



Water Supply and Sanitation Technology Platform

A Platform that can facilitate field
implementations for INBO

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Water Supply and Sanitation Technology Platform

One of the technology platforms (ETPs), set up within the European Environmental Technology Action Plan (ETAP), adopted by the European Commission in 2004.

Aim: to bring together -research, -industry, -financial institutions, -decision-makers and -end-user groups, involved in European water supply and sanitation. A framework for stakeholders, led by industry.

Produce: -common vision document - strategic research agenda -implementation plan for the short (2010), medium (2020) and long term (2030).

Contribute to: -competitiveness of the European water industry (Lisbon Strategy), therefore lead by Industry; -solving the European water problems; -reaching the Millennium Development Goals (Johannesburg).

Drivers: -climate change and related impacts; -globalisation and demographic changes (resulting water stress, Q and Q); -aging infrastructures.



WSSTP SRA

4 Challenges

- Water stress (Quantity & Quality) & Cost -*demography, resource deterioration*
- Urbanisation -*pollution, sludge management, infrastructure degradation*
- Extreme events -*droughts, floods, heat waves*
- Rural & under developed areas -*Restricted access to safe water, lack of infrastructure*

Strategy

Integrated approach: **IWRM** (*integrated water resource management*) coupled with **DSS** (*decision support system*)

- **Integrated Solutions** to address major issues through 6 pilot programs
- **Innovative Technical Solutions** in wide area: natural sciences, engineering, economics, environmental & social sciences, governance

5 Research Themes

- Balancing Water Demand & Supply
- Ensuring Water Quality & Security
- Reducing Negative Environmental Impacts
- Novel approaches to design, construction & operation of water infrastructure assets
- Establishment of an enabling framework



WSSTP Integration - Pilots

SRA Execution

Using IWRM/DSS to manage Water as a global resource to meet societal needs for Water while protecting the environment

PILOT Concept

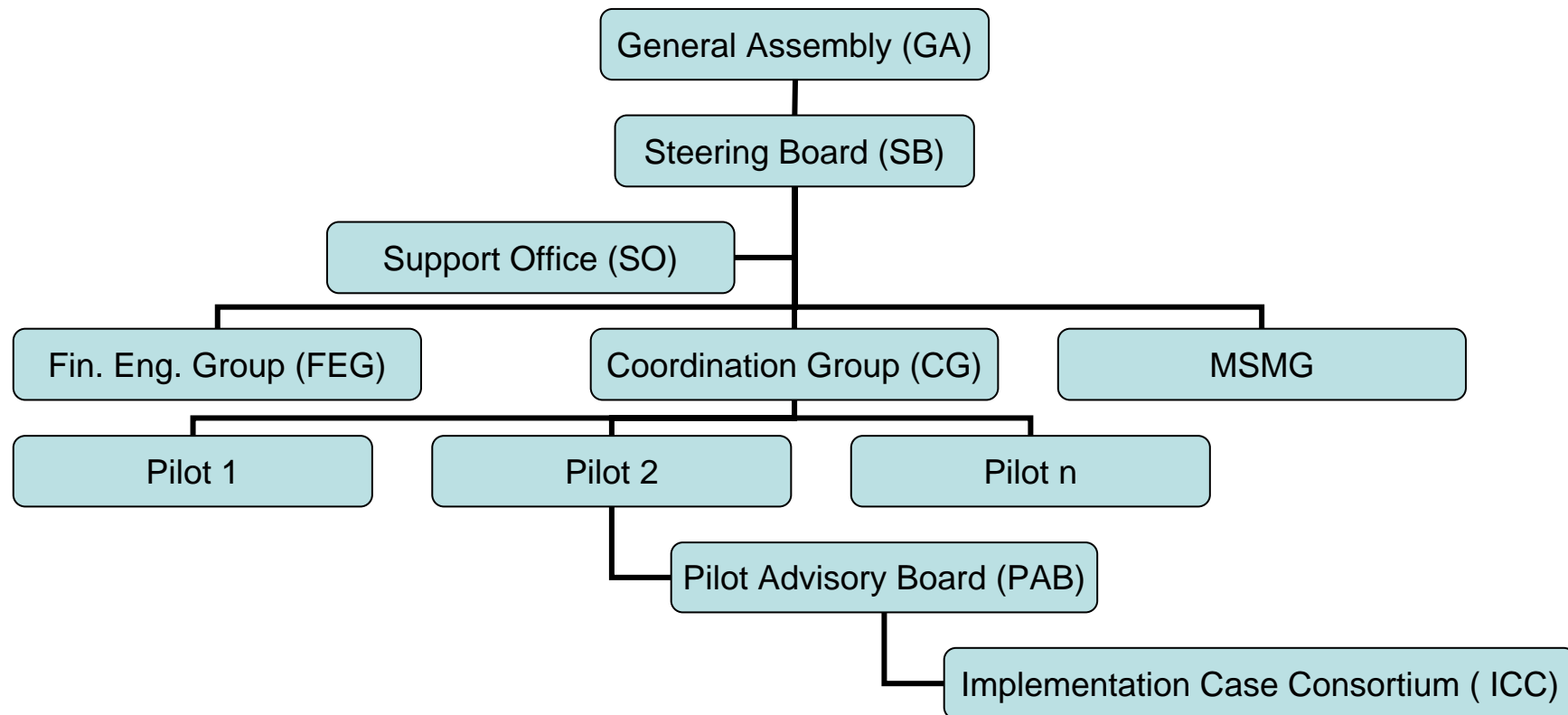
Principal integrating mechanism aimed at solving a major EU W issue: -Generic RTD; -Enabling technologies; -Implementation Cases

6 Pilot Programs

- Mitigation of Water Stress in Coastal Zones (PP1)
- Sustainable Water Management inside and around large Urban Areas (PP2)
- Sustainable Water Management for Agriculture (PP3)
- Sustainable Water Management for Industry (PP4)
- Reclamation of Degraded Water Zones (surface & ground) (PP5)
- Proactive and Corrective Management of Water Impacts from Extreme hydro climatic events (PP6)

40 Implementation Cases identified

WSSTP Structure





WSSTP Members

Founding WSSTP members

DWF, Delft Hydraulics, EUCETSA, EURAQUA, EUREAU, IWA, KIWA, SINTEF, SUEZ, SWS, TNO, UIE, UKWIR, VEOLIA

Forthcoming new WSSTP memberships

AGBAR, ADP, HERA, Cemagref, BGS, BRGM...

MSMG (20 states)

A,B,CH,CY,DK,FI,FR,G,H,I,NL,PL,PO,RO,SL,SP,SW,TU,UK



Pilot Mitigation of Water Stress In Coastal Zones

1/ Generic research and technology development (RTD)

2/ Enabling RTD

3/ Implementation Case(s)

	Area	Country
IC 1	Rivers Rhine, Meuse and Scheldt delta	Netherlands, Belgium, France, Germany
IC 2	Coastal zone Cyprus	Cyprus
IC 3	Algarve region	Portugal
IC 4	Southern Adriatic-Dinaric Coast	Slovenia, Croatia, Bosnia-Herzegovina, Serbia, Montenegro, Albania, Greece
IC 5	Aquitaine - Gironde Estuary	France
IC 6	South-Western Mediterranean Coast	Spain
IC 7	LLobregat Delta	Spain
IC 8	Thessaloniki - Chalkidiki Coast	Greece
IC 9	Dammour region	Lebanon
IC 10	Izmit Bay	Turkey
IC x	Open to other proposed IC's	Open

- Knowledge capture
- Saltwater intrusion mitigation
- Global water management scenario builders
- Sustainable supply of quality water
- IWRM / DSS
- ...

- Alternative water resources
- Active water management (e.g. recharge/storage)
- Monitoring/Forecasting networks
- Optimization infrastructures
- Active seawater intrusion barriers
- ...



Implementation Cases, approach

To provide WSSTP with - a strategy implementation plan,
- predict impacts, - select alternatives with the largest net social welfare value and - justify investments:

A Identification and quantification: IC's assessment

Stakeholders needs and priorities, Scope of Work

B Identification and quantification of solutions

Generic technologies & Enabling technologies

C Economic estimation and valuation of the possible solutions *Consortium, Costing, Financial engineering*

D Criteria for project justification

E Sensitivity analysis

F Business Plans - Project Plans – Proposals

submissions for best fitting solutions

IWRM: Nature aspects, Socio-economical aspects, Governance aspects,

Technology implementation aspects, Legislation and policy aspects, Financial aspects, 8

Risk and acceptance aspects



To know more :

http://cordis.europa.eu/technology-platforms/home_en.html

www.WSSTP.org

Thank you for your attention



Financial Engineering

Generic and Enabling Research and Technologies (RTD)

Grants & subsidies:

National research funds & bilateral EU - 3rd countries funds, FP7, EUREKA Cluster WATEAU, ERA-NET+, Regions of Knowledge

Risk sharing support:

EIB/FP7 RSFF (Risk Sharing Finance Facility)

Implementation Cases

Public-Private partnerships (Private co-investment)

Structural/Regional/Cohesion funds

Debt financing:

EIF (Venture Capital Funds)

EIB (project finance model, corporate finance model)

Natl banks guaranteed by EIB



Links & Bridges

With EU Integrated Projects (IP) -AQUASTRESS, NEWATER, TECHNEAU, AQUATERRA, SWIFT

Key Environment Projects -GEOSS

Other Technology Platforms: Synergies

SUSCHEM (biorefinery, smart factory)

ZEP, Steel (water cycle, shallow aquifer protection for CCS)

NANOTech. (chemical sensors, water purification, desalination, catalysts)

Smart grids (monitoring networks)

ECTP Construction (distribution networks)

Manufacture (water management products & infrastructure)

Sustainable nuclear energy (water cycle-cooling)

EUMAT (high technology materials)

BIOMASS (water & waste mgt)

Key Organizations -EWP, EWI, INBO