

ICL Pathway ICL Pathway Customer Service Problem Management Ref: CS/PRD/021
Process
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Abstract: This document defines the ICL Pathway Customer Service Problem Management Process.

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Author & Dept: Evandro Manolas - ICL Pathway CS Business Effectiveness Team

Contributors:

Reviewed By: Paul Curley, Bob Davis, Alex Nicholson

Comments By:

Comments To: Evandro Manolas

Distribution: ICL Pathway Library

0.0 Document Control

0.1 Document History

| Version No. | Date | Reason for Issue | Associated CP/PinICL No. |
|-------------|----------|---|--------------------------|
| 1.0 | 05/11/97 | ICL Pathway Problem Management Process | |
| 1.1 | 16/04/98 | Update | |
| 1.2 | 25/05/98 | Update | |
| 1.3 | 19/07/98 | Update | |
| 1.4 | 03/12/98 | Update | |
| 1.5 | 02/04/99 | Update | |
| 1.6 | 29/07/99 | Updated following internal review and comments | |
| 2.0 | 26/08/99 | Stored in PVCS as "Version Complete" | |
| 2.1 | 15/05/00 | Updated following a review of the CS Problem Management Operation | |
| 3.0 | 13/11/00 | Updated with comments from version 2.1, and developed for approval. | |

0.2 Approval Authorities

| Name | Position | Signature | Date |
|----------------|----------|-----------|------|
| Martin Riddell | | | |
| | | | |

0.3 Associated Documents

| | Reference | Version | Date | Title | Source |
|----|------------|---------|----------|---|-------------|
| 1. | CS/IFS/008 | 0.3 | 04/09/00 | ICL Pathway / POCL Interface Agreement for the Problem Management Interface | ICL Pathway |
| 2. | CS/PRD/074 | 1.0 | 13/11/00 | ICL Pathway Incident Management Process | ICL Pathway |
| 3. | CS/PRO/110 | 2.0 | 13/11/00 | ICL Pathway Problem Management Database Procedures | ICL Pathway |

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|----|------------|-----|----------|------------------------|-------------|
| 4. | PA/PRO/001 | 7.0 | 07/04/00 | Change Control Process | ICL Pathway |
|----|------------|-----|----------|------------------------|-------------|

0.4 Abbreviations/Definitions

| Abbreviation | Definition |
|--------------|---|
| ATP | Authorised Temporary Procedure |
| CP | Change Proposal |
| CS | ICL Pathway Customer Service |
| DM | ICL Pathway CS Duty Manager |
| HSH | Horizon Systems Helpdesk |
| ICL PW | ICL Pathway |
| ICL PW PM | ICL Pathway CS Problem Manager |
| PIR | Post Implementation Review |
| PM | ICL Pathway Problem Manager |
| PON | Post Office Networks (formerly known as POCL) |
| PON BSM PM | PON Business Service Management Problem Manager |
| RO | Resolution Owner |
| TP | Temporary Procedure |

0.5 Changes in this Version

| Version | Changes |
|---------|--|
| 2.1 | The document has been revised to take account of latest development in Problem Management thinking and also to fit in with latest process and policy developments. |
| 3.0 | Revision of the Process following comments to version 2.1 and of the Problem Management Role. |

0.6 Changes Expected

| Changes |
|---------|
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0.7 Table of Contents

| | | |
|----------|--|-----------|
| 1 | INTRODUCTION | 6 |
| 2 | SCOPE | 6 |
| 2.1 | Objective of Problem Management | 6 |
| 2.2 | Process Definition | 7 |
| 3 | DEPLOYED PROCESS | 8 |
| 4 | ROLES WITHIN THE PROBLEM MANAGEMENT PROCESS | 9 |
| 4.1 | Problem Originator | 9 |
| 4.2 | Problem Manager | 9 |
| 4.3 | Resolution Owner/Team | 10 |
| 5 | PROBLEM MANAGEMENT PROCESS | 11 |
| 5.1 | Problem Notification | 11 |
| 5.1.1 | Assign Problem Manager | 11 |
| 5.1.2 | Provide details of the Problem | 11 |
| 5.2 | Problem Analysis | 12 |
| 5.2.1 | Log Problem | 13 |
| 5.2.2 | Analyse Problem | 13 |
| 5.2.3 | Assess Impact | 13 |
| 5.2.4 | Prioritise | 13 |
| 5.3 | Problem Action | 14 |
| 5.3.1 | Assign Resolution Owner | 15 |
| 5.3.2 | Agree Action and Update plan | 15 |
| 5.3.3 | Requirement for a Temporary Procedure | 15 |
| 5.4 | Problem Resolution | 16 |
| 5.4.1 | Identify Root Cause | 17 |
| 5.4.2 | Develop permanent solution | 17 |
| 5.4.3 | Agree solution | 17 |
| 5.4.4 | Implement solution | 17 |
| 5.5 | Problem Monitoring | 18 |
| 5.5.1 | Monitor Solution Implementation | 18 |
| 5.5.2 | Solution Implemented | 18 |
| 5.6 | Problem Closure | 19 |
| 5.6.1 | Requirement for a PIR | 19 |
| 5.6.2 | Close Problem | 20 |
| 5.7 | (Authorised) Temporary Procedure | 21 |

| | | |
|------------|---------------------------------------|-----------|
| 5.7.1 | Temporary Procedure Development | 22 |
| 5.7.2 | Until Problem resolved | 22 |
| 5.7.3 | Withdrawal of the Temporary Procedure | 22 |
| 5.8 | Escalation | 23 |
| 5.8.1 | Decision to escalate | 23 |
| 5.8.2 | Escalate | 23 |
| 5.8.3 | Manage Escalated Problem | 23 |

1 Introduction

Not all incidents that arise at the helpdesk can easily be resolved using the incident management process [Ref.2]. Some incidents have a wide impact, some may be difficult and time consuming to resolve, whilst others may arise as a result of a single underlying issue. Therefore, some incidents may require referral into ICL Pathway Customer Service, as well as being passed through their regular incident management support routes, to aid resolution.

A key element for success in the resolution of incidents that are referred to ICL Pathway CS is an effective Problem Management process.

2 Scope

This document details the ICL Pathway CS Problem Management process.

The process begins from the point that a problem has been identified. The process has been broken up into the major Problem Management elements as reflected within the "Deployed Process" in Section 3.

It is important to note at this stage that, where required, each element also distinguishes between the management of a problem that requires input from the PON Problem Management team (Cross-Domain problems), and those that are resolved solely as ICL Pathway problems.

2.1 Objective of Problem Management

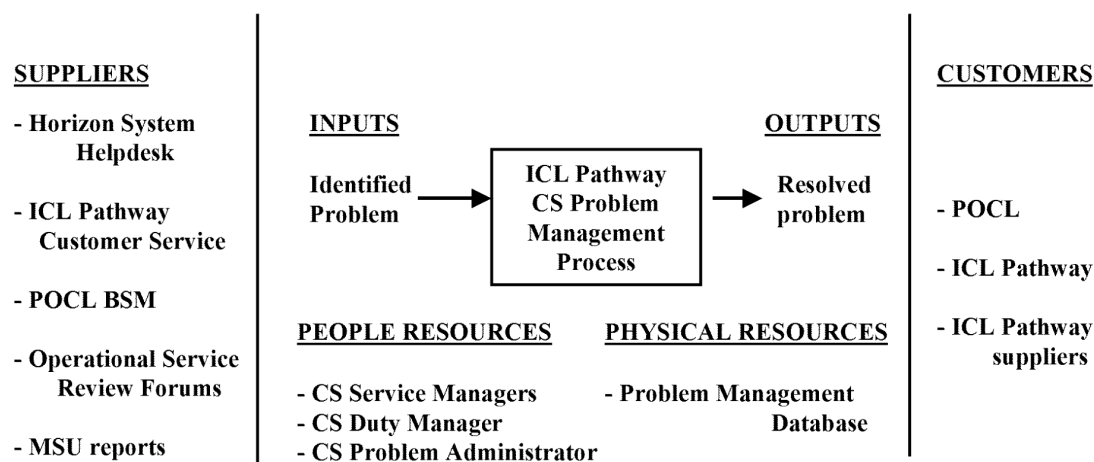
*"To identify the **root cause** of incidents and thus prevent the recurrence of incidents stemming from a single source."*

- Reference: CCTA, IT Infrastructure Library - Problem Management.

2.2 Process Definition

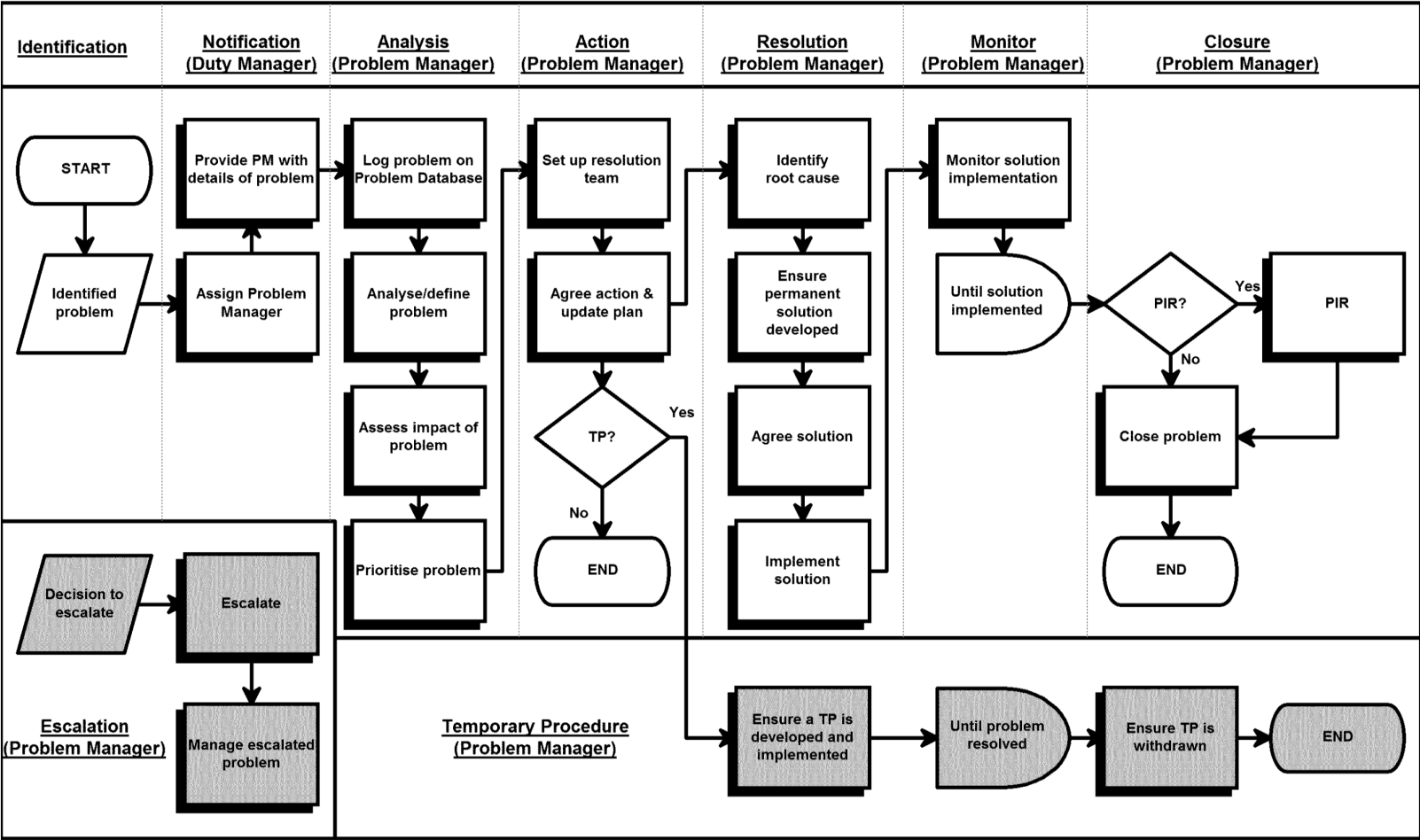
The diagram below highlights the feeds in and out of the problem management process, and the resources required for the process to run.

Each of the suppliers is able to identify problems that link in to the ICL Pathway CS Problem Management process. The customers are those who potentially benefit from the resolution of a problem.



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3 Deployed Process



4 Roles within the Problem Management Process

4.1 Problem Originator

The person who raises the problem and notifies the Service Management team within the parent organisation of the problem.

4.2 Problem Manager

The Problem Manager is the person within the Service Management organisation with responsibility for managing a problem through to resolution.

The Problem Manager will apply Project Management principles to progress the problem to resolution. This includes:

- Constructing a plan (including key target dates),
- Securing appropriate resource and commitment,
- Monitoring.

The duties of the Problem Manager include:

| | |
|--|--|
| <u>Stage 1</u> INITIAL ACTIONS | <ul style="list-style-type: none">• Logging the problem onto the Problem Management database.• Define problem• Initial impact assessment and prioritisation• Establishment of initial closure criteria |
| <u>Stage 2</u> ONGOING ACTION | <ul style="list-style-type: none">• Problem Control<ul style="list-style-type: none">- Temporary procedure management- Escalation- Inform and communication (cross-domain?)• Keep record on Problem Management database updated |

| | |
|----------------|--|
| <u>Stage 3</u> | |
|----------------|--|

| | |
|---|---|
| INITIATE PROBLEM RESOLUTION | <ul style="list-style-type: none">• Set up Resolution team• Agree an action plan and update plan• Determine root cause of problem• Design solution (proposed deliverable(s) including implementation plans)• Agree solution |
| <u>Stage 4</u> IMPLEMENT SOLUTION | <ul style="list-style-type: none">• Manage implementation of the solution<ul style="list-style-type: none">- Manage action plan- Management of change- Monitor progress |
| <u>Stage 5</u> CLOSURE | <ul style="list-style-type: none">• Problem closure<ul style="list-style-type: none">- Closure acceptance- Post Implementation Review |

The Problem Manager is the only formal communication channel between the Service Management teams of ICL Pathway and PON.

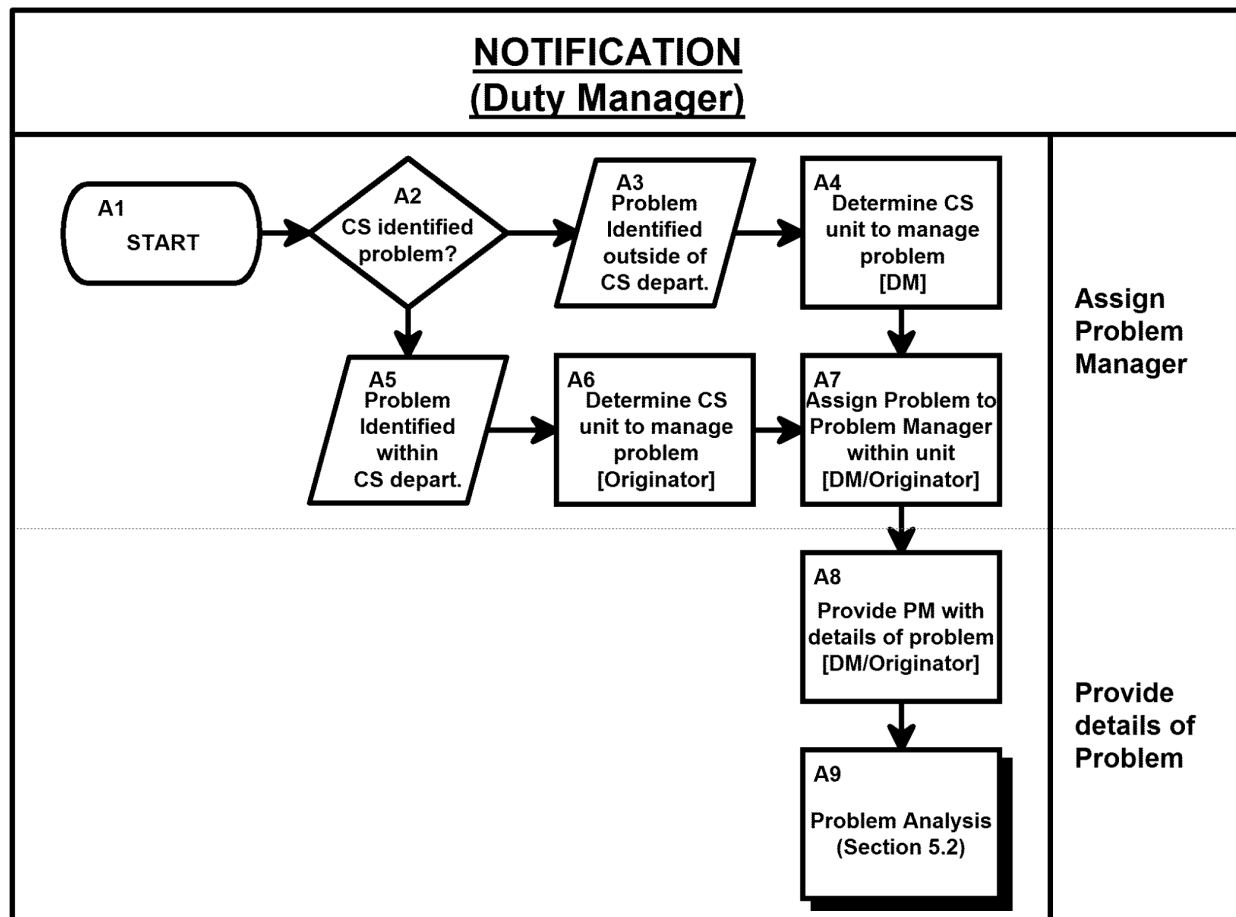
4.3 Resolution Owner/Team

The Resolution Owner/Team is the authority assigned to resolve a particular problem and is responsible for developing a permanent solution.

5 Problem Management Process

The process followed by the Problem Manager to ensure the resolution of a problem depends upon whether the problem is internal to ICL Pathway, or a cross-domain problem that requires managing with a PON BSM Problem Manager.

5.1 Problem Notification



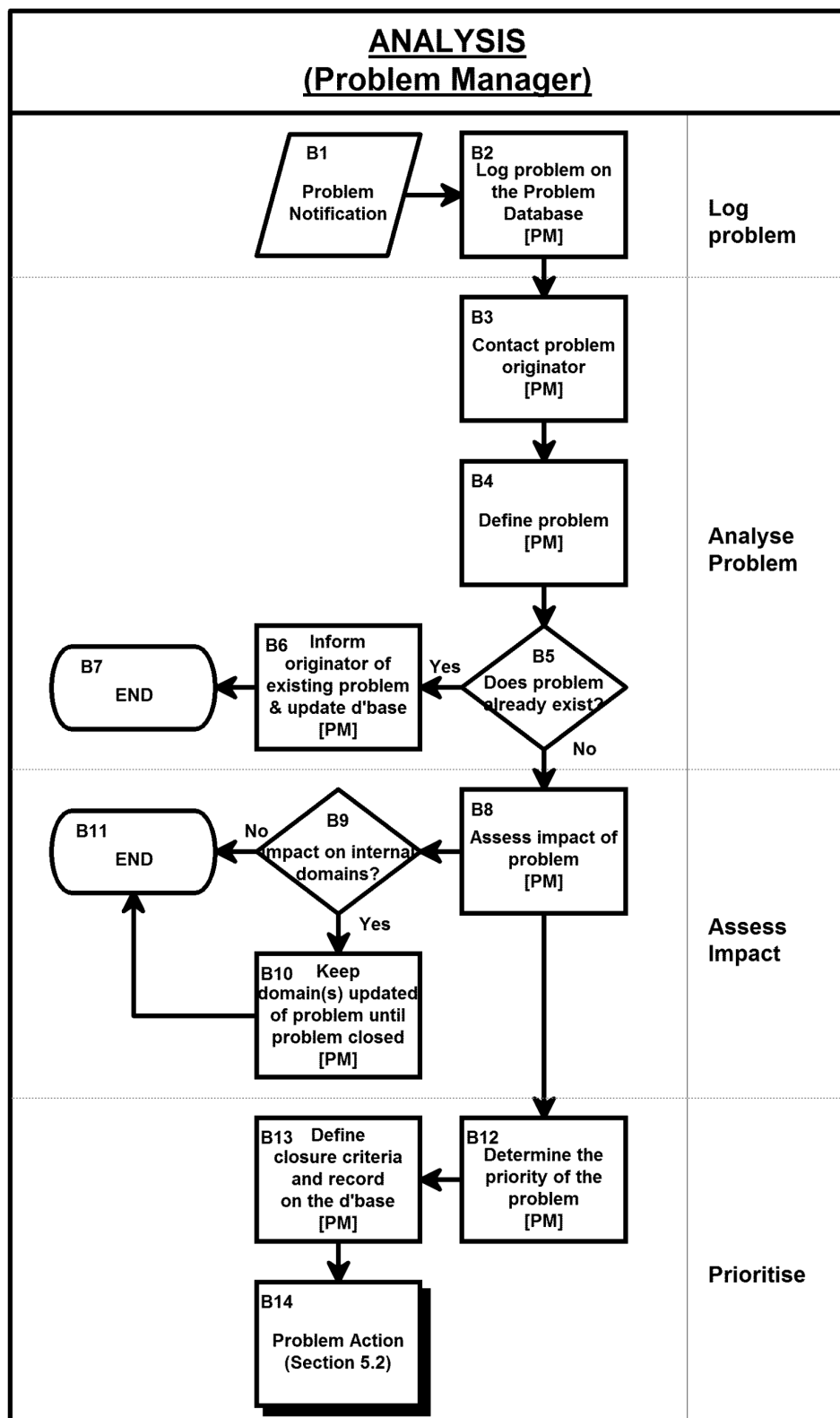
5.1.1 Assign Problem Manager

There are two routes to log a assign a Problem Manager to a Problem. If a problem is identified within the CS department, the problem originator assigns the Problem to the Problem Manager best placed to manage it. If a problem originates outside of the CS department it is routed to the CS Duty Manager first. The Duty Manager (DM) then assigns the Problem to the Problem Manager best placed to manage it.

5.1.2 Provide details of the Problem

The DM or the CS problem originator provides the assigned Problem Manager with all the available details of the Problem.

5.2 Problem Analysis



5.2.1 Log Problem

All the details of the problems, along with any action taken to date, must be logged on the database [Ref.3]. This includes cross referencing the problem to any existing incident numbers or linked PinICL numbers, and also the PON problem number if the problem is a cross-domain problem (see Section 5.3).

5.2.2 Analyse Problem

The Problem Manager contacts the originator of the problem in order to understand, if necessary, the problem more fully. It also allows the originator to know who the Problem Manager is and be informed of the Problem Reference number. The Problem Manager is then in a position to define the problem. If the problem already exists, the originator is notified of the Problem Manager dealing with the existing problem.

5.2.3 Assess Impact

If the problem doesn't already exist, the Problem Manager assesses the impact of the problem. This allows the problem Manager to decide who is impacted by the problem so that they can be informed and kept updated.

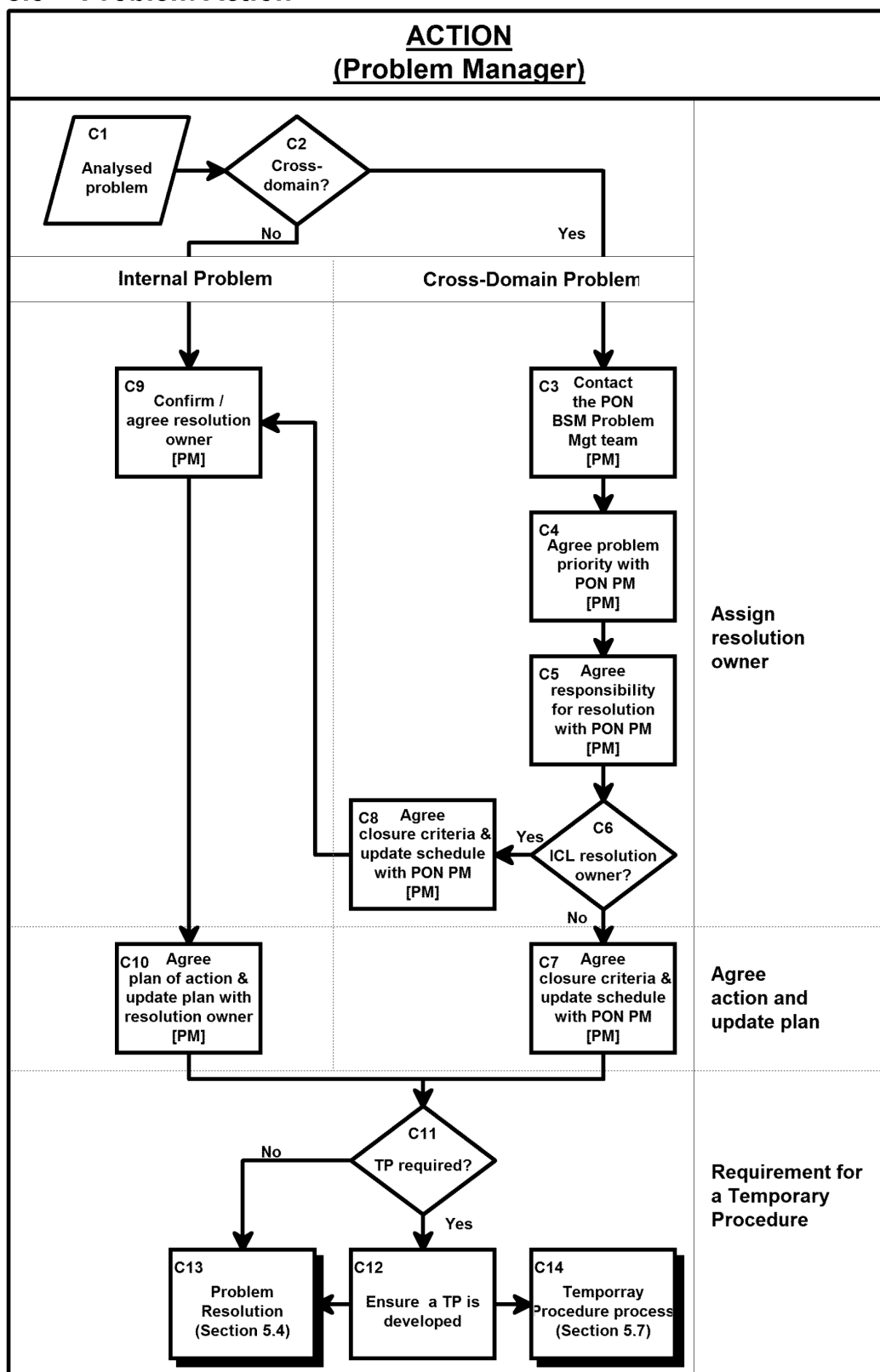
5.2.4 Prioritise

Having assessed the impact of the Problem the Problem Manager assigns a priority to the problem. The priority defines how urgent the problem is.

The Problem Manager also determines the closure criteria for the problem, i.e. the conditions under which the problem can be closed. This is also captured on the database.

If required, the Problem Manager can inform the HSH to set up a Master Incident to capture incidents arising as a result of the problem. The priority of the problem could subsequently increase (or be lowered) if the volumes of incidents arising changes dramatically.

5.3 Problem Action



5.3.1 Assign Resolution Owner

At this stage the Problem Manager must decide whether or not the Problem impacts the Post Office Network (PON), i.e. a cross-domain problem.

If the problem is internal to ICL Pathway (or is a cross-domain problem for which ICL Pathway has resolution responsibility), the Problem Manager determines and agrees which unit is responsible for problem resolution. In many cases, via the Incident Management process [Ref.2], the problem will already be assigned to a unit for resolution. The Problem Manager therefore confirms problem resolution ownership with the unit.

If the problem is identified as cross-domain the PON BSM Problem Management team is contacted [Ref.1]. Once a PON BSM Problem Manager has been established the Problem Managers from ICL Pathway and PON agree the priority of the problem, and also decide which organisation is responsible for the resolution of the problem.

5.3.2 Agree Action and Update plan

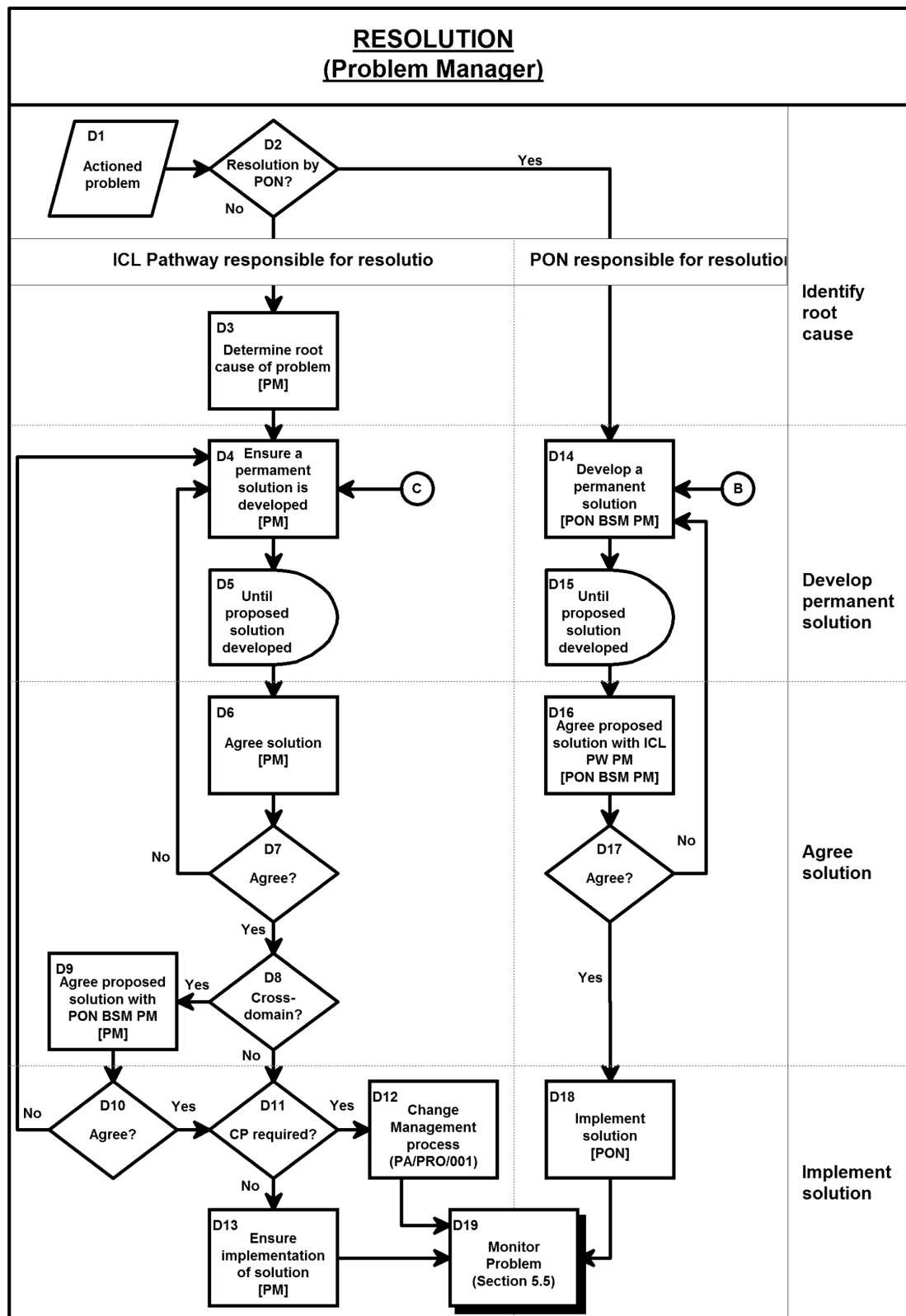
A plan of action (including target dates) and an update schedule is then agreed with the Resolution Owner. The Problem Manager is then in a position to monitor the resolution progress and take action should any delays occur.

If the Problem is cross-domain, then having agreed which organisation is responsible for the resolution of the problem, the Problem Managers agree the closure criteria, i.e. the conditions under which the problem can be closed, and also an update schedule to keep each other informed of progress.

5.3.3 Requirement for a Temporary Procedure

Whether the problem is cross-domain or internal to ICL Pathway, the Problem Manager decides if a temporary procedure (TP) is required to address incidents arising as a result of the problem whilst a permanent solution to the problem is being developed. If a TP is required, see Section 5.7.

5.4 Problem Resolution



5.4.1 Identify Root Cause

If ICL Pathway is responsible for the resolution of the Problem, whether or not it is an internal problem or a cross-domain problem, the root cause of the problem must be determined before any feasible solution can be developed.

5.4.2 Develop permanent solution

Having identified the root cause of the problem the Problem Manager ensures that the resolution owner develops and proposes a permanent solution to the problem, all the while keeping the Problem Manager updated with progress.

If responsibility for resolution lies within PON, the PON BSM Problem Manager ensures that a proposed solution is developed.

5.4.3 Agree solution

If ICL Pathway is responsible for resolution, the Problem Manager agrees the proposed solution with the resolution owner. If the problem is cross-domain, the Problem Manager must also agree the solution with PON BSM Problem Manager.

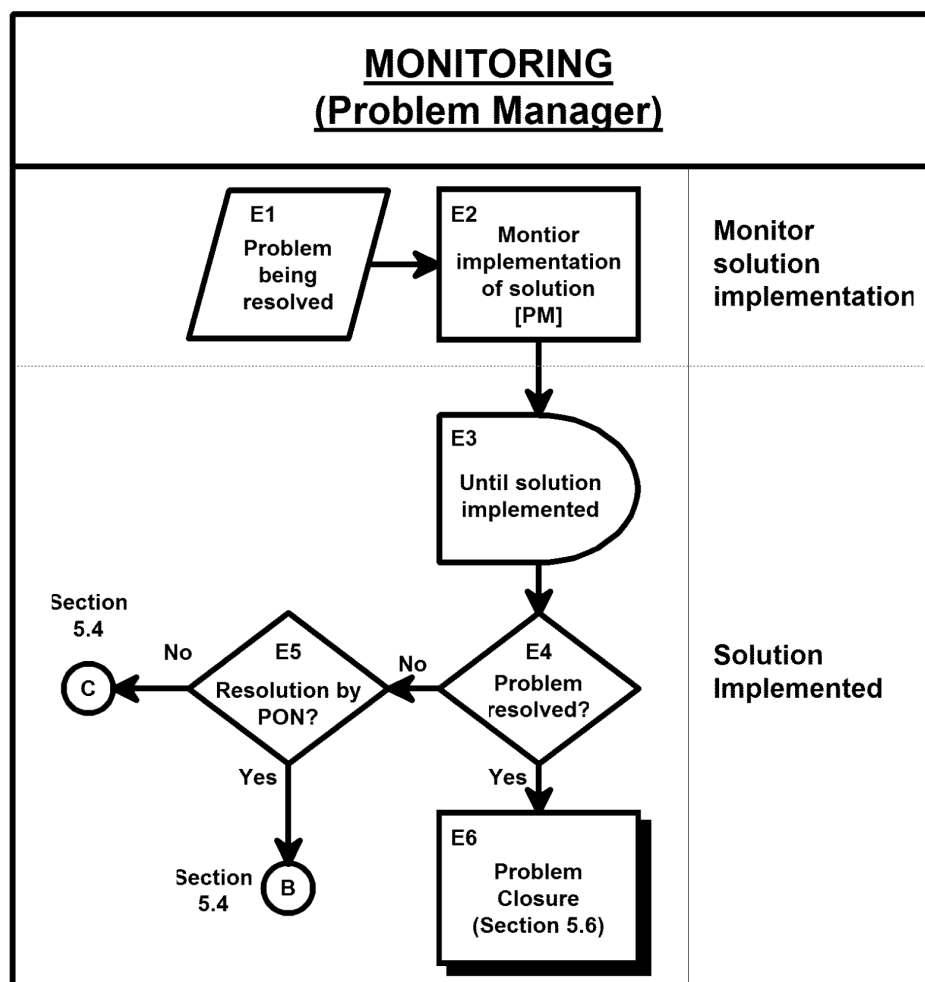
If POCL are responsible for the resolution of the problem, after having developed a proposed solution, the PON BSM PM will agree the solution with the ICL Pathway CS PM.

5.4.4 Implement solution

If ICL Pathway is responsible for the resolution, then after having agreed the proposed solution, the Problem Manager ensures the process for implementing the change is initiated. In many cases, this requires the initiation of the formal Change Management process [Ref.4].

If PON is responsible for resolution, then once the solution has been agreed with the ICL Pathway Problem Manager, the PON BSM Problem Manager ensures that the solution is implemented.

5.5 Problem Monitoring



5.5.1 Monitor Solution Implementation

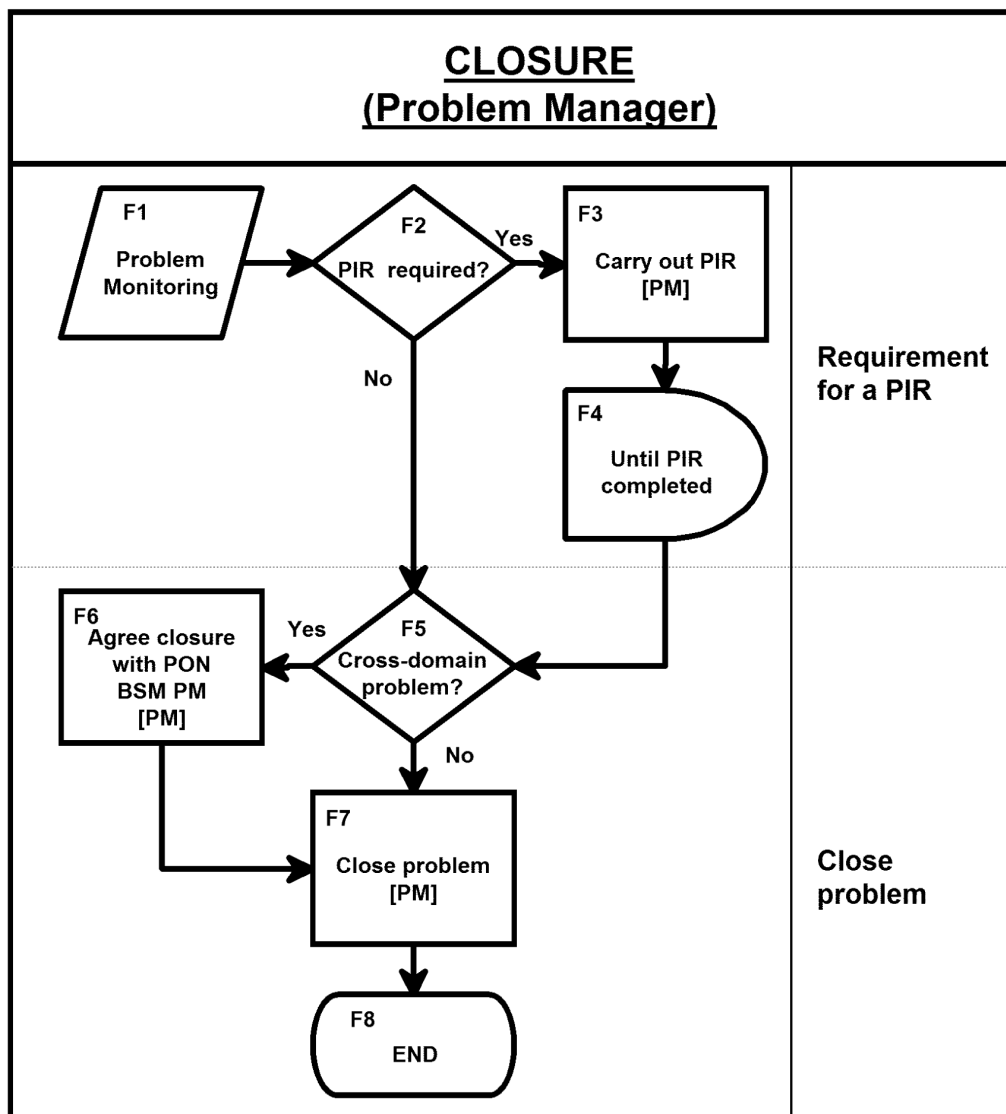
The Problem Manager monitors the resolution and implementation of the problem to ensure constant progress against deadlines. If deadlines are not being met, or progress is slow, then if necessary, the Problem Manager can escalate (see Section 5.8) the problem to ensure continuous progress against requirements.

5.5.2 Solution Implemented

Once the solution has been implemented, the Problem Manager determines whether the problem has been resolved. If not, then action must be taken to understand why the problem still remains and to ensure that a solution is developed that resolves the problem. Again, escalation may be used to ensure that resources are available to develop a solution to meet target deadlines.

If the problem has been resolved, the Problem Manager can move on to closing the problem.

5.6 Problem Closure



5.6.1 Requirement for a PIR

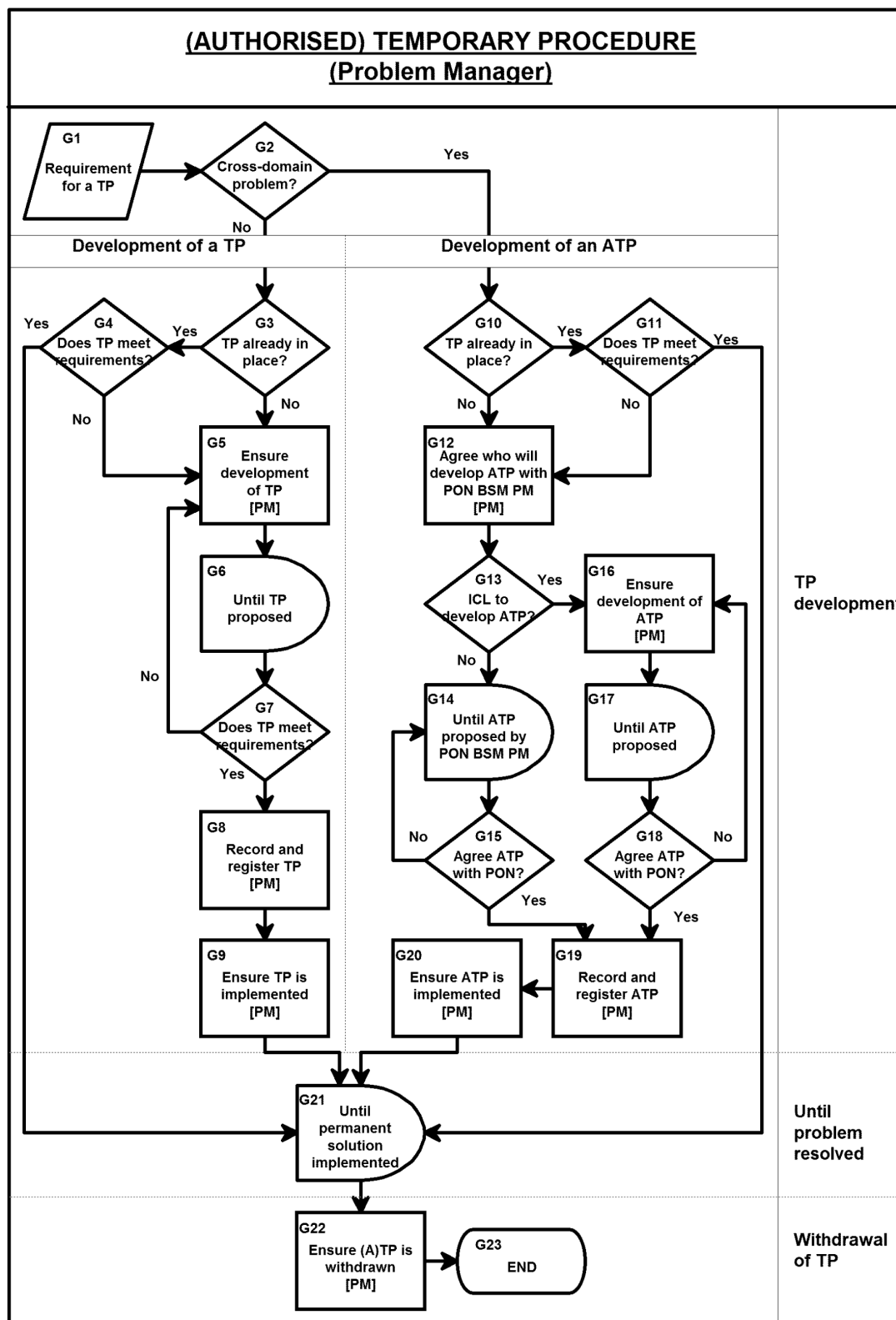
Before the Problem is formally closed the Problem Manager decides if a Post Implementation Review (PIR) is required. In the case of a Cross-Domain Problem, either organisational Problem Manager can request a PIR. A PIR should take place if the Problem Manager was unhappy with the way that the problem was resolved. The Review should include all the main players within the resolution of the problem with a view to running through the problem and determining which parts of the process could have been implemented more efficiently. The end result is to initiate improvement actions to ensure that the process is operated as it should be or ultimately improved. The PIR is presided over by the Problem Manager who requested it.

5.6.2 Close Problem

If a PIR is has been carried out, this should be used as the authority to close the problem. The problem is closed after all actions arising from the PIR have been completed.

If the problem was cross-domain, it can not be closed until agreed with the PON BSM Problem Manager. If agreement is required from the PON BSM Problem Manager, evidence of their agreement to close is required, i.e. letter, email, fax etc.

5.7 (Authorised) Temporary Procedure



5.7.1 Temporary Procedure Development

If a Temporary Procedure (TP) is already in place then the Problem Manager determines whether or not the TP meets current requirements. In the case of cross-domain problems, the Problem Manager agrees with the PON BSM Problem if the existing Temporary Procedure meets requirements.

Note: Cross-domain temporary procedures are agreed between the Problem Managers of both organisations. Once agreed, the TP is known as an Authorised Temporary Procedure (ATP).

If an existing TP meets current requirements then no further action is taken until the TP is withdrawn.

If an existing TP does not meet current requirements, or no TP is yet in place, the Problem Manager ensures that a TP is developed, recorded and registered, and finally implemented. Development of the Temporary Procedure must include an implementation and withdrawal plan.

If a cross-domain problem requires an ATP to be developed, the Problem Managers agree which organisation is responsible for developing the ATP. The Problem Manager of the organisation responsible for the development of the ATP ensures that an ATP is developed. This is then agreed with their counterpart, recorded and registered, and implemented.

5.7.2 Until Problem resolved

The (A)TP remains in place until a permanent solution has been developed and implemented. During this time, the Problem Manager(s) regularly review and monitor the (A)TP to ensure that it is working as it should.

5.7.3 Withdrawal of the Temporary Procedure

Once a permanent solution to the problem has been developed and implemented, the temporary procedure is withdrawn. This must be carried out in a co-ordinated manner alongside the implementation of the permanent solution.

5.8 Escalation

5.8.1 Decision to escalate

During the life of a problem, the Problem Manager constantly monitors the progress of the problem resolution to ensure that everything is on track and that target deadlines are being met. At any point during the Problem Management process the Problem Manager can escalate the problem.

The process of escalation is intended to bring increasing levels of management attention and/or expertise to bear upon the resolution of a Problem. Escalation should be considered to be an exceptional resort.

Escalation to a higher level will normally occur either:

- When an issue is causing increased concern through time delay and consequent impact, or
- When it has not been possible to reach agreement on some aspect of the definition or management of the issue.

5.8.2 Escalate

The Problem Manager escalates the problem to the next level of management.

Note: If a cross-domain problem is being escalated, the Problem manager must ensure that the counterpart organisational Problem Manager is informed so that escalation can take place to the same level within the partner organisation. This ensures that the same management levels are aware of the situation should they need to contact each other.

5.8.3 Manage Escalated Problem

The Problem Manager manages the escalated problem through to its resolution, acting as the interface between the higher levels of management now involved and those who are already involved in the resolution of the problem.