

Agenda: 2018/OP/6/2018 LOT-1

Lisbon, EMSA Meeting Room 01/13, 28 January 2020

Time	Agenda Item	Speaker
09.30 – 09:45	Welcome and Agenda Overview	EMSA
09:45-10:45	Project management - Current project team, profiles and structure Module 1: Status and on-going activities - Test block status - Issues	EDISOFT
10:45 – 11:00	Coffee break	
11:00 – 11:45	Module 2: Status and contract performance overview <ul style="list-style-type: none"> ■ Contractual Overview ■ Service Statistics ■ Service Performance <ul style="list-style-type: none"> ○ Delivery reliability ○ Timeliness delivery reliability ○ Quality delivered reliability 	EDISOFT
11:45 – 12:15	Non-conformances, Incidents and Problems <ul style="list-style-type: none"> ■ List of non-conformances and status (EMSA) ■ List of problems and status (EMSA) ■ Preventive and corrective measures (Edisoft) 	EMSA / EDISOFT
12:15 – 12:30	EMSA systems status and transition <ul style="list-style-type: none"> ■ Mass File Transfer system (Axway) ■ EICD 2.0.0 	EMSA
12:30 – 12:45	Meeting wrap-up <ul style="list-style-type: none"> ■ Draft action list ■ AOB 	ALL

* Draft minutes of the meeting are the responsibility of the contractor and should be distributed for EMSA's assessment maximum 2 working days after the meeting takes place.

2018/EMSA/OP/06/2018

Edisoft Annual Meeting

Module 2: Status and contract performance overview

[REDACTED]

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Time	Agenda Item	Speaker
09.30 – 09:45	Welcome and Agenda Overview	EMSA
09:45-10:45	Project management <ul style="list-style-type: none"> - Current project team, profiles and structure Module 1: Status and on-going activities <ul style="list-style-type: none"> - Test block status - Issues 	EDISOFT
10:45 – 11:00	<i>Coffee break</i>	
11:00 – 11:45	Module 2: Status and contract performance overview <ul style="list-style-type: none"> ■ Contractual Overview ■ Service Statistics ■ Service Performance <ul style="list-style-type: none"> ○ Delivery reliability ○ Timeliness delivery reliability ○ Quality delivered reliability 	EDISOFT
11:45 – 12:15	Non-conformances, Incidents and Problems <ul style="list-style-type: none"> ■ List of non-conformances and status (EMSA) ■ List of problems and status (EMSA) ■ Preventive and corrective measures (Edisoft) 	EMSA / EDISOFT
12:15 – 12:30	EMSA systems status and transition <ul style="list-style-type: none"> ■ Mass File Transfer system (Axway) ■ EICD 2.0.0 	EMSA
12:30 – 12:45	Meeting wrap-up <ul style="list-style-type: none"> ■ Draft action list ■ AOB 	ALL

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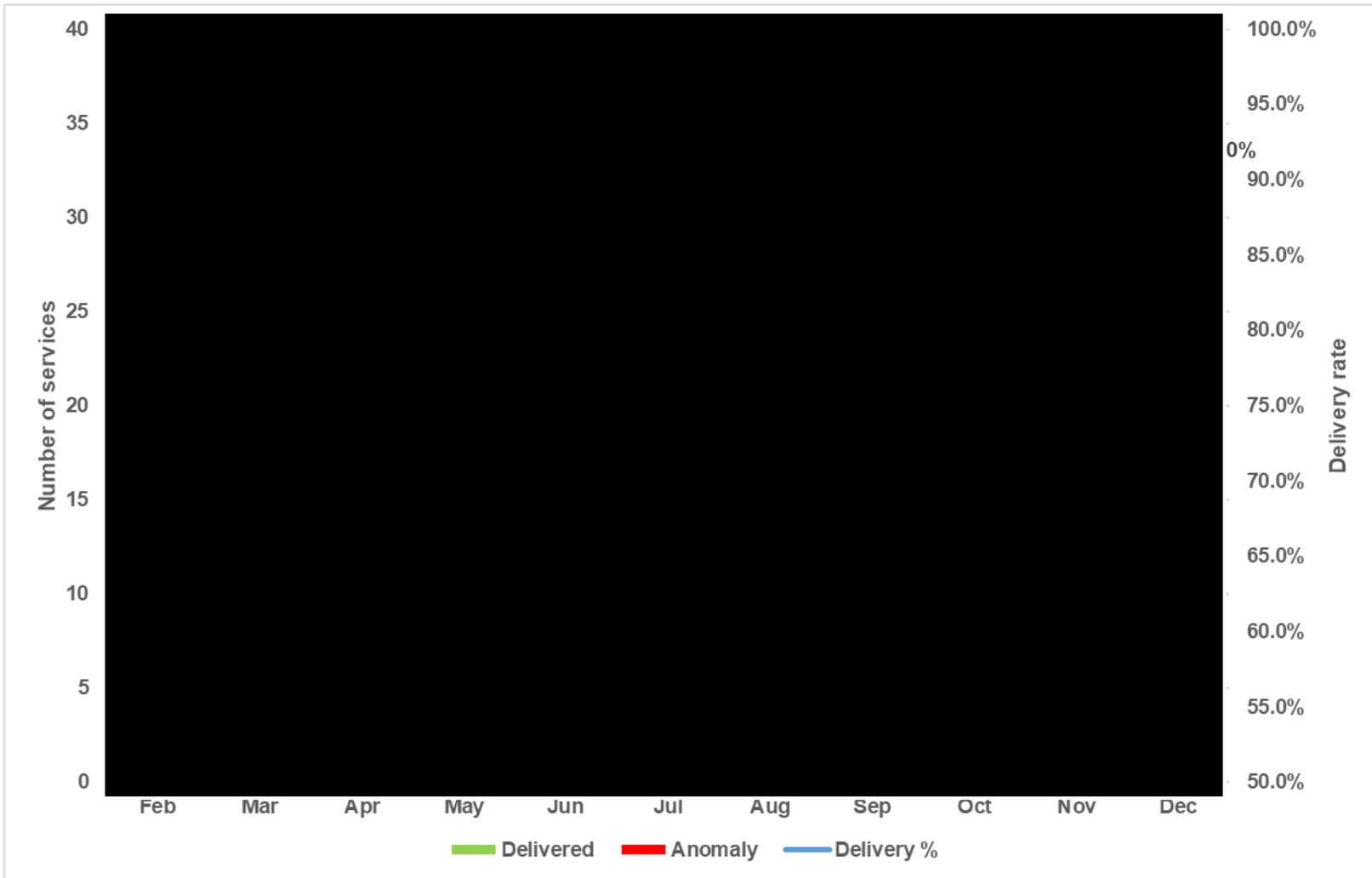
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Module 2: Status and contract performance
overview

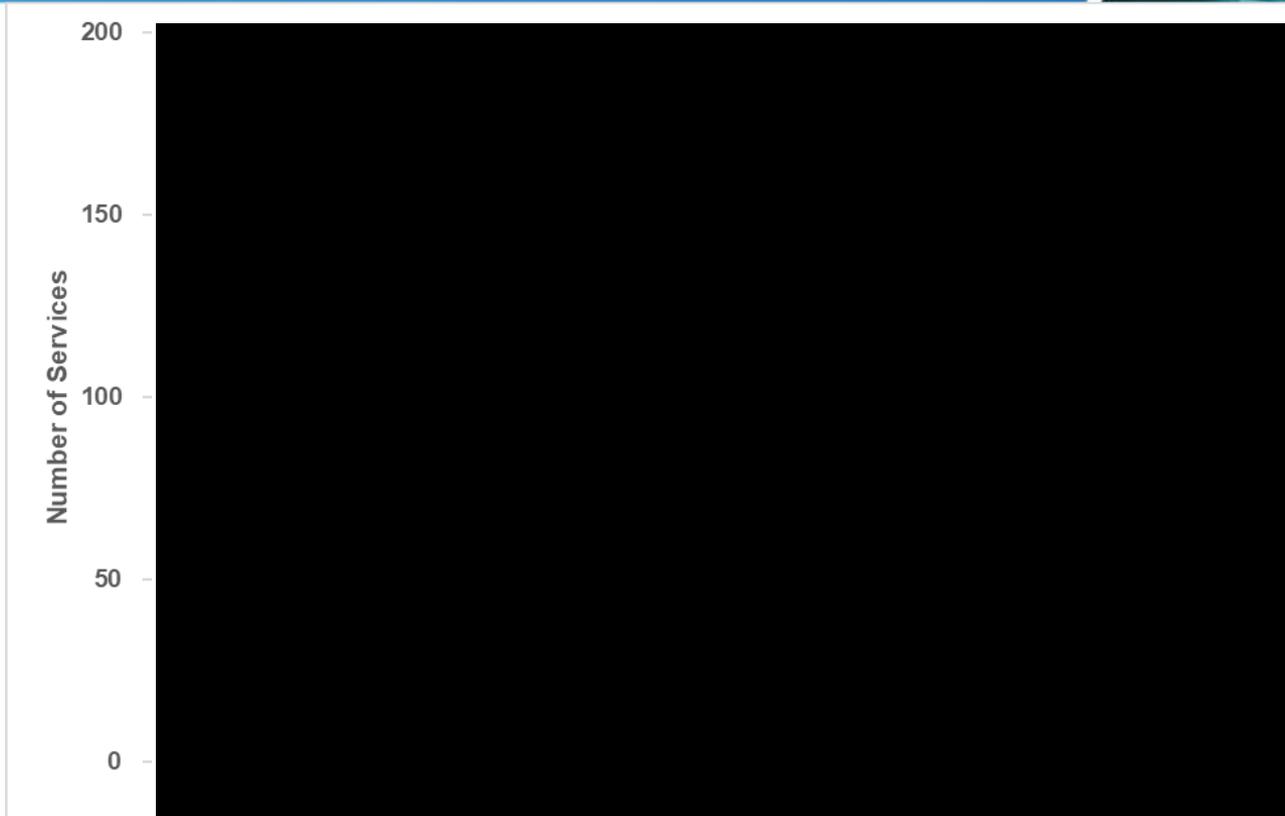
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Delivery Over



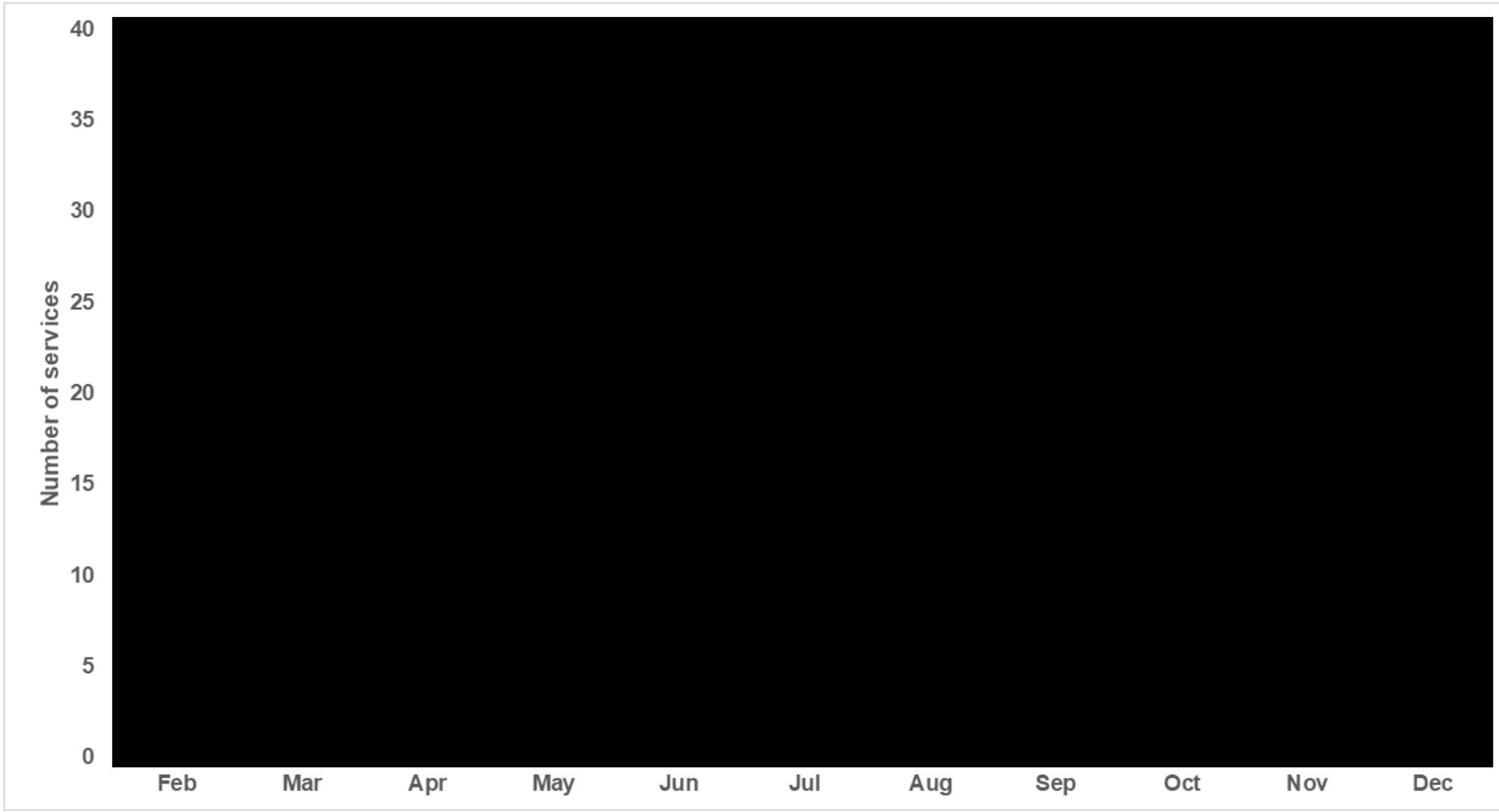
Near real time



	NRT1	NRT2-4 (0' < Delay ≤ 30')	NRT5 (30' < Delay ≤ 60')	NRT 6 (60' < Delay ≤ 120')	NRT Performance (%)
[Redacted Data]					

Near real time performance (2019)

Monthly evolution



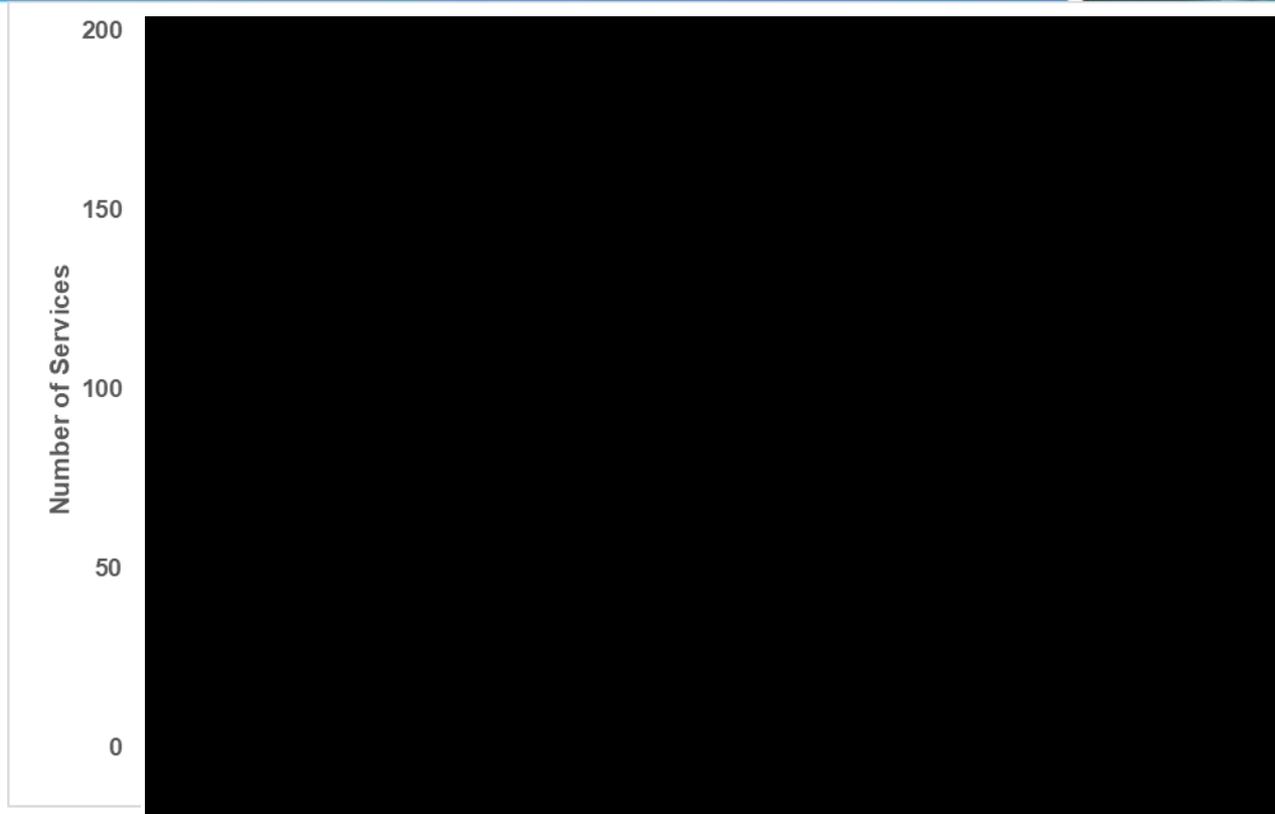
Excluded NRT7 and Quality <50% (EOS_GENE_1710: "Only Successfully delivered EO services")

Near real time performance (2019)

Overall



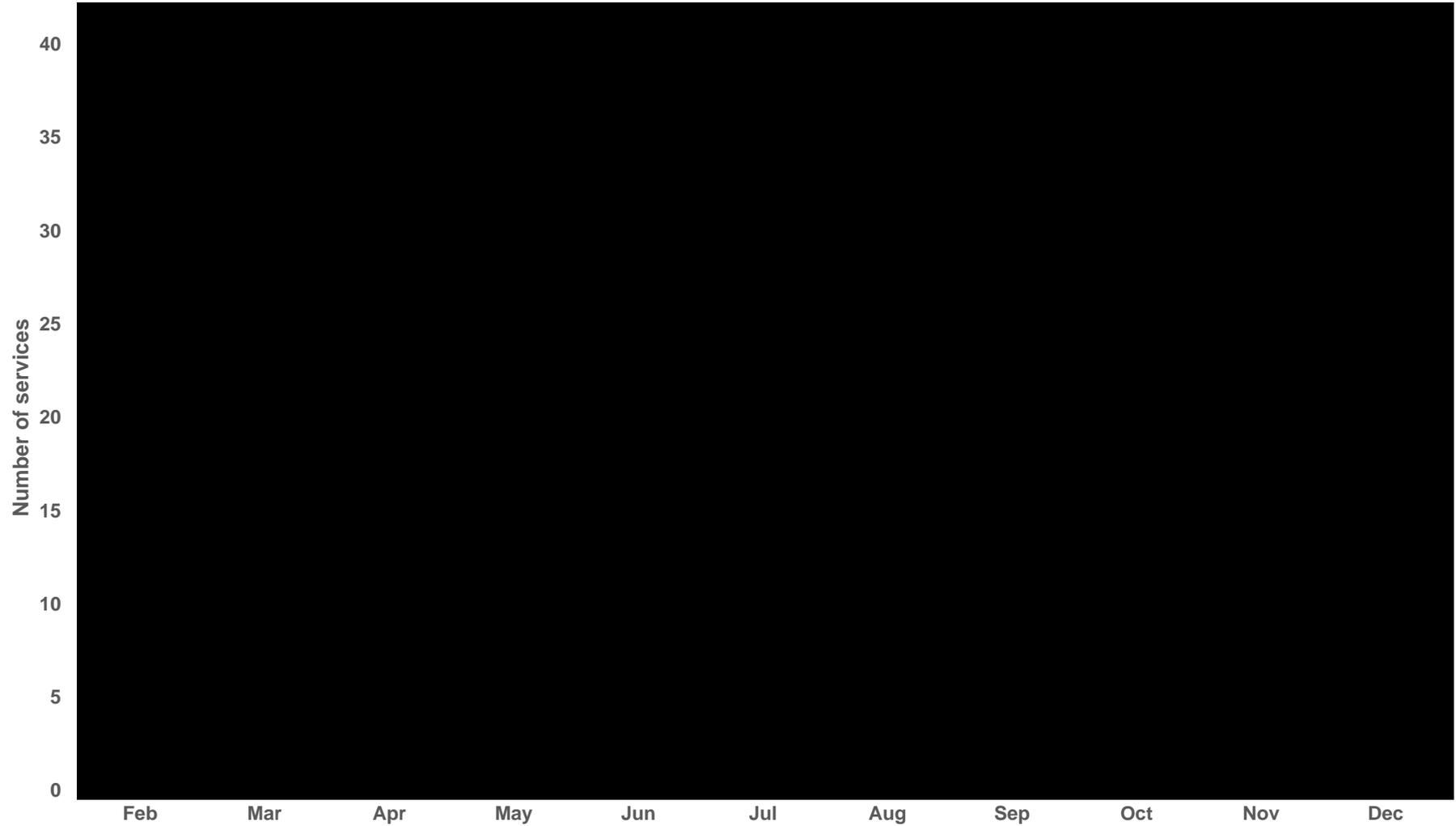
Quality perfor



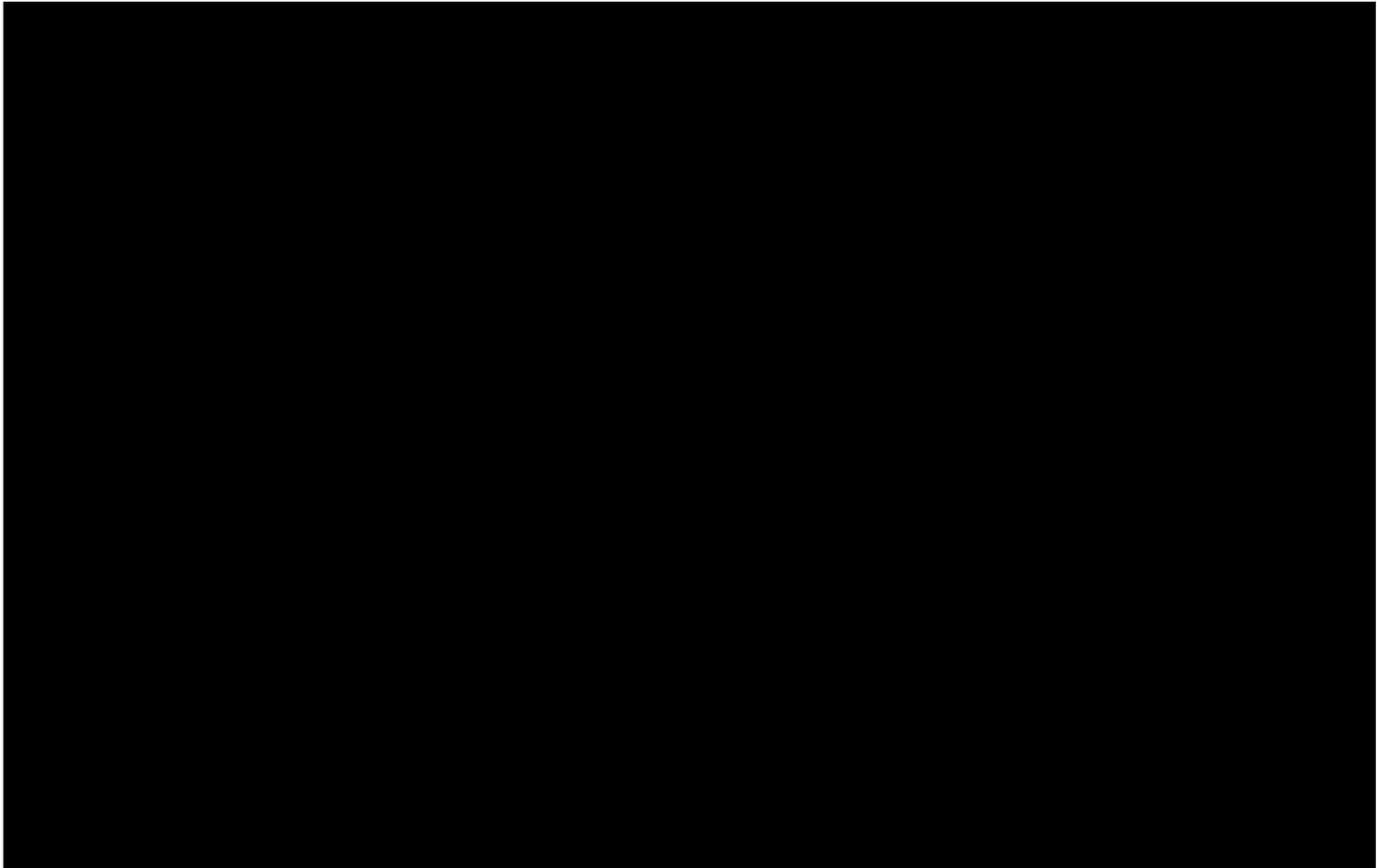
	Quality Parameter 1	Quality Parameter 2	Quality Parameter 3	Quality Parameter 4	Quality Performance
[Redacted Data]					

Excluded NRT7 and Quality <50% (EOS_GENE_1710: "Only Successfully delivered EO services")

Quality perfor



Excluded NRT7 and Quality <50% (EOS_GENE_1710: "Only Successfully delivered EO services")



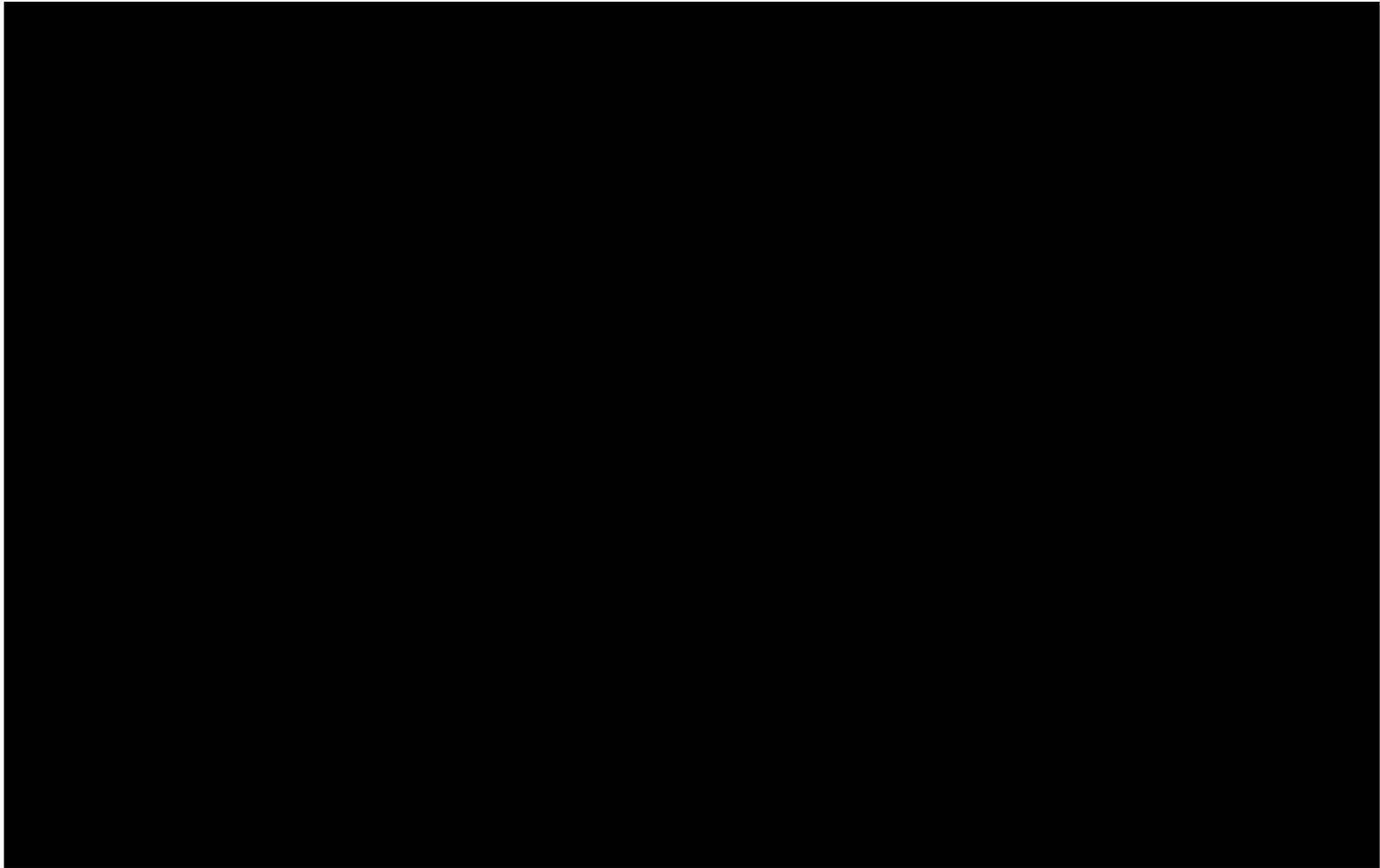
Incidents and Non-Conformances Overview



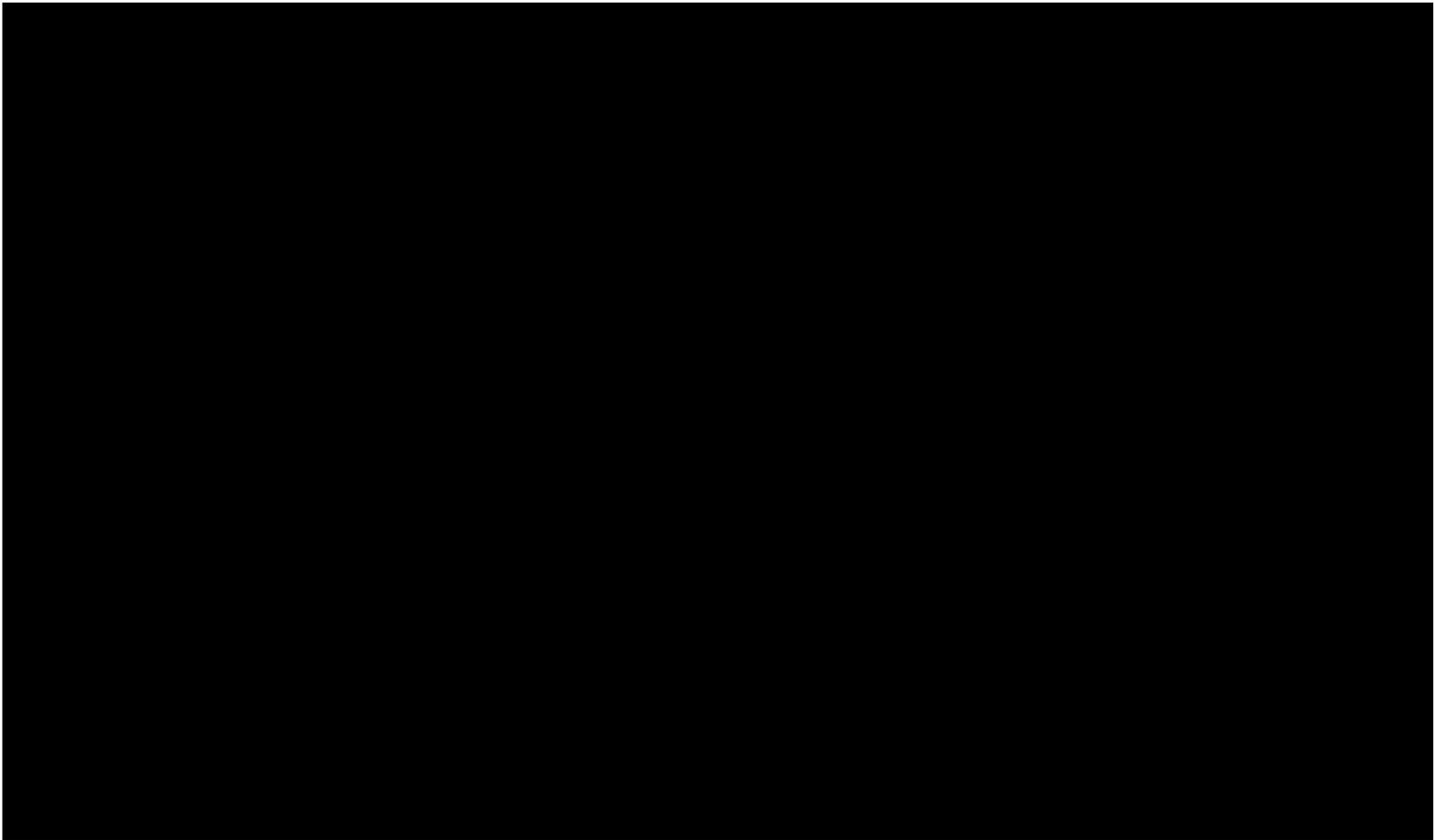
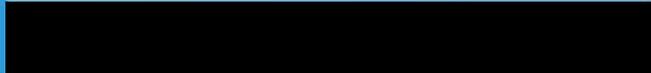
Incidents and Non-conformances Management



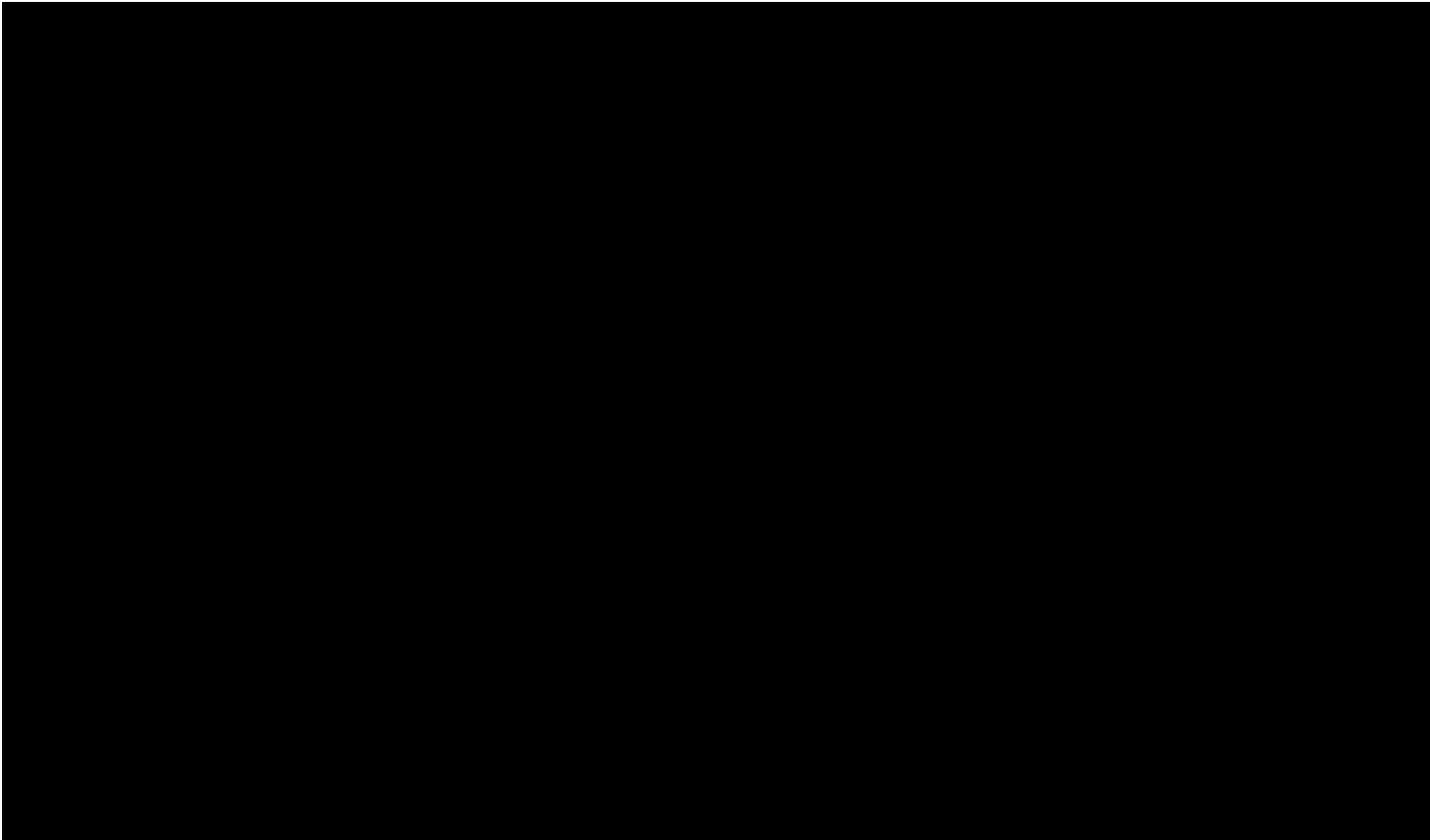
Incident: Sent 



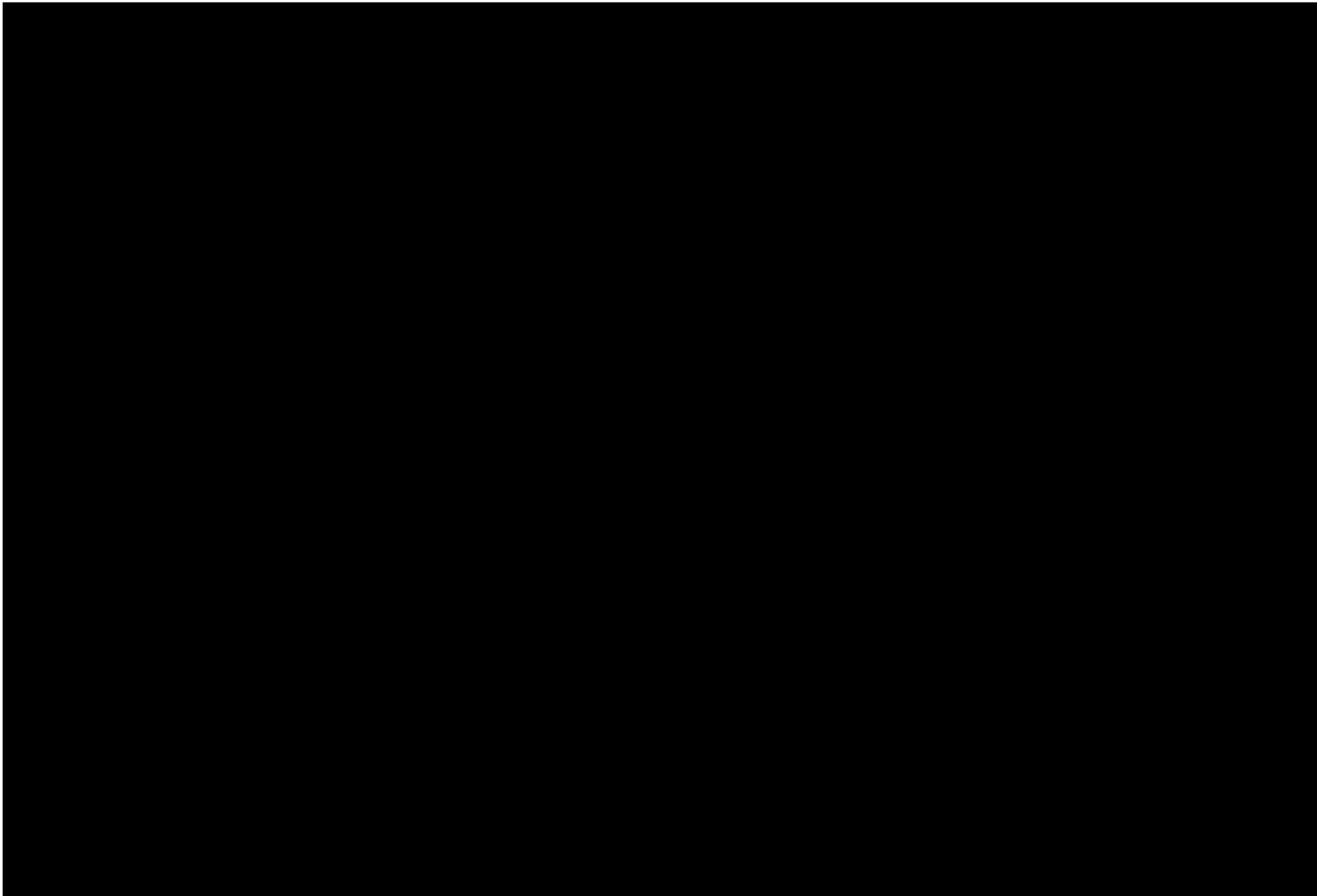
Problem #01:



Problem #02:



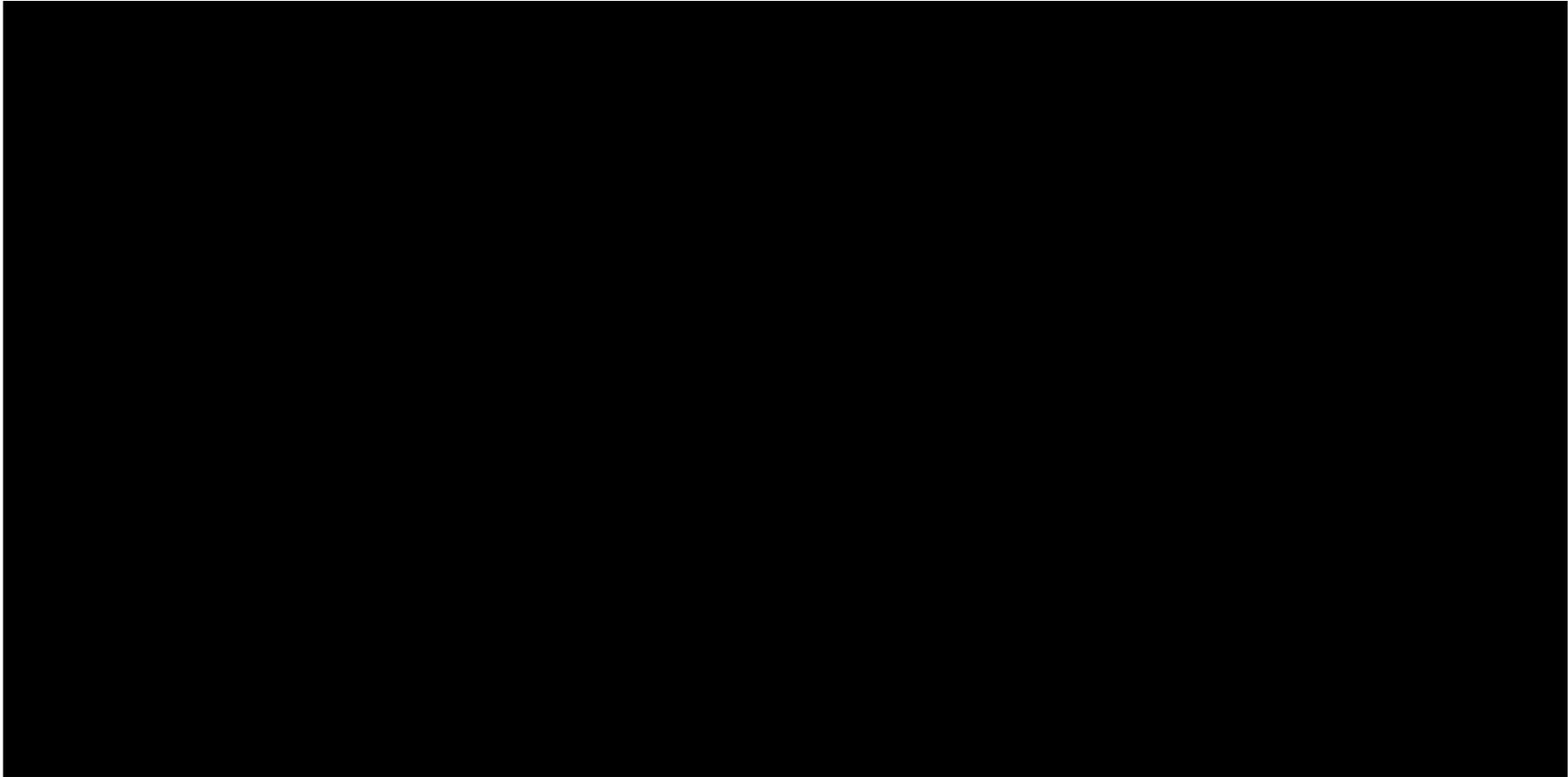
Problem #03:



Problem #04:



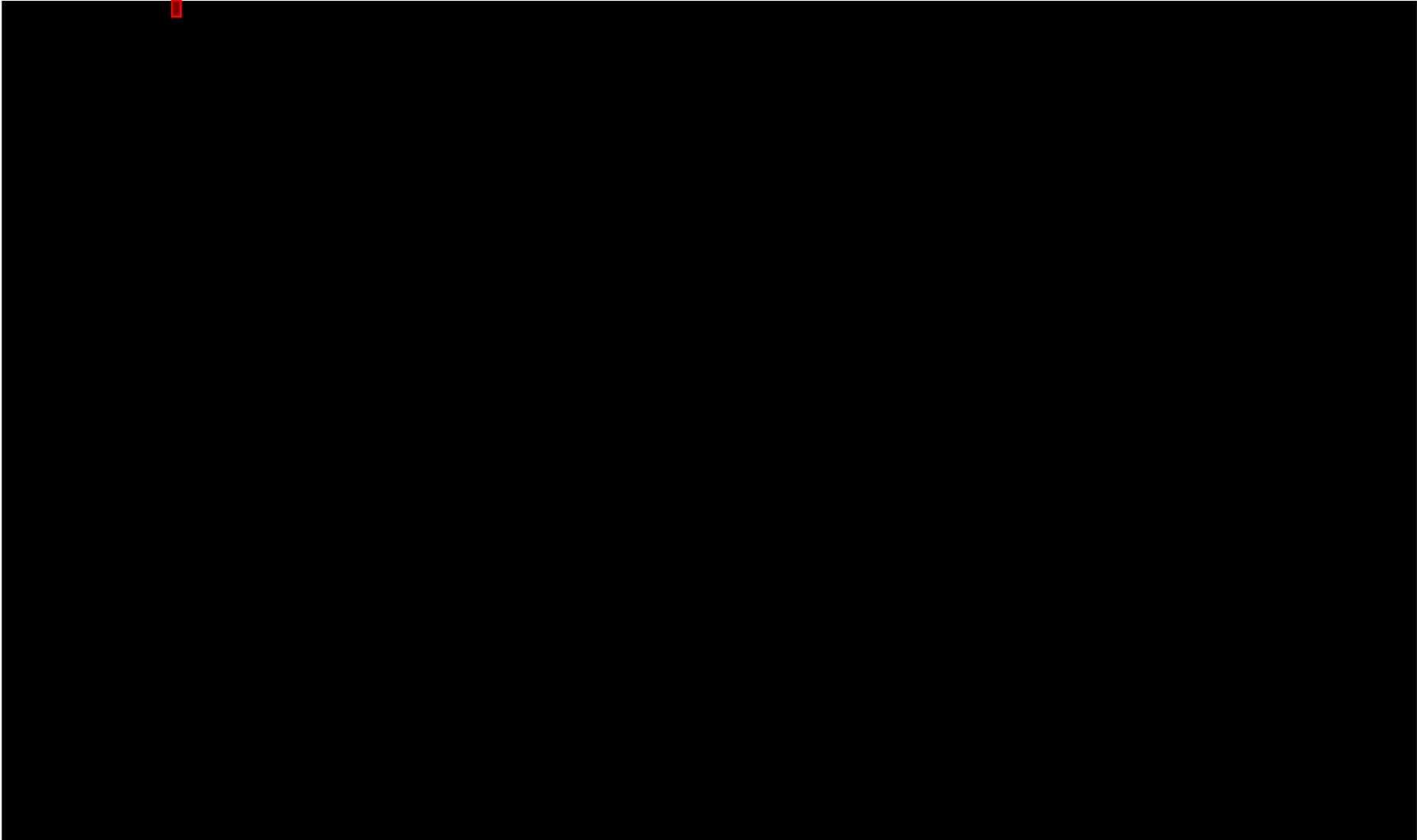
Problem #05:



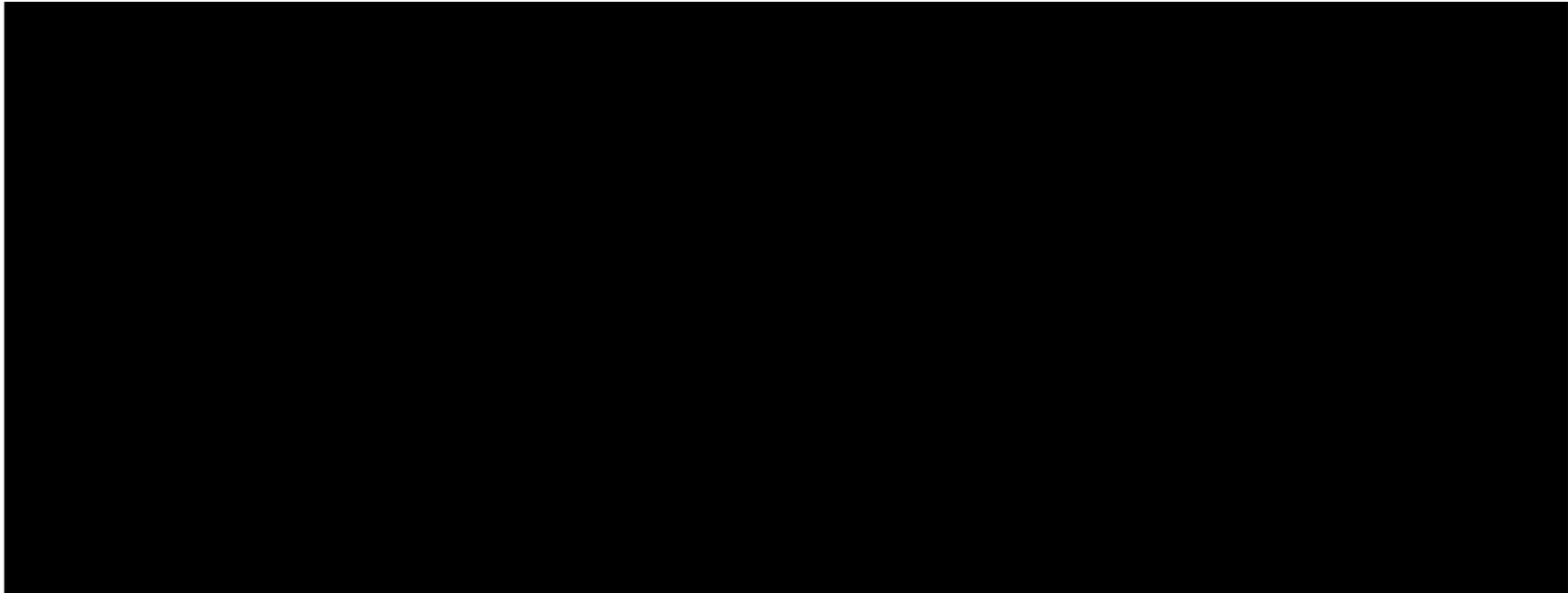
Problem #06:



Overview of SAP Wind and Wave Problems



Problem: No F



Problem: SLA



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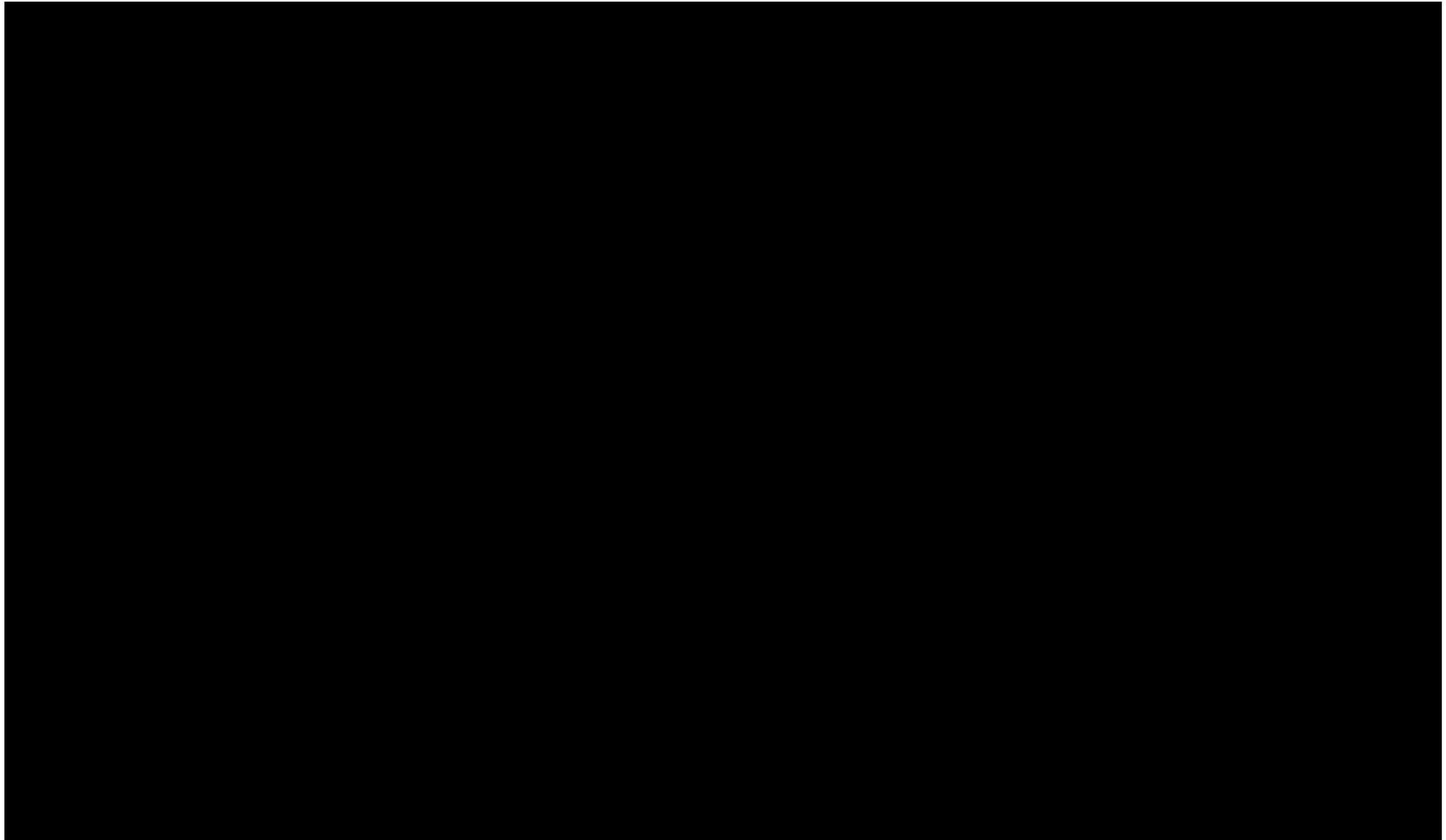
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EMSA systems status and transition

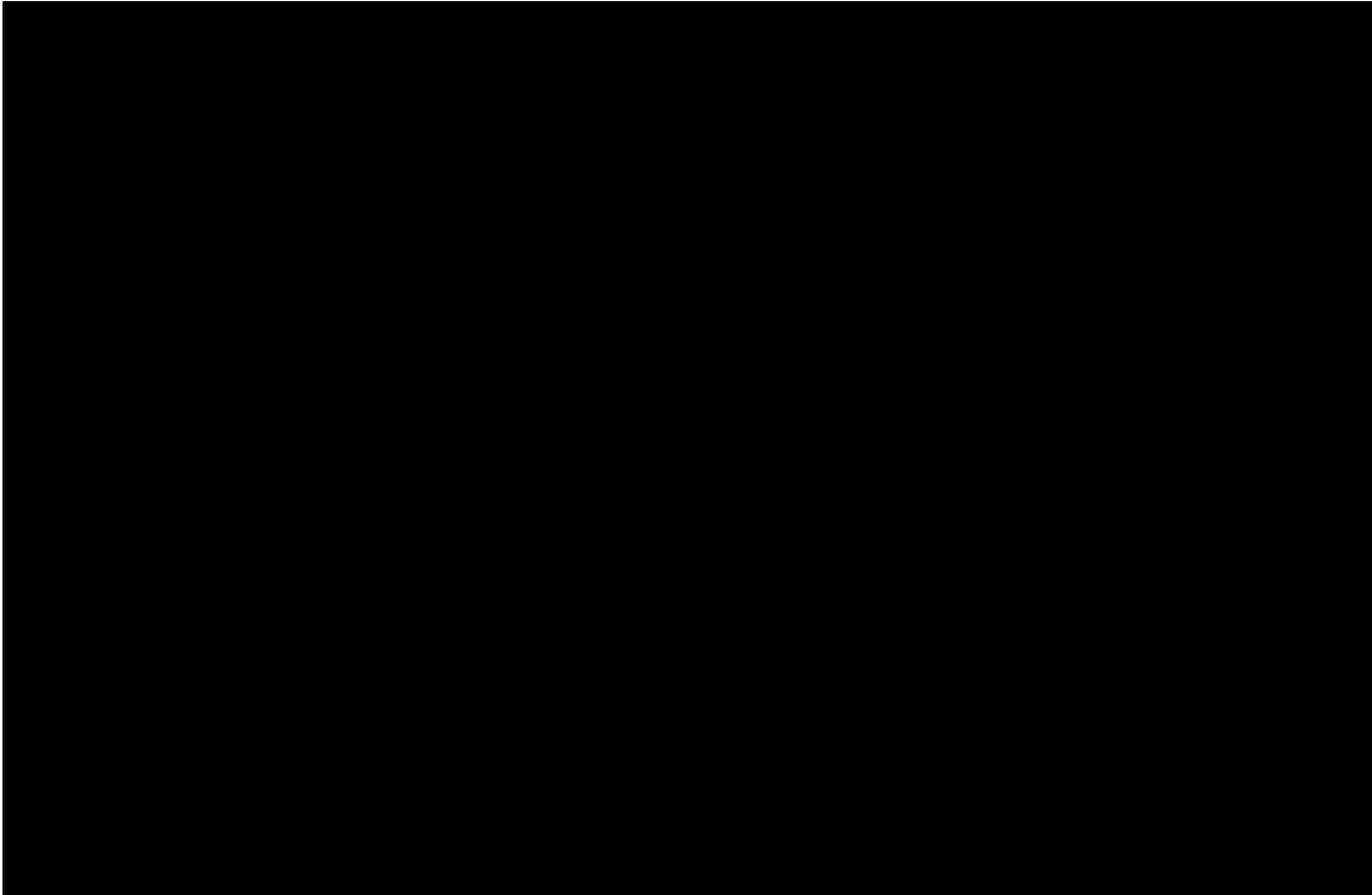


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Earth Observation Systems Transition



Earth Observation Systems Transition



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EMSA EARTH OBSERVATION SERVICES

ANNUAL REPORT 2019

Prepared for the European Maritime Safety Agency (EMSA)

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Follow-up of the evolutions

LOG OF CHANGES			
Revision	Date	Author	Modification
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APPROVAL				
	Name	Role	Date	Signature
Written by				
Reviewed by				
Verified by				
Approved by				
Approved by the customer				

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3. SUMMARY

EDISOFT provides a full service chain including inter alia: acquisition of SAR data on Santa Maria Ground Station (in its 5° footprint coverage), processing SAR data in NRT, oil spill and vessel detection analysis services, and delivery of products to EMSA, following the agreed standards and protocols and according to the agreed time limits as described in the “Tender Enclosure I Technical Specification”.

This document presents the annual report of modules 1/2 activities between January and December 2019, as required by the Tender Enclosure I Technical Specifications 241000018 - 2018/EMSA/OP/2018. The previous EMSA Earth Observation Services generation concluded the operations in September 2018. In October 2018, 3rd Generation was replaced by the 4rd Generation of EMSA Earth Observation Services which is expected to last until October 2022.

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4. INTRODUCTION

The European Maritime Safety Agency (EMSA) under his responsibilities offers to all EU Member States (Coastal States) provides to Member States a Near Real Time (NRT) service marine oil spill detection service using radar satellite imagery acquired by SAR satellites.

This service is free of charge to all Coastal States and it covers all European waters. To date EMSA delivers the Earth Observation Services to the 24 European Coastal States: Belgium, Bulgaria, Croatia, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovenia, Spain, Sweden, United Kingdom, and may expand to other countries in the future.

The tasking of satellite acquisition is done directly by the EMSA Earth Observation Services. 



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5. APPLICABLE AND REFERENCE DOCUMENTS

5.1 APPLICABLE DOCUMENTS

Ref.	Document title
	Invitation To Tender N° EMSA/OP/6/2018, Annex B.01 – May 2018
	Technical Specifications, Tender Annex B.02 – May 2018

Table 1 – Applicable documents

5.2 REFERENCE DOCUMENTS

Ref.	Document title
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Table 2 – Reference documents

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6. LIST OF ACRONYMS

AIL	Action Items List
CSN	CleanSeaNet
DC	Data Centre
DER	SAR Derived Products
EDI	EDISOFT
EICD	External Interface Control Document
EMSA	European Maritime Safety Agency
EO	Earth Observation
EODC	Earth Observation Data Centre
EOP	Earth Observation Product
EU	European Union
FAT	Final Acceptance Test
FCCN	Fundação para a Computação Científica Nacional
FTP	File Transfer Protocol
GCPs	Ground Control Points
GIS	Geographical Information Systems
HR	High Resolution
HRDFEP	High Rate Demodulator and Front-End Processor
JOU	Journaling
ICD	Interface Control Document
KOM	Kick-off Meeting
MR	Medium Resolution
NA	Not Applicable
NRT	Near Real Time
MEOS	Multiple Earth Observation System (Kongsberg)
OS	Oil Spill
OSN	Oil Spill Notification
OSW	Oil Spill Warning
POR	Planning and Ordering
QNO	Quality Notification
QR	Quality Results

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RAP	Rules of Application of Regulation
RS2	RADARSAT-2 Satellite
S1	SENTINEL-1 Satellite(s)
S1A	SENTINEL-1A Satellite
S1B	SENTINEL-1B Satellite
SAR	Synthetic Aperture Radar
SAT	Service Acceptance Test
SC	Specific Contract
SH	Service Handbook
SMA	Santa Maria
SP	Service Provider
SSL	Secure Socket Layer
TF	Team Forge
VDS	Vessel Detection Service
VPN	Virtual Private Network
WUP	Web User Portal (GIS Viewer)

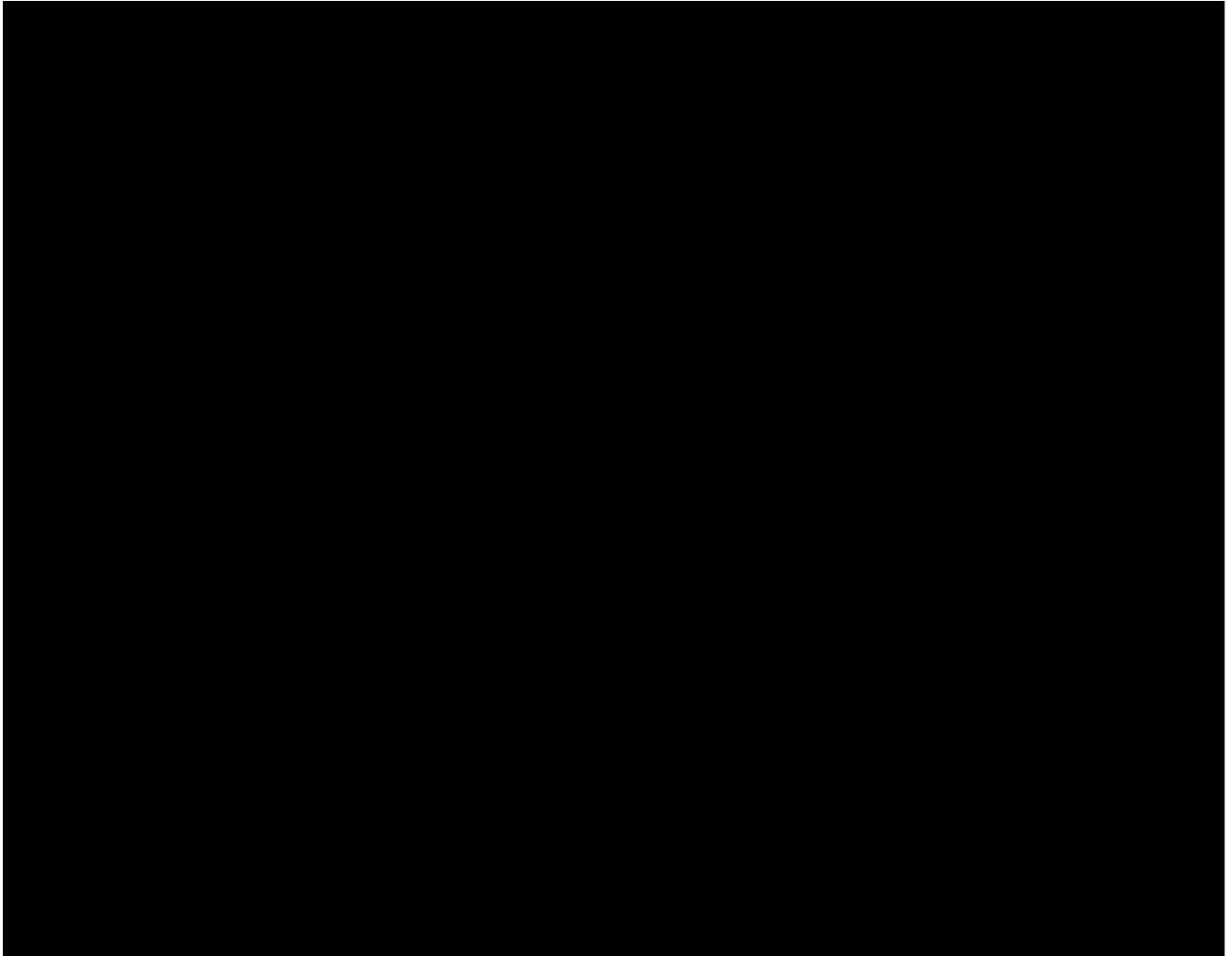
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7.2 OVERALL UPDATED STAFF



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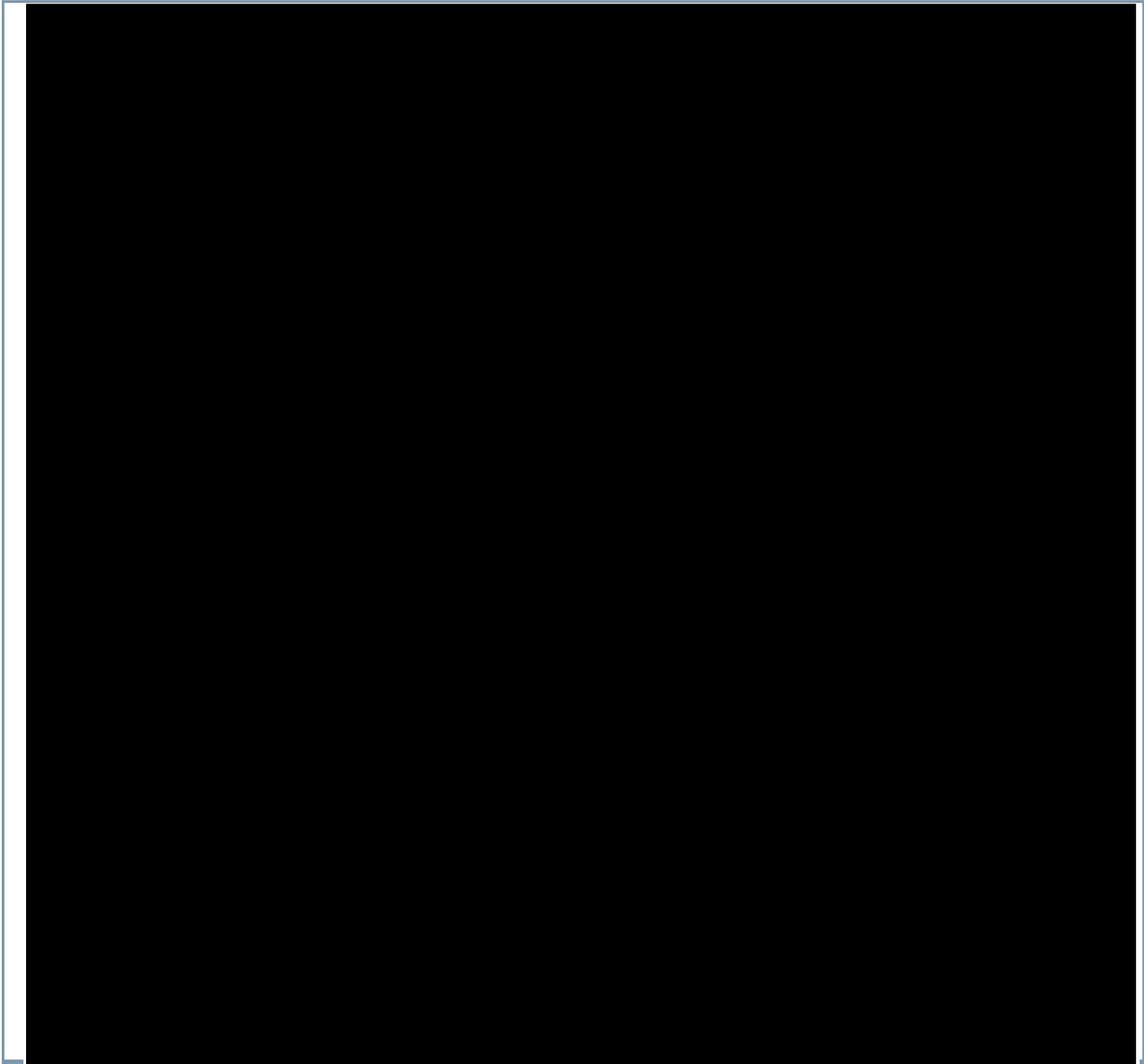
Name	Profile	Year of relevant experience	Years in company	Summary of key skills	Link to roles and projects relevant for the domain

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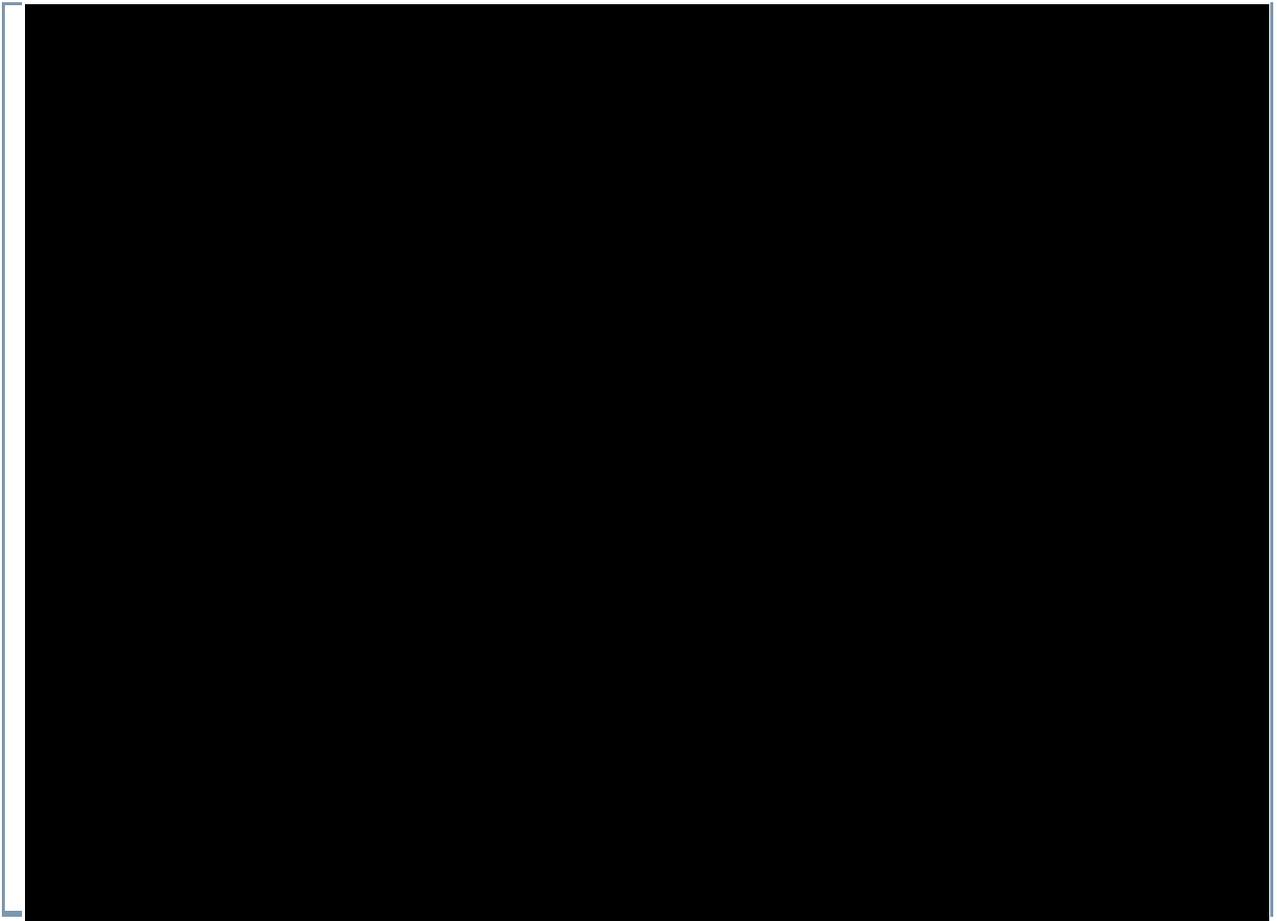


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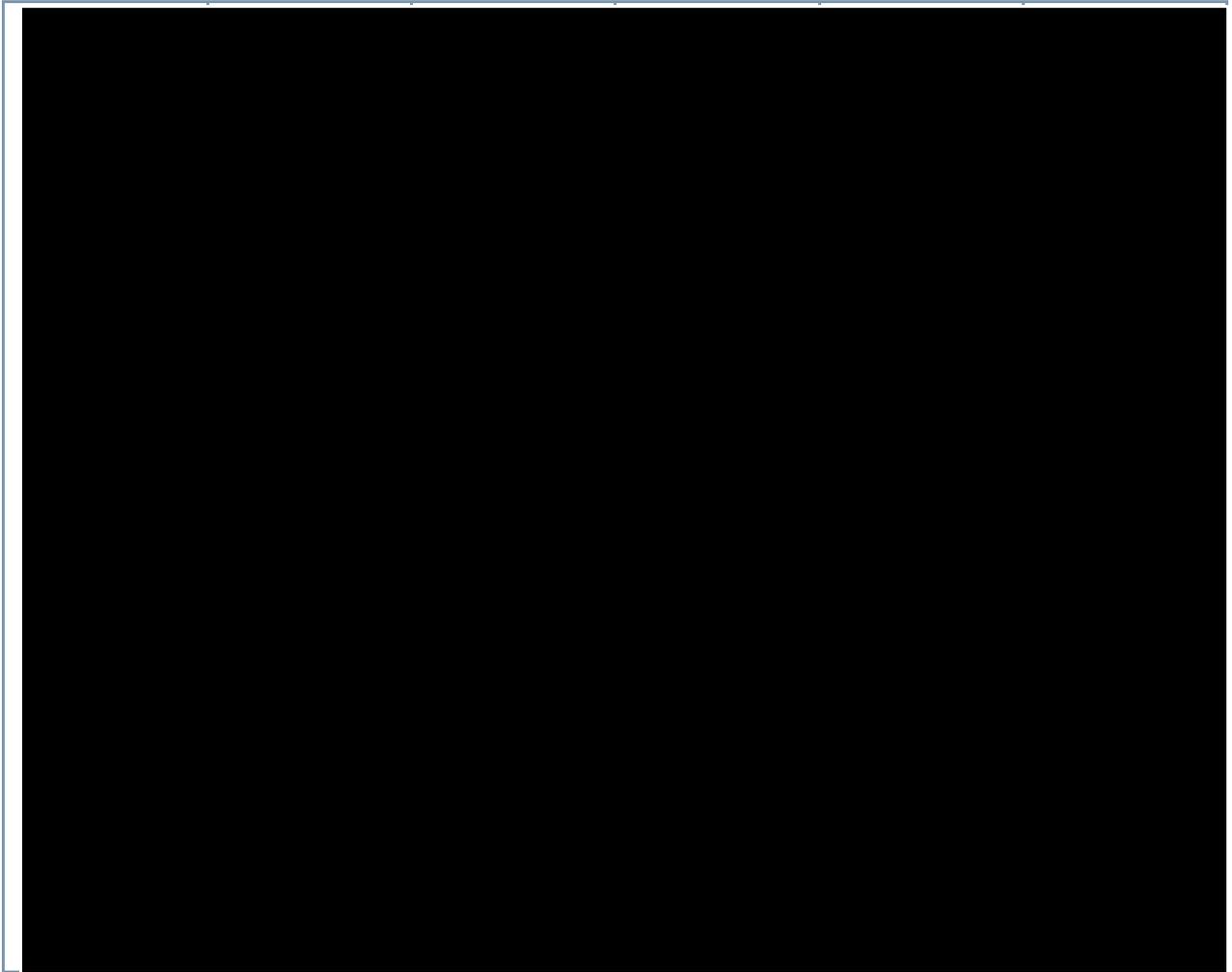


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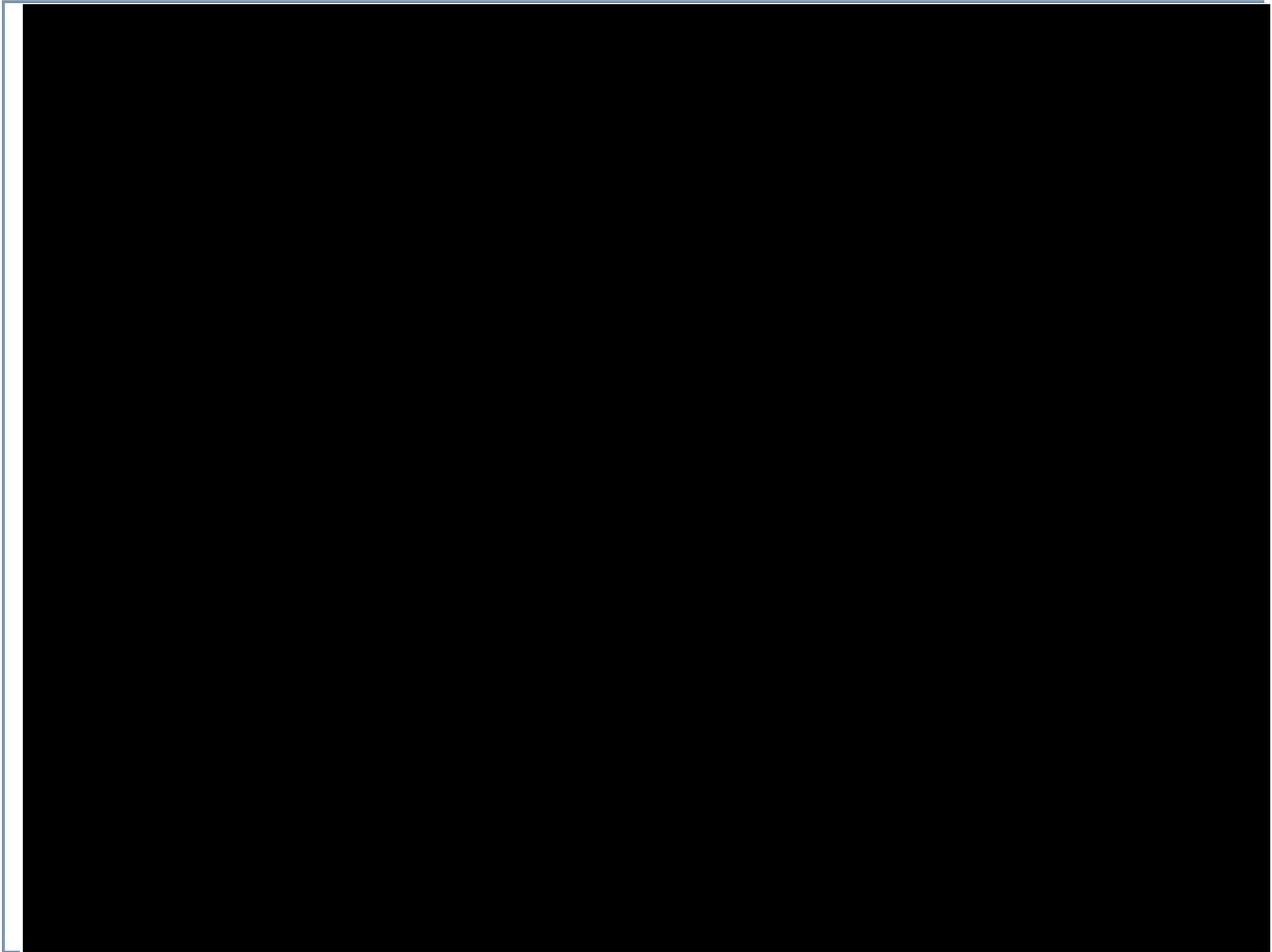


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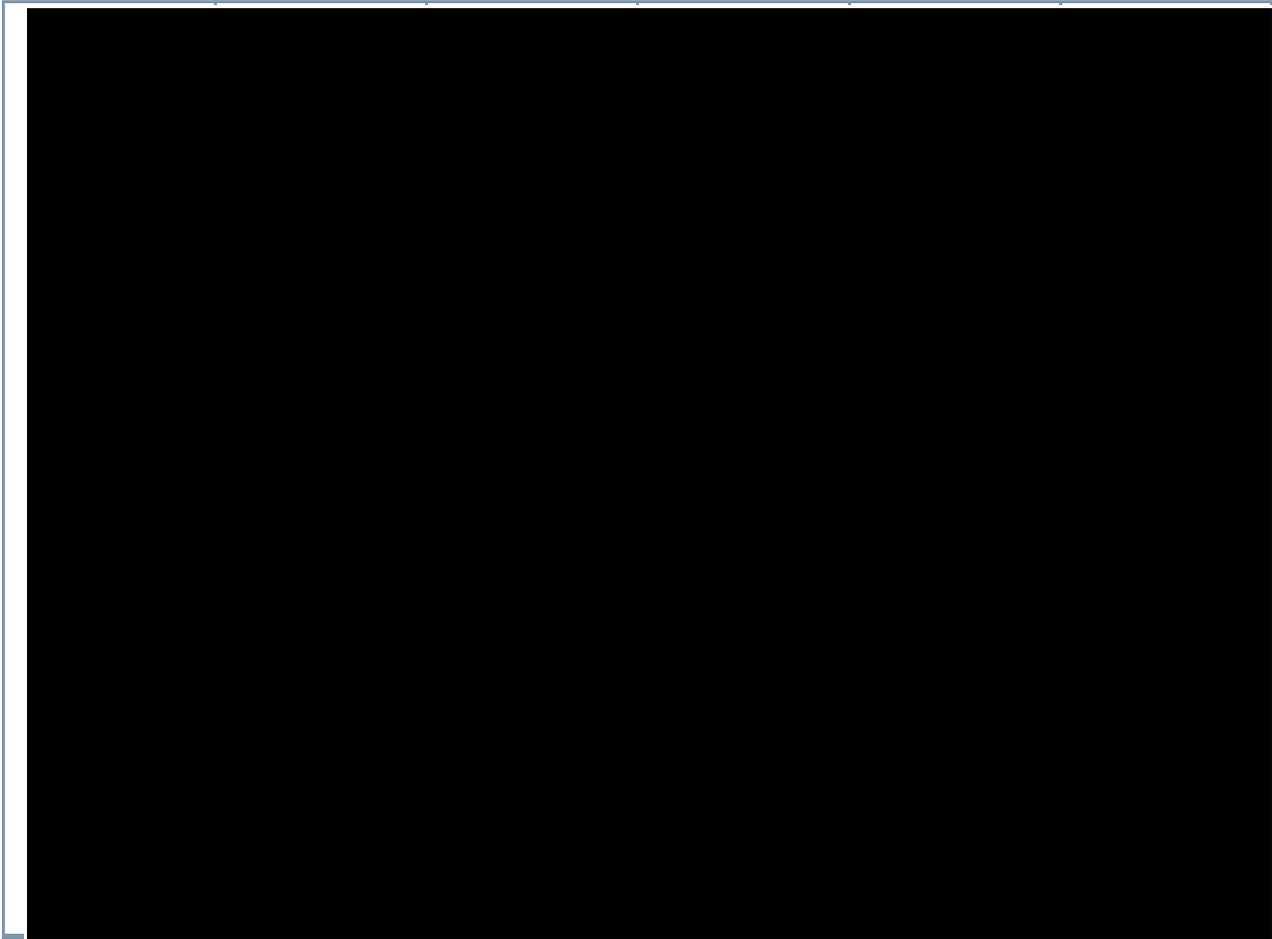


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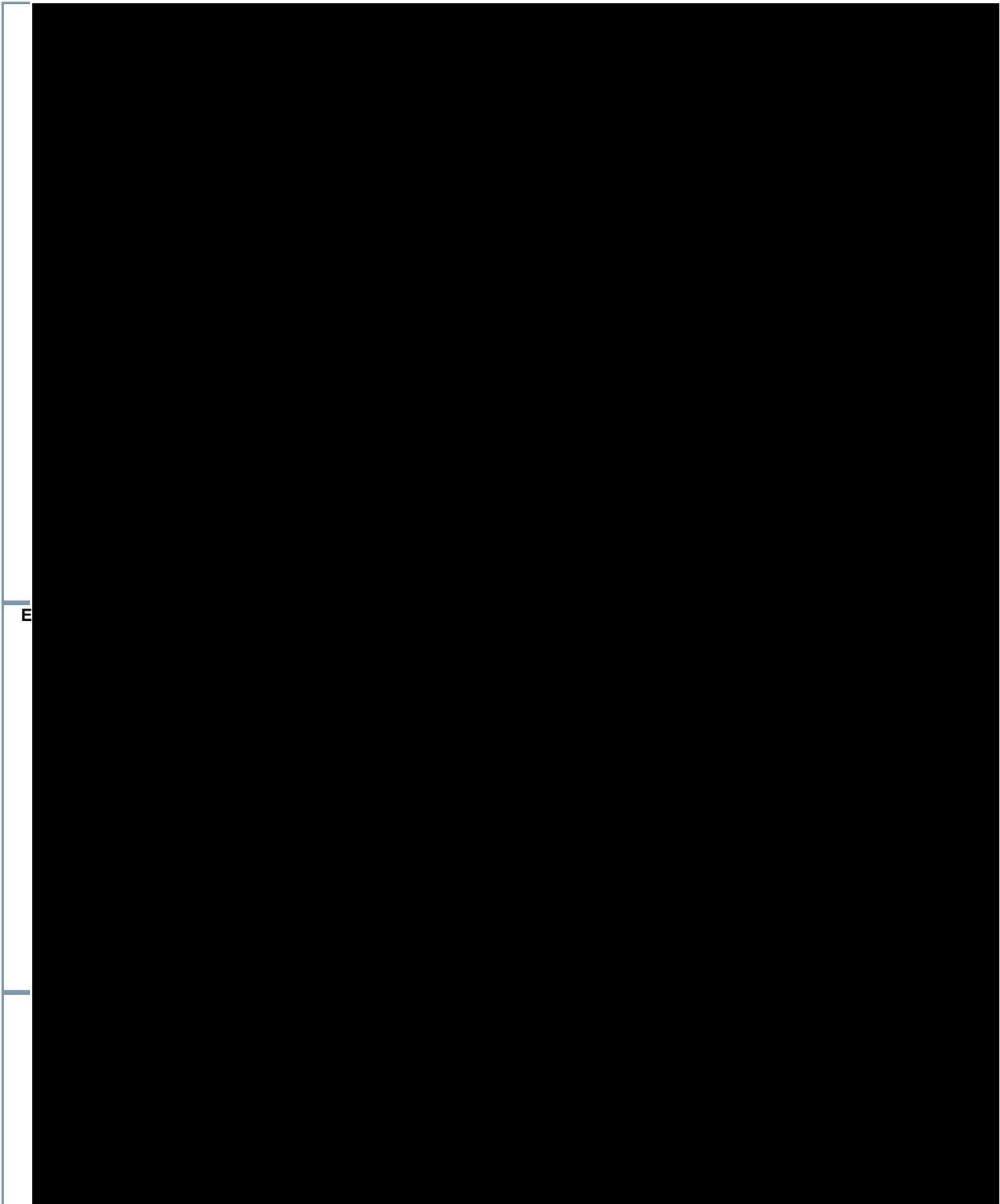


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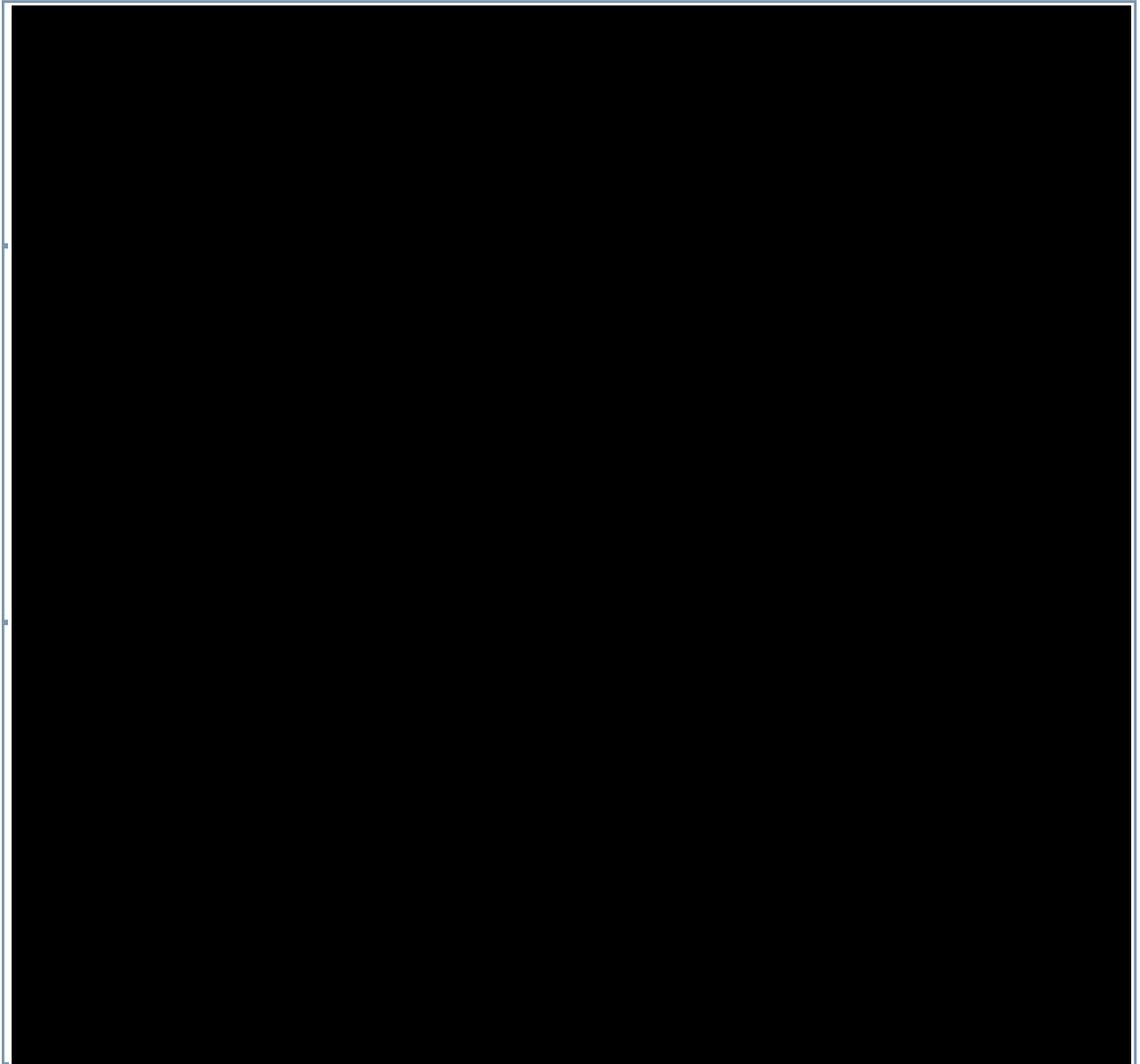


Table 4 – Overall updated staff (2019)

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8. SERVICE PERFORMANCE

This section details the service statistics and covers the period from February to December 2019.

8.1 SERVICES ORDERED AND DELIVERED

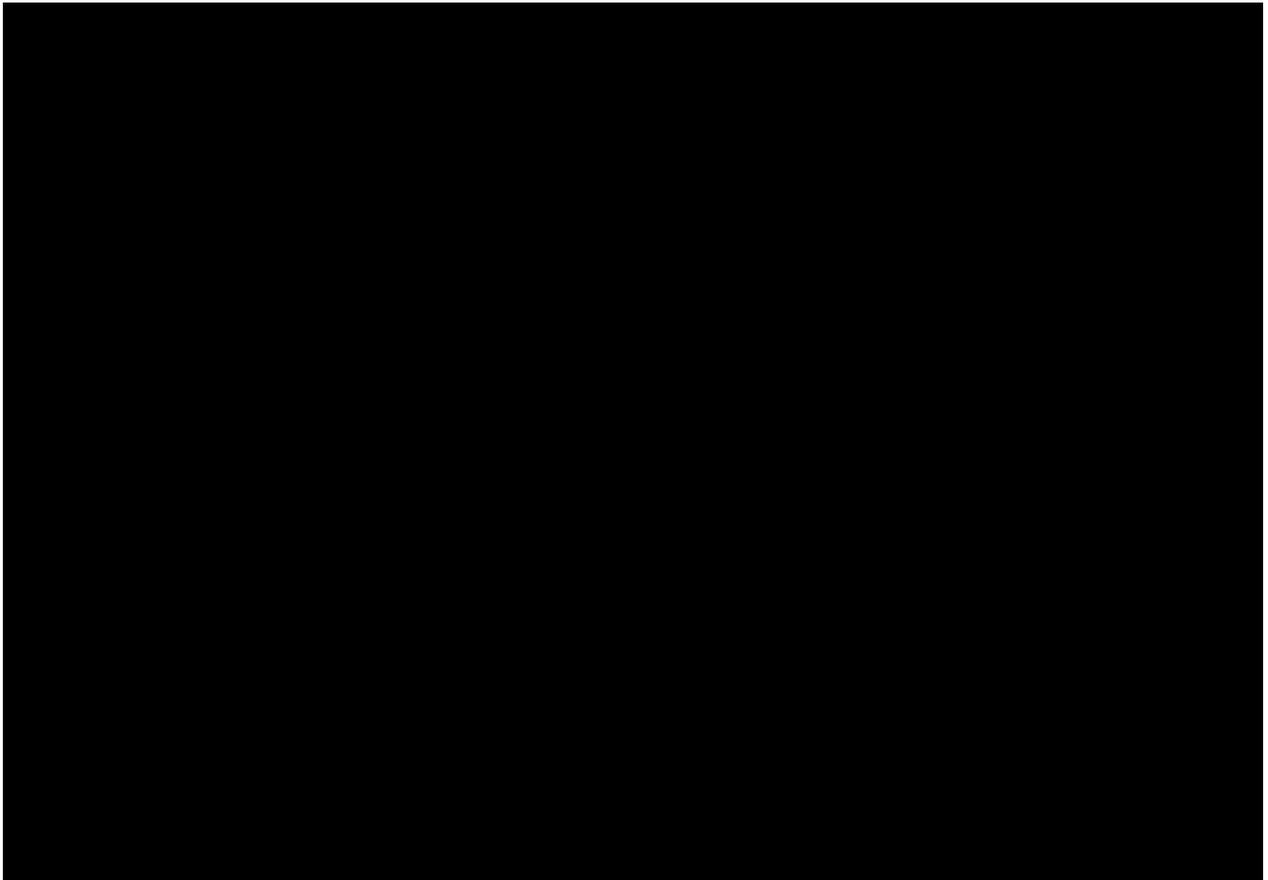


Figure 1 – Delivered Services 2019

The following table presents the number of delivered, cancelled, and service anomalies in 2019, on a monthly basis.

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	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Delivered												
Delivered with delay												
Cancelled												
Anomaly (EMSA)												
Anomaly (SATELLITE)												
Anomaly (EDISOFT)												
Total												

Table 5 – Monthly Delivered Services (2019)



Figure 2 – Monthly Orders by Satellite (2019)

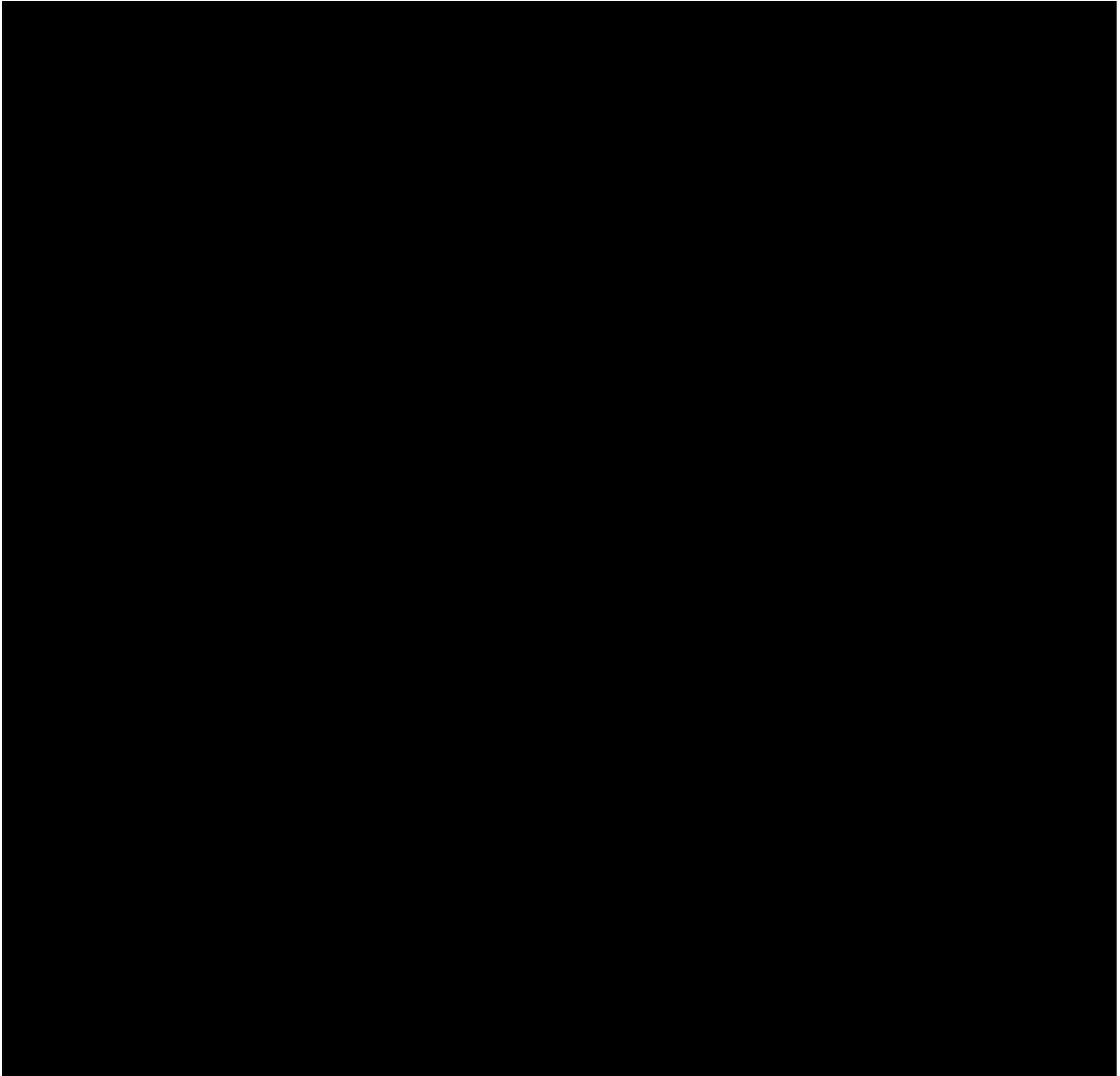
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8.2 SERVICE PERFORMANCE AND NRT DELIVERY

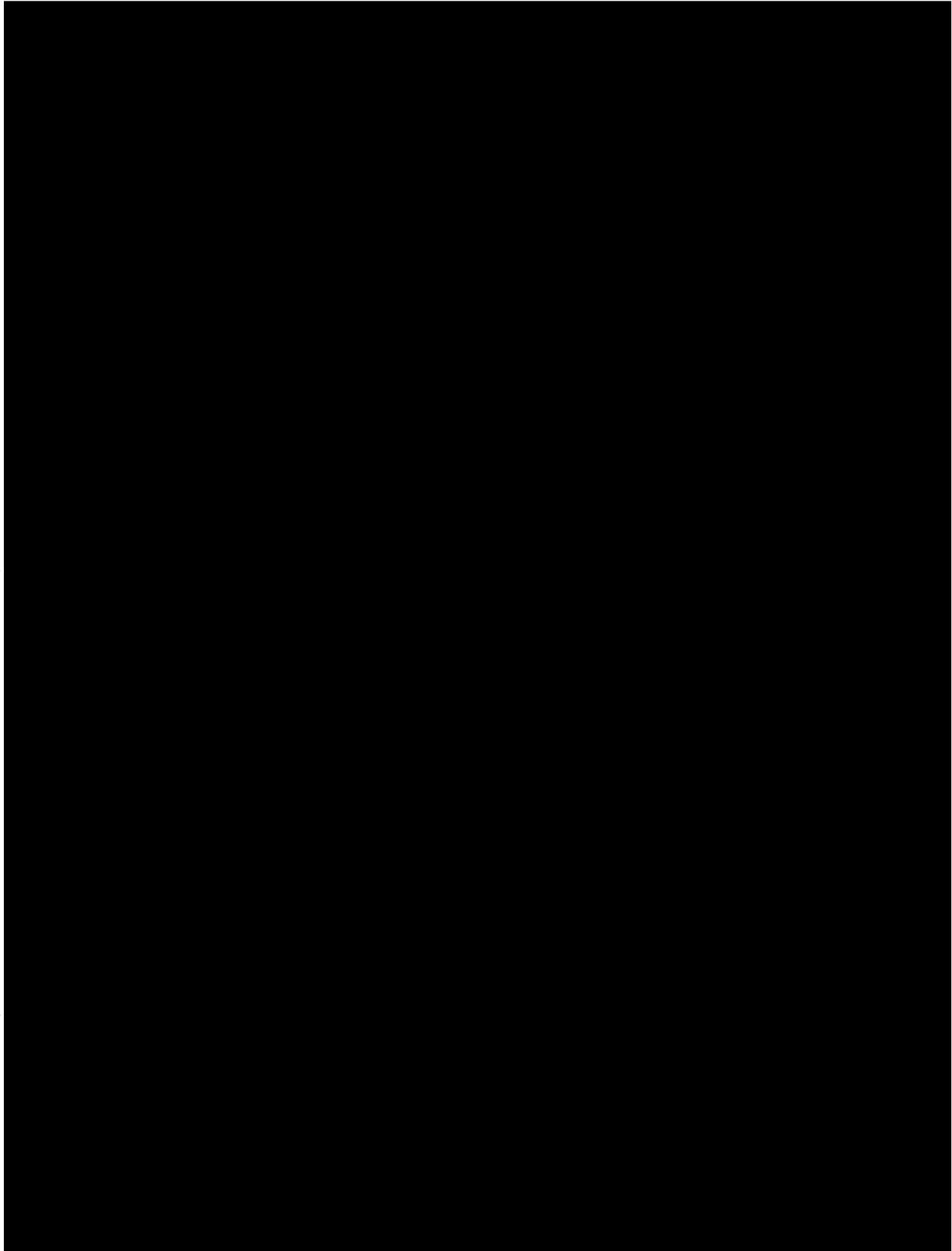


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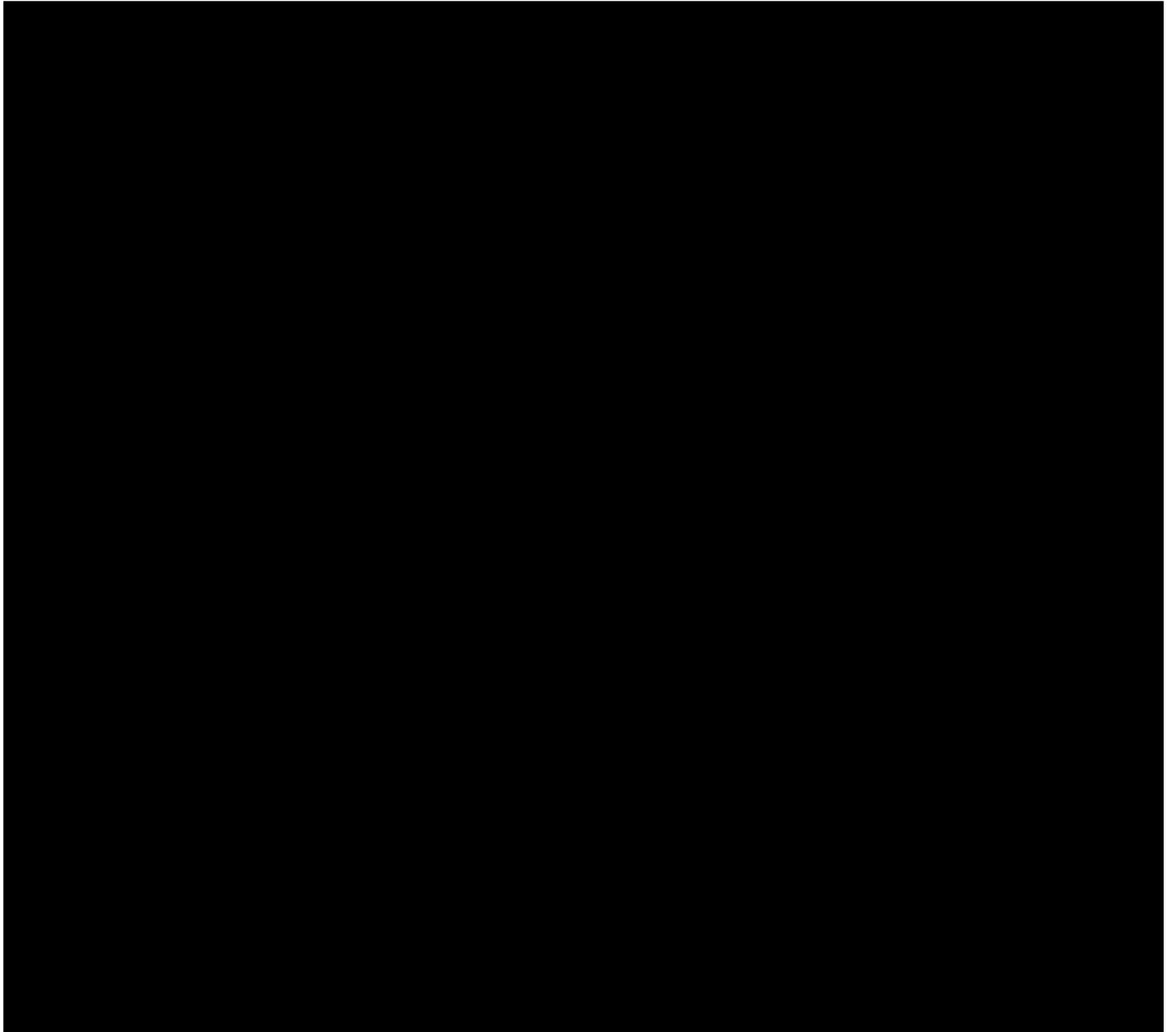


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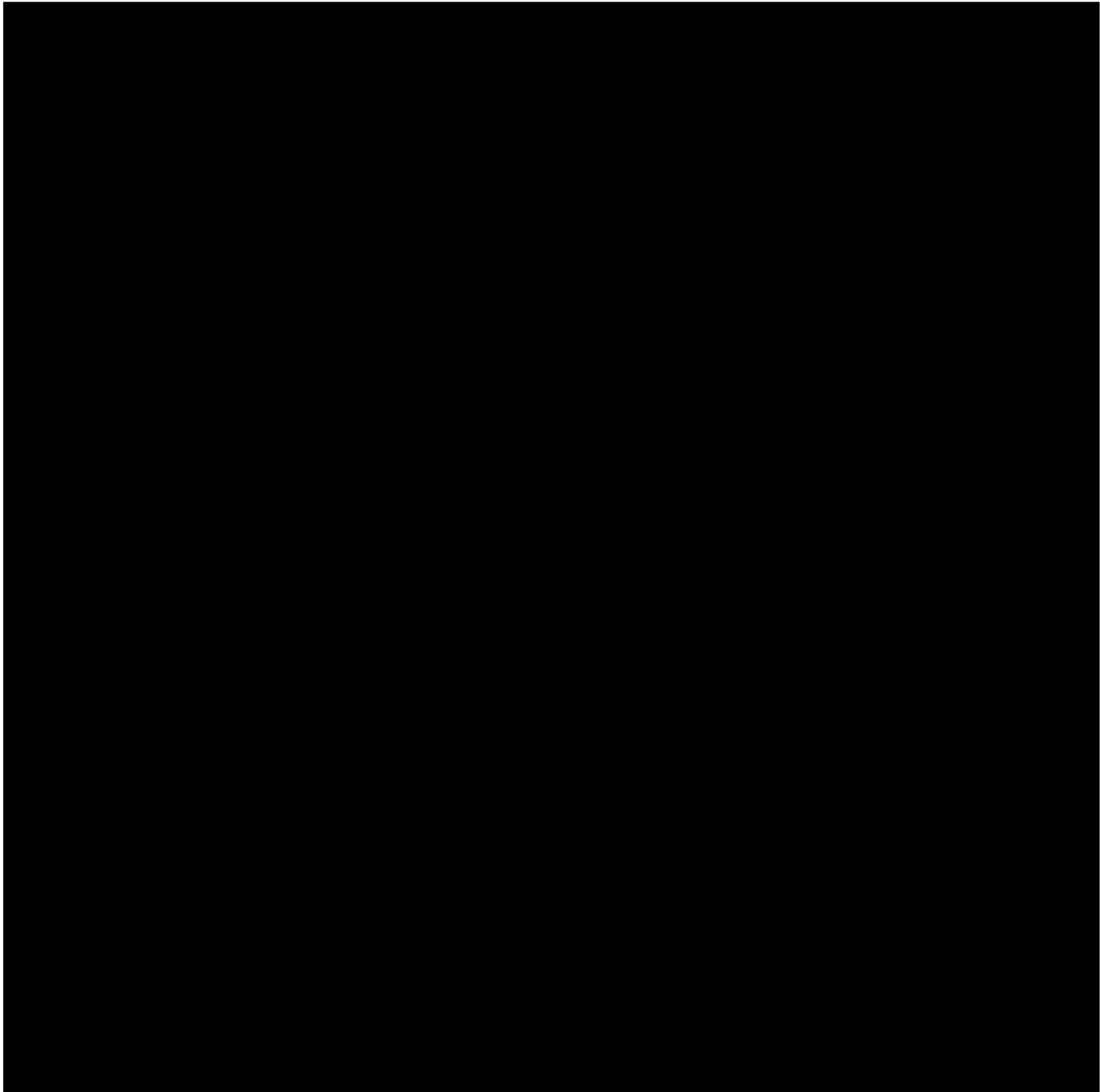


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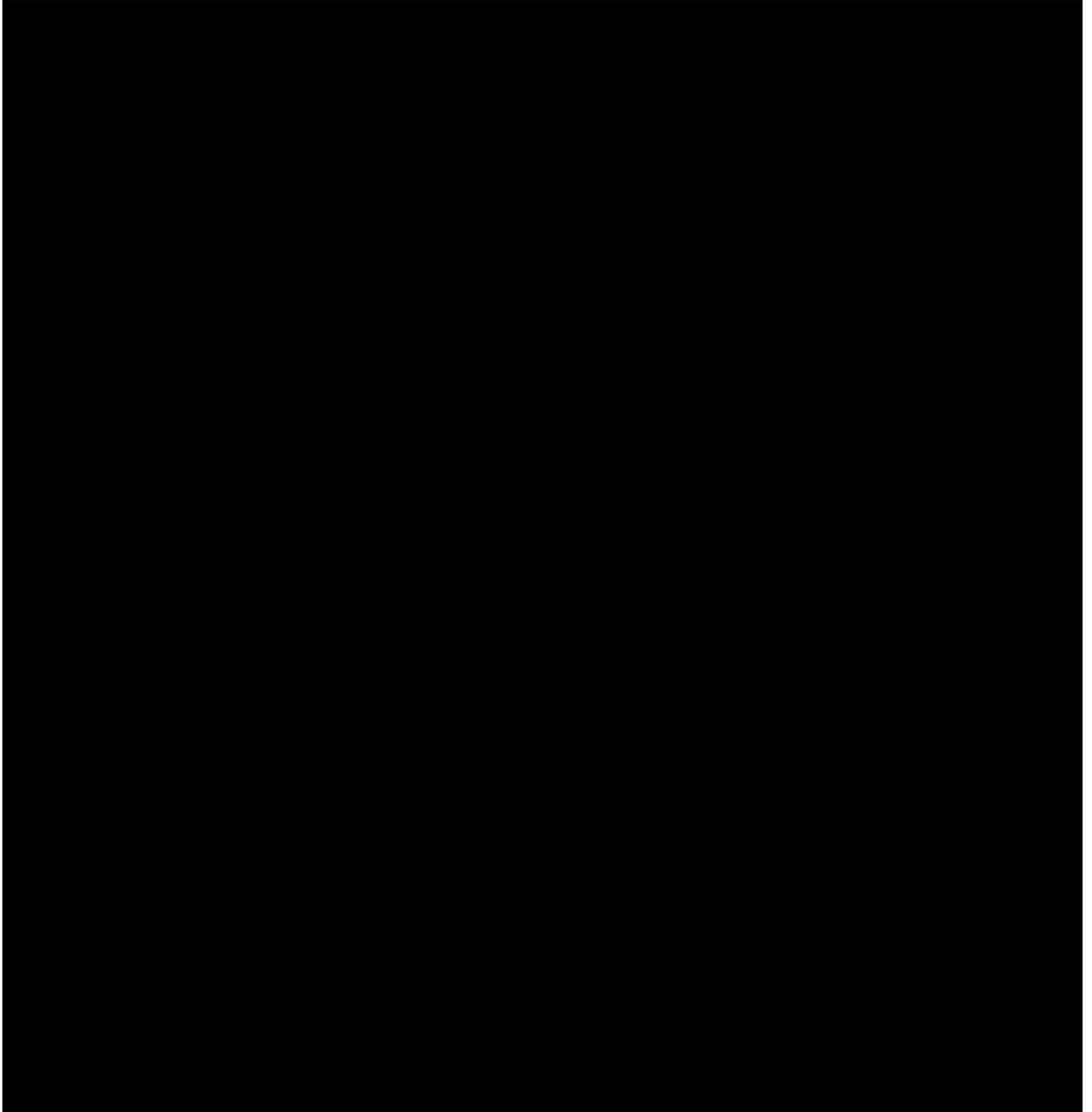
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8.3 OIL SPILL DETECTION SERVICE



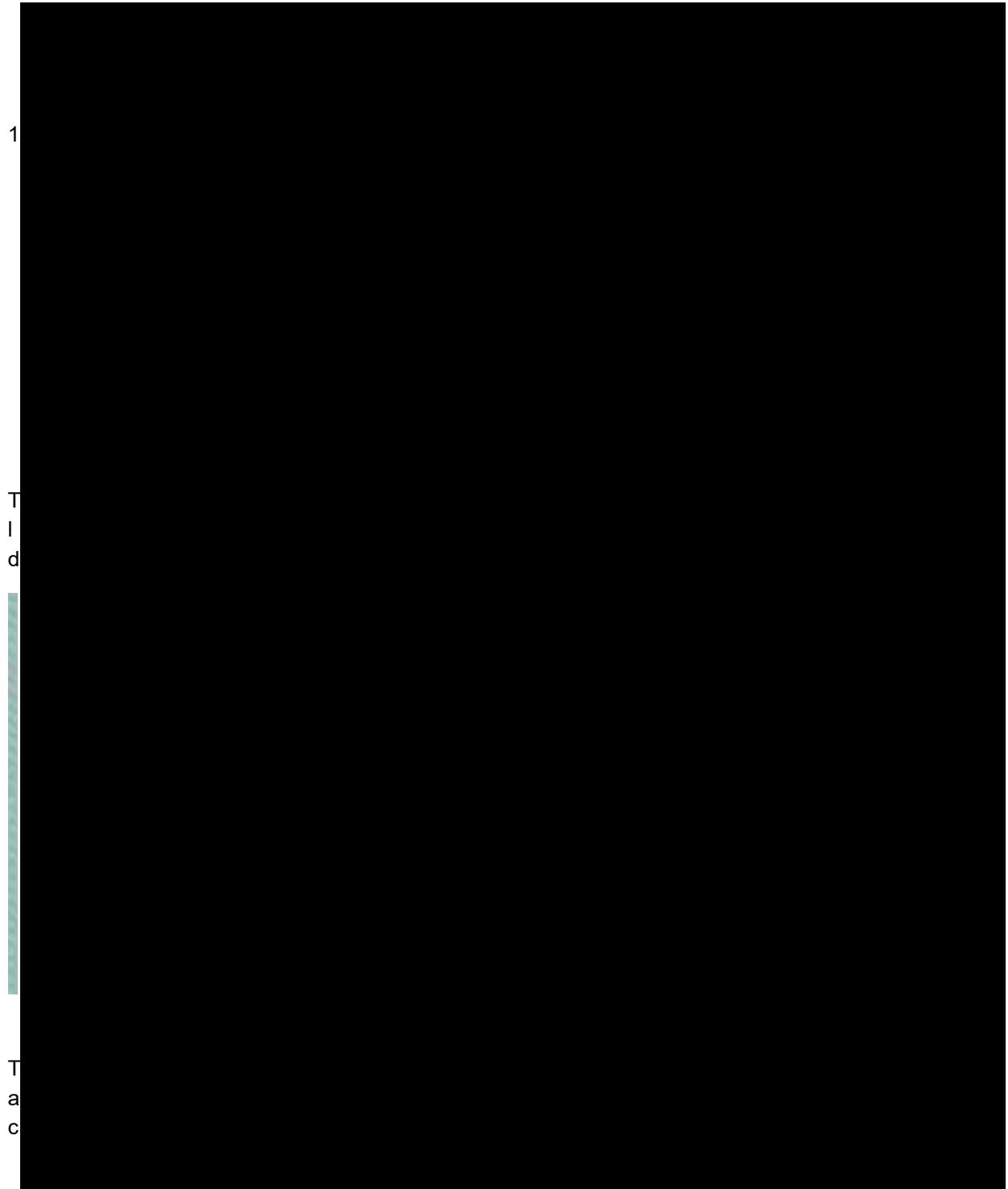
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9. SERVICE GOOD RESULTS



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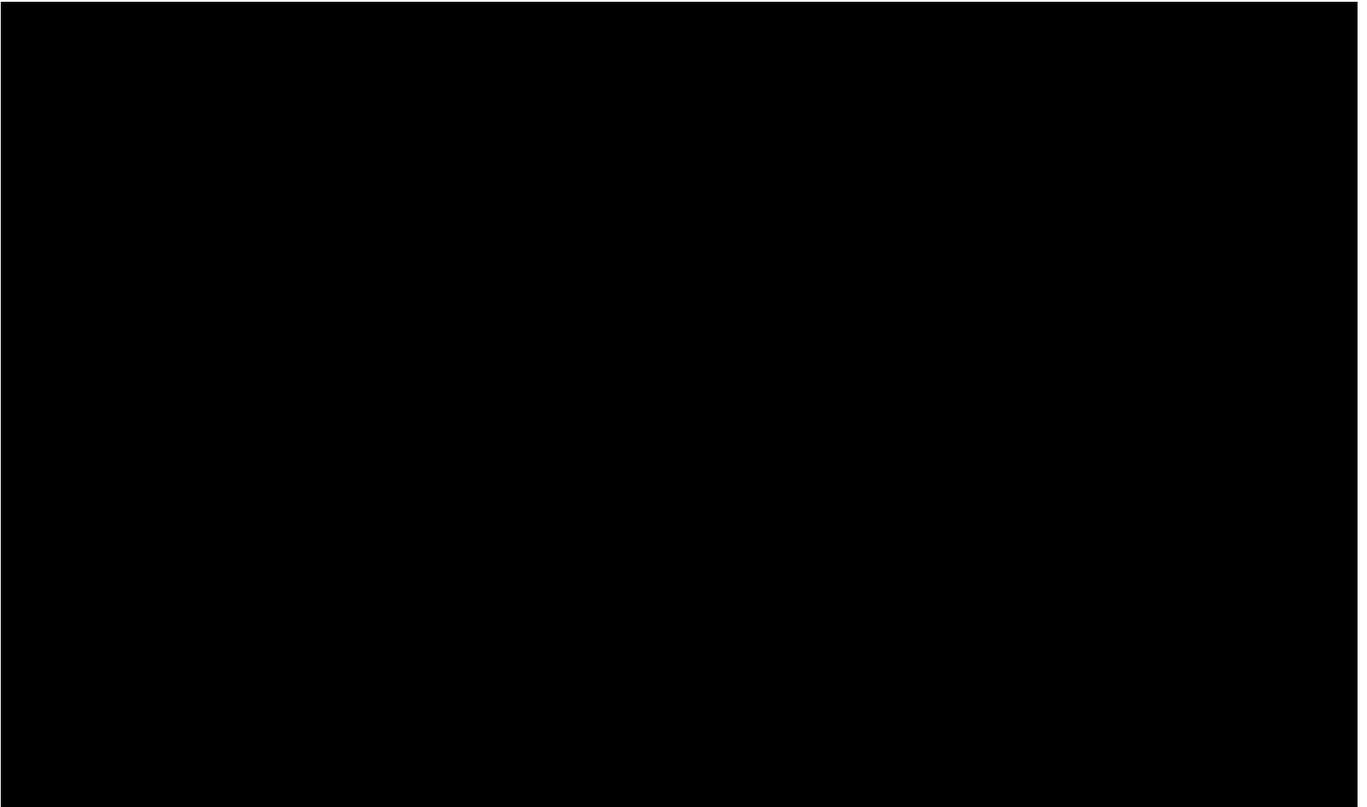
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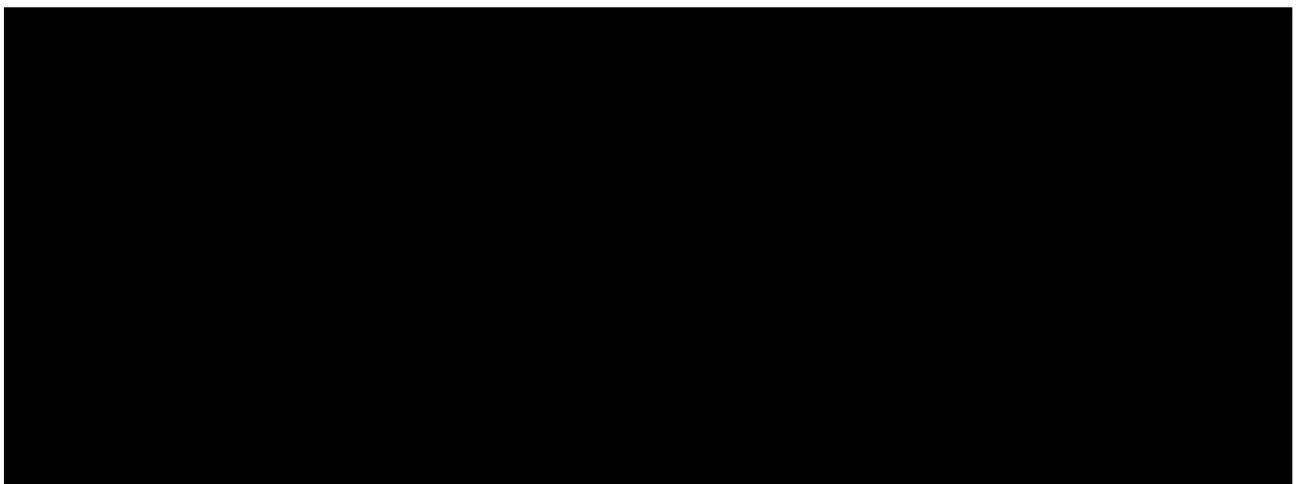
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10. SERVICE EVOLUTION

10.1 TECHNICAL UPDATES



10.2 MISSION UPDATES

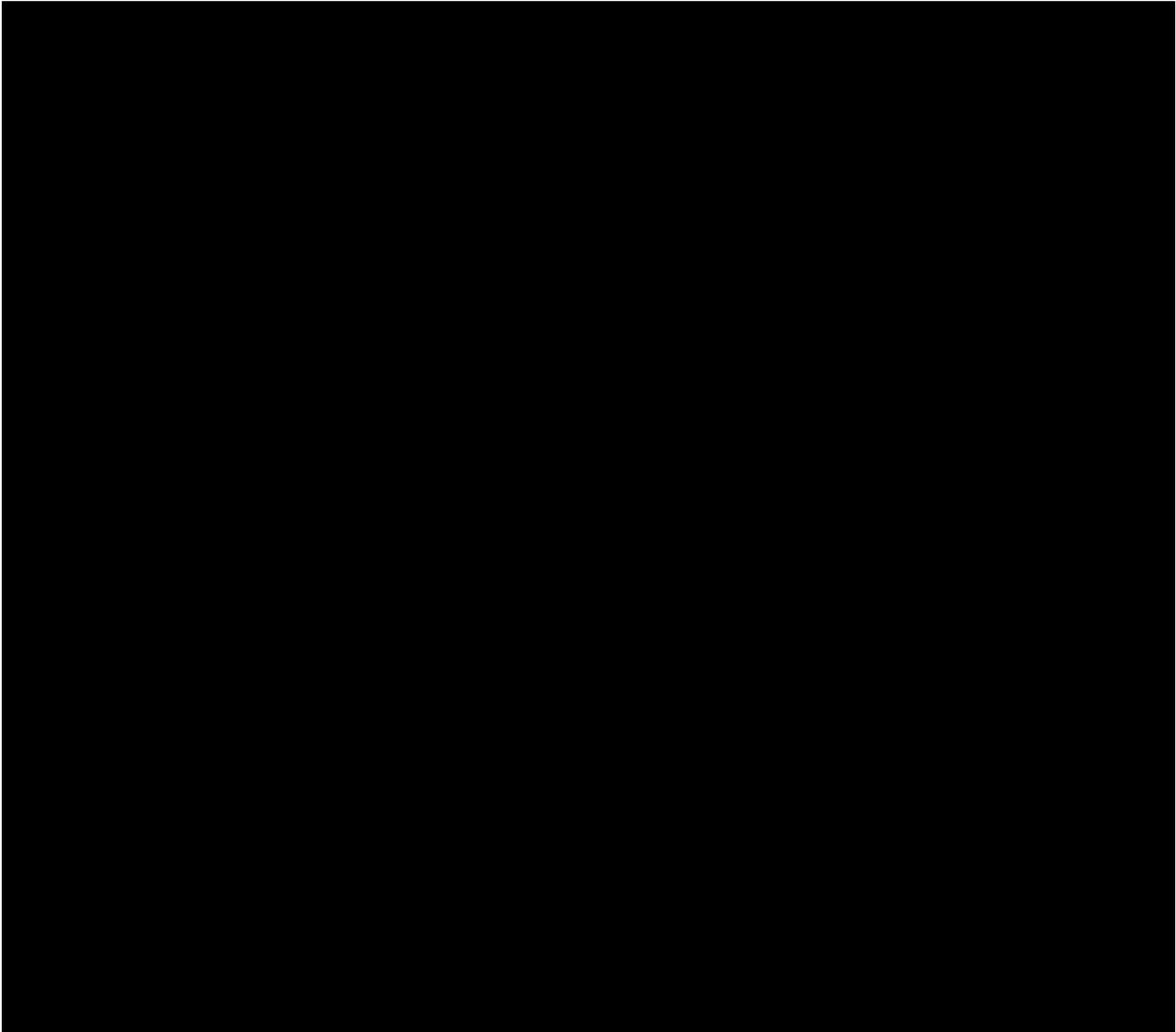


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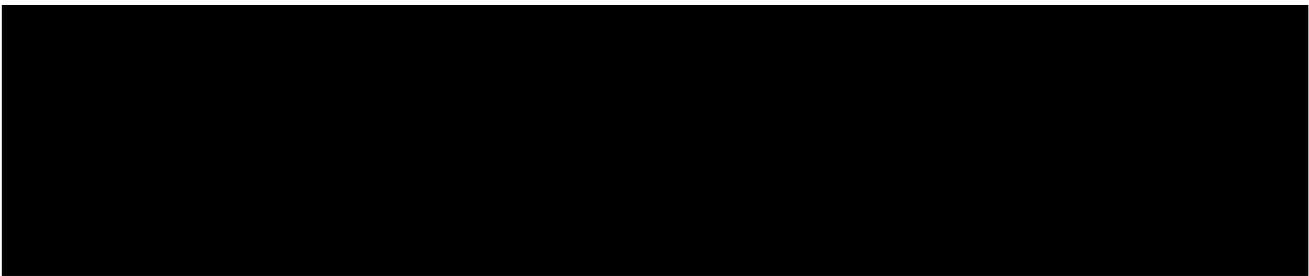
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10.3 PROCEDURE UPDATES

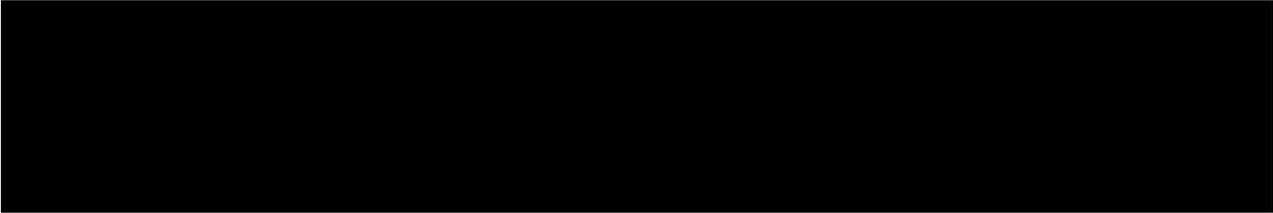


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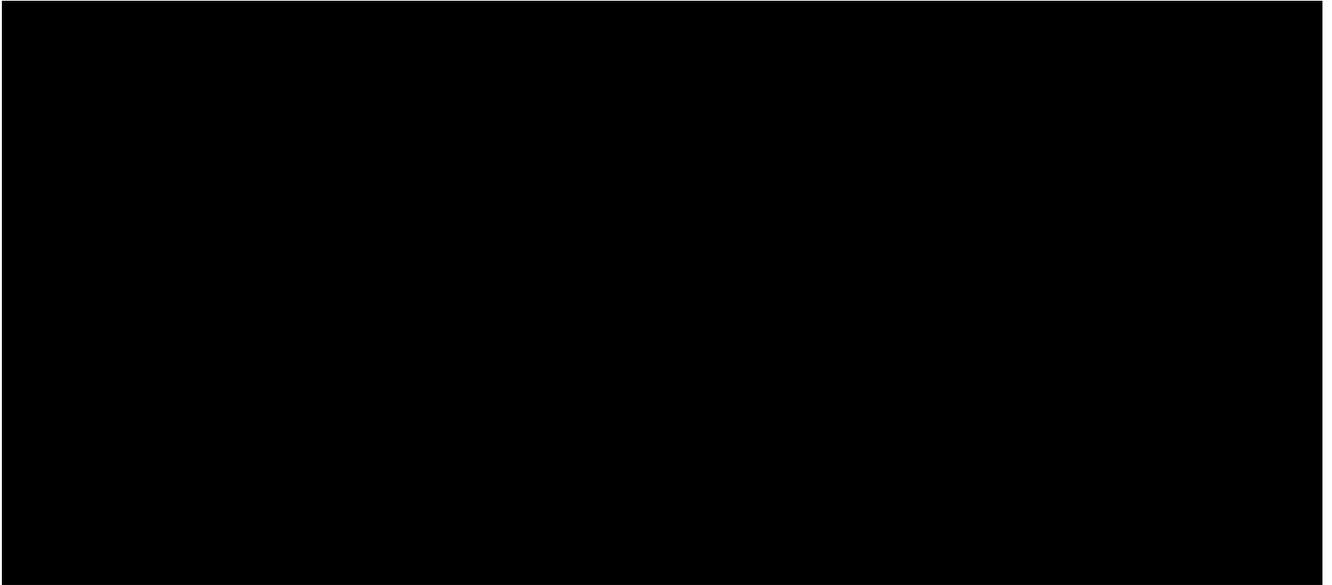
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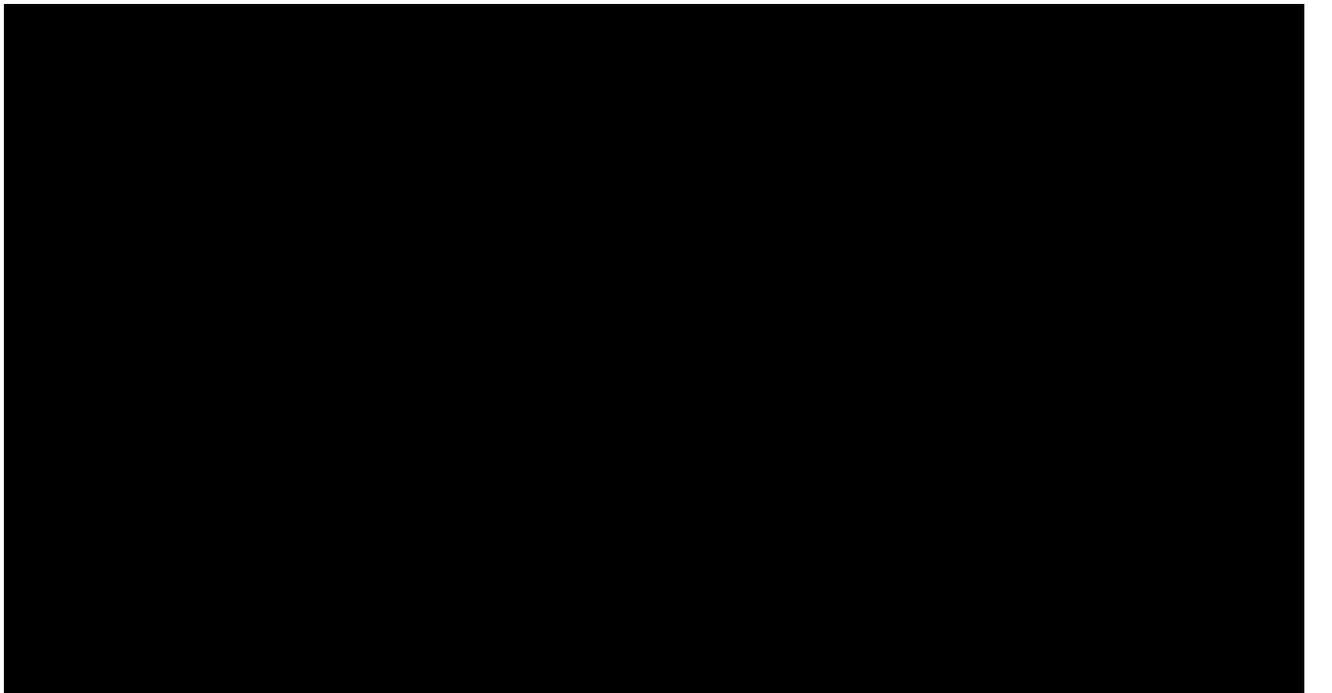
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11. QUALITY ASSURANCE AND CONTROL

11.1 SERVICE PROVIDER QUALITY CONTROL



11.2 REPORTED NON-CONFORMANCES

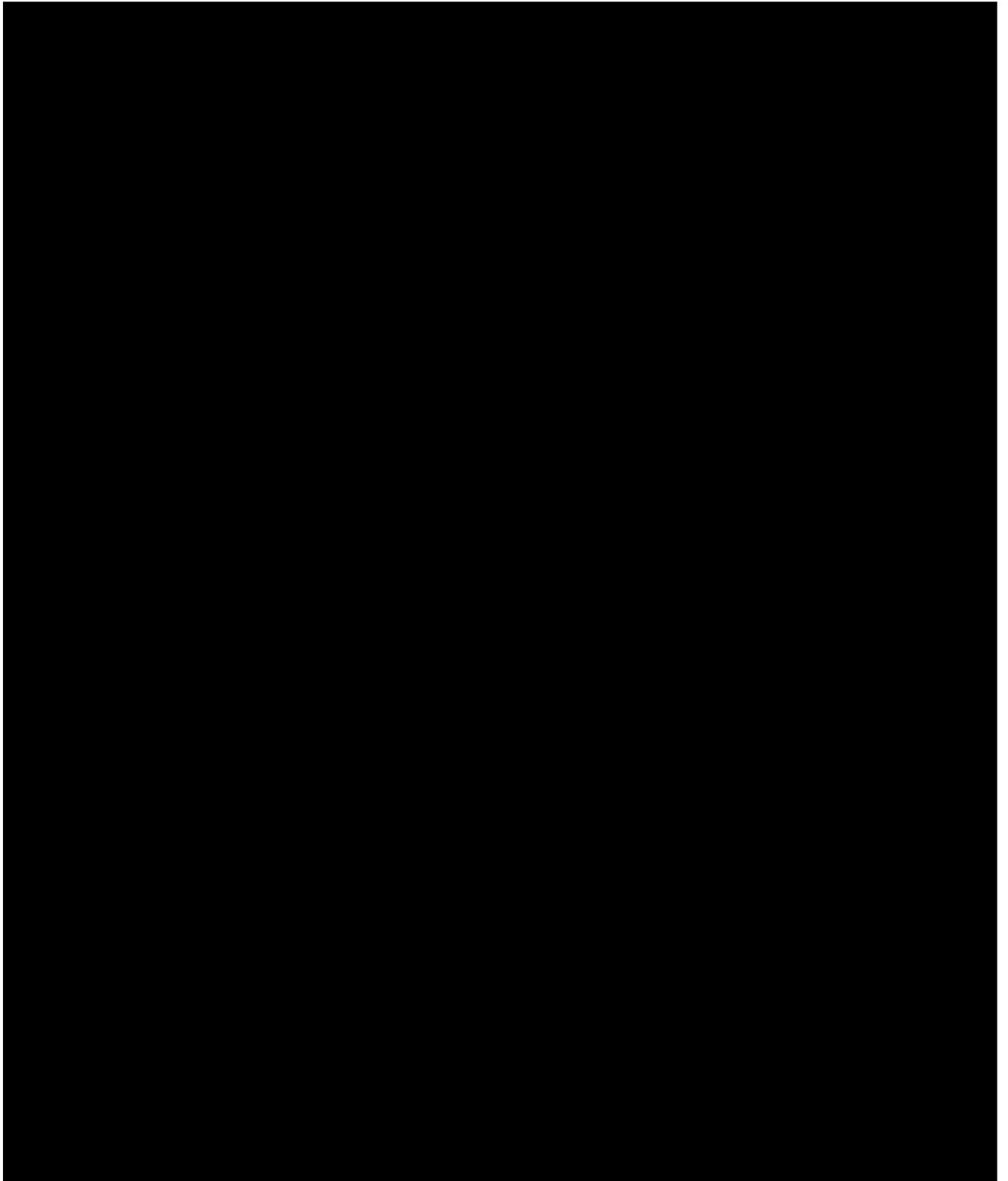


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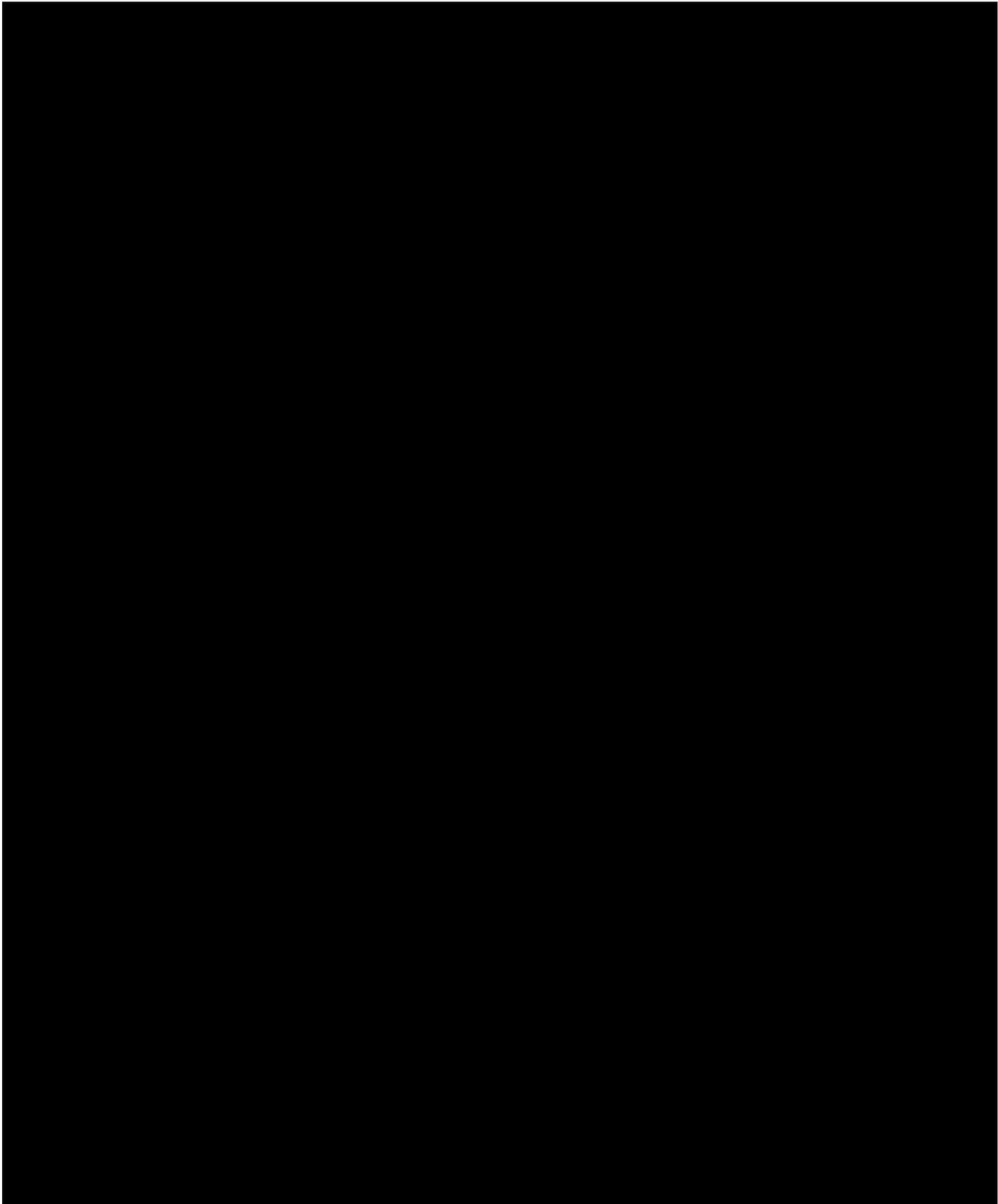


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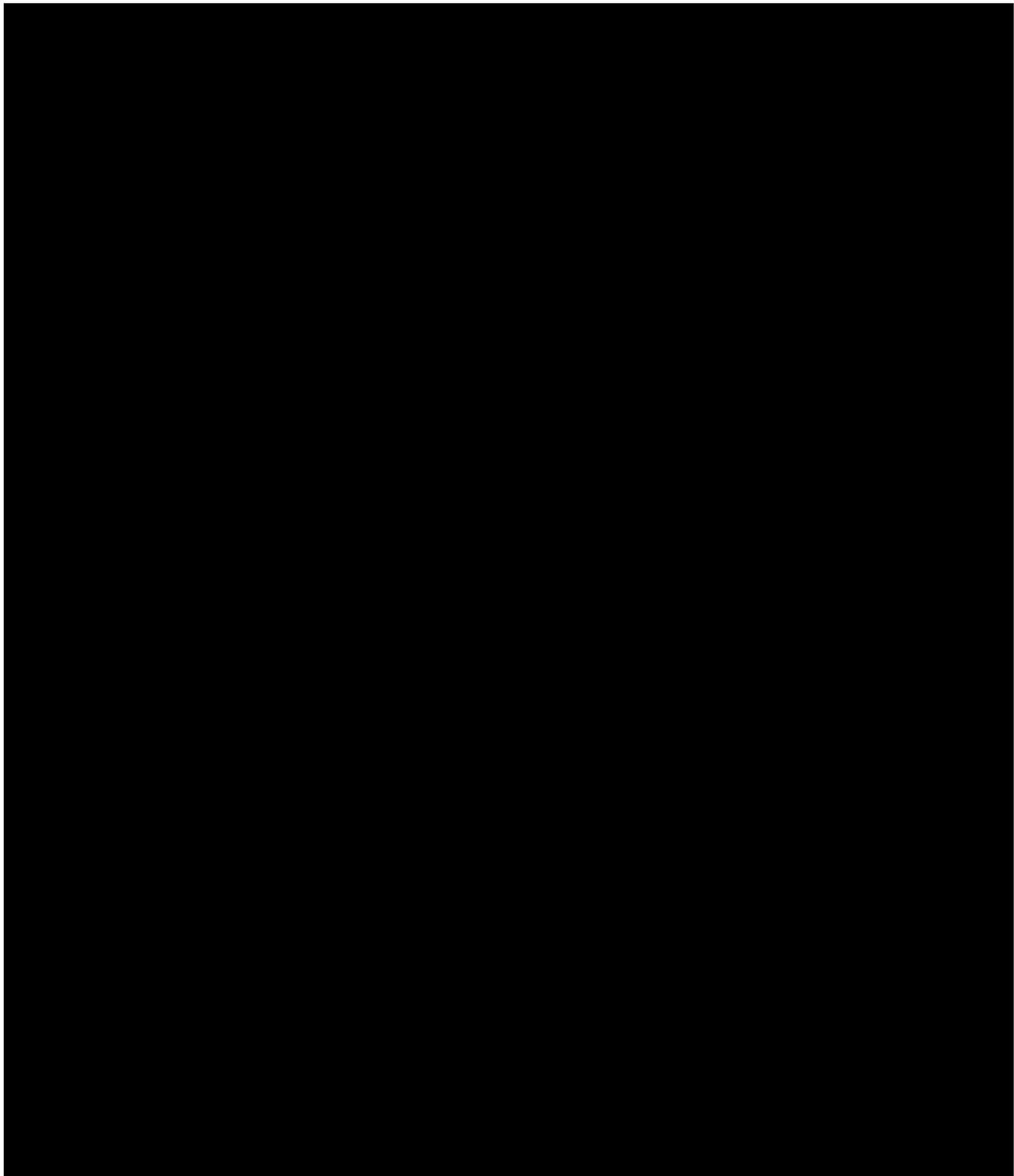


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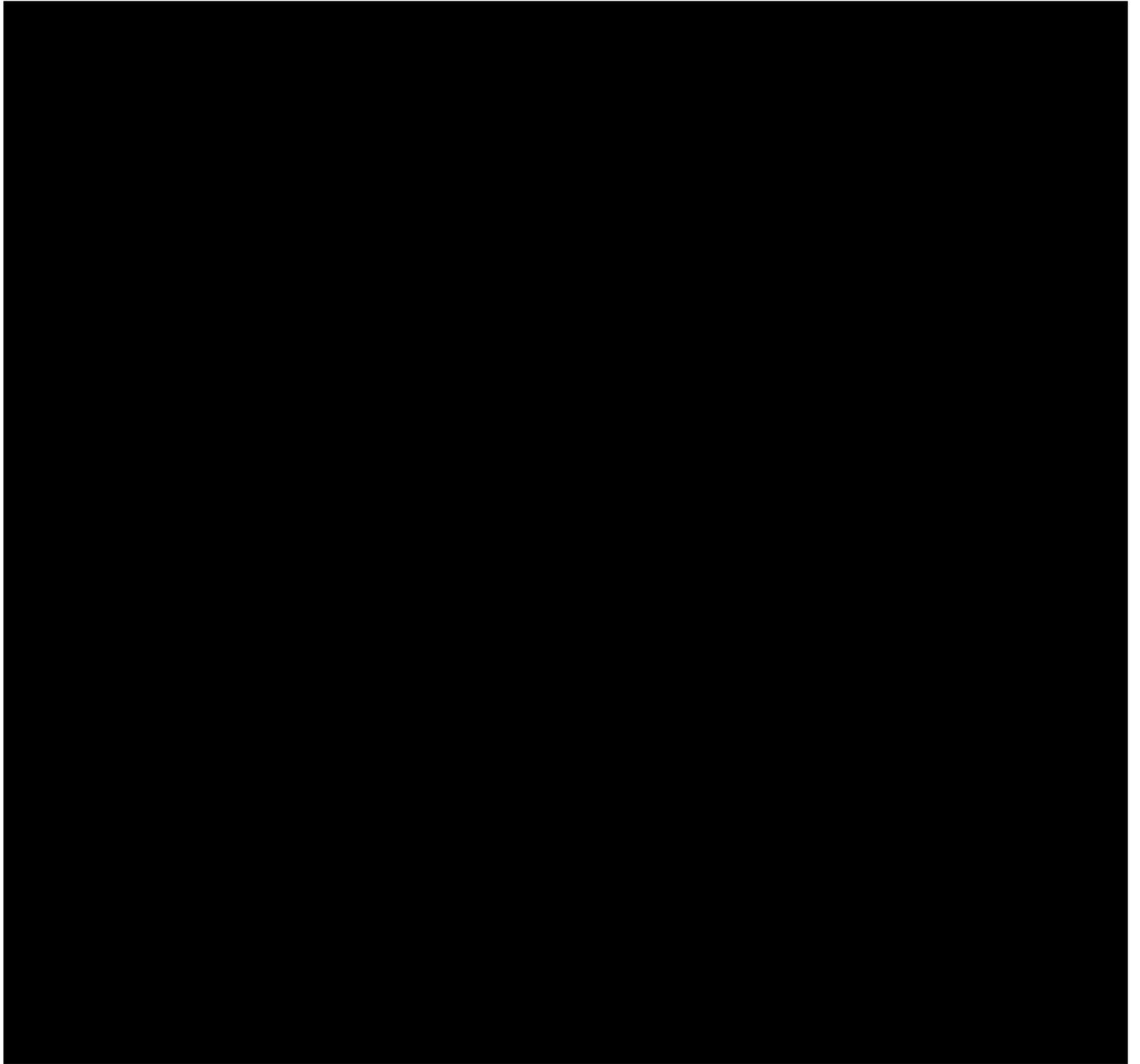


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11.3 CHANGE MANAGEMENT

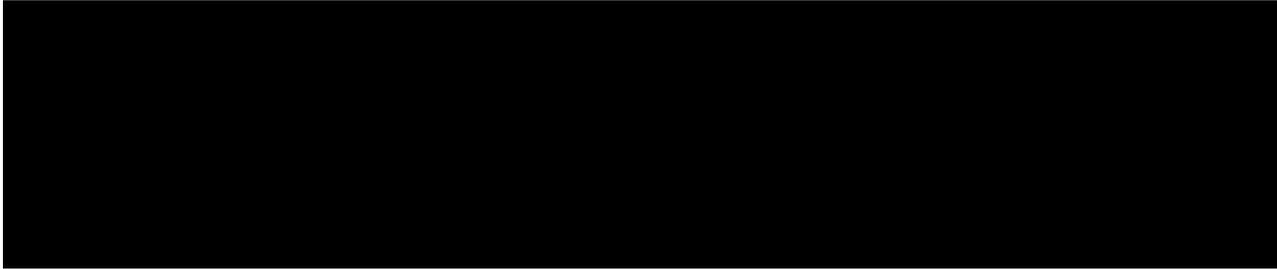


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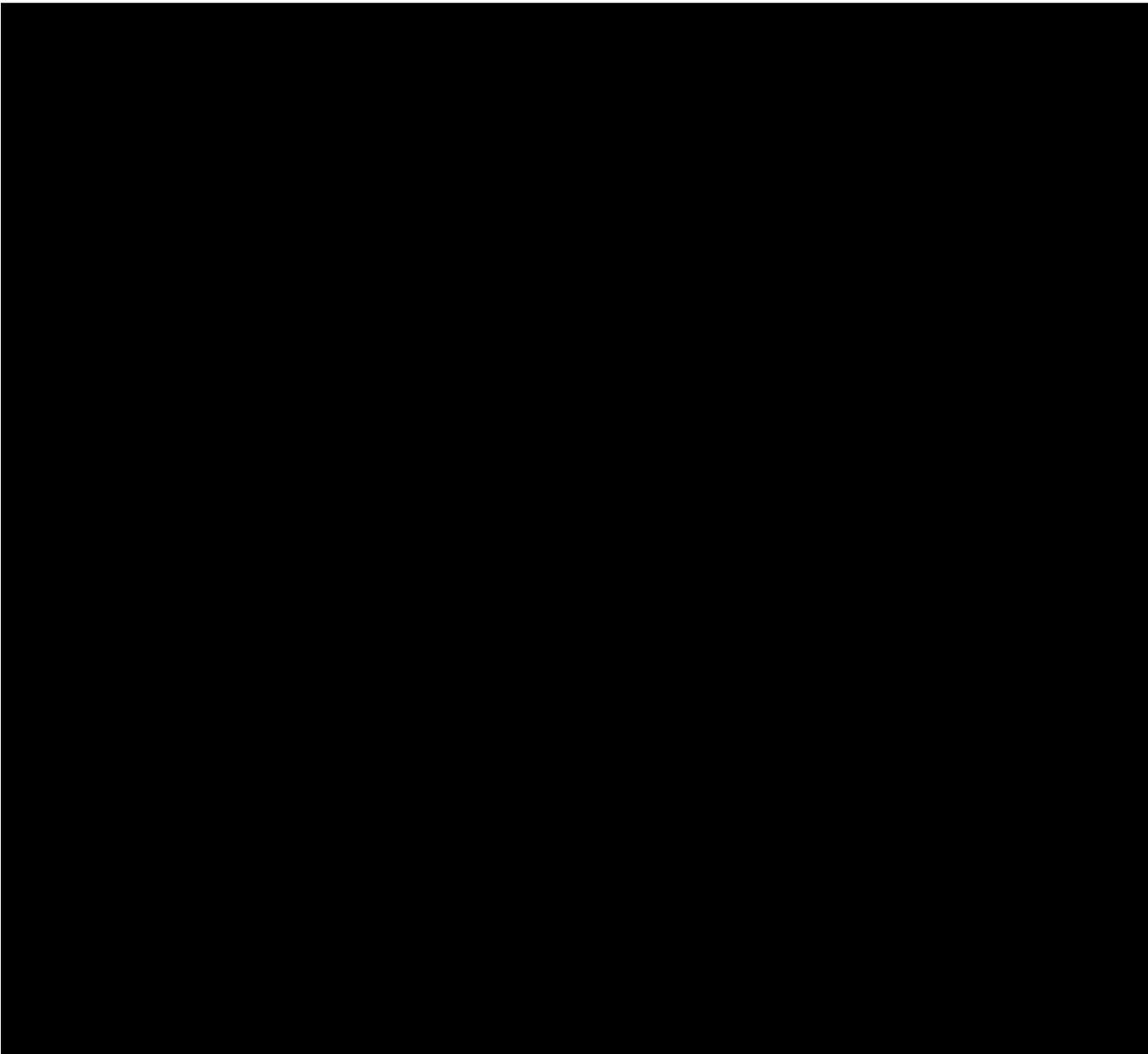
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11.4 ANOMALIES

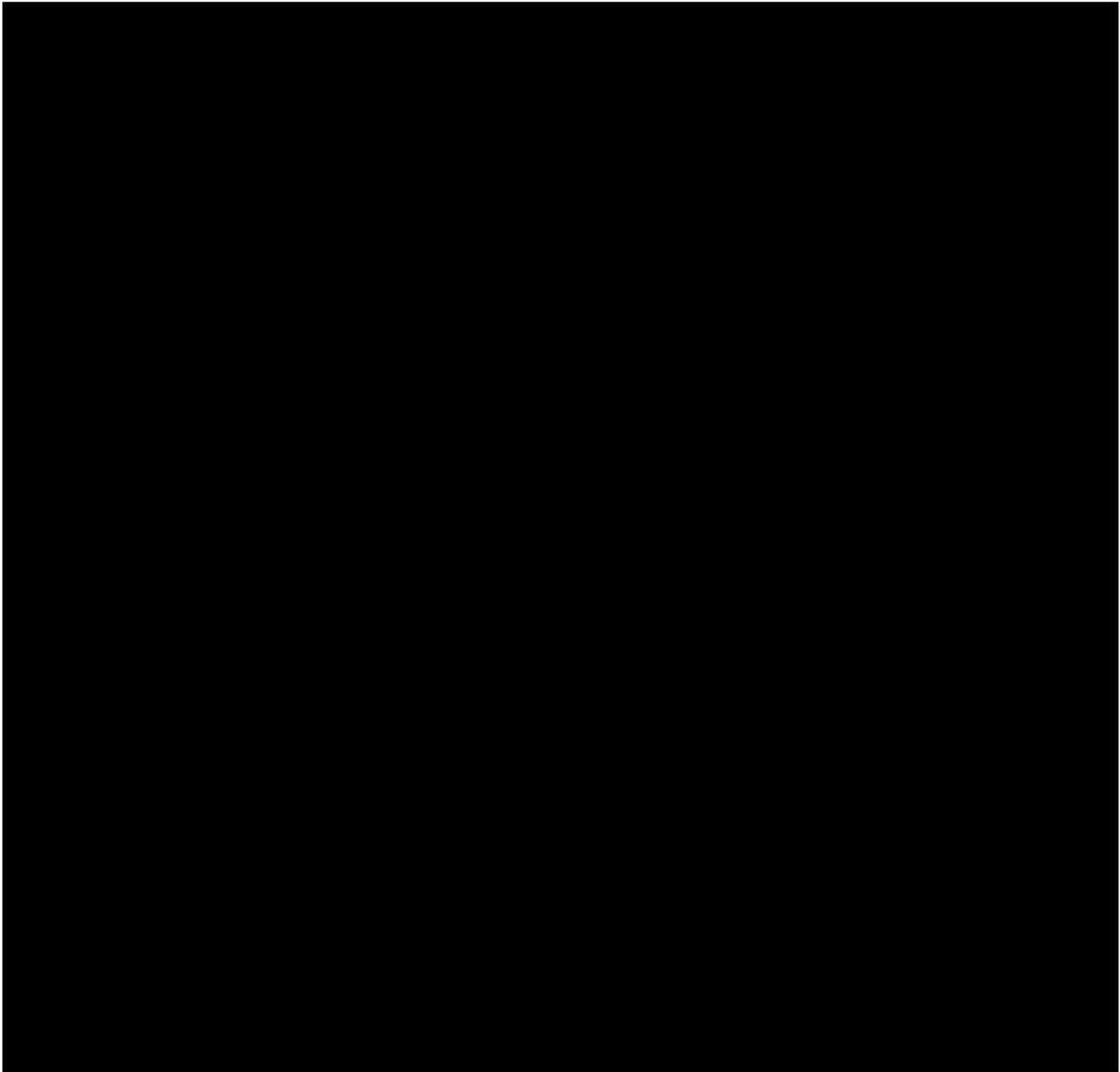


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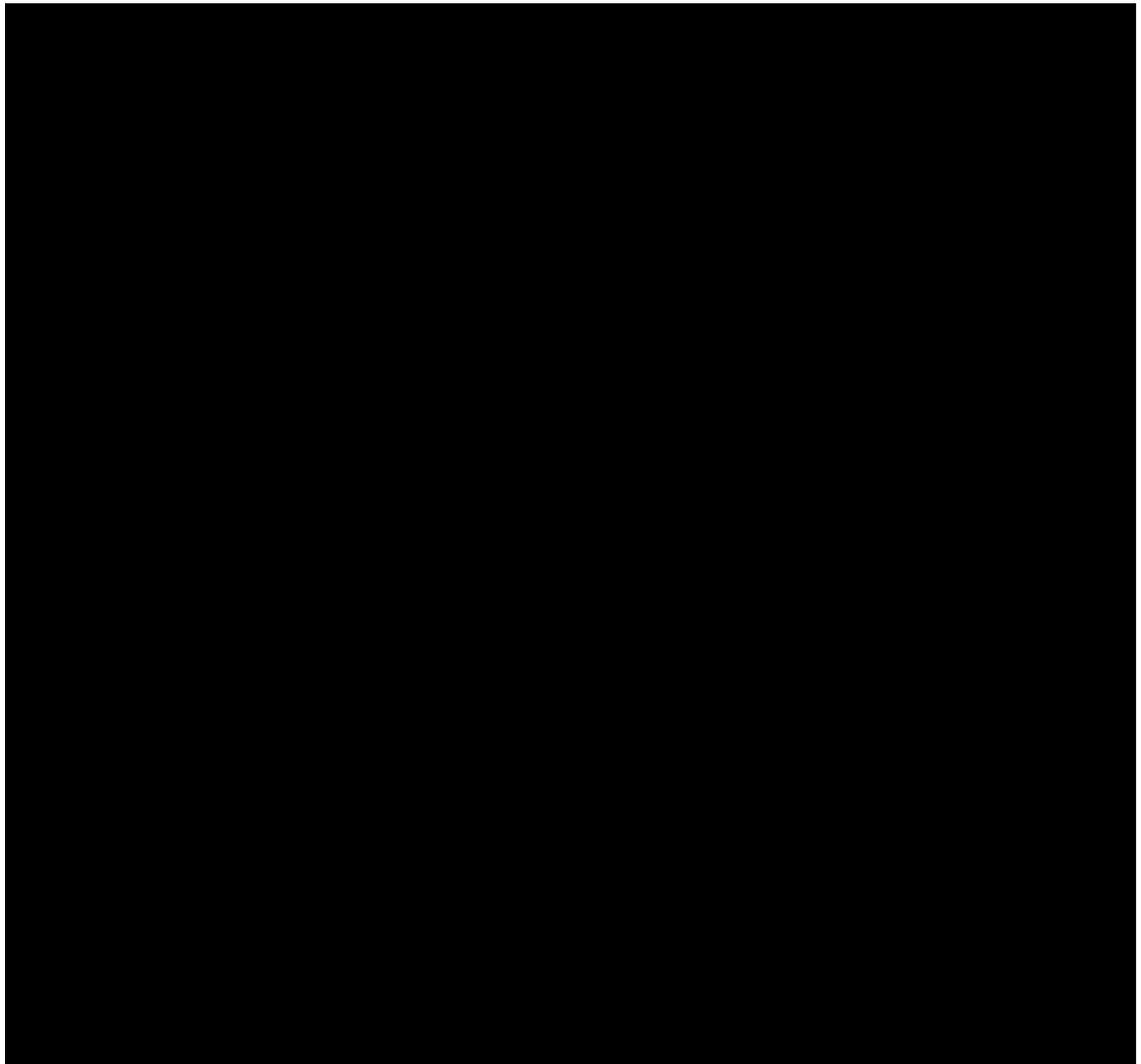


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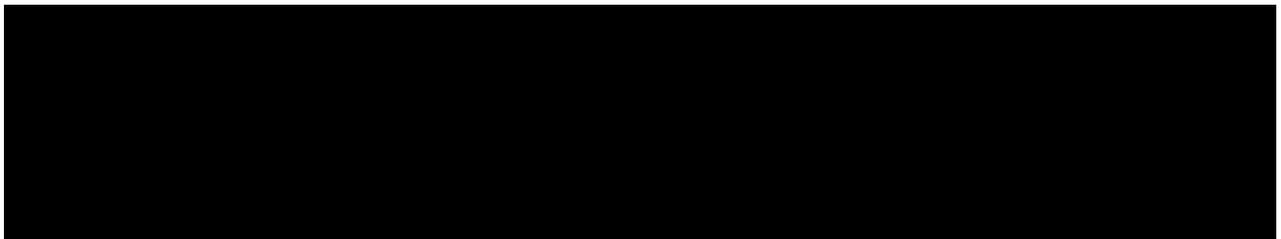
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11.5 ISSUED REQUESTS

Staff and team updates

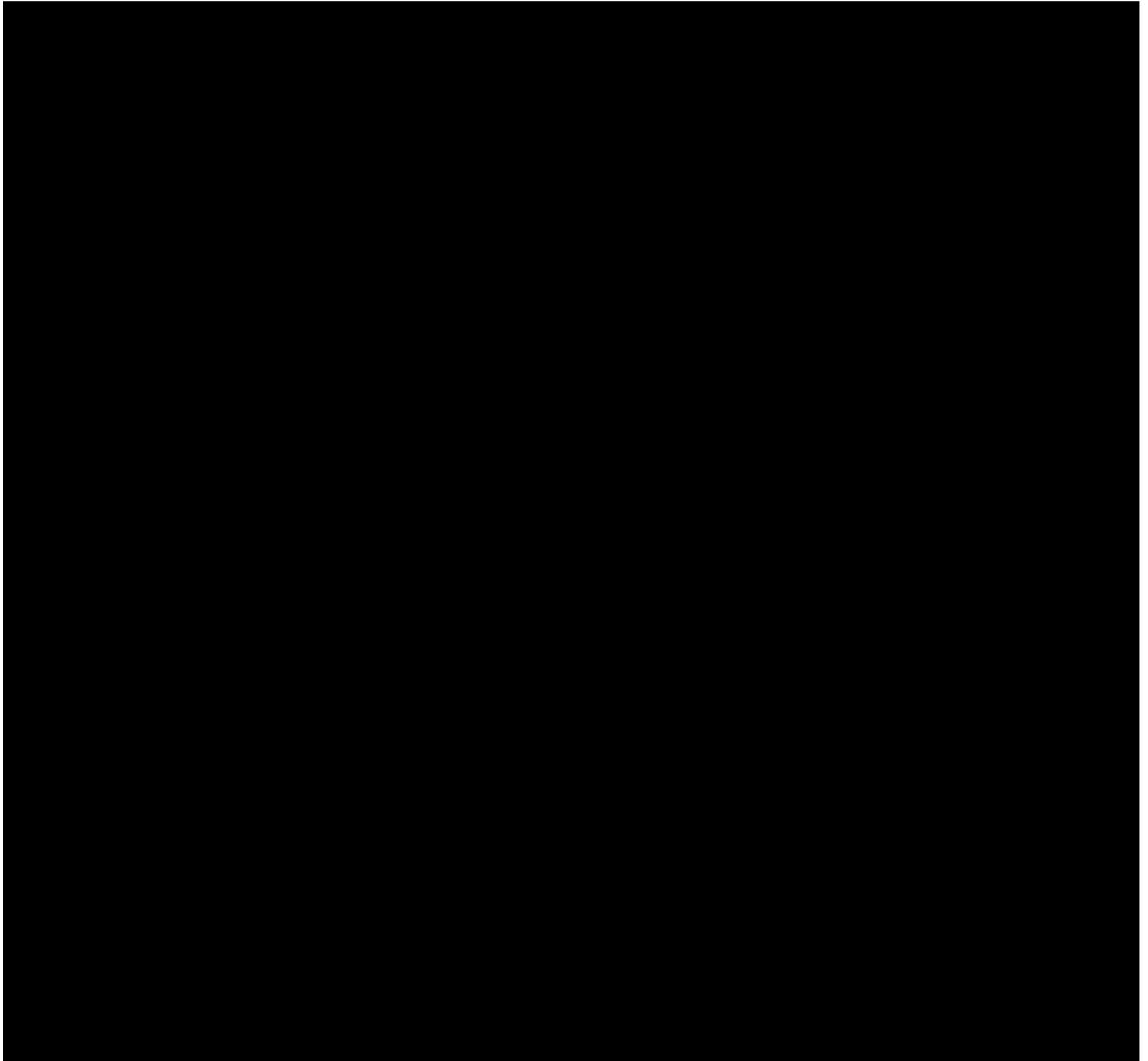


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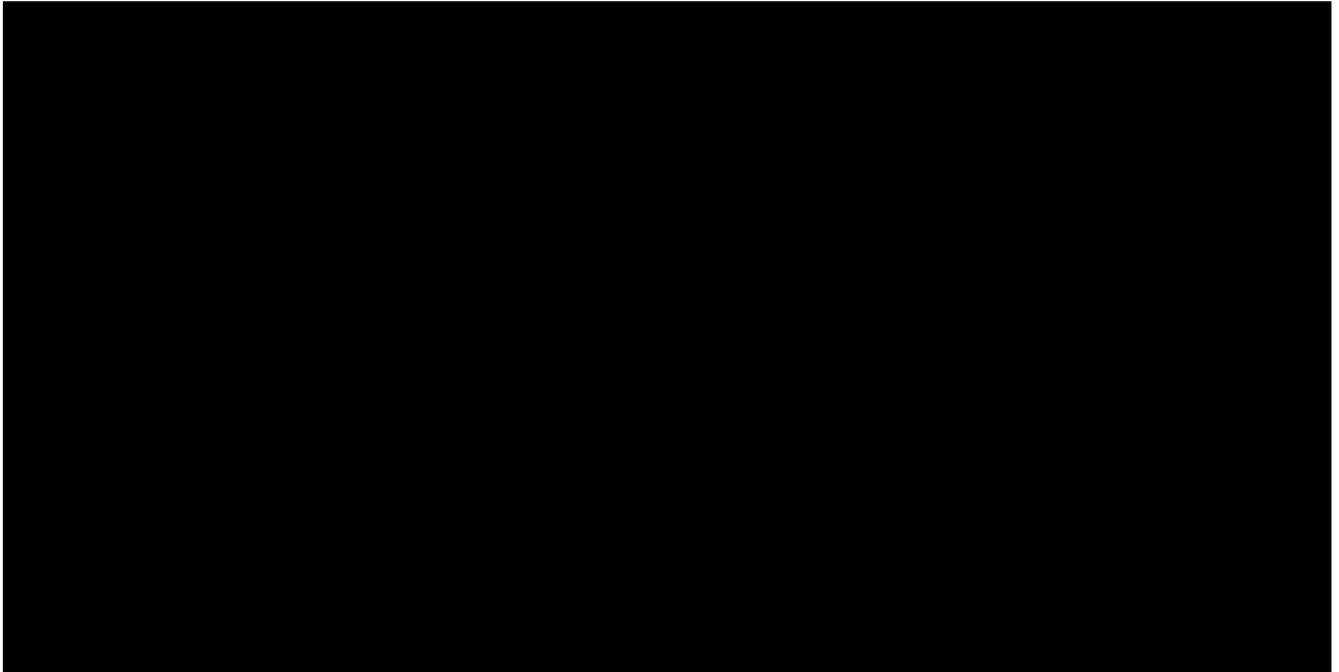


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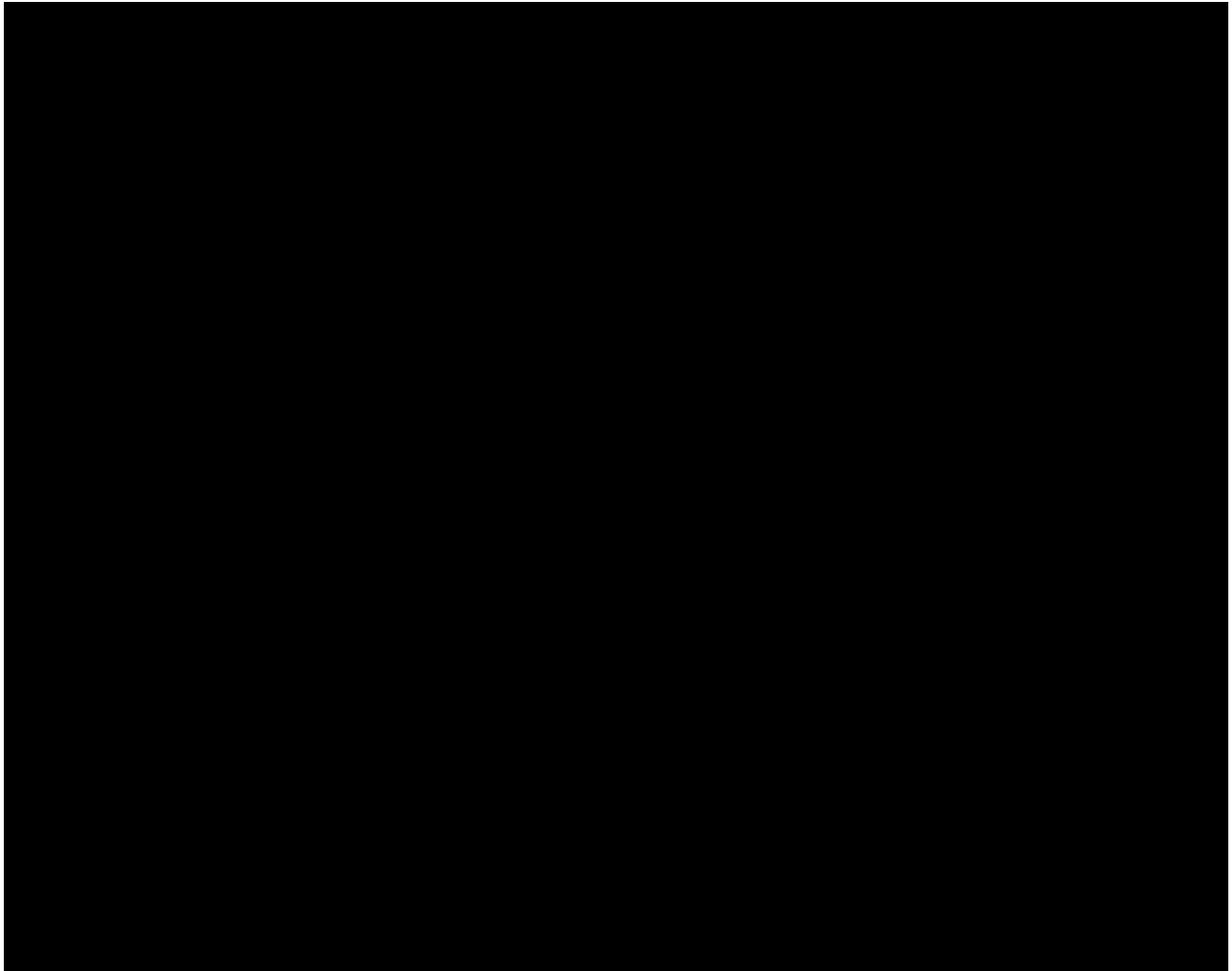
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12. LESSONS LEARNED



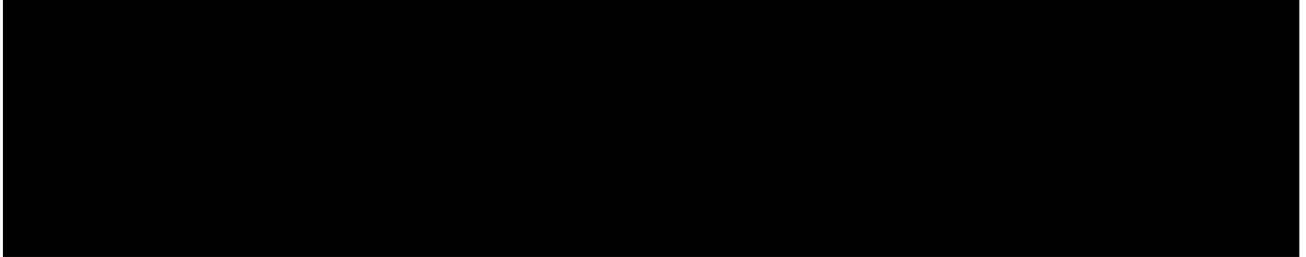
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13. CONCLUSIONS & RECOMMENDATIONS



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14. ANNEXES

No annexes provided in this report.

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ANNUAL MEETING FOR THE YEAR 2019

EMSA/OP/6/2018

AGENDA		
Time	Agenda Item	Speaker
09:30 – 09:45	Welcome and Agenda Overview	EMSA
09:45-10:45	Project management - Current project team, profiles and structure Module 1: Status and on-going activities - Test block status - Issues	EDISOFT
10:45 – 11:00	<i>Coffee break</i>	
11:00 – 11:45	Module 2: Status and contract performance overview <ul style="list-style-type: none"> ■ Contractual Overview ■ Service Statistics ■ Service Performance <ul style="list-style-type: none"> ○ Delivery reliability ○ Timeliness delivery reliability ○ Quality delivered reliability 	EDISOFT
11:45 – 12:15	Non-conformances, Incidents and Problems <ul style="list-style-type: none"> ■ List of non-conformances and status (EMSA) ■ List of problems and status (EMSA) ■ Preventive and corrective measures (EDISOFT) 	EMSA / EDISOFT
12:15 – 12:30	EMSA systems status and transition <ul style="list-style-type: none"> ■ Mass File Transfer system (Axway) ■ EICD 2.0.0 	EMSA

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MINUTES

EMSA/OP/06/2018 ANNUAL MEETING FOR THE YEAR 2019

1. WELCOME AND AGENDA OVERVIEW

EMSA Jarraud welcomed the meeting participants and explained that EMSA's Earth Observation (EO) services will see significant development and evolution in the near future. In this context, it will be crucial to present continuous quality improvements and to cooperate in this evolution. The importance of EO services is expected to grow.

The remaining attendees from EMSA then introduced themselves and their roles.

Following EMSA's introduction, EDISOFT began by acknowledging EMSA's message regarding the importance of EO services and the required evolution and by summarizing the internal reorganization at EDISOFT which saw the integration of Defence and Space. The major challenge faced by EDISOFT was the series of staff changes in 2019. EMSA was thanked for its contribution to EDISOFT winning a Proof of Concept (PoC) for FRONTEX for combined SAR and Optical services,. This PoC is scheduled to last another four months, approximately.

The remaining attendees from EDISOFT then introduced themselves and their roles.

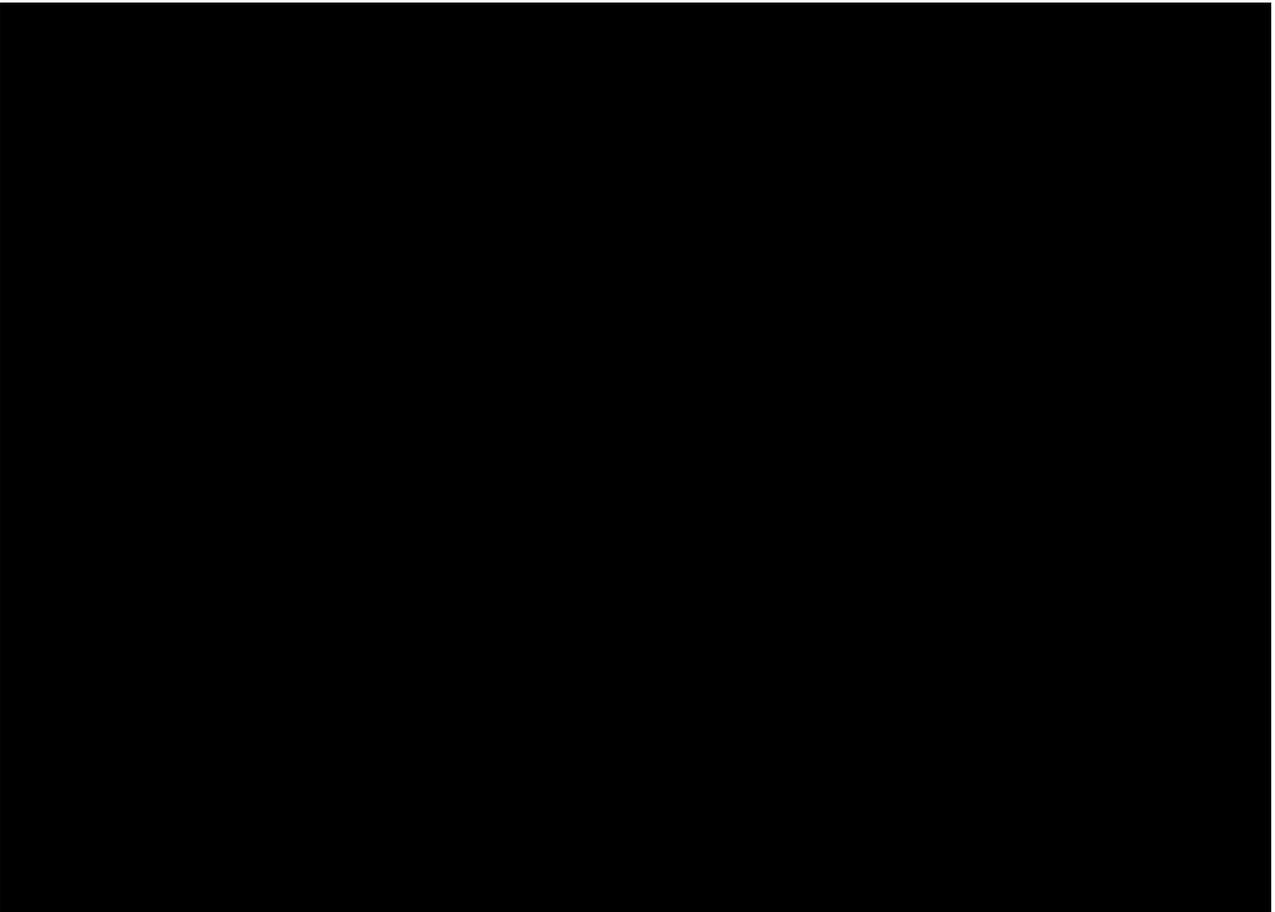
The Agenda Overview was then presented by António Rocha.

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2. PRESENTATION BY EDISOFT

Following the introductory remarks by both parties, [REDACTED] presented EDISOFT's project management update, as well as Module 1 and Module 2 status.

2.1 PROJECT MANAGEMENT UPDATE



2.2 MODULE 1 AND TEST BLOCK STATUS

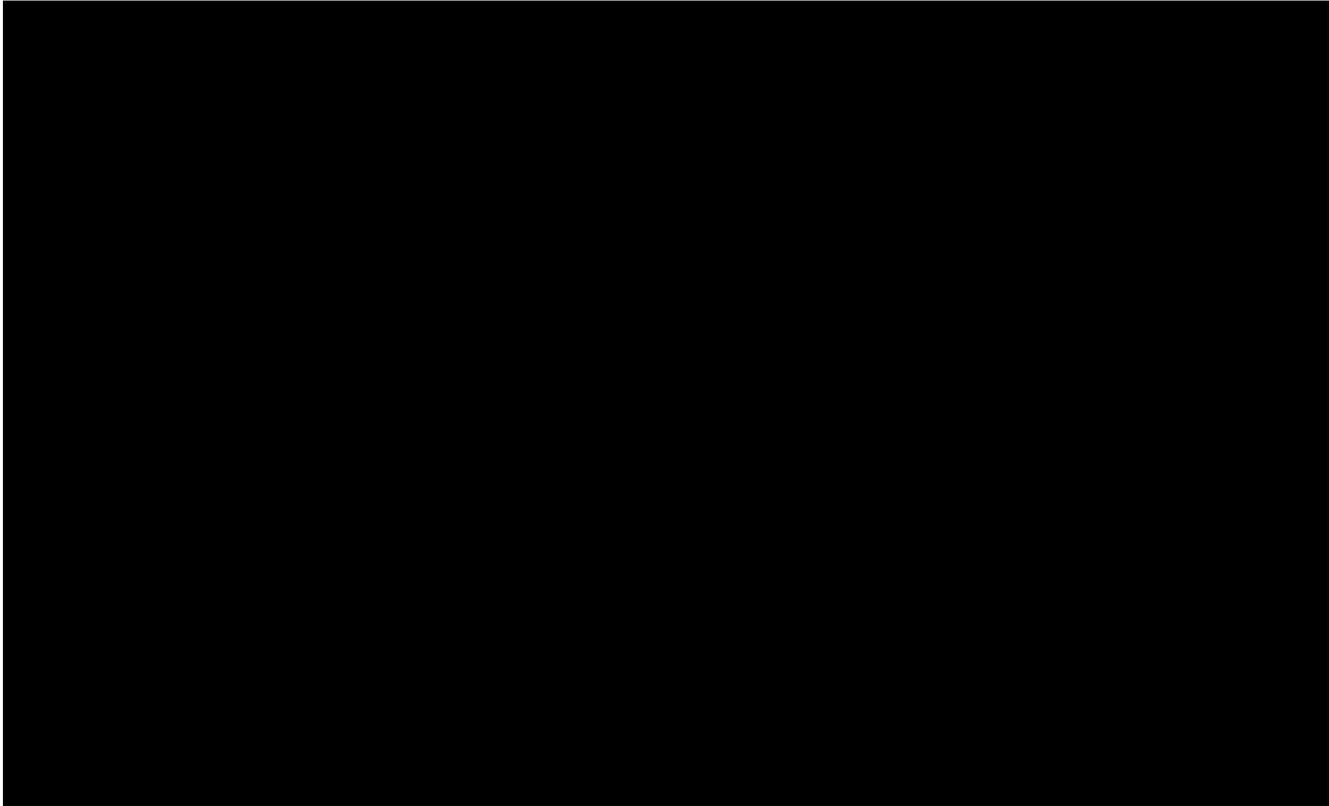
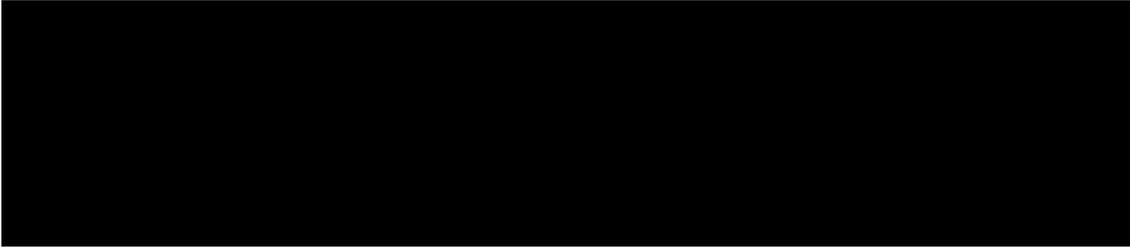
Module 1 has seen three amendments to the Specific Contract that grant extensions to the timeline. A fourth extension was rejected by EMSA, which requested a mitigation plan to deal with the foreseen delays.

EDISOFT identified a number of issues which have impacted the Module 1 timeline:

- Changes to the engineering team;

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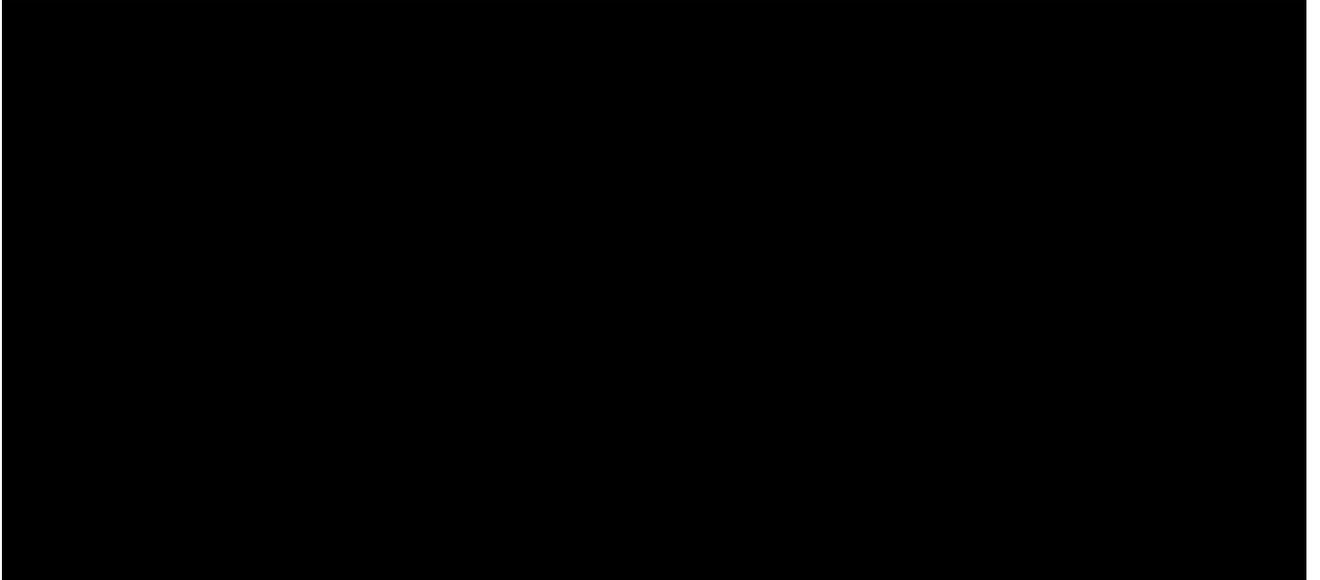


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2.3 MODULE 2 PERFORMANCE INDICATORS

In Module 2, three Specific Contracts have been signed so far, totalling [REDACTED]

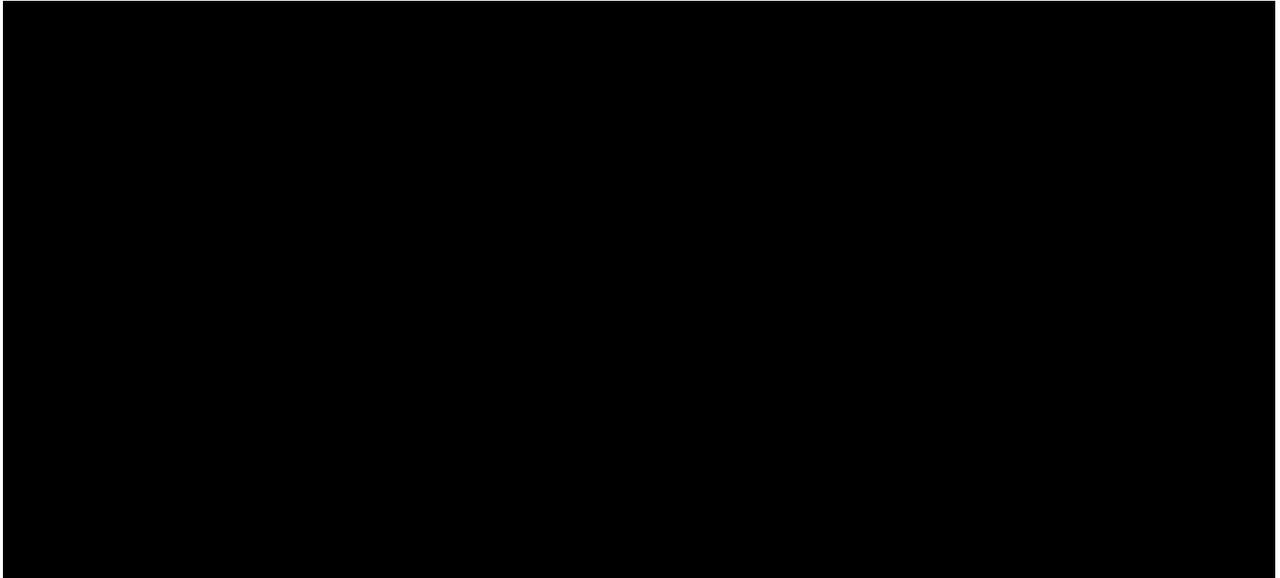


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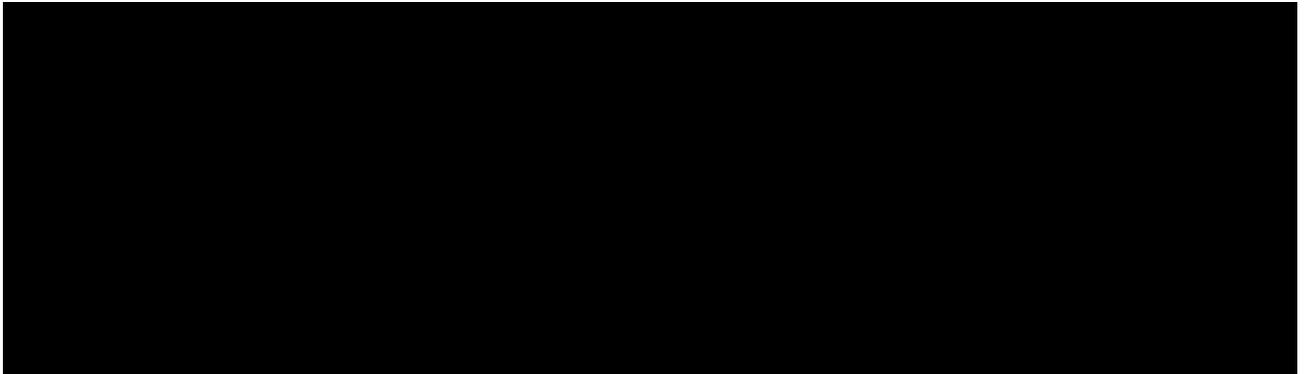
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3. MODULE 2 NON-CONFORMANCES

3.1 MODULE 2 PERFORMANCE



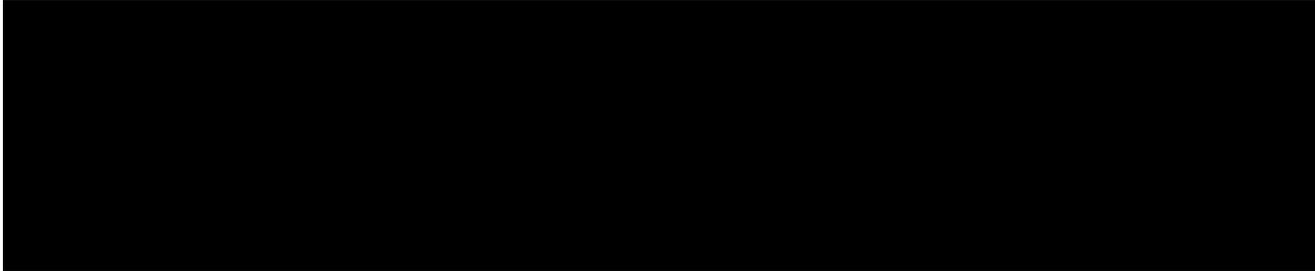
3.2 INCIDENTS AND NON-CONFORMANCES



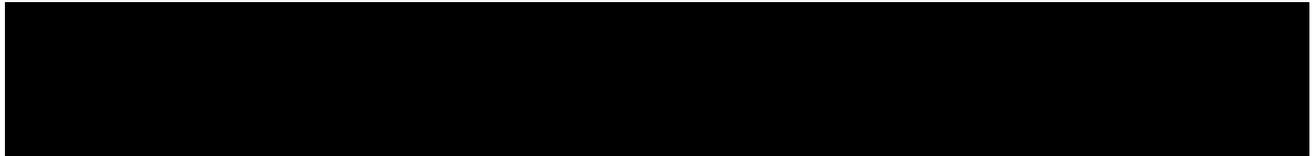
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3.2.1 Incident: Quality < 100% - Black Stripes



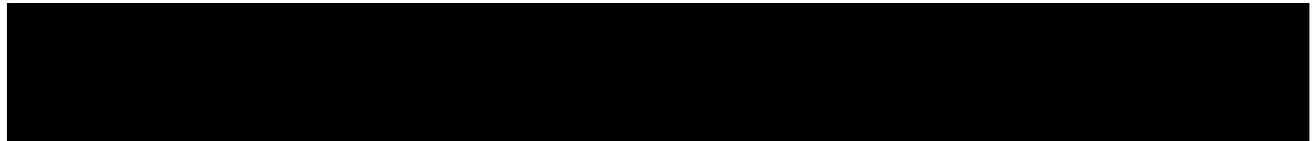
3.2.1 Incident: SAR Wind and Wave over land areas



3.2.2 Problem 1: SAR Wind and Wave missing NetCDF files



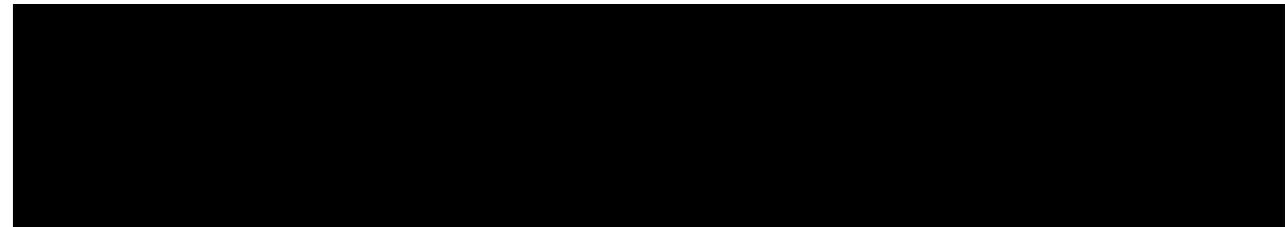
3.2.3 Problem 2: SAR Wind Quality issues



3.2.4 Problem 3: EOP packages with no image



3.2.5 Problem 4: SAR Wave height quality issues

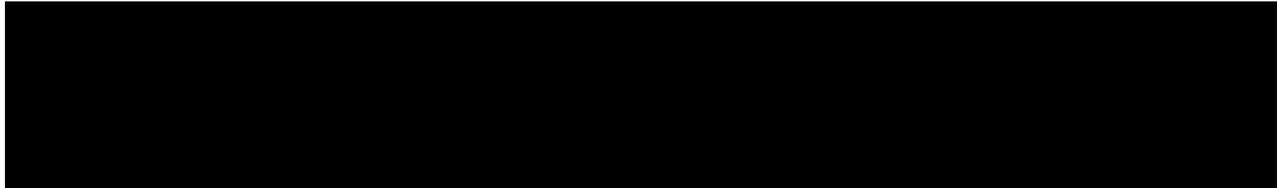


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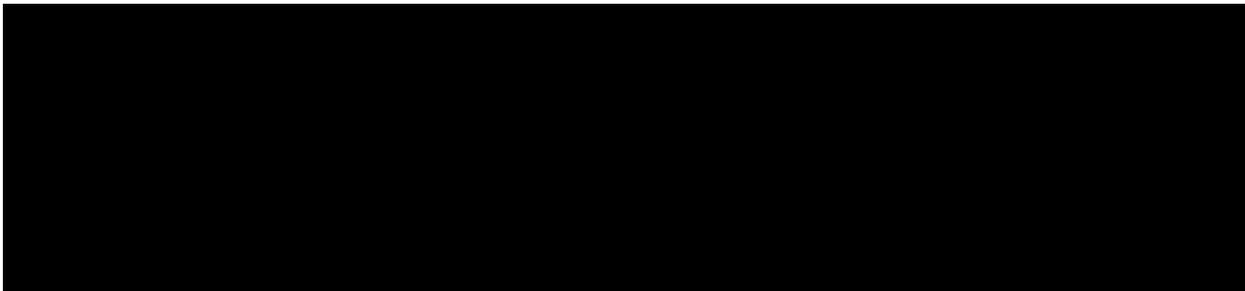
3.2.6 Problem 5: Sentinel-1 DER packages without Wind products



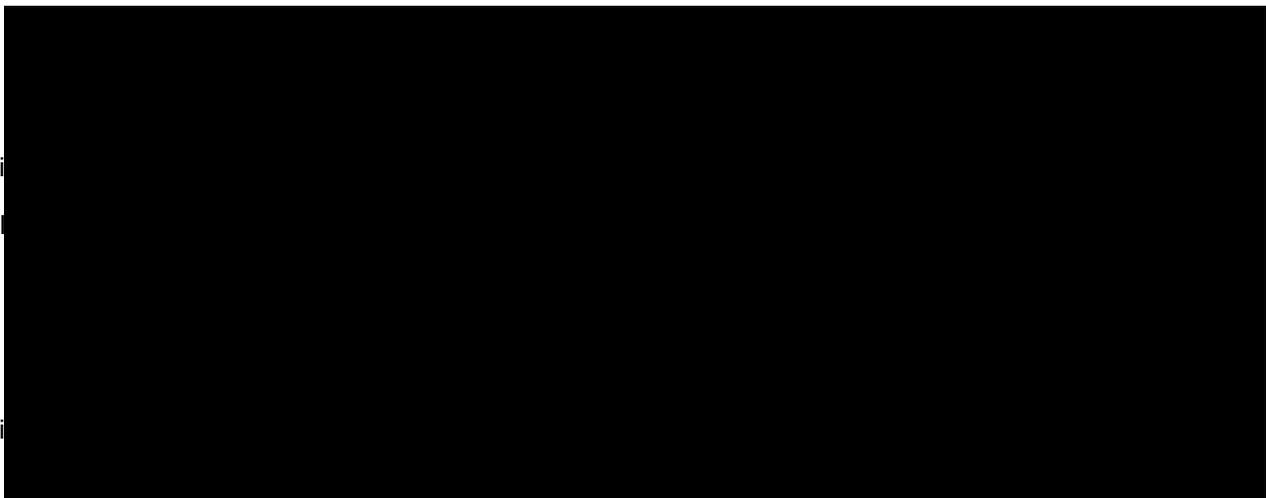
3.2.7 Problem 6: SLA not being followed



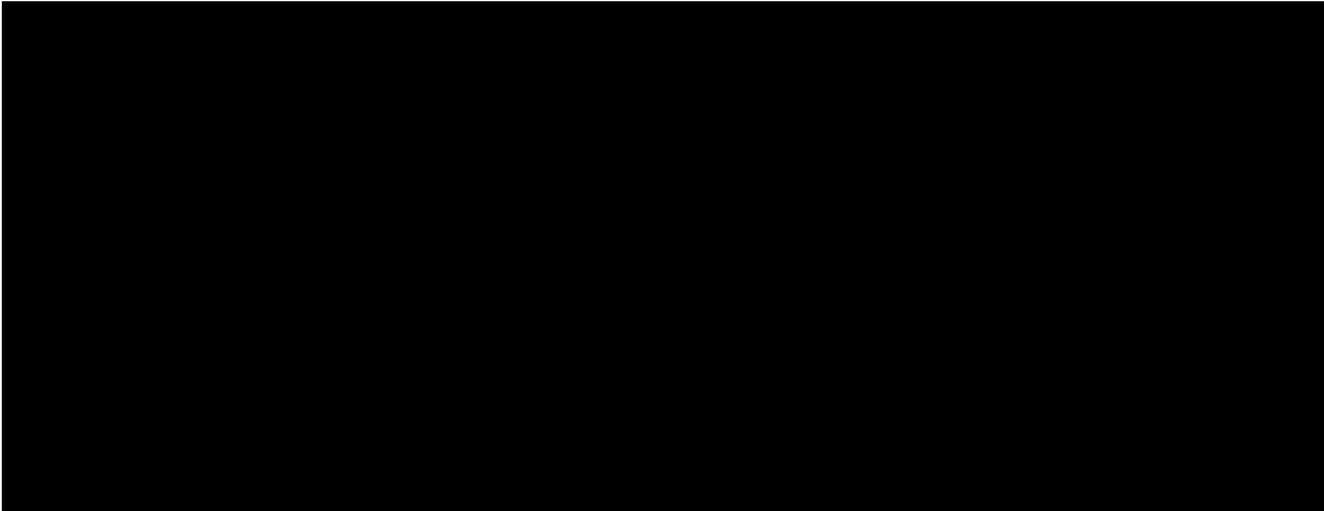
3.2.8 Summary



3.2.9 Preventive and corrective measures



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4. EMSA SYSTEMS STATUS

Following the discussion of the status of Module 2, [REDACTED] presented the status of EMSA's new systems.

EMSA has three systems which are crucial for OP/6: [REDACTED]

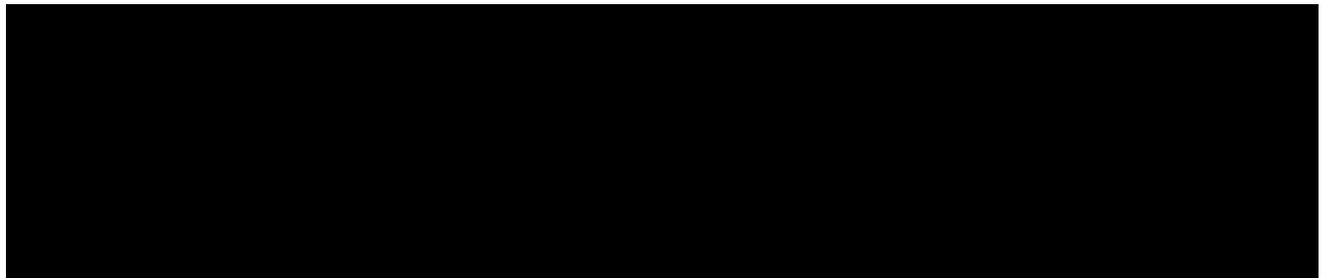
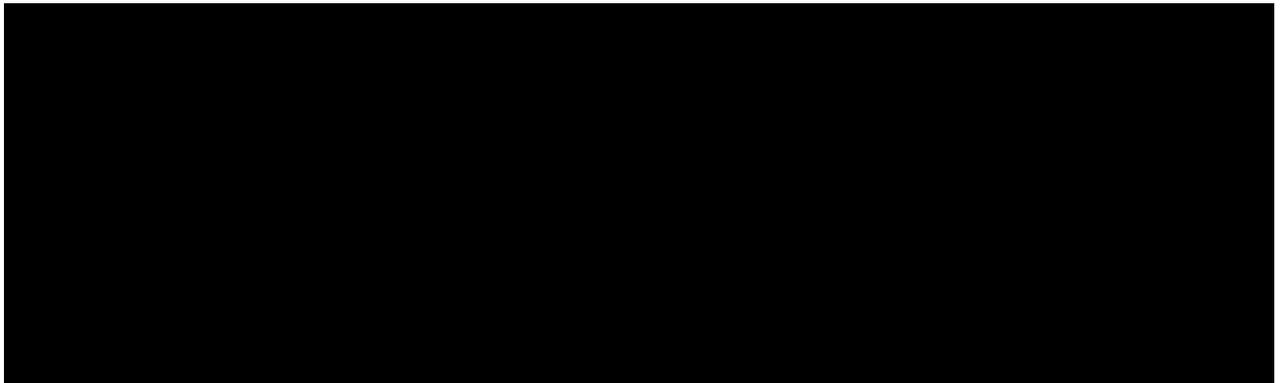


5. MEETING WRAP-UP

After the main points of the agenda, the meeting was wrapped-up with discussions of future plans, as well as a review of actions that resulted from the meeting.

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5.1 STATUS OF THE SMA-2 ANTENNA



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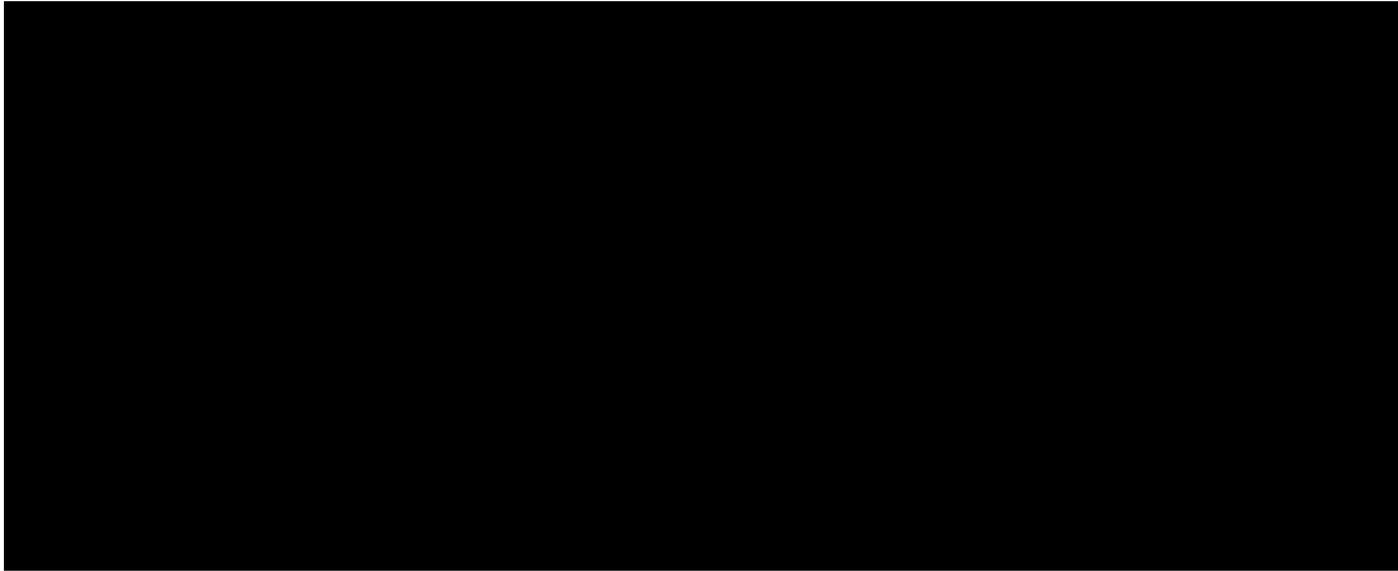


Table 1 – List of actions from the Annual Meeting for the year 2019

NEXT MEETING


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EDISOFT EARTH OBSERVATION SERVICES

SEMESTRIAL REPORT 2018 - 2019

Prepared for the European Maritime Safety Agency (EMSA)

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Follow-up of the evolutions

LOG OF CHANGES			
Revision	Date	Author	Modification

APPROVAL				
	Name	Role	Date	Signature
Written by				
Reviewed by				
Verified by				
Approved by				
Approved by the customer				

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5. Lessons Learned	Error! Bookmark not defined.
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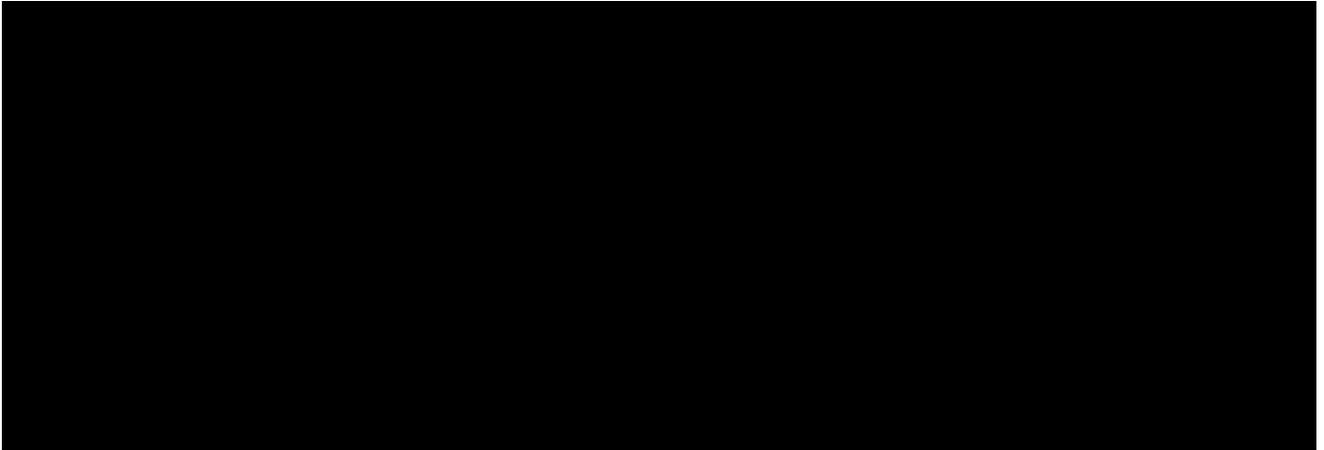
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1. SUMMARY



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2. INTRODUCTION

The European Maritime Safety Agency (EMSA) under his responsibilities offers to all EU Member States (Coastal States) provides to Member States a Near Real Time (NRT) service marine oil spill detection service using radar satellite imagery acquired by SAR satellites.

This service is free of charge to all Coastal States and it covers all European waters. To date EMSA delivers the Earth Observation Services to the 24 European Coastal States: Belgium, Bulgaria, Croatia, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovenia, Spain, Sweden, United Kingdom, and may expand to other countries in the future.

The tasking of satellite acquisition is done directly by the EMSA Earth Observation Services. Each tasking covers a time period of one month. The tasking is sent to the operational contact points within the Coastal States for confirmation. This process is called “image allocation”, and is used by Coastal States when planning the aerial and/or vessel verification. When a Coastal State has confirmed the tasking, EMSA issues the tasking for the scenes to the Satellite Operators and Service Providers.

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Entity Identifier	Document Identifier	DTC	Revision
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3. LIST OF ACRONYMS

AIL	Action Items List
DC	Data Centre
DER	SAR Derived Products
EDI	EDISOFT
EICD	External Interface Control Document
EMSA	European Maritime Safety Agency
EO	Earth Observation
EODC	Earth Observation Data Centre
EOP	Earth Observation Product
EU	European Union
FAT	Final Acceptance Test
FCCN	Fundação para a Computação Científica Nacional
FTP	File Transfer Protocol
GCPs	Ground Control Points
GIS	Geographical Information Systems
HR	High Resolution
HRDFEP	High Rate Demodulator and Front-End Processor
JOU	Journaling
ICD	Interface Control Document
KOM	Kick-off Meeting
MR	Medium Resolution
NA	Not Applicable
NRT	Near Real Time
MEOS	Multiple Earth Observation System (Kongsberg)
OS	Oil Spill
OSN	Oil Spill Notification
OSW	Oil Spill Warning
POR	Planning and Ordering
QNO	Quality Notification
QR	Quality Results
RAP	Rules of Application of Regulation

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RS2	RADARSAT-2 Satellite
S1	SENTINEL-1 Satellite(s)
S1A	SENTINEL-1A Satellite
S1B	SENTINEL-1B Satellite
SAR	Synthetic Aperture Radar
SAT	Service Acceptance Test
SC	Specific Contract
SH	Service Handbook
SMA	Santa Maria
SP	Service Provider
SSL	Secure Socket Layer
TF	Team Forge
VDS	Vessel Detection Service
VPN	Virtual Private Network
WUP	Web User Portal (GIS Viewer)

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4. QUALITY ASSURANCE AND CONTROL

4.1 SERVICE STATISTICS

This section details the service statistics and covers the period from July 2018 to January 2019 under the OP/15/2013 SAR EO Service Provision and from February 2019 to June 2019 under the OP/06/2018 SAR EO Service Provision.

4.1.1 OP/15/2013 SAR EO Service Provision

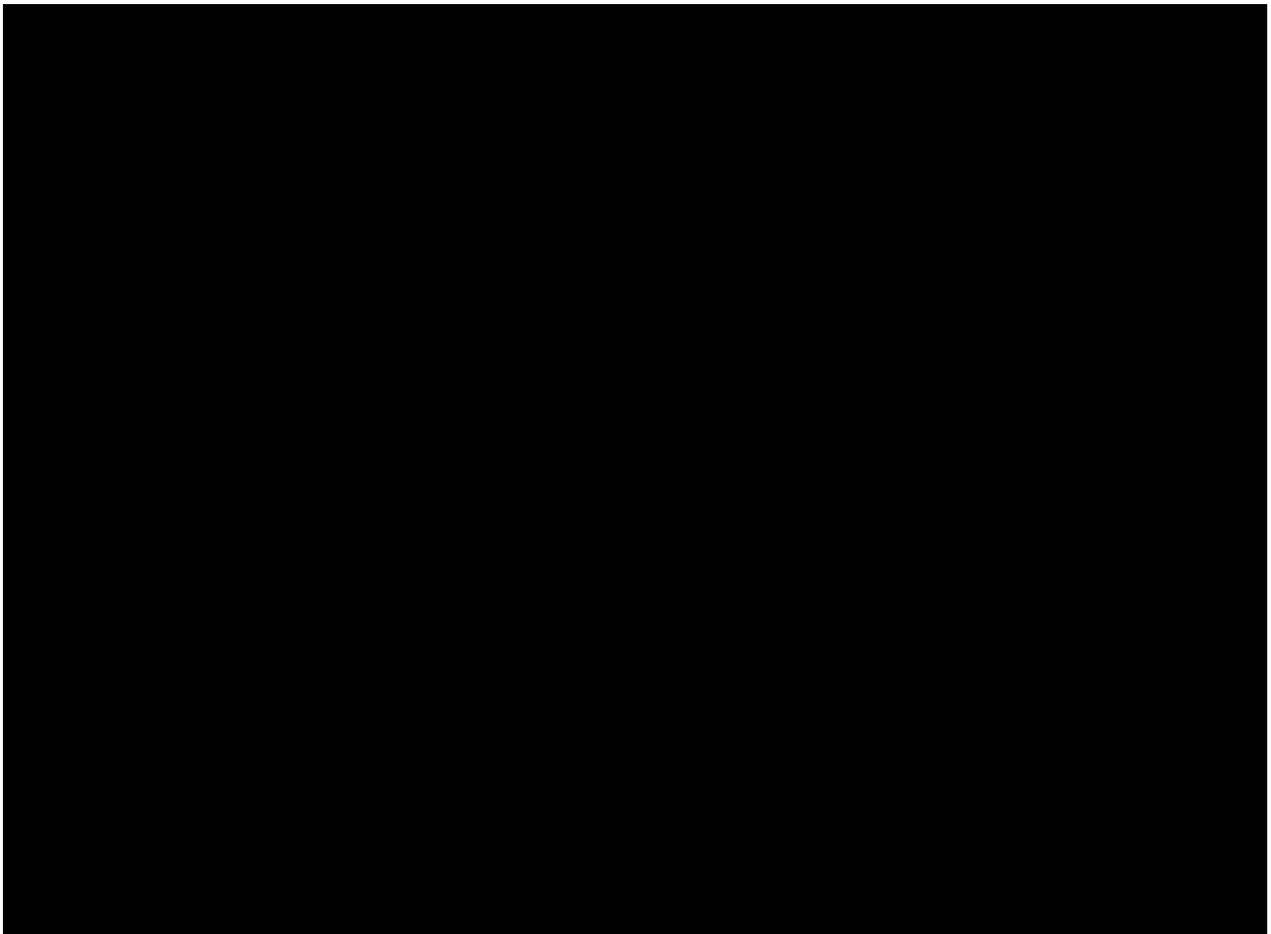


Figure 1 – Delivered Services (July 2018 – January 2019)

The following table presents the number of delivered, cancelled, and service anomalies in this period, on a monthly basis.

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Entity Identifier	Document Identifier	DTC	Revision
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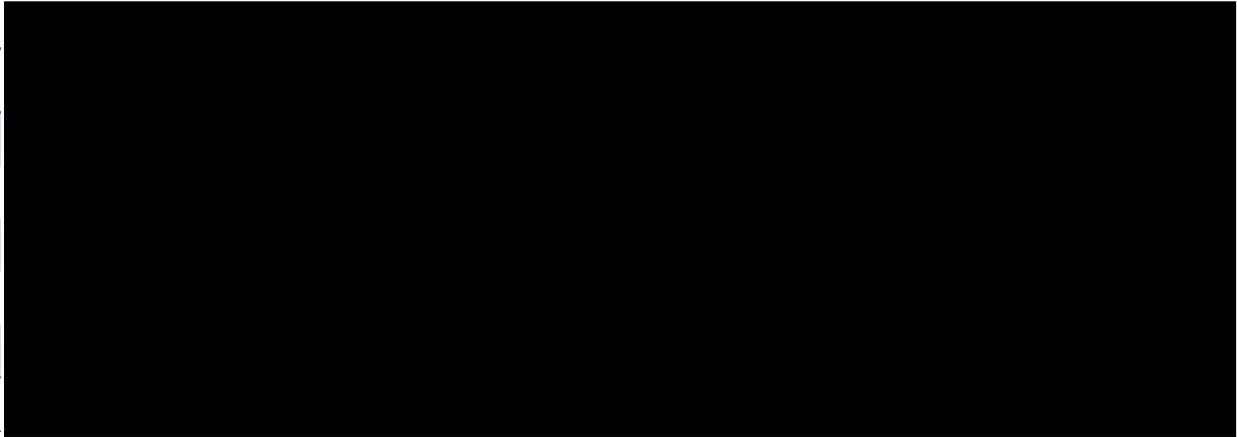
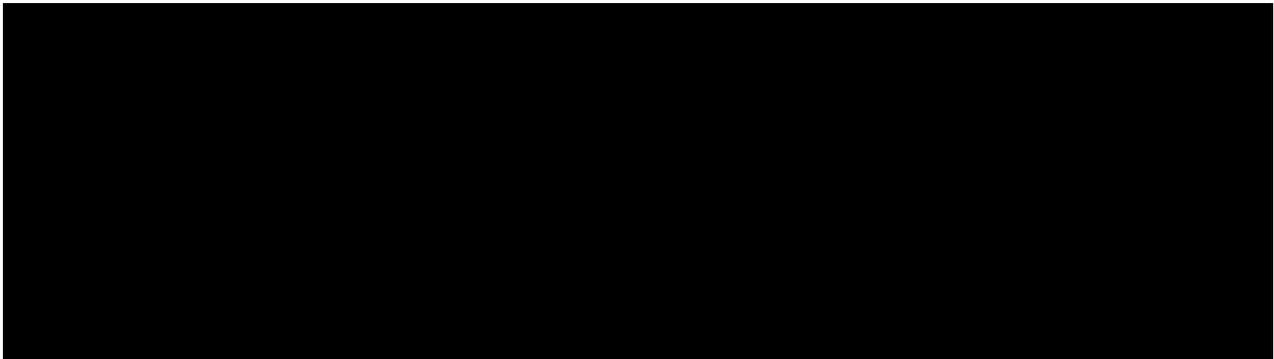


Table 1 – Monthly Delivered Services (July 2018 – January 2019)



4.1.2 OP/06/2018 SAR EO Service Provision



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Figure 2 – Delivered Services (February - June 2019)

Table 2 – Monthly Delivered Services (February - June 2019)

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4.2 QUALITY PARAMETER

This section details the quality parameters for the services provided, as based on the coverage for each service (how much of the SAR image corresponds to the requested area) and its usable area (how much of the acquired image was properly processed), during the period from July 2018 to January 2019 under the OP/15/2013 SAR EO Service Provision and from February 2019 to June 2019 under the OP/06/2018 SAR EO Service Provision.

4.2.1 Coverage compliance and usable area

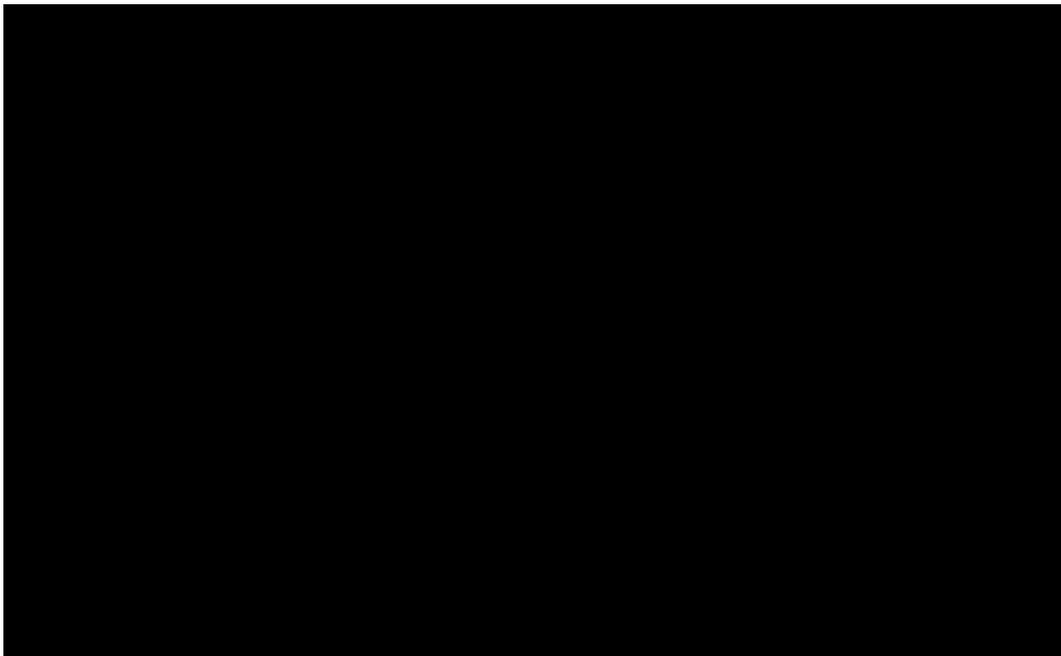
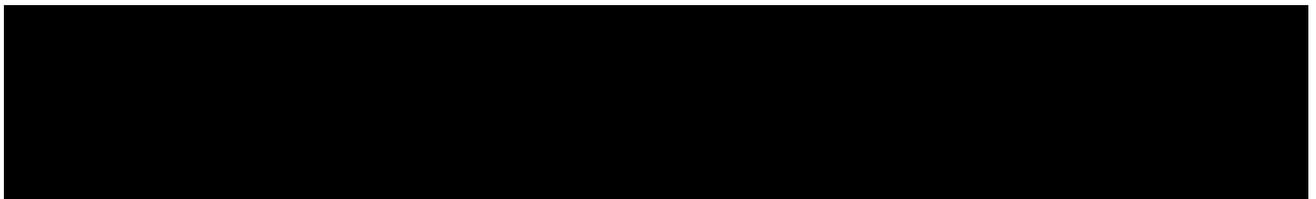


Figure 3 – Coverage and usable area on services acquired (July 2018 – January 2019)



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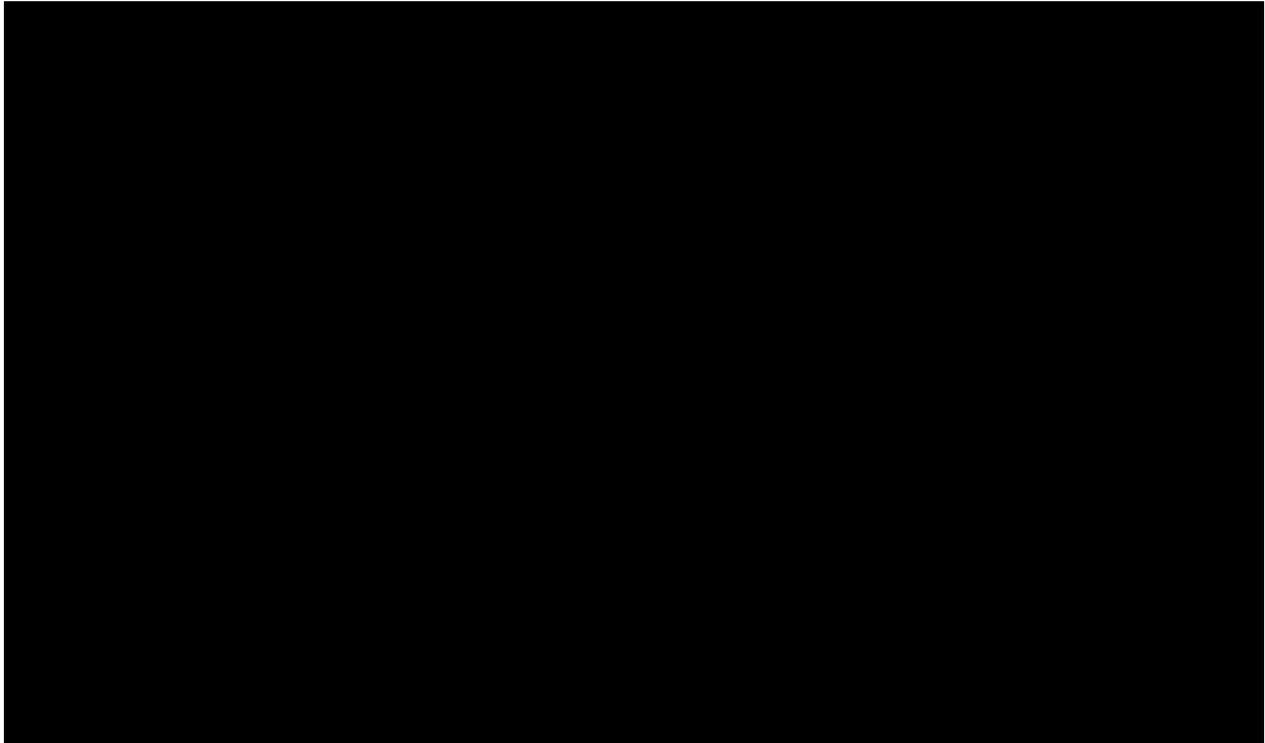
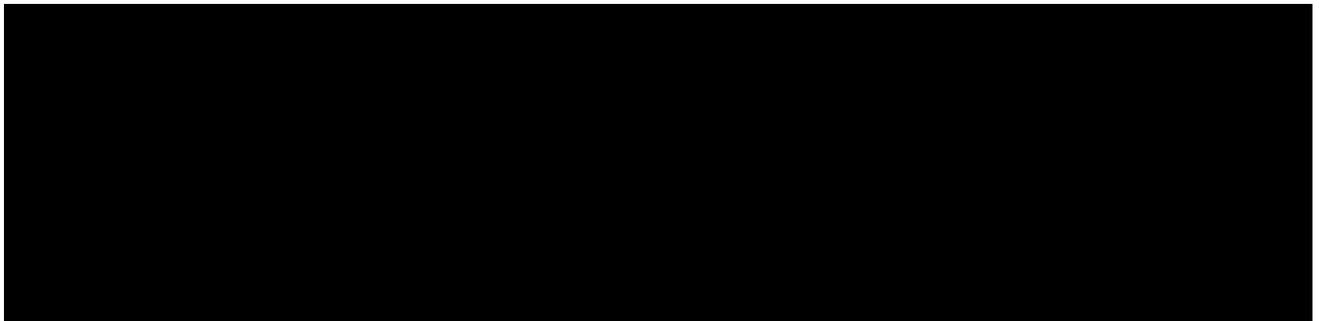


Figure 4 – Coverage and usable area on services acquired (February - June 2019)



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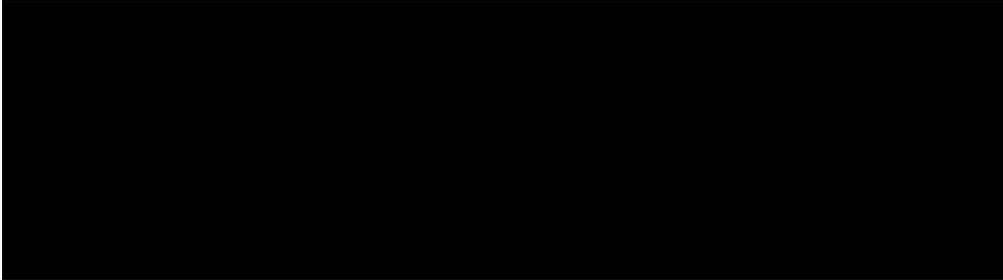
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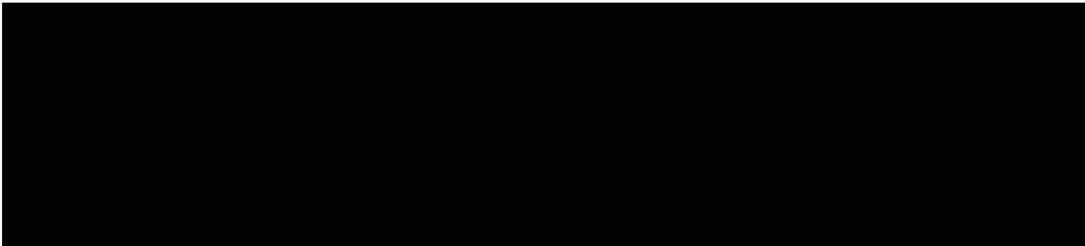
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5. REFERENCED DOCUMENTS

5.1 APPLICABLE DOCUMENTS



5.2 REFERENCE DOCUMENTS



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Agenda

Meeting: 2018/EMSA/OP/06/2018.Lot-1 Kick-off meeting

Contractor: EDISOFT

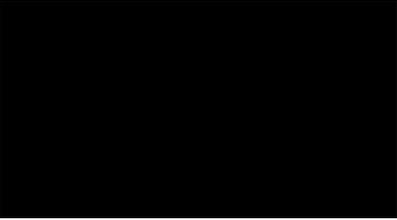
Date: Lisbon, 1 October 2018

Time	Agenda Item	Speakers
09:30 - 09:45	Welcome	EMSA
09:45 – 10:00	Contract background and Overview <ul style="list-style-type: none"> - Objectives - Structure - Transition from previous contracts (timeline, issues and risks) - EO services evolution 	EMSA
10:00 - 11:15	Project Management <ul style="list-style-type: none"> - Project team - Points of contact: <ul style="list-style-type: none"> o Contractual and management o Technical o Operational (routine and emergencies) Service Provision <ul style="list-style-type: none"> - Ground segment and key infrastructures - EO Processing chain and service provision - Contractor's procedures (quality assurance, operational, etc.) - Risk management (including risks and mitigation actions) - Future capabilities 	Contractor
11:30 - 12:30	Project Management <ul style="list-style-type: none"> - Points of contact - Project management tools [REDACTED] - Main Procedures and systems [REDACTED] - Deliverables and meetings Service Provision <ul style="list-style-type: none"> - Contract cascade mechanism and QRT/NRT areas - Incident management - Quality and timeliness - Value adding products 	EMSA
12:30 – 14:00	Lunch	All
14:00 – 15:00	Module 1 – Service set-up <ul style="list-style-type: none"> - [REDACTED] - [REDACTED] - [REDACTED] - [REDACTED] - [REDACTED] 	EMSA
15:00 – 15:30	Module 1 <ul style="list-style-type: none"> - Timeline of activities - Delivery schedule - Questions 	Contractor
15:30 – 16:00	AOB and Wrap up: <ul style="list-style-type: none"> - Review timelines/planning - Review action points 	All



Meeting participants

EMSA



Contractor:

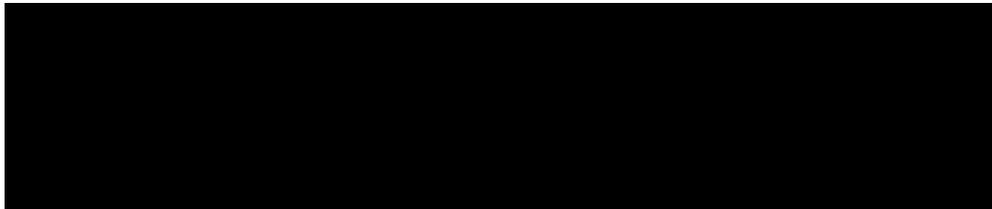




2018/EMSAOP/06/2018.Lot-1/2

Kick off Meeting

Contract background and overview





Focus of QRT/NRT capabilities

**Services
depend on SAR
and Optical
NRT/QRT
capabilities**

Synthetic Aperture radar

- ✓ Quasi-real time in Europe (value added products delivered to users within 20 min)
- ✓ Near real time outside Europe (using on-board recorders and EDRS)

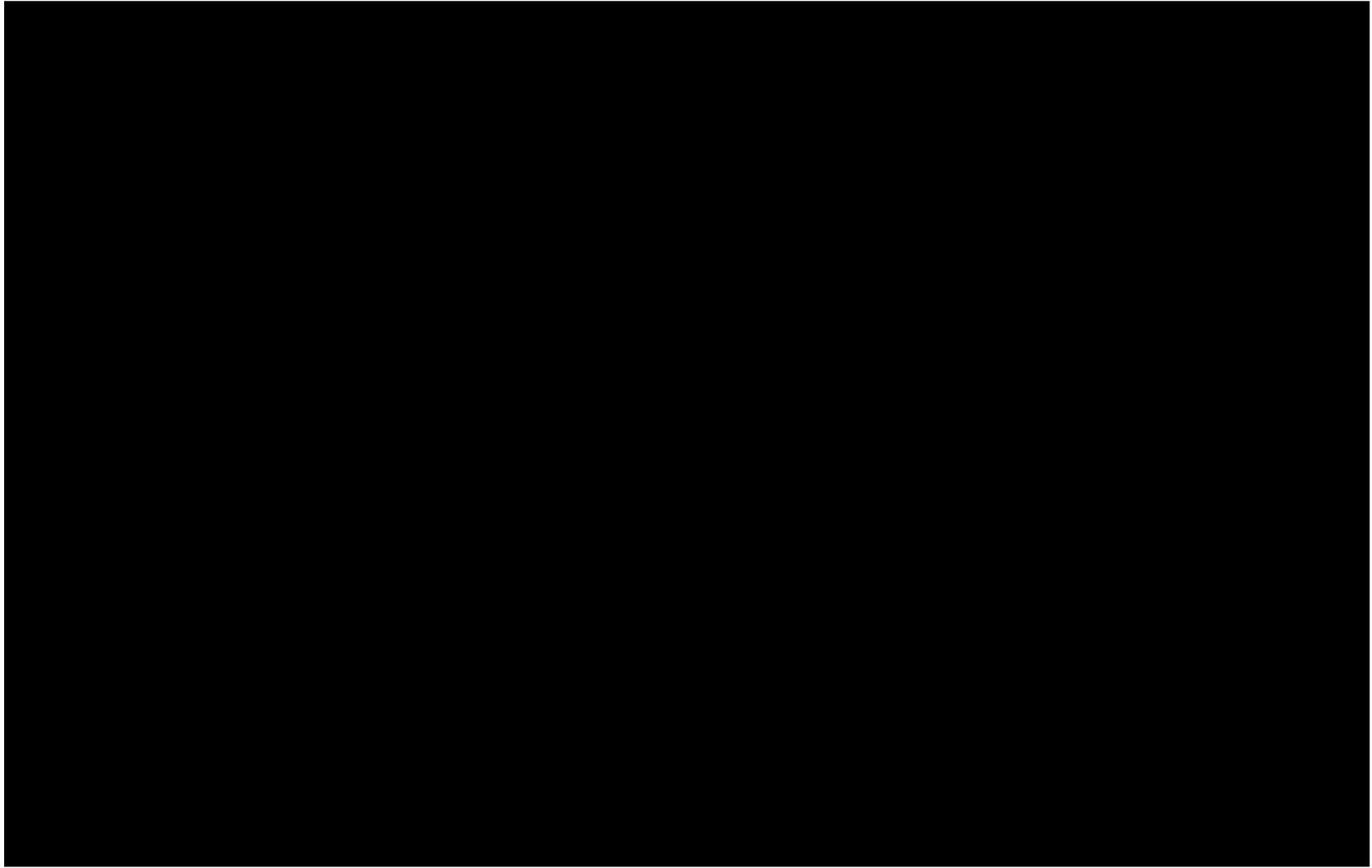
Optical (Very high resolution)

- ✓ NRT Delivery: 30 min for images and 40 min for value adding products (vessel detection and feature detection)

Earth Observation Services Background (expenditure with EO)



Expenditure



■ SAR Services ■ Optical Services

* Forecasted



High level objectives

**Enabling
continuity of
service,
improving
quality and
performance**

**Combine in the same contract
radar [REDACTED] and optical [REDACTED]
[REDACTED] services**

**Faster delivery (20 minutes
after acquisition) and extended
portfolio of products**

**Focus on the quality of
delivered products (i.e.
penalties for reduced quality)**



High level objectives

Support EMSA's Services

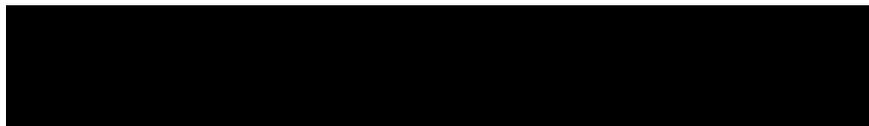
CleanSeaNet

- ✓ Identifying polluters and tracing oil pollution on the sea surface
- ✓ Monitoring accidental pollution during emergencies

Copernicus Maritime Surveillance

- ✓ Wide range of operational functions, including: maritime safety and security, fisheries control, customs, law enforcement, and marine environment monitoring

Support to border control





Framework Contract structure

**All EO services
needs in the
same contract,
divided by Lots**

2018/EMSA/OP/06/2018.Lot-1

- ✓ Provision of services for the acquisition and processing of SAR Earth Observation data.
- ✓ Focus on services from multiple SAR satellites

2018/EMSA/OP/06/2018.Lot-2

- ✓ Provision of licenses and services for the acquisition and processing of VHR Optical Earth Observation data.



Framework contract implementation

**Implementation
via three
distinct
modules**

Module 1 Development & testing

- ✓ Implementation of the processing chains, technical and network set-up to deliver EO Services to EMSA

Module 2 Provision of services

- ✓ Tasks related with Service Delivery and support to EMSA.

Module 3 Further developments

- ✓ Service Enhancements, upon request of Contracting Authority.

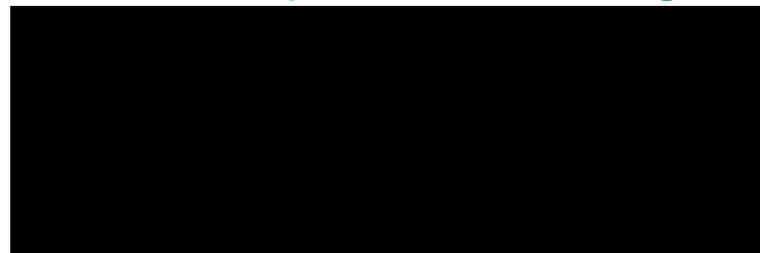


Contract transition

**Transition to
OP/06
(Lot-1)**

Lot 1 Module 2 services

- ✓ Can be requested as soon as Module 2 SCs are signed (products EICD 1.4.4)
- ✓ Transition from current OP/15 to OP/06 for acquisitions starting:



- ✓ After Module 1 approval: Services based on EICD 2.0.0



Contract transition

**Transition to
OP/06
(Lot-2)**

Lot 2 Module 2 services

- ✓ Can be requested as soon as Module 2 SCs are signed (products EICD 1.4.4)
- ✓ OP/14 framework contract lasts until March/2019
- ✓ Expected transition:

- ✓ Delivery based on EICD 2.0.0



New data sources

**Increasing the
scope of
maritime data
Earth
Observation
sources**

**Detection and identification of
ships based on the signals
emanating from vessels**

**Thermal imaging (HR and VHR)
to support night time
operations**

**VHR Satellite video for object
detection, tracking and
classification**



EO Analytics

**Extracting
insights towards
improving
maritime domain
awareness**

Analytics based on machine learning applied to historical datasets (Earth Observation, met-ocean, vessel information)

Real time automatic classification of relevant objects (vessels, oil spills, activities)

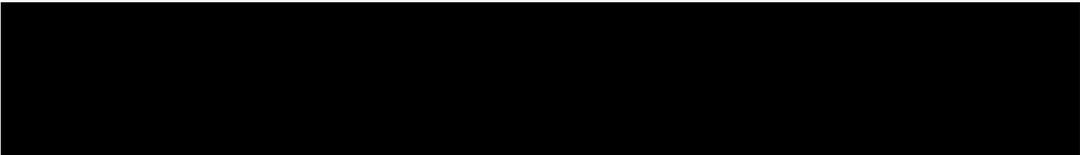
Use of automated classification and analytics outputs to feed anomalous behavior algorithms



2018/EMSA/OP/06/2018

Kick-off meeting

Project Management

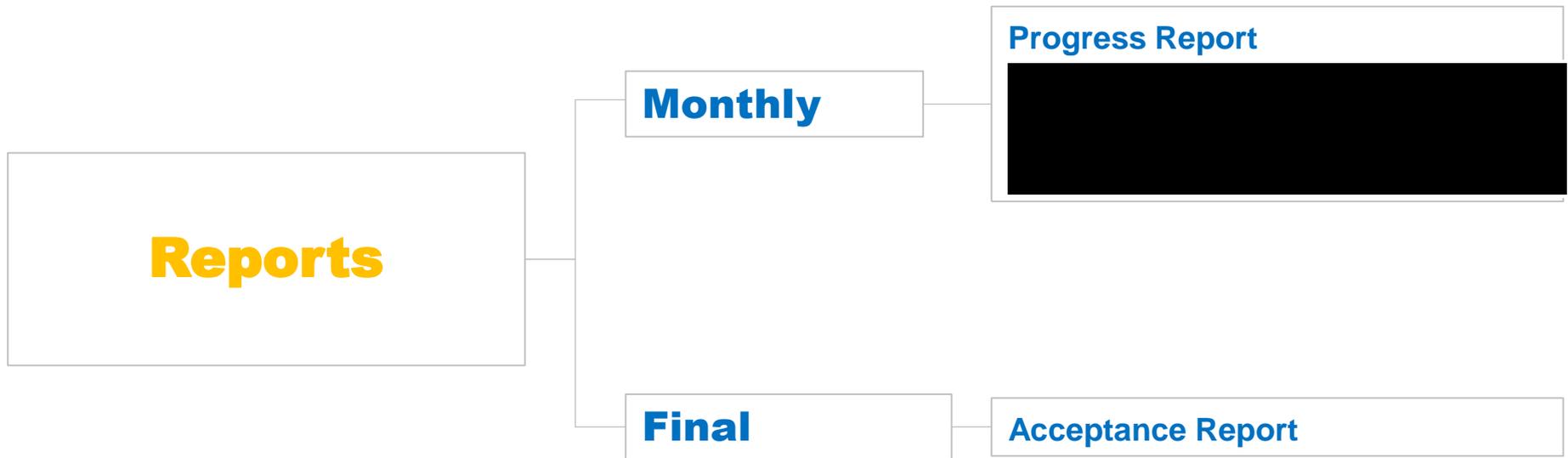


Lisbon / 1 October 2018

<i>Functions</i>	<i>Persons</i>	<i>Email</i>	<i>Phone</i>
[Redacted content]			

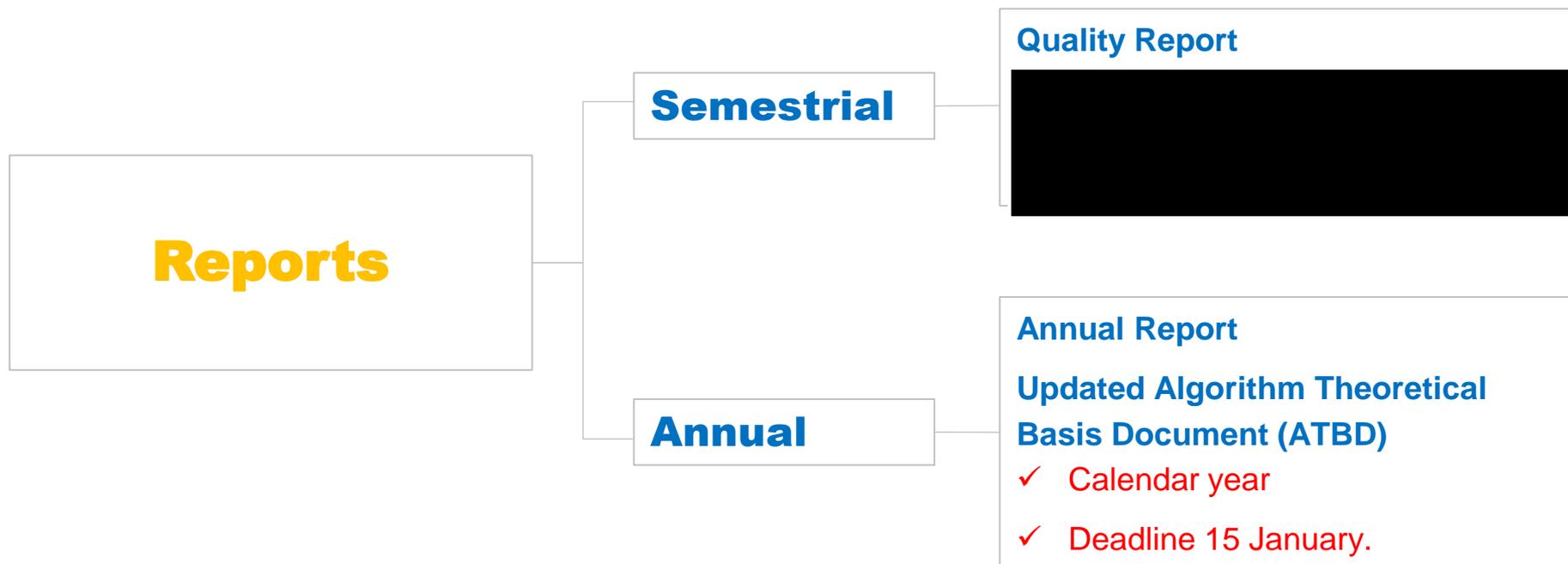


Contract Deliverables (Module 1)





Contract Deliverables (Module 2)



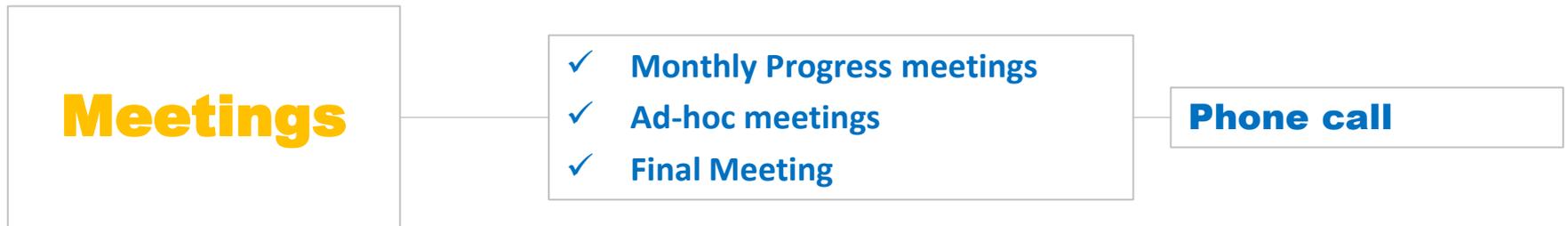


Contract Deliverables (Module 2)



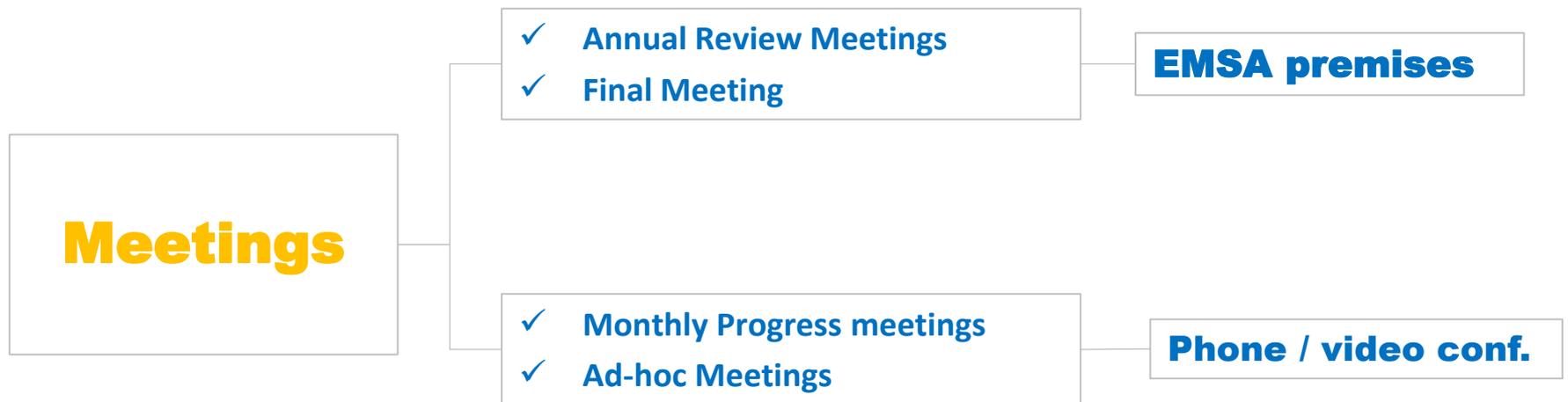


Contract Events (Module 1)



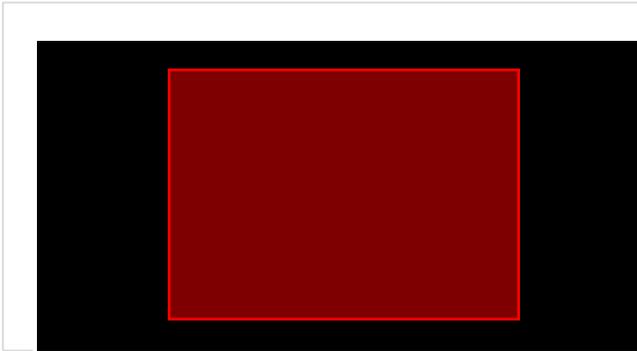


Contract Events (Module 2)





- ✓ **Project management collaborative tool**
- ✓ **Includes**
 - Documentation repository**
 - Issue tracker**
 - Risk register – to be maintained by the contractor**
- ✓ **Please check and confirm you have access**



Development of new systems replacing:

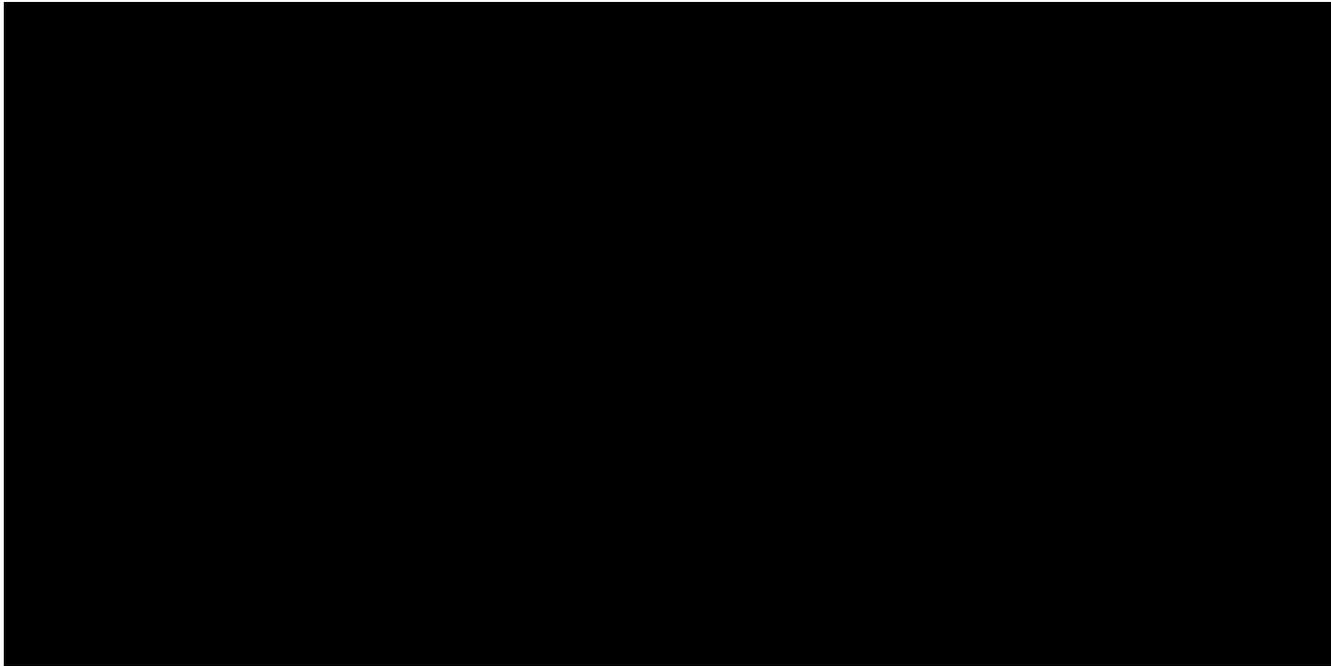
- POR
- JOU
- Financial System
- Alerting

New functionalities, including:

- User request interface
- User validation interface
- Notifications (to EMSA, providers and users)
- Customizable alerts

Improved reporting and quality control

EO Systems timeline (Production)



 twitter.com/emsa_lisbon

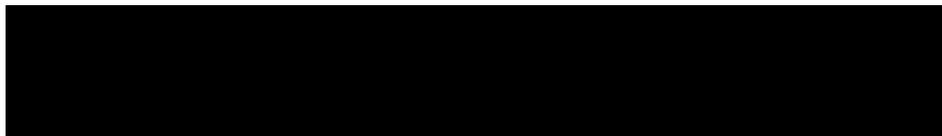
 facebook.com/emsa.lisbon





2018/EMSAOP/06/2018.Lot-2

Kick off Meeting
Service Provision- LOT-2



Lisbon, 1 October 2018

Cascade Mechanism: Lot-1



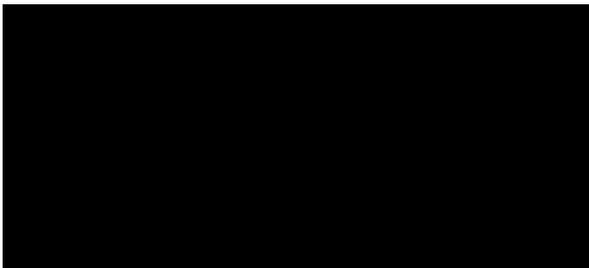
Cascade Mechanism

- ✓ EO Services are placed to the highest ranked Contractor
- ✓ Based on User Request, EMSA may request a specific satellite/constellation
- ✓ QRT/NRT areas used to assign EO Services to the highest ranked Contractor

QRT/NRT areas- replacing Tasking areas

- ✓ Defined per satellite/constellation
- ✓ May be updated during the duration of the contract for areas not covered by a different contractor
- ✓ QRT/ NRT areas can be updated once every year

Lot-1 Cascade rank:



NRT coverage areas: Lot-1

- ✓ As defined in the bid by the Tenderers and using RS-2 coverage*



*Pending on final confirmation of GS coverage from higher ranked Service Providers

Maximum Delivery time: Lot-1

Near Real Time

E C					
V F M					

Tasking and Ordering Process



A

User Request

- ✓ Authorized users places EO Service Request
- ✓ EO Service request defines user needs not satellite, modes or incidence angles

Types of User Requests

-



-

-

Tasking and Ordering Process

Service Request

- ✓ EMSA “translates” the user request to a Service Request
- ✓ EMSA requests/generates planning files- Satellite Owners
- ✓ EMSA uploads planning file in [REDACTED]
- ✓ Communication tools between EMSA and Service Providers:
 - ✓ Confirmation of SP capability: Email
 - ✓ Confirmation of acquisitions: [REDACTED]

EODC automatically assigns EO Services to SP based on:

- Satellite mission;
- Cascade position;
- NRT areas.

Tasking and Ordering Process



User Validation

- ✓ Users may confirm or discard confirmed acquisitions

Tasking and Ordering Process



Ordering in EODC

- ✓ EMSA's FO and AO approves the EO Services
- ✓ EMSA delivers the Signed Task forms to SP

Signed Task Form:

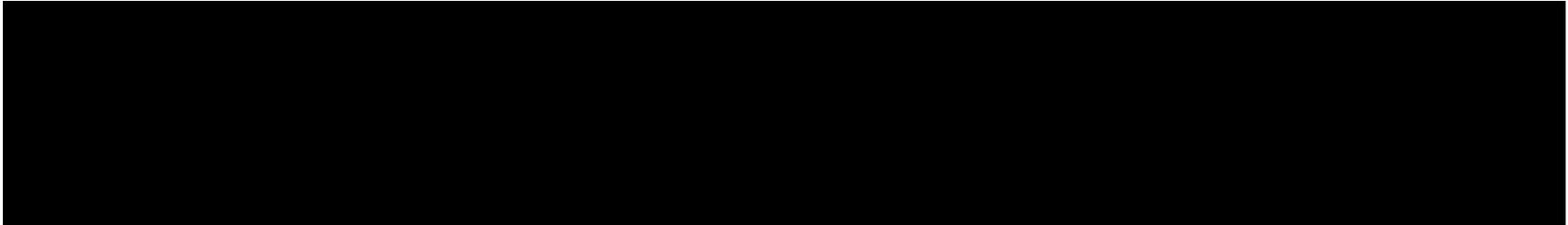
- Lists the requested EO Services
- Formalization and commitment of the Service request by EMSA

Tasking and Ordering Process

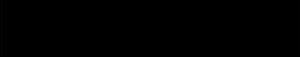


Tools

- ✓
- ✓
- ✓



Procedure

- ✓ Procedures to be applied between EMSA and the Service Providers
 - ✓ Routine and Short Notice
 - ✓ Emergency
- ✓ Same procedures for all Service Providers of the same Lot
- ✓ Repository of the procedures: 
- ✓ Scheduled date for the release of the Procedures: before Module 2

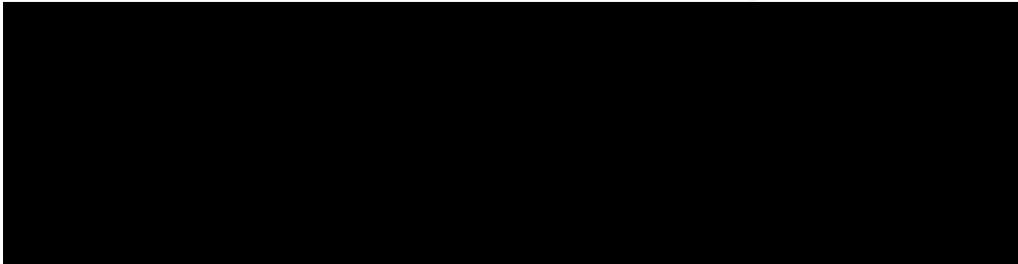
EO Service Status

Tasked

- ✓ Set by EMSA after the approval of EMSA's authorizing Officer

Cancellation – before the acquisition start time

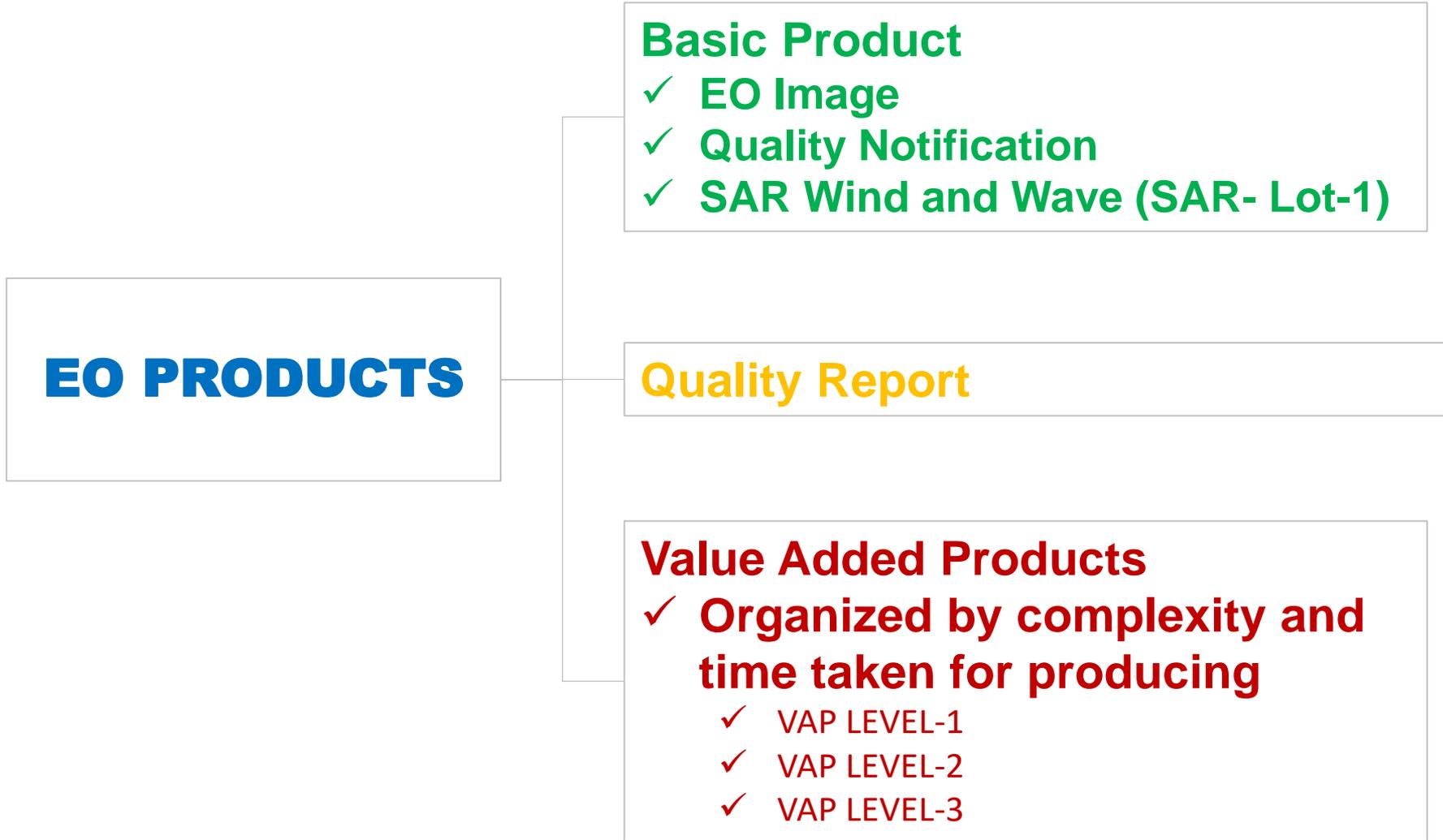
- ✓
- ✓



Anomaly- after the acquisition start time

- ✓

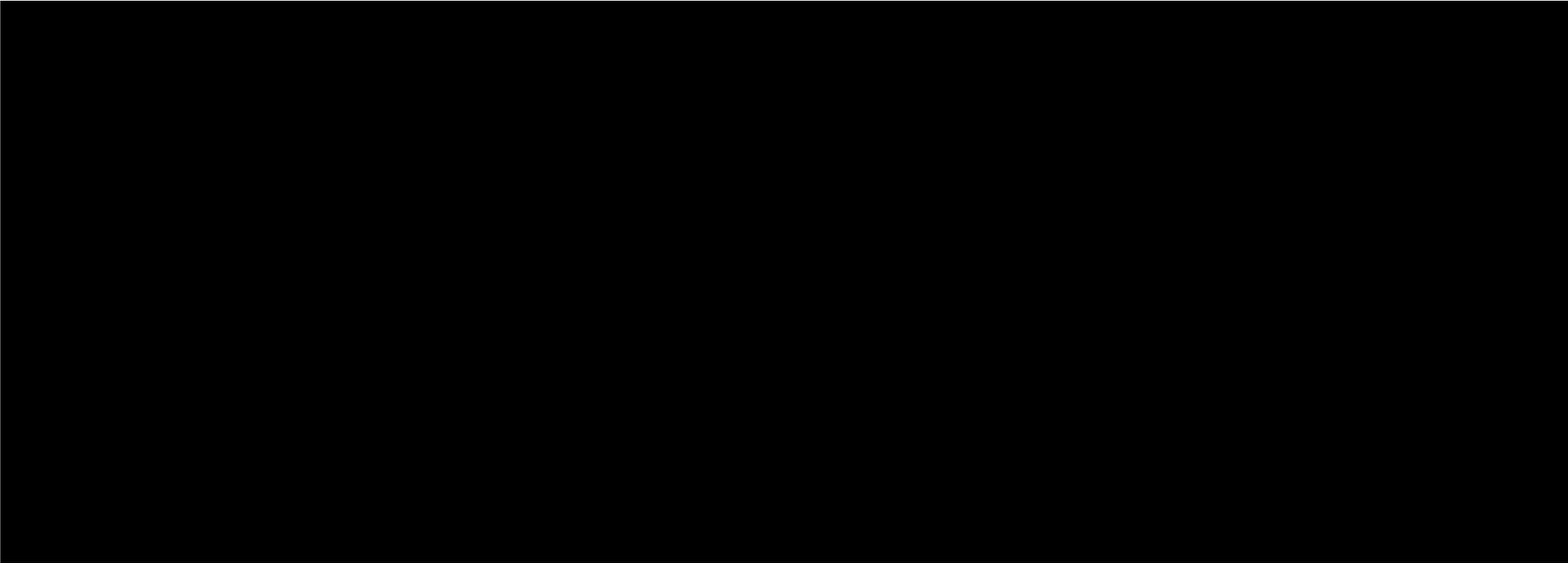
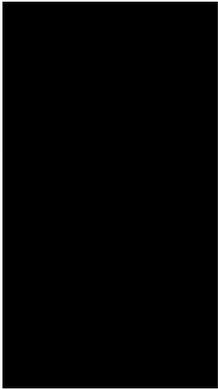




Updated Value Added Products



Type of value added service



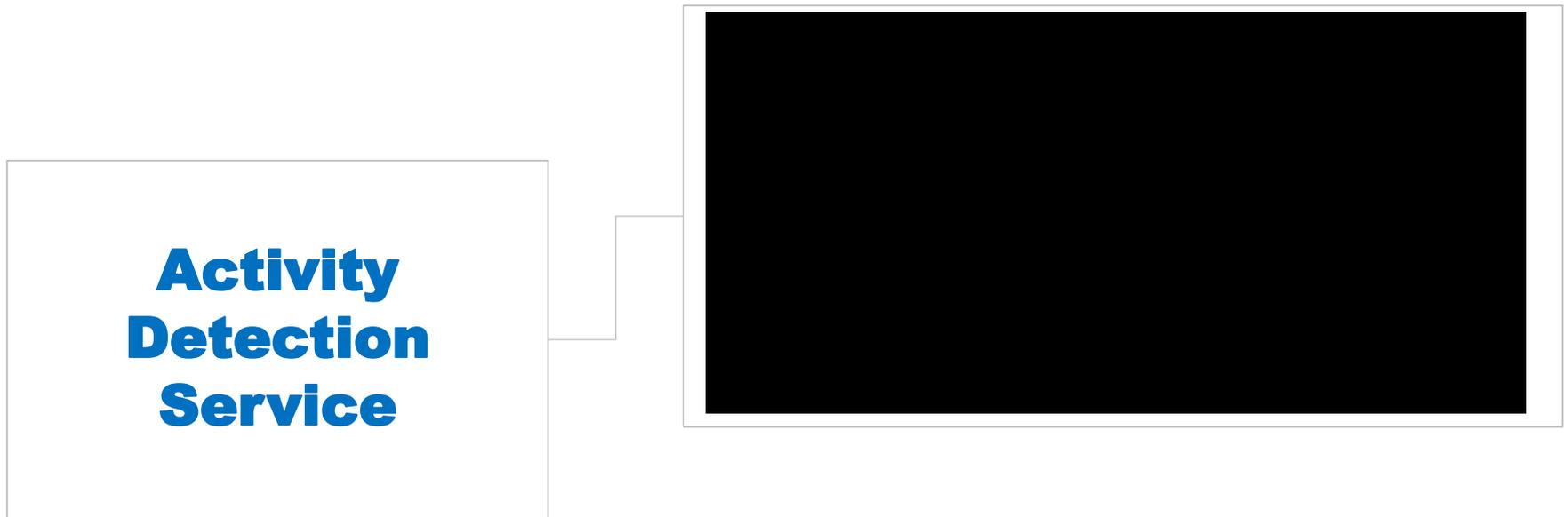


Comparison with previous contracts



Updated Value Added Products

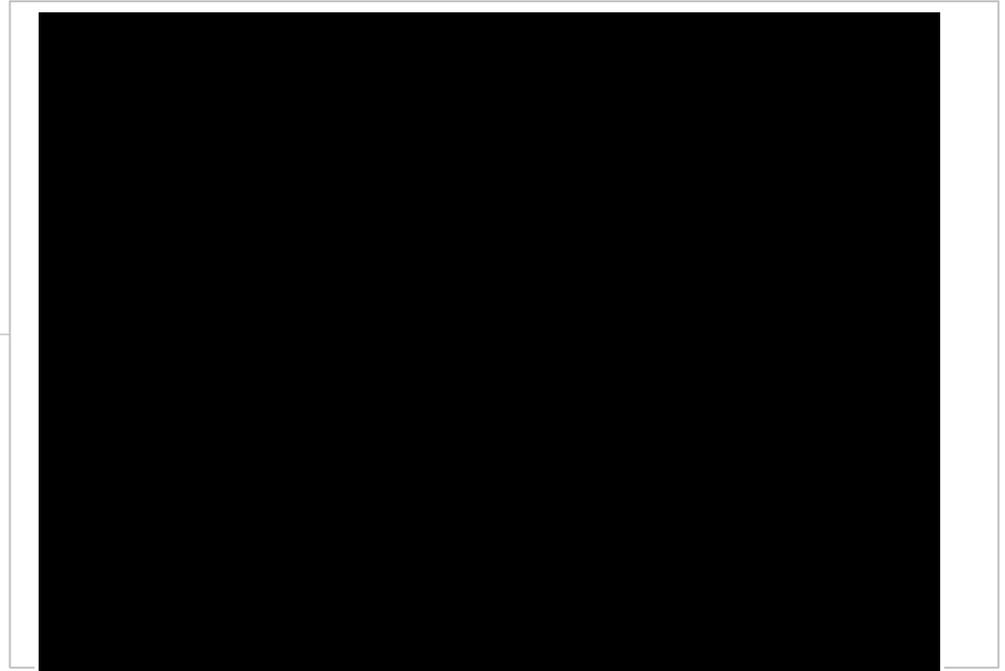
Comparison with previous contracts





Comparison with previous contracts

**Oil Spill
Notification**

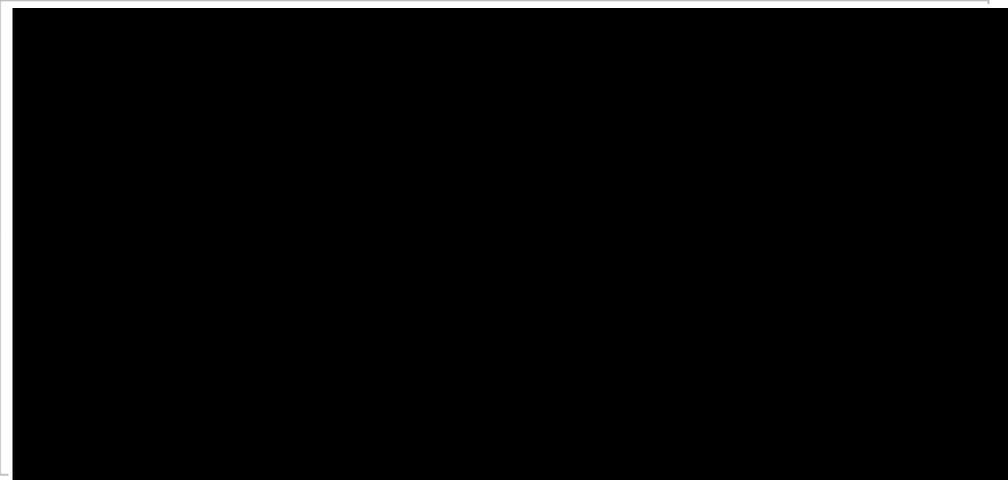


Updated Value Added Products



New Value Added Product

Wake Detection Service

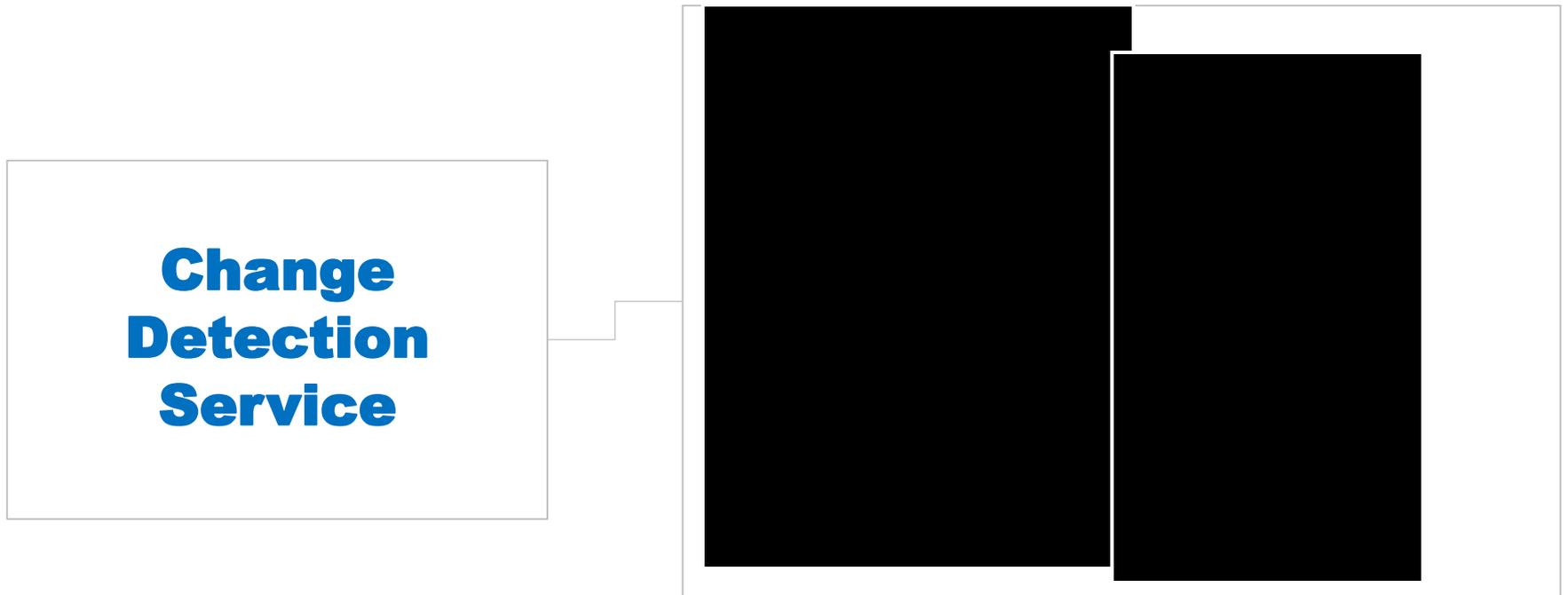


Updated Value Added Products

New Value Added Product

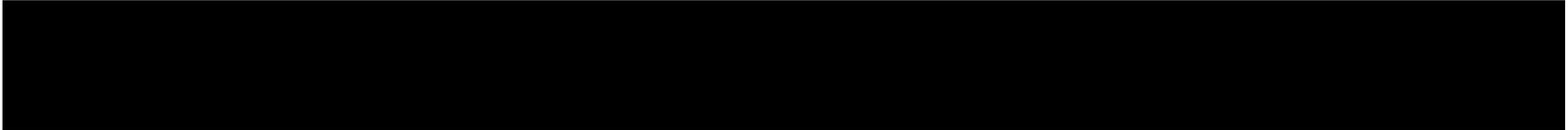


New Value Added Product





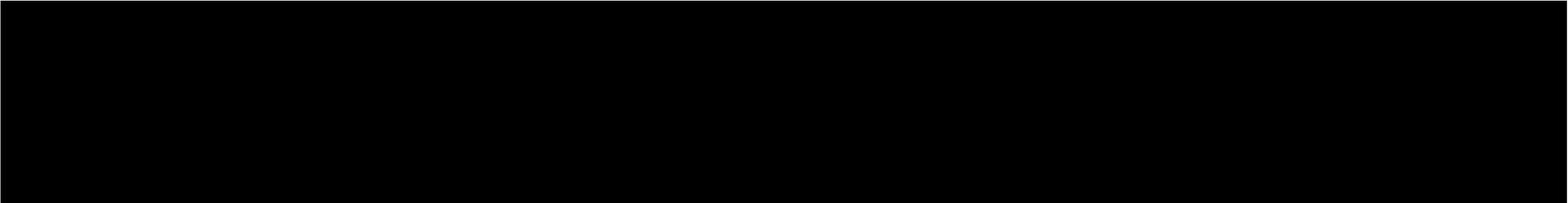
Oil Spill Detection Capability Map (Lot-1)



Discarded areas (both Lots)



Usable area (both Lots)



Price Reduction: Definition



Price Reductions

Quality

- ✓ Deliver of EO Service with quality issues
- ✓ Based on: Quality Report content and EMSA evaluation of VAP

Timeliness (Delivery delay)

- ✓ Service Providers delivers the service with a time delay
- ✓ Measure by: Acquisition Stop time and delivery time to EODC
- ✓ Lowest Coefficient Delay is applied

Calculation

- ✓ Applied to the entire price of the EO Service
- ✓ Not incremental: Price reduction cannot be more than 100%

Comparison with previous contracts

Price Reductions

- ✓ Delays in QUA are less penalized
- ✓ Small delays (<5min) in the delivery of Basic Product are less penalized

- ✓ EO Services with quality below 50% are not paid
- ✓ Quality from 91-95% is now penalized
- ✓ Delays above 2 hours are no longer paid

EO Service Quality



$$\text{Quality Parameter (\%)} = \frac{[\text{Usable Area} * \text{Coverage Area}]}{100} - [\text{Quality reduction of EO Product}]$$

Usable Area and Coverage Area

- ✓ Define how much the EMSA request was fulfilled by SP
- ✓ Delivered by SP in QUA package

Quality reduction for EO Products

- ✓ Defined by EMSA
- ✓ Reduction: 10%

EO Service Quality

Quality Coefficient



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EO Services Delivery delays

Coefficient delay



Service Level Agreement



Requests

- ✓ Raised by EMSA and Service Provider

Non-Conformances

- ✓ Raised by EMSA
- ✓ Delivered EO Products do not comply with specifications or quality but still required further analysis

Incidents

- ✓ Raised by EMSA
- ✓ Non-Conformances that are disrupting/degrading the service

Problems

- ✓ EMSA raises a problem, in one of the following conditions
 - ✓ 5 incidents, of the same nature, in 1-year moving time window;
 - ✓ 3 incidents, of the same nature, in 1-month moving time window

EMSA can suspend the Contractor from providing EO Services under Module 2 until a problem is solved [EOS_GENE_1881]

Service Level Agreement

SLA to handle incidents

- ✓ Raised by EMSA and Service Provider

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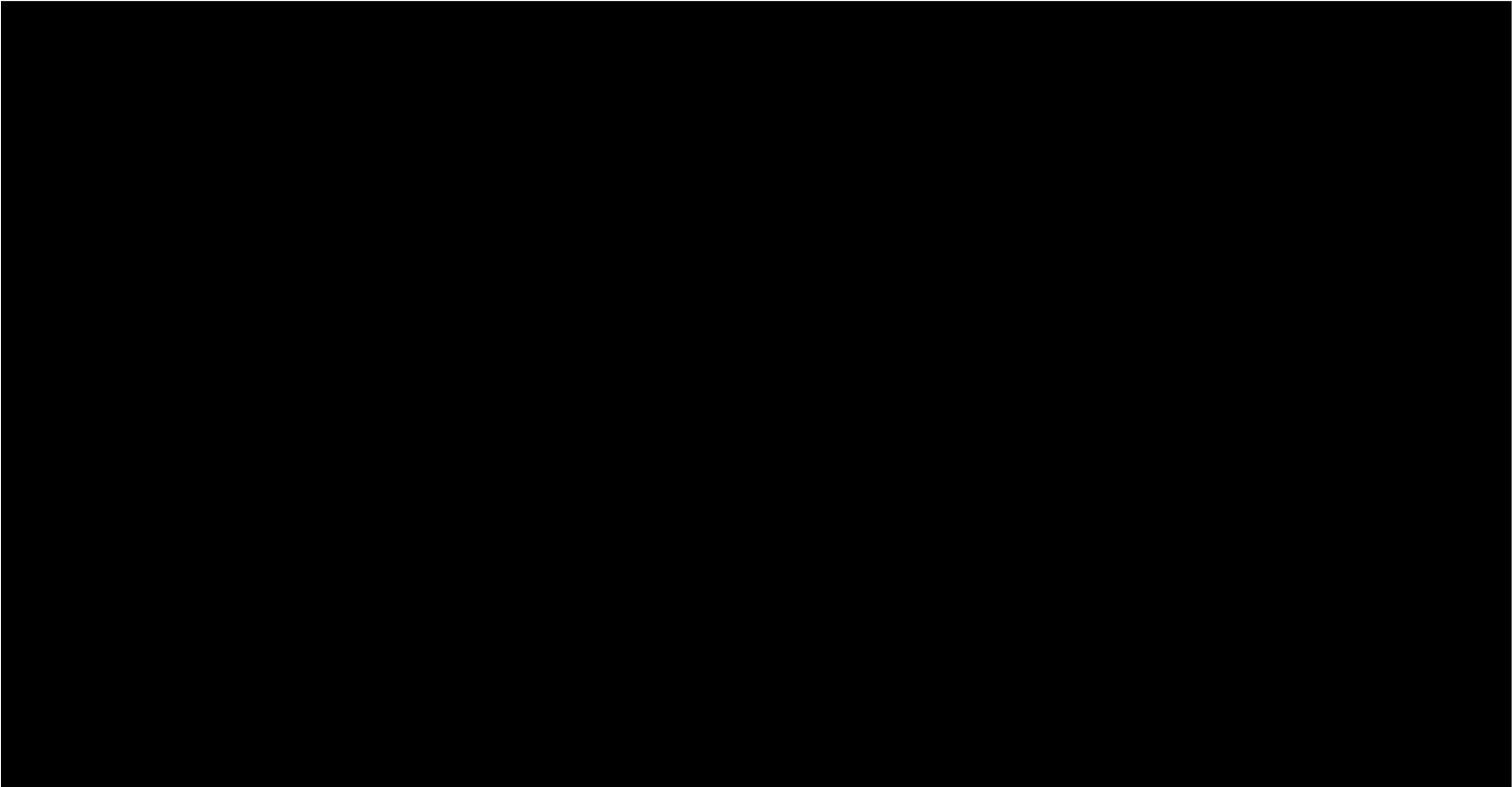
Reporting

- ✓ Raise tickets in [REDACTED] for Incidents and Problems
- ✓ Monthly SLA report



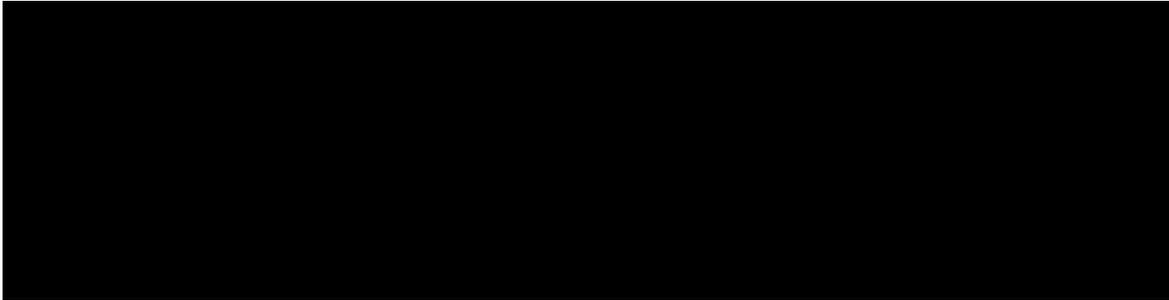
Issue Management Procedure

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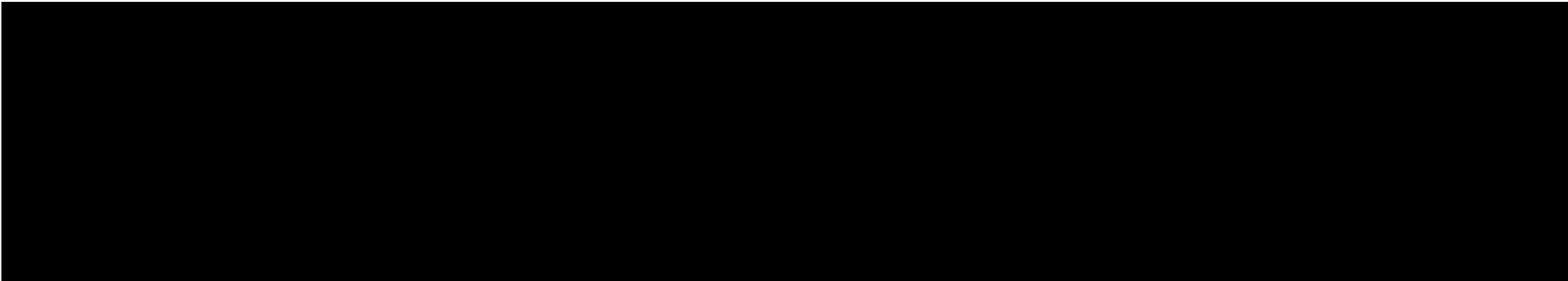




EO Service Desk



EO Emergency Service Desk



Service Level Agreement



Additional Service Level Agreements

- ✓ **Delivery of EO Services and VAP**
 - ✓ **24/7/365**

- ✓ **Contest information in EODC**
 - ✓ **96 calendar hours**

- ✓ **Delivery of invoices (after approval by EMSA and Service Provider)-**
In Q4, EMSA may request shortest delivery time:
 - ✓ **Digital version: 3 EMSA working days**
 - ✓ **Hard-copy: 8 EMSA working days**

- ✓ **Cancellation of EO Services- with no costs to EMSA:**
 - ✓ **Lot-1: until acquisition start time**

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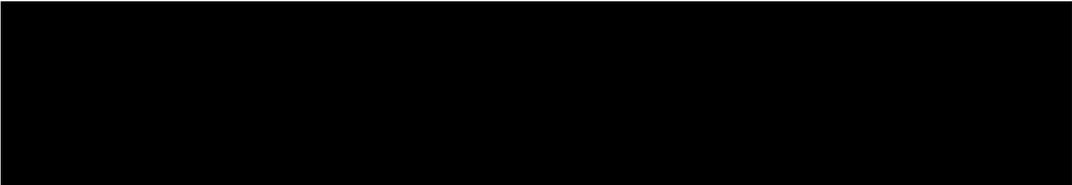




2018/EMSA/OP/06/2018

Kick-off meeting

Module 1 Project Management



Lisbon / 1 October 2018



Module 1- Service set-up and testing

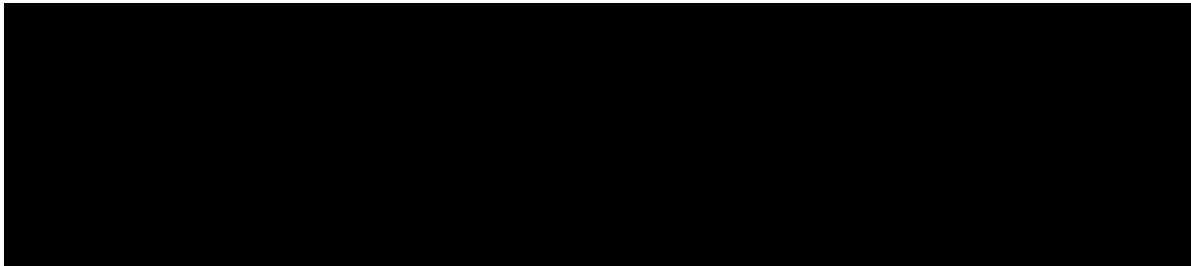
Development and implementation of the processing chains, technical and network set-up to deliver EO Services to EMSA (according to EICD 2.0) and test and validation of the service chain.

The specific contract has the duration of 6 months.



✓ **Project management collaborative tool**

✓ **Includes**



✓ **Please check and confirm you have access**

Issue types

✓ **Requests**

Requests for support or information

✓ **Non-conformance**

Products or services do not comply with the specifications or quality expected

Criticality v SLA

Priority of the non-conformance	Time to acknowledge and provide a preliminary analysis	Time to Solve



Interfaces

External Interface Control Document

EICD 2.0.0

Content

- ✓ Definition of the webservices
- ✓ Axway documentation
- ✓ Package structures
- ✓ Naming conventions
- ✓ All annotations of elements for SP
- ✓ EO Package's schemas

Changed Content

- ✓ Less documents for Service Providers- no elements mapping documentation per EO Product
- ✓ All references to CSNDC were replaced by EODC
- ✓ Main document without schemas
- ✓ Removed MyOcean references



EO Image (EOP/EOPO)

New Content/Changes

- ✓ EOP and EOPO are now a single package- same Schema for SAR and Optical EO images
- ✓ Additional elements for quality control- e.g. number of rows, lines, etc
- ✓ Additional elements: orbit and view angles.

Removed Content

- ✓ DIMAP formats not are supported (not Schema related)

External Interface Control Document

**SAR Wind/Wave
(Lot-1)**

No Changes

**Quality
Notification
(QNO)**

No Changes



Vessel Detection Service (VDS)

Changes

- ✓ Element's annotations were updated
- ✓ Vessel width, length and heading are not mandatory- part of EVS

Removed Content

- ✓ Elements no longer to be delivered (e.g. vessel classification, speed and confidence level of classification)

Enhanced Vessel Service (EVS)

New EO Product

- ✓ Same attributes as in VDS (EICD 1.4.4)
- ✓ If applied, SP to update VDS detections
- ✓ EMSA expects contractors to provide more often the full list of elements
- ✓ Comment from Service Provider



Feature Detection (FDS)

New EO Product

- ✓ Define EMSA request (and AOI)
- ✓ Locate and define Feature and its location

Moved Content

- ✓ Features were part of Activity package in EICD 1.4.4

Enhanced Feature Service (EFS)

New EO Product

- ✓ Additional elements to be provided (e.g. length, width, area)
- ✓ Clip Images
- ✓ If FDS is requested, EFS shall update detected features

Wake Detection (WDS)

New EO Product

- ✓ Detect and characterize wakes
- ✓ When and if possible, associate with vessel

Change Detection (CDS)

Changed EO Product

- ✓ Simplified Schemas
- ✓ Used to report changes for: Vessels; Features; Activities.
- ✓ Lot-1: extract speed and heading with high accuracy for multiple-sequence acquisitions
- ✓ Clip Images



Activity Detection (VDS)

Changes

- ✓ Only to be used for activities
- ✓ Simplified the amount of elements to be provided

Removed Content

- ✓ Associate features and vessels with activities



Quality Report (QUA)

Changes

- ✓ Cloud coverage (Lot-2) and defined cloud threshold
- ✓ Cancellation and anomaly information
- ✓ List and basic description of used ancillary data



Oil Spill (OSN)

Changes

- ✓ No OSW
- ✓ Additional non-mandatory requirements related with slicks/spills (estimation error)



Planning file

Changes

- ✓ Inclusion of annotations in the Schema

Potential updates during Module 1

- ✓ Additional updates on elements annotations (not foreseen any impact on planning file schema)



Description of specific elements

- ✓ Inserted in Schema annotations
- ✓ Updates to elements' annotations will be incorporated in EICD minor releases

Repository of EICD



Questions and Answers



Foreseen release date to OP/06/2018 Providers: 1st week of October

Interfaces with EODC- AXWAY



New Transfer technology

- ✓ **New transfer technology for EO Products**
- ✓ **Decrease the transfer time between Service Providers and EMSA**
- ✓ **Timeline in Pre-production environment (Module 1): Mid-October 2018**

Installation

- ✓ **Requires the installation of a client application at Service Provider's infrastructure**
- ✓ **Technical documentation: available on TF**



AIS provision

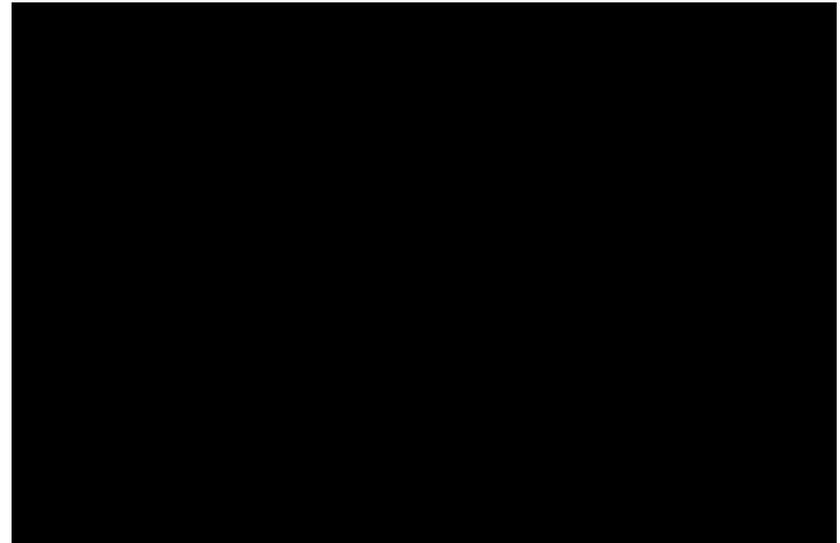


New transfer mechanism

- ✓ **WebService (WFS)**
- ✓ **Already available to Service Providers in PRODUCTION environment**

Documentation

- ✓ **EICD document provides all information**

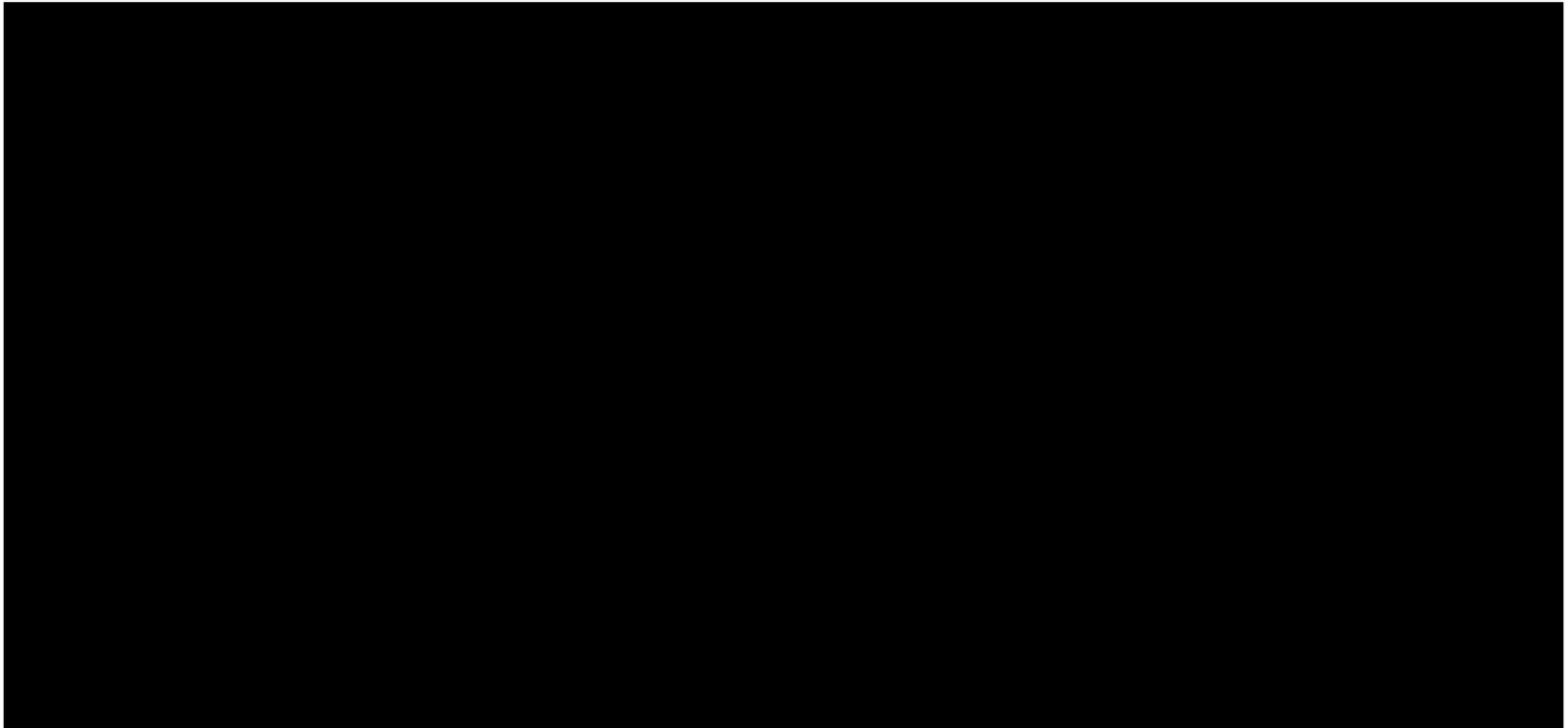




Test Management

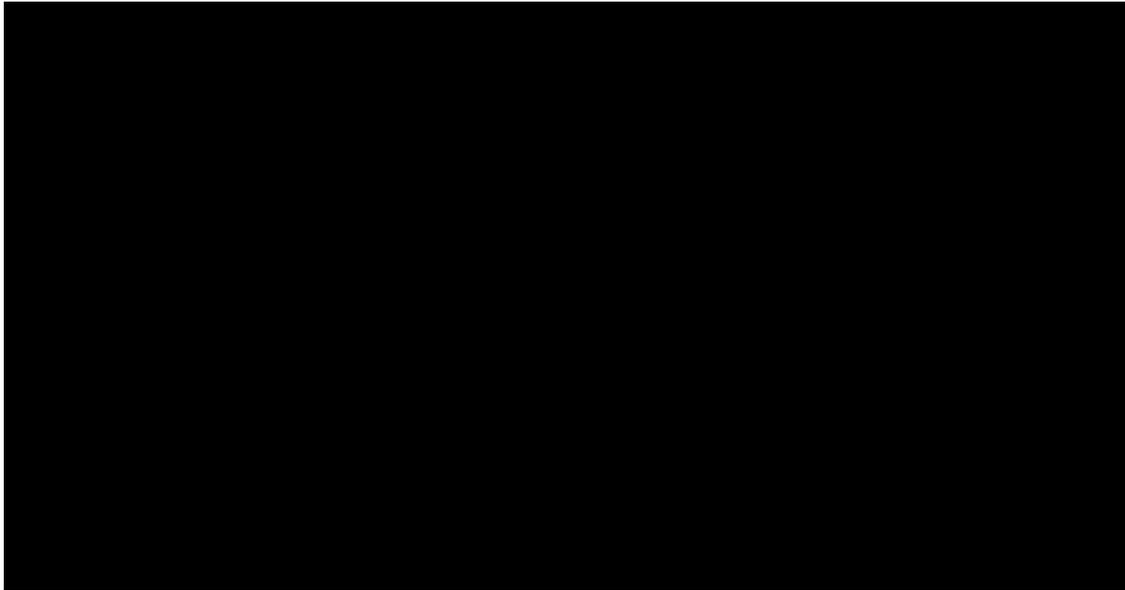


Test Plan Timeline





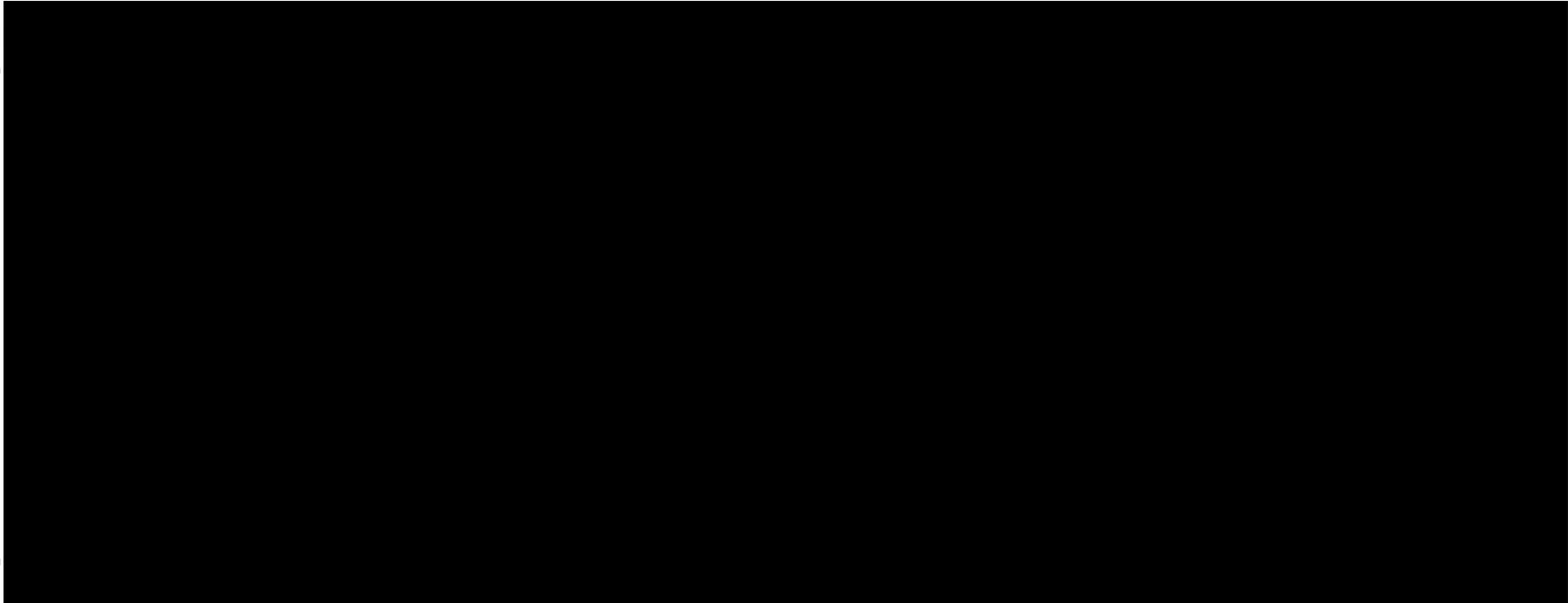
Test Plan





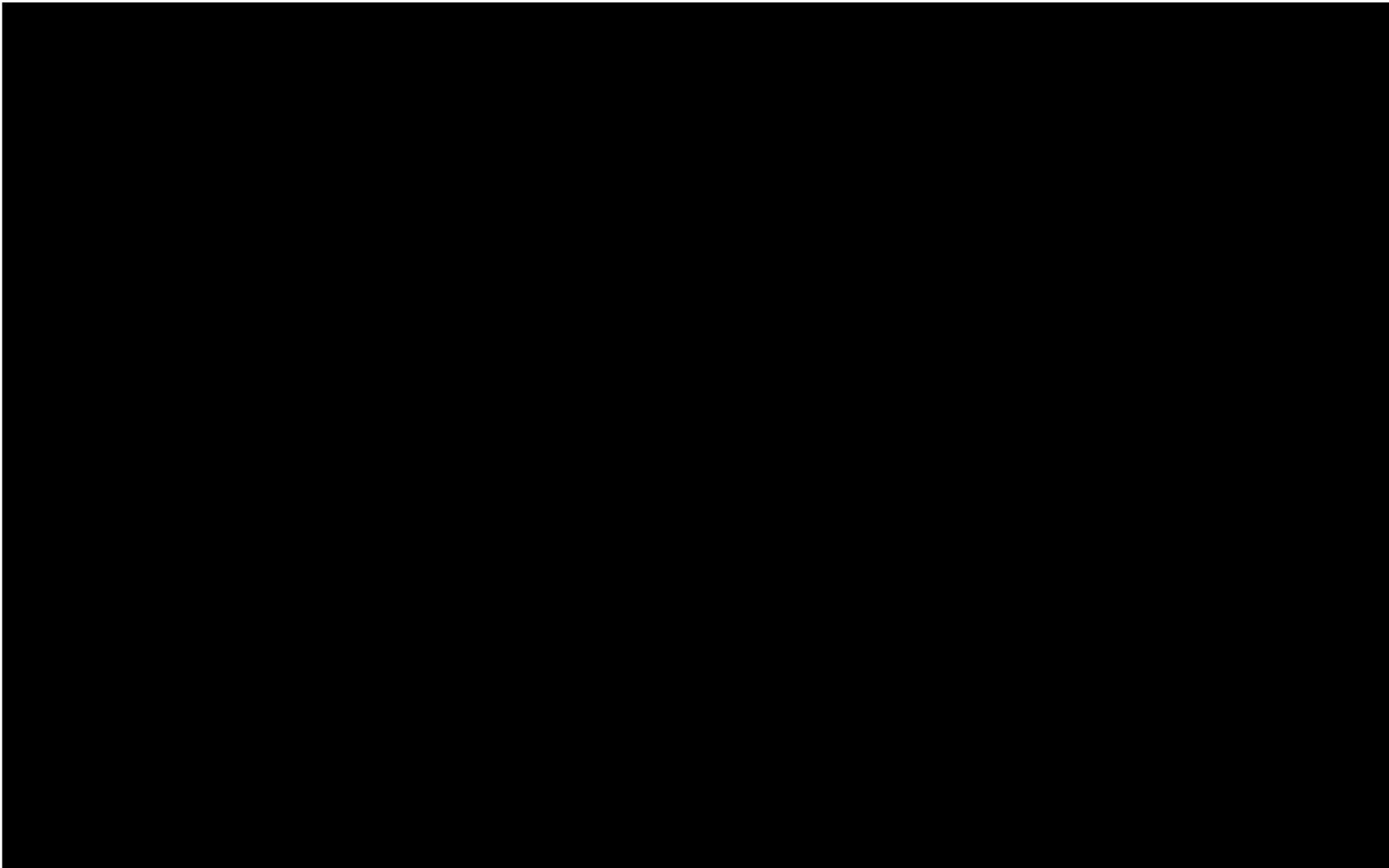
Test Plan Approach







Test Results



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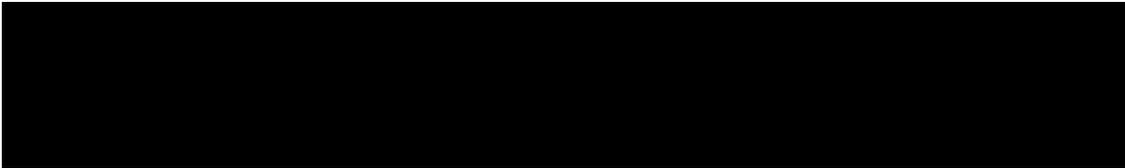


MINUTES OF MEETING

2018/EMSA/OP/06/2018.LOT1 KICK-OFF MEETING

AGENDA

1. Welcome and presentations
2. Contract Background and Overview (EMSA)
3. Project Management and Service Provision (EDISOFT)
4. Project Management and Service Provision (EMSA)
5. Module 1 – Service set-up (EMSA)
6. Module 1 (EDISOFT)
7. AoB and Wrap up



ATTENDEES

Present / Absent	Mandatory	Name	Role	Department/Entity
P	-			
P	-			
P	-			
P	-			
P	-			
P	-			
P	-			
P	-			

EDISOFT INTERNAL

Distribution except planned attendees:			
For information / For action	Name	Role	Department/Entity

■ SUMMARY

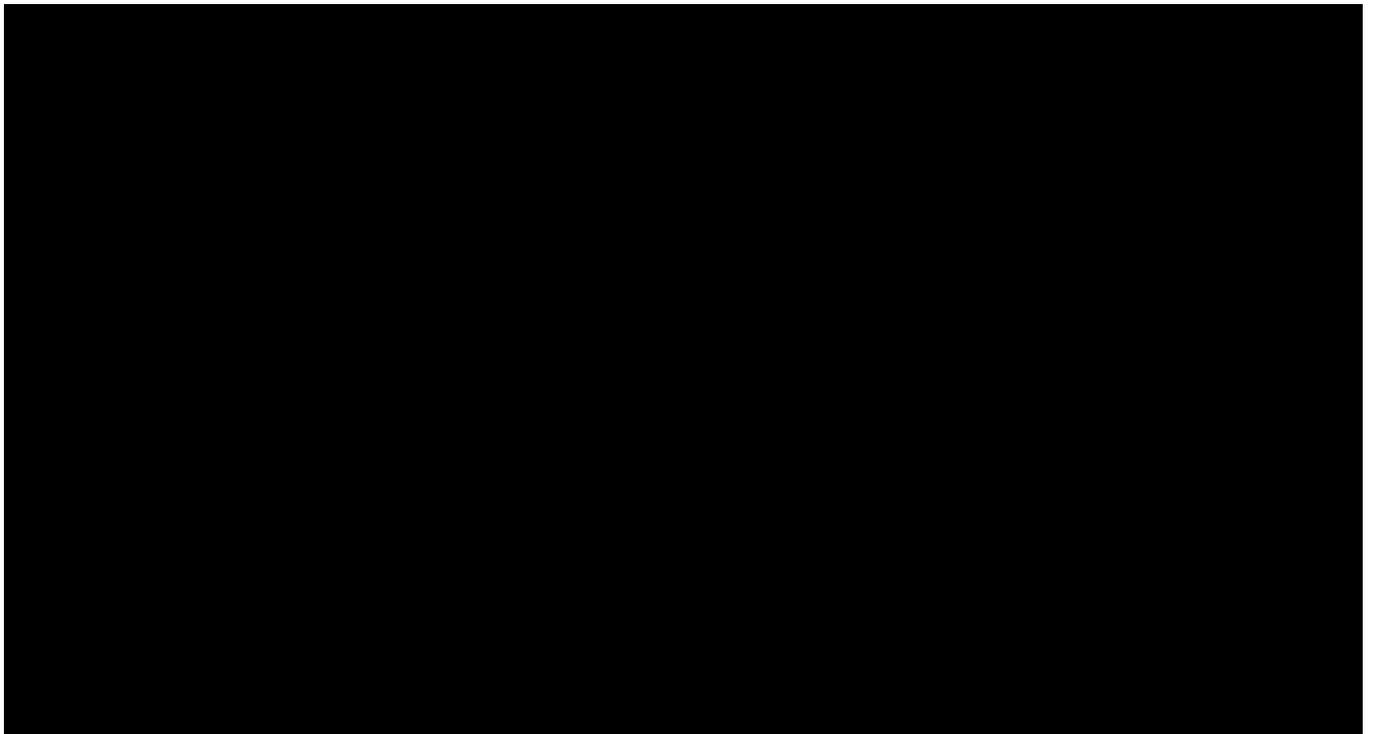
2018/EMSA/OP/06/2018.LOT1 KICK-OFF MEETING

Introduction:

Presentation of the meeting participants

Minutes of Meeting:

EMSA presented the main aspects of the new contract 2018/EMSA/OP/06/2018.Lot1 (OP/06) implementation and transition between OP/15 and the OP/06.



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Actions from KO meeting:

Action #	Action	Owner	Open date	Due date	Status
A1					
A2					
A3					
A4					
A5					

NEXT MEETING
Meeting to be scheduled for the 12 th of October 2018.

EDISOFT INTERNAL