# European Commission initiatives for connectivity and landscape scale biodiversity conservation - and their link to Natura 2000

**ENV B2 – Biodiversity Unit**

*M.L. Paracchini (Joint Research Centre)*

**International workshop**

**From patchwork to network: Landscape scale nature conservation and connectivity**

**Gazzada, 14/05/14**



## EU Biodiversity Strategy

Structure of the EU 2020 Biodiversity Strategy


Action 6b of EU Biodiversity Strategy:

*The Commission will develop a Green Infrastructure Strategy by 2012 to promote the deployment of green infrastructure in the EU in urban and rural areas, …*

## Target 2 of the EU biodiversity Strategy

*By 2020, ecosystems and their services are maintained and enhanced by establishing green infrastructure and restoring at least 15% of degraded ecosystems*

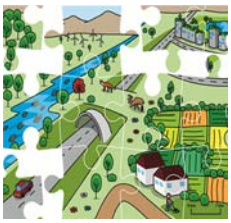
*-> Action 6b: The Commission will develop a Green Infrastructure strategy*

## Green Infrastructure: What is it?

*Green Infrastructure: a strategically planned network of natural and semi-natural areas with other environmental features designed and managed to deliver a wide range of ecosystem services (in terrestrial, aquatic, coastal, marine environments). In short, the structure enabling healthy ecosystems to deliver their multiple services to people. On land, GI is present in rural and urban settings, and in protected (such as Natura 2000) and non-protected areas.*

***Contribution to Europe 2020 Strategy: promoting smart, sustainable and inclusive growth – supporting a shift towards a resource efficient, low-carbon, sustainable economy by investing in our natural capital.***

***Spatial structure delivering nature benefits to people***



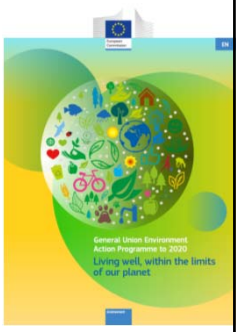
## Why is the Commission acting?

Commitments in the EU 2020 Biodiversity Strategy and the Roadmap to resource efficiency to come forward with a strategy on Green Infrastructure (GI).

Council and EP mandate to develop a GI strategy, "as contribution to further integrating biodiversity considerations into other EU policies"

Communication on "Green Infrastructure (GI) – Enhancing Europe's Natural Capital" adopted by College on 6 May 2013

**>> policy signal towards decision makers, planners and promoters to invest in GI projects at local, regional, national and cross-boundary level.**





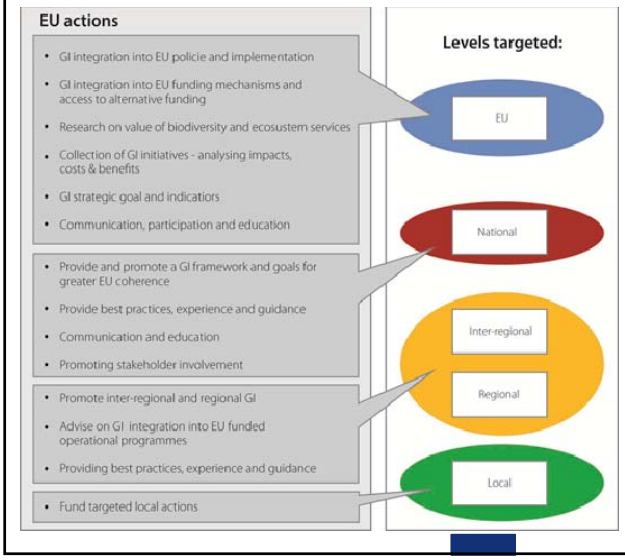
## What is the GI Strategy about?

- Short description of what Green Infrastructure is
- Contribution of GI to a number of key policy areas: regional development, climate change, disaster prevention and resilience, agriculture, forestry, urban, water, and biodiversity protection and enhancement
- Why EU action? Priorities at EU level:
  - Promote the deployment of GI in main policy areas and their funding mechanisms (integrate into implementation + guidance, awareness raising, best practices)
  - Improve knowledge base and promote innovation
  - Better access to finance (including innovative mechanisms)
  - Assess opportunities for TEN-G
- Progress report on implementation in 2017

# Green Infrastructure: Elements

| Local or town/city scale | Regional and national scale | EU level | Descriptor |
|---|---|---|---|
| Natural and semi-natural ecosystems, such as pastures, woodland, forest (no intensive plantations), ponds, bogs, rivers and floodplains, coastal wetlands, lagoons, beaches, marine habitats | Extensive agricultural and forest landscapes, large marsh and bog areas, rivers and floodplains, shorelines/coastal zones | Freshwater systems, major river basins, mountain ranges, regional sea basins | Core areas – outside protected areas |
| Local nature reserves, water protection areas, landscape protection areas, Natura 2000 sites | Regional and National Parks and wilderness zones (includes Natura 2000 sites) | Ecological Networks with cross-border areas, incl. Natura 2000 network | Core areas/protected areas |
| Restored areas which were before fragmented or degraded natural areas, brownfield land or disused quarries; transitional ecosystems due to land abandonment or regeneration processes | Restored ecosystem types | Restored Landscape systems covering a substantial part of agricultural/forestry areas and industrialised sites, including cross-border areas | Restoration zones |
| High nature value farmland and multi-use forests (such as watershed forests); protection forests (against avalanches, mudslides, stonefall, forest fires), natural buffers such as protection shorelines with barrier beaches and salt marshes | Extensive agricultural landscapes, sustainable forest management on regional and national level, functional riparian systems | Transboundary landscape features on river basin or mountain range level, sustainable coastal and marine management zones related to the respective sea basin | Sustainable use zones |
| Street trees and avenues, city forests/woodlands, high-quality green public spaces and business parks/premises; green roofs and vertical gardens; allotments and orchards; storm ponds and sustainable urban drainage systems; city reserves incl. Natura 2000 | Greenways, green belts, metropolitan park systems | Metropolitan areas with substantial share of high quality green areas in Europe, including coherent approaches in cross-border urban zones. | Green urban and peri-urban areas |
| Hedgerows, stone walls, small woodlands, ponds, wildlife strips, riparian river vegetation, transitional ecosystems between cropland, grassland and forests | Multi-functional, sustainably managed agricultural landscapes, riparian systems | Supra-regional corridors, substantial share of structure-rich agricultural, forestry or natural landscapes | Natural connectivity features |
| Eco-ducts, green bridges; animal tunnels (e.g. for amphibians), fish passes, road verges, ecological powerline corridor | De-fragmentated landscapes, improved areas along transport and energy networks, migration | European-wide or transnational defragmentation actions | Artificial connectivity features |

***Spatial structure delivering nature benefits to people***




# Actions on all levels

Figure and text adapted from the Recommendations of the GI Working Group on http://ec.europa.eu/environment/nature/ecosystems/index_en.htm

## Natura 2000 and Green Infrastructure

**Natura 2000: ecological network established under the Habitats and Birds Directives with more than 26,000 sites in all MS; occupying 18% of the EU's land territory.**

*> backbone of EU Green Infrastructure is already in place; reservoir of biodiversity to re-populate and revitalise degraded environments.*

*> requirements of HD art. 3 and 10 (coherence of the network): no major progress: sites are often small, isolated or have no spatial or functional connectivity – increasingly significant for climate change and 15% restoration target.*

*> Green Infrastructure: focus on the improvement of spatial structures which enable our ecosystems to deliver their multiple services in the long-term – inside and outside of nature, water, landscape or other protection sites.*

*> Policy signal which can be used by MS, regional local authorities, private enterprises or associations e.g. to reduce fragmentation and to improve the functional/spatial coherence of Natura 2000.*

## GI: Institutional follow-up in 2013

*Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions*

- Council:
  - **LT PRES discussed GI as lunch item at 14th October ENV council**
- EP
  - **Oral question with resolution in Plenary (11th Dec); ENVI committee in Oct.**
- CoR and EESC:
  - **Both Committees: Adoption of Opinions in October**
  - **Joint conference with CoR on November 5th**

⇒ **All published online on http://ec.europa.eu/environment/nature/ecosystems/index_en.htm**

⇨ Planned follow-up actions at national level?

# GI promotion and best practice sharing


Natura 2000 Newsletter 07/13
http://ec.europa.eu/environment/nature/info/pubs/natura2000nl_en.htm

*Promote GI approaches in communication to citizens*
*Developing dedicated IT platform*


- Already available:
  - **Information material on website**
  - **Facebook application, video, illustrations**
  - **GI is de facto part of the Green Capital award**
  - **BISE with GI platform currently being updated**
  - **Brochure for wider public**
- Upcoming:
  - **Better integration into on-going communication measures and IT facilities, also from other DGs**
  - **Working Group on GI implementation and restoration (first meeting 24/03)**

# Working Group on GI Implementation and Restoration (WG GIIR)

*The objective of this WG is to support the implementation of actions of the GI Strategy as set out in the Commission Communication and to provide a platform for sharing best practices on GI deployment. The WG will also address the linkages between the restoration of degraded ecosystems and the deployment of GI.*

*Meeting 24/03/14: First exchange on priorities of WG*
*Next meeting June 2014*

## TEN-G

*Assess opportunities for developing an EU TEN-G initiatives*


- Already available:
  - **Analysing projects which could serve as examples of trans-european GI**
- Upcoming:
  - **Study to assess the opportunities for TEN-G, including assessment of costs and economic, social and environmental benefits by 2015**

## Improve access to finance

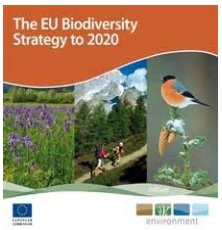
*Exploring opportunities for setting up innovative financing mechanisms to support GI*


- Already available:
  - **Current work on innovative financing mechanisms with ECFIN and EIB**
- Upcoming:
  - **Work towards establishment of innovative financing facility with EIB by 2014 (NCFF pilot phase)**

## The value of Europe's Natural capital

*Why to invest?*

- **Political and legal commitments**
  - EU Biodiversity Strategy to 2020
  - EU Nature legislation
  - 7th EAP
- **Preservation and restoration of the ecosystems and their services**
- **Nature and biodiversity's intrinsic values**




## Europe's Natural capital v. Growth and Jobs

*Why to invest?*

**Investing in nature and biodiversity …**

**… creates green jobs**

**… is a step towards green economy**

**and can …**

Facilitate compliance with the Natura 2000 *acquis* and create jobs (e.g. 104 000 jobs are directly linked with Natura 2000 network);

Facilitate maintenance and promotes restoration of ecosystems and their services (e.g. 110 000 jobs related to restoration);

Facilitate combatting Invasive Alien Species (e.g. 2520 jobs supported for IAS control/monitoring + new jobs expected in the sector).

## Europe's Natural capital & Cohesion Policy

*Legal Basis (1)*

**CPR – Article 8 on Sustainable Development**

- The objectives of the ESI Funds shall be pursued in the framework of **sustainable development** and (….) **preserving, protecting and improving the environment,** (…) taking into account the polluter pays principle.

- MSs and the Commission shall ensure that **environmental protection requirements, resource efficiency,** climate change mitigation and adaptation, **biodiversity**, disaster resilience and risk prevention and management are **promoted in the preparation and implementation of PAs and OPs**.

- Tracking the support for climate change objectives.

## Europe's Natural capital & Cohesion Policy

*Funding Opportunities & Investment Priorities*

***Direct funding opportunities***

**TO 5 - promoting climate change adaptation, risk prevention and management through:**

(a) adaptation to climate change, **including eco-system based approaches**;
(b)address specific risks, disaster resilience and developing disaster management systems;

**TO 6 - preserving and protecting the environment and promoting resource efficiency through: […]**

**(c) conserving, protecting, promoting and developing natural and cultural heritage;**
**(d) protecting and restoring biodiversity, soil protection and restoration and promoting ecosystem services including NATURA 2000 and green infrastructures;**
(e) action to improve the urban environment, revitalisation of cities, regeneration and decontamination of brownfield sites, reduction of air pollution, noise reduction measures;
(ea) promoting **innovative technologies** to improve environmental protection and **resource efficiency** in the waste sector, water sector, soil protection or to reduce air pollution;
(eb) **supporting industrial transition towards a resource-efficient economy**, promoting green growth, eco-innovation and environmental performance management in the public and private sectors;

## Europe's natural capital & Cohesion Policy

*Funding Opportunities & Investment Priorities*

***Indirect funding opportunities and integrating biodiversity and nature in other Thematic Objectives***

**TO 1 - Research, technological development and innovation**

**TO 3 - Competitiveness of SMEs**

**TO 4 - Shift towards a low-carbon economy in all sectors**

## Europe's natural capital & Cohesion Policy

*Funding Opportunities & Investment Priorities*

**Cross-cutting initiatives and territorial cooperation**

- **Prioritised action frameworks (PAFs), Art. 8 of the Habitats Directive:** identify priorities and strategic planning
- **Sustainable urban development (SUD) : Green Infrastructure**
- **LIFE integrated projects**
- **Community Led Local Development (CLLD):** integration of sub-regional and local concerns into national planning
- **European Territorial Cooperation (ETC):** support cooperation between different regions
- **Coordination and complementarity with other EU financial instruments (EAFRD, LIFE, EMFF, ESF).**

# Further action

*Service contract on Green Infrastructure implementation support – Open call to be published in April/May*

*Task 1: Ensuring a more effective promotion of GI at all relevant levels (including through WG)*

*Task 2: Capacity building, training, education for GI*

*Task 3: Improving information exchange mechanisms*

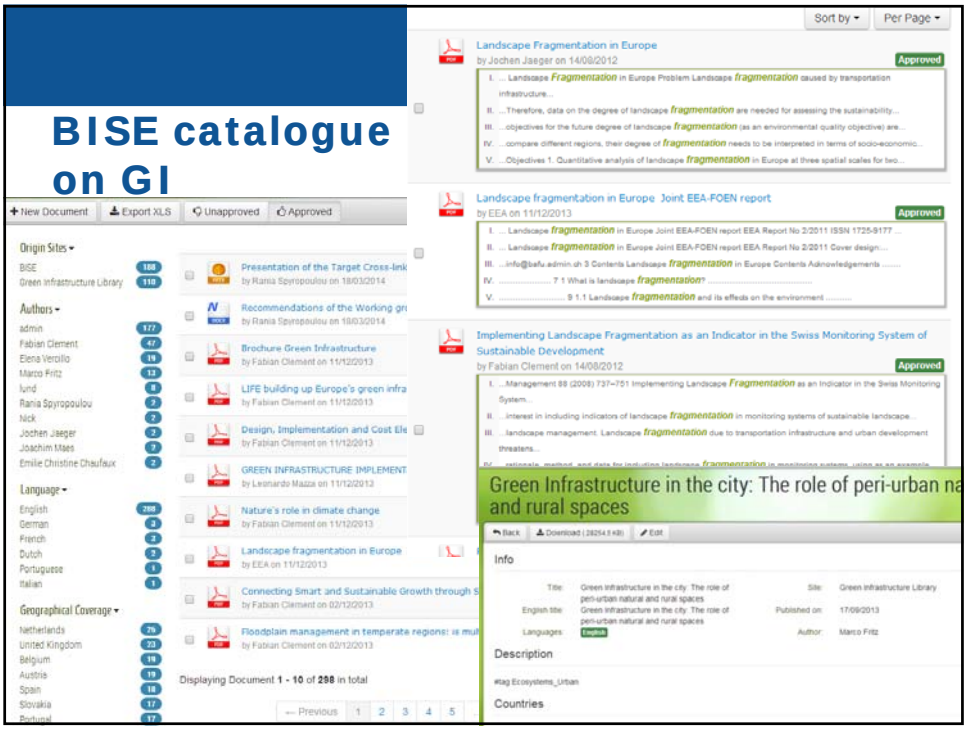
*Task 4: Assessing technical standards and innovation possibilities*

*Task 5: Assessing costs and benefits of TEN-G*

*Increased cooperation with administrations, policy makers and civil society in the fields of*

- *Finance administrations*
- *Industry (e.g. construction)*
- *Transport*
- *Energy*
- *Public health and social sector*

# BISE catalogue on GI



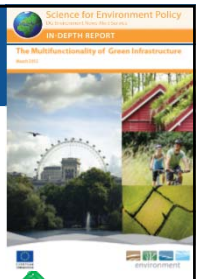
## GI guidance

- Already available:
  - **Better environmental options for flood risk management**
  - http://ec.europa.eu/environment/water/flood_risk/better_options.htm
  - **Guidance on connectivity**
  - http://ec.europa.eu/environment/nature/ecosystems/docs/adaptation_fragmentation_guidelines.pdf
  - **Natural water retention measures (link to adaptation)** http://ec.europa.eu/environment/water/adaptation/ecosystemstorage.htm
  - **Integration of biodiversity and climate change into SEA and EIA**
  - http://ec.europa.eu/environment/eia/pdf/EIA%20Guidance.pdf
  - http://ec.europa.eu/environment/eia/pdf/SEA%20Guidance.pdf
  - **Connecting Smart and Sustainable Growth through Smart Specialisation**
  - http://ec.europa.eu/regional_policy/sources/docgener/presenta/green_growth/greengrowth.pdf
  - **Smart guide to multi-benefit investments**
  - http://ec.europa.eu/regional_policy/sources/docgener/studies/pdf/guide_multi_benefit_nature.pdf

**Upcoming guidance:**

- **Agriculture/Climate adaptation**
- **Factsheet presenting all EU funding mechanisms for GI**

## Research And Knowledge Base




*Assess the need and opportunities in the context of Horizon 2020. Review extent and quality of spatial and technical data available in relation to GI deployment*


- Already available:
  - **Current work on Horizon 2020 (Challenge 5 and others)**
  - http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-sc5-2015-one-stage.html
  - http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-sc5-2014-two-stage.html
  - **EEA reports on GI and territorial cohesion, fragmentation and on Spatial analysis of GI in Europe**
  - **Information available in Data Centres and CHMs (BISE, WISE …)**
  - **Current working programs/management plans in relevant institutions**

- Upcoming:
  - **Working meetings with relevant DGs, e.g. JRC, RTD, ESTAT, EEA and ETCs**

## More information:


http://ec.europa.eu/environment/nature/ecosystems/index_en.htm

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