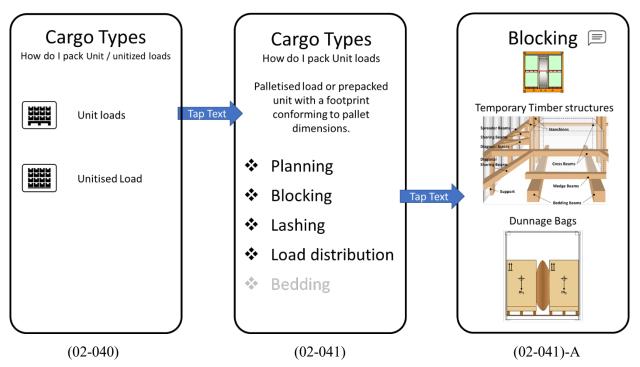


Picture showing the "length" L<sub>C</sub> of the cargo

The button at the bottom of the screen would allow the user to access tables X.1 and X.2 shown in the document CTU-Code\_2022\_second-informal-meeting\_9.pdf.

# Example 2 to demonstrate Unit / Unitised loads





Following the screens through from the Entry Screen (00-000) and Cargo Types screen (02-000), this time the user wishes to pack a palletised load, selecting "Unit / unitised load which brings up the cargo group subdivisions for packing unit / unitised loads (02-040).

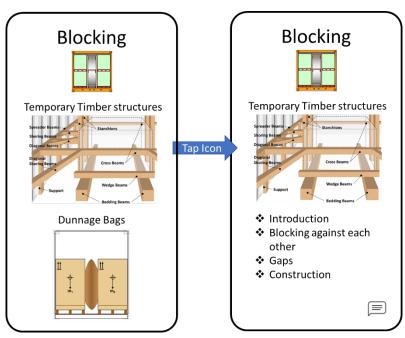
Tapping the cargo sub-division text, in this example "Unit loads" will bring up the various packing elements related to the cargo subgroup (02-041).

Selecting "Blocking" will bring Blocking Screen (02-041)-A with the two principle means for blocking:

- Using a temporary timber structure, and / or
- Using dunnage bags

Note – Tapping "Bedding" in this screen would bring up the message "Not required for this type of cargo" and the words greyed out.

Tapping on the Temporary Timber Structure will bring up Clause 2.3 from annex 7. The user can scroll through that section or a use a contents / summary page to identify those elements that relate to unit loads, for example:



(02-041)-A

(02-041)-B

Tapping on:

Introduction would bring up §2.3.1 to §2.3.4

Blocking against each other would bring up §2.3.8 and §4.3.3

Gaps would bring up §2.3.7

Construction would bring up §4.1.7.2, §4.2.4, §4.2.7 and §4.2.9

Note – The summary subjects and the links are suggestions and can only be finalised once the amendments to the CTU Code have been agreed.

## Feedback and future developments



It is important that the App is seen to be a useful tool and therefore it should incorporate an opportunity to provide feedback on the current state of the App (rating) and areas that the user feels are missing and that they would find useful in their work (Gap analysis).

An Icon should feature on the output and information pages that allows the user to provide feedback, comments and suggestions.