#### Project Hörnsten

#### Interface Specification Functional Document

Interface Name:

RICEFW ID:

Author: Name of the team member

Version: 1.

IBM | Lundin Mining

#### Document History

Document Location

This is a snapshot of an on-line document located on SharePoint. Paper copies are valid only on the day they are printed. Refer to the author if you are in any doubt about the currency of this document.

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| **Document Name** | **Sol Man Folder Path** | **Document #** | **Solman Link** |
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Revision History

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Design Authority Approval Details

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# General Information

|  |  |  |  |
| --- | --- | --- | --- |
| **RICEFW ID** |  | | |
| **Short Description** |  | | |
| **Process Owner** |  | | |
| **Implementation Phase** |  | | |
| **Transaction(s) (if applicable)** |  | | |
| **Run Frequency** |  | **Language** |  |

# Desired Functionality / User Story

**TEXT TO BE REMOVED, GUIDANCE ONLY <**

User story#1:

Add a brief description of user story and the features expected by business.

Please give brief bullet points, elaborate description is not expected.

Describe the desired functionality in SAP related to the user story. Due to the wide variety of possible customer enhancement scenarios, a generic description of the logic behind the processing is rather limited. The basic enhancement however can be understood best as extra code that is added to standard SAP transactions. When the SAP transaction is run, the added code will run too. The enhancement may involve some calculations, some formatting or conversion of data (perhaps using a custom table) but this varies widely from one enhancement to the next. Field-exits, for example, will often simply be a check of a database table and an error message if certain criteria are not satisfied, whereas a user-exit may involve much more complicated processing**.**

Note: The designer should be aware that the more processing a customer enhancement contains, the more load is put onto the SAP transaction containing the enhancement functionality

Aside from functionality, general requirements in table must be filled.

User story#2:

User story#3:

User story#N:

BPH reference – L1-L2-L3-L4

PDD Reference

Change Management process approvals

**> END OF GUIDANCE TEXT**

Please add DevOps link of the user story in the table.

|  |  |  |
| --- | --- | --- |
| **User Story Name** | **Project Name** | **DevOps Link** |
|  |  |  |

**Note: Please mention all the transaction codes impacted by enhancement.**

## Business Benefits

**TEXT TO BE REMOVED, GUIDANCE ONLY<**

Explain the business benefit of this object **>END OF GUIDANCE TEXT**

## Scope

**TEXT TO BE REMOVED, GUIDANCE ONLY<**

What is the scope of this object? **>END OF GUIDANCE TEXT**

## Process flow

**TEXT TO BE REMOVED, GUIDANCE ONLY<** Attach a general diagram of the interface with the connected systems as well as flow of data and technologies/mediums used (Web services, EDI, files, etc.)**>END OF GUIDANCE TEXT**

## Solution Details

**TEXT TO BE REMOVED, GUIDANCE ONLY<** Enter the requested information and type one “X” in each checkbox group. **>END OF GUIDANCE TEXT**

|  |  |
| --- | --- |
| Data Source System: |  |
| Data Target System: |  |
| Direction  *(with respect*  *to S/4HANA)* | |  |  |  |  | | --- | --- | --- | --- | |  | Inbound | Interface data flows inbound to S/4HANA | | |  | Outbound | Interface data flows outbound from S/4HANA | | |  | Other | Specify: |  | |  | | | |
| Interface  Type | |  |  |  |  | | --- | --- | --- | --- | |  | Batch | One-way transfer of “accumulated” data set; Usually done by scheduled file transfer. | | |  | Near Real-Time | One-way message-based transfer of data; Usually triggered by event. | | |  | Real-Time | Immediate transfer of small data set; Usually triggered by event. | | |  | Excel Upload | Manually invoked from SAP session; Local spreadsheet file uploaded from PC. | | |  | Other | Specify: |  | |  | | | |
| Interface  Frequency | |  |  |  |  | | --- | --- | --- | --- | |  | Hourly | Details: |  | |  | Daily | Details: |  | |  | Weekly | Details: |  | |  | Monthly | Details: |  | |  | Quarterly | Details: |  | |  | Yearly | Details: |  | |  | On-Demand | How often: |  | |  | Other | Specify: |  | |  | | | |
| Type of  Records  Sent | |  |  |  |  | | --- | --- | --- | --- | |  | Full record load | Send all records every time interface is executed | | |  | Delta full records | Only send records where one or more fields have changed since previous execution | | |  | Delta records | Only send fields (and keys) that changed since previous interface execution | | |  | Other | Specify: |  | |  | | | |
| Volume  *(per single*  *execution)* | |  |  | | --- | --- | | Average Volume: | <Volume> records per interface execution | | Peak Volume: | <Lower Volume – Upper Volume> | |

|  |  |
| --- | --- |
| 1. Quality of Legacy Data: 2. Complexity of Legacy Data:   3. Complexity of a Manual Input:  4. Number of SAP Screens: | ( ) Good ( ) Average ( ) Poor  ( ) Simple ( ) Average ( ) Complex ( ) Extra-complex  ( ) Simple ( ) Average ( ) Complex  # screens |

## Mapping and business rules

**TEXT TO BE REMOVED, GUIDANCE ONLY<** Provide the mapping between the source and the target as well as any filtering and transformation rules that may apply. If this information is document on a separate spreadsheet, attach it to this document

**>END OF GUIDANCE TEXT**

## Initiating Process / Process Type / Transaction / Program

**TEXT TO BE REMOVED, GUIDANCE ONLY<** What is the event that initiates the object? For example SAP transactions complete, batch job executed, file available on middleware, etc. For workflow, identify each separate trigger within each step of the workflow. **>END OF GUIDANCE TEXT**

## Impact to Markets

**TEXT TO BE REMOVED, GUIDANCE ONLY<** Include any impact to global or local markets **>END OF GUIDANCE TEXT**

## Translation Requirements

**TEXT TO BE REMOVED, GUIDANCE ONLY<** Include any language translations that need to be included **>END OF GUIDANCE TEXT**

# Middleware Solution

**TEXT TO BE REMOVED, GUIDANCE ONLY<** Describe the middleware solution if applicable. Detail the scenario and how the middleware comes into the picture. If a mapping/transformation is required, attach the corresponding spreadsheet with the necessary information**>END OF GUIDANCE TEXT**

# Design considerations for Developers

**TEXT TO BE REMOVED, GUIDANCE ONLY<**

Any functional inputs to be considered by the developers eg: Class/Function module to be used **>END OF GUIDANCE TEXT**

# Integration Impacts

**TEXT TO BE REMOVED, GUIDANCE ONLY<** This should contain the areas of integration that could/will be impacted by this enhancement **>END OF GUIDANCE TEXT**

# SAP Data Archiving Access Requirements

**TEXT TO BE REMOVED, GUIDANCE ONLY<** This section will define future archiving requirements for this FSD. Use the Comments/Notes section for additional information and/or special consideration*.* **>END OF GUIDANCE TEXT**

|  |  |
| --- | --- |
| Data Archiving | Data Archiving is the process used to delete data that is no longer needed from online database and storing same in an external storage that allows for data retrieval and analysis when need be.  Data that have been archived cannot be changed/updated. |
| Residency Time | The period of time that the document is stored in the online database before the document can be archived. Usually, the archiving process checks the last changed date to calculate the residency time. |
| Retention Time | The total period of time that a document exists in the online database + archived storage until it is required to be destroyed. From document creation to document’s end-of-life. |

|  |
| --- |
| 1. Will access to data older than 2 years be required?  YES  No |
| 1. If YES to question 1:    1. Will the data older than 2 years need to be updated. Why? What process would require this update, please specify?    2. Please specify reason / explain the need for these data required? Please check all that applies.     Legal requirement:  Explain: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_    Business  Explain: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Tax  Explain: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Audit  Explain: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Others: Specify \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Explain: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 1. Please indicate the type of data used in this FSD     Shipments  Shipment Costs  Deliveries  SD Billing documents  Sales documents  Material Documents  Purchase Orders  Purchasing Requisitions  Financial Documents  Material Ledger  COPA  Handling Units  Others:  please specify \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

| **Comments/Notes** |
| --- |
|  |

# Acceptance Criteria

**TEXT TO BE REMOVED, GUIDANCE ONLY<** This should contain the acceptance for each user story **>END OF GUIDANCE TEXT**

# Assumptions

**TEXT TO BE REMOVED, GUIDANCE ONLY<** The technical designer should detail here all the procedures or configuration affecting the enhancement that the developer can take for granted. Other assumptions that the designer foresees will better focus the scope of the enhancement should also be included here.

These are a very important part of the specification as they ensure that no unnecessary development work is undertaken.

It is normal for assumptions to be thought up at the technical development stage as well as the functional specification stage as development and testing may throw up more obscure scenarios than thought out at a business level. These should be discussed during the development stage and added to the spec when agreed.

Example assumptions:

1. All weights in the SAP system will be in kilograms
2. The user-exit will only be available to the Spanish users
3. Deliveries will have a maximum of 5 line items
4. The login language will be Spanish
5. Only Billing documents with Delivery documents (SD Preceding document category ‘J’) as their preceding referenced document will be extracted
6. The lessee’s price will never be more than 7 characters long Etc.**> END OF GUIDANCE TEXT**

# Error Handling/Monitoring Requirement

**TEXT TO BE REMOVED, GUIDANCE ONLY <** Error Handling Detail: Provide details here, if additional information is required.

If this has been identified as a business-critical process, then special job run notifications or error notifications or E-Mail messaging or custom programming may be required to ensure smooth business operation*.* ***>* END OF GUIDANCE TEXT**

## Error Conditions and Logging

**TEXT TO BE REMOVED, GUIDANCE ONLY <** Specify the error conditions under which the program should abort the control. Please describe the general requirements here and provide the escalation steps in the next section. Elaborate on issues like: If the program fails half way through, will this have any impact on any programs to be run after its completion? **> END OF GUIDANCE TEXT**

## Notification

**TEXT TO BE REMOVED, GUIDANCE ONLY <** Use this section to detail how the error should be handled. This may include a fix and a restart, manually editing a message, or it can be restarted automatically. If a common technique is used, please describe how the program/object will use it. For example, if there is a standard email system, what parameters would be used. Use the next section to elaborate on restart procedures if necessary. **> END OF GUIDANCE TEXT**

|  |  |  |  |
| --- | --- | --- | --- |
| **Error** | How error message should be reported | **Error Messages** | **Corrective action** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

## Restart / Recovery

**TEXT TO BE REMOVED, GUIDANCE ONLY <** Use this section to detail how the error should be handled. This may include a fix and a restart, manually editing a message, or it can be restarted automatically. If standard error notification is to be used, write “standard” in the second column. Include external errors such as a short dump due to a database or spool issue. That is, in the event of a catastrophic system wide error, what is the restart procedure?. **> END OF GUIDANCE TEXT**

## Monitoring Requirements

**TEXT TO BE REMOVED, GUIDANCE ONLY <** Any Monitoring requirements eg: BPM**> END OF GUIDANCE TEXT**

# Security Requirements/ Authorization Details

**TEXT TO BE REMOVED, GUIDANCE ONLY<**Please describe any specific security requirements**>**

**END OF GUIDANCE TEXT**

To be filled by FSD Author in case SAP Transaction is used

RICEF is used to update, display or print data? Please capture the details here:

|  |  |
| --- | --- |
|  | Update |
|  | Display |
|  | Print |
|  | All |

Please indicate which SAP module the RICEF applies to.

|  |  |  |  |
| --- | --- | --- | --- |
| Module | Check (X) | Module | Check (X) |
| MM |  | PP |  |
| WM |  | FI |  |
| SD |  | CO |  |
| PM |  | BI |  |
| XI |  | Security |  |
| Master Data |  | ABAP |  |
| Other | *Please Specify* |

Please indicate which scenario, process and process steps the RICEF impacts since the BPML will be updated in line with the security change.

|  |  |
| --- | --- |
|  | **Description** |
| Scenario | *Scenario (exact name as appears in BWL)* |
| Process | *Process (exact name as appears in BWL)* |
| Process Step(s) | *Process Step(s) (exact name as appears in BWL)* |

Please give a brief description of the functionality the RICEF is used for?

e.g. RICEF01357 - The program is used to create and print (PDF form or ALV) sampled physical inventory list. Program copied from J\_3R\_LF\_INV3\_19 and modified . Or

e.g. RICEF02006 - Copy of standard MB25 report with additional Modification of Adding 3 text fields.

Please specify

RICEF needs additional authorization checks on already known organizational levels (e.g. company code, purchasing organization, plants etc.)?

|  |  |
| --- | --- |
|  | Yes |
|  | No |

When answer yes, the following organizational levels need to be checked:

|  |  |
| --- | --- |
| Organizational levels | Check (X) |
| Company Code |  |
| Cost Center |  |
| Profit Center |  |
| Sales Organization |  |
| Purchasing Organization |  |
| Plants |  |
| Other | *Please Specify* |
|  |  |
|  |  |

To be filled by Security Team / Development Team

Additional security requirements needed? (to be filled by security)

|  |  |  |
| --- | --- | --- |
|  | Yes | Proceed in filling the requirements – Developers to implement security requirements |
|  | No | No further information needed – No implementation of additional security requirements needed. |

Information for developer to implement security requirements in RICEF:

Authorization group to be assigned to report / program (to be filled by developer)

|  |
| --- |
|  |

RICEF is started by using an SAP transaction (to be filled by developer)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Custom SAP Transaction | Name: |  | |
|  | None |
| Transaction type *(only to be filled when transaction is used)* | | | |
|  | Report transaction |
|  | Parameter transaction |

Does the report call another custom or standard transaction? (to be filled by developer)

|  |  |  |
| --- | --- | --- |
|  | Yes | Name: |
|  | No |  |

RICEF needs to have additional authorization checks included? (to be filled by security)

|  |  |  |
| --- | --- | --- |
|  | Yes | Organizational segregation needed – e.g. Report is able to access data from all market units |
|  | No | Organizational segregation not needed – e.g. Report only handles market unit specific data |

When answer is yes, please implement the following authorization check in the RICEF before any data is displayed or manipulated:

|  |  |  |
| --- | --- | --- |
| Authorization object | Authorization field: | Authorization values |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Information for security to setup relation between transactions and implemented authorization checks:

RICEF is using standard components and already has included authorization checks? (to be filled by developer)

|  |  |  |
| --- | --- | --- |
|  | Yes | Includes standard components with standard authorization checks |
|  | No | do not include standard authorization checks or is called by standard transactions. |

When answer yes, the following authorization objects need to be maintained in SU24:

|  |  |  |
| --- | --- | --- |
| Authorization object | Authorization field: | Authorization values |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

# Controls Impacts

**TEXT TO BE REMOVED, GUIDANCE ONLY<**Describe impacts to controls or design considerations or feedback related to controls.>**END OF GUIDANCE TEXT**

# Issues

**TEXT TO BE REMOVED, GUIDANCE ONLY****<**This section should be used like a log during the creation of this document to outline any outstanding issues that need to be resolved prior to continuing with the development work. Prior to sign-off there should be no issues remaining.

**>** **END OF GUIDANCE TEXT**

| **Issue #** | **Date Raised** | **Issue Description** | **Issue Resolution** |
| --- | --- | --- | --- |
|  |  |  |  |
|  |  |  |  |

# Dependencies

**TEXT TO BE REMOVED, GUIDANCE ONLY<**Dependency on other configuration, programs, external applications (if any). **> END OF GUIDANCE TEXT**

# 

# Unit Test Plan

**TEXT TO BE REMOVED, GUIDANCE ONLY <Test Condition** – Unit Test Process to be defined **> END OF GUIDANCE TEXT**



## Key Test Conditions

**TEXT TO BE REMOVED, GUIDANCE ONLY <**Identify methods to verify that the object worked properly such as reports, other transactions, etc.

Identify key business testing conditions. Specifically identify test conditions related to the business requirements, key logic branches, key data variations, etc. Full Assembly test conditions will be captured in HPQC/Worksoft. **> END OF GUIDANCE TEXT**

| **Test Condition** | **Step** | **Step Description** | **Test Data** | **Expected Result** | **Actual Result** | **Executed By/Date** | **Remarks** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1 |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

## Technical Test Conditions

**TEXT TO BE REMOVED, GUIDANCE ONLY <** Identify any special technical test conditions. **> END OF GUIDANCE TEXT**

| **Test Condition** | **Step** | **Step Description** | **Test Data** | **Expected Result** | **Actual Result** | **Executed By/Date** | **Remarks** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1 |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

## Risk and Controls Test Conditions

**TEXT TO BE REMOVED, GUIDANCE ONLY <** Identify any test conditions needed to test any risks or controls that were identified. Work with PCS to identify these test conditions. **> END OF GUIDANCE TEXT**

| **Test Condition** | **Step** | **Step Description** | **Test Data** | **Expected Result** | **Actual Result** | **Executed By/Date** | **Remarks** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1 |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

## Testing Considerations/Dependencies

**TEXT TO BE REMOVED, GUIDANCE ONLY <**Identify testing considerations and dependencies such as data requirements, prerequisite configuration, connectivity, etc. **> END OF GUIDANCE TEXT**

## Exception and Error Handling Test conditions

Exception - special logic or exceptions (e.g. do not process Government Markets customers, only process pre-packs)

| **Test Condition** | **Step** | **Step Description** | **Test Data** | **Expected Result** | **Actual Result** | **Executed By/Date** | **Remarks** |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

Error Handling - functionality in case of errors (e.g. Customer not found, Record already exists)

| **Test Condition** | **Step** | **Step Description** | **Test Data** | **Expected Result** | **Actual Result** | **Executed By/Date** | **Remarks** |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |