

D9.3 Guide for the establishment of national hubs



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What is Biodiversa+

The European Biodiversity Partnership, Biodiversa+, supports excellent research on biodiversity with an impact for policy and society. Connecting science, policy and practise for transformative change, Biodiversa+ is part of the European Biodiversity Strategy for 2030 that aims to put Europe's biodiversity on a path to recovery by 2030. Co-funded by the European Commission, Biodiversa+ gathers 81 partners from research funding, programming and environmental policy actors in 40 European and associated countries to work on 5 main objectives:

1. Plan and support research and innovation on biodiversity through a shared strategy, annual joint calls for research projects and capacity building activities
2. Set up a network of harmonised schemes to improve monitoring of biodiversity and ecosystem services across Europe
3. Contribute to high-end knowledge for deploying Nature-based Solutions and valuation of biodiversity in the private sector
4. Ensure efficient science-based support for policy-making and implementation in Europe
5. Strengthen the relevance and impact of pan-European research on biodiversity in a global context.

More information at: <https://www.biodiversa.eu/>

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List of acronyms

ANR - French National Research Agency (France)

BfN - Federal Agency for Nature Conservation (Germany)

BMBF - Federal Ministry of Education and Research (Germany)

BMUV - Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (Germany)

CBD COP - Conference of the Parties to the Convention on Biological Diversity

Cirad - Agricultural Research Centre for International Development (France)

CNRS - French National Centre for Scientific Research (France)

DFG - German Research Foundation (Germany)

DLR-PT - Project Management Agency of the German Aerospace Center (Germany)

EU - European Union

FRB - French Foundation for Research on Biodiversity (France)

INRAE - National Research Institute for Agriculture, Food and Environment (France)

IPBES - Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services

IUCN - International Union for Conservation of Nature

MASA - Ministry of Agriculture and Food Sovereignty (France)

MESR - Ministry of Higher Education and Research (France)

MNHN - National Museum of Natural History (France)

MTECT - Ministry of Ecological Transition (France)

NCN - National Science Centre (Poland)

OFB - French Office for Biodiversity (France)

SHS - Human and Social Sciences

SRIA - Strategic Research and Innovation Agenda

VDI-VDE-IT - Association of German Engineers (Germany)

Executive Summary

This guidance document outlines the establishment and organisation of National Hubs within European Union member states to enhance the impact of Biodiversa+ initiatives at both national and European levels. National Hubs serve as platforms for consultation, coordination, and engagement, involving stakeholders such as research funders, policymakers, and environmental agencies. The document highlights the importance of stakeholder participation, clear communication, and concerted planning to align national activities with Biodiversa+ goals.

Key messages:

- 1. Purpose and Scope:** The document aims to guide EU member states in establishing National Hubs to bridge the gap between science and policy, communicate Biodiversa+ objectives, and provide feedback to the Partnership.
- 2. National Hub Functionality:** National Hubs facilitate exchange, dissemination of results, and policy alignment, acting as consultative bodies and knowledge exchange platforms. They promote stakeholder engagement and support transdisciplinary approaches to biodiversity conservation.
- 3. Setting Up Process:** The establishment of a National Hub involves identifying key stakeholders, defining goals, recruiting experts, holding regular meetings, and developing a work plan. Flexibility in structure and engagement strategies is essential to accommodate diverse national contexts.
- 4. Challenges and Recommendations:** Challenges in National Hub functioning include management of diverse interests and sustainability of funding. Recommendations include clear mandates, governance structures, and transparent communication channels.
- 5. Added Value and Support:** National Hubs offer benefits such as enhanced coordination, stakeholder engagement, and policy impact. Support from Biodiversa+ can include guidelines, communication tools, and financial assistance to facilitate hub establishment and operation.

In short, establishing a National Hub can be very helpful for maximising the impact of Biodiversa+ initiatives. Effective coordination, stakeholder engagement, and support mechanisms are crucial for the successful establishment and operation of National Hubs, enabling alignment with Biodiversa+ objectives and enhancing biodiversity conservation efforts.

1. Introduction

When working on main Biodiversa+ partnership objectives, aimed to connect science, policy and practice for transformative change involving 81 research programmers and funders and environmental policy actors from 40 European and associated countries, it is crucial to have active involvement of the member states. It is also key to have dedicated national structures that can help to connect the objectives and research results of the Biodiversa+ Strategic Research and Innovation Agenda (SRIA) to national efforts on the bridging of science and policy, communicate science and to answer specific policy-relevant questions. Researchers, policymakers, industry, and other stakeholders, all need to have clear information on the strategy implementation and goals of Biodiversa+.

The purpose of this document is to guide the relevant bodies within EU member states on how they may establish and organise their own National Hubs, to maximise Biodiversa+ impact at national and European level. Inclusive stakeholder participation strengthens mutual understanding and helps to determine a clear common sense of Biodiversa+ objectives, outcomes and results, and to communicate them more widely on the national level on the one hand and to produce beneficial feedback to the Partnership from the national level on the other.

This guidance document is set up to support the Member States in setting up National Hubs. It builds upon a survey among the Biodiversa+ partners to identify interest and collect information on national experiences, and a Staff Exchange workshop organised back-to-back with the Biodiversa+ General Assembly on 14 September 2023 in Tbilisi, Georgia.

This guidance document addresses activities organised under Task 9.3 of Biodiversa+ and corresponds to deliverable D9.3 under Task 9.1.

2. What is a National Hub

To better coordinate Biodiversa+ activities at national level, countries may decide to set up a National Hub through which Biodiversa+ issues are addressed. The expected outcomes of such National Hubs are a better involvement of interested national stakeholders in Biodiversa+ activities, and to better disseminate Biodiversa+ outputs at national level to reach a wide range of actors in the different countries.

In general, National Hubs (sometimes called mirror groups) are formal or informal structures improving coordination between (sub)national organisations in a specific domain. Such structures can be set up in different ways, which are not mutually exclusive, depending on the needs and possibilities in each country.

National Hubs for Biodiversa+ are set up as national platforms for consultation, coordination and engagement, bringing together the relevant actors to engage in the Partnership. Included are often ministries in charge of research, research funding organisations, ministries in charge of environment, environmental protection agencies, and relevant stakeholders at national, regional or local level.

In parallel, there can also be other types of structures to coordinate activities to promote biodiversity conservation and management at national level, such as the IUCN National Committees, Key Biodiversity Area National Coordination Groups, Nature-Based Solutions National hubs, etc.

It should be noted that National Hubs are different from the thematic Knowledge Hubs that are established under Biodiversa+ programmes, notably the BiodivClim Knowledge Hub on biodiversity and climate, and the BiodivRestore Knowledge Hub on biodiversity restoration.

A Biodiversa+ National Hub functions as a panel for exchange, discussion, and concerted planning on biodiversity-related national research policy and recommendations for aligning national initiatives with those of Partnerships. More in detail, it can be used to:

- communicate information about Biodiversa+ goals, objectives and action areas;
- ensuring connections to related national hubs, advisory structures or clusters, and to promote public-private synergies;
- connect between European and national public policies, for mutual dialogue and as feedback for the Partnership;
- provide assessment of national and regional needs to give assistance to align activities with national strategies;
- act as a forum to disseminate results and findings from the projects funded in Biodiversa calls;
- act as a consultative body to provide expert knowledge to public authorities and facilitate alignment of national activities with Biodiversa+ activities and strategies, and to feed into the work of Biodiversa+;
- act as a meeting place for discussion and stakeholder knowledge exchange, representation and learning of best practices, and for dialogue to consolidate expectations.

3. General process of setting up a National Hub

Setting up a National Hub for interactions between science, policy and practice can be a complex process, but according to the experiences from existing National Hubs, the numerous opportunities it provides are well worth the effort (see [Appendix I](#)).

Some steps to get started:

- *identify key participants/stakeholders*: Determine potential participants and key stakeholders that would be interested in biodiversity research, research results and policy and who could help implement it. This might include government agencies, policy- and decisionmakers, researchers, industry experts, and members of relevant communities.
- *establish the purpose*: Determine the purpose of the National Hub. What specific goals do you hope to achieve with the group? What issues will it focus on? What kind of Biodiversa+ practice and policies do you want to promote?
- *recruit experts*: Recruit a diverse group of experts who have the necessary knowledge and skills to help implement national activities related to Biodiversa+ goals. This might include scientists, policy analysts, legal experts, and communicators. It is recommended that these experts are selected to represent relevant networks/institutions, to reflect the visions of communities and not just personal opinions.
- *set up regular meetings*: Establish regular meetings that the group can attend to discuss progress, address challenges, and share ideas. These meetings can be in person or virtual.
- *develop a work plan*: Develop a work plan that outlines the group's goals, objectives, and timelines for achieving them. This will help to keep everyone on track and ensure that progress is being made towards the group's overall goals.
- *communicate progress*: Keep stakeholders informed about the group's progress and achievements.

4. Tips for setting up a National Hub

4.1. Composition of a National Hub

Some of considerations for engaging of stakeholders are outlined below:

- identify all potential participants and key national stakeholders;
- inform the stakeholders – What are goals? What is a value? How could this impact them? How will it be applied?
- collect and summarise feedback from stakeholders;
- identify stakeholders willing to participate;
- engage stakeholders through many channels – be proactive and flexible;
- consult with other National Hubs for advice and best practices.

Most common members of National Hub include funders, policymakers, and end users. National experts that contribute to organisations collaborating with Biodiversa+ are highly desirable among them. The members of the hub normally have diverse motivations to participate, but work with a consensus to assist on required actions, and to help increase and diversify overall benefits.

It is recommended to supplement National Hubs in order to have as much stakeholder representation as possible. However, countries may consider to set up a more flexible structure with a “core group” involving the main stakeholders, supplemented with a more open forum for information exchange (and possibly ad-hoc working groups) for a larger range of stakeholders who want to join practice with the Partnership.

4.2. Functioning of a National Hub

The general objective of a National Hub is to develop concerted opinions and solutions, to overcome barriers and to reinforce the work of the Partnership at the national and sub-national level.

Clear mandates and specific joint objectives are crucial to the resilient functioning of the hub, to overcome concerns that are due to inherent differences in approach by the diverse stakeholders involved.

The existing hubs identify that most of their work is focused on organising National Hub meetings, where an established governance and shared responsibility within the group can help. Depending on the size of the group and the level of its mandate, there might be a need to establish Terms of Reference and a formal management structure (e.g., with facilitator and secretary), ensuring equal status and authority of the members (see further in [Appendix II](#)). Working collectively, where all engaged parties are provided the opportunity to make tangible contributions, requires an open,

equitable and transparent process. Also, communication must be clear and timely, with agreed processes and identified channels for internal and external communication.

It is expected that hubs will assist countries to be more coordinated among their different biodiversity actors, and to go across the silos. Among the goals should also be to raise awareness of Biodiversa+ and science-based decision making.

Sufficient funding and work time/salaries for responsible position(s) within the hub must be ensured for permanent and successful operation of the hub. The potential sources of funding must be investigated in each country according to national possibilities (see [Appendix I](#)).

4.3. Added value of the National Hubs

A National Hub provides occasions for a broad and cross-cutting dialogue among different actors, promoting better coordination among national and local bodies and policies. This should allow for better informed decision-making, and for sharing of information and knowledge to and from Biodiversa+.

It also gives a good opportunity to set up a communication channel for all matters related to Biodiversa+, including both by raising awareness and dissemination of knowledge, and by providing input to the Partnership through consultation. These efforts should of course build upon and complement any existing national structures, for example biodiversity related committees, dialogue events, seminar series, etc.

Depending on national strategies and demand, National Hubs could engage in cross-cutting and trans-sectoral activities such as:

- feedback on various national projects or processes, in terms of expectations of actors and stakeholders, suggestions and ideas, prioritisation, and how to address encountered barriers;
- supporting transdisciplinary approaches and the inclusion of Human and Social Sciences (SHS) in terms of fair and effective structural and transitional changes and collective levers for communities;
- implementing action, applying approaches and performing analyses to address and mitigate barriers and encountered difficulties in practical, organisational, or regulatory matters.

National Hubs can also provide added value by providing/supporting the following:

- balance between research and policy needs, linking policy needs for research and monitoring;
- valorise research potential and available knowledge;
- build and promote a national position with the support of the local governments;
- promote Biodiversa+ goals and actions at national level, help recognize Biodiversa+ as a key actor in the science-policy arena at the interface between national, European and international decision-making;

- help to build transparency and shared understanding among the national stakeholders (who is interested in what, and why?);
- create more impact from activities in research and monitoring, by involving stakeholders from the start;
- optimise the use of budget, especially for countries with several participating funders;
- build competences, to promote better (national) decision-making and unifying national priorities;
- mobilise both public and private R&I teams to respond effectively to current needs, and to avoid duplication;
- share information on interests and operational responses from local authorities, research community and business;
- find out about stakeholders' point of view on proposed strategies and activities.

5. Potential challenges

Some challenges may follow from an inherent diversity in the composition of the hub. According to a survey among Biodiversa+ partners ([Appendix I](#)), such challenges are related mainly to differences in engagement and capacity among members, different priorities and diversity in terms of mandates, as well as competing powers and interests in the group (lobbying included).

Another challenge, in particular for countries with smaller communities or less resources, can be to incorporate a wide stakeholder representation with the associated workload.

This is connected to the need to acquire and maintain resource levels to ensure efficient management of the Hub, both in terms of work time and for funding of events and meetings. It should be noted that the involvement of the private sector or NGOs in particular might require dedicated resources for such costs.

6. Support from Biodiversa+ and how to facilitate the links

To help overcome such challenges in establishing, developing and maintaining National Hubs, participants of the Biodiversa+ Staff Exchange workshop on the setting up of National Hubs outlined some possible inputs from the Partnership that could facilitate the process:

- guidelines with steps and timetable for setting up a hub (living document);
- communication and tool kit for stakeholders to explain what a National Hub is and why it can be beneficial;
- continuous sharing and exchanges among Biodiversa+ partners, with national updates on agreed topics;

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- joint Biodiversa+ calendar with key dates for call processes, key deliverables, etc;
- additional tailored tools needed because of difference between e.g. European and non-European countries, diversities in national structures, different needs of research communities, funding availabilities, etc.;
- add an international perspective: how to engage between countries, use of overarching narrative for separate activities, use Biodiversa+ to communicate on issues at EC level;
- financial support for specific actions (including work time) on cooperation - this should serve as a starting momentum, be only of partial character, enable staff exchange, etc.;
- clear information/guidance from Biodiversa+ when key actions are needed by the Biodiversa+ partners, so they can forward easily to their National Hub;
- produce descriptive and analytic materials serving as recommendation for capacity building and running of a National Hub – with examples of methodologies / types of hubs, experience descriptions, success stories: worst/best practices, causalities of the influence of hub implementation on results;

All these documents should form an attractive, coherent narrative that should aim to:

- attract more stakeholders and all relevant scientific fields;
- “sell” the topics to policy makers and hopefully attract more funds;
- help to make a more overarching presentation of Biodiversa+ goals and objectives;
- result in positive incentives to participate.

Appendix I. Examples of National Hubs

A survey to Biodiversa+ partners yielded response from 47 partners of 28 countries, where 11 already had established a National Hub (or mirror group, or similar), while 13 indicated a strong interest to learn more about this type of structure.

Below are some examples of national structures related to Biodiversa+, to illustrate different types and their functioning.

1. Estonia

According to directions set in the national [“Estonian Research and Development, Innovation and Entrepreneurship Strategy 2021-2035”](#), five working groups based on focus areas have been formed to coordinate participation of Estonia in the European partnerships. The group with the scope of valorization of local resources covers the field Biodiversa+ is working in.

The scope of the group is broader than the areas of interest directly related to biodiversity issues, as the overall goal of the group is to exchange information related to the preparation and participation in partnerships and missions, as well as to bring funders, advisors (professional associations) and potential applicants together in a joint information circle.

Activities of the working group include cooperation with ministries of the given scope:

- close communication with related ministries during the preparation phase of the application rounds, agreement on which topics are more important for the ministry, recommendations on where to preferentially direct funding;
- coordination of budgets to participate, related to differences in the roles of each partner;
- preliminary agreement on how projects are divided between different Estonian funders - for example, if a proposal with 1 Estonian partner reaches the top of the ranking, but there are 2 funders;
- harmonising national requirements for applicants;
- organising joint information days;
- participation in focused area-based partnership working group meetings.

The overall partnership participation plan for Estonia includes:

- annually updated list and overview of FP partnerships, NordForsk programs and international infrastructures in which Estonia participates as a funder;

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- a web-based platform, with authenticated access containing structured information about partnerships, calls, the success of Estonian participants, projects, their duration, the amount of funding, the source of funding, the role of the participants (coordinator/partner), and the participating institution, as well as connections to focus and research areas.

Information is gathered by the [Estonian Research Council](#) (ETAG), with input from funders and policy makers (ministries).

2. Poland

The Polish Biodiversa+ hub is based on the [National Science Centre](#) (NCN) Operational Team, which is created within NCN with the input from the NCN Advisory group. Additional feed into Operational Team activities comes from external consultations with related ministries e. g. the Ministry of Climate and Environment and other interested actors.

The National advisory group to the Biodiversa+ partnership consists of 5 experienced researchers (NCN grant winners, Biodiversa grant winners) from different research fields:

- social aspects of nature conservation;
- forest ecology;
- peatland ecology;
- fresh water/fish ecology;
- marine ecology;
- arctic ecology.

Normally the group has 2 meetings per year plus on-line consultations as needed. The objectives of the National advisory group are to:

- provide substantial advice on decision-making e.g. on flagship programmes;
- provide advice on promoting Biodiversa+ activities within the Polish scientific community;
- participation in consultations of the main documents elaborated by the Partnership (e.g. SRIA) and call topics;
- liaise with the Polish scientific community and suggesting experts for consultation.

3. Germany

The German national hub is formed from German Biodiversa+ partners and representatives from the ministries and agencies [BMBF](#), [BMUV](#), [DFG](#), [VDI-VDE-IT](#), [DLR-PT](#) and [BfN](#). Contributors are holding 2-3 virtual meetings per year with additional email exchanges as needed. DLR-PT is the meeting facilitator, sending invitations and supplying agendas. Additionally, bilateral virtual meetings of partners are being organised (e.g. to discuss funding issues, specific advisory needs etc.). Furthermore, hub contributors inform each other on other national networking meetings (for partnerships etc.) of common interest they participated in.

The goals of the German national hub are:

- coordination of common positions for General Assemblies of Biodiversa+ (e.g. on instalments of the Grant Agreement, Flagship Programmes, monitoring pilots, research infrastructures etc.);
- exchange of information on outcomes of past and upcoming Biodiversa+ meetings and events, other co-funded European partnerships, the Convention on Biological Diversity Conference of the Parties (CBD COP) and IPBES meetings, and the role of Biodiversa+;
- organisational matters (hub meetings);
- other related matters and overarching issues, also going beyond research, monitoring, etc.

4. France

The French Mirror Group covers a vast spectrum of stakeholders, including:

- Biodiversa+ partners: French National Research Agency ([ANR](#)), Ministry of Ecological Transition ([MTECT](#)), French Office for Biodiversity ([OFB](#)), French Foundation for Research on Biodiversity ([FRB](#));
- ministries: Ministry of Higher Education and Research ([MESR](#)), Ministry of Agriculture and Food Sovereignty ([MASA](#));
- Scientific organisations and universities ([CNRS](#), [MNHN](#), [Cirad](#), [INRAE](#) etc...) which can have 2 representatives: one from the research community, one from European partnerships;
- scientific alliances: National Alliance for Environmental Research ([AllEnvi](#));
- stakeholders: representatives of the FRB Strategic council;
- local authorities, including overseas territories;
- funding agencies with an interest in the topics of Biodiversa+: French Development Agency ([AFD](#)), French Environment and Energy Management ([Ademe](#));
- observers: Executive Director of Biodiversa+, Chairman and Vice-Chairman of the FRB Scientific Council, Horizon Europe national contact points for Cluster 6;
- representatives of other mirror groups and European initiatives as required.

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The goals of the French Mirror Group are to:

- help define France's scientific policy and commitment to this European partnership;
- provide support to the French partners involved in Biodiversa+;
- coordinate the positions of the various national stakeholders and contributes to strategic documents, defining joint French positions to be discussed within the partnership's governance structures;
- mobilise the French research and innovation communities. It seeks to arouse the interest of research organisations and universities, encouraging them to contribute actively to these initiatives.

The calendar of upcoming activities of the French Mirror Group is summarised in the table below:

	Main topics to be discussed	Format	Preparation of the General Assembly
August/Sept. 2023	Selection of the next biodiversity monitoring pilots - presentation of the process and candidates (by OFB)	Online	12-14 sept. 2023
January 2024	Prioritisation of themes for flagship programs and future calls for projects	In person	February 2024
August/Sept. 2024	Discussion of Year 4 Work Plan	Online	September 2024
December 2024	Activities planned as part of the "3rd instalment" (3rd phase of the partnership, Oct. 2025-Sept. 2027)	Online	February 2025
March/April 2025	Updating the Biodiversa+ Strategic Research and Innovation Agenda (SRIA)	In person (tbc)	September 2025

The Group is chaired by the Ministry of Higher Education & Research, which validates documents and procedures, facilitated by FRB and ANR. Members are in charge of consulting their organisations ahead of meetings. They are also in charge of sharing information with their communities. Online or in-person meetings are organised ahead of General Assembly (GA) meetings and when needed, to prepare the French positions on other topics related to Biodiversa+ activities.

Main challenges emerging in functioning of the Group are related to diversity of members' expectations, which induces to establish Terms of References to set the goals, memberships and functioning.

Time constraints for consultation feedback on GA documents sometimes prompt the organisation of meetings independently of the documents, and not always based on the latest Biodiversa+ information.

5. Belgium

The Belgian Mirror Group can be represented by the [Belgian Biodiversity Platform](#), which is a project from [BELSPO](#). The Federal Public Service for Science Policy, which prepares, executes and evaluates federal science policy, including the implementation and the constitution of a permanent scientific expertise capacity at the service of the Federal Authority in specific scientific and technical fields. The Platform has taken on science policy interfacing and communication tasks of the ERA-NET on behalf of BELSPO.

The steering committee of the platform is composed of members from all entities in the country that are concerned with science and biodiversity, including all partners participating in Biodiversa+. The platform and its steering committee can therefore act as a mirror of Biodiversa+ to coordinate their needs and positions regarding issues addressed in the Partnership.

Strategic Objectives of the Belgian Mirror group are:

- to provide capacity and infrastructures on biodiversity science, policy and practice;
- to facilitate collaboration between regional and federal actors in support of biodiversity science-policy interfacing;
- to catalyse innovative approaches which improve the transdisciplinary evidence-base on biodiversity.

Within the Belgian Biodiversity Platform portfolio, we distinguish between five broad sets of activities:

- National Focal Point: The Belgian Biodiversity Platform also acts as the IPBES national focal point, the IUCN National Focal Point and the GBIF National Node. Through these networks we ensure the exchange of information between Biodiversa+ and our focal point activities.
- expert committees/ Advisory Boards: In addition, we act as expert in subsidiary bodies and advisory boards of biodiversity-related initiatives including amongst others CBD-SBSSTA, the National Scientific Secretariat on Invasive Alien Species, GBIF-related bodies and EOSC FAIR.

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- communication and outreach: We also provide specific knowledge brokerage services, including the dissemination of research results to specific audiences (e.g. drafting of policy briefs) and information sharing (e.g. through our newsflashes and social media).
- capacity building: We also provide the capacity to scientists to do knowledge brokerage themselves. This includes training on science communication, open science and the development and use of specific tools and guidance notes (e.g. stakeholder engagement, ensuring policy relevance, promoting the inclusion of a citizen science component in research projects, support to Data Management Plans, etc).
- networking and Think-tank: Finally, we enable direct dialogues (networking) and think-thank activities between scientists, decision-makers and practitioners on topical issues (see section 7.). These activities are extremely important to nurture trust among the different communities so they better understand each other's objectives and challenges, and to ensure trans- and interdisciplinarity. Engagement of young scientists in these activities will be a specific focus of our activities.

Appendix II. Recommendations regarding Terms of Reference for National Hubs

Below are recommendations for Terms of Reference for National Hubs, based on input from Biodiversa+ partners.

1. Background

To achieve Biodiversa+ objectives and ensure foreseen impact, there is a need for complementarity of EU and national biodiversity research agendas from EU Member States and associated countries. National and EU research & innovation programmes must share information between programmes and with environmental ministries and agencies, combining in-cash and in-kind resources. To facilitate and to better disseminate Biodiversa+ activities at national level, programme partners' countries are encouraged to set up a National Hub to hold meetings at which Biodiversa+ activities and related issues are addressed.

2. Objective of the National Hub

The role of the National Hub will be to ensure national coordination of and with relevant stakeholders linked to biodiversity and ecosystem research and its impact for society and policy, and to facilitate the alignment between national and Biodiversa+ activities, to contribute to the objectives of Biodiversa+ and to benefit from it. The expected outcomes of such National Hubs are a better involvement of national stakeholders in Biodiversa+ activities and a better dissemination of Biodiversa+ outputs at national level. Thereby, it will be possible to reach a wider range of actors at national level for dissemination of Biodiversa+ outputs, as well as providing input to help feed the formation of Biodiversa+ annual work plans, strategies and flagship programs with information about national strategies, interests and activities.

3. Composition of the National Hub

Generally, the National Hubs are open to all committed national stakeholders and while the composition of a National Hub is at the discretion of each country, it is recommended to involve the following stakeholders:

- Biodiversa+ governance structure representative(s);
- national partners of Biodiversa+;
- relevant national and sub-national authorities (i.e. representatives of the ministries of environment, environmental protection agencies, ministries of research, research funders, etc.);

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- representatives of the national planning for biodiversity protection, monitoring, and data collections (e.g. agencies/authorities, monitoring centres, NGOs and associations involved in monitoring activities, scientific organisations, natural history museums, etc.);
- representatives of Biodiversa+ key collaborators and reference networks (IPBES, NetworkNature, etc.);
- research institutions involved in biodiversity related research;
- representatives of business, entities and networks concerned by biodiversity issues.

4. Role of the National Hubs

The main role of the National Hub is to ensure that national activities, strategies, and needs are considered when taking decisions at the Biodiversa+ level. A national representative to Biodiversa+ General Assembly (GA) will report on the National Hub's views and positions when such input is requested, or if particular needs arise.

The National Hubs should:

- assess national needs, consolidate expectations and summarise the state of current knowledge in order to better understand what unites and what distinguishes European and national public policies;
- enable national actors to be aware of Biodiversa+ SRIA action areas, inform and support national initiatives and give assistance to align activities with governmental strategies;
- detect possible contributors to the portfolio of actions and coordinate the participation of national actors in the field of the biodiversity research into the Biodiversa+ activities;
- define the national position and priorities to be reported to the Biodiversa+ and for its Annual Work Plan;
- sustain relation with national hubs, advisory structures, clusters and promote public-private synergies;
- ensure the alignment between Biodiversa+ and national strategy in the field of the biodiversity research by promoting Biodiversa+ actions and outcomes at national level.

5. Organisation of the work of National Hubs

It is recommended to have a dedicated facilitator and secretary who ensures that regular meetings are conducted and information is shared, and puts the necessary attention into the organisation, running, documentation and evaluation of the meetings.

It is recommended that National Hubs plan face-to-face meetings at least once a year. Ideally such meetings should take place with a timeline that allows discussion on proposed Biodiversa+ Annual Work Plans and to provide timely national recommendations and views for the General Assembly.

If considered relevant (and to facilitate the work/discussions on specific subjects), dedicated working groups can also be established within the National Hub.

National Hubs can receive support from the Biodiversa+ Operational Team for the preparation/delivering of relevant documents and presentations.