

The European Border and Coast Guard Agency

Remotely Piloted Aircraft Systems in the EU frontiers

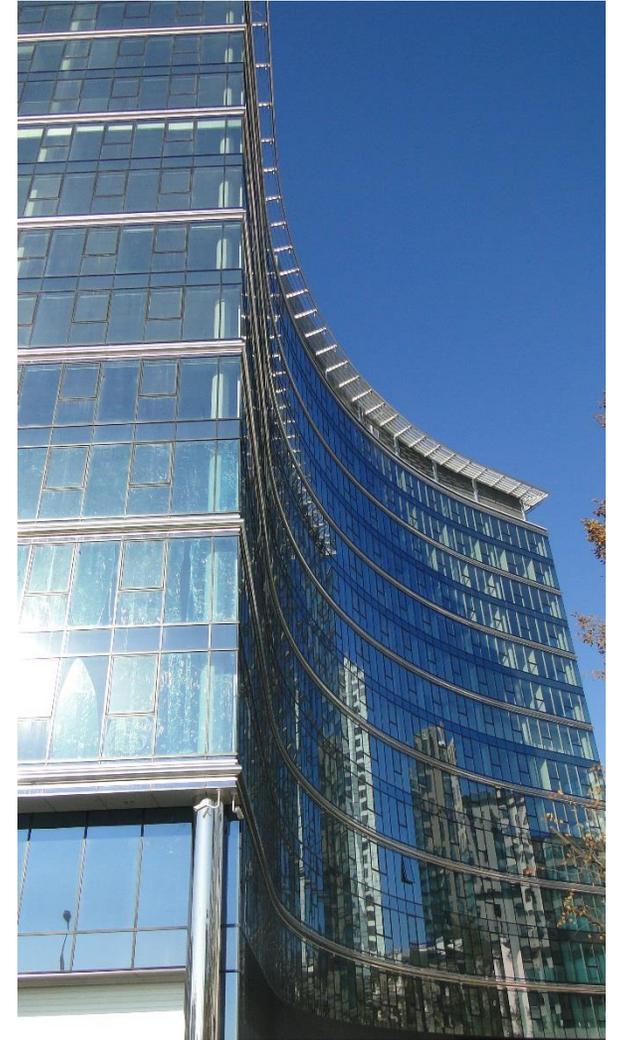
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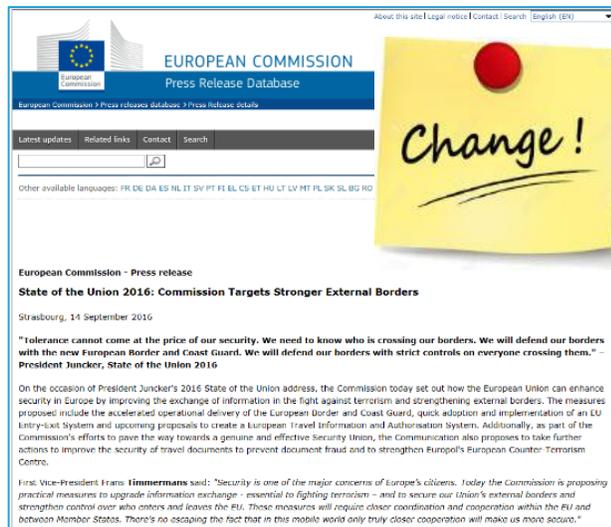
WHAT IS FRONTEX?

- EU agency
- Own legal personality
- Autonomous budget (€250 million in 2016, increasing to €281 million in 2017, reaching €322 million in 2020)
- Governed by a Management Board composed of the heads of national border guard authorities of EU Member States and representatives of the European Commission
- Operational since October 3, 2005 - currently has **418** staff, will increase to more than 1000 by 2020.



European cooperation on coast guard functions in Frontex new mandate

The European Border and Coast Guard Agency (Frontex) was established by Regulation (EU) 2016/1624 of the European Parliament and of the Council of 14 September 2016



New Agency has an expanded mandate still keeping main focus on illegal migration.

The new mandate will allow the Agency to address:

- migratory challenges
- potential future threats
- serious crime with cross-border crime dimension

Frontex new mandate 1/2

UNION STANDARDS FOR BORDER MANAGEMENT

The new Agency will ensure Union standards for border management are implemented at all external borders. The external borders will be constantly monitored with periodic risk analyses and mandatory **vulnerability assessments** to identify and address weak spots. **Liaison officers** will be seconded to Member States where the borders are at risk. They will be fully integrated into the national information systems and able to relay the information back to the Agency.



THE RIGHT TO INTERVENE



When deficiencies are identified, the Agency will be empowered to require Member States take **timely corrective action**. In urgent situations that put the functioning of the Schengen area at risk and when deficiencies have not been remedied, the Agency will be able to step in to **ensure that action is taken on the ground** even where there is no request for assistance from the Member State concerned or where that Member State considers that there is no need for additional intervention.

A RESERVE OF EUROPEAN BORDER GUARDS AND TECHNICAL EQUIPMENT

The Agency's permanent staff will be more than doubled and for the first time, the Agency will be able to purchase its own equipment and deploy them in border operations at a moment's notice. A **rapid reserve pool of border guards** and a **technical equipment pool** will be put at the disposal of the Agency – meaning there will no longer be shortages of staff or equipment for Agency operations.



Frontex new mandate 2/2

WORKING WITH AND IN THIRD COUNTRIES

The Agency will have a new mandate to send liaison officers and launch **joint operations** with neighbouring third countries, including operating on their territory.



A STRONGER ROLE IN RETURNS



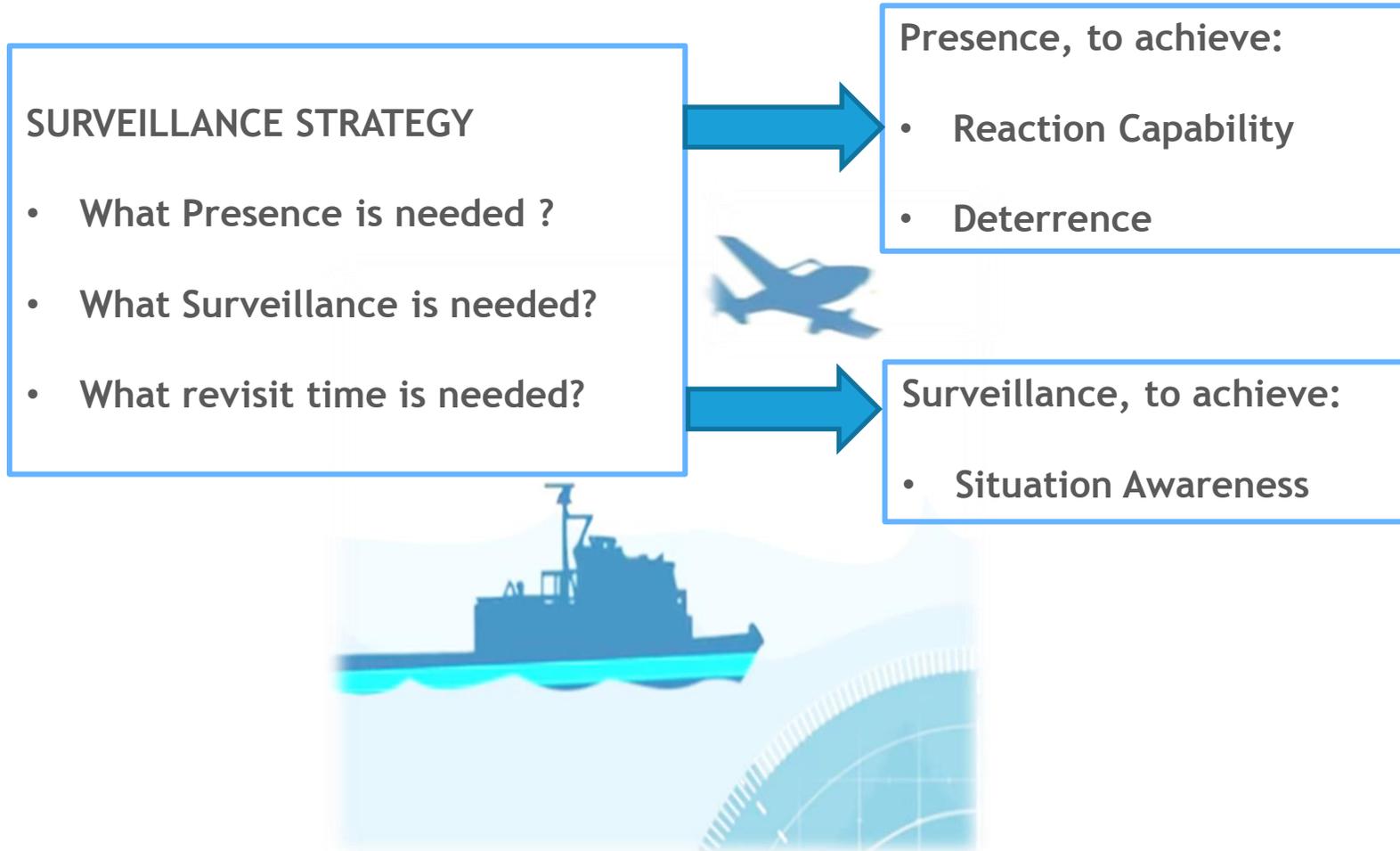
A European Return Office within the Agency will allow the deployment of **European Return Intervention Teams** composed of escorts, monitors and return specialists who will work to effectively return illegally staying third country nationals. A uniform **European travel document for return** will ensure a wider acceptance by third countries.

GUARANTEEING INTERNAL SECURITY

The Agency will include cross-border crime and terrorism in its risk analysis, process personal data of persons suspected to be involved in acts of terrorism and cooperate with other Union agencies and international organisations on the **prevention of terrorism**.



RPAS as part of a wider 'platform' STRATEGY



Surveillance is carried out by patrolling assets

Patrolling assets with sensors and communication tools to:

- detect and deter
- gather data/ information to produce situation awareness (identify & track)
- facilitate a timely response
- complement and confirm cooperative information

Patrol Paradigm

- Deployment of patrol assets should be based on “risk” and “effect”, including deterrence as a wanted effect
- Patrols should have a clear intended effect and measurable effectiveness criteria, as opposed to asking for a particular asset

Notional representation of patrolling needs



	%	%	%	%	<i>endurance</i>
	Land	Coastline	High Seas	Pre Frontier	
Light fixed wing twin or single engine/ rotary wing/ Long Range RPAS (*)					<i>< 6 hr</i>
Light fixed wing twin engine Long Range RPAS (*)					<i>8-12 hr</i>
Medium fixed wing twin engine MALE RPAS (**)					<i>>20 hr</i>

(*) Long Range RPAS = 150 to 500 Kg;

(**) MALE RPAS = > 500 Kg; endurance

Border Surveillance requires Platforms & Sensors

SENSORS

- Detect
- Classify
- Track

GROUND / SURFACE

- Intercept

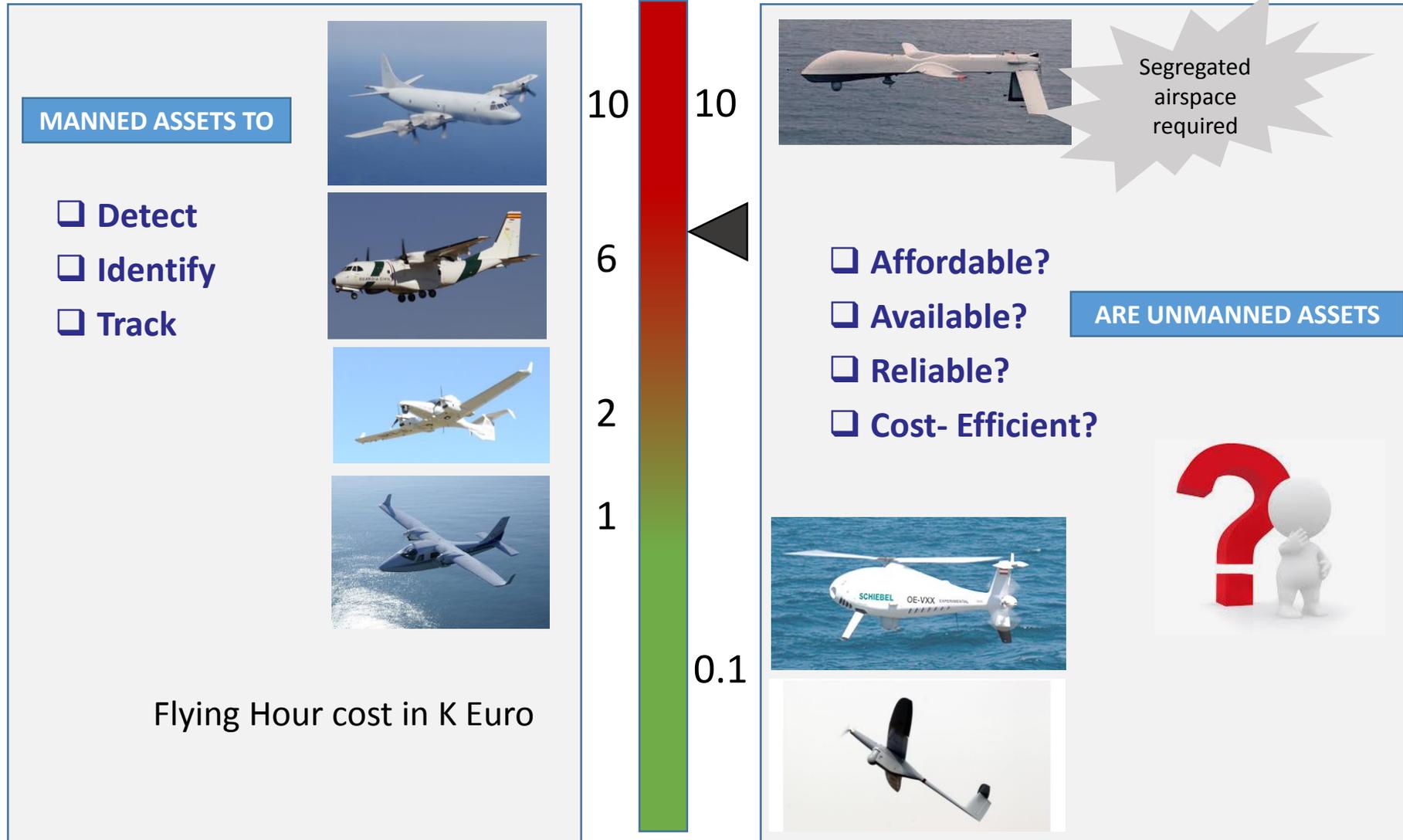


- Affordable
- Available
- Reliable
- Cost- Efficient

- Other platforms?



Challenge: cost-efficient surveillance assets



Frontex Uses Remote Piloted Aerial Systems, already

Following EUROCONTROL Operations Classification:

1. Very Low Level Operations, under 500'
 - A. Visual Line of Sight (RPAS in direct visual contact)
 - » **Mini/ Small RPAS** for land border surveillance and/or Support to land border patrols

2. Operations above 500'
 - A. Operations in Radio Line of Sight
 - » **VTOL RPAS** -to extend patrol vessel horizon
 - B. Operations Beyond Radio Line of Sight
 - » **MALE RPAS** -Under trial for “long range maritime surveillance” (> 500 Kg; > 20 hr endurance)

Open tender MALE RPAS services for maritime surveillance and in the Pre-Frontier (> 20 hr endurance), deployed BRLOS - 7 M€ (lot 1 - MALE >1000 Kg - 600 hours; lot 2 - small MALE >500 Kg 300 hours)



RPAS as a Border Surveillance Tool

RPAS for Maritime Surveillance:

- New in Border Control
- Long Range/ MALE
- Intermediate and Long Endurance
- Satellite Comm.
- Radar + Camera + AIS receiver



Shortfalls?

- Segregation for Airspace safety
- Exploitation of the information
- Frequency Spectrum access
- Civilian Market offer
- Cost

RPAS for Land Surveillance:

- EU Member States use them
- Mini/ Small <25 Kg
- Support to Land Patrols
- Use non-segregated air space



Shortfalls?

- Limited to Line of Sight
- Use free comm. spectrum

Issues to be covered by Frontex MALE RPAS Pilot

Second half 2018

Challenges to be addressed:

- Airspace access
- Civilian Market offer
- Cost
- Frequency Spectrum access
- Exploitation of the information

Regulatory Framework

- National Civil Aviation Authorities
- EASA, EUROCAE, ICAO...

Cooperation Partnership

- Neighboring MSs/FIRs
- Third Countries
- Other EU Agencies (EMSA/EFCA)

Commercial Partnership

- Providing a Business Case
- In a quasi-operational environment
- Cost assessment

Information Exploitation

- International Coordination Centers
- Frontex in Joint Operations
- Frontex in the Pre-frontier

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