

Open architecture for
Smart and
Interoperable networks in
Risk management based on
In-situ
Sensors

"The Integrated European Information Infrastructure for Effective Environment Management"

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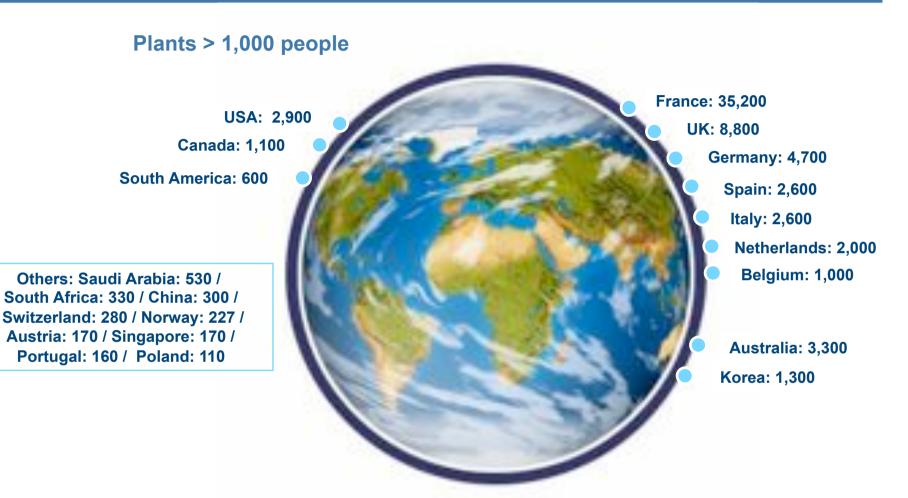








Thales in the world - Main country headcounts



More than € 12bn annual revenues
68,000 employees worldwide, >50% outside France
Presence in 50 countries

Core competences to business

Secured Communication & Information System of Systems

PLATFORMS and SENSORS.

Domains covered:
Space, Airborne,
Ground, Maritime,
Underwater,
Etc...

Electromagnetism Electromagnetism TRANSMISSION DETECTION DECISION Information processing Computing information processing

VALUE-ADDED SERVICES

Prime Contractor, System Architect and Integrator, Equipment Supplier, and Service Provider

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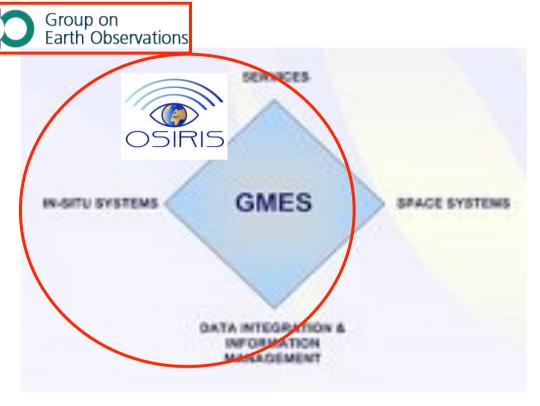


Open architecture for Smart and Interoperable networks in Risk management based on In-situ Sensors





The OSIRIS programme



OSIRIS covers the three stage process of the GMES Programme

- ✓ In-situ observation systems
- ✓ Data processing, fusion and presentation of the information to the end-users
- √ Services delivery through a Web portal



Requirements

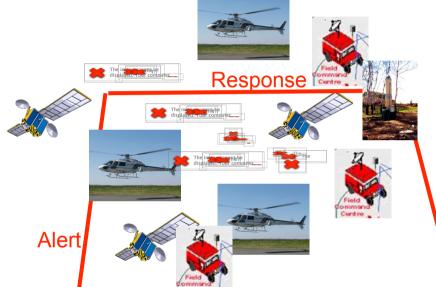






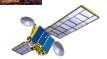








Prevention Monitoring - Preparation





And different phases so, different:

- Configurations of the system
- Services required



Requirements

Users







Use of information from different means according to the operational situations and their phases.

Different Users ;

Civil Protection - Humanitarian organisations -

European Union - European Commission

Different organizations

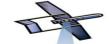
Possible cooperation between users

Possible pre-existing capacities

Sensors -Network of sensors

Communication

Various types of data



















OSIRIS



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The OSIRIS objectives

To facilitate the access for users to multi-domain sensors information in order to improve their knowledge of the operational situation (monitoring & crisis management)

Ensure the System Management of the deployed system (configuration, processing and fusion of information, etc).

Integrate the sensors or the networks of sensors in a "Web Services Architecture"

OSIRIS provides a "Service Oriented Architecture" addressing the deployment, use and (re)configuration of the systems of in-situ sensors

Operational

System

Sensor

End-users involvement for

- the requirements capture
- and the deployment for validation of the developments done in OSIRIS

Deployment of the OSIRIS architecture in 4 real operational situations

... Keeping the objective of genericity of the architecture and of the OSIRIS services for reusability in other domains and operational situations.

Accessibility of the services and data through a GIS: Web portal ou Generic Display (data, supervision, parameterisation of the sensors, access management, etc.)











This document is the property of the OSIRIS Consortium and may

The OSIRIS programme

2008 Thales Communications - OSIRIS GEOSS 15th May **System** Development of an open and flexible system architecture

Management of the configuration of the system and its evolution

Searching engine to identify the available Sensors and Observation capacities

Sensors and Services Supervision

Data workflow management

Data processing and fusion



The OSIRIS programme

2008 Thales Communications - OSIRIS GEOSS 15th May **Sensor**

Deployment of a Sensor Web Architecture, based on SWE OGC standards - Open Geospatial Consortium -

Adoption of the OpenSource approach

Analysis of the strategy for sensor deployment, use and cooperation.

Access to observation and produced data

Sensor tasking and remote control



Cooperation between OSIRIS and SANY

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SOURCE OF THE SOURCE

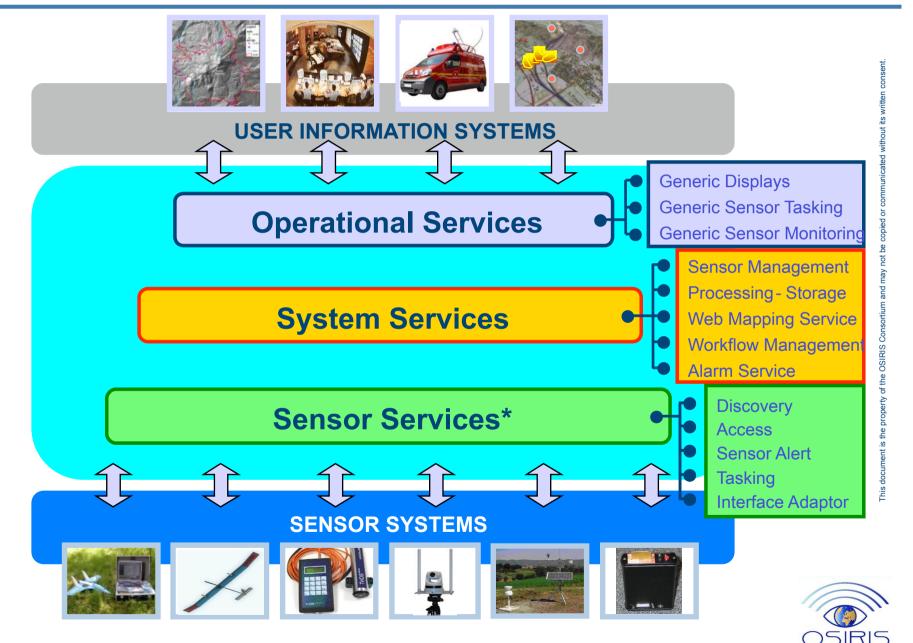
Several activities are done in conjunction between OSIRIS & SANY

Exchange on the global architecture

Common SWE standardization activities

OSIRIS

Three dimensions reflected by the OSIRIS architecture



Live Experiments Scenarios



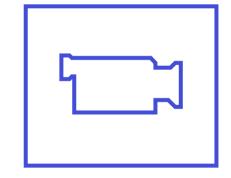


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Film realised for the GEO Summit in Cape Town, to illustrate this EC flagship programme.

www.osiris-fp6.eu







- Addresses the in-situ requirements.
- Provides an open Service Oriented Architecture (SOA) largely implementing OGC standards
- It ensures EC that R&D will be translated into Users' real life concerns.



THANK YOU FOR YOUR ATTENTION

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