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
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EU 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, ...

addressing main drivers of biodiversity loss and aiming to reduce key pressures

specific, partly time-bound measures
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.**
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

<table>
<thead>
<tr>
<th>Local or town/city scale</th>
<th>Regional and national scale</th>
<th>EU level</th>
<th>Descriptor</th>
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<tbody>
<tr>
<td><strong>Spatial structure delivering nature benefits to people</strong></td>
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<td><strong>Core areas – outside protected areas</strong></td>
<td><strong>Core areas/protected areas</strong></td>
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<td><strong>Restoration zones</strong></td>
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<td><strong>Actions on all levels</strong></td>
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<td><strong>Natural and semi-natural ecosystems, such as pastures, woodland, forest (no intensive plantations), wetland, peatland, rivers and floodplains, coastal habitats, riparian areas, grasslands, heathlands, peatlands, meadows, and heathlands</strong></td>
<td><strong>Extensive agricultural and forest landscapes, large rivers and floodplains, urban areas, natural waters, salt marshes and estuaries, transitional ecosystems due to land abandonment or regeneration processes</strong></td>
<td><strong>Transitional systems, existing coastal and marine management zones related to the respective habitats</strong></td>
<td><strong>Core areas – outside protected areas</strong></td>
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<td><strong>Urban and peri-urban areas</strong></td>
<td><strong>Multi-functional, sustainably managed agricultural landscapes, riparian systems and networks, urban areas with substantial share of high quality green areas in Europe, including coherent approaches in trans-border urban areas</strong></td>
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<td><strong>Sustainable use zones</strong></td>
<td><strong>Transboundary landscape features on river basin or mountain range level, sustainable coastal and marine management zones related to the respective habitats</strong></td>
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<td><strong>Restored areas which were before fragmented or degraded natural areas, brownfield land or disused quarries; transitional ecosystems due to land abandonment or regeneration processes</strong></td>
<td><strong>Restored landscape systems covering a substantial part of agricultural/forestry areas and industrialised sites, including cross-border areas</strong></td>
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<td><strong>Hedgerows, stone walls, small woodlands, ponds, wildlife strips, riparian river vegetation, transitional ecosystems between cropland, grassland and forests</strong></td>
<td><strong>Multi-functional, sustainably managed agricultural landscapes, riparian systems and networks, urban areas with substantial share of high quality green areas in Europe, including coherent approaches in trans-border urban areas</strong></td>
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<td><strong>Green trees and avenues, city forests/woodlands, high-quality green public space and biodiversity parks/forests; green roofs and vertical gardens, allotments and community gardens, storm water management systems, city reserves incl. Nature 2000</strong></td>
<td><strong>Multi-functional, sustainably managed agricultural landscapes, riparian systems and networks, urban areas with substantial share of high quality green areas in Europe, including coherent approaches in trans-border urban areas</strong></td>
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<td><strong>Natural connectivity features</strong></td>
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<td><strong>Eco-ducts, green bridges; animal tunnels (e.g. for amphibians), fish passes, road verges, ecological powerline corridors</strong></td>
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<td><strong>Impacts of transport and infrastructure networks on water and landscape quality, including coastlines, rivers and estuaries, and peatland ecosystems, coastal and marine habitats</strong></td>
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**EU actions**
- GI integration into EU policy and implementation
- GI integration into EU funding mechanisms and access to attractive funding
- Research on value of biodiversity and ecosystem services
- Call to GIs: GI guidelines - analysing impacts, costs & benefits
- GI strategy - goal and indicators
- Communication, participation and education
- Transparency, coherence and implementation
- Provide and maintain GI framework and goals for greater EU coherence
- Provide best practices, experience and guidance
- Communication and education
- Promoting stakeholder involvement
- GI action plan and regional and national GI
- Advice on GI integration into EU-funded operational programmes
- Providing best practices, experience and guidance
- Fund targeted local actions

**Levels targeted:**
- EU
- National
- Inter-regional
- Regional
- Local

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

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

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**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;
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

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
GI guidance

- Already available:
  - Better environmental options for flood risk management
    - [http://ec.europa.eu/environment/water/flood_risk/better_options.htm](http://ec.europa.eu/environment/water/flood_risk/better_options.htm)
  - Guidance on connectivity
  - Natural water retention measures (link to adaptation)
  - Integration of biodiversity and climate change into SEA and EIA
  - Connecting Smart and Sustainable Growth through Smart Specialisation
  - Smart guide to multi-benefit investments

- 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)
  - 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