Created:

Date: Signature:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Hans Nijssen, inSITE Design and Build Lead MM/PUR,

Fresenius Netcare

Reviewed:

Date: Signature:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Jochen Braun, Business Process Architect MM/PUR,

Fresenius Medical Care

Approved:

Date: Signature:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Lars Weisbrich, Program Validation Responsible,

Fresenius Netcare

Table of contents

[1 Change History 3](#_Toc495420549)

[2 Attachments 3](#_Toc495420550)

[3 Terms, Definitions, Abbreviations 3](#_Toc495420551)

[4 Reference Documents 3](#_Toc495420552)

[5 Reference to URS 4](#_Toc495420553)

[6 Purpose of the Interface 5](#_Toc495420554)

[6.1 Receive Material Master data 5](#_Toc495420555)

[6.2 Receive Batch Master Data 5](#_Toc495420556)

[6.3 Receive Open Purchase Requisition 5](#_Toc495420557)

[6.4 Receive Open Purchase Order/Outbound Delivery 5](#_Toc495420558)

[6.5 Post Goods Receipt 5](#_Toc495420559)

[6.6 Post Goods Issue 6](#_Toc495420560)

[7 Data Flow Diagram 6](#_Toc495420561)

[7.1 Receive Batch Master Data 6](#_Toc495420563)

[7.2 Receive Open Purchase Requisition 7](#_Toc495420564)

[7.3 Receive Open Purchase Order/Outbound Delivery 7](#_Toc495420565)

[7.4 Post Goods Receipt 8](#_Toc495420566)

[7.5 Post Goods Issue 9](#_Toc495420567)

[8 Functional Description 10](#_Toc495420568)

[8.1 Receive Material Master data 10](#_Toc495420569)

[8.2 Receive Batch Master Data 10](#_Toc495420570)

[8.3 Receive Open Purchae Requisition 10](#_Toc495420571)

[8.4 Receive Open Purchase Order/Outbound Delivery 10](#_Toc495420572)

[8.5 Post Goods Receipt 10](#_Toc495420573)

[8.6 Post Goods Issue 11](#_Toc495420574)

[9 Source & Target System 11](#_Toc495420575)

[10 Volume of the Data 11](#_Toc495420576)

[11 Dependencies 11](#_Toc495420577)

[12 Type and Frequency of Interface 12](#_Toc495420578)

[13 Data Transfer 12](#_Toc495420579)

[14 Special Functions 12](#_Toc495420580)

[15 Assumptions & Conditions 12](#_Toc495420581)

[16 Authorization Requirements 12](#_Toc495420582)

[17 Error Handling 12](#_Toc495420583)

[18 Open Issues/Remarks for a subsequent revision 12](#_Toc495420584)

[19 Tables & Figures 12](#_Toc495420585)

# Change History

|  |  |  |  |
| --- | --- | --- | --- |
| **Ver.** | **Created, Changed** | | **Remarks, Kind of change** |
| **Name** | **Date** |
| 0.1 | Hans Nijssen | 18-Aug-17 | Creation of Initial Version |
| 0.2 | Idris Özaltun | 30-Aug-2017 | FS Creation |
| 0.3 | Kinga Urbanski | 30-Aug-2017 | Peer Review |
| 0.4 |  |  | Solution Architect Review |
| 0.5 | Terry Liu | 09-Oct-2017 | FS update |

Table 1: Change History

# Attachments

The below listed FS attachments are part of the FS document.

The below listed FS attachments are part of the FS document.

|  |  |
| --- | --- |
| S. No | Attachment Name |
| 1 | PostGoodsReceipt\_OSService.wsdl |
| 2 | PostGoodsIssue\_OSService.wsdl |
| 3 | PurchaseOrder\_OSService.wsdl |

Table 2: Attachments

# Terms, Definitions, Abbreviations

N/A

# Reference Documents

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No** | **Document ID.** | **Version No.** | **Document Title** |
| 1 | inSITE\_FS-P\_25-055\_R6 | 3.0 | NC\_Confirm\_Consumption |
| 2 | inSITE\_FS-P\_25-061\_R5 | 3.0 | Receive\_Goods\_In\_Clinics |
| 3 | inSITE\_FS-I\_95-043\_CN\_V1 | 1.0 | HIS Material Master distribution |

Table 3: Reference Documents

# Reference to URS

| **Requirement ID** | **Requirement Title** | **Domain** |
| --- | --- | --- |
| BR\_25\_0417 | **Re-Invoicing – Transfer PO information**  The application transfer automatically PO information for imports from D-GmbH to P15 | MM/PUR |
| BR\_CHN\_25\_0022 | **HIS - PO and return PO data frequency maintenance**  The application allows transfer frequency parameter maintenance | MM/PUR |
| BR\_CHN\_25\_0019 | **HIS - GR information receipt**  The application receives and processes GR information for the PO related items from HIS Lenovo | MM/PUR |
| BR\_CHN\_25\_0016 | **HIS - GR information flexible data transfer**  The application supports the data transfer in a flexible parameter based frequency, i.e. every x days, y hours or z minutes | MM/PUR |
| BR\_CHN\_25\_0014 | **HIS - GR information frequency maintenance**  The application allows transfer frequency parameter maintenance | MM/PUR |
| BR\_CHN\_25\_0008 | **HIS - inventory consumption information receipt and processing**  The application receives and processes inventory movements based on normal inventory consumption from HIS Lenovo | MM/PUR |
| BR\_CHN\_25\_0020 | **HIS - stock take variance information receipt and processing**  The application receives and processes inventory movements based on stock take variances from HIS Lenovo | MM/PUR |
| BR\_CHN\_25\_0026 | **HIS - scrapping information receipt and processing**  The application receives and processes inventory movements based on scrapping from HIS Lenovo | MM/PUR |
| BR\_CHN\_25\_0011 | **HIS - inventory movement information flexible data transfer**  The application supports the data transfer in a flexible parameter based frequency, i.e. every x days, y hours or z minutes | MM/PUR |
| BR\_CHN\_25\_0006 | **HIS - inventory movement information frequency maintenance**  The application allows transfer frequency parameter maintenance | MM/PUR |
| BR\_CHN\_25\_0028 | **HIS - purchase requisition receipt and processing**  The application receives and processes PR information for the PR related items from HIS Lenovo | MM/PUR |
| BR\_CHN\_25\_0027 | **HIS - purchase requisition flexible data transfer**  The application supports the data transfer in a flexible parameter based frequency, i.e. every x days, y hours or z minutes | MM/PUR |
| BR\_CHN\_25\_0029 | **HIS - purchase requisition frequency maintenance**  The application allows transfer frequency parameter maintenance | MM/PUR |

Table 4: Requirements

# Purpose of the Interface

Because FME China will use P11 in future the interfaces are requested to support the process:

## Receive Material Master data

The Material master data from P11 system will be send from P11 system to clinical system via PO system. See Chapter 4 reference for more details

## Receive Batch Master Data

The Batch master data from P11 system will be send from P11 system to clinical system via PO system.

## Receive Open Purchase Requisition

The open Purchase Requisition data will be sent from clinical system to P11 via PO system.

## Receive Open Purchase Order/Outbound Delivery

For the Goods Receipt process the open documents (Purchase Order/Outbound Delivery) are needed. These documents will be send from P11 system to clinical system via PO system.

## Post Goods Receipt

Posting of Goods Receipt from clinical system via PO system to P11 system.

## Post Goods Issue

Posting of Goods Issue from clinical system via PO system to P11 system.

# Data Flow Diagram

~~The changed material master data from P11 system will be send from P11 system to clinical system via PO system. From P11 system an Idoc will be created based on the change document pointer (frequently running report in P11). PI system will send out a XML to clinical system.~~

~~The material data will be restricted according to the materials, which have a~~ *~~purchasing view~~* ~~for a plant/clinic, which should be defined in a separate customer table. There is~~ *~~no additional~~* ~~restriction according to material type or any other material attributes~~. See Chapter 4 reference for more details

~~Here is the list of the fields:~~

|  |
| --- |
| ~~Field~~ |
| ~~Material Number~~ |
| ~~Material Description (Short Text)~~ |
| ~~Language ID~~ |
| ~~Base unit of measure~~ |
| ~~General material status (deleted or not)~~ |
| ~~Product Hierarchy~~ |
| ~~Alternative unit of measure~~ |
| ~~Conversion factor of alternative unit of mease to the Base unit of measure~~ |
| ~~EAN number of the alternative unit of measure~~ |
| ~~Plants with a purchasing view~~ |
| ~~Status of the plant-purchasing view~~ |
| ~~Master Material Number~~ |

## Receive Batch Master Data

The batch master in P11 will be replicated to clinical system via the SAP PI system. This interface will send only *changed data* and will also provide a function to execute a *initial replication* of all relevant existing batches.

This interface will be triggered (*Push*) by SAP P11 system. The frequency will be set at once a day but can be changed afterwards.

The batch data will be restricted according to the batches, which exists within a plant/clinic, which will be defined in a separate customer table. There will be *no additional* restriction according to any other batch attribute.

The following attributes of a batch master data are in scope:

|  |
| --- |
| Field |
| Material Number |
| Plant |
| SAP Batch Code |
| Vendor Batch Code |
| SAP Vendor ID |
| Validity/Status |
| Shelf Life Expiration or Best-Before Date |
| Indicator if stock exists |

## Receive Open Purchase Requisition

Clinical system will send the purchase requisition data synchrone/realtime to the P11 system.

The following information shall be sent from clinical system to generate purchase requisition in P11 system via PI:

|  |
| --- |
| Field |
| Document Type |
| Material Number |
| Plant |
| Purchase Requisition Number |
| Purchase Requisition Item Number |
| Unit of measure |
| Item Delivery Date |
| Quantity |

## Receive Open Purchase Order/Outbound Delivery

It will be possible to get existing Purchase Orders/Outbound Deliveries from P11 system. These are the relevant search criterias in ERP. A search for open documents is not needed. System will determine all open documents relevant for this clinic. User will be able to search in this received list within clinical system for the correct document.

|  |  |
| --- | --- |
| Field | Meta |
| Plant | Mandatory |
| Material Number | Optional |
| Purchase Order Number | Optional |
| Outbound Delivery Number | Optional |

The system will check if the corresponding plant/clinic is active for this process by using the new customer table. The following data will be determined in P11 system and send back to clinical system:

|  |
| --- |
| Field |
| Material Number |
| Plant |
| Purchase Order Number |
| Purchase Order Item Number |
| Return flag on PO item level |
| Outbound Delivery Number |
| Outbound Delivery Item Number |
| SAP Batch code (only for Outbound Deliveries, only FME products) |
| Expire Date (only for Outbound Deliveries, only FME products) |
| Supplier ID |
| Supplier Name |
| Item Delivery Date |
| Quantity |
| Unit of measure |

This interface will be realtime and synchrone. Clinical system will call immediately the P11 system to get the open Purchase Order/Outbound Delivery data via PI system.

The determination logic will consider only Document items related to a material, that means service and limit items are not in scope. The system will consider also freetext items. Document items, which are not blocked, released and not fully received.

## Post Goods Receipt

After the user has confirmed received items, the clinical system will send the posting data synchrone/realtime to the P11 system. For internal items received via outbound delivery the user will not be able change the received quantities. This will be ensured by the clinical system.

The following information shall be send from clinical system to post a goods receipt in P11 system via PI:

|  |
| --- |
| Field |
| Reference Document (Purchase Order or Outbound Delivery Number) |
| Processing user (First 12 character of the last name or user id) |
| Header text |
| Material Number |
| Plant |
| Storage Location |
| Posting Date |
| Document Date |
| Purchase Order Number |
| Purchase Order Item Number |
| Outbound Delivery Number |
| Outbound Delivery Item Number |
| SAP Batch code (only for Outbound Deliveries, only FME products) |
| Expire Date (only for Purchase Orders, non FME products) |
| Supplier ID |
| Vendor Batch Code (only for Purchase Orders, non FME products) |
| Quantity |
| Unit of measure |

## Post Goods Issue

Clinical system will send the posting data synchrone/realtime to the P11 system. There is no additional interface needed to provide additional information from P11 before posting these documents (e.g. Stock information won’t be available at this point).

The following information will be send from clinical system to post consumption in P11 system:

|  |
| --- |
| Field |
| Header text |
| Processing user (First 12 character of the last name or user id) |
| Posting Date |
| Document Date |
| Material Number |
| Plant |
| Storage Location |
| Quantity |
| Unit of measure |
| Movement Type (291 for Consumption, 9NC for scrapping, movement types for inventory counting (Profit/Loss) to be developed) |
| SAP Batch code |
| Treatment type |
| Movement reason (only for scrapping) |

# Functional Description

## Receive Material Master data

The Material master data from P11 system is needed in clinical system. These information are needed for the posting of goods receipt as well for the posting of goods issue.

## Receive Batch Master Data

The Batch master data from P11 system is needed in clinical system. These information are needed for the posting of goods issue.

## Receive Open Purchae Requisition

The purchase requisition data from clinical system is needed in P11 system. These information are needed for the generation of purchase requisition in P11.

## Receive Open Purchase Order/Outbound Delivery

The posting of goods receipt requires a reference document. For third party supplier it’s the purchase order existing in P11 system. For the internal goods from a internal supplier it’s the outbound delivery. That’s why the open documents will be send from P11 system to the clinical system.

## Post Goods Receipt

The confirmation of the received items within a clinical will be managed by this interface. In P11 system the corresponding material document will be created.

## Post Goods Issue

Consumed items within a clinical will be managed by this interface. The system will create a material document for the consumption as well for the scrapping process.

# Source & Target System

For the material and batch master data replication and as well for the Receive Open Purchase Order/Outbound delivery:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| System | Source/Target | Application name | SAP/Non-SAP | Comment |
| P11 | Source | N/A | SAP | N/A |
| P50 | Middleware | N/A | SAP | N/A |
| HIS | Target | N/A | NON SAP | N/A |

Table 5: Source & Target Systems

For the both posting (Goods Receipt, Goods Issue) interfaces:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| System | Source/Target | Application name | SAP/Non-SAP | Comment |
| P11 | Target | N/A | SAP | N/A |
| P50 | Middleware | N/A | SAP | N/A |
| HIS | Source | N/A | NON SAP | N/A |

# Volume of the Data

An exact number of messages can’t be provided.

# Dependencies

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Description | System | System | E2E process | Comment |
| N/A | N/A | N/A | N/A | N/A | N/A |

Table 6: Dependencies

# Type and Frequency of Interface

The idoc from P11 will be send to PI system. PI system will convert it to a XML file and send it out to clinical system.

For the posting the PI system will receive the XML file and will forward the XML file via SOA to P11 system.

# Data Transfer

Please find in attached WSDL files the corresponding interface documentation (PostGoodsReceipt\_OSService, PostGoodsIssue\_OSService and PurchaseOrder\_OSService).

# Special Functions

N/A

# Assumptions & Conditions

Re-usage of existing EuCliD interface without any changes.

# Authorization Requirements

No additional authorization requirements related to these interface.

# Error Handling

SAP Standard IDoc error handling and monitoring functionalities will be leveraged for these interfaces.

# Open Issues/Remarks for a subsequent revision

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ID | Description | Responsible | Status | Impact on | Proposed solution |
| 1 | N/A | N/A | N/A | N/A | N/A |

Table 7: Open Issues/Remarks

# Tables & Figures

[Table 1: Change History 4](#_Toc491868287)

[Table 2: Attachments 4](#_Toc491868288)

[Table 3: Reference Documents 4](#_Toc491868289)

[Table 4: Requirements 5](#_Toc491868290)

[Table 5: Source & Target Systems 10](#_Toc491868291)

[Table 6: Dependencies 11](#_Toc491868292)

[Table 7: Open Issues/Remarks 12](#_Toc491868293)