

Science Europe Scientific Advisory Committee (SAC)
SYMPOSIUM – Brussels, 17th November

*“Building a Scientific Narrative on Impact and
Societal Value of Science”*

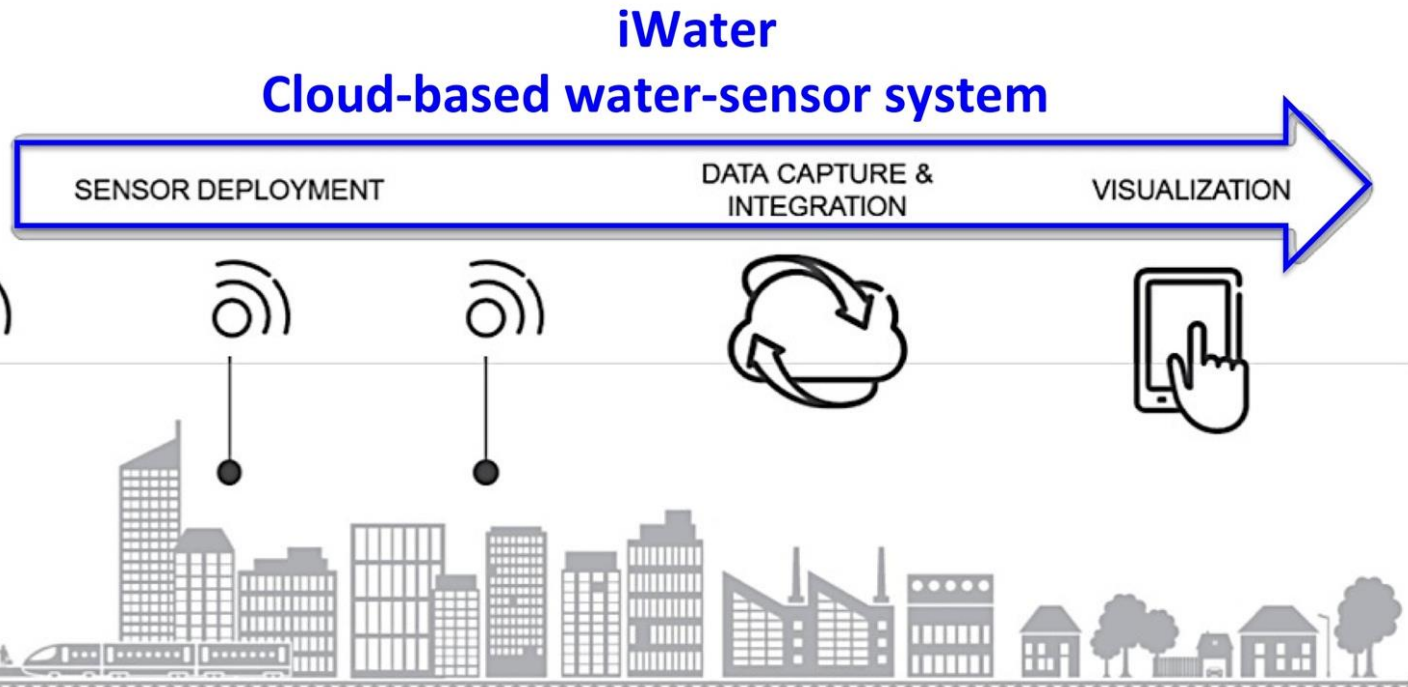
**The iWater Project:
Research and Society Co-designing
a Monitoring System for Cities’
Water Supply**

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#SEimpact

iWater – Connected Water Life Cycle

Pilot case Stockholm – started 2016



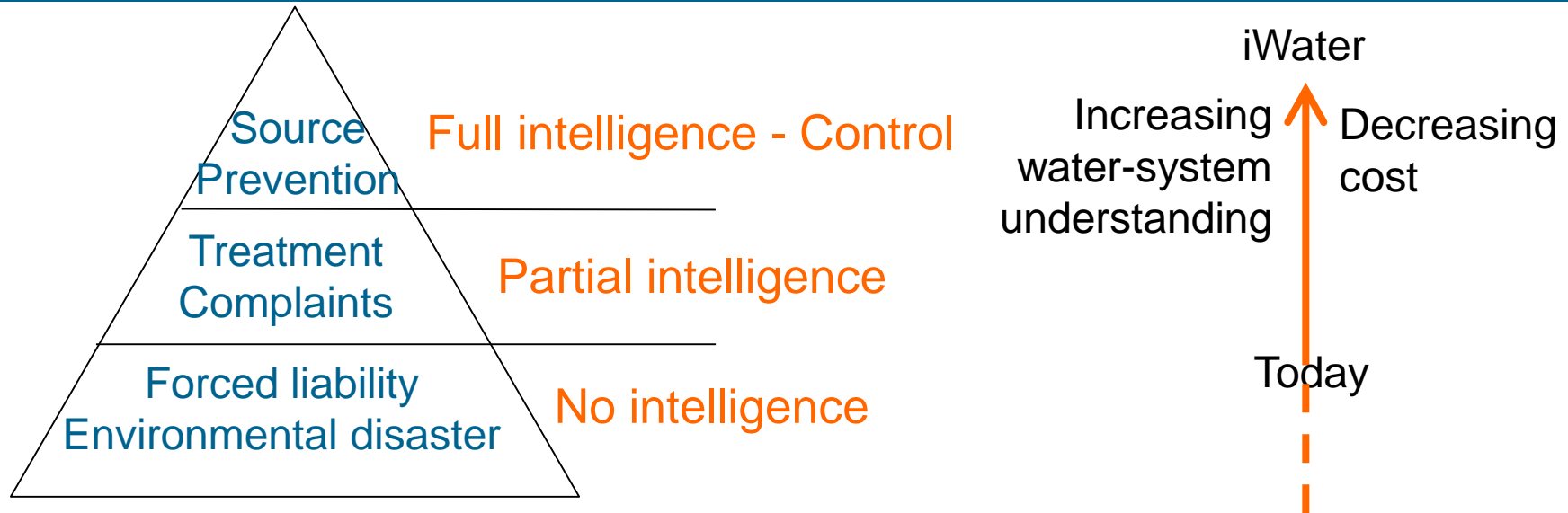
Massive real-time water quality monitoring

Early warning

- *From hydrological catchment*
- *Through city's main water supply*
 - *To end water user*
- *Back to lake through waste water systems*

Curiosity-driven research **meets** societal challenge

Co-creating new knowledge



- **Universities** – *Royal Institute of Technology, Stockholm University* – **Multi-disciplinary**
- **Stakeholders**
 - **Companies** – *Ericsson, ABB* – **Multi-technological**
 - **Cities - Metropolitan Regions** – Pilot case Stockholm – **Smart city** – **Clean water** aims

Multidisciplinary research and development

Real-time detection of chemical substances and pathogens

- Intelligent monitoring localization - bridging traditional monitoring gaps
- Massive cheap indicator monitoring - more expensive direct parameter monitoring
- New cheap/cheaper long-life monitoring sensors
- Indicator – parameter relations
- Connecting sensors and other information sources through mobile networks
- Cloud-based management, visualization – data interpretation

Partner drivers - expectations

► **Universities:**

- Research - Application test beds
- Transferable results across cities – urban – other regions of the world

► **Companies:**

Show what their technologies can provide in terms of Smart City solutions

► **Cities - regions:**

Smart cities - Ensuring clean & safe water for citizens

KEY MESSAGE

Collaborative Challenges:

Curiosity- and needs-driven R&D meets stakeholders and their needs to co-design new knowledge and intelligence

Will we manage ?

Reconcile:

- Curiosity – Need drivers
- Result – Timing expectations

Maintain:

- Collaboration persistence during result-delay and low-funding periods
 - Long-term stability and funding