

Annexes

Annex 1: Analytical framework used

Category	Detailed questions
Regulatory Framework (RF)	<ul style="list-style-type: none"> - Title, date of coming into force - Updates/reforms, if applicable
Aims/ Objectives	<ul style="list-style-type: none"> - Ecosystem Services (ES) concept mentioned explicitly (where/ how)? - ES terminology used in RF documents (which/ where/ how)? - Please do classify RF with respect to ES framing (Type 0: no ecological or environmental knowledge referred to ... Type 5: ES fully embedded throughout (Helming et al., 2013)) - Degree of a consideration of different groups of ES: cultural, provisioning, and regulating/maintenance services in the objectives and/ measure design; number of different ES mentioned - If ES or the ES concept is not referred to explicitly, is the spirit of the RF directed towards safeguarding ES or can positive effects in this direction expected? - Which (problematic) drivers or (global/regional) developments/trends (e.g., biodiversity loss) does the RF tackle? - If applicable, please indicate if all or parts of the above changed significantly in the context of policy updates/reforms)
Policy type	<ul style="list-style-type: none"> - Strategy, Framework, Directive, etc. - General distribution of responsibilities (e.g., implementation, financing) between EU, Member States (MS), and perhaps regional/ local levels - Predominant mode of steering (e.g., command-and-control, incentive-based, advisory, or else)
Directorate General (DG) with lead responsibility	<ul style="list-style-type: none"> - Other DGs involved in RF negotiations, design, implementation, evaluation, monitoring, etc.? - If possible, please provide some indication/assessment of the relative importance/ strength of the lead DG (hidden hierarchies, budgets, etc.) – in general, and perhaps related to the RF
Responsible for RF and / or concrete measure design	<ul style="list-style-type: none"> - Room for manoeuvre for MS or regional authorities/actor groups to implement RF and/or define concrete measures
Formal reporting	<ul style="list-style-type: none"> - Who, whom, what, how, do reports exist?
Responsible for evaluation / monitoring	<ul style="list-style-type: none"> - Who, what, how, exist evaluation/monitoring reports? - What sanctions are defined? Are there reports on actually imposed sanctions (who, what)? - Is there are specific official request for the reporting /evaluation/monitoring of the RF and/or the policies effects on ES? - Have unintended effects of the RF (or concrete measures therein) on ES been reported?
Responsible for financing	<ul style="list-style-type: none"> - Who, what, how, exist information on budget/ cash flows?
Comments/ additional information and/ or useful categories	

Annex 2: Policy analysis ‘Marine Strategy Framework Directive’

(Charlotte Deerenberg)

Category	Detailed answers
Aims/ Objectives	<p><u>Objectives</u></p> <p>Four pillars:</p> <ul style="list-style-type: none"> - Establishment of a framework for taking measures to achieve or maintain good environmental status (GES) in the marine environment - Development of marine strategies to i) protect, preserve, prevent deterioration or restore and ii) prevent and reduce input - Apply an ecosystem-based approach to the management of human activities - Contribute to coherence between and ensure the integration of environmental concerns into the different policies, agreements and legislative measures <p>ES concept (marine goods and services) mentioned explicitly:</p> <ul style="list-style-type: none"> - Considerations 2 (marine ecological services), 8 and 18 ((marine) goods and services) - Art. 3.1: “...while enabling the sustainable use of <i>marine goods and services</i> by present and future generations.” - Art. 3.8: “...impairment of the sustainable use of <i>marine goods and services</i>.” <p>ES concept mentioned indirectly:</p> <ul style="list-style-type: none"> - Art. 3.5: “...the use of the marine environment...” - Art. 8.1c: “an economic and social analysis of the use of those waters...” <p>Classification: Type 4 (contains framing around ES)</p> <p>All different groups of ES considered (Art. 3.8: “...the hindering of marine activities, including fishing, tourism and recreation and other legitimate uses of the sea, impairment of the quality for use of sea water and reduction of amenities or, in general, impairment of the sustainable use of marine goods and services).</p> <p>Problematic driver/trends:</p> <ul style="list-style-type: none"> - pressure on natural marine resources and too high demand for marine ecological services - insufficient environmental state
Policy type	<p><u>EU</u></p> <ul style="list-style-type: none"> - Strategy, framework and directive - Control development of elements of MS’s national strategy - Take action when measures at national level are insufficient or when there is a link to another EC policy or international agreement - Provide (already existing) financing - Evaluate implementation by MSs - Give progress reports <p><u>Member States (MS)</u></p> <ul style="list-style-type: none"> - Develop marine strategy (Art. 5) - Regional cooperation and devise plan of action
DG with lead responsibility	<p>DG Environment</p> <p><i>No information found, yet</i></p>
Responsible for RF and / or concrete	<p><u>EU</u></p> <p>policy (RF) design</p>

measure design	<p><u>MS</u> (Art. 5.2)</p> <ul style="list-style-type: none"> - Initial assessment of environmental state and determine GES - Establish targets and associated indicators - Implement monitoring - Develop and implement programme of measures
Formal reporting	<p><u>Who:</u></p> <ul style="list-style-type: none"> - MS for national strategies - MS for reviews - EU Commission for common review reports <p><u>What:</u></p> <ul style="list-style-type: none"> - Up to date national strategies (elements by 2012-2016) - National reviews by element every sixth year (Art. 17) - Interim report progress on programme of measure within three years after publication or update thereof (Art. 18) <p><u>How:</u></p> <p>Guidelines for the report available, provided by the EU</p>
Responsible for Evaluation	<p><u>Who:</u></p> <p>EC</p> <p><u>What:</u></p> <p>Evaluation report on the implementation of the directive (2019 and every six years thereafter)</p>
Responsible for monitoring and/or sanctioning	<p><u>Who:</u></p> <p>MSs</p> <p><u>What:</u></p> <p>Monitor ongoing assessment of the environmental status on the basis of a given list of elements (Art. 11)</p> <p><u>Who:</u></p> <p>EC</p> <p><u>What:</u></p> <p>See above (formal reporting)</p>
Responsible for financing	<p><u>Who:</u></p> <p>EC, MS?</p> <p><u>What:</u></p> <p>EC estimates costs at ???</p> <p><u>How</u></p> <p>Supporting and co-financing through various existing community financial policy instruments (not specified) (Art. 22)</p>
Comments/ additional information and/or useful categories	--

Annex 3: Policy analysis 'Forest Strategy'

(Eeva Primmer)

Category	Detailed answers
Regulatory Framework (RF)	EU Forest Strategy
Aims/ Objective	<p>Starting points: "Forests are multifunctional, serving economic, social and environmental purposes." ... "Ensuring sustainable forest management is essential if these benefits are to be delivered in a balanced way." (p. 2)</p> <p>Aim stated in 2020 Forest objectives (p.6): "To ensure and demonstrate that all forests in the EU are managed according to sustainable forest management principles and that the EU's contribution to promoting sustainable forest management and reducing deforestation at global level is strengthened, thus: - <u>contributing to balancing various forest functions, meeting demands, and delivering vital ecosystem services;</u> - providing a basis for forestry and the whole forest-based value chain to be competitive and viable - contributors to the bio-based economy"</p> <p>ES mentioned explicitly: Definition (p. 2): "<u>Sustainable forest management means using forests and forest land in a way, and at a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality and their potential to fulfil, now and in the future, relevant ecological, economic and social functions, at local, national, and global levels, and that does not cause damage to other ecosystems.</u>"</p> <p>Justification (p. 4): "A new framework is needed to: Ensure that the multifunctional potential of EU forests is managed in a sustainable and balanced way, <u>enabling our forests' vital ecosystem services to function correctly.</u>"</p> <p>Objectives (p. 6): "<u>...contributing to balancing various forest functions, meeting demands, and delivering vital ecosystem services...</u>"</p> <p>Priority area Supporting our rural and urban communities (p. 6): "Member States should use the opportunities given in the new Rural Development Regulation and prioritise investments in: modernising forestry technologies; optimising the sector's contribution to the bio-economy; <u>improving the resilience, environmental value and mitigation potential of forest ecosystems achieving nature and biodiversity objectives; adapting to climate change; conserving genetic resources; forest protection and information;</u> and creating new woodland and agro-forestry systems." (p.6) ... "The Commission will, together with Member States and stakeholders: - <u>Explore and promote the use of wood as a sustainable, renewable, climate and environment friendly raw material more fully without damaging the forests and their ecosystem services;</u>" ... (p.7)</p> <p>Priority area 4 Protecting forests and enhancing ecosystem services (p. 9) Numerous ES ideas, including: - Biodiversity - Protection against pressures and improving resilience</p>

	<ul style="list-style-type: none"> - Preventing negative impacts rather than restoration <p>Main strategic orientations for MSs:</p> <ul style="list-style-type: none"> - Valuation, mapping, assessment - Maintaining forest cover through integration with WFD and rural development programmes - Conservation with Natura 2000 and integrating forest management plans with N2000 management - Biodiversity Strategy and Aichi targets - Genetic and species diversity <p>Main strategic orientations for EC:</p> <ul style="list-style-type: none"> - Monitor MS uptake of forest management plans - Control pests together with MSs - Phytosanitary measures - Combat desertification and land degradation <p>Priority area 5 What forests do we have and how are they changing? (p. 11) <u>"Mapping and assessing the state of forest ecosystems and their services requires better EU forest information"</u></p> <p>Priority area 8 Forests from a global perspective (p. 14) <u>"At global level, the EU is at the frontline of work on combating deforestation and forest degradation. It promotes sustainable forest management as a way of protecting biodiversity, fighting desertification and responding to climate change, whilst ensuring that forest ecosystems deliver goods and services."</u></p>
Policy type	<p>Strategy</p> <ul style="list-style-type: none"> - The Treaty on the Functioning of the EU makes no reference to specific provisions for an EU forest policy - The Strategy refers to other policies, e.g., growth and jobs, resource efficiency, rural development, climate and energy, biodiversity. - The predecessor (Forest Strategy 1998) highlighted subsidiarity and shared responsibility between EU and Member States - Nominates action-like strategic orientations for both MS and EC
DG with lead responsibility	<p>No DG with lead or other specified responsibility (The strategy does not mention any Directorate).</p> <p>Rather, there is a general shared responsibility between EU and MS and the purpose of the strategy is to coordinate a range of EU and MS policies that concern forests.</p> <p>The other policies mentioned (growth and jobs, resource efficiency, rural development, climate and energy, industry, biodiversity and plant health) indicate the DGs who can be assumed to take some responsibility (p.3, 17).</p> <p>Rural development policy has a somewhat more significant role as it channels financing to sustainable forest management: "Co-financing of forestry measures under the Rural Development Regulation has been and will remain the main means of EU-level funding"</p> <p>...</p> <p>"Member States should use the opportunities given in the new Rural Development Regulation and prioritise investments in: modernising forestry technologies; optimising the sector's contribution to the bio-economy; improving the resilience, environmental value and mitigation potential of forest ecosystems; achieving nature and biodiversity objectives;</p>

	<p>adapting to climate change; conserving genetic resources; forest protection and information; and creating new woodland and agro-forestry systems” (p.6-7).</p> <p>Already the predecessor Forestry Strategy from 1998 highlighted subsidiarity.</p>
Responsible for RF and / or concrete measure design	<p>Voluntary coordination, cooperation and communication.</p> <p>The Standing Forestry Committee, designed as a forum for discussing all forest-related issues, is responsible for coordination.</p> <p>The Advisory Committee on Forestry and Cork is the main multi-stakeholder platform for discussing issues related to forestry and sustainable forest management.</p> <p>The Advisory Committee on Forest-based Industries²⁵ will remain the main platform for issues related to industrial value chains.</p> <p>Instead of measures, the strategy includes action-like strategic orientations, which nominate the responsibilities for the Commission and for Member States. Mostly, the strategic orientations address the EC and the MS in parallel.</p> <p>Under the Priority area 4 Protecting forests and enhancing ecosystem services, strategic orientations are assigned separately for EC and MS (p. 9):</p> <p>Main strategic orientations for MSs:</p> <ul style="list-style-type: none"> With the Commission’s assistance, develop a conceptual framework for valuing ecosystem services Maintain forest cover through integration with WFD and rural development programmes - Achieve a significant and measurable improvement in the conservation status by implementing Natura 2000 and integrating forest management plans with N2000 management - Implement biodiversity Strategy and Aichi targets - Strengthen genetic conservation and species diversity <p>Main strategic orientations for EC:</p> <ul style="list-style-type: none"> - Monitor MS uptake of forest management plans - Control pests together with MSs - Phytosanitary measures - Combat desertification and land degradation
Formal reporting	<ul style="list-style-type: none"> - Varies, depending on the strategic orientation. - Not stated clearly.
Responsible for Evaluation	<p>Not clear, perhaps EP and the Council?</p> <p>“A review will be carried out by 2018 to assess progress in implementing the strategy.</p> <p>...</p> <p>The European Parliament and the Council are invited to endorse this strategy and to express their views on its implementation.” (p. 17)</p>
Responsible for monitoring and/ or sanctioning	<ul style="list-style-type: none"> - Varies, depending on the strategic orientation. - Not stated clearly.
Responsible for financing	<ul style="list-style-type: none"> - The strategy does not have a budget for its implementation. Rather, it refers to other funds, notably the rural development funds, which are co-financed between EU and MS. - Out of total EU forestry funding, forestry measures under the Rural Development

	<p>Regulation receive 90%.</p> <ul style="list-style-type: none"> - €5.4 billion were earmarked for forestry measures in 2007-2013. - A similar level of could be expected for 2014-2020. - The spending should be dedicated to contributing to the objectives of the strategy, in particular to ensuring that EU forests are demonstrably managed sustainably. - LIFE+ supports nature conservation, climate change adaptation, information and protection needs - The structural funds support cohesion projects and - Horizon 2020 supports research and innovation actions, including the public-private partnership on bio-based industries.
Comments/ additional information and/ or useful categories	<p>The coordination of forest policy principles in EU is dominated by a process currently named “Forest Europe” (2011), which has a long history in the pan-European process also known as Ministerial Conference on the Protection of Forests in Europe (MCPFE).</p> <p>Forest Europe (2011) is a process aiming at a legally binding agreement, which the Strategy acknowledges:</p> <p>“At pan-European level, the focus is on the ongoing negotiations on establishing a legally binding agreement on forests, with the EU as a key actor. Through this agreement, the EU aims to improve sustainable forest management across the region. The new strategy forms a suitable vehicle for the implementation of the agreement.</p> <p>ensure consistency between EU and Member State policies and commitments on forest related issues at international level “(p. 14)</p> <p>Despite the apparently fragmented, and hence somewhat weak, EU forest policy, Europe is a frontrunner and important driver of global forest policy. The strategy states: “At global level, the EU is at the frontline of work on combating deforestation and forest degradation.” (p. 14)</p> <p>EU forest policy is referred to in varying ways in literature and reports, ranging from notions of non-existence of common forest policy to highlighting the role of the Forest Strategy and its predecessors as well as the Forest Europe process.</p> <p>EU forest policy consists of a “dense regulatory network”, as different forest functions are regulated by a range of laws.</p> <p>There is some frustration about a long-recognised need for coordination not having resulted in concrete agreement. One reason is the delay itself: the relevant other policy fields have rather far developed regulation, which is hard to integrate. This can be called even a “(dis)integration paradox”, resulting from sectoral and institutional competition and competing interests. Also in Member States, the responsibilities are fragmented to different ministries. For this reason, the so called national forest Programmes have become a legitimate way of coordinating national forest policy.</p>

Annex 4: Policy analysis ‘Renewable Energy Directive’

(Elena Preda & Hanna-Liisa Kangas)

Category	Detailed answers
Regulatory Framework (RF)	Renewable Energy Directive (RED) Directive 2009/28/EC
Aims/ Objectives	<ul style="list-style-type: none"> - Objectives: <ul style="list-style-type: none"> - establishes a common framework for the promotion of energy from renewable sources; - sets mandatory national targets for the overall share of energy from renewable sources in gross final consumption of energy (at least 20% for each MS- RED, art. 3(1)) and for the share of energy from renewable sources in transport (at least 10% for each MS- RED, art. 3(4)); - lays down rules relating to statistical transfers, joint projects between Member States and with third countries, guarantees of origin, administrative procedures, information and training, and access to the electricity grid for energy from renewable sources; - establishes sustainability criteria for biofuels and bioliquids (RED, art. 1). • ES concept is mentioned within the background of RED development- <i>“it will be taken into account the areas that provide basic ecosystem services in critical situations such as watershed protection and erosion control”</i> and in Art.18 related to Verification of compliance with the sustainability criteria for biofuels and bioliquids- <i>due consideration shall be given to measures taken for the conservation of areas that provide, in critical situations, basic ecosystem services (such as watershed protection and erosion control), for soil, water and air protection, indirect land-use changes, the restoration of degraded land, the avoidance of excessive water consumption in areas where water is scarce</i> • ES framing- Type 1- <i>“environment mentioned but neither a prominent objective nor relevant for/ mirrored in policy measure design”</i> • Only regulating services are mentioned explicitly, resp. watershed protection & erosion control • Main drivers referred within RED are: <ul style="list-style-type: none"> - <i>Climate change</i>: RED is a part of package of measures needed to reduce greenhouse gas emissions and comply with the Kyoto Protocol to the United Nations Framework Convention on Climate Change, and with further Community and international greenhouse gas emission reduction commitments beyond 2012 (pg.1 (1)) - <i>Land-use change</i>: It is appropriate to monitor the impact of biomass cultivation, such as through land-use changes, including displacement, the introduction of invasive alien species and other effects on biodiversity, and effects on food production & local prosperity (pg. 8 (78)) - Biodiversity is mentioned a few times in terms of “land with high biodiversity value” (primary forest, protected area, highly biodiverse grassland) which is not allowed to be used for raw material for biofuels or bioliquids (“the increasing worldwide demand for biofuels and bioliquids, and the incentives for their use provided for in this Directive, should not have the effect of encouraging the destruction of biodiverse lands”)
Policy type	<ul style="list-style-type: none"> - Directive - Responsibilities: <ul style="list-style-type: none"> - EU-Commission: provides templates; monitors the origin of biofuels and bioliquids consumed and the impact of their production; monitors the commodity price changes associated with the use of biomass for energy; analyzes the impact of increased demand for biofuel on sustainability in the Community and in third countries, considering economic and environmental impacts, including impacts on biodiversity; proposes corrective action - MS report to the Commission on progress in promotion and use of energy from renewable sources by end of 2011 (every two years). Sixth report due end of 2021 (RED, art. 22(1)). - National level - implementing RED, controlling economic operator - mostly decentralized decision making with diversified aims for each MS - MS decide independently on instruments
DG with lead	DG Energy

responsibility	
Responsible for RF and / or concrete measure design	<ul style="list-style-type: none"> - MS shall adopt a national renewable energy action plan (RED, art. 4 (1)) - Commission shall adopt a template for the national renewable energy action plans (RED, art. 4 (1)), establish a list of appropriate and relevant information on environmental degradation of economic operator (RED, art. 18 (3)) - MS are responsible for implementation (RED, art. 13), distribution of information about support systems and other RED mechanisms (RED, art.14), guarantee origin of energy (RED, art. 15) - MS take measures to ensure that economic operators submit reliable information (RED, 18 (3)) - 2018, Commission represents a Renewable Energy Roadmap for post-2020 period (RED, 23 (9))
Formal reporting	<ul style="list-style-type: none"> - MS notify Commission 6 months before national renewable action plan is due (RED, art. 4 (3)) - MS notify their national renewable energy action plans to the Commission by 30 June 2010 (RED, art. 4 (2)) → published http://ec.europa.eu/energy/renewables/action_plan_en.htm - MS whose share of renewable energy fall below trajectory of part B Annex I, submit amended national renewable energy action plan to the Commission (RED, art. 4 (4)) - EC sends EU Parliament national renewable energy action plan & forecast documents (RED,4 (6)) - Commission reports to the EU Parliament and Council every two years about the national measures taken to respect the criteria, but also report on the national reports and the monitoring, first report submitted in 2012 (RED, art. 17 (7), art. 23 (3)) - 31 Dec 2009, Commission report to EU Parliament and Council requirements for a sustainability scheme for energy use of biomass, other than biofuels and bioliquids (RED, art. 17 (7)) - economic operator need to show the MS that sustainability criteria are fulfilled (RED; art. 18 (1)) - Commission reports to the EU Parliament and Council in 2010 and 2012 on the operation of the mass balance verification method (RED, art. 18 (2)) - MS report to the Commission auditing reports of the economic operators (RED, art. 18(3)) - By 31 March 2010, MS report Commission expected GHG emissions in their NUTS2 regions (RED, art. 19 (2)) and Commission report to EU Parliament and Council, impact of indirect land-use change on GHG emissions (RED, art. 19 (3)) by 31 Dec 2010 - MS submit report to Commission on progress by 31 Dec 2011 and every two years thereafter, sixth and last report 31 Dec 2021 (RED, art. 22 (1)) - Commission reports GHG emission savings based on the MS reports (RED, art. 23 (4)) - By 31 Dec 2014, Commission reports on minimum GHG emission savings, financial aspects, and evaluation of implementation of Directive, proposals to EU Parliament and Council on modifications concerning the reported topics (RED, art. 23 (8)) - 2021, Commission reports a review of RED application (RED, art. 23 (19))
Responsible for Evaluation	<ul style="list-style-type: none"> - Commission shall evaluate national renewable energy action plans (RED, art. 4 (5)) - Commission analyse effectiveness of measures taken by MS on establishing single administrative body for authorisation/ certification/ ... applications (RED, 23 (6))
Responsible for monitoring and/ or sanctioning	<ul style="list-style-type: none"> - Commission monitor the origin of biofuels and bioliquids consumed in the Community, based on MS reports, intergovernmental organizations, scientific studies and any other relevant information, the commodity price changes associated with the use of biomass for energy and any associated positive and negative effects on food security (RED, art. 23 (1))
Responsible for financing	<ul style="list-style-type: none"> - By 31 Dec 2010, Commission publish an analysis and action plan with a particular focus on financing and coordination possibilities (RED, art. 23 (7))
Comments/ additional information and/ or useful categories	<ul style="list-style-type: none"> - Transposition of Directive has been slower than desirable and the trajectory grows steeper in coming years so that in reality most of Member States' effort is needed towards the end. Whilst Member States have had seven years to achieve the first 20% of their target for 2012, thereafter they have only two years to achieve the next 10% for 2014, 15% for 2016, 20% for 2018 and 35% for 2020. In addition, the significant change in economic circumstances in Europe will result, according to analysis undertaken for the Commission, in <i>current</i> policies being insufficient to trigger the required renewable energy deployment in a majority of Member States.

Annex 5: Policy analysis ‘Climate Change Adaptation Strategy’

(Pam Berry & Alison Smith)

Category	Detailed answers
Regulatory Framework (RF)	<p>An EU Strategy on adaptation to climate change -COM (2013) 216. 2013.</p> <p>There are number of associated Staff Working Documents (SWD) e.g. Principles and recommendations for integrating climate change adaptation considerations under the 2014-2020 rural development programmes; Adaptation to climate change impacts on human, animal and plant health. See http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52013SC0131.</p> <p>Builds on the 2009 White Paper ‘Adapting to climate change: Towards a European framework for action’</p>
Aims/ Objectives	<p>Aim: “to contribute to a more climate-resilient Europe. This means enhancing the preparedness and capacity to respond to the impacts of climate change at local, regional, national and EU levels, developing a coherent approach and improving coordination. “</p> <p>Ecosystem Services: One explicit mention (see drivers below)</p> <p>ES terminology: all implicit e.g. benefits of ecosystem-based adaptation (e.g. reduced flood risk, less soil erosion, improved water and air quality); social impacts on health and well-being; economic – cost-effectiveness of adaptation (now), new market opportunities and jobs; competitiveness for SMEs.</p> <p>Classification of RF: Type 2</p> <p>Degree of a consideration of different groups of ES: all implicit, but primarily provisioning (agriculture, forest and water) and regulating (climate, air, soil, water), supporting (productivity), no cultural</p> <p>Use of ES or the ES concept: adaptation as promotes certainly could contribute to aspects of the sustainability/resilience of ES</p> <p>Drivers or (global/regional) developments/trends: One mention “Ecosystems and the services they provide are suffering from the adverse impacts of climate change”, otherwise focused in climate change relates it to impacts on a large number of sectors and society, and biodiversity loss</p>
Policy type	<p>Strategy</p> <p>EU</p> <ul style="list-style-type: none"> - mainstream adaptation measures into EU policies and programmes, including tabling legislative proposals on integrating adaptation into different sectors - facilitate the climate-proofing of the Common Agricultural Policy (CAP), the Cohesion Policy and the Common Fisheries Policy (CFP) - launch a mandate for European standardisation organisations to start mapping industry-relevant standards for more resilient infrastructure - explore the need for additional guidance for authorities and decision makers, civil society, private business and conservation practitioners to ensure the full mobilisation of ecosystem-based approaches to adaptation - promote insurance and other financial products for resilient investment and business decisions - implementation of adaptation measures - fill knowledge and action gaps by working with MS and stakeholders and feed into Horizon 2020 - promote EU-wide vulnerability assessments - finance or co-finance adaptation - explore further ways of accommodating some adaptation investment expenditure,

	<p>such as expenditure co-financed by the EU in the assessment of Stability and Convergence Programmes and international financing institutions e.g., European Investment Bank</p> <ul style="list-style-type: none"> - encourage projects with demonstration and transferability potential and green infrastructure and ecosystem-based approaches - encourage exchange of good practice - promote urban adaptation strategies - dialogue and co-operate with neighbouring and developing countries - develop an adaptation preparedness scoreboard, identifying key indicators for measuring MS level of readiness - by 2017 assess whether action being taken in the Member States is sufficient - introduce adaptation in the Covenant of Mayors framework (which involves 4000+ local authorities) - further develop Climate-ADAPT as the 'one-stop shop' for adaptation information in Europe and improve access to this and other relevant platforms, including national and local adaptation portals - facilitate policy coordination and will seek to cooperate with Member States through the existing Climate Change Committee <p>Member States (MS)</p> <ul style="list-style-type: none"> - adopt an adaptation strategy; where already adopted need to integrate adaptation measures into sectoral policies - implementation of adaptation measures - appoint national contact points for the Commission's work <p>Regional to local</p> <ul style="list-style-type: none"> - implementation of adaptation measures <p>Mode of steering: primarily advisory, reporting (see below) implies a level of control</p>
Directorate General (DG) with lead responsibility	<p>Lead: DG CLIMA (Climate Action)</p> <p>Other DGs involved: implicitly all? Possible DGs given sectors mentioned: DG Agri; DG Environment; DG Health; DG Maritime affairs and Fisheries; DG Energy; DG Regio; DG Research; DG Infrastructure and Logistics; DG Mobility and Transport.</p> <p>Not found evidence on strength of lead DG</p>
Responsible for RF and / or concrete measure design	<p>EU</p> <p>See policy type box above</p> <p>MS</p> <ul style="list-style-type: none"> - design and implementation of a national adaptation strategy, with good room to manoeuvre.
Formal reporting	<p>EU</p> <ul style="list-style-type: none"> - 2017 - Commission will report to the European Parliament and the Council on the state of implementation of the strategy and propose its review if needed. The report will be based on information provided by MS under the Monitoring Mechanism Regulation, the annual implementation reports for programmes funded by the European Structural and Investment funds in the period 2014-2020 <p>MS</p> <ul style="list-style-type: none"> - Monitoring Mechanism Regulation on national adaptation planning and strategies (annual reporting on GHG) - vulnerability assessment reports feed into 'Integrated threat and risk

	assessment reports' to be adopted by the Commission and the High Representative (2015).
Responsible for Evaluation	<p>EU</p> <ul style="list-style-type: none"> - “Monitoring and evaluation is particularly difficult, as indicators and monitoring methodologies have hardly been developed”. Propose using Horizon 2020 to fill knowledge gap of effectiveness of adaptation measures - develop indicators to help evaluate adaptation efforts and vulnerabilities across the EU, using LIFE funding and other sources - adaptation preparedness scoreboard mentioned but not clear what it is <p>MS</p> <ul style="list-style-type: none"> - reporting on GHG under Monitoring Mechanism Regulation
Responsible for monitoring and/or sanctioning (<p>EU</p> <ul style="list-style-type: none"> - Monitoring Mechanism Regulation <p>MS</p> <ul style="list-style-type: none"> - monitoring and evaluation of measures
Responsible for financing	<p>EU</p> <ul style="list-style-type: none"> - finance or co-finance adaptation projects e.g. through LIFE funding; priority to adaptation flagship projects that address key cross-sectoral, trans-regional and/or cross-border issues. Also increasing climate-related expenditure in the draft 2014-2020 Multi-annual Financial Framework (MFF) <p>MS</p> <ul style="list-style-type: none"> - mostly no evidence but can use EU ETS auction revenues as a source of financial support for adaptation
Comments/ additional information and/or useful categories	<p>EU</p> <p>There are a number of Staff Working Documents (SWD) and some Communications flowing from the Adaptation Strategy. See http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52013SC0131</p> <p>It could be interesting to investigate whether ES features more clearly in these.</p>

Annex 6: Policy analysis ‘Habitats Directive’

(Irene Bouwma)

Category	Detailed answers
Regulatory Framework (RF)	Habitats Directive (HD) of 21 May 1992 Various updates of the Annexes of the Directive due to enlargement process. Most recent update in 2013. Also inclusion of new biogeographical regions in Article 1 Definitions
Aims/ Objectives	<p><u>Objectives</u></p> <p>Two pillars:</p> <ul style="list-style-type: none"> - Protection of habitats and species in specifically designated sites (the Natura2000 network /special areas of Conservation) - Species protection (strict protection of animal species) <p>The ES terminology is not used in the directives nor is the concept mentioned. Nowhere in the text is a reference made to the value that nature has for humans or the services it delivers. Also this issue is not addressed in the measures proposed.</p> <p>Problematic driver/trends: loss of biodiversity. Although the directive speaks of ‘threats’ these are not specified.</p> <p>Type 3 (revised: strong environment framing and evaluation but ES not explicitly mentioned)</p> <p>If we look at the aims and objectives of the Directive which is restricted to conservation of biodiversity and even a particular part of and understand if this goal is compatible with ecosystem-service maintenance we can consider the following. Protecting biodiversity and ecosystems does not necessarily guarantee the delivery of ecosystem services. In a given situation striving to protect certain species and habitats might also ensure in safeguarding ecosystems and the delivery of ecosystem services whereas in other situations it might not. The components of biodiversity that are directly responsible for service delivery have been called ‘service providing unit’ and ‘ecosystem service providers’. All habitats and ecosystems are delivering (to some degree) regulating ecosystem services, even in absence of active management and harvesting, and therefore are by definition ecosystem service providers, although the extent of a particular service delivered or the bundle of services delivered might vary. Not all species however are ecosystem service providers.</p>
Policy type	<p>Directive</p> <p>Distribution of responsibilities:</p> <p><u>EU</u></p> <ul style="list-style-type: none"> - Lawmaking - Ensure correct transposition - Set criteria for site selection; - Providing financing for conservation measures; - Control if it forms a coherent network; - Control MSs’ site selection; - Take legal action against MS in case of failure to implement directive <p><u>Member States (MS)</u></p> <ul style="list-style-type: none"> - Laws, regulations and administrative provisions to put HD into action (art. 23, HD) - Select, propose and designate protected areas - Ensure that required conservation measures are taken - Avoid, the deterioration of natural habitats and the habitats of species as well as disturbance of the species for which the areas have been designated - Approve a plan or project only after having ascertained that it will not adversely affect

	<p>the integrity of the site</p> <ul style="list-style-type: none"> - Provide if needed funding <p>The Directive does not stipulate responsibilities for owners/users/companies involved in the management of Natura 2000 sites</p> <p>The predominant mode of steering is command and control due to the rather stringent requirements for protection in the directive itself which need to be put into legislation as well as the requirement to ensure environmental effectiveness (e.g. ensure the favourable conservation status). The choice of instruments to manage Natura 2000 sites to achieve this is left to the discretion of the Member States.</p>
DG with lead responsibility	<p>DG Environment</p> <p>Other DG are involved in two ways :</p> <ul style="list-style-type: none"> - providing financing – most important DG Agri: the old CAP specified specific measures for Natura 2000 areas, Dg Regio also provides funding through LEADER and INTERREG - DG Mobility & Transport – implementation – control of impact of TEN-T on N2000 areas <p>Overall the influence of DG ENV on spending of CAP and other funds is limited</p>
Responsible for RF and / or concrete measure design	<p><u>EU</u></p> <p>policy (RF) design</p> <p><u>MS</u></p> <ul style="list-style-type: none"> - Shall consider aspects of coherence of Natura2000 network in their land-use planning and development policies (art. 10, HD) - Take necessary conservation measures in Natura 2000 sites (art 6.1) - Only approve plans after assessment (art 6.3) - Take necessary measures to protect animal species (art. 12(1), HD) and plant species (art. 13(1), HD) <p>The Directive itself sets the goals, part of the instruments (site designation, legal protection of species, project & plan assessment) as well as a requirement for the end result in terms of environmental effectiveness. A certain level of freedom is provided to Member States on the instruments used to designate the sites, implement conservation measures and asses' plans and projects.</p>
Formal reporting	<p><u>who:</u></p> <ul style="list-style-type: none"> - MS for national reports - EU Commission for overall report <p><u>what:</u></p> <ul style="list-style-type: none"> - National report every sixth year (art. 17, HD), 2013 National Report to the EU time period: 2007-2012, status of the 2013 National Reports available - Every second year: MS have to report on derogations that were allowed within art. 16(1), HD (art. 16(2), HD) - General report out of all national reports (art. 17(2), HD) <p><u>how:</u></p> <p>guidelines for the report available, provided by the EU</p>
Responsible for Evaluation	<p><u>Who:</u></p> <p>Diverse research organisations</p> <p><u>What:</u></p> <p>Different studies are available ranging on:</p> <p>Implementation issues: N2K Group. Establishing conservation measures for natura 2000 sites</p> <p>Legal transposition: EC, 2006. Nature and biodiversity cases</p>

	<p>Ruling of the European court of justice.</p> <p>Economic benefits:</p> <p>Arcadis, ECNC, Efttec, 2012. Recognizing natura 2000 benefits and demonstrating the economic benefits of conservation measures. Development of a Tool for Valuing Conservation Measures</p> <p>IEEP, 2013. The Economic benefits of the Natura 2000 Network.</p>
Responsible for monitoring and/ or sanctioning	<p>The Directive specifies different fields in which monitoring and sanctioning needs to occur.</p> <p><u>Who:</u> MS</p> <p><u>What:</u> Monitor conservation status within and outside Natura2000-sites (art. 11, HD)</p> <p><u>Who:</u> EU Commission</p> <p><u>What:</u></p> <ul style="list-style-type: none"> - Review the contributions of Natura2000 towards achievement of the objectives (art.9, HD) - Legal action against Member States for failing to comply properly with their obligations under the HD <p><u>Who:</u> MS</p> <p><u>What:</u> Review / approve plans and projects undertaken in and near vicinity of N2000 sites</p> <p><u>Who:</u> MS</p> <p><u>What:</u> Ensure conservation measures are taken</p>
Responsible for financing	<p><u>Who:</u> MS, EU Commission</p> <p><u>What:</u> EU Commission estimates costs of around €6 billion/year for Natura2000 in the period 2010-2015 → €63 per ha/year, economic benefits of Natura2000 estimates €2-300 billion/year</p> <p><u>How</u> Various EU policy instruments</p> <ul style="list-style-type: none"> - EU LIFE programme (€1.2 billion for management and restoration until 2012), EU Agricultural Fund for Rural Development , EU Regional Development Fund, European Social Fund, Cohesion Fund, European Maritime and Fisheries Fund, 7th Research Framework Programme, Horizon 2020 – The Framework Programme for Research and Innovation <p>Major part of HD financed by MS (art. 8, HD)</p> <p>Public-private-partnership</p>
Comments/ additional information and/ or useful categories	<p>HD introduced 1992</p>

Annex 7: Policy analysis ‘Green Infrastructure Strategy’

(Esther Carmen, Juliette Young & Klara Winkler)

Category	Detailed answers
Regulatory Framework (RF)	GI Strategy (2013)
Aims/ Objectives	<ul style="list-style-type: none"> - Objective: Development and investment for GI as a crucial step towards the protection of Natural Capital <p>GI concept: a strategically planned network of natural and semi-natural areas designed and managed to deliver a wide range of ecosystem services, known to provide cost effective ecological, economic and social benefits. Applicable to terrestrial, aquatic and marine areas, on land GI is present in urban and rural areas, however, it is particularly important in urban environments.</p> <p>Ecosystem services concept explicitly mentioned throughout (first mention in second sentence of first section). The multiple benefits of GI is identified throughout as a key feature of GI. Does not refer explicitly to different the classification of ecosystem services (regulating, supporting, cultural and provisioning) but does identify the benefits (for example, food, materials, clean water, clean air, climate regulation, flood prevention, pollination and recreation in the first sentence of the document and natural features contributing to cultural heritage and identity). Policy structured into sections aimed at highlighting benefits to different policy sectors. These include 1. Regional policy, 2. Climate change and disaster risk management and 3. Natural capital (with sub sections on land and soil/ water/ nature conservation). The stated aim is to mainstream GI into spatial planning to sustain and maximise multiple benefits.</p> <ul style="list-style-type: none"> - Types of provisioning services highlighted are water provision and fish stocks. - Cultural services – mentions culture and local identity by preserving local physical features. Also mentions natural laboratory to provide education benefits. - Main focus is on regulating and supporting services (pollination, pest control, air quality regulation, soil function, sequestration, regulate water flows and quality). <p>There is a mix between services and benefits (for example mental, physical and psychological health and reduced social exclusion) throughout and these are not clearly distinguished. Conservation sector benefits are highlighted as maintaining the existence, bequest and altruistic value from habitats, species and genetic diversity.</p> <ul style="list-style-type: none"> - Problems: <ul style="list-style-type: none"> o Human dependence on ecosystems o Benefits from nature not fully appreciated by society o Over reliance on built (grey) infrastructure o Continued degradation of Europe’s Natural Capital (1.1)
Policy type	<ul style="list-style-type: none"> - So far, formulated as strategy: EU thinks that the strategy should take the form of an enabling framework providing a combination of policy signals and technical or scientific actions (4) - Implementation within existing legal, policy and financial instruments (5) <p>To optimise the functioning of GI and maximise benefits work on the different scales of GI should be interconnected and interdependent.</p>

	<ul style="list-style-type: none"> - Coordination and full commitment at the EU level is necessary to deliver the full potential of GI beyond a few initiatives. The EU has a particular role in financial support. - MS (national authorities) play a crucial role in developing strategic context of and vision for GI (information gathering and sharing to integrate across sectors and support implementation). - Regional and local authorities should lead the planning and delivery of GI through spatial planning decisions. Different branches of regional and local authorities will need to work together (environment, planning, agriculture, social departments and treasury) and ensure participation of a range of stakeholders.
	<p>EU level coordination/ lead;</p> <ul style="list-style-type: none"> - EU Commission and DG Environment
	<p>Existing EU policies, in which GI can be or has been integrated</p> <ul style="list-style-type: none"> - EU Biodiversity Strategy 2020 - Birds Directive - Habitats Directive - Europe 2020 Strategy, contributing to the regional policy - EU Strategy on adaption to climate change - Environment Action Programme to 2020 - Environment and Health Action Plan (for health benefits in urban areas particularly) - Regional and Cohesion policy - European Spatial Development Perspective - EU 2020 Territorial Agenda - Urban Strategy - CAP - EU Forest Strategy - EU Energy Policy - TEN-T and TEN-G - Green Belt Initiative - Water Framework Directive/ river basin management plans - Floods Directive - EU Drought Policy - EU Water Blueprint - Thematic Strategy for Soil Protection - Environmental Impact Assessment and Strategic Environmental Assessment Directives - Environmental Liability Directive - Marine Strategy Framework Directive - EU Marine Spatial Planning Strategy - 2002 Recommendation of Integrated Coastal Zone Management (ICZM) - Fisheries Policy (marine) - Disaster Risk Reduction Policy
	<p>EU promoting policies</p> <ul style="list-style-type: none"> - regional and cohesion policy - climate and environment policy - disaster risk management - health policy - consumer policy - CAP - including concerning funding mechanisms
DG with lead responsibility	DG Environment (Marco Fritz)

Responsible for RF and/ or concrete measure design	DG Environment <i>(until so far no further information)</i>
Formal reporting	<ul style="list-style-type: none"> - until so far, no central responsibility - Model is a cooperation of EU Commission, EEA and further research institution in the context of reporting for the Biodiversity Strategy - some reports of the EEA are available
Responsible for evaluation / monitoring	EU level action involves collection of GI initiatives to analyse impacts, costs and benefit. <i>Possible: Evaluation and sanctioning with funding mechanisms</i>
Responsible for financing	<ul style="list-style-type: none"> - To improve access to funding mechanisms to support GI. Together with the European Investment Bank (EIB), the Commission undertakes to set up an EU financing facility by 2014 to support and reduce the risk for people seeking to develop GI projects. - The private sector has a role to play in investing in GI. - Implementing GI into key sectors will ensure support of the associated funding mechanisms. For example at the EU level; <ul style="list-style-type: none"> - Common Agricultural Policy - Cohesion Fund - European Regional Development Fund - Horizon 2020 - Connecting Europe Facility - European Maritime and Fisheries Fund - Financial Instruments for the Environment (LIFE)
Comments/ additional information and/ or useful categories	<p>Spatial planning in/ for urban/ peri urban areas is a particular focus for GI as the majority of people now live in these areas.</p> <p>Regional and local level is the main focus, not national level.</p> <p>Looking at the types of stakeholders identified is interesting – for example for GI it identified the need for close links with local public, stakeholders and developers. To help provide a level of consistency in deploying GI the EEA, other research bodies and agencies, the members states and stakeholders and the Commission are working to ensure the most effective use of data from planned and current actions. The scientific community's input should be strengthened.</p>

Annex 8: Policy analysis 'Biodiversity Strategy to 2020'

(Györgyi Bela)

Category	Detailed answers
Regulatory Framework (RF)	Our life insurance, our natural capital: an EU biodiversity strategy to 2020"- COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGION (2011)
Aims/ Objectives	<p><i>Ecosystem Service (ES) concept mentioned explicitly in several times in the text. ES terminology used in RF documents in following context</i></p> <p>The biodiversity conservation and maintaining ES are important for wealth (well-being): „Biodiversity is also our natural capital, delivering ecosystem services that underpin our economy. Its deterioration and loss jeopardises the provision of these services: we lose species and habitats and the wealth and employment we derive from nature, and endanger our own wellbeing.</p> <p>Nature-based innovation, and action to restore ecosystems and conserve biodiversity, can create new skills, jobs.</p> <p>„Nature-based innovation, and action to restore ecosystems and conserve biodiversity, can create new skills, jobs and business opportunities.”</p> <p>The biodiversity conservation is important for education and innovation and research: „Genetic diversity, for example, is a main source of innovation for the medical and cosmetics industries, while the innovation potential of ecosystem restoration and green infrastructure is largely untapped”</p> <p>Biodiversity gives individual and community benefits. Biodiversity provides a wide range of ecosystem services “Biological diversity underpins ecosystem functioning and the provision of ecosystem services essential for human well-being. It provides for food security, human health, the provision of clean air and water; it contributes to local livelihoods, and economic development, and is essential for the achievement of the Millennium Development Goals, including poverty reduction.” - CBD Strategic Plan 2011-2020</p> <p>„Biodiversity — the extraordinary variety of ecosystems, species and genes that surround us — is our life insurance, giving us food, fresh water and clean air, shelter and medicine, mitigating natural disasters, pests and diseases and contributes to regulating the climate.</p> <p>Biodiversity is also our natural capital, delivering ecosystem services that underpin our economy. Its deterioration and loss jeopardises the provision of these services: we lose species and habitats and the wealth and employment we derive from nature, and endanger our own wellbeing.</p> <p>There are opportunities for bundling climate change and biodiversity benefits. Preserving biodiversity and ecosystems help to slow climate change by enabling ecosystems to store and absorb more carbon</p> <p>Determined action to value and protect biodiversity will benefit people in many ways, including through better health, greater food security and less poverty. It will also help to slow climate change by enabling ecosystems to store and absorb more carbon; and it will help people adapt to climate change by adding resilience to ecosystems and making them less vulnerable. Better protection of biodiversity is therefore a prudent and cost-effective investment in risk reduction for the global community” - CBD Strategic Plan 2011-2020</p> <p>The actions to conserve biodiversity can increase the resource use efficiency of the economy Although action to halt biodiversity loss entails costs, biodiversity loss itself is costly</p>

for society as a whole, particularly **for economic actors in sectors that depend directly on ecosystem services**. For example, insect pollination in the EU has an estimated economic value of € 15 billion per year. The continued decline in bees and other pollinators could have serious consequences for Europe's farmers and agri-business sector."

„Biodiversity is also our **natural capital**, delivering **ecosystem services** that **underpin our economy**. Its deterioration and loss jeopardises the provision of these services: we lose species and habitats and the wealth and employment we derive from nature, and endanger our own wellbeing."

The (economic) value of biodiversity is not reflected in the current accounting system. It is one of the reasons behind the inefficiency of biodiversity policy.

„The EU 2020 biodiversity target is underpinned by the recognition that, in addition to its intrinsic value, biodiversity and **the services it provides have significant economic value that is seldom captured in markets**. Because it **escapes pricing and is not reflected in society's accounts**, biodiversity often falls victim to competing claims on nature and its use. The Commission-sponsored international project on The Economics of Ecosystems and Biodiversity (**TEEB**) recommends that the economic value of biodiversity be factored into decision making and reflected in accounting and reporting systems"

In sum, at the European level, it is the increased importance of economic arguments that is especially noted (EU Biodiversity Strategy to 2020), such as the contribution of biodiversity conservation to green economy and sustainable growth, clearly linking biodiversity protection with the new economic policy of the EU. Cooperation with the private sector is envisaged to achieve these goals. Social arguments that are used at the EU level were especially in relation to sectoral economic policies with regard to the livelihood of communities such as fishing communities as well as rural communities dealing with forestry (as stated in the European Community Biodiversity Strategy 1998) and employment opportunities related to biodiversity conservation (BESAFE, 2014).

Classification of RF with respect to ES framing:

Type 4: Ecological or environmental knowledge is referred to several times, but the links between ESs and biodiversity and between ES and human well-being is not clearly defined.

Degree of a consideration of different groups of ES:

Wide range of ecosystem services are considered in the strategy:

- Food, fresh water, clean air, shelter
- medicine
- mitigating natural disasters, pests and diseases and
- contributes to regulating the climate
- better (human) health
- greater food security and
- less poverty
- slow climate change by enabling ecosystems to store and absorb more carbon;
- help people adapt to climate change by adding resilience to ecosystems and making them less vulnerable. risk reduction for the global community

Which problematic drivers or global/regional developments/trends does the RF tackle?

Halting the loss of biodiversity and the degradation of ecosystem services in the EU by 2020, and restoring them in so far as feasible.

It is also identify some measures for tackling the problems come from indirect drivers that relate to demographic and cultural/lifestyle choices, institutional drivers, market failures,

	economic structure, size and growth, and trade.
Policy type	<p>Strategy with aims:</p> <ul style="list-style-type: none"> • of mainstreaming of biodiversity objectives in cross-cutting EU policies • of proposing targets <p>identifying necessary, feasible and cost-effective measures and actions for reaching them</p>
DG with lead responsibility	<p>Biodiversity Unit, DG Environment</p> <p>All institutions of the European Union made their positions on the EU 2020 biodiversity strategy during the course of 2010</p>
Responsible for RF and/ or concrete measure design	<p>Common Implementation Framework:</p>
Formal reporting	<ol style="list-style-type: none"> 1. A mid-term review of the Strategy will be completed in 2015 2. A final assessment of the Strategy should be carried out in 2020. 3. Other relevant reports from information are gained: <ul style="list-style-type: none"> • the Biodiversity • taking into account the next streamlined conservation status assessment under the Habitats and Birds Directives: MS Reporting under Art. 17 of HD by June 2013, MS Reporting under and Art. 12 BD by end 2013; • reporting and evaluations carried out under the Water Framework Directive and the Marine Strategy Framework Directive • Reporting under EU Plant & Animal Health Regimes • reporting obligations under the CBD <p>Governance EU institution: Reporting Expert Group under Nature Directives</p>
Responsible for evaluation / monitoring	<p>Biodiversity Unit, DG Environment</p> <p>Member States</p>
Responsible for financing	<p>The Commission and the Member States are responsible for ensuring that every EU funding measure would be consistent with biodiversity and water protection laws</p> <p>Multiannual Financial Framework (2014-2020)</p>
Comments/ additional information and/ or useful categories	

Annex 9: Policy analysis ‘Water Framework Directive’

(Klara Winkler & Christian Schleyer)

Category	Detailed answers
Regulatory Framework	<p>EU Water Framework Directive (2000)</p> <p>Blueprint to Safeguard Europe’s Water resources (2012) is kind of an extension/ addition to the WFD, as it “concentrates on better implementation of current water legislation, [...] filling the gaps in particular as regards water quantity and efficiency.”</p> <p>(http://ec.europa.eu/environment/water/blueprint/index_en.htm)</p>
Aims/ Objectives	<ul style="list-style-type: none"> - Objectives <ul style="list-style-type: none"> o at maintaining and improving the aquatic environment in the Community ((19)) o achieve the objective of at least good water status ((26)) o elimination of priority hazardous substances ((27)) o promote sustainable water use based on long-term protection of available water resources (art. 1 b)) o progressive reduction of discharges, emissions and losses of priority substances, pollution of groundwater (art. 1c+d) o environmental objectives are defined in article 4, e.g. prevention of deterioration of water bodies, goal of good (potential) ecological and chemical status of water bodies, but not further defined o goal to reach objectives until 2027 is very ambitious, maybe over-ambitious (Hering et al, 2010, p.4007) o ES not explicitly mentioned o getting the prices right (art. 9), o getting the citizen involved more closely (art. 14) o streamlining legislation - ES concept is not explicitly mentioned - Ecosystems are the basic unit of the WFD. - Type 3: strong environment framing and evaluation, but ecosystems or ES not explicitly mentioned (→ ecosystems are mentioned but not ES!) - focus on regulating and provisioning ES of water, cultural services not completely ignored but less attention paid to - problematic drivers: hazardous substances (27)
Policy type	<p>Directive</p> <p>WFD is an umbrella over other actions and directives</p> <p>The Water Directors (high ranking government officials from all EU MS, EU candidate countries, EFTA countries, Switzerland, Norway and Iceland) developed together at Common Implementation Strategy (CIS) with various working groups on different topics and publish bi-annual reports</p> <p>MS:</p> <ul style="list-style-type: none"> • ensure appropriate administrative arrangement (art. 3 (2)) <p>enforcement of polluter-pays principle (38)</p> <p>participation of general public important (46)</p>
DG with lead responsibility	<p>DG Environment</p> <p>only limited budget</p>
Responsible for RF and/ or concrete measure design	<p>EU Parliament + Council:</p> <ul style="list-style-type: none"> • adopt measures against pollution of water by individual pollutants (art. 16 (1), 17(1)) • submit proposal with a list of priority substances selected amongst those which present a significant risk and of priority hazardous substances (art. 16 (2+3)) • review adopted list every four year (art. 16 (4)) • propose possible controls for substances (art. 16 (6)) • created a common implementation strategy (EC, 2001)

	<ul style="list-style-type: none"> • Common implementation strategy created concrete and useful results, guidelines, ... MS: • define and implement necessary measures to achieve aims ((45), art.4) • taking action (protect, enhance, restore) • define limits/ thresholds • establish monitoring programme (art. 8(1)) • produce river basin management plan (art. 13 (1)) incl. the programmes of measures which help to achieve env. objectives cost-effectively. The planning, implementation, and evaluation of the programmes of measures is iterative throughout the different river basin management plans (art. 11, http://www.eea.europa.eu/themes/water/water-management/river-basin-management-plans-and-programme-of-measures) • coordinate if river basin is in multiple MS • encourage active involvement of all interested parties (art. 14 (1)) <p>due the strong emphasis of participation, quite some possibilities to influence river basin plans</p>
Formal reporting	<ul style="list-style-type: none"> • MS send copies of river management plan and updates to EC and other concerned MS (art. 15 (1)) • MS send reports of water analysis and monitor programme design to EC (art. 15 (2)) • Commission publish report on implementation of WFD and on implementation process in MS in 2012 and then every sixth year and submits it to the EU Parliament + Council (art. 18) • Commission can organize conference/ other event in reporting cycle (art. 18 (5)) • bi-annual reports of the Common Implementation Strategy • Commission: 1st implementation report in 2007, • MS report electronically through WISE (Water Information System for Europe) (EC, 2009a) • user guide for reporting exists (EC, 2009a)
Responsible for evaluation / monitoring	<ul style="list-style-type: none"> • Commission can take action if MS have/ do not deliver on their obligations (EC, 2004, p.1) • monitoring programmes must establish a coherent and comprehensive overview of water status within each river basin district (art. 8) • MS have to establish monitoring system until Dec 2006 (http://www.eea.europa.eu/themes/water/status-and-monitoring/water-framework-directive-and-monitoring) • more than 107,000 monitoring stations for ground water and surface water throughout the EU • monitoring assesses the health of ecosystems • huge amount of monitoring data is produced, but there is no central storage, which makes use of data beyond WFD difficult • three types of monitoring: surveillance monitoring, operational monitoring, investigative monitoring (WFD, Annex V 1.3) • establishment of monitoring system is great achievement, still problems to harmonize monitoring over Europe • Guidance document on monitoring exists
Responsible for financing	<ul style="list-style-type: none"> • Common Implementation Strategy financed by Commission • funds of Cohesion policy are consistent with WFD actions • MS have to find a way to cover costs, thereby they can use of various economic instruments as well as command-and-control (costs shifted to private operators) • measures are differently funded, partly public money, partly private operators have to cover costs, European funds to support structural cohesion and CAP fund • Commission's proposal for new LIFE (2014-2020) includes possibilities to co-finance WFD projects
Comments/ additional information and/ or useful categories	<ul style="list-style-type: none"> • Integration into policy sectors: Regional Policy, Agricultural Policy, Fisheries Policy, Development Policy, Marine Policy, Energy, Transportation & Internal Market • To be analysed: Common Implementation Strategy (CIS) reports and how they develop over time (available 2003/04, 05/06, 07-09, 10-12, 13-15) • EEB criticizes the many allowed exemptions

Annex 10: Policy analysis 'Common Agricultural Policy / Rural Development Regulation

(Klara Winkler, Jana Špulerová, Zuzana Barankova, Peter Bezák & Christian Schleyer)

Category	Detailed answers
Regulatory Framework (RF)	<p>Common Agricultural Policy (CAP) came into force 1962, last reform 2013 consists of various legislation documents:</p> <ul style="list-style-type: none"> - Rural Development (1305/2013) - "Horizontal" issues such as funding and controls (1306/2013) - Direct payments for farmers (1307/2013) - Market measures (1308/2013) <p>(http://ec.europa.eu/agriculture/cap-post-2013/legislation/index_en.htm)</p>
Aims/ Objectives	<ul style="list-style-type: none"> - Long-term CAP objective: sustainable management of natural resources and climate action (EC, 2013a, Overview CAP, p.2) - aim: "EU agriculture needs to attain higher levels of production of safe and quality food, while preserving the natural resources that agricultural productivity depends on" action (Commission, 2013a, Overview CAP, p.2) → focus on provisioning services, with idea that regulating are necessary for provisioning services - "Improved sustainability will be achieved by the combined and complementary effects of" cross compliance, greening, and rural development as policy instruments action (Commission, 2013a, Overview CAP, p.6)) - One of the six priorities of the Rural Dev. is: "restoring, preserving & enhancing ecosystems" (Commission, 2013b, CAP explanation, p.5) - there is a spirit of safeguarding ES though it could be much stronger implemented. Last CAP reform did not include ES concept although ES concept was widely used in DG Env already, but interested especially of MS was not supporting the inclusion of the ES concept in the CAP - CAP moved "from product to producer support ... to a more land-based approach" (Commission, 2013a, Overview CAP, p.2) → CAP has been less focused on env issues, and is more considering a wider array of issues now - Horizontal Regulation: <ul style="list-style-type: none"> o Cross compliance: all direct payments, certain rural dev. payments and certain vine payments are connected to some requirements relating to environment, climate change, good agricultural condition of land, human, animal & plant health standards, animal welfare. (Commission, 2013b, CAP explanation, p.6) - ES explicitly mentioned in the Rural Development regulation,: <ul style="list-style-type: none"> o art. 25 (2): "investments shall be aimed at the achievement of commitments for environmental aims, for the provision of ecosystem services..." o art. 53 (3, c, (iii)): "The tasks of the European Innovation Partnership shall be to: facilitate the setting up of cluster initiatives and pilot or demonstration projects which may relate, inter alia, to the following issues: biodiversity, ecosystem services, soil functionality and sustainable water management." - ES terminology used in the Rural Development regulation: <ul style="list-style-type: none"> - Term of ES is directly mentioned in the document, but overall ES problematic is solved implicitly through the financial support provided for Member States to ecosystem services by means of applying concrete measures. With respect to ES framing, the document can be classified as a type 4. - In the Regulation, a number of measures is aimed at ES utilisation or protection, although in the document a concept of ES is not explicitly mentioned. However, successful application of RDP in Member States based on the Regulation can represent a significant contribution to optimal ES utilisation in agricultural landscape. o (20): a measure should be developed to support "non-remunerative investments which improve ecosystem and climate resilience and environmental value of forest ecosystems." o (22): "Agri-environmental-climate payments should continue to play a prominent role

in supporting the sustainable development of rural areas and in responding to society's increasing demands for environmental services."

- (28): "Payments should continue to be granted to forest holders who provide environment-friendly or climate-friendly forest conservation services by undertaking commitments to enhance biodiversity, preserve high-value forest ecosystems, improve their climate change mitigation and adaptation potential, and reinforce the protective value of forests with respect to soil erosion, maintenance of water resources and natural hazards."
- (38): payment for "forest-environmental and climate services ... related measures" no selection criteria for the payments is needed.
- art. 34: Forest-environmental and climate services and forest conservation
- Annex II – amounts and support rates: max. 200€ per year for "forest-environmental and climate services and forest conservation"
- Annex IV: "Forest-environmental and climate services and forest conservation" is part of the "climate change mitigation and adaption and biodiversity" sub-programme
- (problematic) drivers/issues the Rural Development regulation tackles:
 - social drivers (young farmers, education), small farms, mountain areas, creation of short supply chains, women in rural areas, ecological drivers (climate change mitigation and adaptation and biodiversity) ((8), art. 7 (3))
- Rural Dev. reg.:
 - min. of 30% of the total contribution of the financial support should go to climate change mitigation, adaptation and env. issues. ((22)
 - EAFRD (European Agricultural Fund for Rural Development) shall contribute to a sus rural dev. (art.3)
 - three objectives
 - fostering competitiveness in agriculture
 - ensuring sus management of nat resources & clim. action
 - achieve balanced territorial development of rural economies & communities (art. 4)
 - The Regulation determines three basic strategic objectives (aimed at fostering the competitiveness of agriculture; ensuring the sustainable management of natural resources, and climate action and achieving a balanced territorial development of rural economies and communities). The objectives are further developed through 6 priorities, which are reflected in concrete measures. Thus through the supporting measures presented in Resolution, different groups of ES are indirectly supported:
 - Provisional services are ensured through the measures aimed to support organic farming (article 29 in Resolution) or areas facing natural or other specific constrains (article 31) both aimed at maintaining the agriculture in less favourable areas, biomass and other renewable energy sources (article 20, 35), efficient water management (article 17, 35), land consolidation and improvement (article 17), restoration of agricultural production potential damaged by natural disasters and catastrophic events (article 18) and biomass for direct use and processing (article 26).
 - Regulating and supporting services are also not directly mentioned in the Regulation, however, a big attention is put to support measures aimed at ecosystems protection (articles 21, 24, 25, 30), agri-environmental measures (article 28), mitigation of climatic changes (articles 15, 17, 24, 25, 28, 35), or soils consolidation and improvement (article 17, 26).
 - Cultural services: The Regulation devotes to cultural services implicitly by means of supporting tourism services relating to rural tourism development of recreational infrastructure (articles 20, 35), supporting the leisure and cultural activities or cultural heritage of the rural landscape (article 20).
- Direct Payments reg.:
 - no explicit mentioning of ecosystem services

	<ul style="list-style-type: none"> o drivers addressed with “greening”: climate and environment ((37)) o “one of the objectives of the new CAP is the enhancement of environmental performance through a mandatory “greening” component” ((37)) o greening methods are crop diversification, maintenance of permanent grassland, establishment of ecological focus areas ((37), art. 43 (2),) o greening is compulsory, also for farm land which is part of a Natur2000 area ((37)), but not for organic farms ((38)) o “Ecological focus areas should be established” ((44), art.46) o detailed rules on crop diversification (art.44), permanent grassland (art. 45), ecological focus areas (art. 46) o greening = new policy instrument of the first pillar to provide environmental public goods action (Commission, 2013a, Overview CAP, p.5) <p>provisioning services and to some degree regulating ecosystem services (biodiversity, soil & water quality, preservation of landscape, climate change mitigation and adaptation ((45), art. 43(3)) are addressed, but no cultural ecosystem services (Dir. payments)</p>
Policy type	<p>Policy including four main legislative texts/ regulations</p> <p>market-oriented policy (http://ec.europa.eu/agriculture/cap-post-2013/)</p> <p>CAP is a policy framework (Commission, 2013a, Overview CAP, p.2)</p> <p>Rural Dev: strategic document. It outlines the strategic context for rural development policy and defines the measures to be adopted in order to implement rural development policy. It also lays down rules on programming, networking, management, monitoring and evaluation through declaring responsibilities, which are shared between MS and Commission.</p> <p>Commission:</p> <ul style="list-style-type: none"> - provides framework for national RDPs (determines priorities and focusing areas, elaborates controlling questions and indicators for evaluation) - Provides financing (through the European Agricultural Fund for Rural Development) - Controls evaluation documents and reports elaborated by Member States <p>MS:</p> <ul style="list-style-type: none"> - Determine key areas that will be financially supported through the concrete measures - Provide and manage the operational parts of the programme and coordinate activities of involved subjects at national and regional level - Provide monitoring and evaluation of the Programme.
DG with lead responsibility	<p>DG Agriculture and Rural Development</p> <p>Agriculture budget is one of the biggest EU budgets</p>
Responsible for RF and / or concrete measure design	<p>The Rural Development Policy has been developed under the CAP. The CAP is under the supervision of the European Commission and DG AGRI. CAP defines 3 strategic objectives that are given in more detailed expression through 6 priorities defined in RDPs. Each RDP priority identifies focus areas. Priorities and focus areas provide basis for programming and supporting the EU rural areas from EAFRD</p> <p>MS</p> <ul style="list-style-type: none"> - prepare either national or regional rural development plans (Rural Dev, (7), art. 6 (2)) - use part of their national ceilings for direct payments for payments for “greening” components (Dir. payment, (37)) - decide which farming practices are “equivalent practices” to the greening practices ((39)) - set rules for implementation of ecological focus areas ((45)) - flexibility for MS in budgeting and implementing first pillar instruments action (Commission, 2013a, Overview CAP, p.5)
Formal reporting	<p>Member states through their coordination bodies of the RDPs are obliged to elaborate conclusive report on implementation of programming document and to submit it to the EC.</p>

	<p>Conclusive reports are key documents to manage and monitor implementation of structural funds. The reports are approved by Monitoring committee, and consequently the Commission informs Member States about the result of report appraisal. In case the Commission considers the report as unsatisfactory, it announces in its statement also with results, including the connection with possible sanctions.</p> <p>Member states also elaborate annual reports on progress of RDP.</p>
Responsible for Evaluation	<ul style="list-style-type: none"> - each rural development programme is evaluated to improve quality and demonstrate achievements (Rural Dev, (55))
Responsible for monitoring and/or sanctioning	<p>No monitoring of ES planned.</p> <p>In the 2014-2020 programming period, for the first time, a common monitoring and evaluation framework is set up for the whole CAP with the aim to provide reliable and on-time data allowing proper assessment, follow up, and improved implementation of RDPs. Till now, the draft list of common indicators was elaborated in September 2013 by the DG AGRI. The former RDP 2007-2013 was monitored and evaluated by means of consists of common baseline, output, result and impact indicators, which are defined in Annex VIII of the implementing Regulation No. 1974/2006</p> <ul style="list-style-type: none"> - each rural development programme needs to be regularly monitored (Rural Dev, (51)) - annual implementation reports are sent to the Commission (Rural Dev, (54)) - Commission is “checking, controlling, monitoring, evaluating and adapting direct payments” (Dir. Payment (57)) - “The Commission will present a report before the end of 2018 – and every 4 years thereafter – on the performance of the CAP with respect to its main objectives” (one of which is sustainable management of natural resources) (Commission, 2013b, CAP explanation, p.7)
Responsible for financing	<p>Rural Development legislation:</p> <p>Finances to support rural development are drawing partly from the EAFRD, and partly from national sources. EAFRD represents pillar II of the Common Agricultural Policy, and allocates 95.577 billion Euros for the RDPs of the Member States for programming period 2014-2020.</p> <ul style="list-style-type: none"> - Annex II – Amounts and Support Rates defines the maximal amount in € or rate for payments <p>Dir. Payments:</p> <p>MS have the right to reduce payments (art. 11)</p> <p>MS can decide to take partly money of the Rural Dev. programme to finance dir. payments (art. 14)</p> <p>30% of the annual dir. payments should go into greening (art. 47)</p> <p>National ceilings set for 2015-18 by the regulation (AnnexII)</p>
Reports/ literature on the policy and ES	<p>first publication on the effects of the new CAP on biodiversity and environment are quite pessimistic about the CAP reform</p>
Comments/ additional information and/or useful categories	

Annex 11: Policy analysis ‘Trans-European Network – Transport’

(Klara Winkler)

Category	Detailed answers
Regulatory Framework (RF)	<p>TEN-T – trans-European Network Transport</p> <p>1995: 1st regulation on EU funding</p> <p>1996: 1st guidelines by EU Parliament & Council</p> <p>2009: major policy review</p> <p>2014: new legislative framework up to 2030/50</p> <p>latest version in force since Jan 2014</p>
Aims/ Objectives	<ul style="list-style-type: none"> - term ecosystem or ES is not mentioned in the RF - Type 2: the environment mentioned and/ or relevant for/ mirrored by policy measure design <ul style="list-style-type: none"> (22): Environmental Impact Assessment (EIA) to analyse climate-related and environmental costs & benefits of planned projects → Socio-economic costs-benefit analysis → ES framing could come into play here through starting with the societal benefits framed in ES language (34): projects should improve resilience to climate change and environmental disasters (35): EIA in order to avoid neg impacts on env like landscape fragmentation, soil sealing, air & water pollution, noise, biodiv loss (36): protection of environment and biodiversity (41,42): environmental sustainability criteria for selecting important urban nodes, core network corridors, (43): development of transport corridors should minimize env impact/ emissions art. 3 (t): socio-economic cost-benefit analysis should include EIA • art. 6 (2): network and project should promote env sustainable use of infrastructure art. 6 (4): env. and climate protection should be considered when carrying out TEN-T projects → consideration of ES could be helpful to design projects art. 21 (c): projects for motorways of the sea have to - among others – perform activities for improving environmental performances • art. 26 (d): priorities for air transport infrastructure development projects that improve sustainability and mitigate env impact of aviation art. 32: particular attention to projects that contribute to reduction of GHG or other harmful env impacts art.33 (h): new technologies should contribute to the improvement of resilience to climate change art. 45, 2: knowledge of env evaluation one of the criteria to select European Coordinator • art. 47, 1(e): work plans (on the development of corridors) should include measures taken in order to mitigate GHG emissions, noise, and other neg environmental impacts <ul style="list-style-type: none"> - indirect mentioning of regulating ES: <ul style="list-style-type: none"> (35): soil services, cleaning services or air water, mitigation of noise, habitat provisioning - one of the objective is ‘sustainability’ trough a contribution to env protection, reduced GHG emissions, low-carb and clean transport (art. 4, (c) (ii + iii)) → resource-efficient network (art. 5) - one of the priorities is to improve or maintain the environmental performance - art. 35: during planning processes, improvement of resilience to climate change and to environmental disasters should be considered - art. 36: EIA shall be conducted in order to protect the env - ((23)): goal of the Transport White paper is the reduction of GHG emission by 60% by 2050 compared to 1990 - (33): climate change and natural disasters mentioned as threat for infrastructure and accessibility

	<ul style="list-style-type: none"> - Green corridors shall be included into consideration (Corridor Progress Report, 2014, p.5) - by 2030: complete implementation of Core Corridors in EU (Corridor Progress Report, 2014, p.11)
Policy type	<ul style="list-style-type: none"> • Regulation on Union guidelines • env issues not in the focus, more economic goals (European internal market, reduction of technical barriers within the EU) (http://ec.europa.eu/transport/themes/infrastructure/index_en.htm) “re-boost its economy and to generate new jobs” (http://ec.europa.eu/transport/themes/infrastructure/ten-t-guidelines/index_en.htm) • predominate mode of steering: consulted & coordinated planned action (Corridor Progress Report, 2014, p.6) <ul style="list-style-type: none"> ◦ involvement and close cooperation with a wide range of relevant stakeholders like MS, representatives of infrastructure managers/ authorities, regions, EU macro-regions, representatives of infrastructure users and civil society (Corridor Progress Report, 2014, p.9) • transparent process of developing working plans (Corridor Progress Report, 2014, p.10)
Directorate General (DG) with lead responsibility	<p>DG Transport</p> <p>Innovation and Networks Executive Agency (INEA) manages technical and financial implementation of TEN-T (http://inea.ec.europa.eu/)</p>
Responsible for RF and / or concrete measure design	<ul style="list-style-type: none"> - art. 45: European Coordinators support coordination of implementation of the core network corridors, concerned MS must cooperate with European Coordinators - art. 46: for each core corridor a Corridor Forum is established with the European Coordinator, MS
Formal reporting	<ul style="list-style-type: none"> - European Coordinator reports to MS, Commission on difficulties while development of corridor (art. 45 5 d) - European Coordinator annually reports to EU Parliament, Council, Commission and MS on progress of implementing core network corridor (art. 45 5 e) - European Coordinator present work plan on the development of corridors, which – among others – include the measures to be taken to minimize neg env impacts (art. 47) - MS regularly report Commission about progress in implementing projects (art. 49 1) - Commission publishes every second year a progress report (start 21 Dec 2013) (art. 49 3)
Responsible for evaluation	<ul style="list-style-type: none"> • once the corridor work plan is approved by MS and Commission, the work plan gains legal status and the European Coordinators monitor the implementation of the work plan (Corridor Progress Report, 2014, p.11)
Responsible for financing	<ul style="list-style-type: none"> - projects of common interest are eligible for Union financial assistance e (art. 7 5) - various sources: MS, international, national, regional, local and Union levels (art. 47 1e) - cross-financing when possible (art. 47 1e) - partly also private capital (art. 47 1 e) - financial aid by the Commission under the Cohesion Fund, European Regional Development Fund, Horizon 2020 (art. 49 1; http://inea.ec.europa.eu/en/horizon_2020/), the Connecting Europe Facility (http://ec.europa.eu/transport/themes/infrastructure/ten-t-guidelines/project-funding/cef_en.htm), funds of the European Investment Bank (EIB) (http://ec.europa.eu/transport/themes/infrastructure/ten-t-guidelines/index_en.htm) - MS fund project on national level (Corridor Progress Report, 2014, p.7)
Reports/ literature on the policy & ES	
Comments/ additional information and/ or useful categories	

Annex 12: Policy analysis ‘Thematic Strategy on the Urban Environment

(Alison Smith)

Category	Detailed answers
Regulatory Framework (RF)	Thematic Strategy on the Urban Environment {COM(2005) 718 final; SEC(2006) 16 } 2006 None
Aims/ Objectives	<p>Aim: “contribute to a better implementation of existing EU environment policies and legislation at the local level by supporting and encouraging local authorities to adopt a more integrated approach to urban management and by inviting Member States to support this process and exploit the opportunities offered at EU level. If implemented at all levels, the Strategy will ultimately contribute to improve the quality of the urban environment, making cities more attractive and healthier places to live, work and invest in, and reduce the adverse environmental impact of cities on the wider environment, for instance as regards climate change.”</p> <p>Ecosystem Services: No mention of the word “ecosystem”.</p> <p>ES terminology: No ES terminology used. However there is implicit mention of ES e.g. “The attractiveness of European cities will enhance their potential for growth and job creation”.</p> <p>Classification of RF: Type 3: strong emphasis on environment, but no mention of ES.</p> <p>Degree of a consideration of different groups of ES No mention of provisioning, but implicit reference to regulating and cultural: “making cities more attractive and healthier places to live, work and invest in”; “The attractiveness of European cities will enhance their potential for growth and job creation”; “Properties near to the now cleaner bathing water have seen their rental value rise” (for the example of Copenhagen). Also mentions the role of urban design and management to protect human health (e.g. air quality), adapt to climate change (e.g. flooding, heat waves, more frequent and severe water shortages) and mitigate greenhouse gas emissions. But there is no specific mention of ES-based approaches – the focus is on man-made infrastructure such as sustainable transport, energy efficient buildings and urban design.</p> <p>Spirit of the RF: Yes, though there is no explicit mention of ES, the spirit of the RF is directed towards safeguarding ES, e.g. integrated management of the urban environment and sustainable urban design (appropriate land-use planning) will help reduce urban sprawl and the loss of natural habitats and biodiversity, reduce soil-sealing, and promote urban biodiversity.</p> <p>Drivers or (global/regional) developments/trends: “Most cities are confronted with a common core set of environmental problems such as poor air quality, high levels of traffic and congestion, high levels of ambient noise, poor-quality built environment, derelict land, greenhouse gas emissions, urban sprawl, generation of waste and wastewater. The causes of the problems include changes in lifestyle (growing dependence on the private car, increase in one-person households, increasing resource use per capita) and demographic changes.”</p>
Policy type	<p>Strategy</p> <p>General distribution of responsibility: Local authorities play the main role in managing the urban environment, but the EU can play an important role in promoting best</p>

practice, encouraging networking between cities, providing financial support for environmental investment and capacity-building by developing guidance, funding research and training and establishing national advisory points for cities. Member States are responsible for encouraging local authorities to exploit the help and funding provided by the EU, and enabling close co-operation between relevant administrative bodies to help local authorities in their region.

Local

“Local authorities have a decisive role in improving the urban environment. The diversity in terms of history, geography, climate, administrative and legal conditions calls for locally developed, tailor-made solutions for the urban environment. Application of the subsidiarity principle, where action should be taken at the most effective level, also implies acting at the local level. However, the urban environment needs action at all levels: national and regional authorities, as well as the EU, all have a role to play.”

- The Commission strongly recommends local authorities to take the necessary steps to **achieve greater use of integrated management** at the local level and encourages national and regional authorities to support this process.
- The Commission strongly recommends local authorities to develop and implement **Sustainable Urban Transport Plans**.

EU

“The EU can best support Member States and local authorities by promoting Europe’s best practices, facilitating their widespread use throughout Europe and encouraging effective networking and exchange of experiences between cities. It can offer financial support for investments to meet environmental priorities and support capacity building by making funds available for research and training, by developing relevant guidance and encouraging the establishment of national advisory points for cities.”

Specific actions:

- The Commission will provide technical guidance in 2006 on integrated environmental management, drawing on experiences and giving good practice examples.
- The Commission will provide technical guidance in 2006 on the main aspects of transport plans based on the recommendations of the 2004 Expert Working Group and give best practice examples
- The Commission will offer support for the exchange of good practice and for demonstration projects on urban issues for local and regional authorities through these instruments: the new LIFE+ Regulation, the Cohesion Policy and the Research Framework Programme.
- The Commission is co-financing under URBACT a pilot network of national focal points (the ‘European Knowledge Platform’) to provide structured and evaluated information on social, economic and environmental issues in urban areas in response to enquiries from local authorities. The Commission will evaluate the pilot (end 2006) and consider whether it can be used as a building block for a “European framework programme for the exchange of experience on urban development” under the proposed Cohesion Policy 2007-2013.
- The Commission will assess the feasibility of establishing a thematic portal for local authorities.
- The Commission will use the new LIFE+ Regulation and other instruments to support capacity building (e.g. training) for local and regional authorities on urban management issues, and it encourages Member States to initiate such activities.
- The Commission will offer support for further urban research and will actively involve local authorities and endeavour to make material developed for them

	<p>available in many languages to facilitate use at the local level.</p> <p>Member States (MS)</p> <p>“It is essential that Member States exploit the opportunities offered at EU level as highlighted in this Strategy for the benefit of the local authorities. They are also invited to support local authorities to meet the objectives of this Strategy by promoting close cooperation and coordination between relevant administrative bodies to identify effective solutions for their cities and regions.”</p> <ul style="list-style-type: none"> • The Commission encourages Member States to initiate capacity building for local and regional authorities on urban management issues, exploiting funding provided by the Commission under the new LIFE+ Regulation. • The Commission strongly encourages Member States to exploit cohesion funds and structural funds to address the problems facing their urban areas and give the National Strategic Reference Frameworks an appropriate urban focus <p>Predominant mode of steering: Advisory: “supporting and encouraging local authorities to adopt a more integrated approach to urban management and by inviting Member States to support this process”. A legal obligation was considered but rejected: “Commission examined different options, including the desirability of legislating to ensure that integrated management would be done at the local level (see impact assessment). However, given the diversity of urban areas and existing national, regional and local obligations, and the difficulties linked to establishing common standards on all urban environment issues, it was decided that legislation would not be the best way to achieve the objectives of this Strategy. Most Member States and local authorities supported this approach, questioning the need for binding EU obligations on environmental management and urban transport plans.” However, options for LAs to implement the strategy include public procurement and standards (e.g. for buildings and vehicles).</p>
Directorate General (DG)	<p>Lead: DG Environment</p> <p>Other DGs involved: Expert group and working groups for development of strategy included representatives from DG JRC, DG TREN (now Mobility and Transport), DG EAC (Education and Culture), DG AIDCO (now DG DEVCO, Development and Co-operation), DG Research, DG REGIO, DG INFSO (now DG Connect).</p> <p>Not found evidence on relative or absolute strength of lead DG, though there were many more representatives from DG ENV than from the other DGs on the working groups and expert group.</p>
Responsible for RF and / or concrete measure design	See policy type box above. As there are no legal requirements and the EU plays only an advisory and supporting role, there is plenty of room for manoeuvre by Member States and local authorities in how they implement the RF and in the choice and design of concrete measures.
Formal reporting	There is no requirement for formal reporting other than the plans for an Urban Audit report by the Commission in 2006 and the assessment as part of the 6 th EAP review in 2010 (see below).
Responsible for evaluation	<p>Evaluation seems very “light-touch” and plans only specify an Urban Audit report in 2006 and a consultation with member States in 2009 (see below). There are no sanctions as the strategy contains no legal requirements. There are no requirements to evaluate the impacts on ES, and no reports on unintended consequences on ES.</p> <p>“The Commission, with the help of the EEA and in close cooperation with the Member States, will work to improve European data on urban environment issues without increasing the burden for national, regional or local authorities, in order to evaluate the</p>

	<p>environmental performance of European urban areas over time. This will be done in the context of INSPIRE (Infrastructure for Spatial Information in Europe) and link with the GEO and GMES initiatives.”</p> <p>“The Commission will undertake a further Urban Audit in 2006 and publish a report in 2006 based on indicators describing the living conditions in a number of EU cities, covering economic, social and environmental aspects.”</p> <p>“Member States, local and regional authorities and other stakeholders will be invited to submit their views on the impact of the measures contained in this Strategy on a regular basis as well as part of a wide consultation exercise in 2009. These views together with the available data on environment performance at the urban level will be assessed as part of the review of the 6th EAP in 2010 where the need for further measures will be considered.”</p>
Responsible for financing	<p>No specific information on budgets, but it is stated that the Commission will provide funding for knowledge exchange and capacity building through the LIFE+ Regulation, the Cohesion Policy and the Research Framework Programme.</p> <p>MS are encouraged to help local authorities and regions to apply for this funding.</p>
Comments/ additional information and/ or useful categories	<p>“Solutions need to be forward-looking, incorporating risk prevention aspects, such as anticipating the impacts of climate change (e.g. increased flooding) or progressively reducing dependency on fossil fuels.”</p> <p>Synergies and conflicts: “The environmental problems in cities are particularly complex as their causes are inter-related. Local initiatives to resolve one problem can lead to new problems elsewhere and can conflict with policies at national or regional level. For example, policies to improve air quality through the purchase of clean buses can be undermined by private transport growth brought about by land-use decisions (e.g. the construction of city-centre car parks). Problems related to a poor quality built environment are often linked to underlying socio-economic problems.”</p> <p>Relevance to four challenges: from Copenhagen example: Governance: “Work with ethnic minorities on developing solutions to environmental issues has led to greater social inclusion of these communities and better community relations with the city authority. The authority itself is more efficient at planning and managing the urban environment and the level of staff awareness of environmental issues is higher than before.” Competitiveness: “The Copenhagen authority also believes that there has been an increase in the city’s competitive advantage as a result, since the city can present its environmental policies and projects to companies interested in relocating there.”</p>