

EEA contributions to frame and deliver European Ecosystems Assessments

Reference: EU Biodiversity Strategy 2020 and corresponding
Common Implementation Framework

→ Working Group on Mapping and Assessments of
Ecosystems and their Services (MAES)

Links with WFD, MFSD, Fishery, Agri, Forest, and CC monitoring
/ reporting ...and CBD reporting! As well as Resource efficiency
...and environmental accounting ...and SOER



Biodiversity Strategy 2020: 6 targets, 20 actions

- Target 1: Fully implement the Birds and Habitats Directives
- Target 3: Increase the contribution of agriculture and forestry to maintaining and enhancing biodiversity
- Target 4: Ensure the sustainable use of fisheries resources
- Target 5: Combat Invasive Alien Species
- Target 6: Help avert global biodiversity loss
- **Target 2: Maintain and restore ecosystems and their services**
By 2020, ecosystems and their services are maintained and enhanced by establishing green infrastructure and restoring at least 15% of degraded ecosystems.



Ecosystem Assessments in Biodiversity Strategy 2020

→ Action 5 under target 2 of the Biodiversity Strategy to 2020:

”Member States, with the **assistance** of the Commission, will **map and assess** the **state of ecosystems** and **their services** in their national territory by 2014, **assess the economic value** of such services, and promote the integration of these values into accounting and reporting systems at EU and national level by 2020.”



4 steps of implementation

By 2014:

- I. Biophysical baseline mapping and assessment of the state of major ecosystems;
- II. Biophysical baseline mapping and assessment of defined ecosystem services;

2015-2020:

- I. Alignment of ecosystem service assessments with scenarios of future changes;
- II. Valuation of ecosystem services for baseline and contrasting scenarios and integration into environmental and economic accounting.



Ecosystem assessments - EEA contribution

- Development of methodological approach with Commission and Member States for:
 - European Ecosystem Assessments
 - Country support
 - Knowledge portal
- Links with EEA thematic assessments, SOER2015, indicators & accounts
- Links to MA follow up: liaison with UNEP-WCMC and the secretariat for Sub-Global Assessments



From Baseline 2010...

Table 3.1 Trends in the status of European ecosystem services

Ecosystems	Agro ecosystems	Forests	Grasslands	Heath and scrubs	Wetlands	Lakes and rivers
Provisioning						
Crops/timber	↓	↑			↓	
Livestock	↓	=	=	=	↓	
Wild foods	=	↓	↓		=	
Wood fuel		=		=		
Capture fisheries					=	=
Aquaculture					↓	↓
Genetic	=	↓	↓	=	=	
Freshwater		↓			↑	↑
Regulating						
Pollination	↑	↓	=			
Climate regulation		↑		=	=	=
Pest regulation	↑		=			
Erosion regulation		=	=	=		
Water regulation		=		↑	↑	=
Water purification					=	=
Hazard regulation					=	=
Cultural						
Recreation	↑	=	↓	↑	↑	=
Aesthetic	↑	=	=	=	↑	=

Status for period 1990–present ■ Degraded ■ Mixed ■ Enhanced ■ Unknown □ Not applicable

Trend between periods □ ↑ Positive change between the periods 1950–1990 and 1990 to present □ ↓ Negative change between the periods 1950–1990 and 1990 to present □ = No change between the two periods

Source: Adapted from Harrison et al., 2010.

...to Target 2,
Action 5.



Filling (reload) the matrix...

2014: EU and MS report on mid-term implementation of the EU Biodiversity Strategy to 2020

2011-2012 reporting on river basin management under WFD

end 2013: MS reports to DG AGRI on RDP

mid-2014: Parties report to CBD on mid-term implementation of Strategic Plan for Biodiversity, 2011-2020

2011

2012

2013

2014

...

October 2011 LULUCF reporting system proposal for 2020

June 2012: MS report to DG AGRI on implementation of EU Forest Strategy

2013: GIO-Land Corine land cover 2012 inventory

2013-2014: EU report on MS implementation of article 17 HD

2014: use of reported data on current environmental status under MSFD (reporting end 2012)

...and integrated analysis / accounts production



Streamlining, synchronizing related reporting?

- Discussion document shared between Nature, Water and Marine Directors by end of May: *How to create synergies and implement them together in the most efficient way?*
 - Streamlining and harmonisation of reporting and information management
 - Streamlining developments in Ecosystem-based approach (ESA) and Ecosystem Services (ES)
- EC invited to prepare a cross-cutting policy paper:
 - on interfaces between the various Directives and policies in these areas - 1st half 2013
 - Further develop the shared monitoring and reporting systems through WISE and BISE for an easier integration of the information



Filling the Matrix - EEA's contributions (1)

- Classifications (services, ecosystems) revision and prioritization
 - UN/SEEA-CICES and Rubicode
- Ecosystem mapping exercise
 - Enhance Corine landcover maps (EUNIS, HNV etc)
- Ecosystem assessment
 - Evaluate methods, drivers, data, indicators
 - Report data availability and methodology
 - Implement environmental / ecosystem capital accounts & pave way for valuation
 - Harmonize approaches towards prioritisation of ecosystems services
 - Implement forward-looking tools (Quickscan)



Filling the Matrix - EEA's contributions (2)

- Member countries networking
 - Web platform for information exchange
 - Report on Member countries activities on ecosystem based management and related policies
 - Guidelines using EU and Member countries best practice and research



Filling the Matrix - EEA's contributions 2012 (1)

Main Objective	Activity	Outcomes	Delivery
Mainstream ecosystem assessment approach	CICES revision	Revision of ES service definition esp. marine	05/2012
	ecosystem classification	Functional classification of ES for matrix	05/2012
	priority services	Proposal for prioritisation of services for implementation	05/2012
EU wide ecosystem assessment	Fast Track Accounts	Simplified ecosystem accounts for water, land, carbon and biodiversity	05/2012
	Quick Scan	Report testing tool for scenarios	12/2012
	EU wide assessment	Report on European wide data and methods	12/2012
MS and stakeholder involvement	Web platform	Ecosystem service website and library as part of BISE	03/2012
	MS activities	Report ecosystem based management in European countries	12/2012



Filling the Matrix - EEA's contributions (2)

Sector	Ecosystems	Deliverable	Time
	Cross-cutting	Green Infrastructure and Territorial Cohesion	2011
	Cross-cutting	Ecosystem degradation and restoration	2012
Climate Change	Cross-cutting	Climate Change indicator report	2012
Biodiversity	Cross-cutting	Art 17 reporting SEBI indicators Alien Species	2015 2012 2012
Terrestrial	Land	Land cover maps (Corine and High Resolution Layers)	2013 / 2014
	Agro-ecosystems	High Nature Value Farmland	2012
	Grasslands	Grassland ecosystem service report	2012
	Heath and scrub	-----	----
	Forests	Report on forest ecosystem services	2012
	Coastal	Coastal zone report	2012
	Urban	Urban metabolism Urban green infrastructure	2012 2013
Freshwater	Lakes and rivers	WFD – RBM reporting and Blueprint for Water	2012
	Wetlands	-----	----
Marine	Marine	Marine Strategy reporting; marine fish and ecosystem accounts	2014
Atmosphere	Atmosphere	annual GhG and air quality reporting	annual

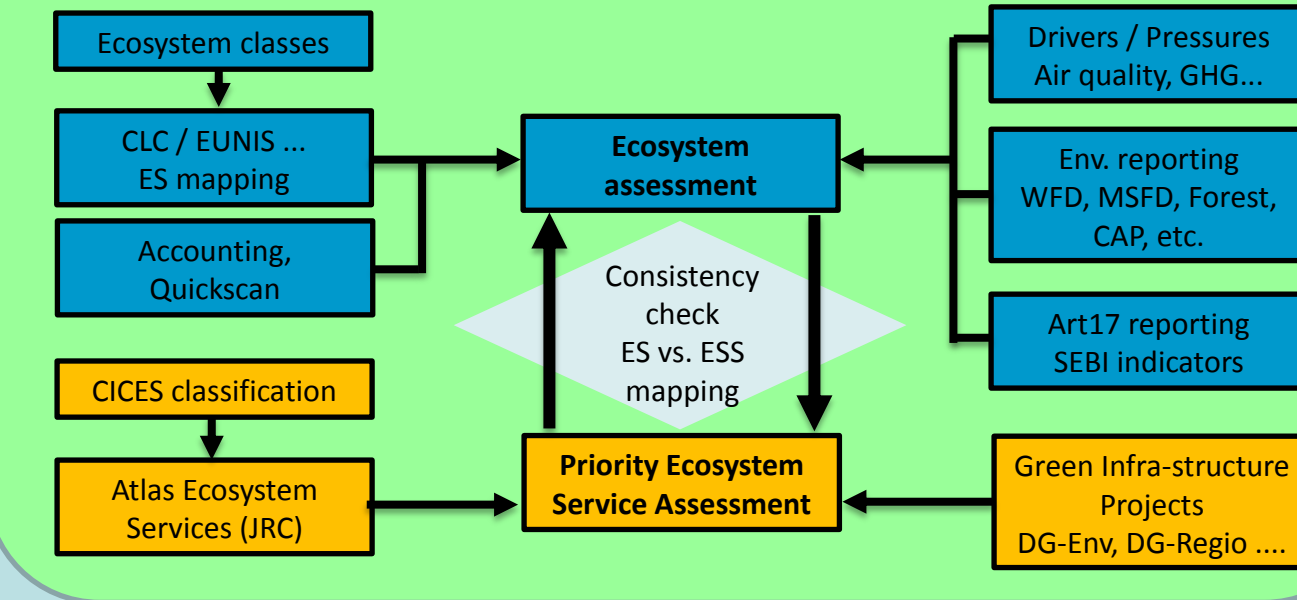


Filling the matrix - Work flow

Policy Process

'Filling the Matrix - EU & Member States'

EU level assessment

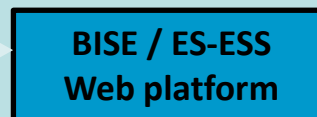


Guidelines

Reporting



Reporting



Targets

Scenarios

Reporting

Target 2 Action 5

MEA update



Thank you



Filling the Matrix - EEA's activities

Main Objective	Activity	Outcomes
2012		
Mainstream ecosystem assessment approach	CICES revision esp. marine ecosystem classification Define priority list of ecosystem services	Ecosystem service classification Functional classification of ES for matrix Priority list of services for approval
EU wide ecosystem assessment	Fast Track Accounts Ecosystem mapping Quick Scan EU wide data evaluation	Simplified ecosystem accounts for water, land, carbon and biodiversity Concept paper for mapping European ecosystems Report testing tool for scenarios Report on pan-European data and methods
MS and stakeholder involvement	Web platform MS activities	Ecosystem service website and library as part of BISE Report ecosystem based management in European countries
2013		
EU wide ecosystem assessment	Ecosystem mapping Implementation of data flows including accounts Qickscan implementation Implementation operational environmental accounts	Reference maps for assessment European ecosystem assessment Feasibility study scenario approach Updated accounting data
MS and stakeholder involvement	Create guidelines and organize approval	Guidelines ready and documents on ESS website
2014		
EU wide ecosystem assessment	Consistency-check ES - ESS Qickscan scenario analysis Integration ES - ESS (priority services) Outline ecosystem service valuation methodology for post 2014 assessment	Report on state and gaps Report scenarios for Target 2 Action 5 Report priority ecosystem service assessment Valuation roadmap
MS and stakeholder involvement	Priority ecosystem service assessment	Member States reports (MEA sub-global assessment)



Filling the Matrix - ES related activities

Sector	Ecosystems	Deliverable	Time
	Cross-cutting	Green Infrastructure and Territorial Cohesion	2011
	Cross-cutting	Ecosystem degradation and restoration	2012
Climate Change	Cross-cutting	Climate Change indicator report	2012
Biodiversity	Cross-cutting	Art 17 reporting SEBI indicators Alien Species	2015 2012 2012
Terrestrial	Land	Land cover maps (Corine and High Resolution Layers)	2013 / 2014
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	Wetlands	-----	----
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Atmosphere	Atmosphere	annual GhG and air quality reporting	annual

