



European
Commission



Transforming Science into Innovation for Civil Protection and Efficient Disaster Risk Reduction

Philippe QUEVAUVILLER

*"Security Research and Industry" unit
DG Enterprise and Industry*

Brussels , 04 July 2013



Policy drivers

Internal Security Strategy (2010)

- **Serious and organised crime**
- **Terrorism**
- **Cyber-crime**
- **Border security**
- **Natural and man-made disasters**

Innovation Union

- **Strengthen the innovation chain and boost levels of investment throughout the Union**

UN Hyogo Framework for Action

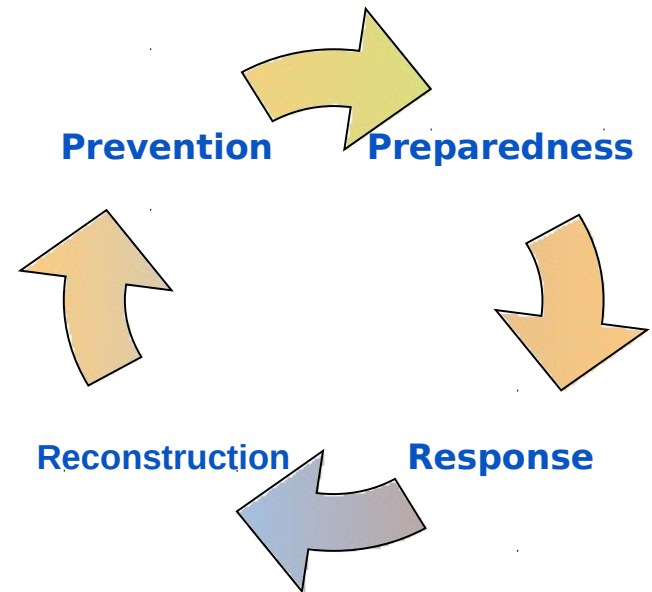


*Linking the actors and policies
throughout the disaster
management cycle*

*Making existing instruments
perform better for disaster
prevention*

*Guidelines for minimum
standards for disaster
prevention*

*Development of a risk
management policy*



Research contributing to the Disaster Risk Management Cycle



PRE-DISASTER
From Hazard to Risk Assessment, Forecasting, Early-Warning, Multi-Risk management and Governance, Prevention / Mitigation

DG Reseach & Innovation
"Environment Programme"
"Research Infrastructures"
(ERC / REA)

POST-DISASTER			RESPONSE		
Reconstruction Development	Economic/social recovery Risk Assessment	Prevention	Warning/ Evacuation	Saving people	Assistance/ Emergency response Damage Assessment

DG Enterprise & Industry
"Security Programme"
"GMES"
(ERC / REA)

POST-DISASTER
On-going assistance Restoration of infrastructure



Needs to link with policy milestones - ex. floods



DEVELOPMENT

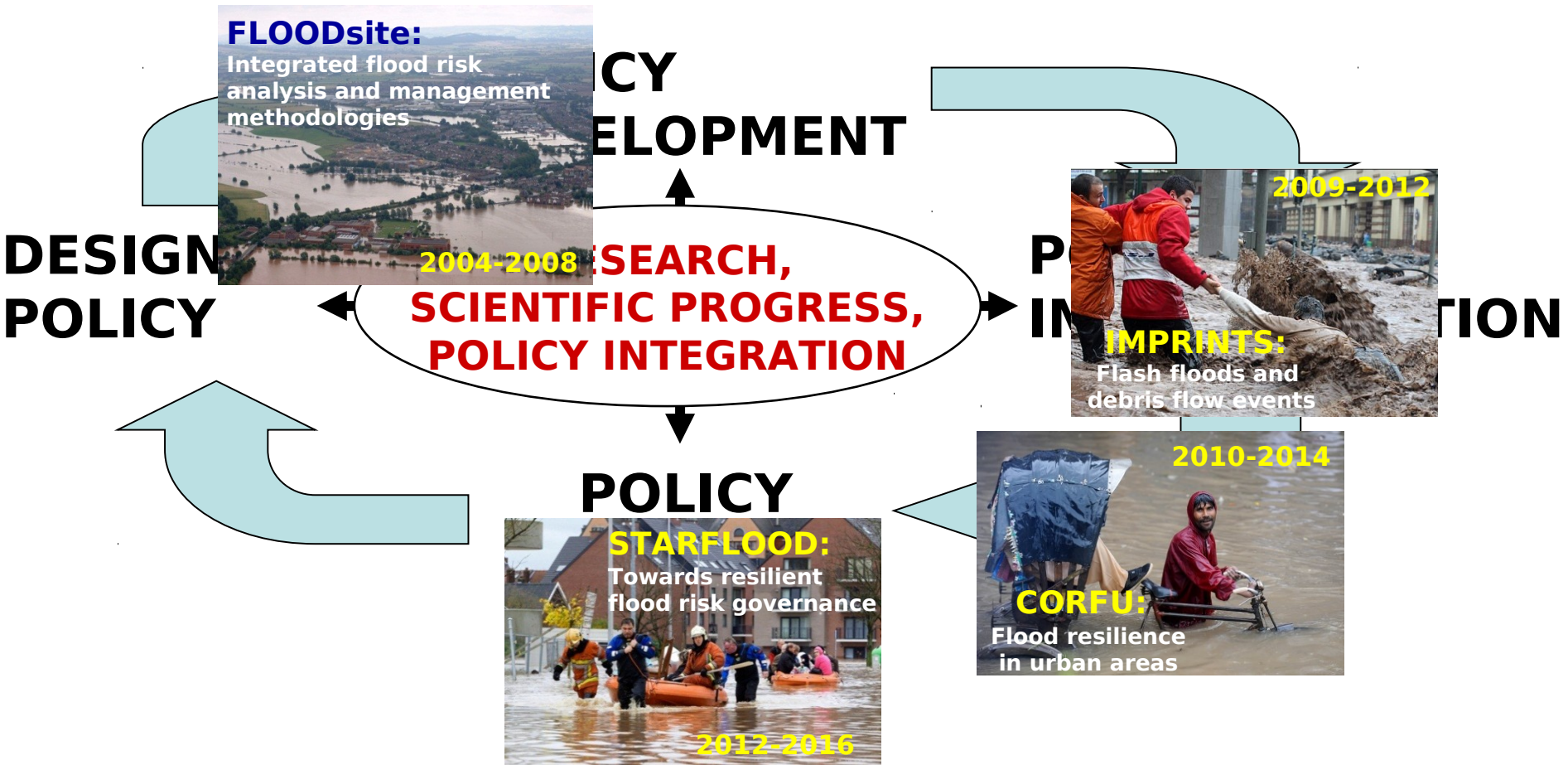
SEARCH, SCIENTIFIC PROGRESS, POLICY INTEGRATION



DESIGN POLICY

IMPLEMENTATION

POLICY





- ✓ Develop *technologies* and produce *knowledge* to ensure *security of citizens* from threats such as terrorism, (organised) crime, *natural disasters* and industrial accidents.
- ✓ While respecting fundamental rights
- ✓ Ensure *optimal use* of technology for the benefit of *civil European security*
- ✓ *Stimulate co-operation* of providers and users
- ✓ Improve *competitiveness* of the European security industry
- ✓ *Mission oriented results*
- ✓ Exclusively *civil oriented* and clear European added value
- ✓ In coordination with EDA*’s activities

*European Defence Agency



Active involvement of end users is considered of utmost importance:

- **Direct participation of user organisations implementing research actions**
- **Other forms of indirect participation might also be followed**

Networks of security research stakeholders are key in disseminating results to end users, national public authorities and citizens





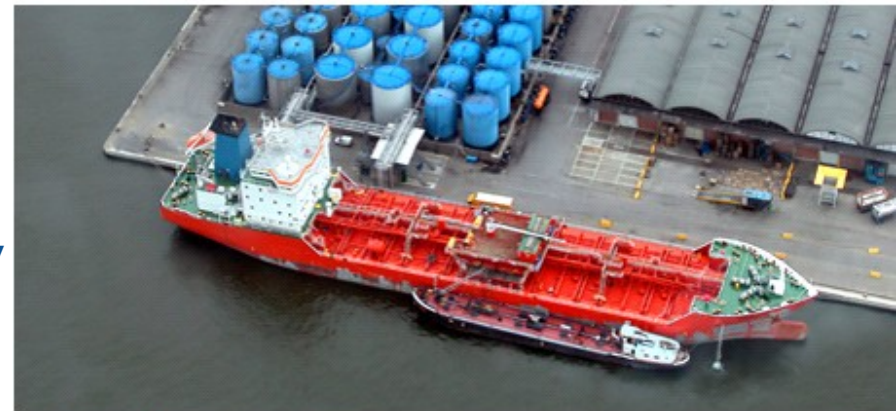
Societal impact of the proposed technologies must be addressed

Ethical issues are essential in the core of the project development

Dual use technologies (both civilian and defence applications) might be covered (EDA coordination)

Standards are crucial for interoperability

Concrete achievements are strongly encouraged (expected impact)

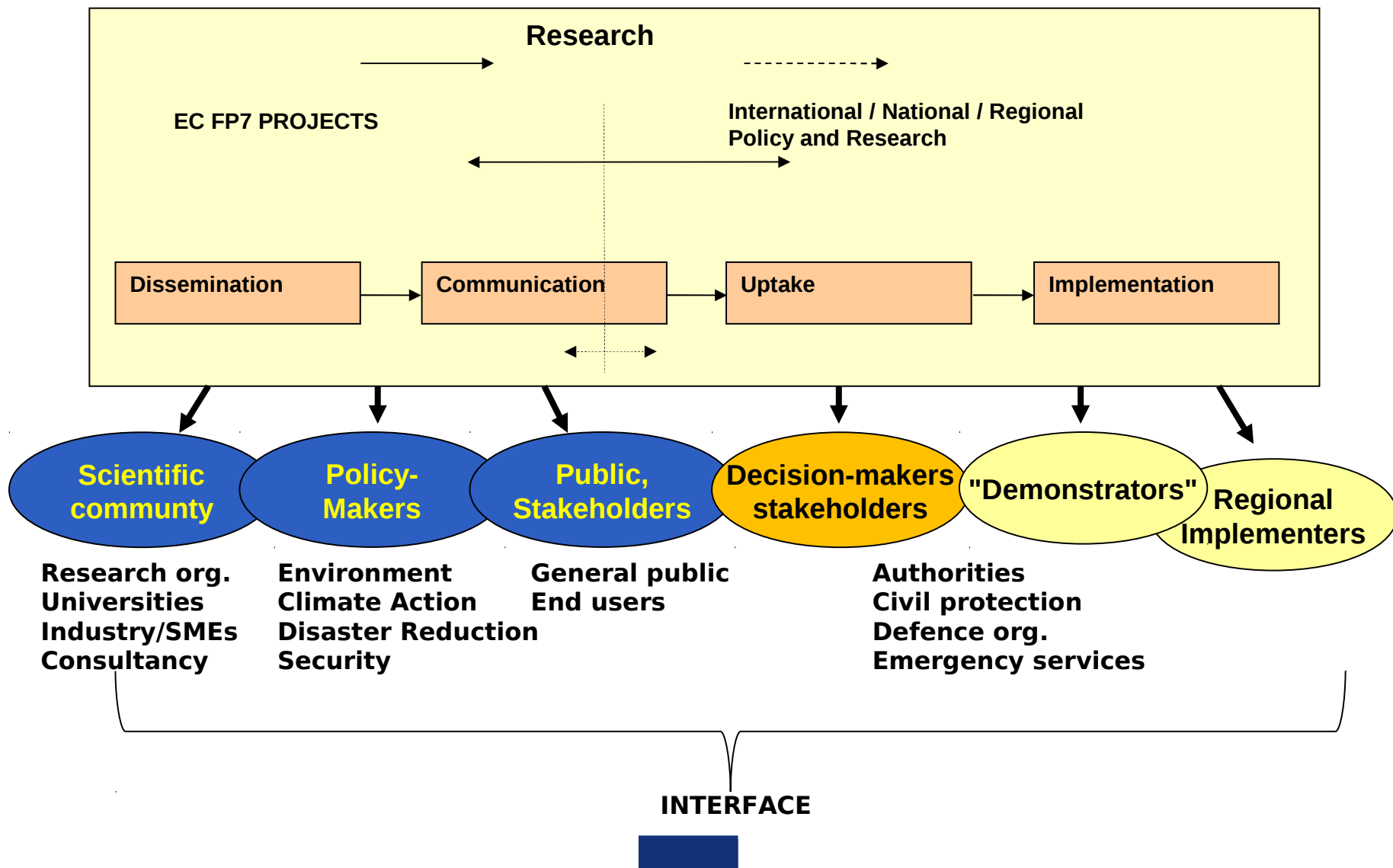




Support to EU policies

- the EU internal security strategy
- the Stockholm programme
- the EU disaster response capacity
- the EU Civil Protection Mechanism (ECHO)
- border surveillance (FRONTEX, EUROSUR)
- the EU CBRN and Explosives Action Plans (HOME)
- the Critical Infrastructure Protection (HOME)
- Health Security (SANCO)
- violent radicalisation, privacy and data protection (JUST)
- Transport (MOVE)
- *CBRN Centres of Excellence (DEVCO +JRC-EEAS-UNICRI)*
- *European Framework Cooperation EC-EDA (NRBC)*

Research Implementation



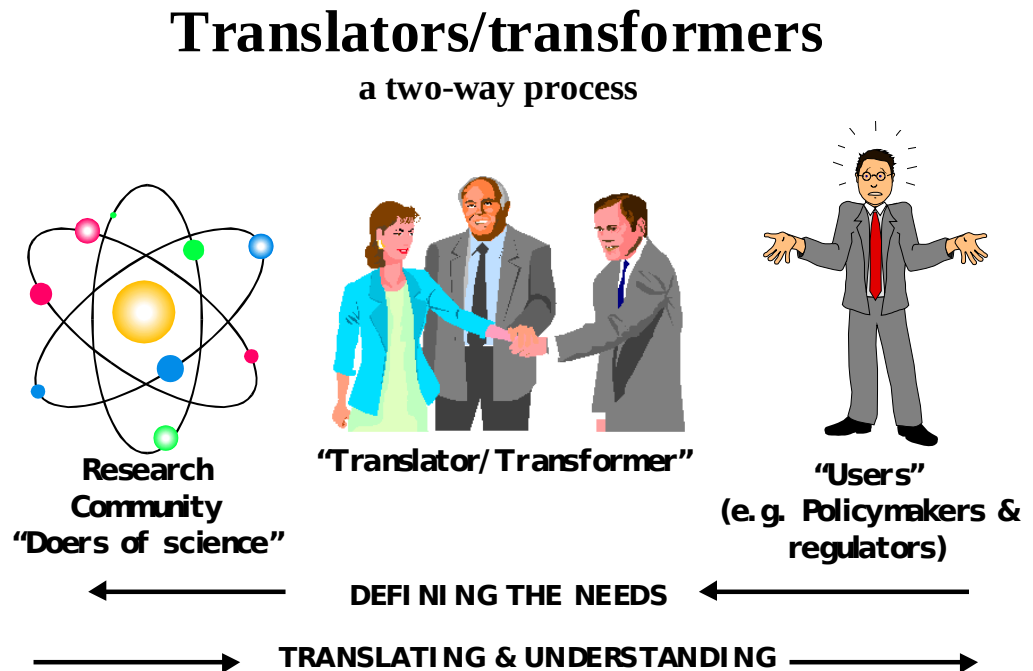
Needs for "mediation" mechanism

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?



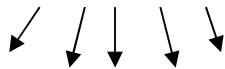
How to ensure an efficient „transforming“ work?



European Commission

Research

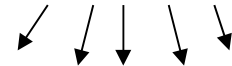
Numerous universities, research organisations



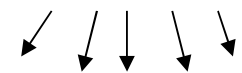
One main communication language: EN

Policies

28 EU Member States



More than 120 River Basin Districts



More than 320 Regions

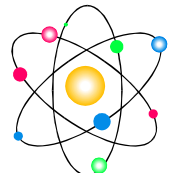


243 EU Official languages



Translators/transformers

a two-way process



Research Community
"Doers of science"



"Translator/Transformer"



"Users"
(e.g. Policymakers & regulators)

DEFINING THE NEEDS

TRANSLATING & UNDERSTANDING

Courtesy P.A. Williams & R. Harris

Knowledge providers



Policy implementation



Stakeholders, Industry, citizens

Policy implementation: example of strategic approach in the water area



Water Directors
Steering of implementation process
Chair: Presidency, Co-chair: Commission

Strategic Co-ordination Group
Co-ordination of work programme
Chair: Commission

CIS-SPI

Art. 21 Committee

WG A
"Ecological Status"
Chair: JRC, DE, UK

WG D
"Reporting"
Chair: EC, EEA, FR

WG F
"Floods"
Chair: EC, IE

WG C
"Groundwater"
Chair: EC, AT

WG E
"Chemical Aspects"
Chair: EC, JRC, IT, FR, SE

Climate Change & WFD
Chair: DE, EC

WFD and Agriculture
Chair: FR, UK

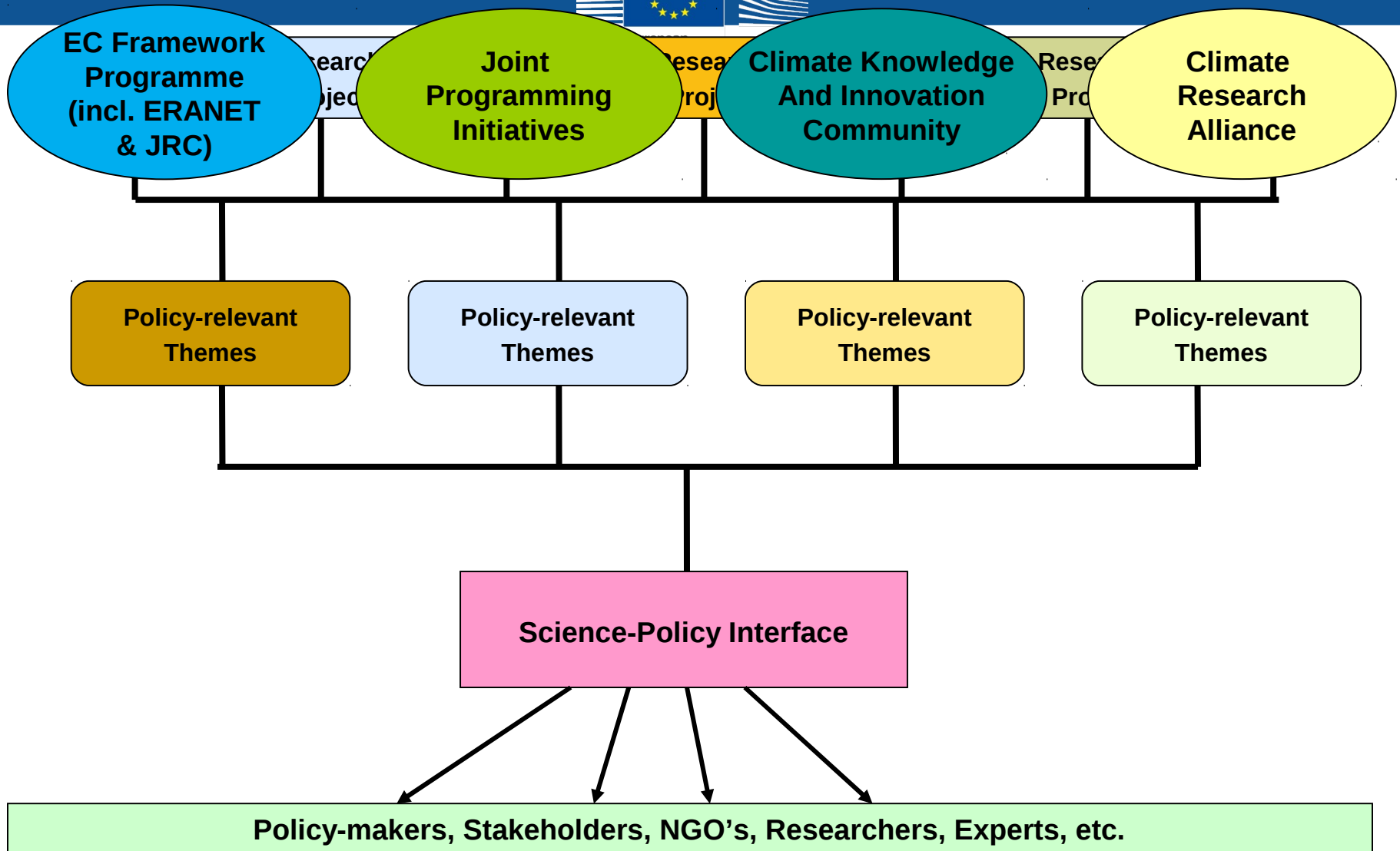
Water scarcity and drought
Chair: IT, FR, ES

Established working groups

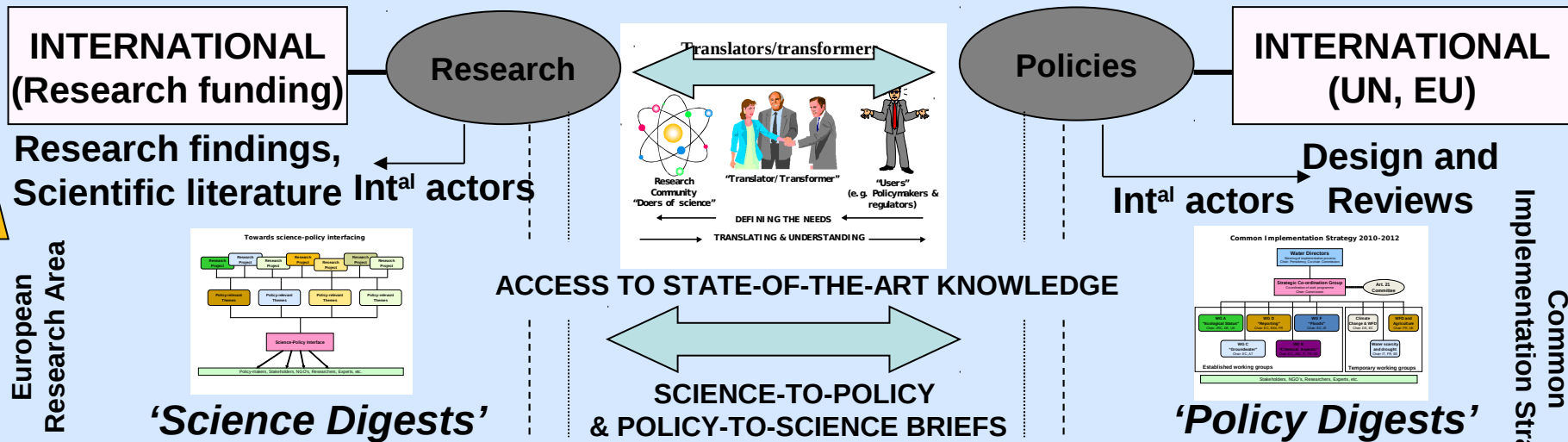
Temporary working groups

Stakeholders, NGO's, Researchers, Experts, etc.

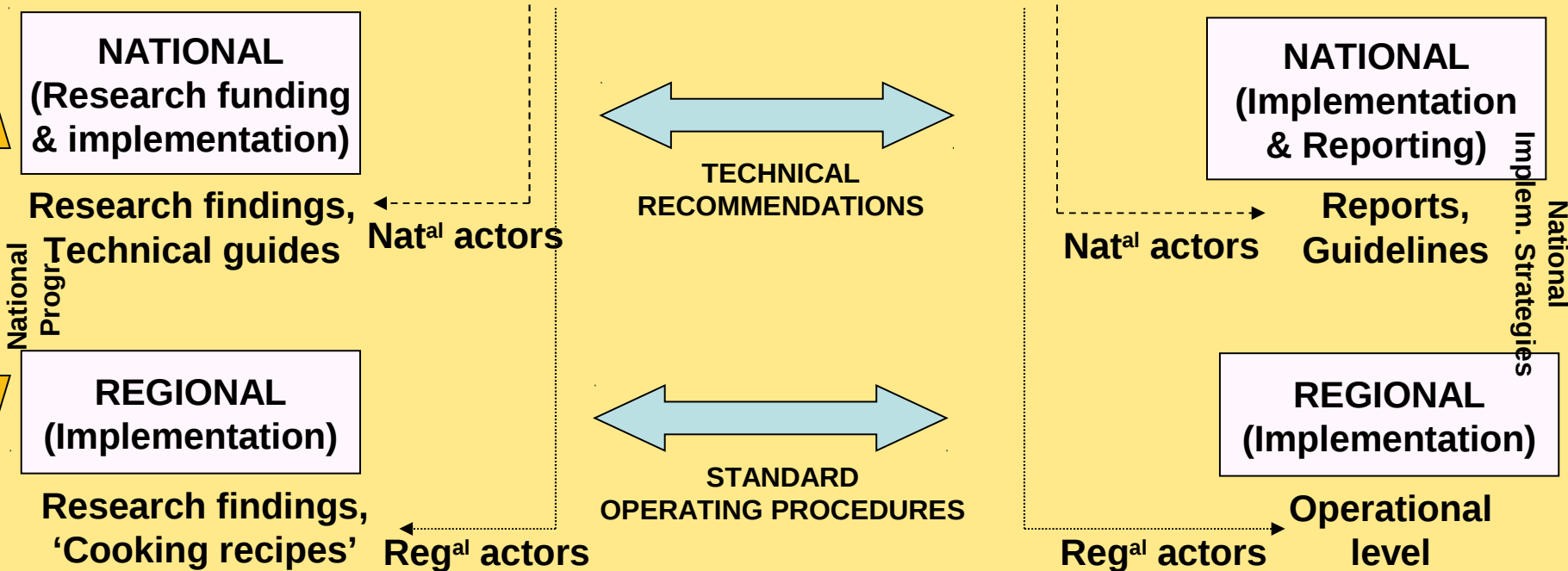
Towards science-policy interfacing?



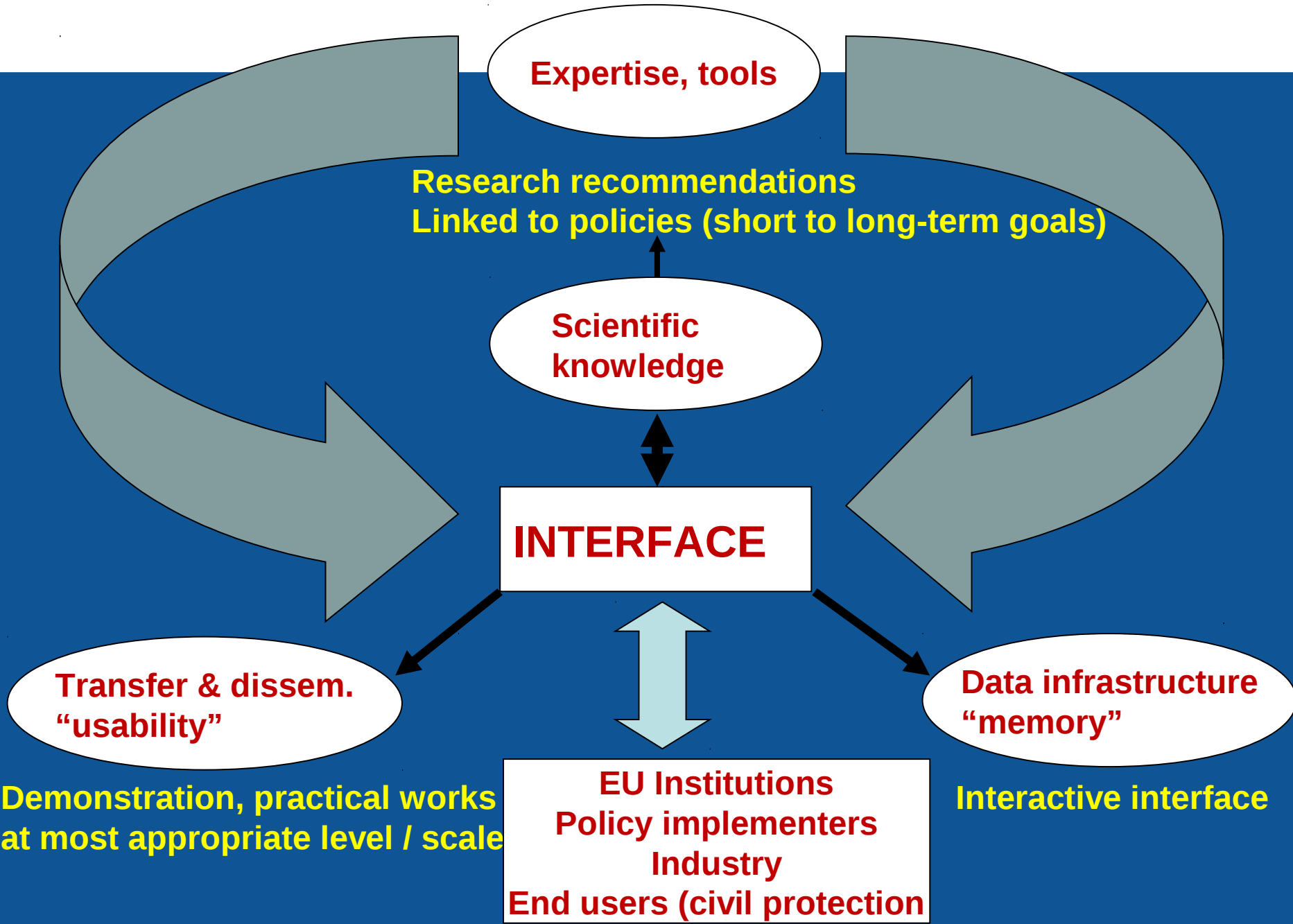
Role for the EU: Implementation Strategy



Role for the Member States: Networking, Transfer and Implementation



The challenge





"Secure Society" in Horizon 2020: Mission areas

- 1. Fighting crime and terrorism**
- 2. Strengthening security through border management**
- 3. Providing cyber security**
- 4. Increasing Europe's resilience to disasters (includ. critical infrastructure protection)**
- 5. Ensuring privacy in the Internet and enhancing the societal dimension**
- 6. 'Dual-use' technologies**

Detailed information on :

http://ec.europa.eu/research/horizon2020/index_en.cfm

Conclusions

Some challenges...



- **Challenge 1** - Increasing and streamlining communication of knowledge derived from EU research projects to reach targeted audiences: needs for professional communication strategy with various vectors, e.g. layman factsheets, tailored seminars, established dialogue at all project steps, e-learning etc.
- **Challenge 2** - Improving accessibility and transfer of research results through a "cascade-type" communication, e.g. factsheets, guidance documents, technical guidelines discussed and agreed among scientists, policy-makers and stakeholders, with established links to demonstration / capacity building initiatives at regional/local level
- **Challenge 3** - Strengthening the Science-Policy-Industry Interface to become results-oriented: linked to the above needs and challenges and requiring an effective "institutionalised" transfer mechanism with professional "mediators"

**Thank you for
your attention!**