GIS for Border Management and Surveillance
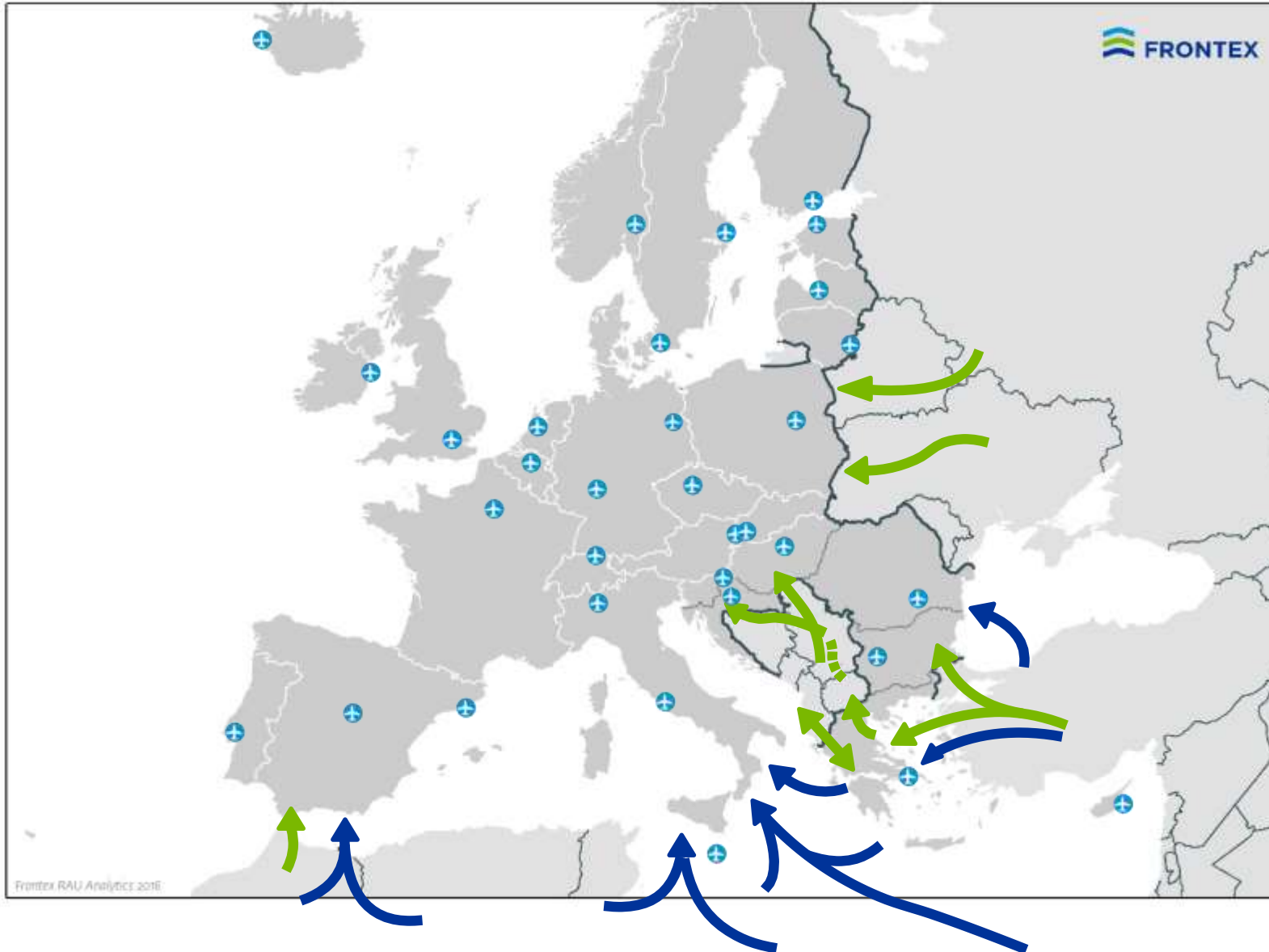
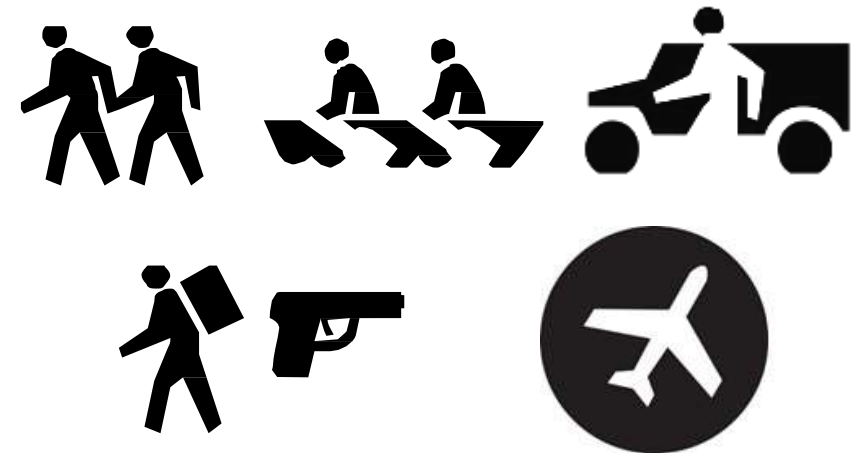Risk Analysis Unit – Operations Division

Filipe Paisana

Frontex Mission

- Frontex promotes, coordinates and develops European border management in line with the EU fundamental rights charter applying the concept of Integrated Border Management.
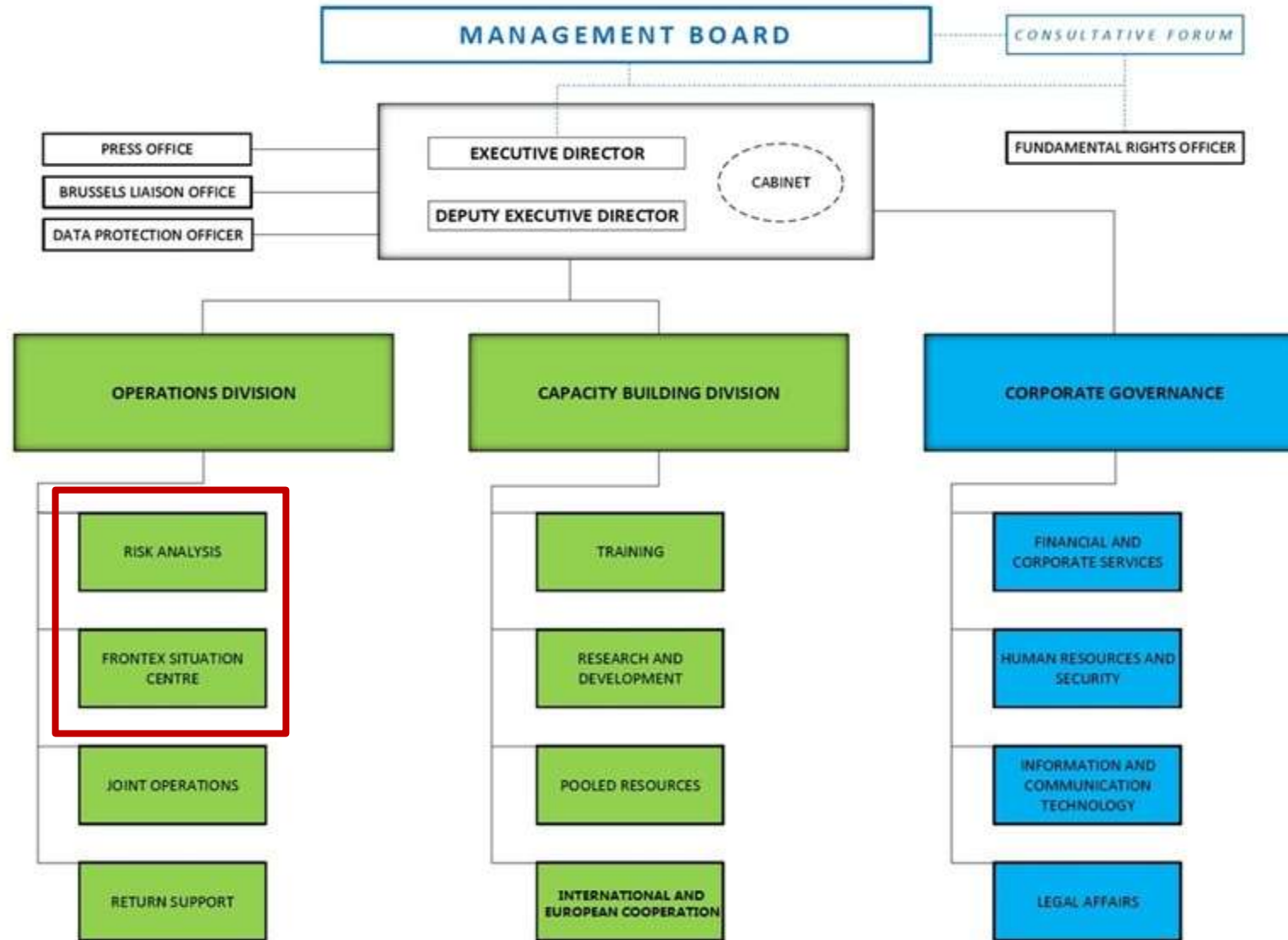
EU External Borders

- 44 000 km of coastline
- 9 000 km of land borders

- Border Crossing Points
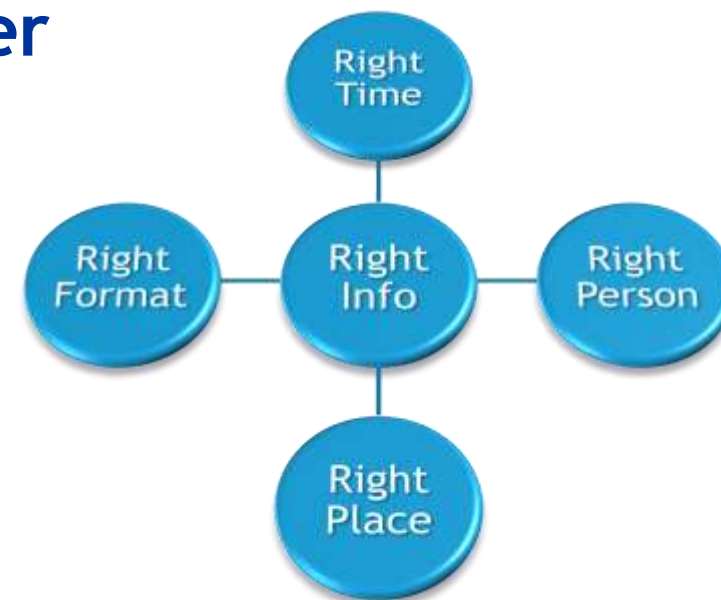 - 811 Sea
  - 481 Land
  - 675 Air

Frontex Structure

Frontex Situation Center

01 To promote enhanced **situational monitoring**

02 To act as an **information exchange hub – contact point**

03 To drive **Eurosur** operational running

04 To perform **media monitoring**

Situational Picture

- Incidents (JORA)
- Vessel Detection
- Vessel Monitoring and Tracking
- Satellite Imagery
- Digital Surface Model
- Weather forecast
- Operational Areas
- ...

Frontex Situation Centre

DATA SOURCES

**INTERAGENCY COOPERATION + COMMERCIAL SUPPLIERS**

SITUATIONAL PICTURE

Situational monitoring

Risk Analysis Unit

01 Situation at EU's external border and **key factors influencing it**

02 Establish **trends and** identifying **risks**

03 **Advice for high-level decision** making as well as **joint operations**

04 To produce relevant, accurate and timely **intelligence products**
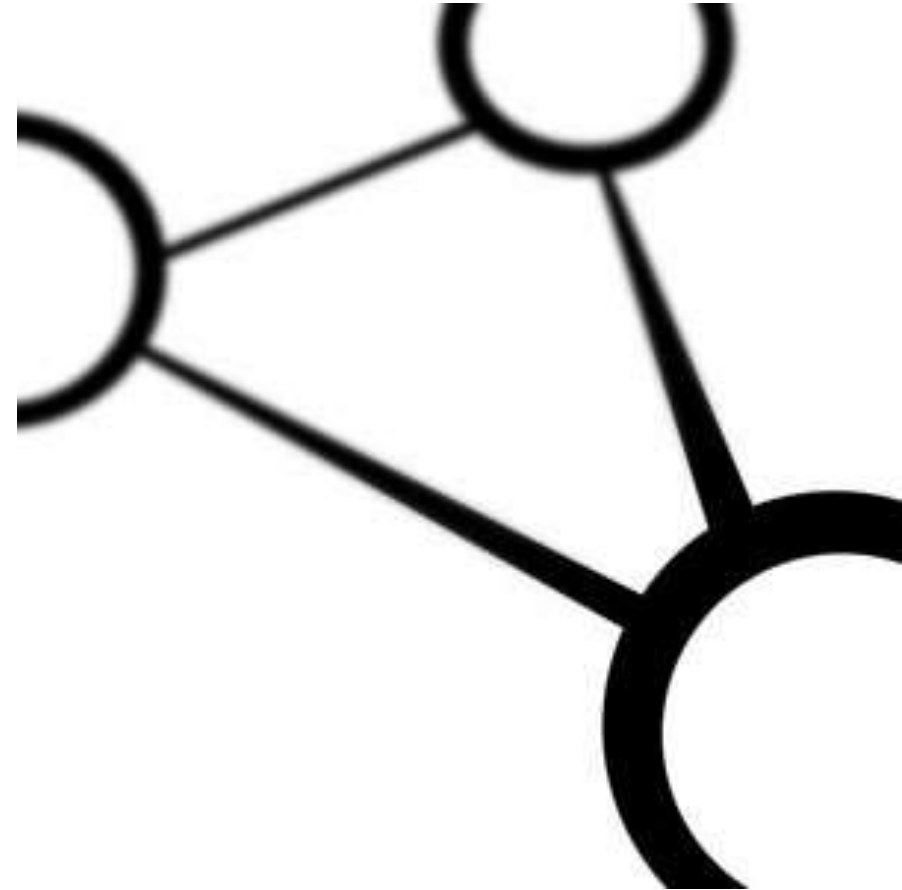
Risk Analysis Unit - Sectors

Strategic Sector

Operational Sector

Analytical Sector

- Border authorities of Member States and non-EU countries
- EU partners
- International organisations
- Joint Operations
- Intelligence debriefing
- Open sources

Information is requested, collected, analysed, and disseminated

Risk Analysis Networks with MS/SAC
- FRAN, EDF-RAN, THB Experts, ALUG

Regional Risk Analysis Networks
- EaP countries
- WB-RAN
- TU-RAN
- AFIC Participant
- AFIC invited as observers

ANALYSIS LAYER Earth Observation SERVICES (ALEOS)
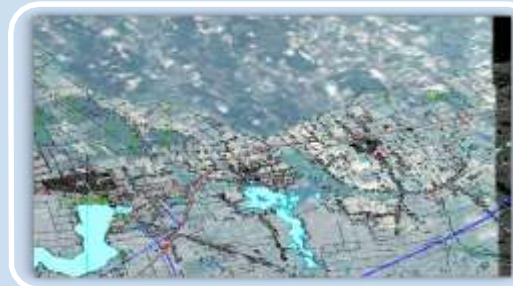
Coastal Monitoring

Delivery of surveillance information on specific external coastal areas

Pre-frontier Monitoring

Delivery of surveillance information on specific Pre-frontiers areas

Reference Mapping

VHR imagery and vectors covering specific third-country areas identified through risk analysis

Coastal Monitoring: Illegal immigration and criminal networks

Monitoring areas of embarkation in Libya

Coastal Monitoring: Illegal immigration and criminal networks
Changes in areas of embarkation in Libya

Coastal Monitoring: Illegal immigration and criminal networks
Confirmation and continue monitoring and analysis for critical intelligence

Pre-frontier Monitoring: CBC activities
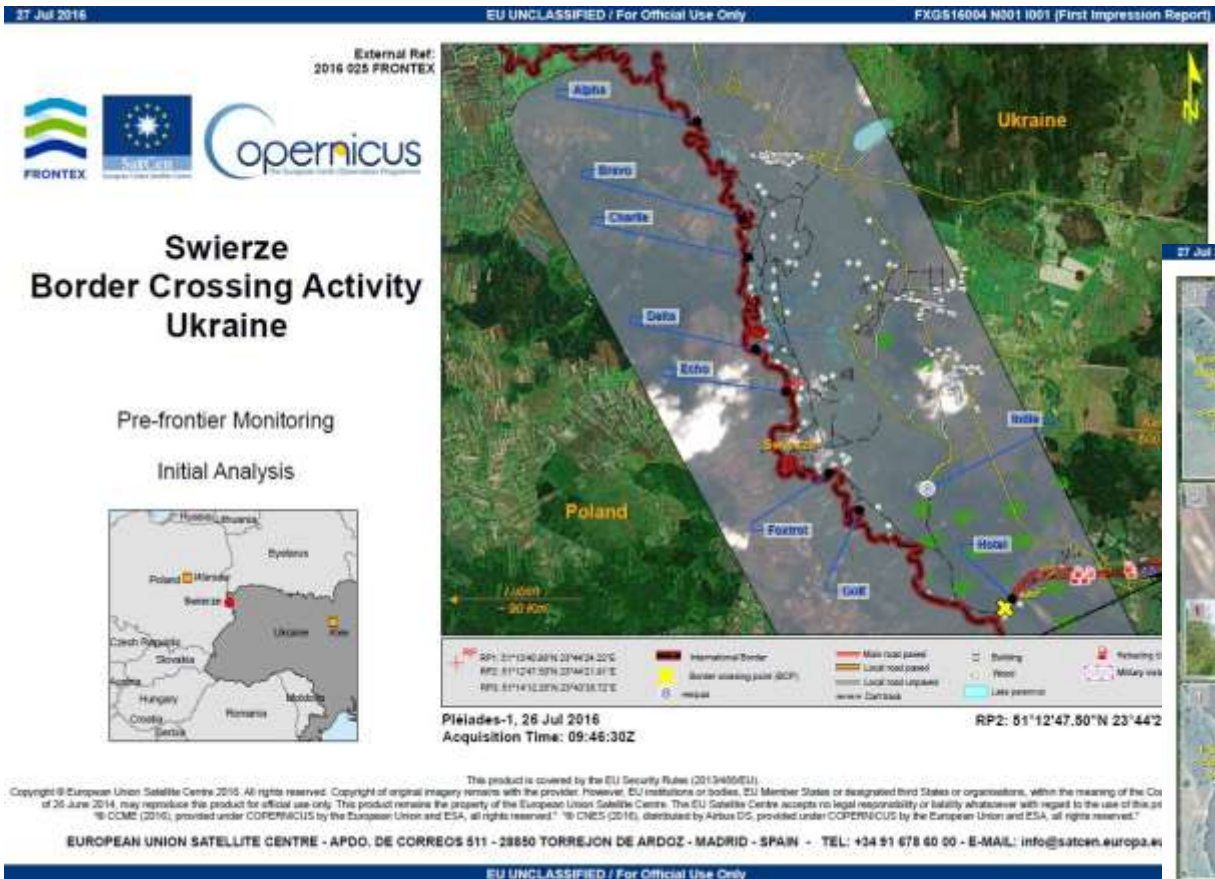
Illegal migration
Firearms
Tobacco smuggling

- Identify groups of offenders
- Identify main routes used by smugglers
- Identify the exact crossing points
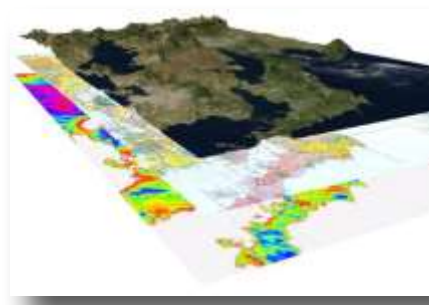- Key objects of interest: groups of people, vehicles and MO

GEOINT products and services

Imagery

Imagery Intelligence

Geospatial Data

- Supporting tool for intelligence analysis

- Gathering additional information (contextualisation AoI)

- Support detection-prevention-combating CBC & other security threats

- Validation/confirmation of hypothesis

- Improve specific analysis

RAU GIS Portal

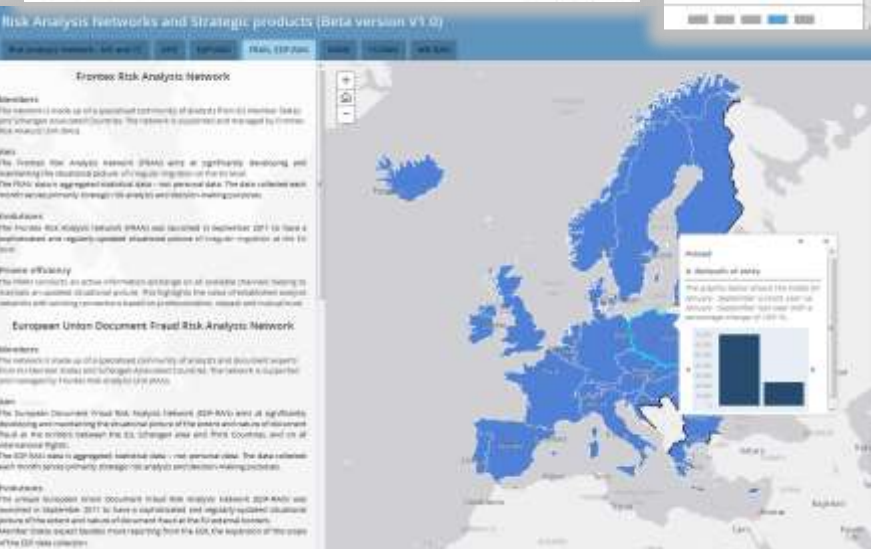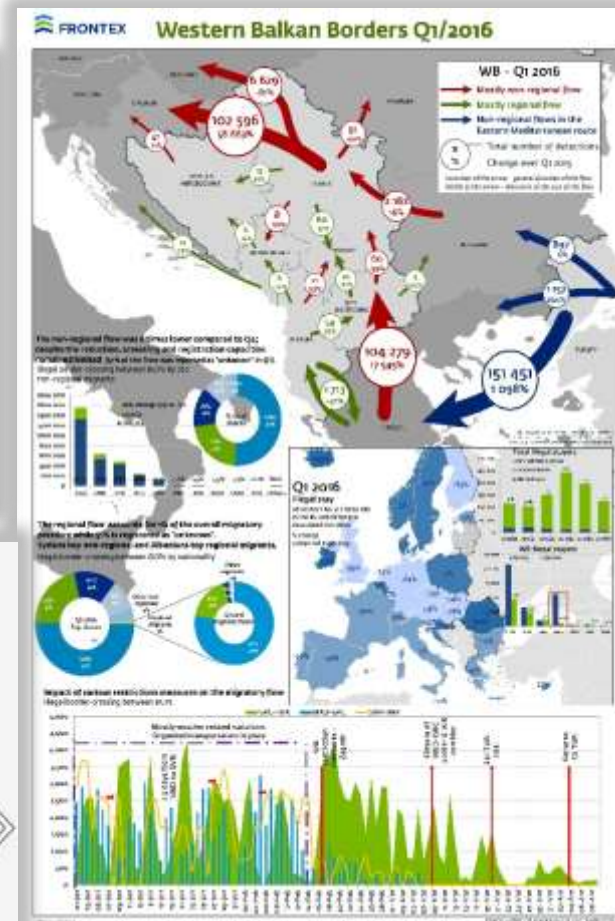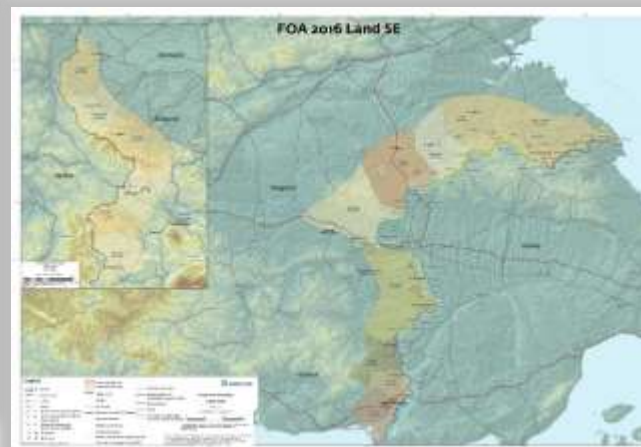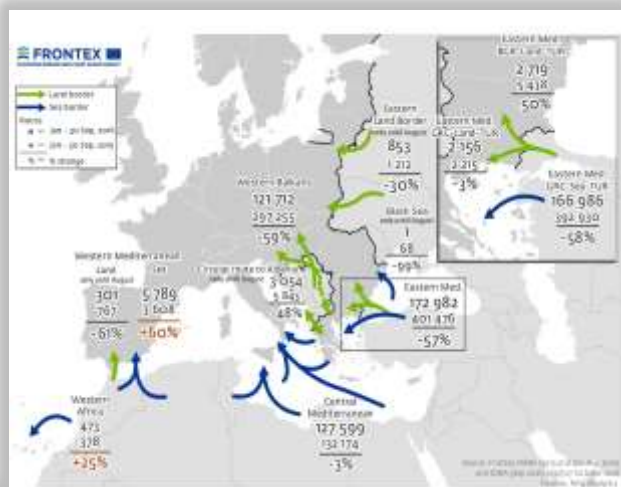## A Portal to collaborate, share and integrate information

- Access to GIS products and services

- Create and share content

- Access point for Web map applications

- GIS collaborative environment

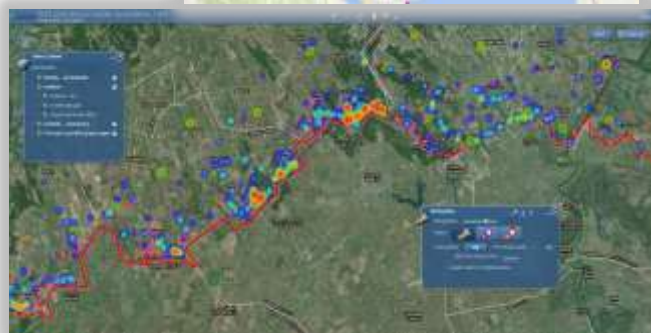- Support other Frontex Divisions/Units (JOU; PRU; Press)

GIS products and maps

Access to the latest updated information and indicators

Web Map Applications

- Interactive way to display and analyze geographic information

- Customized for analysts requirements

- Operational
  - Incidents
  - Number of migrants
  - Nationalities
  - Density
  - Time slider
  - Clusters
  - Distances
  - Statistics
  - ...

- Third Country Monitoring
  - Reports
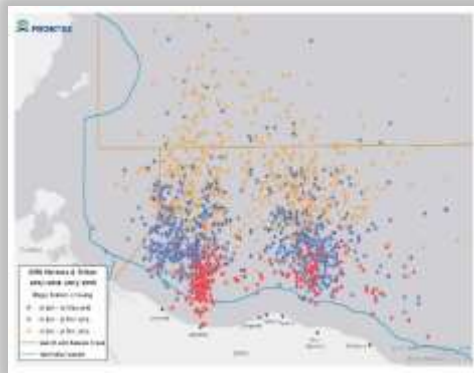 - Validation
  - Notifications
  - Collaborative

- Liaison Officers

RAU Products – Dissemination

- Annual, Quarterly, Monthly, Weekly…

- Map production

Thank you