



Document Title: RMGA Customer Service Problem Management Process

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0 Document Control

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A APPENDIX: PRIORITY GENERATION **24**

UNCONTROLLED IF PRINTED



0.2 Document History

| Version No. | Date | Summary of Changes and Reason for Issue | Associated Change - CP/PEAK/PPRR Reference |
|-------------|----------|---|--|
| 0.1 | 13/11/07 | Draft updated | |
| 0.2 | 07/01/08 | Updated with comments from review | |
| 0.3 | 07/01/08 | Updated to include tracked changes | |
| 1.0 | 07/01/08 | Updated to version 1.0 | |

0.3 Review Details

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(*) = Reviewers that returned comments



0.4 Associated Documents (Internal & External)

| Reference | Version | Date | Title | Source |
|------------------|---------|------|---|------------|
| PGM/DCM/TEM/0001 | | | Fujitsu Services Post Office Account HNG-X Document Template | Dimensions |
| | | | | |

0.5 Abbreviations

| Abbreviation | Definition |
|--------------|---------------------------|
| HSD | Horizon Service Desk |
| KEL | Known Error Log |
| KPI | Key Performance Indicator |
| SLA | Service Level Agreement |
| SLT | Service Level Target |
| | |

0.6 Glossary

| Term | Definition |
|------|------------|
| | |
| | |
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| | |

0.7 Changes Expected

| Changes |
|---------|
| |

0.8 Accuracy

Fujitsu Services endeavours to ensure that the information contained in this document is correct but, whilst every effort is made to ensure the accuracy of such information, it accepts no liability for any loss (however caused) sustained as a result of any error or omission in the same.

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1 Introduction

1.1 Process Objective and Scope

The objective of this document is to define the process for Problem Management in the POA environment. For the purpose of this document a Problem is defined as the unknown underlying root cause of one or more Incidents.

The Problem Management Process covers both reactive and proactive functions of Problem Management.

The scope of **Reactive Problem Management** is from identification of a Problem through to closure and includes root cause analysis, identification of Known Errors, initiation of any necessary Change Requests and the provision of management information to POA & POL. Problem Management is responsible for ensuring that resources are prioritised to resolve Problems in the appropriate order based on business need.

The scope of **Proactive Problem Management** includes trend analysis and investigation to identify potential Problems, which are then progressed through the Problem Management process to be removed from the estate.

For clarity it should be noted that individual Problems are owned by the Service Delivery Manager responsible for the Service most affected by the Problem. In the event that multiple Services are impacted, the Service Delivery Team Manager / Head of Service Management will appoint an SDM as Problem Manager, who will remain in this role until the Problem has been resolved.

1.2 Process Rationale

The primary goal of the Problem Management process is to minimise adverse impact of Incidents and Problems on the Post Office Estate, and to proactively prevent the re-occurrence of Incidents, Problems and Errors. Problem Management focuses on finding the root cause of Incidents, creating Known Errors and permanently removing Errors from the estate through the Change Management Process.

Although a Problem may be identified at any time, the management of Problems is essentially conducted during office hours; i.e. 09:00 – 17:30 Monday to Friday, excluding Bank Holidays.

1.3 Roles and Responsibilities

1.3.1 Process Owner

The owner of the process is the POA Service Delivery Manager responsible for the Service most affected by the Problem. The Process Owner, otherwise known as the Problem Manager, is appointed by the Service Delivery Team Manager. Process owner responsibilities include:

- Overseeing Problem Management Process
- Investigating potential resolutions
- Assessing if and when to resolve
- Defining target effectiveness metrics
- Ensuring Reports, Audits and Reviews are carried out regularly and effectively



1.3.2 Problem Resolver

The Problem Resolver is responsible for finding a resolution to the problem, and is assigned by the Problem Manager.

1.3.3 Knowledge Manager

The Knowledge Manager is responsible for the information held in the Knowledge base and KEL, which is updated by the HSD. The Knowledge Manager should be appointed by the Service Delivery Team Manager.

1.3.4 Service Delivery Team Manager

The Service Delivery Team Manager is responsible for appointing a Problem Manager and Knowledge Manager, ensuring Reports, Audits and Reviews are carried out regularly and effectively, and organising and chairing Problem Review meetings. Meetings should be held as problems arise on an ad hoc basis, but at least once a month.



2 Process Inputs & Outputs

2.1 Process Inputs

Inputs to this process include:

- Multiple similar Incidents
- Notification to the SDM by the HSD of a Problem for which no record exists on the Knowledge Database (KEL) for the specific circumstances associated with an Incident.
- Evidence of an Error
- Problem record raised by the Service Delivery Manager as the result of a direct request from POL e.g. during monthly reviews or on the telephone.
- Problem record raised by the Service Delivery Manager as the result of a direct request from an SDU, apart from Service Desk, who have noticed a trend which needs investigation.
- Outputs from performance metrics where, for example, the SLT is at risk.

2.2 Process Outputs

Outputs from this process include:

- An entry in the KEL
- A workaround
- A permanent solution where commercially feasible
- A closed Problem
- Proactive feedback and advice to users
- Improved IT Services
- Reduced Incident volume
- Contribution to a Continuous Service Improvement Plan (CSIP)
- Management Information



3 Risks & Dependencies

3.1 Risks

The following define the risks to the successful delivery of the process:

- Insufficient time and resource to build and maintain a Knowledgebase
- Break in the communications chain to third parties. Mitigation is to invoke escalation procedures
- Resistance by parties to carry out pro-active recommendations to reduce number of Incidents. Mitigation is to investigate and address any issues, before escalating to senior management
- Increased business and operational impact through lack of Problem progress updates to POL.
- Unavailability of sufficient support unit staff
- Unavailability of sufficient tools for problem diagnosis
- Non-availability of KEL or call management systems
- The provision of inadequate staff training
- Unavailability of systems for evidence gathering
- Loss of any infrastructure component which links support systems to the live estate

3.2 Dependencies

This process is dependent on:

- Effective use of the process by IMT and SDUs
- Effective routing of Problems to SDUs and third parties
- Effective escalation procedures within Fujitsu, POL and third parties
- POL acceptance of feedback, contributing to end user education and reduced Incident rates
- Effective collaboration diagnosis between SDU's and third parties

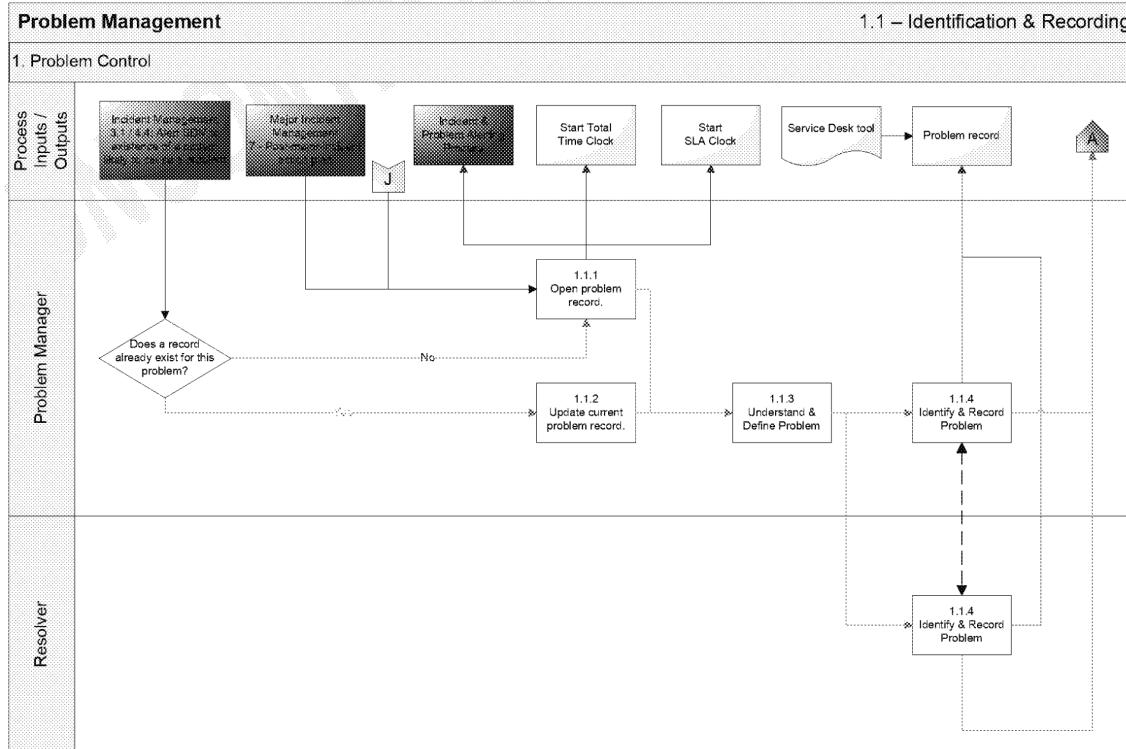


4 Process

| Step Number | 4.1.1 to 4.1.3 | 4.2.1 to 4.2.3 | 4.3.1 | 4.4.1 to 4.4.2 |
|-------------|---|--|---|----------------------|
| Action | Problem Control: Identification, Classification and Investigation | Error Control: Identification, Workaround/Resolution and Closure | Trend Analysis | Knowledge Management |
| Role | Problem Manager and Problem Resolver | Problem Manager and Problem Resolver | HSD, Problem Manager and Problem Resolver | Knowledge Manager |

4.1 Problem Control

4.1.1 Problem Identification and Recording





4.1.1.1 A Problem Record is opened following a Major Incident, in relation to trend analysis, or as the result of an Incident for which there is no existing problem record being received through contact (see definition in Section 2.0 above) with the HSD from:

- Users
- Fujitsu SDUs
- POA IT Service Management
- Third Parties
- Fujitsu Service Delivery Management

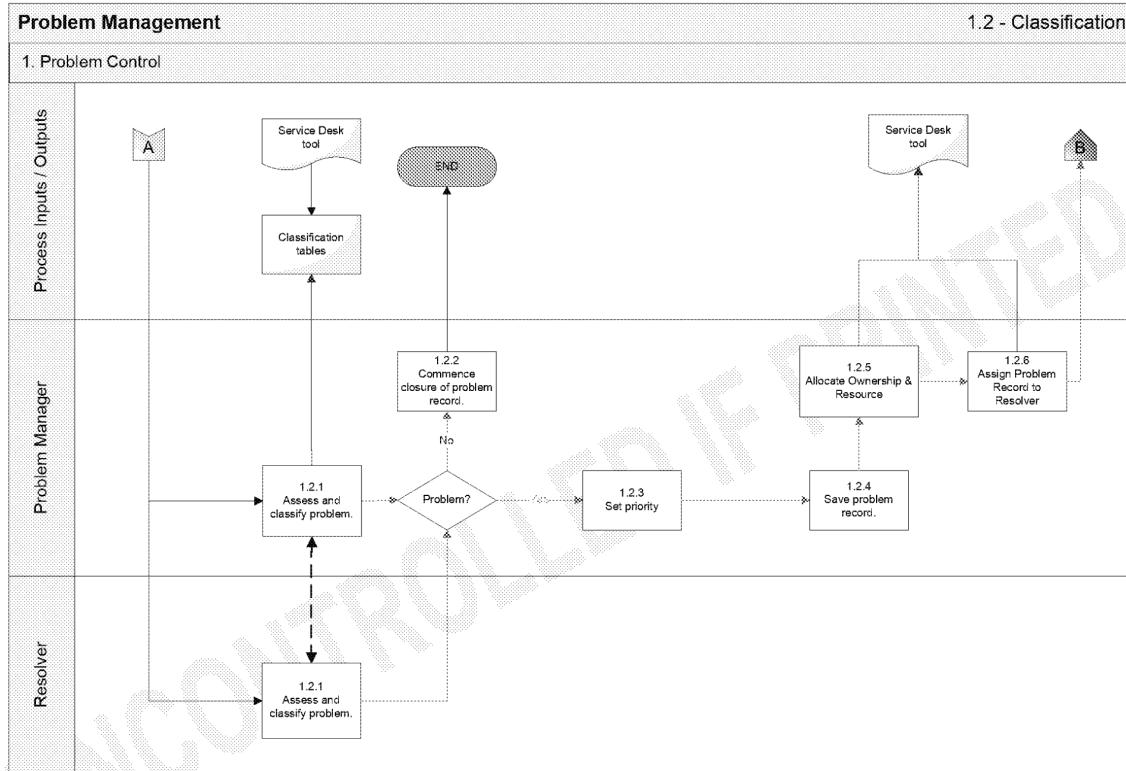
4.1.1.2 If a Problem Record already exists, it should be updated and the new Incident should be attached as a Child. If a KEL or workaround exists it should be implemented at this stage, but the Problem Management process should still be followed to ensure that a resolution is found if possible.

4.1.1.3 The Problem Manager should understand and define the scope of the problem.

4.1.1.4 The Problem Manager and Resolver should identify and record the problem and proceed to step 1.2.1.



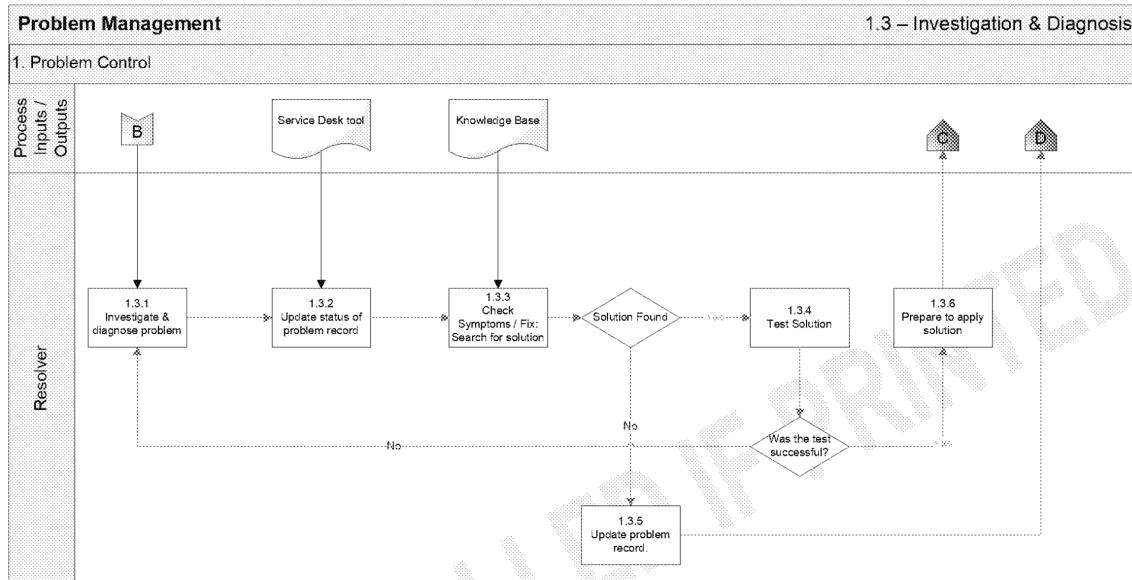
4.1.2 Problem Classification



- 4.1.2.1 The Problem Manager and Resolver assess the problem and capture Sense and Respond codes.
- 4.1.2.2 If the Problem is discovered to not in fact be a problem, the Problem Manager should proceed to step 4.1.4.5.
- 4.1.2.3 If the Problem is indeed classified as a Problem, Priority should be assigned using the Priority Matrix (see Appendix A)
- 4.1.2.4 Save the Problem Record
- 4.1.2.5 The Problem Management allocates ownership of the problem to the Service team whose area is most affected by the problem, and assign resources for dealing with the problem.
- 4.1.2.6 The Problem Manager assigns ownership of the Problem Record to a particular SDM within the service team, and proceeds to step 4.1.3.1



4.1.3 Identification and Diagnosis

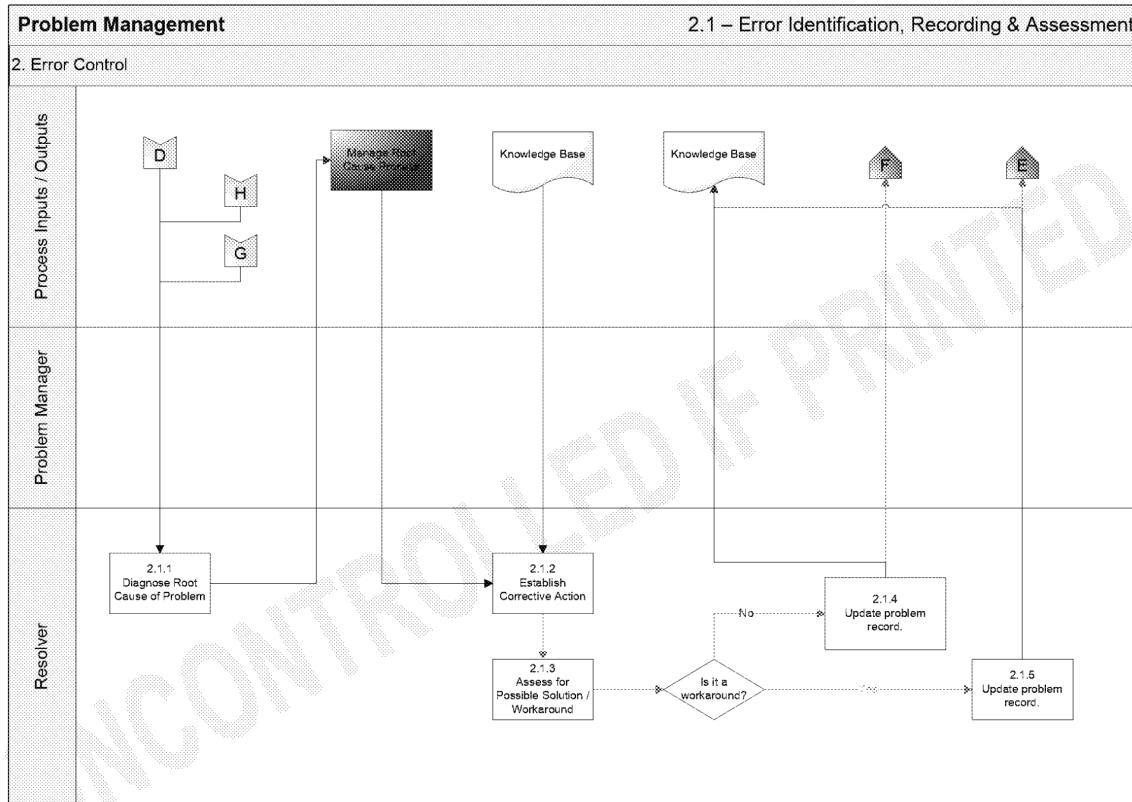


- 4.1.3.1 The Resolver investigates and diagnoses the problem.
- 4.1.3.2 The Resolver updates the status of the problem record.
- 4.1.3.3 The Resolver looks for a solution to the problem.
- 4.1.3.4 If the Resolver is unable to find a solution, he should move to step 4.2.1.
- 4.1.3.5 If the Resolver finds a solution, it should be tested. If the test is unsuccessful, he should return to step 4.1.3.1 and recommence diagnosis.
- 4.1.3.6 If the test is successful, the Resolver prepares to apply the solution, moving to step 4.2.1.



4.2 Error Control

4.2.1 Error Identification, Recording & Assessment



4.2.1.1 The Resolver performs a Root Cause Analysis of the problem.

4.2.1.2 The Resolver establishes the proper corrective action required.

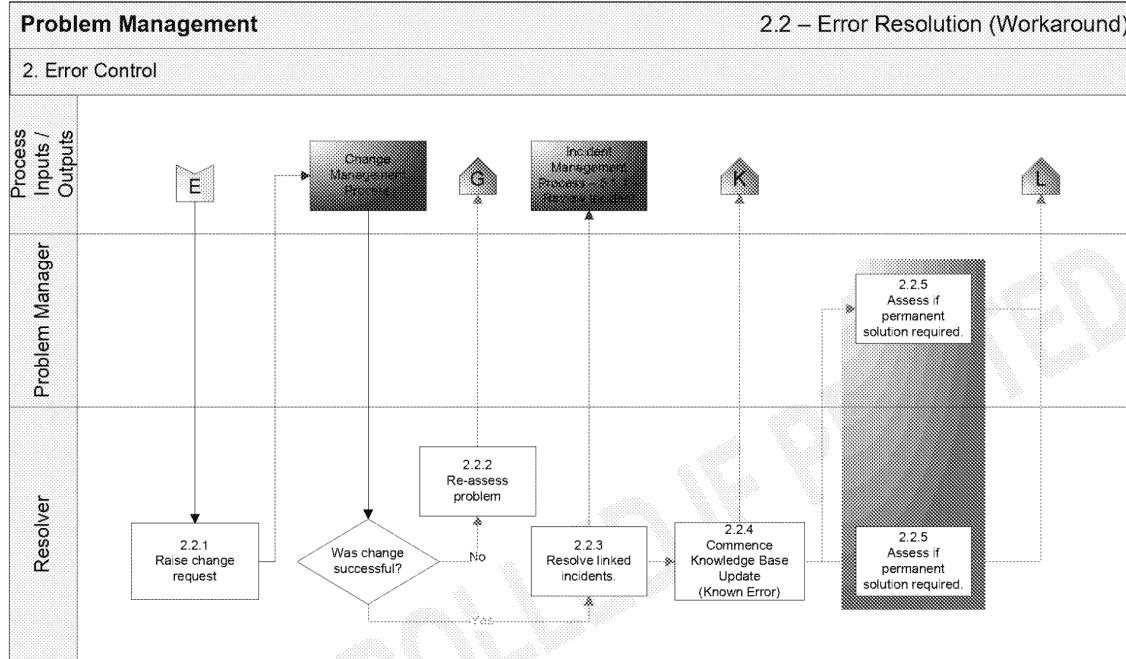
4.2.1.3 The Resolver then assesses the problem for a potential workaround.

4.2.1.4 If a workaround is unavailable or inappropriate, the Resolver updates the Knowledge Base and proceeds to step 4.2.4.1.

4.2.1.5 If a workaround is available and appropriate, the Resolver updates the Problem Record and Knowledge base and proceeds to step 4.2.2.1.



4.2.2 Error Resolution



4.2.2.1 If a workaround is available and appropriate, the Resolver raises a Change Request.

4.2.2.2 If the change was unsuccessful, the Resolver proceeds to step 4.2.1.1.

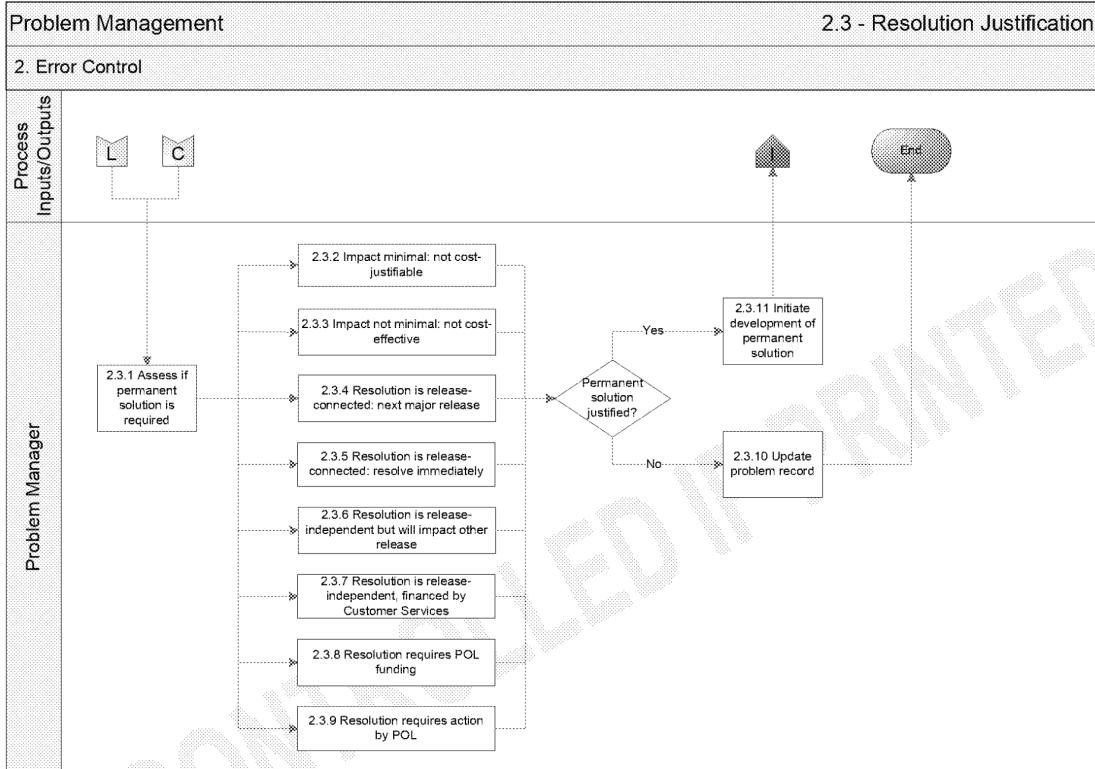
4.2.2.3 If the change was successful, the Resolver resolves any linked 'Child' issues.

4.2.2.4 The Resolver then updates the Knowledge base with a KEL.

4.2.2.5 The Resolver and the Problem Manager assess the situation to decide if a permanent solution is required, and proceed to step 4.2.3.1.



4.2.3 Resolution Justification



4.2.3.1 The Problem Manager and the Resolver assess whether a permanent solution is justified. There are eight possible outcomes to this.

4.2.3.2 The impact is deemed minimal and thus the resolution is not cost-justifiable.

4.2.3.3 The impact will not be minimal, but the resolution is not cost-effective.

4.2.3.4 The resolution is release-connected and can be included in the next major release.

4.2.3.5 The resolution is release-connected and should be solved immediately, without waiting for the next major release.

4.2.3.6 The resolution is itself release-independent but will have an impact on another release: e.g. the resolution requires testing on a test rig, which is already fully booked for testing on a major release and therefore the testing may impact release plans.

4.2.3.7 The resolution is release-independent and can be fully financed by Fujitsu Services Customer Services.

4.2.3.8 The resolution requires funding from POL.

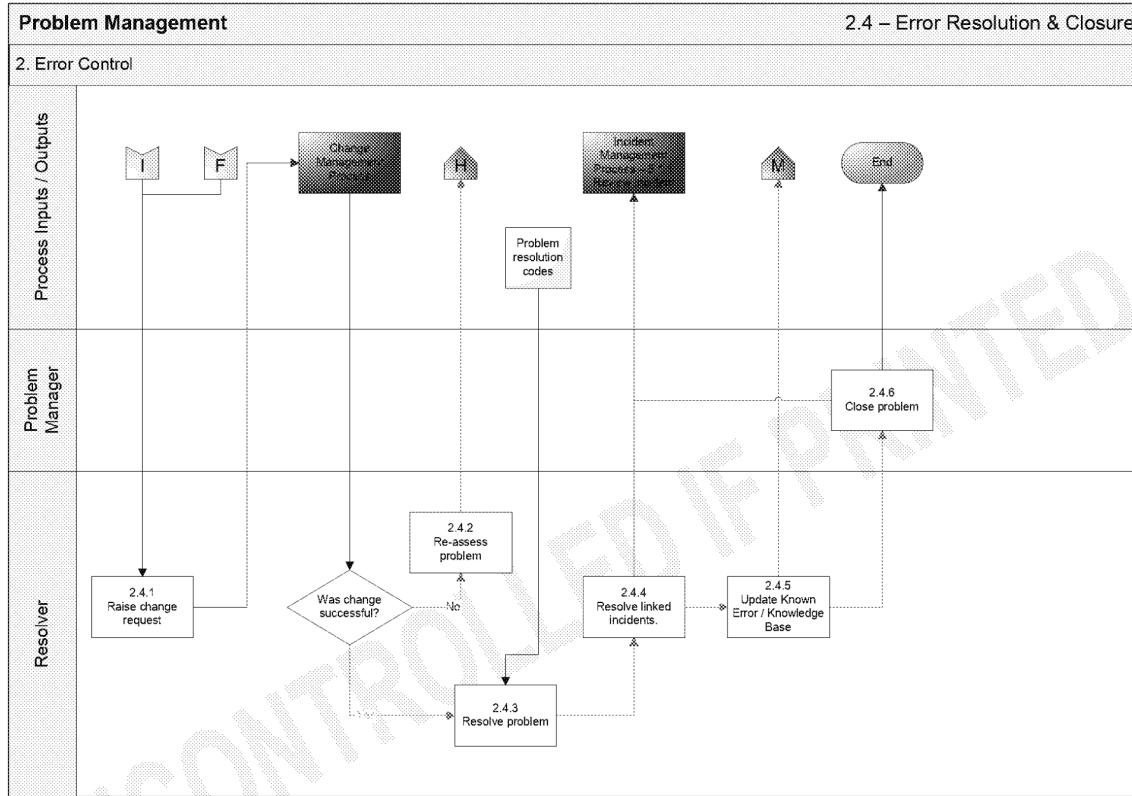
4.2.3.9 The resolution requires action by POL.

4.2.3.10 If the Problem Manager decides that a permanent solution is not justified, the Problem Record should be made dormant and monitored. Any further reoccurrences will be linked to the original record and the problem can be reassessed for future resolution.

4.2.3.11 If the Problem Manager decides that a permanent solution is justified, proceed to step 4.2.4.1.



4.2.4 Error Resolution & Closure



4.2.4.1 The Resolver should raise a Change Request.

4.2.4.2 If the Change was not successful, the Resolver should proceed to step 2.1.1.

4.2.4.3 If the Change was successful, the Resolver should resolve the problem.

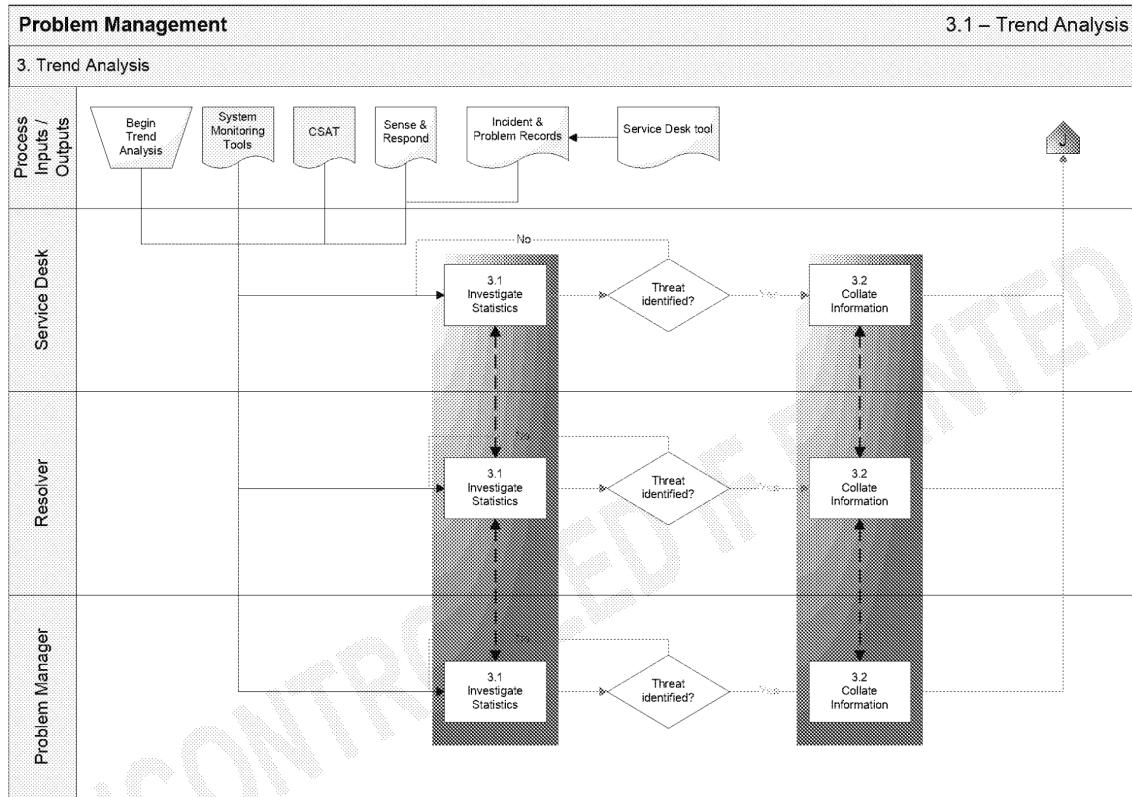
4.2.4.4 The Resolver should then resolve all known linked 'Child' incidents.

4.2.4.5 The Resolver then updates the KEL and Knowledge base.

4.2.4.6 The Problem Manager then closes the resolved problem.



4.3 Trend Analysis



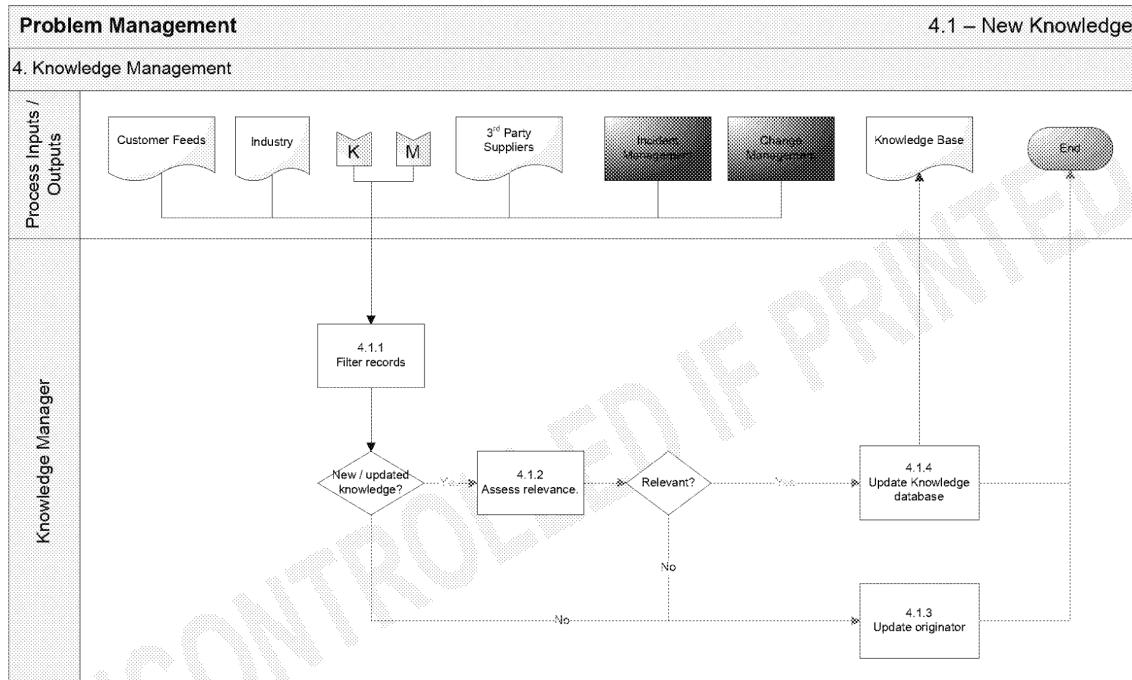
4.3.1 The Service Desk Tool, the Problem Manager and the Resolver should all investigate statistics drawn from System Monitoring Tools, CSAT, Sense and Respond and Incident and Problem Records.

4.3.2 If a threat is identified, they should collate all available information and proceed to step 4.1.1.1. If a threat is not identified, proceed to step 4.3.1 to continue the trend analysis process.



4.4 Knowledge Management

4.4.1 New Knowledge



4.4.1.1 The Knowledge Manager filters information received from Customer Feeds, the industry, steps 4.2.2.4 and 4.2.4.5, third party suppliers and the Incident Management and Change Management processes.

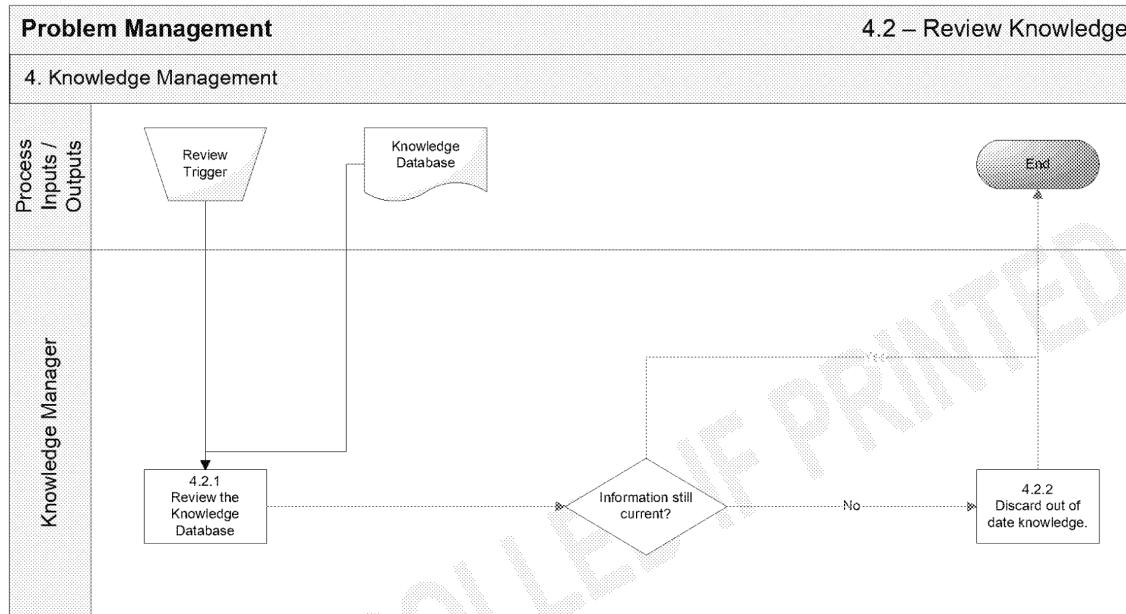
4.4.1.2 If the information is new, the Knowledge Manager assesses the relevance and proceeds to step 5.1.4. If the knowledge is not new, move to step 4.4.1.3.

4.4.1.3 If the information received is not new or relevant, the Knowledge Manager updates the originator and ends the process.

4.4.1.4 If the information is new and relevant, the Knowledge Manager updates the Knowledge base.



4.4.2 Review Knowledge



4.4.2.1 The Knowledge Manager receives a regular reminder to review the Knowledge base.

4.4.2.2 If information is out of date, it should be discarded. If information is still current, it should be kept.



A Appendix: Priority Generation

Incident / Problem Priority generation

A criticality value will be assigned by the account to each of their Classifications, as per the table below:

| Criticality | Value (1-5) |
|--|-------------|
| Critical | 1 |
| High | 2 |
| Medium | 3 |
| Minor | 4 |
| (Cosmetic – Incident only) / Change (Incident & Problem) | 5 |

Based on the value selected by the Agent for the number of users affected, and the Criticality assigned to the Classification they have chosen, an Impact value will be calculated using the table below. For example, if the account has decided that the 'Security.Firewall.Install' Classification has a Criticality of 2, and the number of users affected is 10% - 40%, an Impact value of 2 will be generated.

| IMPACT | | | | | |
|--|--------------------------|-----------|-----------|-------|-------------|
| Criticality | Number of users affected | | | | |
| | > 70% | 40% - 70% | 10% - 40% | < 10% | Single user |
| 1 - Critical Function | 1 | 1 | 1 | 1 | 1 |
| 2 - High Impact Function | 1 | 1 | 2 | 2 | 2 |
| 3 - Medium Impact Function | 2 | 2 | 3 | 3 | 3 |
| 4 - Low Impact Function | 3 | 3 | 4 | 4 | 4 |
| 5 - Cosmetic Function or Training System | 5 | 5 | 5 | 5 | 5 |



The agent will manually select an Urgency value from the drop down list, based on the following criteria:

| Urgency | Definition |
|---------|---|
| 1 | <ul style="list-style-type: none"> Has a significant adverse impact on the delivery of service to a large number of end users. Causes significant financial loss and/or disruption. Results in any material loss or corruption of customer data. <p>For example, incidents with this urgency may affect the COMPANY</p> |
| 2 | <ul style="list-style-type: none"> Has a moderate adverse impact on the delivery of service to a large number of end users Causes a financial loss and/or disruption to the customer which is more than trivial but less severe than the significant financial loss described in the definition of an Urgency level of 1. For example, incidents with this urgency may affect a VIP SITE |
| 3 | <ul style="list-style-type: none"> Has a moderate adverse impact upon the delivery of service to a small or moderate number of end users; <p>For example, incidents with this urgency may affect ALL COUNTERS IN A MULTIPLE COUNTER BRANCH or a SINGLE COUNTER BRANCH</p> |
| 4 | <ul style="list-style-type: none"> Has a minor adverse impact upon the delivery of service to a small number of end users <p>For example, incidents with this urgency may affect a SINGLE COUNTER IN A MULTIPLE COUNTER BRANCH</p> |
| 5 | <ul style="list-style-type: none"> Has no impact upon the delivery of service <p>For example, incidents with this urgency may affect a SINGLE PERIPHERAL IN A MULTIPLE COUNTER BRANCH</p> |

The Priority is then automatically calculated behind the scenes using a combination of Impact and Urgency, as per the table below.



RMGA Customer Service Problem Management Process
COMMERCIAL IN CONFIDENCE



| PRIORITY | | | | | |
|----------|---------|---|---|---|---|
| Impact | Urgency | | | | |
| | 1 | 2 | 3 | 4 | 5 |
| 1 | 1 | 1 | 2 | 2 | 3 |
| 2 | 1 | 2 | 2 | 3 | 4 |
| 3 | 2 | 3 | 3 | 4 | 4 |
| 4 | 3 | 3 | 4 | 4 | 5 |
| 5 | 4 | 5 | 5 | 5 | 5 |

For example, if the agent decides that the Urgency value is 3, and the Impact has been calculated as 2, then from the Priority table, the final Priority will be automatically generated as 2. The assigned priority can be overridden if the problem is serious and discussed with the Service Delivery Team Leader, but the Problem Management process must be followed.