

www.swan.technology

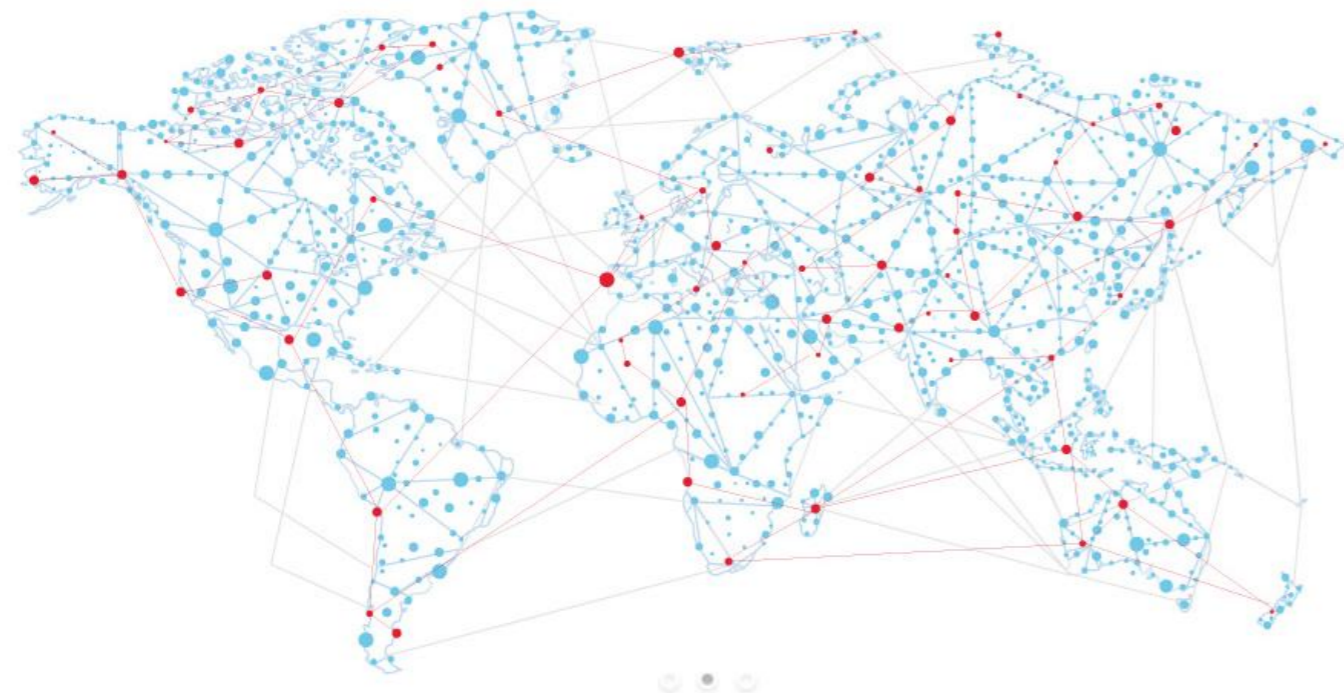
## European Innovation Partnership on Water

Ctrl+SWAN

Cloud Technologies & Real time monitoring + Smart Water Network

### 1. MEMBERS AND PARTNERS

People, Universities, Companies and Research centers coming from European Countries (England, Italy, Spain, Germany, Greece, Switzerland, etc.) and Non European Countries (Mexico and Morocco).



38  
People

7  
Universities

5  
Research centers

16  
Companies

#### UNIVERSITIES

Second University of Naples – Department of Civil Engineering, Design, Building and Environment (SUN-DICDEA)  
Second University of Naples - Department of Industrial and Information Engineering (SUN – DIII)  
University of Naples “Federico II” – Department of Physics  
University IbnTofail of Kenitra  
University of Thessaly  
University of Exeter  
Universitat Politècnica de Valencia

#### RESEARCH CENTERS

BioMEMs (www.biomemsrc.org)  
National Research Council (CNR) - Institute of Information Science and Technologies, Signal and Images Lab (ISTI)  
National Research Council (CNR) - Institute for Electromagnetic Sensing of the Environment (IREA)  
National Research Council (CNR) - Institute of Geosciences and Earth Resources (IGG)  
The Mexican Institute of Water Technology (IMTA)

#### COMPANIES

Aqua-Consult Ingenieros (A-CING) (www.a-cing.com)  
Aqualia, gestión integral del agua (www.aqualia.es)  
Bdigital  
Costrame di Di Maso s.r.l.  
EdgeLab S.r.l. ( www.edgelab.eu)  
Environmental Technologies S.r.l.  
Hach Lange (www.hach-lange.com)  
INFOSOLUTION S.p.A. (www.infosolution.it)  
Mares Costruzioni e Progetti I.T. S.r.l.  
MED.HYDRO s.r.l. Coastal and Hydraulic Engineering and Research (www.medhydro.it)  
Novaetech s.r.l. – National Institute for Astrophysics (INAF) spinoff company  
Promete S.r.l. – CNR spin-off company  
SENSUS ITALIA  
SYSTEVA - Systems Technology Advance SpA

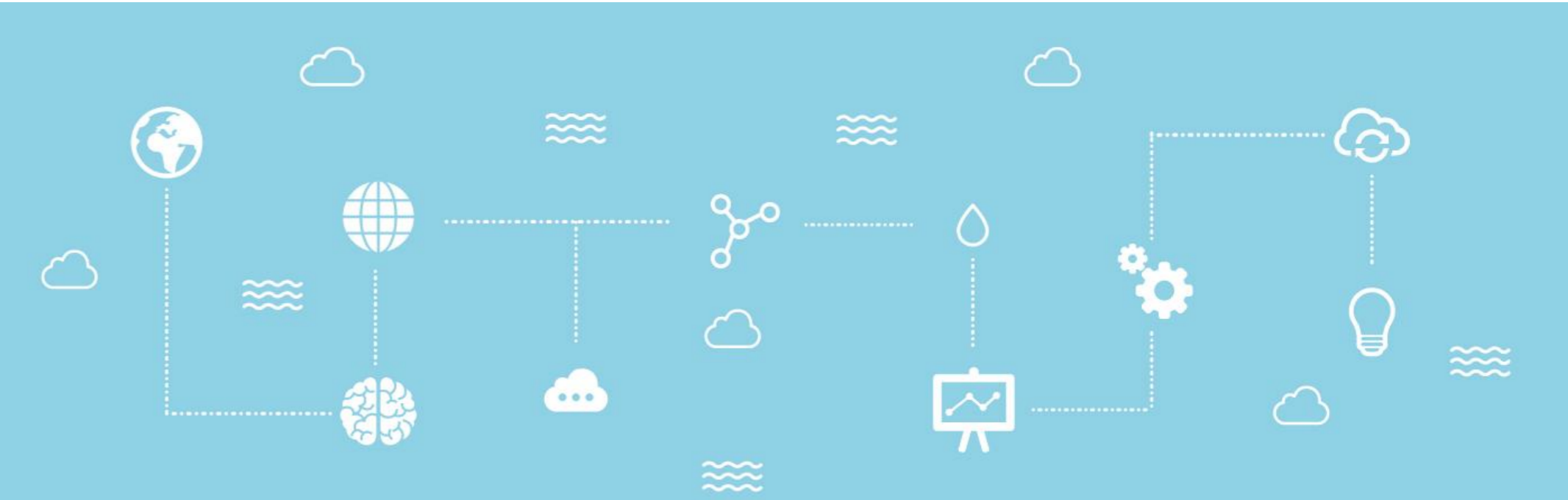
#### PARTNERS

Basin Authority-County of Trento (IT)  
Smart H2O project (www.smarth2o-fp7.eu)

### 2. MISSION

Action Group is devoted to the development of innovative sensors and technologies to integrate and implement into water distribution networks, with the broader goal to introduce the new paradigm of SWAN as a key subsystem of the notion of Smart City. The mission can be summarized in different topics:

- Smart Water Networks Technologies and Software
- Smart quality sensors for water protection
- Best practice and Best Available Technologies (BAT) on SWAN
- Action of pressure for European water directive and road maps.



### 3. ACTIONS

In order to transform the traditional Water Systems in modern Smart Water Networks (SWAN), Ctrl+Swan will perform the following actions :

- Take part as Advisory board and Stakeholder to EU project
- Industrialize pre-industrialized products (sensors, software, etc.)
- Transform R&D results into powerful engineered products/services and solutions to create value and take over a leadership position
- Participate to international congress to strength current relationships, generate new ones and disseminate results
- Have an active participation to R&D project /Horizon 2020

### 4. RESEARCH AND DEVELOPMENT

The activities of the AG Ctrl+SWAN are focused on research and development of innovative smart sensors analyzing the new possibilities offered by the implementation of real time and on-line measurements in water resources both in terms of network management and user safety. Essentially the main R&D activities are:

- develop innovative smart sensors to be placed on smart water networks for online detection of microbiological and/or physical-chemical parameters.
- design decision support systems to define optimal partitioning and sectorization of SWAN to improve the management and the protection of water supply systems.
- realize and implement a smart platform to collect and manage data from sensors in an early warning system based on cloud technologies.