

# **Telema EDI Module Functional Requirements**

Telema AS

2.09.2021

Version 1.6

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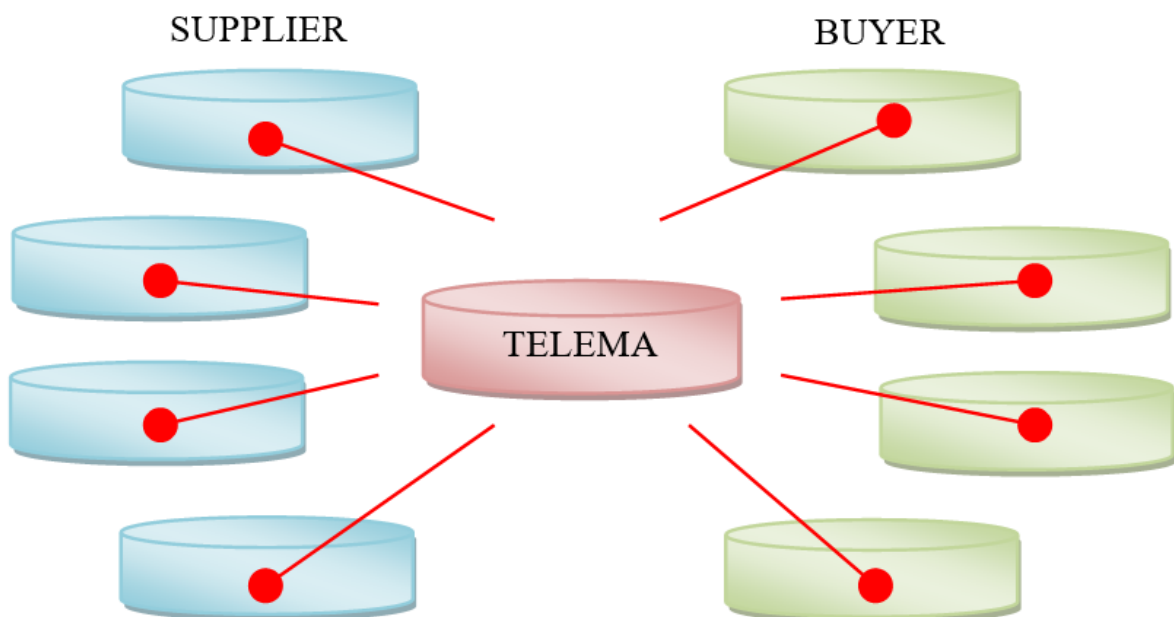
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## INTRODUCTION

The objective of this document is to give instructions, directions and recommendations to help in development of Telema EDI Module. ERP must support all Telema EDI Module functionalities to become Telema Certified partner.

Telema AS is the leading EDI (Electronic Data Interchange) operator in the Baltic States, uniting over 1000 suppliers and over 3000 shops (as of May 2012). Telema offers IT solutions for automated data flow in supply chain processes. Telema transfers, converts, monitors and processes electronic business documents (e-documents) such as orders, shipping notices and invoices.

Telema EDI service is integrated with customers' own software, allowing for full automation and cost savings. Received orders can be imported automatically and processed in own warehouse module, invoices created and sent conveniently from own software.



### Basic document types exchanged via Telema EDI System

#### Transaction documents:

- **Order** - message specifying details for goods or services ordered under conditions agreed between the seller and the buyer. (Telema eDoc ORDER). Return order is subtype of the document to exchange information about returns.

- **Despatch Advice** - message specifying details for goods despatched or ready for dispatch under agreed conditions. (Telema eDoc DESADV).
- **Receiving Advice** - this message is to address the business needs related to the goods receipt. This message is used to report the physical receipt of goods. The message allows for the reporting of discrepancies in products, quantities, terms, packages, etc. The message may contain only the information that the received consignment is completely in line with the consignment information given in the Despatch Advice message. In case there is no detail to be provided. (Telema eDoc RECADV).
- **Invoice** - message claiming payment for goods or services supplied under conditions agreed between the seller and the buyer. (Telema eDoc INVOICE). Document subtype credit invoice is also often used in business processes.
- **Announcement for returns** - a message by which a party announces to another party details of goods for return due to specified reasons (Telema eDoc RETANN).

**Master data documents:**

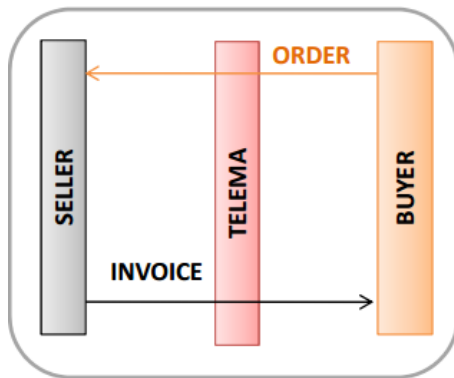
- **Product Catalogue** - message to submit master data - a set of data that is rarely changed – to identify and describe products a supplier offers to his (potential) customer or buyer. This information of long validity includes technical and functional product description but not commercial terms and conditions. This message can be used as well to update the information on a previously sent PRODAT message. (Telema eDoc PRODAT)
- **Price Catalogue** - message to enable the transmission of information regarding pricing and catalogue details for goods and services offered by a seller to a buyer. (Telema eDoc PRICAT).
- **Partners List** - message to enable the transmission of basic information regarding locations and the related operational, administrative, financial, manufacturing and trading data.

**Reports:**

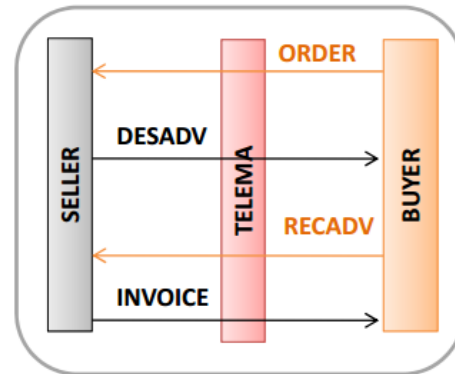
- **Sales Report** - Message to enable the transmission of sales data related to products or services, such as corresponding location, period, product identification, pricing, monetary amount, quantity, market sector information, sales parties. It enables the recipient to process the information automatically and use it for production, planning, marketing, statistical purposes, etc. (Telema eDoc SLSRPT).
- **Inventory Report** - Message specifying information relating to held inventories. The inventory report message is intended to be used in either direction between trading partners. (Telema eDoc INVRPT).

**Most common EDI document exchange schemas used by Telema clients:**

### 2DOC



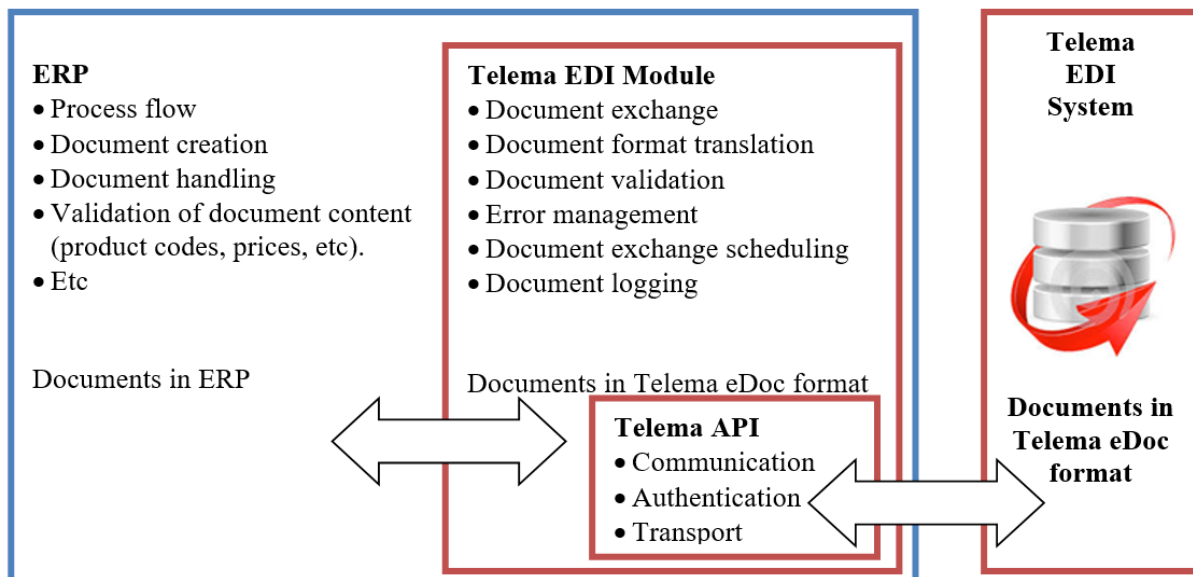
### 4DOC



## 1. TELEMA EDI MODULE

**Telema EDI Module** is the combination of the document conversion module converting documents between ERP System internal structure and Telema eDoc format and the part of the ERP System handling the communication to the Telema EDI System.

**Telema eDoc** shall mean a document format for EDI Messages, which relies on XML format for data encoding. The Telema eDoc format has been derived from EDIFACT, Estonian e-invoice standard, ISO20022, and other relevant standards. It specifies different kinds of trade document types and encompasses the needs of retail companies in the Baltic States and the neighboring countries. The Telema eDoc format description is available at <http://www.telema.eu/developer>.



## **2. TELEMA EDI MODULE FUNCTIONS**

### **2.1. Document Exchange with Telema EDI System**

Telema EDI Module must implement electronic data interchange between an End User ERP Software and Telema EDI System using [Telema Rest API](#). In case of a server-based ERP solution, the End User instance of the ERP Software may be common for several users. Exchange of documents means that documents in electronic format are transferred from and to Telema EDI System using the connection channel implemented by Telema Rest API. Scheduling of communication sessions is described in section 2.5 and conversion of incoming documents to ERP internal structure described in section 2.2 of the current document. In case ERP architecture does not support possibility to create automated document exchange then also only manual exchange can be implemented.

#### **2.1.1. Automated Document Exchange**

Telema EDI Module works as automated solution to initiate document exchange with Telema EDI System. The document exchange is initiated based on the schedule which has been created using the functionality described in section 2.5.

#### **2.1.2. Manual Document Exchange**

Manual document exchange is additional functionality for initiating document exchange between End User ERP Software and Telema EDI System. This enables the user to exchange documents at any given time by initiating the document exchange with user interface controls.

### **2.2. Document format conversion**

Conversion of all incoming documents (documents transferred from the Telema EDI System to the End User ERP Software) from Telema eDoc format to the internal structure of the ERP Software and all outgoing documents (documents transferred from the End User instance of the ERP Software to the Telema EDI System) from the internal structure of the ERP Software to Telema eDoc format.

### **2.3. Document Validation**

Functionality for validating that outgoing documents confirm to Telema eDoc format. The validation of documents ensures that the document syntax confirms to eDoc specification.

### **2.4. Error Management**

Error Management functionality must enable management of all types of errors that may occur in the usage of Telema EDI Module. These errors include, but are not limited to, errors

related to incorrect document syntax, item product or customer codes, possible errors in communication with Telema EDI System, problems with document handling and other situations that require user attention.

User must be appropriately notified of errors that require user attention.

## **2.5. Document Exchange Scheduling**

It must be possible to schedule tasks for document exchange with Telema EDI System via Telema EDI Module user interface controls. There are two types of document exchange tasks:

- getdata – request documents from Telema EDI System. Activation interval for getdata must be 10 minutes.
- putdata. – send document to Telema EDI System. . Activation interval for putdata must be 10 minutes. Putdata scheduled task is not required in case putdata is activated immediately after document is ready for sending.

## **2.6. Document Logging**

The Document Logging functionality maintains history of exchanged documents and their content in a form of a document log. The document log created must be accessible to the user of the system. The history of exchanged EDI documents (containing document metadata) must be available for 6 months. Archiving the content of exchanged EDI documents is optional.

### **2.6.1. Incoming Document Log**

List of documents that are received from Telema EDI System.

Required metadata for Incoming Document Log:

- Document type (sortable)
- Document number (sortable)
- Document date and time (sortable)
- Document sender company branch name (sortable)
- Document import date and time
- The result of document import from Telema EDI System

### **2.6.2. Outgoing Document Log**

List of documents that are sent to Telema EDI System. Required metadata for Outgoing Document Log:

- Document type (sortable)
- Document number (sortable)
- Document date and time (sortable)
- Document receiver company branch name (sortable)
- Document export date and time
- The result of document export to Telema EDI System

## **2.7. Session Logging**

The Session Logging function stores information on the communication sessions between the Telema EDI Module and the Telema EDI System. The session log contains the following information:

- time and date of the session initiation
- duration of session
- number of documents exchanged
- final status of session (e.g., success, failure, some errors)

### **3. TELEMA EDI MODULE USER INTERFACE**

**User Interface for Telema EDI Module in ERP Software (Telema UI).** The user interface should enable using, monitoring and handling of errors that may occur in the usage of the Telema EDI Module at an adequate level. Telema UI must be usable in the languages supported by the ERP System, adding additional languages must be possible with minimal effort.

#### **3.1. Document Management Panel**

Document Management Panel is the main tool of the Telema EDI Module for the End User. The panel includes information about incoming and outgoing documents, sessions with the Telema EDI System and errors that have been logged by the Module. All these views can be combined into one single list or displayed separately. Exact structure of Document Management Panel is not described in this document, but agreed with ERP developer separately.

##### **3.1.1. Incoming Document List**

Displays the documents from the incoming document log described in section 2.6.1 of the document. The user can sort the document list by date, document type and status.

Required fields in Incoming Document List are described in chapter 2.6.1.

Recommended functions in document list:

- Manually activate document transfer
- View document XML

##### **3.1.2. Outgoing Document List**

Displays the documents from the outgoing document log described in section 2.6.2 of the document. The user can sort the document list by date, document type and status.

Required fields in Outgoing Document List are described in chapter 2.6.2.

Recommended functions in document list:

- Manually activate document transfer
- View document XML

##### **3.1.3. Session Log**

History of document exchange sessions with the Telema EDI System, including number of documents exchanged and session final status.

Required fields in Session Log are described in chapter 2.7.

##### **3.1.4. Error Log**

Displays the error log, including history of import and export errors.

### **3.2. Telema Connection Configuration**

The Telema Connection Configuration functionality enables configuring all the settings for the connection to the Telema EDI System.

Telema Setup must have functionality for testing connectivity to the Telema EDI System.

The following settings are configured using the functionality:

1. username
2. user password
2. session retry count

### **3.3. Document Exchange Scheduler**

The configuration of schedules must enables configuring all the settings described in section 2.5.

Telema EDI Module may optionally include tasks that activate reports or master data documents creation. These tasks are not directly linked to document exchange tasks.

## **4. FUNCTIONALITY NOT PART OF TELEMA EDI MODULE**

Telema EDI Module is a software module that implements the functionality and user interface described in chapter 2 and 3 of the current document.

There are several functions, which erroneously historically have been considered to be a part of Telema EDI Module. Telema EDI Module is not:

- Document handling process in ERP
- Document validation (product codes, prices, etc)
- Document matching
- Business process flow

## 5. EXAMPLES

Example of Telema EDI Module Document Management Panel (incoming and Outgoing Document Lists are combined into single view).

Televa kontrollpaneel

Tegevuste logi | Ajastatud tööd

Kauplus: Teine kauplus Näita: ☒ Kõik ☐ Edukas ☐ Ebaõnnestus

30.11.2012 kuni 7.12.2012

| Kuupäev              | Arvuti      | Ka... | Toiming                  | Fail                                               | Veateade                   |
|----------------------|-------------|-------|--------------------------|----------------------------------------------------|----------------------------|
| ✓ 7.12.2012 13:35:59 | ANDRES-ORDI | 0     | Allalaadimine            | C:\WBNET\TelemaModule\Import\invoice-113-T29-16... |                            |
| ✓ 7.12.2012 13:36:13 | ANDRES-ORDI | 2     | Arve number värskendatud | C:\WBNET\TelemaModule\ImportBU\invoice-113-T25...  |                            |
| ✓ 7.12.2012 13:36:13 | ANDRES-ORDI | 2     | Arve number värskendatud | C:\WBNET\TelemaModule\ImportBU\invoice-113-T26...  |                            |
| ✓ 7.12.2012 13:36:14 | ANDRES-ORDI | 2     | Arve number värskendatud | C:\WBNET\TelemaModule\ImportBU\invoice-113-T27...  |                            |
| ✓ 7.12.2012 13:36:14 | ANDRES-ORDI | 2     | Arve number värskendatud | C:\WBNET\TelemaModule\ImportBU\invoice-113-T28...  |                            |
| ✓ 7.12.2012 13:36:14 | ANDRES-ORDI | 2     | Arve number värskendatud | C:\WBNET\TelemaModule\ImportBU\invoice-113-T29...  |                            |
| ✓ 7.12.2012 16:00:16 | ANDRES-ORDI | 0     | Allalaadimine            | C:\WBNET\TelemaModule\Import\invoice-113-T25-16... |                            |
| ✓ 7.12.2012 16:00:16 | ANDRES-ORDI | 0     | Allalaadimine            | C:\WBNET\TelemaModule\Import\invoice-113-T26-16... |                            |
| ✓ 7.12.2012 16:00:16 | ANDRES-ORDI | 0     | Allalaadimine            | C:\WBNET\TelemaModule\Import\invoice-113-T27-16... |                            |
| ✓ 7.12.2012 16:00:16 | ANDRES-ORDI | 0     | Allalaadimine            | C:\WBNET\TelemaModule\Import\invoice-113-T28-16... |                            |
| ✓ 7.12.2012 16:00:16 | ANDRES-ORDI | 0     | Allalaadimine            | C:\WBNET\TelemaModule\Import\invoice-113-T29-16... |                            |
| ✓ 7.12.2012 16:00:26 | ANDRES-ORDI | 2     | Arve number värskendatud | C:\WBNET\TelemaModule\ImportBU\invoice-113-T25...  |                            |
| ✓ 7.12.2012 16:00:26 | ANDRES-ORDI | 2     | Arve number värskendatud | C:\WBNET\TelemaModule\ImportBU\invoice-113-T26...  |                            |
| ✓ 7.12.2012 16:00:26 | ANDRES-ORDI | 2     | Arve number värskendatud | C:\WBNET\TelemaModule\ImportBU\invoice-113-T27...  |                            |
| ✓ 7.12.2012 16:00:26 | ANDRES-ORDI | 2     | Arve number värskendatud | C:\WBNET\TelemaModule\ImportBU\invoice-113-T28...  |                            |
| ✓ 7.12.2012 16:00:26 | ANDRES-ORDI | 2     | Arve number värskendatud | C:\WBNET\TelemaModule\ImportBU\invoice-113-T29...  |                            |
| ✓ 7.12.2012 16:00:26 | ANDRES-ORDI | 2     | Tellimuse eksport        | C:\WBNET\TelemaModule\Upload\ORDER_h04_12-2...     |                            |
| ✓ 7.12.2012 16:00:27 | ANDRES-ORDI | 0     | Üleslaadimine            | C:\WBNET\TelemaModule\UploadBu\ORDER_h04_1...      |                            |
| ✗ 7.12.2012 16:51:48 | ANDRES-ORDI | 2     | Tellimuse eksport        | C:\WBNET\TelemaModule\Upload\ORDER_h04_12-3...     | Lehepunkt OÜ KMK r...      |
| ✗ 7.12.2012 16:58:03 | ANDRES-ORDI | 0     | Üleslaadimine            | C:\WBNET\TelemaModule\Upload\ORDER_h04_12-3...     | Session error: -5 Error... |
| ✗ 7.12.2012 17:17:48 | ANDRES-ORDI | 2     | Tellimuse eksport        | C:\WBNET\TelemaModule\Upload\ORDER_h04_12-3...     | Lehepunkt OÜ KMK r...      |

✓ Ava  
Lisa  
Sulge

Example of Document Exchange Scheduler

Ajastatud töö muutmine

Töö nimi: Müügiaruanded 1 ☒ Lubatud

Kirjeldus: Eksportib kõikide poodide müügiaruanded

Ajasti: Igal ööl kell 1

Järgmine käivitumine: 8.12.2012 1:00:00

Aktiivne alates 22.11.2012 1:00:00 kuni 31.12.2012 23:59:59  
Viimane käivitumine 7.12.2012 9:43:46  
Kordub iga 1 PÄEV  
Lubatud

Sammu nimi: kpl 2 slsrpt 1 ☒ Samm lubatud

Käsk: SLSRPT

Kauplus: Teine kauplus

Hankija: LEHEPUNKT 81

Lisa samm  
Kustuta samm

| Sammu nimi   | Käsk   | Parameetrid                           | L... |
|--------------|--------|---------------------------------------|------|
| kpl 2 slsrpt | SLSRPT | kauplus.kaupl_id=2 AND hankija.hk_... | 1    |
| kpl 3 slsrpt | SLSRPT | kauplus.kaupl_id=3 AND hankija.hk_... | 0    |

✓ Salvesta  
✗ Kustuta  
Sulge