

Export Cargo Management



INSTRUCTION: 'CONNECT System Interface' **SERVICE: Arrival at Terminal (container terminal)**

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Why the instruction 'Connect System Interface'?

This instruction serves to support the customer and software supplier for the rapid and efficient realization of a System Interface connection for the desired service. It contains a step-by-step plan and the information necessary for a successful realization. This instruction does not provide information for the connection with web interfaces.

Step-by-step plan

Step	Explanation
1. The customer requests the application form and returns it filled in and signed.	Via sales@portbase.com (only possible as a customer, not as a software supplier)
2. Align the information flow, process flow, message flow and message specifications. This also includes the alignment of synonyms and codes for the sender, receiver and carrier.	In cooperation with the Portbase Business Manager Portbase delivers instructions, message specifications, code tables and a step-by-step connection plan.
3. Align technical details (transfer protocol, check message structure and message data)	In cooperation with a Portbase Interface specialist For possible transfer protocols see chapter 'Transfer protocols system interfaces' in this document.
4. Portbase establishes a test environment	By a Portbase Interface specialist (configure account, terminal preferences and message configuration)
5. Test execution (no production and chain tests) and acceptance	In cooperation with a Portbase Interface specialist
6. Connecting to the production environment	In cooperation with a Portbase Interface specialist/Service desk (configure account, terminal preferences and message configuration in the production environment)
7. Activation of terminal and document type in the production environment	In cooperation with Portbase Sales support/ Sales manager based on terminal contract(s)

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Introduction to the service 'Arrival at Terminal'

With the business service 'Arrival at Terminal' as a container terminal you don't have to perform manual operations at the arrival of a transport equipment. All export documents that are notified by the ship brokers, exporters and forwarders via Portbase are already available in your system. The arrival of the ECS and NCTS cargoes are directly reported to Customs (Arrival at Exit and Arrival Notification). The service also gives feedback in case Customs wants to inspect the cargo. The release of the cargo after the inspection took place is also serviced.

For more detailed information about the service we refer to the factsheet, which can be found via <https://www.portbase.com/en/services/notification-arrival-export-containers/factsheet/> and <https://www.portbase.com/en/services/clearance-ncts-export-containers/factsheet/>

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Functional process flow of the service 'Arrival at Terminal'

The process starts with the report of the gate-in by the container terminal. The gate-in is sent to Portbase. Portbase determines for which document(s) an Arrival at Exit (ECS) or an Arrival Notification (NCTS) has to be send¹.

ECS

Portbase sends the Arrival at Exit to Customs. The customs system replies with a functional acknowledgement of the arrival message. If Customs sends no control notification within 240 seconds, the container terminal receives a release trigger. When Customs sends a control notification, the container terminal is informed that the transport equipment should be blocked. This notification includes the document(s) and the type of inspection involved. The container terminal receives a subsequent release notification as soon as the inspection is handled.

NCTS

Portbase sends an Arrival Notification to Customs for all NCTS documents which have arrived. The reply of Customs (release or inspection) is sent to the container terminal in a status message.

This process is supported by the Portbase services:

- Notification of Arrival Export Containers
- Clearance NCTS Export Containers

A schematic overview of the process can be found on the next page.

¹ The booking reference and transport equipment ID in the gate-in are matched with the information received in the service 'Notification Export Documentation'. If however there is no Notification Export Documentation the container terminal is able to enter this data in its own system or enter the data in Portbase using the web browser interface.

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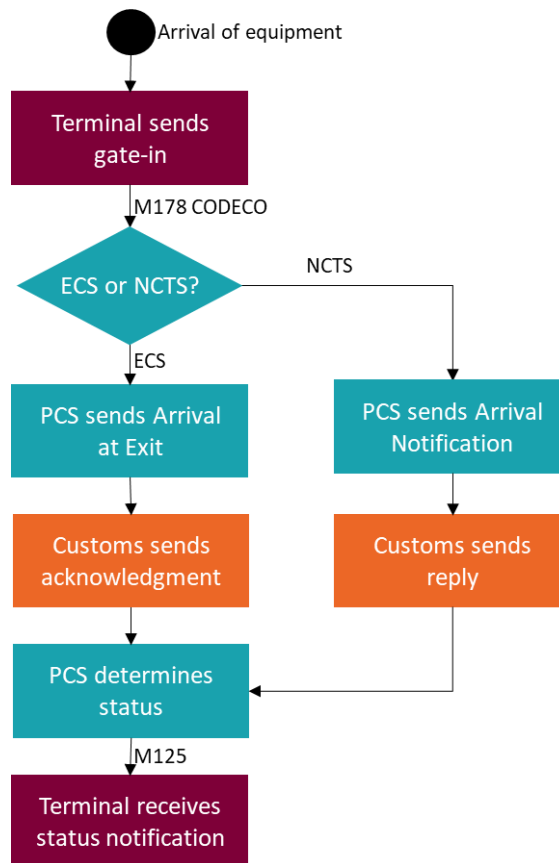


Figure 1: Schematic overview of the functional process flow

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Message flow of the service 'Arrival at Terminal'

Usage of the service 'Arrival at Terminal' is possible by using EDI messages. The following messages are involved:

ID	Description	Type
M178	Gate-in/CODECO	EDIFACT
M125	Export Container status message	XML

Table 1: Messages involved in the service 'Arrival at Terminal'

The message ID's correspond to the numbers next to the arches in the functional process flow. This results in the message flow, shown in the underneath figure:

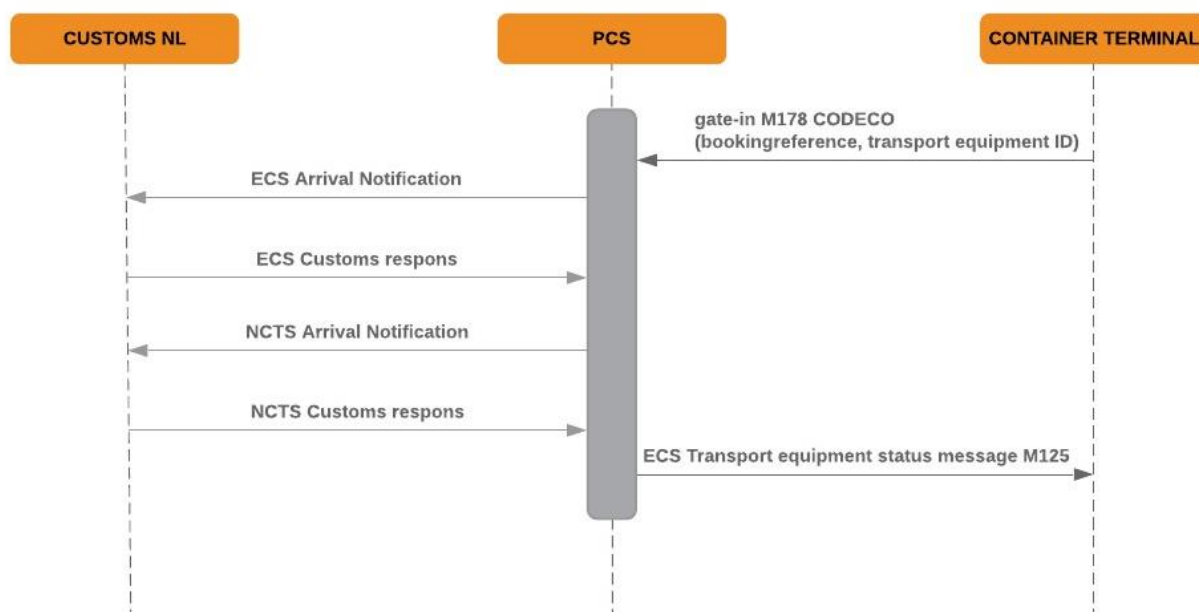


Figure 2: Message flow

Message specifications

Detailed message specifications as well as code sets, used in the messages, are available as separate files and are to be requested at the interface specialists. Possible values for code sets are incorporated in the message specifications. Underneath you find a couple of extra instructions for composing the messages:

- Be aware of the order of the groups and segments.
- In the TDT+1 segment the Transport identification is mandatory. It is preferred to use the Barge Europe Number, train number of truck license number. When these are not available a dummy value can be used

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for the export services. Be aware that when the M178-message (CODECO) is also used for other PCS services a dummy value is not allowed.

- Don't forget to add the LOC+165 segment in the message.

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System Interface transfer protocols

Portbase supports the following protocols:

- AS1 or SMTP

In order to use e-mail, the SMTP address should be set to edi@pcs.portbase.com.

- AS2 or HTTP

Information is available on request. Only a few clients use this protocol.

- AS3 or FTP

FTP documentation: see appendix.

- Web services

For the time being, connection through web services is message-based.

- MQ – Message Queue

This technology uses EAI; it allows server processes to communicate asynchronously.

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Appendix A: PCS connection using SFTP

Communicating with the PCS using SFTP (VLTrader, v0.1)

Introduction

Portbase offers their customers several ways of electronic communication to exchange messages between their own in-house system and our Port Community System (PCS). This document describes the procedure of pushing and pulling messages via the PCS SFTP channel.

Technical requirements

- The Portbase SFTP services only accept push/pull. This means that you are responsible to place and get the files in the directories.
- The maximum file size is 4 MB. Larger files will be rejected.
- Every customer may have only 100 MB of data on his server space. When you exceed that quota you will get a notification.
- Messages in the *cur* directory (upload and download) will be deleted after 7 days. You have the possibility to delete them earlier, though that is not preferred.

Procedure

The PCS SFTP server can be reached via [FTP.pcs.portbase.com](ftp.pcs.portbase.com). By the use of an SFTP client you can log on to this server with your username and password.

A file that is being downloaded or uploaded should always be in the *tmp* directory. In this directory, the file has a locked status and will not be removed.

After a successful download or upload, the file should be moved (not copied!) to the *new* or *cur* directory. In this case the file is unlocked so that it can either be processed or archived.

Step-by-step upload procedure

1. Upload the specific file to directory *upload/tmp/*
2. After successful upload: move the file to directory *upload/new/*
3. When moving the file to the *upload/new/*, the file will immediately be processed by the PCS. A Copy of the file will be stored in the *upload/cur/* directory.
4. After 7 days the file will be automatically deleted.

Step-by-step download procedure

1. Check the directory *download/new/* for new files to download.
2. Move the specific file to directory *download/tmp/*
3. Download the file from *download/tmp/*
4. Move the downloaded file to directory *download/cur/* to show that you have downloaded the file. After 7 days the file will be automatically deleted.