1st MARISA Workshop
Eurosur Fusion Services

14 June 2018, The Hague
Alexander Fuchs
Frontex Situation Centre

- Situation monitoring
- Eurosur Fusion Services / Copernicus
- Operational information exchange
- Crisis management support
- Operational media monitoring
Legal basis

- **European Border and Coast Guard Regulation**: Art. 53  ➔ European cooperation on coast guard functions

- **Eurosur Regulation**: Art. 10, Art. 11, Art. 12  ➔ European situational picture, pre-frontier monitoring and the common application of surveillance tools
Eurosur

- Eurosur Regulation (2013)
- Providing European situational picture and pre-frontier intelligence picture
- Eurosur: European border surveillance framework
- National Coordination Centres network
- Fighting cross-border crime, people smuggling, saving lives
Eurosur/Copernicus Fusion Services

- Enhance situational awareness and reaction capability
- Provided by Frontex
- Cooperation with other EU Agencies

S1 Incident Reporting
S2 Vessel Monitoring and Tracking
S3 Tracking Vessels of Interest
S4 Vessel Detection
S5 Meteo
S6 Visual Data Discovery
S7 Maritime Simulation
S8 Satellite Imagery
S9 Anomaly Detection
S10 Visualisation Tools
S11 Coastal Monitoring
S12 Pre-frontier Monitoring
S13 Reference Imagery / Mapping

Multipurpose Aerial Surveillance
Eurosur Fusion Services

SITUATIONAL PICTURE

INTERAGENCY COOPERATION

COMMERCIAL SUPPLIERS

OPERATIONAL MEDIA MONITORING
Eurosur/Copernicus Fusion Services

Vessel services

- Tracking and reporting on vessels suspected of illegal activities
- Detection of boats at sea
- Simulation of vessel movements
- Alerts on anomalous vessel behaviour
Eurosur/Copernicus Fusion Services

- **Satellite Imagery**: high resolution optical images of pre-frontier areas
- **Meteo**: weather and maritime forecasts and past data
- **Visual Data Discovery**: dedicated, detailed reports
Command and Control Centre

- Operational implementation of **Eurosur Fusion Services**
- Support to the implementation of Coast Guard Functions at the EU level
- Remote monitoring operations in non-EU countries
- Mobile Situation Centres

**European Monitoring Team**

- Team Leader
- Search and Rescue expert
- Law Enforcement expert
- Fishery Control expert
- Frontex Reporting Officer

**INFORMATION**

- Search and Rescue
- National Law Enforcement
- Fisheries Monitoring Centre
- Frontex Situational Picture
### Eurosor/Copernicus Fusion Services

**NEW Multipurpose Aerial Surveillance**

- Real-time surveillance for situational awareness in pre-frontier areas
- Data transmission from aircraft to European Monitoring Team at Frontex
- Coast Guard Functions cooperation with MS, EFCA

<table>
<thead>
<tr>
<th>Service</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1</td>
<td>Incident Reporting</td>
</tr>
<tr>
<td>S2</td>
<td>Vessel Monitoring and Tracking</td>
</tr>
<tr>
<td>S3</td>
<td>Tracking Vessels of Interest</td>
</tr>
<tr>
<td>S4</td>
<td>Vessel Detection</td>
</tr>
<tr>
<td>S5</td>
<td>Meteo</td>
</tr>
<tr>
<td>S6</td>
<td>Visual Data Discovery</td>
</tr>
<tr>
<td>S7</td>
<td>Maritime Simulation</td>
</tr>
<tr>
<td>S8</td>
<td>Satellite Imagery</td>
</tr>
<tr>
<td>S9</td>
<td>Anomaly Detection</td>
</tr>
<tr>
<td>S10</td>
<td>Visualisation Tools</td>
</tr>
<tr>
<td>S11</td>
<td>Coastal Monitoring</td>
</tr>
<tr>
<td>S12</td>
<td>Pre-frontier Monitoring</td>
</tr>
<tr>
<td>S13</td>
<td>Reference Imagery / Mapping</td>
</tr>
</tbody>
</table>

**Multipurpose Aerial Surveillance**
Eurosur/Copernicus Fusion Services

**NEW Multipurpose Aerial Surveillance**

- Operational results: over 30 interceptions and 1,960 people saved at sea in 2017
- Currently monitoring pre-frontier areas in Central Mediterranean Sea and Western Black Sea
Gaps

- Multi sensor fusion, data processing and sharing
- Systematic exploitation of social media
- Long term monitoring of specific areas (with NRT data)
- Complementing sensor integration
Questions?