

**WaterLink 2017** An event that will stretch our imagination. Dare to dream, set a new course, chase new opportunities. Where would innovations come from when we stop using our imagination?



Save the Date! January 26<sup>th</sup> 2017 WTC Leeuwarden Symposium WaterLink The Water Tech business event of the Water Alliance

# WATERLINK 2017

January 26th 2017, Leewarden

SESSION 3

REAL TIME MONITORING AND SMART SENSORS FOR WATER QUALITY CONTROL

European Innovation Partnership on Water Action Group CTRL + SWAN

**Cloud Technologies & ReaL time monitoring + Smart WAter Network** 

Anna Di Mauro



**European Innovation Partnerships (EIP) were born** with the main purpose to initiate and promote collaborative processes for change and innovation in the different sectors across the public and private sector, non-governmental organizations and the general public and to contribute job creation and economic growth. **This is mainly done via the establishment of Action Groups.** 

The European Innovation Partnership on Water (EIP Water in short) is an initiative within the EU 2020 Innovation Union.

The EIP Water implementation started in May 2013 but right now :

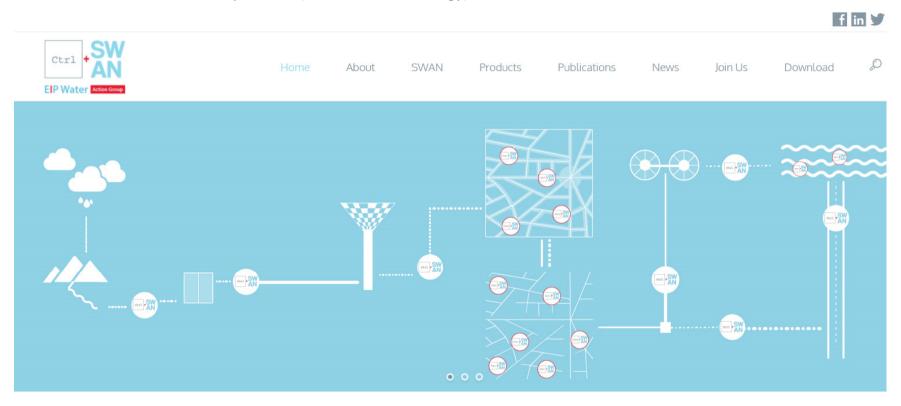
✓ The EC does not invite more new AGs

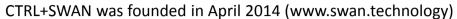
 $\checkmark$  The EC wants to **maximize** the outcomes and impact of the **current AGs** thought the work undertaken by the AG Group and by leveraging the projects of the individual AG members

✓ There is **no statuary time limit for AGs**, AGs can continue working without deadline



# **CTRL + SWAN** Cloud Technologies and ReaL time Monitoring + Smart WAter Network













### **CTRL + SWAN** Members & Partners

#### Universities (10)

✓ Second University of Naples – Depertment of Civil Engineering, Design, Building and Environment

✓ Second University of Naples - Department of Industrial and Information Engineering

 $\checkmark$  University of Naples "Federico II" Department of Physics

✓ University IbnTofail of Kenitra

✓University of Thessaly

✓ University of Exeter

**√**...

#### Research centers (5)

✓ BioMEMs

✓ 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)

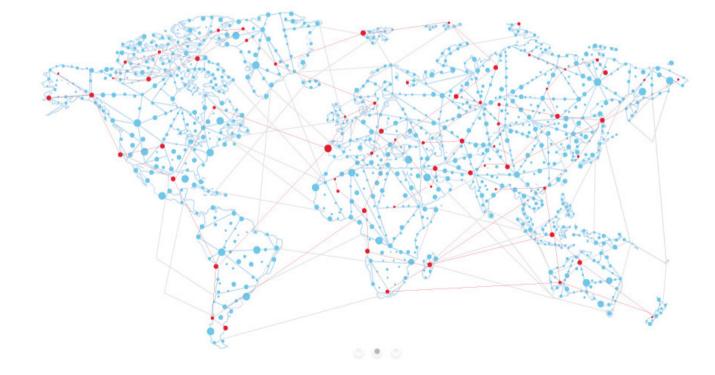
✓ The Mexican Institute of Water Technology
✓ EURECAT

**√**...

#### ✓ Companies (18)

- ✓ Aqua-Consult Ingenieros (A-CING)
- ✓ Aqualia, gestión integral del agua
- ✓ EURECAT
- ✓ EdgeLab S.r.l.
- ✓ Hach Lange
- ✓ INFOSOLUTION S.p.A.
- ✓ MED.HYDRO s.r.l.
- ✓ Novaetech s.r.l.
- ✓ Promete S.r.I. CNR spin-off company
- ✓ SENSUS ITALIA
- ✓ SYSTEA Systems Technology Advance SpA

✓ ...



Action Group is devoted to the development of innovative sensor technologies to be integrated and implemented in the design of an innovative approach to the water distribution networks management, with the broaden goal to introduce the concept of Smart WAter Network (SWAN) as a key subsystem of the notion of Smart City, as it has been recently recognized in the scientific and technical international community.



# **CTRL + SWAN** Objectives

**#** Promote and develop **innovative smart sensors** to be placed on distribution network for online detection of microbiological and/or physical-chemical parameters

**# Design decision support systems** to define optimal partitioning of SWAN to improve management and protection of water supply systems

# Implementation of smart platform to collect and manage data from sensors in an early warning system based on cloud technologies. It will be based on multi-sourced and cloud data platforms including quality and quantity monitoring







### **# BAT (Best Available Technology) for Smart Water Network**

Design of a website section on BAT for SWAN. The idea is to propose to EU and water operators, trough our web Platform, Best Available Technologies (BAT) already proposed for other engineering fields (i.e. remediation, etc.). The idea could become a novel approach to disseminate and implement some results of many research in hydroinformatics (and not only).



### **#** Partecipation of the Action Group to the following Confernce:

**EIP Annual Conference 2017,** on 27-28 September 2017 in Porto, Portugal Workshop in collaboration with ICT4Water Cluster and PROTEUS Project :

"Smart Water monitoring: What low-cost sensors solutions for high efficiency water monitoring networks"



#### **#** Pilot site and/or testing prodcts:

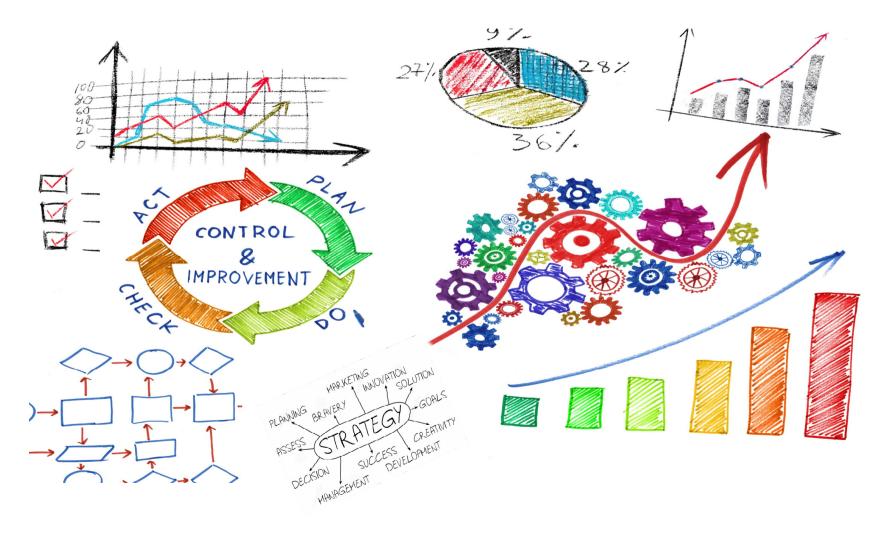
Implementation of the software SWANP on Mexican water networks of IMTA (Mexican Institute of Water Tehcnology).



**# Horizon 2020** Examination of some HORIZON 2020 proposal to submit R&D projects.

# **CTRL + SWAN** Strategy

- # Strengthen current relationships and generate new ones
- # Looking for funds to partners through applications to European calls (H2020)
- # Design and optimize a really innovative interaction model that can represent a truly best practice
- # Design road maps
- # Transform R&D results into powerful engineered products/services and solutions





**EIP Water** Action Group Pooling resources – Innovating water

Thank you for your attention

Visit our website www.swan.technology

Join us agctrlswan@gmail.com