SafeSeaNet

Change Management Framework

EUROPEAN MARITIME SAFETY AGENCY

Change Management Framework

Document Approval

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1.   Introduction

1.1   CMF Overview

The SafeSeaNet (SSN) Change Management Framework (CMF) document, which is part of the SSN technical and operational documentation, describes the process by which changes to the SSN system are decided upon, introduced and managed. This framework applies to all parties in the SSN system, including the participating Member States (MSs) and EMSA.

It covers the process of assessment and approval of changes to the items subject to configuration control (hardware, software and documentation). The CMF document defines the process of managing changes on SSN. Its objective is to ensure that every **Request for Change (RFC) is recorded, evaluated, authorised and then implemented**.

This document is part of the gradual alignment of EMSA processes to the ITIL standard. The Change Management Process (CMP) will evolve along with future needs following these same lines.

SSN is operated in accordance with the Interface and Functionalities Control Document (IFCD) as approved by the SSN High Level Steering Group (in accordance to Annex III of the Directive 2002/59/EC).

It should be noted that EMSA internal Release Management Process (plan, development, testing/quality assurance and production) is out of the scope of this document.

1.2   Target Audience

This document is addressed to:

- Members of the SSN Group;

- National Competent Authority (NCA);

- SSN High Level Steering Group (HLSG);

- European Maritime Safety Agency (EMSA);

- EMSA development and operations contractors.

1.3   CMF Structure

The CMF structure is as follows:

1. **Introduction**: Includes an overview of the CMF, the definition of relevant terms, and the definition of the target audience.

2. **Change management process overview:** Describes the Change Management Process (CMP), where requests for change to SSN are introduced, coordinated and evaluated**.**

3. **Roles and responsibilities:** Identifies the actors involved in the CMP, along with their roles and responsibilities.

4. **Request for change template:** Describes the content of request for changes.

5. **Change management evaluation report:** Describes the documentation and reporting standards established in order to provide an appropriate measure of accountability for changes made using the CMP.

6. **CMF amendments and updates:** Presents how changes are introduced in this document.

1.4   Abbreviations and Definitions

Change: the addition, modification or removal of hardware, software, or associated documentation,

SSN CAB – SSN Change Advisory Board: a group of people which provides expert advice to the Change Manager on the implementation of RFCs. The SSN CAB is composed of members of the SafeSeaNet project team.

CMF - Change Management Framework: this document.

CMDB - Change Management Database: a central repository where all RFCs are described and progress of RFCs is traced, from the moment when they are initiated to their closure.

CMP - Change Management Process: the process of controlling changes to the system.

EMSA: European Maritime Safety Agency.

SSN HLSG: the SSN High Level Steering Group as defined in Annex III of Directive 2002/59/EC (as amended).

LCA: Local Competent Authority.

MS: Member State.

NCA: National Competent Authority.

RFC - Request for Change: a set of files containing all information related to a specific change.

SSN: SafeSeaNet.

2. Change Management Process overview

A Request for Change (RFC) is registered under the Change Management Process (CMP) when a change on SSN's hardware, software or documentation is requested.

As soon as a RFC is registered, its impact on SSN is evaluated. This evaluation is performed by the SSN Change Advisory Board (SSN CAB), which is composed of members of the SafeSeaNet project team.

Once evaluated, RFCs are presented to the relevant body for approval. RFCs may be approved at different levels depending on their impact, according to article 6.1.2 of the IFCD:

a. When a RFC implies a change in the IFCD, a decision of the HLSG is needed.

b. When a RFC implies a change in the mandatory SSN documentation and the change requires some type of action from the MSs (e.g. configuration of the national SSN applications), a decision from the SSN group is needed.

c. In other cases, a decision by EMSA is sufficient, subject to preliminary consultation with the SSN group.

In point b above, the term "SSN mandatory documentation" covers the following documents:

- Change Management Framework;

- Common operational procedures;

- Incident Report Messages Guidelines;

- LOCODEs Guidelines.

- Member State Commissioning Test Plan;

- SSN Group Rules of Procedure;

- Security Guidelines;

- XML Reference Guide[1];

- Web Services - Message Service[2].

Once approved, the RFCs are implemented. Initiators of the RFCs and the SSN Group are informed on the progress of the implementation of RFCs.

The Change Management Process is described in the figure below:

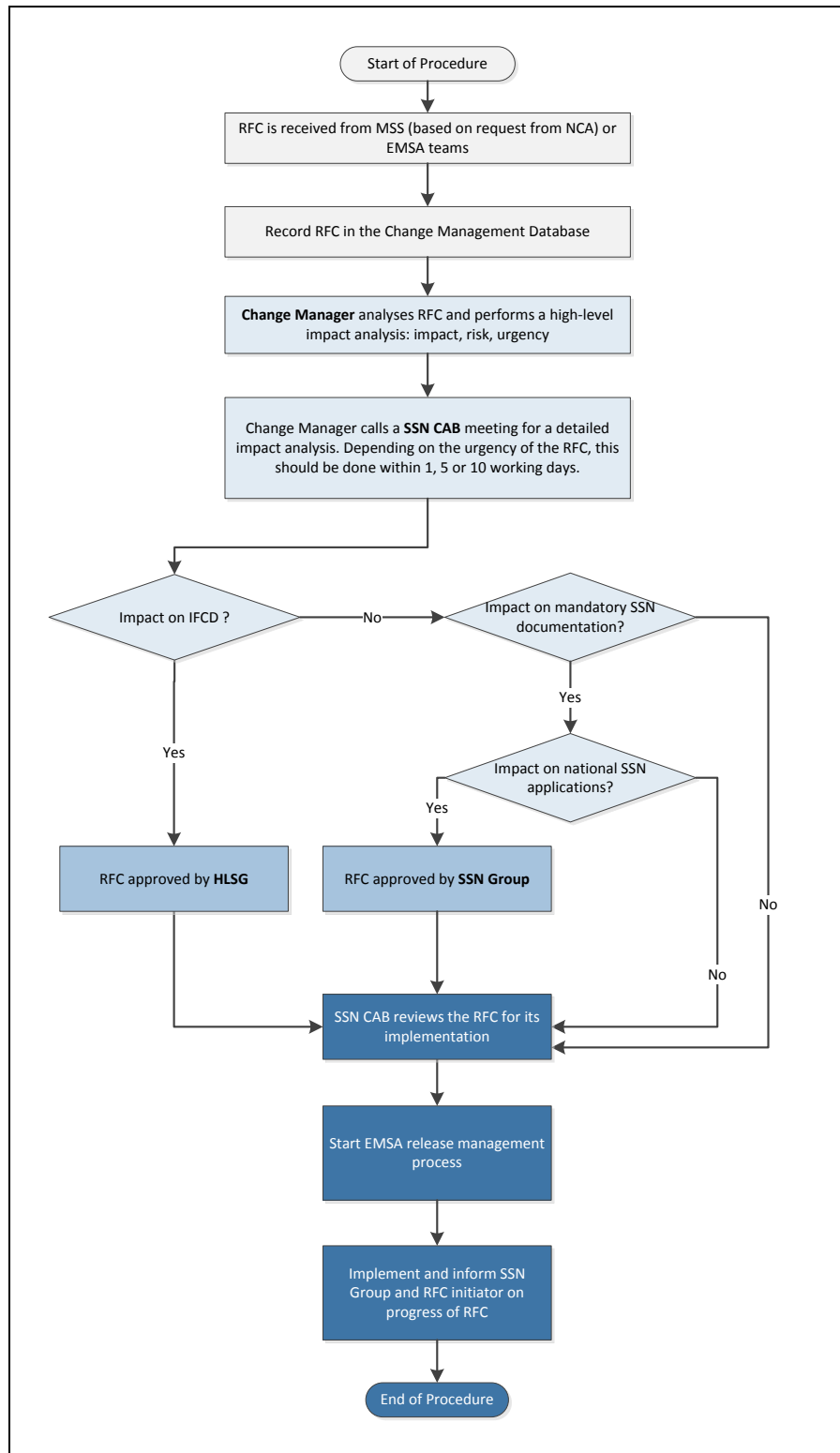[1] & [2] These documents will be compiled into a new document named SSN System Interface Guide.

Figure 1 – Change Management Process (CMP)

3. Roles and responsibilities

Detailed tasks and responsibilities of persons and bodies involved in the CMP are described below.

Change Manager
The change manager is responsible for the execution of the CMP He monitors the progress of RFCs.
Tasks and responsibilities: – Initiate RFCs (Optional). – Record all RFCs lifecycle in the Change Management Database (CMDB). The CMDB is a central repository where all RFCs are described and progress of RFCs is traced, from the moment when they are initiated to their closure. – SSN CAB meeting chairman: decide CAB participants based on the RFCs area of expertise; circulate relevant RFCs to SSN CAB members in advance of meetings to allow prior consideration. – After consideration of SSN CAB, record the decision on each RFC. – Review progress of RFCs. Review all implemented RFCs to ensure that they have met their objectives. Review all outstanding RFCs awaiting consideration or action. – Close RFCs. – Assess periodically the Change Management Process, and issue the Change Management Evaluation Report. – Maintain the Change Management Framework document.

SSN Change Advisory Board (SSN CAB)
The SSN CAB provides expert advice to the Change Manager on the implementation of RFCs. The SSN CAB is composed of members of the SafeSeaNet project team. If necessary, other persons can be invited by the SSN CAB, such as: – Representatives of the development team; – Representatives of the operational team; – Representatives of the support team (MSS); – Representatives of the relevant business and ICT units of EMSA.
Tasks and responsibilities: – Assess the impact, risk and schedule of each RFC. – Prioritize RFCs. – Define the contents of each RFC and the context in which the change will be released. – Review progress of RFCs.

SSN HLSG
The SSN HLSG is responsible for approving RFCs which impact the IFCD.
Tasks and responsibilities:
− Initiate RFCs (Optional). − Approve or reject RFCs which have an impact on the IFCD. − Approve or reject RFCs, when the SSN group and EMSA cannot reach an agreement on an RFC.

SSN group
The SSN group is responsible for reviewing the overall progress of RFCs, approve relevant RFCs, and review the implementation of the CMP.
Tasks and responsibilities:
− Initiate RFCs (Optional). − Approve or reject RFCs which have an impact of the SSN mandatory documentation and which require some type of action from the MSs (e.g. configuration of the national SSN applications). − Review the progress of RFCs, as presented by EMSA. − Evaluate Change Management Evolution Reports.

NCA
The NCA is responsible for gathering requests at national level (e.g. from local competent authorities, from end-users), for liaising with EMSA MSS during the implementation of RFCs when necessary, and for communicating the progress of RFCs at national level.
Tasks and responsibilities:
− Raise RFCs (Optional) and review their progress.

EMSA MSS
The EMSA MSS receives requests from the NCAs and translates the relevant requests into RFCs. It communicates the progress and implementation of RFCs to the initiators of the requests.
Tasks and responsibilities:
− Initiate RFCs based on NCAs request. − Inform NCAs on the progress of RFCs. − When relevant, inform the SSN community on the implementation of RFCs.

4. Request for change template

RFCs are recorded according to the template below.

SafeSeaNet - Request for Change			
RFC ID	*Unique ID (defined by CMDB)*		
Date	*Date when RFC was registered*		
Initiator	*HLSG / SSN Group / MS / MSS / EMSA*		
Product	*Product name within SSN*	Release	*Version number of product*
Description			
Category	*Bug fix / Documentation / Functional / Technical / User interface*	Severity	*Applied to bug fixes: Minor / Major / Blocking*
Title	*One-line title of the RFC*		
Description	*General description of the change.*		
Justification/Reference	*Explanation of why the change is requested. This can be a reference to a decision or document.*		
Reference to other RFCs	*ID of other RFC which implementation has to be considered jointly with this RFC.*		
Reference to MSS tickets	*MSS Ticket numbers (one or several) associated to the change request.*		
Impact Analysis			
Priority	*Low / Medium / High / Highest*		
Impact on	*Identification of elements impacted: on SSN documentation, in Central SSN system, in national SSN applications. This should be pre-defined lists.*		
Impact level	*Rough estimation of impact of the change: low / intermediate / high*		
Risk	*Description of risk associated to the implementation of the change.*		
Other systems or interfaces affected	*Indication of other systems or interfaces affected by the change (e.g. THETIS, CSN, EU LRIT DC)*		
Type of Change	*Corrective / Improvement*		
CAB recommendation	*Conclusion of analysis by CAB*		
To be approved by	*HLSG / SSN Group / CAB, with indication of date.*		
Review results	*Conclusions of review from relevant body (HLSG, SSN Group, CAB)*		
Schedule	*Description of target release where the change should be implemented*		
Release number	*Version number of product release where the change has been implemented*		
Approval			
Approved by	*HLSG / SSN Group / CAB*		
Date			
Status history			
Status	Logged / Assessed / Approved / Rejected / On-hold / Scheduled / Implemented / Cancelled / Closed		
Date			
Observations			

Notes:

Category: this can be one of the following options:

- Bug fix: change is necessary because the system does not function as expected (according to its documentation, or to a normally expected behaviour).

- Documentation: change is limited to the SSN documentation. There is no impact on the system.

- Functional: change is on a functionality of the system.

- Technical: change is limited to the technical environment of the system. It does not affect any functionality of the system.

- User interface: change is on the user interface (web or graphical) and does not have any impact on any functionality. This is mainly text errors (grammar, spelling, etc.) or adjustments (graphical alignment, formatting, etc.).

Severity: this can be one of the following options:

- Minor: bug does not stop the user from executing the functionality (user can go around the problem and continue to correct completion of the functionality).

- Major: bug causes incorrect executing of the functionality and user cannot find a work-around.

- Blocking: functionality cannot be executed completely because of the bug.

Status: this can be one of the following options:

- Logged: the RFC is registered in the change management database.

- Assessed: the RFC has been analysed and assessed by the CAB.

- Approved: the RFC is approved by the relevant body (HLSG, SSN Group or SSN CAB).

- Rejected: the RFC has been rejected by the relevant body and will not be implemented.

- On hold: the RFC has been put on hold. This can happen when further elements are necessary to implement the RFC, or when the RFC is not approved but kept for future evaluation.

- Scheduled: Work to implement the RFC has been scheduled and a target release has been identified.

- Implemented: the RFC is implemented and waiting for release.

- Cancelled: the RFC has been cancelled (although approved) and will not be released.

- Closed: the RFC has been implemented and released.

5. Change management evaluation report

With the objective to assess the implementation of the Change Management Process, the Change Manager shall present a ***Change Management Evaluation Report*** to the SSN group on a year basis, with:

- The summary of the status of RFCs;

- The measurement of the efficiency and effectiveness of the CMF. This is based on key indicator (e.g. number of RFCs treated, pending, implemented, in progress, discontinued, approved and not approved);

- The measurement of the RFCs implemented for the relevant items (IFCD, SSN documentation, SSN Central System);

- Statistics on RFCs implemented per type, impacted item, etc.

6. CMF amendments and updates

This document is maintained by EMSA in cooperation with the SSN group. EMSA is responsible of maintaining this document updated and making it available in electronic format on the EMSA website. In order to maintain consistency within the technical and operational documentation and as well as result of the Change Management Evaluation Report, EMSA and Member States may propose amendments to the SSN group.

The detailed description of the amendments is noted with each new revision.