

# The research demands of the Water Framework Directive (WFD) Common Implementation Strategy 2010 – 2012.

Peter Gammeltoft, European Commission, DG Environment

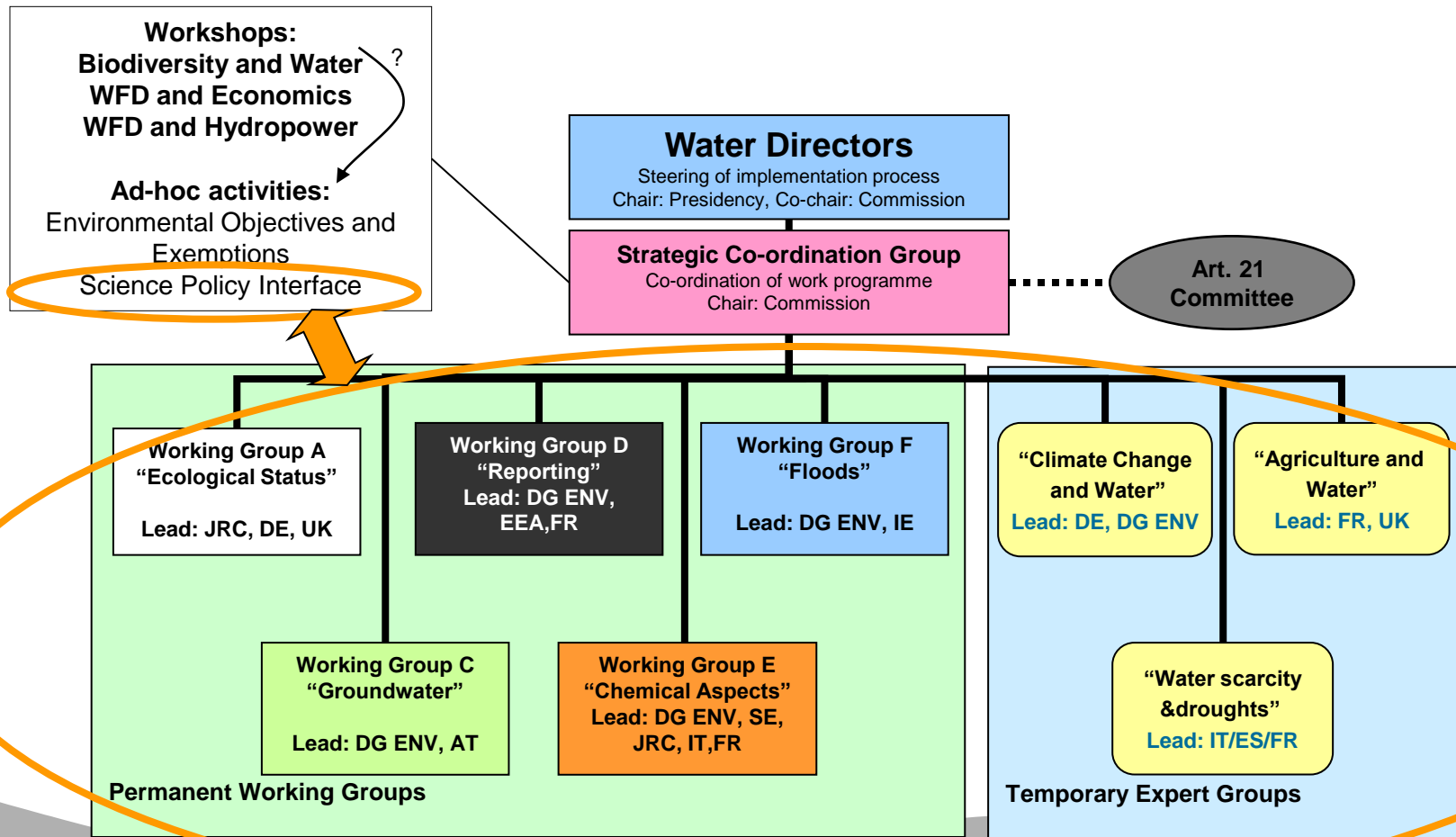
IWRM-Net final conference, Brussels, 1/12/2010



# Contents:

- **WFD Common Implementation Strategy (CIS)**
- **Key conclusions from recent event on research needs for CIS**
- **The Blueprint to safeguard EU Waters**
- **Towards a prioritization of research needs for FP8**

# WFD Common Implementation Strategy (CIS) Organisation 2010-2012



# « Water Science meets Policy » : Key research needs identified (1/2)

## ■ Ecological Status, Hydromorphology:

- new bio-assessment tools: fill the gaps, extrapolation
- Interaction sediments / flow / connectivity + links with biodiversity and ecosystem services

## ■ Groundwater

- fate and behaviour of pollutants
- Groundwater dependent ecosystems and groundwater as an ecosystem
- impacts of climate change
- interactions between energy policy

## ■ Chemicals:

- Improvement/development of chemico-analytical methods consistent with EQS Directive
- Evaluation interactions between substances and effects on environment

# « Water Science meets Policy » : Key research needs identified (2/2)

## ■ Floods

- Ecosystem-based approach
- Climate change adaptation.

## ■ Water Scarcity and droughts

- Indicators
- Impacts of climate change and adaptation

## ■ Agriculture

- evaluation cost-effectiveness of water resources protection measures
- up-tacking of measures by farmers

## ■ Horizontal needs for RB managers:

- Scale-specific indicators (e.g. river basin-wide indicators)
- Social approach with uncertainties and model inputs
- Ecosystem services (e)valuation
- Water Cycle/ Land use
- Measures
- Synergy between Directives

# 2012: A Blueprint to safeguard EU Waters

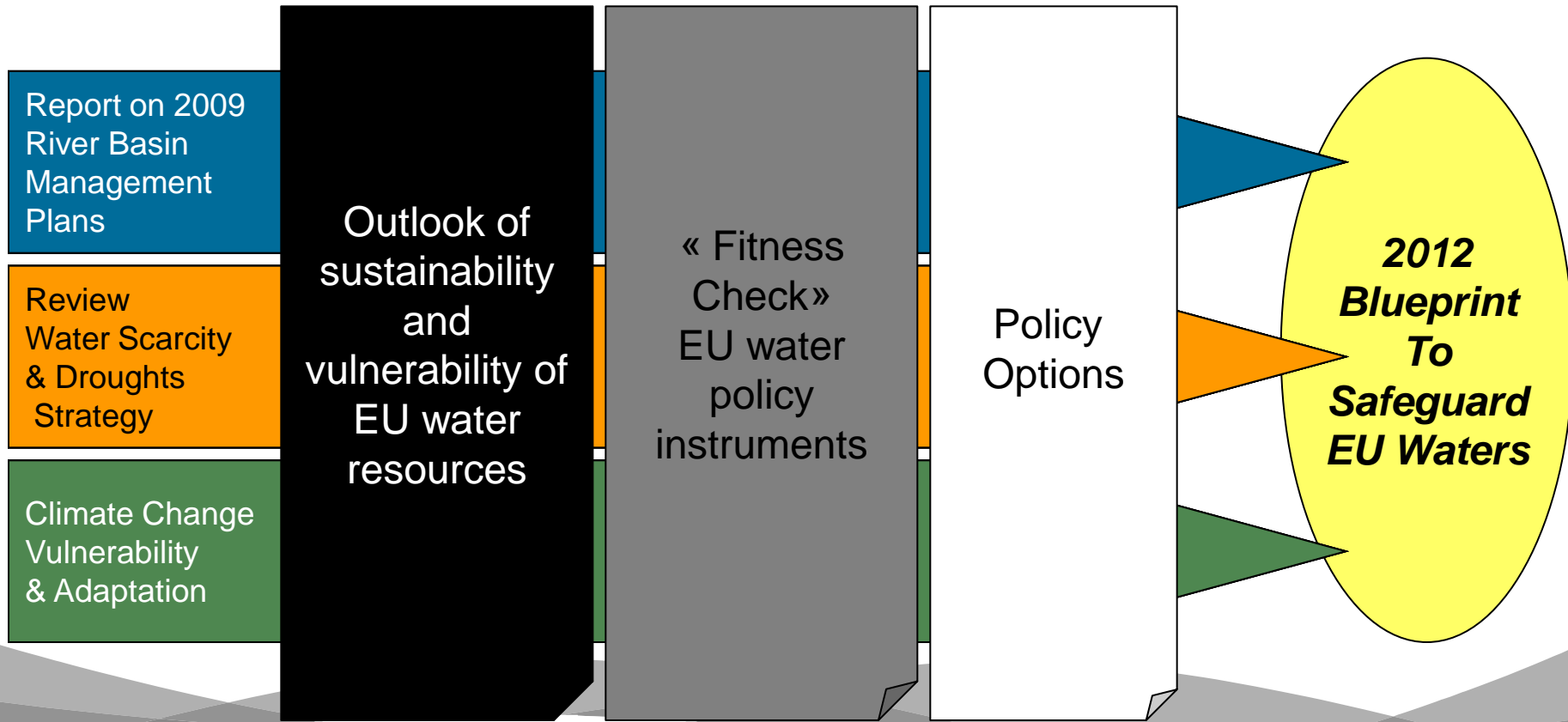
## ■ The Blueprint will include the 3 reviews foreseen for 2012

- Assessment of river basin management plans
- Review of the Strategy for Water Scarcity and Droughts
- Review of the vulnerability of water and environmental resources to climate impacts and man-made pressures.

## ■ The Blueprint will:

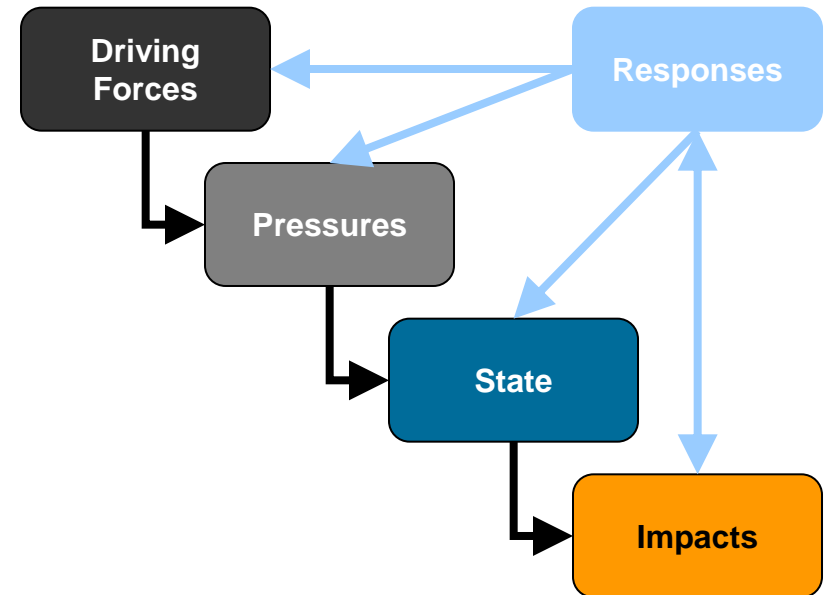
- **Look back** and assess the implementation and achievements of policies and measures in place to ensure the protection and availability of EU water resources
- **Look forward** at the evolving vulnerability of the water environment to assess the sufficiency of existing measures and tools, and evaluate potential new instruments to ensure a sustainable use of good quality water in the EU in the long term.
- The Blueprint will synthesise **policy recommendations** drawing from the evaluation exercise, and will be accompanied by a number of reports and new initiatives, including of a legislative nature if appropriate.

# Impact Assessment



# Outlook of sustainability and vulnerability of EU water resources

- Both medium term (policy implementation horizon) and longer term (robust decision making under uncertainty)
- Drivers: mixing demographic, socio-economic developments and climate change.
- Pressures: cross-sectoral perspective, focusing on production & consumption processes
- State: identifying thresholds, recovery time, etc.
- Impacts: strong emphasis on ecosystem services

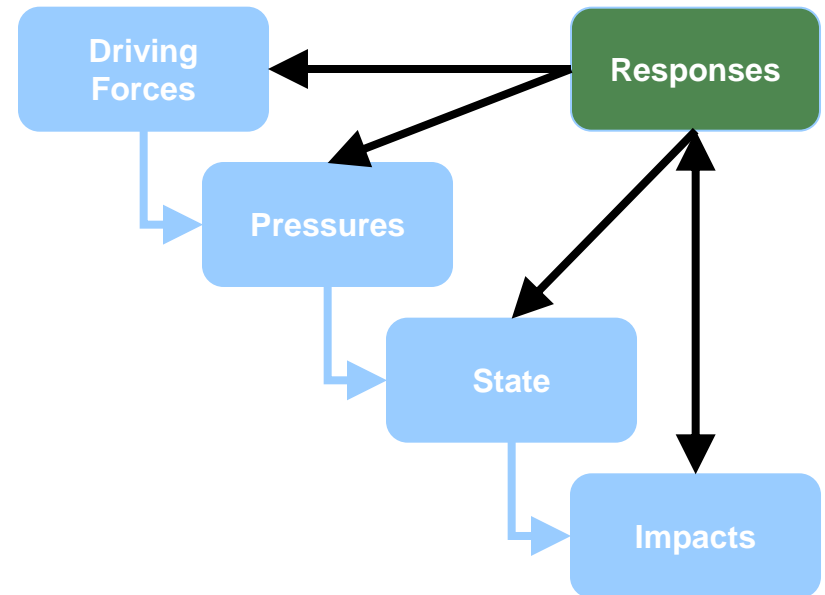


## Tools:

- Water balances & ecosystem accounts
- Integrated Modelling (hydrology, land-use, resource efficiency)
- Knowledge mapping
- Mix of Global, EU and local focus

# Policy options

- **Mainstreamed into Europe 2020 priorities**
- **Options to be developed i.e. in the following areas:**
  - Demand management in water stressed areas
  - Improved water efficiency in different sectors,
  - Spatial measures "green-infrastructure" approach.
  - Mainstreaming of climate change adaptation in water policy
- **Cover the broad scope of potential policy options:**
  - Regulation
  - Economic instruments (Pricing, Cap&trade, etc.)
  - Labelling
  - Soft-coordination mechanisms
  - Support Tools



# The Blueprint will just be the starting point.

- **The Bueprint will :**
  - make use of all relevant scientific knowledge
  - identify the gaps and set a research agenda for the next 10 years,
  - facilitate the implementation of an integrated and adaptive management approach for water resources.
- **Interaction with policy making should happen both:**
  - at EU level to support a strategic vision for EU Water policy,
  - at river basin level, for the next generations of RBMP (2015, 2021).
- **Need to improve the interaction, not only between science and policy makers, but also with end water users:**
  - Need for targeted communication of scientific evidence, as they will have to implement and bear the cost of the measures.
- **Transform WISE in a real knowledge sharing platform**
  - Access to results of research projects, demonstration studies, etc. in a structured way
  - Link with data from monitoring and indicators, and guidelines for policy making.