FIFTH REPORT OF THE EUROPEAN UNION TO THE CONVENTION
ON
BIOLOGICAL DIVERSITY
June 2014
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EXECUTIVE SUMMARY

Why is biodiversity important for your country?

The European Union’s landscape has been shaped by centuries of diverse farming and forestry traditions, resulting in a wide range of agricultural and woodland landscapes that have significantly contributed to Europe’s biodiversity. In addition, the EU’s Outermost Regions and Overseas Countries and Territories are situated in five biodiversity hotspots where 20% of the world’s coral reefs and lagoons are to be found. The long-term well-being of Europe’s economies and societies is underpinned by its natural capital. Its genetic resources, species, and ecosystems provide essential goods and services.

What major changes have taken place in the status and trends of biodiversity in EU?

Biodiversity loss is an enormous challenge in the EU. Europe’s biological richness is currently highly threatened by human activities. Progress has been made on a number of fronts: certain populations and distributions of wildlife species are showing positive trends, with some species that were once considered at risk of extinction now stabilising or even increasing. The Birds Directive has clearly helped bird species to recover and Europe has seen an encouraging recovery in some large carnivore species. In 2010, the Natura 2000 network of protected areas in Europe comprised 25,000 sites covering around 17% of the EU land area. By the end of 2013, this had risen to 27,000 sites and 18% — more than 1,000,000 square kilometres — with a 25% increased share of EU marine areas since 2011.

However, the EU 2010 Biodiversity Baseline published by the European Environment Agency indicates that artificial or intensively used areas are still increasing at the expense of natural areas. Between 2000 and 2006, artificial surfaces increased by 3%. Agricultural land was the largest land category — at over 77% — taken by urban and other artificial land development. In general, greater areas of forest, natural grassland and open space were taken by artificial land development than in the previous decade (1990-2000). This meant a greater loss of natural ecosystems in 2000-06. The highest net losses (besides forest) still occur in one of the most vulnerable ecosystems — inland wetland areas (mire, bog and fens) — which declined by 0.4%.

Similarly alarming trends have been reported for species, especially freshwater and marine. About 30% of assessed fish stocks were outside safe biological limits in 2009. As for terrestrial biodiversity, amphibians are severely threatened. Populations of grassland butterflies have declined by 50% since 1990 and show no sign of recovery.

What are the main threats to biodiversity?

Major causes of biodiversity loss — such as habitat change, overexploitation of natural resources, the introduction and spread of invasive alien species and climate change — have increased. This has offset the positive effects of actions to stem biodiversity loss.

What are the impacts of the changes in biodiversity for ecosystem services and the socio-economic and cultural implications of these impacts?

2 These results will be updated by mid-2015 with Corine Land Cover 2012 data by the European Environment Agency.
Many of Europe’s ecosystems are now so heavily degraded that their ability to deliver valuable services is drastically reduced. One issue alone — insect pollination, which is being heavily degraded in Europe — has an estimated economic value of EUR 22 billion a year in the EU.\(^4\) This presents an important problem that differs from the case of economic and human capital. The value of natural capital to our economies and societies and the interdependencies of nature with other societal objectives are often not reflected in the private and public decisions, indicators, or accounting systems and economic signals in our market economies.

**What are the biodiversity targets set by your country?**

In line with the global commitment made in Nagoya in October 2010 with the adoption of the Strategic Plan for Biodiversity 2011-2020 and its 20 Aichi Biodiversity Targets, the Commission in 2011 an EU biodiversity strategy to 2020 ‘Our life insurance, our natural capital’ (COM(2011) 244 final).\(^5\) It is an ambitious strategy to halt the loss of biodiversity and ecosystem services in the EU by 2020 and to restore them in so far as feasible, while stepping up the EU contribution to averting global biodiversity loss. To help Europe reach its goal, there are six main targets. They address the main drivers of biodiversity loss (related to agriculture, forestry, fisheries, resource use, and trade) and aim to reduce the key pressures (fragmentation, invasive alien species, pollution, climate change) on nature and ecosystem services in the EU. Each target has a set of time-bound actions and other accompanying measures.

The strategy is part of a 2050 vision in which catastrophic changes caused by the loss of biodiversity are avoided. The European Union aims to protect, value and appropriately restore biodiversity and the ecosystem services it provides — its natural capital — to safeguard biodiversity’s intrinsic value and its essential contribution to human well-being and economic prosperity.

The strategy’s targets and actions fully cover the 2020 Aichi Biodiversity Targets.\(^6\)

**How has your national biodiversity strategy and action plan been updated to incorporate these targets and to serve as an effective instrument to mainstream biodiversity?**

The EU strategy is implemented through a common implementation framework involving the European Commission and Member States in partnership with key stakeholders and civil society. It is underpinned by the EU 2010 Biodiversity Baseline on the state of biodiversity and ecosystems in Europe, which is used as a basis for monitoring progress.

Specifically, the implementation framework aims to:

i. facilitate implementation of the EU Biodiversity Strategy to 2020 by putting in place a clear and logical EU-level governance framework that is as efficient and effective as possible;

ii. create ownership for the implementation of the strategy across all relevant policy areas by involving representatives from a wide range of services, ministries and institutions in its implementation;

iii. ensure the involvement of all interested stakeholders beyond the traditional ‘biodiversity community’ at the appropriate level of policymaking; and

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\(^5\) [http://ec.europa.eu/environment/nature/biodiversity/comm2006/pdf/2020/1_EN_ACT_part1_v7.%5b1%5d.pdf](http://ec.europa.eu/environment/nature/biodiversity/comm2006/pdf/2020/1_EN_ACT_part1_v7.%5b1%5d.pdf)

iv. minimise duplication of work and maximise synergies between efforts undertaken at different levels by various actors and stakeholders; share information and best practice; and address common challenges.

For more information on the common implementation framework and related working groups, see [http://biodiversity.europa.eu/policy](http://biodiversity.europa.eu/policy).

**How effectively has biodiversity been mainstreamed into relevant sectoral and cross-sectoral strategies, plans and programmes?**

Biodiversity is mainstreamed through the major EU policy instruments, in particular the common agricultural policy, the common fisheries policy and cohesion policy. The focus is particularly on Natura 2000 and green infrastructure. Reforms of the common agricultural and fisheries policies aim at reducing support that has a negative environmental impact, whilst rewarding practices that deliver public goods, including biodiversity. New opportunities for supporting green infrastructure have been introduced in the latest cohesion policy. The introduction of a new methodology for tracking biodiversity-related expenditure throughout the EU budget is also an effective tool for mainstreaming biodiversity in other instruments. In addition, there is more focus on the involvement of the private sector. This includes the launch of the second phase of the EU Business and Biodiversity Platform, and the setting up — with the European Investment Bank — of a Natural Capital Financing Facility to provide loans and equity instruments for projects, including climate adaptation projects, that promote the preservation of natural capital and which are revenue generating or cost-saving.

**What progress has been made by your country towards the implementation of the Strategic Plan for Biodiversity 2011-2020 and its Aichi Biodiversity Targets?**

It is too early to assess progress in implementing the EU 2020 Biodiversity Strategy and the targets. Some actions under the strategy have already been implemented. In May 2013, the Commission adopted a Green Infrastructure Strategy and in September 2013, it adopted a proposal for a new regulation on invasive alien species. A thorough assessment of progress will be made in 2015 based on the EU 2010 Biodiversity Baseline, new data from the 2007-12 assessments of conservation of habitats and species covered by EU nature directives, and the outcomes of the EU initiative on ‘Mapping and assessment of ecosystems and their services’.

The Fifth National Reports to the Convention by Member States will be a major source of information for this EU mid-term review in 2015.

With regard to the implementation of the ‘Nagoya Protocol on access to genetic resources and the fair and equitable sharing of benefits arising from their utilisation’, the European Parliament and the Council gave their formal approval on a draft regulation in March and April 2014, respectively. The regulation on compliance measures in the Union for users under the Nagoya Protocol on access to genetic resources and the fair and equitable sharing of benefits arising from their utilisation will enter into force at the beginning of June. The EU deposited its instrument of ratification of the Nagoya Protocol on behalf of the EU in May 2014 ahead of the twelfth meeting of the Conference of the Parties to the Convention.

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What has been the contribution of actions to implement the Convention towards the achievement of the relevant 2015 targets of the Millennium Development Goals in your country?

The 2010 assessment on implementing the EU 2006 Biodiversity Action Plan\(^9\) has shown that some progress has been made. The Natura 2000 network of protected sites in Europe now comprises 27,000 sites or 18\% (more than 1,000,000 km\(^2\)) of the EU’s land area, with a 25\% increase in the share of EU marine areas since 2011.\(^10\) Nevertheless, the EU has missed its 2010 target of halting biodiversity decline. Europe’s biodiversity remains under severe threat from changes in land use, the excessive demands we are making on our environment, pollution, invasive species and climate change. Important lessons learned from implementing the action plan did underpin the EU 2020 strategy and vision.

In June 2014, the Commission adopted a Communication ‘A decent life for all: from vision to collective action’\(^11\) as the EU’s contribution to the post-2015 UN Sustainable Development Goals in which it presents proposals for tackling the intertwined challenges of eliminating poverty and ensuring progress is sustainable. The communication sets the basis for further defining and adapting EU policy positions on the post-2015 framework. It includes relevant biodiversity targets and indicators (along the lines adopted under Convention) to provide a stimulus for change and structural transformation globally and at all other levels.

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I. AN UPDATE ON BIODIVERSITY STATUS, TRENDS, AND THREATS AND IMPLICATIONS FOR HUMAN WELL-BEING

I.1 Status and trends of biodiversity, including benefits from biodiversity and ecosystem services

The main ecosystems in Europe\textsuperscript{12} are forest and woodland (covering 41\% of the territory), croplands (25\%), and grassland (19\%). Centuries of diverse farming and forestry traditions, resulting in a wide range of agricultural and woodland landscapes, have significantly contributed to Europe’s biodiversity. Europe is also home to a considerable diversity of species: there are 260 species of mammals (of which 40 are marine mammals), 500 species of fish, 500 of breeding birds, 150 of reptiles, 84 of amphibians and 90000 species of insects, including 10000 of butterflies and moths, 30000 of beetles and 20000 species of vascular plants.

Species richness of selected groups in the EU\textsuperscript{-27}\textsuperscript{13}

<table>
<thead>
<tr>
<th>Species groups</th>
<th>EU\textsuperscript{-27}</th>
<th>Europe *</th>
<th>World</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amphibians</td>
<td>84</td>
<td>85</td>
<td>6000</td>
</tr>
<tr>
<td>Reptiles</td>
<td>141</td>
<td>151</td>
<td>8800</td>
</tr>
<tr>
<td>Terrestrial mammals (only EU\textsuperscript{-25}\textsuperscript{14})</td>
<td>179</td>
<td>219</td>
<td>5000</td>
</tr>
<tr>
<td>Marine mammals (only EU\textsuperscript{-25})</td>
<td>41</td>
<td>41</td>
<td></td>
</tr>
<tr>
<td>Birds</td>
<td>453</td>
<td>482</td>
<td>9900</td>
</tr>
<tr>
<td>Butterflies</td>
<td>451</td>
<td>482</td>
<td>20000</td>
</tr>
<tr>
<td>Dragonflies</td>
<td>135</td>
<td>138</td>
<td>5500</td>
</tr>
</tbody>
</table>


The EU’s Outermost Regions and Europe’s Overseas Countries and Territories are not included in this description. These regions, countries and territories — situated in five biodiversity hotspots that include over 20\% of the world’s coral reefs and lagoons — host more than twice the number of species present in continental Europe.

However, Europe’s biological richness is currently highly threatened by human activities. The EU 2010 Biodiversity Baseline published by the European Environment Agency\textsuperscript{15} indicates that 52\% of species and 65\% of habitat types of European conservation interest have an unfavourable conservation status. Areas of extensive agriculture, grasslands and wetlands continue to decline across Europe while artificial surfaces continue to expand. Between 2000


\textsuperscript{13} EU-27 includes Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, United Kingdom but NOT Croatia which joined the EU in 2013.

\textsuperscript{14} EU-25 includes Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, United Kingdom but NOT Bulgaria and Romania which joined the EU in 2007 and Croatia in 2013.

\textsuperscript{15} http://www.eea.europa.eu/publications/eu-2010-biodiversity-baseline.
and 2006, artificial surfaces increased by 3%. Agricultural land was the largest land category — at over 77% — taken by urban and other artificial land development. In general, more areas of forest, natural grassland and open space were taken by artificial land development than in the previous decade (1990-2000). This resulted in a higher loss of natural ecosystems in 2000-06, even when taking into account compensatory activities such as newly planted forests. The highest net losses (besides forest) still occur in one of the most vulnerable ecosystems — the inland wetlands (mire, bog and fens) — which declined by some 0.4%, in addition to the 5% decline registered during 1990-2000 in 23 countries.\textsuperscript{16}

Land cover change between 2000 and 2006: Area change for major ecosystems

Similarly alarming trends have been reported for species. In Europe, around one in four species is currently threatened with extinction: nearly one in six (15%) of terrestrial mammals and 25% of marine mammals are threatened with the risk of extinction. Preliminary results from the EU Red List of wild pollinators, to be published this autumn, show that 24% of the 68 species of bumblebees present in Europe are threatened with extinction. The final results of this assessment, which will include all wild pollinators in Europe, will shed considerable light on their status and trends.

IUCN threat categories and trends of several animal groups in the EU

<table>
<thead>
<tr>
<th>Group/IUCN category</th>
<th>Threatened (%)</th>
<th>Data deficient (%)</th>
<th>Stable and increasing trend (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mammals — marine</td>
<td>25</td>
<td>45</td>
<td>40</td>
</tr>
<tr>
<td>Mammals — terrestrial</td>
<td>15</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Birds</td>
<td>12</td>
<td>0</td>
<td>62</td>
</tr>
<tr>
<td>Amphibians</td>
<td>22</td>
<td>1</td>
<td>38.5</td>
</tr>
<tr>
<td>Reptiles</td>
<td>22</td>
<td>2</td>
<td>44.6</td>
</tr>
<tr>
<td>Dragonflies</td>
<td>16</td>
<td>2</td>
<td>64</td>
</tr>
<tr>
<td>Butterflies</td>
<td>7</td>
<td>1</td>
<td>59</td>
</tr>
</tbody>
</table>

\textbf{Note:} There is no assessment at EU level yet but, at European level, 38% of freshwater fish are threatened.

Between 1990 and 2011, populations of European common birds declined by 12% and farmland birds by 28%. The conservation status of over 40% of European bird species remains unfavourable and the risk of extinction for birds has increased almost everywhere in Europe.

Grassland butterflies have declined by 50% since 1990 and show no sign of recovery. Likewise, about 30% of assessed European fish stocks are outside safe biological limits.\(^\text{17}\)

The long-term well-being of Europe’s economies and societies is underpinned by its natural capital. Its genetic resources, species and ecosystems provide essential goods and services. These include fertile soils, multi-functional forests and productive seas, fresh water and air,

biomass for multiple uses and ecosystem-based climate mitigation and adaptation. Unfortunately, many of Europe’s ecosystems are now so heavily degraded that their ability to deliver these valuable services is drastically reduced. One issue alone — insect pollination, which is being heavily degraded in Europe — has an estimated economic value of EUR 15 billion a year in the EU. This presents an important problem that differs from the case of economic and human capital. The value of natural capital to our economies and societies, and the interdependencies of nature with other societal objectives, is often not reflected in private and public decisions, indicators, or accounting systems and economic signals in our market economies.

I.2 Main pressures on and drivers of change to biodiversity (direct and indirect)

Habitat fragmentation, degradation and destruction due to land-use change, climate change and use of the seas are some of the main pressures and drivers causing biodiversity loss. Natural grasslands are still being turned into arable land and built-up areas; extensive agricultural land is being converted into forms of more intensive agriculture and, mainly as a result of abandonment, into forest. These are a major concern. They are leading to the loss of farming practices that support biodiversity and 70% of EU species (dragonflies, butterflies, mammals, amphibians, reptiles) are threatened by the loss of their habitat. Fragmentation due to urban sprawl and infrastructure development — nearly 30% of the EU land mass shows signs of moderately high to very high fragmentation — severely affects ecosystem connectivity and their health and ability to provide services.

Some 30% of species are threatened by overexploitation of forests, oceans, rivers, lakes and soils. Pollution from pesticides and fertilisers, such as nitrates and phosphates, is threatening 26% of species. Agricultural nitrogen balance is generally declining but is still high in some countries, particularly in lowland western Europe. It is estimated that some 50-80% of the total nitrogen load in freshwater originates from farming, contributing to biodiversity loss in freshwater ecosystems and coastal waters. In particular, half of the geographical range of natural and semi-natural habitats across the European Union was exposed to atmospheric nitrogen deposits above the critical load in 2004.

Invasive alien species represent an increasing threat to biodiversity. About 12,000 alien species have been found in the environment of the EU, 10-15% of them becoming invasive. Their number is steadily rising, in particular in marine and estuarine systems. Climate change is another threat, recording negative impacts already, for example on a majority of bird species.

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II. THE NATIONAL BIODIVERSITY STRATEGY AND ACTION PLAN, ITS IMPLEMENTATION, AND THE MAINSTREAMING OF BIODIVERSITY

II.1 The EU Biodiversity Strategy to 2020 — the EU response to the global Strategic Plan for Biodiversity 2011-2020

In Nagoya in October 2010, parties to the Convention undertook global commitments to address global biodiversity loss over the coming decade. They adopted the global Strategic Plan for Biodiversity 2011-2020 and its 20 Aichi Biodiversity Targets. In line with these, the European Commission adopted in 2011 a biodiversity strategy to 2020 ‘Our life insurance, our natural capital’. This ambitious new strategy aims to halt the loss of biodiversity and ecosystem services in the EU by 2020. Six main targets and 20 actions serve to help Europe reach its goal.

The six targets cover:

1. Full implementation of EU nature legislation to protect biodiversity
2. Better protection for ecosystems, and more use of green infrastructure
3. More sustainable agriculture and forestry
4. Better management of fish stocks and achievement of good environmental status in the marine environment
5. Tighter controls on invasive alien species
6. A bigger EU contribution to averting global biodiversity loss

The strategy supports two commitments made by EU leaders in March 2010. The first is the 2020 headline target: ‘Halting the loss of biodiversity and the degradation of ecosystem services in the EU by 2020, and restoring them in so far as feasible, while stepping up the EU contribution to averting global biodiversity loss’. The second is the 2050 vision: ‘By 2050, European Union biodiversity and the ecosystem services it provides — its natural capital — are protected, valued and appropriately restored for biodiversity’s intrinsic value and for their essential contribution to human well-being and economic prosperity, and so that catastrophic changes caused by the loss of biodiversity are avoided.’

The strategy to 2020 follows up on the 2006 EU Biodiversity Action Plan. It is among the first to be fully aligned with the global Strategic Plan for Biodiversity 2011-2020. The strategy’s targets and actions fully cover the EU’s commitment to the 2020 Aichi Biodiversity Targets.

For more information on the EU strategy as its response to the global Strategic Plan for Biodiversity 2011-2020, see http://biodiversity.europa.eu/policy.

19 See COM 2011/244 http://ec.europa.eu/environment/nature/biodiversity/comm2006/pdf/2020/1_EN_ACT_part1_v7.5b1.5d.pdf.
II.2 Support mechanisms for implementation (legislation, funding, capacity building, coordination, mainstreaming, etc.)

The EU Biodiversity Strategy to 2020 underlines the need for close coordination between the authorities at all levels — EU, national, sub-national — which are responsible for ensuring implementation of the strategy, and the importance of stakeholder involvement (including business and society at large) in its implementation. To this end, the strategy has a common implementation framework, which also serves the purposes of monitoring, assessing and reporting on progress in implementing the strategy. The implementation framework involves the European Commission and Member States in partnership with key stakeholders and civil society. Specifically, its purpose is to:

(i) facilitate implementation of the EU Biodiversity Strategy to 2020 by putting in place a clear and logical EU-level governance framework that is as efficient and effective as possible;
(ii) create ownership for the implementation of the strategy across all relevant policy areas by involving representatives from a wide range of services, ministries and institutions in its implementation;
(iii) ensure the involvement of all interested stakeholders beyond the traditional ‘biodiversity community’ at the appropriate level of policymaking; and
(iv) minimise duplication of work and maximise synergies between efforts undertaken at different levels and by various actors and stakeholders; share information and best practice; and address common challenges.


The Birds Directive ensures far-reaching protection for all of Europe’s wild birds, identifying 194 species and sub-species among them as particularly threatened and in need of special conservation measures. Member States are required to designate Special Protection Areas for 194 particularly threatened species and all migratory bird species. Special Protection Areas are scientifically identified areas, such as wetlands, that are critical for the survival of the targeted species. They are part of the Natura 2000 ecological network set up under the Habitats Directive. The Birds Directive also bans activities that directly threaten birds, such as the deliberate killing or capture of birds, the destruction of their nests and taking of their eggs, and associated activities such as trading in live or dead birds (with a few exceptions). It also limits the number of bird species that can be hunted (82 species and sub-species) and the periods during which they can be hunted. It also defines the hunting methods that are permitted (e.g., non-selective hunting is banned).

The Habitats Directive’s main aim is to promote the maintenance of biodiversity, taking account of economic, social, cultural and regional requirements. It ensures the conservation of a wide range of rare, threatened or endemic species, including around 450 animals and 500 plants. Some 200 rare and characteristic habitat types are also targeted for conservation in their own right. The Directive provides for a ban on the downgrading of breeding and resting places for certain strictly protected animal species. Exceptions to the strict protection rules can be
granted under very specific conditions. The Habitats Directive also establishes the EU-wide Natura 2000 ecological network of protected areas. For these areas, it provides a high level of safeguards against potentially damaging developments.

The EU welcomes the involvement of the Committee of the Regions in the implementation framework. The EU recognises the key role played by local and regional authorities, together with Member States, in the delivery of a multilevel, cooperative and integrated approach towards the Aichi targets and the related targets of the EU 2020 Biodiversity Strategy. Several local and regional authorities are actively involved in the programmes for capacity building and sharing good practice supported by the LIFE\textsuperscript{21} and cohesion policy, in particular INTERREG\textsuperscript{22} programmes. Their involvement is also reflected in the latest opportunities, such as the new ‘Biogeographical process’ and its Natura 2000 communication platform, and the new Natura 2000 Award scheme.

LIFE — the Financial Instrument for the Environment — is the only EU financial instrument fully dedicated to the environment. Since 1992, LIFE has supported over 3100 projects. The new LIFE Regulation, published on 20 December 2013, sets a budget for the 2014–20 funding period of EUR 3.4 billion. The 2014-20 LIFE programme has two components: environment and climate action. It is the sub-programme for environment that provides the possibility to support projects addressing threats to biodiversity and contributing to the achievement of the targets of the EU Biodiversity Strategy to 2020. Two out of three priority areas of this sub-programme — LIFE Nature & Biodiversity in particular and LIFE Information & Governance — take into account biodiversity questions. The project topics under the nature & biodiversity priority area, defined in the LIFE multiannual work programme for 2014-17, prioritise projects contributing to Targets 1, 2, 3, 4 and 5 of the EU 2020 Biodiversity Strategy. Under the information & governance priority area, one of the project topics covers information and awareness-raising campaigns on the EU biodiversity strategy. The new LIFE regulation also provides for the possibility of LIFE contributing to other financial instruments, for instance the Natural Capital Financing Facility. The objective is to encourage investments in revenue-generating or cost-saving projects that promote the conservation of natural capital to meet biodiversity and adaptation objectives and support green growth.

For more information on the common implementation framework and related working groups, see http://biodiversity.europa.eu/policy.

Mainstreaming

Biodiversity objectives, especially for the Natura 2000 protected area network and for green infrastructure, are mainstreamed throughout the EU budget. Several sectoral policies provide positive incentives for biodiversity conservation, in particular through funding instruments for agriculture, fisheries and regional policy.

The establishment of Natura 2000 is now at an advanced stage. The coming years will be critical in making the network fully operational through the effective management and restoration of sites. While the main responsibility for financing Natura 2000 lies with Member

\textsuperscript{21} LIFE is the EU’s financial instrument supporting environmental and nature conservation projects throughout the EU. Since 1992, LIFE has co-financed some 4171 projects, contributing approximately EUR 3.4 billion to the protection of the environment.

\textsuperscript{22} INTERREG is financed by the European Regional Development Fund and helps regions of Europe share knowledge and transfer experience to improve regional policy.
States, Article 8 of the Habitats Directive legally links the delivery of necessary conservation measures to the provision of the EU co-financing. The Council of Ministers has invited the Commission, in collaboration with Member States, to assess whether the current integrated approach, whereby Natura 2000 funding is available under the different EU sectoral funds, has been adequate for the effective implementation of the network. The invitation extends to exploring ways of enhancing the uptake of EU funds for Natura 2000 in the next budgeting period.

In response, the European Commission issued a staff working paper in December 2011 that summarises an evaluation of the effectiveness of the current approach to the EU co-financing of Natura 2000; it also provides an overview of relevant provisions in Commission proposals for the next multiannual financial framework. It includes an updated estimate of Natura 2000 costs and underlines the benefits to be gained from effective management of these areas. The paper explains how the ‘prioritised action frameworks’ required under the Habitats Directive can serve as strategic planning tools to help strengthen the integration of Natura 2000 financing into the use of relevant EU financial instruments for the next programming period. Most Member States have submitted their frameworks to the Commission. The individual actions for which EU financial support will be provided will be determined in the operational programmes under the various funding instruments. The aim is to ensure as much coherence as possible with the prioritised action frameworks, while taking into account the priorities and specificities of individual instruments.

The Commission is preparing a new handbook on financing Natura 2000 to coincide with the publication of the EU’s financial regulations for the period 2014-20. The handbook is designed to help Member States strengthen the uptake of EU funds for the management and conservation of their Natura 2000 sites. The handbook describes each of the different EU funds available for Natura 2000. To coincide with its publication, the Commission is running a series of information seminars — to take place in Member States — on the financing of Natura 2000 under the new EU funds.

Effective management and restoration of sites in the Natura 2000 network requires significant investments. Based on data received from Member States, it is estimated that a minimum of EUR 5.8 billion a year will be needed to manage and restore the sites in the network. These costs are greatly outweighed by the benefits provided by the network. In addition to playing a crucial role in protecting Europe’s biodiversity, Natura 2000 sites provide a wide range of other ecosystem benefits and services to society. The economic value of these multiple benefits is considered to be very significant. The European Commission undertook a number of studies to help identify, evaluate and subsequently demonstrate the economic benefits provided by Natura 2000. A first broad assessment of the overall economic value of the Natura 2000 benefits puts the figure in the region of EUR 200-300 billion a year for the whole network. More information on financing Natura 2000 is available at http://ec.europa.eu/environment/nature/natura2000/financing/.

The reforms of the common agricultural policy and the common fisheries policy aim at reducing support that has a negative environmental impact, whilst rewarding practices that deliver public goods, including biodiversity. Under the common agricultural policy during the period 2007-13, progress has been made in conserving and restoring biodiversity and ecosystem services in the countryside as a whole. During this period, funding through rural development programmes under the policy’s second pillar provided the principal means of supporting biodiversity protection, management and restoration measures in agricultural and
forest habitats. The rural development policy gave Member States options to support measures that aim to preserve biodiversity through various means including advice, training and land management measures, and to draw up management plans related to Natura 2000 sites. Two new ‘CAP reform’ regulations — establishing rules for direct payments to farmers under support schemes within the framework of the common agricultural policy, and on support for rural development by the European Agricultural Fund for Rural Development — apply from 1 January 2014 to 31 December 2020. A new direct payments system for farmers replaces the current Single Payment Scheme. A key change is that 30% of the direct payment will be dependent on meeting certain ‘greening’ requirements relating to environmental measures that go beyond cross-compliance, namely: crop diversification; permanent grassland; and ecological focus areas.

EU funding for European fisheries covers measures in support of biodiversity or marine environmental protection. In the 2007-13 funding period, specific measures related to biodiversity accounted for about 6% of total expenditure commitments. If measures with indirect positive impacts are included, this may have represented up to one third of the total funds. The next round of funding, under the 2014-20 European Maritime and Fisheries Fund, will have specific built-in indicators to track biodiversity-related spending and to measure environmental impacts.

Cohesion policy instruments will continue to support key biodiversity and Natura 2000 investments. The European Regional Development Fund and the Cohesion Fund both aim to redress the main regional and national imbalances by supporting the development and structural adjustment of Member States’ economies, having particular regard to the Europe 2020 objectives. In this respect, the funds may support Member States in financing measures related to biodiversity, including green infrastructure and Natura 2000. Support is also available for a range of broader sustainable regional development measures, with possible indirect links to biodiversity and Natura 2000. These include supporting investment in adaptation to climate change and disaster risk reduction (e.g. through ecosystem-based solutions), protecting, promoting and developing cultural heritage (e.g. on Natura 2000 sites) and integrating nature conservation into broader plans to regenerate deprived urban and rural communities. Funding provided under the European Social Fund could also contribute to the achievement of biodiversity objectives through supporting education and training, investments in skills and the creation of new jobs.

Other instruments relevant for biodiversity financing include EU external financing instruments, in particular to deliver on the Hyderabad commitments on biodiversity-related flows to developing countries, and EU funding for research and innovation under the Horizon 2020 programme — the Framework Programme for Research and Innovation 2014-2020. Tracking biodiversity-related expenditures is essential. This ensures that spending can be related to policy outcomes that will improve the effectiveness of EU and national funding, and also fulfil the reporting commitments of the EU and Member States under the Convention. The European Commission has developed a specific tracking and reporting methodology for international and domestic flows of financial resources under the EU central budget. It is based on the ‘Rio markers’ developed by the Organisation for Economic Cooperation and Development (OECD). These markers classify projects depending on whether their primary

objective is biodiversity (Rio marker 2) or whether biodiversity is a significant but secondary objective (Rio marker 1). The tracking methodology applies a weighting factor to categories of expenditure to reflect the degree of their contribution to biodiversity objectives. Expenditure for which biodiversity is the primary objectives would be accounted for in full, whereas a discount factor of 40% is applied to expenditure for which biodiversity is a secondary objective.

The Commission’s communication on the EU’s 2014 draft budget included a table presenting estimates — based on past trends — of how the main relevant instruments in the 2014-20 multiannual financial framework are expected to contribute to biodiversity. For 2015, all relevant Commission services were requested to provide estimates of expected contributions to biodiversity objectives as part of the formal 'programme statements' in which the operational appropriations requested are justified. These estimates were again published as part of the communication on the 2015 draft general budget of the EU, and — given the state of programming of most instruments — were expected once more based for most instruments on historical trends. To the extent possible, the methodology is also being applied ex post to the EU’s 2007-13 budget to provide estimates of biodiversity-related financing flows for Convention reporting on resource mobilisation. The Commission has launched a study to improve the biodiversity tracking methodology for the EU budget, both ex ante and ex post.

In addition, the role of the private sector in the funding of biodiversity protection is being strengthened. The European Commission and the European Investment Bank (EIB) are in the process of setting up a Natural Capital Financing Facility (NCFF) to provide loans and equity instruments for projects, including climate adaptation projects, that promote the preservation of natural capital and which are revenue generating or cost-saving. The intention is to fund a small pilot project in an initial phase. The facility aims to act as a catalyst to demonstrate the attractiveness of natural capital projects for investors, and their positive impacts on biodiversity and ecosystems. It will leverage funding, both from the EIB and other partners, to encourage investments that would not otherwise take place because of market failures, the novelty of projects or perceived high risks. Regarding nature and biodiversity, the NCFF will contribute to implementing EU policy and legislation by demonstrating the viability of natural capital projects and attracting funding from other sources.

The EIB has also launched a study, due to be completed by July 2014, to identify a series of projects that could be supported by the NCFF. Projects will cover the following broad categories:

- **Green infrastructure** — Green infrastructure is a strategically planned network of natural and semi-natural areas with other environmental features designed and managed to deliver a wide range of ecosystem services. It incorporates green spaces (or blue if aquatic ecosystems are concerned) and other physical features in terrestrial (including coastal) and marine areas. On land, green infrastructure is present in rural and urban settings. Projects have the potential to generate revenues or save costs based on the provision of goods and services including water management, air quality, forestry, recreation, flood/erosion/fire control, pollination, and increased resilience to the consequences of climate change.

- **Payments for ecosystem services** — These are payments for the flows of benefits resulting from natural capital, usually a voluntary small-scale bilateral transaction with a clearly identified buyer and seller of an ecosystem service. They are based on the
‘beneficiary pays’ principle, whereby payments are made to secure critical ecosystem services.

- Offsets (including through habitat banks) — Biodiversity offsets are conservation actions intended to compensate for the residual, unavoidable harm to biodiversity caused by development projects. They are based on the ‘polluter pays’ principle, whereby offsets are undertaken for compliance or to mitigate reputational risks. Projects funded by the NCFF will not support compensation of damage to Natura 2000 sites under Article 6(4) of the Habitats Directive.

- Innovative pro-biodiversity and climate change adaptation businesses — These businesses are mostly small and medium-sized enterprises that supply goods and services aiming to protect biodiversity or increase the resilience of communities and other business sectors.

Phase 2 of the EU Business and Biodiversity (B@B) Platform was launched in April 2014. It builds on Phase 1 but goes further and takes a new approach. Firstly, it is open to all sectors and aims to engage businesses more actively. It also helps coordinate and raise awareness of other national and international business and biodiversity platforms. Finally, in order to deliver tangible results, the B@B Platform is working with business on three work streams: accounting for natural capital; innovation for biodiversity and business; and access to finance and innovative financing mechanisms. Currently, over 100 organisations have joined including over 50 businesses and more than 20 multinationals.

The EU B@B Platform is a member of the Convention Global Platform on Business and Biodiversity. It takes part in the international network of business and biodiversity initiatives hosted by the Convention and ensures that the B@B Platform objectives are in line with the Convention targets, e.g. with respect to resource mobilisation and innovative financial mechanisms. The EU B@B Platform also helps raise awareness of numerous Member State business and biodiversity platforms (including in Central and Eastern Europe, France, Germany, Netherlands, Spain, Portugal and the UK) and other international initiatives besides the Global Platform.

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II.3 Mechanisms for monitoring and reviewing implementation

Monitoring framework

The EU 2020 Biodiversity Strategy and related targets are underpinned by the EU 2010 Biodiversity Baseline. This provides data on the state and trends of biodiversity and ecosystems and thereby is the basis for measuring and monitoring progress in the EU from 2011 to 2020. The EU 2010 Biodiversity Baseline\(^{29}\) will be updated in 2015, based on the new data from the 2007-12 assessments of conservation of habitats and species covered by EU nature directives and on the outcomes of the EU initiative on ‘Mapping and assessment of ecosystems and their services’.\(^{30}\)

In accordance with EU nature legislation (Article 17 of the Habitats Directive and Article 12 of the Birds Directive), Member States are required to report every six years on the status of species and habitat types protected under this legislation. For all these species and habitats, there is an obligation to monitor their situation. Information collected for each species and habitat concerns basic data such as distribution and range, population size and trends, habitat area and trend, threats and pressures, and future prospects. All this data, collected in a harmonised way across all Member States, forms a unique source of information that is freely accessible. The data is not only collected, but also assessed on various spatial levels by the European Environment Agency and its European Topic Centre on Biological Diversity:

As of May 2014, the national reports of all EU Member States that were submitted in the second half of 2013 are being assessed. A consolidated analysis, including an interim assessment of Member State progress towards the 2020 targets (particularly Target 1), is due in April 2015.

The Biodiversity Information System for Europe (BISE)\(^{31}\) is a single entry point for published data and information supporting the implementation and monitoring of the EU 2020 Biodiversity Strategy. Bringing together data on biodiversity and ecosystem services, it links to related policies, environmental data centres, assessments and research findings from various sources. It is being developed to strengthen the knowledge base and to support decision-making on biodiversity. BISE has integrated within its structure the European Biodiversity Clearing House Mechanism in support of the Convention. BISE is a partnership between the European Commission and the European Environment Agency. Comments or questions: \(\text{www.eea.europa.eu/enquiries.}\)

A monitoring framework for the EU 2020 Biodiversity Strategy is being developed in preparation for the mid-term review in 2015. It will be integrated into the Biodiversity Information System for Europe to ensure easily accessible, user-friendly and up-to-date information up to 2020 and beyond. Since December 2013, consultations with a range of EU stakeholders have been conducted on each EU target. This is helping to ensure that the framework provides a comprehensive picture of available data and information both now and in the future, including from relevant processes at regional and global levels. The monitoring framework will include the European Environment Agency’s existing set of SEBI indicators on

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\(^{29}\) [http://www.eea.europa.eu/publications/eu-2010-biodiversity-baseline/]


\(^{31}\) [http://biodiversity.europa.eu/].
streamlining European biodiversity,\textsuperscript{32} which serve to monitor both EU targets and the corresponding Aichi Biodiversity Targets.\textsuperscript{33} Member States have called for reporting to different processes at EU and global levels to be facilitated by linking the various requirements and respective information sources. In response to this, a European Environment Agency working group is developing a biodiversity targets crosslinking tool\textsuperscript{34} to facilitate reporting on EU and Aichi biodiversity targets from national to EU and global level. See EU submission to notification 2013-120 on ‘Improving the efficiency of structures and processes under the Convention and its Protocols’ (March 2014).

Monitoring data

The availability of long-term monitoring data for biodiversity remains an important issue. As stressed in the conclusions of the October 2013 GEO-BON\textsuperscript{35} expert workshop in Montreal, the contribution of remotely sensed data, not only to biodiversity indicators and assessments\textsuperscript{36} but also to essential biodiversity variables, should be improved. This implies greater interaction between different fields of expertise — including earth observation, field workers and modellers — and agreement on the data to be used for producing meaningful indicators. Important progress has been made in Europe on free and open access to satellite data even for high-resolution images.\textsuperscript{37} But there is a lack of free of charge infrastructure to store and process in near real time global high-resolution data for monitoring important biodiversity threats and to be useful for policymaking. See EU submission to notification 2013-109 on the Review of the use of remotely-sensed data for monitoring biodiversity change and tracking progress towards the Aichi Biodiversity Targets (February 2014).

Mechanisms to improve the evidence base for policy on biodiversity and ecosystem services

Evidence for EU environment policy is based on environmental monitoring, data, indicators and assessments linked to the implementation of EU legislation and formal scientific research and ‘citizen science’ initiatives. There has been considerable progress in strengthening this evidence base, raising awareness and improving the confidence of policymakers and the public in the evidence-based approach to policy, facilitating their understanding of complex environmental and societal challenges. Steps are being taken at EU level to further strengthen and improve the science-policy interface for environment, such as through the appointment of chief scientific advisors, as already done by the Commission and some Member States. However, the pace of current developments and uncertainties surrounding likely future trends requires further steps to maintain and strengthen this evidence base. This will ensure policy in the EU continues to draw on a sound understanding of the state of the environment, possible response options and their consequences. Previous EU framework programmes for research have supported the understanding and development of effective science-policy-society interfaces and will be further developed under the new Framework Programme for Research and Innovation 2014-2020, Horizon 2020.

\textsuperscript{32} \url{http://biodiversity.europa.eu/topics/sebi-indicators}.
\textsuperscript{33} \url{http://biodiversity.europa.eu/policy/eu-biodiversity-indicators-and-related-global-aichi-targets}.
\textsuperscript{34} \url{http://demo.tct.biodiversity.europa.eu/}.
\textsuperscript{35} Group on Earth Observations — Biodiversity Observation Network.
\textsuperscript{36} See study of the European Space Agency on the contribution of earth observations to ecosystem assessments and valuation in different aquatic and terrestrial ecosystems (see \url{http://www.space4ecosystems.com/}).
\textsuperscript{37} e.g. Copernicus Sentinels (Copernicus is a programme coordinated and managed by the European Commission with the support of the European Space Agency and of the European Environment Agency).
Over recent decades, we have seen improvements in the way environmental information and statistics are collected and used, at EU and at Member State level, as well as globally. However, data collection and quality remain variable and the plethora of sources can make access difficult. Continuous investment is therefore needed to ensure that credible, comparable and quality-assured data and indicators are available and accessible to those involved in defining and implementing policy. Environmental information systems should be designed such as to enable new information on emerging themes to be easily incorporated.

Further implementation of the principle of ‘produce once, use often’ and the common approaches and standards on acquisition and collation of spatial information under the INSPIRE Directive and the Copernicus programme will help avoid duplication of effort and eliminate unnecessary administrative burdens on public authorities, as will efforts to streamline reporting obligations under different pieces of legislation. Member States gather information to assess environmental impacts of plans, programmes and projects (e.g. through environmental or strategic impact assessments) and should make this information more accessible to the public.

There are still significant gaps in knowledge, some of them relevant to this programme’s priority objectives. Investing in further research to fill these gaps is therefore essential to ensure that public authorities and businesses have a sound basis for taking decisions that fully reflect true social, economic and environmental benefits and costs. Under Horizon 2020, actions will be launched to support earth observation and GEOSS (Global Earth Observation System of Systems), in particular (including filling data gaps for ecosystems, oceans and developing further citizens’ observatories, etc.).

Horizon 2020 provides opportunities to focus on research efforts and to deploy Europe’s innovation potential by bringing together resources and knowledge across different fields and disciplines within the EU and internationally. Pan-European research and innovative opportunities for the conservation and management of biodiversity have been developed, in particular by BiodivERsA (under the EU’s ERA-Net scheme), which is a network of 21 national research funding agencies across 15 European countries. There are several provisions in Regulation (EU) No 1291/2013 establishing Horizon 2020 that are relevant for biodiversity, such as the two societal challenges dealing with bioeconomy and environment. As indicated in the regulation, in parallel to its market-related function, the bioeconomy sustains a wide range of public goods functions, and biodiversity and ecosystem services. EU and global policy frameworks must ensure that ecosystems and biodiversity are protected, valued and appropriately restored in order to preserve their ability to provide resources and services in the future.

It is also worth noting the significant number of ongoing research projects financed under the 7th Framework Programme for Research 2007-13 focusing specifically on biodiversity as ecosystem services, and now at different stages in their implementation (e.g. BESAFE, BiodivERsA, BIOFRESH, BIOMOT, EU BON, EU BON).

38 See e.g. Digital Observatory for Protected Areas (DOPA) developed at the Joint Research Centre in collaboration with the UNEP-WCMC, IUCN, GBIF and BirdLife International.
40 Copernicus is the European earth observation programme.
41 http://www.biodiversa.org/
42 http://ec.europa.eu/justice/grants/programmes/research-development/index_en.htm
FUNDIVEUROPE, GLOBAQUA, KNEU, KNOWSEAS, LIBERATION, MARS, MIDAS, NEWFOREX, OpenNESS, OPERAs, Policymix, QUESSA, ROBIN, SCALES, SPIRAL, STEP, TURAS, VOLANTE).43

New and emerging issues arising from rapid technological developments that outpace policy — such as nanomaterials, unconventional energy sources, carbon capture and storage and electromagnetic waves — pose risk management challenges and can give rise to conflicting interests, needs and expectations. This in turn can lead to increasing public concern and potential hostility towards new technologies. We need to ensure a broader, explicit debate in society about the environmental risks and possible trade-offs that we are willing to accept in the light of sometimes incomplete or uncertain information about emerging risks and how they should be handled. As highlighted in the General Union Environment Action Programme to 2020, a systematic approach to environmental risk management will improve the EU’s capacity to identify and act upon technological developments in a timely manner, while providing reassurance to the public.44

Other relevant regional mechanisms with global scope

European expert meetings in preparation of SBSTTA meetings

The EU holds expert meetings to prepare for meetings of the convention’s Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA). The expert meetings are informal scientific workshops, aiming to exchange information and opinions on the topics to be discussed at the SBSTTA meetings. The meetings are open to participants from countries in the UN European regions — Western European and Other Groups and Central and Eastern Europe — who attend in their personal capacity as biodiversity experts. A representative of the Convention Secretariat is invited to take part in the meetings as an observer. The objective of the expert meetings is to enable national experts from countries of the European region to exchange information on draft recommendations45 to be negotiated at SBSTTA meetings. These informal discussions are based on the documents prepared by the Convention Secretariat.

Promotion of regional communities of practice on biodiversity indicators

The EU is supporting projects to promote regional communities of practice to share national experiences of the selection, development and use of biodiversity and related indicators to measure progress towards the Aichi targets. Using this information as a basis, governments and the global community will be able to make better decisions on action to stem biodiversity loss and to achieve global biodiversity targets. This is implemented by boosting regional capacity to support national indicator development in the context of the revision of national biodiversity strategies and action plans. Working through regional hubs, the project is improving indicators developed at sub-national, national and regional scales, in support of national target setting under the new Aichi targets framework. It is helping participating countries to understand the


Aichi targets and how a flexible framework can be utilised to establish country-specific indicators to track progress towards the targets. The project is embedding capacity at the regional level to provide sustained technical support to countries. It is also drawing on the expertise of more than 40 global institutional partners under the Biodiversity Indicators Partnership, enhancing the multi-scale global network of biodiversity indicator developers and users — both big and small — and providing online resources and opportunities for sharing lessons. The project will result in future national reports including a greater use of appropriate indicators to provide quantitative information on progress towards national, regional and global targets. As examples, the EU has provided support to the Biodiversity Indicators Partnership and for the development of indicators to monitor the Aichi targets; for sub-global assessments and regional workshops; to ecosystem restoration through compilation of guidance and best practices and organisation of regional workshops with practitioners; and to the Economics of Ecosystems and Biodiversity (TEEB⁴⁶) initiative for follow-up.

**Wealth accounting and the valuation of ecosystem services (WAVES)**

The European Union provided financial support to the WAVES global partnership for the period 2012-16. The partnership aims to promote sustainable development worldwide through environmental accounting that reflects the values of ecosystem services. The objective is to incorporate these values into national income and comprehensive wealth accounting. This can generate better information for decision-making, including measuring attainment of Millennium Development Goal 7 on environmental sustainability and of Aichi Biodiversity Target 2. The initial list of pilot countries includes Botswana, Colombia, Costa Rica, Madagascar and the Philippines, and an expansion phase is currently being considered. The partnership entails collaboration to develop environmental accounts in a variety of countries as a basis for formulating international standards for ecosystems valuation in the UN System of Environmental Economic Accounting. The project is committed to identifying and exploiting complementarities where these exist, through partnership activities, and to bringing together regional organisations, such as the European Environment Agency, engaged in complementary activities. At the pilot-country level, the project exploits complementarities with other activities to improve management efficiency. For example, in Botswana and the Philippines, the project works in partnership with the UNDP-UNEP Poverty-Environment Initiative.

**Capacity development activities for the assessment of values**

The European Union is supporting Member States’ work on the assessment of values of biodiversity through the ‘Mapping and assessment of ecosystems and their services’ initiative. This includes a component on valuing ecosystems and their services, and integrating these values into accounting and reporting systems; this initiative will benefit from upcoming Horizon 2020 actions. Support to TEEB work in developing countries is also provided, for example through the UNEP-implemented TEEB national implementation project funded by the European Commission (see further details below). At international level, the global biodiversity finance initiative BIOFIN,⁴⁷ partly funded by the European Commission, supports the assessment of expenditures, funding gaps and the development of national resource mobilisation strategies in 19 countries.

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⁴⁶ The Economics of Ecosystems and Biodiversity (TEEB) is a global initiative focused on drawing attention to the economic benefits of biodiversity including the growing cost of biodiversity loss and ecosystem degradation. TEEB presents an approach that can help decision-makers recognise, demonstrate and capture the values of ecosystem services and biodiversity. See [http://www.teebweb.org/](http://www.teebweb.org/).

⁴⁷ The global Biodiversity Finance Initiative (BIOFIN) was launched in October 2012 and will run for three years. It is managed by UNDP, in partnership with the European Union and the governments of Germany and Switzerland.
Support to UNEP-implemented TEEB national implementation project
Building on the previous accomplishments of TEEB, including its coordination functions carried out by the UNEP TEEB office, the European Union funded a project to assist governments in accounting for the values of biodiversity and ecosystem services and reflecting these values in decision-making. In this respect, the project directly contributes to the implementation of the global Strategic Plan for Biodiversity 2011-2020, and in particular Targets 1, 2 and 4 under Strategic Goal A (‘Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society’). The objective of this project is to support the implementation of 8-10 national TEEB projects led by developing country institutions in close cooperation with national government ministries. This project responds to interest and demand expressed by developing countries by building national, regional and local government capacity to produce tailored economic assessments of ecosystems and biodiversity and to support the mainstreaming of this information in policymaking processes.

Invasive alien species information facility
Aichi Biodiversity Target 9 seeks to prevent the introduction and establishment of invasive alien species. This project contributes to this by aiming to further enhance regional collaboration of the Global Invasive Species Information Network (GISIN) in Costa Rica, Brazil, Mexico, Venezuela, Panama, Argentina, Uruguay and Cuba, and to develop and maintain an invasive alien species information portal for global users. This activity is implementing the joint work programme of GISIN, GBIF, IUCN, CABI, NOBANIS, DASIE, FishBase and the Convention Secretariat prepared in response to paragraph 3 of annex to decision X/38.
II.4 Review of progress in implementing the EU 2020 Biodiversity Strategy

**EU Target 1:** To halt the deterioration in the status of all species and habitats covered by EU nature legislation and achieve a significant and measurable improvement in their status so that, by 2020, compared to current assessments: (i) 100% more habitat assessments and 50% more species assessments under the Habitats Directive show an improved conservation status; and (ii) 50% more species assessments under the Birds Directive show a secure or improved status.

Target 1 aims at a significant and measurable improvement in the status of all species and habitats covered by EU nature legislation. This is to be achieved by:

- the completion of the Natura 2000 network and by ensuring good management (Action 1);
- ensuring adequate financing of Natura 2000 sites (Action 2);
- increasing stakeholder awareness and involvement and improving enforcement (Action 3); and
- improving and streamlining, monitoring and reporting (Action 4).

Over the last 25 years, on the legal basis of the Birds and Habitats Directives, the EU has built up a vast network of more than 27,000 protected areas throughout its Member States. Known as Natura 2000, the network covers an area of more than 1,000,000 km², which is 18% of the EU’s land area. The EU has also increased the share of marine areas in the network by 25% since 2011, which covers 4% of European seas. This achievement is already going beyond Aichi Biodiversity Target 11 for the terrestrial part of the network. The implementation of EU and national nature legislation and conservation efforts, often supported by EU funding instruments such as the LIFE and EAFRD funds (second pillar of the common agricultural policy) have already delivered results. There has been an impressive recovery of many species and habitats that were on the brink of extinction and the large-scale destruction of valuable wildlife-rich habitats has been halted. Cooperation between the various public and private actors has greatly increased at local, national and EU level and the 28 EU Member States are coordinating their efforts to conserve Europe’s natural heritage. However, despite these measures and successes, only 17% of habitats and species of Community interest were in favourable condition in 2010 (EEA, 2010).

The EEA indicators SEBI 003 (Conservation status of species of European interest) and SEBI 005 (Conservation status of habitats of European interest) are being used to monitor Target 1. The indicators draw on data provided by Member States every six years under the Habitats Directive. The reporting under Article 17 for the period 2001-06 was the first period to include assessments on the conservation status of habitat types and species of Community interest. Member States are currently delivering their reports for the reporting period of 2007-12 so that data will be available for the mid-term review of the EU Biodiversity Strategy in 2015.

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2011, the reporting requirements under the Birds Directive were streamlined with the reporting requirements under the Habitats Directive in accordance with Action 4.\textsuperscript{52}

The establishment of Natura 2000 on land is largely complete (Action 1a). As regards marine designations, significant progress has been achieved over recent years but the network remains substantially incomplete in most marine regions, especially offshore. An overview of the state of play for Natura 2000 site designations under the Birds\textsuperscript{53} and Habitats\textsuperscript{54} Directives, in terms of area and number of sites, is provided in the barometer published in the latest Natura 2000 newsletter.\textsuperscript{55} The barometer provides a breakdown by Member State and differentiates between terrestrial and marine sites. Updated information about remaining insufficiencies for each Member State, as regards sites to be proposed under the Habitats Directive, can be found online.\textsuperscript{56}

With regard to ensuring adequate financing of Natura 2000 sites (Action 2), the LIFE multiannual work programme was agreed upon in February 2014; the LIFE programme for 2014-17 is now operational.

Natura 2000 prioritised action frameworks are important planning tools to strengthen the integration of Natura 2000 financing into other EU financial instruments. They provide a well-defined framework of priorities, describe the Natura 2000 activities to be financed under relevant plans or programmes, and provide a clear overview of how to achieve them.

Information on the adequate financing of Natura 2000 sites from funds under shared EU-Member State management (e.g. European Regional Development and Social Funds) can be obtained from operational programmes that set out a region’s priorities for delivering these funds. In the coming months and before any implementation begins, these will be agreed upon with Member States for the budgetary period 2014-20. There is at least one operational programme for each region in the EU.

With regard to increasing stakeholder awareness and involvement, indicator SEBI 026 on public awareness about biodiversity in Europe has just been updated by the EEA, revealing that understanding and awareness of biodiversity have increased slightly over recent years. EU citizens are becoming more aware of the issues on threats and challenges for biodiversity, but it is a slow progress and still requires greater communication efforts and activities on biodiversity. In 2013, more than two thirds (73\%) of EU citizens had heard of biodiversity but only less than half knew the meaning of the word. This, however, is still 10\% more than in 2007.\textsuperscript{57}

\textsuperscript{52} http://ec.europa.eu/environment/nature/knowledge/rep_birds/index_en.htm.
\textsuperscript{56} https://circabc.europa.eu/w/browse/0c011fbc-edd4-49a6-8f3d-b67901a2084d.
In order to enhance public awareness about biodiversity and Natura 2000, the European Commission has launched a new award designed to celebrate and promote best practices for nature conservation in Europe. The European Natura 2000 Award aims to bring the success of the Natura 2000 network to the public’s attention and to demonstrate its importance for protecting biodiversity across Europe. The initiative rewards excellence in the management and promotion of the network and its objectives. Natura 2000 works to assure the long-term survival of Europe’s most valuable and threatened species and habitats, and is the centrepiece of the EU’s nature and biodiversity policy. The first awards were announced on 21 May.

In relation to enforcement of EU nature legislation, the EU has stepped up efforts to improve implementation by publishing further guidance documents and disseminating good practices, and by supporting the exchange of information, experience and knowledge on Natura 2000 management at biogeographical region level. Specific training sessions for judges and prosecutors have been organised with EU support on key provisions of nature legislation. Coordinated action at EU level has been launched, in cooperation with the Council of Europe, to address illegal trapping, killing and trade of birds, which also specifies actions on monitoring and data collection. Cases of non-compliance with EU nature legislation have been pursued, including through infringement procedures, with a focus on systemic failures.

**EU Target 2:** By 2020, ecosystems and their services are maintained and enhanced by establishing green infrastructure and restoring at least 15% of degraded ecosystems.

59 http://ec.europa.eu/environment/nature/conservation/wildbirds/illegal_killing.htm
Target 2 is to be achieved by:

- improving knowledge of ecosystems and their services in the EU (Action 5);
- setting priorities to restore and promote the use of green infrastructure (Action 6); and
- ensuring no net loss of biodiversity and ecosystem services (Action 7).

In addition to indicator SEBI 003 Conservation status of species of European interest and SEBI 005 Conservation status of habitats of European interest (see target 1), the following SEBI indicators will be used to monitor Target 2: SEBI 004 Ecosystem coverage, in conjunction with the European Environment Agency’s indicator CSI 014 Land take; SEBI 007 Nationally designated protected areas; SEBI 009 Critical load exceedance for nitrogen; SEBI 011 Impact of climate change on bird populations; SEBI 013 Fragmentation of natural and semi-natural areas; SEBI 014 Fragmentation of river systems; and SEBI 016 Freshwater quality.

Member States are undertaking work on ‘Mapping and assessment of ecosystems and their services’ — with the assistance of the European Commission and the European Environment Agency — that will be completed by the end of 2014. Under Horizon 2020, a specific coordination and support action will be funded in 2014 to develop and apply a consistent methodology across Member States. It is an essential part of the EU strategy and a necessary condition to make ecosystems and their services key factors for informing planning and development processes and decisions. High quality and consistent information on the condition of ecosystems and the services they provide will also be highly relevant for the future development and implementation of related policies such as regional policy, agriculture, fisheries, climate change, and disaster risk reduction and management. A first report published in April 2013 provided an analytical framework for mapping and assessment of ecosystems and their services in Europe. The second mapping and assessment report was published in March 2014. It proposes indicators that can be used at European and Member State level to map and assess biodiversity, ecosystem condition and ecosystem services according to the Common International Classification of Ecosystem Services (CICES v4.3).

Member States, assisted by the Commission, are developing a strategic framework to set priorities for ecosystem restoration at EU, national and subnational level by 2014. A Green Infrastructure Strategy was adopted in 2013 to promote the deployment of green infrastructure in the EU in urban and rural areas. Considerable progress has been made in implementing the actions proposed in the strategy: publications aimed at awareness raising in relation to green infrastructure and guidance on the integration of green infrastructure perspectives into other policy areas have been produced. Green infrastructure has been integrated into major EU financing instruments, and will be covered under the Natural Capital Financing Facility, the innovative financing mechanism set up with the European Investment Bank. The Horizon 2020 programme will support relevant research and innovation, notably on innovative nature-based solutions. Data-related reports will be provided by the European Environment Agency. Work is under way on assessing the contribution technical standards and innovation could make to ‘growing the market’ of green infrastructure solutions, and on cost-benefit analysis for opportunities in promoting EU-scale projects through a trans-European approach.
network green infrastructure initiative.

In seeking to achieve ‘no net loss’ of biodiversity and ecosystem services, a dedicated initiative in 2015 and ‘biodiversity-proofing’ of EU-funded projects, plans and programmes will also be part of the action under this target. In 2012, a Commission review of the opportunities for biodiversity-proofing the EU budget found that numerous tools exist to facilitate the process. Biodiversity-proofing is a structured process to ensure the effective application of tools to avoid — or at least minimise — biodiversity-harmful spending and to act as a catalyst for biodiversity-friendly spending. The Commission recently launched a follow-up contract to create a practical common framework for biodiversity-proofing the EU budget, which would include general and fund-specific guidelines for national and regional authorities and for Commission services. Regarding the EU ‘no net loss’ initiative, the European Commission has already undertaken an informal consultation of Member States and stakeholders through a dedicated working group, which delivered its outputs in summer 2013. A consultancy report on policy options for the initiative has also been published.67 A formal internet consultation on the main issues to be addressed by the initiative will be launched before the summer.

**EU Target 3**

A) Agriculture: By 2020, maximise areas under agriculture across grasslands, arable land and permanent crops that are covered by biodiversity-related measures under the CAP so as to ensure the conservation of biodiversity and to bring about a measurable improvement* in the conservation status of species and habitats that depend on or are affected by agriculture and in the provision of ecosystem services as compared with the EU 2010 Baseline, thus contributing to enhance sustainable management.

B) Forests: By 2020, forest management plans or equivalent instruments, in line with sustainable forest management (SFM), are in place for all forests that are publicly owned and for forest holdings above a certain size** (to be defined by the Member States or regions and communicated in their rural development programmes) that receive funding under the rural development policy so as to bring about a measurable improvement* in the conservation status of species and habitats that depend on or are affected by forestry and in the provision of related ecosystem services as compared with the EU 2010 Baseline.

(*) For both elements of this target, improvement is to be measured against the quantified enhancement targets for the conservation status of species and habitats of EU interest in Target 1 and the restoration of degraded ecosystems under Target 2.

(**) For smaller forest holdings, Member States may provide additional incentives to encourage the adoption of management plans or equivalent instruments that are in line with SFM.

Target 3 aims to increase the contribution of agriculture and forestry to maintaining and enhancing biodiversity. This is to be achieved by:

- enhancing direct payments for environmental public goods in the common agricultural policy (Action 8);
- better targeting of rural development to biodiversity conservation (Action 9); and

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• conserving Europe’s agricultural genetic diversity (Action 10).

Also, forest holders are encouraged to:
• protect and enhance biodiversity (Action 11); and
• integrate biodiversity measures in forest management plans (Action 12).

Biodiversity in agriculture

Under the common agricultural policy, progress has been made in conserving and restoring biodiversity and ecosystem services in the countryside as a whole during the period 2007-13. Rural development funding under the policy’s second pillar provided the principal means of supporting biodiversity protection, management and restoration in agricultural and forest habitats. The current rural development policy for 2014-20 will continue to give Member States options to support measures that aim to preserve biodiversity. Although it has not escaped the general trend of reductions in the EU budget, rural development will still include advice, training and land management measures and provide support to draw up management plans related to Natura 2000 sites.

Two new ‘CAP reform’ regulations — establishing rules for direct payments to farmers under support schemes within the framework of the common agricultural policy, and on support for rural development by the European Agricultural Fund for Rural Development (EAFRD) — apply from 1 January 2014 to 31 December 2020.

A new direct payments system for farmers replaces the current Single Payment Scheme. A key change is that 30 % of the direct payment will be dependent on meeting certain ‘greening’ requirements relating to environmental measures that go beyond cross-compliance, namely: crop diversification; permanent grassland; and ecological focus areas.

Article 110 of Regulation (EU) No 1306/2013 of the European Parliament and the Council on the financing, management and monitoring of the common agricultural policy lays down provisions for a monitoring and evaluation system for 2013-20. The new common monitoring and evaluation system will assess the common policy performance and its main instruments (i.e. direct payments, market measures, rural development measures and the application of cross-compliance) building on and maximising synergies between monitoring and evaluation tools. Member States will report on the common agricultural policy’s first pillar (production support) from 2015 onwards and on the second pillar (rural development) from 2016 (covering years 2014 and 2015). In January 2014, the Commission published draft impact indicators, a draft list of common context indicators, and a working document on proxy indicators for rural development programmes. The final lists of indicators — context, impact, result and output for rural development programmes — will be included in implementing acts.

Agricultural genetic diversity

Agri-environmental measures, as part of rural development, offer Member States the opportunity to target the level of everyday farming to perform on-farm conservation of genetic resources. Agri-environmental measures include the possibility to compensate farmers for engaging in conservation activities aiming to preserve breeds and crops under threat of genetic erosion.

The EU programme on the conservation of genetic resources in agriculture established conservation activities, both in situ and ex situ. These actions enhanced the morphological and genetic knowledge of plant genetic resources and the dissemination of results to end-users. It provided co-funding for 17 conservation actions, concerning various farm animals, plants and forest trees. Those actions were implemented by around 180 partners in 25 Member States and 12 non-EU countries with a budget of EUR 8.9 million. The programme resulted in the collection and characterisation of several thousands of new accessions and the establishment of conservation infrastructures, databases, core collections, gene banks, and accession catalogues. Furthermore, actions included the formulation of guidelines and the exchange of genetic material between participants in the programme and end-users (farmers, breeders, gardeners).

With regard to legislation, the EU adopted two directives in 2008-09 on conservation and amateur varieties to support the conservation in situ of genetic resources. The rules concern less stringent requirements for marketing of agricultural landraces and varieties naturally adapted to local conditions but threatened by genetic erosion. In addition, derogations are provided for marketing vegetable landraces and varieties traditionally grown in certain regions, again threatened by genetic erosion, and varieties with no intrinsic value for commercial production but developed for growing under particular conditions (‘amateur varieties’). As regards crop wild species, the EU adopted legislation in 2010 for marketing so-called ‘preservation mixtures’. The rule authorises the use of wild plant species in grass mixtures. In 2012, the common catalogues contained 656 conservation or amateur varieties, of which 158 were conservation varieties of agricultural crops and 498 were amateur or conservation varieties of vegetable crops. In addition, the Commission has prepared legislation supporting the identification of conservation varieties of fruit plants and authorising their marketing as set out by Directive 2008/90/EC.

EU legislation on the marketing of forest reproductive material provides that Member States may depart from the legislative requirements in the interest of conserving plant genetic resources used in forestry. This is possible to take account of developments in relation to the conservation in situ and the sustainable use of plant genetic resources, through growing and marketing of forest reproductive material of origin, that are naturally adapted to the local and regional conditions and threatened by genetic erosion.

In 2014, the European Commission presented a proposal to amend existing legislation on zootechnia. The objective is to set up at EU level the zootechnical and genealogical conditions...

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for trade in and imports into the European Union of breeding animals and their germinal products. This proposal also provides the Commission with the necessary authority to take action where there is a risk to the protection of genetic diversity, including for domestic animals. This proposal has been presented to the European Parliament and the Council and it will take some time before a final agreement is reached in view of its entry into force.

Finally, there are a number of research projects and coordination actions concerning the conservation of genetic diversity in agriculture and forestry, such as PGR Secure (crop wild relatives), Trees4future (research infrastructure), and FORGER (forest genetic resources). The Horizon 2020 work programme for 2014-15 also includes relevant targeted calls, such as one on management and sustainable use of genetic resources.

**Biodiversity in forests**

Following the abandonment of cultivation in several regions of Europe, natural vegetation dynamics have caused an increase in Europe’s forest area over recent decades. However, depending on the type of management and the overall local situation, new forest areas have not necessarily increased the quality of forest biodiversity; for example, some types of ecosystems with high natural value were the direct result of historical land management practices, abandoned in the meantime.

Forest Europe’s report ‘State of Europe’s Forests 2011’ states that Europe’s forest area has grown on average by around 500,000 hectares annually over the last 20 years. It also mentions that about 10% of forests are protected with the main objective to conserve biodiversity. Greater integration of biodiversity aspects in forest management practice is gaining ground, such as not removing deadwood and keeping old trees in forests managed for wood production. In several countries, monitoring of threatened forest species has indicated that new forest management measures have reduced the decline of threatened species and there has been good progress in the conservation of forest biodiversity. Nevertheless, there are still significant measurement and monitoring problems.

To receive funding under the new rural development policy, all forests that are publicly owned must, by 2020, have in place forest management plans or equivalent instruments in line with sustainable forest management. The same obligation applies for private forest holdings, above a certain size that will need to be defined by Member States or regions in their rural development programmes, to be approved by the Commission.

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78 In Europe, excluding the Russian Federation.
EU Target 4: Fisheries: Achieve maximum sustainable yield (MSY)\(^79\) by 2015. Achieve a population age and size distribution indicative of a healthy stock, through fisheries management with no significant adverse impacts on other stocks, species and ecosystems, in support of achieving good environmental status by 2020, as required under the Marine Strategy Framework Directive.

Target 4 aims at ensuring the sustainable use of fisheries resources and achieving good environmental status of the marine environment. This is to be achieved by:

- improving the management of fished stocks in particular through long-term management plans fixing fishing quotas such as quotas in line with scientific advice (Action 13);
- significantly reducing adverse impacts of fishing on non-targeted marine resources and marine ecosystems (avoiding by-catch and eliminating discards) and the elimination of adverse impacts on fish stocks, species, habitats and ecosystems (Action 14).

Despite important progress made in the context of the EU’s common fisheries policy since 2002 (in particular arising from the introduction of long-term management plans for several stocks) and the adoption of the Marine Strategy Framework Directive in 2008, some 40% of Europe’s commercial fish stocks remain over-exploited in the northeast Atlantic. A high but unknown proportion is also over-exploited in the Mediterranean Sea; knowledge about this area is improving. EU policy aims to restore and maintain stocks above levels that can produce maximum sustainable yield by achieving the maximum sustainable yield exploitation rate by 2015, where possible, and — on a progressive incremental basis — at the latest by 2020 for all stocks. It also aims to achieve good environmental status of Europe’s seas by 2020, as required by the framework directive. This is to be achieved by improving the management of fish stocks. The most recent reform of the common fisheries policy, which is effective as of January 2014, will play a crucial role in getting closer to this target.\(^80\)

Analysis of the number of stocks fished at the maximum sustainable yield rate shows that in 2013, 39% of assessed stocks in the north-east Atlantic, and 88% in the Mediterranean and Black Seas, were overfished.

\(^79\) The EU signed up to a target of achieving maximum sustainable yield levels by 2015 at the World Summit on Sustainable Development in 2002, and to the new 2020 fisheries target adopted at CBD COP 10.

Status of fish stocks in International Council for Exploration of the Sea (ICES) and General Fisheries Commission for the Mediterranean (GFCM) fishing regions of Europe

Note: The map shows the status of the fish stocks in ICES and GFCM fishing regions of Europe in 2008. Status of fish stocks was assessed in 2009 (ICES) and from 2002-2009 (GFCM), although data refers to 2008 in the ICES regions and 2005 in the GFCM regions.

There are, however, data gaps. Not all fisheries have been assessed and, of those assessed, not all are evaluated using the maximum sustainable yield approach.

The number of multiannual fisheries plans within EU waters is increasing and reached a total of 11 as of January 2014\(^81\) (8 within the north-east Atlantic; 2 in the Mediterranean and 1 in the Black Sea).

The EU 2020 Biodiversity Strategy and the new common fisheries policy aim to promote the sustainability of all stocks where the EU fleet operates, including those within external waters, such as the exclusive economic zones of other countries (accessed through bilateral fisheries agreements), or the high seas managed by regional fisheries management organisations.

In support of the Marine Strategy Framework Directive, the EEA Indicators SEBI 003 and SEBI 005 give the conservation status of species in marine ecosystems and marine habitat types, respectively. The results of the 2001-06 assessment (soon to be updated) showed that more data and better knowledge is needed on marine species.

The European Environment Agency has drawn on the recent publication of the Member States initial assessment of their marine waters under the framework directive to summarise the status (good, not good, other, unknown) of seven natural features (e.g. seabed habitats, marine fish, seabirds etc.\(^82\)). At present, the status of these features is overwhelmingly ‘unknown’ but this


information should improve with the 2018 update of the initial assessments. Significant efforts are still needed to enhance coordination of marine biodiversity information across all regions of the EU in order to improve the knowledge base.

In support of reducing the adverse impact of fishing on non-target species and marine ecosystems, the reform of the common fisheries policy includes a specific initiative to reduce and eliminate discards, aiming to reduce the incentives to fish non-target species. In addition to this, a Council Regulation adopted in 2004 lays down measures concerning incidental catches of cetaceans in fisheries, and the Commission has also developed an ‘Action plan for reducing incidental catches of seabirds in fishing gears’.

The network of marine protected areas (MPAs) is growing, made up of both Natura 2000 sites and other designations. Data on Natura 2000 sites is given by the Natura 2000 Barometer and the European Environment Agency is working on a new MPA indicator. In 2012, there were 7725 MPA sites covering 338,600km². The Natura 2000 network covers 4% of European waters and other protected areas account for 1.9%, making a total of 5.9% of European waters as marine protected areas. Currently only two regional seas (Western Mediterranean and Greater North Sea — including Kattegat & English Channel) have MPA coverage above 10%. The EEA has calculated that another 230,000 km² should be designated to achieve Aichi Biodiversity Target 11, i.e. for there to be ‘10% cover of both coastal and marine/offshore marine protected sites.’

**EU Target 5:** By 2020, invasive alien species and their pathways are identified and prioritised, priority species are controlled or eradicated, and pathways are managed to prevent the introduction and establishment of new invasive alien species.

Target 5 aims at combating invasive alien species. To achieve this, the Commission committed itself to:

- integrate additional biodiversity concerns into plant and animal health regimes by 2012 (Action 15); and
- fill policy gaps in combating invasive alien species by developing a legislative instrument by 2012 (Action 16).

Invasive alien species have become one of the fastest growing threats to biodiversity in Europe, causing damage to the value of at least EUR 12 billion a year in the EU. By 2020, Target 5 aims to have invasive species and their pathways identified and prioritised, priority species controlled or eradicated, and pathways managed to prevent the introduction and establishment of new invasive alien species.

Indicator SEBI 010 on invasive alien species in Europe will be used to monitor Target 5.

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The cumulative number of alien species present in Europe has been constantly increasing since the 1990s: in the 2000s, the total number of terrestrial alien species reached more than 3500.

**Data source:** NOBANIS — European Network on Invasive Alien Species provided by North European and Baltic Network on Invasive Alien species (NOBANIS)

In response to Action 16, the European Commission in September 2013 proposed a regulation on the prevention and management of the introduction and spread of invasive alien species. The objective of the proposal is to establish a framework for action to prevent, minimise and mitigate the adverse impacts of invasive species on biodiversity and ecosystem services. Furthermore, it will seek to limit social and economic damage. This will be achieved through measures to ensure coordinated action, focusing resources on priority species and on increasing preventive measures, in accordance with the approach of the Convention and with the EU’s plant and animal health regimes. In practical terms, the proposal seeks to attain these objectives through:

1) measures addressing the intentional introduction of invasive alien species into the EU and their intentional release into the environment;
2) provisions tackling the unintentional introduction and release of invasive alien species;
3) requirements to set up a system of surveillance to support early warning and rapid response; and
4) requirements to manage the invasive alien species that are already present in EU Member States.

The proposal has been the subject of intensive negotiations between the European Parliament and the Council and the legislative procedure is now drawing to a close.

The regime will be underpinned by an information support mechanism: the European Alien Species Information Network (EASIN). This network aims to enable easy access to online data and information on alien species across Europe, for the terrestrial, freshwater and marine environments.
environments. It facilitates the exploration of various information sources by developing and making freely available tools and interoperable web services compliant with internationally recognised standards. The EASIN web tools and services can be used freely and independently by any website, while ownership of the data remains with its source, which is properly cited and linked. The network also provides access to occurrences of alien species in Europe through the Global Biodiversity Indicators Facility and the Global Invasive Species Information Network. The EASIN network can even be seen as a pilot project within the Global Invasive Alien Species Information Partnership.

**EU Target 6:** By 2020, the EU has stepped up its contribution to averting global biodiversity loss.

**Target 6** aims at helping avert global biodiversity loss. This is to be achieved by:

- reducing indirect drivers of biodiversity loss (**Action 17**);
- mobilising additional resources for global biodiversity conservation (**Action 18**);
- ‘biodiversity-proofing’ EU development cooperation (**Action 19**); and
- regulating access to genetic resources and the fair and equitable sharing of benefits arising from their use (**Action 20**).

The EU is fully committed to helping combat biodiversity loss across the globe and to fulfilling its global commitments under the Convention. This target is about further stepping up the EU’s contribution to averting global biodiversity loss by 2020. Actions to achieve this include the implementation of the Nagoya Protocol on access and benefit sharing — once the EU has ratified the Protocol, as expected in 2014 — and the contribution of a fair share to international efforts to significantly increase resources for global biodiversity. The EU is already the largest contributor to biodiversity finance with an average allocation under the EU external assistance budget for biodiversity of about EUR 1.7 billion during 2006 to 2010. At COP 11, the EU further committed, along with other Parties, to double biodiversity-related flows to developing countries by 2015, based on an average from 2006–10, and to maintain it until 2020. Furthermore, as the world’s biggest trader, the EU must also address the impact that its consumption patterns are having on the rest of the planet. The strategy aims to reduce the EU’s biodiversity footprint on the rest of the world. It seeks to enhance the contribution of EU trade policy to conserving biodiversity, whilst eliminating as far as possible any negative biodiversity impacts of EU trade agreements; and to assist developing countries in their efforts to conserve biodiversity and ensure its sustainable use. This is to be achieved, for example, by providing the right market signals for biodiversity conservation. This includes work to reform, phase out and eliminate harmful subsidies at both EU and Member State level, and ‘biodiversity-proofing’ EU development cooperation, to avoid or at least minimise the harmful impacts of EU spending and to maximise the biodiversity benefits.

Indicator SEBI 023 (Ecological footprint for European countries) is being used to report on Target 6. It is considered the best available EEA indicator on the overall resource demand of European societies compared with resource availability in Europe and in the rest of the world.

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European Ecological Footprint and biocapacity, 1961-2005

Global hectares per person — pan-European nations

From 1961 to 2003, Europe’s Ecological Footprint increased from 3 to 4 ha/person.


Forest law enforcement, governance and trade (FLEGT)

Significant progress has been made in implementing the EU 'Forest law enforcement, governance and trade' (FLEGT) action plan, which dates back to 2003. The action plan provides for a combination of supply and demand-side measures to exclude illegal timber from markets, improve the supply of legal timber and increase the demand for wood products from legal sources. Its ultimate goal is to encourage sustainable forest management, but improving forest governance frameworks and ensuring the legality of forest operations is considered a vital first step. A key element of the FLEGT action plan is the possibility for the EU to conclude Voluntary Partnership Agreements (VPAs). These bilateral trade agreements with timber exporting countries help to prevent illegal timber from being placed on the European market. These trade agreements promote the strengthening of forest governance in partner countries and provide for the establishment, through a multi-stakeholder process, of timber legality assurance systems to certify the legality of exports of timber and timber products into the EU. Cameroon, Central African Republic, Congo (Brazzaville), Ghana, Indonesia and Liberia have ratified agreements. Negotiations are ongoing with Côte d’Ivoire, Gabon, Guyana, Democratic Republic of Congo (Kinshasa), Honduras, Laos, Malaysia, Thailand and Vietnam.  

To complement the FLEGT VPAs, the EU has legislation in place laying down the obligations of operators who place timber and timber products on the market, also known as the EU Timber Regulation. The Regulation came into force on 3 March 2013. It prohibits operators in Europe from placing illegally harvested timber and products derived from illegal timber on the market.

EU market. The European Commission is monitoring how Member States are implementing and enforcing the EU Timber Regulation. Reports on its effectiveness will be compiled by the European Commission from reports by Member States before March 2015. The consolidated report will be sent to the European Parliament and the Council before December 2015.

Under the framework of the FLEGT action plan, the EU has also been promoting public procurement policies as a means to encourage trade in sustainable and verified legal timber (eleven EU Member States have adopted timber public procurement policies), and private sector initiatives (voluntary codes of conduct, procurement policies, chain-of-custody/certification initiatives, etc.). In addition, development cooperation funding has been used to support efforts of timber producing countries to strengthen their legal and policy frameworks in the forest sector and building capacity to tackle the problem of illegal logging.

**Status of species in trade**

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) has been implemented throughout the EU by means of regulations\(^\text{93}\) that are directly applicable in the Member States. Four regulations constitute the legal framework for all Member States: they regulate international and internal trade in wild animals and plants in the EU.

Those regulations are regularly amended to accommodate new measures agreed under CITES. In addition, the EU wildlife trade regulations contain measures that are stricter than decisions adopted under the CITES framework. EU legislation provides for decisions stipulating the conditions under which wildlife products can enter the EU market. Under that scheme, there are currently 347 species in approximately 90 countries for which trade suspensions are in place. Measures are decided by the Commission based on input from EU scientific experts and are regularly adapted to changing trade patterns. The Commission is in permanent contact with Member States, trade operators and civil society to ensure a smooth application of the rules across the EU, avoid loopholes and provide guidance for clarification when necessary.

Finally, the EU monitors the implementation by Member States of the EU wildlife trade framework, notably through the work done at the wildlife trade enforcement group, which meets twice a year and is chaired by the Commission.

**Environmentally harmful subsidies**

The European Commission ordered a study on reforming environmentally harmful subsidies for a resource efficient Europe.\(^\text{94}\) The study aimed to support the Commission in implementing the call in the Roadmap to a Resource Efficient Europe to phase out harmful subsidies by 2020. The study, published in December 2012, identifies a number of existing harmful subsidies in EU Member States across a range of environmental sectors and issues, including subsidies that are harmful to biodiversity. The study identified obstacles to reform, as well as potential solutions. The reform of environmental harmful subsidies is also a regular item, for a number of EU countries, in the European Semester process, the annual governance process of the Europe 2020 strategy for smart, sustainable, and inclusive growth.

\(^{93}\) [http://ec.europa.eu/environment/cites/home_en.htm](http://ec.europa.eu/environment/cites/home_en.htm)  
**Access and benefit sharing**

The EU recently adopted a regulation\(^5\) implementing within the EU the ‘Nagoya Protocol on access to genetic resources and the fair and equitable sharing of benefits arising from their utilisation’. This regulation implements at EU level the compliance pillar of the Nagoya Protocol and puts measures in place to ensure that genetic resources from other countries that are Parties to the Nagoya Protocol, accessed after the entry into force of the Protocol, are used in the EU in compliance with the Nagoya Protocol requirements. The EU regulation will be complemented by measures taken at Member State level (e.g. designation of competent authorities, definition of system of penalties for instances of non-compliance) and by EU implementing acts on registered collections, best practices and monitoring user compliance. The EU ratified the Nagoya Protocol on 16 May 2014.\(^6\)

**Genetic diversity in food and agriculture**

The European Union is party to the International Treaty on Plant Genetic Resources for Food and Agriculture,\(^7\) which aims to conserve and sustainably use agricultural plant biodiversity, both inside (including on-farm) and outside ecosystems and natural habitats. It is also a member of the FAO Commission on genetic resources for food and agriculture. The Member States of the FAO Commission have adopted a first ‘Global plan of action for animal genetic resources’ and a second ‘Global plan of action for the conservation and sustainable utilisation of plant genetic resources for food and agriculture’. A first report on the state of the world’s forest genetic resources is under preparation.

**Overseas territories**

The EU’s BEST Initiative (Biodiversity and Ecosystem Services in Territories of European Overseas)\(^8\) aims to promote conservation and sustainable use of biodiversity and ecosystem services, including ecosystem-based approaches to climate change adaptation and mitigation. The regions concerned include the South Pacific, Indian Ocean, Caribbean Region, French Guyana, Greenland, Antarctic and Macaronesia. The initiative addresses issues such as designation and management of terrestrial and marine protected areas, combating invasive alien species, and synergies between biodiversity conservation and using ecosystem services for climate change adaptation and mitigation; valuation of ecosystem services; increasing knowledge; and networking, education, capacity building and outreach activities. Attempts are being made to build the required critical mass needed through partnerships, leverage funding and strategy development. A platform\(^9\) is being set up to enable and facilitate information sharing on funding availability from different sources. The central BEST team, supported by seven regional knowledge hubs, is developing ecosystem profiles using the tested methodology of the Critical Ecosystem Partnership Fund.


\(^7\) [http://www.planttreaty.org/](http://www.planttreaty.org/).


### III. Progress towards the 2020 Aichi Biodiversity Targets and Contributions to the Relevant 2015 Targets of the Millennium Development Goals

#### III.1 EU Biodiversity Targets and related Aichi Targets


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<tr>
<th>EU Biodiversity Target 1</th>
<th>Aichi targets 1, 11, 12</th>
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<tr>
<td><strong>Target 1: Fully implement the <em>Birds and Habitats Directives</em></strong></td>
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| To halt the deterioration in the status of all species and habitats covered by EU nature legislation and achieve a significant and measurable improvement in their status so that, by 2020, compared to current assessments: (i) 100% more habitat assessments and 50% more species assessments under the Habitats Directive show an improved conservation status; and (ii) 50% more species assessments under the Birds Directive show a secure or improved status. | 1: By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.  
11: By 2020, at least 17% of terrestrial and inland water, and 10% of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscape and seascapes.  
12: By 2020, the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained. |

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<tr>
<th>EU Biodiversity Target 2</th>
<th>Aichi targets 15, 14, 8, 10</th>
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<td><strong>Target 2: Maintain and restore ecosystems and their services</strong>*</td>
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| By 2020, ecosystems and their services are maintained and enhanced by establishing green infrastructure and restoring at least 15% of degraded ecosystems. | 15: By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15% of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.  
14: By 2020, ecosystems that provide essential services including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable.  
8: By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity.  
10: By 2015, the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimised, so as to maintain their integrity and functioning. |

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<tr>
<th>EU Biodiversity Target 3</th>
<th>Aichi targets 7, 5, 13</th>
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Target 3: Increase the contribution of **agriculture and forestry** to maintaining and enhancing biodiversity

**Agriculture:** By 2020, maximise areas under agriculture across grasslands, arable land and permanent crops that are covered by biodiversity-related measures under the CAP so as to ensure the conservation of biodiversity and to bring about a measurable improvement in the conservation status of species and habitats that depend on or are affected by agriculture and in the provision of ecosystem services as compared to the EU 2010 Baseline, thus contributing to enhance sustainable management.

7: By 2020, areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.

13: By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimising genetic erosion and safeguarding their genetic diversity.

**Forests:** By 2020, Forest Management Plans or equivalent instruments, in line with Sustainable Forest Management (SFM), are in place for all forests that are publicly owned and for forest holdings above a certain size (to be defined by the Member States or regions and communicated in their Rural Development Programmes) that receive funding under the EU Rural Development Policy so as to bring about a measurable improvement in the conservation status of species and habitats that depend on or are affected by forestry and in the provision of related ecosystem services as compared to the EU 2010 Baseline.

7: By 2020, areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.

7: By 2020, invasive alien species and pathways are identified and prioritised, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment.

EU Biodiversity Target 4

Target 4: Ensure the sustainable use of **fisheries** resources

Achieve Maximum Sustainable Yield (MSY) by 2015. Achieve a population age and size distribution indicative of a healthy stock, through fisheries management with no significant adverse impacts on other stocks, species and ecosystems, in support of achieving Good Environmental Status by 2020, as required under the Marine Strategy Framework Directive

6: By 2020, all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem-based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits.

7: By 2020, areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.

10: By 2015, the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimised, so as to maintain their integrity and functioning.

EU Biodiversity Target 5

Target 5: Help combat **invasive alien species**

By 2020, invasive alien species (IAS) and their pathways are identified and prioritised, priority species are controlled or eradicated, and pathways are managed to prevent the introduction and establishment of new

6: By 2020, invasive alien species and pathways are identified and prioritised, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment.

Aichi targets 6, 7, 10

Aichi Target 9
**EU Biodiversity Target 6**

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<th>Aichi targets 2, 3, 16, 17, 20</th>
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<td>2: By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems.</td>
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<td>3: By 2020, at the latest, incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimise or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio economic conditions.</td>
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<td>16: By 2015, the Nagoya Protocol on access to genetic resources and the fair and equitable sharing of benefits arising from their utilisation is in force and operational, consistent with national legislation.</td>
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<td>17: By 2015, each Party has developed, adopted as a policy instrument, and has commenced implementing an effective, participatory and updated national biodiversity strategy and action plan.</td>
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<td>20: By 2020, at the latest, the mobilisation of financial resources for effectively implementing the Strategic Plan for Biodiversity 2011-2020 from all sources, and in accordance with the consolidated and agreed process in the Strategy for Resource Mobilisation, should increase substantially from the current levels. This target will be subject to changes contingent to resource needs assessments to be developed and reported by Parties.</td>
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**Horizontal Issues**

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<tr>
<th>Aichi targets 4, 18, 19</th>
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<tr>
<td>4: By 2020, at the latest, governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits.</td>
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<tr>
<td>18: By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully</td>
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</table>
The EU biodiversity indicators, the so-called SEBI indicators (Streamlining European Biodiversity Indicators), will be used to report on progress towards the Aichi Biodiversity Targets. The SEBI 2010 initiative was launched in 2005 with the aim to develop a set of biodiversity indicators to assess progress towards the 2010 biodiversity target. SEBI was created as a pan-European process with a focus on bridging between global-regional-national indicator production and collating information within a regional hub of knowledge.

A review of the original SEBI indicators started in 2011 in order to ensure the maximum possible alignment with the new 2020 targets. Indicators have been identified to monitor EU biodiversity targets and the corresponding Aichi Biodiversity Targets. This will facilitate their inclusion in the fourth Global Biodiversity Outlook and the mid-term review of the global Strategic Plan 2011-2020 prior to COP12, as requested by decision UNEP/CBD/COP/DEC/XI/3.

Planned indicator updates are listed in III.2.

### III.2 List of EU indicators available for each Aichi Biodiversity Target

In 2014, the following SEBI indicators will be updated:

- SEBI 001: Abundance and distribution of selected species
- SEBI 004: Ecosystem coverage
- SEBI 016: Freshwater quality
- SEBI 017: Forest: growing stock, increment and felling
- SEBI 018: Forest: deadwood
- SEBI 019: Agriculture: nitrogen balance
- SEBI 020: Agriculture: area under management practices potentially supporting biodiversity
- SEBI 026: Public awareness

The list of SEBI indicators, with links to indicator factsheets on the EEA Indicator Management System, is available on the Biodiversity Information System for Europe (BISE) at: [http://biodiversity.europa.eu/topics/sebi-indicators](http://biodiversity.europa.eu/topics/sebi-indicators)

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Please note that the online versions of SEBI indicators on the EEA Indicator Management System are currently being updated and the links to new versions will appear in the coming months.

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<thead>
<tr>
<th>Aichi Biodiversity Target</th>
<th>SEBI Indicators</th>
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<tbody>
<tr>
<td><strong>Strategic goal A: Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society</strong></td>
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<tr>
<td>1. By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.</td>
<td>1. SEBI 26: Public awareness</td>
<td>1. Updated in 2014</td>
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<tr>
<td>2. By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems.</td>
<td>Indicators to be developed under the ‘Mapping and assessment of ecosystems and their services’ initiative’s Natural Capital Accounting Pilot project</td>
<td>(to be determined)</td>
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<tr>
<td>3. By 2020, at the latest, incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimise or avoid negative impacts and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio-economic conditions.</td>
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<tr>
<td><strong>Strategic goal B: Reduce the direct pressures on biodiversity and promote sustainable use</strong></td>
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<tr>
<td>5. By 2020, the rate of loss of all natural</td>
<td>1. SEBI 04: Ecosystem coverage</td>
<td>1. Updated in 2014</td>
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</table>
### Aichi Biodiversity Target

**habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced.**

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<tr>
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| 6. By 2020, all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem-based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits. | 1. SEBI 02: Red List Index for European marine species  
2. SEBI 03: Conservation status of species of European interest (marine)  
3. SEBI 04: Ecosystem coverage (marine)  
4. SEBI 05: Conservation status of habitats of European interest (marine)  
5. SEBI 07: Nationally designated protected areas (marine)  
6. SEBI 08: Sites designated under the EU Habitats and Birds Directives (marine)  
7. SEBI 21: Fisheries: European commercial fish stocks  
8. SEBI 22: Aquaculture effluent water quality from finfish farms | 1. Updated in 2014 |

| 7. By 2020, areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity. | 1. SEBI 01: Abundance and distribution of selected species  
2. SEBI 02: Red List Index for European species  
3. SEBI 03: Conservation status of species of European interest  
4. SEBI 04: Ecosystem coverage  
5. SEBI 05: Conservation status of habitats of European interest  
6. SEBI 07: Nationally designated protected areas  
7. SEBI 08: Sites designated under the EU Habitats and Birds Directives | 1. Updated in 2014 |
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<tr>
<td></td>
<td>Birds Directives</td>
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<td>9.</td>
<td>SEBI 14: Fragmentation of river systems (when available)</td>
<td>9.</td>
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<tr>
<td>15.</td>
<td>SEBI 22: Aquaculture effluent water quality from finfish farms</td>
<td>15.</td>
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<td>8. By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity.</td>
<td>1. SEBI 09: Critical load exceedance for nitrogen</td>
<td>1.</td>
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<td>2. SEBI 15: Nutrients in transitional, coastal and marine waters</td>
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<tr>
<td>9. By 2020, invasive alien species and pathways are identified and prioritised, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment.</td>
<td>1. SEBI 10: Impact of invasive alien species in Europe</td>
<td></td>
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<tr>
<td>10. By 2015, the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimised, so as to maintain their integrity and function.</td>
<td>1. SEBI 11: Impact of climate change on bird populations</td>
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<td></td>
<td>2. SEBI 15: Nutrients in transitional, coastal and marine waters</td>
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<td>Strategic goal C: To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity</td>
<td>1. SEBI 03: Conservation status of species of European interest</td>
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<td></td>
<td>2. SEBI 05: Conservation status of habitats of European interest</td>
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<td>3. SEBI 07: Nationally designated protected areas</td>
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<td>measures, and integrated into the wider landscape and seascape.</td>
<td>4. SEBI 08: Sites designated under the EU Habitats and Birds Directives 5. SEBI 13: Fragmentation of natural and semi-natural areas 6. SEBI 14: Fragmentation of river systems (when available)</td>
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<tr>
<td>12. By 2020, the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.</td>
<td>1. SEBI 02: Red List Index for European species</td>
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<td>13. By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained and strategies have been developed and implemented for minimising genetic erosion and safeguarding their genetic diversity.</td>
<td>To be further developed</td>
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<tr>
<td><strong>Strategic goal D: Enhance the benefits to all from biodiversity and ecosystem services</strong></td>
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<td>14. By 2020, ecosystems that provide essential services, including services related to water and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities and the poor and vulnerable.</td>
<td>1. SEBI 13: Fragmentation of natural and semi-natural areas 2. SEBI 14: Fragmentation of river systems (when available)</td>
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<tr>
<td>15. By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15% of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.</td>
<td>1. SEBI 04: Ecosystem coverage 2. SEBI 05: Habitats of European interest</td>
<td>1. Updated in 2014</td>
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<tr>
<td>16. By 2015, the Nagoya Protocol on access to genetic resources and the fair and equitable sharing of benefits arising from their utilisation is in force and operational, consistent with national legislation.</td>
<td>1. [SEBI 24: Patent applications based on genetic resources — to be replaced by indicators covering the Nagoya Protocol]</td>
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<tr>
<td><strong>Strategic goal E: Enhance implementation through participatory planning, knowledge management and capacity-building</strong></td>
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<td>17. By 2015, each Party has developed, adopted as a policy instrument, and has commenced implementing, an effective, participatory and updated national biodiversity strategy and action plan.</td>
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</table>
18. By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels.

19. By 2020, knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied.

20. By 2020, at the latest, the mobilisation of financial resources for effectively implementing the Strategic Plan for Biodiversity 2011-2020 from all sources and in accordance with the consolidated and agreed process in the Strategy for Resource Mobilisation should increase substantially from the current levels. This target will be subject to changes contingent on resources needs assessments to be developed and reported by Parties.

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<td>19. By 2020, ...</td>
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<td>20. By 2020, ...</td>
<td>1. SEBI 25. ...</td>
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Appendix I — Information concerning the reporting Party and preparation of the fifth national report

A. Reporting Party

Contracting Party: European Union

NATIONAL FOCAL POINT
Full name of the institution: Directorate-General Environment, European Commission
Name and title of contact officer: François Wakenhut, Head of Unit, Biodiversity
Office BU 5 – 5/137, B-1049 Brussels, Belgium
Telephone: +32 2 2965380
Fax: +32 2 2968824
E-mail: francois.wakenhut@ec.europa.eu

CONTACT OFFICER FOR NATIONAL REPORT (IF DIFFERENT FROM ABOVE)
Full name of the institution: Directorate-General Environment, European Commission
Name and title of contact officer: Anne Teller, Biodiversity Policy Officer
Office BU 5 – 5/152, B-1049 Brussels, Belgium
Telephone: +32 2 2993856
Fax: +32 2 2968824
E-mail: anne.teller@ec.europa.eu

SUBMISSION
Signature of officer responsible for submitting national report
‘signed’ (François Wakenhut)
Date of submission: 19 June 2014

B. Process of preparation of national report

This report was prepared by the above-mentioned contact officer with support from colleagues from Directorate-General Environment, other European Commission services and the European Environment Agency.

Part I, which provides an overview of biodiversity status, trends and threats, is based on the information provided for the 2013 update of the EU’s Biodiversity Country Profile, which was drafted by the European Commission, including additional comments made by the European Environment Agency. Part II complements the EU submission of 2 July 2012 in response to notification 2012-046 on views on ‘Updating and Revision of the Strategic Plan’.

Most of the factual information used in this report is drawn from the ongoing mid-term review process on implementation of the EU 2020 Biodiversity Strategy due in 2015. Discussions on preparation of the 2015 mid-term review are taking place within the common implementation framework of Biodiversity and Nature Directors and the Coordination Group for Biodiversity and Nature, involving Member States and key stakeholder groups. Representatives of various European Commission services also provided updates on specific actions and targets.

A draft of the Fifth National Report underwent an inter-service consultation within the European Commission. Comments received in the course of this consultation were considered when finalising the report.

104 http://www.cbd.int/countries/?country=eur.
Appendix II — Further sources of information

The mid-term review on implementation of the EU 2020 Biodiversity Strategy will compile key information from a wide variety of sources. Progress on the mid-term review can be found on the Biodiversity Information System for Europe (BISE) under http://biodiversity.europa.eu/policy.

Appendix III — National implementation of the thematic programmes of work and plans under the Convention on Biological Diversity or decisions of the Conference of the Parties related to cross-cutting issues

A. Progress on targets of the Global Strategy for Plant Conservation

The European Commission has not developed a special instrument to implement the Global Strategy for Plant Conservation, but plants and other important species are covered by the Habitats Directive.

No particular information can be provided on the following targets 1, 3, 5, 7, 8, 9, 12, 13, 15 and 16.

Target 2: An assessment of the conservation status of all known plant species, as far as possible, to guide conservation action
The outcomes of the forthcoming EU-level assessment on the conservation status of species and habitats of community interest, covering the period 2007-13, will be published in 2015.

Target 4: At least 15 per cent of each ecological region or vegetation type secured through effective management and/or restoration
Over the last 25 years, on the legal basis of the Birds and Habitats Directives, the EU has built up a vast network of more than 27,000 protected areas throughout its Member States. Known as Natura 2000, the network covers an area of more than 100,000 km², which is 18% of the EU’s land area. It has also increased its share of EU marine areas by 25% since 2011. EU nature legislation, including Natura 2000, has led to the area protected for nature conservation more than tripling in the EU.

Target 6: At least 75 per cent of production lands in each sector managed sustainably, consistent with the conservation of plant diversity
By 2020, the EU aims to have maximised the share of agricultural and forested areas covered by biodiversity-related measures. The EU is also committed to bring about, by 2020, a measurable improvement in the provision of ecosystem services and in the conservation status of species and habitats that depend on, or are affected by, agriculture and forestry. Measures to achieve this will include enhancing direct payments for environmental public goods in the common agricultural policy, better targeting of rural development measures on biodiversity conservation, and encouraging the adoption of forest management plans that include biodiversity-specific measures.

Target 10: Effective management plans in place to prevent new biological invasions and to manage important areas for plant diversity that are invaded

The EU is preparing a dedicated legislative instrument to address common challenges associated with invasive alien species in the EU. The EU will also further integrate additional biodiversity concerns into its plant and animal health regimes and other relevant legislation. The European Alien Species Information Network\(^{106}\) aims to facilitate the exploration of various existing information sources on alien species in Europe, and to assist the implementation of European policies on biological invasions.

Target 11: No species of wild flora endangered by international trade

The EU is responsible for regulating trade in wildlife. The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) has been complemented throughout the EU by regulations that are directly applicable in Member States. Four regulations constitute the legal framework for all EU governments, regulating international and internal trade in wild animals and plants. For more information on CITES implementation and the European Union please see http://ec.europa.eu/environment/cites/home_en.htm.

Target 14: The importance of plant diversity and the need for its conservation incorporated into communication, education and public awareness programmes

The 2007-13 LIFE+ programme had a specific strand (LIFE+ Information and Communication) whose aim was to disseminate information and raise awareness on environmental issues. A number of projects co-financed under this strand directly or indirectly targeted plant biodiversity. The most relevant ones are listed below. In addition, each of the 455 LIFE+ Nature & Biodiversity projects co-financed by LIFE+, some three quarters of which aim to improve habitats and plant biodiversity, devote 5-15% of their budget to communication and awareness-raising actions. The new LIFE programme (2014-20) will continue to co-finance such work under the strands Environmental Governance and Information, and Nature and Biodiversity.

LIFE08 INF/B/000052
Increase awareness to curb horticultural introductions of invasive plants in Belgium

http://www.alterias.be

LIFE09 INF/PT/000045
Communicating to the socio-economic sustainability, human benefit and biodiversity in Natura 2000 sites in the Madeira archipelago

http://www.lifeecocompativel.com/

LIFE10 INF/PL/000673
Biodiversity Protection in Forest Areas, including Natura 2000 Areas — Promotion of Best Practices

http://www.bestpractice-life.pl

\(^{106}\) See http://easin.jrc.ec.europa.eu/.
LIFE10 INF/PL/000677
National awareness raising campaign ‘Discover your Nature’
http://www.gdos.gov.pl/ProjectCategories/viewProject/544/2/0/Poznaj_Swoja_Nature

LIFE10 INF/UK/000189
Futurescapes: promoting the development of green infrastructure in 34 priority areas throughout the UK
http://www.rspb.org.uk/futurescapes

LIFE10 INF/ES/000540
Boosting land stewardship as a conservation tool in the Western Mediterranean arch: a communication and training scheme
http://www.landstewardship.eu/

LIFE11 INF/ES/000665
Natura 2000: Connecting People with Biodiversity

LIFE11 INF/ES/000683
Natura 2000, an opportunity for everyone

LIFE11 INF/PL/000467
Roads for Nature — campaign promoting trees in Poland’s rural landscapes, as habitats and ecological corridors
http://aleje.org.pl

LIFE11 INF/DK/000891
Smooth methods of communication, cooperation and awareness-raising tools of the Natura 2000 plans
http://www.smart-natura.dk

LIFE11 INF/ES/000672
The key role of big trees and mature forests in biodiversity conservation
LIFE11 INF/CY/000863
An awareness-raising campaign in Cyprus for appreciating biodiversity in our life
http://www.cyprusbiodiversity.eu

LIFE12 INF/FR/000735
Mediterranean open pastoral habitats are an important resource! Let’s share our knowledge to preserve their biodiversity.
http://www.cenlr.org

LIFE12 INF/BG/000105
Promoting a sustainable herbal harvest in Bulgaria (SusHerb)
http://www.ecologybg.com

B. Progress on targets of the Programme of Work on Protected Areas

The EU component of the global network of protected areas is Natura 2000. It builds upon the Birds and Habitats Directives and provides a coherent ecological framework for protected areas to secure the long-term conservation of Europe’s most threatened species and habitats.

The Birds Directive (1979) was the first piece of EU legislation designed to preserve biological diversity in situ. A pan-European approach was necessary to coordinate and support national initiatives, especially when dealing with transborder bird migration. The Directive called for the establishment of special protection areas for endangered bird species. Wetlands are recognised in the Directive as being of particular importance for migratory birds.

The Habitats Directive (1992) established a common framework for the conservation of endangered species and habitats in the EU. It obliges Member States to designate and manage special areas of conservation.

The aim of Natura 2000 is to ensure the restoration or maintenance of natural habitats and species of Community interest at a favourable conservation status. It complements other protected wildlife areas designated at national, regional and local levels.

The land part of Natura 2000 is nearly completed and additional efforts are needed to finalise the marine network. The challenge is increasingly to effectively manage and restore sites within the Natura 2000 network.

For more information on Natura 2000, please see: