

Appendix V

Earth Observation services

Service Level Agreement

for Oil Spill Thickness and Volume estimation

(OSV) services

Version: 1.0

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Acronyms

ADS: Activity Detection Service	IPR: Intellectual Property Rights
AO: Authorizing Officer	JMS: Java Message Service
AOI: Area of Interest	JOU: Journaling (EODC sub-module)
API: Application Programming Interface	Lat: Latitude
APT: RS-2 Acquisition Planning tool	Lon: Longitude
ATBD: Algorithm Theoretical Basis Document	KML: Keyhole Markup Language
AWG: Architectural Working Group	LRIT: Long Range Identification and Tracking
BCF: Business Continuity Facilities	MAOC(N): Maritime Analysis and Operation
BCSEA: Black and Caspian Sea Project (EMSA Project)	Centre-Narcotics
BP: Basic Products	MS: Member State
CDS: Change Detection Service	MR: Medium Resolution
CET: Central European Time	N/A: Not Applicable
CMS: Copernicus Maritime Surveillance (EMSA Service)	NCA: National Competent Authority
CSN: CleanSeaNet (EMSA Service)	NRT: Near Real Time
CSW: Catalogue Service Interface	OCT: Overseas Community Territories
CV: Curriculum Vitae	OGC: Open Geospatial Consortium
DEM: Digital Elevation Model	OSV: Oil Spill Volume
DG DIGIT: Directorate General Informatics	PO: Project Officer
DoH: Declaration of Honour	POC: Point of Contact
DTO: Data Take Opportunity	QI: Quality Indicators
EC: European Commission	QUA: Quality Report
EDES: Early Detection and Exclusion System	QNO: Quality Notification
EFS: Enriched Feature Service	QRT: Quasi-Real-Time
EICD: External Interface Control Document	RCS: Radar Cross Section
EFCA: European Fisheries Control Agency	RHIB: Rigid-Hull inflatable boat
EMSA: European Maritime Safety Agency	RIB: Rubber Inflatable boat
ENC: Electronic Nautical Chart	RS-2: Radarsat-2
EDRS: European Data Relay Satellite	SAR: Synthetic Aperture Radar
EO: Earth Observation	SC: Specific Contract
EODC: Earth Observation Data Centre	SEG: SSN Ecosystem GUI (EMSA application)
EOS: Earth Observation Service	SG: Service Groups
EU: European Union	SLA: Service Level Agreement
ESA: European Space Agency	SR: Service Request
EVS: Enriched Vessel Service	SSN: SafeSeaNet (EMSA application)
FDS: Feature Detection Service	ST: Service Type
FO: Financial Officer	SWW: SAR Wind and Wave
FR: Full Resolution	TDD: Technical Design Document
FRONTEX: European Border and Coast Guard Agency	TSX: TerraSAR-X
FTP: File Transfer Protocol	UK: United Kingdom
FWC: Framework Contract	UML: Unified Modelling Language
GIS: Geographical Information System	UR: User Request
GS: Ground Station	UTM: Universe Transfer Mercator
GSD: Ground Spatial Distance	UWI: LRIT User Web Interface
GUI: Graphical User Interface	VAP: Value Added Products
HMA: Heterogeneous Mission Accessibility	VAT: value added tax
HR: High Resolution	VDS: Vessel Detection Service
ICD: Interfaces Control Document	VHR: Very High Resolution
ID: Identification	WCS: Web Coverage Service
IMO: International Maritime Organisation	

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1 Scope

The purpose of this document is to define a procedure between EMSA and the Contractor to handle issues related to the delivery of Oil Spill Thickness and Volume estimation (OSV) services.

The procedure aims to manage, in a structured way, topics related to the provision of operational services, including issues¹:

- **Request** is defined by a Request from EMSA/Contractor for information, advice, support, access to a service or provision of Quality Control Products.
- **Event** is defined as the detectable occurrence of a change of state and has significance for the management of the delivery of the service.
- **Incident** is defined as an unplanned interruption or reduction in the quality of a service.
- **Problem** is the root cause of one or more incidents.

This procedure describes how issues shall be managed by both parties (EMSA and Contractor) and provides instructions on how to set the prioritisation of issues based on their impact and urgency. The expected maximum time for acknowledging and solving the issues is indicated in this document.

¹ Following ITIL framework best practices

2 Service Level Agreement Tools and Contact Points

2.1 EMSA collaborative tool

EMSA is responsible for providing access to a collaborative tool and to support the implementation of this procedure. The collaborative tool currently in use is JIRA for contract related issues and Confluence for contract related documentation management and archiving.

Link to EMSA's collaborative tool will be provided at Kick Off Meeting (KoM)

2.2 POCs

The relevant contact points, including email and phone number, shall be configured by EMSA in EMSA's Collaborative tool (Confluence).

2.2.1 EMSA POCs

EMSA is responsible for providing EMSA's relevant points of contact at the kick-off meeting. Afterwards this information will be configured in Confluence as per point 2.2.

Link to EMSA's collaborative tool will be provided at KoM

2.2.2 Contractor's unique POC:

Contractor shall provide a unique point of contact (email; phone number) for all activities listed below:

- EO Service Desk: for Planning and Ordering
- Financial Report and Invoice: for closing financial report and delivery of Invoices;
- Project Manager: POC for managing the activities under the contract.

Link to EMSA's collaborative tool will be provided at KoM

Regarding updates to the Contractor's Point of Contact (POC): the Contractor is required to open a JIRA issue and escalate it to EMSA for requesting updates to the Contractor's POC details. This request shall be made at least two weeks prior to any changes to the Contractor POC details.

3 Issue status

In accordance with its evolution, the issues created in EMSA Collaborative Tool (JIRA) shall have one of the following status:

- Open: initial status of an Issue. Also reflects issues that are being analysed and information/data/product is being produced by EMSA/Contractor;
- Pending: the issue is waiting for information or for data from another EMSA team other than the EMSA EO team. This status can only be set by EMSA;
- Ready for Review: this status indicates that the issue is proposed for closure by the Contractor- only to be used when requested information/data was already provided to EMSA - the JIRA timer for Solve is paused with this Status;
- Cancelled: final state, means that the issue is withdrawn. This status can only be set by EMSA in all issues and by the Contractor on their own Service Request and actions- the JIRA timer for Solve is stopped with this Status;
- Closed: final state, means that the issue is closed. This status can only be set by EMSA in all issues and by the Contractor on their own Service Request- the JIRA timer for Solve is stopped with this Status.

4 Issue Priority

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

Table 1- Issue Priority.

	Impact			
Urgency		1- High	2- Medium	3- Low
	1- High	Blocker	Critical	Major
	2- Medium	Critical	Major	Low
	3- Low	Major	Low	Lowest

The following definitions are to be taken into consideration:

- **Impact:**
 - High – Business stopped. Essential services are unavailable;
 - Medium – Critical Business Impact. The service can be provided with limited functionalities (e.g. delay on delivery of data; lower quality parameter);
 - Low – Business Impact. A non-critical functionality or service is not available (e.g. persistent error in estimation of an attribute with low impact to users).

5 SLA

The Contractor shall meet the service level as defined in Table 2.

Table 2- Service Level Agreement

Priority of the Issue	Time to acknowledge and provide a preliminary analysis	Time to Solve
Blocker	1 hour	12 hours
Critical	1 hour	24 hours
Major	1 working day	2 working days
Low; Lowest	2 working days	5 working days

Where:

- **Time to acknowledge** – the time from when the Contractor is informed of the non-conformance, until the Contractor provides an initial investigation and analysis of the issue;
- **Time to solve** – the time from when the Contractor is informed of the issue, until the moment the issue is solved and the service is available again to the end user. Currently, JIRA already calculates the time to solve.
- **Priority-** as defined in section 4.

EMSA is solely responsible for classifying the issues (priority, issue type, etc.) and may at any moment update the priority. In case the Contractor disagrees with EMSA's classification, the Contractor can propose a different classification within the acknowledge time. In case of conflict, EMSA has the right to take the final decision.

The SLA reported in this section is applicable to all the types of issues, under Module 1.

6 Request

Request is defined by a request for information, advice, support, or access to a service from EMSA or from the Contractor, and may refer to:

- Requests for support from:
 - EMSA to the Contractor (e.g.: technical expertise, clarifications);
 - the Contractor to EMSA (e.g.: clarifications);

Requests for the following services from EMSA to the Contractor:

- Requests for feasibility;
- Requests related with Financial Reports and Invoicing;
- Requests for reprocessing;
- Requests for reanalysis;
- Requests for database of features and objects;
- Requests for Quality Control Report;
- Requests for Quality Control Products.

6.1 Request from EMSA to the Contractor for support/advice

The following diagram displays the workflow for EMSA placing requests to the Contractor.

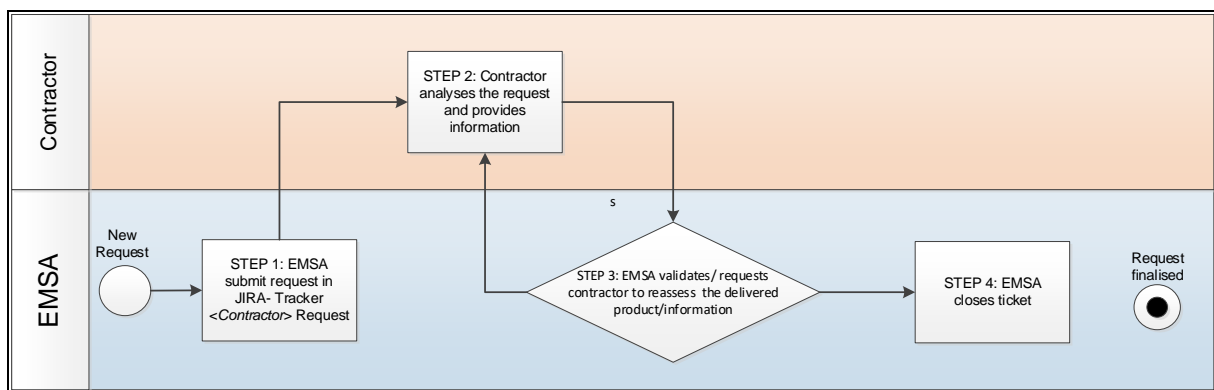


Figure 1 Workflow of requests from EMSA to the Contractor.

The following table defines the procedures for EMSA to request support from the Contractor.

Step	Description	Responsible	Tool
STEP 1	<p>EMSA submits a request in JIRA:</p> <p>Project: <Contractor Project></p> <p>Issue Type: Request</p> <p>Summary: <short description of the request></p> <p>Sub-Type: Request from EMSA</p> <p>Description: <longer description for the request></p> <p>Priority: <defined by EMSA according to the SLA></p> <p>Assignee: < Contractor></p>	EMSA	JIRA
STEP 2	<p>The Contractor analyses the request.</p> <p>In case of clarification, the Contractor shall reassign the Issue to EMSA and place questions or needed clarifications in the comment section. This shall be done by changing:</p> <ul style="list-style-type: none"> - Comment: < insert a comment> - Assignee: <EMSA- select the initiator of the Issue in EMSA or, in alternative, select the Contract Manager> <p>Else, the Contractor uploads the requested information in JIRA and:</p> <ul style="list-style-type: none"> - Comment: < insert a comment> - Attachment: attach a file - Status: Ready for Review - Assignee: <EMSA- select the initiator of the Issue in EMSA or, in alternative, select the Contract Manager> 	Contractor / EMSA	
STEP 3	<p>EMSA validates the provided information.</p> <p>If the information is validated, move to STEP 4.</p> <p>If the provided information does not fulfil the requested information, then EMSA shall update JIRA Issue as follows:</p> <ul style="list-style-type: none"> - Status: Open 	EMSA	

	<ul style="list-style-type: none"> - Comment: <add a comment on the identified issue> <p>The process workflow returns to STEP 2.</p>		
STEP 4	<p>Actions in JIRA Issue:</p> <ul style="list-style-type: none"> - Status: Closed - Comment <if applicable, insert a comment> 	EMSA	

6.2 Request for support from the Contractor to EMSA

The following diagram displays the workflow for the Contractor placing requests to EMSA.

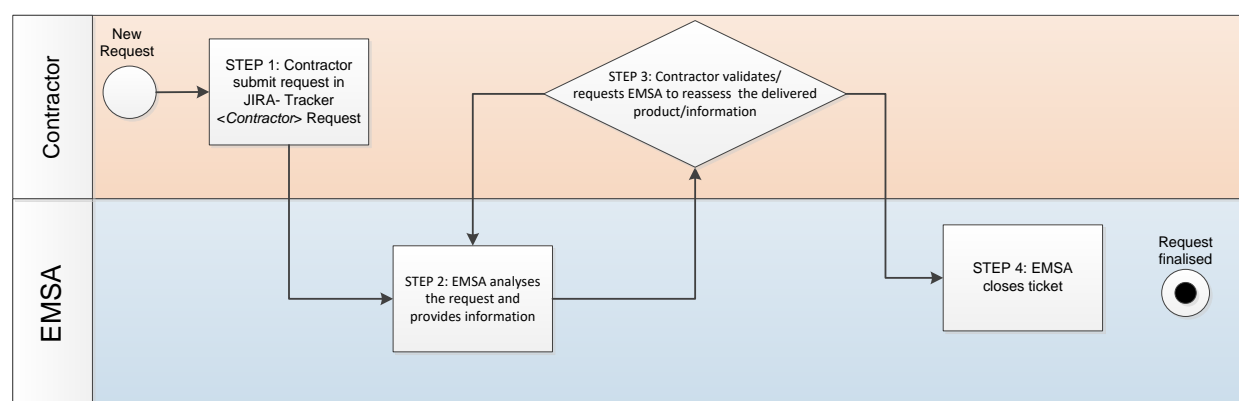


Figure 2- Workflow for requests for support from the Contractor to EMSA.

The following table defines the procedures for the Contractor to request support or clarification from EMSA.

Step	Description	Responsible	Tool
STEP 1	<p>Contractor submits a request in JIRA:</p> <p>Project: <Contractor Project></p> <p>Issue type: Request</p> <p>Summary: <short description of the request></p> <p>Sub-Type: Request from the Contractor</p> <p>Description: <insert request text>.</p> <p>Status: Open</p> <p>Priority: Major</p> <p>Assignee: <EMSA- select the most appropriate person in EMSA or, in alternative, select the Contract Manager></p>	Contractor	JIRA

STEP 2	<p>EMSA analyse the request.</p> <ul style="list-style-type: none"> - Comment: <if applicable, insert a comment> - Priority: to be assessed by EMSA in accordance with section 4. <p>If the reply is pending action from another actor (e.g. other EMSA unit/section or external entity):</p> <ul style="list-style-type: none"> - Status: Pending. <p>After the reply from another actor, or if no action is requested from another actor:</p> <p>EMSA reply to the Issue</p> <ul style="list-style-type: none"> - Assignee: <Contractor> 	EMSA	
STEP 3	<p>If no more information is needed,</p> <ul style="list-style-type: none"> - Assignee: < EMSA- same person> - Comment: <if applicable, insert a comment> - Status: Ready for Review <p>Move to STEP 4.</p> <p>If more information is needed:</p> <ul style="list-style-type: none"> - Assignee: < EMSA- same person > - Status: Open. - Comment: <request for information text>. <p>The process workflow returns to STEP 2.</p>	Contractor	
STEP 4	<p>Actions in JIRA Issue:</p> <ul style="list-style-type: none"> - Status: Closed. - Comment <if applicable, insert a comment> 	EMSA	

6.3 Request from EMSA to the Contractor for POC update

The following diagram displays the workflow for EMSA to inform the Contractor of an update of the POC.

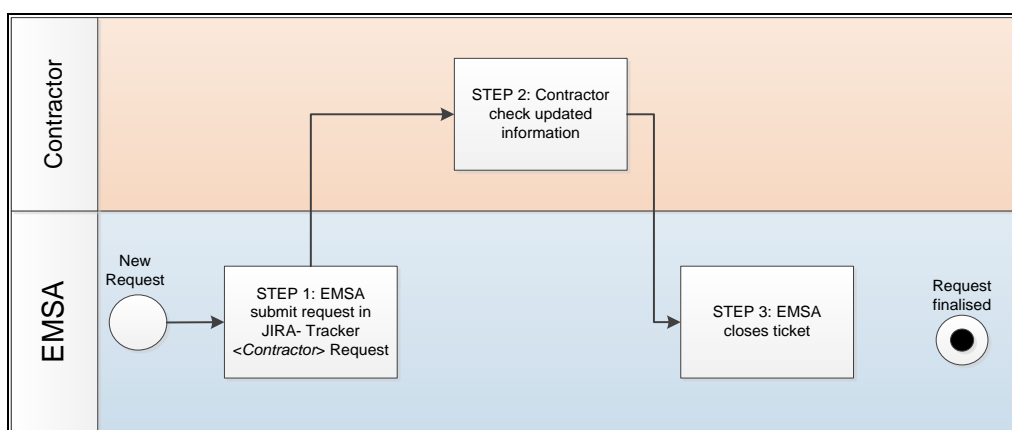


Figure 3- Workflow of requests for update of POC from EMSA to the Contractor.

The following table defines the procedure for EMSA to inform the Contractor of EMSA's POC update.

Step	Description	Responsible	Tool
STEP 1	EMSA submits a request in JIRA: Project: <Contractor Project> Issue type: Request Summary: <short description of the request> Sub-type: Contact Points: Request from EMSA to the Contractor Description: <insert text and link to Confluence contact points document updated (see section 2.2.1)> Status: Open Priority: <defined in accordance with the SLA> Assignee: <Contractor>	EMSA	JIRA
STEP 2	The Contractor checks updated information <ul style="list-style-type: none"> - Status: Ready for Review - Assignee: <EMSA- select the initiator of the Issue in EMSA or, in alternative, select the Contract Manager> 	Contractor	
STEP 3	Actions in JIRA Issue: <ul style="list-style-type: none"> - Status: Closed. - Comment < if applicable, insert a comment> 	EMSA	

6.4 Request from the Contractor to EMSA for points of contact update

The scope of this procedure refers only to change of phone number(s) or email(s). Change of team members impacting the Tender Specification Selection Criteria, is outside the scope of this procedure.

The following diagram displays the workflow for the Contractor to request EMSA to accept updates of the POC.

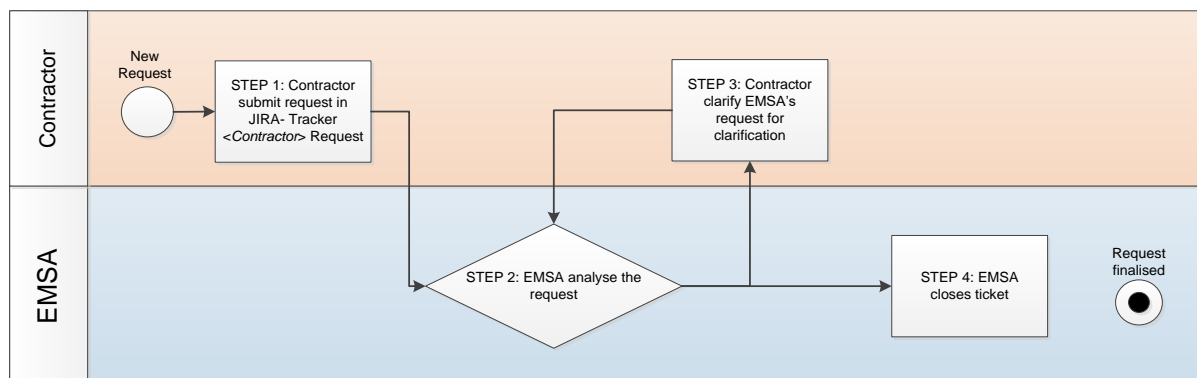


Figure 4- Workflow of requests for update of point of contact from the Contractor to EMSA.

The following table defines the procedures for Contractors to request for POC update

Step	Description	Responsible	Tool
STEP 1	<p>The Contractor submits a request in JIRA:</p> <p>Project: <Contractor Project></p> <p>Issue type: Request</p> <p>Summary: Request for Contact update <short description></p> <p>Sub-type: Contact Points: Request from the Contractor to EMSA</p> <p>Description: <longer description including the update of contact points></p> <p>Priority: Major</p> <p>Assignee: <EMSA- select the Contract Manager></p> <p>Attachment: Proposed update of Excel file that will replace the current Contact Points.</p>	Contractor	JIRA
STEP 2	<p>EMSA analyses the proposed change.</p> <p>If the request is accepted:</p>	EMSA	

	<ul style="list-style-type: none"> - Comment: <if applicable, insert a comment> - Assignee: <Contractor> <p>Go to STEP 4</p> <p>If the request needs clarification:</p> <ul style="list-style-type: none"> - Comment: <if applicable, insert a comment> - Assignee: <Contractor> <p>Go to STEP 3</p>		
STEP 3	<p>In case of clarification:</p> <ul style="list-style-type: none"> - Comment: <if applicable, insert a comment> - Assignee: <EMSA- same person> <p>Go to STEP 2</p>	Contractor	
STEP 4	<p>EMSA validates the information in Excel file in JIRA Document and if valid, move to STEP 5.</p> <p>If the provided information is not accepted, then EMSA shall update JIRA Issue as follows:</p> <ul style="list-style-type: none"> - Status: Open. - Comment: <add a comment on the identified issues/problems>. <p>EMSA shall also remove the uploaded Excel file with updated contact points.</p> <p>And the process returns to STEP 2.</p>	EMSA	
STEP 5	<p>Actions in JIRA issue:</p> <ul style="list-style-type: none"> - Status: Closed. - Comment <if applicable, insert a comment> 	EMSA	

6.5 Request related with Financial Reports and Invoicing

All requests related with Financial Reports and Invoicing shall be placed by email, between EMSA's and Contractor's POC (section **Error! Reference source not found.**).

6.6 Request from EMSA to the Contractor for reprocessing services

In accordance with requirement EOS-CON-0051 of Appendix II:

"In case the OSV products present errors associated with the Contractor's processing chain, and if re-processing could increase the quality, EMSA may request the Contractor to re-process and re-deliver the products. This delivery of OSV products shall be done with no-extra costs to EMSA."

The following diagram displays the workflow for EMSA to request the Contractor to reprocess EO data.

Step	Description	Responsible	Tool
	<ul style="list-style-type: none"> - Status: Ready for Review - Description: longer description for the reply, and full path to the reprocessed package in FTP. <p>Go to STEP 4</p>		
STEP 3	<p>In case of clarification, EMSA shall</p> <ul style="list-style-type: none"> - Assignee: <Contractor> - Description: longer description for the clarification reply. - Go to STEP 2. 	EMSA	JIRA
STEP 4	<p>EMSA validates the product. If the product is accepted, move to STEP 5.</p> <p>If the product is not accepted, then EMSA shall update JIRA Issue as follows:</p> <ul style="list-style-type: none"> - Status: Open. - Comment: <add a comment on the identified issues/problems>. - Assignee: <Contractor>. - Go to STEP 2. 	EMSA	
STEP 5	<p>Actions in JIRA Issue:</p> <ul style="list-style-type: none"> - Status: Closed; - Comment <if applicable, insert a comment> 	EMSA	

6.7 Request from EMSA to the Contractor for reanalysis

In accordance with requirement EOS-CON-054 of Appendix II:

“Under its quality control activities EMSA may request the Contractor to perform a re-analysis of a service that has already been delivered to EMSA. The re-analysis shall be delivered to EMSA in the same formats as the initial request. This delivery of OSV products shall be done with no-extra costs to EMSA.”

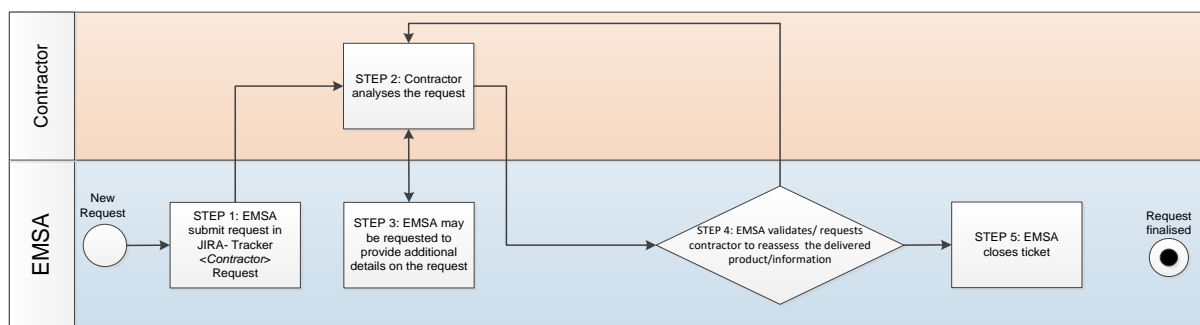


Figure 6- Workflow of requests for EMSA to request reanalysis to the Contractor.

The following table defines the procedures for reanalysis requests by EMSA.

Step	Description	Responsible	Tool
STEP 1	<p>EMSA submits a request in JIRA:</p> <p>Project: <Contractor Project></p> <p>Issue type: Request</p> <p>Summary: [<EO Service(s)>]: <VAP(s) for reanalysis>: <short description></p> <p>Sub-Type: Request for reanalysis</p> <p>Description: <longer description for the request>.</p> <p>Priority: <defined by EMSA according to priorities and relevancy of the request></p> <p>Assignee: < Contractor></p>	EMSA	JIRA
STEP 2	<p>Contractor analyse the request.</p> <p>If the request is accepted:</p> <ul style="list-style-type: none"> - Comment: <if applicable, insert a comment>; - Go to STEP 4. <p>In case of clarification, Contractor shall reassign the Issue and place questions or needed clarifications in the comment. This shall be done by changing:</p> <ul style="list-style-type: none"> - Status: Open - Assignee: EMSA - Go to STEP 3. 	Contractor	
STEP 3	<p>In case of clarification, EMSA shall</p> <ul style="list-style-type: none"> - Assignee: <Contractor> 	EMSA	

	<ul style="list-style-type: none"> - Description: longer description for the clarification reply; - Go to STEP 2. 		
STEP 4	<p>EMSA validates the product. If the product is accepted, move to STEP 5.</p> <p>If the product is not accepted, then EMSA shall update JIRA Issue as follows:</p> <ul style="list-style-type: none"> - Status: Open; - Comment: <add a comment on the identified issues/problems>; - Assignee: <Contractor>; - Go to STEP 2. 	EMSA	
STEP 5	<p>Actions in JIRA Issue:</p> <ul style="list-style-type: none"> - Status: Closed; - Comment < if applicable, insert a comment> 	EMSA	

6.8 Request from EMSA to the Contractor for Quality Reports

In accordance with requirement EOS-CON-0050 of Appendix II:

“Following EMSA request, the Contractor shall deliver a Quality Report and Assessment of the delivered OSV Services in the scope of EMSA validation campaigns. This report shall also include recommendations for improvements.

The following diagram displays the workflow for EMSA to request Quality Reports.

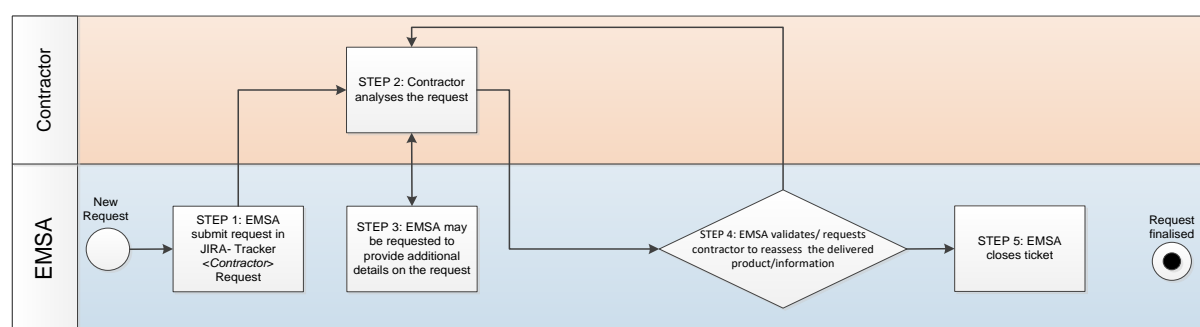


Figure 7- Workflow of requests for EMSA to request Quality Reports.

The following table defines the procedures for EMSA to request Quality Reports from the Contractor.

Step	Description	Responsible	Tool
STEP 1	<p>EMSA submits a request in JIRA:</p> <ul style="list-style-type: none"> - Project: <Contractor Project> - Issue type: Request - Summary: [<EO Service(s)>]: <short description of the request> - Sub-Type: Request of Quality Report - Description: <Longer description for the request> - Priority: <defined by EMSA according to the SLA> - Assignee: <Contractor> 	EMSA	JIRA
STEP 2	<p>In case of clarification, Contractor shall</p> <ul style="list-style-type: none"> - Assignee: <EMSA>; - Description: longer description for the clarification; - Go to STEP 3. <p>If no Clarification is needed, then:</p> <ul style="list-style-type: none"> - Assignee: <EMSA- select the initiator of the Issue in EMSA or, in alternative, select the Contract Manager> - Status: Ready for Review - Comment: longer description for the reply; - Attachments: if needed, files shall be attached; - Go to STEP 4. 	Contractor	
STEP 3	<p>In case of clarification, EMSA shall:</p> <ul style="list-style-type: none"> - Assignee: <Contractor>; - Description: longer description for the clarification reply; - Go to STEP 2. 	EMSA	
STEP 4	<p>EMSA validates the report. If the report is accepted, move to STEP 5.</p> <p>If the report is not accepted, then EMSA shall update JIRA Issue as follows:</p> <ul style="list-style-type: none"> - Status: Open; - Comment: <add a comment on the identified issues/problems>; - Assignee: <Contractor>; - Go to STEP 2. 	EMSA	
STEP 5	<p>Actions in JIRA Issue:</p> <ul style="list-style-type: none"> - Status: Closed; 	EMSA	

Step	Description	Responsible	Tool
	<ul style="list-style-type: none"> - Description: Link JIRA Quality Report document; - Comment < if applicable, insert a comment>. 		

6.9 Request from EMSA to the Contractor for Quality Control Products

In accordance with requirement EOS-CON-0052 of Appendix II :

“In case of quality issues and/or to validate cloud coverage, EMSA may request the delivery of the following Quality control Products:

- *Coverage map Area, from OSV Service, that is covered by image and without any quality issue.*
- *Usable map Area, from ordered OSV Service, that is covered by image and without any quality issue.*
- *Cloud coverage mask- areas considered as clouded by the Contractor.*
- *Discarded Areas map.*

Request mechanism: in accordance with Appendix V Service Level Management procedure

GIS ESRI Shapefile, KML formats, in Vector format in WGS84 can be requested.”

The following diagram displays the workflow for EMSA to request Quality Control Products.

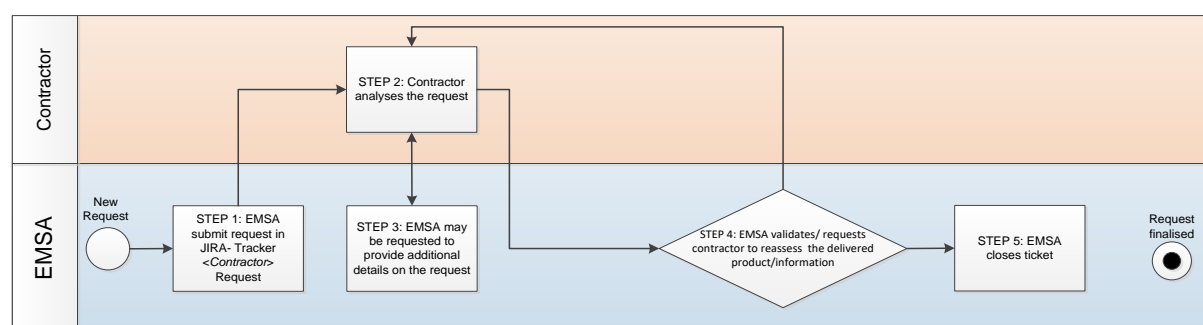


Figure 8- Workflow of requests for EMSA to request Quality Control Products

The following table defines the procedures for requesting Quality Control Products.

Step	Description	Responsible	Tool
STEP 1	EMSA submits a request in JIRA: <ul style="list-style-type: none"> - Project: <Contractor Project>; - Issue type: Request; - Summary: [<EO Service(s)>]: <Quality Control Product> Quality Control Product request: <short description if needed>; - Sub-Type: Request of Quality Control Product; 	EMSA	JIRA

Step	Description	Responsible	Tool
	<ul style="list-style-type: none"> - Quality control Product: <select applicable Quality Control Product>; - Description: longer description for the request; - Priority: <defined by EMSA according to the SLA>; - Assignee: <Contractor> 		
STEP 2	<p>In case of clarification, Contractor shall</p> <ul style="list-style-type: none"> - Assignee: <EMSA- select the Contract Manager>; - Description: longer description for the clarification; - Go to STEP 3 <p>If no Clarification is needed</p> <ul style="list-style-type: none"> - Assignee: <EMSA- select the Contract Manager> - Status: Ready for Review - Description: longer description for the reply. <p>Go to STEP 4</p>	Contractor	
STEP 3	<p>In case of clarification, EMSA shall</p> <ul style="list-style-type: none"> - Assignee: <Contractor> - Description: longer description for the clarification reply. <p>Go to STEP 2</p>	EMSA	
STEP 4	<p>EMSA validates the product. If the product is accepted, move to STEP 5.</p> <p>If the product is not accepted, then EMSA shall update JIRA Issue as follows:</p> <ul style="list-style-type: none"> - Status: Open; - Comment: <add a comment on the identified issues/problems>. - Assignee: <Contractor> <p>Go to STEP 2</p>	EMSA	
STEP 5	<p>Actions in JIRA Issue:</p> <ul style="list-style-type: none"> - Status: Closed; - Description: Link JIRA Quality Report document. - Comment < if applicable, insert a comment> 	EMSA	

7 Events

Event is defined as the detectable occurrence of a change of state and has significance for the management of the delivery of the service.

In the OSV context it is identified as event any issue referring to:

- Cancellation of OSV Services by EMSA;
- Cancellation of OSV Services by the Contractor more than 24 hours before acquisition time;
- Interruption of the service by the Contractor due to planned or unforeseen technical constraints such as satellite manoeuvres, hardware and software maintenance less than 24 hours before acquisition time.
- Anomaly due to data not available in the Copernicus Open data Hub
- Anomaly due to cloud coverage above threshold;

Cancellation refers to the process of informing EMSA or the Contractor that the OSV product will no longer be delivered. The process of cancelling an OSV service must be done before the acquisition start time.

OSV services for which the contractor identified a disruption on the delivery only after the acquisition time, are identified as Anomalies. The definitions of cancellation and anomalies are further defined in the applicable framework contract.

7.1 Cancellation of OSV services by EMSA

The following table describes the steps that shall be followed by EMSA for the cancellation of OSV Services.

Step	Description	Responsible	Tool
STEP 1	<ol style="list-style-type: none"> 1. EMSA submits a request in JIRA Project: <Contractor Project> Issue type: Event Summary: [<EMSA Request form number – service counter>]: Cancellation of OSV service by EMSA Sub-type: Cancellation of OSV Service Description: <insert description> Status: Ready for Review Assignee: <Contractor>. 2. After creation, change the Status to Ready for Review. 	EMSA	JIRA
STEP 2	Contractor acknowledges the event and closes the ticket.	Contractor	JIRA

7.2 Cancellation of OSV services by the Contractor (more than 24 hours before acquisition)

The following table describes the steps that shall be followed by the Contractor to cancel services more than 24 hours before acquisition Start time.

Step	Description	Responsible	Tool
STEP 1	If it is identified that the problem is on ESA side, contractor sends an email to ESA Copernicus helpdesk inquiring about the issues and get details of the cancelation.	Contractor	-
STEP 2	Send an email to EMSA contact points as defined in section 2.2.1. Email template as defined in section 12. For each OSV service, one email shall be sent.	Contractor	Email
STEP 3	1- Contractor submits a request in JIRA (not needed if the EVENT/INCIDENT tags were used in the subject of the email) Project: <Contractor Project> Issue type: Event Summary: [<EMSA Request form number – service counter>]: Cancellation of OSV service by the Contractor (more than 24h) Sub-type: Cancellation of OSV Service (more than 24h) Description: <insert description> Status: Ready for Review 2- Assignee: <EMSA- select the Contract Manager>. 3- Attach the full exchange of emails with ESA to the Issue and update the Issue with your analysis. 4- After creation, change the Status to Ready for Review.	Contractor	JIRA
STEP 4	EMSA validates the event. If accepted: - Status: Closed If not accepted: - Go to procedure of Incidents > Cancellation of OSV Services (section 7) – in this case, the issue shall be moved to Incidents.	EMSA	JIRA

7.3 Anomaly due to no data available or less than 50% of data available

All acquisitions not received by the Contractor shall be set to anomaly. These shall include the following situations (not exhaustive):

- No data available in the Copernicus Open Data Hub.
- Less than 50% of the data received, when compared with the planned coverage area (quality parameter).

The following table describes the workflow for the Contractor to notify EMSA of an anomaly due no data being received from satellite.

Step	Description	Responsible	Tool
STEP 1	If it is identified that the problem is on ESA side, contractor sends an email to ESA Copernicus helpdesk inquiring about the issues and get details of the cancellation.	Contractor	Email
STEP 2	Send an email to EMSA contact points as defined in section 2.2.1. Email template as defined in section 12 For each OSV service, one email shall be sent.	Contractor	Email
STEP 3	Contractor submits a request in JIRA (not needed if the EVENT/INCIDENT tags were used in the subject of the email) Project: <Contractor Project> Issue type: Event Summary: [<EO Service(s)>]: Anomaly: <brief description of the anomaly reason e.g. No data available in Copernicus data Hub> Date of event/incident: Insert date of Acquisition Sub-type: Anomaly due to no data received from satellite Identification of anomaly due to no data received from satellite- Select the applicable option. Description: <insert explanation for the anomaly and if related with other EO Services> Status: Ready for Review 1- Assignee: <EMSA- select the Contract Manager>. 2- Attach the full exchange of emails with ESA to the Issue and update the Issue with your analysis. 3- After creation, change the Status to Ready for Review.	Contractor	JIRA
STEP 4	EMSA validates if the situation is acceptable and sets: Status: Closed	EMSA	JIRA

	Assignee: <EMSA- same person> If not accepted, then other processes shall be initiated.		
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7.4 Anomaly due to cloud coverage above threshold

The following table describes the steps that shall be followed by the Contractor for setting OSV Services to Anomaly- Cloud Coverage.

Step	Description	Responsible	Tool
STEP 1	Contractors sends an email to EMSA contact points as defined in section 2.2.1. Email template as defined in section 12. For each OSV service, one email shall be sent.	Contractor	Email
STEP 2	1- The Contractor submits a request in JIRA (not needed if the EVENT/INCIDENT tags were used in the subject of the email) Project: <Contractor Project> Issue type: Event Summary: [<EO Service(s)>]: Anomaly: Due to Cloud Coverage above threshold Sub-type: Anomaly due to cloud coverage above threshold Description: <insert description> Status: Ready for Review 2- Assignee: <EMSA- select the initiator of the Issue in EMSA or, in alternative, select the Contract Manager> 3- After the creation, Status shall be changed to Ready for Review. Further details shall be inserted in JIRA	Contractor	JIRA
STEP 3	EMSA validates the anomaly If accepted: <ul style="list-style-type: none"> - Status: Ready for Review - Assignee: <EMSA- select the initiator of the Issue in EMSA or, in alternative, select the Contract Manager> - Status to Closed If not accepted: <ul style="list-style-type: none"> - Go back to step 2. Assignee: Contractor 	EMSA	JIRA

8 Incidents

An Incident is defined by an unplanned interruption of a service or a decrease in the quality of a service.

In the OSV context it is identified as incident any issue referring to:

- Cancellation of OSV services less than 24 hours before acquisition start time.
- Anomaly of OSV Services (excluding Events anomalies).
- Quality issues
- Failure to follow the SLA management Procedure

Cancellation refers to the process of informing EMSA or the Contractor that the OSV product will no longer be delivered. The process of cancelling an OSV service must be done before the acquisition start time.

The Contractor may cancel the acquisition if, before the acquisition start time, there is information that enables them to understand that the acquisition will not occur for technical or other issues.

OSV services for which the contractor identified a disruption on the delivery only after the acquisition time, are identified as Anomalies. The definitions of cancellation and anomalies are further defined in the applicable framework contract.

8.1 Incident procedures initiated by the Contractor

Incidents procedures initiated by the Contractor may refer to:

- Cancellation of OSV services less than 24 hours before acquisition start time.
- Anomaly of OSV Services (excluding Events anomalies).

The following table describes the steps that shall be followed by EMSA and the Contractor on Incidents initiated by the Contractor.

Step	Description	Responsible	Tool
STEP 1	If it is identified that the problem is on ESA side, Contractor sends an email to ESA Copernicus helpdesk inquiring about the issues and get details of the cancellation.	Contractor	Email
STEP 2	1- The Contractor submits a request in JIRA (not needed if the EVENT/INCIDENT tags were used in the subject of the email) Project: <Contractor Project> Issue Type: Incident Summary: [<EO Service(s)>]: Cancellation (< 24h)/ Anomaly: <short description>	Contractor	JIRA

	<p>Sub-Type: <select the most adequate option></p> <p>Description: <insert explanation for the cancellation></p> <p>Date of event/incident: <date of acquisition></p> <p>Closure Date/ Time: filled by the Contractor and it refers to the expected date when the issue will be solved meaning that necessary changes if needed have been implemented.</p> <p>Preventive Actions: list the preventive actions</p> <p>Corrective Actions: list the corrective actions</p> <p>2- Assignee: <EMSA- select the Contract Manager>.</p> <p>3- After creation, change the Status to Ready for Review.</p>		
STEP 3	<p>EMSA validates the Incident in JIRA</p> <p>If accepted:</p> <ul style="list-style-type: none"> - Assignee: <Contractor> - Status: Closed <p>If not accepted:</p> <ul style="list-style-type: none"> - Status: Open - Description: Clarification request <p>Go to STEP 4</p>	EMSA	JIRA
STEP 4	<p>The contractor shall provide additional information:</p> <ul style="list-style-type: none"> - Description: <insert explanation for the incident> - Status: Ready for Review - Assignee: <EMSA- same person>; 	Contractor	

8.2 Incident procedures initiated by EMSA

Incident procedures initiated by EMSA may refer to:

- Quality issues;
- Failure of SLA on Incident, Event, Request and Problem management;
- Failure of SLA on providing a feasibility for planning and ordering;
- Failure to meet SLA Management procedures.

Incident procedure, identified as “quality issues” sub-type, include the following situations (not exhaustive):

- Late delivery of OSV product;
- Delivery of OSV product not complying with the specifications or quality.

The following table describes the steps that shall be followed by EMSA and the Contractor on Incident raised by EMSA.

Step	Description	Responsible	Tool
STEP 1	<p>EMSA creates an Issue in JIRA:</p> <p>Project: <Contractor Project></p> <p>Issue Type: Incident</p> <p>Summary: [<EO Service(s)>]: <Incident identification>: <short description if needed></p> <p>Description: <longer description for the request>.</p> <p>Priority: <defined by EMSA according to the SLA></p> <p>Assignee: < Contractor></p> <p>Date of event/Incident: <Acquisition date></p> <p>EO Product Affected: <select adequate option></p> <p>Incident sub-type: <select adequate option></p> <p>In case of “Quality issues“ incidents, one of the following options for the quality control issue shall be selected:</p> <ul style="list-style-type: none"> • Ad-hoc: quality issue identified in a specific OSV Product • Quality Control Sample: quality issue identified in a OSV Product or service that is part of the sampling approach for the quality control strategy implemented in EMSA 	EMSA	JIRA
STEP 2	<p>Contractor analyses the request and provides:</p> <ul style="list-style-type: none"> - Comment: <if applicable, insert a comment> - Closure date; - Preventive Actions; - Corrective Actions; - Status: Ready for Review; 	Contractor	

	<ul style="list-style-type: none"> - Assignee: <EMSA- select the initiator of the Issue in EMSA or, in alternative, select the Contract Manager> <p>Status shall be set to Ready for Review only after all the information is available on the Issue.</p>		
STEP 3	<p>EMSA validates the Incident</p> <p>If accepted:</p> <ul style="list-style-type: none"> - Status: Closed <p>If not accepted:</p> <ul style="list-style-type: none"> - Assignee: <Contractor> - Status: Open - Description: Clarification request; Go to STEP 2. <p>In case EMSA requests Quality Control Product, procedure under section 6.9 shall be initiated.</p>	EMSA	JIRA

9 Problems

Problem process will be started to prevent similar incidents to occur and with the aim to identify optimal solutions to solve recurring incidents in a systematic manner.

A problem is a cause, or potential cause, of one or more incidents. Problems include:

- Contractor's failure to respond to EMSA's request timelines;
- Incident related with an EMSA request.

Only after EMSA accepts that the problem is solved, or if EMSA considers that the mitigation measures put in place are acceptable and reduce the impact to the service delivery, the problem will be closed.

The following table describes the steps that shall be followed by EMSA and by the Contractor for the Problem Management procedure.

Step	Description	Responsible	Tool
STEP 1	EMSA submits a Problem in JIRA: Project: <Contractor Project> Issue Type: Problem Summary: <short description of Problem> Description: <longer description for the problem> Problem Sub-Type: select the adequate option Priority: <defined by EMSA according to the SLA> Assignee: <Contractor> Number of affected OSV Service(s): <number of OSV Services>; List of affected OSV Services: <list of affected OSV Services> Problem date: <select date> Operational impact: <EMSA to describe operational impact> Link the related JIRA Incidents	EMSA	JIRA
STEP 2	Description: shall include but not be limited to: <ul style="list-style-type: none"> - Closure date; - Update List of affected OSV Services- if requested by EMSA; - Preventive actions; 	Contractor	

	<ul style="list-style-type: none"> - Corrective actions. <p>Assignee: <EMSA- select the Contract Manager>.</p> <p>If the problem is solved:</p> <ul style="list-style-type: none"> - Go to STEP 4 <p>If the problem is not solved, then:</p> <ul style="list-style-type: none"> - Go to STEP 5. 		
STEP 3	<p>Before the Problem is solved, EMSA may request additional elements and information.</p> <p>Assignee: <Contractor>;</p> <p>Until the problem is solved, Go to STEP 2.</p>	EMSA	
STEP 4	<p>When the problem is solved, the Contractor shall provide evidence and inform EMSA by:</p> <ul style="list-style-type: none"> - describing the solution and evidence that the problem was closed. For this, the Actions shall be updated (if applicable); - Status: Ready for Review - Assignee: <EMSA- same person>. 	Contractor	
STEP 5	<p>EMSA validates the provided information.</p> <p>If Problem closure is accepted, proceed to STEP 6. If not:</p> <ul style="list-style-type: none"> - Status: changed to Open; - Go to STEP 2. 	EMSA	
STEP 6	<p>If Problem closure is accepted by EMSA:</p> <ul style="list-style-type: none"> - Status: changed to Closed - Description: < If applicable> 	EMSA	

10 Technical issues

In case the Contractor encounters technical difficulties, in any of the cases described below, the EMSA 24/7 point of contact Maritime Support Service (MSS) shall be contacted directly. EMSA's POC (as defined in section 2.2.1) shall be in copy of the email. This is applicable if:

- JIRA or Confluence not accessible.
- Not possible to contact EMSA by phone;

In case any of these situations have an impact on the service delivery and therefore on the timeliness of its data availability and financial part, a ticket shall be raised in JIRA.

11 Issues Template

The following issue types are available:

- Request;
- Event;
- Incident;
- Problem.

11.1 Issues common fields

The following elements are common to all issue types:

- **Unique ID**- automatically generated by JIRA;
- **Summary**- shorter text element with the description;
- **Description**- longer text element;
- **Status**- as defined in section 3;
- **Priority**- as defined in section 4;
- **Assignee**- Person or organisation to which the issue is pending reply.
- **Comment**- free text;
- **Attachments**- documents and files can be attached to JIRA Issue;
- **Linked Issues**- can be associated with other issues or Confluence documents;
- **Labels**: Labels to organise by subject (if applicable).

11.2 Issue type Request fields

Requests shall be used in the scope of the procedures defined in section 6 and contain the following elements (in addition to the common elements in section 11.1):

- **Request Sub-Type**- the following options are available
 - Request from EMSA
 - Request from the Contractor
 - Contact Points: Request from EMSA to the Contractor
 - Contact Points: Request from the Contractor to EMSA
 - Request for reprocessing
 - Request for reanalysis
 - Request for Quality Report

- Request for Quality Control Product
- Quality Control Product- only to be used if the selected sub-type is *Request of Quality Control Products*. The options available are:
 - Cloud coverage mask;
 - Discarded areas map.

11.3 Issue type Event fields

Event issue type shall be used in the scope of the procedures defined in section 7 and contain the following elements (in addition to the common elements in section 11.1):

- **Event Sub-Type**- the following options are available:
 - Cancellation of OSV Services by the Contractor (>24h)
 - Anomaly due to no data received
 - Anomaly due to cloud coverage above threshold
- **Identification of anomaly** - In case the contractor selected the option *Anomaly due to no data received from satellite*, the contractor shall also fill in this element by selecting one of the options below- this list may be updated during the duration of the framework contract:
 - No data received;
 - Other- if other is selected, the Contractor shall describe in the description field.
- **Date of event/incident**- Date of event/incident;
- **Closure date**- Time of closing of event/incident. Until it is closed, the defined time is merely estimated

11.4 Issue type Incident fields

Incident issue type shall be used in the scope of the procedures defined in section 8 and contain the following elements (in addition to the common elements in section 11.1):

- **Incident Sub-Type**- the following options are available:
 - Cancellation of OSV Service (<24h);
 - Anomaly of OSV Service;
 - Quality issues:
 - None (default option for all incidents);
 - Ad-hoc: quality issue identified in a specific OSV Service or Product;
 - Quality Control Sample: quality issue identified in the OSV product that is part of the sampling approach for the quality control strategy implemented in EMSA

- Failure of SLA on Incidents, Events, Requests and Problems management;
 - Failure of SLA on providing a feasibility for planning and ordering;
 - Failure to meet SLA
- **Date of event/incident**- Date of event/incident;
- **Closure date**- Time of closing of event/incident. Until it is closed, the defined time is merely estimated;
- **EO Product Affected**- select the affected EO Products. In case of EO Service, select the option *All*;
- **Number of incidents** - number of affected EO Services;
- **Preventive Actions**- Actions proposed by the Contractor to prevent the repetition of the same incident;
- **Corrective Actions**- Actions proposed by the Contractor, aiming to rectify a task, process, product, or even operational procedures, to correct the situation.

11.5 Issue type Problem fields

Problem issue type shall be used in the scope of the procedures defined in section 9 and contain the following elements (in addition to the common elements in section 11.1):

- **Problem Sub-type**
- **Number of affected EO Service(s)**- number of OSV Services;
- **List of affected EO Services**- list Service IDs;
- **Problem date**- Date of problem;
- **Closure date**- Time of closing of problem. Until the problem is closed, the defined time is merely estimated;
- **Operational impact**- EMSA describes the Operational impact of the problem;
- **Preventive Actions**- Actions proposed by the Contractor to prevent the repetition of the same problem;
- **Corrective Actions**- Actions proposed by the Contractor aiming to rectify a task, process, product, or even operational procedures, to correct the situation.

12 Emails Template

This section defines the content and structure of the emails that the Contractor shall send to EMSA in case of: i) cancellation; ii) anomaly; iii) anomaly due to clouds. Upon receiving an email, following this pre-defined template, an automatic JIRA issue is created under the contractor's JIRA project and the assignee is automatically set to the contractor's user account. The applied status is the following:

- Events Issues: Ready for Review;
- Incidents: Open.

Two templates are available:

- Template email for cancellation by contractor;
- Template email for anomaly by contractor.

Both templates can be found in the following Confluence link:

Table 3- Email templates link

Contractor	Link to email template in Confluence
Name of contractor	<i>Link will be provided at KoM</i>

EMSA contact point to be used: EMSA Non-delivery contact point (see section2.2.1).