# A Sensor Web for the Environment in Europe

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## Interest Group on the Future Sensor Web

Growing demand for:

- Near real time data
- Better user interfaces
- Intelligent collaborative reporting
- Cross-domain service chaining

Mass deployment challenging:

- Scalability
- Capacity
- Throughput
- Mobility
- Trust

INSPIRE · Infrastructure for Spatial Information in Europe

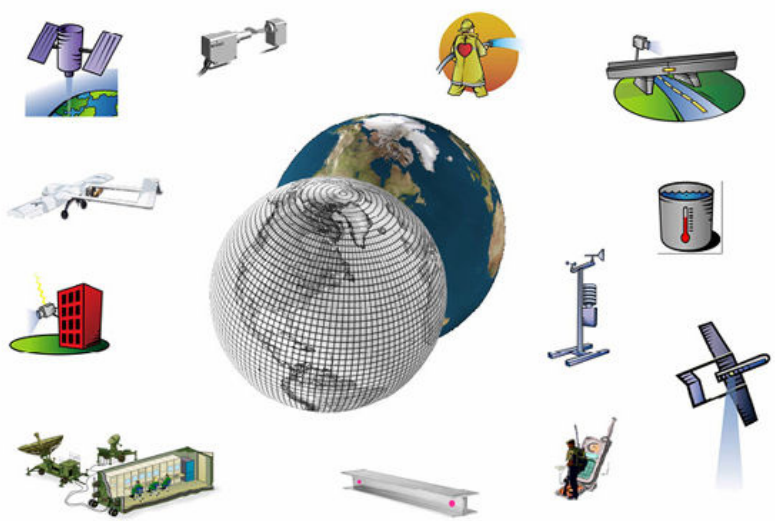
GEO GROUP ON EARTH OBSERVATIONS

## *(1) Large-scale experimentation with the Future Internet*

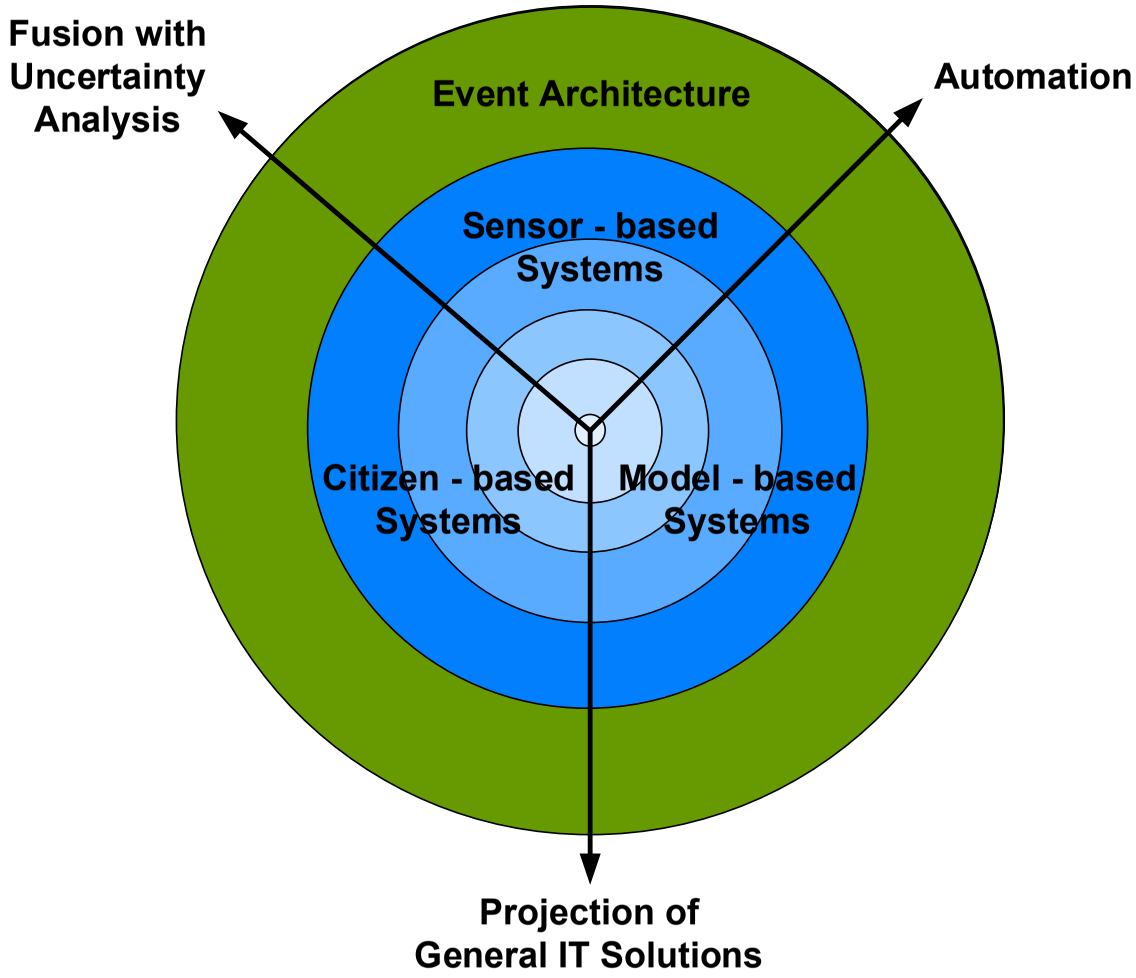
**Environmental applications** are highly appropriate scenario

Especially the **integration of sensors** into the FI for:

- marine ecosystem environmental monitoring and management
- climate change impact on ecosystems and biodiversity
- urban industrial activities and geo-hazards management
- enhanced traffic management, and
- green smart cities



# *(2) Important innovative Internet functionality and technologies*




**Real time view of the world**

Extracting knowledge

from **large amounts of data**

depending on **context**

## *(3) Expected functionalities of FI core technology platform*

**Robustness**, **scalability**, and **quality** of service

- Hybrid Service Oriented and **Event** Driven Architecture with brokers
- Mechanisms to react to critical **situations**
- **Semantic** technologies and distributed metadata management

## *(4) Requirements for experimentation and prototyping*

Participants from a wide range of communities (including **users**)

Test and develop **existing** solutions further (to address above points)

Encompassing the **socio-economic** and **organisational** dimensions

## *(5) Potential role of our organization in the FI-PPP*

We…

… represent the required **wide range of communities**

… can advance the topic of sensor and model integration into the FI taking into account **different perspectives** and thus ensuring an **application driven approach**

… could **deploy** the **Future Sensor (and Model) Web infrastructure** and take into account of the existing standards, provide required FI core services, and build/reuse test platform(s)

‘Future Sensor Web’ Group on the INSPIRE Forum

Thank you for your attention!