

Knowledge Management for CERN

“Those who do not learn from history
are condemned to repeat it”.

Process Documentation

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1 Document Information

1.1 Version Management

Change	Date	Version	Author
Initial Creation	23.11.2011	0.1	Phil Marland
Second draft following initial comments	24.11.2011	0.2	Phil Marland
Final document	03.12.2011	1.0	Phil Marland

1.2 Distribution List

1.3 Authors and Collaborators

The following persons were involved in the creation of this document:

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2 Management Summary

This document provides both an overview of the Knowledge Management process for CERN and covers the requirements of the various stakeholder groups.

The Knowledge Management process will be designed to fulfil the overall goal of unified, standardized and repeatable handling of all Knowledge Articles created by CERN.

The Knowledge Management process design is characterized as follows:

- **Publishing Articles**
- **Managing Articles**
- **Reviewing Articles**
- **Archiving Articles**

This document is intended as an addendum to the existing CERN Service Management process documentation which currently covers Incident Management, Request Fulfilment, Change Management and Knowledge Management.

This document contains descriptions of roles required for implementation and operation.

3 Purpose of Knowledge Management

Knowledge Management will play a key role in any Continuous Service Improvement that CERN wish to implement. Within each service lifecycle phase, data should be captured to enable knowledge gain and an understanding of what is actually happening, thus enabling wisdom. Within ITIL v3, this is often referred to as the DIKW (Data, Information, Knowledge and Wisdom) model. All too often an organization will capture the appropriate data but fail to process the data into information, synthesize the information into knowledge and then combine that knowledge with others to bring us wisdom. Wisdom will lead CERN to make better decisions and improvements.

This applies both when looking at the services themselves and when drilling down into each individual process. Knowledge Management will be the mainstay of any improvement process for CERN Service Management activities.

4 Knowledge Management Mission Statement

To ensure that knowledge is shared in a timely and economic fashion in order to maximise service quality provided to the CERN user base.

5 Definitions

Knowledge Management for CERN will be based on ITIL best practices to ensure that Publishing, Managing, Reviewing and Archiving articles is undertaken in a controlled manner

Although the process is supported by Knowledge Management Analysts, other resources and departments are involved in the Knowledge Management Process, including technical staff and Functional Managers.

6 Benefits

6.1 To the Various Departments (Delivering Services)

- More educated support staff
- Better first-time fix at the Service Desk
- Departments can show added value to the organisation
- Improved prioritization of effort
- Reduction in the time to fix Incidents
- Better use of resources
- More control over services provided

6.2 To the Customer Organisation (Receiving Services)

- Improved quality of services
- Higher service availability
- Improved user productivity

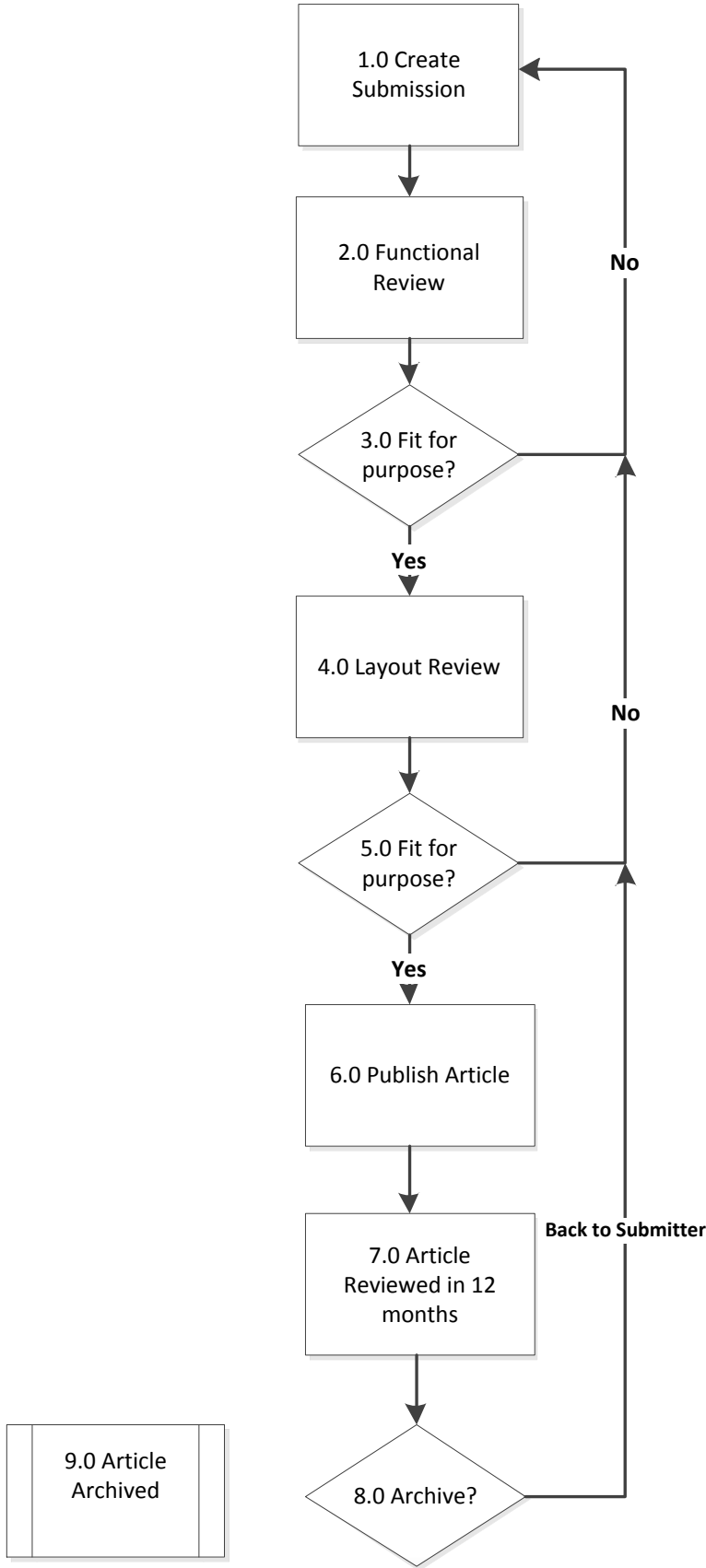
7 Scope of Knowledge Management

The scope of the Knowledge Management process is across all areas of service provision within CERN for IT and GS services.

Knowledge Management will be used within the following Processes/Repositories:

- Incident Management
- Problem Management
- Request Fulfilment
- Service Portal
- News Articles

8 Process Overview



9 Process Activities

The following table provides a description of each activity in the Knowledge Management High Level Process Flow diagram:

Activity	Description
1.0 Create Submission	The article is submitted for publication to the responsible Functional Manager.
2.0 Functional Review	The Functional Manager undertakes a technical review of the submitted article.
3.0 Fit for Purpose?	If the technical content is approved and “fit for purpose”, it is submitted for a Layout Review. If the content is not approved then it is rejected and sent back to the submitter. The submitter then may modify the submission and re-submit; or the submission is deleted.
4.0 Layout Review	The Service Management team and/or the Knowledge Analysts undertake a Layout Review.
5.0 Fit for Purpose?	If the layout is acceptable then the Article is published.
6.0 Publish Article	Article published in the Knowledge Management Database.
7.0 Article reviewed in 12 months	All articles are reviewed in 12 months to ensure that they are still necessary.
8.0 Archive?	The article is sent back to the original Submitter and if appropriate the article will be archived. If not then it will be re-reviewed in a further 12 months.
9.0 Article Archived	The article is archived.

10 Roles and Responsibilities –

RACI Matrix

Process Roles	Knowledge Process Owner	Service Managers/Knowledge Analysts	Service Desk/Support Groups	Functional Manager
Activities Within Process				
1.0 Create Submission	A	I	R	I
2.0 Functional Review	A	I	I	R
3.0 Fit for Purpose?	A	I	I	R
4.0 Layout Review	A	R	I	I
5.0 Fit for Purpose?	A	R	I	I
6.0 Publish Article	A	I	I	I
7.0 Article reviewed in 12 months	A	R	I	I
8.0 Archive?	A	R	I	R
9.0 Article Archived	A	I	I	I

A – Accountable

R – Responsible

C – Consulted

I – Informed

11 Knowledge Management Process Owner

11.1 Profile of the Role

The person fulfilling this role has end-to-end responsibility for the way in which the Knowledge Management process functions and develops. The main role of the Knowledge Management Process Owner is to ensure that the processes are efficient, effective, and fit-for-purpose.

The identified Process Owners will work closely together to ensure integration of the ITIL disciplines and their process-flows.

The ideal Knowledge Management Process Owner:

- Has been trained to ITIL v3 Expert and or Service Management Manager level
- Is positioned at Management level within the organisation
- Has a strong knowledge of the Infrastructure processes
- Can coach and mentor the Knowledge Analysts
- Understands the environment and has a strong network of contacts
- Understands the business side of the organisation

11.1.1 Objective of the Role

- Take ownership of the process to establish accountability
- Be an escalation point regarding any Knowledge Management Process issues
- Ensure there is balance between the key components of a good Service Management environment: People, Process, Tools and Partners

11.1.2 Responsibilities

- Define the Business Case for the Knowledge Management Process
- Ensure end to end responsibility for the Knowledge Management Process
- Ensure the Knowledge Management process is fit-for-purpose
- Ensure there is optimal fit between people, process and technology
- Ensure reports are produced, distributed, and used
- Integrate the Process into the line organization
- Drive forward the integration of the Knowledge Management process with other Service Management processes

11.1.3 Activities

- Promote the Service Management vision to management
- Attend top-level management meetings to assess the impact of organizational decisions on the Knowledge Management environment
- Attend meetings with the Knowledge Management Process Analysts
- Communicate changes to the Knowledge Management infrastructure
- Discuss report outcomes, improvements and recommendations with the Knowledge Analysts
- Distribute reports
- Review proposed changes to the Knowledge Management process

11.1.4 Authority

- Initiate and approve the implementation of any changes to the Knowledge Management Process
- Escalate any breaches in the use of the process to top-level management
- Initiate research with respect to any tools to support the execution of the process's tasks.
- Block any tool change that negatively impacts the process
- Recruit a Knowledge Analysts
- Communicate with the relevant Process Owners when there are conflicts between inter-related processes
- Organize training for employees and nominate staff. They cannot oblige any staff to attend training, but can escalate to line management should training be required in their opinion

12 Knowledge Analysts

12.1 Profile of the Role

The Knowledge Analysts reports to the Knowledge Management Process Owner and performs the day-to-day operational and managerial tasks demanded by the process flows.

The Knowledge Analysts are responsible for identifying opportunities for improvement and audits the use of the process on an operational level. This ensures compliance to the process by the Support staff.

The Knowledge Analysts are responsible for liaising with and providing reports to other Service Management functions. They act as a guardian of the quality of the discipline and are responsible for ensuring that processes are used correctly.

The Knowledge Analysts:

- Is a discussion partner at Functional Manager and Service Owner level within the organization
- Understands the services that are delivered to the customers

12.1.1 Objective of the Role

- Establish accountability for the day-to-day operation of the process
- Create a responsible monitoring function

12.1.2 Responsibilities

- Ensure the Knowledge Management process is conducted correctly
- Ensure the Knowledge Management process operates effectively and efficiently
- Ensure process, procedure and work instruction documentation is up-to-date
- Be the operational process executer
- Be the owner of registered Knowledge Articles
- Provide management and other processes with steering information
- Promote the (correct) use of the process
- Carry out Knowledge Management activities according to the process, procedures, and work instructions
- Obtain the technical and organizational knowledge required to perform the activities

12.1.3 Activities

- Update the process and procedures documentation
- Initiate and update the process work instructions
- Perform trend analysis
- Attend meetings with the Knowledge Management Process Owner, Functional Managers, Service Owners and Support Group staff.
- Coach Support Group staff in the correct use of the process
- Identify training requirements
- Identify improvement opportunities to make the Knowledge Management process more effective and efficient
- Identify and improve operational alignment between various processes
- Review and evaluate archived Knowledge Articles

12.1.4 Authority

- Monitor the Knowledge Management process for all departments
- Escalate any issue impacting the ability of the Knowledge Management process to complete its objectives to Line Management, Functional Management and/or the Knowledge Management Process Owner
- Recommend (process) improvements to the Knowledge Management Process Owner

13 Line Management Responsibilities

13.1 Functional Manager

The Functional Managers have a key role to play in the Knowledge Management process. The Functional Managers is responsible to ensure that only proven articles are passed for Layout Review and hence onward population of the Knowledge Database.

13.2 Knowledge Authors/Submitters

The Knowledge Authors and Submitters are responsible for writing and submitting the submissions.

14 Tool Requirements

Any additional tooling requirements will be handled outside this document.