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COMMISSION STAFF WORKING DOCUMENT

Criteria and guidance for protected areas designations

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1. THE BIODIVERSITY STRATEGY'S MANDATE FOR WORK ON PROTECTED AREAS

Following the European Green Deal¹, the European Commission adopted, on 20 May 2020, a Communication on an "EU Biodiversity Strategy for 2030 – Bringing nature back into our lives" (subsequently referred to as the strategy).

Section 2.1 of the strategy concerns a coherent network of protected areas. It recognises that protected areas are important for the conservation of biodiversity and that the existing network of protected areas is not sufficiently large to safeguard biodiversity. There is evidence that the Aichi biodiversity targets, of 17% of land and inland waters and 10% of sea covered by protected areas, are insufficient³.

The strategy therefore sets the objective of establishing a truly coherent Trans-European Nature Network, to legally protect at least 30% of the land, including inland waters, and 30% of the sea in the EU, of which at least one third (10% of land and 10% of sea) to be under strict protection. These targets have been welcomed by the EU Council of Ministers in its October 2020 conclusions⁴.

These EU targets are coherent with the global targets proposed to the 15th Conference of the Parties (COP15) of the UN Convention on Biological Diversity and with the objectives of the Bern Convention⁵. As described in the strategy, currently 18% of land and 8% of sea in the EU are integrated in Natura 2000, with an additional 8% of land and 3% of sea covered by national protection schemes. Only 3% of land and 1% of sea are strictly protected⁶. It is important to note that there is a large variation among Member States for the terrestrial coverage of Natura 2000, ranging from 8% in Denmark to 38%

Dinerstein et al (2019), "A Global Deal For Nature: Guiding principles, milestones, and targets" in Science Advances, vol.5 no.4, https://www.science.org/doi/10.1126/sciadv.aaw2869

Maxwell et al (2020), "Area-based conservation in the twenty-first century", in Nature 586, https://www.nature.com/articles/s41586-020-2773-z

Visconti et al (2019), "Protected area targets post-2020" In Science vol 364, https://science.sciencemag.org/content/364/6437/239

¹ COM/2019/640 final, https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1576150542719&uri=COM%3A2019%3A640%3AFIN

² COM/2020/380 final, https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1590574123338&uri=CELEX%3A52020DC0380

³ See, for instance:

⁴ https://data.consilium.europa.eu/doc/document/ST-12210-2020-INIT/en/pdf

⁵ Council of Europe's Convention on the Conservation of European Wildlife and Natural Habitats, https://www.coe.int/en/web/conventions/cets-number-/-abridged-title-known?module=treaty-detail&treatynum=104

⁶ Estimates calculated on the basis of the IUCN Protected Area Management Categories 1 and 2 – https://www.eea.europa.eu/ims/nationally-designated-terrestrial-protected-areas

in Slovenia. The situation is similar for the marine coverage of Natura 2000 and the coverage of different ecosystems also varies significantly. More detailed information on the current situation and links to information on the national level are available in the website of the European Environment Agency (EEA), at https://biodiversity.europa.eu/protected-areas and https://biodiversity.europa.eu/countries.

All references to the EU seas in this document are to be interpreted as meaning sea areas under national jurisdiction of the Member States. References to national protection schemes are to be interpreted as including also sub-national schemes.

The strategy identifies the need for new protected areas to concentrate on areas of very high biodiversity value or potential, stating that these areas are the most vulnerable to climate change and should be subject to strict protection. Specifically, it identifies all remaining primary and old-growth forests as ecosystems that need strict protection aiming to ensure their conservation. The strategy also highlights that significant areas of other carbon-rich ecosystems, such as peatlands, grasslands, wetlands, mangroves and seagrass meadows should be strictly protected. The strategy also highlights the importance of nature and nature-based solutions, including the protection of wetlands, peatlands and costal ecosystems, for increasing net removals and climate adaptation.

The strategy states that the designation of additional protected and strictly protected areas, either to complete the Natura 2000 network or under national protection schemes, including the spatial protection measures to comply with the Water and Marine Strategy Framework Directives, will be a responsibility of the Member States.

The strategy also highlights that all protected areas should have clearly defined conservation objectives and measures. This applies to the new areas to be designated but also to all existing areas, including Natura 2000 sites and those under a national protection regime.

According to the strategy, the Commission, together with the Member States and the European Environment Agency, would put forward criteria and guidance for identifying and designating additional protected areas, including a definition of strict protection, as well as for appropriate management planning. This is the basis for this Commission Staff Working Document. The Commission would aim to agree these criteria and guidance with the Member States by the end of 2021.

The strategy states that the guidance to be put forward by the Commission would, among other things, indicate how other effective area-based conservation measures (OECMs)⁷ and greening of cities could contribute to the above-mentioned targets. It would also make the necessary links with the restoration targets in the strategy. Additionally, the EU's Bioeconomy Strategy highlights the importance of strengthening the resilience of land and sea ecosystems, ensuring their contribution to climate mitigation, and enhancing their biodiversity.

The protected areas targets relate to the whole EU and could be broken down according to biogeographical regions and marine regions, or at a more local level. Indeed this

⁷ See the definition of OECMs in section 3.3.2 below.

Commission Staff Working Document proposes that they should be achieved in each EU biogeographical region and sea basin. The strategy also states that particular focus would be placed on tropical and sub-tropical marine and terrestrial ecosystems in the EU's outermost regions.

The strategy highlights the importance of setting up ecological corridors in order to have a truly coherent and resilient Trans-European Nature Network, and of promoting and supporting investments in green and blue infrastructure, as well as cross-border cooperation among Member States, including through the European Territorial Cooperation⁸.

Finally, for Overseas Countries and Territories, the strategy encourages relevant Member States to consider promoting rules which are equal or equivalent to the EU environmental rules.

This Commission Staff Working Document reflects the wide consensus reached as a result of the discussions held within the framework of the Nature Directives Expert Group (NADEG). It takes into account the work done in other groups, such as the Marine sub-Expert Group and the Working Group on Forests and Nature, on definitions (e.g. 'old growth forest') or specific criteria (e.g. for the marine environment). All these groups include representatives of Member States and stakeholders.

The criteria and guidance included in this document do not affect in any way Member States obligations under the EU *acquis*. The criteria and guidance are non-binding and aim to help Member States fulfil the political commitment expressed in the above-mentioned Council conclusions⁹ when they welcomed the protected areas targets of the EU Biodiversity Strategy.

2. THE ROLE OF NATURA 2000

According to the strategy, the target of 30% of the land and 30% of the sea in the EU under legal protection by 2030 should be reached by completing the Natura 2000 network and by protection under national schemes¹⁰.

It is therefore clear that Natura 2000 will remain an essential part of a Trans-European Nature Network, and that the existing gaps in the Natura 2000 network need to be filled by Member States as soon as possible, in line with the Nature Directives' requirements and as part of their contribution to reaching the targets set by the strategy. This is particularly the case for marine areas, where important gaps in Natura 2000 still exist, which Member States should address on the basis of Article 4 and the criteria in Annex III of the Habitats Directive, as well as Articles 3 and 4 of the Birds Directive.

As highlighted by the EEA¹¹ and, more recently, by the European Court of Auditors¹², the Nature Directives do not cover all marine species and habitats. In the marine

National protection schemes are not limited to schemes that apply to the whole Member State, but also to regional and local protection schemes.

European Territorial Cooperation goal of Cohesion Policy (Interreg), https://ec.europa.eu/regional-policy/en/policy/cooperation/european-territorial/, see also section 6 below.

https://data.consilium.europa.eu/doc/document/ST-12210-2020-INIT/en/pdf

environment, therefore, the requirements of the Nature Directives are complemented by those of the Marine Strategy Framework Directive (MSFD)¹³, which, in Article 13(4), sets the obligation to contribute to coherent and representative networks of marine protected areas, adequately covering the diversity of the constituent ecosystems, as part of the measures that Member States need to take to achieve good environmental status. In addition, Article 8.2 of the Maritime Spatial Planning Directive¹⁴ indicates "nature and species conservation sites and protected areas" as one of the activites and uses of the marine space that Member States could consider when establishing their national maritime spatial plans¹⁵. Member States should clearly identify these areas and the rationale for integration in their maritime spatial plans. These requirements are unchanged and the Commission will continue to work cooperatively with the Member States to ensure their implementation as well as their enforcement as appropriate.

The need for clear site-specific conservation objectives and conservation measures for all Natura 2000 sites is a legal requirement that continues to apply. The Commission's guidance notes on the designation of special areas of conservation¹⁶ and on the establishment of conservation objectives¹⁷ and conservation measures¹⁸ will therefore continue to be the relevant guidance for all Natura 2000 sites. Similarly, the guidance on the establishment of conservation measures for marine Natura 2000 sites and MSFD-relevant measures under Article 11 of the Common Fisheries Policy Regulation¹⁹ continues to be relevant.

https://ec.europa.eu/environment/nature/natura2000/management/docs/commission_note/commission_note EN.pdf

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EEA report 3/2015: "Marine protected areas in Europe's seas", https://www.eea.europa.eu/publications/marine-protected-areas-in-europes.

¹² ECA's Special Report 26 (2020). Marine environment: EU protection is wide but not deep, https://www.eca.europa.eu/en/Pages/DocItem.aspx?did=57066.

¹³ Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy, OJ L 164, 25.6.2008

Directive 2014/89/EU of the European Parliament and of the Council of 23 July 2014 establishing a framework for maritime spatial planning, OJ L 257, 28.8.2014

Member States have to establish maritme spatial plans as per article 15.3 the Maritime Spatial Planning Directive.

https://ec.europa.eu/oceans-and-fisheries/system/files/2018-06/swd 2018 288 en.pdf

3. CRITERIA FOR THE IDENTIFICATION OF AREAS UNDER LEGAL PROTECTION (30% TARGET)

3.1. Ecological criteria

3.1.1. Introduction

The baseline figures on national protected areas that are mentioned in the strategy are derived from the Member States' reporting to the European Environment Agency for the Common Database on Designated Areas (CDDA).

It is likely, however, that some protected areas reported under the CDDA are protected for reasons that are not linked to the conservation of biodiversity and do not have conservation objectives and measures in place²⁰. In addition, the CDDA includes only a few OECMs at the moment.

Therefore, while Natura 2000 sites count towards the 30% target for protected areas because they have been designated for the protection of nature and biodiversity and are subject to a legal requirement for conservation objectives and measures, , other nationally protected areas and OECMs should be counted towards the 30% target only if they comply with a minimum set of criteria.

Thus, the criteria identified in this document to guide Member States in the designation of additional protected areas should also be used to screen which of the existing protected areas, other than Natura 2000 sites, and other spatial conservation measures that could be considered as OECMs can be counted towards the target in the strategy. In this regard, a process for the development of additional designations and for the screening of current nationally protected areas will be established, as described below.

The strategy does not include specific criteria for the identification of additional protected areas. However, significant work has been done in the past to identify areas based on their importance for conservation of biodiversity, setting up criteria that can be used for further designating protected areas.

In particular, **Annex III of the Habitats Directive**²¹ sets out criteria for the identification of special areas of conservation. They include:

- the significance of the presence of specific species and habitat types on a site;
- their degree of conservation;
- the degree of isolation of the species' population; and
- a global assessment of the value of a site for the conservation of those species and habitat types.

The current reporting under CDDA does not collect information on whether areas have clear areaspecific conservation objectives and measures for the protection of biodiversity. Additional information on nationally protected areas will therefore need to be collected with this reporting process.

²¹ Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora, OJ L 206, 22.07.92.

Although the Habitats Directive concerns the designation of sites for the protection of habitat types and species included in its Annexes I and II, similar criteria can be applied to other species and habitats or ecosystems which are not covered by the directive but fall within the general scope of the strategy.

The Birds Directive²² sets, in its Article 4, requirements for the designation of the most suitable territories, in number and size, as special protection areas for the conservation of wild birds. It is not specific in terms of criteria for identifying those most suitable territories, but the Court of Justice of the EU has specified that they need to be based on objectively verifiable ornithological criteria.

More detailed criteria have been developed by BirdLife International for Important Bird and Biodiversity Areas (IBAs)²³ and by IUCN for Key Biodiversity Areas (KBAs)^{24,25}. Although these criteria are not directly linked to a requirement to legally protect the identified areas, they provide a good scientific basis to guide the selection of areas to be protected. In particular, the criteria for the identification of IBAs and resulting lists of sites have been used in the past by the Commission and by the Court of Justice of the EU to assess the sufficiency of designations of special protection areas under the Birds Directive.

In addition to the 2007 Guidelines for the establishment of the Natura 2000 network in the marine environment²⁶, **criteria for the identification of marine protected areas** have been developed under various international processes such as the Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR)²⁷ and the Convention on the Protection of the Marine Environment of the Baltic Sea Area (HELCOM)²⁸. Furthermore, identification of areas based on scientific evidence as important for certain marine habitats or species could also be used, as those areas have been selected on the basis of specific criteria (for example, **important marine mammal areas²⁹**, **threatened or declining habitats identified by OSPAR³⁰ and HELCOM³¹ and vulnerable marine ecosystems identified by the International Council for the Exploration of the Sea (ICES)³²). In the Mediterranean Sea, the Protocol concerning Specially Protected Areas and Biological Diversity of the Barcelona Convention (SPA/BD Protocol)³³ provides criteria for the identification of areas of special**

²² Directive 2009/147/EC of the European Council and of the Parliament of 30 November 2009 on the conservation of wild birds, OJ L 20, 26.01.2010.

²³ http://datazone.birdlife.org/site/ibacriteria

²⁴ https://portals.iucn.org/library/node/46259

²⁵ The criteria for KBAs includes all IBAs.

 $^{{\}color{red}^{26}\,\underline{https://ec.europa.eu/environment/nature/natura2000/\underline{marine/docs/marine_gui}delines.pdf}}$

²⁷ https://www.ospar.org/documents?d=32398

²⁸ https://helcom.fi/action-areas/marine-protected-areas/background-of-helcom-mpas/selection-criteria/

²⁹ https://www.marinemammalhabitat.org/immas/

https://www.ospar.org/work-areas/bdc/species-habitats/list-of-threatened-declining-species-habitats#:~:text=The%20OSPAR%20List%20of%20Threatened%20and%2For%20Declining%20Species,consider%20to%20be%20in%20need%20of%20priority%20protection.

³¹ http://maps.helcom.fi/website/mapservice/?datasetID=d27df8c0-de86-4d13-a06d-35a8f50b16fa&features=MPA ID:113

³² https://www.ices.dk/data/data-portals/Pages/vulnerable-marine-ecosystems.aspx

³³ https://www.rac-spa.org/node/1036

importance for Mediterranean biodiversity, as well as the procedure and the steps to be followed to include these areas in the list of Specially Protected Areas of Mediterranean Importance. Criteria were also developed under the **Convention on Biological Diversity** (**CBD**) for the identification of **Ecologically or Biologically Significant Marine Areas**³⁴. According to the MSFD, the networks of marine protected areas should be coherent and representative, also covering species and habitats identified under international or regional agreements to which the Member States are parties.

It should be noted that all the existing criteria largely overlap but are more or less specific and have different levels of detail and target different habitats and species. For the identification of new protected areas, it is possible to use the more general criteria. However, where they exist, Member States should use more specific criteria for the habitats and species that those areas will aim to protect.

All wild birds naturally occurring in the EU are protected under the Birds Directive. For other species and habitats, extensive work has been done to identify those that are most endangered in the EU, through the elaboration of European red lists of species³⁵ and habitats³⁶. Member States and some regional sea conventions have, in many cases, used similar criteria to elaborate national or regional red lists, and the IUCN developed red lists of endangered species³⁷ and of ecosystems³⁸.

Furthermore, Annex I of the Technical Measures Regulation under the common fisheries policy³⁹ lists species for which there is a prohibition to fish for, retain on board, tranship, land, store, sell, display or offer for sale, identified as prohibited species.

The red lists and the list of prohibited species provide useful information on species and habitats that may not be listed in Annexes I and II of the Habitats Directive nor covered by the requirements of Article 4 of the Birds Directive but require specific conservation efforts.

It is worth noting that there is a broad agreement among conservation scientists that the Natura 2000 network's effectiveness, in its present form, is limited by the fact that it often includes areas that are too small, too disconnected from one another and not adequately managed to be effective in terms of nature conservation⁴⁰. Providing protection for more areas which are small and disconnected will therefore not be enough to reach the ambition of the strategy.

³⁴ https://www.cbd.int/doc/meetings/mar/ebsaws-2014-01/other/ebsaws-2014-01-azores-brochure-en.pdf

³⁵ https://ec.europa.eu/environment/nature/conservation/species/redlist_en.htm

³⁶ https://ec.europa.eu/environment/nature/knowledge/redlist_en.htm

³⁷ https://www.iucnredlist.org/

³⁸ https://www.iucn.org/theme/ecosystem-management/our-work/red-list-ecosystems

³⁹ Regulation (EU) 2019/1241 of the European Parliament and of the Council of 20 June 2019 on the conservation of fisheries resources and the protection of marine ecosystems through technical measures, OJ L 198, 25.7.2019.

⁴⁰ See, for example, Gaston, K.J., Jackson, S.F., Nagy, A., Cantu-Salazar, L. and Johnson, M., 2008, 'Protected Areas in Europe. Principle and Practice', *Annals of the New York Academy of Sciences*, 1134: 97–119.

3.1.2. Completion of the Natura 2000 network

According to the strategy, the designation of additional protected areas should either help to complete the Natura 2000 network or be under national protection schemes.

The completion of the **Natura 2000 network**, based on the criteria in Annex III of the Habitats Directive for special areas of conservation and on the IBA criteria or similarly robust ornithological criteria for special protection areas under the Birds Directive, should be done first and foremost by **addressing the identified gaps in site designations.** These are particularly important in the marine environment, especially offshore, but also concern terrestrial habitats and species. Since this concerns the fulfilment of a legal obligation, the designation of Natura 2000 sites aiming to complete the network needs to be the **first step towards reaching the protected areas targets in the strategy**.

In addition to addressing the gaps in designation, this process could also be used to examine the existing network and identify **sites that would need to be enlarged or connected** in order to better fulfil their conservation objectives.

3.1.3. Completion of coherent and representative networks of marine protected areas

Member States should make sure that, through the designation of new protected areas where necessary, under Natura 2000 or at national level, they comply with the legal obligations under Article 13 of the MSFD. This article requires Member States to include in their programmes of measures spatial protection measures contributing to coherent and representative networks of marine protected areas, adequately covering the diversity of the constituent ecosystems, such as special areas of conservation pursuant to the Habitats Directive, special protection areas pursuant to the Birds Directive, and marine protected areas established in the framework of international or regional agreements to which they are parties.

However, coherence and effectiveness at a regional level have not been fully addressed in the designation of marine protected areas, which are unevenly distributed across regions and across depth zones⁴¹. The Commission will continue to work to ensure that the legal requirements on marine protected areas are adequately implemented by Member States.

3.1.4. Designations under national protection schemes

The existing and future **designations under national protection schemes**, based on the different sets of ecological criteria described above, **may focus on the protection of species and habitat types covered by EU nature legislation**, even if they concern areas that would not need, according to that legislation, to be included in Natura 2000. This applies, for instance, to areas outside Natura 2000 hosting an Annex I habitat type for which the current Natura 2000 coverage is already considered sufficient, or areas which

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See, for example, Agnesi et al, 2020, Spatial Analysis of Marine Protected Area Networks in Europe's Seas III, ETC/ ICM Technical Report 3/2020, <a href="https://www.eionet.europa.eu/etcs/etc-icm/products/etc-icm-report-3-2020-spatial-analysis-of-marine-protected-area-networks-in-europe2019s-seas-iii#:~:text=ETC%2FICM%20Report%203%2F2020%3A%20Spatial%20Analysis%20of%20Marine%20Protected,seas%20established%20as%20of%202019%20%28excluding%20overseas%20territories

are needed to buffer the effects of climate change on Natura 2000 sites or to facilitate species migration. Such designations may include, in particular, areas contiguous to existing Natura 2000 sites, if the existing sites are already considered sufficient in terms of compliance with the legislation. They may also include land that is covered by one or more of the categories listed in Annex III point b) of the LULUCF Regulation review⁴².

It is expected, however, that additional designations will also focus on the protection of habitats and species that are not covered by the EU nature legislation and especially those identified in European or national red lists. Criteria such as those used for the identification of KBAs, including IBAs or, by extension, those in Annex III of the Habitats Directive, should guide the identification of the areas to be protected.

National designation of additional areas hosting wild pollinating insects, such as seminatural grasslands, will help deliver the strategy's objective of pollinator recovery in the longer term.

Considering that many marine habitats and species, including red-listed ones and prohibited species under Annex I of the Technical Measures Regulation under the common fisheries policy, are not protected under the Habitats and Birds Directives, these could be prioritised for protection under national protection schemes, which will significantly contribute to achieving the legal requirements of the MSFD, of the regional seas conventions and other international agreements to which Member States are parties, such as the Convention on Migratory Species⁴³ or the Convention on Wetlands of International Importance⁴⁴.

It is also worth noting that some areas which have been or are currently managed under LIFE projects are, for this reason, subject to protection requirements. Where such requirements are in line with the minimum criteria for protected areas as set in this document, those areas can be counted towards the target.

Similarly, fish stock recovery areas established under Article 8 of the Common Fisheries Policy Regulation⁴⁵ may also be considered, if they comply with the minimum criteria for protected areas.

Therefore, in terms of priorities for the designation of national protected areas, **Member States should start by identifying and designating areas which**, while they are not and will not need to be included in Natura 2000, **are important to increase the coherence of the Natura 2000 network and improve the connectivity** among Natura 2000 sites, including across national borders.

Secondly, Member States should identify species and habitats that require the establishment of additional protected areas. These should include, as described

44 https://www.ramsar.org/

Proposal for a Regulation of the European Parliament and of the Council amending Regulations (EU) 2018/841 as regards the scope, simplifying the compliance rules, setting out the targets of the Member States for 2030 and committing to the collective achievement of climate neutrality by 2035 in the land use, forestry and agriculture sector, and (EU) 2018/1999 as regards improvement in monitoring, reporting, tracking of progress and review, COM/2021/554 final, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021PC0554&qid=1642504788597

⁴³ https://www.cms.int/

⁴⁵ Regulation (EU) No 1380/2013 of the European Parliament and of the Council of 11 December 2013 on the Common Fisheries Policy, OJ L 354/22, 28.12.2013.

above, species and habitats covered by EU nature legislation (habitats listed in Annex I of the Habitats Directive, species listed in Annexes II, IV and V, and all wild birds, habitats to be protected under the MSFD), those identified under international or regional agreements to which the Member States are parties, as well as those included in European red lists or identified as prohibited species under the common fisheries policy. The identification of areas to be put under legal protection should be done using the most relevant criteria, among those described above, for the species and habitats that require protection.

Finally, Member States should identify additional species and habitats which are included in national or regional red lists and use a similar process to the one described above for the identification of the most relevant areas for those species and habitats which are not yet under legal protection.

3.1.5. Links with restoration

An important component of the strategy is the EU Nature Restoration Plan. The strategy specifies that the Commission, subject to an impact assessment, will put forward a proposal for legally binding EU nature restoration targets.

Without pre-empting the legal requirements for the protection of areas that are subject to restoration under that future instrument, if the restored areas comply (or are expected to comply once restoration produces its full effect) with the criteria for protected areas, these restored areas should also contribute towards the EU targets on protected areas.

On the other hand, protected areas can also provide an important contribution to the restoration targets in the strategy, by creating the conditions for restoration efforts to be successful.

3.1.6. Links with climate change

Climate change and biodiversity loss are interdependent and need to be addressed in an integrated manner. In this prospect, several EU policies, including the Adaptation Strategy⁴⁶, the EU Climate Law⁴⁷, the proposal to amend the regulation on land use, landuse change and forestry (LULUCF)⁴⁸, the proposal to revise the Renewable Energy Directive⁴⁹, and the communication "Sustainable carbon cycles"⁵⁰ also highlight the importance of protecting biodiversity from climate change impacts and to support climate action.

The Adaptation Strategy highlights the need to better understand the interdependencies between climate change, ecosystems, and the services they deliver as major shifts in terrestrial ecosystems and vegetation types on the European Union's land area are expected during this century, including in protected areas. The EEA report on 'State of Nature in the EU' published in 2020 states that global warming is already having noticeable impacts on species and ecosystems, and it qualifies **climate change as an**

⁴⁶ COM/2021/82 final, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2021%3A82%3AFIN

Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality ('European Climate Law'), OJ L 243, 9.7.2021.

⁴⁸ COM/2021/554 final, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52021PC0554

⁴⁹ COM/2021/557 final, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2021:557:FIN

https://data.europa.eu/doi/10.2775/57117

'emerging threat'⁵¹. Without adaptation measures, it can be expected to further weaken the effectiveness of today's network of protected areas⁵². However, Article 5 of the European Climate Law requires the relevant Union institutions and the Member States to ensure continuous progress in enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change.

Protecting wetlands, peatlands, coastal and marine ecosystems, are examples of nature-based solutions whose implementation on a larger scale would increase climate resilience and contribute to multiple Green Deal objectives. Through carbon farming, the Commission will promote a new business model for land-based carbon removals, including financial incentives to rollout nature-based solutions. Under the EU Climate Law, which highlights the importance of nature-based solutions that can benefit climate change mitigation, adaptation and biodiversity protection, Member States shall promote nature-based solutions and ecosystem-based adaptation.

The proposal to amend Regulation (EU) 2018/841, as part of the package for delivering the Green Deal, aims to strengthen the contribution of the LULUCF sector to the 2030 climate ambition of at least 55% net emission reduction and the 2050 climate neutrality. The proposal aligns objectives with related policy initiatives, including biodiversity protection. In particular, the proposal includes amendments to the Governance Regulation⁵³ to put in place measures increasing the accuracy of the monitoring and reporting of greenhouse gas emissions and removals on land under biodiversity protection.

The proposal for the revision of the Renewable Energy Directive, as part of the package for delivering the Green Deal, sets out additional concrete safeguards, including enlarging no-go areas for biomass sourcing. In addition to prohibiting the source of agricultural biomass from land with a high biodiversity value, the proposal includes prohibiting the sourcing of forest biomass from primary forests and limiting it in highly biodiverse forests to ensure no interference with nature protection purposes.

The communication "Sustainable Carbon Cycles" promotes carbon farming as a new green business model for healthier ecosystems, and highlights the critical role of increasing protected areas for generating carbon removals and reaching EU climate objectives. In 2022, the Commission will propose a carbon removal certification framework to set up robust monitoring, reporting and verification of the carbon removed from the atmosphere at the level of individual land holdings.

Therefore, when identifying additional areas to be protected, Member States need to take particular account of the links between biodiversity protection and climate change, in terms of ecosystems contributing to climate change mitigation (e.g. peatlands, forests, seagrass meadows), and adaptation (e.g. through drought prevention and flood protection or through forest protection against wildfires) as well as those which are particularly vulnerable to the impacts of climate change and need to be made more resilient. The EU Climate Change Adaptation Strategy, the European Climate-ADAPT platform and

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https://www.eea.europa.eu/publications/state-of-nature-in-the-eu-2020

⁵² See the review of new scientific and technical information on biodiversity and climate change and potential implications for the work of the Convention on Biological Diversity. CBD/SBSTTA/23/INF/1. 2019. https://www.cbd.int/meetings/SBSTTA-23

Regulation (EU) 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the Governance of the Energy Union and Climate Action, OJ L 328, 21.12.2018

national climate change adaptation strategies, plans and platforms provide useful information for this purpose.

In particular, special attention should be given to the protection of carbon-rich ecosystems, but also of ecosystems which have a lower carbon content but more extensive coverage and therefore can provide a significant contribution to mitigate climate change. Such ecosystems are particularly relevant for their capacity to store carbon, but may also need to be protected to avoid the release to the atmosphere of the carbon that they currently store. For example, in the marine environment the extensive shelf sediments provide significant potential for carbon sequestration if they are healthy and left undisturbed. Similarly, coastal wetlands and seagrass meadows store blue carbon and offer natural solutions for coastal defence.

Particular attention should also be given to creating the adequate conditions for the movement of species or habitats and more generally for increasing nature's capacity to adapt to climate change.

3.2. Management effectiveness

The designation of protected areas can only contribute to the overall goal of the strategy, to put biodiversity on the path to recovery by 2030, if these areas are adequately and effectively managed and are not allowed to deteriorate.

The strategy specifies that **all protected areas need to have clearly identified conservation objectives and measures**. The existence and implementation of adequate management plans or equivalent management tools for protected areas, which include the necessary **monitoring and review mechanisms**, contributes significantly to the effectiveness of protection.

The Commission has already produced guidance on setting conservation objectives⁵⁴ and establishing conservation measures for Natura 2000 sites⁵⁵. The Commission has also adopted a series of guidance documents concerning the management of Natura 2000 sites, including in relation to specific economic activities⁵⁶. Updated guidance on Natura 2000 and climate change is expected to be published in the course of 2022. Although these documents were developed specifically for Natura 2000 sites, to address the legal obligations under Article 6 of the Habitats Directive, the guidance provided may be applied more generally to the establishment of conservation objectives and conservation measures aimed at protecting biodiversity in protected areas. It is possible, however, that these are established at a more general level for nationally protected areas.

The setting up of conservation objectives and measures to deliver them is the first fundamental step to ensure the effectiveness of protected areas. Conservation objectives

https://ec.europa.eu/environment/nature/natura2000/management/docs/commission_note/commission_note2_EN.pdf

https://ec.europa.eu/environment/nature/natura2000/management/docs/commission_note/comNote%20conservation%20measures EN.pdf

⁵⁴

⁵⁵

Available in https://ec.europa.eu/environment/nature/info/pubs/directives en.htm

should be SMART⁵⁷, based on sound science and on the ecological needs of each area. Should Member States rely on OECMs, **tailored conservation objectives and measures would be necessary also for OECMs**.

When conservation objectives and measures are in place, it is important to assess the management effectiveness of protected areas to keep track of the progress towards the commitments of the strategy and make any necessary adjustments. Today, most systems that assess management effectiveness are based on the International Union for Conservation of Nature's World Commission for Protected Areas (IUCN-WCPA) framework. The most widely used methods include the Rapid Assessment and Prioritisation of Protected Area Management Tool (RAPPAM)⁵⁸ and the Management Effectiveness Tracking Tool (METT)⁵⁹, both of which have been used occasionally by some EU Member States to assess the management effectiveness of their Natura 2000 sites or their nationally protected areas. Furthermore, tools such as the IUCN Green List of Protected Areas⁶⁰ may help Member States in assessing the effectiveness of the management and governance of protected areas.

In border regions there can be a significant added value of a cross-border approach, contributing to increased management effectiveness, as differing national approaches may undermine management effectiveness. Establishment of European legal bodies of a cross-border nature, such as European Groupings of Territorial Cooperation (EGTCs)⁶¹, may be considered for the joint management of cross-border protected areas.

Considering the legal obligations under the Nature Directives and the commitments of the strategy regarding management effectiveness, the Commission has launched a study to develop and test a methodology to assess the management effectiveness of marine Natura 2000 sites (and other EU marine protected areas). The methodology will be discussed with Member States and finalised in 2022. It could then be extended to terrestrial Natura 2000 sites and other protected areas, enabling an EU-wide assessment of progress towards the strategy's key commitment to effectively manage all protected areas.

Without prejudice to existing obligations under the Birds and Habitats Directives, Member States are expected to put in place the necessary governance systems and allocate sufficient resources to ensure that all protected areas, in Natura 2000 or under national protection schemes, as well as all OECMs are adequately managed and monitored.

⁵⁷ Objectives are SMART if they are specific, measurable, achievable, realistic and time-bound.

Ervin J. (2003) Rapid Assessment and Prioritization of Protected Area Management (RAPPAM) Methodology, http://assets.panda.org/downloads/rappam.pdf

^{59 &}lt;a href="https://www.iucn.org/news/protected-areas/202112/management-effectiveness-tracking-tool-mett-new-edition-mett-handbook-launched">https://www.iucn.org/news/protected-areas/202112/management-effectiveness-tracking-tool-mett-new-edition-mett-handbook-launched

⁶⁰ https://www.iucn.org/regions/europe/our-work/biodiversity-conservation/natura-2000-europes-protected-areas-network/iucn-green-list/life-green-list-natura-2000

^{61 &}lt;u>https://ec.europa.eu/regional_policy/en/policy/cooperation/european-territorial/egtc/</u>

3.3. Formal designation criteria for reaching the EU 30% target

3.3.1. Natura 2000 sites and other protected areas

As mentioned above, Natura 2000 still has gaps, in particular for what concerns marine areas. The first action for expanding the coverage of protected areas in the EU is therefore necessarily the designation of additional Natura 2000 sites or the enlargement of existing sites, in order to complete the network according to the legal requirements of the Birds and Habitats and Directives.

For additional protected areas, other than Natura 2000 sites, although "legal protection" is not defined in the strategy, it is clear that temporary formal or informal mechanisms do not effectively contribute to reaching the ambition of the strategy. A contribution to that ambition requires a long-term commitment to protect specific areas of land and sea. This long-term commitment may include, when adequate, seasonal restrictions (e.g. on fisheries) that are repeated every year for a sufficiently long time to ensure that they produce a tangible long-term impact.

Whether that long-term commitment is reached through a **formal legal designation**, an administrative act or contractual means depends on existing national practices and on a case-specific analysis of the most effective tool and opportunities. This may concern public land but also private land conservation commitments. In any case, administrative or contractual arrangements should have a **minimum duration that is set on the basis of the ecological requirements of the species or habitats to be protected**.

The designation instrument of each protected area, independently of its legal character, should **identify clearly the natural values** for which the area is protected. It should also identify **the conservation objectives** for those natural values and **measures to reach them**, or establish a mechanism for their timely identification. The designation instrument should also describe the mechanism through which the conservation measures will be **regularly reviewed** on the basis of science, taking into account their effectiveness and the progress achieved.

3.3.2. Other effective area-based conservation measures

The strategy specifically mentions that the Commission guidance will indicate how other effective area-based conservation measures (OECMs) and greening of cities could contribute to the targets.

According to the definition adopted under the Convention on Biological Diversity, "other effective area-based conservation measure" means "a geographically defined area other than a Protected Area, which is governed and managed in ways that achieve positive and sustained long-term outcomes for the *in situ* conservation of biodiversity, with associated ecosystem functions and services and where applicable, cultural, spiritual, socioeconomic, and other locally relevant values"⁶².

OECMs may therefore include areas which have some form of legal protection that is not related to the protection of habitats and species (e.g. areas designated for water protection, flood prevention areas, agroforestry landscapes, military areas with restricted

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⁶² CBD/COP/DEC/14/8 of 13 November 2018, https://www.cbd.int/doc/decisions/cop-14/cop-14-dec-08-en.pdf

access, fisheries restriction measures, underwater cables sites) but indirectly promote the conservation of biodiversity⁶³.

OECMs can be counted towards the EU target if:

- the area is covered by a national or international legislative or administrative act or a contractual arrangement aiming to achieve long-term conservation outcomes;
- conservation objectives and measures are in place; and
- effective management and monitoring of the biodiversity in the area is in place.

3.3.3. Greening of cities

Greening of urban and peri-urban areas is covered in the strategy mostly in the chapter about an EU Nature Restoration Plan. The strategy stresses the need to systematically integrate the promotion of healthy ecosystems, green infrastructure and nature-based solutions into urban planning.

Nature and biodiversity play a crucial role in supporting mental and physical human health, as demonstrated during the COVID-19 lockdown period. Urban and peri-urban protected areas have a great potential for providing an escape from increasing stressful, noisy, polluted surroundings and delivering to citizens the health benefits of nature. Furthermore, the public recognition of such areas as having a high ecological value can help create a sense of place and ownership to the citizens and increase awareness about the need to protect nature and biodiversity. Finally, urban and peri-urban protected areas can also support adapation to climate change e.g. by providing cooling or flood prevention functions.

It is worth noting that cities host more natural values than generally recognised. In fact, about 11 000 Natura 2000 sites are at least partially within city boundaries, as are also many areas protected under national schemes. Other urban and peri-urban areas, without being legally protected, are important components of green or blue infrastructure, adding to urban biodiversity and providing connectivity among protected areas and therefore contributing to the coherence of the protected areas network.

The specific measures mentioned in Section 2.2.8 of the strategy concern mostly connectivity among protected areas, as mentioned below in relation to the general coherence of a Trans-European Nature Network. Some measures, however, such as the creation of urban forests, urban wetlands and parks, may be done in a way that is consistent with the criteria described above for designation of new protected areas.

Urban and peri-urban green areas should be counted towards the EU target if they are designated as protected areas or are recognised as OECMs and comply with the criteria for OECMs listed above.

IUCN criteria for recognising and reporting C

d reporting OECMs are available

in

3.4. The EU coordination process

The responsibility for the identification, designation and adequate and effective management of protected areas lies with the Member States.

All **Member States are expected to contribute** towards reaching the strategy protected areas targets, to an extent that is **proportionate to the natural values they host and to the potential they have for nature restoration**.

Each Member State is expected to submit to the Commission a list of existing protected areas⁶⁴ (in addition to Natura 2000) which fulfil the criteria as well as **an initial pledge for new areas to be designated** explaining:

- (1) which criteria were used for their identification;
- (2) the scientific evidence that leads to their selection for designation; and
- (3) the mechanism that will be put in place to ensure their effective and adequate management and monitoring.

Member States should also explain how their pledges contribute to reaching the EU-level targets set in the strategy. In this context, Member States are expected to carefully consider whether or not existing protected areas other than Natura 2000, as well as OECMs, meet the criteria set out above, in particular whether or not they are effectively managed. This information should be reported using an electronic tool that will be developed by the Commission and the European Environment Agency, and should be made publicly available.

The current Natura 2000 biogeographical process is being expanded to cover work done under the strategy, in particular concerning a pledge-and-review process for the targets on improving conservation trends and status of protected species and habitats, as well as the targets on protected areas. This process covers all terrestrial and freshwater ecosystems, and a similar regional process will deal with the marine environment. Through these processes, the Commission will also support and improve cross-border coordination.

The initial pledges of the Member States related to protected areas designations will be discussed in the framework of biogeographical meetings with the participation of national authorities, relevant stakeholders and experts. Member States may be asked to revise their pledges on the basis of the conclusions of those meetings so that they all contribute in a proportionate way to reaching the targets. The regional sea conventions may contribute to the discussions at marine biogeographical region level and other existing groups, namely the EU Biodiversity Platform and the Water and Marine Strategy Framework Directives Common Implementation Strategies, will be involved where relevant.

It is essential that these discussions focus not only on the natural value and effective management mechanisms of protected areas but also on the ecological coherence of the network (see Section 5.1).

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⁶⁴ These can be reported for individual protected areas or for types of protected areas, in which case they should include relevant data, such as spatial coverage and management systems in place.

The Commission's tentative planning for undertaking this work under the biogeographical process is divided into three steps for each biogeographical region:

- Step 1, expected to take place at the beginning of 2022, will consist of an introductory meeting to launch the process and clarify what Member States are expected to submit in terms of pledges, and to discuss how the contribution of each Member State should be ensured;
- Step 2, expected to take place in the first semester of 2023, will consist of a biogeographical seminar to discuss the pledges made by Member States and review them at biogeographical level, with a view to agreeing steps to ensure completeness and coherence of the implementation of the targets;
- In Step 3, in late 2023, a virtual meeting will take place to assess progress in view of
 an interim evaluation of the implementation of the strategy, including whether
 adjustments of the criteria are needed.

Although a more precise timing for each biogeographical or marine region will be discussed in the meetings planned in Step 1, the national pledges should be submitted to the Commission sufficiently in advance of the Step 2 seminars to allow for an adequate preparation of the discussions.

The biogeographical seminars will provide the opportunity to assess the consistency of the initial pledges of the Member States with the relevant criteria and whether they are sufficient to establish a functional, representative and ecologically coherent network and reach the targets at EU and biogeographical level. The Commission will also work with the Member States and stakeholders to promote dissemination of good practices for the identification of new protected areas and for the management of all protected areas, both within Natura 2000 and under national protection schemes.

Once the designations of new protected areas and the recognition of OECMs is in place, these will need to be reported through the existing electronic reporting systems for Natura 2000 and the CDDA.

3.5. Stakeholder involvement

Effective stakeholder participation is crucial in all stages of protected area management, from the identification and designation phases to the management and monitoring. The aim should be to create local ownership. It is especially important to respect the rights of indigenous peoples and local communities when designating new protected areas.

It is therefore essential that Member States involve all relevant stakeholders, including land owners, managers and users, indigenous peoples, local communities and NGOs in the identification, designation and management of new protected areas, in a fair and participatory way, in line with the Aarhus Convention and in accordance with national procedures. In particular, designation of protected areas in private land, when envisaged, should be done with the full involvement of the landowners and adequate compensation mechanisms in accordance with national law. Likewise, local communities, including women and youth, should be engaged in decision-making processes that affect their livelihoods and use rights.

3.6. Monitoring and reporting

The functioning of a pledging system as described above requires that Member States gradually provide a certain amount of information on the baseline and their pledges. The discussion on the Member States' pledges in the framework of the biogeographical process will need to be based on **Member States' reporting on**:

- a) existing protected areas that should be counted towards the strategy's targets, including areas reported under the CDDA which fulfil the ecological and formal criteria described above and possibly other areas not previously reported that fulfil the same conditions;
- b) when this is not already available in the CDDA reporting, information on the **natural values** that led to the decision to protect the areas concerned;
- c) **national pledges for new designations**, including geographically explicit information on the areas to be designated, information on the natural values or ecosystem functions that led to the selection of each area linked to the specific criteria used for the identification of areas to be protected;
- d) information on how **conservation objectives and conservation measures** will be established, which form they will take (inclusion in designation instrument, management plan or other), and what governance will be put in place to ensure adequate management and monitoring of the newly designated or existing areas.

Furthermore, according to the strategy, the Commission will assess by 2024 whether the EU is on track to meet its 2030 targets or whether stronger actions, including EU legislation, are needed. This assessment will be based on reporting by Member States on Natura 2000 and on reporting on other protected areas in CDDA. The Natura 2000 and CDDA reporting will need to be adapted so that they can serve this purpose, namely to include information on management effectiveness.

Remote sensing data from Copernicus will be used to provide geospatial information on the designated areas. This information will allow for further analyses of their role in meeting conservation objectives, as well as climate change mitigation and adaptation goals, including contributing to Member States' obligations under the Governance Regulation⁶⁵ to monitor greenhouse gas emissions and removals associated to land.

Regulation (EU) 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the Governance of the Energy Union and Climate Action, OJ L 328, 21.12.2018

4. CRITERIA FOR THE IDENTIFICATION OF AREAS UNDER STRICT PROTECTION (10% TARGET)

4.1. Ecological criteria

4.1.1. Natural processes

The strategy sets a target of at least one third of all protected areas in the EU, representing 10% of EU land and 10% of EU sea, to be under strict protection by 2030. It is therefore clear that strictly protected areas are a subset of the 30% protected areas target and the criteria described above for legally protected areas also apply to strictly protected areas.

In the context of the 10% target in the Biodiversity Strategy, strictly protected areas are defined as follows: "Strictly protected areas are fully and legally protected areas designated to conserve and/or restore the integrity of biodiversity-rich natural areas with their underlying ecological structure and supporting natural environmental processes. Natural processes are therefore left essentially undisturbed from human pressures and threats to the area's overall ecological structure and functioning, independently of whether those pressures and threats are located inside or outside the strictly protected area".

Strict protection is not an end in itself, but should be applied in areas hosting natural features which can thrive through natural processes, such as primary and old-growth forests, raised bogs or seagrass beds.

The condition that natural processes should be left essentially undisturbed by human pressures and threats means that **many strictly protected areas will be non-intervention areas**, where only limited and well-controlled activities that either do not interfere with natural processes or enhance them will be allowed. Such activities may, in many cases, include scientific research, natural disaster prevention (e.g. wildfires), invasive alien species control, non-intrusive activities and installations, non-intrusive and strictly controlled recreational activities, when such activities are compatible with the conservation objectives of the areas on the basis of a case-by-case assessment.

In addition, strictly protected areas may also be areas in which active management sustains or enhances natural processes, such as semi-natural grasslands or some peatlands. In these cases, management activities should be limited to those necessary for the restoration and/or conservation of the habitats and species for whose protection the area has been designated. For example, mowing/grazing of grasslands would be considered compatible with strict protection if it is limited to the intensity needed for optimising the conservation value of the grasslands in question. Similarly, population control of wild ungulates to ensure a good status for the habitats and species targeted by the protected areas when natural predation is insufficient would be considered compatible with strict protection. Instead, activities that interfere with natural processes by not sustaining or enhancing them should not be allowed.

Activities authorised in strictly protected areas should also include those that are **necessary for the restoration of the natural values** of the areas in question. They should also include activities linked to small-scale subsistence resource use for indigenous peoples, provided it does not interfere with the conservation objectives of the area.

Strictly protected areas already exist in most Member States, sometimes with different designations and with varying degrees of protection (included in the zoning of protected areas, or through designations such as nature reserves, scientific reserves, marine "notake zones", etc.).

The concept of strict protection is also present in the IUCN Guidelines for Applying Protected Area Management Categories⁶⁶, and it is often associated with the definitions of categories Ia, strict nature reserve, Ib, wilderness area, and II, national park. It should be noted, however, that while the definitions of categories Ia and Ib are largely in line with the objective specified in the strategy, of leaving natural processes essentially undisturbed to respect the areas' ecological requirements, the definition of category II allows for a process of zoning, in which strict protection does not necessarily apply to the whole protected area.

In 2013, the Commission developed guidelines on wilderness in Natura 2000⁶⁷. An annex to those guidelines lists species and habitats protected under the Nature Directives that benefit from wilderness management. This is not only relevant to areas with existing wilderness values but also applicable to areas with potential for rewilding.

The areas under strict protection have to be functionally meaningful, so that their strict protection regime can produce the expected results in terms of conservation. Although this will depend on the specific ecosystems being protected, strictly protected areas should be large enough for key natural processes to take place essentially undisturbed. The identification of buffer zones, within protected areas but not subject to strict protection, may be used as a tool to ensure the functioning of these undisturbed natural processes, where a sufficient expansion of the strictly protected area itself may not be feasible.

As mentioned before, protected areas can provide an important contribution to the restoration objectives in the strategy. This is particularly the case for areas which can be restored naturally by stopping or limiting some of the existing pressures from human activities. Placing such areas under strict protection, in particular in the marine environment, will in some cases be sufficient to lead to the restoration of the natural values they host. It will also often provide socio-economic benefits by allowing for the replenishing of fisheries resources outside the marine protected area⁶⁸.

4.1.2. Primary and old-growth forests

In addition to the Bidioversity Strategy, the EU Forest Strategy⁶⁹ includes measures to step up EU efforts to protect forest biodiversity, including the mapping and the strict protection of all remaining primary and old growth forests. The Commission is working in cooperation with Member States and stakeholders to agree, by the end of 2021, on a common definition for primary and old-growth forests and the strict protection regime.

^{66 &}lt;a href="https://portals.iucn.org/library/sites/library/files/documents/PAG-021.pdf">https://portals.iucn.org/library/sites/library/files/documents/PAG-021.pdf and special edition for MPAs: https://www.iucn.org/content/guidelines-applying-iucn-protected-area-management-categories-marine-protected-areas-0

⁶⁷ https://ec.europa.eu/environment/nature/natura2000/wilderness/pdf/WildernessGuidelines.pdf

Partnership for Interdisciplinary Studies of Coastal Oceans. 2011. The Science of Marine Reserves (2nd Edition, Europe), https://www.piscoweb.org/science-marine-reserves

⁶⁹ COM/2021/557 final, https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=COM:2021:572:FIN

Member States should urgently engage in completing the mapping and monitoring of these forests, and ensuring no deterioration until they start to apply the protection regime.

According to the strategy, it will be crucial to define, map, monitor and strictly protect all the EU's remaining primary and old-growth forests, to ensure their conservation. Work towards a common definition of primary and old-growth forests is currently ongoing in the Working Group on Forests and Nature.

When that group has achieved its goal, all areas identified as primary and old-growth forests according to the agreed definition should be granted strict protection.

The estimated cover of primary and old-growth forests is only around 3% of EU forested land and patches are generally small and fragmented. Primary and old-growth forests are not only among the richest EU forest ecosystems, but they store significant carbon stocks and also remove carbon from the atmosphere, while being of paramount importance for biodiversity and the provision of critical ecosystem services.

4.1.3. Other carbon-rich ecosystems

The strategy also states that, significant areas of other carbon-rich ecosystems⁷⁰, such as peatlands, grasslands, wetlands, mangroves and seagrass meadows, should also be strictly protected.

It is important to note the reference to "significant areas", in contrast with "all" for primary and old-growth forests.

Member States should therefore identify, when setting conservation objectives for each protected area, the cases in which the presence of carbon-rich ecosystems requires a level of protection that goes beyond the legal protection afforded to all protected areas, and place them under strict protection. Although the decision on which areas to place under strict protection will have to be based on the ecological requirements of each area, particular attention needs to be given to the strategy's objective of placing "significant areas" of carbon-rich ecosystems under strict protection.

This should be seen in conjunction with the EU's goal of climate neutrality by 2050 and the objective to reduce greenhouse gases by at least 55% in 2030 and with the EU Climate Adaptation Strategy, as well as the EU Mission on Adaptation to Climate Change⁷¹. The protection and restoration of carbon-rich ecosystems has a significant contribution to make to the achievement of those goals whose implementation tools will be further developed through the ongoing revision of climate/energy legislation. Therefore, Member States should fully harness the potential of climate mitigation and adaptation that is offered by the protection and restoration of nature in the EU.

4.1.4. Other ecosystems

In addition to primary and old-growth forests and other carbon-rich ecosystems, due to their importance for the fight against climate change, the strategy states that there should

Carbon-rich ecosystems, by definition, sequester (both store and pump) the most carbon from the atmosphere, helping with stabilisation and climate change mitigation.

https://ec.europa.eu/info/research-and-innovation/funding/funding-opportunities/funding-programmesand-open-calls/horizon-europe/missions-horizon-europe/adaptation-climate-change-including-societaltransformation_en

be a special focus on **areas of high biodiversity value or potential**, which should be granted special care in the form of strict protection. It is for Member States, on the basis of the ecological requirements of each of the natural values present in an area, to place them under strict protection. This exercise will be part of the setting of area-specific conservation objectives.

In particular, ecosystems that provide important ecosystem services or those that need increased resilience to adapt to climate change should be prioritised. For example, aquatic ecosystems of high value because of their pristine state or because of their important role in ecological connectivity for migratory fish could qualify for strict protection. Similarly, endangered ecosystems essential for replenishing fish stocks should be prioritised. The strategy underlines that achieving good environmental status of marine ecosystems, including through strictly protected areas, must involve the restoration of carbon-rich ecosystems as well as important fish spawning and nursery areas.

Strict protection may also be relevant for areas which are critical for certain habitats or species, such as relic sites or areas which are essential for the life or reproduction of endangered species.

4.2. Management effectiveness

Strictly protected areas need to have clear area-specific conservation objectives. Being strictly protected means, according to the strategy, that natural processes should be left essentially undisturbed. Management measures are therefore expected to be restricted to activities absolutely essential for supporting or enhancing natural processes, such as fire prevention and combat, managed burning for nature conservation, management of invasive species, or disease control, if proportionate to the threats they are expected to face and in line with the area's conservation objectives.

Area-specific management plans or equivalent management tools will need to identify, depending on the ecological requirements of the area and projected climate scenarios, which activities are compatible with strict protection of the area and under which conditions. All such activities need to be regulated, controlled and enforced. The compatibility of the authorised activities with the strict protection regime and the ecological needs of the natural values that require strict protection should be regularly reassessed.

4.3. Formal designation criteria

First of all, strictly protected areas need to be legally protected. The requirements set above for protected areas in general therefore also apply to all strictly protected areas.

A protected area may be strictly protected in its entirety, but it is also possible that the area under strict protection is only a part of a wider protected area. Furthermore, depending on the natural features being protected, a strictly protected area may be part of Natura 2000 or it may be under a national protection scheme.

Strictly protected areas can be designated through specific national legal instruments, such as some existing nature reserves, through specific long-term contractual agreements, or through zoning in the management planning of wider areas. In these cases, the strictly protected areas have to be clearly identified in the management plans and those plans have to have a legal standing.

4.4. The EU coordination process

The process described above for protected areas under legal protection (30% target), including initial pledges by Member States and their review within bio-geographic and marine regions meetings, will also be followed for strictly protected areas.

As for protected areas in general, the contributions of individual Member States towards the strategy targets have to be proportionate to the natural values they host that would benefit from strict protection in accordance with the strategy, and to the potential they have for restoration of those same natural values.

4.5. Monitoring and reporting

The principles laid out above for protected areas in general also apply to strictly protected areas.

It should be noted that the CDDA reporting includes information about the IUCN Protected Area Management Category, which can be helpful for the monitoring of progress towards the strict protection targets.

5. A COHERENT TRANS-EUROPEAN NATURE NETWORK

5.1. Coherence of the network

The targets set in the strategy, for protecting at least 30% of the land and 30% of the sea in the EU, are part of a more general objective of building a truly coherent Trans-European Nature Network, integrating ecological corridors.

The aim of setting up a coherent European ecological network was first introduced into EU legislation by the Habitats Directive, which established the Natura 2000 network. The Habitats Directive provides, in its Annex III, a set of criteria aiming to achieve such a network of special areas of conservation. Its Article 10 provides that Member States shall endeavour, where they consider it necessary, to improve the ecological coherence of the Natura 2000 network by managing the features of the landscape which are of major importance for wild fauna and flora, with regard to their migration, dispersal and genetic exchange. In this regard, the strategy's specific target aiming at providing space for nature in agricultural areas by bringing back at least 10% of agricultural area under high-diversity landscape features also contributes to making the network coherent. A well-planned network of such features in agricultural areas could support functional biodiversity and connectivity and act in a complementary and synergistic way with the network of protected areas.

In addition, for freshwater, the Water Framework Directive includes river continuity as a supporting element for ecological status of water bodies, therefore establishing requirements for measures to maintain or re-establish connectivity.

In the marine environment, Article 13 of the Marine Strategy Framework Directive requires programmes of measures to include spatial protection measures "contributing to coherent and representative networks of marine protected areas, adequately covering the diversity of the constituent ecosystems, such as special areas of conservation pursuant to the Habitats Directive, special protection areas pursuant to the Birds Directive, and marine protected areas as agreed by the Community or Member States concerned in the framework of international or regional agreements to which they are parties". Some Member States have started to include species and habitats from the regional sea conventions in their programmes of measures and their marine protected areas.

Significant work has been done to develop methodologies and criteria for the assessment of ecological coherence of networks of marine protected areas, notably by the regional sea conventions^{72,73}. The EEA and the European Commission reviewed available methodologies with a view to proposing an EU-level approach^{74,75}.

The Commission, together with the EEA, in its review of the pledges for designations of protected areas that Member States will put forward in the above-mentioned biogeographical process, will rely on this work to assess the overall coherence of the Trans-European Nature Network, proposing corrective action as necessary.

A true Trans-European Nature Network needs to take into account links between protected areas in the EU and those in other European countries integrated in the Emerald Network under the Bern Convention. Coherence of the network at a pan-European level should therefore also be considered.

5.2. Ecological corridors

In a coherent network, protected areas should not be seen in isolation, but need to be considered together with ecological corridors that help prevent genetic isolation, allow for species migration, facilitate adaptation to climate change and, more generally, maintain and enhance healthy ecosystems⁷⁶.

Parts of these ecological corridors will fulfil the criteria described above for protected areas and should therefore be counted towards the corresponding targets in the strategy. Many of them, however, are too small to be manageable as protected areas. Member States, when preparing their pledges for designations of protected areas, should assess carefully how to ensure sufficient connectivity in the network, including across borders,

⁷² https://helcom.fi/media/publications/BSEP148.pdf

⁷³ https://oap-cloudfront.ospar.org/media/filer_public/50/bb/50bba6bf-4d16-4066-ad51-169d1784979d/p00730 ospar mpa status-report 2018.pdf

⁷⁴ https://www.eionet.europa.eu/etcs/etc-icm/products/etc-icm-reports/assessing-europes-marine-protectedarea-networks-proposed-methodologies-and-scenarios

⁷⁵ https://ec.europa.eu/environment/marine/publications/index_en.htm

⁷⁶ See, for instance, Hilty et al (2020), Guidelines for conserving connectivity through ecological networks and corridors, in https://portals.iucn.org/library/sites/library/files/documents/PAG-030-En.pdf

taking into account the specificities of habitats and species, and decide on the best ways to do it, through the designation of protected areas, buffer zones, landscape features or otherwise. In particular, some of the restoration targets set out in the strategy aim at improving connectivity among protected areas and should be seen as significant contributions to a coherent network. Hence, the existence of ecological corridors and their functionality will be part of the assessment of coherence of the Trans-European Nature Network mentioned in the previous section.

5.3. Greening of cities

As mentioned above, the specific measures mentioned in the strategy concerning urban and peri-urban areas are mostly about connectivity among protected areas and provision of ecosystem services.

Such areas should be given due consideration, when legal protection is not feasible, as part of ecological corridors that aim to increase the coherence of the Trans-European Nature Network.

6. FUNDING

Reaching the objectives of the strategy requires significant investment but also opens opportunities for developing sustainable economic activities.

Member States need to rely on all available sources for this purpose, using national public and private funds and EU funding instruments. Therefore, the needs related to the protected areas targets can be identified in the prioritised action frameworks (PAFs)⁷⁷ developed at national or regional level.

On that basis, Member States should take into consideration such needs in their programming for EU funds, also making the best possible use of the funding possibilities for the post-COVID recovery under the Recovery and Resilience Facility and InvestEU.

According to the Biodiversity Strategy for 2030, at least €20 billion a year should be unlocked for spending on nature.

30% of the EU budget, under both the long-term budget and NextGenerationEU, will be spent to fight climate change. This includes a specific attention to biodiversity protection.

In addition, the Interinstitutional Agreement on budgetary discipline, on cooperation in budgetary matters and on sound financial management, as well as on new own resources⁷⁸, provides for:

PAFs are strategic multiannual planning tools, aimed at providing a comprehensive overview of the measures that are needed to implement the EU-wide Natura 2000 network and its associated green infrastructure, specifying the financing needs for these measures and linking them to the corresponding EU funding programmes.

⁷⁸ Interinstitutional Agreement between the European Parliament, the Council of the European Union and the European Commission on budgetary discipline, on cooperation in budgetary matters and on sound

"expenditure contributing to halting and reversing the decline of biodiversity, on the basis of an effective, transparent and comprehensive methodology set out by the Commission, in cooperation with the European Parliament and with the Council, and, where relevant, in accordance with sectoral legislation, with a view to working towards the ambition of providing 7,5 % in 2024 and 10 % in 2026 and in 2027 of annual spending under the Multiannual Financial Framework (MFF) to biodiversity objectives, while considering the existing overlaps between climate and biodiversity goals".

The new Common Agricultural Policy (CAP) offers many opportunities to Member States for the protection of biodiversity. The possibilities opened by the new delivery model and the green architecture of the new CAP, including the enhanced conditionality and new eco-schemes should be be exploited by the Member States.

Therefore, Member States should consider and address their funding needs in the preparation of their CAP Strategic Plans and national programmes for EU funds, including the European Maritime, Fisheries and Aquaculture Fund (EMFAF), the programmes for the use the European Regional Development Fund and Cohesion Fund, incuding Interreg, as well as in applications for funding under Horizon Europe.

The LIFE Programme⁷⁹ can also provide some of the necessary support. In particular, future strategic nature projects (SNAPs) proposals should explain how the proposed project will contribute to reaching the objectives of the strategy and, in particular, the protected areas targets. LIFE standard projects can also help in the identification, mapping, designation, setting and implementation of conservation measures. In line with the strategy, preparatory work for the designation of new protected areas and for improving the biodiversity focus on existing protected areas is indicated as a policy priority for LIFE Nature and Biodiversity funding in the LIFE multiannual work programme for 2021-24.

The Technical Support Instrument (TSI)⁸⁰ provides technical support to design and implement reforms in EU Member States. The support is provided, upon request, across a wide range of policy areas, such as the implementation at Member State level of the Natura 2000 network and of protected areas in the context of the EU Biodiversity Strategy, in line with EU priorities such as the green and digital transition.

Moreover, under the EU research programme Horizon Europe, the Commission launched calls for proposals for scientific support to the implementation of the protected areas targets under the strategy, in particular under the Destination "biodiversity and ecosystems services" and under the "Blue Parks" initiative of the EU Mission "Restore our Ocean and Waters by 2030"82.

financial management, as well as on new own resources, including a roadmap towards the introduction of new own resources, OJ L 433, 22.12.2020.

https://cinea.ec.europa.eu/life en

https://ec.europa.eu/info/overview-funding-programmes/technical-support-instrument-tsi_en#:~:text=The%20Technical%20Support%20Instrument%20%28TSI%29%20is%20the%20EU,and%20does%20not%20require%20co-financing%20from%20Member%20States

HORIZON-CL6-2021-BIODIV-01-08, HORIZON-CL6-2021-BIODIV-02-01, HORIZON-CL6-2021-BIODIV-01-12:

