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COMMISSION STAFF WORKING DOCUMENT

Technical information on Green Infrastructure (GI)

Accompanying the document

COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS

Green Infrastructure (GI) — Enhancing Europe's Natural Capital

{COM(2013) 249 final}

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Green Infrastructure (GI) — Enhancing Europe's Natural Capital

1. PART I: COMPONENTS OF GREEN INFRASTRUCTURE

Part 1: Components of GI[1]

Physical Building Blocks: ***the network of green spaces in which and through which natural functions and processes are sustained.***

The types of physical features that contribute to GI are diverse, specific to each location or place and very scale-dependent. On the local scale, biodiversity-rich parks, gardens, green roofs, ponds, streams, woods, hedgerows, meadows, restored brownfield sites and coastal sand-dunes can all contribute to GI if they deliver multiple ecosystem services. Connecting elements are green bridges and fish ladders. On the regional or national scale, large protected natural areas, large lakes, river basins, high-nature value forests, extensive pasture, low-intensity agricultural areas, extensive dune systems and coastal lagoons are just a few of many examples. On the EU scale, trans-boundary features such as international river basins, forests and mountain ranges are examples of the EU's supranational GI. They have an important function: to deliver multiple benefits, or connect ecosystems so that they can deliver their services.

Projects: ***interventions designed to conserve, improve or restore nature, natural functions and processes to secure multiple ecosystem services for human society.***

There are now hundreds of examples of GI projects in Europe, many of which are not necessarily labelled as GI. Key initiatives include the French '*trame verte et bleue*', the German '*Wiedervernetzungsprogramm*', the UK 'room for nature' initiative, the Dutch 'room for the river' initiative, the Estonian and Dutch ecological networks or the South-East European Lower Danube Green Corridor (see Part V for more examples of GI projects in Member States)

Planning: ***Integrating the conservation, improvement and restoration of nature, natural functions and processes into spatial planning and territorial development and sustainably delivering the associated benefits for human society.***

Neither GI nor any other approach can simultaneously maximise all benefits and trade-offs will have to be carefully assessed. However, integrating GI considerations into planning processes allows all the relevant issues to be assessed and a coherent decision to be taken in order to reap as many benefits as possible. This "mainstreaming" of GI into planning is particularly important in the case of overarching multi-annual strategies and plans.

Tools: ***Methodologies and techniques that help us understand the value of the benefits nature provides to human society and mobilise the investments necessary to sustain and enhance those benefits.***

[1] More detailed information on http://ec.europa.eu/environment/nature/ecosystems/index_en.htm.

2. PART II: BENEFITS AND FUNCTIONS OF GREEN INFRASTRUCTURE

Table 1: Overview of key Green Infrastructure benefits

Benefits group	Specific Green Infrastructure benefits
Enhanced efficiency of natural resources	Maintenance of soil fertility
	Biological control
	Pollination
	Storage of freshwater resources
Climate change mitigation and adaptation	Carbon storage and sequestration
	Temperature control
	Storm damage control
Disaster prevention	Erosion control
	Reduction of the risk of forest fires
	Flood hazard reduction
Water management	Regulation of water flows
	Water purification
	Water provisioning
Land and soil management	Reduction of soil erosion
	Maintaining/enhancing soil's organic matter
	Increasing soil fertility and productivity
	Mitigating land take, fragmentation and soil sealing
	Improving land quality and making land more attractive
	Higher property values
Conservation benefits	Existence value of habitat, species and genetic diversity
	Bequest and altruist value of habitat, species and genetic diversity for future generations
Agriculture and forestry	Multifunctional resilient agriculture and forestry
	Enhancing pollination
	Enhancing pest control
Low-carbon transport and energy	Better integrated, less fragmented transport solutions
	Innovative energy solutions

Investment and employment	Better image
	More investment
	More employment
	Labour productivity
Health and well-being	Air quality and noise regulation
	Accessibility for exercise and amenity
	Better health and social conditions
Tourism and recreation	Destinations made more attractive
	Range and capacity of recreational opportunities
Education	Teaching resource and 'natural laboratory'
Resilience	Resilience of ecosystem services

Source: http://ec.europa.eu/environment/nature/ecosystems/studies.htm#implementation, adapted.

Table 2: Examples of costs and benefits from a selection of GI projects in Europe

Project	Location	Costs and Benefits
Urban nature for Lindenholt neighbourhood of Nijmegen	Netherlands	Comparing reference scenario with grey scenario (paved area) and Green Infrastructure scenario (whole area planted with trees). Capital and maintenance costs of different options. Estimation of the health impacts of particulate matter and NOx, noise impacts, flooding impacts, water treatment costs, enjoyment of the environment, recreation, climate regulation, reduced energy costs due to wind shelter effects, impacts on travel time, carbon sequestration. Net present values: loss of EUR 275 m for grey scenario, gain of EUR 230 m for Green Infrastructure scenario.
Blackwater Estuary	United Kingdom	Costs and benefits of maintaining flood defences with those of sea-level rise and the coastal squeeze of intertidal wetlands. Benefits included fisheries production, carbon sequestration and other environmental benefits. Costs included capital costs of realignment, maintenance costs and opportunity costs of agricultural land. The study shows that managed realignment can be cost-effective if non-marketed benefits are taken into account, in particular for conservation and recreation (net present value of £ 106 m over 25 years or £ 192 m over 100 years).
River Elbe floodplain restoration	Germany	Restoration of nature through dike shifting, reducing the impact of agriculture and constructing fish ladders. Benefit-cost ratios ranged from 2.5 to 4.1 depending on scenarios. Recreation, flood protection and carbon benefits, which were not monetised, would increase the value of benefits. Costs covered avoidance costs, engineering costs and land opportunity costs.
Agro-ecosystem of Sint-Truiden	Belgium	Actions to protect the village from soil erosion and mud floods, including through grassed waterways, grassed buffer strips, retention ponds and conservation tillage in the catchment area. The total costs of these measures were low (EUR 126/ha/20 years) compared to repairing the damage caused by muddy floods in the study area and the costs of cleaning up (EUR 54/ha/year) and all secondary benefits, including better downstream water quality; lower downstream dredging costs; less psychological stress for inhabitants and greater biodiversity.
Restoration of the Skjern River floodplain	Denmark	Restoration of the Skjern River floodplain in Denmark would cost US$ 44.2 million but provide net present benefits of US$ 2.3 million in avoided water pumping (currently used to prevent flooding) and US$ 84.6 million in resultant benefits. These include hunting, fishing, recreational opportunities and biodiversity conservation.
River Gardon downstream restoration	France	Restoration of river used for recreation (walking, swimming, kayaking, fishing). Valuation of use and non-use values. Costs included investments and functioning costs linked to urban and industrial pollution, river artificialisation, agricultural pollution, etc. The overall net present value of improvements is EUR 36 m. The cost-benefit ratio is 1.9.
National Forest	United Kingdom	Large regeneration area including some former landfill sites, quarries, other post-industrial brownfield sites, in the context of a long-term project to create woodlands and priority open habitats on 33 % of the National Forest land area. The study estimated £ 178 m of costs based on actual and predicted expenditure to achieve the objectives, compared to £ 1623 m of benefits, largely from recreation, with lower contributions from carbon, biodiversity and aesthetic values in particular. Results indicate a net present value of £ 1.44 bn and a cost-benefit ratio of 9.1:1.
Hoge Kempen National Park	Belgium	Natural assets contribute to job creation. In the densely populated province of Limburg (BE), a local NGO convinced policy makers in 2006 with an economic argument (job creation) to create Belgium's first national park: Apart from protecting biodiversity, the 'Hoge Kempen National Park' created some 400 jobs and stimulated private investment in tourism in this historically de-industrialised region. Tourists appreciate the recovering nature in former coal mines for its particular landscape and biodiversity values. (TEEBcase by Schops 2011).

Table 2: Examples of costs and benefits from a selection of GI projects in Europe (continued)

Project	Location	Benefits
Ekostaden Augustenborg (urban regeneration initiative)	Malmö, Sweden	Rainwater run-off rates decreased by half. The image of the area improved. Biodiversity increased by 50 % (green roofs have attracted birds and insects and an open storm water system provides a better environment for the local plants and wildlife). The impact on the environment decreased by 20 %. Unemployment fell from 30 % to 6 %. The turnover of tenancies decreased by 50 %.
Natural Economy North West (NENW)	United Kingdom	Human health/well-being, social, environmental, economic (e.g. direct gross value added (GVA) from the environment calculated at £2.6 bn, supporting 109 000 jobs in environmental and related fields).
Kennet and Avon canal restoration	United Kingdom	Safeguarded habitats, better waste management, tourism, economic (direct and indirect employment totalling 150 to 210 full-time employment (FTE) jobs between 1997 and 2002). Total of 1198 to 1353 FTE jobs created and safeguarded.
Fishing Wales	United Kingdom	Habitat improvements, population increase (e.g. increase of >2 000 adult salmon and trout each year), return on marketing investment of 20:1, forecasts of £10 million of increased income, employment (minimum 75 additional FTE jobs), tourism (additional £2.1 million per year).
Green roof-building regulations	Basel, Switzerland	23 % of Basel's flat roof area is now green (estimated in 2007 as 700 000 m2); endangered invertebrate species are protected; four giga watt hours savings per year across Basel (first incentive programme) and 3.1/year (second programme); profits for local businesses from sales of materials and supplies for the installation of green roofs; energy savings for business owners; worldwide recognition of Basel for achievements.

Source: http://ec.europa.eu/environment/enveco/biodiversity/pdf/GI_DICE_FinalReport.pdf, adapted.

3. PART III: GREEN INFRASTRUCTURE AND EUROPEAN POLICIES

Table 3: EU-level GI policies and instruments

Policy area	EU policies and instruments considered for Green Infrastructure	Possible measures
EU 2020	EU 2020 Strategy	Giving policy signal through COM
	Innovation Union flagship initiative	Detailed follow-up on contribution of GI to eco-innovation
	Resource Efficiency flagship initiative under EU 2020/Roadmap for a Resource-Efficient Europe	Detailed follow-up on contribution of GI to resource efficiency (in particular land and ecosystems)
Environment Strategy	Seventh EAP	Incorporating Green Infrastructure into integrated strategies and planning with emphasis on health benefits
Agricultural Policy	CAP Pillar 1 — Greening measures incl. cross-compliance	Ecological focus areas, crop rotation, maintenance and restoration of permanent grassland and functional agricultural landscapes etc.
	CAP Pillar 2 — EAFRD funding	Greening measures under Pillar 2 (agro-environmental measures)
	CAP Pillar 2 — Training, advice, extension services, planning provisions — Farm Advisory System	Integration of Green Infrastructure into education and training and the re-establishment of rural areas
Forestry Policy	1998 EU Forestry Strategy and forthcoming new EU Forest Strategy	Integration of Green Infrastructure into forestry planning and management (defragmentation, restoration of forests)
Biodiversity and Nature	EU 2020 Biodiversity Strategy	Development and implementation of all targets, in particular links to actions 5, 6 and 7
	Birds Directive	Application of Article 3
	Habitats Directive	Application of Article 10
	Voluntary scheme for biodiversity and ecosystem services (BEST) in EU overseas territories	Financing GI in EU overseas territories
	LIFE+ Regulation	Financing Green Infrastructure projects
Water Policy	Water Framework Directive/River Basin Management Plans	Applying GI in river basin management
	Floods Directive	Better environmental options for flood management
	EU Drought Policy (Communication on Water Scarcity and Droughts)	Using GI solutions for building up resilience against droughts
	EU Water Blueprint	Natural water retention measures

Soil Policy	Thematic Strategy for Soil Protection	Soil-sealing guidelines
	Proposal for a Directive establishing a framework for protecting soil	Integrated planning on soil issues
Climate Change Policy	EU Strategy on Adaptation	Guidance on GI for adaptation
	2050 Low-Carbon Roadmap	LULUCF
Cohesion Policy, including Territorial Cohesion and Innovative Financing	Regional Policy (Cohesion Policy)	Including GI in the ERDF, CF and ESF priorities
	Technical Assistance for preparation of Major Projects (Jaspers) and innovative financing (Jessica, Jeremie etc.).	Use of innovative funding for large GI projects
	Macro-regional strategies: EU Strategy for the Danube Region / EU Strategy for the Baltic Sea Region and forthcoming macro-regional strategies	Inclusion of GI into the programmes and implementation of macro-regional strategies as well as the cross-border, transnational and interregional programmes. (e.g. Alpine Convention)
Transport and Energy	TEN-T and TEN-E	Include measures to limit fragmentation and improve connectivity in TEN guidelines
	EU White paper on transport IA	Use GI for low-carbon transport planning
	Energy Policy	Urban GI as an example of energy efficiency in buildings
	Connecting Europe Facility	Integrate GI into implementation of TENs
Impact Assessment, Damage Prevention and Remediation	Environmental Impact Assessment (EIA) Directives	Implement revisions of the EIA Directive
	Strategic Environmental Assessment (SEA) Directive	Guidelines on including biodiversity and climate change in EIA and SEA
	Environmental Liability Directive	Assess GI as part of remediation
Spatial Planning	European Spatial Development Perspective	Promote GI on all territorial levels
	ESPON 2013 Programme	Promote GI as inter-territorial tool
	EU 2020 Territorial Agenda	Use GI for integrated spatial planning
	Urban Strategy	Promote urban and peri-urban GI solutions
Marine and Coastal Zones Policy	Marine Strategy Framework Directive	Applying GI on the marine environment
	EU Maritime Spatial Planning Strategy	Use GI for integrated spatial planning on the seas
	2002 Recommendation on Integrated Coastal Zone Management (ICZM)	Use GI for delivering coastal ecosystem services
	Fisheries Policy/the EMFF	Including GI on seas into EMFF actions

Environment and Health	Environment and Health Action Plan 2004–10	Use GI for health benefits in particular in urban areas
Research	Research Policy/Horizon 2020, framework programme for research and innovation	Funding research projects related to Green Infrastructure
External Cooperation	EU external development cooperation	Supporting Green Infrastructure-based development solutions
Hazard Response	Disaster risk reduction policy	Using Copernicus products with Green Infrastructure-relevant information for non-rush mapping Use GI for ecosystem-based risk reduction

Source: http://ec.europa.eu/environment/nature/ecosystems/studies.htm#implementation, adapted.

In addition to the EU-level actions mentioned above, national, regional and local roles and responsibilities for better deploying Green Infrastructure should be strengthened.

National authorities play a crucial role in developing the strategic context of and vision for GI, depending on how competences are distributed within Member States. This could be done by giving regional and local authorities clear guidance and direction on how to plan and manage GI, using their own national planning policy framework to set out the need for regional or local planning authorities to consider GI provision in local development planning and policy. National authorities could also help gather and share regional information on GI, particularly good practice with regard to designing, mapping, assessing, delivering, deploying and integrating it into policy and planning.

The role of regional or local authorities in successfully deploying Green Infrastructure is also crucial. In most European countries, these authorities are responsible for spatial planning decisions. Different branches of administration would need to work together, such as environmental, planning, agricultural and social departments and the treasury. Due to their close links to the local public, stakeholders and developers, local authorities are well placed to enhance communication, public participation and the involvement of stakeholders. Regional or local authorities should be seen as the lead organisation to undertake detailed GI (master) planning, including assessing GI assets, taking into account their location, threats, constraints, priorities, opportunities and regional factors (geographic, environmental, social, political, economic, etc.).

The establishment and maintenance of GI will not be possible without the full and engaged commitment of stakeholders and resource holders, NGOs and interest groups within civil society. They need to see the advantages GI can bring to their assets, resources and economic activities, improving the quality of decision-making, fostering a sense of ownership and raising awareness. Their early involvement in planning decisions can avoid conflicts and delays later on in the process. Support for communication and capacity building will need to be secured on all levels.

Table 4: EU GI actions targeting different levels

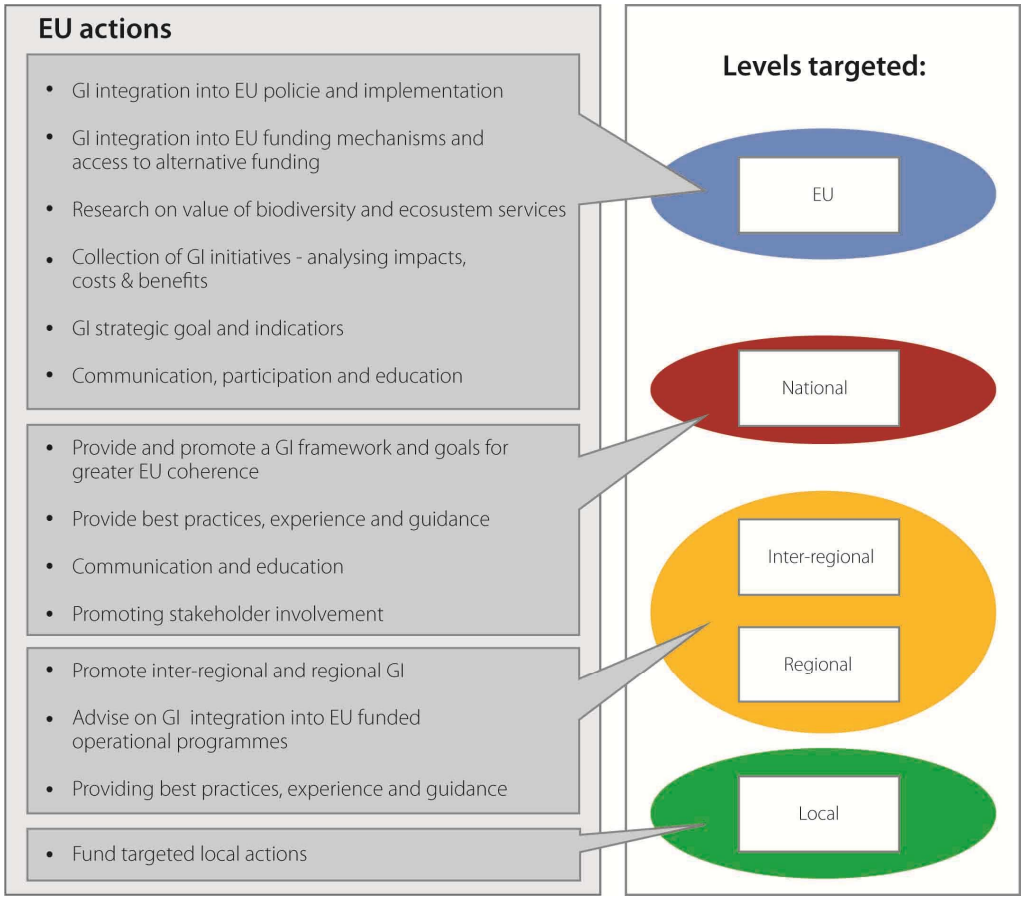

Figure and text adapted from the Recommendations of the GI Working Group on http://ec.europa.eu/environment/nature/ecosystems/index_en.htm.

4. PART IV: GLOSSARY

Biodiversity is the variability among living organisms from all sources, including terrestrial, marine and other aquatic ecosystems, and the ecological complexes of which they are part. It includes diversity within species, between species and between ecosystems. Connecting biodiversity to ecosystem functioning involves locating ecosystems in a multivariate space defined by dimensions that describe different ways of relating organisms to one another Examples of these dimensions include taxonomic (or species) diversity, phylogenetic (evolutionary) diversity, functional diversity (variation in the degree of expression of multiple functional traits), interaction diversity (characteristics of the (food web) network of linkages defined by biotic interactions) and landscape diversity (the number, relative abundance and distribution of different habitat types within a landscape).

Connectivity comprises two components, structural and functional connectivity. It expresses how landscapes are configurated, allowing species to move. Structural connectivity, equal to habitat continuity, is measured by analysing landscape structure, independent of any attributes of organisms. This definition is often used in the context of metapopulation ecology. Functional connectivity is the response of the organism to the landscape elements other than its habitats (i.e. the non-habitat matrix). This definition is often used in the context of landscape ecology. A high degree of connectivity is generally linked to low fragmentation.

An ecosystem is a dynamic complex of plant, animal and microorganism communities and their non-living environment interacting as a functional unit. For practical purposes it is important to define the spatial dimensions of the ecosystem in question. Ecosystems are often grouped in units that have similar specific biotic and abiotic features.

Ecosystem-based approaches are strategies and measures that use nature's multiple services (= nature-based solutions) e.g. for climate change adaptation and mitigation. They are part of Green Infrastructure, because they use biodiversity and ecosystem services as part of an overall adaptation strategy to help people adapt to or mitigate the adverse effects of climate change — by conserving carbon stocks and reducing emissions caused by ecosystem degradation and loss, or by enhancing carbon stocks, thus increasing resilience and reducing vulnerability. Green Infrastructure adds spatially planned, multi-purpose elements to these approaches[2].

Ecological networks are a representation of the biotic interactions in an ecosystem, in which species are connected by pairwise interactions. These interactions can be trophic or symbiotic. They include areas covered by a wide range of conservation measures, from a single ecoduct to intercontinental interconnected networks of protected and non-protected areas. They usually aim to maintain the functioning of ecosystems to facilitate the conservation of species and habitats and promote the sustainable use of natural resources to reduce the impacts of human activities on biodiversity and/or increase the biodiversity value of managed landscapes. They would have to be coherent and resilient to be functional parts of green infrastructure, which encompasses ecological networks but goes further due to the multi-purpose function additional to biodiversity conservation that ecological networks are designed for, and to the inclusion of urban elements that are not part of ecological networks. Each Green Infrastructure element should play a role in the network but that does not mean they are all physically connected to each other.

Ecosystem services are the benefits that people obtain from ecosystems, or their direct and indirect contributions to human well-being. These include provisioning services such as food and water; regulating services such as flood and disease control; cultural services such as spiritual, recreational and cultural benefits. Since people do not directly use supporting services such as of nutrient cycling, they do not obtain benefits from them and they may not strictly be part of ecosystem services.

A **habitat** is the place or type of site where an organism or population naturally occurs.

Natura 2000 is the centrepiece of EU nature and biodiversity policy. It is an EU-wide network of nature protection areas established under the 1992 Habitats Directive, incorporating areas designated under the 1979 Birds Directive. The aim of the network is to ensure the long-term survival of Europe's most valuable and threatened species and habitats. It is not a system of strict nature reserves

[2] http://ec.europa.eu/environment/nature/ecosystems/studies.htm#assess.

where all human activities are excluded. Whereas the network will certainly include nature reserves, most of the land is likely to continue to be privately owned and the emphasis will be on ensuring that future management is ecologically and economically sustainable. The network also fulfils a Community obligation under the UN Convention on Biological Diversity.

Natural capital is the extension of the economic notion of capital (manufactured means of production) to environmental goods and services. Natural capital is the stock of natural ecosystems that yields a flow of valuable ecosystem goods or services into the future.

Resilience describes the ability of an ecosystem to return to its original state after being disturbed.

References:

Millenium Ecosystem Assessment (2005) http://www.unep.org/maweb/en/index.aspx

MAES Working Group glossary http://biodiversity.europa.eu/ecosystem-assessments/european-level

CBD Technical series No 23 http://www.cbd.int/ts/

Glossary of the EEA Technical Report No 4/2009 on SEBI http://www.eea.europa.eu/highlights/publications/progress-towards-the-european-2010-biodiversity-target/.

Ad hoc group on Biodiversity and Climate Change http://ec.europa.eu/environment/nature/climatechange/index_en.htm

Wikipedia http://en.wikipedia.org/

5. PART V: EXAMPLES OF GREEN INFRASTRUCTURE IN ALL EU MEMBER STATES

Table 5: Green infrastructure examples in each Member State. More than 120 examples were assessed in the following studies: http://ec.europa.eu/environment/nature/ecosystems/studies.htm#assess, http://ec.europa.eu/environment/nature/ecosystems/studies.htm#design. http://ec.europa.eu/environment/nature/ecosystems/studies.htm#implementation. The last study underlines that, out of 100 GI initiatives analysed, slightly more than half (52) were national initiatives, most others were regional and local initiatives and about 10 per cent (9) were transboundary initiatives. While most of the Green Infrastructure initiatives in the Member States were government-led, 15 were driven by other types of organisation, principally environmental NGOs, research institutes and businesses. The largest number of initiatives identified corresponded to ecological networks (35) followed, in order of importance, by freshwater and wetland management (15), multi-functional use of coastal zones (11), urban Green Infrastructure (10), multi-functional use of forests (6), Green Infrastructure mapping (6), mitigation of grey infrastructure (4), multi-functional use of farmland (3) and a few others, many of which included climate change mitigation and adaptation (8).

MS	Initiative	Primary GI function	Primary GI Elements	Background and Objectives
AT	Vienna Water Charter	Water management	Sustainable use/ecosystem service zones	Vienna obtains almost all of its drinking water from mountain springs originating in the Lower Austrian-Styrian high alpine zones. In 1965, the entire Rax-Schneeberg-Schneealpen massif was designated as a water protection area containing the first Vienna mountain spring pipeline. In 1988 the Pfannbauern spring was added to the network as the second spring. Since this addition, under normal conditions these protection areas are able to supply all of Vienna with fresh alpine spring water. During periods of high water demand, the Lobau well-field provides additional water. The principles above mean that forest soil is used wisely to collect and filter water. Other functions such as timber production, hunting, agriculture and tourism have been subordinated to this purpose. The city of Vienna therefore supports natural forest management in the areas concerned to guarantee the conservation of healthy forests that offer a habitat to a variety of plant and animal species. The optimum soil condition is determined by its capacity to absorb, hold and filter water. The most important aspects regarding forest structure are stability and resilience, provided by mixed, unevenly aged and structured forest. This means that no clearings are carried out, only small-scale interventions occur, natural regeneration is promoted and native tree species are used. Rare and ecologically valuable tree species are also encouraged.
BE	Sigmaplan	Flood control	Sustainable use/ecosystem service zones	Considerable flood damages occurred in the past in the Scheldt Estuary. This led to the Flemish Sigmaplan in the beginning of the 1980s to protect the estuary against tidal floods. It is generally believed that flood risks will increase significantly during the 21st century due to sea-level rise and economic developments. This is the main reason why the Flemish Government required an update of the Sigmaplan. It wanted to reconsider its necessity, taking several issues into account. Besides safety objectives, nature conservation and shipping are important functions of the estuary that need to be combined.

				The authorities responsible for mobility, waterways, forests and nature conservation are implementing the plan between 2000 and 2030. It consists of a combination of natural water retention areas and higher dykes. The Sigmaplan is a collection of projects affecting 200 km of water courses, including flood control areas with controlled reduced tide and flood control areas combining agricultural and recreational land use, wet valley restoration projects, wetlands and meadow bird areas and intertidal mud flats and marshes.
BG	Wetlands restoration and pollution reduction project	Water management	Core areas, restoration areas, sustainable use/ecosystem service zones	This project was developed to help show how environmentally-friendly rural development activities can improve livelihoods. It focuses on the link between poverty and the quality of the environment. As the official appraisal document (Ministry of Environment and Water 2002) states: 'The region along the Danube coast is one of the poorest areas in Bulgaria, mainly related to the decreased economic productivity of the Danube River, which has seen a tenfold drop in fishery catch since the late 1960s, seriously affecting rural incomes and livelihoods. One of the underlying causes of the decrease is the destruction of riverine wetlands necessary for fish spawning. Hence, linking wetland restoration with the sustainable use of natural resources in the region will help increase the well-being of the local population by enabling them to increase their economic opportunities for fishery, agriculture, eco-tourism as well as by allowing downstream communities to enjoy cleaner water supplies.'
CY	Coastal Area Management Programme	Coastal protection	Core areas, sustainable use/ecosystem service zones	The Coastal Area Management Programme (CAMP) began in Cyprus in 2002 and the project work was carried out between 2005 and 2007, with the focus on managing the whole coastal area. The programme was jointly implemented by the Cypriot Government (Environment Service of the Ministry of Agriculture, Natural Resources and Environment) and the Mediterranean Action Plan (MAP). It brought together national and local authorities in institutions in selected coastal areas to manage coastal and marine zones in a more systematic, integrated way. This CAMP includes using tools such as Geographic Information Systems (GIS), Environmental Impact Assessment (EIA), Strategic Environmental Assessment (SEA) and Economic Analysis (EA) to support the management of natural resources, including water and soil, and economic activities such as tourism, urban development, aquaculture and waste treatment. The main objective of CAMP Cyprus is to develop an integrated coastal management strategy. The main focus is on addressing gaps in the current policy framework for coastal planning and management, particularly on incorporating environmental concerns in the development process. The specific objectives of CAMP Cyprus are to: · strengthen the integration of policies for conserving and sustainably developing coastal resources; · increase collaboration among the competent Departments/Ministries in the policy-making and implementation process; · improve public awareness of the scope and significance of coastal management; · harmonise national or local development visions and reconcile planning policies with the economic development aspirations of local communities.
CZ	Territorial System of Ecological Stability	Biodiversity conservation	Core areas, restoration areas, sustainable use/ecosystem service zones, natural connectivity features	The TSES initiative officially started in June 1992, although plans and discussions had been going on since the 1970s. The concept is part of national environmental legislation. It is obligatory as a basis for land and use or territorial planning, forest management plans, water management documents and other documents regarding the protection and restoration of the landscape. The system was thought to represent a network of ecologically significant segments of landscape, efficiently distributed on the basis of functional and spatial criteria, covering biotic, hydrological, soil and relief conditions. Initially an extensive network of 50 000 core areas and 85 000 corridors was planned, to be centrally mapped. Core areas can also be represented by nationally protected areas and Natura 2000, if they overlap with the planned TSES system. The estimated number of features implemented as of January 2010 amounted to less than 200, in core areas and corridors. Work is underway to adapt the system to current and future conditions.

				The main objective of the initiative is to reinforce the ecological stability of the landscape by conserving or restoring ecosystems and their mutual interconnection. It specifically aims to: · maintain and restore the national natural heritage; · reinforce ecosystem resilience in degraded landscapes and maintain intact areas; · deliver favourable impacts in surrounding, degraded parts of the landscape.
DE	Green Belt Germany	Biodiversity conservation	Core areas, sustainable use/ecosystem service zones, natural connectivity features, artficial connectivity features	The Green Belt of the former Iron Curtain is an ecological network of 1393 km through Germany. It comprises an area of 17656 hectares. Eight European countries signed an agreement to form a Green Belt across Europe, running from the Barents Sea to the Black Sea, of which the German Green Belt forms a part. It connects several protected areas and aims to enhance their ecological value by developing these links and building a network of stakeholders. It connects national parks, nature parks, biosphere reserves and transboundary protected areas (70% in total) and 30% of non-protected areas along or across borders. It supports regional development initiatives based on nature conservation. It is also called 'a transregional, broad-scale habitat network of great ecological importance'. The areas, that once formed the Iron Curtain and the death strip, are now the backbone of the German biotope network. About 15% of the area is degraded. The objectives are the following: - to conserve biodiversity and unique natural assets – first of all by harmonising management methods on both sides of the border; - to conserve national nature heritage; - to conserve a memorial to recent German history; - to create a special sort of open-air museum, a cross-section through almost every possible type of German landscape; - to create a line that no longer divides but connects the old and the new Länder of Germany, a living monument to German reunification. An interesting part of this initiative was the launch of a public appeal to purchase Green Share Certificates. Any donor who gives over 65 euros becomes a symbolic shareholder in the Green Belt and receives a certificate to prove it. The revenue from the certificates is being used to purchase land along the former border between East and West Germany, to fund public relations and lobbying activities and to support implementation projects.
DK	Danish strategy for adapting to a changing climate	Climate change adaptation	Artificial connectivity features, natural connectivity features	In 2008, Denmark produced a national strategy for climate adaptation that also takes biodiversity adaptation measures into account. The goal of the strategy is to ensure that in the future, climate change is considered and integrated in planning and development in the most appropriate way. It contains a number of guidelines to enable authorities, businesses and citizens to react promptly and autonomously to the problems climate change will create for Danish society. It notes that a number of activities are already underway to ensure that nature remains healthy and robust under the changed climate conditions, for example activities to prevent the fragmentation of nature and ward off and combat invasive species.

				The strategy also notes that municipalities will need information and guidelines on green corridors for planning purposes, and that authorities and the public will need information on invasive species. It notes that economic analysis will be needed in a number of areas including 1) the costs and benefits of promoting nature's own climate change adaptation through planning and regulating that will result in less fragmentation, ensure growth corridors and reduce the number of existing stress factors; 2) nature and environment-neutral climate change adaptation in sectors that are important for nature, for example agriculture, forestry and coastal management; 3) pricing a number of goods and services from nature that do not have a direct market value, for example the dilution of air pollution, water treatment, soil preservation, and models for calculating the socio-economic benefits and costs of nature management. Planned measures include converting selected river valleys into natural wetlands, measures to reduce oxygen depletion in marine waters, or measures to address habitat fragmentation.
EE	Estonian Green Network	Biodiversity conservation	Core areas, sustainable use/ecosystem service zones, green urban and peri-urban areas, natural connectivity features	Since the 1970s the country has taken a multi-functional approach to ecological networks. In the early 1990s, the network initiative was taken up by experts on planning and in 1995 legislation was passed on ecological networks through the Building and Planning Act. The national long-term spatial plan, Estonia 2010, established the basic principles of the Estonian ecological network by identifying corridors and 12 core areas of international importance. The first indicative map was produced in 1983 and in 1999, the second phase of county planning (thematic planning) began. It aims to define environmental conditions for developing land use and settlement. The main tasks of this phase included the designing the green network that would guarantee its natural, environmental and socio-economic uses for the area. The concept of ecological networks in Estonia is principally embedded in the spatial planning system and implemented through other sectors such as nature conservation, forestry, water management and others. At county level, the green network is an essential part of county planning. The vision determines the green network total coverage at around 55% of the whole Estonian territory, in 12 comparatively compact core areas. This area is large enough to fulfil the compensatory function not only on the national, but also on the European, scale. The spatial planning system is mainly organised around basic Estonian administrative units (country — national plan > counties — county plans > municipalities — comprehensive plans). The green network is, to various degrees, taken into account at all three levels of planning. The main aims are to: - complete functionally the network of protected areas, connecting them in a complete system with natural areas; - to protect valuable natural habitats and preserve the migration routes of wild animals, and to protect and preserve valuable landscapes; - to promote nature conservation outside protected areas. Additonal multifunctional aims are to: - shape the spatial structure of natural areas in the most reasonable way considering the ecological, environmental protection, economic and social aspects; - to soften, compensate, and forestall the anthropogenic impact on nature, to contribute to the sustainable development strategy; - to offer the possibility of nature-friendly management, lifestyles and recreation by ensuring spatial accessibility to natural areas; - to minimise future conflicts of interest involving different sectors (forestry, agriculture, transport, recreation) through spatial planning; - to guide settlement and land use; - to preserve the environment's natural self-regulation ability; - to support international and transboundary cooperation.

EL	Environment and Sustainable Development Operational Programme 2007–13	Ecosystem service provision	Core areas, sustainable use/ecosystem service zones	The Environment and Sustainable Development Operational Programme manages EU structural and other funding available to Greece over the period 2007–13. The plan outlining the design for the programme starts from the position that Greece is lagging behind other European economies in the scale of industrialisation and therefore has the potential to combine economic growth with sustainable development. The overall strategic objective of this policy initiative is to protect and sustainably manage the environment so that it is the springboard for protecting public health and improving citizens' quality of life, and a basic factor in boosting economic competitiveness by sustainably managing environmental elements, natural resources and urban centres (soil, water, atmosphere, nature), making public administration better at designing and implementing environmental policy and improving the response of society and citizens in matters of environmental protection.
ES	Towards urban green infrastructure in Vitoria-Gasteiz	Ecosystem service provision	Sustainable use/ecosystem service zones, green urban and peri-urban areas, natural connectivity features, artficial connectivity features	Vitoria-Gasteiz, capital of the Basque Country in northern Spain, won the European Green Capital award in 2012. It is one of Europe's cities with the largest proportion of green areas per inhabitant (app. 45 m2 per person) — the entire population lives within 300 m of an open green space. For over 30 years now, the city has invested in its 613-hectare green belt that will soon cover 950 hectares, in a successful mobility shift, an extensive network of parks and city walks and sustainable water-management systems. The semi-natural green belt has been work in progress since the early 1990s, with a lot of work and investment in reclaiming degraded areas such as gravel pits and drained wetlands. It links the city and the countryside — two of its suburban, restored wetland areas have been recognised for their significant natural value with international protection status. They are also efficient water retention and purification areas, parks and visitor centres, minimising the flow of river water into the city's sewage treatment network. This would otherwise have needed to be renewed and enlarged. Apart from its merely aesthetic functions and those relating to the recreational use of the population, the city's green belt plays a fundamental role in cooling the urban climate in summer and improving comfort, reducing contamination, capturing carbon, increasing the infiltration capacity of the soil and consequently improving urban biocapacity. Business park projects will transform degraded spaces into new, mixed urban areas and watercourses in the city have been re-opened. New green bridges will be built to connect residencial areas with the countryside. All this is possible thanks to the urban government's and its citizens' rigorous spatial planning and long-term commitment. With the current economic crisis and struggle against high unemployment in Spain, Vitoria-Gasteiz is investing heavily in green education and jobs, linked to technology and innovation, or through programmes to improve the natural environment and recover biodiversity.
FR	Green and blue infrastructure	Biodiversity conservation	Core areas, restoration areas, natural connectivity features	The green and blue network is a key national spatial planning tool. Its core objective is to stop the decline of biodiversity by conserving and restoring ecological continuities to ensure the provision of ecosystem services. The green and blue infrastructure is managed locally between the state and local authorities (primarily the regions) and in consultation with other local players, on a contractual basis, in a coherent framework set out by the state. The representative of the central government in the region (prefet de region) sets out the final plan after consulting the regional council (parliament). The overall objective is to ensure that the preservation of biodiversity is taken into account in planning decisions, particularly in territorial coherence schemes (ScoTs) and local urban planning schemes (PLUs). At national level, a framework document titled 'National directions for preserving and enhancing ecological continuities' ('Orientations nationales pour la préservation et la remise en bon etat des continuités écologiques') was produced and updated by the competent authorities. They also set up a national green and blue networks committee whose members are representatives of local authorities, economic actors, national parks and environmental NGOs. At regional level, a framework document titled 'Regional plan for ecological coherence' ('Schéma régional de cohérence écologique'), taking into account the national framework, was produced. The regional framework, which includes an identification of areas and mapping and other information on planned measures, is sent to the local authorities for them to take into consideration. The regional schemes need to be taken into account in local planning tools.

HU	Hungarian National Agro-Environmental Programme	Ecosystem service provision	Sustainable use/ecosystem service zones	This programme aims to protect biodiversity within agricultural land, that covers 83% of Hungary. Launched in 2002, it offers financial support to farmers who voluntarily implement agro-environmental farming systems. They are particularly encouraged for environmentally sensitive areas, defined as 'any extensively cultivated area, that serves to conserve nature-friendly cultivation methods and thereby to protect natural habitats and conserve biodiversity, landscape assets and cultural and historical assets'. Some agro-environmental measures are aimed at particular species, such as the great bustard and the corncrake. The programme included 2160 farmers and 121614 hectares of environmentally sensitive areas in 2011. Specific objectives are: · farm-level planning of land-use prescriptions with the help of an advisory system, and taking the specificities of local environment into account when defining management requirements; · strengthening the connection between management requirements and the ecological needs of target species; · improving monitoring activities to measure the natural and environmental benefits of payments; · harmonising the programme overall with the Natura 2000 Network.
IE	Integrated Constructed Wetlands	Ecosystem service provision	Restoration areas, sustainable use/ecosystem service zones	The Integrated Constructed Wetland (ICW) concept and term was developed in the 1980s and 1990s by the Irish Department of the Environment, Heritage and Local Government. The subsequent initiative was taken forward by the Irish National Parks and Wildlife Service (NPWS). The concept developed from work done in the late 1980s and early 1990s in the 25 km2-water catchment of the Dunhill-Annestown stream in County Waterford to better manage natural resources for the rural community. The initiative has seen the construction of numerous examples of ICWs that have put the concept into practice, and the development of formal guidance produced by the national government. The concept aims to create 'ecological infrastructures that are largely self-managing, biologically self-designing and which have social and economic coherence'. It is intended that these will also help provide additional habitat for species associated with wetlands formerly ubiquitous in Ireland. In particular, the ICWs promoted by the initiative mimic in large part the structure and processes found in those wetlands dominated by emergent vegetation with shallow water and nutrient-enriched soils. Specific objectives: · to contain and treat influents within emergent vegetated areas; · to aesthetically place the containing wetland structure in the local landscape to enhance a site's ancillary values; · to improve habitat diversity and nature management; · to advocate the advantages of restoring some of wetlands' key environmental services and their associated lost habitat.
IT	Mirandola Urban Green Belt	Climate change mitigation and adaptation	Sustainable use/ecosystem service zones, green urban and peri-urban areas	The Local Energy Plan of the municipality of Mirandola, in the Emilia Romagna region, aims to significantly reduce energy consumption and contribute to climate change mitigation (20% energy reduction by 2020). One of the measures is the creation of a green belt around the city to provide cooling and shading in summer and store CO2. This is done using 'transfer of development rights', whereby developers are allowed to increase the size of their buildings if they allot a significant part of their land to green space. The individual green spaces form a continuous green belt. Flexible, negotiable development standards encourage developers to participate in town planning and shortens the wait for planning permission. The initiative started in 2001 and the first wooded areas were planted in 2003. The related measure 'Una città nel bosco' ('A city in the wood') aims to create a public wooded area of about 1.3 million m2 related to low energy intensity residential building programmes. This would include about 440000 m2 of woodland along the planned Cispadana motorway.

LT	Development of a pilot ecological network in southern Lithuania	Biodiversity conservation	Core areas, restoration areas, natural connectivity features, artficial connectivity features	The project duration is 2010–14 and it involves three main activities: protecting target species, creating the ecological network and educating the local community. The target species of the project are reptiles and amphibian species included in the Habitats Directive and a number of birds and invertebrate species that need small standing water bodies, small meadows or uncovered sandy slopes. The current protected area system in southern Lithuania does not protect these target species enough and does not ensure migration between the most bio-ecologically important habitats. The project aims to create ecological corridors in southern Lithuania that should ensure a favourable conservation status for species and increase the region's ecological value. Another project activity is to distinguish scientific and legal selection criteria in establishing an ecological network. These criteria will be designated for the protection of biodiversity in general. It is expected to cover the entire territory of Lithuania. These activities will be coordinated with those of the local communities, explaining the benefits of these actions for nature and people. Educational materials, events, articles in local and national newspapers, the project's webpage and a nature trail will be used to educate the local community about the environment.
LU	The River Contract	Water management	Sustainable use/ecosystem service zones	The Contract for the Haute Sure River is a cross-border project, implemented with the support of the European Union, Luxembourg, Wallonia (Belgium) and Lorraine (France). Its aim is to design a series of measures to better protect and manage water resources. It relies on the participation of the general public and the consultation of all the actors to achieve sustainable, reasonable water management. It aims to combine measures to improve the quality of water, biodiversity, structural quality and water-based recreation. It is a multi-annual programme to restore, protect and valorise the valley of the Haute Sure and its rivers. Cooperation, dialogue and agreement are key features of the project, for which the voluntary participation of actors is crucial. It also seeks to improve inter-town cooperation and coordination between different projects in the region. Finally, it is a platform for promoting cultural and landscape heritage and raising awareness among all the citizens of the valley, informing them and exchanging experience.
LV	Protection and management of coastal habitats	Coastal protection	Sustainable use/ecosystem service zones	Until recently, the Latvian coast was spared much negative human impact. As a result, it now possesses an impressive array of habitat types — grey, white and wooded dunes, coastal lagoons, boreal Baltic coastal meadows and calcareous fens — but is facing increasing human pressure, with more tourists every year. To ensure the conservation, restoration and sustainable management of coastal habitats and species of Community importance, the project (2001–06) focused on the following broad objectives: · Mapping and evaluating coastal habitats of Community importance in the whole coastal protection belt. · Planning the appropriate protection and management measures in protected nature areas where there were no nature conservation plans. · Implementing management measures in the coastal zone in areas with high and increasing visitor activity. · Restoring and maintaining coastal meadows and grey dunes in areas where immediate protection is required (cutting trees and bushes, mowing, grazing); removing aggressive alien plant species (in some areas where they are rapidly expanding in distribution and destroying indigenous flora). · Preparing and disseminating information about the coastal project and about threatened coastal habitats of Community importance and their protection.

MT	Protection of ecological corridors — rubble walls	Biodiversity conservation	Artificial connectivity features	Rubble walls, found all over in Malta, serve as borders between the fields of one farm and another. They also allow excessive rainwater to drain from the fields, benefiting agricultural production and minimising soil erosion. They are an important ecological corridor and a refuge for a number of endangered terrestrial fauna. Originally built using the local limestone, these architectural features result in a very distinctive landscape that provides continuity with the historic features and fabric of many villages and other urban centres. Over the centuries, terracing and the construction of retaining dry rubble walls have allowed the extension of agricultural activities along steep slopes that would otherwise have been considered marginal. Traditionally built, well maintained rubble walls are also important as a habitat for many species of flora and fauna and as soil conservation structures. To conserve and maintain these structures, the Government of Malta enacted regulations for their recognition and protection in view of their environmental, historical and architectural importance, their role in the habitat for flora and fauna and their vital importance in conserving the soil and water. These regulations prohibit their unlawful modification through prohibited human activities and provide the basis for remediation action. Funding for the restoration of terraced rubble walls was allocated in the 2004–06 and 2007–13 Rural Development Programmes.
NL	Room for the River programme	Flood protection	Natural connectivity features	The Room for the River programme is undertaking a range of actions to increase the carrying capacity of the main rivers that flow through the Netherlands in order to increase the safety of 4 million inhabitants. The programme period is 2006 to 2015 (with a budget of EUR 2.2 billion) and includes the secondary objective of enhancing the biodiversity value of the river basins where this could be combined with flood control measures. The programme's development and implementation is the primary responsibility of the Ministry of Infrastructure and the Environment in cooperation with the respective provinces, municipalities and water authorities. Its overall objective is to increase the maximum safe flow of the rivers entering the Netherlands to a level that occurs once in 1 250 years. The biodiversity of the river basins will be enhanced by implementing 39 projects along the rivers. Those that can be classified as Green Infrastructure measures include projects to widen and/or lower the floodplain and to flood previously reclaimed land.
PL	Improving water storage capacity and preventing floods and drought in lowland forest ecosystems	Ecosystem service provision	Core areas, sustainable use/ecosystem service zones	This project's objective is to stop or slow down the outflow of surface water in the vicinity of small catchment areas and support the development of natural landscape. The activities include the construction or renovation of several thousand water storage systems in lowland forests throughout the country. One of the project's major goals is to support ecologically sound methods of water retention. Improving water balance will enhance biodiversity in forest ecosystems and buffer flood and drought events. Other benefits include more timber biomass production, better fire control, CO2 sequestration and better water quality for neighbouring communities. The project can become the first large-scale effort in Europe to develop small-scale water retention in forests. Financed by cohesion funding, it will benefit 178 forest districts. The implementation costs from 2007 to 2014 will be about EUR 50 million.
PT	National Ecological Reserve	Biodiversity conservation	Core areas, sustainable use/ecosystem service zones, natural connectivity features	A national ecological reserve (REN) is a biophysical structure that integrates all areas, by value and ecological sensitivity or exposure and susceptibility to natural hazards that should be given special protection. It defines a network of conservation areas, including coastal and riverine areas, aquifer recharge and steep slope areas for erosion protection. Areas included under REN regulations must be identified in regional and local plans. Special committees manage the application of this regulation and manage conflicts. They involve local authorities and central and regional public agencies. The regulation aims to: - protect water and soil resources and safeguard systems and biophysical processes associated with coastal and terrestrial water cycles, ensuring the provision of environmental goods and services essential for the development of human activities; - prevent and reduce the effects of the degradation of groundwater recharge, flood risk, drought, soil erosion and mass movements on slopes, thus contributing to adaptation; to connectivity and ecological coherence; and to the realisation of the priorities of the Territorial

				Agenda of the European Union and environmental areas of trans-European natural hazards management.
RO	Lower Danube Green Corridor	Biodiversity conservation	Core areas, restoration areas, sustainable use/ecosystem service zones	The Lower Danube Green Corridor Agreement was signed in 2000 by the governments of Romania, Bulgaria, Ukraine and Moldova. It recognises a need and shared responsibility to protect and sustainably manage one of the most outstanding biodiversity regions in the world. Restoration projects carried out under the auspices of the WWF, which focuses on practical implementation; demonstration projects; and work with local stakeholders in particular to promote sustainable local development. This large-scale initiative aims to coordinate biodiversity conservation and water management among several countries, particularly the conservation of wetlands and the management of floodplains. The network includes areas that are strictly protected (including Natura 2000 sites) and areas where economic activities are possible, with buffer zones in between. The signatories have committed themselves to establishing the corridor composed of 773 166 ha of existing protected areas plus 160 626 ha of proposed new protected areas, (protection for 1 million ha of existing and new protected areas) and 223 608 ha of areas proposed to be restored to natural floodplains.
SE	Sveaskog company strategy	Sustainable forest management	Core areas, restoration areas, sustainable use/ecosystem service zones, natural connectivity features	Sveaskog is a Swedish state-owned forest company with a holding of 15 % of the country's productive forest land (productive forests cover more than half of Sweden's total land area), making it the largest forest owner in Sweden. It aims to lead the way in the development of all kind of forest values. It launched a programme with the aim of using 20 % of the company's land for biodiversity protection. Three different strategic tools have been developed to implement the company's policy and achieve its environmental objectives. They operate at different levels, thus reinforcing and complementing each other. Additional measures such as restoring approximately 50 wetlands, developing climate programmes and taking ecosystem services into account, have begun to be implemented. (1) Sveaskog is in the process of establishing 36 ecoparks — large, contiguous landscapes with high biological and ecological values — throughout Sweden. Their average size is about 5 000 hectares with a range from 1 000 to 20 000 hectares. In total, the ecoparks make up for 5 % of the land holding, which corresponds to 175 000 hectares. At least half of the productive forest land is used for nature conservation and ecological values always take precedence over financial values in an ecopark. (2) Forests set aside for nature conservation (300 000 hectares of smaller land holdings are used for nature conservation only). Criteria such as international responsibility for, and national under-representation of specific forest types, as well as several landscape ecology criteria, have been used in selecting forests with high conservation values today, but also with a high ecological potential to recover values in the near future. (3) Taking nature into account in production forests (related to regulations established in the Swedish forest act). All Sveaskog's forest holdings are certified in accordance with FSC standards in Sweden. Individual trees, groups of trees or minor areas of the forest are preserved during felling. On average, 9 % of every commercial forest stand will be preserved, which amounts to 250 000 hectares.

SI	Protection of the Sava River floodplains	Water management	Core areas, restoration areas, sustainable use/ecosystem service zones, natural connectivity features	Duration of the project 2007–09. Following the signing of an International Framework Agreement (IFA) in December 2003, Slovenia, Croatia, Serbia and Bosnia-Herzegovina set up the Sava River Basin Commission in June 2005. The commission's priority task was to elaborate an Integrated River Basin Management (IRBM) plan meeting the requirements of the EU Water Framework Directive (WFD) and other EU legislation based on the IFA. The main objectives were to: - support transborder cooperation and agreement between the Sava countries to designate and manage an ecological network of protected areas, buffer zones and corridors for habitat types and species of European importance; - protect global significant biodiversity and support rural development by encouraging sustainable land use practices and rural tourism.
SK	Alpine-Carpathian Corridor	Biodiversity conservation	Natural connectivity features, artficial connectivity features	Based on an initial initiative of the Donau-Auen National Park and the Austrian Federal Ministry of Traffic, Innovation and Technology, in 2002 a range of organisations, from NGOs such as WWF and hunter organisations to Slovakian and Austrian road authorities, decided to support the development of green corridors across the Alps and Carpathians, recognising the importance of implementing measures that support species migration and genetic exchange between the two mountain areas. The partnership resulted in a range of activities in Austria and Slovakia, from developing a first green bridge in Austria to creating wildlife passages in Slovakia. This was followed by a project called the Alpine-Carpathian Corridor (2008–12), financed by the European Regional Development Fund (ERDF) and Austrian authorities, including scientific research, developing green bridges and integrating green corridors into spatial planning and awareness-raising. Its overall objective is 'to safeguard the ecological connectivity between the Alps and the Carpathians by especially embedding instruments of spatial planning and to trigger sustainable development which considers the requirements of both humans and wildlife, focusing on ecological bottlenecks'.
SU	Forest Biodiversity Programme for southern Finland	Biodiversity conservation	Core areas, restoration areas, sustainable use/ecosystem service zones, natural connectivity features	The Forest Biodiversity Programme for southern Finland, i.e. the METSO Programme (2008–16) began in 2008 to halt the loss of forest biodiversity by improving Finland's network of protected areas and the forestry methods used in commercially managed forests (METSO 2011). The METSO Programme aims to improve the conservation of private and state-owned forests. The measures will largely be financed through the annual framework budgets allocated to the Ministry of the Environment and the Ministry of Agriculture and Forestry. Previous government resolutions have already guaranteed funding amounting to EUR 182 million by 2012. An important part of the programme is voluntary conservation activities that will be carried out through temporary or permanent agreements. The forest owner will be compensated for the costs of managing nature on the site and for the loss of income. The voluntary approach is valued by forest owners who also appreciate the independence in decision-making and the chance to retain their property rights in the conservation schemes available. They can also set up cooperation networks under the programme. The aim of this is to help them maintain broader forest landscapes, develop joint recreational activities related to forest biodiversity, and manage valuable habitats. A cooperation network can consist of forests bordering on each other or include forested areas in different municipalities. The programme has the following objectives. In terms of extending the protected area network, a total of 96 000 ha of areas voluntarily offered by landowners shall be established as private nature reserves or acquired by the state by 2016. In terms of commercially managed forests, the total area of sites where biodiversity is safeguarded (through management practices) in privately owned forests should be increased by 82 000 to 173 000 hectares by 2016. These sites include 400 to 800 habitat management projects. With regard to state-owned forests, proposals should be made for the extension of protected areas of significance for biodiversity on state-owned land by a total area of 10 000 ha between 2008 and 2010, in connection with natural resource planning processes.

UK	Cambridge Green Infrastructure Strategy and Green Vision	Ecosystem service provision	Core and restoration areas, sustainable use/ecosystem service zones, green urban/peri-urban areas, natural/artficial connectivity features	Over the next twenty years, the population of the Cambridge sub-region is expected to increase by approximately 130 000 from its current 425 000. This increase in population can be seen as an opportunity for improving the quality of life enjoyed by existing communities. The housing developments will put pressure on the environment (e.g. in terms of habitat loss, fragmentation and disturbance), but at the same time provide opportunities to enhance the adjoining GI, which could link into a strategic network of green spaces. Much will depend on the extent to which the existing infrastructure, including GI, can be enhanced to support the scale of growth proposed. The provision of GI has therefore been identified as a key priority for successfully implementing the growth agenda. Subsequent strategies and visions were produced to enable forward-looking approaches for the next 20 to 30 years. This is underpinned by the following strategic objectives: Connectivity of habitats — the provision of better linkages between existing and proposed GI resources is essential for the success of the strategy. Multi-functionality — wherever possible, green space in and around settlements should be multi-functional, carefully tailoring various uses such as agriculture, access, recreation and biodiversity to the local situation. Extended access — better access for everyone, and by sustainable means, including on foot, by bicycle, on horse and in boat to promote a healthier lifestyle, is fundamental. Landscape enhancement — the strategy should reflect the distinctive patterns of the Cambridgeshire landscape, both in terms of its natural and historical and cultural landscapes. Biodiversity enhancement — the strategy should reflect regional biodiversity resources, patterns and targets and enhance the county's distinct natural environments.