# *Regional support approaches to IPBES – Europe as showcase*

## *IPBES-I, Bonn, 25th of January, 2013*



Europe has been and is active in biodiversity science

- Networks of Excellence: **EDIT, ALTER-Net, MARBEF**
- Data networks: **GBIF, EBONE, EU BON**
- **50 biodiversity & ecosystem services research** collaborative research projects in FP5-FP7 (500 Mio € of investment in FP7)
- Infrastructures: **LIFEWATCH & EXPEER**
- Cooperative funding for research: **BiodivERsA**

# Main areas of work on the Science Policy Interface (SPI) in Europe

**Support of policy development and implementation**

| Organi-sation of data and knowledge | Analysis of concepts and approa-ches of SPIs | Network-ing of knowledge holders |
|---|---|---|
| Talk by Rob Jongman | Talk by Juliette Young | Talk by Carsten Neßhöver |

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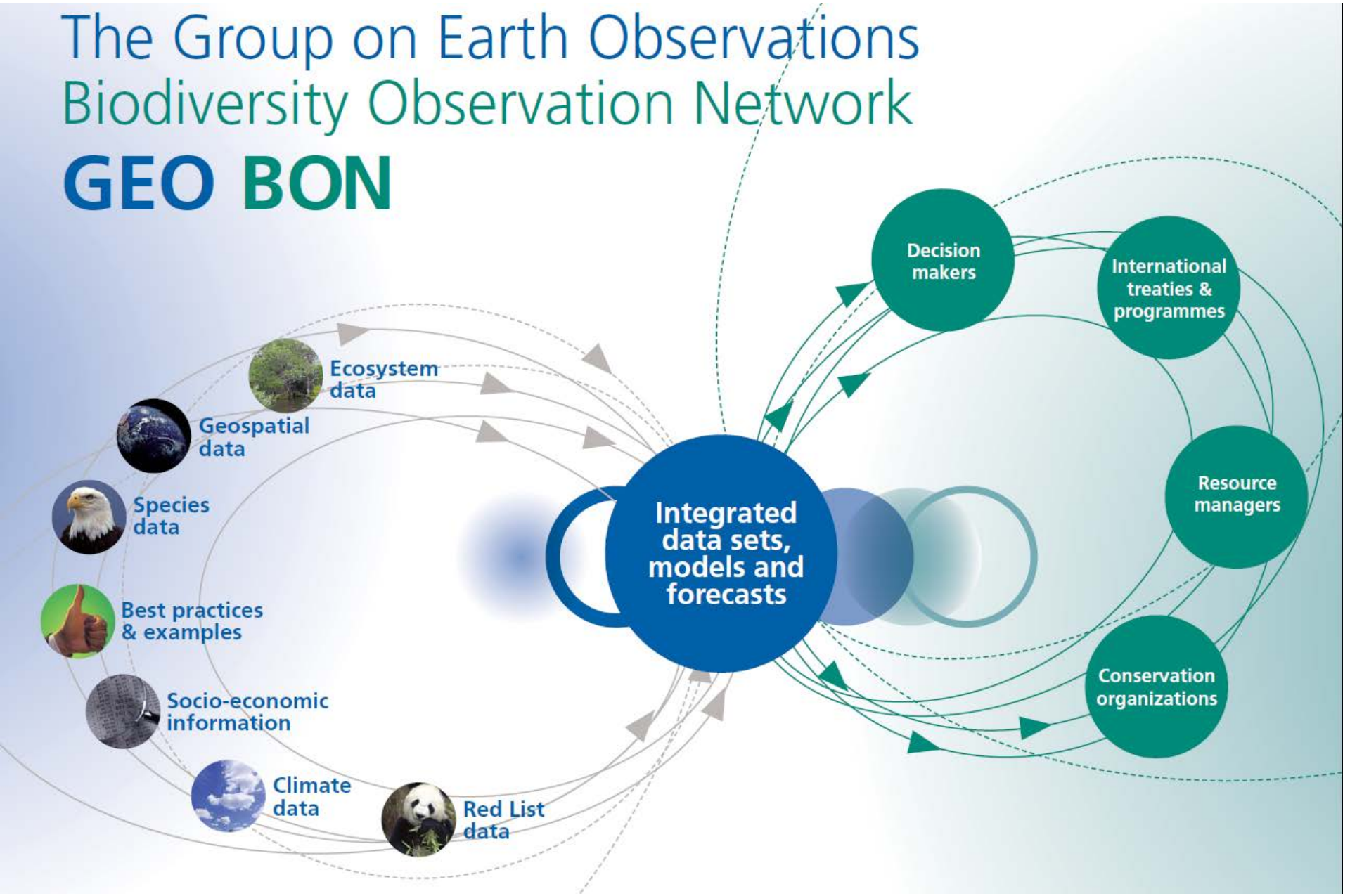
# Networking monitoring, data and knowledge: the European link to GEO BON

Rob Jongman, Alterra Wageningen UR

GROUP ON EARTH OBSERVATIONS | GEO BON

# The Group on Earth Observations Biodiversity Observation Network

# GEO BON

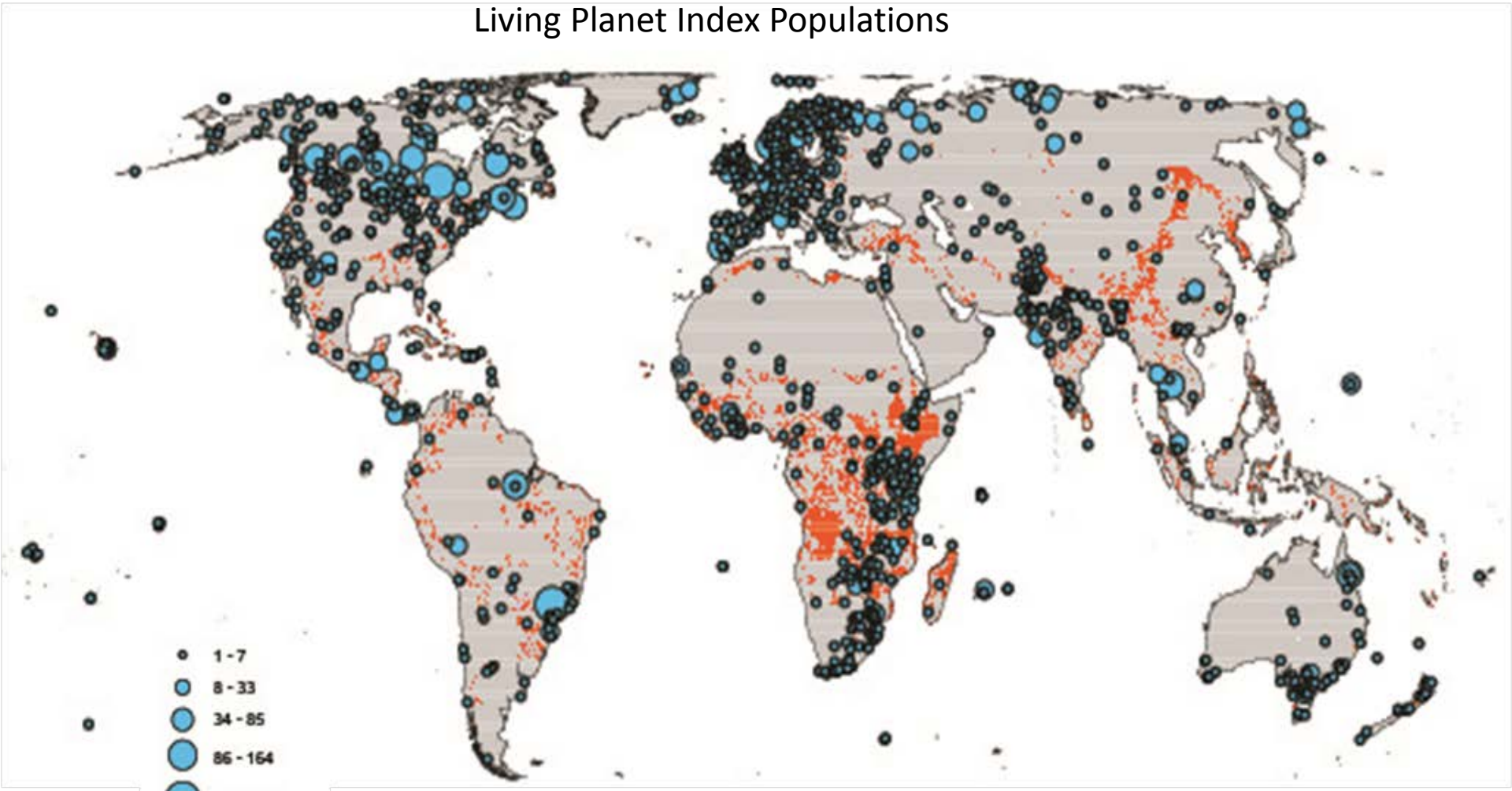


# Contribution to data and knowledge

- Europe contributes actively to the work of the Group on Earth Observations (GEO) also in the field of Biodiversity.
- Through the EBONE project we have progressed harmonisation and standardisation in data gathering and delivery of information
- All products are meant to be available for global use and global harmonisation.
- We are advocating long term continuity of data supply (moving observations from the experimental to operational spheres) and data sharing

# We recognise existing spatial gaps in biodiversity monitoring

Living Planet Index Populations



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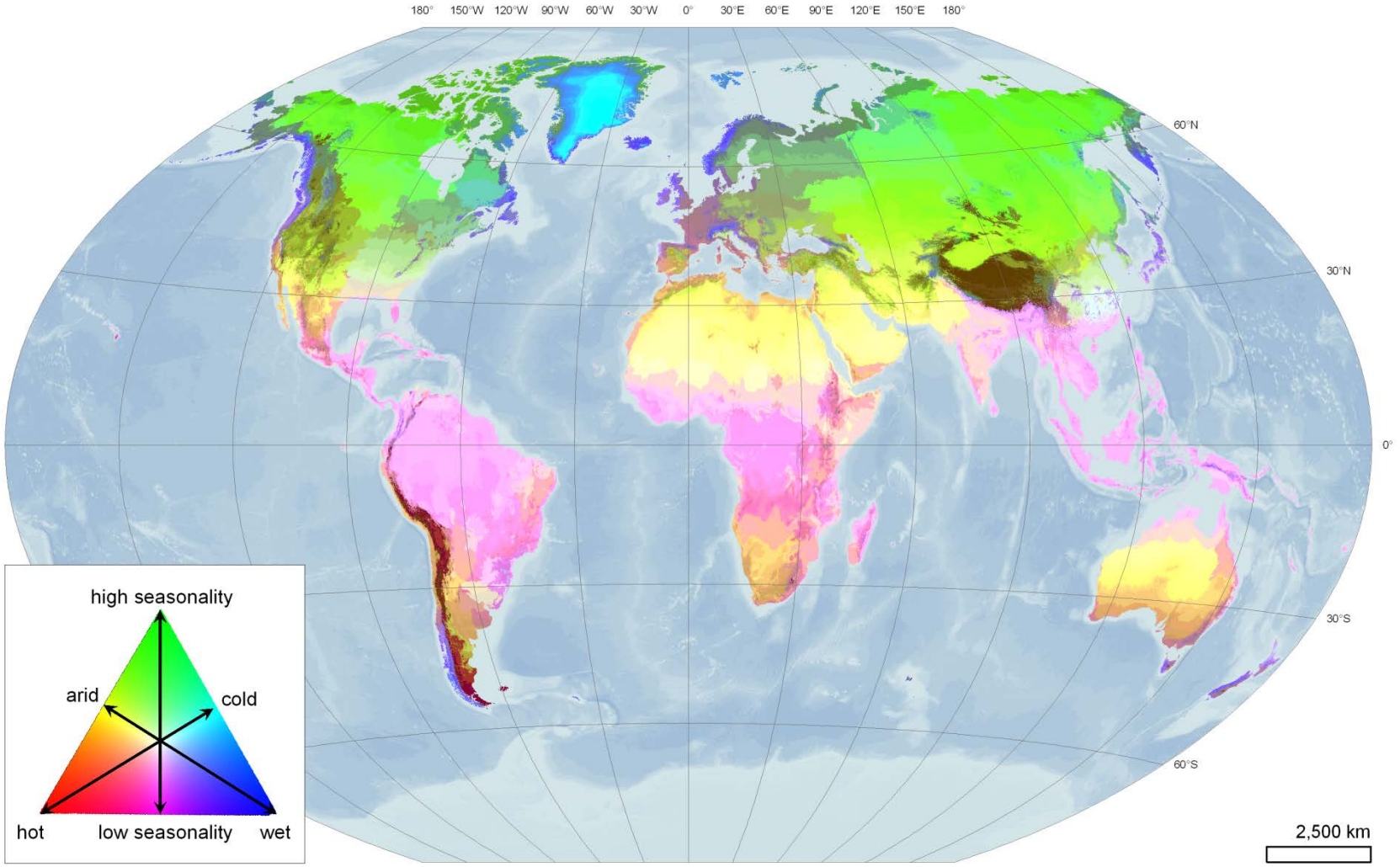
# EBONE: towards solving spatial gaps:
# Global Environmental Stratification




Metzger et al., GEB, 2013

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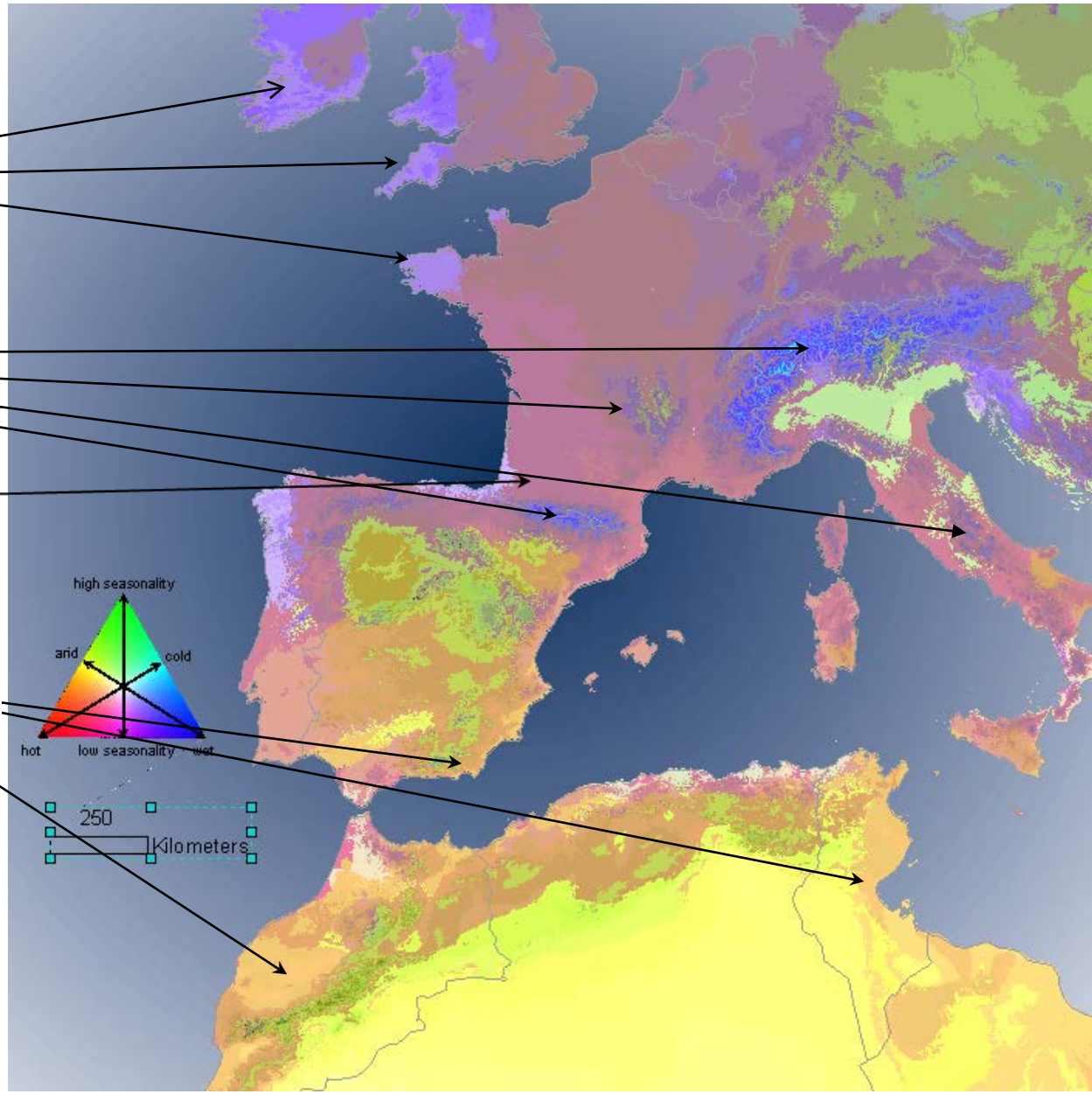
# This means identification and linking regions

**J4 (cool temperate and moist)**
Links Bretagne, Cornwall and western Ireland

**G8 (cold mesic)**
Links Apennines with other Mountains regions

**L6 (warm temperate and xeric)**
Links the hottest parts of Europe with Africa

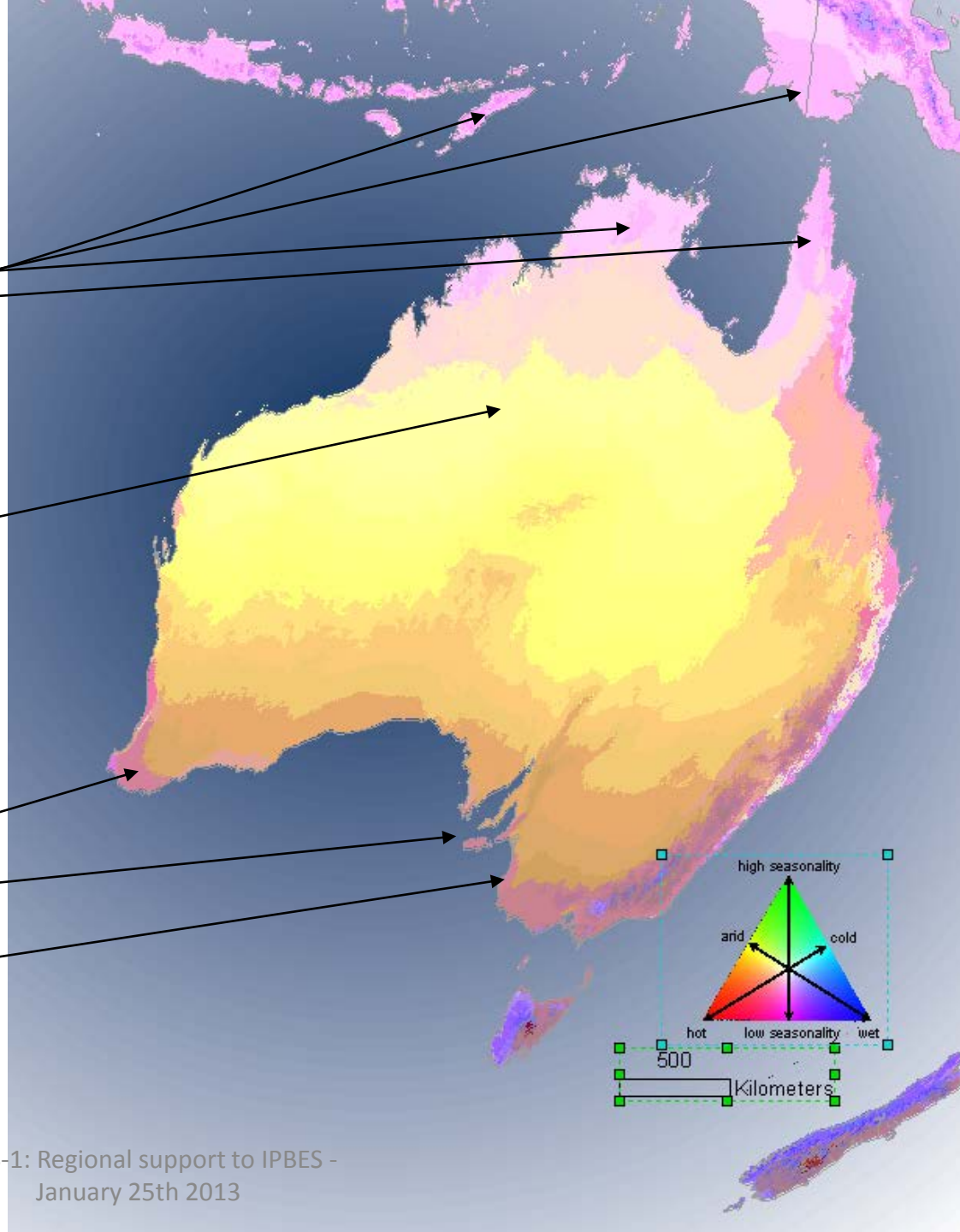


# Even between continents

**R9 (extremely hot and moist)**
Links Australian tropics to SE Asia and beyond

**P2 (extremely hot and arid)**
Links the Gibson with the deserts of Arabia, the Sahel and the Thar desert.

**K10 (warm temperate and mesic)**
Links Mediterranean regions in Australia with those in Chile, South Africa, California and Europe.



# We have developed linkage between in situ and Remote Sensing mapping data: LCCS and GHCs

- Both General Habitat Categories (GHC) for in situ mapping and the FAO Land Cover Classification System (LCCS) are based on plant Life forms and therefore exchangeable
- They allow harmonisation of different national approaches as tested in Europe
- The approaches are being tested and used in projects in Europe and sub-Saharan Africa.

# Next step: EU BON (2013-2018), integration of biodiversity information systems

- Enabling greater interoperability of data layers and systems
- Advancing data integration and increasing data mobilization (from science and society)
- Harmonizing and mainstreaming biodiversity recording and monitoring schemes
- Improving analytical tools and services
- Supporting (biodiversity) science policy interfaces
- Linking integrated information to relevant stakeholders
- Strengthening European capacities and infrastructures for environmental information management

Thank you for your attention

Further discussion on EBVs:

side event tomorrow


http://www.earthobservations.org/geobon.shtml

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## *IPBES-I, Bonn, 25th of January, 2013*



# Challenges of multi-level science-policy interactions

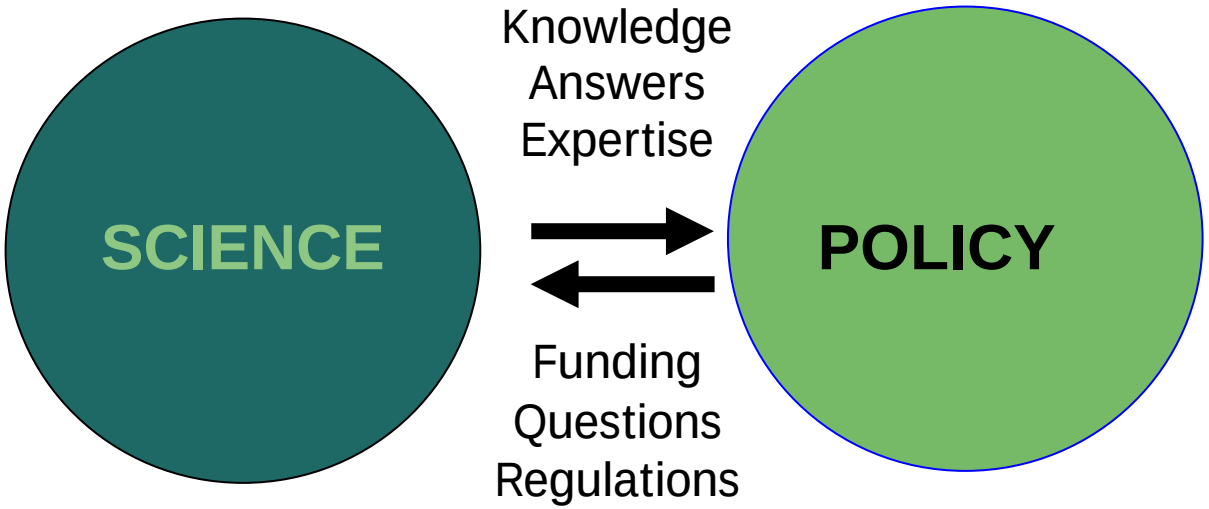
Juliette Young, Sybille van den Hove
and Allan Watt

MEDIAN

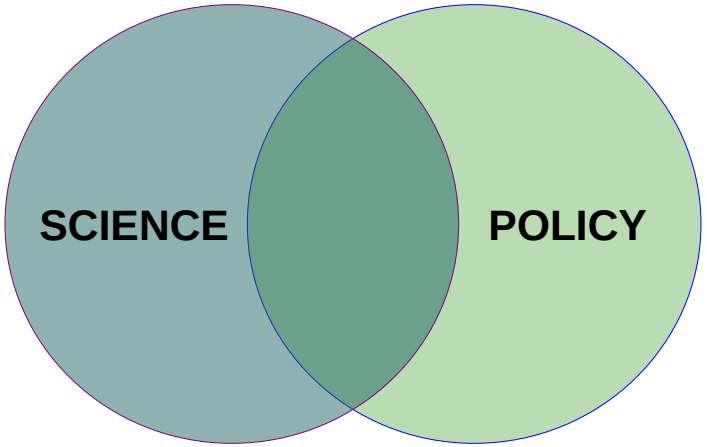
CEH Centre for Ecology & Hydrology
NATURAL ENVIRONMENT RESEARCH COUNCIL

SPIRAL
Interfacing Biodiversity and Policy

# Science-policy interfaces



# Science-policy interfaces – the challenge


The intersection: ***science-policy interfaces***

# SPIRAL: *Science-Policy Interfaces for Biodiversity: Research, Action and Learning*

- **Research** project:
  - Improve our knowledge and understanding of Science-Policy Interfaces for biodiversity
- **Action** project:
  - Contribute to designing or improving real-life science-policy interfaces: Test cases, recommendations
  - Resource group

# Challenges of multi-level SPIs

- Uncertainty, complexity, ignorance
- Lack of links, or difference, between disciplines and sectors – challenges of interdisciplinarity & trans-disciplinarity
- Divergent implicit norms, values and worldviews
- Limited incentives for increased interactions
- Multiplicity of existing SPIs

# Mapping existing science-policy interfaces

**Interfaces of specific projects or networks**

**Face to face communications**

**Scientific advisory bodies and councils**

easac European Academies Science Advisory Council

ICES CIEM

**International or regional assessment processes**

MILLENNIUM ECOSYSTEM ASSESSMENT

**Subsidiary bodies**

Convention on Biological Diversity

CMS

**Interfaces with research policy**

NKGCF

epbrs

**Strategic initiatives**

ipBes

*Side-Event at IPBES-I Plenary, Bonn*

# A multiplicity of SPIs

- at local, national, regional and international levels;
- can be closer to the policy or to the scientific processes;
- can be formal and institutionalised, or informal and more flexible;
- many of them are intertwined or embedded in one another;
- operate at different stages of the policy process (early warning, issue identification, policy design, implementation, assessment, review)

➢ No 'one size fits all' ⇒ cherish diversity and build on existing interfaces to improve, link, complement, innovate.

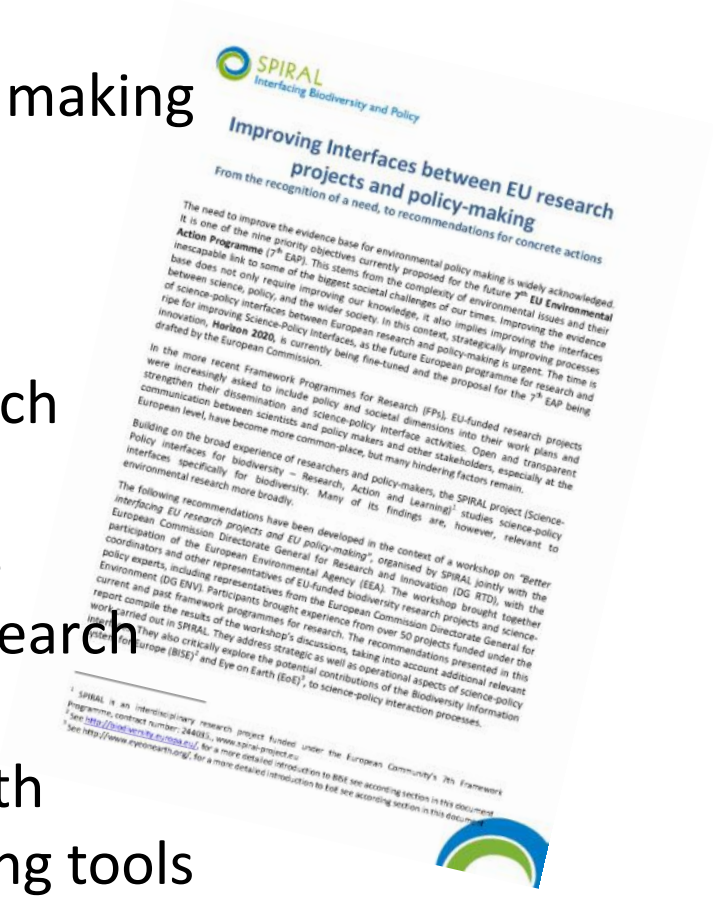
# Improving interfaces between EU research projects and policy-making

- Recommendations to policy-makers
  - ➢ Integration of research results into policy making

- Recommendations for research funding institutions
  - ➢ Adding and sustaining the value of research

- Recommendations to EU research projects
  - ➢ Improving the use and impact of your research

- Recommendations on BISE and Eye on Earth
  - ➢ Making better use of existing and emerging tools


SPIRAL
Interfacing Biodiversity and Policy

Improving Interfaces between EU research projects and policy-making

From the recognition of a need, to recommendations for concrete actions

The need to improve the evidence base for environmental policy making is widely acknowledged. It is one of the nine priority objectives currently proposed for the future 7th **EU Environmental Action Programme** (7th EAP). This stems from the complexity of environmental issues and their inescapable link to some of the biggest societal challenges of our times. Improving the evidence base does not only require improving our knowledge, it also implies improving the interfaces between science, policy, and the wider society. In this context, strategically improving processes of science-policy interfaces between European research and policy-making is urgent. The time is ripe for improving Science-Policy Interfaces, as the future European programme for research and innovation, **Horizon 2020**, is currently being fine-tuned and the proposal for the 7th EAP being drafted by the European Commission.

In the more recent Framework Programmes for Research (FPs), EU-funded research projects were increasingly asked to include policy and societal dimensions into their work plans and strengthen their dissemination and science-policy interface activities. Open and transparent communication between scientists and policy makers and other stakeholders, especially at the European level, have become more common-place, but many hindering factors remain.

Building on the broad experience of researchers and policy-makers, the SPIRAL project (Science-Policy Interfaces for Biodiversity – Research, Action and Learning)[1] studies science-policy interfaces specifically for biodiversity. Many of its findings are, however, relevant to environmental research more broadly.

The following recommendations have been developed in the context of a workshop on "*Better interfacing EU research projects and EU policy-making*", organised by SPIRAL jointly with the European Commission Directorate General for Research and Innovation (DG RTD), with the participation of the European Environmental Agency (EEA). The workshop brought together coordinators and other representatives of EU-funded biodiversity research projects and science-policy experts, including representatives from the European Commission Directorate General for Environment (DG ENV). Participants brought experience from over 50 projects funded under the current and past framework programmes for research. The recommendations presented in this report compile the results of the workshop's discussions, taking into account additional relevant work carried out in SPIRAL. They address strategic as well as operational aspects of science-policy interfacing. They also critically explore the potential contributions of the Biodiversity Information System for Europe (BISE)[2] and Eye on Earth (EoE)[3], to science-policy interaction processes.

[1] SPIRAL is an interdisciplinary research project funded under the European Community's 7th Framework Programme, contract number: 244031, www.spiral-project.eu

[2] See http://biodiversity.europa.eu/, for a more detailed introduction to BISE see according section in this document

[3] See http://www.eyeonearth.org/, for a more detailed introduction to EoE see according section in this document

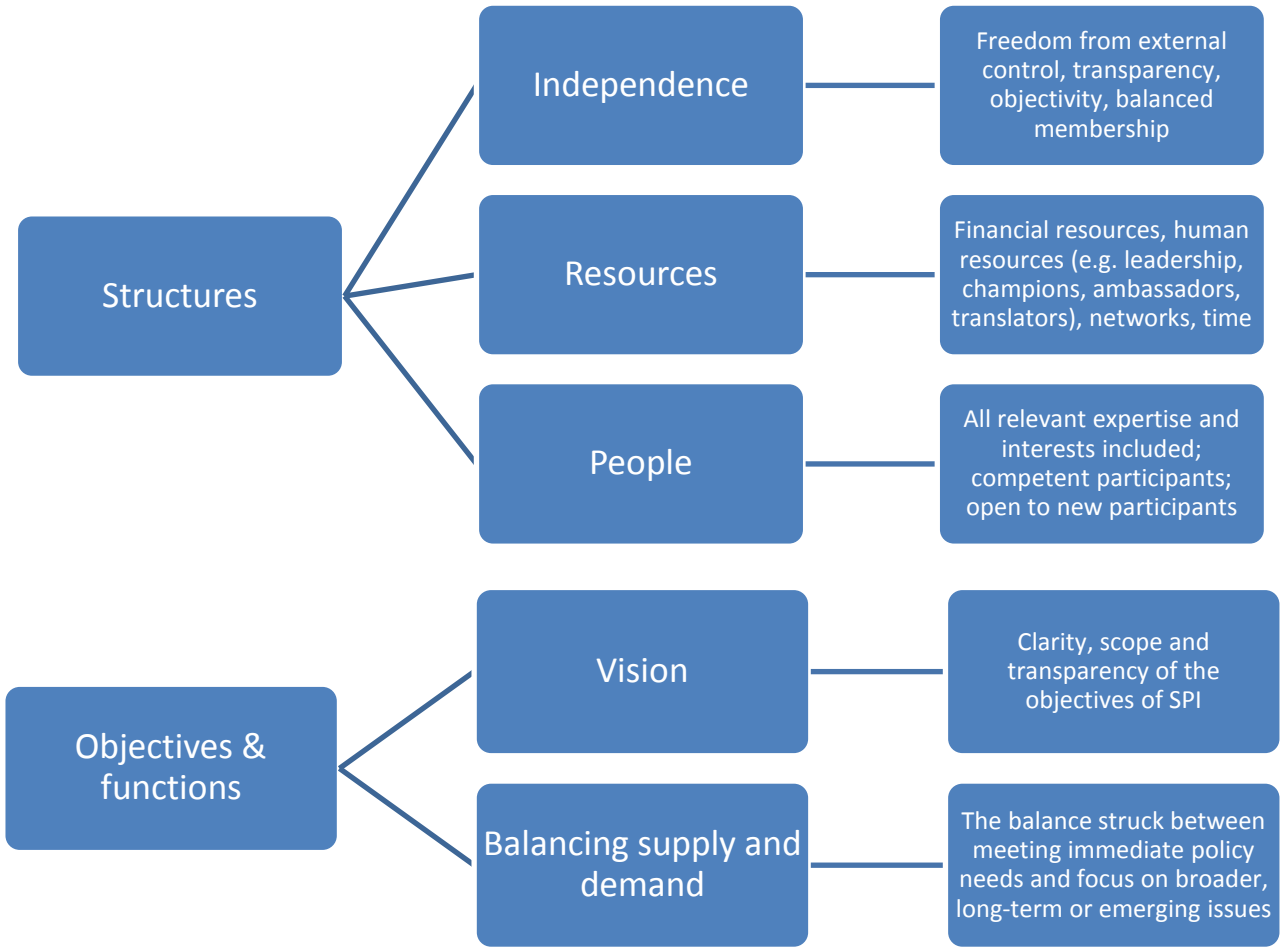
*Side-Event at IPBES-I Plenary, Bonn*

# Recommendations for communication

| | Individual | Teams | Organisation |
|---|---|---|---|
| Science | ○ Look for training courses and other opportunities to learn about policy processes.<br>○ Recognise that 'policymakers' are diverse and have diverse views. Some have science backgrounds.<br>○ Use visual materials.<br>○ Use different communication tools, e.g. scenarios, user guides, videos or online best practice guides, maps, social media.<br>○ Be prepared to adapt approaches according to your audience.<br>○ Plan to publish reviews. These are helpful to non-researchers, and can fit with academic motivations.<br>○ Contextualise the presentation of research or specific findings. | ○ Discuss plans and outputs throughout projects, and from the design stage, not just at the end.<br>○ Policy briefs can be useful but must be disseminated and linked to other communication outputs.<br>○ Organise field trips and practical demonstrations.<br>○ Allow communication strategies to evolve and be flexible.<br>○ Learn from experience in interdisciplinary research.<br>○ Proactively seek out ways to present research and its implications to different audiences.<br>○ Preface all reports with accessibly-written executive summaries. | ○ Research and fund training for communication skills and understanding of policy processes for scientists.<br>○ Explore potential for broader assessment of impact), and create and publish in high journals aimed at policy.<br>○ Encourage scientists to get acquainted with policy processes and support those who wish to operate at the science-policy interface. |
| Both science and policy | ○ Seek out events where other disciplines and sectors will attend.<br>○ Explore job-shadowing, i.e. scientists and policy-makers observing the day-to-day job of the other.<br>○ Cultivate personal contacts though recognise that everyone is under time pressures.<br>○ Look for training courses and opportunities to improve communication and networking skills. | ○ Plan projects and budgets to spend time and resources on science-policy interfaces and communication.<br>○ Explore the use of scenario-building and other tools as a process for building shared understanding.<br>○ Provide directories of experts /subject-specific contacts.<br>○ Consider the merits of cross-reviewing: for example in addition to academics reviewing academic papers (peer-review) and policy-makers reviewing policies, explore the merits of academics reviewing policy, or policy-makers reviewing academic outputs.<br>○ Plan topic-focused events that allow mingling from those with different backgrounds.<br>○ Organise field trips to bring together researchers and stakeholders across levels (e.g. from policy to land-manager). | ○ Promote general understanding about science and its role in society.<br>○ Provide incentives (monetary and career) for interaction between science and policy.<br>○ Promote discussions about career structures and motivations.<br>○ Fund and support interdisciplinary research.<br>○ Fund training or resourcing for "linker/broker/facilitator" individuals and "linker" events to build science-policy relationships (do not just focus on tangible "Knowledge Exchange outputs").<br>○ Develop a communication strategy to help identify and prioritise audiences and partners.<br>○ Provide funding for networking events. |
| Policy | ○ Recognise that many researchers are personally motivated to see their research used and valued.<br>○ Recognise that 'scientists' are diverse and do not have knowledge of all issues relating to biodiversity and ecosystem services.<br>○ Subscribe to feeds about relevant news and policy brief sites.<br>○ Seek out opportunities to learn how science works in general, as well as to learn about specific job-related topics. | ○ Be transparent about questions, and expected needs for current and/or future knowledge. Putting this into a briefing note for researchers can be a helpful starting point for discussion.<br>○ Welcome conversations about defining questions or problems.<br>○ Consider developing a list or network of scientific experts and researchers to help you.<br>○ Provide space and resources to allow teams and individuals to learn and to build contacts beyond the policy sphere. | ○ Promote transparency and wider understanding (e.g. through training course) of policy and decision-making and implementation processes.<br>○ Explore if and why science is valued compared to other forms of evidence.<br>○ Liaise with funders to ensure funded projects (i) are clearly aware of policy priorities, and (ii) encourage communication e.g. enforce clearly written summaries from tender stage.<br>○ Liaise with funders to develop projects that allow flexibility for interaction between science and policy. |

- We need **flexible & adaptive communication approaches**
- Communication involves a **broad range of stakeholders**
- We need a **change in mindsets & behaviours**

# Attributes of successful SPIs



# SPIRALLING out

**General briefs:**

A beginner's guide to understanding challenges of communicating about biodiversity

What's so special about biodiversity?

A myth-busting-guide to science-policy interfaces (SPIs)


**Case study reflections:**

Recent reflections on science-policy communication in the context of deer management in Scotland

Reflections on recent experiences with the UK National Ecosystem Assessment

**Recommendations:**

Recommendations for improving science-policy communication

Designing for success: SPI structures

Goals and roles: SPI objectives and functions

Keep it CRELE: credibility, relevance and legitimacy for SPIs

CRELE Choices: trade-offs in SPI Design

*Side-Event at IPBES-I Plenary, Bonn*

# Thank you

For more information about the SPIRAL project, please visit our website: www.spiral-project.eu or contact us at info@spiral-project.eu

*Side-Event at IPBES-I Plenary, Bonn*

# *Regional support approaches to IPBES – Europe as showcase*

## *IPBES-I, Bonn, 25th of January, 2013*



Creating a Network of Knowledge for biodiversity and ecosystem services
*www.biodiversityknowledge.eu*

# BiodiversityKnowledge
# An approach to network knowledge on biodiversity across Europe to support decision making

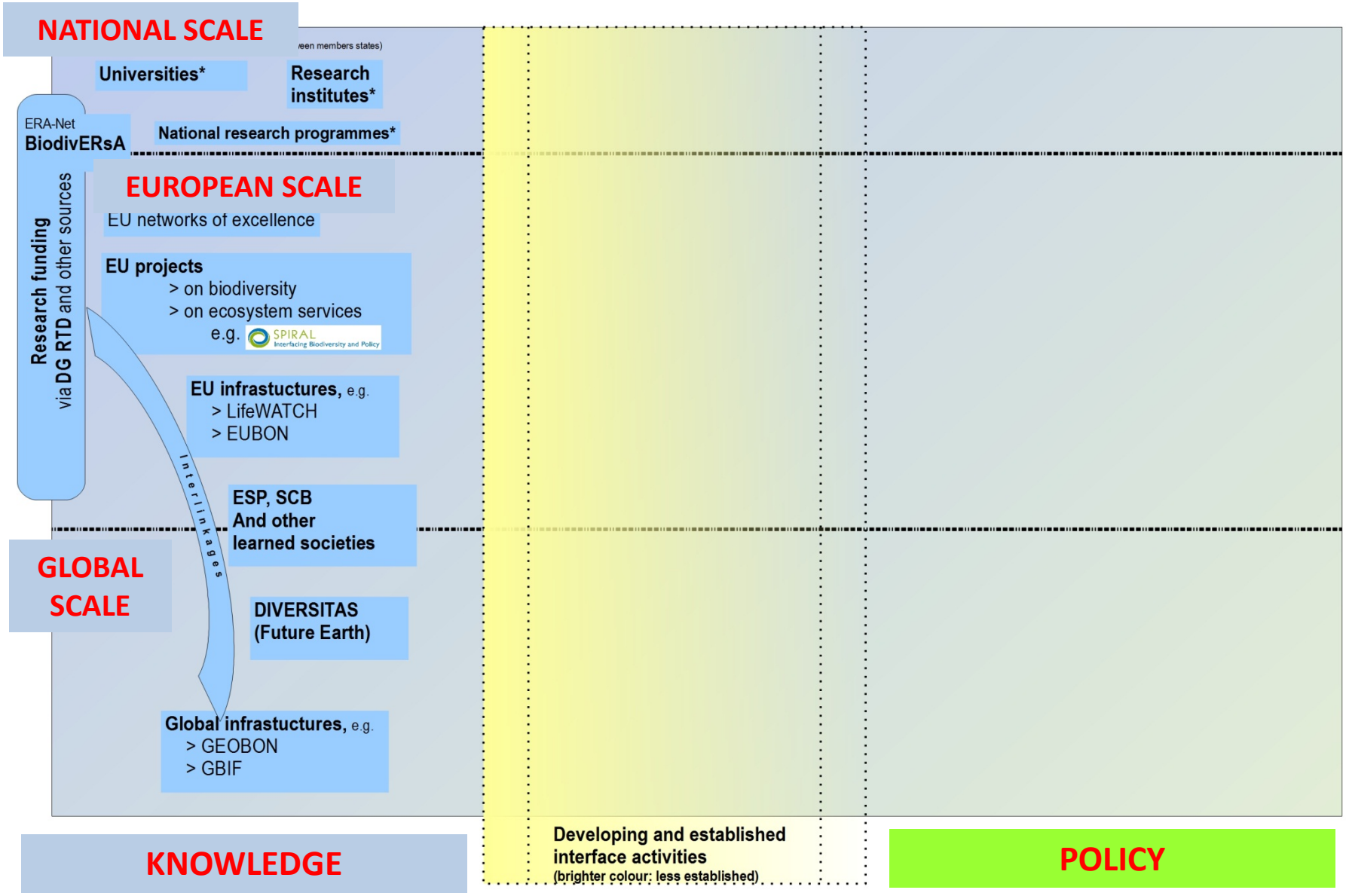
Carsten Neßhöver & Marie Vandewalle (UFZ)
Barbara Livoreil (FRB) & Estelle Balian (RBINS)
& BiodiversityKnowledge partners

Dept. of Conservation Biology &
Science-Policy Expert Group
UFZ, Germany

HELMHOLTZ CENTRE FOR ENVIRONMENTAL RESEARCH – UFZ

IPBES-I, Bonn, 25th of January, 2013

# A sketch of the "science-policy landscape" of the EU (and beyond)



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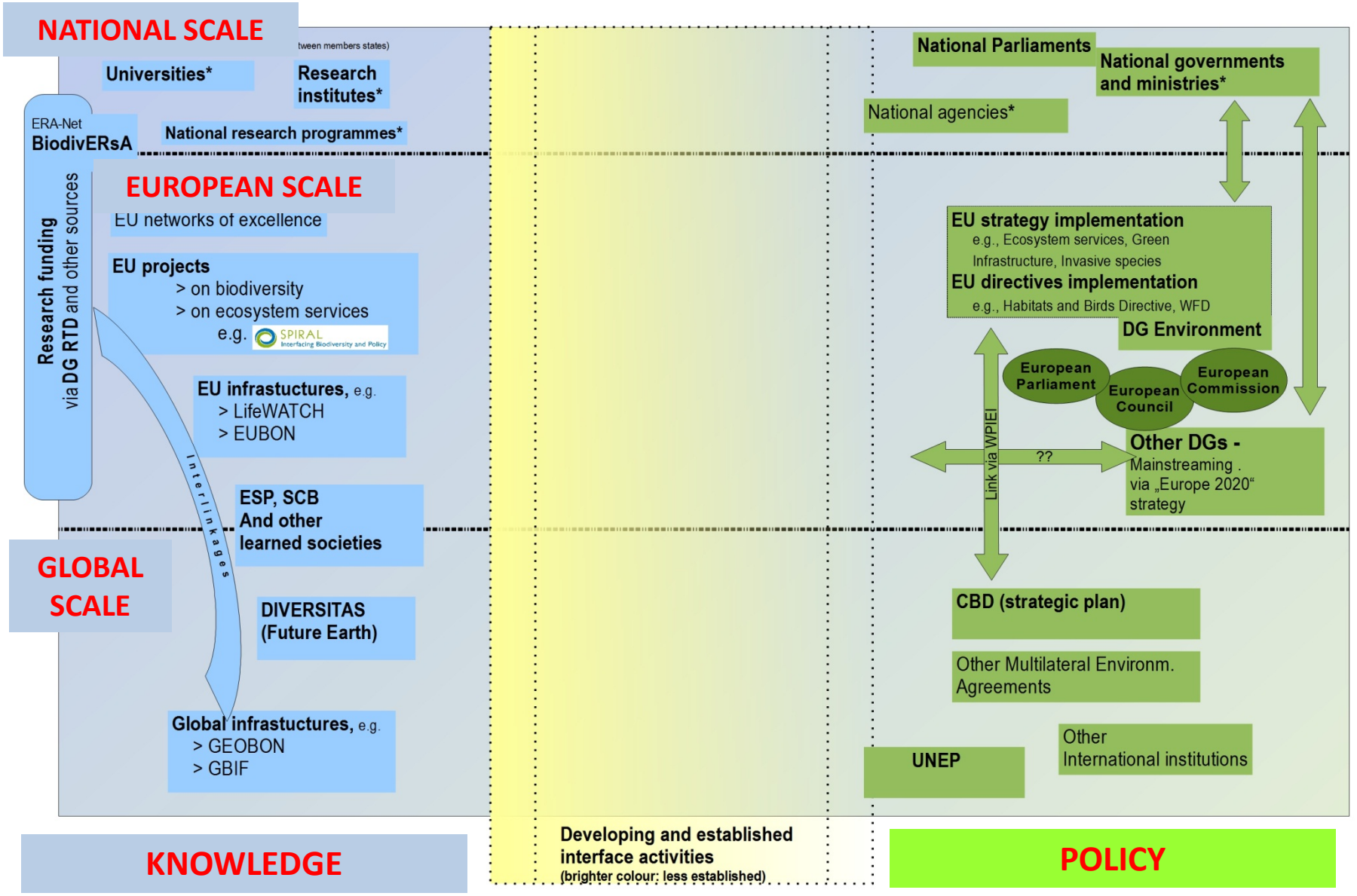


Drafted by UFZ Science-Policy Expert Group, 5th revision, 5.11.2012

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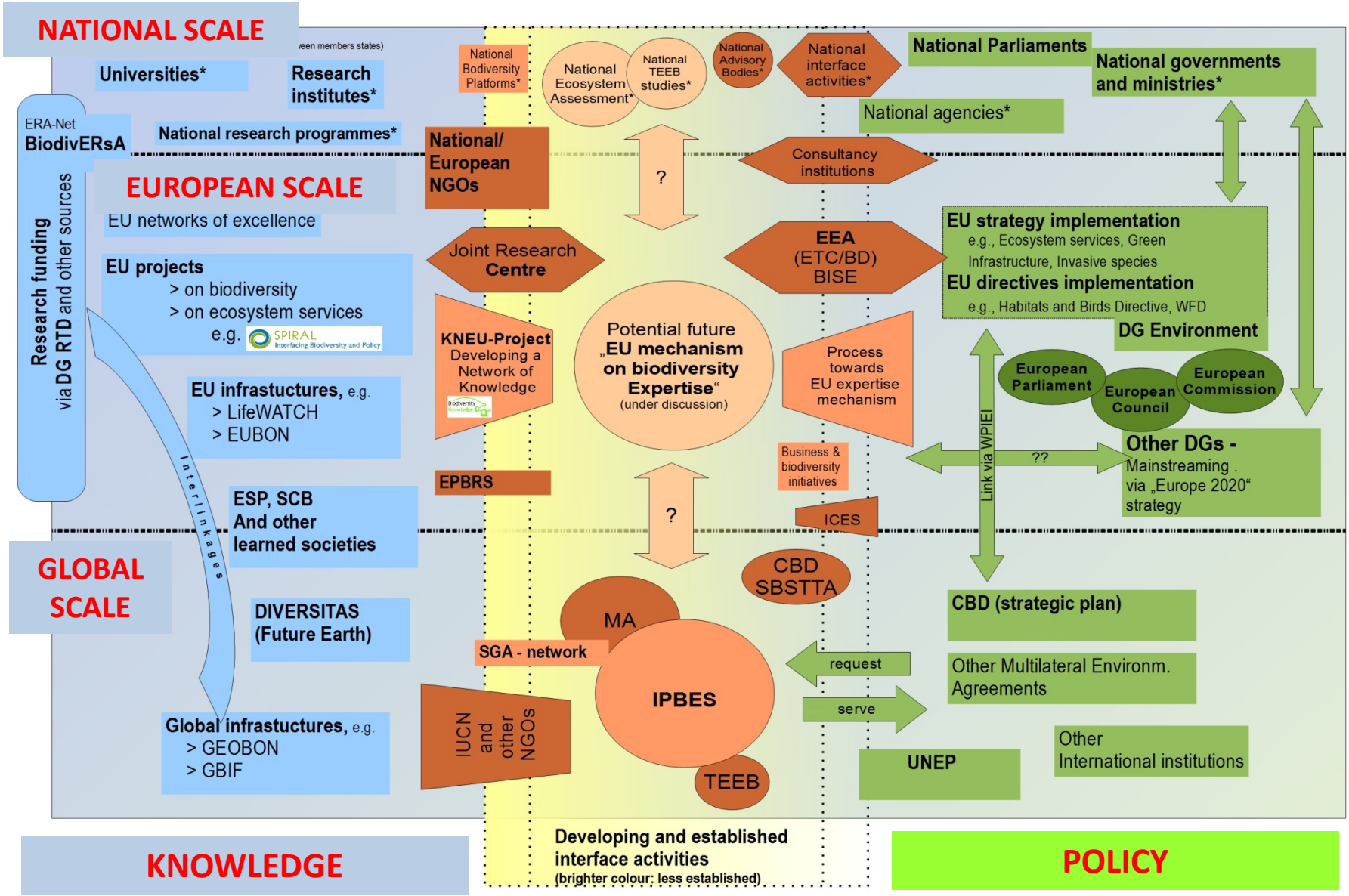


# *Potential functions for the science-policy interface in the EU*

1. Network-function: Building a BES community of Interest → "Capacity Building"
2. Policy implementation support function → "Assessment" and "policy support"
3. Research strategy function → "Knowledge generation"
4. Support mechanism for IPBES from a regional perspective

!

Biodiversity Knowledge

# Ensuring that the best Knowledge on biodiversity and ecosystem services is made available to Governments and other decision makers in Europe.

funded by the European Commission via the project KNEU (Coordination action, FP7)



SEVENTH FRAMEWORK PROGRAMME

# Network of Knowledge (NoK)

a structure that improves access to reliable and timely information, and

- **asks for contribution of various stakeholders**
- **benefits from existing processes**

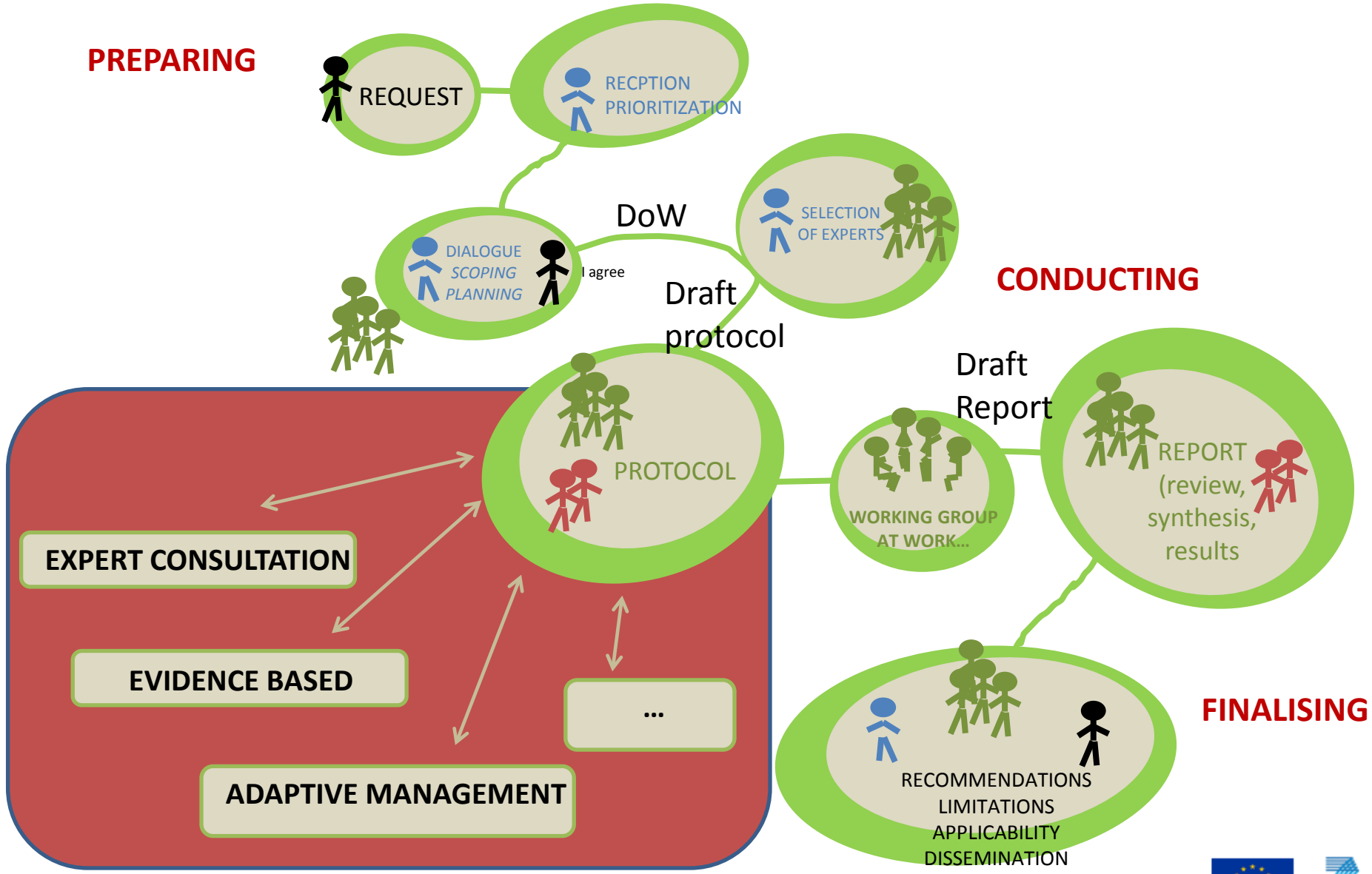
# Elements of the NoK


- Orchestrate the European „community of interest“ for exchange and mutual learning


- Propose rules and procedures for request formulation, scoping, assessment of feasibility, and establishment of procedure of work between the requester and the NoK


- Open consultation, review and validation at different stages

# Providing a process for request-driven advice




Draft of prototype developed by B.Livoreil & the BiodiversityKnowledge team

## *TESTING the prototype : 3 demonstration cases*

### *GREEN INFRASTRUCTURES*

**Impact of multifunctional floodplain management on biodiversity**

### *NATURAL PEST CONTROL*

***Which types of landscape/habitat management are effective at maintaining or restoring populations of natural pest control agents?***

### *KELP FORESTS*

***What are the current trends in kelp forests in Europe and what is the evidence that these trends will affect the ecosystem's biodiversity and the provision of ecosystem services?***

# Our next steps in Europe

- **NoK Prototype consultation**
  - **Open consultation in spring 2013**
  - **Conference September 24-26, 2013**

- **Link to the implementation of the European Biodiversity Strategy 2020, and the 7th Environmental Action Programme**

- **How to use the approach to support IPBES**

# Why regional networks are essential for IPBES

- **Easier level of stakeholder engagement**
- **Knowledge overview:** experts, data, relevant forms of knowledge, best practices
- **Collaboration:** (often) better networks, shorter ways of interactions
- **Close link to policy:** institutions, procedures, decision-makers, cultural specificities
- **Increase impact:** good linkage & buy-in by policy needed to make IPBES results relevant: regional specification needed

Biodiversity Knowledge

## Get engaged!

## Learn more on our flyer and website:

## www.biodiversityknowledge.eu

# Thank you for your attention!

BiodiversityKnowledge is funded by the European Commission via the project KNEU
(Coordination action, FP7, Grant No. 265299)

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Biodiversity Knowledge

SPIRAL
Interfacing Biodiversity and Policy

SEVENTH FRAMEWORK PROGRAMME

GEO GROUP ON EARTH OBSERVATIONS | GEO BON

# Some lessons learned …

- Data integration & sharing happens at the regional level but needs to be harmonized at the global level
- Multiplicity of SPIs should be embraced, learned from and built upon
- Ongoing external monitoring & evaluation
- Possible win-win situation for regional hubs & stakeholders engagement

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