# S@NY

Sensors Anywhere FP6-033564



SWE Enabled Station Computer Waageningen

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# S@NY - Sensors Anywhere

SANY is an
Integrated Project
(contract number 0033564)

co-funded by the Information
Society and Media DG of
the European Commission
within the RTD activities
of the

Thematic Priority Information Society Technologies"









# SANY Partnership

Project acronym	SANY
Project reference	IST-2006-033564
Project type	Integrated Project
Start date	01/09/2006
Duration	36 months
Budget	11,2 M€
EC contribution	7,0 M€



An Enterprise of the Austrian Research Centers



Fraunhofer

Institut Informations- und Datenverarbeitung

**Sol Data** 























MARINE

Eidgenössische Technische Hochschule Zürich Swiss Federal Institute of Technology Zurich

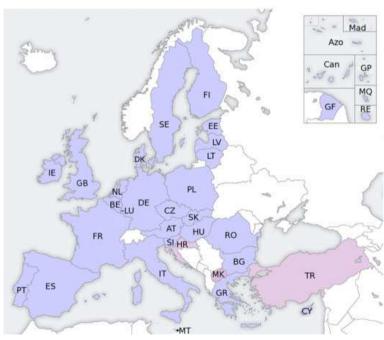






#### The scene





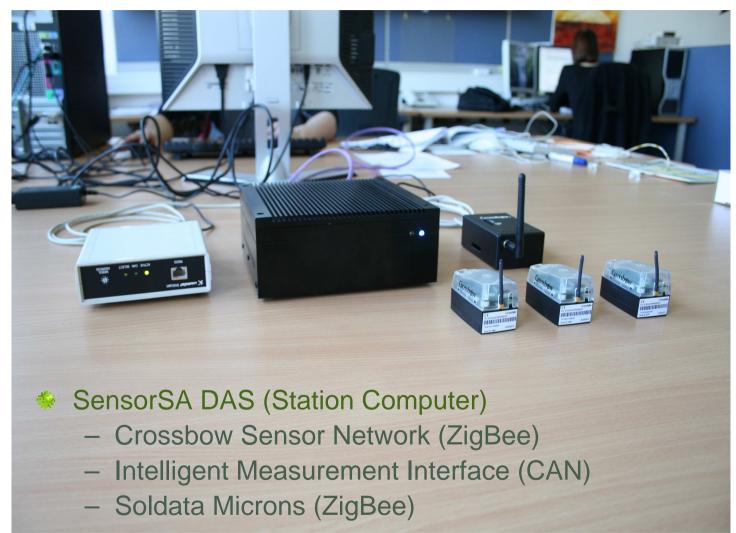
- a European Environment Monitoring and Risk Management Infrastruture
- Syntactic and semantic interoperability
- Integration of existing sensor technologies
- SANY (Sensors ANYwhere)
- Standardised Interfaces
- OGC Sensor Web Enablement (SWE)







## The Prototype



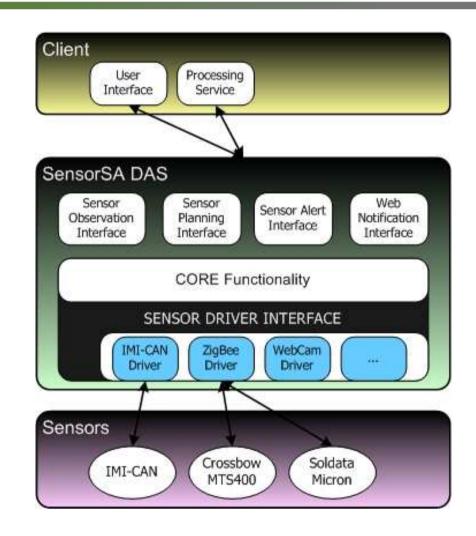






# UWEDAT SWE Architecture 1

- Tasks
  - Sensor Data provision
  - Configuration
  - Planning
  - Notification
- Layers
  - Client
  - Sensors
  - SensorSA DAS
- Client
  - GUI (DataGraph, SSE)
  - Data processing (eg. Annotation)
  - Model, etc.





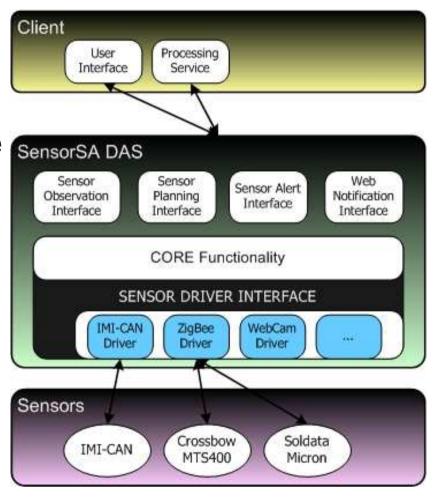




### **UWEDAT SWE Architecture 2**

#### Interfaces

- Sensor ObservationService
- Sensor Planning Service SensorSA DAS
- Sensor Alert Service
- Web Notification Service
- Sensor driver interface
  - Sensor Compatibility
     (Cameras, UV Spectrum Analysers, CPU temperature)









## Plug and Measure Adapter



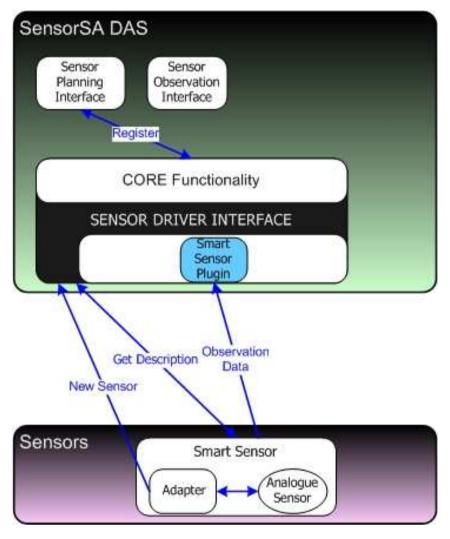
- SensorSA DAS Sided
  - USB (Communications Device Class Mode, recognised as COM-Port)
- Sensor sided:
  - RS-232
  - Voltage Encoded Input 0 .. 10V
  - Current Encoded Input 0 .. 20mA
  - 5V Output (as sensor power supply)
- SensorML (Sensor-Markup-Language Document)
  - Sensor Identification
  - The initially programmed SensorML queried by and transferred to the DAS.







#### Plug and Measure



- Event (new sensor)
- Get sensor description (SensorML)
- Load driver (plugin)
- Register sensor
- Task sensor
- Get observation







