

# Project Application Form Under the Recovery and Resilience Facility

<b>1. Project name.</b>
“Integration of ecosystem approach and application of nature based solutions in the protection of Natura 2000 protected sites”
<b>2. Description of the project (objectives, main activities).</b>
<p><b>Rationale:</b></p> <p>This project proposal takes the following documents into account:</p> <ul style="list-style-type: none"><li>- The <b>annual Country Report for Bulgaria (2019)</b> regarding the EU environmental policy implementation review states that more efforts are needed to identify the site-site-specific conservation objectives and measures, to create an effective structure for the management of Natura 2000 and to strengthen the capacity of the administration and other bodies working in the field of management of Natura 2000. It also states integrating nature and biodiversity policy into other sectoral policies will not only lead to better management of the protected sites and protection of species, but could provide additional sources of financing;</li><li>- In the <b>2019 and 2020 European Semester, the Council of the EU</b> recommends that Bulgaria should focus its investment in the field of environmental and digital transformation, particularly in the field of environmentally friendly and clean production and the use of the energy and resources, the environmental infrastructure and sustainable transport, thus contributing to the gradual decarbonisation of the economy. The semester further states that priority should be given to ready-to-implement public investment projects and that private investment should be stimulated in order to accelerate economic recovery;</li><li>- According to the <b>EU's Annual Sustainable Growth Strategy for 2021</b>, Bulgaria should undertake actions to improve its environmental infrastructure, improve, and protect its biodiversity. Protection and restoration of biodiversity and natural ecosystems and ensuring sustainable food systems is of key importance for increasing the carbon sinks, enhancing resilience and prevention of the emergence and dissemination of future disease outbreaks. This will also create new economic opportunities in rural areas via more sustainable land use;</li><li>- <b>EU's Next Generation Recovery Plan</b> focuses on finding opportunities and solutions to restore ecosystems and protect biodiversity, emphasising their essential role in maintaining life and food, economic and social development, human well-being and achieving the EU's climate neutrality objectives;</li><li>- In order to achieve the objectives of the <b>European Green Deal</b> to restore biodiversity and decrease pollution, as well as implementation of the requirements of the <b>Taxonomy Regulation</b>, which is a key instrument for achieving the Green Deal's objectives, it is necessary to encourage private sector investment in environmentally friendly and sustainable projects and economic activities with a significant positive impact on climate and the environment. Assessments of the ecological status of biodiversity and ecosystems are included in the list of</li></ul>

indicators for assessing the impact of planned investments, in accordance with the above Regulation. These indicators have become compulsory to apply in the assessment of public and private investment and projects starting from 2023. Next, **digital transformation** is the basis for improving the governance for biodiversity by creating an opportunity for free data sharing between the business and the public sector, which will contribute to better management decision-making;

- **The Strategy for Biodiversity 2030** focuses on the introduction of nature-based solutions for restoring of ecosystems and biodiversity. It is expected that nature-based solutions will link the objectives and measures for protection of biodiversity with the climate objectives.

The implementation of the recommendations and guidelines presented in the strategic documents and other documents requires implementation of a reform to increase the responsible administration capacity in the long term to implement the policy for biodiversity conservation so that the relevant goals of this policy could be achieved.

At present, Bulgaria faces the following challenges in managing biodiversity:

- ✓ *It is a priority to complete the special areas of conservation designation process and put in place clearly defined site-specific conservation objectives and the necessary conservation measures for each habitat and species of Community interest in all Natura 2000 sites* – all orders for protection areas for birds in Bulgaria have been issued by 2014. Orders for designation of 86 habitat areas out of a total of 234 areas have been issued by 2020. 36 orders have been promulgated in the State Gazette. The orders of 43 more special areas are undergoing public consultation. The process of designation of special areas of conservation for habitats is planned to be completed at the end of the first quarter of 2021. In line with the Commission guidelines, Bulgaria is in the process of identifying site-specific conservation objectives and measures for the sites and, in this regard: a four-tier approach has been developed for identifying the objectives of Natura 2000; a document of Natura 2000 objectives has been developed, which identifies the objectives of the first three tiers; site-specific conservation objectives and measures for a total number of 32 sites in Bulgaria are under development. **The site-specific conservation objectives and measures for more 309 sites still need to be developed.** These objectives and measures will serve as a basis for the development of management plans of the protected sites, which are planned to be funded under the Programme for the Environment 2021-2027;
- ✓ *Establish efficient management structures for the Natura 2000 network, with sufficient administrative and financial capacity* – the large territory of the Natura 2000 network in Bulgaria and the diverse land ownership therein requires concentrated efforts to manage the network involving all stakeholders. In this regard, an approach for management of the environmental network has been developed, which foresees building a structure at national and regional level. The financing of the structure is planned to be obtained from OP “Environment” 2014-2020 and to continue under the Programme for the Environment 2021-2027;
- ✓ *Address shortcomings in the implementation of the nature directives (in particular the authorisation of plans and projects) and integration of the policy in the other sectoral policies* – based on the site-specific conservation objectives and measures developed the quality of the assessments of the compatibility of plans, programmes and projects will be improved to ensure that they will not have an adverse impact

on the achievement of the objectives of the protected sites. In the presence of clear and site-specific conservation objectives and measures for the protected sites, they could be acknowledged by other sectoral policies, such as agriculture, forestry, tourism, etc.

- ✓ *Complete the process of mapping, biophysical assessment and monetary valuation of ecosystems and ecosystem services* – the typology of ecosystems in Bulgaria, the methods for mapping and assessment of their ecological condition, as well as the ecosystem services have been elaborated under the project “Methodological Support for Ecosystem Services Mapping and Biophysical Valuation” (MetEcoSMap). Currently, 9 types of ecosystems outside Natura 2000 network have been mapped on the territory of Bulgaria. A biophysical assessment has been made with respect to them (this mapping and the relevant biophysical assessment have been completed as part of 7 projects funded by Programme BG03 of the EEA Financial Mechanism. 7 more projects have been implemented following the initiative of non-governmental organisations in the field of nature conservation, including projects implementing private payment schemes for ecosystem services, involving the tourism and agriculture sectors in the specific protected sites. Under the “MAYA” project financed under Horizon 2020 programme model accounts for the environment, forest and freshwater ecosystems are being developed for certain pilot regions. A methodology for monetary valuation of the ecosystem services in the tourism sector is planned to be developed through funding under the EEA Financial Mechanism. **The ecosystems on the territory of Natura 2000 have not been mapped. There is no monetary valuation of the ecosystems and their services. The green infrastructure has not been mapped and no assessment of its status has been made as an element ensuring the connectivity of the Natura 2000 network in and outside the protected sites. The entire information about mapping and assessment of the ecosystems and ecosystem services should be made publicly available so that stakeholders could obtain timely and adequate information that is necessary for their decision-making process, including with respect to both investment planned and their environmental sustainability;**
- ✓ *Integrate the objectives to achieve climate neutrality into the biodiversity conservation objectives by creating conditions for implementation of nature-based solutions* – in order to implement such solutions, the expertise of interdisciplinary teams of experts is necessary, with the active involvement of the local authorities, the non-governmental sector, the business, the land owners and the citizens. All this requires concentrated efforts to identify working solutions that would be widely supported in order to attract the necessary interest for their wider application. So far we have implemented pilot initiatives in this field with EU financing, e.g. in relation to the protection of the birds and salt production in Atanasovsko lake, creation of a “pocket park” in Dolno Ezerovo neighbourhood, city of Burgas, etc. Based on the identified site-specific conservation objectives for the protected sites, the assessment of the ecosystem condition and the green infrastructure elements, **further action is necessary to develop feasible nature-based solutions** that could be implemented on-site based on the specific conditions in the areas;
- ✓ *Accelerate the process of implementation of the Taxonomy Regulation in the*

**assessment of environmental sustainability of investment projects** – to implement the Regulation, the assessment of the ecosystem condition in Bulgaria needs to be available and the site-specific conservation objectives and measures for protected sites need to be developed. This will make it possible to identify the baseline values under the different criteria for sustainable investment and will provide the necessary data and information to conduct assessment based on these criteria.

To address these challenges, a reform is necessary that could bring about structural changes in the parameters addressing the problems identified, so that sustainable enhancement in biodiversity management could be achieved.

Based on the foregoing, the **main objective of this project** is:

- ✓ **Ensuring quality and modern management of biodiversity and Natura 2000 in Bulgaria.**

**Site-specific conservation objectives :**

- ✓ To complete the process of identification of site-specific conservation objectives and measures for the Natura 2000 network protected sites (development of site-specific conservation objectives and measures for 309 protected sites, which comprise of approximately 30% of the territory of Bulgaria);
- ✓ To complete the process of mapping and assessment of the ecosystem condition and ecosystem services and the green infrastructure on the territory of Natura 2000 network. Monetary valuation of ecosystems and their services (mapping and assessment of the condition of 9 ecosystems on the territory of Natura 2000, monetary valuation of the ecosystem services of the 9 ecosystems) and visualisation of the digital databases in the existing information environment;
- ✓ To develop and integrate nature-based biodiversity recovery solutions in the management of Natura 2000 mitigating the impact of climate change and contributing to new jobs and green growth (packages of nature-based solutions linked to the 9 types of ecosystems).

The planned objectives will be achieved via implementation of the following work packages:

- ✓ **Work Package 1:** Research;
- ✓ **Work Package 2:** Analyses and assessments;
- ✓ **Work Package 3:** Deployment;
- ✓ **Work Package 4:** Communication, consulting and capacity building for implementation;
- ✓ **Work Package 5:** Project management.

**WORK PACKAGE 1: RESEARCH**

As part of this work package, all the necessary research will be conducted, which will organise the data and information available that are necessary for the implementation of the activities under Work Package 2, Work Package 3 and Work Package 4. The work package will include the following activities:

**Activity 1:** Research on past experience and good practices in the field of identification of

site-specific conservation objectives and measures for protected sites, for mapping and assessment of the ecosystems and ecosystem services, as well as for the development of nature-based solutions.

This activity will include an analysis of the experience gained in Europe and Bulgaria, with an overview of projects and initiatives already implemented in this field. The analysis will focus on:

- ✓ The Commission's guidelines on the identification of site-specific conservation objectives and measures for protected sites, or mapping and assessment of the ecosystems and ecosystem services, as well as for the development of nature-based solutions;
- ✓ Guidance papers and reports from the activity of the MAES Working Group;
- ✓ Analytical reports and results from implemented projects, including projects implemented in Bulgaria;
- ✓ Identification of past experience and good practices that could be applied in the implementation of the activities under Work Package 2, Work Package 3 and Work Package 4;
- ✓ Development of an analytical report from researching experience and good practices.

*Milestone 1:* Experience and good practices identified, that could be used for the implementation of Activity 2 of Work Package 1, as well as for the implementation of the activities under Work Package 2, Work Package 3 and Work Package 4.

*Input indicator 1:* Member states identified for researching their past experience and good practices

- Baseline value 0;
- Target value 5 EU member states, including Bulgaria.

*Output indicator 1:* Analytical report from the research on past experience and good practices

- Baseline value 0;
- Target value 1.

*Result indicator 1:* Presence of a good research and information basis for development of the methodological foundation for conducting the other research under this work package.

- Baseline value 0;
- Target value 1, corresponding to sufficient data and information necessary for the development of the methodological foundation for conducting the other research under this work package.

*Period for implementation of activity:* 3 months

*Budget for implementation of activity:* EUR 100 000.

**Activity 2:** Development/adaptation and upgrading of the methodological foundation for identification of site-specific conservation objectives and measures for the protected sites, for mapping and assessment of the ecosystems and their services, for mapping and assessment of the green infrastructure, and for monetary valuation of the ecosystem services.

Under this activity, and based on the results from Activity 1, the following methodological guidelines will be adapted:

- ✓ Adaptation and upgrading of the methodological foundation for identification of site-specific conservation objectives and measures for the protected sites of the Natura

2000 network – elements of the methodological foundation are developed for 32 selected protected sites. Considering the high number of areas (309) for which site-specific conservation objectives and measures need to be developed, it is necessary to review and analyse the methodological guidelines that have been developed so far in Bulgaria and, where necessary, elaborate on them, by taking due account of the variety of specifics in these areas, the results from the application of the existing approaches for work and the application of nature-based solutions, as well as to analyze the data applicability for the reporting under the both Natura 2000 Directives;

- ✓ Adapting and upgrading the methodological foundation for mapping and assessment of the ecosystem condition and ecosystem services – the methods for mapping and assessment of the ecosystem condition and ecosystem services that have been developed so far need to be adapted to the framework for integrated ecosystem assessment (Burkhard, 2016). The last guidelines of the MAES Working Group will be taken into account and will be included in the 5th report of the group<sup>1</sup>;
- ✓ Development of a methodological foundation for mapping and assessment of green infrastructure – there is no such methodology available at present;
- ✓ Development of a methodology for monetary valuation of the ecosystem services – there is no such methodology available at present;
- ✓ Identification of the necessary data and information for the application of the abovementioned methodological instruments – the purpose is to identify the information that needs to be collected, both in terms of data available and new field data to be collected under this project.

*Milestone 2:* Developed/adapted methodological foundation for identification of site-specific conservation objectives and measures for the protected sites, for mapping and assessment of the ecosystems and their services, for mapping and assessment of the elements of the green infrastructure, and for monetary valuation of the ecosystem services.

*Input indicator 2:* Available methods for identification of site-specific conservation objectives and measures for protected sites and for mapping and assessment of the ecosystems and their services.

- Baseline value 0;
- Target value 11 (2 for identification of site-specific conservation objectives and measures for protected sites and 9 for mapping and assessment of the ecosystems and their services).

*Output indicator 2:* Developed/adapted and upgraded methods for identification of site-specific conservation objectives and measures for the protected sites, for mapping and assessment of the ecosystems and their services, as well as for monetary valuation of the ecosystem services.

- Baseline value 11 (2 for identification of site-specific conservation objectives and measures for protected sites and 9 for mapping and assessment of the ecosystems and their services);
- Target value 24 (2 existing methodologies for identification of site-specific conservation objectives and measures for protected sites, 1 adapted methodology

---

<sup>1</sup> [https://ec.europa.eu/environment/nature/knowledge/ecosystem\\_assessment/pdf/5th%20MAES%20report.pdf](https://ec.europa.eu/environment/nature/knowledge/ecosystem_assessment/pdf/5th%20MAES%20report.pdf)

for identification of site-specific conservation objectives and measures for protected sites, 9 existing methodologies for mapping and assessment of ecosystems and their services outside Natura 2000, 10 adapted methodologies for mapping and assessment of ecosystems and their services in Natura 2000 – for the 9 ecosystems under MAES and 1 for urbanised ecosystems, 1 new methodology for mapping and assessment of the elements of the green infrastructure, 1 methodology for monetary valuation of ecosystem services).

*Result indicator 2:* Presence of a methodological foundation for conducting the other research under this work package.

- Baseline value 0;
- Target value 1.

*Period for implementation of activity:* 4 months

*Budget for implementation of activity:* EUR 200,000.

**Activity 3:** Collection and organisation of data and information available for identification of site-specific conservation objectives and measures for the protected sites, for mapping and assessment of the ecosystems and their services, for mapping and assessment of the elements of the green infrastructure, and for monetary valuation of the ecosystem services.

As part of this activity, the available data and information that are necessary for the implementation of the methodological instruments under Activity 2 will be collected and organised. This includes:

- ✓ Data and information available from projects already implemented;
- ✓ Data and information from the national monitoring of biodiversity;
- ✓ Statistical data on certain socio-economic indicators;
- ✓ Other types of information identified as necessary under Activity 2, including maps of the distribution of biological organisms and abiotic factors of the environment, statistical data for quantification of the indicators included in the methods for assessment of the ecosystems condition, etc.

The sufficiency of data for the purpose of successful application of the methodological instruments under Activity 2 will be analysed in order to identify any inconsistencies and deficit of data that should be collected via fieldwork under the project.

Based on this a plan for collection of new field data will be developed.

*Milestone 3:* Collected and organised existing information that is necessary for the application of the methodological instruments under Activity 2. Identified need of new data and information to be collected under the project.

*Input indicator 3:* Available data and information for the application of the methodological instruments under Activity 2.

- Baseline value 0;
- Target value 1, corresponding to all available data.

*Output indicator 3:* Organised package of available data and information. Plan for collection of new field data

- Baseline value 0;
- Target value 2 (1 package of available data and information, 1 plan for collection of new field data).

*Result indicator 3:* Identified field effort for implementation of Activity 4 of this work package

- Baseline value 0;
- Target value 1.

*Period for implementation of activity: 4 months*

*Budget for implementation of activity: EUR 1 445 000*

#### **Activity 4: Field studies**

As part of this activity all field research will be completed for collection of the necessary new field data, so that the activities under Work Package 2 and Work Package 3 can be implemented. This includes:

- ✓ Collection of field data about the status of the target species and natural habitats necessary for the identification of site-specific conservation objectives and measures for the protected sites from Natura 2000 network;
- ✓ Collection of field data necessary for mapping and assessment of the ecosystems and their services on the territory of Natura 2000 network;
- ✓ Collection of field research necessary for mapping and assessment of the green infrastructure elements (mainly for the territory of Natura 2000 network, where, in case of identified need, field research outside this network will also be planned);
- ✓ Collection of field data necessary for the monetary valuation of the ecosystem services.

The field research will take place in line with the plan for collection of new field data developed under Activity 3. Considering the overlapping territorial scope of the planned field research, they can be combined in the cases where the necessary expertise is similar. This will contribute to the more effective and efficient spending of the financial resources and will optimise the field efforts. The fieldwork will be performed over two field seasons.

The data and information collected will be organised in a database for the purpose of implementing the activities under Work Package 3.

*Milestone 4:* Collected and organised new information that is necessary for the subsequent analyses under Work Package 2 and Work Package 3.

*Input indicator 4:* Plan for collection of new field data. Human resources, expertise, field work equipment

- Baseline value 0;
- Target value 1, corresponding to all inputs.

*Output indicator 4:* Database with all new field data collected

- Baseline value 0;
- Target value 1 (1 database).

*Result indicator 4:* New data and information provided for identification of site-specific conservation objectives and measures for 309 protected sites, for mapping the ecosystems on the territory of Natura 2000, for development of a map of the green infrastructure elements, for assessment of the ecosystem condition and ecosystem services, for assessment of the green infrastructure elements, and for monetary valuation of the ecosystem services.

- Baseline value 0;
- Target value 1, corresponding to a package of new data for the purposes of the analyses under Work Package 2 and Work Package 3.

*Period for implementation of activity: 32 months*

*Budget for implementation of activity: EUR 10,285,000*



## WORK PACKAGE 2: ANALYSES AND ASSESSMENTS

As part of this work package all necessary analyses and assessments related to identification of site-specific conservation objectives and measures for the protected sites, for mapping and assessment of ecosystems and their services and for mapping and assessment of the green infrastructure will be completed. The work package will include the following activities:

**Activity 5:** Identification of site-specific conservation objectives and measures for 309 protected sites

The objectives should be:

- ✓ specific by territories;
- ✓ comprehensive;
- ✓ specific with respect to the characteristics;
- ✓ specific with respect to the desired state;
- ✓ in line with the environmental requirements for the different types of natural habitats under annex I and the species under annex II of the Habitats Directive available in these territories;
- ✓ reflecting the significance of the territory for maintaining or recovering the types of habitats or biological species encountered in the territory to a level of favourable conservation status, as well as for the connectivity of Natura 2000 network.

The same requirements will apply to special protected sites classified under Art. 4 of the Birds Directive.

For this purpose, the following tasks will be implemented:

- ✓ short overview of the status of each target site at biogeographical level, Natura 2000 network level and protected area level;
- ✓ identification of target values for the individual parameters of each target site in each protected area where it is subject to conservation;
- ✓ identification of objectives of the individual protected sites;
- ✓ development of nature-based solutions for each protected area in order to achieve the objectives that have been set out;
- ✓ development of reports for each protected area;
- ✓ development of a catalogue of nature-based solutions, containing packages of measures by protected area;
- ✓ updating the SDF for the protected sites.

*Milestone 5:* Site-specific conservation objectives and measures developed for 309 protected sites. This is a prerequisite to start the consultations envisaged in Work Package 4.

*Input indicator 5:* Organised packages of data developed under Work package 1. Methodology for identification of the objectives developed under Work Package 1

- Baseline value 0;
- Target value 2, corresponding to all inputs.

*Output indicator 6:* Analytical reports presenting the site-specific conservation objectives and measures for the 309 protected sites. Updated SDF and orders for designation of 309 protected sites.

- Baseline value 32;

- Target value 341.

*Output indicator 7:* A catalogue of nature-based solutions, containing packages of measures by protected area

- Baseline value 0;
- Target value 1.

*Result indicator 5:* Management of the protected sites in line with the developed site-specific conservation objectives and measures (updated orders for designation of protected sites)

- Baseline value 32;
- Target value 341.

*Period for implementation of activity:* 17 months

*Budget for implementation of activity:* EUR 1,275,000

#### **Activity 6:** Mapping of the ecosystems and the green infrastructure elements

Mapping will be performed on the basis of the available information organised under Activity 3 and the field data collected under Activity 4.

The 9 types of ecosystems in Bulgaria on the territory of Natura 2000 network will be mapped in accordance with the guidelines of MAES. This will take place through the development of a series of layers of key factors, such as distribution of different groups of organisms, the biophysical environment (soil types, water basins and wetlands, geology) and the spatial interactions. In this way, the ecosystems will share a set of climate, geophysical and biochemical conditions, biological conditions (including species composition and interactions) and formation of socio-economic factors (as far as the human impact on the different ecosystems will be different). Mapping will take place in a GIS environment.

Because no map of the ecosystems outside the Natura 2000 territory is available, a specific task under this activity will be to combine the layers of the ecosystems within and outside the environmental network in order to obtain combined maps of the ecosystems in Bulgaria. This will require specific efforts to make the layers of ecosystems complete and up-to-date based on the latest data available.

The green infrastructure elements will be positioned on the map of the ecosystems.

Meta data in accordance with the requirements of INSPIRE will be created.

*Milestone 6:* All ecosystems within Natura 2000 are mapped in a GIS environment.

*Input indicator 6:* A package of available and new data and information for mapping the ecosystems on the territory of Natura 2000 and available maps of the ecosystems outside Natura 2000, as well as packages of data for the development of a map of the green infrastructure elements developed under Work Package 1.

- Baseline value 0;
- Target value 1, corresponding to all inputs.

*Output indicator 8:* Maps of the ecosystems and their services, as well as of the green infrastructure elements.

- Baseline value 9 (maps for the territory outside Natura 2000);
- Target value 11 (10 ecosystems for the entire territory of Bulgaria and 1 map of the green infrastructure elements).

*Result indicator 6:* Geographic positioning of the ecosystems and their services, as well as of the green infrastructure elements.

- Baseline value 9 (ecosystems on the territory outside Natura 2000);

- Target value 11 (10 ecosystems for the entire territory of Bulgaria and 1 of the green infrastructure elements).

*Period for implementation of activity: 4 months*

*Budget for implementation of activity: EUR 500,000.*

**Activity 7:** Assessment of the condition of the ecosystems and of the ecosystem services they provide, as well as of the green infrastructure

The assessment of the ecosystem condition will be performed based on the guidelines published in the fifth report of MAES<sup>2</sup>, which provides an integrated and analytical framework and a set of indicators for mapping and assessment of the ecosystem condition in the EU.

The assessment of the ecosystem condition will be performed based on the identified indicators for impact and condition of the ecosystem, by ecosystems, as follows:

- ✓ Impact indicators:
  - Conversion and degradation of habitats (land conversion);
  - Climate changes;
  - Pollution and enrichments with nutrients;
  - Overexploitation;
  - Introduction of invasive alien species.
- ✓ Indicators for the ecosystem condition:
  - Quality of the environment;
  - Ecosystem attributes;
  - Structural ecosystem attributes (general);
  - Structural ecosystem attributes based on the diversity and abundance of species;
  - Structural ecosystem attributes observed according to the EU Nature Directives;
  - Structural attributes of the soil;
  - Functional ecosystem attributes (general);
  - Functional attributes of the soil.

Both the available information organised under Activity 3 and the field data collected under Activity 4 will be used.

The link between the impact on ecosystems, their condition, the ecosystem services offered by them and the objectives of the policy for improving the ecosystem condition will be identified. An assessment of the sufficiency of the green infrastructure as an element of the ecosystem condition will be performed.

In addition, specific methodological guidelines will be used from the report on the European assessment of ecosystem condition<sup>3</sup> published in 2020.

The assessment of the condition of ecosystems and the ecosystem services they provide, as well as of the elements of the green infrastructure and its sufficiency with respect to the good condition of ecosystems will be presented in the form of an analytical report.

*Milestone 7:* All ecosystems, the services they provide and the sufficiency of the green infrastructure elements within Natura 2000 have been assessed. *Input indicator 7:* Maps of the ecosystems and their services, as well as of the green infrastructure elements

<sup>2</sup> [https://ec.europa.eu/environment/nature/knowledge/ecosystem\\_assessment/pdf/5th%20MAES%20report.pdf](https://ec.europa.eu/environment/nature/knowledge/ecosystem_assessment/pdf/5th%20MAES%20report.pdf)

<sup>3</sup> [file:///Z:/projects/ZOP%20BG/MOEW/NPAF\\_2021-2027/Ecosistemi/eu\\_ecosystem\\_assesment\\_final.pdf](file:///Z:/projects/ZOP%20BG/MOEW/NPAF_2021-2027/Ecosistemi/eu_ecosystem_assesment_final.pdf)

developed under Activity 6. A package of data and information for assessment of the condition of the ecosystems and their services, as well as for assessment of the condition and sufficiency of the green infrastructure elements collected within Work Package 1.

- Baseline value 0;
- Target value 11 (for 10 ecosystems for the entire territory of Bulgaria and 1 map of the green infrastructure elements).

*Output indicator 9:* Maps of the condition of ecosystems and their services.

- Baseline value 9 (maps for the territory outside Natura 2000);
- Target value 10 (10 ecosystems for the territory of the entire country).

*Output indicator 10:* Map of the condition of the green infrastructure elements.

- Baseline value 0;
- Target value 1.

*Result indicator 9:* Assessed ecosystems and their services as a basis for identification of their monetary value.

- Baseline value 9 (ecosystems on the territory outside Natura 2000);
- Target value 10 (10 ecosystems for the territory of the entire country).

*Result indicator 10:* Assessed status of the green infrastructure elements as a basis for identifying actions to ensure the connectivity of the Natura 2000 network within and outside the protected sites.

- Baseline value 0;
- Target value 1.

*Period for implementation of activity:* 6 months

*Budget for implementation of activity:* EUR 552,500.

### **WORK PACKAGE 3: DEPLOYMENT**

**Activity 8:** Monetary valuation of the ecosystem services and its introduction in the accounting standards of Bulgaria

The monetary valuation of the ecosystem services will be performed by taking into account the “Integrated System of Natural Capital and Ecosystem Services Accounting in the EU” (INCA), the UN standards for environmental economic accounting, the UN system for environmental economic accounting – “Experimental Ecosystem Accounting” (SEEA EEA) and the EU guidance on integrating ecosystems and their services into decision-making. Regarding the integration of ecosystems and their services in the accounting systems, the guidelines of MAES’s sixth technical and methodological report will be followed<sup>4</sup>.

Monetary valuation will be performed of the ecosystem services – material services, regulating and maintaining services and cultural services (defined under MAES) for the 10 types of ecosystems by using economic methods, such as market price method, transport method, preferences method, etc. Where the use of purely economic methods is not possible, the monetary valuation will be performed by using biophysical approaches. The monetary valuation of the ecosystem services will determine the “overall economic value of the ecosystem”, based on which the value of “natural capital” will be determined, which should be integrated into the accounting systems. Macroindicators will be developed for assessment of the economic significance and value of the ecosystems and their services, together with GDP. The information from Work Package 1 and Work Package 2 will be

---

<sup>4</sup> [https://ec.europa.eu/environment/nature/capital\\_accounting/pdf/MAES\\_INCA\\_2019\\_report\\_FINAL-fpub.pdf](https://ec.europa.eu/environment/nature/capital_accounting/pdf/MAES_INCA_2019_report_FINAL-fpub.pdf)

used for the implementation of this activity, including the information about the ecosystem condition and the “flows” of services they provide.

*Milestone 8:* Performed monetary valuation of the ecosystem services. Drafted proposal for introduction of the monetary valuation in the accounting standards of Bulgaria. This is a prerequisite to start the implementation of Activity 10.

*Input indicator 8:* Methodology for monetary valuation of the ecosystem services. A package of data and information for assessment of the condition of the green infrastructure elements collected within Work Package 1.

- Baseline value 0;
- Target value 1, corresponding to all inputs.

*Output indicator 11:* Report about monetary valuation of the ecosystem services.

- Baseline value 0;
- Target value 1.

*Result indicator 8:* Identified total economic value of the ecosystems.

- Baseline value 0;
- Target value 10 (for each type of ecosystem).

*Period for implementation of activity:* 4 months

*Budget for implementation of activity:* EUR 297,500

**Activity 9:** Creation of specialised databases about ecosystems, ecosystem services and green infrastructure and their visualisation in the existing information environment

This activity will visualise the information and data collected under the project by reporting a wide range of ecosystem services and their monetary terms in an “understandable” manner for the public. The benefits of investing in nature and sustainable management of resources by types of economic activities under the Taxonomy Regulation will be updated. The visualisation of data will provide information about:

- The reserves of ecosystem assets and their related ecosystem services by types of economic activities;
- The interrelation between the “natural capital” and the economic activities.

The information will be presented in different scales: e.g. in the scale of ecosystem units, river basins and biogeographical regions, but also at regional and national level. This will allow summarising and/or analysing of the data and will support the decision-making regarding the use of natural resources, as well as the monitoring and reporting of their status.

The information from Work Package 2 and Work Package 3 – Activity 9 will be used for the implementation of this activity.

*Milestone 9:* Available visualisation of the condition of the ecosystem, the ecosystem services and the green infrastructure elements – the reserves of ecosystem assets and their related ecosystem services by types of economic activities, in the existing information environment

*Input indicator 9:* Maps of the condition of the ecosystems and their services, as well as a map of the condition of the green infrastructure elements developed under Work Package 2 and data from Activity 8 to Work Package 3.

- Baseline value 0;
- Target value 22.

*Output indicator 12:* Specialised database about the ecosystems, the ecosystem services and the green infrastructure – the reserves of ecosystem assets and their related

ecosystem services by types of economic activities.

- Baseline value 0;
- Target value 1.

*Result indicator 9:* Ensured public access to the information about the condition of the ecosystems and their services, as well as about the green infrastructure elements – the reserves of ecosystem assets and their related ecosystem services by types of economic activities

- Baseline value 0 users;
- Target value 2 000 000 users.

*Result indicator 9:* Provided set of tools for monitoring of the condition of the ecosystems and their services in Bulgaria, as well as conditions for their better management.

- Baseline value 0;
- Target value 1.

*Period for implementation of activity:* 5 months

*Budget for implementation of activity:* EUR 297,500

#### **WORK PACKAGE 4: COMMUNICATION, CONSULTING AND CAPACITY BUILDING FOR IMPLEMENTATION**

**Activity 10:** Communication activities and consultations on the implementation of Work Package 1

As part of Work Package 1, activities have been planned for:

- ✓ Research on past experience and good practices in the field of identification of site-specific conservation objectives and measures for protected sites, for mapping and assessment of the ecosystems and ecosystem services, as well as for the development of nature-based solutions;
- ✓ Development/adaptation and upgrading of the methodological foundation for identification of site-specific conservation objectives and measures for the protected sites, for mapping and assessment of the ecosystems and their services, as well as for mapping and assessment of the green infrastructure;
- ✓ Collection and organisation of data and information available for identification of site-specific conservation objectives and measures for the protected sites, for mapping and assessment of the ecosystems and their services, as well as for mapping and assessment of the green infrastructure;
- ✓ Field research.

The communication and consultation activities will aim to inform the wider public and provide a better understanding to stakeholders about the key role of the process of collection of data and information necessary for the analyses under Work Package 2.

In this context, the activity will include:

- ✓ Development of a communication plan;
- ✓ Development of project information materials – three types of materials, 3000 pieces each - about the site-specific conservation objectives and measures for the protected sites and application of nature-based solutions; about the assessment of the ecosystems and their services and of the green infrastructure elements; about the monetary valuation of the ecosystem services;
- ✓ Development of a new section in the information system about Natura 2000 environmental network protected sites of MOEW. The section will comprise of

different parts – news, information materials, interim results, etc.;

- ✓ Organising a kick-off national roundtable – for approximately 100 participants;
- ✓ Formation of working groups for collection of available data and information and for carrying out meetings of the groups – the groups will be linked to the different ecosystems and will include representatives of the stakeholders that collect and maintain data – 2 workshops per working group are planned;
- ✓ Three information campaigns to support the field work under Activity 4.

*Milestone 10:* Public support and support to stakeholders provided in the course of collection of data and information.

*Input indicator 10:* List of stakeholders identified in previous projects of MOEW in relation to the management of Natura 2000 network.

- Baseline value 0;
- Target value 1.

*Output indicator 12:* Communication plan.

- Baseline value 0;
- Target value 1.

*Output indicator 13:* Information materials.

- Baseline value 0;
- Target value: 3000 pcs. for each of the 3 types

*Output indicator 14:* A section in the information system about Natura 2000 environmental network protected sites of MOEW.

- Baseline value 0;
- Target value 1.

*Output indicator 15:* Kick-off national roundtable.

- Baseline value 0;
- Target value 1.

*Output indicator 16:* Meetings conducted of working groups by ecosystems.

- Baseline value 0;
- Target value 20 - 2 meetings per ecosystem.

*Output indicator 17:* Information campaigns to support the fieldwork under Activity 4.

- Baseline value 0;
- Target value 3.

*Result indicator 10:* Public support provided, along with better understanding of the process of collection of data and information for the implementation of Activity 4.

- Baseline value 0;
- Target value: 9000 persons informed and 500 persons consulted.

*Period for implementation of activity:* 40 months

*Budget for implementation of activity:* EUR 316,800

**Activity 11:** Communication activities and consultations on the implementation of Work Package 2

As part of Work Package 2, activities have been planned for:

- ✓ Identification of site-specific conservation objectives and measures for 309 protected sites, including nature-based solutions;
- ✓ Mapping of the ecosystems and the green infrastructure elements;
- ✓ Assessment of the condition of the ecosystems and of the ecosystem services they provide, as well as of the green infrastructure.

The communication and consultation activities will aim at informing the wider public and achieving better understanding among stakeholders about the process of identification of site-specific conservation objectives and measures for the protected sites, including nature-based solutions, and also about the process of mapping and assessment of the condition of ecosystems and of the ecosystem services they provide, as well as of the green infrastructure elements.

In this context, the activity will include:

- ✓ Development of a communication plan;
- ✓ Formation of working groups of stakeholders in the process of identification of site-specific conservation objectives for the Natura 2000 protected sites. Carrying out 2 workshops for each group;
- ✓ Formation of working groups for mapping and assessment of the condition of the ecosystems and of the ecosystem services they provide, as well as of the green infrastructure. The groups will be by ecosystem types. Carrying out 2 workshops for each working group.

*Milestone 11:* Support provided to stakeholders in the process of identification of site-specific conservation objectives and measures for the Natura 2000 network protected sites.

*Milestone 12:* Support provided to stakeholders in the process of mapping and assessment of the condition of the ecosystems and of the ecosystem services they provide, as well as of the green infrastructure.

*Input indicator 11:* List of stakeholders identified as part of Activity 11.

- Baseline value 0;
- Target value 1.

*Output indicator 18:* Communication plan.

- Baseline value 0;
- Target value 1.

*Output indicator 19:* Workshops of the working groups conducted for identification of the site-specific conservation objectives and measures for the Natura 2000 network protected sites.

- Baseline value 0;
- Target value – 20, 2 meetings per ecosystem.

*Output indicator 20:* Workshops of the working groups conducted for mapping and assessment of the condition of the ecosystems and of the ecosystem services they provide, as well as of the green infrastructure.

- Baseline value 0;
- Target value 20 - 2 meetings per ecosystem.

*Result indicator 11:* Ensured public support and better understanding about the process of identification of site-specific conservation objectives and measures for the Natura 2000 network protected sites and about the process of mapping and assessment of the condition of the ecosystems and of the services they provide, as well as the green infrastructure elements.

- Baseline value 0;
- Target value: 1000 persons informed and consulted.

*Period for implementation of activity:* 31 months

*Budget for implementation of activity:* EUR 302,500



**Activity 12:** Communication activities and consultations on the implementation of Work Package 3

As part of Work Package 3, activities have been planned for:

- ✓ Monetary valuation of the ecosystem services and its introduction in the accounting standards of Bulgaria;
- ✓ Creation of specialised databases about ecosystems, ecosystem services and green infrastructure and their visualisation in the existing information environment.

The communication and consultation activities will aim at informing the wider public and achieving better understanding among stakeholders about the process of monetary valuation of the ecosystem services and its introduction in the accounting standards of Bulgaria and also about the operation of specialised databases about the ecosystems, the ecosystem services and the green infrastructure published in the existing information environment.

In this context, the activity will include:

- ✓ Development of a communication plan;
- ✓ Formation of working groups of stakeholders in the process of monetary valuation of the ecosystem services and its introduction in the accounting standards of Bulgaria. Carrying out 2 workshops for each group;
- ✓ Carrying out a roundtable for presenting the monetary valuation of the ecosystem services and its introduction in the accounting standards of Bulgaria and the operation of specialised databases about the ecosystems, the ecosystem services and the green infrastructure published in the existing information environment.

*Milestone 13:* Support provided to stakeholders in the process of monetary valuation of the ecosystem services and its introduction in the accounting standards of Bulgaria.

*Milestone 14:* Information disseminated about specialised databases about ecosystems, ecosystem services and green infrastructure published in the existing information environment.

*Input indicator 12:* List of stakeholders identified as part of Activity 11 and Activity 12.

- Baseline value 0;
- Target value 1.

*Output indicator 21:* Communication plan.

- Baseline value 0;
- Target value 1.

*Output indicator 22:* Workshops of the working groups conducted related to the monetary valuation of the ecosystem services and its introduction in the accounting standards of Bulgaria.

- Baseline value 0;
- Target value 20 - 2 meetings per ecosystem.

*Output indicator 23:* A roundtable carried out for presenting the monetary valuation of the ecosystem services and its introduction in the accounting standards of Bulgaria and the operation of specialised databases about the ecosystems, the ecosystem services and the green infrastructure published in the existing information environment.

- Baseline value 0;
- Target value 1.

*Result indicator 12:* Public support provided, along with better understanding of the process of monetary valuation of the ecosystem services and its introduction in the

accounting standards of Bulgaria and of the operation of specialised databases about the ecosystems, the ecosystem services and the green infrastructure published in the existing information environment.

- Baseline value 0;
- Target value: 1000 persons informed and consulted.

*Period for implementation of activity:* 9 months

*Budget for implementation of activity:* EUR 178,500

### **Activity 13: Capacity building**

This activity aims to build capacity within the administrations involved in the management process of Natura 2000 network. This includes:

- ✓ Capacity building for aligning the site-specific conservation objectives and measures for the Natura 2000 network protected sites in the process of development of management plans – a total of 15 trainings for 20 persons each are planned;
- ✓ Capacity building for operation of specialised databases about the ecosystems, ecosystem services and green infrastructure published in the existing information environment – a total of 15 trainings for 20 persons each are planned.

*Milestone 15:* Capacity built for aligning the site-specific conservation objectives of the Natura 2000 network protected sites in the process of development of management plans.

*Milestone 16:* Capacity built for operation of specialised databases about the ecosystems, ecosystem services and green infrastructure published in the existing information environment.

*Input indicator 13:* List of trainees from administrations at regional and national level.

- Baseline value 0;
- Target value 1.

*Output indicator 24:* 15 trainings carried out for aligning the site-specific conservation objectives of the Natura 2000 network protected sites in the process of development of management plans, with 20 participants in each training.

- Baseline value 0;
- Target value 15.

*Output indicator 25:* 15 trainings carried out for operation of specialised databases about the ecosystems, ecosystem services and green infrastructure published in the existing information environment, with 20 participants in each training.

- Baseline value 0;
- Target value 15.

*Result indicator 13:* Developed capacity of the administrations for aligning the site-specific conservation objectives of the Natura 2000 network protected sites in the process of development of management plans, as well as for the operation of specialised databases about the ecosystems, the ecosystem services and the green infrastructure published in the existing information environment.

- Baseline value 0;
- Target value: 600 trainees.

*Period for implementation of activity:* 12 months

*Budget for implementation of activity:* EUR 290,000

### **WORK PACKAGE 5:**

**Activity 14: Public procurement contracts**

Under this activity external expertise will be provided – a service for drafting the technical specifications and the tender documentation for the public procurement contracts within the scope of the project. A total number of 5 public procurement procedures are planned under the project. The first public procurement procedure will be for receiving the service for organising the public procurement procedures. This procedure will be prepared by MOEW. The scope of the public procurement procedure will be “Provision of services for drafting technical specifications and tender documentation for 4 public procurement procedures” under the project and will involve the development of the technical specifications and documentation under the following public procurement procedures:

- Public procurement procedure for provision of services related to the implementation of work packages 1, 2, 3 and 4 (activities 1-13);
- Public procurement procedure for provision of technical assistance for endorsement of the project outputs (activity 16);
- Public procurement procedure for supply of hardware and software (activity 15);
- Public procurement procedure for supply of materials for communication and publicity under the project (activity 17).

*Milestone 17:* External expertise provided for drafting the technical specifications and the tender documentation for the 4 public procurement procedures in accordance with the Public Procurement Act.

*Output indicator 26:* A contract concluded for implementation of the service for drafting the technical specifications and the tender documentation in accordance with the Public Procurement Act for the 4 public procurement procedures.

- Baseline value 0;
- Target value 1:

*Result indicator 14:* 4 public procurement procedures prepared and published under the project.

- Baseline value 0;
- Target value 4.

*Period for implementation of activity:* 6 months

*Budget for implementation of activity:* EUR 18,000.

**Activity 15: Management, monitoring and reporting**

The purpose of this activity is to ensure the effective and efficient management, monitoring and reporting/accounting of the project. The project management team will include both internal experts from MOEW and external experts. The following experts are planned to be involved – a project manager, a financial manager, a communications expert, a lawyer and an expert with expertise about ecosystems, ecosystem services and Natura 2000. This activity will also include purchase of hardware and software for the work to be performed under the project.

*Milestone 18:* Effective and efficient management, monitoring and reporting/accounting of the project ensured.

*Output indicator 27:* Formation of a project team.

- Baseline value 0;
- Target value 5:

*Result indicator 15:* Effective and efficient management, monitoring and reporting/accounting of the project

- Baseline value 0;
- Target value: 10 reports under the project.

*Period for implementation of activity:* 60 months

*Budget for implementation of activity:* EUR 347,000

**Activity 16:** Technical assistance for endorsing the project outputs

This activity aims to provide external expert support (experts from other member states) for technical assistance related to endorsing the project outputs. The joint work of leading European experts and the representatives of the administration responsible for the management of Natura 2000 ("National Nature Protection Service" Directorate of MOEW) will increase the capacity of the Bulgarian experts involved in the process of endorsing the project outputs by applying the "Learning by doing" approach.

*Milestone 19:* Technical assistance provided for endorsing the project outputs

*Output indicator 28:* A contract concluded for technical assistance for endorsing the project outputs.

- Baseline value 0;
- Target value 1;

*Result indicator 16:* Technical assistance provided and project outputs endorsed

- Baseline value 0;
- Target value 1.

*Period for implementation of activity:* 50 months

*Budget for implementation of activity:* EUR 89,250

**Activity 17:** General communication activities under the project

Under this activity the requirements for publicity and communication under the Recovery and Resilience Plan will be implemented by the project management team. This includes making information signboards and banners, publishing information about the project on the website of MOEW, publishing news and project materials, etc.

*Milestone 20:* Publicity and communication on the Recovery and Resilience Plan provided.

*Output indicator 29:* Information signboards (2) and banners (2) made, information about the project published on the website of MOEW, publishing news and project materials, etc.

- Baseline value 0;
- Target value 4;

*Result indicator 17:* Publicity and communication under the project provided.

- Baseline value 0;
- Target value: 500 000 visitors of the section with project information on the website of MOEW.

*Period for implementation of activity:* 60 months

*Budget for implementation of activity:* EUR 9,950.

**Total project budget – 16 504 500 euro**

Detailed information about the budget is presented in annex Budget\_RRF\_N 2000\_NSZP\_MoEW\_eng.xlsx

**Expected results:** The following results are expected as a result of the implementation of

the project activities:

1. Specialised databases of ecosystems, ecosystem services and green infrastructure in Natura 2000 network created and their visualisation in the existing information environment, including by groups of economic activities under the Taxonomy Regulation.
2. Assessment of the ecosystem condition and ecosystem services, monetary valuation of the ecosystems economic value and assessment of the state of the green infrastructure elements in Natura 2000;
3. Conservation objectives and measures specific for Natura 2000 network developed, with a focus on the application of nature based solutions;
4. Ensuring public support by involving the public in the decision-making process for the protection of Natura 2000 protected sites;
5. Quality and modern management of biodiversity and Natura 2000 in Bulgaria ensured.

- 3. Beneficiary.**

## Ministry of Environment and Water, “National Nature Protection Service” Directorate.

**4. Time schedule for project implementation, including activities, stages<sup>5</sup>.**

[illegible]

Detailed information about the time schedule is presented in annex Budget\_RRF\_N

Page 2

#### 4.1. When can the project implementation start at the earliest after its approval?

There is currently project readiness to start with the project implementation immediately after its approval and financing.

The project has a high priority for the following reasons:

1. The need to define detailed and site-specific conservation objectives and measures for conservation of Natura 2000 protected sites related to the fulfilment of the commitments of the Republic of Bulgaria related to the implementation of the European legislation and public infrastructure projects in the field of transport, water, etc.;
2. The relation between the assessment of the condition and the monetary valuation of ecosystems and their services and the EU's "Action Plan: Financing Sustainable Growth" involving environmental, social and governance factors in the investment decision-making process;
3. Achieving the objectives for decarbonisation of the country, which will be combined with the objectives and measures for conservation and recovery of Natura 2000 protected sites by integrating the ecosystem approach in the decision-making process and application of nature based solutions with a focus on those ecosystems that are the main "sinks" of emissions;
4. Economic recovery from the pandemic by creating opportunities for new jobs and environmentally friendly business development of local communities;
5. Contribution for overcoming the damage caused by the epidemic and developing an environmentally friendly, digital, social and sustainable European Union.

#### 5. Indicative financial resource by activities, incl. sources of funding (state budget, European funding, private funding, IFIs).

The total project budget is **16 504 500 euro**;

The total costs have been calculated based on the following financial forecasts for the package of activities as follows:

Work Package 1: Research – 12 030 000 euro;

Work Package 2: Analyses and assessments – 2 327 500 euro;

Work Package 3: Deployment – 595 000 euro;

Work Package 4: Communication, consulting and capacity building for implementation – 1 087 800 euro;

Work Package 5: Project management – 464 200 euro;

Detailed information about the budget is presented in annex **Budget\_RRF\_N 2000\_NSZP\_MoEW\_eng.xlsx**, in **table Template detailed costs\_RRF\_N 2000\_NSZP\_MoEW\_eng.xlsx**, where the methodology for estimating the project activity costs has been described.

The estimation of costs for the activities has been calculated based on public contracts signed with similar scope and activities both under ongoing and finalised projects.

- For the mapping and assessment of ecosystems and ecosystem services

information from projects about mapping and assessment of the ecosystems outside Natura 2000 has been used for the planning of the field and office work and person-days. The projects have been completed and were financed under the “BG03 Biodiversity and Ecosystems” Programme of the European Economic Area Financial Mechanism 2009-2014:

<https://www.moew.government.bg/bg/ministerstvo/programi-i-proekti/arhiv-fm-na-eip-2009-2014-g/finansov-mehanizum-na-evropejskoto-ikonomichesko-prostranstvo-2009-2014-g/>

- For identification of the site-specific conservation objectives and measures for conservation of Natura 2000 protected sites:

<http://umispublic.government.bg/srchProjectInfo.aspx?id=25009>

Information from project “Mapping and designation of the conservation status of natural habitats and species – phase I” been used, as well as information from additional contracts described in annex Template detailed costs NSZP\_MoEW.xlsx:

Identification	
Project number in EUMIS:	BG161PO005-3.0.02-0001-C0001
Project number:	DIR-59318-1-2
Title:	Mapping and designation of the conservation status of natural habitats and species – phase I
Beneficiary:	<a href="#">Ministry of Environment and Water</a>
Source of funding:	ERDF ==> <a href="#">Operational Programme “Environment”</a>
Date of decision of the contracting authority:	02.07.2009
Start date:	02.07.2009
Completion date:	02.08.2015
Status:	Completed
Place of implementation:	Bulgaria

For determination of the average costs for field and office work additional information from the Commission’s methodology/guidelines for determination of expert fees has been also used:

[https://ec.europa.eu/research/participants/data/ref/h2020/other/experts\\_manual/methodology-for-expert-fees\\_en.pdf](https://ec.europa.eu/research/participants/data/ref/h2020/other/experts_manual/methodology-for-expert-fees_en.pdf)

[https://ec.europa.eu/research/participants/data/ref/h2020/experts\\_manual/h2020-experts-mono-contract\\_en.pdf](https://ec.europa.eu/research/participants/data/ref/h2020/experts_manual/h2020-experts-mono-contract_en.pdf)

**a. Indicative allocation of the financial resource, depending on the type of expense:**

- Infrastructure construction/rehabilitation (construction and assembly works) - %

- Physical capital (purchase of machinery and equipment) - %
- Human capital (skills development, retraining...) **6.59 %**
- Labour (wage costs, consulting services...) – **93.3 %**
- Technology (costs for acquisition of intangible fixed assets – patents, software...) – **0.01 %**

The indicative allocation of the financial resource depending on the type of expense covers work packages 1, 2, 3, 4 and 5 of the project.

## **6. Indicators**

### **6.1. Result indicator/s**

9 types of ecosystems and their ecosystem services outside the Natura 2000 network have been mapped and assessed on the territory of Bulgaria so far.

The ecosystems and their services for the Natura 2000 network territory will be mapped and assessed under this project.

The methods for mapping and assessment of the ecosystems condition and their services outside Natura 2000 that have been developed so far need to be adapted to the Framework for Integrated Ecosystem Assessment (Burkhard, 2016). The last guidelines of the MAES Working Group will be taken into account and will be included in the 5th report of the group<sup>6</sup>. Thus, it is planned to integrate the information and databases under this project with the information and data about the ecosystems outside Natura 2000 in order to obtain a single database about the territory of the country and map and assess 10 types of ecosystems and their services.

The monetary value and the value of “natural capital” will be determined for all ecosystems and ecosystem services, which will serve as a basis for their integration into the accounting standards. The information will be presented by groups of economic sectors.

In order to ensure the connectivity of the Natura 2000 network, the green infrastructure elements will also be mapped and their condition will be determined in parallel with the mapping and assessment of the ecosystems.

Under this project, specific conservation objectives and measures will be developed for 309 Natura 2000 areas, which occupy 30 % of the territory of Bulgaria. At present, the site-specific conservation objectives and measures for 32 protected sites are under development. After the implementation of the project, specific conservation objectives and measures will be identified for all 341 protected sites in accordance with the requirements of the European Commission. It is planned to use the conservation objectives and measures as a basis for the development of the management plans of the Natura 2000 network protected sites.

#### **The result indicators at project level include:**

- Types of ecosystems with ecosystem services and natural capital, including green infrastructure elements that have been subject to mapping, assessment and monetary valuation.
- Number of protected sites with specific conservation objectives and measures identified.

<sup>6</sup> [https://ec.europa.eu/environment/nature/knowledge/ecosystem\\_assessment/pdf/5th%20MAES%20report.pdf](https://ec.europa.eu/environment/nature/knowledge/ecosystem_assessment/pdf/5th%20MAES%20report.pdf)



***The results indicators for each activity are given in the description of the project activities.***

***Types of ecosystems with ecosystem services and natural capital, including green infrastructure elements, that have been subject to mapping, assessment and monetary valuation:***

- Initial value - 0 pcs /type of ecosystems with ecosystem services and natural capital, including green infrastructure elements in Natura 2000, that have been subject to mapping, assessment and monetary valuation [2021]
- Interim value - 10 pcs/type of ecosystems with a methodological base developed (10 methodologies) for mapping, assessment and monetary valuation of the ecosystem services and natural capital, including green infrastructure elements in Natura 2000 [2022]
- Interim value – 8 pcs/type ecosystems with completed field research, covering their green infrastructure elements [2023]
- Interim value - 10 pcs/type of ecosystems that have been mapped and with completed assessment of the ecosystem services, including the green infrastructure elements [2024]
- Final value – 10 pcs/type of ecosystems with valuation of the “natural capital” by economic groups [2025]

***Number of protected sites with specific conservation objectives and measures identified (based on 309 protected sites covered by the project):***

- Initial value – 0 protected sites with specific conservation objectives and measures identified [2021]
- Interim value – 200 protected sites with specific conservation objectives and measures identified [2022]
- Interim value – 309\* protected sites with specific conservation objectives and measures identified [2023]

*\*This indicator has been presented by building on the results where the number of areas from the previous interim value has been included.*

## **6.2. Effect indicator/s**

Ecosystems support the life of plants and animals, thus maintaining the balance in nature. When they function properly, they also bring many benefits to people. These benefits are both material – providing basic goods, such as food and fuel, and spiritual – such as the aesthetically pleasing landscapes we all enjoy.

Today, we often overexploit the natural resources with our activity and affect the ability of ecosystems to provide us with their useful services. Agriculture and forestry, fishing and even tourism can all be "hard to swallow" by ecosystems. With our excessive activity we affect the air quality, the water purification processes, flood control, as well as the climate of the Earth. Therefore, it is necessary to rethink our attitude towards biodiversity and make the right decisions for environmentally friendly social and economic development. Nature recovery is a key element of the Recovery Plan for Europe for recovery from the coronavirus pandemic, which will provide immediate business and investment

opportunities.

The effect indicator is related to the area with direct socio-economic benefits from the sustainable management of Natura 2000 network, with nature-based solutions for recovery of the ecosystems and their biodiversity contributing to new jobs and green growth developed and included in the management of Natura 2000.

- Initial value - 0 ha with nature-based ecosystems/biodiversity recovery solutions included in Natura 2000 management [2021]
- Interim value - 11 500 km<sup>2</sup> with nature-based ecosystems/biodiversity recovery solutions included in Natura 2000 management [2022]
- Interim value - 11 500 km<sup>2</sup> with nature-based ecosystems/biodiversity recovery solutions included in Natura 2000 management [2023]
- Interim value - 11 500 km<sup>2</sup> with nature-based ecosystems/biodiversity recovery solutions included in Natura 2000 management [2024]
- Final value – 38 739,23 km<sup>2</sup> \* with nature-based ecosystems/biodiversity recovery solutions included in Natura 2000 management [2025]

*\*This indicator has been presented by building on the results, where the territory of Natura 2000 network from the previous interim value has been included.*

## **7. Does the implementation of the project require a procedure under the Public Procurement Act?**

It is envisaged that the project activities will be implemented by the MoEW, “National Nature Protection Service Directorate”, through a procedure under the Public Procurement Act. The following 5 procedures under the PPA have been planned:

1. Provision of services for drafting technical specifications and tender documentation for 4 public procurement procedures – estimated cost of 18 000 euro;
2. Provision of the following services under the work packages for implementation of the project “Integration of ecosystem approach and application of nature based solutions in the protection of Natura 2000 protected sites”:
  - work package 1: Research
  - work package 2: Analyses and assessments
  - work package 3: Deployment
  - work package 4: Communication, consulting and capacity building for implementation

Estimated cost – 16 040 300 euro;

3. Supply of hardware and software – estimated cost – 17 000 euro;
4. Provision of technical assistance for endorsement of the project outputs – estimated cost 89 250 euro;
5. Development and supply of materials for communication and publicity under the project – estimated cost 9 950 euro;

### **7.1. If a procedure under the Public Procurement Act is required, what part of the activities and financial resources will be the subject of the public procurement?**

All planned activities are planned for implementation through procedures under the Public Procurement Act. Over 98.5 % of the financial resource is expected to be the subject of a public procurement, with the exception of funds related to project management.

**7.2. If a procedure under the Public Procurement Act is required, what is the indicative schedule for its implementation?**

It is envisaged that the procedures under the Public Procurement Act will start in early 2021. Depending on the subject, milestones, development of intermediate products planned in the indicators for each activity will be set and will be used to achieve the final results and deadline for implementation of the project by December 2025.

**8. Demarcation and complementarity.**

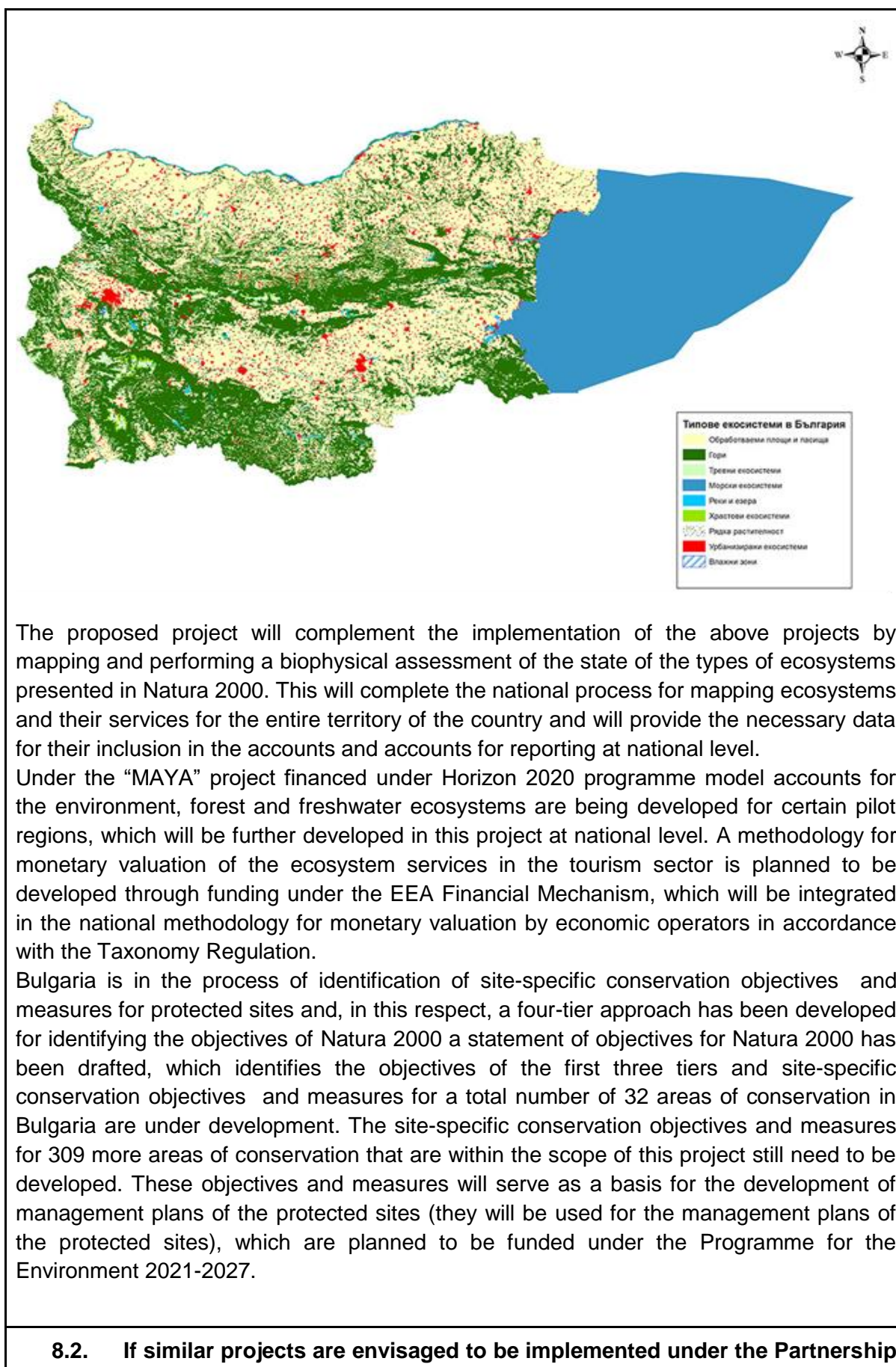
**8.1. If similar projects have been implemented (regardless of their source of funding), describe how this project builds on/complements what has been achieved with previous projects.**

Currently, 9 types of ecosystems outside Natura 2000 have been mapped on the territory of Bulgaria. A biophysical assessment of the condition was made for them. There is no monetary assessment of ecosystems and their services.

The mapping and biophysical assessment of the ecosystems and the services they provide was performed within 7 projects financed under the BG03 European Economic Area Financial Mechanism Programme. Additionally, the typology of ecosystems in Bulgaria, the methodologies for mapping and assessment of their condition, as well as their ecosystem services have been developed under the project "Methodological support for mapping of ecosystem services and biophysical assessment" (MetEcoSMap).

As a result, the following 9 types of ecosystems have been identified for Bulgaria (level 2): agroecosystems, grass ecosystems, shrub and ericoid ecosystems, marine, ecosystems in areas with sparse and no vegetation, freshwater, ecosystems in wetlands, forest and urban ecosystems.

**Map of main types of ecosystems in Bulgaria outside Natura 2000:**



**Agreement programs, the centrally managed facilities of EU or the Just Transition Fund, outline the demarcation with this project.**

Based on the need of immediate reforms to improve the management of Natura 2000 and strengthen the capacity of the administration and the significant importance of the project for the fulfilment of key national and European commitments, for achieving the goals for inclusive economic growth and the objectives of the Green Deal, for achieving the climate neutrality and decarbonisation objectives, as well as the significance of the activities for the financing of large infrastructure projects, this project for funding under the Recovery and Resilience Facility envisages activities related to assessment of the ecosystems and their services, including green infrastructure, and activities for identification of site-specific conservation objectives and objectives for the protected sites. These activities are not planned for funding under the EU Cohesion Policy.

This project will build on the existing database and information about the ecosystems and their services. 9 types of ecosystems and their ecosystem services outside the Natura 2000 network have been mapped and assessed on the territory of Bulgaria so far.

The ecosystems and their services for the Natura 2000 network territory will be mapped and assessed under this project.

The methods for mapping and assessment of the ecosystems condition and their services outside Natura 2000 that have been developed so far need to be adapted to the Framework for Integrated Ecosystem Assessment (Burkhard, 2016). The last guidelines of the MAES Working Group will be taken into account and will be included in the 5th report of the group<sup>7</sup>. Thus, it is planned to integrate the information and databases under this project with the information and data about the ecosystems outside Natura 2000 in order to obtain a single database about the territory of the country and map and assess 10 types of ecosystems and their services.

The monetary value and the value of “natural capital” will be determined for all ecosystems and ecosystem services, which will serve as a basis for their integration into the accounting standards.

In order to ensure the connectivity of the Natura 2000 network, the green infrastructure elements will also be mapped and their condition will be determined in parallel with the mapping and assessment of the ecosystems.

Under this project specific conservation objectives and measures will be developed for 309 Natura 2000 areas, which occupy 30 % of the territory of Bulgaria. At present, the site-specific conservation objectives and measures for 32 protected sites are under development. After the implementation of the project, specific conservation objectives and measures will be identified for all 341 protected sites in accordance with the requirements of the European Commission. It is planned to use the conservation objectives and measures as a basis for the development of the management plans of the Natura 2000 network protected sites.

Communication activities have been planned in the specific project work packages, which include consulting the project outputs with the stakeholders and capacity building actions for applying the project outputs by the local administration.

For the “Environment 2021-2027” Programme activities that build on this project have

---

<sup>7</sup> [https://ec.europa.eu/environment/nature/knowledge/ecosystem\\_assessment/pdf/5th%20MAES%20report.pdf](https://ec.europa.eu/environment/nature/knowledge/ecosystem_assessment/pdf/5th%20MAES%20report.pdf)

been planned. The site-specific conservation objectives and objectives identified for each protected area under the Recovery and Resilience Facility will be included in the management plans of the protected sites. The programme will finance direct conservation measures for achieving the site-specific conservation objectives and restoration of natural habitats and species in the protected sites, improving the knowledge about certain natural habitats and species, activities focusing on improving the stakeholders' capacity to implement the management plans of the protected sites and implementation of the specific conservation measures. The Environment Programme will provide technical assistance to the management bodies of Natura 2000.

Agri-environmental measures and compensation mechanisms for Natura 2000 focusing on farmers and foresters have been planned for the Strategic Plan for Agriculture and Rural Development. These measures are outside the scope of this project.

The project complementarity, demarcation and prevention of double funding with respect to the support provided by the funds (Cohesion Fund, Common Agricultural Policy, etc.) for the field of "Biodiversity and Natura 2000" will be ensured through the created mechanisms for coordination with other programmes and instruments funded by the EU.

**9. Does the project directly contribute to the implementation of any of the Council's Specific Recommendations addressed to Bulgaria in the framework of the European Semester in the period 2017-2020? Please describe how.**

The project directly contributes to the implementation of Council Specific Recommendation 3 addressed to Bulgaria within the European Semester 2019 because:

1. Improving knowledge of ecosystems and ecosystem services in Natura 2000 will create conditions for sustainable and balanced economic development, together with the conservation of biodiversity through the application of nature based solutions that will generate new jobs and livelihoods for local communities;
2. Monetary valuation of ecosystem services will determine the economic value of biodiversity to society and link economic policy to research and innovation, providing a cost of "free" nature services, such as clean air, water regulation and water protection, access to genetic material, services for absorption of CO<sub>2</sub> emissions, etc., enabling the integration of the ecosystem approach in the management of Natura 2000;

At the level of the European Union, it has been proven that the indirect benefits of "healthy" ecosystems are many times greater than the direct material benefits. Therefore, all types of value of Natural Capital must be included in the calculation of benefits and losses from investment projects that affect them in one way or another. The value of ecosystem services is expected to increase in the future and this will be mainly due to the loss of ecosystems. It is therefore crucial to invest in protecting ecosystems and improving the benefits of "healthy" ecosystems and biodiversity for society, which will boost economic recovery.

The project also contributes to the implementation of Council Recommendation 3 on the National Reform Programme of Bulgaria for 2020 and containing an opinion of the Council on the Convergence Programme of Bulgaria for 2020.

It aims to conserve biodiversity and natural capital in Natura 2000, which affects sustainable growth, deterioration or loss of which will create additional health risks during the COVID-19 crisis. The definition of site-specific conservation objectives and measures for conservation of Natura 2000 protected sites will create conditions for implementation of the requirements of the European Commission with regard to protected sites, so that projects can receive funding.

The project has a direct contribution to the implementation of the Integrated Plan in the field of energy and climate of the Republic of Bulgaria until 2030 through the objectives and measures for recovery and maintenance of natural habitats and species of Natura 2000, ecosystems and their services and green infrastructure. The Land Use, Land Use Change and Forestry Sector has the role of a greenhouse gas “absorber” for Bulgaria through the two categories - “Forests” and “Pastures”, which absorb CO<sub>2</sub>. They are subject to conservation and recovery in Natura 2000, and the connection with their good condition for achieving the objectives of decarbonisation has been proven. The destruction and damage of these areas would lead to the release of carbon emissions into the atmosphere. The ecosystem service “Climate change mitigation and regulation” provides an assessment of the carbon stock in the soil, an assessment of the carbon stock in dead organic matter - dead wood and dead forest cover, an assessment of the carbon stock in wood biomass - underground and above ground, as well as an assessment of the total absorbed carbon stock in a given area. For example, for the territory of the Central Balkan National Park the absorbed amount of CO<sub>2</sub> per year is 3,050,206 tons, and the monetary value of the ecosystem service is estimated at BGN 718.80/ha.

The assessment of the state of ecosystems and the valuation of the material, maintenance, regulatory, cultural and recreational services of ecosystems in Natura 2000 provides an opportunity for better integration of climate objectives, along with nature conservation in network management in Bulgaria. Their valuation makes it possible to calculate the value of the necessary investments, through which nature-based solutions will be implemented in the conservation of Natura 2000. It also monetarily illustrates the benefit and costs of biodiversity loss by supporting management decision-making.

The implementation of the project will also contribute to the Digital Transformation of Bulgaria for the period 2020-2030, which in terms of public administration is focused mainly on the transformation of processed and stored data into fixed capital of society. By developing specialised databases on ecosystems, their services, green infrastructure by economic activities, the state of Natura 2000 and integrating their databases into the existing information environment, the involvement of stakeholders in the decision-making process will be improved. At the same time, opportunities will be created for data extraction, data analysis, integrated monitoring, etc., which will ensure more sustainable management of biodiversity in the country and particularly within Natura 2000 network.

**10. Does the project contribute to the implementation of reform in a given sector? Please describe how.**

- The *annual Country Report for Bulgaria (2019)* regarding the EU environmental implementation review states that more efforts are needed to identify the site-

specific conservation objectives and measures, to create an effective structure for the management of Natura 2000 and to strengthen the capacity of the administration and other bodies working in the field of management of Natura 2000. It also states integrating nature and biodiversity policy into other sectoral policies will not only lead to better management of the protected sites and protection of species, but could provide additional sources of financing;

- In the **2019 and 2020 European Semester, the Council of the EU** recommends that Bulgaria should focus its investment in the field of environmental and digital transformation, particularly in the field of environmentally friendly and clean production and the use of the energy and resources, the environmental infrastructure and sustainable transport, thus contributing to the gradual decarbonisation of the economy. The semester further states that priority should be given to ready-to-implement public investment projects and that private investment should be stimulated in order to accelerate economic recovery;
- According to the **EU's Annual Sustainable Growth Strategy for 2021**, Bulgaria should undertake actions to improve its environmental infrastructure and improve and enhance and protect its biodiversity. Protection and restoration of biodiversity and natural ecosystems and ensuring sustainable food systems is of key importance for increasing the carbon sinks, enhancing resilience and prevention of the emergence and dissemination of future disease outbreaks. This will also create new economic opportunities in rural areas via more sustainable land use;
- EU's Next Generation Recovery Plan focuses on finding opportunities and solutions to recover ecosystems and protect biodiversity, emphasising their essential role in maintaining life and food, economic and social development, human well-being and achieving the EU's climate neutrality objectives;
- In order to achieve the objectives of the European Green Deal to recover biodiversity and decrease pollution, as well as implementation of the requirements of the Taxonomy Regulation, which is a key instrument for achieving the Deal's objectives, it is necessary to encourage private sector investment in environmentally friendly and sustainable projects and economic activities with a significant positive impact on climate and the environment. Assessments of the state of biodiversity and ecosystems are included in the list of indicators for assessing the impact of planned investments, in accordance with the above Regulation. These indicators have become compulsory to apply in the assessment of public and private investment and projects starting from 2023. Next, **digital transformation** is the basis for improving the governance for biodiversity by creating an opportunity for free data sharing between the business and the public sector, which will contribute to better management decision-making;
- **The Strategy for Biodiversity 2030** focuses on the introduction of nature-based solutions for recovery of ecosystems and biodiversity. It is expected that nature-based solutions will link the objectives and measures for protection of biodiversity with the climate objectives.

The implementation of the recommendations and guidelines presented in the strategic documents and other documents requires implementation of a reform/**investment to increase the responsible administration capacity in the long term to implement the policy for biodiversity conservation so that the relevant goals of this policy could be achieved.**



<p><b>11. Does the project contribute to the development of any aspect of sustainable economic development? Please describe how.</b></p>
<p>The project directly contributes to the implementation of the EC finding in the report for Bulgaria 2020 on improving the management and effective management of protected sites, as biodiversity and unique nature “represent untapped potential for economic growth based on the development of sustainable and niche tourism, as well as the entertainment sector.” Through the results of the project, the territory in Natura 2000 will be monetary valued, which will significantly improve the decision-making process and contribute to sustainable economic growth and sustainable livelihoods of local communities.</p> <p>The project is directly linked to the following UN Sustainable Development Objectives:          Objective 13 "Taking urgent actions to combat climate change and its effects";          Objective 15 "Preservation, recovery and promotion of sustainable use of terrestrial ecosystems, sustainable forest management, combat desertification, halt and reverse land degradation and prevent biodiversity loss".</p>
<p><b>12. Does the project contribute to the implementation of the objectives of the National Development Program BULGARIA 2030? Please describe how.</b></p>
<p>The project is part of the policy of the "National Development Programme BULGARIA 2030" to stop the loss of biological diversity through interventions aimed at:</p> <p>5.2.a The National Ecological Network for ensuring effective management of the network for protection of natural habitats and species of European and national importance inside and outside the National Ecological Network, conservation, strengthening and recovery of ecosystems, habitats and species, including birds and genetic material.</p>
<p><b>13. Does the project contribute to the implementation of the objectives and priorities set out in the Integrated National Energy and Climate Plan? If yes, please describe how.</b></p>
<p>The project contributes to the implementation of the following objectives set out in the Integrated National Energy and Climate Plan:</p> <p>2. National general and site-specific conservation objectives ; 2.1 “Decarbonisation” dimension:</p> <p>Regulation (EU) No 2018/841 on the inclusion of greenhouse gas emissions and removals from land use, land use change and forestry in the 2030 climate and energy framework requires Member States to ensure that emissions from all categories of land use do not exceed GHG uptake for two five-year periods between 2021 and 2030 (2021 to 2025 and 2026 to 2030), applying certain reporting rules and allowing some flexibility. The implementation of the project will enable sustainable management and administration of biodiversity and Natura 2000 network on the territory of the country, and the measures for recovery and/or maintenance will be planned so as to contribute to the achievement of the objectives of the "Renewable Energy" Section of the Integrated National Energy and Climate Plan by application of nature-based solutions for achieving the objectives for restoration and conservation of the natural habitats and species. These will reduce the</p>

impact of land use, changes in the land use and forestry in and outside the Natura 2000 network, thus preserving and improving the state of the pasture and forest ecosystems, which are major emission "sinks" for the purpose of contributing to decarbonisation.