

WATER QUALITY

**Monitoring of specific substances in the environment
(monitoring, prevention, micro-contaminants, soil and water
environment)**

- **Chemical pollutants/priority substances**

WATER AND HEALTH

- **Drinking water supply systems renovation**
- **Dangerous substances monitoring and elimination**

- **WATER POLLUTION**

- **Membrane technologies in water and wastewater treatment,, closing water cycles in industrial plants**
- **Models of operation and revitalization of water and sewerage infrastructure (innovative reconstruction methods,, innovative treatment technologies, hydrotechnical constructions)**

- **CLIMATE CHANGE ADAPTATION**

- **Extreme events alleviation, innovative storm overflows design,**
- **Sludge transport in sewerage systems – integration into treatment systems**
- **Forecasting, monitoring and treatment of rain waters**
- **Flood risk management in urban areas**

The Strategic Research Agenda of the Polish Platform of Environmental Technologies is open to new subjects,

like those give in the last FP7 call :

Vulnerability and increased drought risk in Europe FP7 ENV.201101.1.3.2-2

Integrated resources management – Lagoons in the context of climate change

FP7 ENV.2011.2.1.1-1

Water resources - **Hydromorphology and ecological objectives of WFD**

FP7 ENV.201102.1.2.

Other subjects related to recently approved integrated FP7 project PREAPRED will find more attention in the nearest future.

- Monitoring water resources based on satellite images as a tool of water management
- Risk assessment in the context of climate change
- Rain water storage and use in municipal areas
- Rain water collection for ground water supplementing
- Indirect rain fall determination and application in instant forecasting models

WSSTP

Water Supply and Sanitation Technology Platform

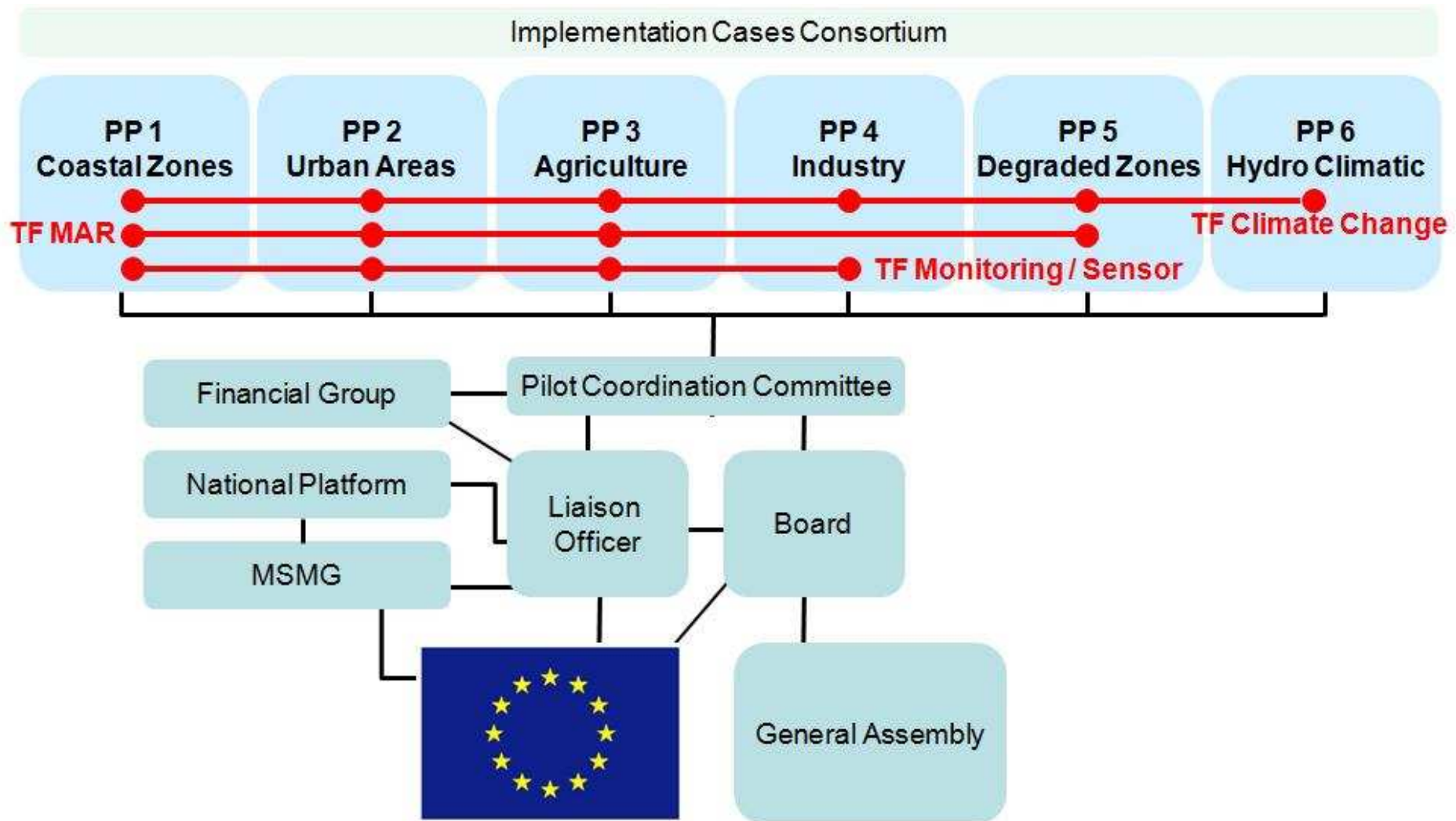
i.e. the **European Platform for Water**

- WSSTP elaborated a Strategic Research Agenda for Europe
- In order to provide strategic answers for the water research future challenges, from fundamental research to implementation has set up 6 pilot programmes to cover all water related issues of our societies

1. Mitigation of water stress in coastal zones

- 2. Sustainable water management inside and around large urban areas
- 3. Sustainable water management and agriculture
- 4. Sustainable water management for industry
- 5. Reclamation of degraded water zones (surface and groundwater)
- 6. Proactive and corrective management of extreme hydro-climatic events

WSSTP structure



- **R&D needs included in new SRA**
- •Balancing Supply and Demand
- •Development of water saving concepts and technologies
- •Methods of customer education promoting efficient use of water (EUW)
- •Advanced metering technologies to promote EUW
- •Develop tools to understand, predict and manage demand
- •Alternative Water Resources
- •Identification of potential sources
- •Reduction of the environmental impact of desalination plants
- •Development of other advanced technologies to permit the re-use of waste water
- •Treatment systems for rainwater harvesting
- •Definition of water quality requirements for various uses
- •Determine the impacts of water demand and supply management options

- **Public Health**

- (Microbiological) Risk Assessment and management tools “from resource to tap” for assuring drinking water quality
- Monitoring systems to detect low levels of chemicals and microbiological contamination in river water or distribution systems
- Improved processes for removal of microbial pollution (including virus) and emerging contaminants

- **Safeguarding the Environment**

- Methods to monitor and remove point source and diffuse chemical and biological pollutants, including emerging/priority contaminants
- Develop water and wastewater treatment systems having reduced energy and chemical usage
- Develop better methods and tools to determine environmentally sustainable river flows
- Decision support systems for the implementation of the sustainable management of bio-solids in urban areas
- Develop processes to produce energy and usable products from bio-solids and other residuals

- **Accommodating Extreme Events**

- •Modelling tools for integrated risk assessment and management of urban flooding and pollution

- •Integrated, quality based storm water management systems

- **•Infrastructure**

- •The development and introduction of easily accessible below ground pipe channels

- •Gain an understanding of scaling, corrosion and bio-fouling and corrosion of below ground assets and develop suitable methods for identification and remediation

- •Develop advanced, non-disruptive methods for maintaining and replacing underground assets

- •Asset management tools for sustainable maintenance and upgrade programmes and for integrated design of networks and decentralized processes

- **•Enabling Framework**

- •Identify most appropriate, risk management, IWRM tools and Decision Support Systems (DSS) for various water industry applications
- •Gain agreement on standardised approach for the above
- •Research the relative importance of the barriers to the implementation of integrated water solutions
- •Identify the most appropriate knowledge transfer and education methods

MSMG

Member States Mirror Group

- The MSMG contributes in the objectives of the Water Supply and Sanitation Technology Platform WSSTP with the aim to develop, promote and exploit a program of research, communication, training and knowledge transfer that will stimulate and underpin co-operation and innovation in the European water sector. The MSMG fulfils the objective by among other providing relevant advice and support to the WSSTP, also contributing to the implementation of the European Strategic Research Agenda .

Several other activities are undertaken to participate in the overall European effort in resilient water resources

inter alia we are interested in participation

- **ERA-Net on Water Research and Water Management**
- **The ERA-Net will function through a “facilitating group” of 6 organisations that will facilitate the network, and in particular support a number of Thematic Action Groups (TAGs)**

TAGs are open groups which exchange information, aiming to:

- Bring together national and international knowledge with respect to (research) questions in a specific field.
- Identify and validate research needs
- Promote / coordinate research investments answering to these questions.



Thanks for your attention