Stakeholders' Conference
Biodiversity and the EU – Sustaining Life, Sustaining Livelihoods

Grand Hotel, Malahide, Ireland
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A first set of EU headline biodiversity indicators

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Presentation will include:

- Background to the proposed set

- Example illustrative indicators

- How to deliver

Background to the proposed set

Background to the proposed EU set

- Recent decisions and discussions at global, pan-European and EU level on requirements for biodiversity monitoring, indicators and reporting

- CBD has agreed 7 focal areas for indicators – for immediate testing and further development

- Proposal from Biodiversity Expert Group for a first set of EU headline biodiversity indicators consistent with the CBD focal areas and indicators

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Considerations for EU set

- EU target to halt biodiversity loss by 2010

- Link to other EU Biodiversity Policy issues

- Link to relevant sectors, threats and pressures

- Make use of ongoing developments (EEA core set, OECD, Bio-IMPs, Biodiversity Index etc)

- Distinguish different indicator functions

- Be selective in the communication

EU Sixth Environmental Action Programme
(from overall aims in Art. 2)

*"Protecting, conserving, restoring and developing the functioning of natural systems, natural habitats, wild flora and fauna with the aim of **halting** desertification and the **loss of biodiversity [by 2010]**, including diversity of genetic resources, both in the European Union and on a global scale."*
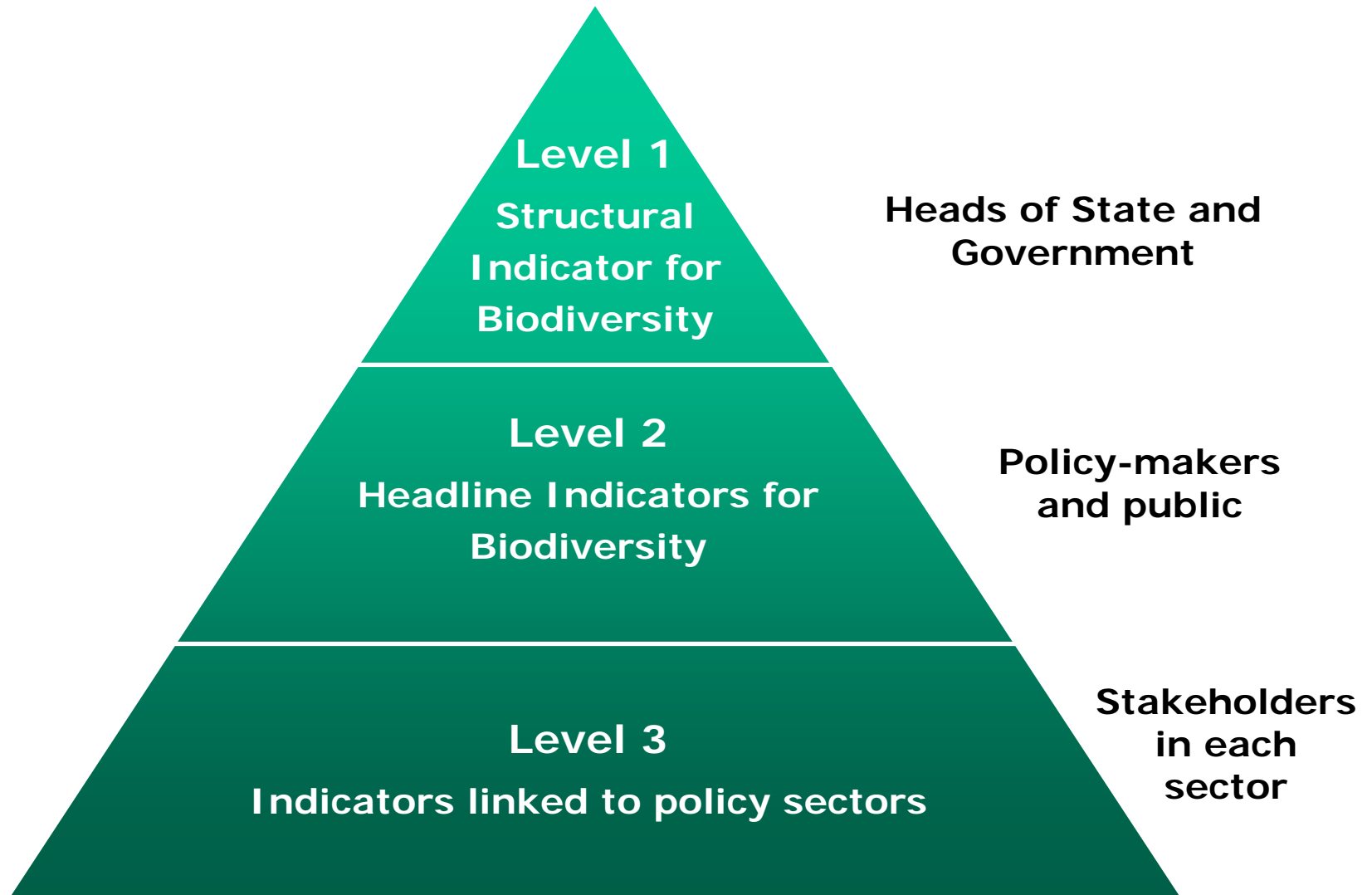
Biodiversity loss definitions

UNEP/CBD/COP/7/L.27 defines biodiversity loss as the long term or permanent qualitative or quantitative reduction in components of biodiversity and their potential to provide goods and services, to be measured at global, regional and national levels.

UNEP/CBD/SBSTTA/9/INF/26 recognises as a basis for developing indicators that biodiversity loss can consist of:

a) A decline in extent, condition or sustainable productivity of ecosystems

b) A decline in abundance, distribution or sustainable use of species populations, and extinctions

c) Genetic erosion

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Levels of communication

Level 1
Structural Indicator for Biodiversity — Heads of State and Government

Level 2
Headline Indicators for Biodiversity — Policy-makers and public

Level 3
Indicators linked to policy sectors — Stakeholders in each sector

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Focal areas for indicators

CBD:

- Status and trends of the components of biological diversity
- Sustainable use
- Threats to biodiversity
- Ecosystem integrity and ecosystem goods and services
- Status of traditional knowledge, innovations and practices
- Status of access and benefits sharing
- Status of resource transfers

EU:

- Public opinion

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First set of EU headline biodiversity indicators based on CBD decision and focal areas   (1/3)

| **Status and trends of the components of biological diversity** |
|---|
| Trends in extent of selected biomes, ecosystems and habitats |
| Trends in abundance and distribution of selected species |
| Change in status of threatened and/or protected species |
| Trends in genetic diversity of domesticated animals, cultivated plants, and fish species of major socioeconomic importance |
| Coverage of protected areas |
| **Sustainable Use** |
| Area of forest, agricultural, fishery and aquaculture ecosystems under sustainable Management |

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Trends in extent of ecosystems

Wetlands concentrate in dark blue areas, are scattered when green and absent when yellow. Areas more concerned by plantation (orange to red) are those with few wetlands
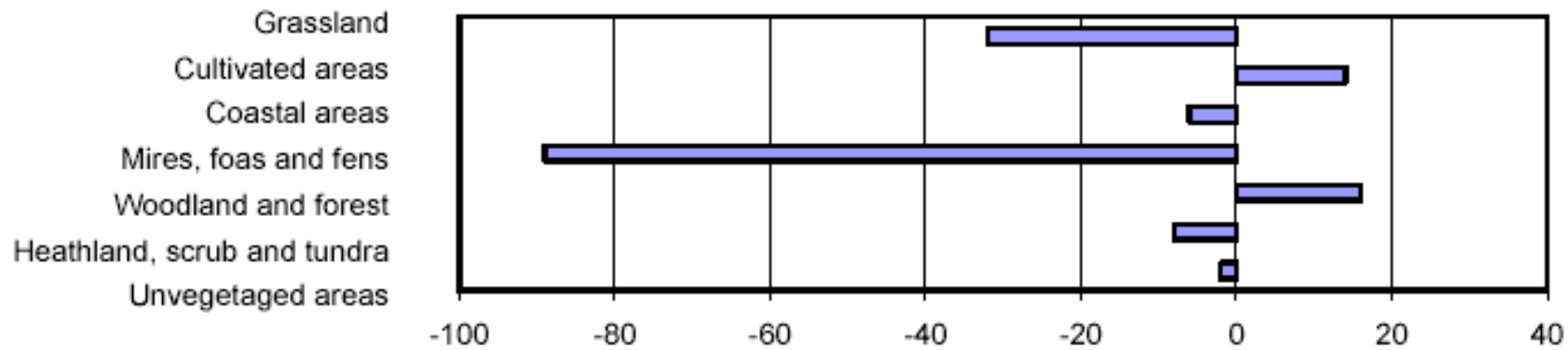
Provisional results:

Coniferous forest planted on peatbogs 1990-2000

hectare in each grid of 900 ha

	6 - 54
	55 - 107
	108 - 197
	198 - 394

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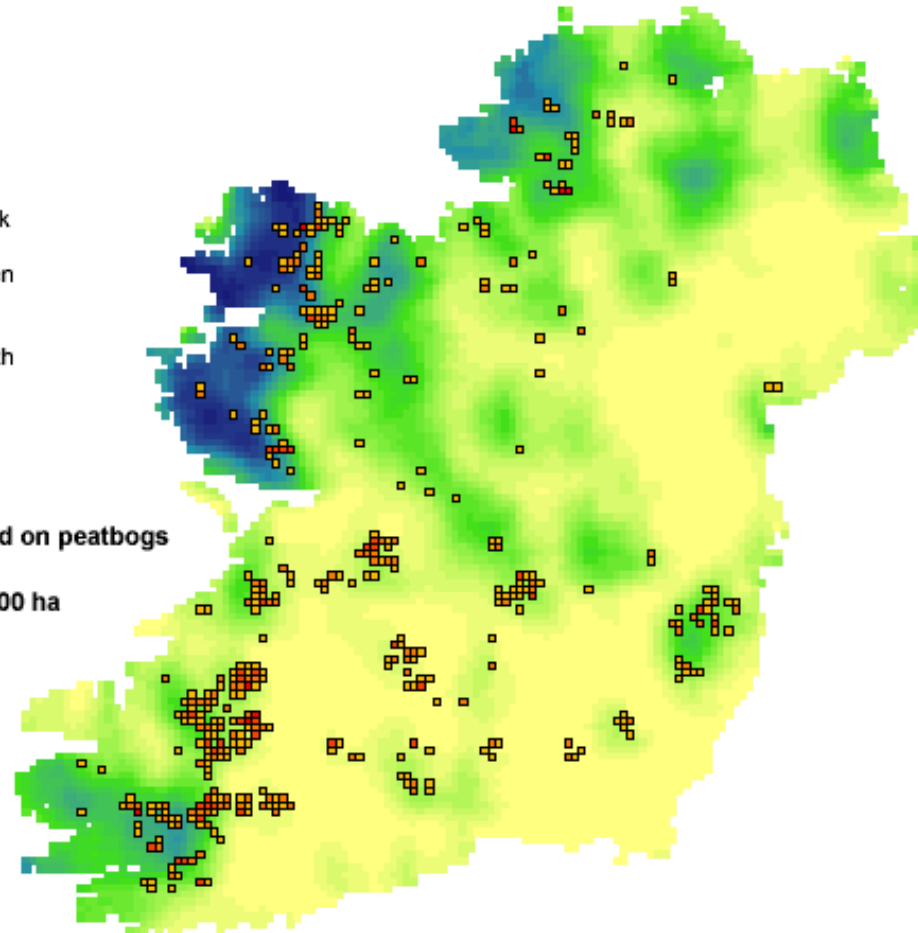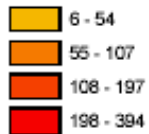
Trends in abundance of selected species

Provisional results:
Percent change in butterfly population size
1970-2000

Change in status of threatened and/or protected species

Iberian Lynx now critically endangered

Source: IUCN 2003 red list of globally threatened species

'It is time to ring the alarm bell. Biodiversity loss has accelerated to an unprecedented level, both in Europe and worldwide'.

Margot Wallström, EU Commissioner for the Environment, at the Third Intergovernmental 'Biodiversity in Europe' Conference, Madrid, January 2004
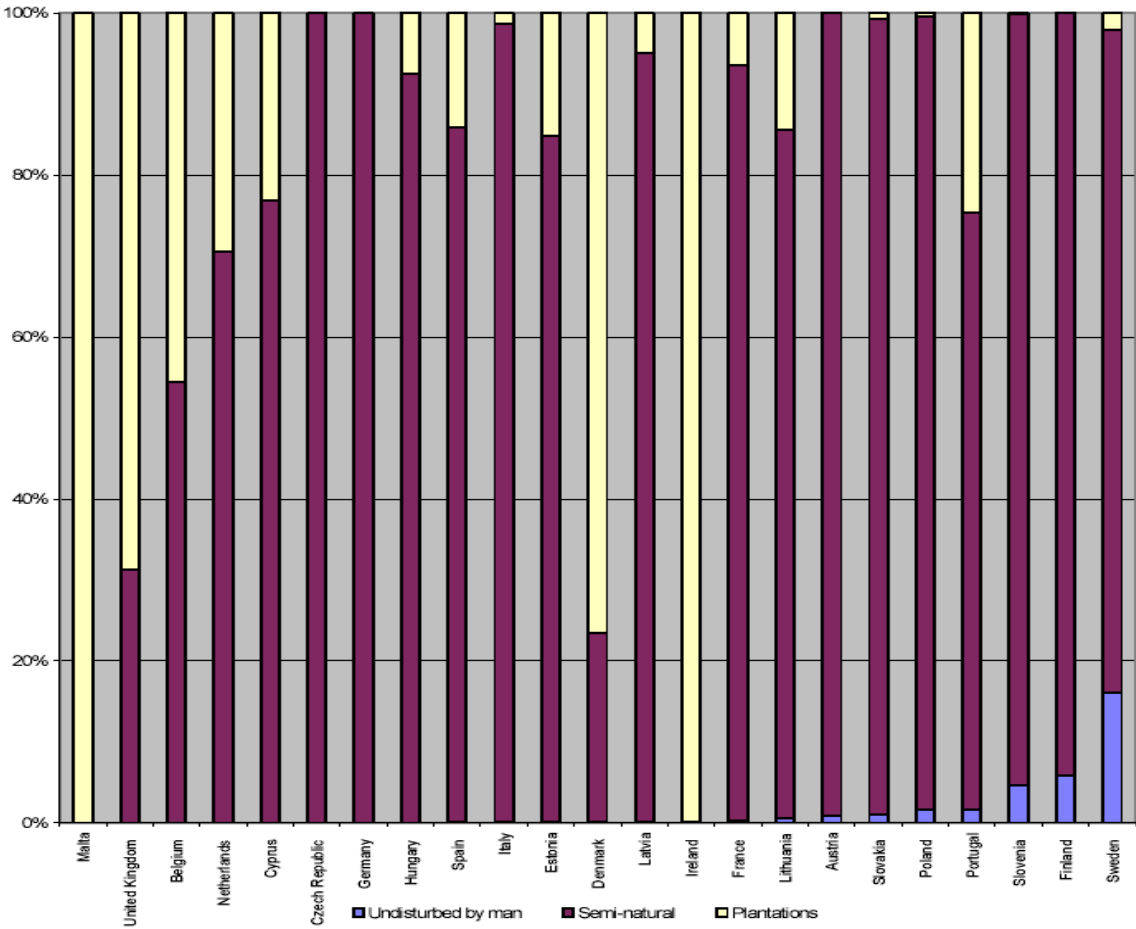
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First set of EU headline biodiversity indicators based on CBD decision and focal areas   (2/3)

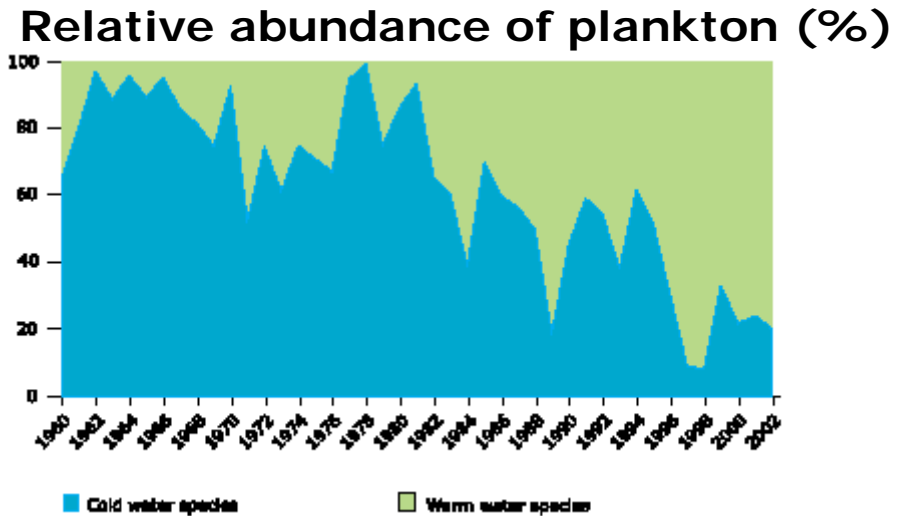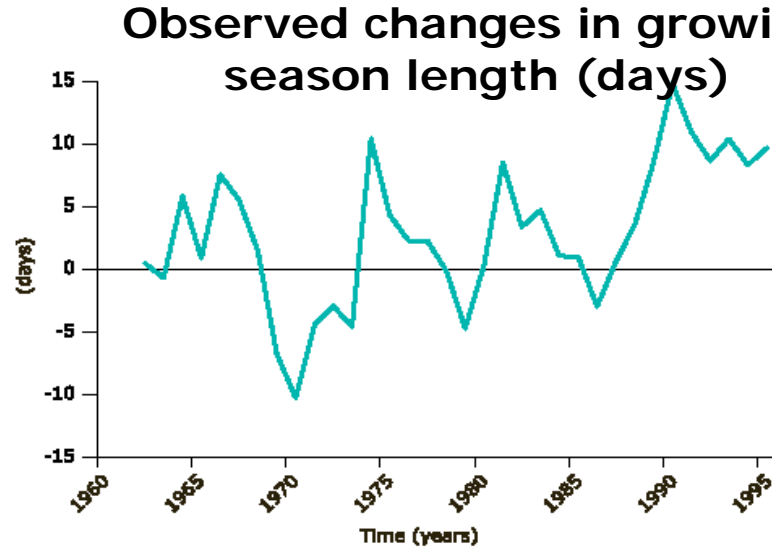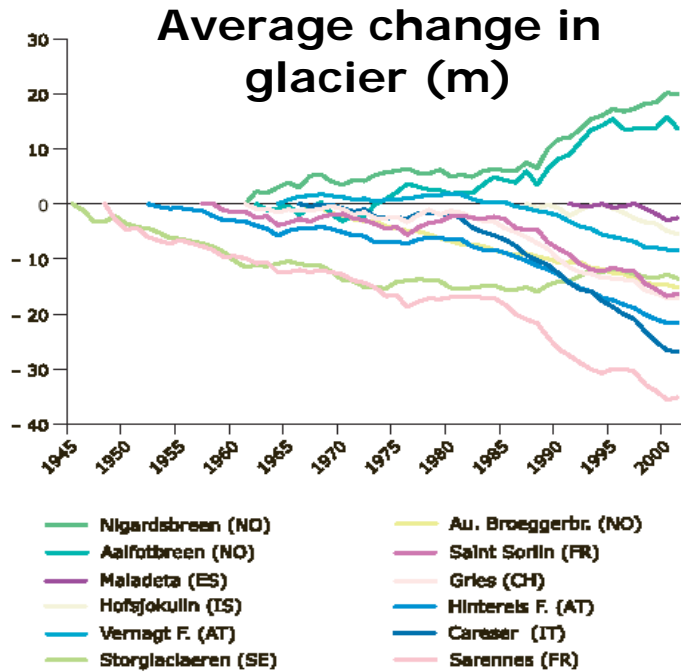| **Threats to Biodiversity** |
| --- |
| Nitrogen deposition |
| Numbers and costs of invasive alien species |
| Impact of climate change on biodiversity |
| **Ecosystem integrity and ecosystem goods and services** |
| Marine trophic index |
| Connectivity/Fragmentation of ecosystems |
| Water quality in aquatic ecosystems |

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Area of forest under sustainable management

Note: No data available for Belgium and Luxembourg.

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Impact of climate change on biodiversity

Average change in glacier (m)

Legend:
- Nigardsbreen (NO)
- Aalfotbreen (NO)
- Maladeta (ES)
- Hofsjokulln (IS)
- Vernagt F. (AT)
- Storglaciaeren (SE)
- Au. Broeggerbr. (NO)
- Saint Sorlin (FR)
- Gries (CH)
- Hinterels F. (AT)
- Careser (IT)
- Sarennes (FR)

Observed changes in growing season length (days)

Relative abundance of plankton (%)

Legend:
- Cold water species
- Warm water species

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Water quality in aquatic ecosystems

Nitrate concentration
(mg NO_3/l)

Arable land cover
(% of total upstream catchment)
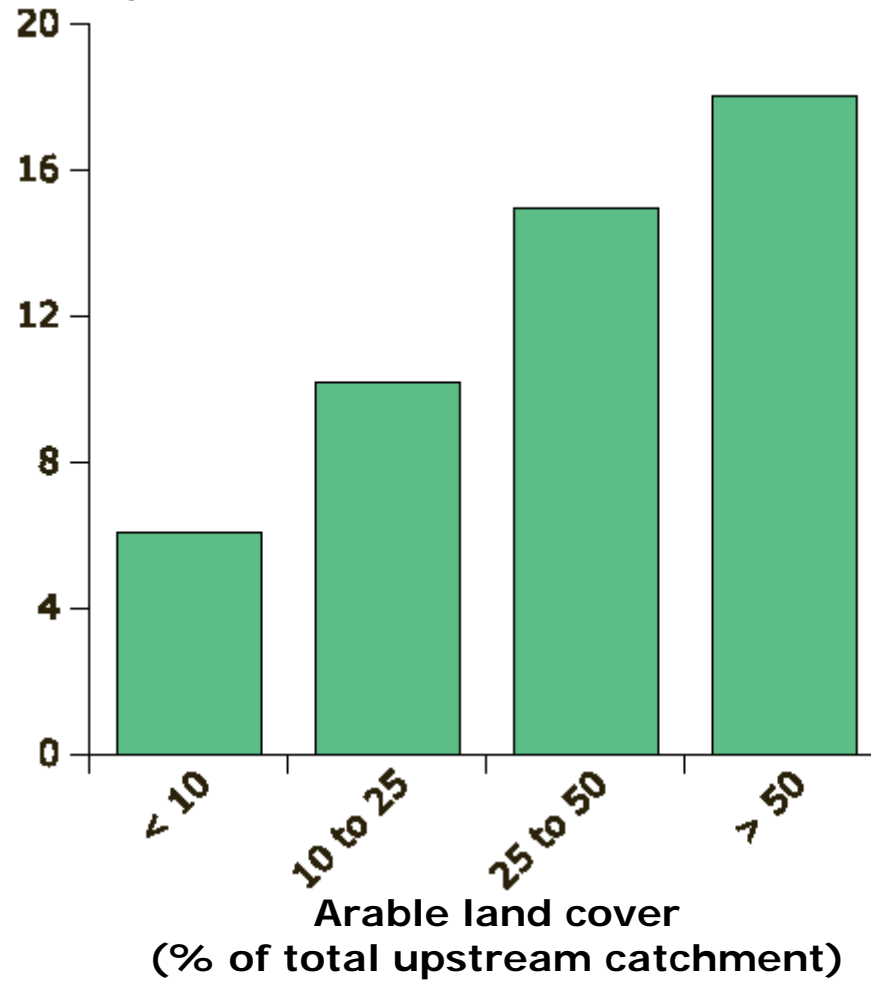
First set of EU headline biodiversity indicators based on CBD decision and focal areas (3/3)

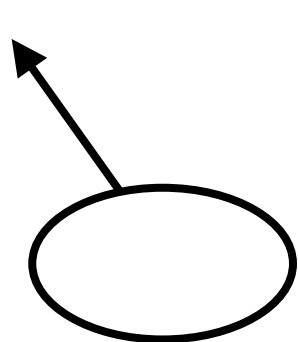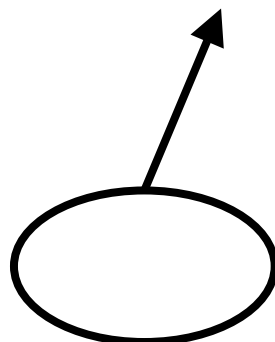| |
|---|
| **Status of access and benefits sharing** |
| Patents |
| **Status of resource transfers and use** |
| Funding to biodiversity |
| **Public opinion (not included in CBD list)** |
| Public awareness and participation |

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How to deliver

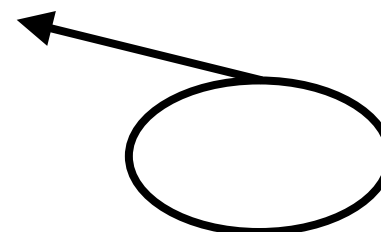European Environment Agency

NOT:
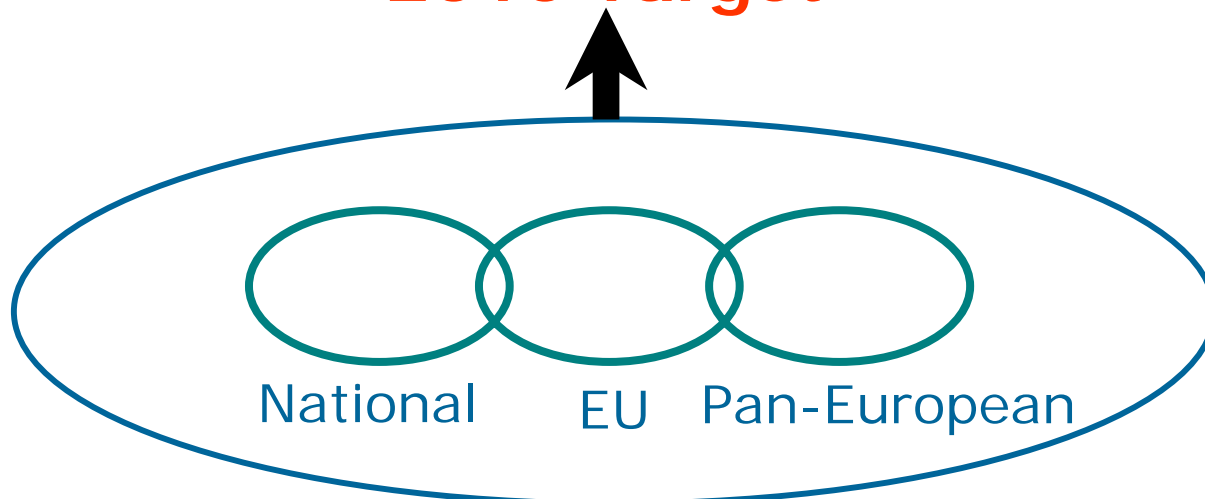
2010 Target

National

EU

Pan-European
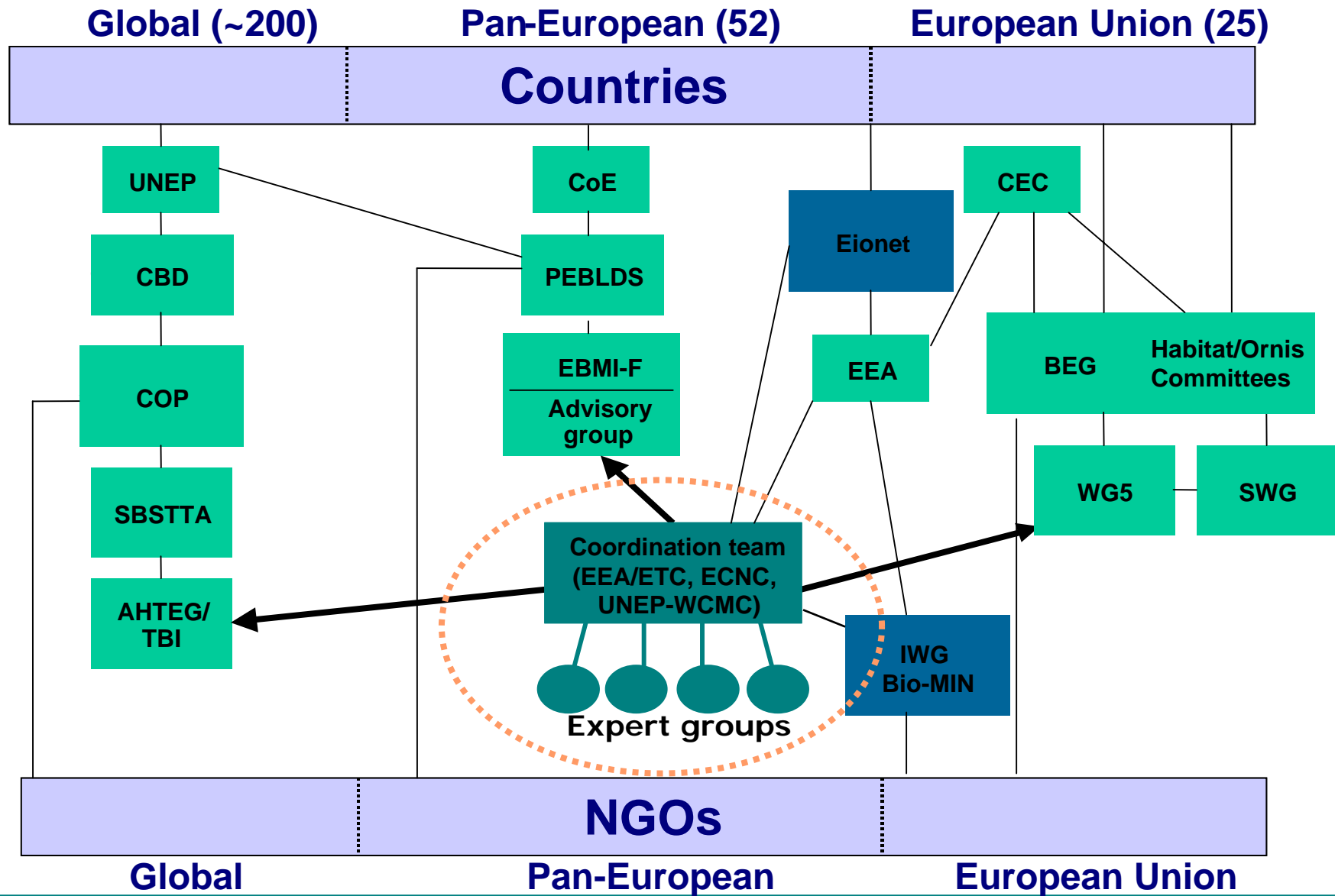
BUT:

2010 Target

National   EU   Pan-European

Indicative overview biodiversity organisations and activities

Objectives for coordination team
(to be led by EEA in cooperation with ECNC and UNEP-WCMC)

- Improve coordination, information exchange and collaboration

- Build on current activities and good practice within both governmental and non-governmental organisations

- Do it! - consolidate, test, refine, document and produce agreed biodiversity indicators

- Ensure adequate funding for monitoring, indicators and assessments to support achievement of 2010 target

Workplan and related events

- **May 2004:** mandate from Malahide Conference to Coordination team
- **August 2004:** detailed work plan prepared
- **2005-2007:** indicators developed and tested; monitoring and reporting requirements defined
- **2005:** reporting under CBD
- **2007:** reporting under Habitats Directive
- **2008:** baseline for 2010 defined
- **2010:** target year
- **2011-2012:** reporting on 2010

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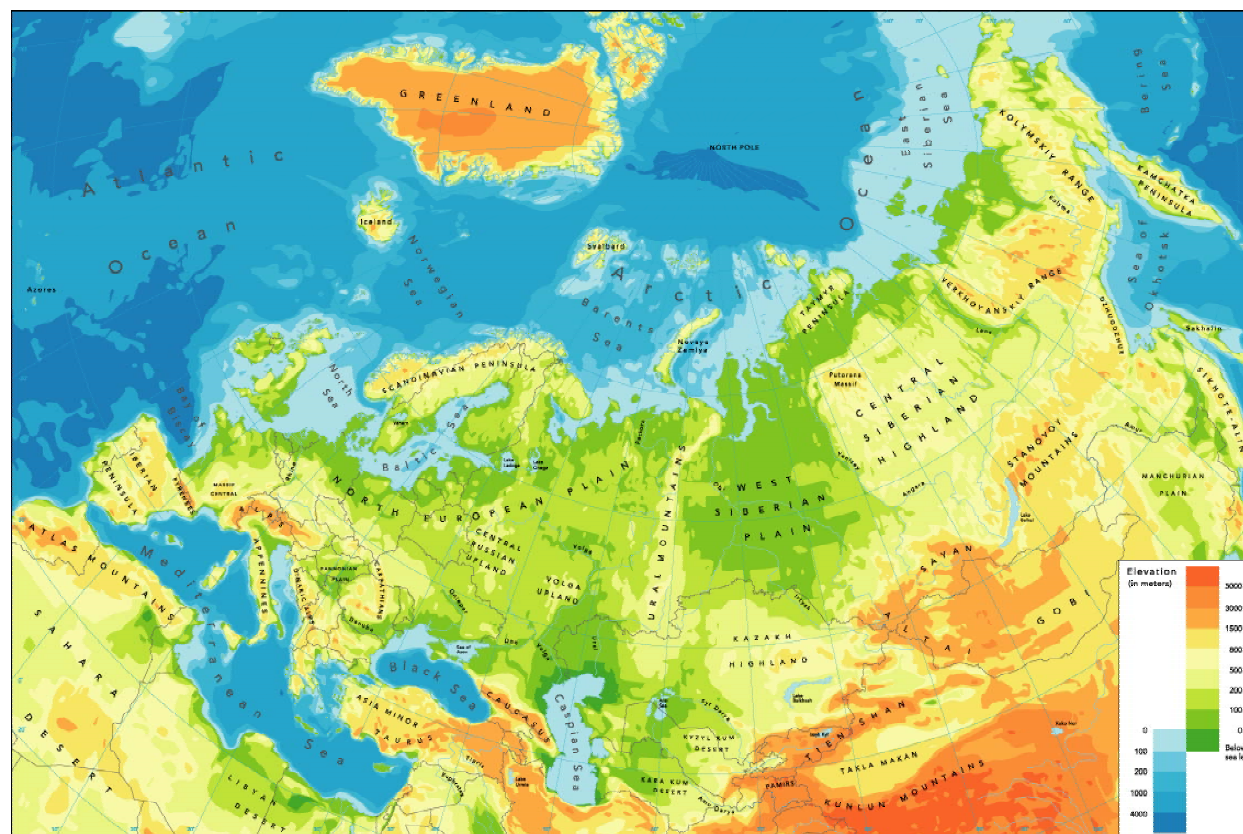
Man has a special responsibility to safeguard and wisely manage the heritage of wildlife and its habitat, which are now gravely imperilled by a combination of adverse factors. Nature conservation, including wildlife, must therefore receive importance in planning for economic development.

Stockholm Declaration - Principle 4 (1972)

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