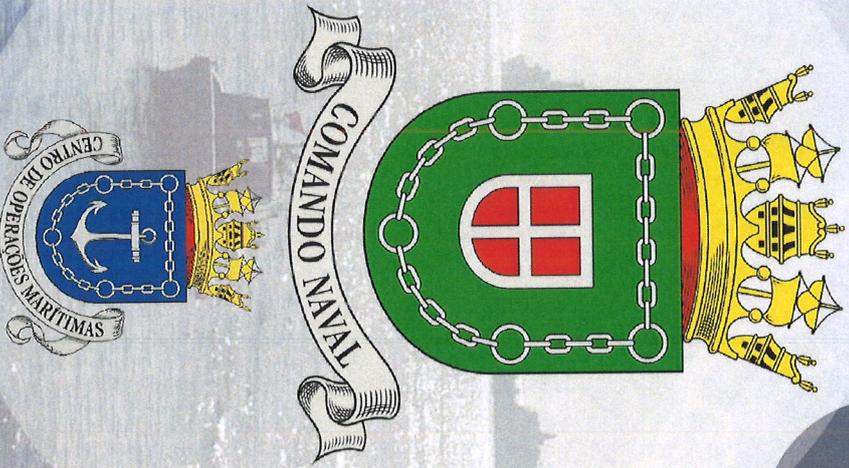


Awareness Session on Search and Rescue – Technologies available

from the Portuguese Navy Maritime Operations Center

Fleet Command, Tuesday, 28 November 2023

Personal data



WHO WE
ARE

WHAT WE
DO

HOW WE DO
IT

RESULTS

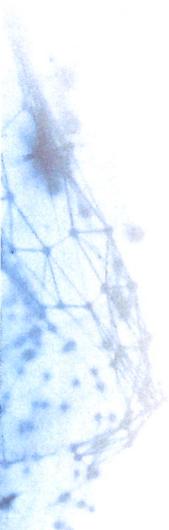
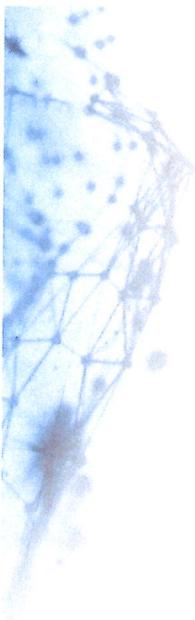
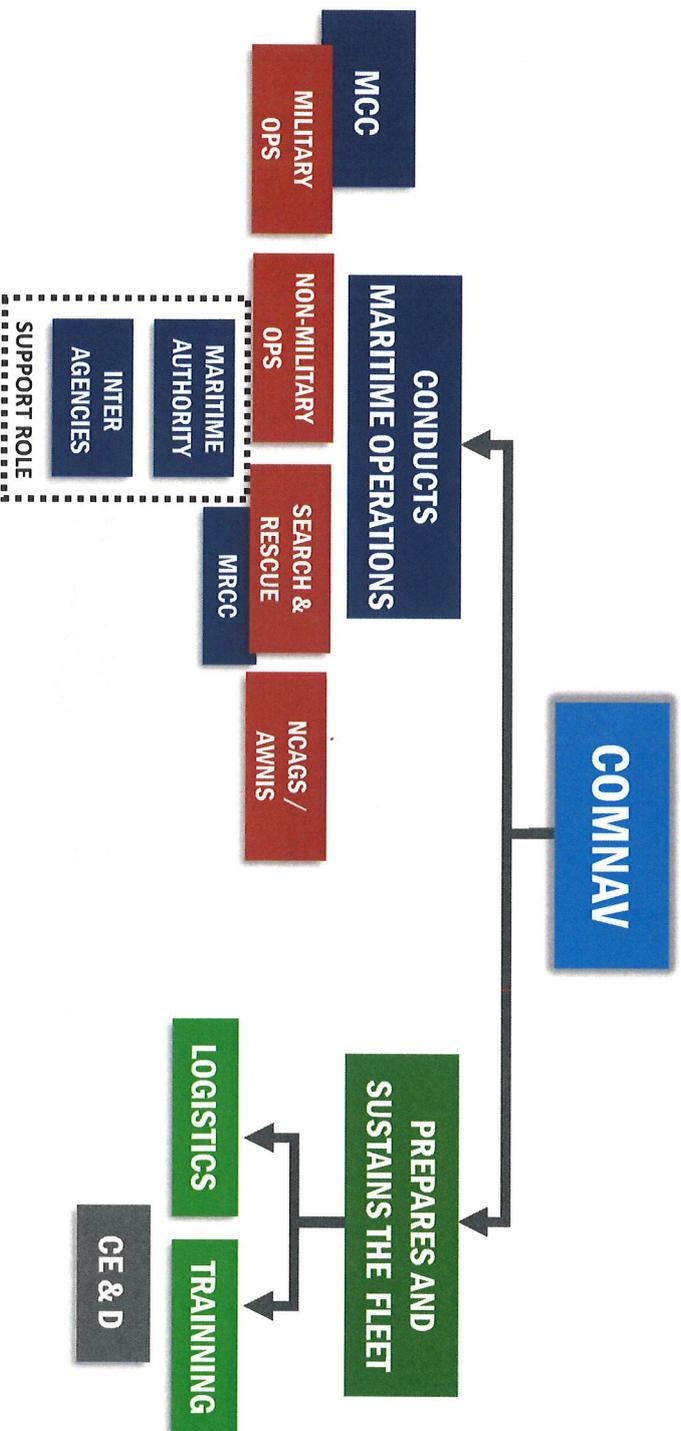


Marinha

Portuguese Navy Operational Sector



OVERVIEW





Marinha



Portuguese Navy Maritime Operations Center - COMAR

WHO WE ARE

WHAT WE DO

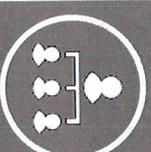
HOW WE DO IT

RESULTS

OVERVIEW



COMAR is a **Maritime Operations Center** serving as an Operational Command Component of the National Force System



Directly under Naval Commander orders, its mission is to support Command and Control at an Operational Level



Marinha



OVERVIEW

Portuguese Navy Maritime Operations Center - COMAR



MARITIME OPERATION CENTER



COAC		Maritime Authority Operations Cell
MRCC Lisbon		Maritime Rescue Coordination Center
CANN		Portuguese Navy Shipping Center
CCRM		Military Response Coordination Center



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WHO WE ARE

WHAT WE DO

HOW WE DO IT

RESULTS

OVERVIEW



Areas of responsibility

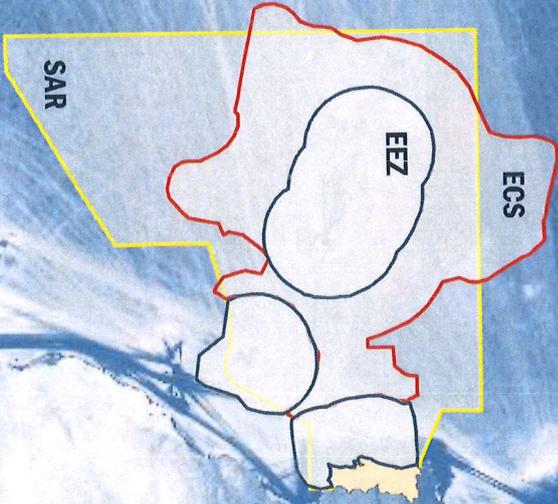
Imports **60,5%**

Petroleum products **100%**

VAT **5,4%**

Jobs **190 000**

Communications **97%**



- EEZ - Authority**
1,7 millions km² (18x Land)
- ECS - Sovereignty**
4,1 millions km² (44x Land)
- SAR - Search and Rescue**
5,8 millions km² (62x Land)



Marinha

WHO WE ARE

WHAT WE DO

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OVERVIEW



Permanent need to monitor the sea





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OVERVIEW

Information systems

CSI

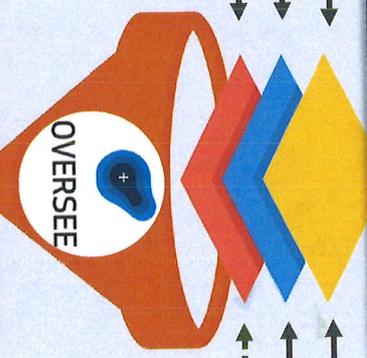
- AIS
- RADAR
- GPS

Costa Segura

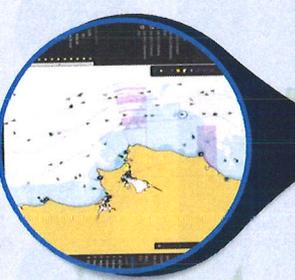
MONICAP (fishing)

Fishing Boat Automatic Location Communicator

COMAR



Fusion, Analysis and Validation



Maritime Situational Awareness

Agencies

VTS

SIWCC





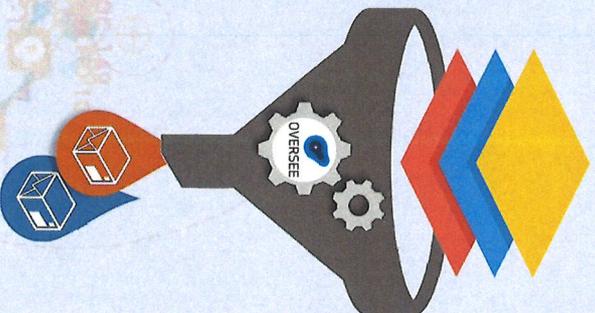
Marinha



OVERVIEW



Information systems



FUSE MARITIME INFORMATION



SHARE OF MARITIME PICTURE



SUPERIORITY OF KNOWLEDGE AND ABILITY TO ACT IN TIME WITHIN ANY FRAMEWORK

KNOWLEDGE AND EXPERIENCE IN THE COLLECTION, COMPILATION, ANALYSIS AND DISSEMINATION OF INFORMATION ABOUT THE SEA AT THE SERVICE OF ANY STATE OR AGENCY



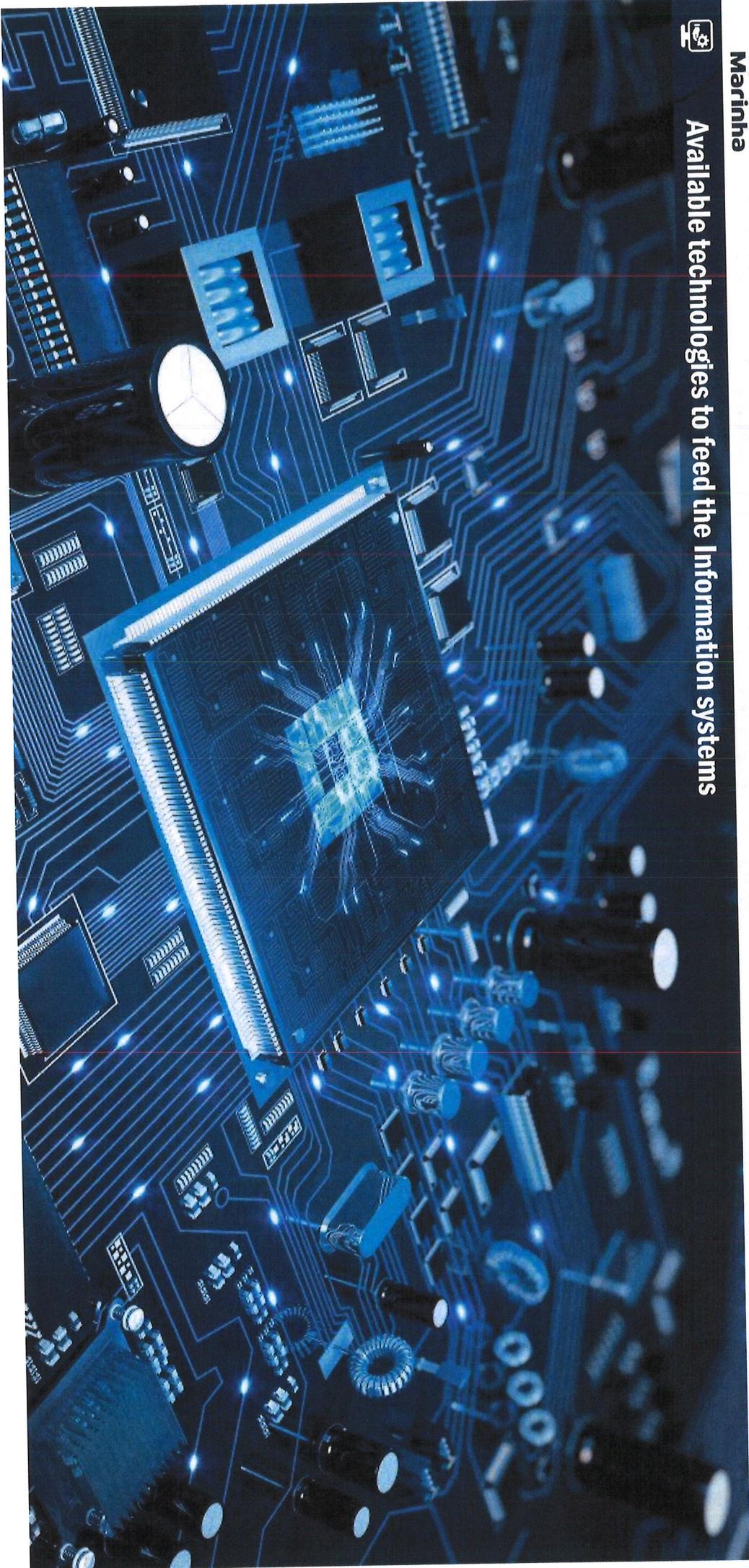
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OVERVIEW



Available technologies to feed the Information systems





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Technologies available - GMDSS

WHO WE ARE

WHAT WE DO

HOW WE DO IT

RESULTS

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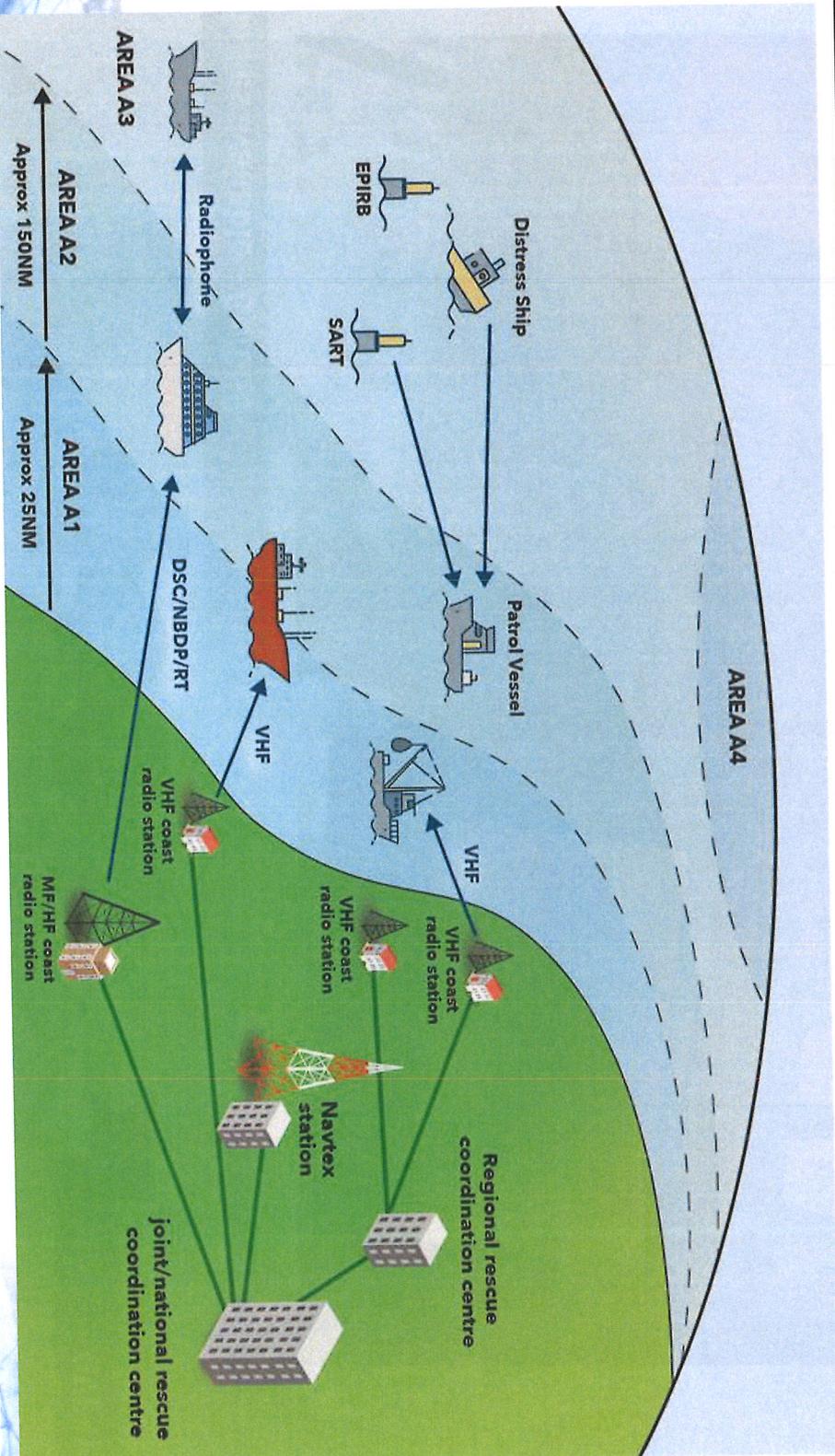


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Technologies available – GMDSS



OVERVIEW





Marintha

Technologies available - GMDSS



OVERVIEW



EPIRB



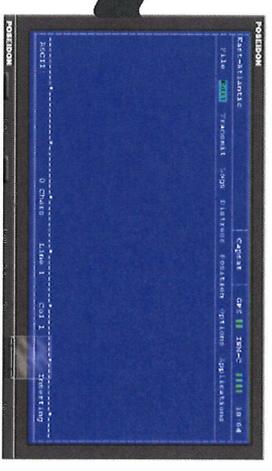
SART



VHF RT/DSC



MF/HF RT with DSC and Radiotelex



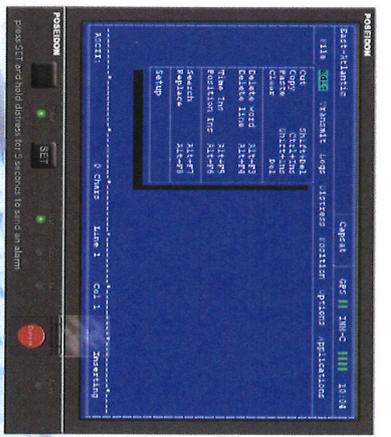
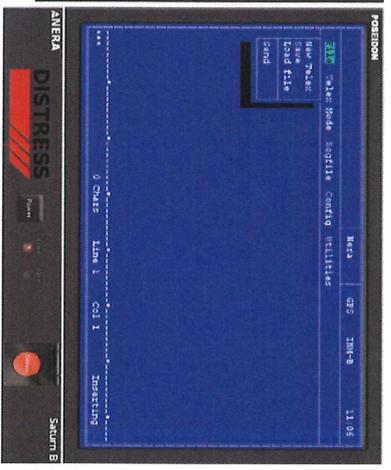
NAVTEX



Immarsat Fleet 77



Immarsat B / FB500



Immarsat C

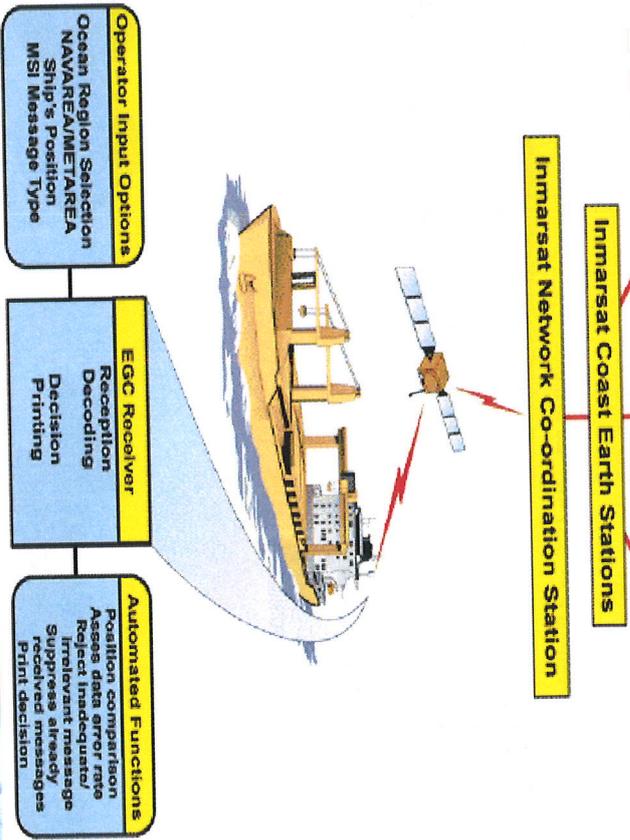
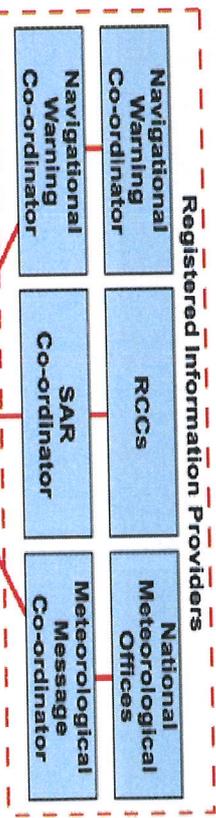
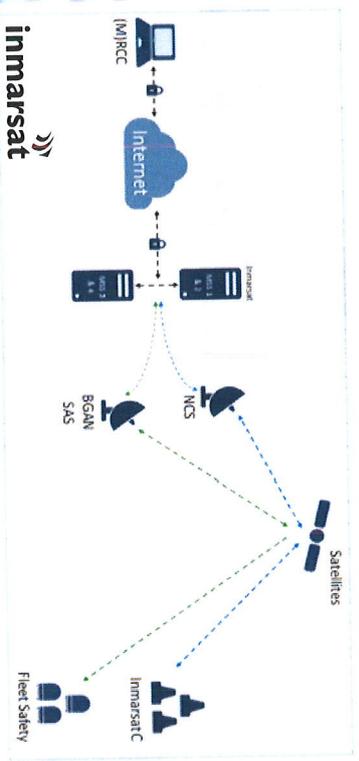
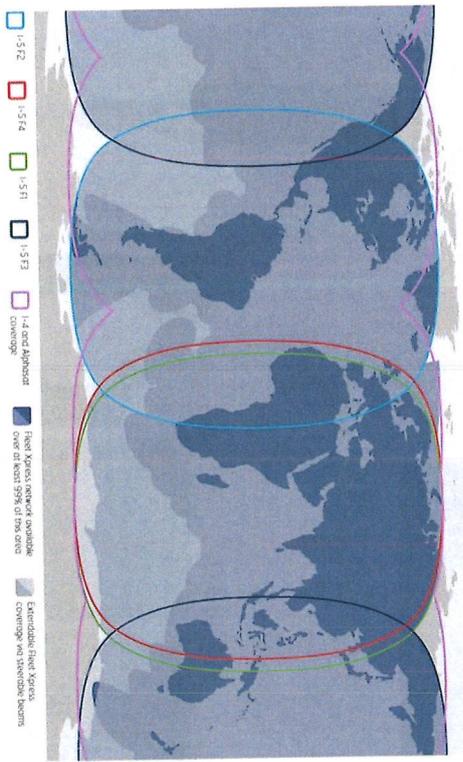


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Technologies available - INMARSAT



OVERVIEW



Operator Input Options
 Ocean Region Selection
 NAVAREA/METAREA
 Ship's Position
 MSI Message Type

EGC Receiver
 Reception
 Decoding
 Decision
 Printing

Automated Functions
 Position comparison
 Assess error rate
 Receive inadequate/
 Suppress already
 received messages
 Print decision



Marinha

WHO WE ARE

WHAT WE DO

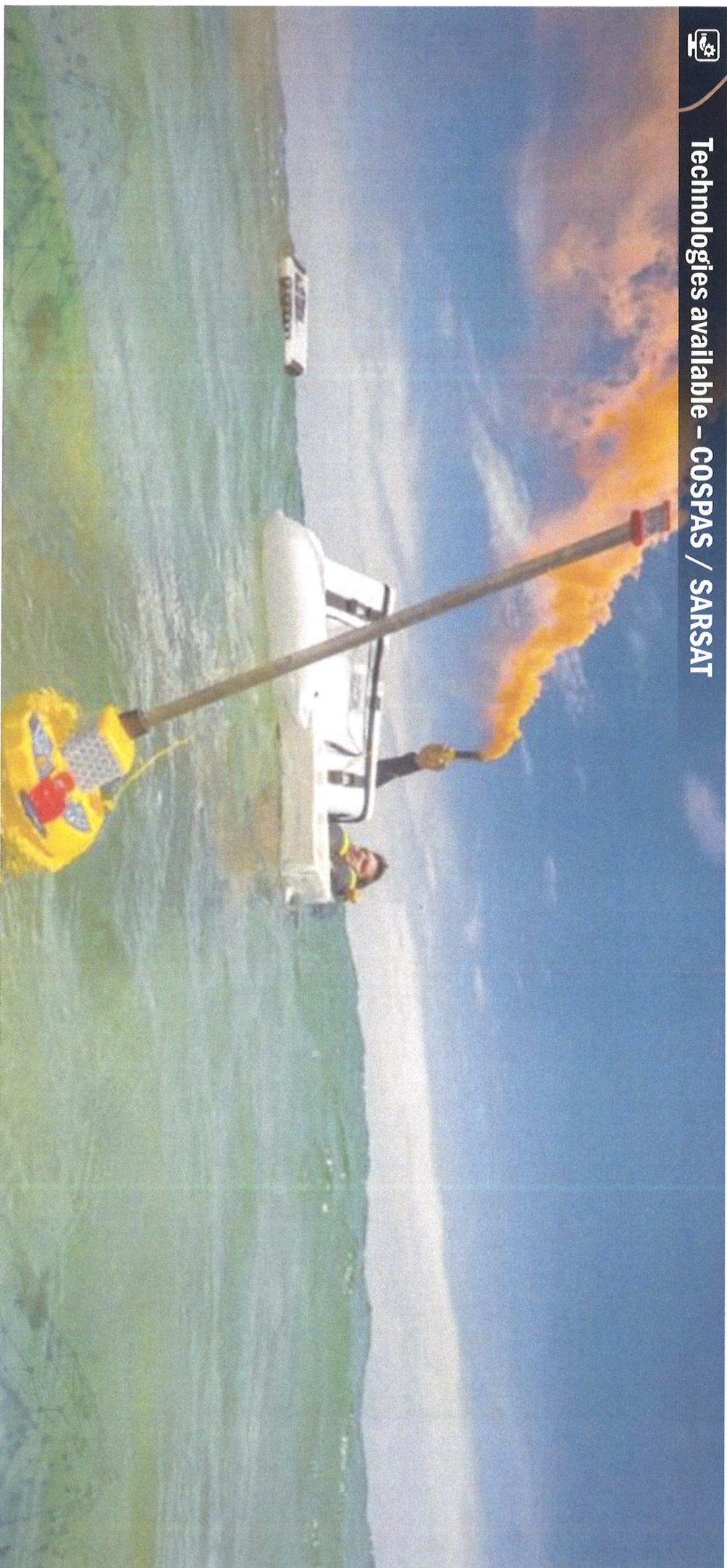
HOW WE DO IT

RESULTS

OVERVIEW



Technologies available – COSPAS / SARSAT





Marinha

Technologies available - COSPAS / SARSAT



OVERVIEW

NAVIGATION

- Dashboard
- Log
- Maritime Picture
- Alerts
- Incidents
- Assets
- Resources
- Traffic Reports
- Resource Activities
- Searches
- Vessels
- Radar
- Contacts
- Reports
- Alerts
- Inspection Reports
- Cameras
- Messages
- Audit Log

Alerts

New Log Entry

Entry ID	From	To	Channel
100279/23	FMCC	MRCC PORTUG - Sal Beazon - E	FMCC
100278/23	FMCC	MRCC PORTUG - Sal Beazon - E	FMCC
100277/23	FMCC	MRCC PORTUG - Sal Beazon - E	FMCC
100276/23	FMCC	MRCC PORTUG - Sal Beazon - E	FMCC
100275/23	FMCC	MRCC PORTUG - Sal Beazon - E	FMCC
100274/23	FMCC	MRCC PORTUG - Sal Beazon - E	FMCC
100273/23	FMCC	MRCC PORTUG - Sal Beazon - E	FMCC
100272/23	FMCC	MRCC PORTUG - Sal Beazon - E	FMCC
100271/23	FMCC	MRCC PORTUG - Sal Beazon - E	FMCC
100270/23	FMCC	MRCC PORTUG - Sal Beazon - E	FMCC
100269/23	FMCC	MRCC PORTUG - Sal Beazon - E	FMCC
100268/23	FMCC	MRCC PORTUG - Sal Beazon - E	FMCC
100267/23	FMCC	MRCC PORTUG - Sal Beazon - E	FMCC
100266/23	FMCC	MRCC PORTUG - Sal Beazon - E	FMCC
100265/23	FMCC	MRCC PORTUG - Sal Beazon - E	FMCC
100264/23	FMCC	MRCC PORTUG - Sal Beazon - E	FMCC
100263/23	FMCC	MRCC PORTUG - Sal Beazon - E	FMCC
100262/23	FMCC	MRCC PORTUG - Sal Beazon - E	FMCC
100261/23	FMCC	MRCC PORTUG - Sal Beazon - E	FMCC
100260/23	FMCC	MRCC PORTUG - Sal Beazon - E	FMCC
100259/23	FMCC	MRCC PORTUG - Sal Beazon - E	FMCC
100258/23	FMCC	MRCC PORTUG - Sal Beazon - E	FMCC
100257/23	FMCC	MRCC PORTUG - Sal Beazon - E	FMCC
100256/23	FMCC	MRCC PORTUG - Sal Beazon - E	FMCC
100255/23	FMCC	MRCC PORTUG - Sal Beazon - E	FMCC

Details of Entry 100279/23

Type of Entry: Alert

Details: 061132Z NOV 23

FROM: FMCC

TO: MRCC PORTUGAL

BT

1. DISTRESS COSPAS-SARSAT POSITION UPDATE

2. MSG NO: 28466 FMCC REF: 373924

3. DETECTED AT: 23 NOV 06 1109 UTC BY MEDUSA

4. DIRECTION FREQUENCY: 406.0399 MHz

5. COUNTRY OF BEACON REGISTRATION: 366/USA

6. USER CLASS: STANDARD LOCATION - EPR8

7. SERIAL NO: 15116

280/15116

EMERGENCY CODE: null

8. RESOLVED - 42 28.3N 022 40.9W

9. POSITION: DOOPER A - ILL

10. DOOPER A - ILL

11. ENCODED - 42 28.3N 022 42.1W

12. EXCEEDED POSITION PROVIDED BY: INTERNAL

13. ENCODED POSITION PROVIDED BY: INTERNAL

Created by: g7777

Save & Close

Status	Date	Linked to
Acknowledged	06 1138Z Nov 23	None
Acknowledged	06 1137Z Nov 23	None
Acknowledged	06 1135Z Nov 23	None
Acknowledged	06 1132Z Nov 23	None
Acknowledged	06 1130Z Nov 23	None
Acknowledged	06 1127Z Nov 23	None
Acknowledged	06 1125Z Nov 23	None
Acknowledged	06 1122Z Nov 23	None
Acknowledged	06 1120Z Nov 23	None
Acknowledged	06 1117Z Nov 23	None
Acknowledged	06 1115Z Nov 23	None
Acknowledged	06 1112Z Nov 23	None
Acknowledged	06 1109Z Nov 23	None
Acknowledged	06 1107Z Nov 23	None
Acknowledged	06 1104Z Nov 23	None
Acknowledged	06 1102Z Nov 23	None
Acknowledged	06 1059Z Nov 23	None
Acknowledged	06 1057Z Nov 23	None
Acknowledged	06 1054Z Nov 23	None
Acknowledged	06 1052Z Nov 23	None
Acknowledged	06 1049Z Nov 23	None
Acknowledged	06 1047Z Nov 23	None
Acknowledged	06 1044Z Nov 23	None
Acknowledged	06 1042Z Nov 23	None
Acknowledged	06 1040Z Nov 23	None
Acknowledged	06 1037Z Nov 23	None

POSITION: 16:04 UTC CTEN M Borges Mendes

View on Maritime Picture

PROPERTIES

100279/23

Type of Entry: Alert

Entry Date: 06 1122Z Nov 23

From: FMCC

To: MRCC PORTUGAL

Channel: Sal Beazon - EPR8

Created by: system

Casualty: Unknown

Position: 42°28.30N 022°40.90W

42°28.30N 022°42.10W

Details: 061132Z NOV 23

FROM: FMCC

TO: MRCC PORTUGAL

BT

1. DISTRESS COSPAS-SARSAT POSITION UPDATE

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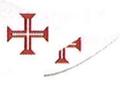
9. POSITION: DOOPER A - ILL

10. DOOPER A - ILL

11. ENCODED - 42 28.3N 022 42.1W

12. EXCEEDED POSITION PROVIDED BY: INTERNAL

13. ENCODED POSITION PROVIDED BY: INTERNAL



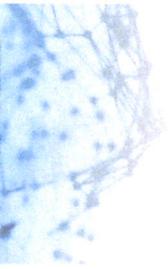
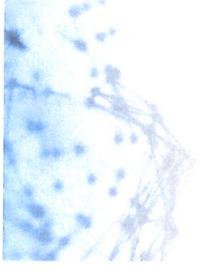
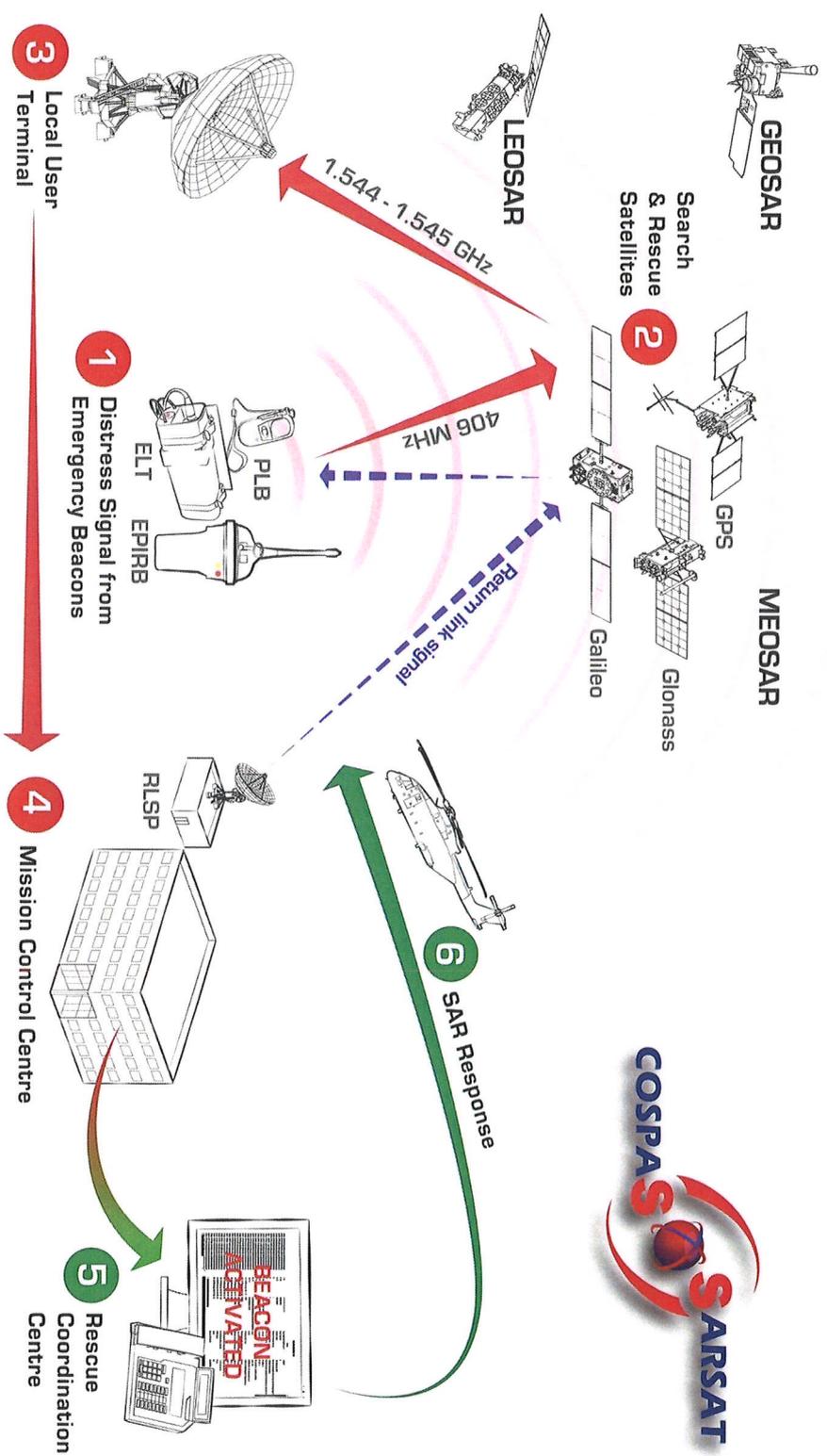
Marinha



Technologies available – COSPAS / SARSAT

- WHO WE ARE
- WHAT WE DO
- HOW WE DO IT
- RESULTS

OVERVIEW





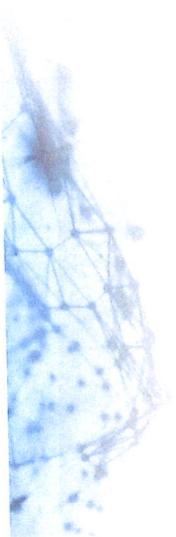
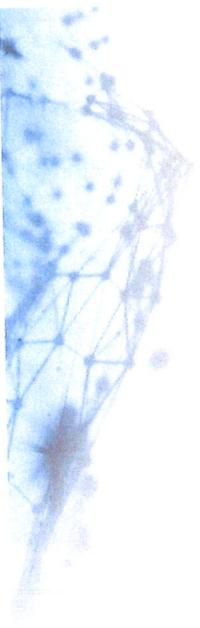
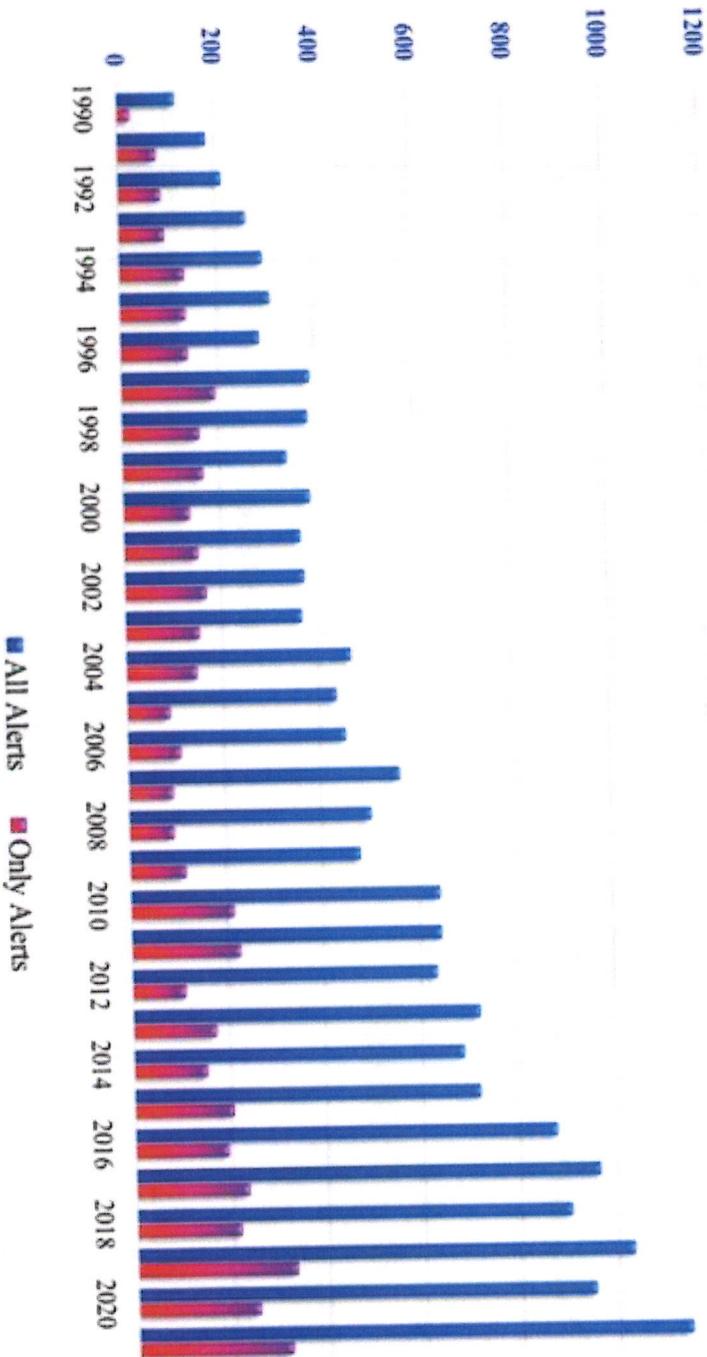
Marinha

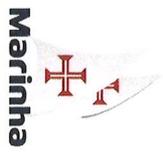


OVERVIEW



Technologies available – COSPAS / SARSAT





Marinha

Technologies available - VTS



OVERVIEW

OVERSEE

NAVIGATION

Dashboard

Log

Maritime Picture

Alerts

Incidents

Assets

Resources

Traffic Reports

Resource Activities

Searches

Vessels

Radar

Contacts

Reports

Alarms

Inspection Reports

Cameras

Messages

Audit Log

NAVIGATION

Maritime Picture

New Log Entry

WHO WE ARE

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HOW WE DO IT

RESULTS

OVERVIEW

União das Ilhas Açores

Área de Cobertura de Sistemas

COM 111

AS 111

MERTO 61

VME - DE 111

DGRM 110

CENTRO DE CONTROLO

CENTRO DE CONTROLO

DGRM

Layers

- Mission
- Assets
- Resources
- Points of Interest
- Data Sources
- AIS
- ARPA
- MANUAL
- MARITIME TRAFFIC
- Fishing



Marinha



Safety of Life at Sea

International and National prizes



Effectiveness Rate

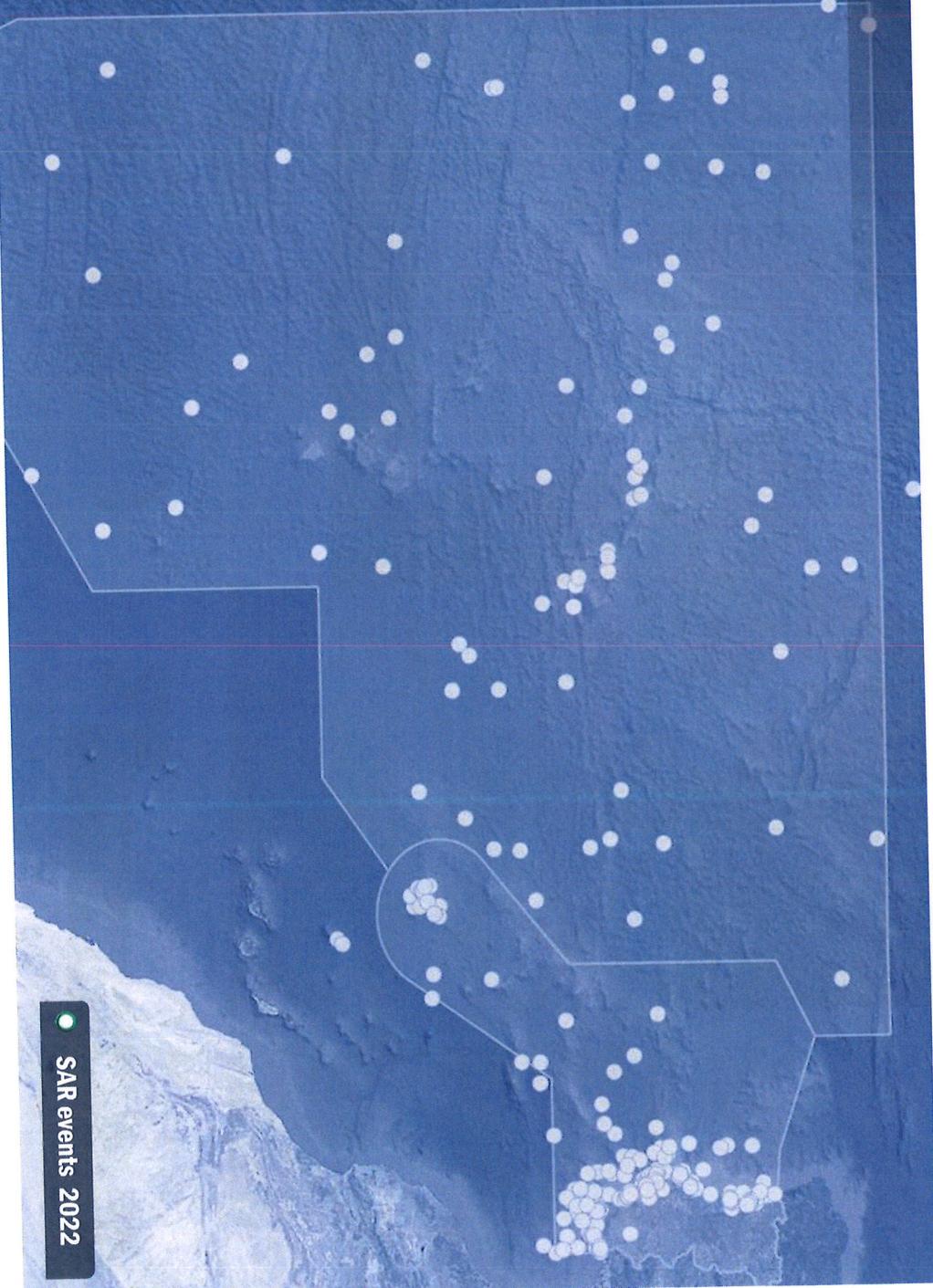


Search and Rescue

2022		429	SAR events
Last 10 years		492	Lives saved
		5 468	Lives saved

- WHO WE ARE
- WHAT WE DO
- HOW WE DO IT
- RESULTS

OVERVIEW



SAR events 2022

Awareness Session on Search and Rescue – Technologies available

from the Portuguese Navy Maritime Operations Center

Fleet Command, Tuesday, 24 October 2023

Personal data

