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Interfacing mechanism between science and policy

An EC case study on floods and droughts

International Workshop on Disaster Risk Reduction
Brussels, 29-30 October 2009

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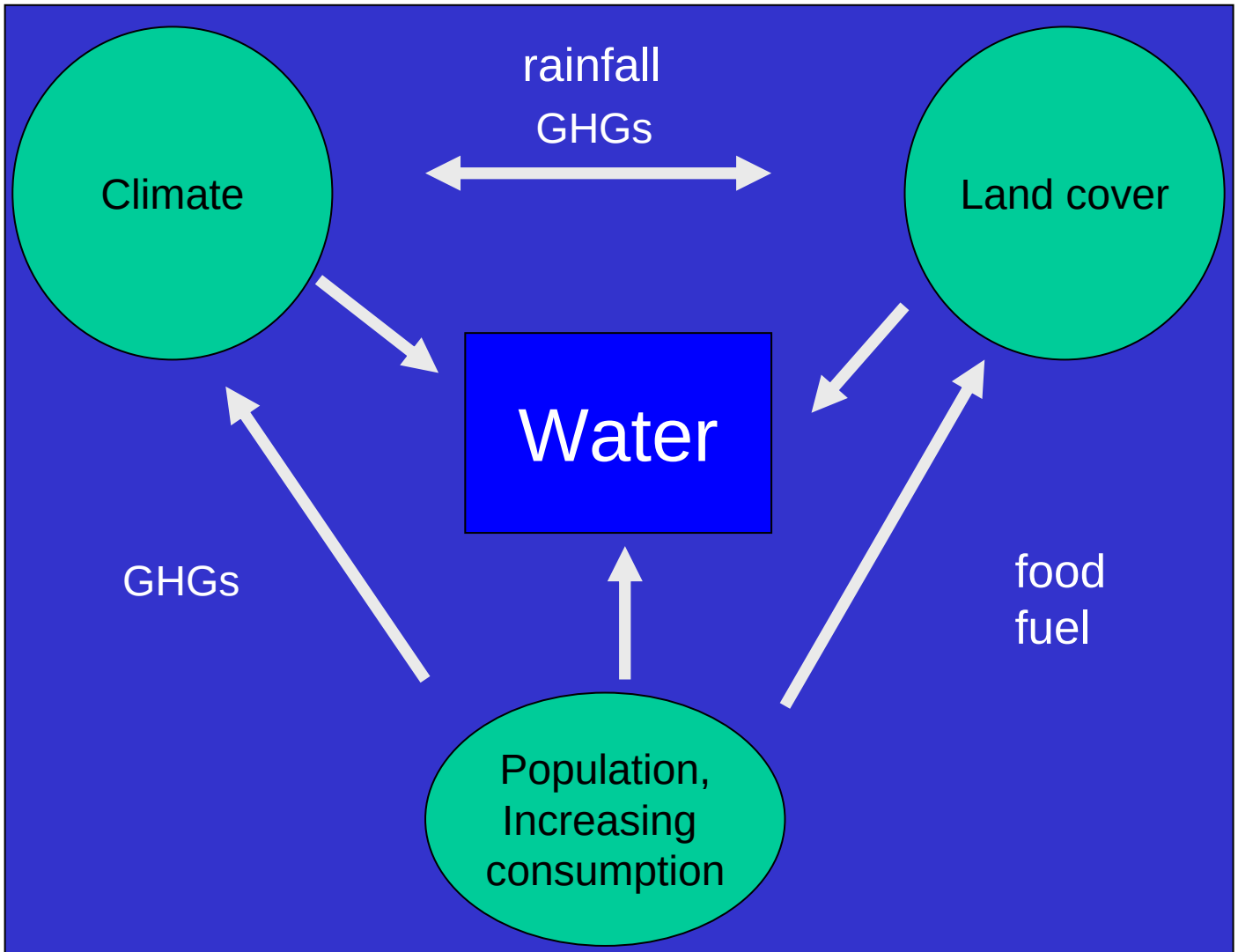
SEVENTH FRAMEWORK PROGRAMME

Global Drivers of Change: Need for understanding interactions



From Richard Harding, Centre of Ecology & Hydrology (WATCH)

Natural hazards in Europe

2007 IPCC reports : future trends

Climate related natural hazards will increase throughout Europe, although different type of hazards will predominate in different regions e.g.

- Increasing risk of floods, snowmelt-related floods, flash floods
- Possible storms increase in the north-eastern Atlantic, decrease in storminess and wind intensity in the Mediterranean
- In mountains, change in T° and snow conditions may increase avalanches, affect permafrost and rock falls
- In the Mediterranean, decrease precipitation and increased temperature may lead to a longer fire season and dry season.

But considerable uncertainty e.g. about rainfall trends, magnitude of changes – Different hydrological models give different responses to rainfall drivers

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Anticipating – Feeding with research outputs linked to well defined Poliy milestones

WFD

Adopted on 20.12.2000

+

Parent legislation & policy trends

- ☑ Flood Directive
- ☑ Water scarcity & drought
- ☑ Disaster Response capacity

River basin districts Delineation water bodies
2005

Analysis of pressures and impacts
2005

Design of monitoring Programmes
2006

RBMP – 2009/2015

6 years cycle / Review

Programmes of Measures
2012

GOOD STATUS OBJECTIVE

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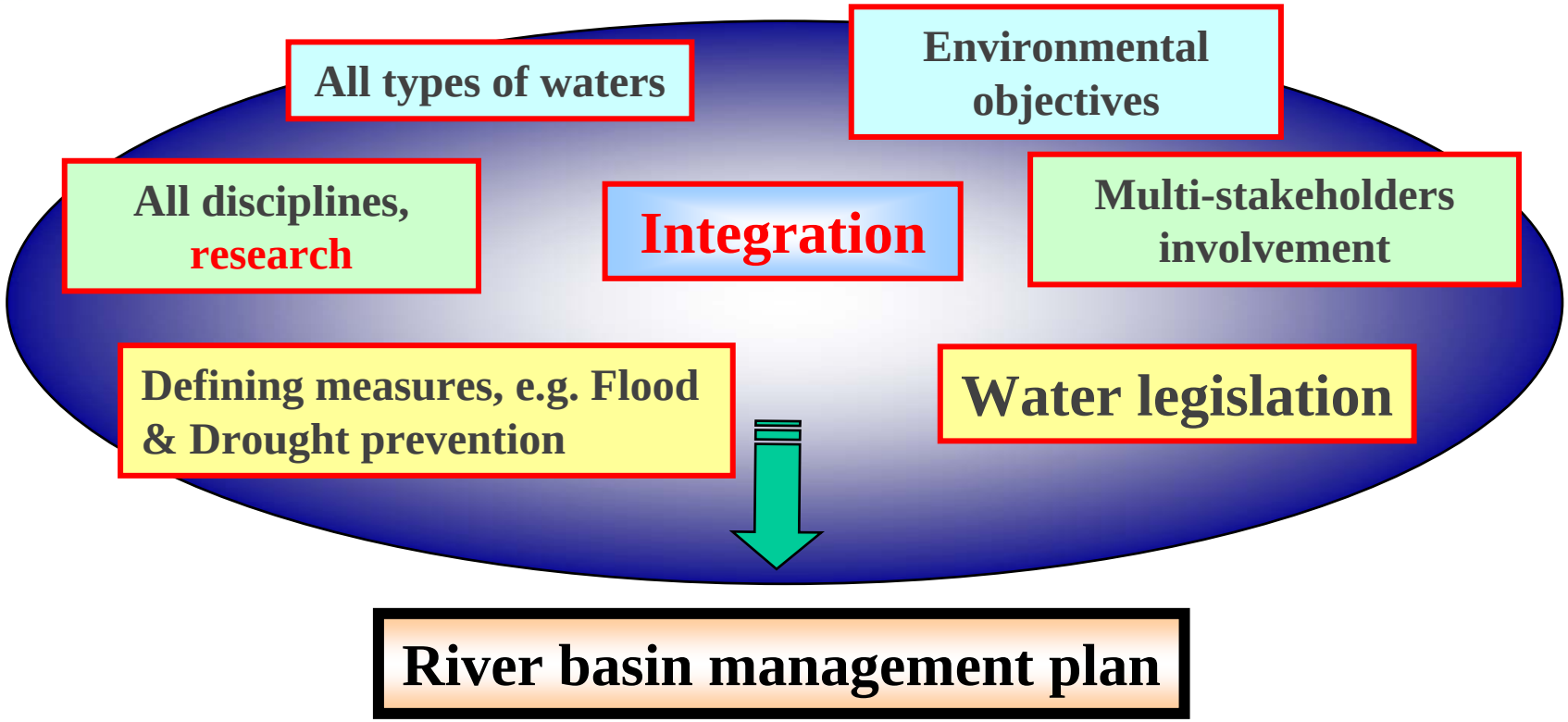
In principle….



Key underlying principles (1)

- Addressing diversity of flood events across Europe, such as river floods, flash floods and debris flows, coastal flooding
- Different types of droughts (meteorological, agricultural, hydrological) not to be confused with water scarcity (linked to availability and demand)
- Flexibility for planning (risk assessment, mapping) and action at local / regional / sub-basin level whilst ensuring cooperation / coordination across the basin



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Key underlying principles (2)

- Building on experience (including research), planning and programmes already in place; using existing cooperation structures such as river basin agreements (links to WFD) and civil protection plans

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Tackling scientific challenges through FP7 in the environment sector

Main drivers:

✓ International commitments (e.g. Hyogo Framework for Action), initiatives concluded by the EU and its Member States

✓Existing and emerging EU environmental legislation and policies

✓Implementation of the 6th Environmental Action programme, associated thematic strategies and the action plans

✓Climate and environmental change, their consequences and the link to energy

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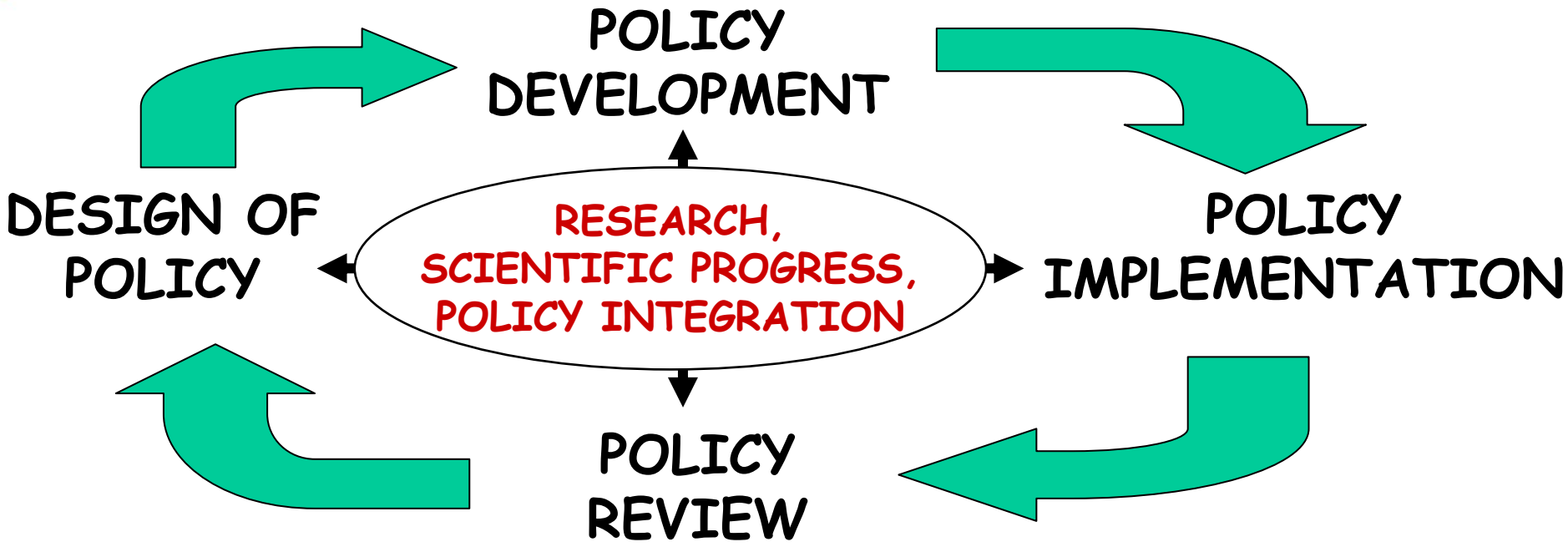
Establishing links with 'science-users'



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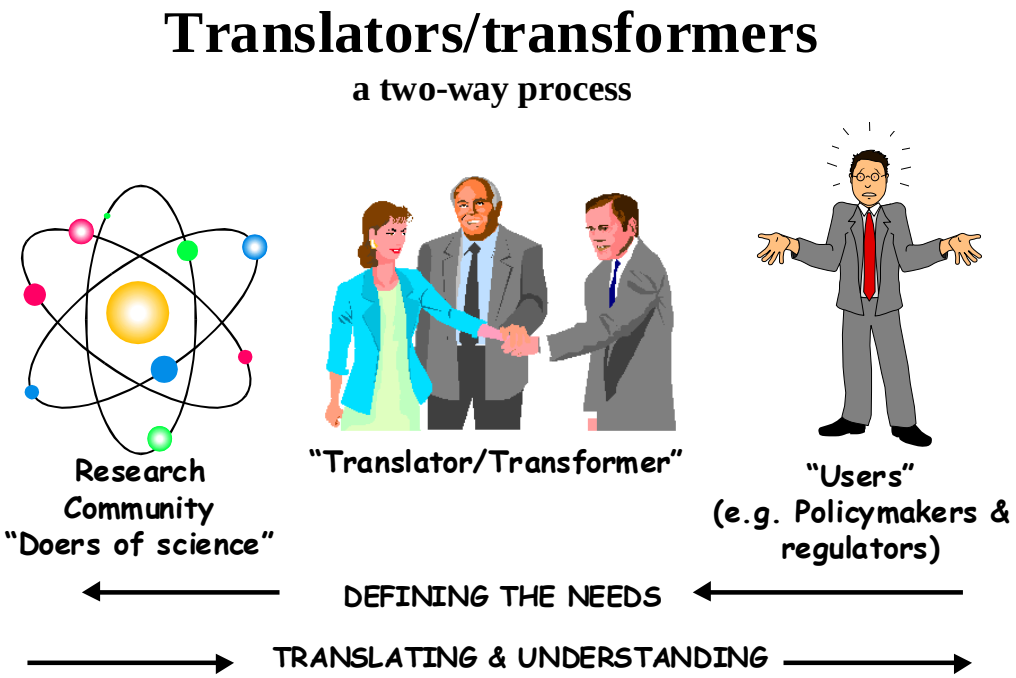
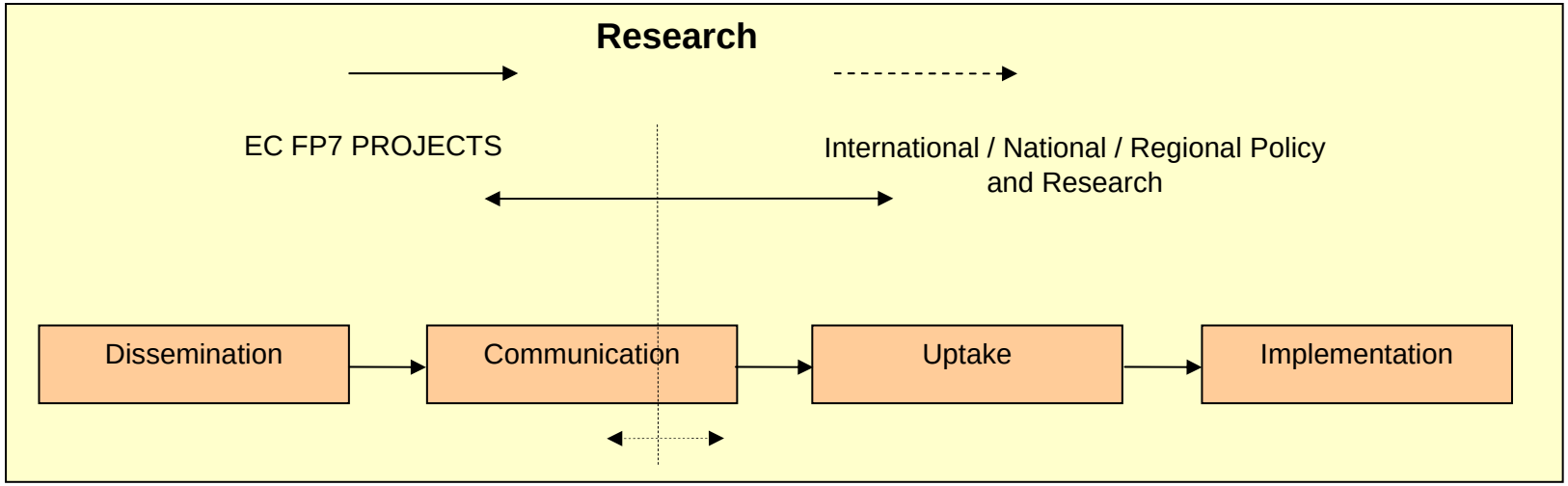
Communication involves two way exchanges of research information

- **who** - is your audience or the users of the information?
- **what -** do they need to know?
- **how** - is it best presented?
- **when -** do they need the information?



Courtesy of Peter Allen-Williams (IWRM.Net) & Bob Harris

Research results
Four stages to implementation



Courtesy of Peter Allen-Williams (IWRM.Net) & Bob Harris

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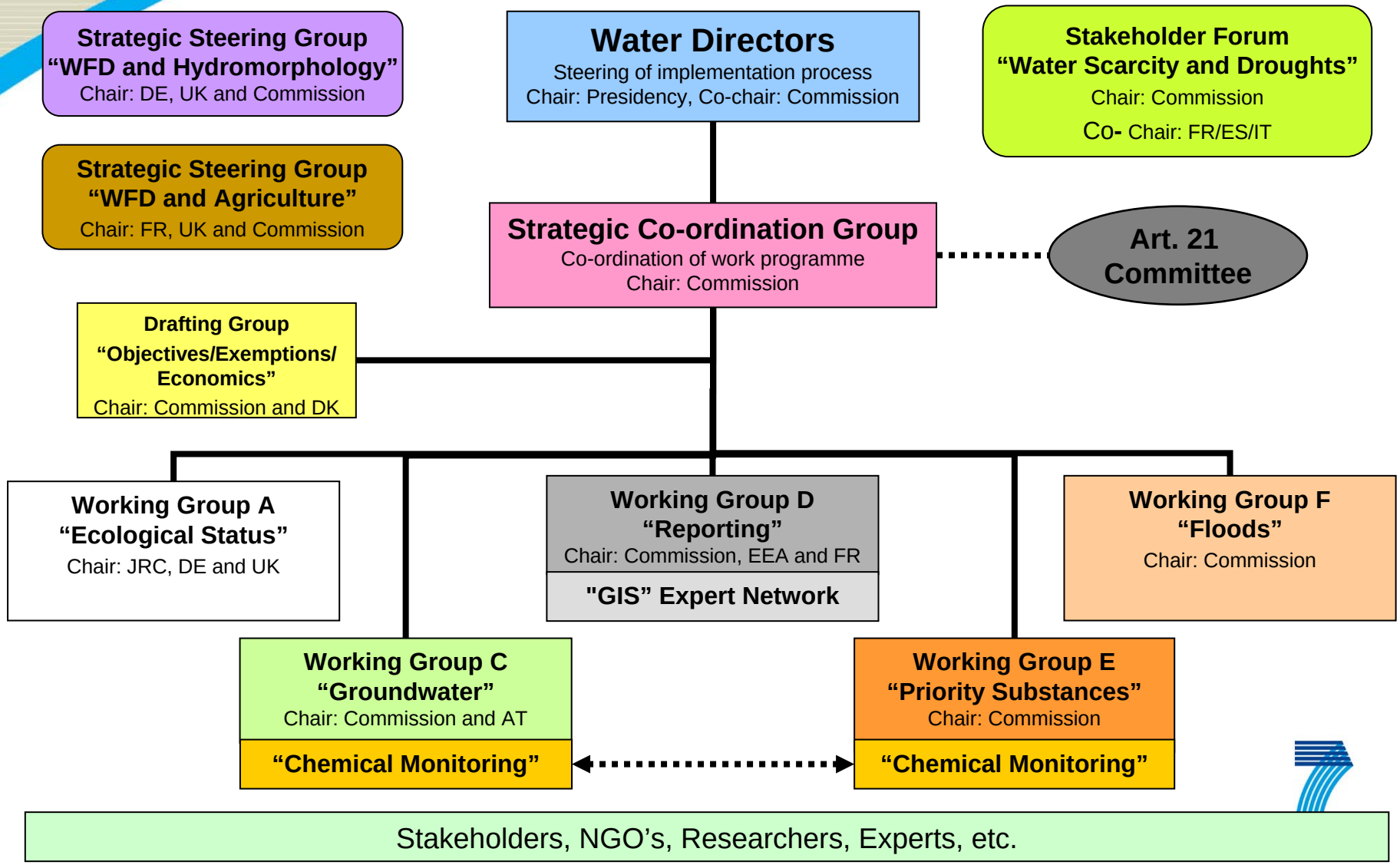
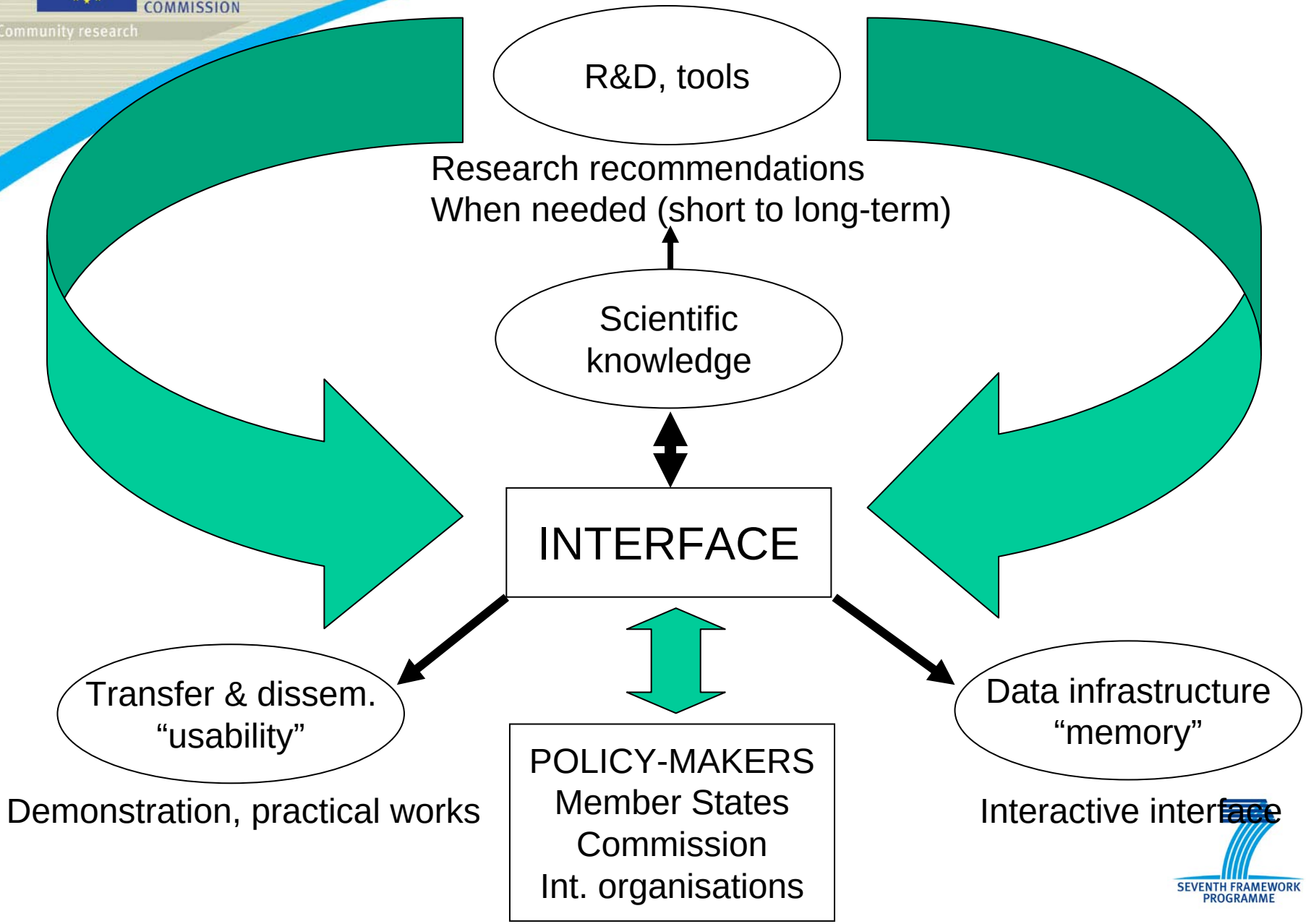
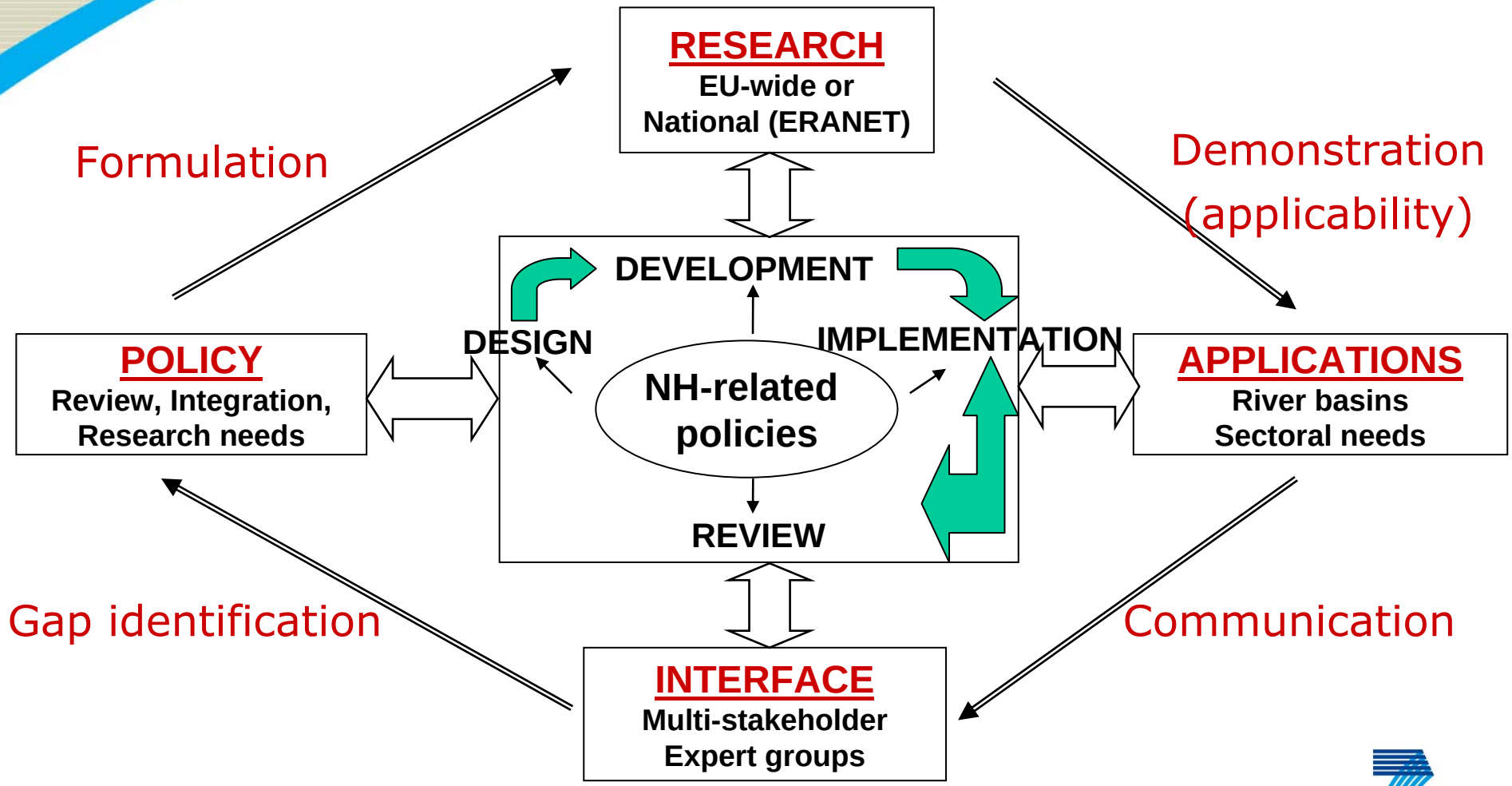
One route to find user's ears: WFD Common Implementation Strategy



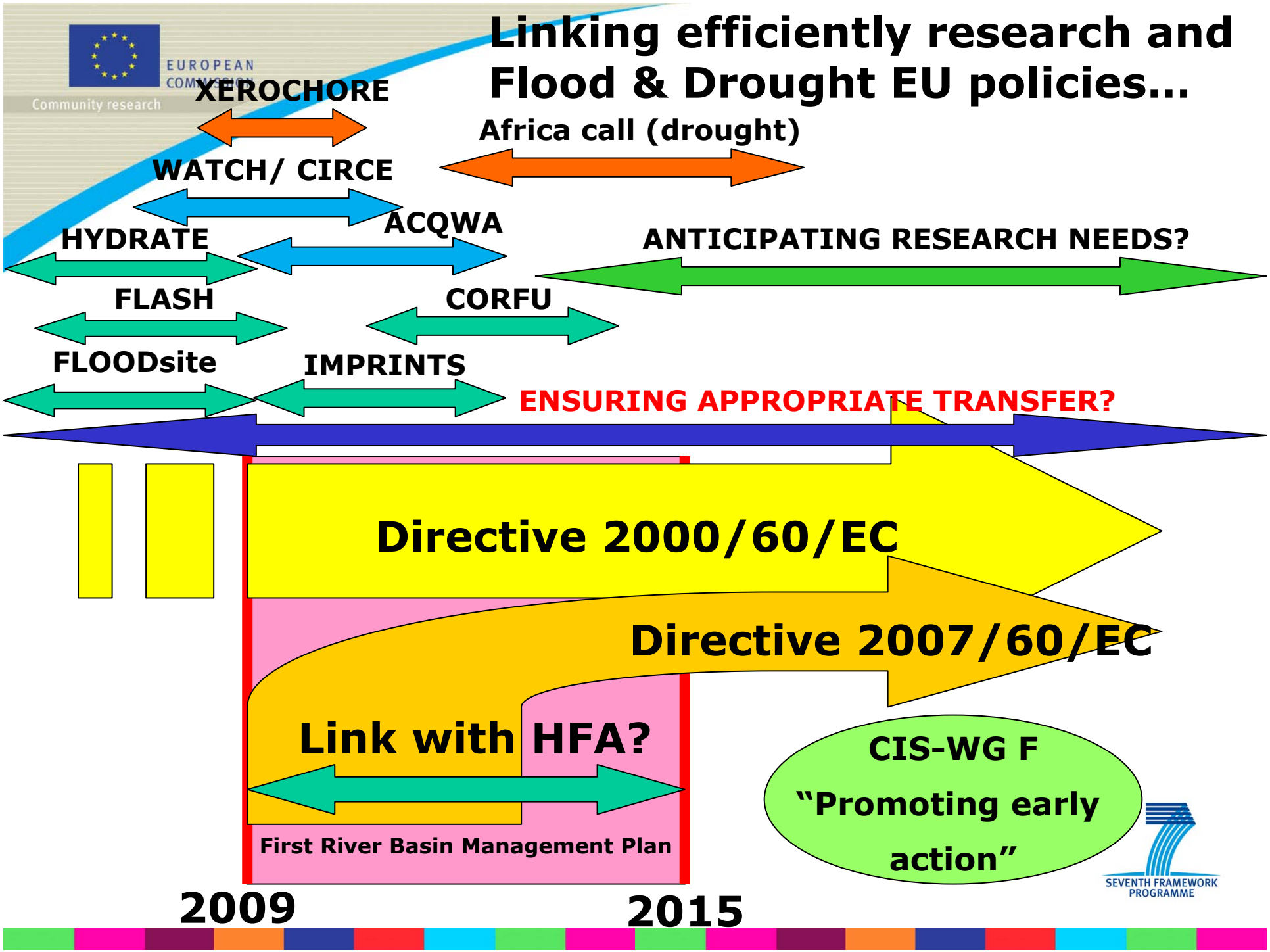
Interfacing mechanism



Seen from a different angle…



Linking efficiently research and Flood & Drought EU policies…



Conclusions

- EU-funded research establishes close links with international policy developments e.g. through participation in IPCC, UNFCCC, ISDR etc.
- At EU level, direct support to policy developments and implementation with participation of policy-makers and stakeholders in research consortia and involvement of scientists in policy discussions
- At international level, European inputs are fully relevant to carry out worldwide and multidisciplinary research on climate change impacts on water
- However, strong need for strengthening the efficient transfer of research knowledge to policy-makers with the perspective of reducing uncertainties of predictive scenarios for better decision-making at policy level

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Thank you very much for your attention

More info on

http://ec.europa.eu/research

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