Title: Water Supply and Sanitation Technology Platform
Detailed information:

Overall Policy Objective:

To meet the global challenge of ensuring safe and secure water supply for different uses and sanitation services through the development of sustainable technologies and of appropriate institutional frameworks.
To promote step changes in the technological capacity of the European Water industry, consolidating and strengthening its position in the world market.

***Europe's technological position in a global context*:**

European **Water enterprises** are **world leaders** in delivering water services. However, European technology providers and engineering companies have to face a very strong competition.

European research on water technologies is of very good quality, but the sector's **expenditure in research** still remains **low** in comparison to the dimension of the Water market.

The **challenges** posed by the world need to **provide water and sanitation to billions of people and to economic activities** and the connected growth of the world water market need the **development of long-term visionary research activities to produce step changes in the water system towards sustainable solutions**. **Climate change** is further threatening the availability of clean freshwater resources in many parts of the world. These challenges can only be tackled through a wide and concerted **public-private effort**.

Research activities, at European, national and local level, in the water field have been publicly and privately supported, particularly in more industrialised countries, for many years. More convergence and efficiency is definitely necessary, **mobilising critical resources** to competitively deliver valuable **tools and solutions to the European water industry and to consumers**.

Research and development activities in **FP5** invested a budget of about **100 M€ in water technology** areas. **FP6** showed a spread of water technology related topics among few priorities with an initial overall allocation of financial resources lower than FP5. After the approval of the **Environmental Technology Action Plan**, new more substantial actions on Water Technologies have been introduced in the FP6 Work Programme of Priority 6.3 "Global change and ecosystems".

The **fragmentation**, and likely unavoidable **duplication**, of research activities considered simultaneously with national, regional and locally dispersed initiatives, public or private sector funded, needs to be efficiently addressed through a **common vision** and the establishment and **adoption of a strategic research agenda** and an **action plan**, with due attention to **addressing the existing barriers for the diffusion of new technologies**.

Many international and European Water associations and networks currently exist but specific driving forces are diverse, varying from research to industrial interest. A shared **platform bringing together all the key actors** will be an excellent opportunity to overcome such obstacles.

Primary Technical, Economic and Political Justification for action:

The today's water system, infrastructure-intensive and capital-demanding, was conceived centuries ago and grew slowly as result of a low technological adaptation capacity. The **growth of the world population, the economic development** and the growing **degradation of clean freshwater resources** make this system unsustainable for the world of tomorrow. Competing water users and sectors are more and more becoming potential sources of conflicts with wide political and socio-economical consequences. **Climate change** impact is dramatically worsening the future scenarios, either because **water availability** is expected to become critical in many parts of the world – particularly in large metropolitan areas – or because of the increasing **flood risks**. New **security needs** are growing, requiring new technologies and new system management.

Worldwide market for water and waste water amounted more than **€ 250 billion** in 2002, and analysts foresee an anticipated overall **growth rate of 18% by 2005 and of 60% by 2010**. The World Bank has ongoing commitments of about € 17 billion in water projects. The EIB loans for water and sanitation projects, more than 300, totalled about € 8.,3 billion over the last 5 years.

The **European water sector** is a major economic player (**1 % of the EU15 GDP**) that generates many positive impacts from a social, economic and environmental perspective. In the recent years, the **turnover** of this sector (about **€ 80 billion in the EU**) grew by an average of 5% per year compared to 2.5% for the average growth of the economy. Also employment in this sector grew faster than the turnover, at a rate between 6 and 7% per year.

Water policy is a large part of European environmental legislation. Regulation is still today a major driver for investments. In particular the requirements of the Drinking Water Directive, the Urban Waste Water Directive – particularly for the new member states - and the implementation of the Water Framework Directive will necessitate **massive investments in the water sectors of the EU 25**, representing a considerable fraction of the Regional Funds, to upgrade and to extend water supply and sanitation systems and to bring water ecosystems to a good ecological and chemical status.

Demand for water services on the international markets have been covered successfully by some of the major European water service providers, a position that should be strengthened and consolidated. It is expected that if the trend of concentration and globalisation in this sector will continue, **less than 20 large undertakings may control 50% of the private participation of the world water market by 2015**.

The European water industry is working in a **worldwide competing market** where the major criteria for success are finance, technology portfolio, internationalisation and attention to users needs. However, to face future challenges, additional efforts and **investments in research** are required to foster international competitiveness. Developments of **new and cost-effective technologies** are primordial in the water market, which is increasingly considering and integrating environmental externalities and energy aspects.

At global level, the **objectives** set in **Johannesburg** – to halve by 2015 the number of people not having access to safe drinking water and adequate sanitation – have to be achieved. There is a growing awareness that the water-related Johannesburg objectives are of fundamental importance for the success of poverty reduction strategies. For this, the EU has launched the **EU Water Initiative** and a **1 billion € EU Water Facility** for Africa and ACP countries has been established. However, the simple transfer of existing consolidated "western" technologies would be too expensive with respect to the possibility to mobilise public and private financial resources, and would lead to **unsustainable consumption of water resources**. The establishment of partnerships should not only help wider financial fluxes, but should lead – through better access to knowledge - to a wider access to appropriate technologies and technological services. The promotion of **technological ingenuity** and **public awareness** worldwide will help to remove barriers that limit the potential diffusion of new sustainable technologies.

The proposed Technology Platform should address **both problems of Europe and of other regions of the world**, knowing that any research result in the broad field of water technologies that may allow to **reduce the costs and to improve quality, safety and long-term sustainability** allows reducing the time needed for achieving the MDGs and makes financial resources available for broader objectives.

Only a very broad **public-private partnership** may put together the **critical mass of willingness and resources to face with one of the most critical challenges of the new Millennium.**

Development of the Technology Platform (State of play):

- **November 2002**: Constitution of the **Water Issue Group** in the framework of the development of the Environmental Technology Action Plan (**ETAP**);
- **March 2003**: Wide multi-stakeholders consultation within the Water Issue Group; first **proposals of a Water Technology Platform;**
- **August 2003:** Publication of the Water Issue Group report;
- **January 2004**: Adoption of the **Communication** "Stimulating Technologies for Sustainable Development: An Environmental Technologies Action Plan for the EU*"
- **May 2004**: First stakeholders meeting.
- **June 2004**: call for proposals including an **SSA** as support for the water supply and sanitation technology platform (deadline October 2004);

(*COM(2004) 38 final (http://europa.eu.int/comm/environment/etap/etap.htm)

Activities ***(existing and planned in short term):***

More than **180 funded projects** under the **FP5 key action** "Sustainable Management and Quality of Water", of which about 40% are dealing with technologies that may be linked to the Water Supply and Sanitation Technology Platform;

Some **Clusters of projects**, such as **CITY NET** on integrated urban water management and related technologies, **CLUED'EAU** on drinking water research, will support the Technology Platform.

- **February 2004 onwards**:
  - elaboration of a more detailed implementation planning, discussion and contacts with key players;
  - **new FP6 projects** (Integrated Projects on Integrated Urban Water Management and on Technologies for Drinking Water Systems and STREPs on various technological subjects) under the area "Water cycle and Soil related aspects" will be included as elements of the Technology Platform;
  - actions to strengthen the link to the EU Water Initiative and to other FP6 water related activities, in particular dealing with **International Cooperation** (INCO), **programme coordination** and joint activities conducted at national or regional level (**ERA-NET**) and European Organisations (**JRC**);
  - reinforcement of links with European and International water research and industry associations;
  - feasibility analysis and road map definition, including an inventory of national and local water related programmes and activities;
- **May-July 2004**: expected constitution of the **Technology Platform Board,** the **Member States Mirror Group** and launch of the Technology Platform
- **Secretariat** (Commission services initially, then EU FP6 Specific Support Action).

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