[organization logo]

[organization name]

Comment [BV1]: All fields in this document marked by square brackets [ ] must be filled in.

PROBLEM MANAGEMENT PROCESS

Comment [BV2]: If you want to find out more about Problem Management process, see http://www.20000academy.com/Blog/August-2013/ITIL-Problem-Management-getting-rid-of-problems

Code:	
Version:	
Date of version:	
Created by:	
Approved by:	
Confidentiality level:	

Comment [BV3]: The document coding system should be in line with the organization's existing system for document coding; in case such a system is not in place, this line may be deleted.

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Change history

Date	Version	Created by	Description of change
xx/xx/2013	0.1	Branimir Valentic	Basic document outline

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1. Purpose, scope and users

The aim of this document is to define the purpose, scope, principles and activities of the Problem Management process.

This document is applied to the entire IT Service Management (ITSM) organization.

Users of this document are all employees of [organization name], as well as all external parties who have a role in ITSM.

Comment [BV4]: ***OPTION***
Use "SMS" if you are implementing ISO 20000.

Comment [BV5]: ***OPTION***
Use "SMS" if you are implementing ISO 20000.

2. Reference documents

- Problem Management Policy
- Problem Measurement and Metrics
- Incident Management Process
- Change Management Process
- Service Asset and Configuration Management Process
- ISO/IEC 20000-1:2011, clause 8.2.

Comment [BV6]: ***OPTION***
Delete this if you are implementing ITIL but not ISO 20000.

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3. Process

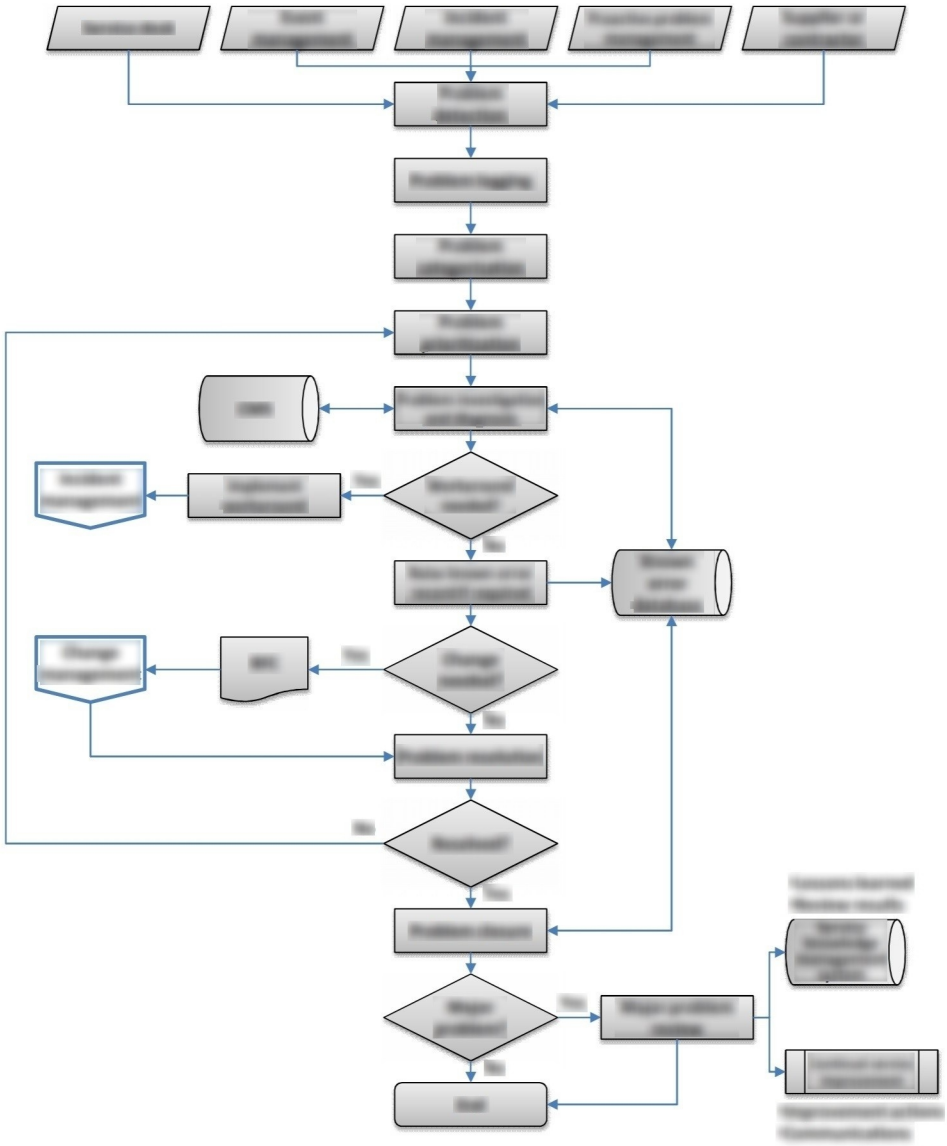

Figure: Problem Management process activities

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Comment [BV7]: Double-click to edit figure and adapt to your own requirements.

Comment [BV8]: ***OPTION*** Delete this figure if you are implementing ISO20000 and not ITIL.

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3.1. Problem detection

Sources of a Problem are:

- Web portal – [insert web or intranet address]
- [illegible]
- [illegible]
- Event Management process – [tool names]
- Supplier or contractor
- [illegible]

3.2. Problem logging

[Organization] uses [Insert Problem Management tool name] for Problem Management; see Problem Record in Appendix. [Insert Problem Management tool name] logs problems with related data.

Responsibility to enter problem data depends on the source of the problem, as follows:

Source	Responsibility for logging, categorization and prioritization
Web portal: [insert web or intranet address]	User
Service Desk	Service Desk staff
Incident Management	Incident assignee
Event management […]	Event Manager
Supplier or contractor	Supplier Manager
Proactive Problem Management – [enter group name]	Problem Manager

Mandatory data that need to be recorded are:

- Problem number – provided automatically
- [illegible]
- Problem category
- [illegible]
- [illegible]
- Description

The Problem Analyst is responsible, as the [illegible] that every action is logged so that a full history of problem resolution is available.

3.3. Problem categorization and prioritization

Problems follow incident [illegible] problem management.

[Problem Manager] can re-categorize and [illegible].

Categories are set in [illegible] Problem Catalogue (see Problem Catalogue in Appendix).

Priority consists of impact and urgency, has [illegible] following table:

Comment [BV9]: ***OPTION*** If implementing ISO 20000 and not ITIL, use the word "identification" instead of "detection."

Comment [BV10]: Delete redundant or add if Problem detection medium is missing.

Comment [BV11]: [illegible] Incident and Problem Management tool.

Comment [BV12]: ***OPTION*** Delete this figure if you are implementing ISO20000 and not ITIL.

Comment [BV13]: ***OPTION*** If implementing ISO 20000 and not ITIL, use the word "recording" instead of "logging."

Comment [BV14]: [illegible]

Comment [BV15]: Delete this if a tool is used instead of a spreadsheet.

Comment [BV16]: [illegible] Usually, users are "opening" Problem Records [illegible]

Comment [BV17]: Insert monitoring tools that are integrated with Incident and Problem Management tool.

Comment [BV18]: ***OPTION*** Delete this figure if you are implementing ISO20000 and not ITIL.

Comment [BV19]: Delete if not true.

Comment [BV20]: These are data which are always needed. Depending on organization requirements, i.e. tool features, this can be changed, i.e. additional data can/must be collected: [illegible], automatic, email, in person, etc.) … [1]

Comment [BV21]: Change if necessary. Example: 1st Level support, 2nd Level support, Specialist group...etc.

Comment [BV22]: ***OPTION*** If implementing ISO 20000, use the word "classification" instead of "categorization."

Comment [BV23]: Delete if not true, although it is strongly advisable to be so.

Comment [BV24]: [illegible] … [2]

Comment [BV25]: It is advisable to categorize problems in 3 or 4 levels. More than that will be confusing when … [3]

Comment [BV26]: [illegible] in Incident Management Process.

Comment [BV27]: Can be adapted according to organization's needs.

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Impact / Urgency	High	Medium	Low
High	1	2	3
Medium	2	3	4
Low	3	4	5

Resolution time of a problem depends on its priority code and is calculated as follows:

Priority code	Description	Target Resolution Time
1	Critical	1 hour
2	High	2 hours
3	Medium	4 hours
4	Low	8 hours
5	Planned	24 hours

Comment [BV28]: Should be adapted according to your organization needs or the SLA with particular customer.

Impact – business impact that a problem causes:

High	Medium	Low
>80% of CIs are affected	30% - 80% of CIs are affected	Less than 30% CIs are affected

Comment [BV29]: This is an example. Change for particular service, insert in into tool/SD/KE and communicate to support staff.

Urgency – how quickly the business needs a resolution:

High	Medium	Low
Immediately – no workaround available	In the medium term – a partial workaround exists	In the long term – a good workaround exists

Comment [BV30]: This is an example. Change for particular service, insert in into tool/SD/KE and communicate to support staff.

3.4. Problem investigation and diagnosis

[Problem Analyst] is responsible to diagnose the root cause, update the problem record and update the Configuration Management System (CMS); see Service Asset and Configuration Management Process.

Comment [BV31]: Change according to your own organization.

Comment [BV32]: Change if needed or delete if CMS is not in place.

[Problem Manager] is responsible to provide appropriate resources with needed expertise.

[Problem Manager] coordinates activities with any other resources outside [IT Service Management organization].

Comment [BV33]: e.g. supplier or building a test environment.

[Problem Manager] serves as escalation level.

Comment [BV34]: Delete if no escalation is foreseen or change according to your own organization.

3.5. Workaround

Where the root cause has been identified, but the problem has not been permanently resolved, [Problem Analyst] identifies actions to reduce or eliminate the impact of the problem on the services. [role description] is responsible to apply any existing workaround(s) or find new ones to resolve the incident as soon as possible.

Comment [BV35]: ***OPTION*** Delete this figure if you are implementing ITIL and not ISO20000.

[Problem Analyst] is responsible to document (in problem record) every workaround implemented.

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After implemented workaround, [problem assignee] communicates the workaround to [Problem Manager], who changes problem priority if needed.

Comment [BV36]: Delete if not relevant.

3.6. Raising a known error record

Comment [BV37]: A problem with a documented root cause and workaround

As soon as the root cause of a problem and respective workaround are known, a known error record (see Known Error Record in Appendix) must be raised by [...].

Comment [BV38]: e.g. problem assignee, expert working on problem resolution – Problem Analyst, Problem Manager...

3.7. Change needed?

[Problem Manager] raises a Request for Change (RfC) (see Request for Change and Change Record in Appendix of Change Management Process) when problem resolution requires a change to be implemented.

Comment [BV39]: ***OPTION*** Delete this figure if you are implementing ISO20000 and not ITIL.

[role description] is responsible to raise a RfC (see Request for Change and Change Record in Appendix of Change Management Process) if resolution of a problems requires changes to a CI.

Comment [BV40]: ***OPTION*** Delete this figure if you are implementing ITIL and not ISO20000.

3.8. Problem resolution

[...] is responsible to implement resolution of a problem. [Problem Manager] coordinates activities with parties outside [problem management organization].

Comment [BV41]: e.g. expert working on a project resolution, Release and Deployment Management...

[role description] is responsible to monitor, review and report to [Problem Manager] the effectiveness of the problem resolution.

Comment [BV42]: e.g. Problem Analyst

[role description] is responsible to escalate problems to [role description] in the following cases:

- Resolution time reached 75% of Target Resolution Time defined in SLA
- More resources are needed for the resolution of the problem

Comment [BV43]: These are examples. Adapt to your own situation.

3.9. Problem closure

[Problem Manager] is responsible to close the problem and send incidents (with resolution) back to the Service Desk (see Service Desk Function) and to [Request Fulfillment Manager] for closure, and to update the problem record.

Comment [BV44]: ***OPTION*** Delete this section if you are implementing ISO 20000 and not ITIL.

[Problem Manager] controls consistency of both the problem and the known error record.

3.10. Major problem review

Comment [BV45]: ***OPTION*** Delete this section if you are implementing ISO 20000 and not ITIL.

[role description] is responsible to fill out a Major Problem Report (see Major Problem Report in Appendix) after every major problem and send it to [role description].

Comment [BV46]: e.g. some management function like CIO.

[role description] is responsible to organize a major problem review meeting [once every quarter]; see Minutes of Meeting of Major Problem review.

Comment [BV47]: e.g. Problem Manager, IT Service Manager...

Comment [BV48]: Adapt to your own requirements.

4. Roles and responsibilities

4.1. Problem Manager

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[role description] assigns the Problem Manager role.

Responsibilities of Problem Manager:

- Overall responsibility for carrying out activities within the scope of Problem Management, i.e. owns problem management activities
- Coordinates interfaces with other Service Management processes
- Plans and manages tools needed to support Problem Management process
- Responsible for reporting and managing information
- Owns and maintains Known Error Database (KEDB)
- Manages work of Problem Management staff
- Develops and maintains Problem Management process and procedures
- Works closely with third parties so that they fulfill their obligations and productively contribute to problem resolution
- Runs all activities and arranges Major Problem review
- Reviews effectiveness of problem resolution once a quarter and reports results to [role description]

Comment [BV49]: Change if needed.

Comment [BV50]: e.g. IT Service Management

4.2. Problem Analyst

[role description] assigns the Problem Analyst role.

Responsibilities of Problem Analyst:

- Review incident data
- Analyze problem to correctly categorize and prioritize
- Analyze and investigate problem until root cause is found or problem is resolved
- Raise Request for Change (RfC)
- Update KEDB with new or updated known errors and workarounds

5. Measurement and Metrics

5.1. Measurement

[role description] is responsible for evaluation of SLA achievement (i.e. comparison of target Resolution Time and achieved Resolution Time) and, if necessary, definition of appropriate corrective measures. Evaluation is done on a weekly basis.

Comment [BV51]: If you want to learn more about measurement, see http://www.20000academy.com/Blog/April-2013/Facing-reality-measurements-in-ITIL#infform_id0_h352_w290

Comment [BV52]: Change if needed.

[role description] is responsible to produce reports.

Reports are sent to the Service Level Manager on a monthly basis.

Comment [BV53]: Or similar role. Change if needed.

[role description] is responsible for ensuring that:

Comment [BV54]: Change if needed.

- reports are produced monthly, with quarterly and yearly summaries
- reports are evaluated
- measures for improvement are defined

Comment [BV55]: Example: Problem Manager, Continual Service Improvement Manager

5.2. Metrics

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Metrics reports are produced monthly, [illegible]. Metrics to be reported:

- Total number of problems
- [illegible]
- [illegible]
- Breakdown of problems by categories and status (logged, work in progress, closed, etc.)
- [illegible]
- [illegible]
- Mean elapsed time to achieve problem resolution or circumvention, broken down by impact category
- Percentage of problems handled within [illegible]
- Number of problems reopened and as a percentage of the total
- [illegible]
- [illegible]
- Number and percentage of problems resolved without involvement of external parties
- Number of recurring Incidents

Reports are grouped into the following categories:

- Problem category
- [illegible]
- [illegible]
- Location

6. Managing records kept on the basis of this document

Record name	Storage location	Person responsible for storage	Controls for record protection	Retention time
Problem Record (in electronic form)	[tool name]	[job title]	Service Desk and Incident Management roles have the right to add to the record; Service Desk and Problem Management functions have the right to add to/change the record.	Problem Records are kept for [5 years].
Reports	[tool name]	[job title]	Problem Manager	Reports are kept for [...].
Known Error record	[tool name]	[job title]	Problem Analyst	Known Error records are kept for [5 years].
Major Problem report	[tool name]	[job title]	Problem Manager	Reports are kept for [...].

7. Validity and document management

Comment [BV56]: If you want to learn more about reporting, see http://www.20000academy.com/Blog/September-2013/Service-Reporting-get-the-picture-big-and-small

Comment [BV57]: [illegible]

Comment [BV58]: [illegible]

Comment [BV59]: Overall responsibility for Problem Records. Usually Problem Manager

Comment [BV60]: Adapt to your own situation.

Comment [BV61]: Overall responsibility for Problem Records. Usually Problem Manager

Comment [BV62]: Change if needed.

Comment [BV63]: Example: for current year (YTD) – in [tool name], otherwise archived in [tool name or place of archive].

Comment [BV64]: Overall responsibility for Problem Records. Usually Problem Manager

Comment [BV65]: Adapt to your own situation.

Comment [BV66]: Overall responsibility for Problem Records. Usually Problem Manager

Comment [BV67]: Example: for current year (YTD) – in [tool name], otherwise archived in [tool name or place of archive].

Comment [BV68]: ***OPTION*** Delete this if you are implementing ISO 20000 and not ITIL.

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This document is valid as of [date].

Owner of this document is [job title], who must check and, if necessary, update the document at least once a year.

Comment [BV69]: This is only a recommendation; adjust frequency as appropriate.

8. Appendices

- Appendix 1: Problem Catalogue
- Appendix 2: Problem Record
- Appendix 3: Major Problem Report
- Appendix 4: Known Error Record
- Appendix 5: Minutes of Meeting of Major Problem Review

Comment [BV70]: ***OPTION*** Delete this if you are implementing ISO 20000 and not ITIL.

Comment [BV71]: ***OPTION*** Delete this if you are implementing ISO 20000 and not ITIL.

[job title]

[name]

_____

[signature]

Comment [BV72]: Only necessary if the Procedure for Document Control prescribes that paper documents must be signed.

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Page 5: [1] Comment [BV20] **Branimir Valentic** **11/20/2013 11:36:00 PM**

These are data which are always needed. Depending on organization requirements, i.e. tool features, this can be changed, i.e. additional data can/must be collected:

- Problem urgency
- Problem impact
- Problem prioritization
- Date/time recorded
- Method of notification (telephone, automatic, email, in person, etc.)
- Related CI
- Support group/person to which the problem is allocated
- Activities undertaken to resolve the problem and when these took place
- Resolution date and time
- Closure category
- Closure date and time

Page 5: [2] Comment [BV24] **Branimir Valentic** **11/20/2013 11:36:00 PM**

Delete if re-categorization and re-prioritization is not possible, i.e. change according to organizational rules.

Page 5: [3] Comment [BV25] **Branimir Valentic** **11/20/2013 11:36:00 PM**

It is advisable to categorize problems in 3 or 4 levels. More than that will be confusing when responsible person has to choose between too many categories.

When tool is used, categories will correspond to Problem Catalogue and will be used to route problem to expert groups.

Note: categories in Problem catalogue should be the same as in Incident catalogue.