Bridging the gap between policy and knowledge on biodiversity in Europe

Document of Work (DoW)

Increase the transformative potential of the spatial planning process in EU countries, to effectively enhance biodiversity

Requested by
the Horizon Europe (HEU) BioValue project

Funded by
the Horizon Europe (HEU) BioValue project

Developed by Eklipse Scoping Group
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Content

Document developed by the Eklipse Scoping Group:

Members of the Eklipse Methods Expert Working Group:

Alister Scott - University of Northumbria, UK

Brady Mattsson - University of Natural Resources and Life Sciences, Vienna (BOKU), Austria

Johan Oldekop - University of Manchester, UK

Josie Antonucci di Carvalho - Helmholtz Institute for Functional Marine Biodiversity, HIFMB/AWI.Germany

Saloni Bhatia - Ashoka Trust for Research in Ecology and the Environment, India

Members of the Eklipse Knowledge Coordination Body:

Simo Sarkki – University of Oulu

Sonja Hoelzl – Bavarian Academy for Nature Conservation and Landscape Management (ANL)

And the **Eklipse Management Body**.

General Information

Original Title:

This request was put to Eklipse by the EU Horizon BioValue project.

This document of work describes the results of the scoping activities as well as the background of the request and is the basis for the call for experts.

Requesters: EU Horizon BioValue project
Funder: EU Horizon BioValue project
Date request received by Eklipse: 20/02/2025
Kickoff meeting by Eklipse: 24/02/2025

Request reformulation following the meeting with the requesters and Eklipse Scoping Group: 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?

Glossary

focal countries: EU member states and accession countries that are represented by participants (who work there) in the survey or workshop.

Remarks:

“each focal country” emphasizes that we look at possible use of instruments/recommendations within each country rather than at some sort of international level.
To ensure relevance for policy-making at the EU level and make sure our results are representative of all EU member/accession countries, we would answer a second question: based on the country-specific answers, are there patterns regarding the most promising BioValue outputs according to demographics, including geography (e.g. north vs. south), human population growth, gross domestic product, or “age” of the country within the EU?

Expected deadline for deliverables: 28/09/2025

In order to refine the request, the following scoping activities have been carried out:

We received the Catalogue of tools and recommendations draft from the BioValue project on 19 May 2025. We did a quick screening of those documents and reformulated the request such that it could be answered in line with the given timeframe while ensuring relevance for policy-making at the EU level and within individual countries. On 18 June 2025, Eklipse received confirmation that the end of the BioValue project and therefore deadline for the knowledge synthesis report was extended until 30 September 2025.

This Document of Work (DoW) describes the background of the request and forms the basis for the proposed methodology. The document explores how the request relates to existing policy processes across EU countries, which instruments are used, and how they vary between countries. It identifies plausible and relevant programmes of work and methodologies to answer this request.

Background and context of the Call

Original request:

To which extent the BioValue outputs developed (catalogue of policy instruments and recommendations) are applicable in different EU spatial planning contexts and systems? For this purpose, BioValue seeks expert opinions on the validity of the recommendations across the EU, and suggestions on how to improve them to make them applicable in different spatial planning contexts.

Background:

The BioValue project developed recommendations for better integrating spatial planning and management instruments, 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 lacking transparent justification and incremental reactive measures dominate 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. 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 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.

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.

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.*

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.

Relevance for biodiversity

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

Added value of Eklipse:

The Eklipse process enables answering requests from decision-makers on a wide range of topics, by synthesizing available knowledge from both scientists and other knowledge holders (i.e. summarizing academic and grey literature). The process, in place since 2016, facilitates evidence-based decisions through a transparent, objective, and robust process. Transparency and robustness are prioritised at every step. For instance, peer-review is favoured at two important stages (1. the development of the methods protocol, and 2. the production of all results deliverables) to ensure scientific quality and rigor. Eklipse ensures a meaningful transfer of scientific knowledge to the policy arena, so that effective evidence-informed environmental decision-making can be undertaken with confidence.

One of the added values of Eklipse concerning this specific call will be to:

- enhance the transferability of results across Europe, as BioValue outputs were based on input from experts working in a restricted number of countries
- increase the policy relevance of the results

Box 1. 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?

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Logbook

The logbook describes the agenda of exchanges with the Requester and the scoping group, which is constituted by members of the Knowledge Coordination Body (KCB), Methods group, and Eklipse Management Body (EMB), as well as the contents discussed during the meetings.

Date	Participants	Topic	Platform
24.02.2025	Presentation of the request by Karla and Heidi to the KCB	Presentation of the ticket	Online
8.04.2025	Eklispe Working Group meeting Eklipse KCB: Ute, Nils, Simo, Sonja, Jan, Eklipse MEG: Ina Eklipse EMB: Candice	Decision on focal points	Online
16.05.2025	Scoping group first meeting with the requester Requester: Maria, Enzo, Karla Eklipse KCB: Ute, Simo, Sonja Eklipse MEG: Alister, Brady, Josie, Johan Eklipse EMB: Candice, Roxanne	To discuss the request, and clarify aspects with the requester	Online
20.05.2025	Scoping group meeting Eklipse KCB: Sonja, Simo Eklipse MEG: Brady Eklipse EMB: Candice, Roxanne	To reframe the request	Online

30.05.2025	Scoping group meeting Eklipse KCB: Sonja, Simo Eklipse MEG: Brady Eklipse EMB: Candice, Marie, Roxanne	To discuss the suggested reformulation of the request and discuss tasks and timeline	Online
04.06.2025	Scoping group meeting Eklipse KCB: Simo, Sonja Eklipse MEG: Alister, Brady, Josie Eklipse EMB: Candice, Roxanne	Discuss the document of work	Online
12.06.2025	Scoping group meeting Eklipse KCB: Simo, Sonja Eklipse MEG: Alister Eklipse EMB: Roxanne	Discuss the document of work and method protocol	Online
26.06.2025	Scoping group first meeting with the requester	Discuss the doW and Method as well as the formulation of the request	Online

Annexes

ANNEX 1: Key points during the meeting with requesters 26-06-2025

Request formulation:

- Karla emphasises that one of the main core values of BioValue is not only to protect or conserve biodiversity, but to enhance. And with Heidi's formulation, she feels it better captures that fact. NRR can be taken as an example but it should be taken into consideration that the **focus is broader than one single policy**. The instruments and recommendations are two different outputs and the reformation with two questions signifies that. The transformative potential of the instruments or the combination of instruments should be broader than one example of NRR.

  Answer: The reformulated request-question mentions "enhance biodiversity" and uses "e.g." to highlight that other policy instruments will be considered besides NRR. After the meeting, we further revised the request-question to explicitly mention recommendations and instruments.

Other key points / clarifications:

- It would be nice to have a draft from Eklipse in the **mid of September** of what would be the outcome, for BioValue to have time to adjust their final documents.

  Answer: as the workshop will be mid-September, we will be able to share a draft regarding methods and survey results, and will incorporate the results of the workshop. Workshop to be held the week of September 8, draft to be shared with the requesters by September 18th.

  There is a need for expertise in Spatial Planning consulted in this request. How is Eklipse going to deal with it?

Answer: Alsiter, co-chair of the Methods Expert Group, has his research focus on spatial planning, He has worked in spatial planning research and publications, and will be considered as one of the experts on spatial planning in the Scoping Group. And if the Scoping Group feels the need of inclusion of more experts in the group they will do so.

- Is the Core Group that's mentioned in the DoW same as the Scoping Group or does it include someone else?

  Answer: Due to the rapid nature of this request Eklipse won't be having an Expert Working Group to answer this request. So here the Core Group is to mention the ones answering the urgent request which includes the Scoping Group: The KCB, MEG and EMB, and potential additional experts on Spatial planning (if needed).

ANNEX 2: request proposals - history

03.07 - Eklipse scoping group suggestion:

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[add which group of EU countries], to effectively enhance biodiversity e.g. in the context of theEU Nature Restoration Regulation (NRR), and why?

Glossary

focal countries: EU member states and accession countries that are represented by participants (who work there) in the survey or workshop.

Clarification of edits to reformulation above

"each focal country" emphasizes that we look at possible use of instruments/recommendations within each country rather than at some sort of international level. One disadvantage is that it's unclear at what level we want biodiversity enhanced – country vs EU. Another disadvantage is that we do not refer to any sort of way to anticipate what is going on in countries that are not included in the survey/workshop. We could expand the definition of focal countries to make sure these are representative of all EU member/accession countries, at least then we can argue that we account for data gaps to give a more complete picture.
For clarity, we could add a 2nd question: Based on the country-specific answers to Q1, are there patterns regarding the most promising BioValue outputs according to demographics, including geography (e.g.

north vs. south), human population growth, gross domestic product, or “age” of the country within the EU? Answering the 2nd question would ensure relevance for policy-making at the EU level, as this could facilitate anticipating performance of the outputs in countries who did/could not participate.

02.07 - Johan’s suggestion:

Which individual or combined instruments and recommendations identified by BioValue are most likely to increase the transformative potential of the spatial planning process in [add which group of EU countries], to effectively enhance biodiversity e.g. in the context of EU Nature Restoration Regulation (NRR), and why?

02.07 - EMB’s suggestion:

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

01.07 - requester’s suggestion:

Are [BioValue] instruments likely to enable the Spatial planning system in your country to effectively enhance biodiversity, individually or in combination e.g. in the context of EU Nature Restoration Regulation (NRR)?

Are [BioValue] recommendations most likely to increase the transformative potential of spatial planning in your country?

01.07 - Simo’s suggestion:

Which set of the [BioValue] instruments will likely enable the Spatial planning system in your country to effectively enhance biodiversity e.g. in the context of EU Nature Restoration Regulation (NRR)?

Which [BioValue] recommendations or combination of recommendations seem most likely to increase the transformative potential of spatial planning in your country?

26.06 - Meeting with requesters:

Which bundle of products identified by Biovalue (e.g., in the context of the Nature Restoration Law) is most likely to increase the transformative potential of the spatial planning process to enhance biodiversity in each EU and accession country, and why?

Subquestion 1) Can recommendations be paired with instruments or vice-versa within a bundle? -> Task 2.2

25.06. - Heidi’s (requester) suggestion:

1. Which set of the recommendations* will likely enable the Spatial planning system in your country to effectively enhance biodiversity e.g. in the context of NRL? (I like the focus on NRL, which is timely and makes the results really relevant for a number of audiences)

and 2. which instruments or combination .... seem most likely to increase the transformative potential of SP in your country? This in my understanding is much broader than the NRL, and even goes beyond biodiversity, so the example would be very limiting here. (*for biodiversity* could be added after transformative potential if you want to reduce scope)

24.06. - Suggestion from the DoW v1:

Which bundle of policy instruments identified by Biovalue (e.g., in the context of the Nature Restoration Law) is most likely to increase the transformative potential of the spatial planning process to enhance biodiversity in each EU and accession country, and why?