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ALFA H2020 PROJECT: End User – MAI/GNR

GUARDA NACIONAL REPUBLICANA

1st ALFA WORKSHOP

BRUSSELS, 04th DECEMBER 2018

Advanced Low Flying Aircrafts Detection and Tracking

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Summary

 **DEFINITION AND DEPENDENCY**

 **MISSION**

 **RESPONSIBILITIES**

 **COSTAL CONTROL UNIT**

 **SIVICC**

Definition and Nature



**Security Force of a military nature
constituted by military elements
organized in a special body of troops.**

n.º 1 do Art.º 1.º Law nr. 63/2007, 6th of November



Double Dependency

MAI

Ministry of Interior



MDN

Ministry of National Defence

Double Dependency



MILITARY FORCES

SECURITY FORCES

SECURITY SERVICES



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MISSION



Ensuring **legal democracy**,
 protecting internal security and **citizens rights**,
 under the **national security and**
protection systems, as well as supporting the
 implementation of **national defense** policy.

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RESPONSIBILITIES



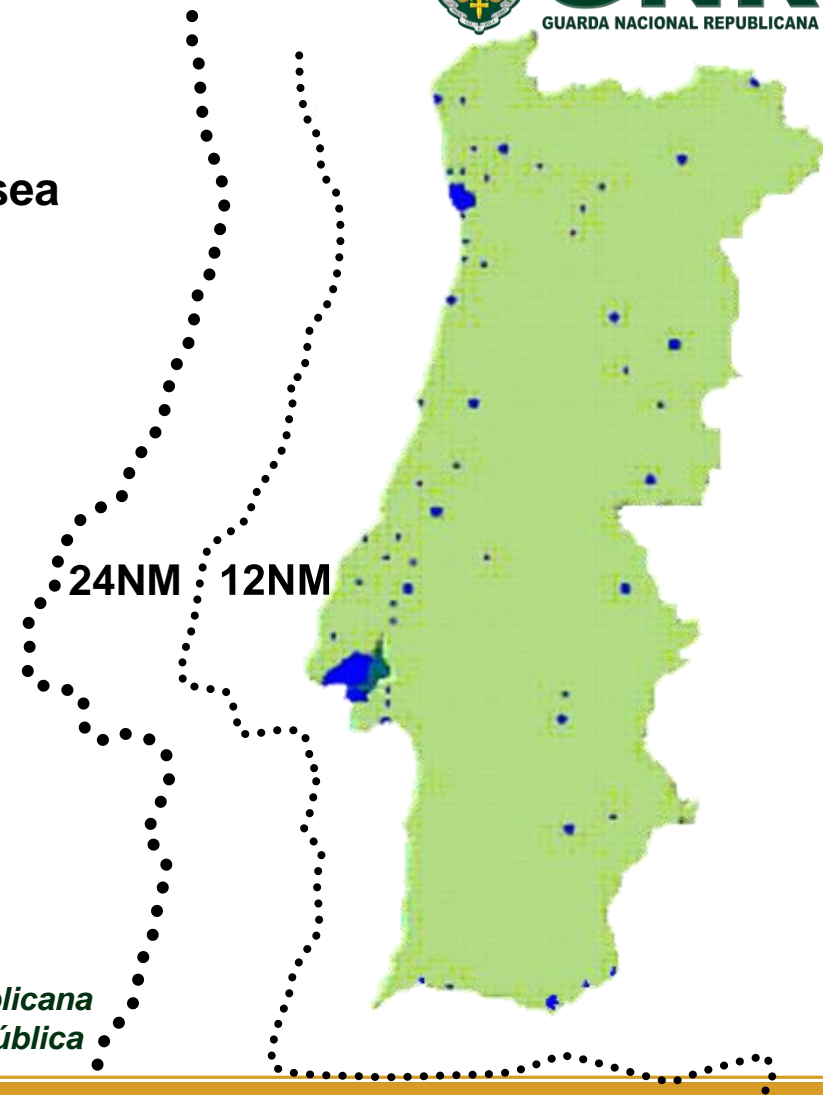
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Area and Population Under GNR's Responsibility



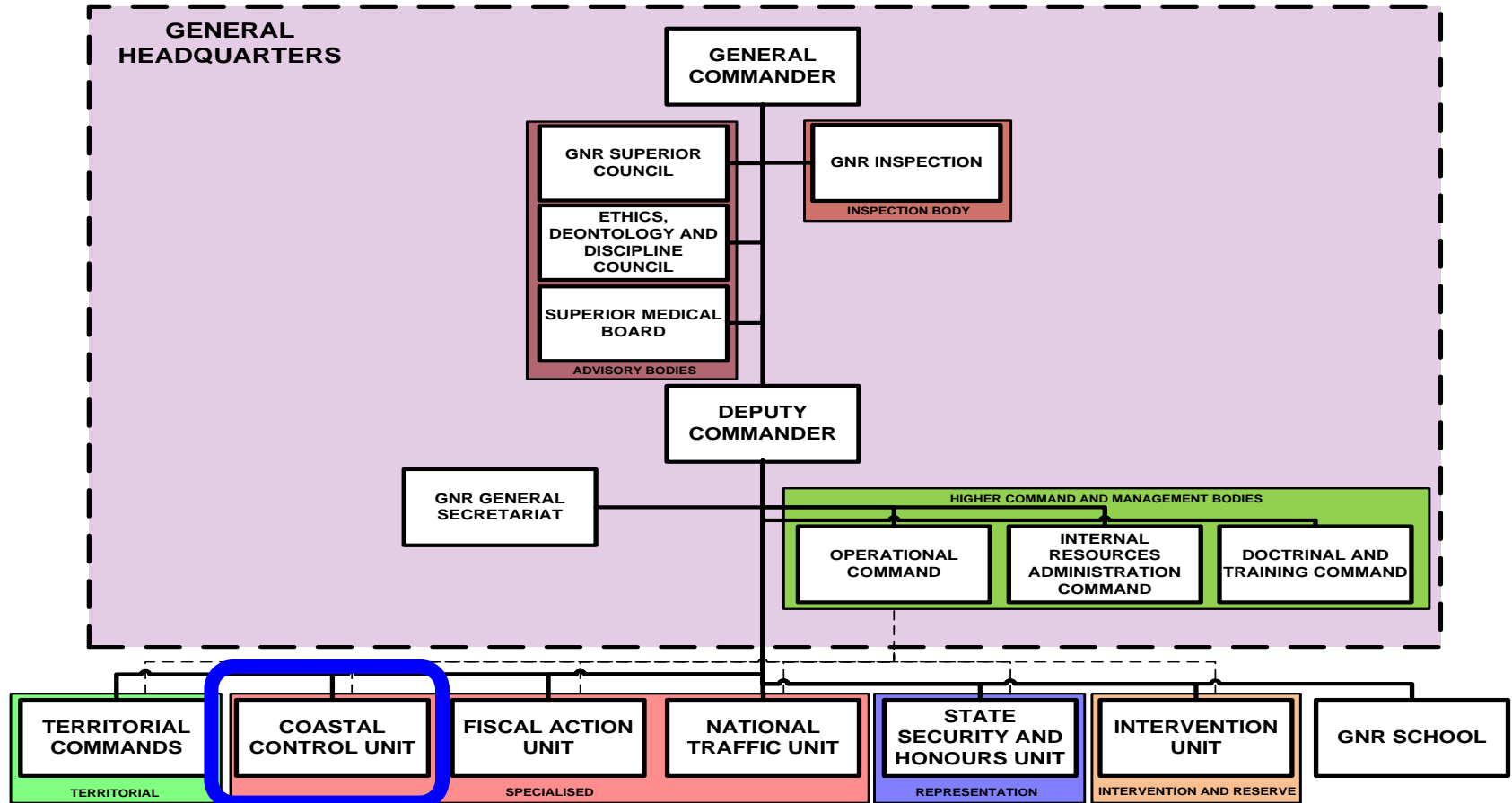
Throughout the national territory and territorial sea

- **Area: 86.600 Km2 (~94%)**
- **Population: 5.580.187 (~54%)**
- **Cities: 40%**
- **Villages: 96%**
- **Municipalities: present in 270 of 278**
- **Traffic network: 98.500 Km (~98%)**
- **Seacoast: 1.850 Km**





General Organization



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--- Operational Command

Coastal Control Unit

Specific competencies:

Monitoring, patrolling and land or sea **intercepting** along the **coast and territorial sea** of the continental territory and islands;

Managing and operating the Integrated Surveillance, Command and Control System (**SIVICC**), which is established along the **continental coast**.

(Law 63/2007, de 06Nov)



ACTIVITIES

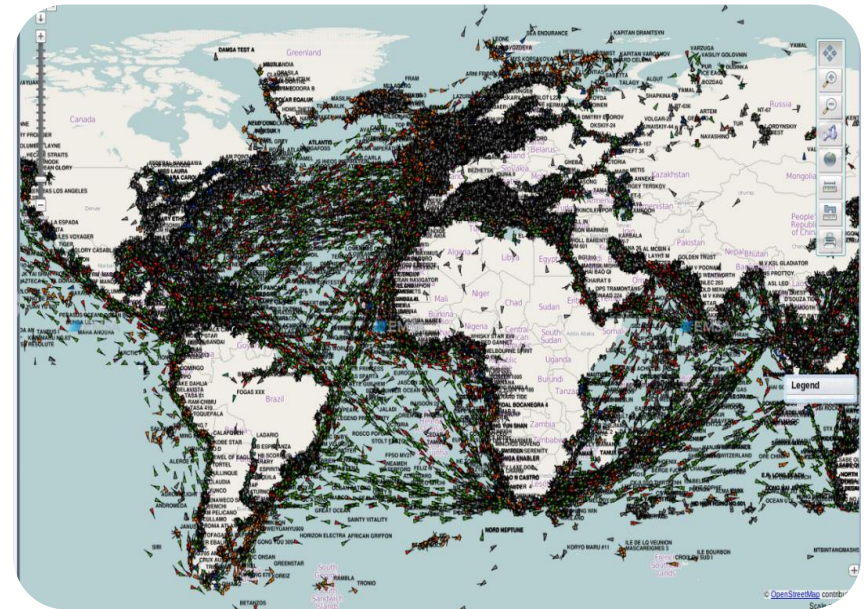
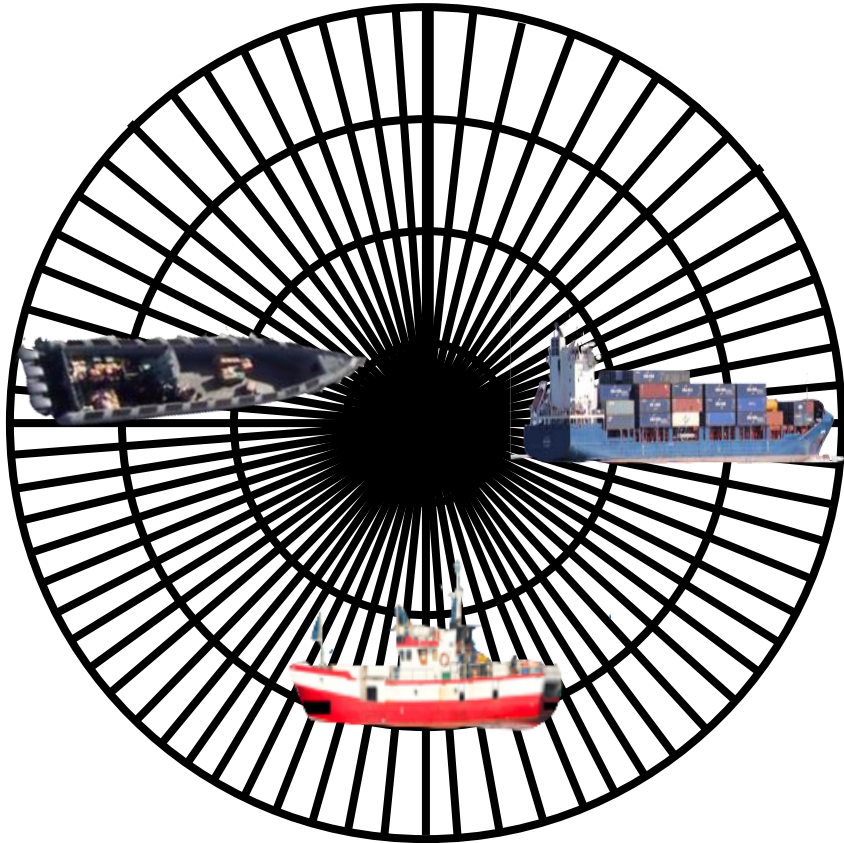
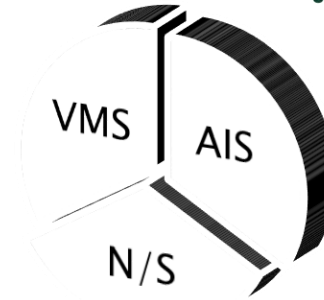


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SURVEILLANCE



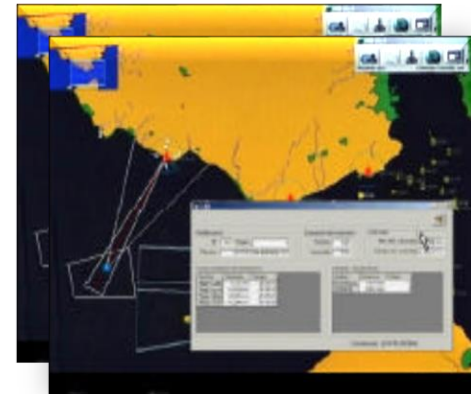
GNR
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SIVICC

Integrated Surveillance, Command & Control System



Before
1990

Direct
Observation

1990

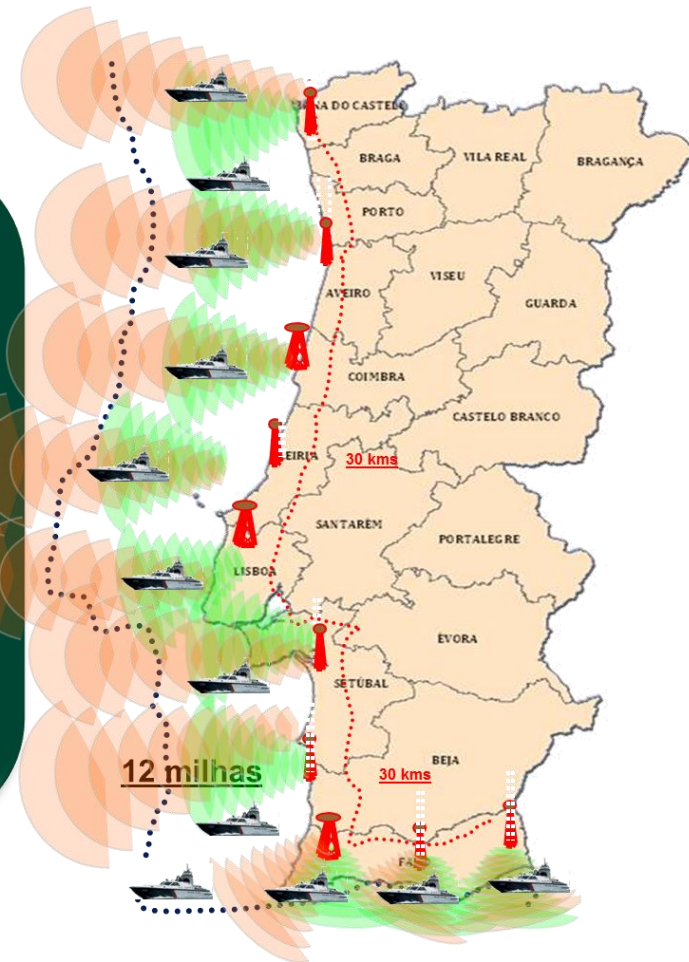
LAOS

2011

SIVICC

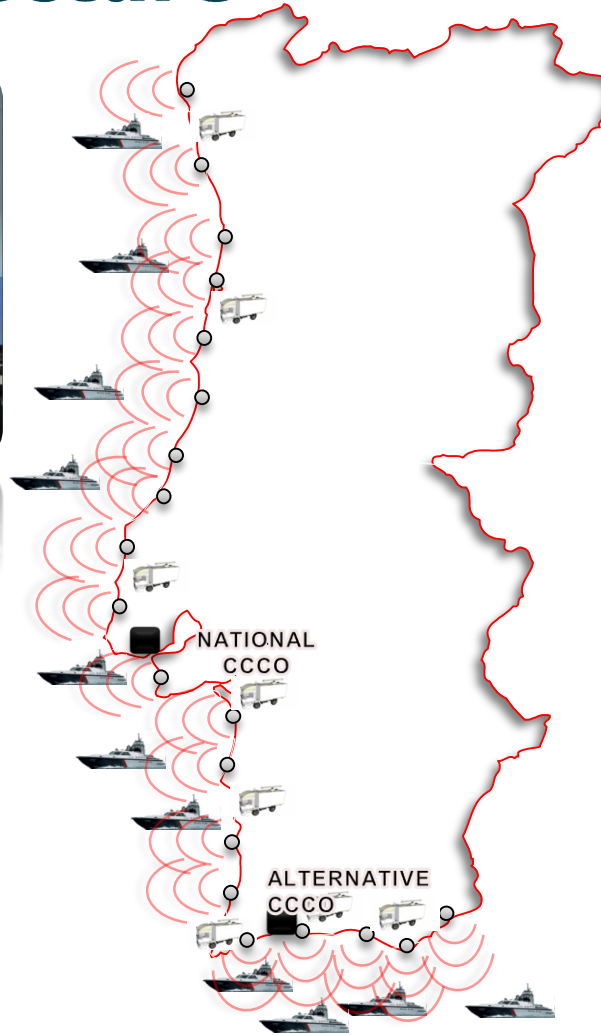
SIVICC

Technological platform consisting of observation posts, placed along the entire coast, equipped with sensors for detection and identification that centralizes all data in a National Command and Control Center



(Law 63/2007, de 06Nov)

SIVICC - Architecture

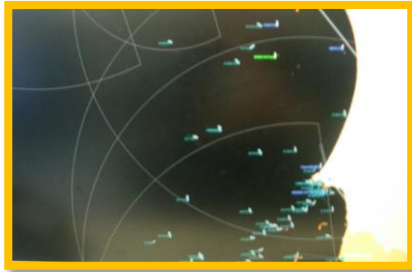


20 FIXED STATIONS



8 MOBILE STATIONS

SIVICC - Concept

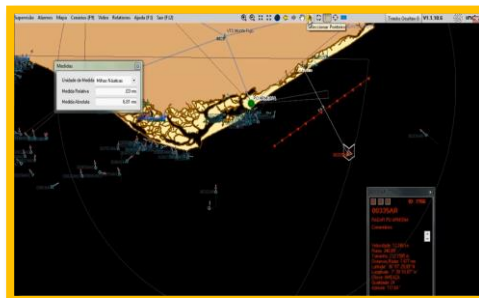


EARLY DETECTION...

IDENTIFICATION



PERMANENT CONTROL...



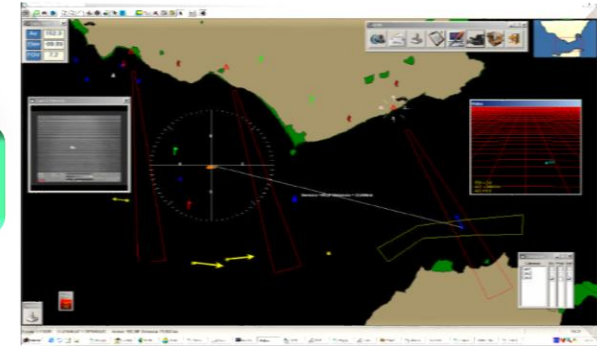
**SELECTIVE
INTERVENTION...
EARLY INTERCEPTION...**

SIVICC - Capacities

- 🐎 **High range, enlarged detecting and tracking**
- 🐎 **24/7 use, under all conditions**
- 🐎 **Centralized and remote – only one C2 center**
- 🐎 **Integrated Coordination of the Communications System**
- 🐎 **Expandable and sustainable**

SIVICC - Components

SURVEILLANCE & C2



MARITIME



LAND



SIVICC – Action Lines



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CCCN (SIVICC + NCC/EUROSUR)



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NCC EUROSUR



NATIONAL COORDINATION CENTRE (PORTUGUESE NCC)

Based on

- Information-sharing;
- 24-hour communication;
- Cutting-edge technologies of border surveillance

NEIGHBOURING SITUATIONAL PICTURE

EUROPEAN SITUATIONAL PICTURE

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Threats



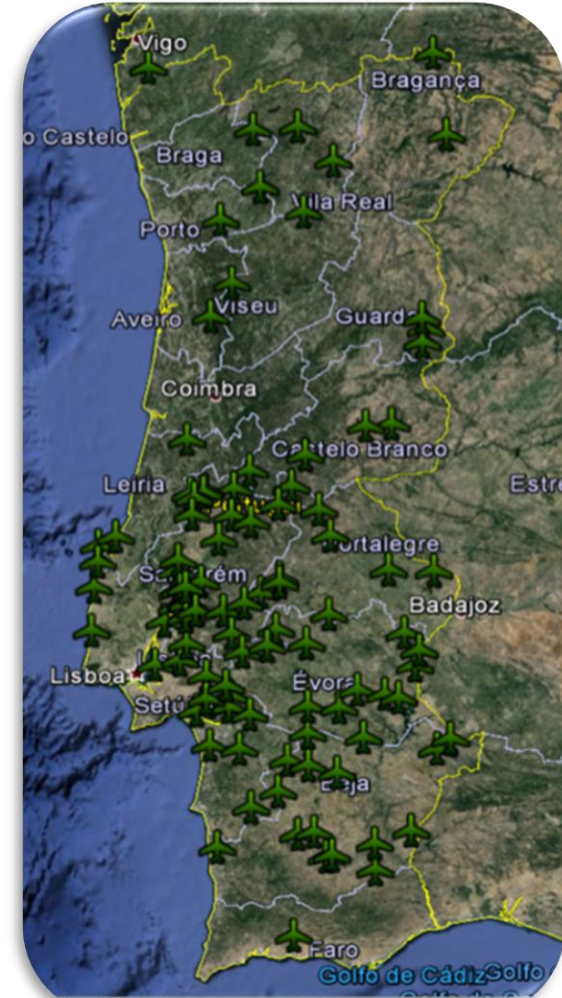
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New Threats



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Landing Sites



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Scenario



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Detections

- **2011** (South of Spain) – 2 Germans – 400Kg Haxixe in a helicopter from Portimão (Portugal);
- **2012** – Unidentified light aircraft from Spain entered national airspace. Air Force tried interception and lost contact in the border area, between Portugal and Spain;
- **2013** – Helicopter in a low flight coming from the ocean entered national territory at the Northwest region (this situation was repeated 2 other times);
- **2013** – In Lagos (Portugal) 2 unidentified aircrafts were detected in the airfield. Planes came from Spain;
- **2013** – Helicopter was detected in a low flight along Guadiana river. The flight was not authorized by national authorities;
- **2014** – Unidentified light aircraft flying south to north entered national airspace and landed without report near the border.



Facilitating Factors

- **Flight Courses;**
- **Flight Schools (Portugal & Europe)**
- **Pilots availability;**
- **Aircraft acquisition/maintenance costs;**
- **Aircraft autonomy;**
- **Landing capability;**
- **Land operations time lapse.**

Situational Awareness

- Efficiency
(Economy of resources)
- Effectiveness
(FASTER RESPONSE)



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