Annex 1: CPu Solution

1. GENERAL DESCRIPTION

The introduction of CPu will replace the current method of picking up containers using PIN codes at the Port of Antwerp with a fully digital solution.

This involves a digital system 1) to which all parties involved must have joined and 2) which is fed by data transmitted by certain Users or inserted by the various Users (the Maritime Transport Organiser, the Terminal, the First Authorised Representative, the Transport Organiser and any User located between the First Authorised Representative and the Transport Organiser). This creates a digital chain where the Release Right, and ultimately the Pickup Right, can be digitally transferred to the next User in the logistics chain. Ultimately, CPu grants a Final Pickup Right so that a container may leave the terminal. The authorities will have a view of this digital chain at all times.

2. CPU SOLUTION AND COMPREHENSIVE CPU SOLUTION

The CPu Solution consists of the following components:

1. CPu Core
2. Asynchronous APIs
3. Notifications
4. CPoint integration
5. Alfapass Validation Service integration
6. Basic GUI

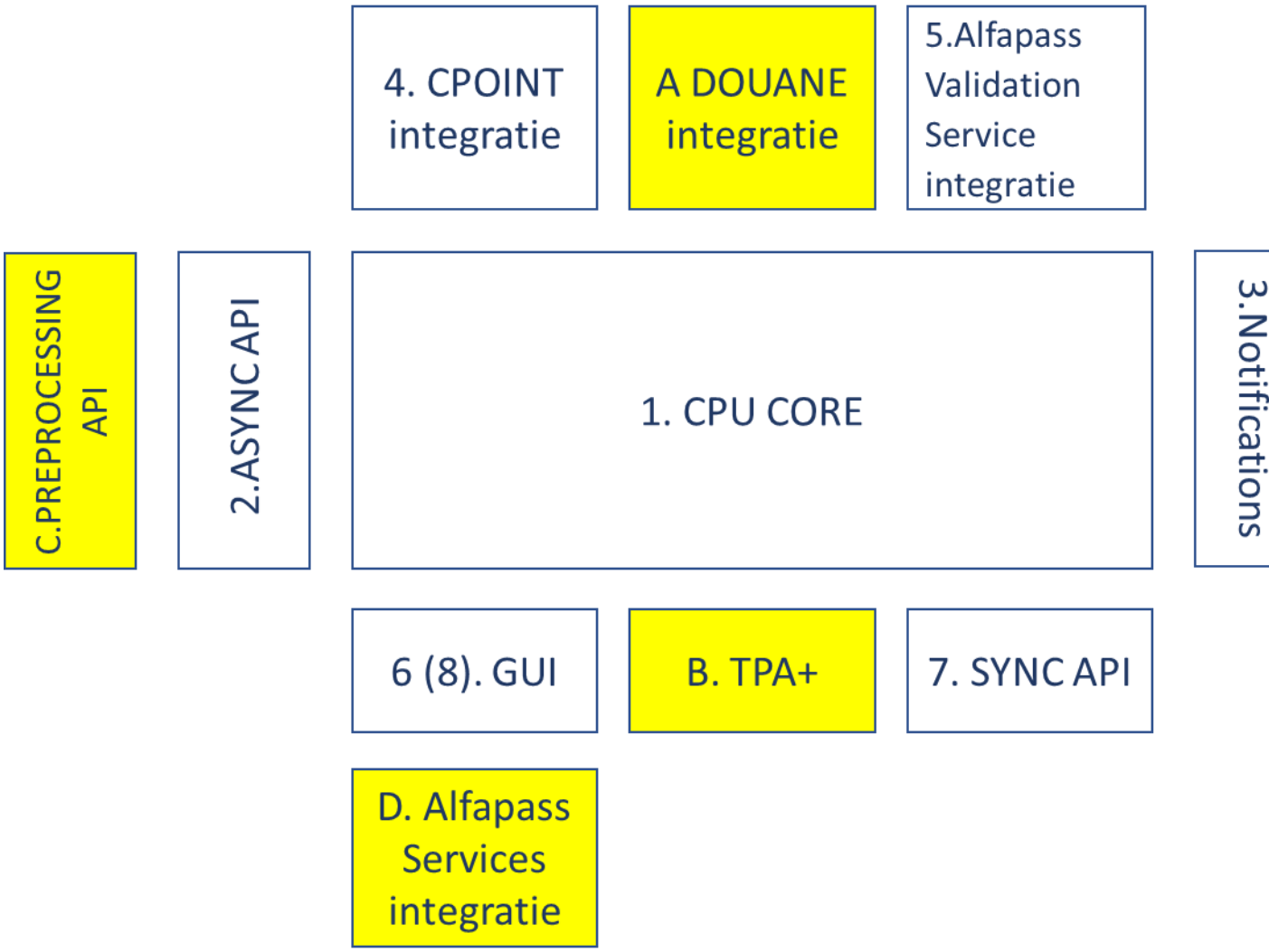
The CPu Solution is extended by the following components:

7. Synchronous APIs
8. GUI+

In addition, the following Add-On solutions are offered, which along with the CPu Solution form the Comprehensive CPu Solution:

A. Customs integration
B. TPA-specific APIs
C. Preprocessing APIs
D. Alfapass Services integration

Overview:



Description of the components of the CPu Solution

1. CPu Core

- Supporting the creation of a commercial release right that can ultimately be converted to a Final Pickup Right.
- Supporting terminal journeys (gate in/discharge and gate out/load) and Terminal Clearance.

2. Asynchronous APIs

- Creating and updating a commercial release. See Documentation for further explanation
- Accepting, refusing, continuing and withdrawing a commercial release
- Sharing terminal journeys inc. status of commercial release.

3. Notifications

- Feedback on requests as under 2. Asynchronous API included
- Sharing events related to a commercial release, Pickup Right, terminal journey or terminal release status

4. CPoint integration

CPu uses CPOINT as a repository of active companies and active users. CPOINT itself is not part of the CPu Solution, just the integration.

5. Alfapass Validation Service integration

CPu uses the Alfapass Validation Service to validate the validity of a Pickup Right at pickup by truck. To this end, NxtPort has developed an integration API with Alfapass Validation Services. The Alfapass Validation Service is not part of the CPu Solution, just the Alfapass Validation Service integration

6. GUI

A User Interface that allows Users to exchange certain Data and perform a limited number of CPu functionalities.

7. Synchronous APIs

Additional synchronous APIs have been provided for the purpose of validating the Pickup Right.

For the purpose of processing the commercial release, an additional API has been provided for the terminals to request details.

8. GUI+

Additional screens have been made available for various roles to consult the status of commercial releases and trigger certain actions in bulk.

Description of the Add-on components of the Comprehensive CPu Solution:

A. Customs integration

Customs sends various messages directly or indirectly to CPu via different transport protocols. Available messages are (partially) processed by the Comprehensive CPu basic solution as described in the Documentation. CPu is not responsible for the unavailability of customs data, nor for the quality of the data.

The customs applications and (intermediate) communication infrastructure are not part of the Comprehensive CPu solution.

B. Preprocessing APIs

A limited number of EDIFACT message types will be temporarily supported for delivery of the Data. The list of supported EDIFACT types is included in Documentation. Validation of messages is required in UAT environment to receive support outside business hours. To do so, please follow the procedure described on the website.

C. TPA-specific APIs

For the purpose of Data Delivery via Third-Party Applications, specific APIs have been developed.

The Third-Party Application is not part of the Comprehensive CPu solution

D. Alfapass Services integration

To confirm certain actions, it uses the Alfapass Services, a collection of services offered by Alfapass to verify a User's identity based on an Alfapass identity.

(i) This includes Alfapass APIs such as
   a. the Alfapass Validation Service,
   b. the MyAlfapass API,
   c. the Alfapass Customer Group Verification API.

(ii) The use of Alfapass authentication tokens, such as
   - Use of Alfapass Smartcard in various ways
   - Use of MyAlfapass

(iii) the Alfapass Customer Group Verification Service in conjunction with the Alfapass Customer Group Verification API.

To use the Alfapass Services, CPu has developed some specific APIs.

The Alfapass Services are not part of the Comprehensive CPu solution, just the integration with the Alfapass Services.

Specific terms and conditions apply to the Alfapass Services as established by Alfapass. A link to these terms and conditions is included for your information: link

3. FUNCTIONALITY

3.1 CPu BASIC FUNCTIONALITY

The shipping agent creates a commercial release in CPu.

The shipping agent transfers a commercial release to the next party. This party will accept or reject the commercial release right and then pass it on to the next party. Thus, the commercial release right passes from one party to another until it has arrived with the Transport Organiser and a Pickup Right is created. CPu will then create a Final Pickup Right so that a container can be picked up from terminal or stripped at terminal.

The shipping agent can 'update' and 'revoke' the release right at any time.

A shipping agent can 'delete' a release right if the shipping agent holds that right.

Stakeholders can be informed of certain events through notifications.

A terminal must query CPu for pickup by truck at the time a container is picked up and CPu will provide feedback on whether the Carrier actually holds the Final Pickup Right and thus may pick up the container. The Final Pickup Right and Status will be returned by CPu to the terminal as a notification on an asynchronous API for pickup by truck (see link) or as a response on a synchronous API (for truck, see link).

A terminal must query CPu for pickup by rail or barge at the time a container reached the Second Barge and Rail Cut Off (2BRCO) and CPu will provide feedback on whether the Planner actually holds the Final Pickup Right and thus may pick up the container. The Final

Pickup Right and Status will be returned by CPu to the terminal as a response on a synchronous API (see link).

3.2 Additional CPu functionality

3.2.1 *Introduction of customs light*

The CPu solution has been extended with the following logic to facilitate Customs Release.

- Processing CCRM messages to determine whether a container may leave the terminal from a customs standpoint.
- Inclusion of customs status when querying Status.
- Processing additional customs messages to visualise checks and the (partial) write-off of freight lists
- Specific logic for identifying port equalisation and triggering an orange customs light.
- Processing CUSCAR messages for better linking of customs messages

3.2.2 *Preprocessing APIs*

A limited number of EDIFACT message types will be temporarily supported for delivery of the Data.

Discontinuation of this support will be discussed with Community Representation.

The list of supported EDIFACT types is included on the NxtPort Website. Validation of messages is required in UAT environment to receive support outside business hours. To do so, please follow the procedure described on the website.

Support for following types of EDI messages can be requested and may be considered by NxtPort subject to a potential charge for the specific costs:

- COREOR
- CODECO (original ‘0’ and delete ’9’ are supported as codes)
- COARRI

The use of Preprocessing APIs does not relieve the parties from providing all the Mandatory Data. Missing data may also possibly be supplied using the GUI.

3.2.3 *TPA-specific APIs*

Specific APIs can be made available for the purpose of TPAs and these can be made available upon request. The specific costs may be charged for if decided by the Community representation.

4. STATUS INFORMATION

The Status of the CPu Solution is maintained in following lights:

- Commercial Release
- Terminal Ready
- Pickup Light
- Terminal Operation
- Gate Operation

The following lights are part of the Comprehensive CPu Solution:

- Customs
- Customs Progress

5. DOCUMENTATION

5.1 Process documentation

- Link to CPU website: link

5.2 Technical documentation

5.2.1 *Terminals*

- General information regarding APIs: link
- Specific information regarding APIs: link. This includes:
    - Unloading notice
    - Terminal release
    - Gate-out notice.
- Specific information regarding Notifications: link .
- Best practices: see link

5.2.2 *Shipping agents*

- General information regarding APIs: link
- Specific information regarding APIs: link. This includes:
    - Commercial release: see link
- Specific information regarding Notifications: link
- Best practices: link

5.2.3 *Release parties*

- General information regarding APIs: link

- Specific information regarding APIs: link. This includes:
    - Transfer Release Right notice: see link
- Specific information regarding Notifications: link
- Best practices: see link

5.2.4 *Transport operators*

- General information regarding APIs: link
- Specific information regarding APIs: link. This includes:
    - Generate Pick-up Right: see link
- Specific information regarding Notifications: link
- Best practices: see link

5.3 TPA

The signed TPAs or Third Party Agreements are an integral part of the Documentation. These are known between NxtPort and Third Party Application Provider(s) and can be requested by User. This cannot be refused by NxtPort without justifiable reasons.