ERL MAINTENANCE SUPPORT SDN BHD

(Company No. 498574-T)

E-MAS

Effective Railway Operations; Reliable System Maintenance

Maintenance Department

SAP
®

SAP Plant Maintenance Process Guide

G00.OMN.M11070.CZ.1001.A

ERL Maintenance Support Sdn Bhd   (Company No. 498574-T)

Location	Reference	Rev.	Date	Page No.	Document Name
E-MAS Offices	G00.OMN.M11070.CZ.1001.A	A	01 Aug 2018	Page 2 of 43	SAP Plant Maintenance Process Guide

TABLE OF CONTENTS

ERL Maintenance Support Sdn Bhd   (Company No. 498574-T)

Location	Reference	Rev.	Date	Page No.	Document Name
E-MAS Offices	G00.OMN.M11070.CZ.1001.A	A	01 Aug 2018	Page 3 of 43	SAP Plant Maintenance Process Guide

1   PURPOSE

This document describes the terms, methods and process guides for use of SAP PM for E-MAS.

2   SAP PM

2.1 Application of Notification Types

A fault notification shall be reported by Operation Control Centre (OCC) or MTN via SAP to notify a failure of a component or equipment. Each failure independent from how it was discovered (e.g. during scheduled maintenance, inspections, etc) has to be notified and if similar failures are discovered in a different locations and components, each failure has to be reported separately.

A failure notification can only be completed after the failure has been rectified.

The followings are the types of notifications used for mode of failures.

Notification Type [1]	Description	Action Dept
OP	To notify and record incidents, security, safety and general operational related activities.	OCC
SF	To notify failure report notification in SAP, when a malfunction is reported by the train drivers/station staff or detected via TMS/Scada. It should cover all failures discovered when the particular technical object is in operation. This includes platform screen doors (PSD) & Depot Workshop Equipment (DWE), if reported by end-user.	OCC RST ELT SIG INF
MR	To notify failures detected during scheduled maintenance, standby or additional inspection activities. *(When ZUMO is created with reference to MR, all originating work orders such as ZSMO, ZAIP, ZSTO, etc shall be referred to ZUMO by the work order relationship function).*	RST, ELT, SIG, INF
RM	To notify Track & Civil Work activities under YTL's scope of work.	SIG (TRW)

Note[1]: Service Failure (SF), Maintenance Request (MR), Operation Procedures (OPE), Degraded Report (DR), Emergency Report (ER), Request for Maintenance (RM)

ERL Maintenance Support Sdn Bhd (Company No. 498574-T)

Location	Reference	Rev.	Date	Page No.	Document Name
E-MAS Offices	G00.OMN.M11070.CZ.1001.A	A	01 Aug 2018	Page 4 of 43	SAP Plant Maintenance Process Guide

2.2 Definition of terms used with Notification/Work Order

Terminology	Description
Assembly	A subdivision of a technical object for the separation into more clearly defined units. It is essentially used for maintenance bill of material and maintenance task list.
Breakdown	Defined as when the condition of a functional location does not allow its operation or is out of service.
Bill of Material	A structured list of parts or components of an equipment or assembly.
Cause Code	The reason for the occurrence of the failure to be defined after investigation and there are corresponding codes for each failure.
Downtime	Defines the time or interval during which a functional unit is down. The downtime starts when a functional location breaks down and lasts until it is able to function again.
Equipment	An individual, physical object that is maintained independently and installed in functional locations or other equipment.
Failure Code	Describes the actual defect of a technical object after the object has been repaired. Codes are the means with which this data is managed in the system and there are corresponding codes for each failure.
Function Location	A place or physical location at which a maintenance task is performed and history data is collected.
Incident Code	The visible effect of a malfunction.
Malfunction start time	Point of time when a system/system component stops to fulfill its required function.
Malfunction end time	Point of time when a system/system component is back to its normal operational conditions.
Operation no.	Numbers that identifies an activity.
Operation	Description of work/activity to be performed.
PM activity type	Describes the type of maintenance service carried out. E.g. regular maintenance, warranty, scheduled maintenance, etc.
Service Failure	Failures or malfunction caused by any part of the E&M System in service where a particular item is not able to fulfill its required function.
Staff no.	Identification (I.D) of the person who performs and confirms the task in SAP.
Work end date	Date on which the work/operation(s) completed.
Work start date	Date on which the work/operation(s) started.
Work centre	An organizational unit that defines where and when an operation should be carried-out. Activities carried out here are valuated by charge rates, which are determined by cost center and activity types.
Planner Group	A group of employee or people responsible for planning and execution of maintenance activities.

2.3 Application of Work Order Types

A work order is a document used by the maintenance department to manage and document maintenance tasks. It may include such information as a description of the work required, the

ERL Maintenance Support Sdn Bhd (Company No. 498574-T)

Location	Reference	Rev.	Date	Page No.	Document Name
E-MAS Offices	G00.OMN.M11070.CZ.1001.A	A	01 Aug 2018	Page 5 of 43	SAP Plant Maintenance Process Guide

task priority, the job procedure to be followed, the parts, materials, tools and equipment required to complete the job, the labour hours, costs and materials consumed in completing the task, as well as key information on failure causes, what work was performed etc.

Types of order and work order definitions are as follows:

SAP Order Type	Description	Notification		W/O Category
		Required	Type	
ZUMO	**Unscheduled maintenance** - Maintenance activity to restore a defective/malfunction structure, system or component to perform its designed functionality by repair, parts replacement, overhaul, etc.	Yes	SF/MR	Unscheduled
ZRPO	**Repair Order** - To be used for repair of exchanged parts or component off vehicle/site in workshop or send for external repair.	No	-	Unscheduled
ZCAN	**Cannibalization Order** - The removal/installation of parts or components from a piece of equipment in one function location to another function location temporarily until spare parts is available and replaced.	No	-	Unscheduled
ZSMO	**Scheduled maintenance** - is a predefined cycle of maintenance e.g., servicing, cleaning, lubrication, inspection or component change based on time, distance or other measurable parameters.	No	-	Scheduled
ZSTO	**Standing Order** - A work order created for collecting labour hours, costs and/or history for tasks for which it maybe decided that individual work orders should not be necessary.	No	-	Scheduled
ZSTC	**Scheduled Calibration** - A planned calibration performed according to calibration interval assigned to an item of equipment, tools and measuring device.	No	-	Scheduled
ZMOD	**Modification** - Activities such as correct, upgrade, improve etc carried out on a structure, system or component to increase the capability of that system/sub-system to perform the required functions.	No	-	Scheduled
ZSIP	**Scheduled Inspection** - is a planned inspection carried out according to inspection interval as specified by manufactures/suppliers manual.	No	-	Scheduled
ZTRN	**Training Order** - To record technical training and general training activities within the department, inter-department or externally conducted training.	No	-	Scheduled

ZAIP	**Additional Inspection** - To record any additional inspection activities on the basis of as and when required during maintenance work or standby time.	No	-	Others
ZMIS	**Miscellaneous Order** - To record support activities not described in the normal unscheduled or scheduled order types e.g. monitoring, checking of spare parts condition & special projects.	No	-	Others
ZNWO	**Activities without work order** - To record activities via timesheet for events such as meeting, documentation work, briefing, visits, planning, etc.	No	-	Others
ZSTB	**Standby Order** - To record standby activity time via timesheet.	No	-	Others

NOTES:

- Malfunctions detected during scheduled maintenance work will require maintenance department to create ZUMO with reference to MR notification while fault found during unscheduled maintenance shall use SF, if it is service/operations critical.

- ZSMO is generated automatically by SAP according to the maintenance plan whereas ZUMO is created manually with reference to notification reported either by OCC or maintenance staff.

- ZSTO Standing order is a work order that is left open for a pre-determined period of time for the purpose of collecting labour hours, costs and/or history for tasks for which it has been decided that individual work orders should not be raised. This order is used for routine work e.g. inspection, checking, cleaning, housekeeping, etc, which are carried out on a daily basis within the respective maintenance department. Performed work is confirmed daily or weekly as a partially confirmed work and technically closed after reached a pre-determined period in the SAP system.

ERL Maintenance Support Sdn Bhd (Company No. 498574-T)

Location	Reference	Rev.	Date	Page No.	Document Name
E-MAS Offices	G00.OMN.M11070.CZ.1001.A	A	01 Aug 2018	Page 7 of 43	SAP Plant Maintenance Process Guide

E-MAS

Overview of Maintenance Processes (SAP)
(Re-classification of Scheduled, Unscheduled & Other activities)

Prepared by: MRD
Date last Update: 17 Sep 2011

Reference ID: G00.OMQ.M11070.CC.0002.C
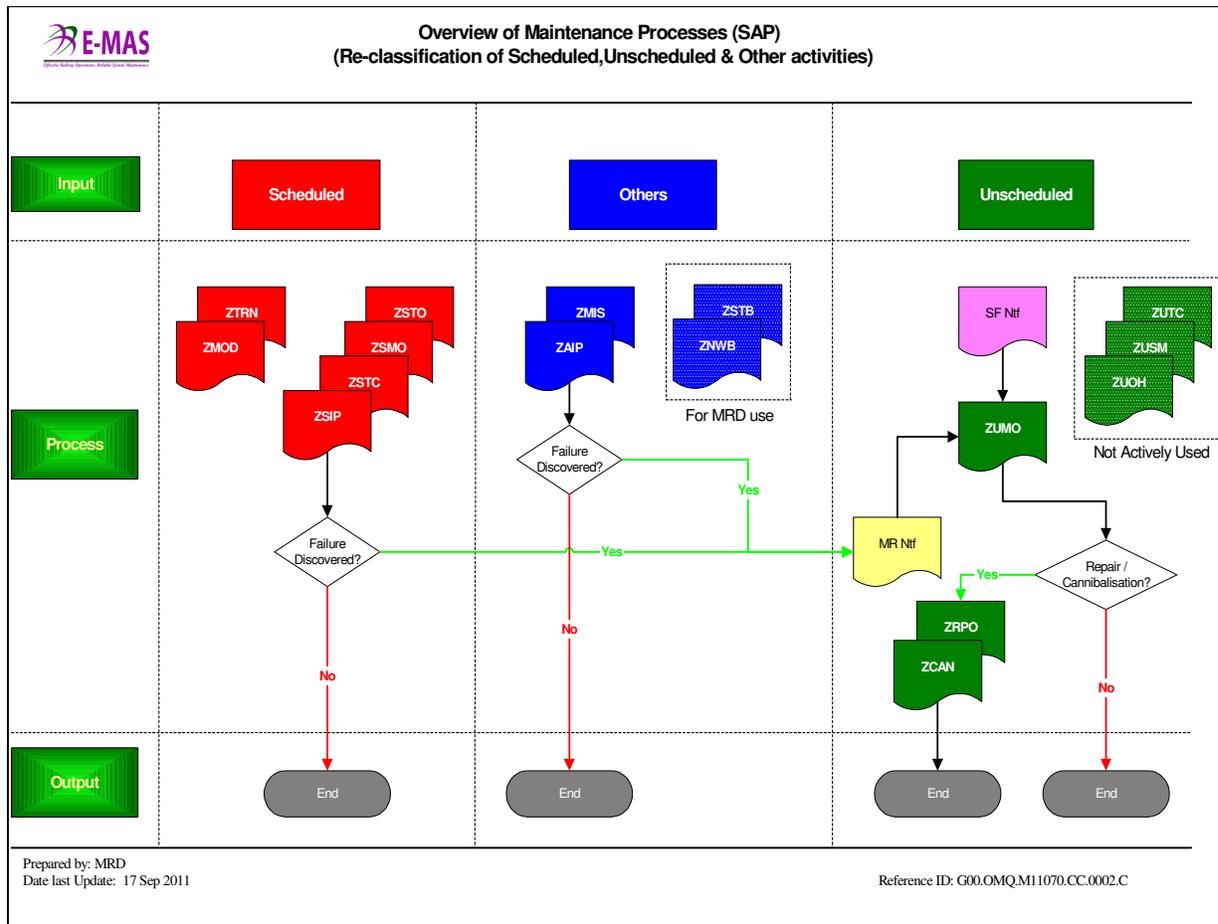
2.4 Maintenance Services

Maintenance department has to identify latent defect work, additional services, above scheduled maintenance and regular maintenance in order to separate the individual work order and charge the maintenance cost according to its activity type. All defect liability work performed on behalf of the suppliers are charged to the supplier and tasks requested by Express Rail Link Sdn. Bhd. (ERLSB), which are not covered by the latest Operations & Maintenance latest O&M contract are classified as additional services.

Definitions for the maintenance activity type are as follows:

- **Regular Maintenance** is the normal maintenance work covered by the latest O&M contract.

- **Additional Services** are additional work, which are performed by E-MAS at the request of ERLSB. (E.g. additional train rides, special modifications on the train, sub systems, refurbishment or improvement work, etc). This includes any external support to 3rd parties, such as ERLSB, Syarikat Pembenaan Yeoh Tiong Lay Sdn. Bhd. (YTL), contractors, etc for work outside latest O&M contract.

ERL Maintenance Support Sdn Bhd   (Company No. 498574-T)

Location	Reference	Rev.	Date	Page No.	Document Name
E-MAS Offices	G00.OMN.M11070.CZ.1001.A	A	01 Aug 2018	Page 8 of 43	SAP Plant Maintenance Process Guide

- **Above Scheduled Maintenance** is the scheduled maintenance work performed, more than required by the maintenance manual of the supplier/manufacturer. This can be required for e.g. serial failures.

Activity Type	Description	Work Order Type
001	Regular Maintenance	ZUMO, ZSMO, ZSTO, ZRPO, ZCAN, ZAIP, ZMIS, ZSIP, ZSTC, ZNWO
002	Additional Services	ZUMO, ZSMO, ZSTO, ZRPO, ZMOD, ZCAN, ZAIP, ZMIS, ZSIP, ZSTC
099	Above Scheduled Maintenance	ZUMO & ZMOD
004	Training	ZTRN only
008	Standby	ZSTB

2.5 Work Types

Defines the type of work performed on the maintenance task. All performed repair work is recorded in the work order on completion of the task to indicate the type of action taken to ensure the functionality of the system/sub-system. This information is then used as a maintenance history for future planning/evaluation purposes.

No.	Work Type	Description	Used with Order Type
1	**Fault Finding / Troubleshooting**	Troubleshooting and any functional test carried out to identify a defect in a component or system that has failed.	ZUMO ZAIP ZSIP
2	**Repair**	All repair work which returns the functionality of a component/system that has failed either permanently or temporarily.	ZUMO ZRPO
3	**Calibrate**	Calibration/validation work e.g. measurement, adjustment, tuning, etc carried out on equipment, tools and measuring devices.	ZUMO ZSTC ZSMO
4	**Clean / Servicing**	All cleaning work including that are associated with servicing – e.g. oil change, consumable item change (belts, filter, etc) and tightening of belts, wiring and filing up diesel tanks.	ZUMO ZSMO ZSTO ZRPO
5	**Inspect**	Any inspection task done visually or by hand checking to determine the condition of the structure, system or	ZUMO ZSMO ZAIP

ERL Maintenance Support Sdn Bhd (Company No. 498574-T)

Location	Reference	Rev.	Date	Page No.	Document Name
E-MAS Offices	G00.OMN.M11070.CZ.1001.A	A	01 Aug 2018	Page 9 of 43	SAP Plant Maintenance Process Guide

		component during unscheduled and scheduled maintenance.	ZRPO
6	**Component Change**	Component change work including scheduled changes after it has been diagnostic as faulty e.g., fuse, belts, lights, etc.	ZUMO ZSMO ZCAN
7	**Support**	Any activities that are associated with cross-departmental assistance to perform certain task e.g. SAP work or order processing, documentation, operation, safety/security etc.	All types of work order
8	**Training**	Record trainer and trainee's man-hours of an individual department or inter department for all technical training and general training.	ZTRN
9	**Testing / Commissioning**	All testing work including functional check, interface check or verification of a system/component availability on completion of corrective or preventive activities.	All type of work order except ZTRN
10	**Modification**	Any modification work carried out by specific instructions either from client or system suppliers in order to correct, improve or upgrade a particular subsystem/system.	ZMOD
11	**Traveling**	Traveling time includes the preparation, waiting time, material withdrawal/return, material management and journey to and from the destination.	All types of work order
12	**Standby**	Standby at stations / workshop.	ZSTB
13	**3RD party Repair /PICOP**	Activities that include assistance, monitoring, supervising, checking, verification, etc for the 3rd party work (ERLSB, outsourced contractors, etc).	ZUMO ZSMO ZMIS
14	**Safety/Quality /Auditing**	Any activities associated with safety functions, internal auditing or providing assistance in auditing within the department or across the company.	ZUMO ZMIS
15	**Data Readout**	All activities associated with data reading/analysis e.g. reading out log files, interpretation of data, etc for trend analysis or ad hoc checking.	ZUMO ZSTC ZMIS

ERL Maintenance Support Sdn Bhd (Company No. 498574-T)

Location	Reference	Rev.	Date	Page No.	Document Name
E-MAS Offices	G00.OMN.M11070.CZ.1001.A	A	01 Aug 2018	Page 10 of 43	SAP Plant Maintenance Process Guide

16	*Monitoring*	Activities carried out to observe and evaluate the performance of a sub system/ system to detect any variation in its behavior or circumstances and respond immediately if failure was to occur.	All type of work order except ZTRN

NOTE:
Application of work type to work order described above is a general GUIDE ONLY, you may use any appropriate type where it is best applicable

2.6 Breakdown / Downtime

The purpose of specifying a breakdown or downtime in the failure notification is a necessity to provide accurate reliability and availability statistics / report for the ERL System. Breakdown of a particular system or component has to be identified correctly and its actual downtime recorded when a work order is closed.

- **Breakdown** can be defined as a failure when the condition of a functional location when it does not allow operation or is out of service.

- The **Downtime** - It define*s* the time/interval during which a functional unit is down. The downtime starts when a functional location breaks down and lasts until it is able to function again. However, ZCON3 (SAP confirmation transaction, page 31) is structured in such a manner that work end is always equals to malfunction end time. Therefore in notification the malfunction end time has to be calculated from the start of malfunction until end of breakdown.

Downtime must be specified only if the selected functional location has a breakdown and to be used for SF and MR type notifications only. The actual downtime of a functional location's breakdown must be entered in minutes to standardize report requirements, refer figure 1.

ERL Maintenance Support Sdn Bhd　　(Company No. 498574-T)

Location	Reference	Rev.	Date	Page No.	Document Name
E-MAS Offices	G00.OMN.M11070.CZ.1001.A	A	01 Aug 2018	Page 11 of 43	SAP Plant Maintenance Process Guide

Figure 1
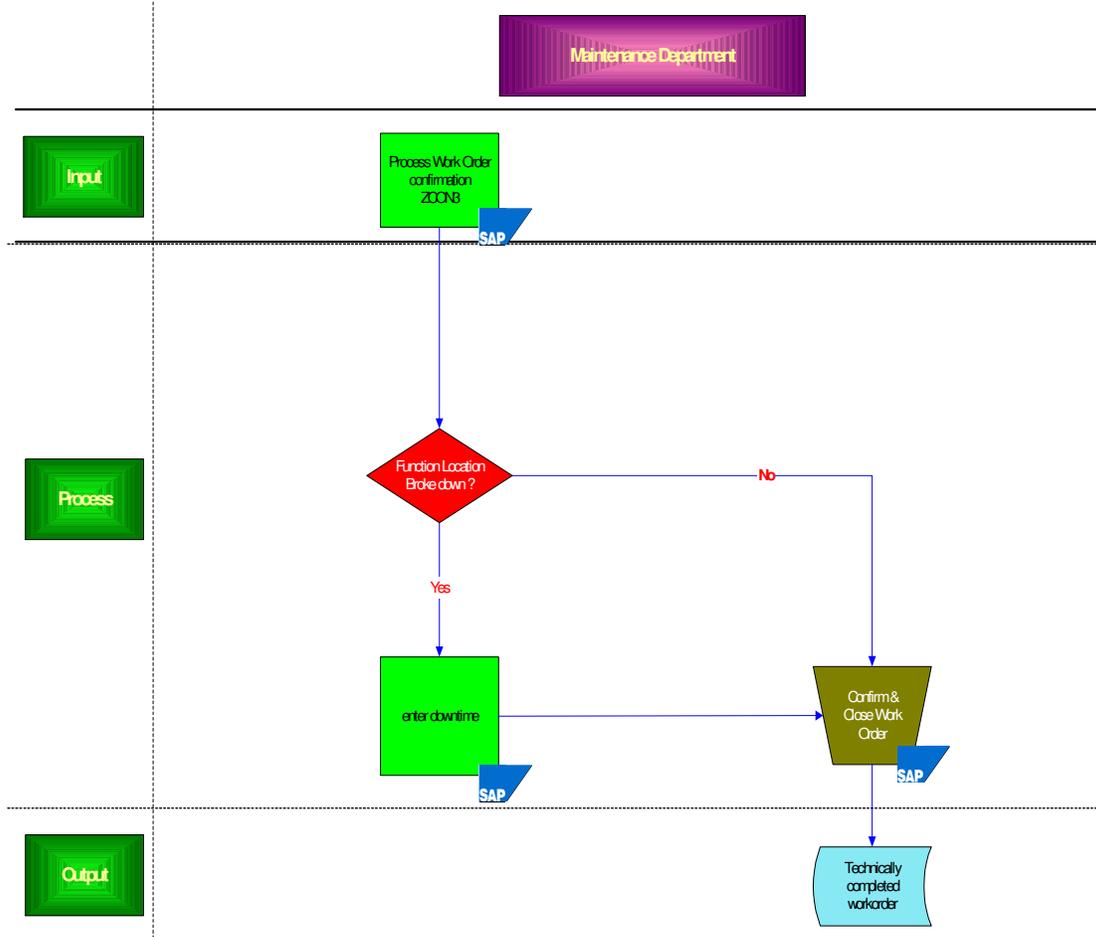
2.7 Work Order Technical and Business Completion

Maintenance completes a work order processing by setting TECO, which means the technical part of the work is finished, but it is still possible to book labour and material costs to this order until the order is financially closed. In a normal case a work order is technically completed by two weeks after released for unscheduled maintenance, 4 weeks for scheduled maintenance orders and within a pre-defined period for standing work orders.

PCNF is a status assigned to a work order when further works are still pending or carried forward to the next month. A work order is partially closed to gather maintenance info for generation of respective month reports. Work order with PCNF shall be closed with TECO once all the works are completed and captured.

Whereas business completion means the order is commercially closed after cost settlement by FIN and after this no work and material transactions can be recorded to this work order any more. FIN performs business completion for TECO work orders after 90 days to enable maintenance to settle any open work orders pending spare part, resources etc.

ERL Maintenance Support Sdn Bhd   (Company No. 498574-T)

Location	Reference	Rev.	Date	Page No.	Document Name
E-MAS Offices	G00.OMN.M11070.CZ.1001.A	A	01 Aug 2018	Page 12 of 43	SAP Plant Maintenance Process Guide

3   MAIN MENU

1. Enter Transaction Code: /niw21, /niw29, etc. See #3.

2. Click enter

3. Transaction Code can be obtained this way

Location	Reference	Rev.	Date	Page No.	Document Name
E-MAS Offices	G00.OMN.M11070.CZ.1001.A	A	01 Aug 2018	Page 13 of 43	SAP Plant Maintenance Process Guide

4 CREATING NOTIFICATION

In SAP Easy Access window:
User Menu → Plant Maintenance → Notification → Create → IW21-General

    a. Type in /niw21 in Transaction Code Box and click Enter

    b. Create Notification page
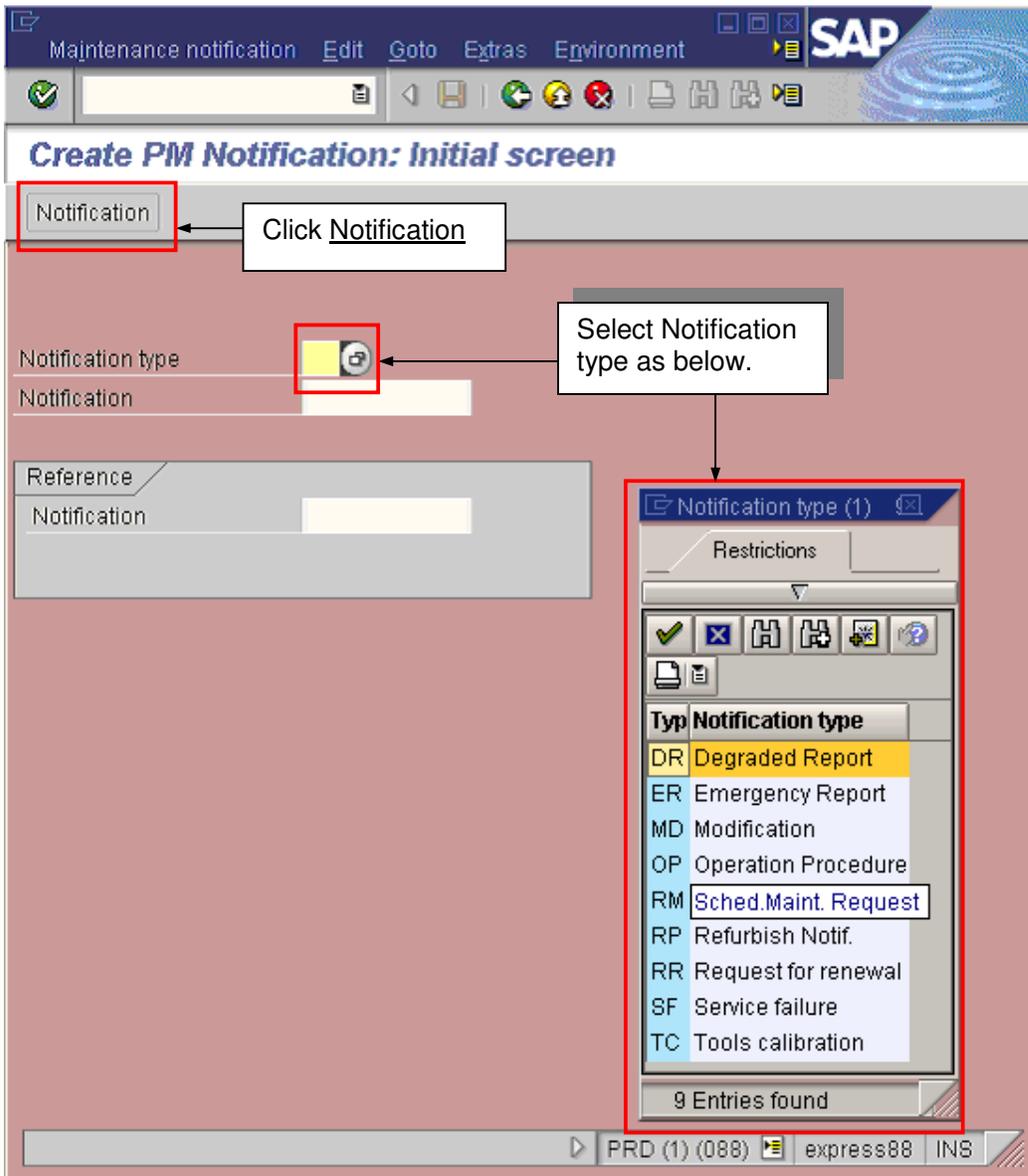
ERL Maintenance Support Sdn Bhd (Company No. 498574-T)

Location	Reference	Rev.	Date	Page No.	Document Name
E-MAS Offices	G00.OMN.M11070.CZ.1001.A	A	01 Aug 2018	Page 14 of 43	SAP Plant Maintenance Process Guide

c. Create Notification Page: Overview Page

ERL Maintenance Support Sdn Bhd   (Company No. 498574-T)

Location	Reference	Rev.	Date	Page No.	Document Name
E-MAS Offices	G00.OMN.M11070.CZ.1001.A	A	01 Aug 2018	Page 15 of 43	SAP Plant Maintenance Process Guide

d. Create Notification Page: Detail Page

ERL Maintenance Support Sdn Bhd   (Company No. 498574-T)

Location	Reference	Rev.	Date	Page No.	Document Name
E-MAS Offices	G00.OMN.M11070.CZ.1001.A	A	01 Aug 2018	Page 16 of 43	SAP Plant Maintenance Process Guide

5   CHANGING NOTIFICATION

    a.   Type in /niw22 in Transaction Box and click Enter

    b.   Change Notification Page
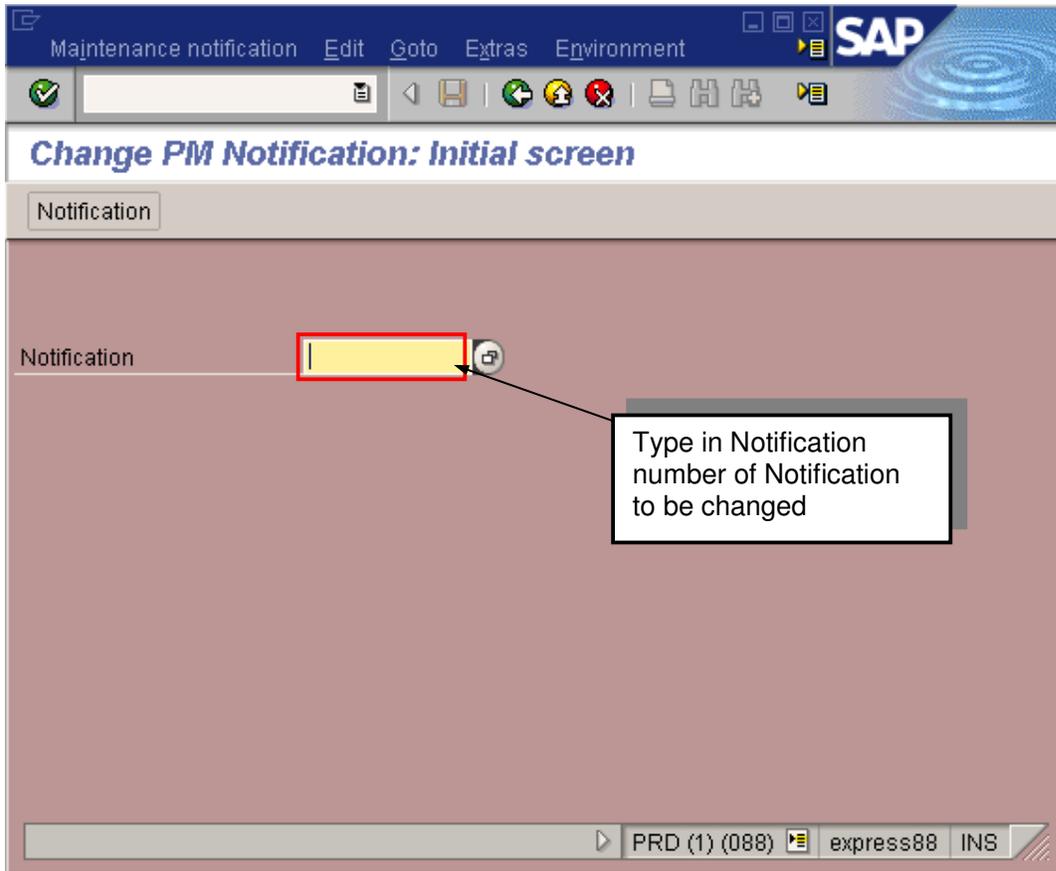
Type in Notification number of Notification to be changed

ERL Maintenance Support Sdn Bhd   (Company No. 498574-T)

Location	Reference	Rev.	Date	Page No.	Document Name
E-MAS Offices	G00.OMN.M11070.CZ.1001.A	A	01 Aug 2018	Page 17 of 43	SAP Plant Maintenance Process Guide

c.   Change Notification Page: Overview and Detail Page

ERL Maintenance Support Sdn Bhd   (Company No. 498574-T)

Location	Reference	Rev.	Date	Page No.	Document Name
E-MAS Offices	G00.OMN.M11070.CZ.1001.A	A	01 Aug 2018	Page 18 of 43	SAP Plant Maintenance Process Guide

6 DISPLAY NOTIFICATION

User Menu → Plant Maintenance → Notification → List Editing → IW29 –Display

    a. Type in /niw29 in the Transaction Box and click Enter

    b. Selection of Notification page
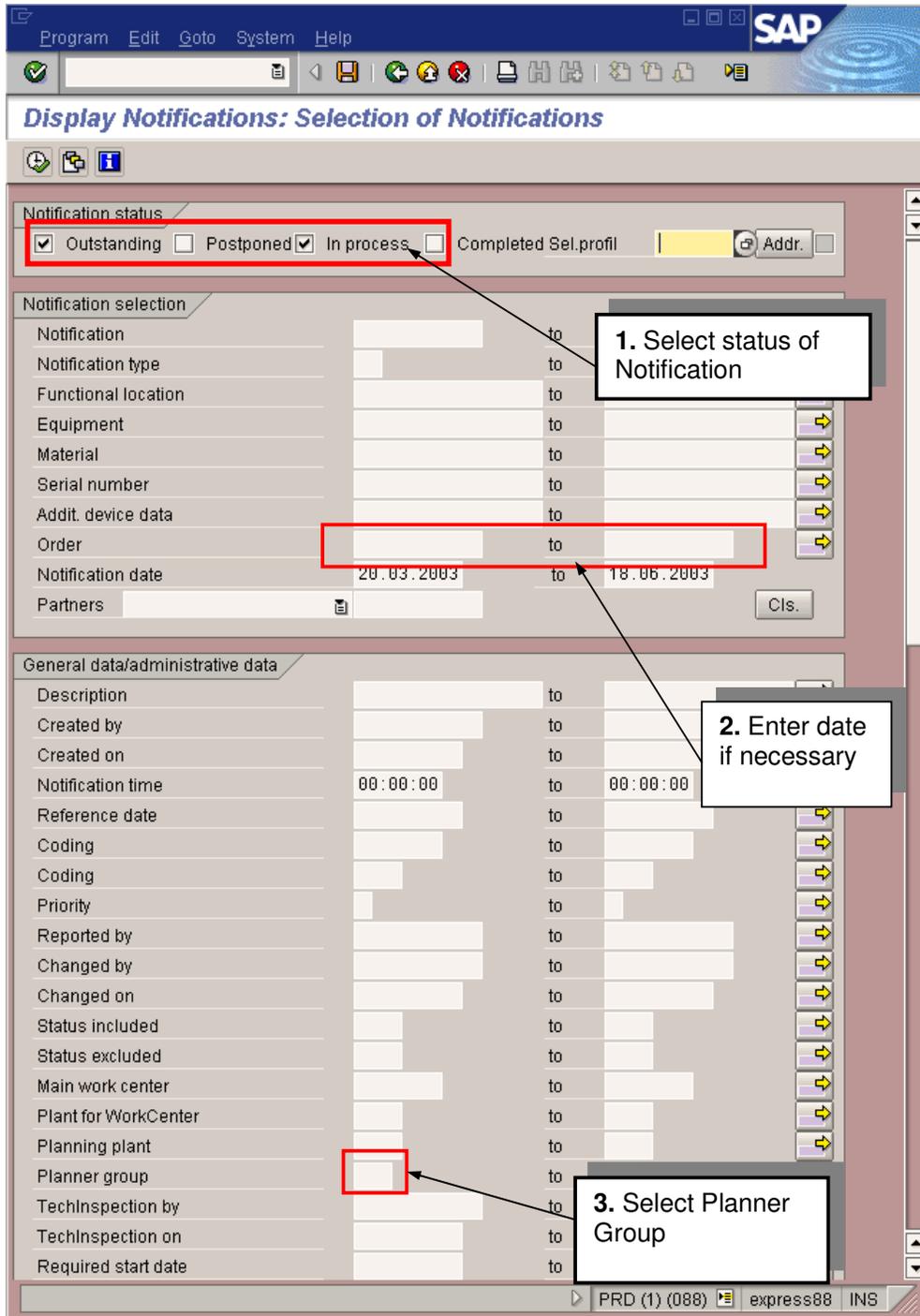
c. Listing of Notification Page

ERL Maintenance Support Sdn Bhd (Company No. 498574-T)

Location	Reference	Rev.	Date	Page No.	Document Name
E-MAS Offices	G00.OMN.M11070.CZ.1001.A	A	01 Aug 2018	Page 20 of 43	SAP Plant Maintenance Process Guide

7 RELEASING WORK ORDER FROM NOTIFICATION

a. Initial Screen Page

ERL Maintenance Support Sdn Bhd (Company No. 498574-T)

Location	Reference	Rev.	Date	Page No.	Document Name
E-MAS Offices	G00.OMN.M11070.CZ.1001.A	A	01 Aug 2018	Page 21 of 43	SAP Plant Maintenance Process Guide

b. Header Data Page

ERL Maintenance Support Sdn Bhd (Company No. 498574-T)

Location	Reference	Rev.	Date	Page No.	Document Name
E-MAS Offices	G00.OMN.M11070.CZ.1001.A	A	01 Aug 2018	Page 22 of 43	SAP Plant Maintenance Process Guide

c. Operation page

8. To print work order, click order → print → order

7. Release Work Order

3. For single task enter same number

4. For single task enter consecutive number

5. For single task enter PM99

6. For data accuracy enter step-by-step maintenance operation

d. Print Page

8   CREATING WORK ORDER

In SAP Easy Access window:
User Menu → Plant Maintenance → Notification → Create → IW31 → Create (General)

    a.   Type in /**niw31** in the Transaction Box and click **Enter**.

    b.   Create Work Order Initial Screen.
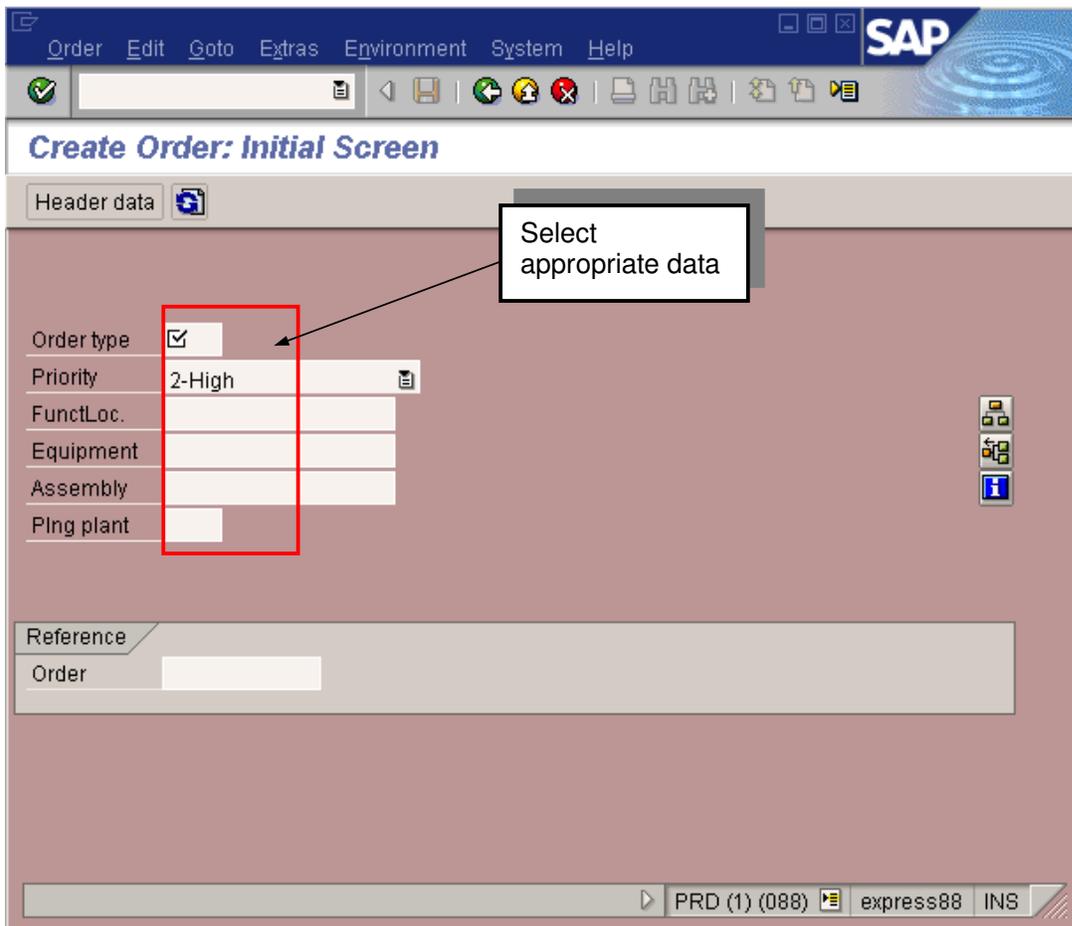
ERL Maintenance Support Sdn Bhd   (Company No. 498574-T)

Location	Reference	Rev.	Date	Page No.	Document Name
E-MAS Offices	G00.OMN.M11070.CZ.1001.A	A	01 Aug 2018	Page 25 of 43	SAP Plant Maintenance Process Guide

c. Create Work Order: Header Page

ERL Maintenance Support Sdn Bhd   (Company No. 498574-T)

Location	Reference	Rev.	Date	Page No.	Document Name
E-MAS Offices	G00.OMN.M11070.CZ.1001.A	A	01 Aug 2018	Page 26 of 43	SAP Plant Maintenance Process Guide

9   RELEASING WORK ORDER FROM SCHEDULED MAINTENANCE (IP10)
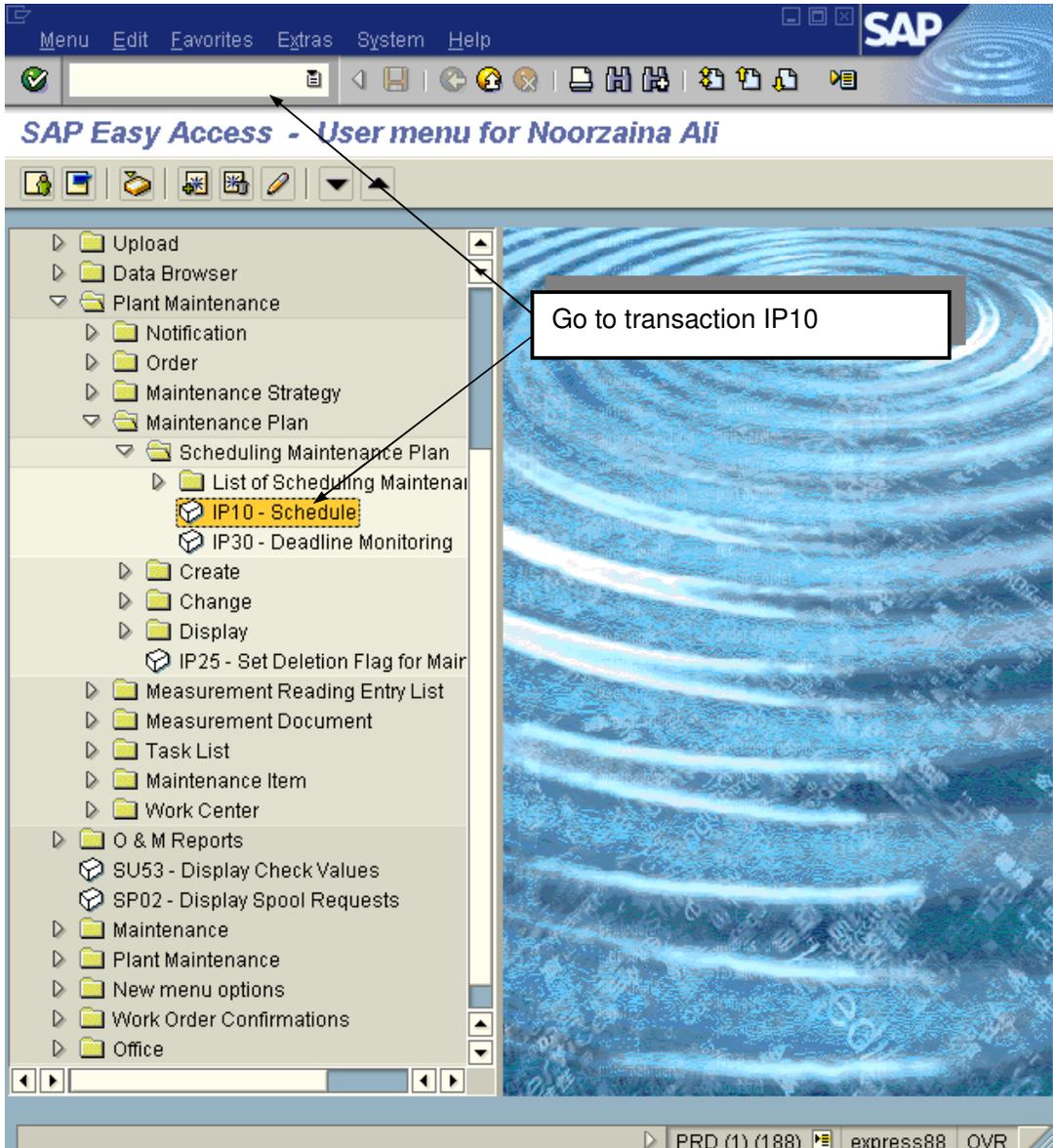
ERL Maintenance Support Sdn Bhd   (Company No. 498574-T)

Location	Reference	Rev.	Date	Page No.	Document Name
E-MAS Offices	G00.OMN.M11070.CZ.1001.A	A	01 Aug 2018	Page 27 of 43	SAP Plant Maintenance Process Guide
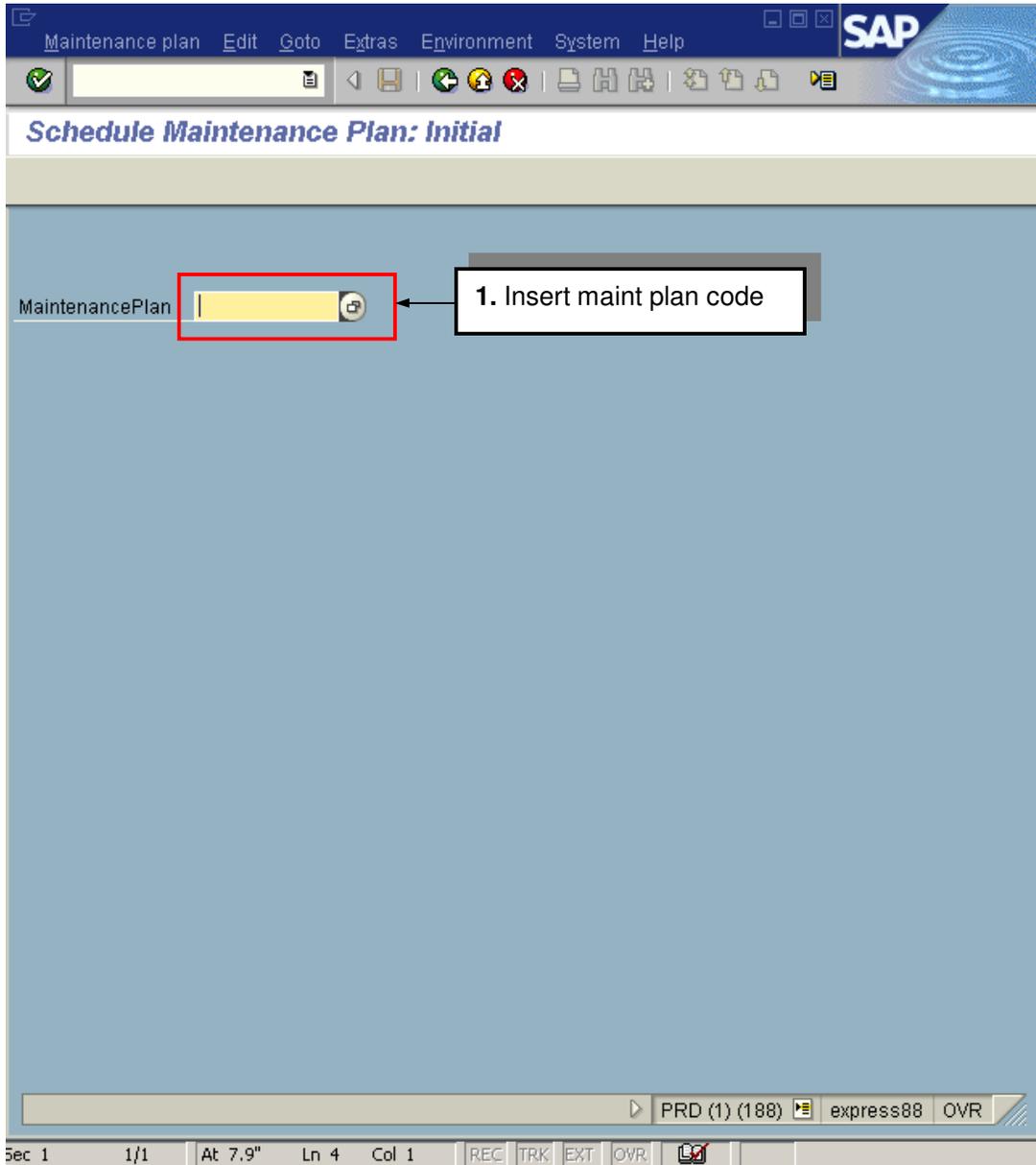
a. Initial Screen Page

b. Schedule Maintenance Plan

c. Display Scheduled Maintenance Work Order: Operation Page
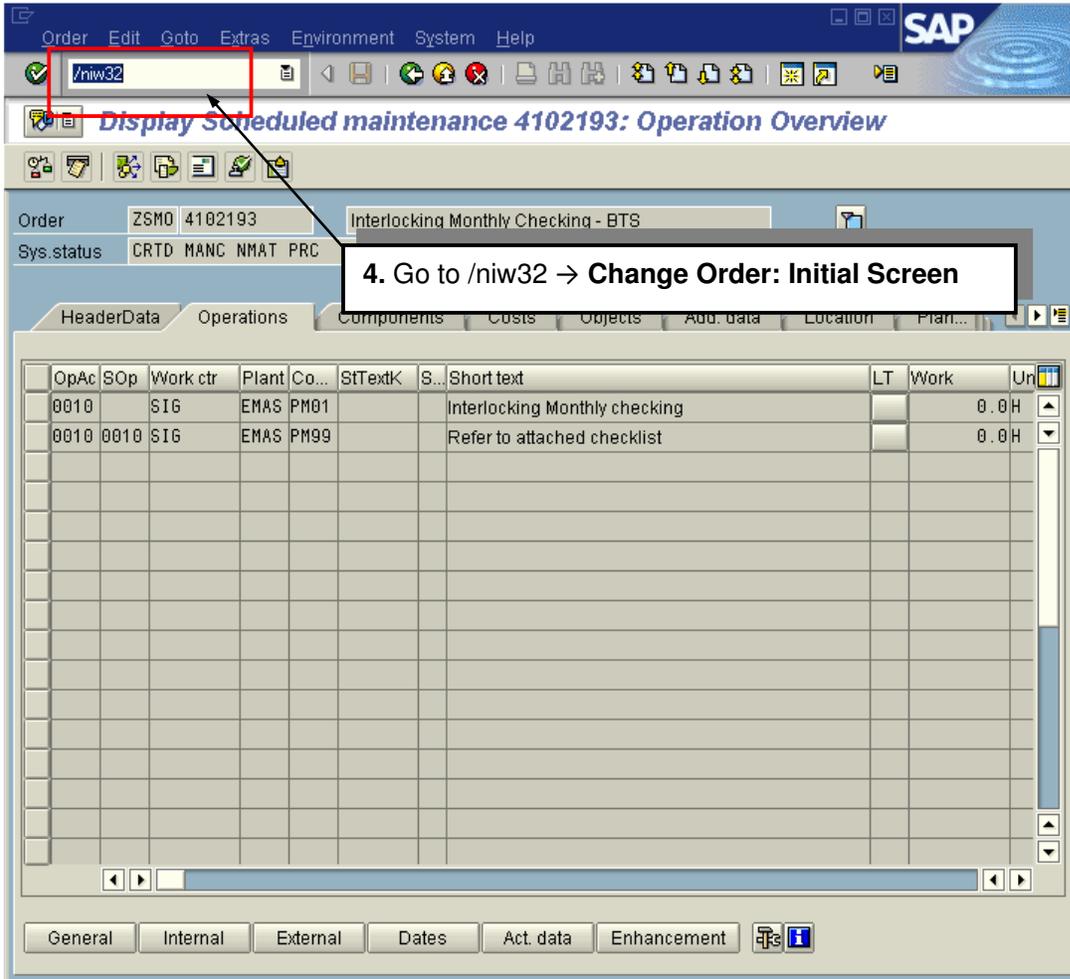
4. Go to /niw32 → **Change Order: Initial Screen**

ERL Maintenance Support Sdn Bhd   (Company No. 498574-T)

Location	Reference	Rev.	Date	Page No.	Document Name
E-MAS Offices	G00.OMN.M11070.CZ.1001.A	A	01 Aug 2018	Page 30 of 43	SAP Plant Maintenance Process Guide

d. Change Scheduled Maintenance Work Order: Operation page

e. Print Page

ERL Maintenance Support Sdn Bhd   (Company No. 498574-T)

Location	Reference	Rev.	Date	Page No.	Document Name
E-MAS Offices	G00.OMN.M11070.CZ.1001.A	A	01 Aug 2018	Page 31 of 43	SAP Plant Maintenance Process Guide

10 WORK ORDER CONFIRMATION: CLOSING WORK ORDER

In SAP Easy Access window:
User Menu → W/O Confirmation V3 → ZCON3

    a. Type in **/nzcon3** in the Transaction Box and click **ENTER**

    b. Work Order Confirmation Page
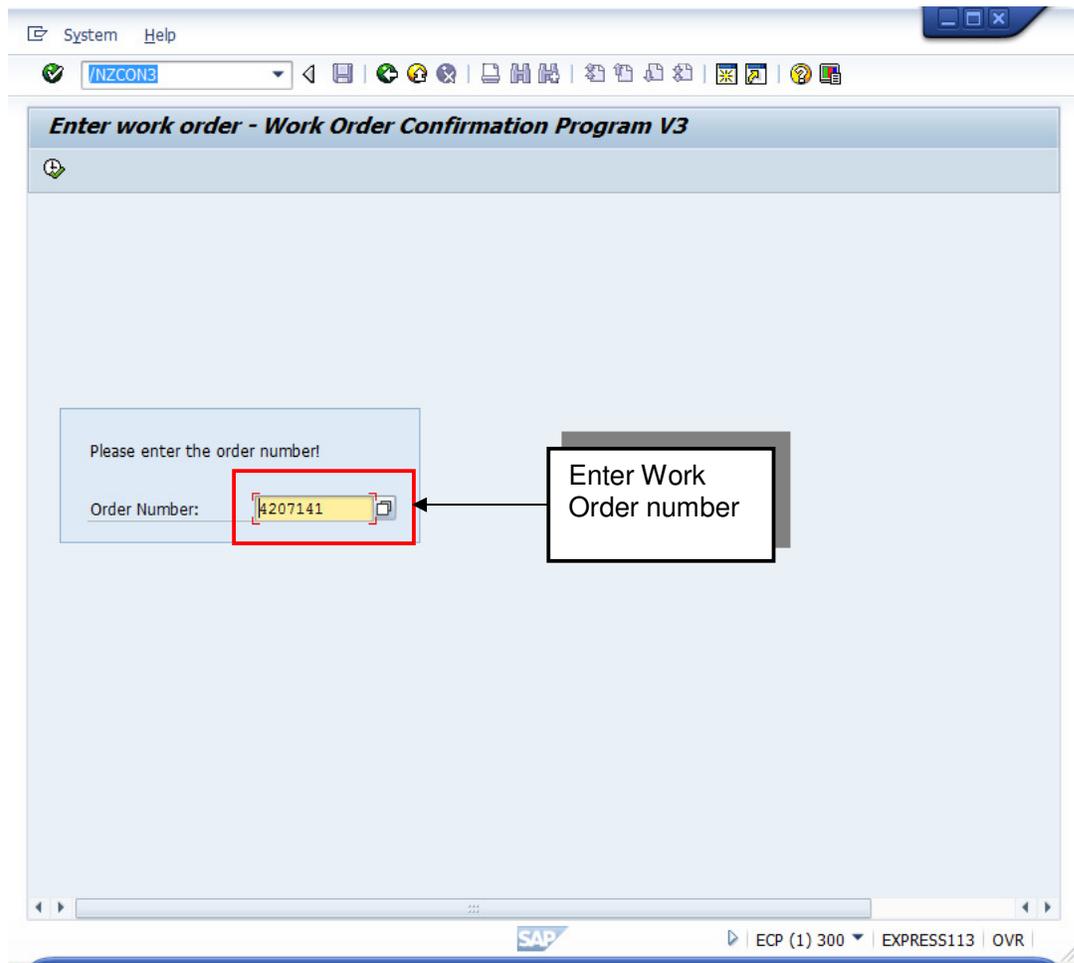
ERL Maintenance Support Sdn Bhd

(Company No. 498574-T)

Location	Reference	Rev.	Date	Page No.	Document Name
E-MAS Offices	G00.OMN.M11070.CZ.1001.A	A	01 Aug 2018	Page 32 of 43	SAP Plant Maintenance Process Guide

c. Details of Work Order Confirmation ZCON3

ERL Maintenance Support Sdn Bhd

(Company No. 498574-T)

Location	Reference	Rev.	Date	Page No.	Document Name
E-MAS Offices	G00.OMN.M11070.CZ.1001.A	A	01 Aug 2018	Page 33 of 43	SAP Plant Maintenance Process Guide

ERL Maintenance Support Sdn Bhd   (Company No. 498574-T)

Location	Reference	Rev.	Date	Page No.	Document Name
E-MAS Offices	G00.OMN.M11070.CZ.1001.A	A	01 Aug 2018	Page 34 of 43	SAP Plant Maintenance Process Guide

11 CHECKLIST TO ENSURE ACCURACY OF NOTIFICATIONS AND WORK ORDERS

Notification	
Notification type	• according to the type of failure/ malfunction, e.g. "**SF**" for Unscheduled Maintenance which can influence the service, "**MR**" for Unscheduled maintenance discovered during Scheduled Maintenance
completion	• only if w/o technically completed or no w/o assigned
Malfunction end time	• must be entered • as per finishing last activity in work order
Functional location	• as detailed as possible, e. g. according to the description in failure code or notification text; • same as FL in work order
Planner Group	• has to belong to the Functional location
Failure code	• at least one entry • codes like *"others"* and *"unknown"* only to be accepted in exceptional cases
Cause code	• at least one entry
Incident Code	• should be entered
FL affected	• same as functional location
effect	• "maintenance related" or "not maintenance related" to be entered
Work order	
NOTE: if notification contains the status *"maintenance related"* a work order must have been assigned	
Order type	• according to the work done
Order text	• to be entered
Status	• technically completed
PM activity type	• according to the work done
Functional location	• as detailed as possible • consider equipment / assemblies • related to order text
material	• material in hardcopy and softcopy must be identical
confirmation	• start/ end date and time of operation, • staff no., • activity type, • work centre, • if *partially* completed reason has to be selected
NOTE: total duration for works or number of workers must be logical	

*DELETE W/O OR NOTIFICATIONS **ONLY** IN THE CASE IT WAS **CREATED BY MISTAKE**!*

ERL Maintenance Support Sdn Bhd   (Company No. 498574-T)

Location	Reference	Rev.	Date	Page No.	Document Name
E-MAS Offices	G00.OMN.M11070.CZ.1001.A	A	01 Aug 2018	Page 35 of 43	SAP Plant Maintenance Process Guide

12   CHANGING DATA IN THE SERVICE DISRUPTION REPORT

12.1   Flow Chart (findings in the OCC Journal)
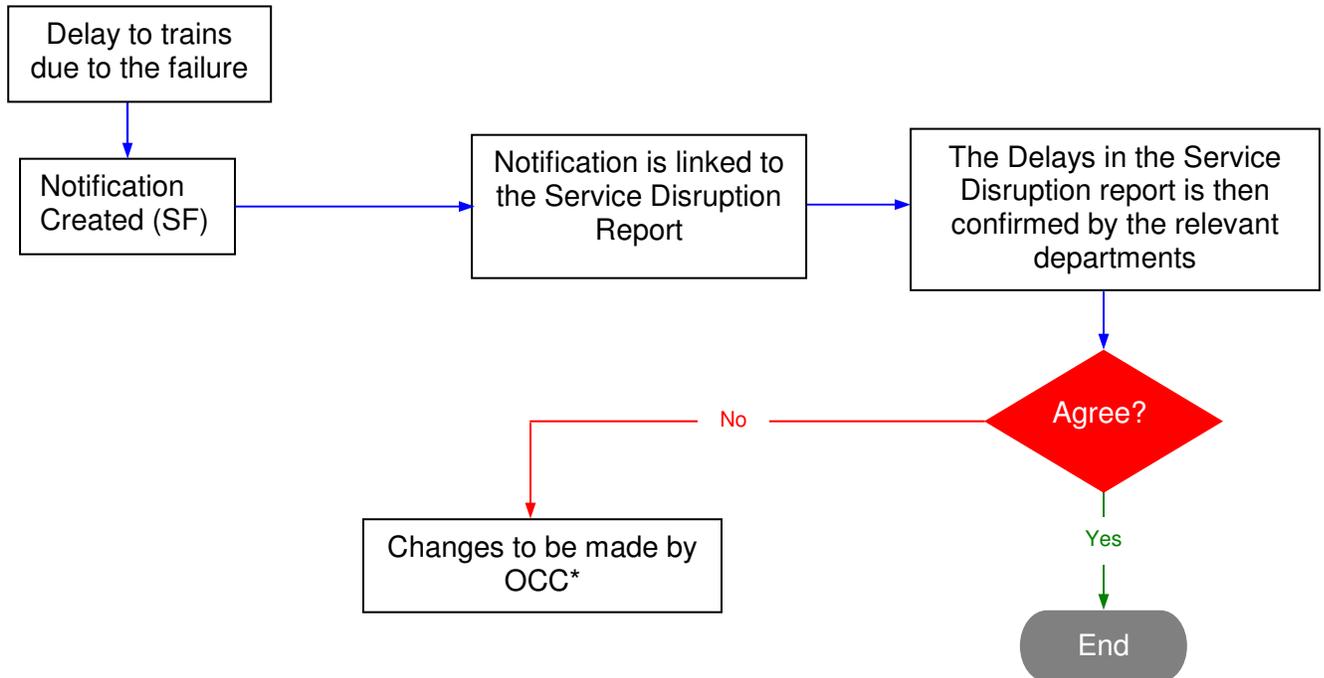
* Guideline for OCC (Changing of Planner Group)

1) Instruction from the OCC Chief

2) OCS will then make the changes on the planner group as requested.
• E.g. Please refer to 12.3

ERL Maintenance Support Sdn Bhd (Company No. 498574-T)

Location	Reference	Rev.	Date	Page No.	Document Name
E-MAS Offices	G00.OMN.M11070.CZ.1001.A	A	01 Aug 2018	Page 36 of 43	SAP Plant Maintenance Process Guide

12.2   Flow Chart (findings not in the OCC Journal)

```
┌──────────────────┐      ┌──────────────────────┐      ┌──────────────────┐
│ Service Disruption│     │ To discuss with the  │     │ Inform OCC Chief │
│ are not agreed by │ ──▶ │ Department involved. │ ──▶ │ regarding on the │
│ the relevant      │     │ E.g. (OCC, SIG, ELT, │     │ changes to be    │
│ department        │     │ INF, RST, PNE)       │     │ made             │
└──────────────────┘      └──────────────────────┘      └──────────────────┘
                                                                  │
                                                                  ▼
                                                         ┌──────────────────┐
                                                         │ Changes to be    │
                                                         │ made by OCC**    │
                                                         └──────────────────┘
```
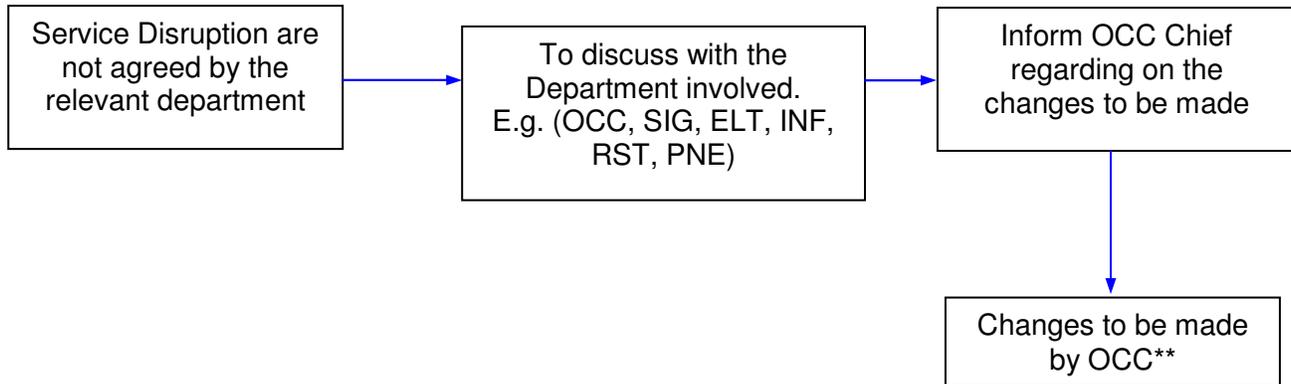
** Guideline for OCC (Changing of Notification No in Service Disruption Report)

   1) Instruction from the OCC Chief

   2) OCS will then make the changes on the planner group as requested.
   •   E.g. Please refer to 12.4

Note: Upon completion of any changes related to both guidelines above, the OCC Chief should then inform the related departments on the changes that have been done.

ERL Maintenance Support Sdn Bhd (Company No. 498574-T)

12.3   Changing of Planner Group
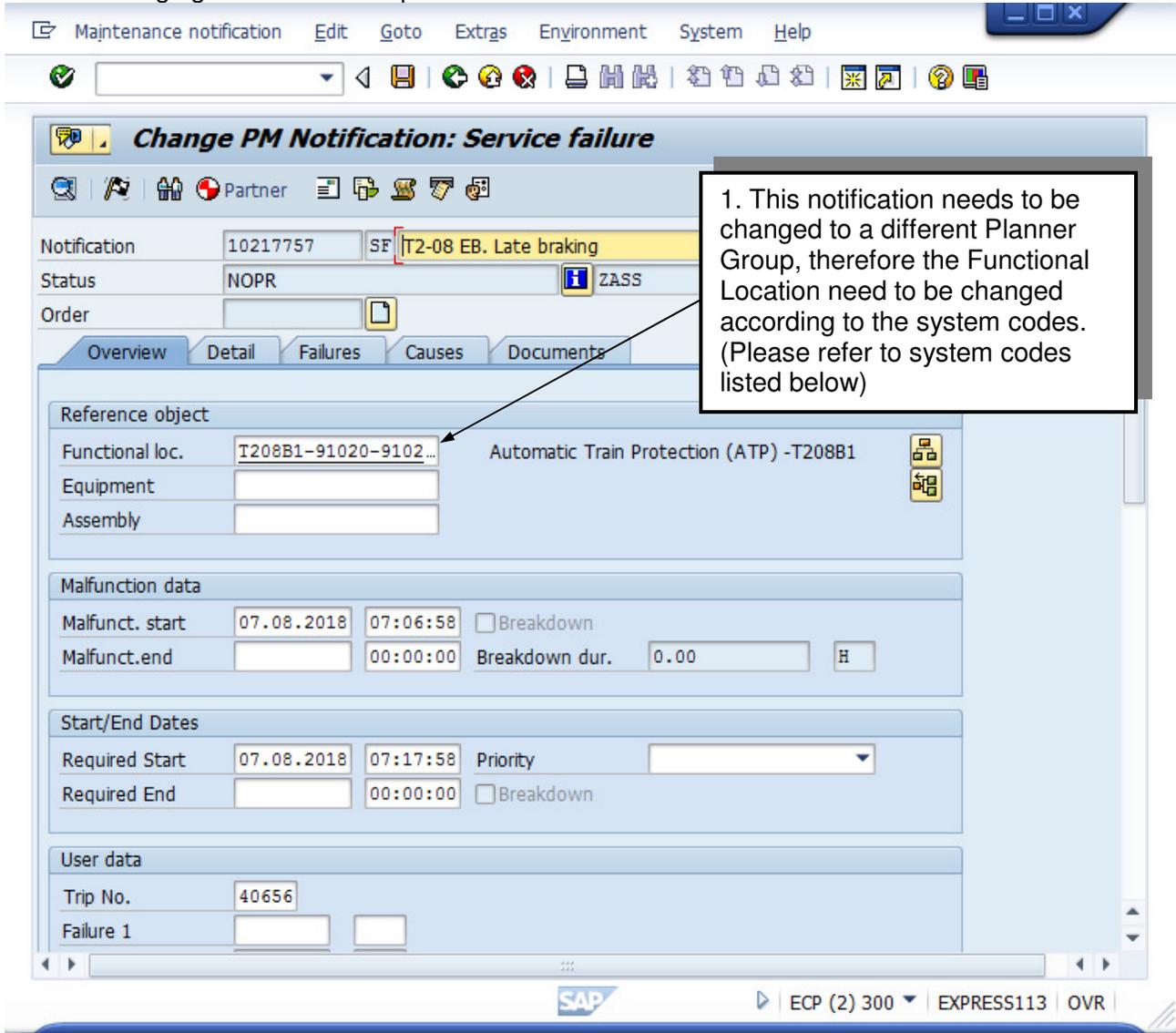
Figure 1 of 4 (Section 12.3) – Please see above

ERL Maintenance Support Sdn Bhd   (Company No. 498574-T)

Location	Reference	Rev.	Date	Page No.	Document Name
E-MAS Offices	G00.OMN.M11070.CZ.1001.A	A	01 Aug 2018	Page 38 of 43	SAP Plant Maintenance Process Guide
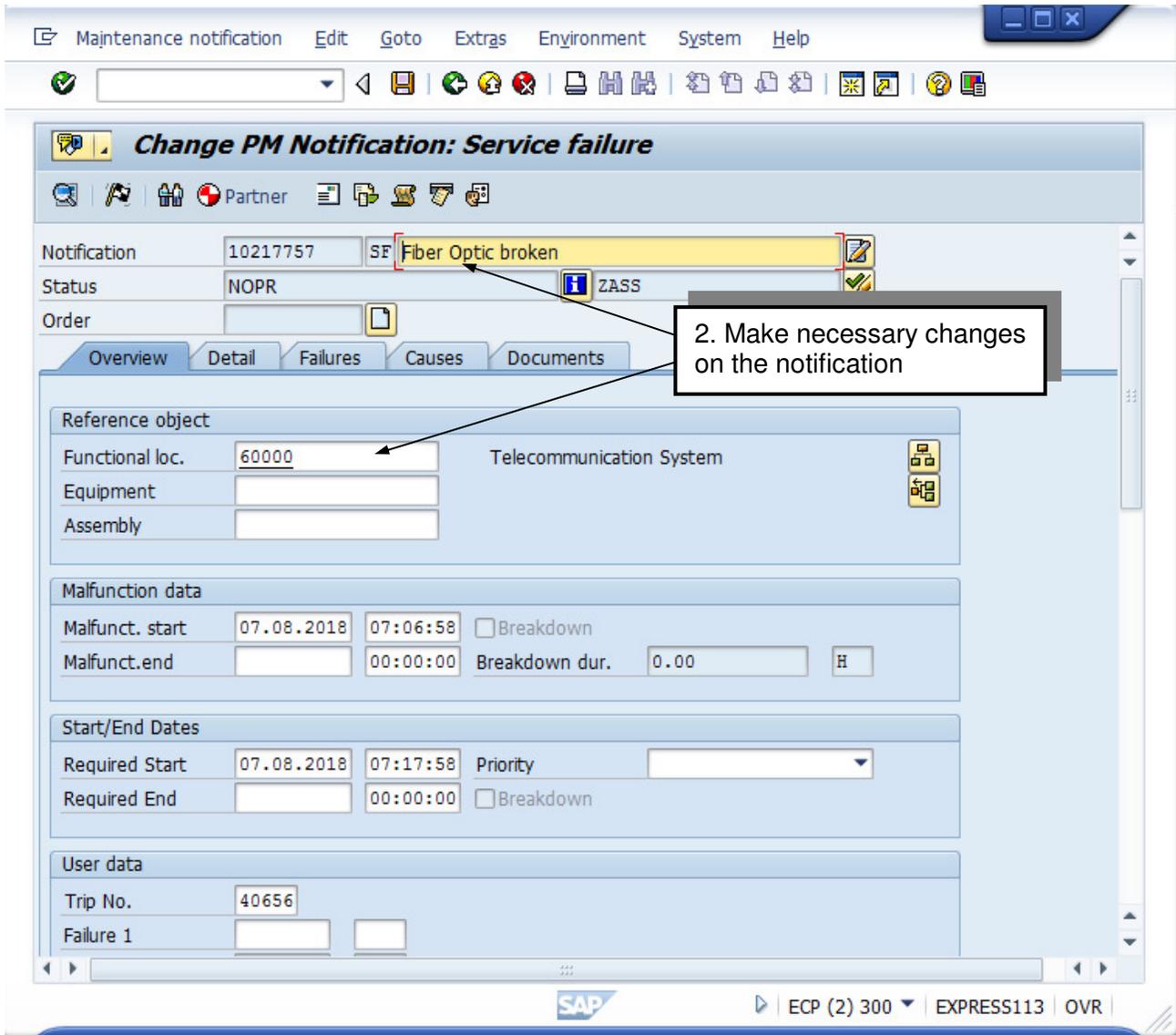
Figure 2 of 4 (Section 12.3) – Please see above

ERL Maintenance Support Sdn Bhd   (Company No. 498574-T)

Location	Reference	Rev.	Date	Page No.	Document Name
E-MAS Offices	G00.OMN.M11070.CZ.1001.A	A	01 Aug 2018	Page 39 of 43	SAP Plant Maintenance Process Guide

Figure 3 of 4 (Section 12.3) – Please see above

ERL Maintenance Support Sdn Bhd   (Company No. 498574-T)

Location	Reference	Rev.	Date	Page No.	Document Name
E-MAS Offices	G00.OMN.M11070.CZ.1001.A	A	01 Aug 2018	Page 40 of 43	SAP Plant Maintenance Process Guide
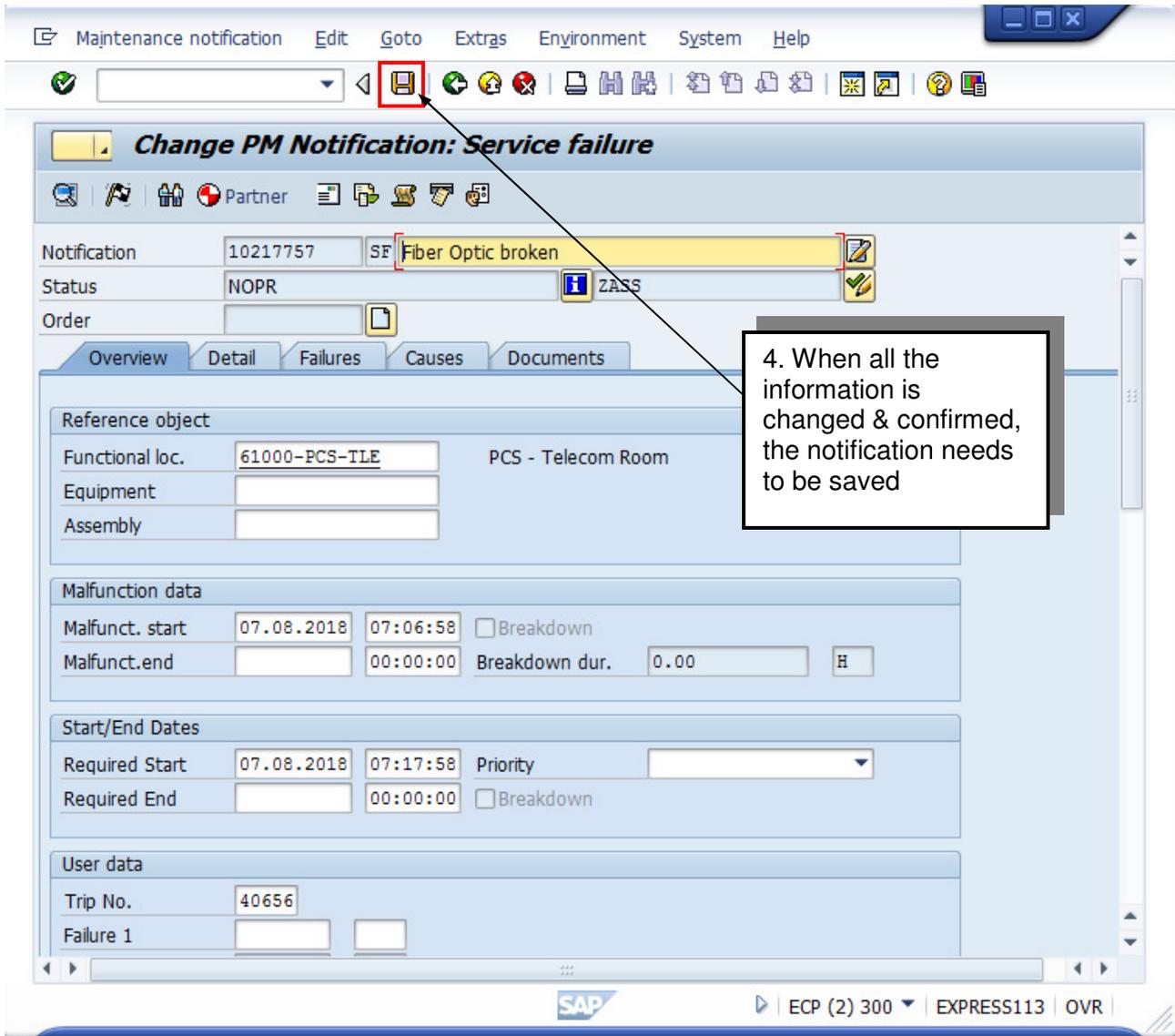
Figure 4 of 4 (Section 12.3) – Please see above

Location	Reference	Rev.	Date	Page No.	Document Name
E-MAS Offices	G00.OMN.M11070.CZ.1001.A	A	01 Aug 2018	Page 41 of 43	SAP Plant Maintenance Process Guide

12.4   Changing of Notification No. in the Service Disruption Report
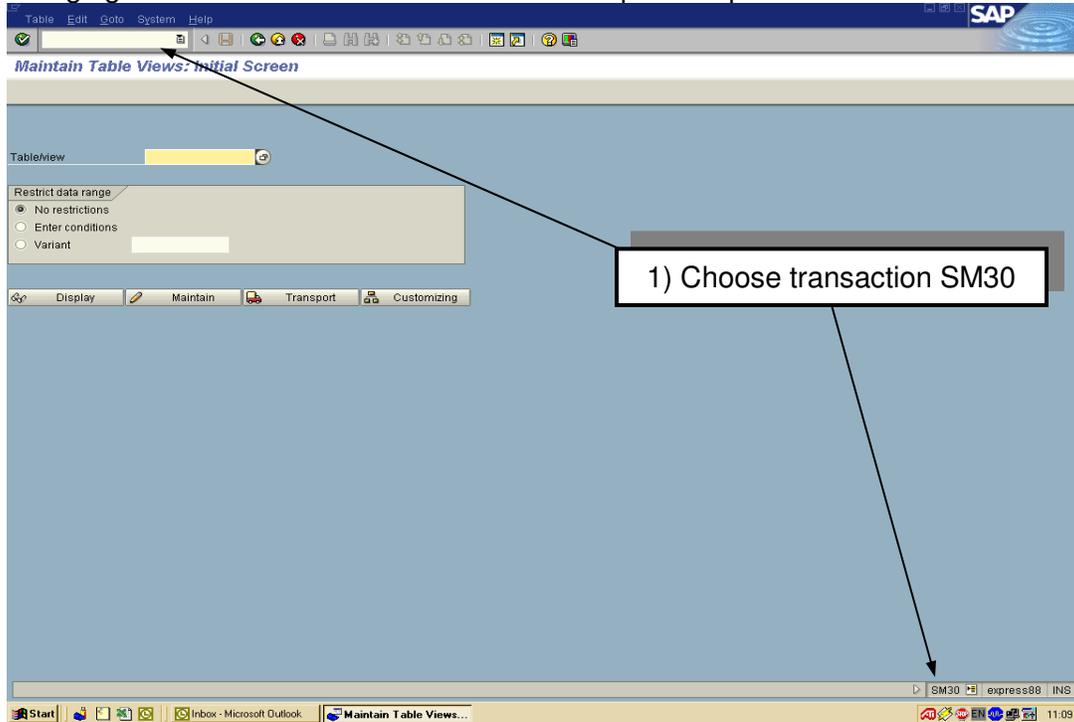
Figure 1 of 5 (Section 12.4) – Please see above
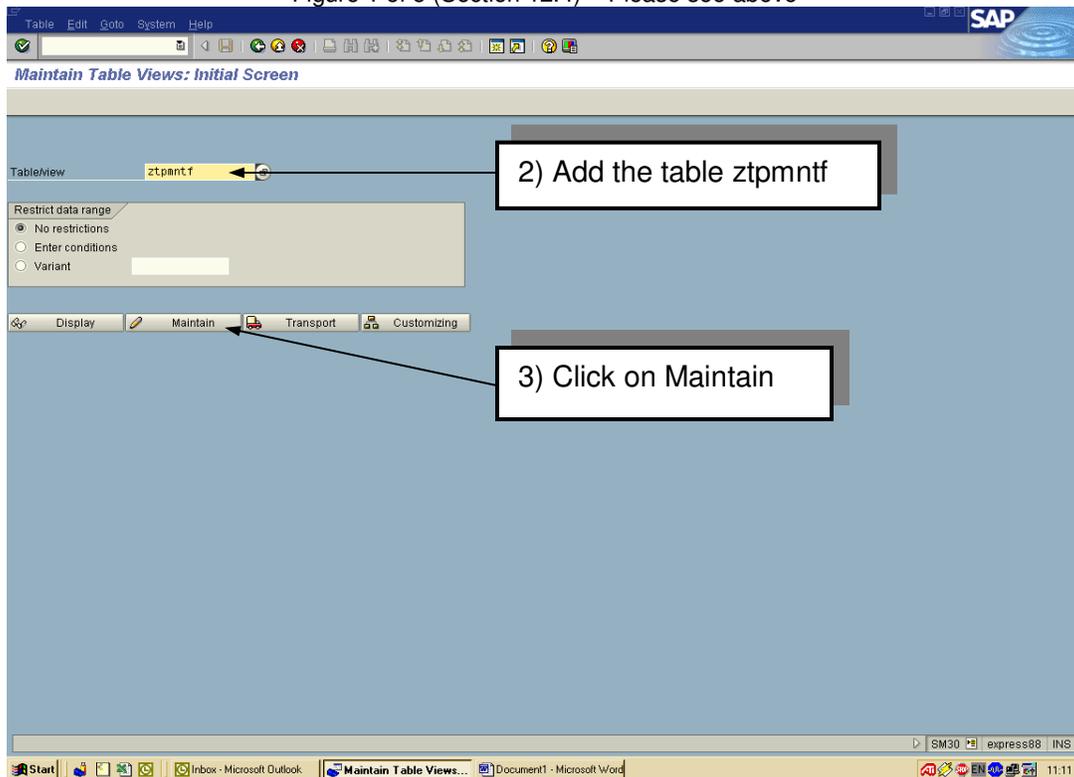
Figure 2 of 5 (Section 12.4) – Please see above

5) Then click the delete button

4) Select the incorrect notification or row
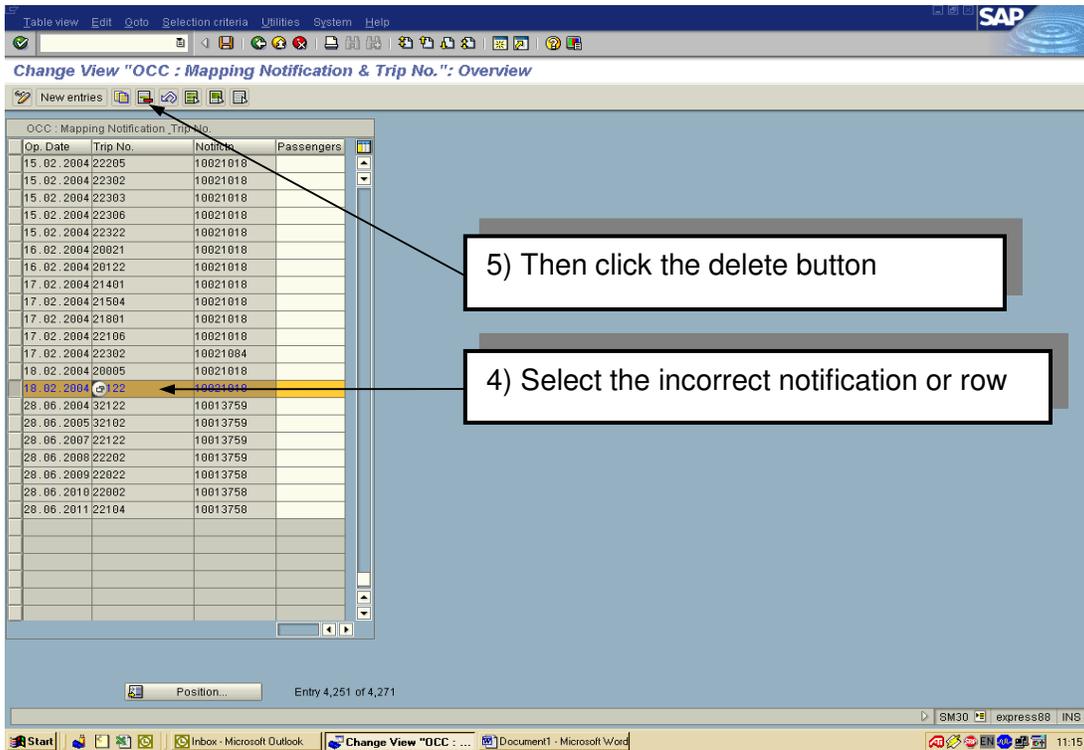
Figure 3 of 5 (Section 12.4) – Please see above

6) Go to new entries to add in a new notification or row
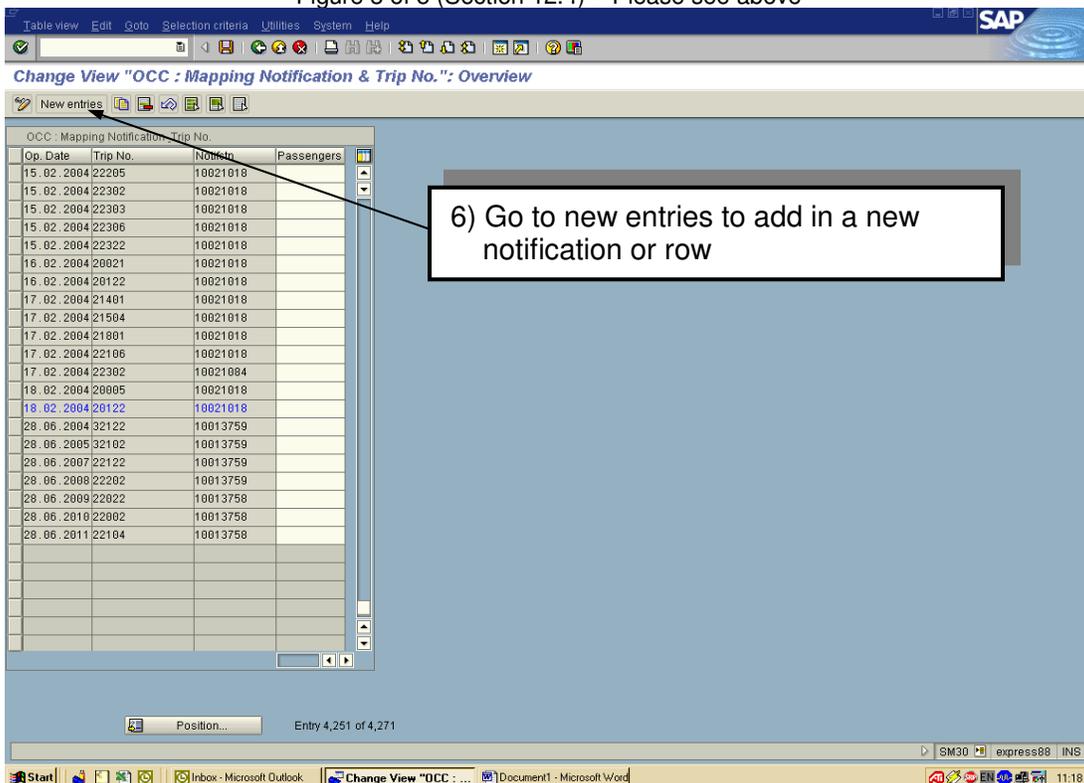
Figure 4 of 5 (Section 12.4) – Please see above

ERL Maintenance Support Sdn Bhd   (Company No. 498574-T)

Location	Reference	Rev.	Date	Page No.	Document Name
E-MAS Offices	G00.OMN.M11070.CZ.1001.A	A	01 Aug 2018	Page 43 of 43	SAP Plant Maintenance Process Guide
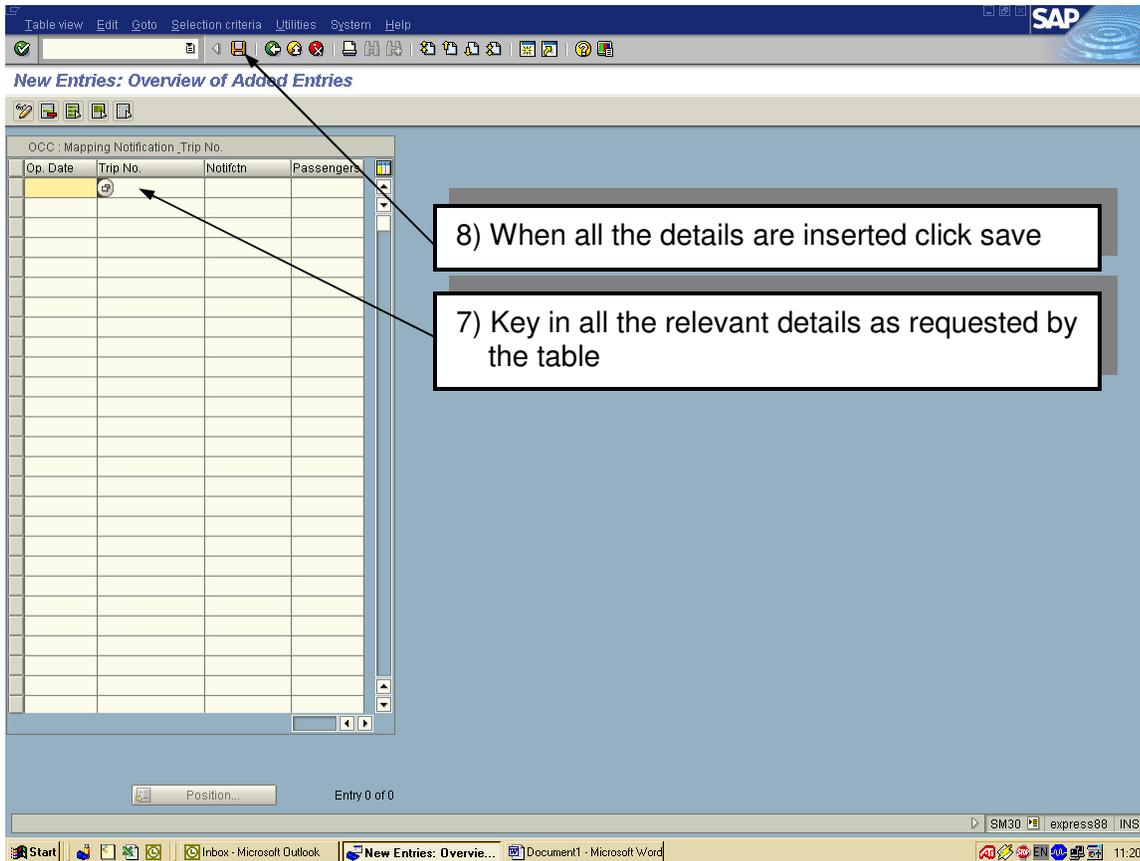
Figure 5 of 5 (Section 12.4) – Please see above

System codes:

30000	-	Overhead Contact Line (OCL)
40000	-	Traction Power Supply (TPS)
50000	-	Signalling (SIG)
58000	-	SCADA
60000	-	Telecommunications (TLE)
70000	-	Infrastructure (INF)
80000	-	Depot and Workshop Equipment (DWE)
90000	-	Rolling Stock (RST)

**codes above are just an example