



**O**pen architecture for  
**S**mart and  
**I**nteroperable networks in  
**R**isk management based on  
**I**n-situ  
**S**ensors

*“The Integrated European Information Infrastructure for Effective Environment Management”*

**Danielle Tacyniak - Thales Communications**

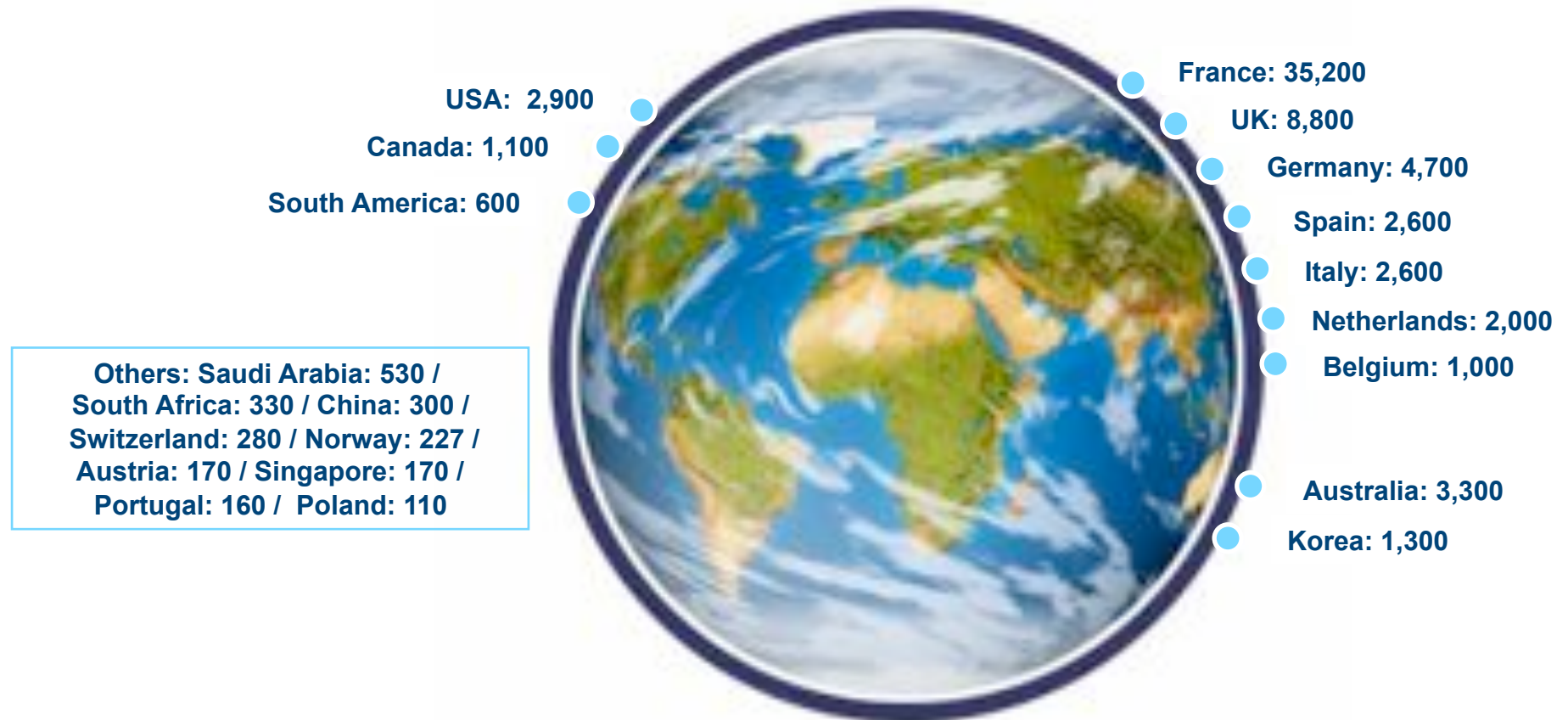
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**THALES**



# Thales in the world - Main country headcounts

Plants > 1,000 people



More than € 12bn annual revenues

68,000 employees worldwide, >50% outside France

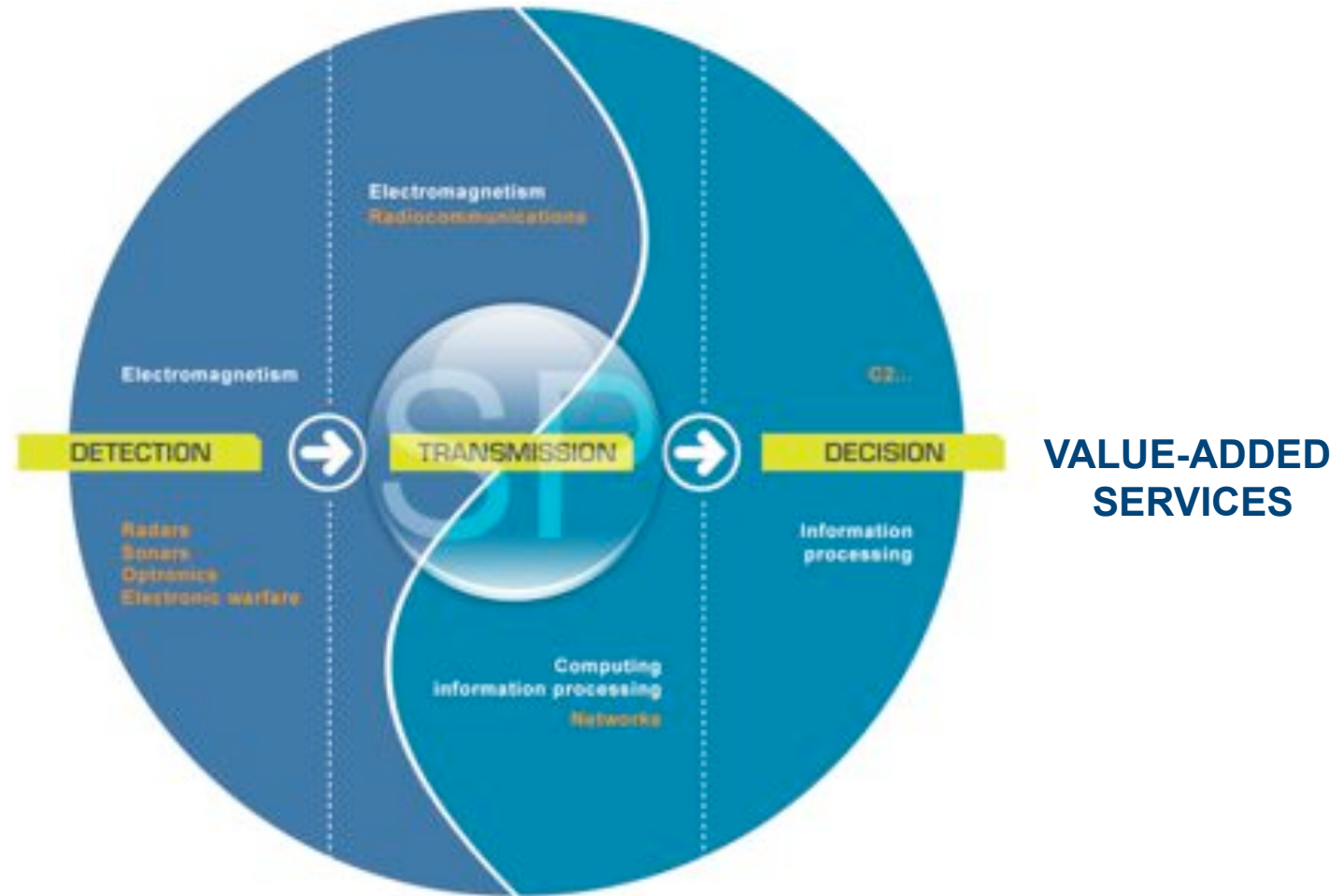
Presence in 50 countries

# Core competences to business

## Secured Communication & Information System of Systems

### PLATFORMS and SENSORS.

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



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



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Westfälische  
Wilhelms-Universität  
Münster

aps  
GmbH

IFCS

La.M.M.A.

gmw  
INNOVATING SOLUTIONS

ESYS  
CONSULTING

HYDROGEO  
TECHNIKA Sp. z o.o.

**4 end-users on 13 partners:**

Ayuntamiento de Valladolid

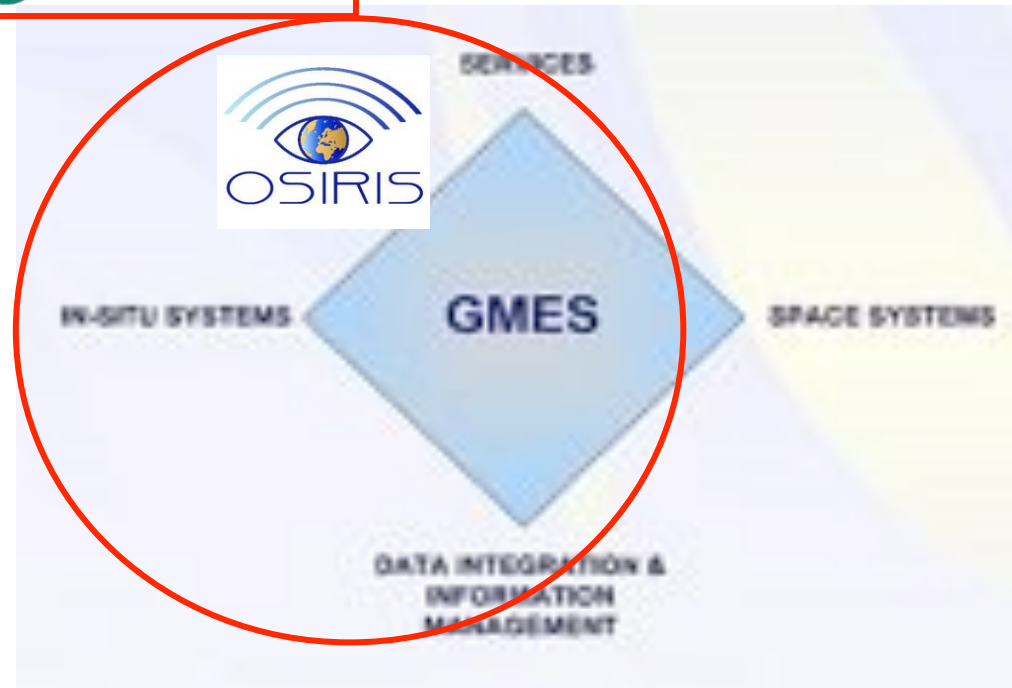
REMIFOR

Feuerwehr Aachen  
Menschen schützen Menschen

REGIONE  
TOSCANA



# The OSIRIS programme



**OSIRIS** covers the three stage process of the GMES Programme

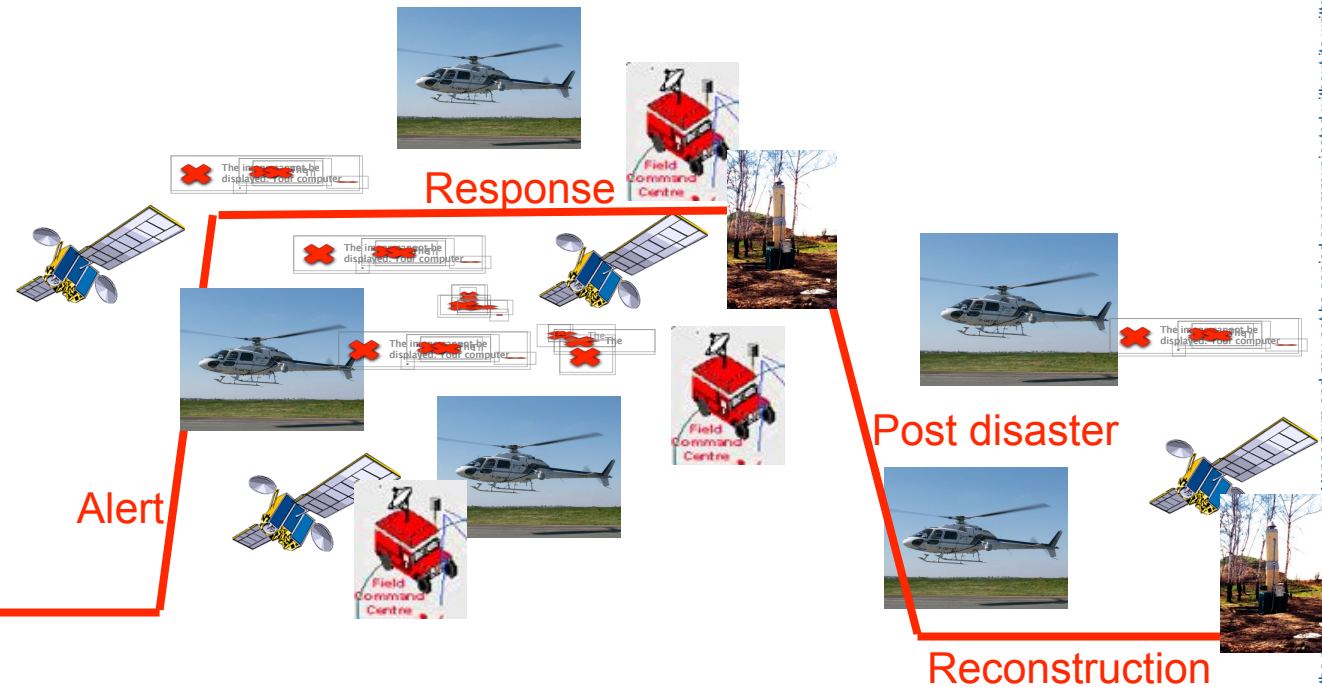
- ✓ In-situ observation systems
- ✓ Data processing, fusion and presentation of the information to the end-users
- ✓ Services delivery through a Web portal

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# Requirements

Large number of different operational situations



And different phases so, different:

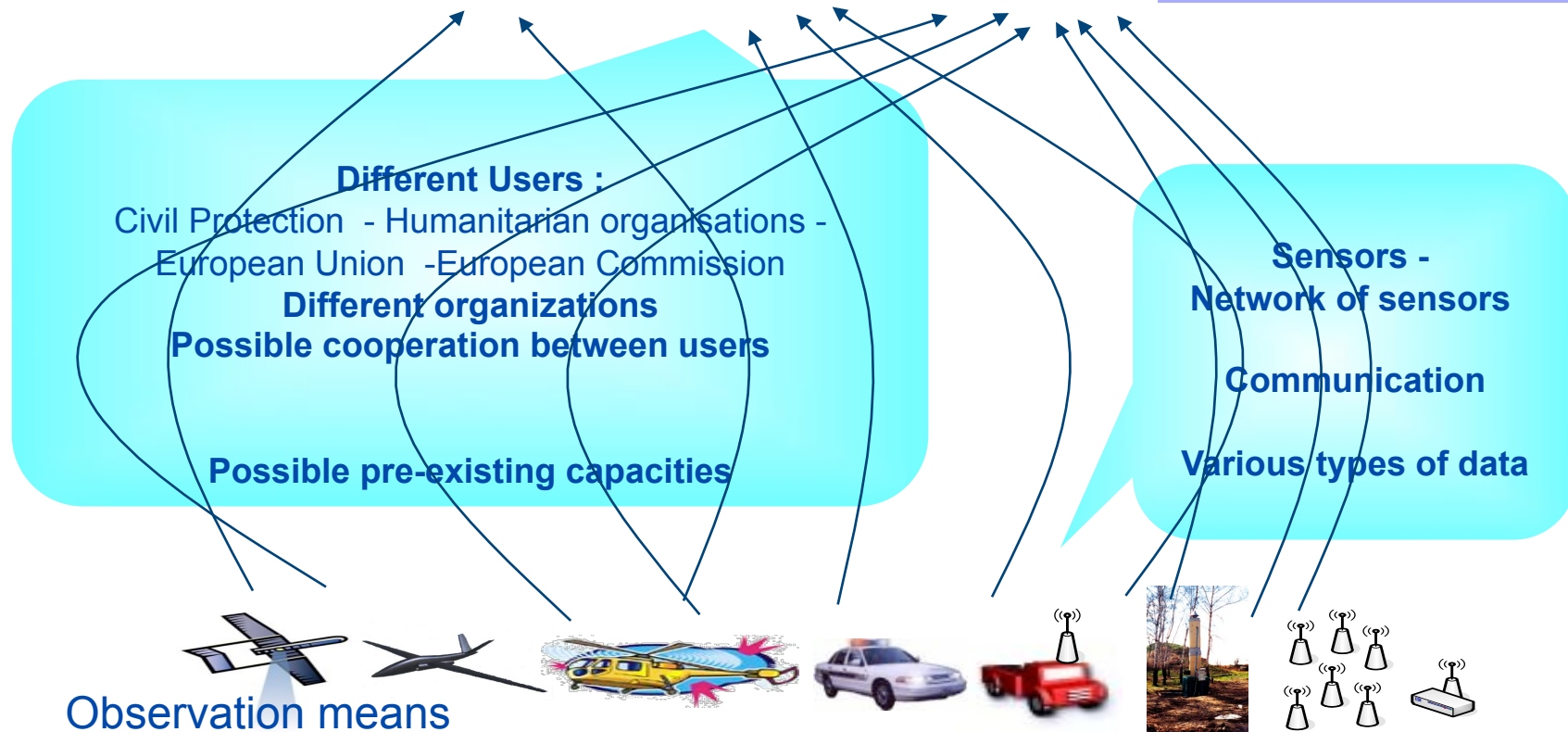
- Configurations of the system
- Services required

# Requirements

## Users



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







# The OSIRIS objectives

3 dimensions

**Operational**



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

**System**



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

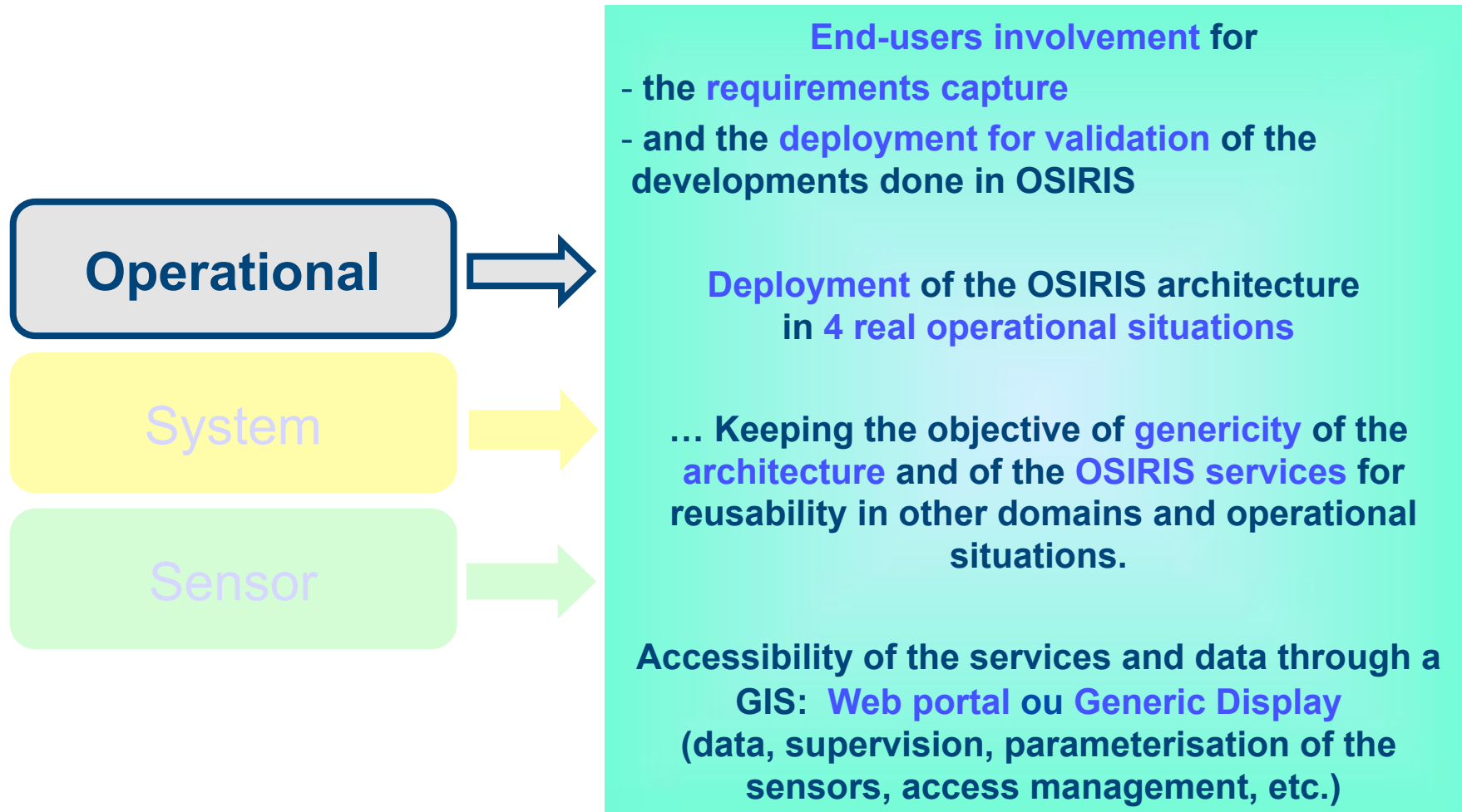
**Sensor**



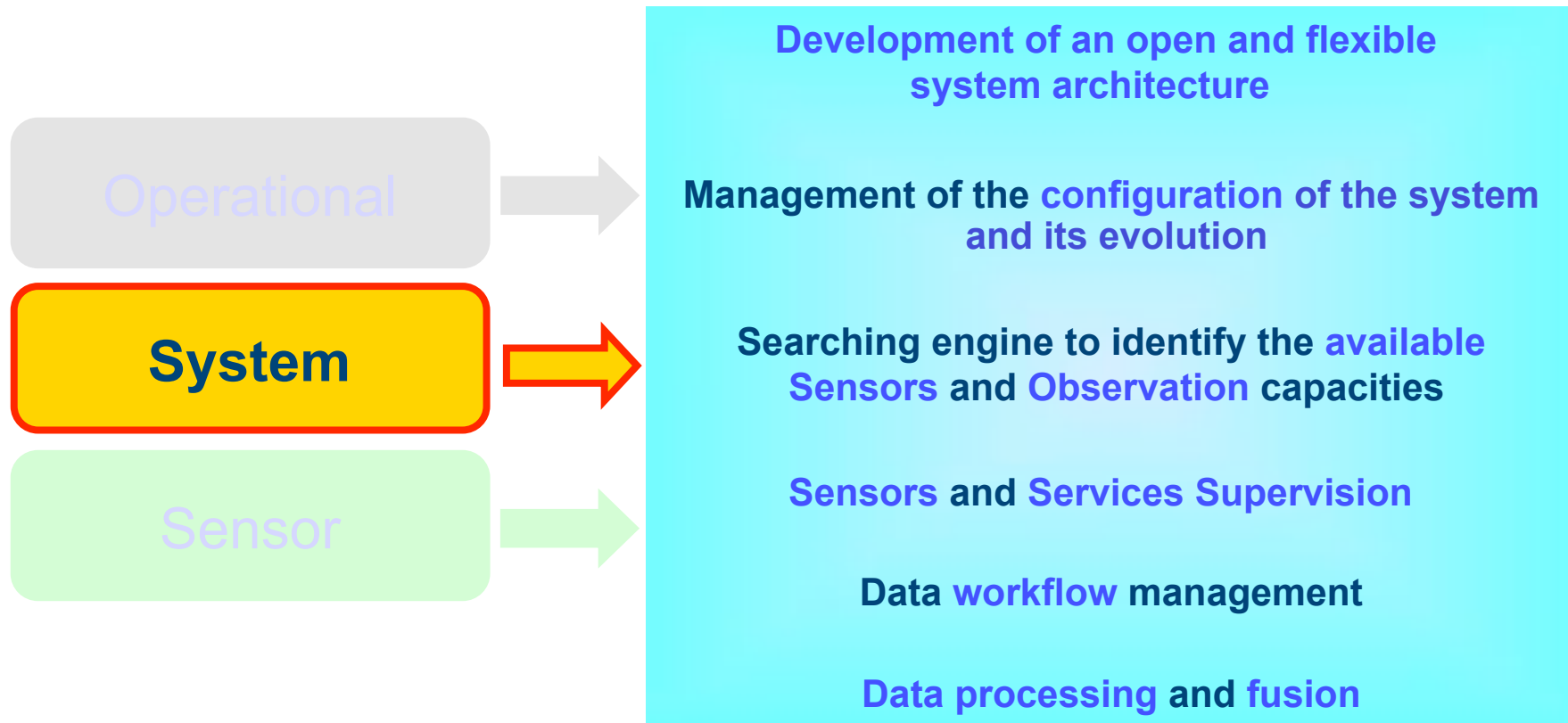
Integrate the sensors or the networks of sensors in a "**Web Services Architecture**"

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

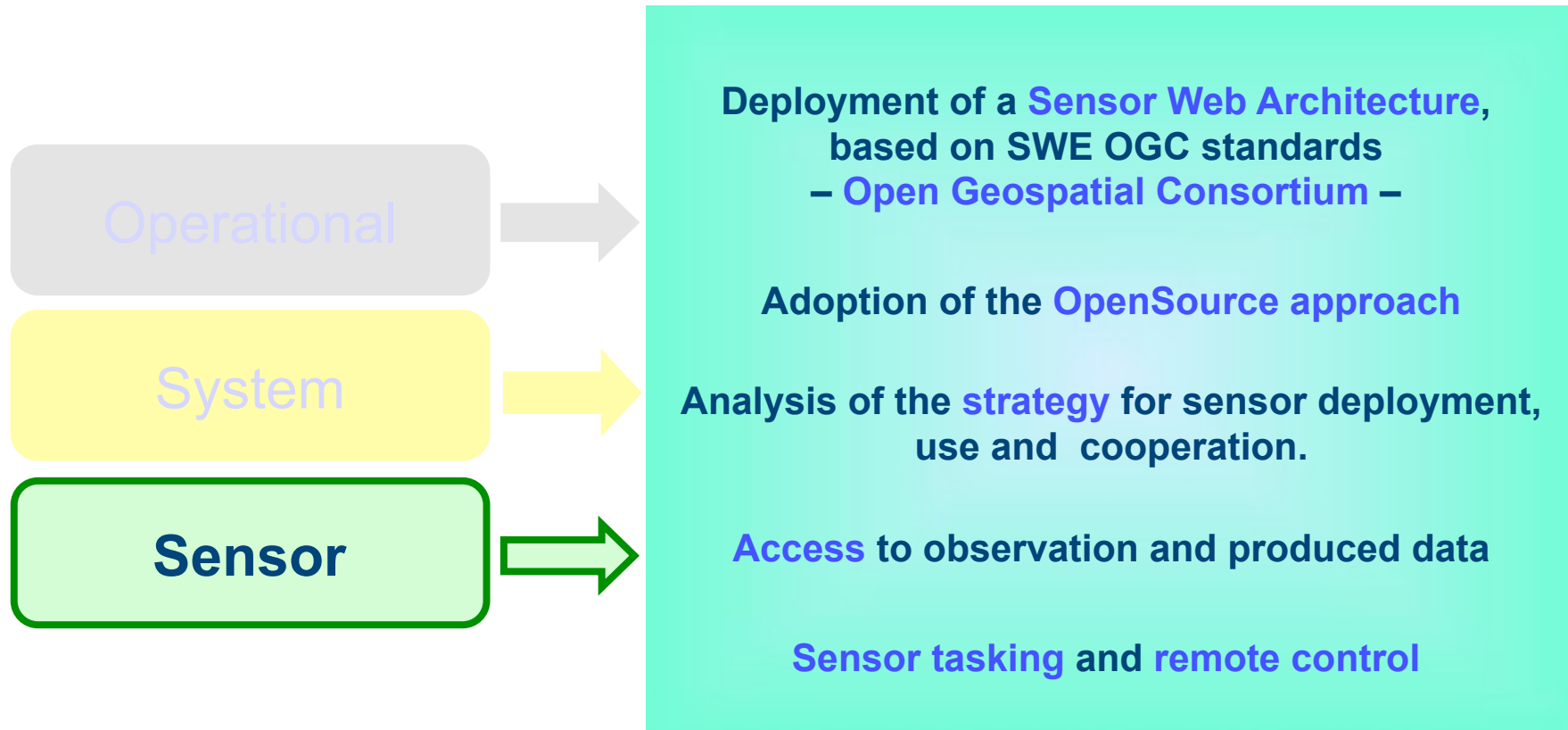
# The OSIRIS programme



# The OSIRIS programme

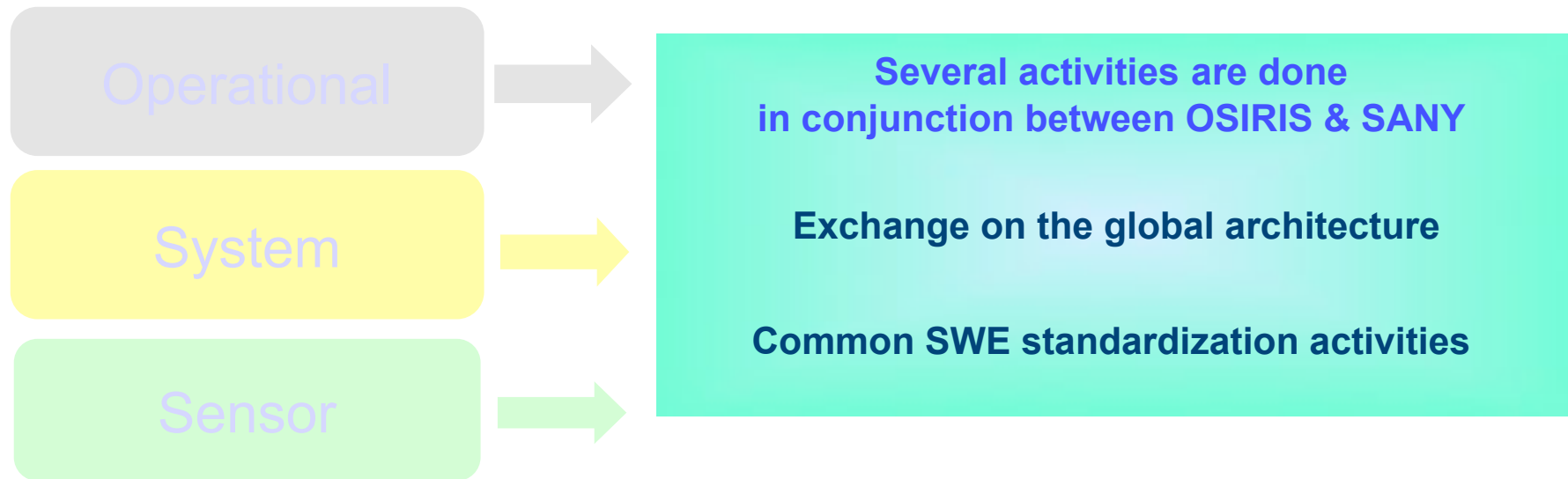


# The OSIRIS programme

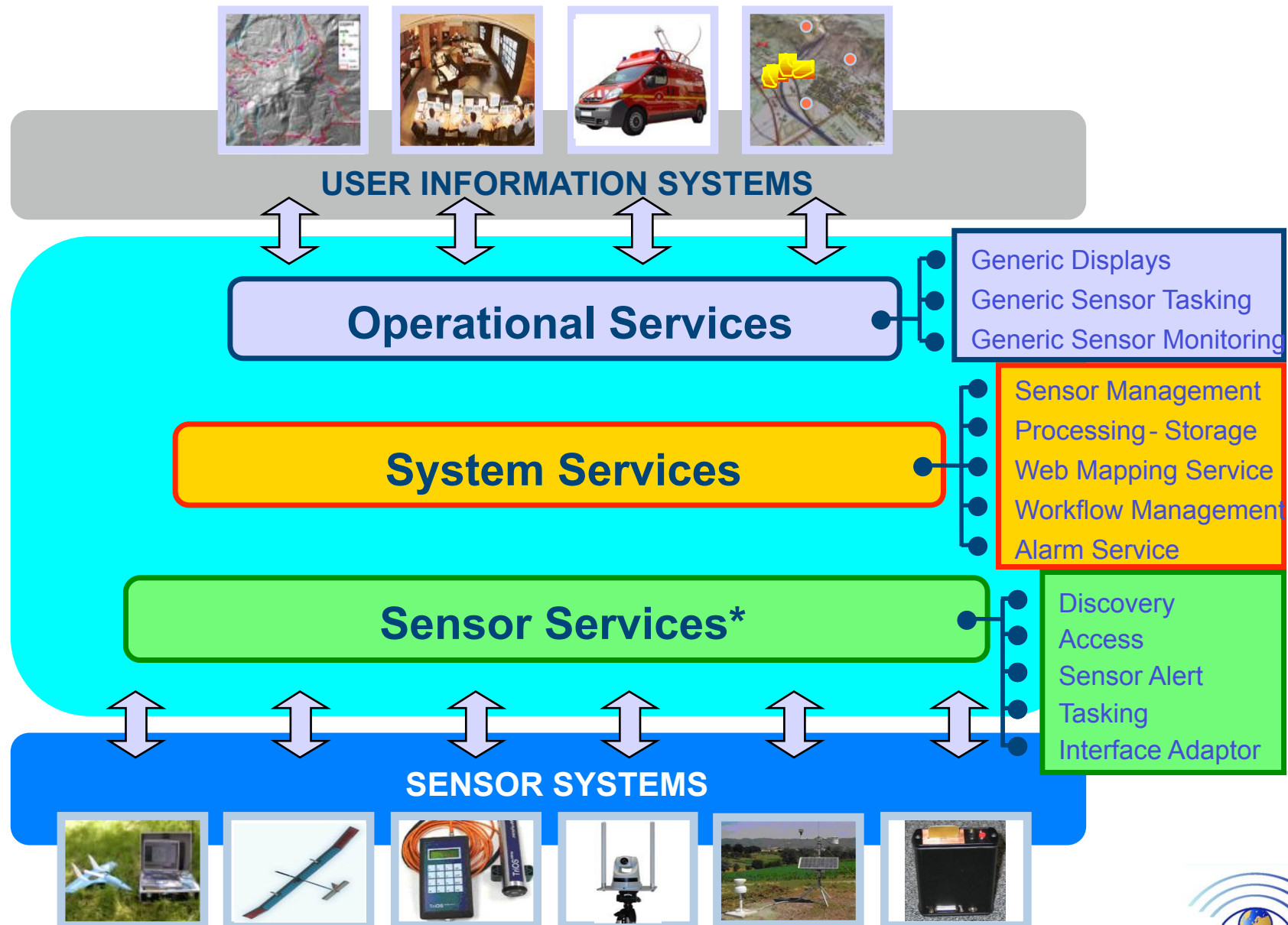




# Cooperation between OSIRIS and SANY



# Three dimensions reflected by the OSIRIS architecture



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# Live Experiments Scenarios

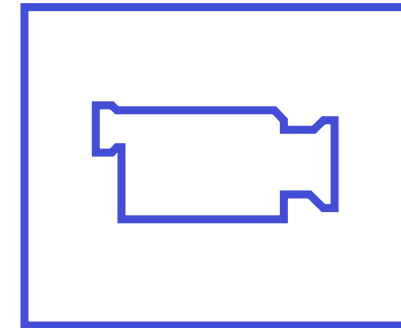
Main objective is to validate the added value of an OSIRIS solution in MONITORING and CRISIS by combining different sensors (*including existing users' means*), and thus improve the global efficiency of users and their reactivity towards the crisis.





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**Film realised for the GEO Summit in  
Cape Town, to illustrate this EC  
flagship programme.  
[www.osiris-fp6.eu](http://www.osiris-fp6.eu)**





# Conclusion



- 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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