



## **TeamForge Issue Management**

15 October 2014

**EMSA CleanSeaNet**

INTENTIONALLY IN BLANK

## Document Record

Code:	EDMS:
Version:	Version 1.0
Date of version:	15 Oct 2014
Created by:	Stephanie Seddon-Brown, Sonia Antunes
Reviewed by:	Marc Journal
Owned by:	Lazaros Aichmalotidis, HoU
Confidentiality level:	For Official Use Only

## Change Record

Date	Version	Created by	Description of change
15-10-2014	1.0	SAN/SSB	First Release

**Contents**

1. Introduction and scope ..... 5

2. TeamForge set-up for tickets and relevant definitions ..... 5

3. Priority and response times ..... 8

Impact vs Urgency ..... 8

Response times based on the priority level..... 9

4. Monitoring of tickets and overall performance ..... 11

5. Issue management Workflow ..... 12

6. References ..... 20

Annex 1 – Definitions ..... 21

Annex 2 – Examples of impact and urgency of issues ..... 22

## 1.Introduction and scope

The purpose of this document is to define a procedure between EMSA and the Service Providers (SPs) to handle issues related to services related to the Earth Observation Data Centre (EO DC). The procedure aims to manage in a structured way issues related to the service including their status of implementation and follow-up until they are addressed and implemented. This could include issues related to: defects, quality, support, new features, testing and information requests. The main tool to implement the procedure is TeamForge (TF).

This procedure describes how tickets shall be opened and updated in TF by both parties (EMSA and SP) and provides indications on how to set the priority level of the issues based on the impact and urgency. The expected maximum times for acknowledging and solving the tickets will also be indicated in this document.

The project to be used is called "CleanSeaNet Services V3".

This procedure is part of the wider Quality Management Strategy defined for the Earth Observation Services at EMSA.

## 2.TeamForge set-up for tickets and relevant definitions

The tool to be used for managing issues between EMSA and the SPs for the Earth Observation Services is TF (<https://sf.emsa.europa.eu/sf/sfmain/do/home>).

Both EMSA and the SPs shall make use of TF to track relevant issues in a systematic and organised way. This method should always be used rather than the use of email. Should a relevant issue arise from an email or phone call, a ticket should be opened in TF by either party.

**Issues, Tickets or Artifacts** are synonyms for entries/items in TeamForge that require an action/response from the Service provider.

Issues are organized in "trackers", which are collections/groups of issues. We have defined three "trackers": 'Internal EMSA', 'Non Conformance' and 'Requests'

Tickets will be created in three main "trackers":

- **INTERNAL EMSA** : This will only be viewed and used by EMSA for internal tickets related to the Earth Observation services. This will not be used by the SPs.
- **NON-CONFORMANCE**: These items include the reporting of defects, quality deviations on a service/product and will also be used to escalate requests for problem management. A response from the SP's is expected to acknowledge the item and implement measures to improve/resolve the situation. This will be the tracker used to follow-up issues identified during acceptance tests in module 1.
- **REQUESTS**: These items include requests for support activities, information, new features, or for requesting testing of new products for module 2 or 3.

The three types of trackers listed above will then be divided in further subtypes or categories based on the guidelines below. The category will be implemented as a field of the ticket.

NON-CONFORMANCE can be:

- **DEFECTS:** issued when a given function is available, but does not work as expected. It can be to report an identified software bug, incorrect file format, or a missing/wrong implementation. This will usually be a software related issue.
- **QUALITY DEVIATION:** issued to identify deviations from data quality standards, incorrect provision of oil spill or vessel detection results, and incorrect polluter identification. This will usually be a service related issue.
- **PROBLEM:** issued as a follow-up to the EMSA internal problem management procedure, in order to request diagnosis/action from the SP's for a repetitive incident. This incident would have been reported via our Maritime Support Services (MSS) and then passed to the EO DC team to solve and then passed to the SP.

REQUESTS can be:

- **SUPPORT:** A service request which is an activity to be undertaken not related to any of the other categories. This could be a request for information, a test activity to phase-in a new data product or to check access to a new server, etc.
- **NEW FEATURE:** is used to define an extension or change of the system capabilities not foreseen so far. A new feature that needs to be implemented.
- **REANALYSIS:** issued when an end-user requests a re-analysis of a specific EO service, not subject to NRT constraints, with involvement of second operator opinion and extended usage of ancillary data. If reanalysis results show that an error was committed during the first analysis, the issue shall be requalified as a quality issue.

Once the ticket has been assigned its relevant category it then needs to have additional fields filled in. The fields to be used for each ticket are the following:

- Status: If the ticket is open, ongoing, resolved, or closed
- Category: whether it is a defect, quality deviation, problem, support, new feature or a reanalysis issue. (as defined above)
- Assigned to: The service provider should be entered here
- Impact: the impact of the ticket (high, medium, or low) and is described further in section 3.
- Urgency: the urgency of the ticket (high, medium, or low) and is described further in section 3.
- Priority: the combination of the impact/urgency giving it its priority in terms of being blocking, critical, major, minor, low status of the ticket as described further in section 3.
- Reported in Release: what release of the EO DC the issue is referring to.
- Environment: pre-production, production, test etc.
- To be solved by (date): the expected date when the issue will be solved meaning that necessary changes if needed have been implemented.

- Comment: any comments to be added to the ticket.
- Attachments: to add any relevant files.

Two very important fields are the 'Status' and the 'Assigned To', as they build the basis for the workflow steps in the issue management process described later in this document.

A ticket can have the following 'Status':

- OPEN: the ticket is opened by EMSA or the SP but the other party has not acknowledged the ticket.
- ONGOING: The assignee has acknowledged the ticket and work is ongoing on the ticket.
- RESOLVED: The issue has been solved by the SP when agreed changes have been implemented.
- CLOSED: the solution implemented by the SP has been tested and accepted by EMSA. Only EMSA can close a ticket.

The 'Assigned To' field will be assigned to the Service Provider responsible for solving the ticket. Each Service provider will only be able to view its own tickets in its own tracker. So there will be "NON-CONFORMANCE" and "REQUESTS" trackers for each SP.

The following are a few screenshots showing how this will be displayed in TeamForge. Note: Each SP will only see his own trackers.














Tracker Summary					
Tracker Name	Summary	Open P			
		1 - Highest	2 - High	3 - Medium	
 MDA Requests	2 Open, 0 Closed: 2 Total	0	0	2	
 MDA Non-Conformance	0 Open, 0 Closed: 0 Total	0	0	0	
 KSAT Requests	2 Open, 0 Closed: 2 Total	0	0	1	
 KSAT Non-Conformance	0 Open, 0 Closed: 0 Total	0	0	0	
 Internal EMSA	0 Open, 0 Closed: 0 Total	0	0	0	
 EUSI&DLR Optical Requests	1 Open, 0 Closed: 1 Total	0	0	1	
 EUSI&DLR Optical Non conformance	2 Open, 0 Closed: 2 Total	0	2	0	
 EGEOS Requests	0 Open, 0 Closed: 0 Total	0	0	0	
 EGEOS Non-Conformance	0 Open, 0 Closed: 0 Total	0	0	0	
 EDISOFT Requests	0 Open, 0 Closed: 0 Total	0	0	0	
 EDISOFT Non-Conformance	0 Open, 0 Closed: 0 Total	0	0	0	
 CLS Requests	1 Open, 0 Closed: 1 Total	0	0	0	
 CLS Non-Conformance	0 Open, 0 Closed: 0 Total	0	0	0	
Planning Folder Summary					

Figure 1 – Trackers in TeamForge.

CleanSeaNet Services V3 / Trackers / KSAI Non-Conformance / Submit Artifact

---

**Submit Artifact**

Title:\*

Description:\*

Status:\*  Attachment:   [Attach another file](#)

Category:\*

Assigned To:

Planning Folder: [None](#)

Reported in Release:

Environment:\*

**Priority**

Impact:\*

Urgency:\*

Priority Level - Highest = Blocking, High = Critical, Medium= Major, Low = Minor, Lowest= Low

Priority:

To be solved by:

Figure 2- a view of the ticket categories as indicated above

### 3.Priority and response times

The 'Priority' field is another very important entry, as it sets the criticality for the SP's to handle the different issues and depending on that level, different timelines are agreed between EMSA and SP's.

#### **Impact vs Urgency**

According to ITIL V3 the following definitions should be taken into account to determine the 'priority' of an ISSUE in TeamForge.

**Priority:** The priority is determined by the impact and urgency of an issue or request. Impact and Urgency are used to assign the priority.

**Impact:** A measure of the effect of an incident, problem or change on business processes. Impact is often based on *how service levels will be affected* however for the EO service this is not the case. This is more whether the incident/problem/change affects the quality of the operational service provided to the end user.

**Urgency:** A measure of how long it will be until an incident, problem or change has a significant impact on the business. For example, a high impact incident may have low urgency, if the impact will not affect the business until the end of the financial year. The urgency describes the measure of the business criticality of an issue or request or problem based on the *business needs of the customer*.

Impact and Urgency are used to assign a priority (ITIL V3). Impact and Urgency should be regarded as having an orthogonal relationship. The rational is to separate the impact



on the SLA of the system (the functionality provided) and the urgency which means how the user is affected by the issue.

Annex 2 shows a list of examples which can be regarded as guidance to identify the impact and urgency of an NON-CONFORMANCE/REQUEST.

The following matrix identifies the priority as a function of the impact and the urgency of the issue:

	Impact			
Urgency		1-High	2-Medium	3-Low
	1-High	Blocking	Critical	Major
	2-Medium	Critical	Major	Minor
	3-Low	Major	Minor	Low

In TF these Priority Categories correspond to:

Blocking = 1 – Highest

Critical = 2-High

Major = 3- Medium

Minor = 4 – Low

Low = 5- Lowest

### **Response times based on the priority level**

The 'Priority' field is filled in manually in the tracker and this is based on the following two factors:

- Time to acknowledge (TtA): The time the service provider is informed of the non-conformance/request until the service provider provides an initial investigation and analysis of the problem. Status set to 'ongoing'.
- Time to solve(TtS): The time the service provider is informed of the non-conformance/request until the moment the non-conformance/request is solved. Status set to 'Resolved'.

For each tracker that is initiated in TeamForge, the priority levels will correspond to a maximum time allowed to acknowledge and a maximum time to solve the non-conformance/request. These are the basis of the expected response from the SPs and are indicated in the table below:

<b><u>Priority Level</u></b>	<b><u>Max TtA</u></b>	<b><u>Max TtS</u></b>
<u>Blocking – 1- Highest</u>	4 working hours	2 working days for analysis and action plan, correction

<b><u>Priority Level</u></b>	<b><u>Max TtA</u></b>	<b><u>Max TtS</u></b>
		within 1 month
Critical = 2-High	4 working hours	5 working days for analysis and action plan, correction within 1 month
Major = 3- Medium	2 working days	3 months
Minor = 4 – Low	3 working days	6 months
Low = 5- Lowest	5 working days	6 months

In case of Blocking or Critical issues (Highest or High), services impacted by the non-conformance/request will be ordered from another SP until this is solved.

This works in the following way:

#### Blocking (Highest)

**TtA:** 4 working hours after a non-conformance/request is entered in TeamForge, sent by email or after a phone call. In case of phone call or email the entry should be put into TeamForge as soon as possible.

**TtS:** The aim is to solve the issue immediately. The SP is in permanent contact with EMSA during working hours or at least to provide a work around if needed. The SP has 2 working days to analyse the situation and provide an action plan and correct the non-conformance/request within 1 month.

#### Critical (High)

**TtA:** 4 working hours after an non-conformance/request is entered in TeamForge, sent by email or after a phone call. In case of phone call or email the entry should be put into TeamForge as soon as possible.

**TtS:** The aim is to solve the issue immediately. The SP is in permanent contact with EMSA during working hours or at least to provide a work around if needed. The SP has 5 working days to analyse the situation and provide an action plan and correct the non-conformance/request within 1 month.

#### Major (Medium)

TtA: 2 working days after an non-conformance/request is entered in TeamForge, sent by email or after a phone call. In case of phone call or email the entry should be put into TeamForge as soon as possible.

TtS: The aim is to solve the non-conformance/request. The SP has 3 months to implement a solution.

#### Minor (Low)

TtA: 3 working days after an non-conformance/request is entered in TeamForge, sent by email or after a phone call. In case of phone call or email the entry should be put into TeamForge as soon as possible.

TtS: The aim is to solve the non-conformance/request. The SP has 6 months to implement a solution.

#### Low (Lowest)

TtA: 5 working days after an non-conformance/request is entered in TeamForge, sent by email or after a phone call. In case of phone call or email the entry should be put into TeamForge as soon as possible.

TtS: The aim is to solve the non-conformance/request. The SP has 6 months to implement a solution.

## 4. Monitoring of tickets and overall performance

The monitoring of the response to non-conformance/requests will be monitored according to the agreed response times indicated in Section 3 of this document (reaction times and time to solve the issues). The performance will be assessed on 6 monthly basis with reports provided by the Service Providers covering data on a monthly basis. These reports can be automatically generated in TeamForge (once set-up accordingly) and should include the following statistics (all timing based on UTC) during the reporting period:

- Number of NC's:
  - open by EMSA per criticality level - These items (number and response) will be used as a further internal quality indicator for SP performance;
  - not acknowledged within max time limit;
  - not solved within max time limit -Difference between date ticket opened and date of ticket being resolved.
- Mean TtA per priority level
- Mean TtS per priority level

- Median and mean average time of TtA and TtS shall be provided, grouped per criticality, over the reporting period.
- List and statistics of all NCs and REQUESTS which are not closed, grouped by criticality.

## 5. Issue management Workflow

The workflow to handle tickets when EMSA opens a ticket can be seen in the diagram in Figure 3. The actions to be performed in each step are detailed in the following table.

After each step, an automatic notification email is triggered to all users in the ticket except the person who has made the change/update.

When EMSA opens a ticket the following table of actions apply:

STEP	Action	EMSA	SP
1	<u>Open new ticket:</u> EMSA opens the ticket in TF and selects/enters <ul style="list-style-type: none"> <li>• <i>Description</i><sup>(*)</sup><sup>1</sup></li> <li>• <i>Category</i><sup>(*)</sup></li> <li>• <i>Impact &amp; Urgency &amp; Priority</i><sup>(*)</sup></li> <li>• the EODC release and environment where the ISSUE has been identified by using the fields <i>Reported in Release</i><sup>(*)</sup> and <i>Environment</i><sup>(*)</sup></li> <li>• <i>Attachments</i></li> </ul> <i>Status</i> is set to Open <i>Assigned To</i> is set to SP	X	
2	<u>More info needed?:</u> SP checks if more information is needed to understand the issue.  Note that information can be requested at any time of the process, if needed to support in solving the issue. At this stage we refer to information to identify/understand the issue.  YES: Go to step 3 NO: Go to step 5		X
3	<u>Request info:</u> In case more information is needed, SP enters a Comment describing the need.  <i>Status</i> remains Open <i>Assigned To</i> is set to EMSA		X

<sup>1</sup> Fields marked with (\*) are mandatory

STEP	Action	EMSA	SP
4	<p><u>Provide further info</u>: EMSA provides additional information, if available.</p> <p><i>Status</i> remains Open</p> <p><i>Assigned To</i> is set to SP</p>	X	
5	<p><u>Category and Priority Level ok?</u>: SP checks the category and Priority level of the issue, to see if they agree or if some change might need to be discussed with EMSA.</p> <p>YES: Go to step 6</p> <p>NO: Go to step 7</p>		X
6	<p><u>Acknowledge ticket</u>: At this stage, the SP's have agreed on the classification of the issue and are ready to start working on it.</p> <p>SP's shall provide an initial analysis of the issue.</p> <p><i>Status</i> is changed to Ongoing</p> <p><i>Assigned To</i> remains set to SP</p> <p>Go to Step 9.</p>		X
7	<p><u>Request ticket reassessment</u>: In case the SP disagrees with the category and/or priority level, it is possible to ask EMSA to reassess the ticket classification.</p> <p><i>Status</i> remains Ongoing</p> <p><i>Assigned To</i> is set to EMSA</p>		X
8	<p><u>Ticket reassessment</u>: EMSA performs a re-analysis and, eventually, changes the issue classification. EMSA might decide to keep the original classification.</p> <p><i>Status</i> remains Ongoing</p> <p><i>Assigned To</i> is set to SP</p> <p>Go to Step 5.</p>	X	
9	<p><u>Handle ticket</u>: The SP works on solving the issue. An estimation of the time needed to solve is provided in the field <i>To be solved by (date)</i>. The way forward is described in the <i>Comment</i> field.</p> <p><i>Status</i> remains Ongoing</p> <p><i>Assigned To</i> remains set to SP</p>		X
10	<p><u>Propose solution</u>: Once the SP finds a solution for the issue, this is to be communicated to EMSA for approval. The SP also indicates the date to implement the change, if applicable. These two items shall be described using the <i>Comment</i> field.</p>		X

STEP	Action	EMSA	SP
	<i>Status</i> remains Ongoing <i>Assigned To</i> is set to EMSA		
11	<u>Solution ok?</u> : EMSA evaluates the proposed solution and the proposed date of implementation, if applicable.  YES: Go to step 13 NO: Go to step 12	X	
12	<u>Solution rejected</u> : In case the resolution proposed by the SP is not considered acceptable, or the date of implementation is not adequate, EMSA indicates this in the <i>Comment</i> field and assigns the ticket back to the SP, for a new proposal.  <i>Status</i> remains Ongoing <i>Assigned To</i> is set to SP  Go back to step 9	X	
13	<u>Solution accepted</u> : In the <i>Comment</i> field, EMSA accepts the proposed solution and agrees with the implementation date, if applicable.  <i>Status</i> remains Ongoing. <i>Assigned To</i> is set to SP	X	
14	<u>Solution Implemented</u> : Required changes in the service chain and/or in the procedures are implemented by the SP, if applicable.  <i>Status</i> is set to Resolved <i>Assigned To</i> is set to EMSA		X
15	<u>Issue solved?</u> : EMSA checks/tests if the implemented solution has solved the reported issue.  YES: Go to step 16 NO: Go to step 9	X	
16	<u>Close issue</u> : EMSA closes the issue.  <i>Status</i> is set to Closed <i>Assigned To</i> remains set to EMSA	X	

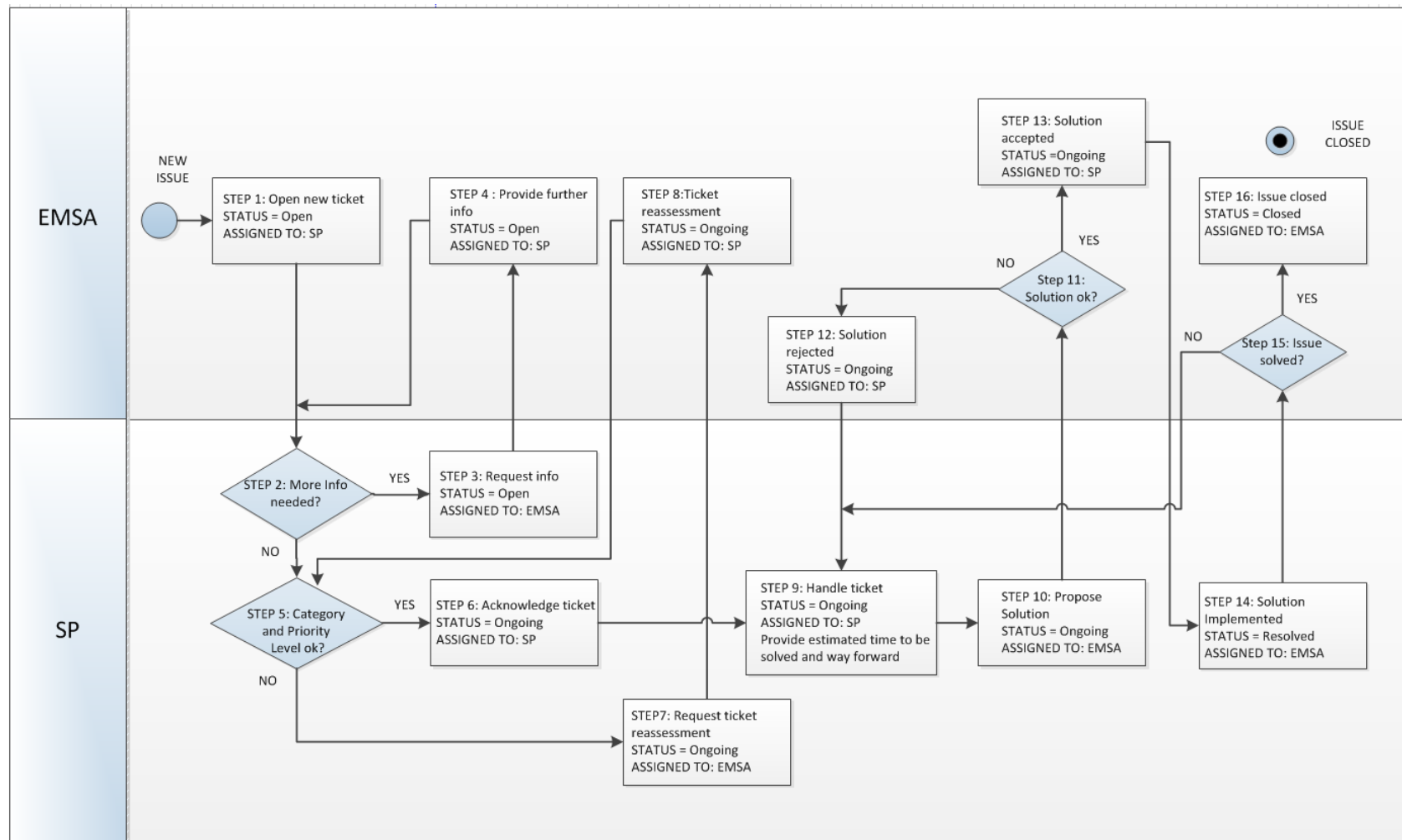


Figure 3: Issue Handling Workflow when EMSA opens a ticket

The workflow to handle tickets when the SP opens a ticket can be seen in the diagram in Figure 4. The actions to be performed in each step are detailed in the following table.

After each step, an automatic notification email is triggered to all users in the ticket except the person who has made the change/update.

When the Service Provider opens a ticket the following actions apply:

STEP	Action	EMSA	SP
1	<u>Open new ticket</u> : SP opens the ticket in TF and selects/enters <ul style="list-style-type: none"> <li>• <i>Description</i><sup>(*)2</sup></li> <li>• <i>Category</i><sup>(*)</sup></li> <li>• <i>Impact &amp; Urgency &amp; Priority</i><sup>(*)</sup></li> <li>• the EODC release and environment where the ISSUE has been identified by using the fields <i>Reported in Release</i><sup>(*)</sup> and <i>Environment</i><sup>(*)</sup></li> <li>• <i>Attachments</i></li> </ul> <i>Status</i> is set to Open <i>Assigned To</i> is set to EMSA		X
2	<u>More Info needed?</u> : EMSA checks if more information is needed to understand the issue.  Note that information can be requested at any time of the process, if needed to support in solving the issue. At this stage we refer to information to identify/understand the issue.  YES: Go to step 3 NO: Go to step 5	X	
3	<u>Request Info</u> : In case more information is needed, EMSA enters a Comment describing the need.  <i>Status</i> remains Open <i>Assigned To</i> is set to SP	X	
4	<u>Provide further info</u> : SP provides more information, if available.  <i>Status</i> remains Open <i>Assigned To</i> is set to EMSA		X
5	<u>Category and Priority Level ok?</u> : EMSA checks the Category and Priority Level of the issue, to see if they agree or if some change might need to be discussed with SP.  YES: Go to step 6	X	

<sup>2</sup> Fields marked with (\*) are mandatory



STEP	Action	EMSA	SP
	NO: Go to step 7		
6	<p><u>Acknowledge ticket</u>: At this stage, EMSA agrees on the classification of the issue and is ready to start working on it.</p> <p>EMSA or the SP may provide an initial analysis of the issue.</p> <p><i>Status</i> is changed to Ongoing</p> <p><i>Assigned To</i> is set to EMSA who will be doing the work.</p> <p>Go to Step 8.</p>	X	
7	<p><u>Request ticket reassessment</u>: In case EMSA disagrees with the Category and/or Priority Level, EMSA can change the ticket classification.</p> <p><i>Status</i> remains Ongoing</p> <p><i>Assigned To</i> is set to EMSA</p>	X	
8	<p><u>Handle ticket</u>: EMSA works on solving the issue. An estimation of the time needed to solve is provided in the field To be solved by (date). The way forward is described in the Comment field.</p> <p><i>Status</i> remains Ongoing</p> <p><i>Assigned To</i> is set to EMSA</p>	X	
9	<p><u>Propose solution</u>: Once EMSA finds a solution for the issue and communicates it to the SP for agreement, as well as the indication of a time to implement the change, if applicable. This shall be described using the <i>Comment</i> field.</p> <p><i>Status</i> remains Ongoing</p> <p><i>Assigned To</i> is set to SP</p>	X	
10	<p><u>Solution ok?</u>: SP evaluates the proposed solution and the date of implementation.</p> <p>If rejected go to step 11, if accepted go to step 12.</p>		X
11	<p><u>Solution rejected</u>: In case the resolution proposed by EMSA is not considered acceptable, or the date of implementation is not adequate, the SP indicates this in the <i>Comment</i> field and assigns the ticket back to EMSA, for a new proposal.</p> <p><i>Status</i> remains Ongoing</p> <p><i>Assigned To</i> is set to EMSA</p> <p>Go back to step 8</p>		X
12	<p><u>Solution accepted</u>: In the <i>Comment</i> field, SP accepts the proposed solution and agrees with the implementation date,</p>		X

STEP	Action	EMSA	SP
	if applicable. <i>Status</i> remains Ongoing. <i>Assigned To</i> is set to EMSA		
13	<u>Solution Implemented</u> : Required changes are implemented or procedures changed by EMSA. <i>Status</i> is set to Resolved <i>Assigned To</i> is set to SP	X	
14	<u>Issue solved?</u> : SP checks/tests if the implemented solution has solved the reported issue. YES: Go to step 15 NO: Go to step 8		X
15	<u>Close issue</u> : SP closes the issue. <i>Status</i> is set to Closed <i>Assigned To</i> remains set to SP		X

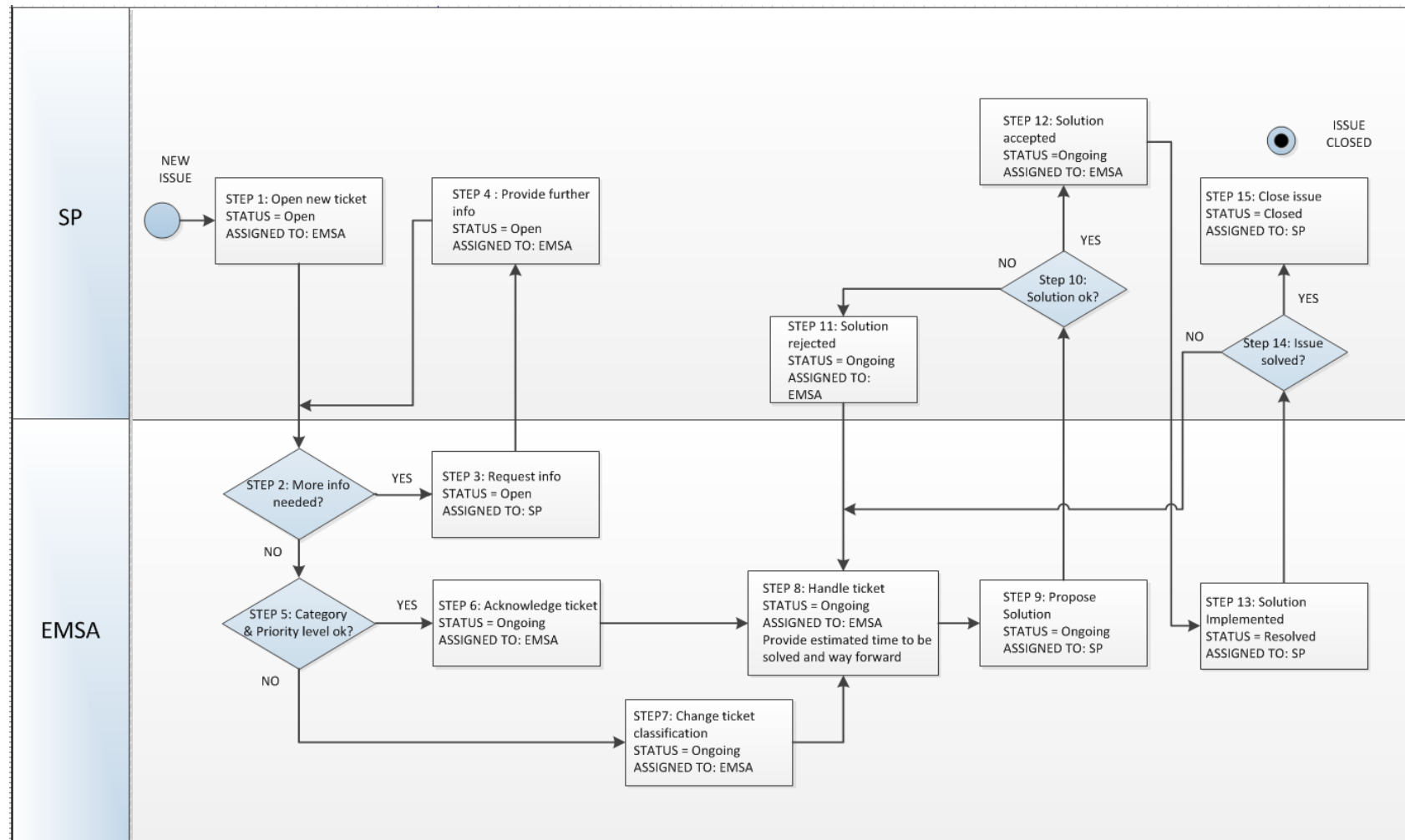


Figure 4 - Issue Handling Workflow when SP opens a ticket

## 6.References

Presentation at Kick-off meeting, September 2014, Project Management presentation given by EMSA, Slides 30-36.

Tender specifications attached to the Invitation to Tender EMSA/OP/15/2013 concerning contract for oil spill monitoring and vessel detection services for EMSA CleanSeaNet

TeamForge User Manual: <http://www.collab.net/community/teamforge>

Problem Management Procedure: EMSA internal wiki. Version 2.3 June 2014.

## Annex 1 – Definitions

The following are some additional definitions from ITIL v3 to clarify terms used in this document:

### **Business Process**

A Process that is owned and carried out by the Business. A Business Process contributes to the delivery of a product or Service to a Business Customer. For example, a retailer may have a purchasing process that helps to deliver Services to its Business Customers. Many Business Processes rely on IT Services. At EMSA this is mainly to do with the core business of providing the service to MS users.

### **Category**

A named group of things that have something in common. Categories are used to group similar things together.

### **Impact**

A measure of the effect of an issue on the business process or service EMSA provides to the MS users.

### **Priority**

A category used to identify the relative importance/criticality of an incident, problem or change. Priority is based on impact and urgency, and is used to identify required times for actions to be taken.

### **Problem**

The unknown cause of one or more incidents.

### **Problem Management**

The process responsible for managing the lifecycle of all problems. The primary objective of problem management is to prevent incidents from happening and to minimize the impact of incidents that cannot be prevented.

### **Procedure**

A document containing steps that specify how to achieve an activity. Procedures are defined as part of processes.

### **Urgency**

A measure of how long it will be until an issue has a significant impact on the business or service to MS users. For example, a high impact issue may have a low urgency, if the impact will not affect the service until the end of the financial year.

### **Workaround**

Reducing or eliminating the impact of an incident or problem for which a full resolution is not yet available.

## Annex 2 – Examples of impact and urgency of issues

The examples below do not provide an exhaustive nor a complete list and should be regarded as guidance to identify the impact and urgency of a non-conformance or request.

### Impact

#### High

Issues with operational consequences at end-user level, e.g.:

- End user frequently has no access to main service results:
  - Satellite image not available in the web interface;
  - Oil spill layer OR vessel detection layer not available in the web interface;
  - Alert content incorrect or missing, leading to incorrect decisions by the end users.
- End user has no pollution identification, or incorrect information on a systematic basis.
- Quality issues, like geolocation deviations, data quality deviations, or late deliveries affect systematically the usability of the results by the end-user.
- Quality information not provided on a frequent basis.

#### Medium

- End user frequently has no access to ancillary service results:
  - SAR wind and swell are systematically unavailable;
  - Meteorological data not available in the alert report
- Issues listed in the 'High' classification occur for a specific service.
- Incorrect analysis leads to wrong provision of results (example: sandbank identified as oil spill, platform reported as vessel in pollution identification table)

#### Low

- End user has no access to ancillary results for a specific service.

### Urgency

#### High

- The operational service is disrupted for all users in the Coastal States preventing the user to operationally use CleanSeaNet in its activities.
- Issue strongly affects a planned operation/validation exercise with an approaching date.
- Issue strongly affects an ongoing emergency activity with the end-users.
- Issue hampers an ongoing planning process.
- Issue prevents systematically the correct computation of the Journaling information.

Medium

- End users are hampered by the issue to undertake their operational tasks;
- Issue can hamper future planning processes;
- Issue prevents the correct computation of the Journaling information for some individual services.

Low

- Issue has no or very limited impact on business;
- The end user is not affected or hampered by the issue.