

Deliverable 2.1

Data Policy (DP) tool

Project Title: Priodiversity LIFE

Project No: Project 101104217 — LIFE22-IPN-FI-Priodiversity LIFE

Work Package: WP2

Task 2.2: Conceptual Biodiversity Information Data Management System for Regional Biodiversity Action Planning (ReBAP)

Subtask ST2.2.3: Data Policy (DP) for Regional Biodiversity Action Plans

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Contributing Partners: Syke (Finnish Environment Institute), MHJHT (Parks & Wildlife Finland), MHMT (Metsähallitus Forestry Ltd), SMK (The Finnish Forest Centre), ELY (KEHA-Centre aka Centre for Economic Development, Transport and the Environment)

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Summary

This deliverable describes the development and implementation of a Data Policy Tool aimed at harmonising biodiversity data policies among stakeholders involved in Regional Biodiversity Action Planning (ReBAP) under the Biodiversity LIFE project. The tool enables the collection, comparison, and analysis of existing data policies, and at the same time provides a foundation for creating a shared, consensus-based Data Policy. The approach aligns with the FAIR principles, which emphasises data findability, accessibility, interoperability, and reusability. Ultimately, this effort helps to close critical knowledge gaps and promote interoperability across Finnish biodiversity data systems.

1 Introduction

Biodiversity is the foundation of both Finnish and global well-being and security. However, the loss of biodiversity presents a significant threat, requiring urgent action across sectors and regions. The Biodiversity LIFE project addresses this issue by creating a collaborative platform, whose aim is to halt biodiversity loss in Finland. Through regional and national cooperation, the project aims to develop innovative and cost-effective solutions for biodiversity conservation.

As part of this effort Work Package 2 (WP2) focuses on supporting and harmonising the development of Finnish biodiversity work regionally and nationally by drafting Regional Biodiversity Action Plans (ReBAPs) for eight regions. Within this framework, the aim of Task 2.2 is to enhance the management of biodiversity data to ensure that all relevant information is easily accessible to stakeholders. This will be accomplished by developing a conceptual biodiversity information data management system to support Regional Biodiversity Action Planning (ReBAP). The core objective is to improve the interoperability and reusability of biodiversity information in line with FAIR data principles, while also addressing existing knowledge gaps and inconsistencies in data governance. To achieve this overall goal, Task 2.2 has been divided into five subtasks, each targeting a specific goal. The primary purpose of Subtask 2.2.3, is to create a method for collecting, analysing, and harmonising existing Data Policies (DPs) that are essential for the regional biodiversity action planning processes (ReBAPs).



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The relevance of this task is particularly clear given the current challenges related to biodiversity data availability and usability in Finland. While the overall volume and quality of biodiversity data are relatively high, the information remains fragmented across various formats, data models, and storage systems. This fragmentation significantly hinders the effective use of data. Moreover, the lack of interoperability between datasets and institutions creates a critical bottleneck for data integration and reuse.

In this context, developing commonly agreed-upon and openly accessible data policies is a crucial first step. Before meaningful conceptual or technical improvements in data management can be achieved, organisations must have clear, shared principles regarding e.g. data access, quality, security, licensing, and interoperability.

2 Objectives of Subtask 2.2.3

The goal of Subtask 2.2.3 is to develop a method and a tool for collecting, analysing, and harmonising existing Data Policies (DPs) used by stakeholders involved in ReBAP processes. The key objectives included:

- Mapping current data policies across relevant organisations.
- Developing a practical, user-friendly tool to gather and compare data policy information.
- Facilitating a consensus-building process to establish a shared Data Policy framework.
- Supporting alignment with FAIR principles and national data governance priorities.

The outcome of this subtask is the **Data Policy Tool**, which forms Deliverable 2.1.

3 Development & Implementation of the Tool

3.1 Stakeholder Collaboration and Design Process

The tool was co-developed by Luomus in collaboration with Syke with support from partner institutions, including MHJHT, MHMT, SMK, and the regional ELY Centres. The development process was executed through a series of workshops where the project partners negotiated



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and agreed upon a flexible, standardised Data Policy template (tool). This template will serve as a common foundation for regional implementation while allowing local adaptation based on legal and institutional requirements. Among the possible choices available, the development team decided to create the Data Policy tool in Microsoft Forms. The main reasons to select this was its flexibility, ease of use, and high user-friendliness. The form was created in Finnish because it is specifically targeted to Finnish stakeholders related to nature and biodiversity sector. Requirements for the data policy tool were drafted in alignment with FAIR principles.

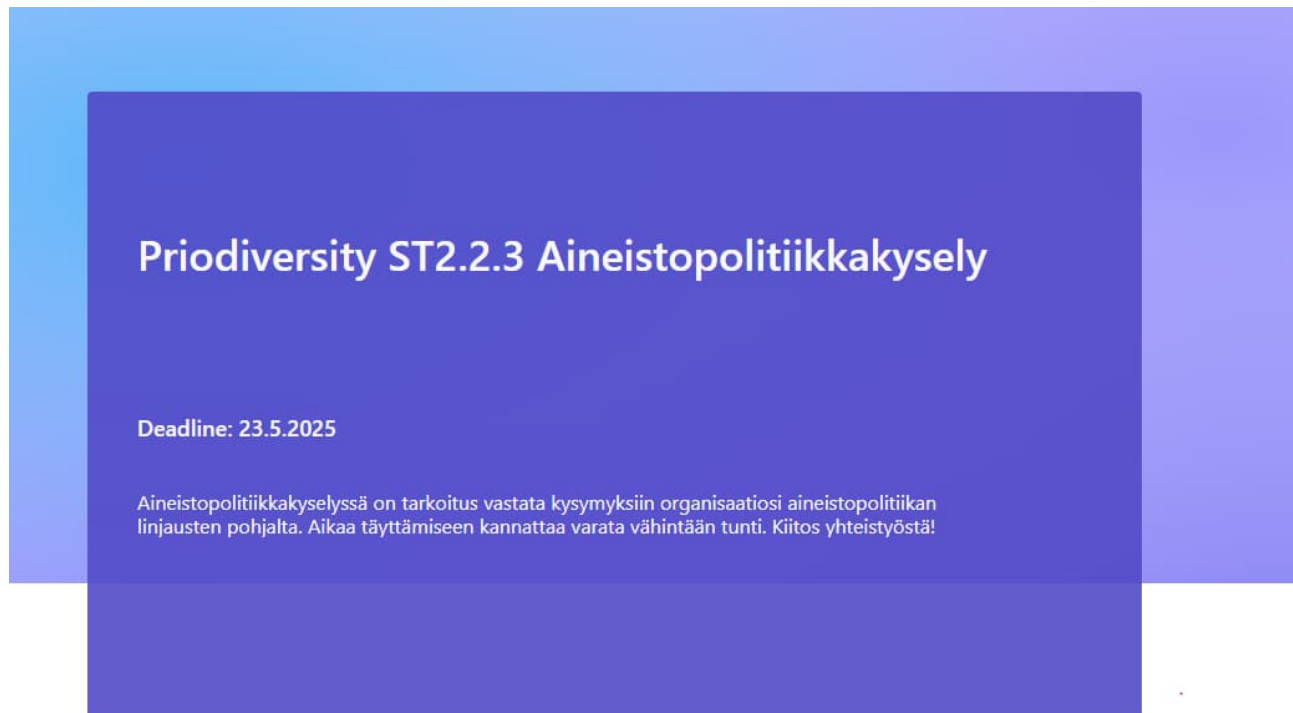


Figure 1: Screenshot showing the tool's front page.

Link to the **Data Policy Tool**: <https://forms.office.com/e/dThjWu6xd8>

A request to fill in the Data Policy Tool to gather information on the data policies was sent to all Priodiversity LIFE project partners. It was completed by seven institutions (Luomus, Syke, MHJHT, ELY, MHMT, YM (The Ministry of the Environment), SLL (The Finnish Association for Nature Conservation)). Of these, only four institutions had a written data policy implemented in their organisations (Luomus, Syke, MHJHT, MHMT).



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3.2 Structure and Content of the Tool

The tool includes thematic sections covering all critical aspects of data policy (table below).

The full English version with the response options is attached as Appendix 1.

Thematic sections	Required
1. General Information about the Organisation	
Name of the organisation.	Yes
Type of organisation.	Yes
Does the organisation have a data policy?	Yes
Name of the data policy.	No
Publication year of the latest version of the data policy	No
Language(s) of the data policy.	Yes
Is the data policy publicly available?	Yes
Link to the data policy (Required if public).	No
Brief description of the data policy.	No
2. Openness and Availability	
Which data does your organisation publish openly?	Yes
Describe which data your organisation publishes openly.	No
Does the data policy specify how data is made available?	Yes
What is stated regarding the availability of data?	No
Detailed description of the data availability policies.	No
Does the data policy include provisions on the cost of access to data?	Yes
Detailed description of pricing policies for data.	No
Does the data policy require creating metadata descriptions (e.g. description text, author, version, reference, owner, etc.)?	Yes
Detailed description of metadata-related policies.	No
3. Data Protection and Security	
Does the data policy state how personal data is protected?	Yes
What does the policy state about personal data protection?	No
Which data security practices are applied?	Yes
What other data security practices are mentioned?	No
Detailed description of data security policies.	No
4. Licensing and Terms of Use	
What usage license(s) has your organisation adopted?	Yes
Specify type: CC BY, CC BY-SA, etc.	No
What other licenses are used?	No
Detailed description of licensing policy.	No



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5. Data Management and Preservation	
Where does the data policy specify storage solutions?	Yes
What are the criteria for data storage mentioned in the policy?	No
Detailed description of data preservation policies.	No
Does the policy define data retention periods?	Yes
Detailed description of retention policies.	No
6. Standards and Technologies	
Does the policy state whether standards are used in data management?	Yes
Which standards are used?	Yes
Does the policy specify APIs, formats, and standards?	Yes
Specify which API-related standards are mentioned.	No
Details about standards-related practices in the policy	No
Are file formats or standards specified? (e.g., JSON, GeoTIFF, GeoPackage, Shapefile)	Yes
Which standards are mentioned?	No
Specify file formats and standards.	No
Is it stated that geospatial data uses the recommended Finnish coordinate system ETRS-TM35FIN?	Yes
Are standardised vocabularies/classifications used (e.g., CORINE, INSPIRE, Darwin Core)?	Yes
Which vocabularies/classifications are mentioned?	No
Clarify how vocabularies/classifications are addressed.	No
7. Data Quality Criteria	
Does the data policy define quality criteria for datasets?	Yes
What quality criteria are used, and how are they monitored?	No
Clarify how quality criteria are addressed.	No
Why are there no quality criteria defined in the data policy?	No

4 Next steps

To finalise and implement a shared Data Policy framework, the following actions are planned.

First, a dedicated working group will review, analyse and document the current state of data policies based on the results collected through the Data Policy tool. This analysis will form the basis for the next phase of development. This will be conducted in autumn 2025.

Second, a series of consensus-building workshops will be organised at the end of 2025. These workshops will bring together all project partners to co-create a consensus Data Policy that will outline the most significant preconditions as recommendations to be adopted by all relevant parties.



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Third, Syke will take the lead in conducting negotiations with regional decision-makers. The objective of these discussions is to ensure a strong regional commitment to a collective Data Policy.

Finally, the project team will develop practical guidance materials, including recommendations and templates, to support organisations that do not yet have formal, written data policies. These materials will provide a clear starting point for developing individual policies aligned with the shared framework.

Through these steps, we ensure the broad adoption of the consensus Data Policy and hence enhance long-term interoperability across biodiversity data systems.



Appendix 1 (English translation of the original Finnish version)

Priodiversity ST2.2.3 Data Policy Survey

Deadline: 23 May 2025

The purpose of this survey is to answer questions based on your organization's data policy guidelines. Completing the form may take at least one hour. Thank you for your cooperation!

1. General Information about the Organization

1. **Name of the organization** *(Required)*
2. **Type of organization** *(Required)*
 - University / Research Institute
 - Public Sector
 - Private Sector
 - NGO
 - Other
3. **Field of operation**
4. **Does the organization have a data policy?** *(Required)*
 - Yes, in writing
 - Yes, but not in writing
 - No
5. **Name of the data policy**
6. **Publication year of the latest version of the data policy**
7. **Language(s) of the data policy** *(Required)*
 - Finnish
 - Swedish
 - English
 - Other
8. **Specify language(s) of the data policy** (if other)
9. **Is the data policy publicly available?** *(Required)*
 - Yes
 - No
10. **Link to the data policy** *(Required if public)*

11. Brief description of the data policy

2. Openness and Availability

12. Which data does your organization publish openly? *(Required)*

- All data that can be shared
- Selected datasets
- None
- Other

13. Describe which data your organization publishes openly

14. Does the data policy specify how data is made available? *(Required)*

- Yes, via public website
- Yes, upon request via email
- Yes, via API (interface)
- Yes, other
- No

15. What is stated regarding the availability of data?

16. Detailed description of the data availability policies

17. Does the data policy include provisions on cost of access to data? *(Required)*

- Yes
- Partly
- No, all data is subject to fees
- No, all data is free of charge

18. Detailed description of pricing policies for data

19. Does the data policy require creating metadata descriptions (e.g. description text, author, version, reference, owner, etc.)? *(Required)*

- Yes, and metadata follows standards (e.g., ISO 19115)
- Yes, but metadata does not follow standards
- Partly
- No

20. Detailed description of metadata-related policies

3. Data Protection and Security

21. **Does the data policy state how personal data is protected?** *(Required)*

- Yes, anonymization in databases and publications
- Yes, anonymization in publications only
- Yes, pseudonymization in databases and publications
- Yes, pseudonymization in publications only
- No personal data collected
- No policy
- Other

22. **What does the policy state about personal data protection?**

23. **Which data security practices are applied?** *(Required)*

- Data encryption
- Role-based access control
- Regular backups
- Two-factor authentication
- Other

24. **What other data security practices are mentioned?**

25. **Detailed description of data security policies**

4. Licensing and Terms of Use

26. **What usage license(s) has your organization adopted?** *(Required)*

- Creative Commons
- Open Data Commons
- Custom license
- No licensing, all rights reserved
- Other license

27. **Specify type: CC BY, CC BY-SA, etc.**

28. **What other licenses are used?**

29. **Detailed description of licensing policy**

5. Data Management and Preservation

30. Where does the data policy specify storage solutions? (Required)

- Cloud service within the EU
- Cloud service outside the EU
- Local servers
- Physical archives
- Other

31. What are the criteria for data storage mentioned in the policy?

32. Detailed description of data preservation policies

33. Does the policy define data retention periods? (Required)

- Yes
- No

34. Detailed description of retention policies

6. Standards and Technologies

35. Does the policy state whether standards are used in data management? (Required)

- Yes
- No

36. Which standards are used? (Required)

- ISO standards
- Dublin Core
- DataCite (DOI)
- RDA (Research Data Alliance)
- Don't know
- Other

37. Specify other standards

38. Does the policy specify APIs, formats, and standards? (Required)

- Yes, standardized (e.g., WFS, OGC API)
- Yes, custom implementation
- No, but agreed practices exist
- No

39. Specify which API-related standards are mentioned

40. Details about standards-related practices in the policy

41. Are file formats or standards specified? (e.g., JSON, GeoTIFF, GeoPackage, Shapefile)
(Required)

- Yes
- Yes, custom implementation
- No, but agreed practices exist
- No

42. Which standards are mentioned?

43. Specify file formats and standards

44. Is it stated that geospatial data uses the recommended Finnish coordinate system ETRS-TM35FIN? (Required)

- Yes
- Partly
- No

45. Are standardized vocabularies/classifications used (e.g., CORINE, INSPIRE, Darwin Core)? (Required)

- Yes
- Yes, custom implementation
- No, but agreed practices exist
- No

46. Which vocabularies/classifications are mentioned?

47. Clarify how vocabularies/classifications are addressed

7. Data Quality Criteria

48. Does the data policy define quality criteria for datasets? (Required)

- Yes
- Partly
- No

49. What quality criteria are used and how are they monitored?

50. Clarify how quality criteria are addressed

51. Why are there no quality criteria defined in the data policy?
