METHOD PROTOCOL

Which individual or combined instruments and recommendations identified by the HEU BioValue project are most likely to increase the transformative potential of the spatial planning process in each EU focal country, to effectively enhance biodiversity e.g. in the context of the Nature Restoration Regulation (NRR), and why?

Requested by

Project Biovalue
"Biodiversity value in spatial policy and planning leveraging multi-level and transformative change"

BioValue

Developed by Eklipse Scoping Group

July 2025

Methods protocol

July 2025

Eklipse Scoping Group (ESG) on the transferability of the outputs of the HEU BioValue project to increase the transformative potential of the spatial planning process in EU countries, to effectively enhance biodiversity.

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A. BACKGROUND

The BioValue project developed recommendations for better integration of spatial planning and environmental assessment instruments, and economic and financial instruments into spatial planning processes to enhance biodiversity and the values that it provides to society. These recommendations were developed and partly tested in close collaboration with practitioners in transformation arenas located in the North of Italy, the greater Lisbon area, and northern Germany.

Spatial planning processes are within the competence of public administrations/governments at multiple levels and involve synchronization across multiple scales; spatial, temporal and sectoral to improve societal outcomes. Fast-emerging social, spatial, and environmental challenges and transformations accelerate the scope and dynamics of uncertainties and contestation providing the context within which spatial planning interventions take place (Lamker 2019; Scott et al. 2013). Hansen et al. (2023) reported that European municipalities mainly show advancements in dealing with ecological issues, such as new plans, strategies, regulations or funding programmes for climate adaptation or biodiversity support, as well as some progress in co-governance with non-governmental stakeholders. However, decisions often lack sufficient transparent justification and incremental reactive measures, leading to disintegrated development (Scott et al. 2013). When municipal representatives are aware that substantive changes are needed, and are willing to act, they often lack the means (e.g., staff, budget, and knowledge). Many European countries deal with potential biodiversity loss by using the mitigation hierarchy through environmental assessment processes (Savilaakso et al. 2023). However, proactive approaches to restore or enhance biodiversity are lacking.

Spatial planning transformations can be divided into deep or shallow interventions (Scott et al. 2022). Shallow transformations are more aligned with incentives that include or nudge changes such as taxes or subsidies but these are vulnerable to change as better financial inducements come along. Deep transformation is more radical and deep-seated leading to changes in behaviours and values and thus quite often will require bundles of incentive, regulatory and participative tools in a more deliberative strategy.

Spatial governance and planning systems in Europe are heterogeneous, reflecting the prevailing territorial social model, institutions, and cultures (Nadin & and Stead 2012). European territorial cooperation initiatives and policies are oriented towards mutual understanding and learning across national boundaries. Since 2002, the EU funded ESPON programme has bridged research with policies to create evidence and knowledge on the needs of European public authorities at all levels. However, implementable effective spatial planning policies across the EU are still lacking.

One key regulatory spatial planning tool is the Strategic Environmental Assessment Directive 2001/42/EC. This Directive created the potential for proposed spatial planning plans to be consistent with policies, priority actions for biodiversity protection, and sustainable use. It supports the consolidation and implementation of biodiversity initiatives pursued by diverse actors through consultation and participation processes. However, the literature points out that the way the Strategic Environmental Assessment Directive is being practiced appears to influence plans mainly through mitigation measures, steering implementation to the project level rather than working at the level of strategic planning choices. Moreover, the Strategic Environmental

Assessment can be inappropriately used to justify the plan rather than to inform and improve it (Noble & Nwanekezie 2017; Therivel 2010).

This observation highlights a predominantly reactive approach, aligned with the directive's requirements to mitigate negative impacts. There is a complementary strategy needed that emphasizes enhancing positive impacts, which could more effectively integrate biodiversity objectives at the strategic level.

The potential of economic and financial instruments to enhance biodiversity is discussed in the literature (e.g. Rode et al. 2016; Calvet et al. 2015). Although spatial plans often mention enhancement of biodiversity, measures that actually enhance biodiversity are rarely implemented and/or evaluated.

The BioValue project has explored how and when policy-, planning-, and management instruments could be used in the planning process to increase the transformative potential of planning practices for biodiversity. As a result, they produced a catalogue of instruments and measures applicable in the fields of spatial planning (n=19), environmental assessment (n=11), along with economic and finance (n=15). They have also elaborated a set of 14 recommendations (Table 1) on how to enhance biodiversity by integrating it more explicitly and systematically within the spatial planning process. Their recommendations are based on a generalized representation of the planning process and input from a limited set of countries or subnational regions. In the request submitted to Eklipse, BioValue partners seek expert opinions on the validity of the recommendations and instruments within countries across the EU including suggestions on how to improve these BioValue outputs to make them more applicable in different planning contexts.

Addressing the request will examine expected performance of the BioValue outputs while improving their transferability and impact within a representative suite of EU member states and accession countries.

Table 1. Recommendations formulated by the HEU BioValue project for Enhancing Biodiversity through Spatial Planning (HEU BioValue project, Deliverable 4.4)

Recommendations	
1- Evolve planning mindset to achieving net-gain of biodiversity *Support the shift from the traditional no-net loss mindset, aimed at avoiding and remedying significant impacts, to a net-gain mindset, where biodiversity conditions are improved beyond current conditions.*	**2- Integrate systems thinking approach** *Breaking conventional linear approaches – particularly within spatial planning and EA governance systems – and adopting systems thinking allows for a more integrated and systemic understanding between causes and effects of activities.*
3- Strengthen the regulatory framework for biodiversity enhancement *This recommendation calls for a regulatory shift at multiple decision-making levels to mandate biodiversity enhancement as a fundamental component of spatial planning, ensuring that policies not only prevent damage but actively contribute to nature recovery and sustainable land use.*	**4- Adjust frameworks for fiscal and economic tools to broaden local governments' options for enhancing biodiversity** *Fostering vertical coordination between planning authorities and fiscal policymakers is essential to align incentives, unlock funding opportunities, and ensure coherent implementation across governance levels. Stronger coordination between these policy spheres is essential to ensure that biodiversity objectives can be*

	systematically integrated into local governance and financial decision-making in an economically and financially viable manner.
5- Establish multilevel monitoring systems for biodiversity *The systems thinking approach and ongoing evaluation based on an ecosystems approach – essential for an integrated understanding of biodiversity with other policies concerning urban and rural areas and natural spaces – require not only the continuous acquisition of data and basic information to support monitoring, but also devices, technological platforms, and the know-how underlying them. Incorporating system-level indicators can help monitor long-term outcomes, such as habitat connectivity or species recovery, and provide ongoing feedback for future planning cycles.*	**6- Empower and build capacity** *To navigate conflicts arising from vested interests in sectors like agriculture, urban development, and infrastructure, practitioners and decision-makers should promote early and transparent stakeholder engagement in environmental assessment and planning processes. Planning authorities must prioritize inclusivity in the design and implementation of spatial planning instruments to avoid exacerbating socio-economic inequalities.*
7- Secure early integration of biodiversity concerns *Early integration of biodiversity concerns in the spatial planning process enables planners and policy-makers to embed biodiversity and ecosystem service priorities into the policy agenda from the outset.*	**8- Ensure successful planning and policy cohesion** *Policy cohesion ensures the effective coherence and communication between planning levels. To ensure coherence and coordination of planning levels, it is crucial that tiering is effectively and successfully implemented in both higher- and lower-tier spatial planning. This includes ensuring that lower-tier planning levels adhere to planning decisions and future actions that are delegated to them from higher-tier planning and that higher-tier makes use of insights collected for preexisting plans and projects in the area.*
9- Address cumulative aspects *Considering that biodiversity is complex, integrated, and dependent on connectivity across scales, it is crucial for spatial planning practice to address the cumulative processes that impact biodiversity over time.*	**10- Strengthen proactive application and enforcement of the mitigation hierarchy** *To counteract the reactive application of the mitigation hierarchy and ensure robust enforcement of mitigation measures, the mitigation hierarchy should be integrated as a fundamental principle at the earliest stages of the planning cycle, ensuring the prioritization of impact avoidance and enhancement of biodiversity before any planning formulations and decisions start being made.*
11- Integrate challenges and opportunities into the vision building and formulation of objectives *While earlier recommendations (R1, R6, and R9) emphasize the importance of early-stage planning, R11 reinforces the need to align biodiversity ambitions within the stages of vision building and objective formulation. This strategic integration is essential to move from high-level ambition to actionable planning frameworks. Incorporating biodiversity from the outset clarifies the level of recognition it receives within administrative agendas and among the stakeholders shaping long-term planning directions.*	**12- Broaden baseline studies to support diagnosis stage and ensure effective use of data at later stages** *Knowledge on the current and evolving situation, and its diagnosis, depend on reliable and as complete as possible data and information. It also enables the use of artificial intelligence, which can speed up the analysis when using multiple instruments that depend on organized data and information.*

13- Improve the development and use of scenarios and alternatives in the strategy stage *The development of scenarios as representations of possible and desired futures enables interactions with representatives of communities and stakeholders, in a limited but very useful and fruitful way, allowing to debate and agree on desired futures concerning biodiversity and nature in the territory and in cities.*	**14- Embed action-oriented monitoring into planning practices** *Implementing spatial planning involves executing policies and plans, projects, and other types of actions through regulations, public and private actions, and other initiatives and activities often engaging negotiation and the preparation and utilization of further planning instruments. To follow-up these complex processes, monitoring is essential.*

B. OBJECTIVES

The main goal of the request, put forward by the BioValue project, is to understand the extent to which the policy tools and recommendations developed by the BioValue project are applicable in different EU planning contexts and systems. During the scoping phase and after consulting with the requester, we devised the following request-question:

Which individual or combined instruments and recommendations identified by the HEU BioValue project are most likely to increase the transformative potential of the spatial planning process in each EU focal country, to effectively enhance biodiversity e.g. in the context of the Nature Restoration Regulation (NRR), and why?

2.1 POLICY RELEVANCE AND GEOGRAPHICAL SCOPE OF THE REQUEST

The policy relevance of this request covers the implementation of the Territorial Agenda (TA) 2030, in particular, Paragraph 36 of the TA2030, which concerns the loss of biodiversity and land consumption, with severe risks to ecosystems and long-term living conditions, affecting livelihoods, quality of life and local economies. The geographical scope covers EU regions and subregions and accession countries.

2.2 RELEVANCE FOR BIODIVERSITY

Safeguard and increase biodiversity through transformative change in multiple decision-making contexts, including spatial planning, planning practices, and infrastructure development.

C. METHODS

3.1 TIMELINE AND TYPE OF DELIVERABLES

Timeline: output expected by the end of September 2025 (report ready for the 28th September)

The deliverable will be in the form of a report, portraying different process pathways to achieve either deep or shallow spatial planning transformation. Through the use of worked examples, the report will frame recommendations on how governance frameworks might change to optimize transformative potential. This could lead to the development of a community of practice as part of the legacy. This report will assess to what extent the BioValue outputs (the catalogue of tools and recommendations) are applicable or adaptable to existing spatial planning regulatory contexts in the EU and accession countries, by identifying a) potential differences in spatial planning contexts that highlight the need for adaptation of the project outputs; b) suggestions on improvements on the project catalogue of tools and recommendations to make them applicable in different planning contexts.

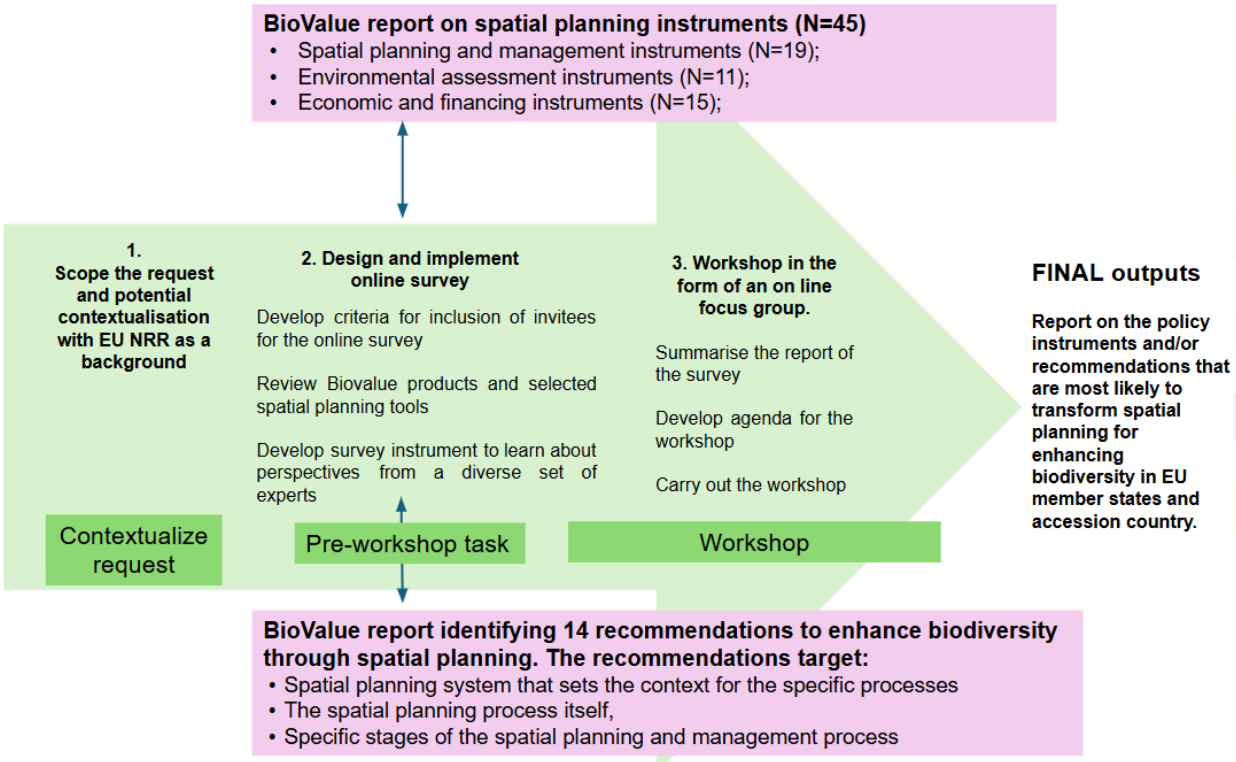

Figure 1. Overview of the flow of tasks, including a description of the envisaged output.

3.2 METHODOLOGICAL FRAMEWORK

To address the refined question (Box 1), the core team will carry out 3 tasks and associated subtasks (Figure 1). All tasks will be subjected to an ethical assessment by Ashoka Trust for Research in Ecology and the Environment (ATREE), in accordance with established principles of good practice (see Code of Ethics).

Task 1. Contextualize and scope the request within a policy context (e.g. EU NRR)

This task requires clearly defining the scope of the request given the resource and time limitations. Our broad focus is on identifying the mix of tools that have the greatest transformative potential of the spatial planning process to enhance biodiversity. A potential additional and more refined focus is on the NRR given its applicability and contemporary relevance. We suggest placing the BioValue recommendations and instruments (henceforth, outputs) along the timeline specified in the EU NRR for implementation within each member state (e.g. Figure 2). This is important to ensure a tight link between the request and real-world implementation of an EU policy, staying in line with the mission of Eklipse.

Obligations and targets	Member States shall: ● **Enhance biodiversity** in agricultural ecosystems ● **Put in place measures to achieve an increasing trend** at national level **of at least two of the three following inc** agricultural ecosystems until satisfactory levels are reached: ○ Grassland butterfly index ○ Stock of organic carbon in cropland mineral soils ○ Share of agricultural land with high-diversity landscape features ● **Put in place measures to achieve a measured increase in common farmland bird index** at national level (indexe 2025 at 100): ○ For Member States with historically more depleted populations of farmland birds the targets are: 110 by 2030, 12 130 by 2050 ○ For Member States with historically less depleted populations of farmland birds the targets are: 105 by 2030, 110 115 by 205 ● **Put in place measures to restore organic soils in agricultural use** constituting drained peatlands on: ○ 30% of such areas by 2030 (of which at least quarter is rewetted) ○ 40% of such areas by 2040 (of which at least third is rewetted) ○ 50% of such areas by 2050 (of which at least third is rewetted
Agro-ecosystems	Restore all HD Annex I agricultural habitats to good condition and Recreate additional habitat area required to achieve FCS
	Restore and recreate agro-ecosystems as necessary to: 1) increase the populations of common farmland birds as measured by the common farmland bird indicator in each Member State by 10% (or 5%) by 2030 as compared to 2020, 20% or (10%) by 2040 and 30% (or 20%) by 2050; 2) achieve the secure status of birds that are predominantly associated with agro-ecosystems, with all necessary restoration measures completed on 30% (or 15%) of degraded areas by 2030, 60% (or 40%) by 2040 and 100% by 2050. Maintain, restore and re-create agro-ecosystems as necessary to achieve the favourable conservation status of species that are listed in Annex II, IV and V of the Habitats Directive and predominantly associated with agro-ecosystems, with 15% of all necessary actions carried out by 2030 and 40% by 2040 and 100% 2050.
	Restore or recreate semi modified and seminatural grassland on modified grasslands and croplands for general biodiversity and ecosystems services,

Figure 2. Timeline of implementation of the EU Nature Restoration Regulation. Specific goals and timeline for agro-ecosystems are shown as an illustrative example. We acknowledge that BioValue

outputs were not restricted to a particular ecosystem, although the outputs may be found to be relevant at this level. FCS = favorable conservation status; HD = Habitats Directive.

Task 2. Design and implement online survey

The goal of the online survey, as a form of expert consultation, is to assess the efficacy of BioValue outputs, singly and in combination, across a representative set of EU member states and accession countries. This online survey will display participant experiences through diverse countries and can help to understand the potential benefits and challenges for the implementation of the BioValue outputs. Information collected by the survey will provide key intelligence to shape the workshop in Tasks 3 & 4 (see below), as it allows the core team to obtain a more robust and informed answer to the focal question for the request (Box 1) than would be possible without the online survey. Responses to the survey will also provide a basis for selecting invitees to the workshop. The survey is furthermore considered as a means for participants to prepare themselves for the workshop by task enabling participants by introducing their first thoughts and making the best use of the limited time available during the request period.

Designing and implementing the survey entails 3 subtasks:

Task 2.1. Develop criteria for inclusion of invitees for the online survey along with an invitation letter designed to maximize robustness of findings from the survey. Identify and secure one contact point in each member state who sends out the invitation letter. By following the Tailored Design Method[1] (Dillman et al. 2014), we help to ensure that the survey results are reliable and useful. We will also use EKLIPSE networks and member networks to maximize response across the EU member states and accession countries. We anticipate some 250-300 responses.

Task 2.2. To identify priority themes for the survey, review Biovalue outputs and selected literature on spatial planning tools through an unstructured literature review. The typology of BioValue outputs may be adapted to ensure relevance for real-world planning and decision-making, while allowing for a concise set of questions in the online survey. For example, a set of recommendations may be merged to not only simplify the elicitation process but also to ensure they are applicable across the broader geographic area. Biovalue developed its outputs based on input from a limited set of countries, so this is a crucial validation to ensure at least potential relevance for all member states.

Task 2.3. Develop an online survey instrument to learn about perspectives from a diverse set of experts and practitioners regarding potential for applying BioValue outputs within member states. The instrument will be informed by the outcomes of the policy framing in Task 1. Questions in the

[1] The Dillman Tailored Design Method (TDM) is a survey design conceived in the early 1970's as an approach to mail and telephone surveys that emphasized giving attention to all aspects of questionnaires and survey implementation procedures experienced by recipients of survey requests. It was proposed that the likelihood of obtaining questionnaire answers was greatest if the survey designer simultaneously focused on reducing costs, increasing benefits, and engendering trust that the expected benefits of responding would outweigh the costs of responding.

survey will capture perspectives of participants regarding (1) their own experiences in using tools for nature restoration, and (2) their reflections on BioValue recommendations based on the challenges and opportunities afforded by the NNR (see ANNEX 1). (3) basic socio-economic details and country. We anticipate using a combination of open and closed questions with 15-20 minutes maximum time for completion. Respondents will be asked to indicate if they are willing to take part in a further workshop.

Task 2.3. Analyze results and generate a report of findings from the survey.

The results from the survey will directly shape the focus and structure of the workshop. Analysis will involve simple frequency analysis of the closed questions with a simple contents analysis of the open questions using post survey thematic coding.

Task 3. On line Participatory Workshop

Task 3.1. The report from the survey will be summarised and presented in a format suitable to be part of an invitation to secure 25-30 workshop participants. As stated in Task 2 (above), respondents to the survey will indicate if they are happy to participate in the workshop. Engaging the survey respondents will give us a breadth of expertise to potentially draw upon during the workshop while being further supported by members of the Eklipse networks. We will select invitees to capture a representative set of people working in EU member states and accession countries.

Task 3.2 Develop agenda for the workshop and identify facilitators and note-takers, ensuring enough people can fill these roles for the necessary 4 break-out groups. A preworkshop task will be set up to enable participants to introduce early thoughts. The Mural/Miro board platform will be used using an approach based on previous successful ventures in Eklipse.

Task 3.3 Carry out workshop

Whilst the specifics of the 3.5-hour workshop will necessarily evolve in response to the survey results, the general format will involve:

1. Results of survey (Task 3.2) followed by aims and objectives of the workshop.
2. There will be two breakout discussion themes, which will build on the survey results.
    i. Breakout 1: Experience using tools to tackle environmental challenges while conserving biodiversity in member states. Each group will have participants representing several countries to ensure meaningful comparisons regarding perspectives about existing and future approaches to biodiversity conservation through spatial planning.

       Summary and report back about Breakout 1

ii. Breakout 2: Which BioValue outputs are expected to be most effective in each member state and why? Each group will have participants from a single country or neighboring countries with similar demographic attributes to enable a focused discussion about applying BioValue outputs at the country level.

Summary and report back about Breakout 2

3. Plenary discussion
4. Reflections from requester, expert panel (3 members) and other invited audience members.
5. Next steps

We expect the end result will be an understanding of which mix of BioValue instruments and recommendations can be used for the NNR for maximum effectiveness set within the particular political, social, economic, and environmental contexts of participating countries. We are also anticipating learning about similarities and contrasts between countries regarding which BioValue outputs are most promising.

Task 4. Generate a report of findings to answer the request with clear recommendations.

D. LIMITATIONS

There are a number of caveats of the proposed methodological approach, which are listed below:

- The workshop may be constrained by language restrictions, depending on budget and traductor availability in such a short timeframe.
- The call had a limited timeframe, which limited the scope and dimension of this review.
- Grey literature, as well as governmental documents, has not been included in the scoping review due to time and resource limitations. However, the participatory workshop can be considered a proxy to enable experts to comment on the scoping review results and address the objectives of the request.
- There will only be one participatory workshop for three hours, which limits the deliberative process and potentially constrains what can be achieved. Pre- and post-workshop tasks (i.e., sharing of the scoping review report and briefing paper before, and sharing of the workshop report after) can help overcome this.

E. ETHICAL CONSIDERATIONS FOR METHODS PROTOCOL

Eklipse process is built on a robust ethical infrastructure composed of twelve measures to mitigate potential ethical risks. In addition to protecting integrity and credibility, this ethical framework is crucial for the cooperation of actors from different spheres within a complex science-policy-society interface. In the context of activities undertaken by the Eklipse scoping group (MEG, KCB and EMB), the ethical framework applies and participants to the planned activities need to comply to the Eklipse

Code of Ethics and tailored ethical measures need to be proactively set up before the activities start. Eklipse will be the body responsible for the overall administration and compliance of the ethical framework and tis procedures. Members of EMB, KCB and MEG will work collaboratively to ensure good practice is followed and the ethical procedures developed for the project are approved through the peer review process.

A. Provide details of participant population and the number of participants required (Include brief characteristics as well as principal inclusion and exclusion criteria)

The workshop will include five clusters (thematic areas) with up to six participants in each thematic area. Given the virtual nature of the workshop, experts from EU . Based on Eklipse's approach to mapping and gathering consent, individuals will be asked to sign a conflict-of-interest declaration, including their involvement in active projects that may be impacted by the outcomes of the report.

B. Describe how and from where participants will be recruited.

See the recruitment section above for details.

Identifying invited experts: Chosen experts would be from national or local policymakers, spatial planning authorities, environmental practitioners and other relevant authorities working in any of the EU member states or accession countries (EU+ countries) with knowledge or experience on spatial planning. Eklipse, BioValue experts as well as the Landscape Knowledge Exchange Network from the BioAgora project will be mobilized to suggest external experts to answer the survey and participate to the workshop.

The participatory workshop will also take place online and will be delivered using Zoom. Workshop recording and Miro board will enable notetaking and summarization, as well as help capture the essence of the discussions. Consent to record will be sought beforehand as part of the recruitment phase. As such, we will have written consent for recording, but crucially, participants will have the choice to remain anonymous in any reporting of their contributions.

C. Describe any incentive participants may receive for participation.

Participants will not be remunerated for their time to avoid financial motivations for participating that may bias their inputs. They will be given the option to either be named in the final report as contributors to the request or remain anonymous.

D. How will consent be obtained from or on behalf of participants? When, where and how?

The Eklipse group responsible of compliance to the ethical infrastructure will develop guidelines for seeking consent, incorporating consent forms and conflict-of-interest declarations as essential components of the recruitment process. These forms will address confidentiality issues, and

outline key participation requirements including minimum time commitments, and a summary of the workshop objectives and structure.

E. How will consent be recorded?

Consent forms will be provided at the recruitment stage and collated by the EMB. Verbal consent will be sought for the recording before the workshop.

F. Describe any ethical issues and how these will be mitigated.

External consultants, stakeholders and other participants may face conflicts of interest due to previous or recent collaboration on projects or the inability to share unpublished work. Eklipse scoping group (ESG) members will be asked to declare possible connections to these organisations/ individuals (e.g. financial, shareholding, personal relationship etc.) when offering suggestions for the workshop. The conflict-of-interest declarations can be reviewed by the Eklipse group responsible of compliance to the ethical infrastructure for this process and decision to include or exclude participants can be made collectively by the ESG.

G. How will the results from this study (including feedback to participants) be disseminated?

A draft report of the scoping review and a briefing paper will be shared with the workshop participants beforehand. The summary of notes from the workshop will be shared for initial review by participants. The focus group and workshop input will be integrated into the final report and circulated to participants.

H. Describe how the anonymity of participants and the confidentiality of data will be protected and the specific methods to be used for this, both through the research and in the dissemination of findings.

Consent forms will include questions on anonymity, and the nature of the request and publication of findings will be explained in the form, allowing the option for experts to be - or not to be - identified. Code-naming will be used, if necessary (e.g. reviewer X1).

I. Who will have access to identifiable information? Describe any potential use of the identifiable data by others.

Eklipse group responsible of compliance to the ethical infrastructure for this process will have access to identifiable information if they attend the workshop. A sub-group of the ESG will be tasked with the analysis of the data.

J. Are there any conditions under which privacy or confidentiality cannot be guaranteed, or if confidentiality is not an issue in this research, explain why.

See above for consent and anonymity. This research does not focus on private data or confidential information. However, workshop participants will also be encouraged to adhere to principles of confidentiality.

K. Describe the methods of data analysis, how data will be stored and how long data will be stored for

Data from the project is collated and safeguarded by Eklipse processes for data collection and storage. Google drive with secured sharing to the ESG will be used to work with the collated data for the duration of the project. The data generated from the workshop will include recordings from Zoom and meeting notes.

L. Conflict of interest - Does the ESG or any other investigator/collaborator have any direct personal involvement (e.g. financial, share-holding, personal relationship, etc.) with the organisations/individuals involved that may give rise to a potential conflict of interest?

The ESG members will be asked again to declare such possible connections before suggesting experts for the workshop. The conflict-of-interest declarations can be reviewed by the EMB and decision to include or exclude participants can be made collectively by the ESG.

M. Participant information sheet and participant consent form.

Due to the short-term nature of this request, these have not yet been finalised. These will be provided promptly for review based on Eklipse's design of forms for experts and previous enquiries. Consent forms will include questions on anonymity and the nature of the request and publication of findings will be explained in the form allowing the option for experts to be or not be identified. Code-naming will be used for anonymity (e.g. reviewer X1).

E. TIMELINE

The following key activities with milestones and proposed duration are described in Table 3.

Table 3. Overview of the methods, indicating the different tasks, milestones, and timelines.

	Description	**Duration/ T**
Step 1	**Method protocol**	**1 month**
Milestone 1	**Method protocol final version**	**09.07.2025**
	Method protocol peer-review finished (3 weeks allocated)	23.07.2025
	Reply to comments peer review.	28.07.2025

Step 2	**Survey design**	**0.5 month** (07.07.2025-23.07.2025)
Milestone 2	**Survey dissemination**	**23.07.2025**
Step 3	**Survey results analysis**	**22.08.2025**
Milestone 3	**Workshop design with quantitative and/or qualitative results**	**August 2025**
	Identification of experts for workshop	August 2025
	Invitation to workshop	August 2025
	Workshop planning	August 2025
	Workshop summaries by group experts to introduce sub-groups progress	August 2025
Step 4	**Workshop**	**Mid September 2025**
Milestone 4	**Analysis of workshop results**	**Mid September 2025**
Step 5	**Report writing**	**August & September 2025**
Milestone 5.1	**Draft report ready for peer review**	**Mid September 2025**
Milestone 5.2	**Report finished**	**September 28th 2025**

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ANNEXES

ANNEXE 1: DRAFT VERSION FOR THE SURVEY IN TASK 2

INTRO & BACKGROUND FOR QUESTIONNAIRE

Thank you for providing your expertise… [to complete, thank you note and overview of the survey sections: intro, part 1, part 2, etc.]

Refined request question

Which individual or combined instruments and recommendations identified by the HEU BioValue project are most likely to increase the transformative potential of the spatial planning process in each EU focal country, to effectively enhance biodiversity e.g. in the context of the Nature Restoration Regulation (NRR), and why?

Aim of questionnaire

[to be filled]

Anonymity and confidentiality of individual responses

[to be filled]

Storage and processing of personal data

[to be filled]

EU Nature Restoration Regulation

The EU Nature Restoration Regulation (NRR), also known as the Nature Restoration Law, is a regulation that aims to restore degraded ecosystems across the European Union. It sets binding targets for restoring at least 20% of the EU's land and sea areas by 2030, and ultimately all ecosystems in need of restoration by 2050. This regulation is part of the EU's broader biodiversity strategy and aims to address biodiversity loss, ecosystem degradation, and climate change.

Transformative change

Transformative change, as defined by IPBES (2019) refers to a fundamental, system-wide reorganization across technological, economic, and social factors, including paradigms, goals, and values. It's a fundamental shift needed to address the underlying causes of biodiversity loss and nature's decline, aiming for a more sustainable and equitable future.

Resources

1. Biovalue Instrument catalogue (Section 4.5, table 1, page 43) and recommendations (Section 3, pages 15-34) in BioValue report
2. Document of Work for BioValue request: [URL]
3. European Commission: Directorate-General for Environment and Sundseth, K., The nature restoration regulation, Publications Office of the European Union, 2025, https://data.europa.eu/doi/10.2779/5842922

PART 1 Demographics

Your country (choose one)

Focal ecosystem(s): Forest, Urban, Freshwater wetland, marine, agriculture, mountain (checkbox)

Your domain: policy, science, business, civil society, national / local policymakers, planning authorities, environmental practitioners

Your age (choose one category; use standard ranges)

Your gender (use European guidelines / categories)

Number of years working in any/all domains chosen above (categories – choose one)

PART 2: Assessment of BioValue Outputs

1. Over what spatial extent does your organization directly affect biodiversity through implementing any or all of the BioValue outputs? Please give a specific name (depending on the spatial level) of e.g. city, specific subnational region, country, etc.) [spatial extent] (free text)

Each of the following focal aspects for each set of BioValue outputs (i.e. type or function of instruments + each cluster of recommendations) is assessed using a multiple choice question

2. Status of implementing the [set of Biovalue outputs]. Choose the option best representing the situation in your organization regarding documentation of implementation or plan to implement the recommendation.

A. Implemented

B. Commitment to implement

C. Considered important or necessary but no commitment to implement

D. Determined to be unimportant or unnecessary

E. Not evaluated yet

F. Other: _____

3. How likely do you believe the [set of Biovalue outputs], if implemented, will enhance biodiversity within the spatial extent you gave for Q1 from 2026-2030?

A. very likely (80-100%)

B. somewhat likely (60-79%)

C. very unsure (40-59%)

D. somewhat unlikely (20-39%)

E. very unlikely (0-19%)

4. During which of the following phases of EU NRR implementation cycle / timeline could the [set of Biovalue outputs] be applied if sufficient resources are secured? (check the relevant options)

A. Incorporation within National Restoration Plans to be finalized in 2027

B. Immediate or near -term implementation of actions to achieve intermediary Restoration targets by 2030

C. Long term implementation until 2050 to achieve final objectives of EU NRR

PART 3: Explanation and Policy Relevance

After set of questions about recommendations and set of questions about instruments ask:

5. Please explain your answers to the above questions, including 1 or 2 examples from your own experience ideally including issues like available resources (financial, know-how for implementation), knowledge about anticipated effects on biodiversity, and legal constraints. [free text]

6. How do EU laws and regulations, including the NRR, influence the likelihood of success of the BioValue products that you believe could and should be implemented to enhance biodiversity through your organization, if at all? Please provide any relevant details, e.g. variation in expected effectiveness among ecosystems if relevant. [free text]

All respondents who fill out the survey will be asked whether they are willing to participate in the focus group via video conference on September X [still to be defined]. This will help us select a diverse and inclusive set of participants but will not be the only mechanism for selection.

ANNEXE 2: EARLY DRAFT QUESTIONS FOR WORKSHOP BREAKOUTS

Possible questions that will be adapted based on the results from the online survey:

1. What factors within a focal country during a particular phase of the EU NRR planning or implementation boost or hinder the use of a mix of instruments and / or recommendations in that country?
2. As a second workshop session, the question on catalysts and barriers for using the instruments in practice, participants discuss and identify catalysts and barriers for instruments in three different contexts identified in BioValue:
    a. Spatial planning system that sets the context for the specific processes
    b. The spatial planning process itself
    c. Specific stages of the spatial planning and management process
    d. The second context could be linked to EU NRR, if it seems interesting.