# Overview of consolidated Technical Specification

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# Requirement Details

## Summary of Requirements

Requirement of this Enhancement is creation of a Malfunction Notification (M2) when the measurement reading is out of the range.

## Functional / Business description

* **IK01** is theT-Code to Create Measurement Point**.**
* **IK11** is the T-code to input measurement readings.
* This enchantement supports T-codes **IK11, IK14, IK16, IK34.**
* Enchantment project **ZPR\_PM\_1** is created for exit **IMRC0001.**
* For FM **EXIT\_SAPLIMR0\_001** of exit **IMRC0001** include **ZXMRCU01** is created.

## Design Alternative (Mandatory)

NA.

## Process Flow Diagram < User Interaction with the system in detailed> (Mandatory)

If Out of Range

IK11/ IK14/ IK16/ IK34

Initial Screen

Execute

START

Output

Mandatory

Measurement Reading Saved

& M2 Notification Created

USER INPUT

Trigger Mail (Previous Enhancement - Trigger Mail if M1/M2 Notification Created)

STOP

## Peer Review



# Reports/Layouts

## Input/Selection screen parameters

NA

## Output Format for Reports/Layouts

NA

# Layouts (Additional info)

## Printing Existing solutions

|  |  |
| --- | --- |
| Output type (Printer) |  |
| Program Name |  |
| Layout Form Name |  |

## New Layout Requirements

|  |  |
| --- | --- |
| Output type (Printer) |  |
| Page Format  (with ref to Page size) |  |
| Orientation (Portrait/Landscape) |  |
| Font |  |
| Font size |  |

# User Exit / Enhancement Details

|  |  |
| --- | --- |
| Enchantement | ZPR\_PM\_1 |
| Component / Exit name / Function module | **EXIT - IMRC0001 / FM - EXIT\_SAPLIMR0\_001** |
| Transactions impacted | IK11 / IK14/ IK16 / IK34 |

# Business Add-in (BADI)

|  |  |
| --- | --- |
| Definition | NA |
| Method | NA |
| Transactions impacted | Na |
| Implementation name | NA |
|  |  |

# Module Pools

Screen layouts to be provided.

### Screen Flow Diagram

### List of screens

|  |  |
| --- | --- |
| Screen no. | Description |
|  |  |
|  |  |
|  |  |

# Other Development Objects

All other objects like function modules, Search helps, Field exits, Form exits etc. which have not been classified earlier and which need to be created should be explained here.

|  |
| --- |
| FM Name |
| FLTP\_CHAR\_CONVERSION\_FROM\_SI |
| CONVERSION\_EXIT\_ALPHA\_OUTPUT |
| BAPI\_ALM\_NOTIF\_CREATE |
| BAPI\_ALM\_NOTIF\_SAVE |
| STATUS\_UPDATE\_TASK\_TRIGGER |

|  |
| --- |
| Class Name |
| NA |
|  |
|  |

|  |
| --- |
| Include name |
| **ZXMRCU01** |
|  |
|  |

# Custom / Z tables

NA.

# Interfaces

Write the interface names and the interface type.

# Development Logic

* Created the **Enhancement Project ZPR\_PM\_1** for T-codes (IK11,IK14,IK16,IK34).
* Include **ZXMRCU01** created in Exit’s FM **EXIT\_SAPLIMR0\_001.**
* Enhancement Logic.

IF SY-UCOMM = 'BU'.  
  DATA(FLAG) = 0.  
  DATA: LS\_IMRG   TYPE IMRG,  
        LT\_IMRG   TYPE TABLE OF IMRG,  
        DATA      TYPE IMRC\_PYEAC,  
        DATA1     TYPE IMRC\_PYEAC,  
        DATA2     TYPE IMRC\_PYEAC,  
        TEMP(16)  TYPE P,  
        TEMPL(16) TYPE P,  
        TEMPU(16) TYPE P,  
        MESSAGE   TYPE STRING,  
        MESSTAB   LIKE BDCMSGCOLL OCCURS 0 WITH HEADER LINE.  
  DATA: NOTIFHEADER     TYPE BAPI2080\_NOTHDRI,  
        NOTIFHEADEREX   TYPE BAPI2080\_NOTHDRE,  
        SENDER          TYPE BAPI\_SENDER,  
        T\_RETURN\_CREATE TYPE TABLE OF BAPIRET2,  
        LONGTEXT        TYPE TABLE OF BAPI2080\_NOTFULLTXTI,  
        LINE            TYPE BAPI2080\_NOTFULLTXTI,  
        COUNTER         TYPE CHAR4.  
  
  IF SY-TCODE = 'IK11'.  
    READ TABLE IMRG\_INS INTO LS\_IMRG INDEX 1.  
    APPEND LS\_IMRG TO LT\_IMRG.  
  ELSEIF SY-TCODE = 'IK14' OR SY-TCODE = 'IK16' OR SY-TCODE = 'IK34'.  
    LT\_IMRG = IMRG\_INS[].  
  ELSE.  
    EXIT.  
  ENDIF.  
  COUNTER = 0.  
  IF LT\_IMRG IS NOT INITIAL.  
    LOOP AT LT\_IMRG INTO LS\_IMRG.  
      SELECT SINGLE MPOBJ FROM IMPTT INTO @DATA(LV\_MPOBJ) WHERE POINT = @LS\_IMRG-POINT AND INDCT NE 'X'.  
      IF LV\_MPOBJ IS NOT INITIAL.  
        SELECT SINGLE EQUNR FROM V\_EQUI INTO @DATA(LS\_EQUI) WHERE OBJNR = @LV\_MPOBJ.  
        SELECT SINGLE TPLNR FROM IFLOT INTO @DATA(LS\_TPLNR) WHERE OBJNR = @LV\_MPOBJ.  
        SELECT SINGLE \* FROM IMPTT INTO @DATA(LT\_IMPTT) WHERE POINT = @LS\_IMRG-POINT.  
  
        NOTIFHEADER-EQUIPMENT = LS\_EQUI.  
        notifheader-FUNCT\_LOC = LS\_TPLNR.  
        SENDER = LS\_IMRG-ERNAM.  
        NOTIFHEADER-REPORTEDBY = LS\_IMRG-ERNAM.  
  
        CALL FUNCTION 'FLTP\_CHAR\_CONVERSION\_FROM\_SI'  
          EXPORTING  
            CHAR\_UNIT     = LS\_IMRG-RECDU  
            DECIMALS      = LT\_IMPTT-DECIM  
            FLTP\_VALUE\_SI = LS\_IMRG-READG  
          IMPORTING  
            CHAR\_VALUE    = DATA.  
  
        CALL FUNCTION 'FLTP\_CHAR\_CONVERSION\_FROM\_SI'  
          EXPORTING  
            CHAR\_UNIT     = LS\_IMRG-RECDU  
            DECIMALS      = LT\_IMPTT-DECIM  
            FLTP\_VALUE\_SI = LT\_IMPTT-MRMIN  
          IMPORTING  
            CHAR\_VALUE    = DATA1.  
  
        CALL FUNCTION 'FLTP\_CHAR\_CONVERSION\_FROM\_SI'  
          EXPORTING  
            CHAR\_UNIT     = LS\_IMRG-RECDU  
            DECIMALS      = LT\_IMPTT-DECIM  
            FLTP\_VALUE\_SI = LT\_IMPTT-MRMAX  
          IMPORTING  
            CHAR\_VALUE    = DATA2.  
  
        CALL FUNCTION 'CONVERSION\_EXIT\_ALPHA\_OUTPUT'  
          EXPORTING  
            INPUT         = LS\_IMRG-POINT  
         IMPORTING  
           OUTPUT        = LS\_IMRG-POINT  
                  .  
  
  
        CONCATENATE 'Meas. Point' SPACE LS\_IMRG-POINT SPACE '- Out of range' INTO NOTIFHEADER-SHORT\_TEXT RESPECTING BLANKS.  
        LINE-OBJKEY  = ''.  
        LINE-OBJTYPE = 'QME'.  
        LINE-TEXT\_LINE = ' Measurement reading out of range '.  
        APPEND LINE TO LONGTEXT.  
  
        CONCATENATE ' Measurement Point - ' LS\_IMRG-POINT INTO LINE-TEXT\_LINE RESPECTING BLANKS.  
        APPEND LINE TO LONGTEXT.  
  
        CONCATENATE ' Measurement Point Description - ' LT\_IMPTT-PTTXT INTO LINE-TEXT\_LINE RESPECTING BLANKS.  
        APPEND LINE TO LONGTEXT.  
  
        CONCATENATE ' Measurement Point Reading - ' DATA INTO LINE-TEXT\_LINE RESPECTING BLANKS.  
        APPEND LINE TO LONGTEXT.  
  
        CONCATENATE ' Measurement Point Range -  From ' DATA1 ' To ' DATA2 INTO LINE-TEXT\_LINE.  
        APPEND LINE TO LONGTEXT.  
  
  
        IF DATA2 IS INITIAL AND DATA1 IS NOT INITIAL AND DATA LT DATA1.  
          FLAG = 1.  
        ELSEIF DATA1 IS INITIAL AND DATA2 IS NOT INITIAL AND DATA GT DATA2.  
          FLAG = 1.  
        ELSEIF DATA2 IS NOT INITIAL AND DATA1 IS NOT INITIAL.  
          IF DATA LT DATA1 OR DATA GT DATA2.  
            FLAG = 1.  
          ENDIF.  
        ELSE.  
  
        ENDIF.  
  
        IF FLAG = 1.  
  
  
*\*BREAK-POINT.*  
          CALL FUNCTION 'BAPI\_ALM\_NOTIF\_CREATE'  
            EXPORTING  
              NOTIF\_TYPE         = 'M1'  
              NOTIFHEADER        = NOTIFHEADER  
            IMPORTING  
              NOTIFHEADER\_EXPORT = NOTIFHEADEREX  *" Notif Number*  
            TABLES  
              LONGTEXTS          = LONGTEXT  
              RETURN             = T\_RETURN\_CREATE.  
  
  
          CALL FUNCTION 'BAPI\_ALM\_NOTIF\_SAVE'  
            EXPORTING  
              NUMBER      = NOTIFHEADEREX-NOTIF\_NO  
            IMPORTING  
              NOTIFHEADER = NOTIFHEADEREX.  
  
          .  
  
          CALL FUNCTION 'STATUS\_UPDATE\_TASK\_TRIGGER'.  
  
          COUNTER = COUNTER + 1.  
  
        ENDIF.  
  
      ENDIF.  
      DATA LAST\_NOTIF TYPE STRING.  
      LAST\_NOTIF = NOTIFHEADEREX-NOTIF\_NO.  
      CLEAR: LS\_IMRG, TEMP, TEMPU, TEMPL, NOTIFHEADER, NOTIFHEADEREX, LINE.  
      REFRESH LONGTEXT.  
      FLAG = 0.  
    ENDLOOP.  
  
CALL FUNCTION 'CONVERSION\_EXIT\_ALPHA\_OUTPUT'  
  EXPORTING  
    INPUT         = LAST\_NOTIF  
 IMPORTING  
   OUTPUT        = LAST\_NOTIF  
          .  
  
    IF COUNTER NE 0.  
      IF SY-TCODE EQ 'IK11'.  
        CONCATENATE 'Maintenance Notification' SPACE LAST\_NOTIF SPACE' Created' INTO MESSAGE RESPECTING BLANKS.  
        MESSAGE MESSAGE TYPE 'I'.  
      ELSE.  
        CONCATENATE COUNTER ' Maintenance Notification Created' INTO MESSAGE RESPECTING BLANKS.  
        MESSAGE MESSAGE TYPE 'I'.  
      ENDIF.  
  
    ENDIF.  
  
  
  ENDIF.  
  
ENDIF.

# Security [Mandatory]

**“The change does not use / create any new authorization objects. Therefore this is Not Applicable” else provide user role**

# Message handling

|  |  |  |  |
| --- | --- | --- | --- |
| Scenario | Message text | Type of message  (Error, Warning, Success) | Corrective Action if any |
|  |  |  |  |

# Impact Analysis: [Mandatory for all changes]

## Impact on processes including application controls: No GR document will be created once we save PO with unticked value in NON GR IV field

## Impact on data: No Impact

## Impact on end users: No need to create GR for two way match PO

## Impact on Interfaces with other systems: Ariba

## Impact on Operational procedures: No Impact

## Impact on Infrastructure: No Impact

## Impact on System / DB Admin: No Impact

# Test cases (State reasons if any of the testing is not applicable)

## Unit testing:

|  |  |  |
| --- | --- | --- |
| Test Case  Sl no. | Test Case Description | Expected Result |
|
|  |  |  |
|  |  |  |

## Integration testing:

NA – As this a technical change

## Interface testing:

NA – As this a technical change

## Volume/ Stress testing:

NA – As volume is not much

## Security testing:

NA – As there is no changes in security roles

## Data conversion testing:

NA – There is no conversion involved.

# Deployment Plan (Applicable for NON SAP application)

* Section 13 and 14 will be applicable only if FS is not there, else delete or use for Technical test cases if any