

“Masters of Safety & Security”



EUCISE2020 Industry Day
Brussels – September 23, 2015
SIGNALIS Presentation



Ability to offer an end-to-end solution



C2 Software & System Integration



Electronics

RADARS



Sonars



ATLAS ELEKTRONIK
A joint company of ThyssenKrupp and EADS

E/O



RDF



gew
technologies

About SIGNALIS

Key facts SIGNALIS

- **Pioneer in Maritime Safety & Surveillance**
 - **Since early 1980's**
 - **World Leader in VTS and Coastal Surveillance Systems**
 - **250 Systems in service**
 - **References in over 50 countries**
-
- **Currently 20 projects under implementation**
 - **85% international business**
 - **200+ maritime surveillance specialists**



Locations



Singapore | Taipei (Taiwan) | Beijing (China) | Abu Dhabi (UAE)

SIGNALIS Business Fields



**Maritime Safety, Efficiency and
Protection of the maritime Environment**
VTS, Port Processes & Maritime Logistics

**Coastal Surveillance
(and other borders security)**



**Critical Infrastructure Surveillance
(O&G, Terminals, Airport, Offshore & Shorebased assets)**



Vessel Traffic Services - Missions and Tasks



Primary Tasks

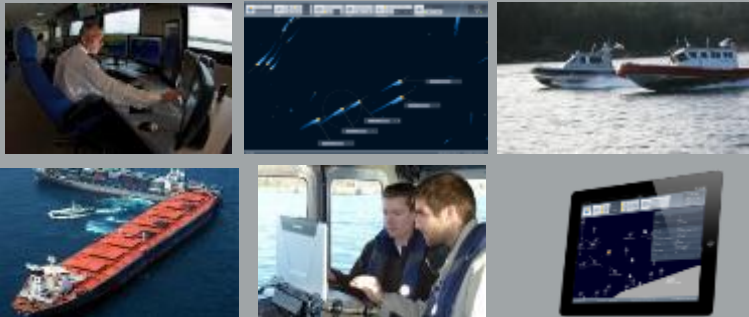
- Common Operational Picture
- Ships Detection & Tracking
- Operator Training
- Reducing Accidents &
- Increased the utilization of Infrastructure
- Port Management Information System
- Data Recording & Replay
- SAR

Primary Mission

- Safety of Life at Sea
- Safety of Navigation
- Protection of Marine Environment
- Supporting Maritime security
- Efficiency of Vessel Traffic movement

VTS

Focus on non cooperative targets



References in VTS

- ❑ Port of London
- ❑ Sydney Port
- ❑ Panama Canal
- ❑ Suez Canal
- ❑ Port of Shanghai
- ❑ Port of Dalian
- ❑ Port of Haifa
- ❑ Port of Vigo
- ❑ Port of Colombo
- ❑ Port of Hamburg
- ❑ Port of Marseille
- ❑ Port of Groningen
- ❑ Port of Mumbai
- ❑ Plus many more...



- ❑ Currently 500 VTS Systems in operation globally
- ❑ IMO Resolution A.857 – 'Guidelines for Vessel Traffic Services

Coastal Surveillance System - Missions and Tasks

Primary Mission's

- ❑ Blue Border Security
- ❑ Multi Agency C2 Capable
- ❑ Environmental Protection
- ❑ Coastal Defence
- ❑ Search & Rescue (SAR)

Focus on non cooperative targets



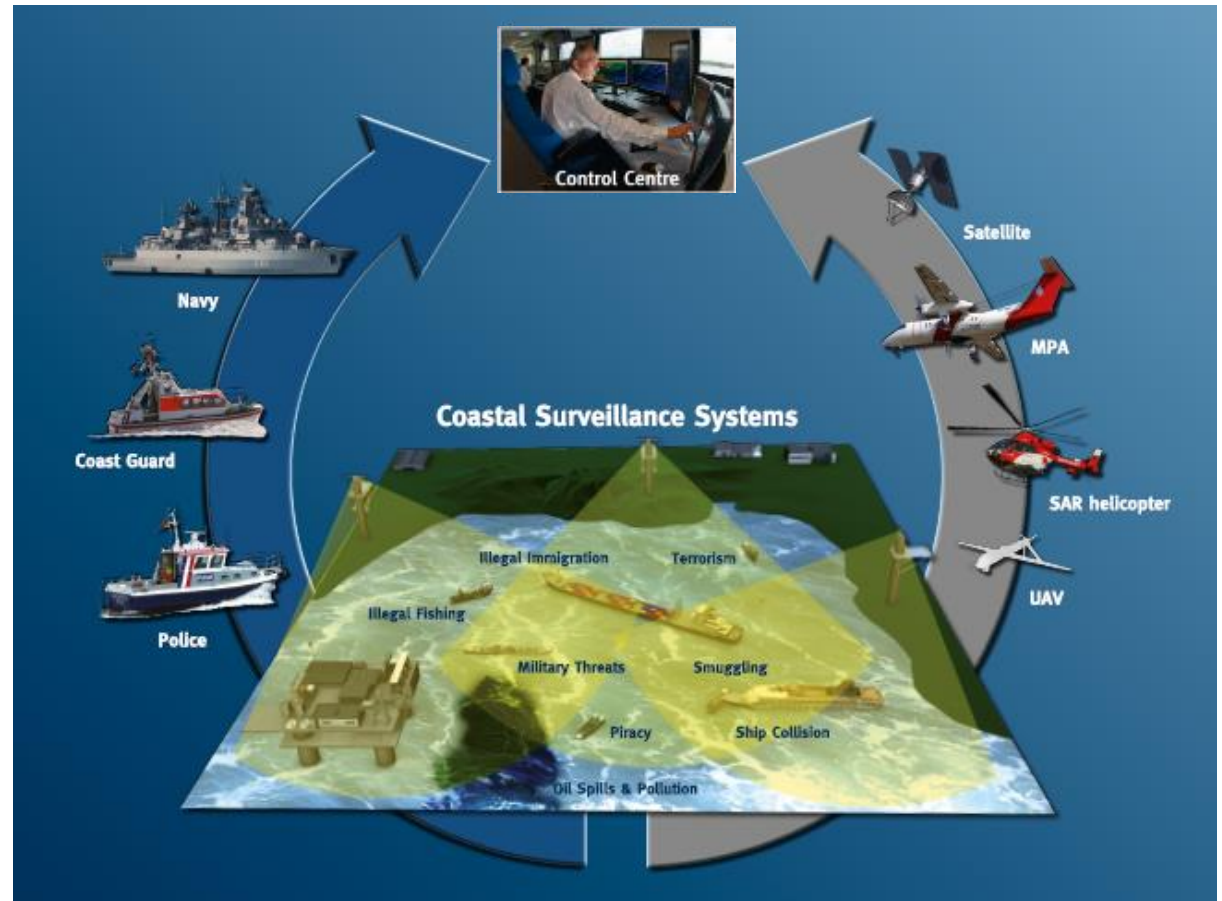
Primary Tasks

- ❑ Recognized Maritime Picture
- ❑ Ships Detection & Tracking
- ❑ Target Data Fusion
- ❑ Maritime Awareness & Alert
- ❑ Threat classification & Identification
- ❑ Data Recording & Replay
- ❑ Command and Control

CSS

References in Coastal Surveillance

- ❑ Bulgaria
- ❑ Canada
- ❑ Denmark
- ❑ Estonia
- ❑ France
- ❑ Germany
- ❑ Malaysia
- ❑ Middle-East
- ❑ Portugal
- ❑ South Korea
- ❑ ...



❑ Multi Agency Capable

❑ Over 45,000km of Coastline around the globe

STYRIS®: Adaptability

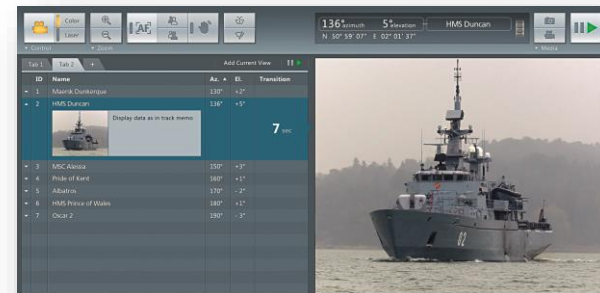


Safety & Security in the Maritime Domain

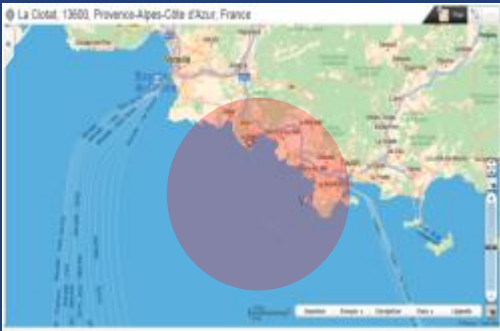
TASKS	ZONES	VESSELS	EVENTS	RESPONSES
SAFETY OF NAVIGATION (Vessel ID) <ul style="list-style-type: none"> Minimise potential for Collisions & Groundings Protect the environment 	REGULATED ZONES <ul style="list-style-type: none"> Traffic Separation Schemes Mandatory Ship Reporting Areas Fishing Areas Fairways Anchorage Port Facilities Estuaries, Rivers and Inland Waterways DANGEROUS AREAS <ul style="list-style-type: none"> Potential Collisions Potential Groundings 	COMMERCIAL VESSELS <ul style="list-style-type: none"> Tankers, Bulk Carriers, Containers, General Cargo, Liners and Ferries FISHING VESSELS RECREATIONAL VESSELS GOVERNMENT VESSELS <ul style="list-style-type: none"> Military Coastguard Government Contract OFF SHORE ASSETS	RULE VIOLATIONS <ul style="list-style-type: none"> Routes, Speed, fishing and protected areas. DRIFTING or STOPPED VESSELS COLLISIONS & NEAR MISS GROUNDINGS DISTRESS CALLS POLLUTING VESSELS	RULE ENFORCEMENT PROSECUTIONS SEARCH & RESCUE ANTI-POLLUTION DETERRENCE
SECURITY (Threat Identification) <ul style="list-style-type: none"> Enhance the security level in the Area of Responsibility 	TERRITORIAL WATERS SUSPICIOUS AREAS <ul style="list-style-type: none"> Smuggling Illegal Immigrations POTENTIAL AREAS <ul style="list-style-type: none"> Robbery and Terrorist Activity 	FOREIGN MILITARY VESSELS SMUGGLER'S BOATS ILLEGAL IMMIGRATION BOATS THREATENING VESSELS	REFUSING LAWFUL CHALLENGE AND IDENTIFICATION SUSPICIOUS BEHAVIOUR	CONFIRMATION OF ID AND INTENT RADIO CONTACT & WARNING INTERCEPTION & INTERROGATION

STYRIS®: One Solution for Maritime Security

- ❑ The result of 30 years of expertise in Maritime Security
- ❑ Latest technology with next generation HMI
- ❑ Radar tracking of smaller and more agile targets such as swimmer
- ❑ Advanced video features such as Video Motion Detection



SIGNALIS Unique Tests & Development Centre



SIGNALIS Unique Test Range

- ❑ Experimentation and Integration of new sensors and latest technologies
- ❑ Benchmarking Sessions at our facility or on location with Mobile STYRIS
- ❑ Trials in live conditions – both cooperative and non cooperative targets
- ❑ Operator Training



