Natural Systems and Vulnerability Programme

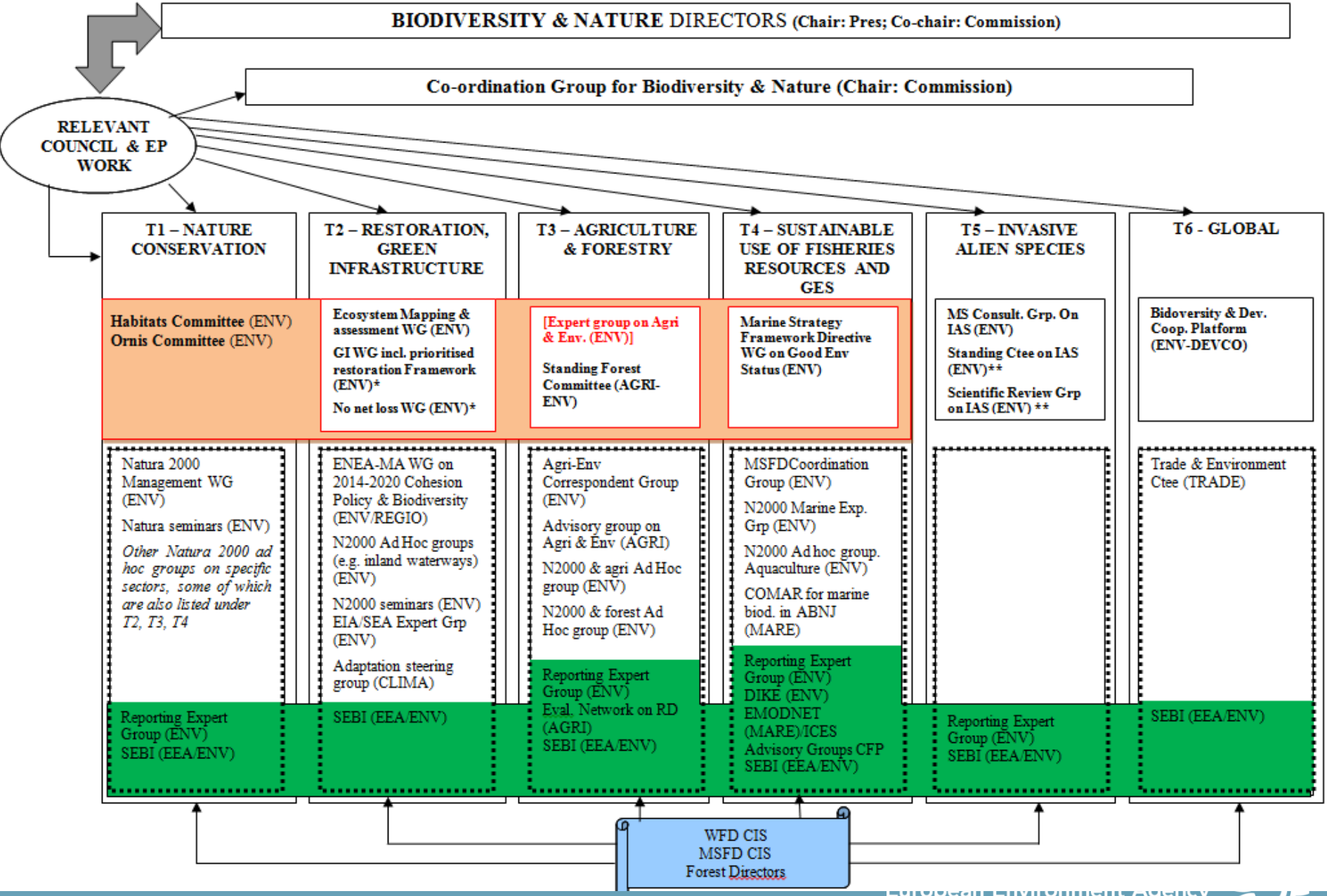
Biodiversity Group

BUILDING THE BIODIVERSITY KNOWLEDGE BASE FOR THE 2020 BIODIVERSITY TARGETS

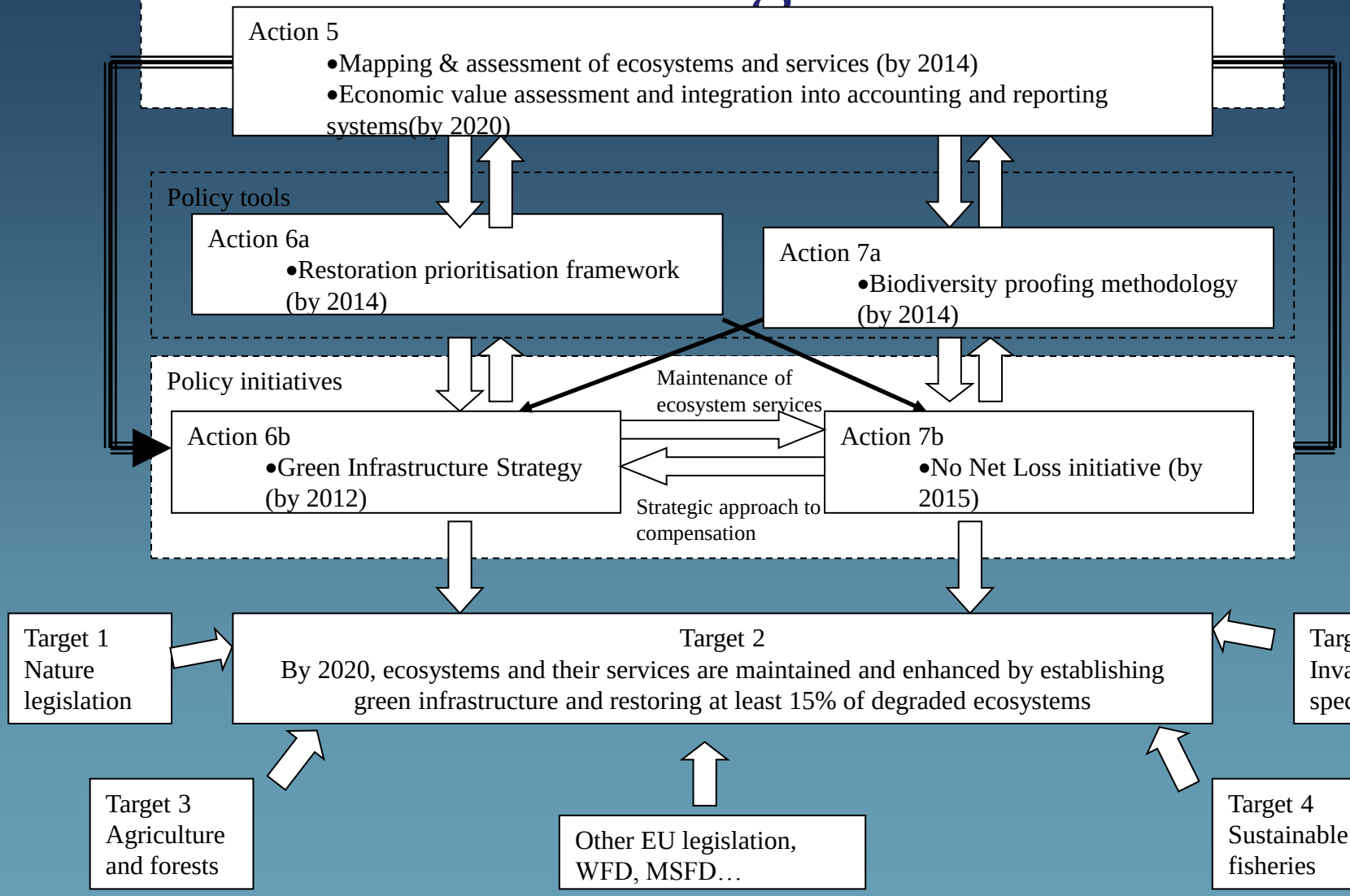
European Environment Agency

1. THE EU CONTEXT – DEVELOPMENT OF A COMMON MONITORING FRAMEWORK (CIF)

CIF GOVERNANCE CHART



The EU knowledge-base



2. THE EEA RESPONSE

EEA response – Improving the knowledge base

- Further Develop the BISE (Biodiversity Information System for Europe) and the BD Data centre
- Further develop (and streamline) Biodiversity relevant Indicators – SEBI, AEI
- Continued reporting support to EU policy and legislation
- Preparing new data (layers) – the GMES/GIO; Art 17
- Producing assessments – building on diverse sources of data and information – towards SOER2015

EEA works on

Reporting support to EU policy and legislation

- Continue support to the implementation of the Nature directives including the Natura 2000 data flow
- Reporting on conservation status of species and habitats (Art 17 Habitat Directive/Art 12 of the Birds Directive)
- Feed into the BD Target 1 & 2 activities
- Continued support to establishment of he EMERALD network

EEA works on
Indicators

- Further develop Biodiversity relevant indicators based on experience with the SEBI2010 and
- adapt/adopt indicators and reporting methodologies to the needs of the 2020 EU and global biodiversity targets – as well as
- input to forthcoming 7th EAP, Europe 2020 flagship initiatives, in particular Resource Efficiency (Roadmap).

EEA works on Assessments

- Conduct comprehensive DPSIR-based assessments on BD trends & status, for selected ecosystems (Marine, coastal, water) or topics for **SOER2015**
- Maintain the BD baseline as the European biodiversity reference benchmark
- Reinforce assessments of biodiversity in agriculture and forest policies (+ water framework directive & the marine strategy framework directive within a land based policy context)
- Ecosystems assessments in support of global and regionalized processes (TEEB, MA, MAES).

EEA works

Support to Global Policies

- Continue to follow the UN Convention on BD namely on the AICHI targets and respective indicator work, using experience from the SEBI model as a lead process on streamlining country-to-global indicators

- Support the IPBES global and regional development (and relate to the EU Mechanism for policy-science interface)

- Follow-up of GEOSS.

EEA's specific mandate – The report on the State of Environment of EUROPE (SOER)

Year	SOER Title	Focus of SOER	Input to EU environmental policy
1995	Environment in the European Union 1995	• addresses 5EAP targets • focus on sectoral integration	Report for the mid-term review of the 5EAP (1993-2000)
1999	Environment in the European Union at the turn of the century	• addresses environmental trends • focus on DPSIR, interconnections	Input to global assessment of 5EAP (1993-2000)
2005	The European Environment: State and Outlook 2005	• addresses air, water, land • focus on DPSIR, core indicators	Input to the mid-term review of the 6EAP (2002 to 2012)
2010	The European Environment: State and Outlook 2010	• addresses 6EAP priorities • focus on systemic challenges	Input to the final assessment of the 6EAP (2002 to 2012)

Note that these have been complemented by 'Europe's Environment' reports in 1995, 1998, 2003, 2007, as well as an Assessment of Assessment in 2011, that focussed on the state of environment across the pan-European region.

SOER from 2010 to 2015: How o integrate the biodiversity assessment?

Box 1 – From SOER 2010 to SOER 2015: What will stay the same? And what will differ?	
Two elements that stay the same …	Two elements that differ …
Maintain continuity regarding structure – The SOER 2015 will build on the structure used in the two previous reports in 2005 and 2010, namely distinct Parts A (global), Part B (European) and Part C (countries).	Build more explicitly on existing EEA information – Instead of developing 'new' thematic and country assessments, the SOER 2015 will take stock of indicators and complement them with short briefings.
Keep and build on the existing narrative – Rather than starting with a 'blank page', the SOER 2015 will further explore the main arguments developed in the SOER 2010 and subsequent Indicator Reports.	Involve stakeholders more in developing conclusions – The SOER 2015 will explicitly aim to engage key stakeholders in synthesising, developing cross-cutting conclusions and reflecting on their implications.

3. Biodiversity System for Europe - BISE

The challenge of a single entry point for EU biodiversity information

in support of the implementation of the 2020 strategy

European Environment Agency

BISE – biodiversity.europa.eu

BISE – who is working on this?

- BISE is a partnership project (DG ENV, DG Research, JRC, EUROSTAT, EEA = biodiversity knowledge group)
- DGENV (+ IT contract)
- EEA and ETC-BD
  - BISE concept (June 2010) - draft
  - Implementation Plan (January 2012) – draft

- Country involvement: EIONET, European Biodiversity CHM network

BISE – what it is

- A single entry point to EU biodiversity information

BISE

Biodiversity is Genes, Species, Habitats, Ecosystems ...

BISE

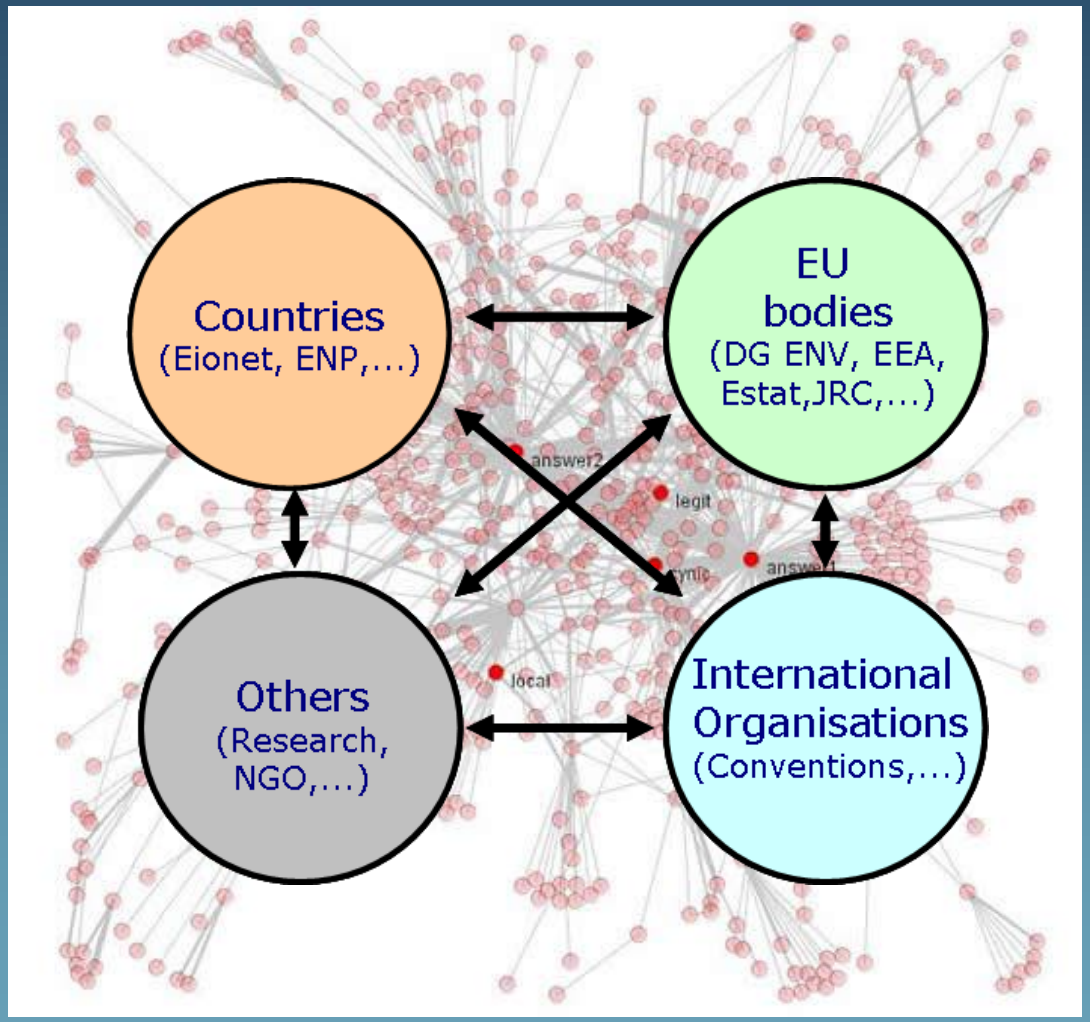
Scale is European
linked to
Global (upstream, CBD)
National (downstream, Countries)

BISE

Information system is
Technically compatible with other European portals

Building the knowledge base for the 2020 biodiversity targets

BISE – information sharing



BISE – information sharing

SEIS principles

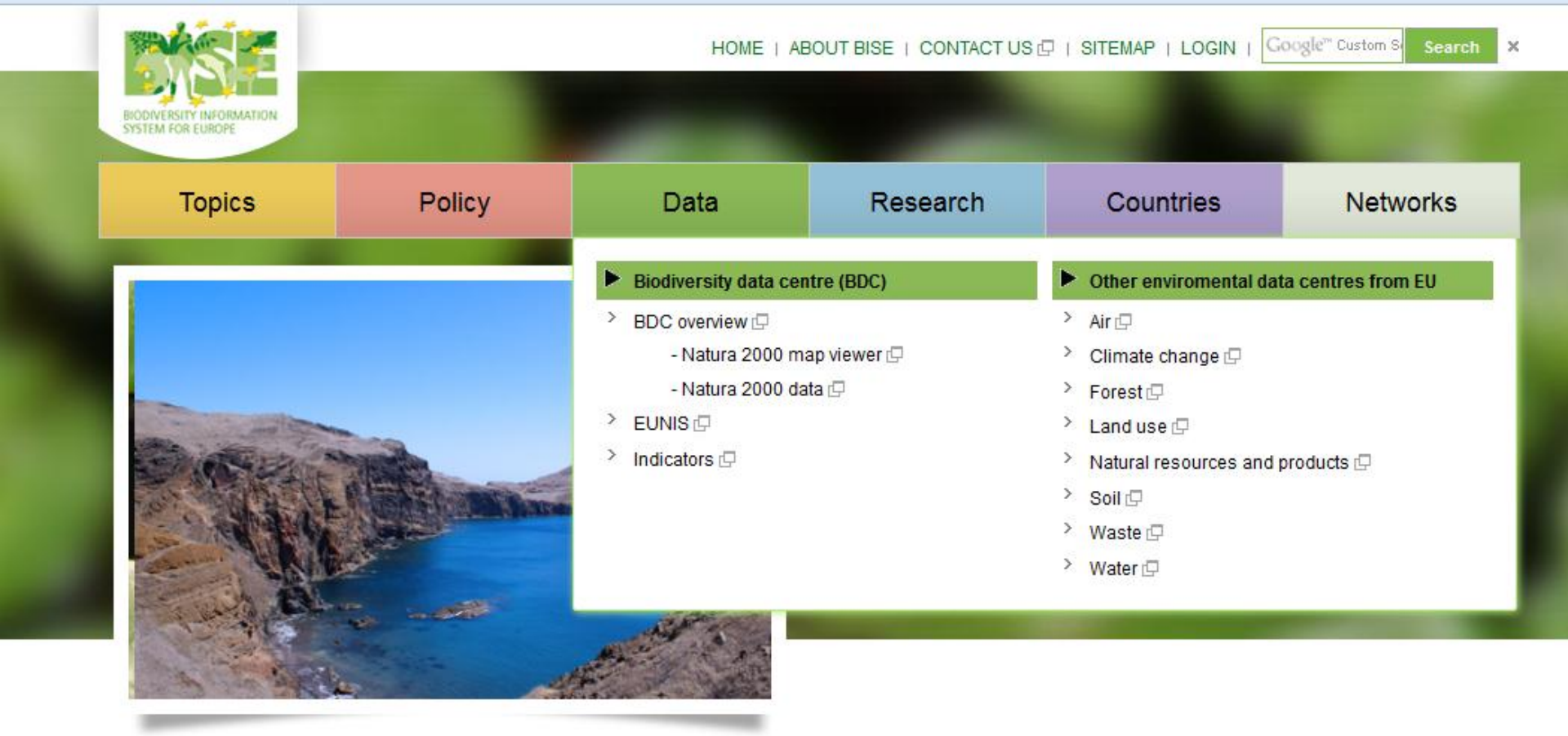
information should be

- managed as **close** as possible to its source;
- collected **once**, and shared with others for many purposes;
- readily **available** and easy **accessible**
- accessible to enable users to make **comparisons** at the appropriate geographical scale
- fully available to the general **public** at national level in the relevant **national language(s)**
- supported through common, free **open** software standards

BISE – what it is

- A **portal** presenting data and information from products developed by EU institutions and Member States
- A **building block** within the wider Shared Environmental Information System **SEIS**
- **Serves as** EU Biodiversity Clearing House Mechanism to CBD
- **A process** of developing tools for re-using data and information products, adding to the EC-CHM Toolkit
- **A overarching approach** to connect biodiversity information form various sources

BISE – *access – link - connect*

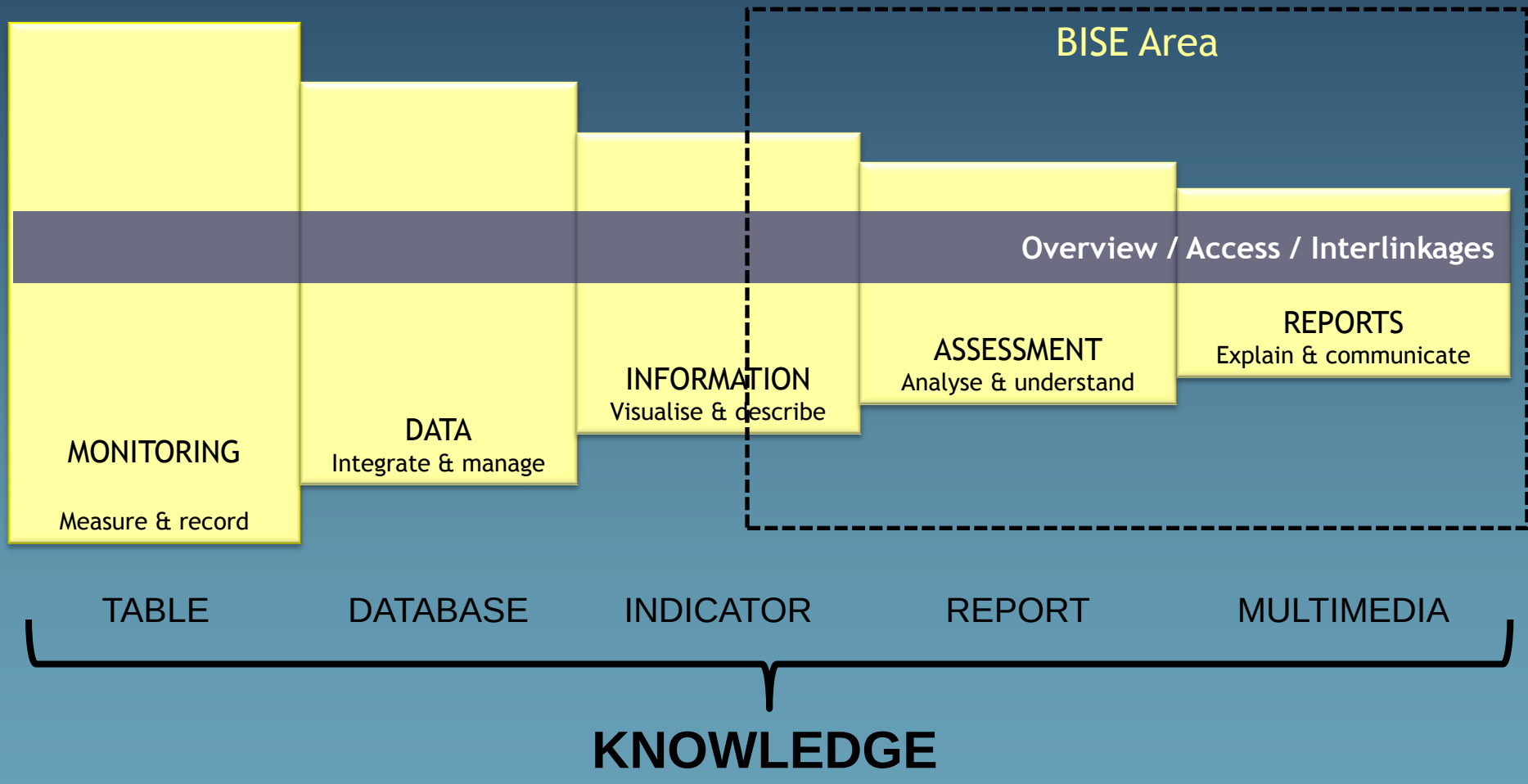


BISE – *access – link - connect*

BIODIVERSITY INFORMATION SYSTEM FOR EUROPE

Data	• CDDA, EEA Biodiversity Data Centre, INSPIRE
Policy	• 2020 biodiversity targets, strategies EU + national
Topics	• EUNIS, semantic services – taxonomy, • Ecosystem assessment
Countries	• Country presentations, national settings
Networks	• EIONET + CHM

Knowledge and the BISE Area



Knowledge and the BISE Area

National level

Biodiversity Targets, Action Plans, products and reports

European Environment Agency

Main BISE tasks [identified for 2012-2015]

1. systematically integrating relevant products from Data Centres and other sources, relevant to all Targets of the EU Biodiversity Strategy.

2. ensuring update of information and transparency of the work done under the Common Implementation Framework of the EU Biodiversity Strategy at European scale.

3. ensuring the accessibility, integration and comparability of assessments and reporting of progress from the national to the European level [similar to the 2010 BAP reporting].

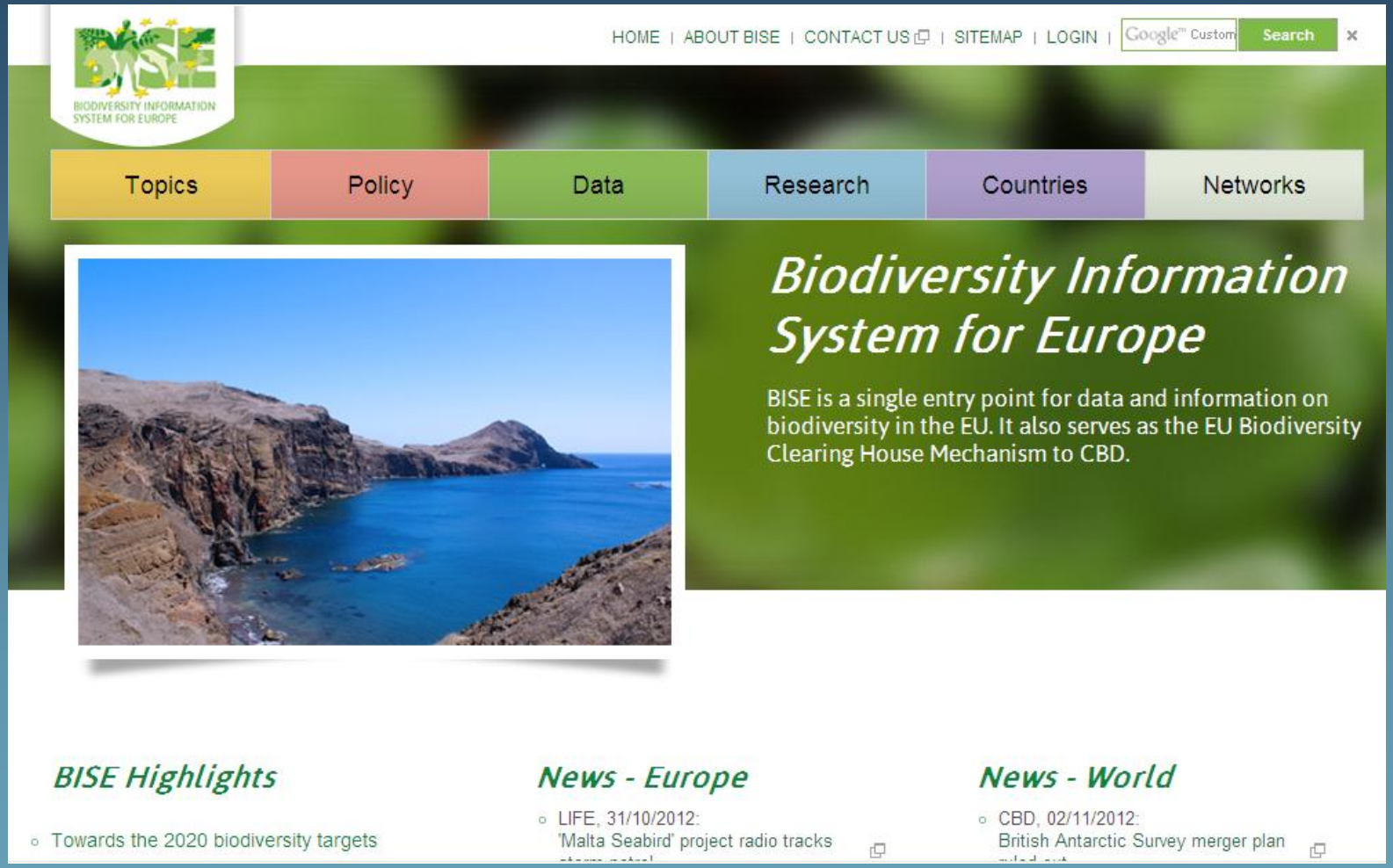
4. enabling the accessibility and re-use of national products related to CBD reporting, following SEIS principles

5. enabling uptake and re-use of products from research [relevant to the science-policy interface needs of the EU biodiversity strategy]

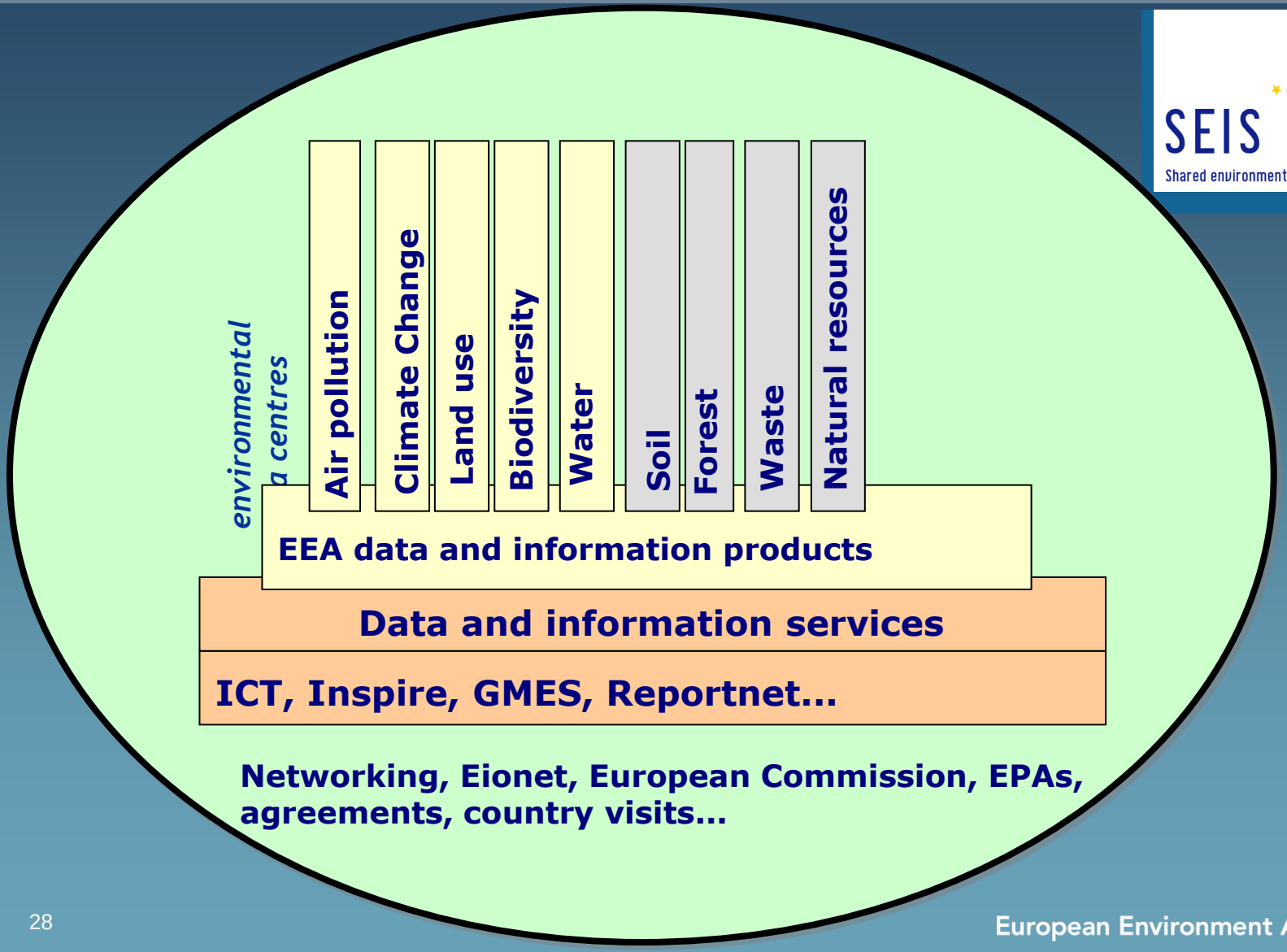
4. THE EEA BIODIVERSITY DATA CENTER

BDC is one of five European data centres at EEA

BDC is a component of BISE



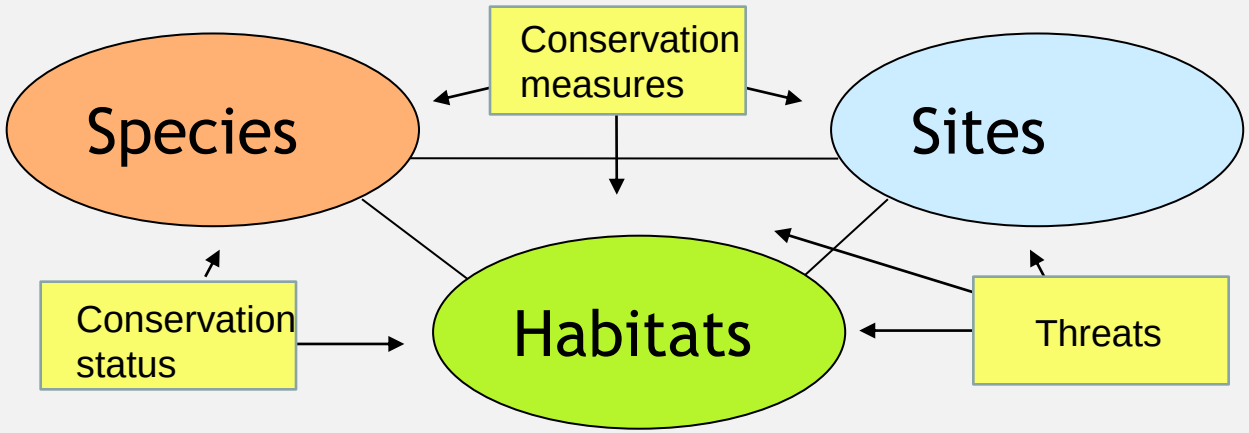
Overview of European data centres in EU institutions



SEIS
Shared environmental information system

Biodiversity Data Centre

Illustration according to content:



Tools for exploring:
Data viewers,
Map viewers,
EUNIS, ...

Illustration according to data flow:

Nature directives data flows

- Natura 2000
- Article 17 (HD)
- Article 12 (BD)
- Derogation reporting

EEA priority data flow

- CDDA

Other data

- IUCN Red lists

Aspirations: Invasive alien species, socio-economically important species

EEA data repositories

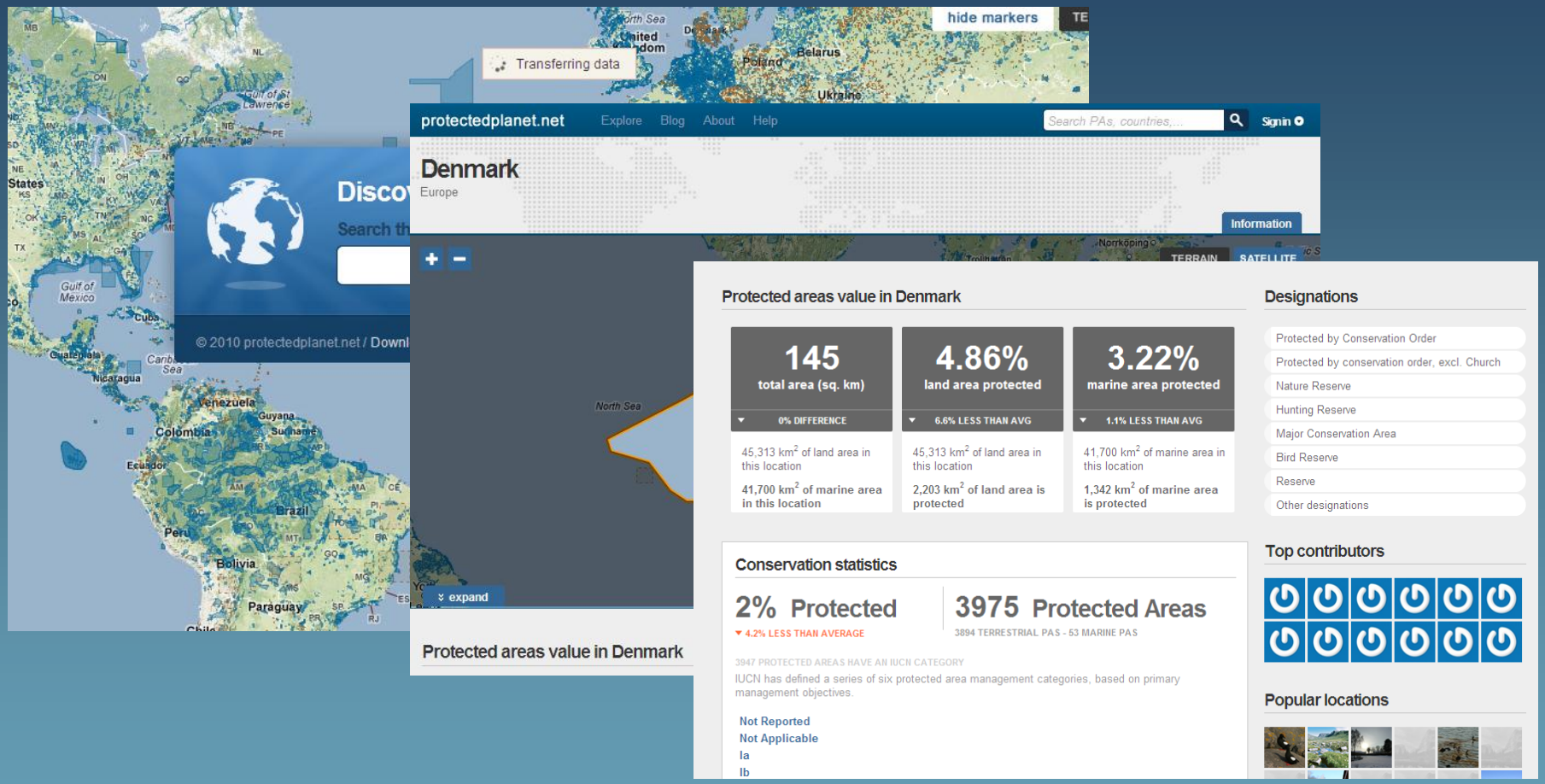
Reportnet

European Environment Agency

New in 2012

- Datasets
  - Natura 2000
  - Common Dataset for Designated Areas
  - Biogeo regions
- Statistics
  - Natura 2000 stats broken down by NUTS and Corine land cover
- Graphics
  - Maps and graphs for reports, e.g. Protected areas and SEBI
- Other
  - Eionet Forum
    http://forum.eionet.europa.eu
  - Semantic data service
    http://semantic.eea.europa.eu/

CDDA feeds Protected Planet (WDPA) for Europe



- http://protectedplanet.net/

5. EUNIS web application

EUNIS – European Nature Information System

- EUNIS goes back to 2005
- EUNIS has three modules
  - Species
    - 280 000+ species (incl synonyms)
  - Habitat types
    - EUNIS habitat types classification
    - Habitats Directive Annex I
  - Sites
    - Natura 2000
    - CDDA

EUNIS species focus

- Species covered by international legislation
- Species covered by the European Red List
- Species used in European indicators
- Species of special interest
  - Invasive alien species
  - Wild crop relatives
  - Pollinators

Species in the Annexes of…

- Habitats D. (92/43/EEC)
- Birds D. (2009/147/EC)
- Bern convention 1979
- Bonn - CMS 1979
- CITES 1973
- CITES EU regulations
- AEWA 2008
- EuroBats 1991
- ACCOBAMS 1996
- ASCOBANS 1992
- Wadden Sea Agreement 1990
- SPA/BD Mediterráneo
- OSPAR
- HELCOM

Species used in indicators

SEBI

- 001 148 common bird species; Grassland butterflies from 13-15 countries (2012 update)
- 002 Bird species
- 003 Those listed in Annexes II, IV, and V Habitats Directive
- 010 More than 12.000 alien species recorded in Europe; 163 "Worst invasive alien species threatening biodiversity in Europe"
- 011 124 bird species covered by the Pan-European Common Bird Monitoring Scheme (PECBMS)
- 012 Fish and invertebrate species landed from fisheries
- 021 Several species of commercial interest

Outlook

- 004 Plant and vertebrate species

EUNIS deep links to other online databases

- PESI (270 000 links)
- Catalogue of Life (64 000 links)
- GBIF (213 000 links)
- WorMS (38 000 links)
- IUCN redlists (5 000 links)
- CITES/UNEP-WCMC (900 links)
- ITIS (39 000 links)
- Fauna Europaea (173 000 links)
- Encyclopedia of Life (5 000 links)
- Wikipedia (13 000 links)
- 8 000 pictures – mainly Wikimedia

EUNIS web application

General Information

Conservation status | Legal instruments | Useful links

Canis lupus, Linnaeus 1758

Taxonomic Information

Kingdom: **Animalia**; Phylum: **Chordata** (Vertebrata); Class: **Mammalia**; Subclass: **Theria** (Eutheria); Order: **Carnivora**; Family: **Canidae**; Genus: **Canis**; Species: ***Canis lupus***

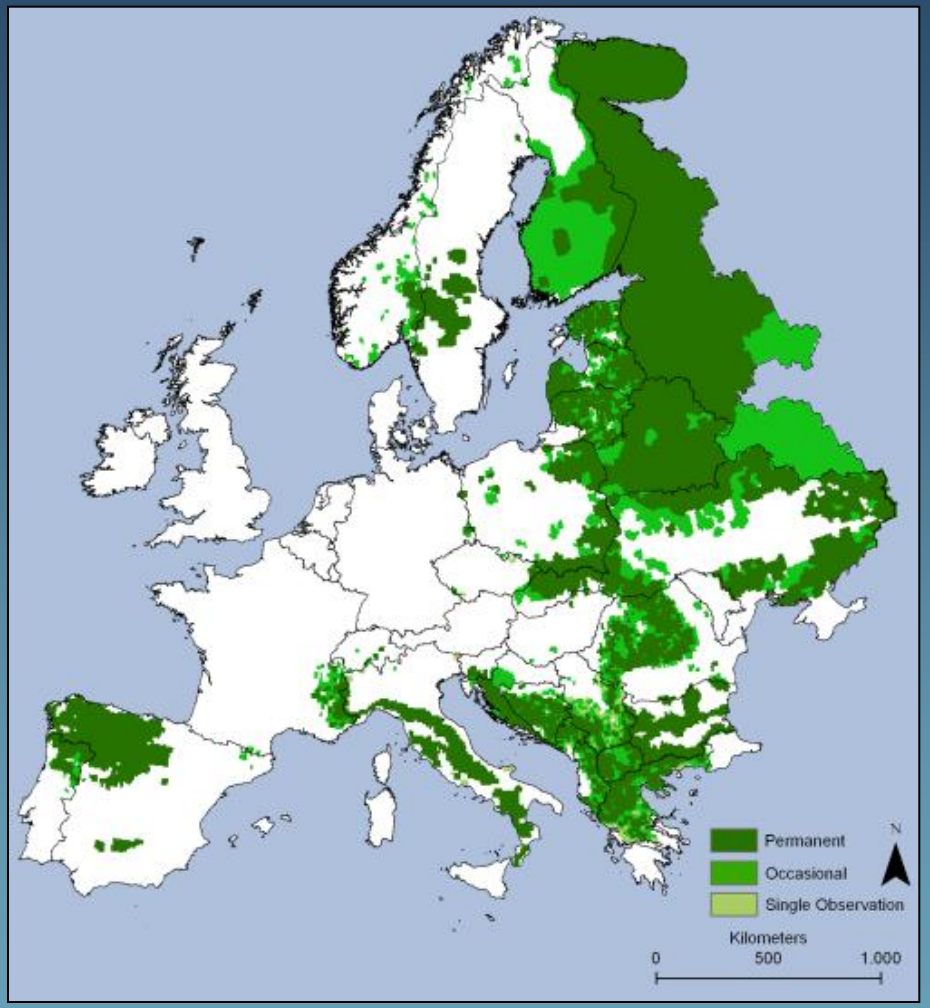
Valid subspecies:

Synonyms:

Vernacular names: Link to official country links

Link to external sources

Invasiveness of the species: European Network on Invasive Alien Species, NOBANIS



THANK YOU!

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European Environment Agency