INTERDISCIPLINARY CENTER
Sant'Anna
Scuola Universitaria Superiore Pisa

Co-funded by the European Union

BENCHES

Biodiversity, Ecosystems and Nature Conservation Helped and Enhanced by Sports

World Sailing, Sustainability sessions,
02/04/2025,

Alessio Novi, PhD
Sustainability management researcher and specialist
Sant'Anna School of Advanced Studies (Italy)

Sport Sustainability Management group
Sant'Anna School of Advanced Studies

Co-funded by the European Union

International projects co-funded by the EU Commission

2018-2022
Environmental sustainability in professional football

2018-2022
Environmental sustainability in grassroots football

2021-2023
Environmental footprint in football

2022-2025
Decarbonisation in Athletics, Biathlon, Floorball

2022-2024
Circular cities and sport events

2023-2025
Football **R**elies on **E**MAS and **E**COLABEL to **K**eep **I**nnovating on **C**ircularity as a **K**ey for **S**ustainability

Co-funded by the European Union

2023-2025
Developing **E**nvironmental and **C**ircular **K**nowledge in canoeing and kayaking

2024-2027
Biodiversity, **E**cosystems And **N**ature **C**onservation **H**elped And **E**nhanced By **S**ports

2025-2027
Greenwashing **A**voided through **R**eporting: a **F**ootball **I**nitiative for **E**nvironmental **L**eaders to **D**evelop

Co-funded by the European Union

2025-2027
Benchmarking for Sport Sustainability

BENCHES: Overview

https://erasmus-benches.com/

Duration: 36 months (from 01.02.2024 to 31.01.2027)

Total budget: € 400,000

Coordinator: Sant'Anna School of Advanced Studies

Project partners:

Co-funded by the European Union

Sport & Biodiversity

The relationship between **biodiversity and business** is increasingly relevant on a global scale: biodiversity is the backbone of the economy and businesses depend directly or indirectly on natural ecosystems.

This link also involves the **professional sports sector**, which **relies and depends deeply on biodiversity**, as ecosystems often provide the context for sporting disciplines. At the same time, sport has an **environmental impact on biodiversity** through activities such as the construction and use of sports facilities and the organization of sporting events.

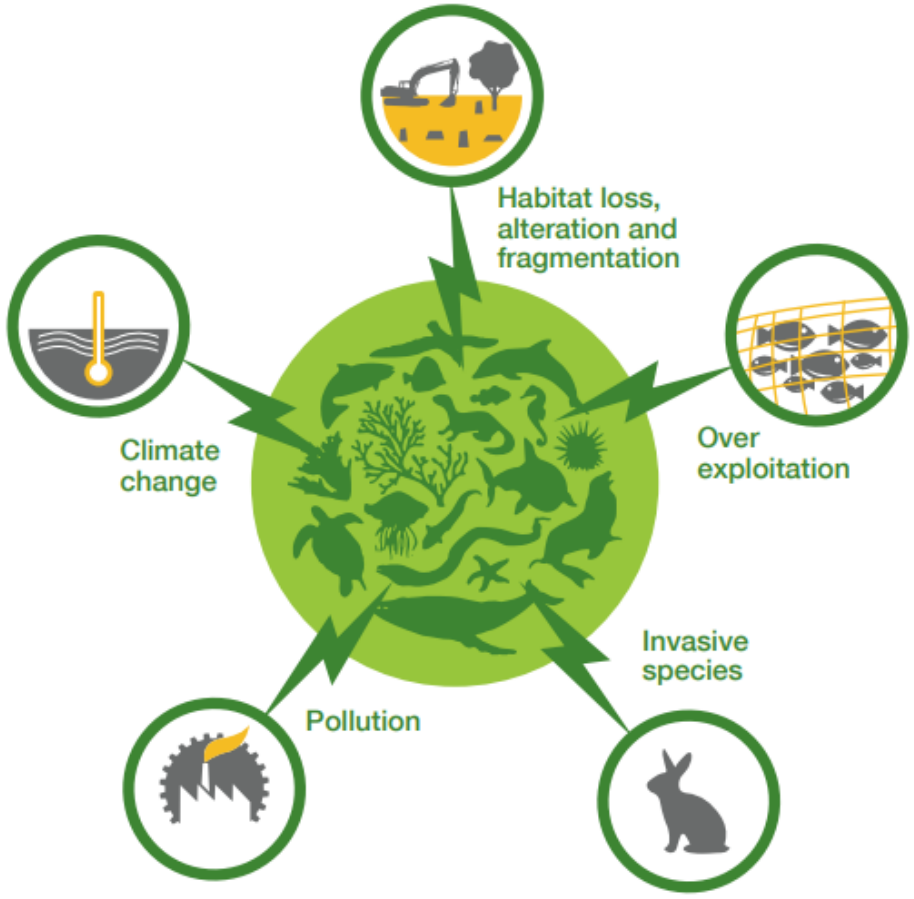
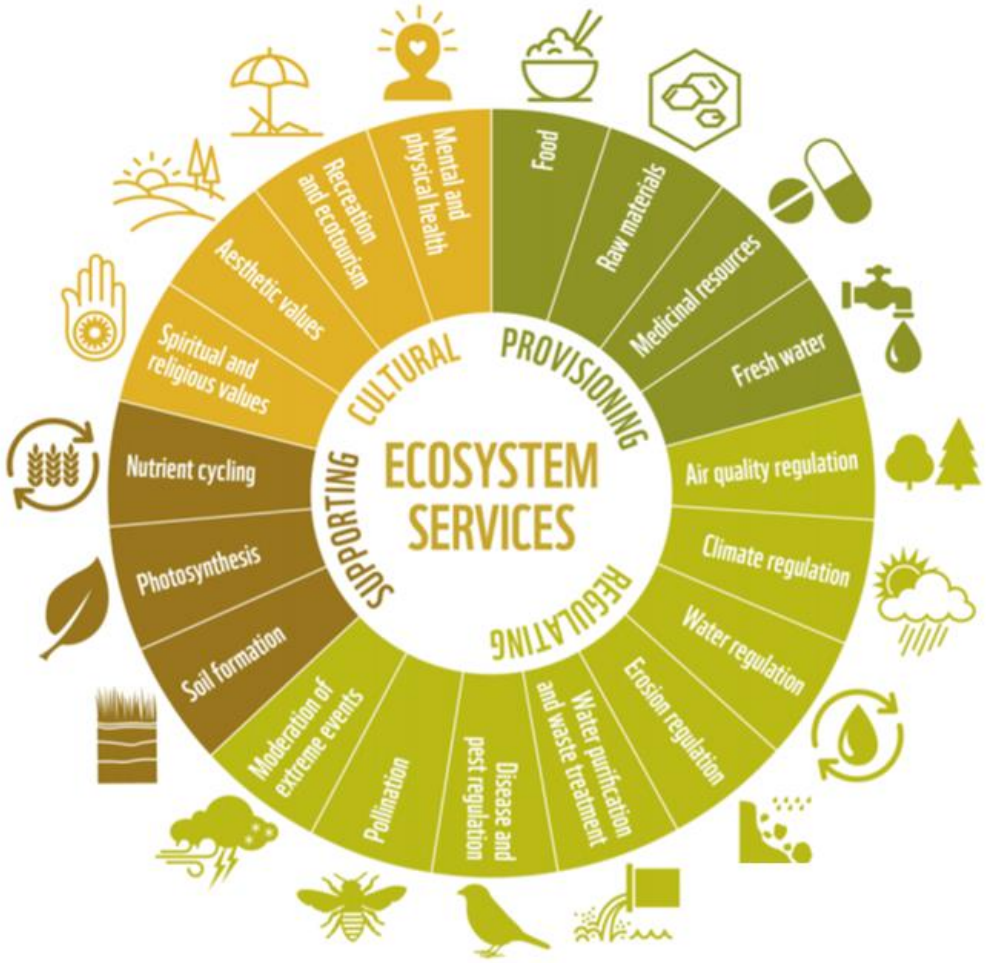


Figure 2: Direct pressures on biodiversity and ecosystems

Source: IUCN (2018). Sport and Biodiversity. Gland, Switzerland

Ecosystem services and sport



Range of ecosystem services provided by nature to humans. Source: WWF, 2016 (adapted from Millennium Ecosystem Assessment, 2005)

Convention on Biological Diversity (1992) defines an ecosystem as:

«a complex of living organisms and the abiotic environment with which they interact in a specified location.»

So, ecosystems are basically a network of interactions between plants, animals and the environment where they live.

Sports mostly rely on regulating and cultural ecosystem services.

What about sailing?

Pressures

Disturbance of marine and coastal habitats:

- Events in sensitive areas (bays, lagoons, marine parks)
- Anchoring on fragile seabeds (e.g. Posidonia meadows)
- Disturbance to fauna (birds, dolphins, turtles)

Pollution (accidental and diffuse):

- Marine litter and plastic waste
- Toxic antifouling paints
- Emissions from support boats

Invasive species

Infrastructures and facilities:

- Construction of permanent and temporary infrastructures
- Impacts on soil, light, and noise pollution

Dependencies

Environment where sailing is practised

Landscape and water quality and attractiveness:

- Healthy ecosystems enhance the sport and tourism experience
- Clean and safe waters for navigation

NATURE

Sailing is a sustainable sport, where humans harness the power of nature. Sailors rely on clean waters to be able to safely participate and are very reliant on a high quality of natural environment to enjoy their time on the water. By following a few simple rules of conduct when sailing we can reduce potential impacts on the environment.

Biosecurity and Invasive Species | Megafauna Sightings and Strikes | Biodiversity | Oil Spills | Reef

When you transport your boat and equipment around from different venues, you can cause the spread of invasive species. This is where non-native species are introduced into a different habitat and reduce the biodiversity present in the habitat. So to stop this, please follow these easy steps:

- Wash your boat, sails, covers and trolley thoroughly

Related Documents

- WS Invasive Species Poster
- WS Oil Spill Poster
- WS Coral Reef Safe Sunscreen Poster
- WS Waste Poster

What about sailing?

The Sports for Nature Framework

The Sports for Nature Framework has one overall objective: to deliver transformative nature-positive action across sports by 2030 and beyond.

It supports sports to make measurable contributions for nature and asks sports organisations to work towards four principles and linked goals that will help them advance their nature journey.

Customised guidance, tools and training will be available to help sport organisations on their nature journey, including how to identify the risks and opportunities.

The Sports for Nature principles are:

1) Protect nature and avoid damage to natural habitats and species;
2) Restore and regenerate nature wherever possible;
3) Understand and reduce risks to nature in your supply chains; and
4) Educate and inspire positive action for nature across and beyond sport.

"A nature-positive future means that we, as a global society, halt and reverse the loss of nature measured from its current status, reducing future negative impacts alongside restoring and renewing nature, to put both living and non-living nature measurably on the path to recovery." — IUCN

Co-created by the International Union for Conservation of Nature (IUCN), the International Olympic Committee (IOC), United Nations Environment Programme (UNEP), in collaboration with the Secretariat of the Convention on Biological Diversity (CBD)

https://sportsfornature.org/wp-content/uploads/2024/06/S4N-Framework-EN-2024.pdf

General objectives

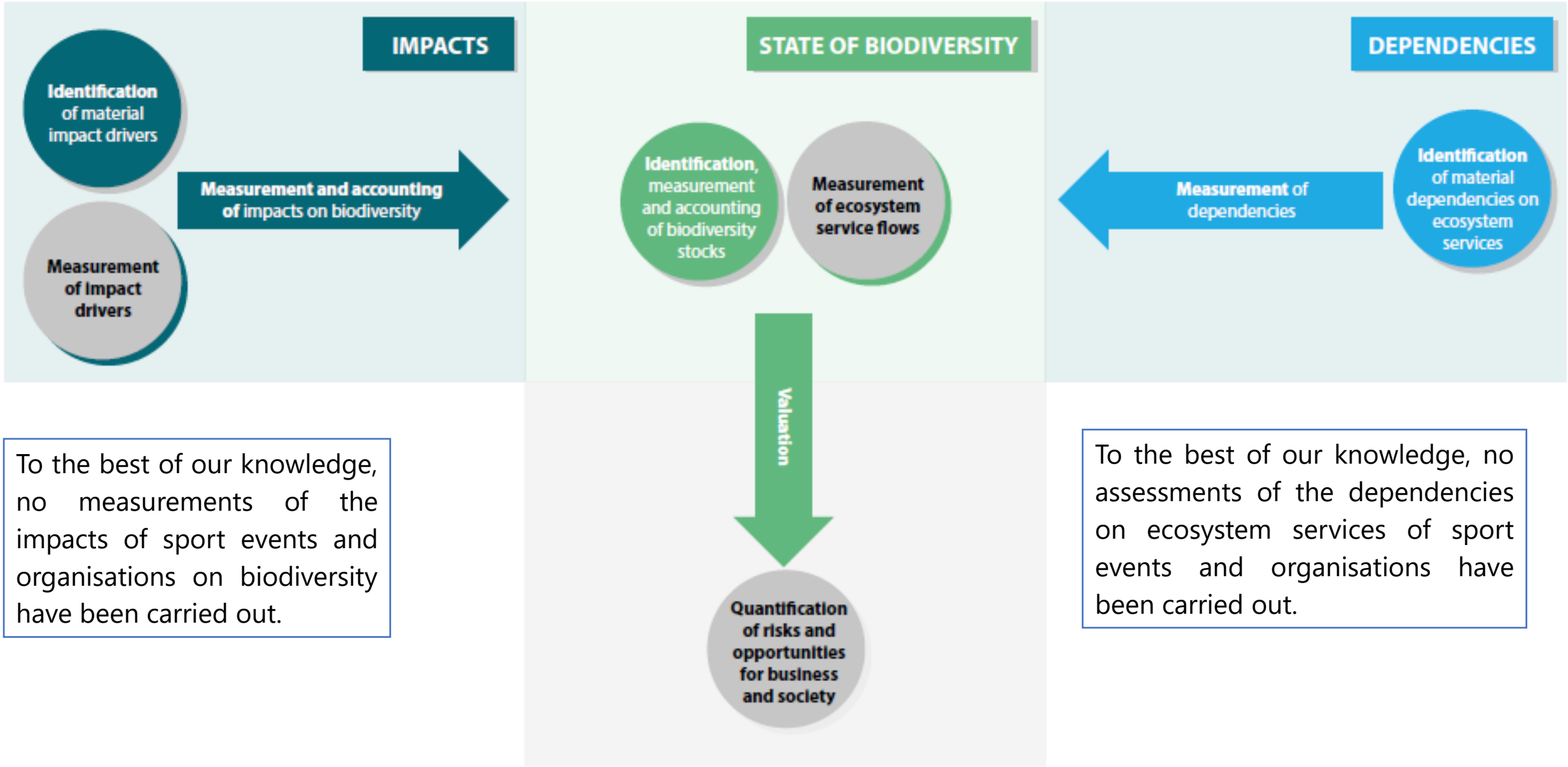
BENCHES aims to improve the interaction between Sport and Nature through three main objectives:

Increase the awareness and **understanding of the impact and dependencies of the sports industry on surrounding ecosystems**

Support the adoption of biodiversity management practices and of good environmental governance by developing **tools and practices to measure, manage and mitigate the negative externalities of sport on biodiversity**

Facilitate the implementation by sports organizations of **policies and initiatives** at the European and international level*.

*e.g. **EU Res. 170/1, 2022** and «**Sport for Nature**» by **IUNC**



To the best of our knowledge, no measurements of the impacts of sport events and organisations on biodiversity have been carried out.

To the best of our knowledge, no assessments of the dependencies on ecosystem services of sport events and organisations have been carried out.

Source: Recommendations for a standard on corporate measurement and valuation (EU Commission, 2022)

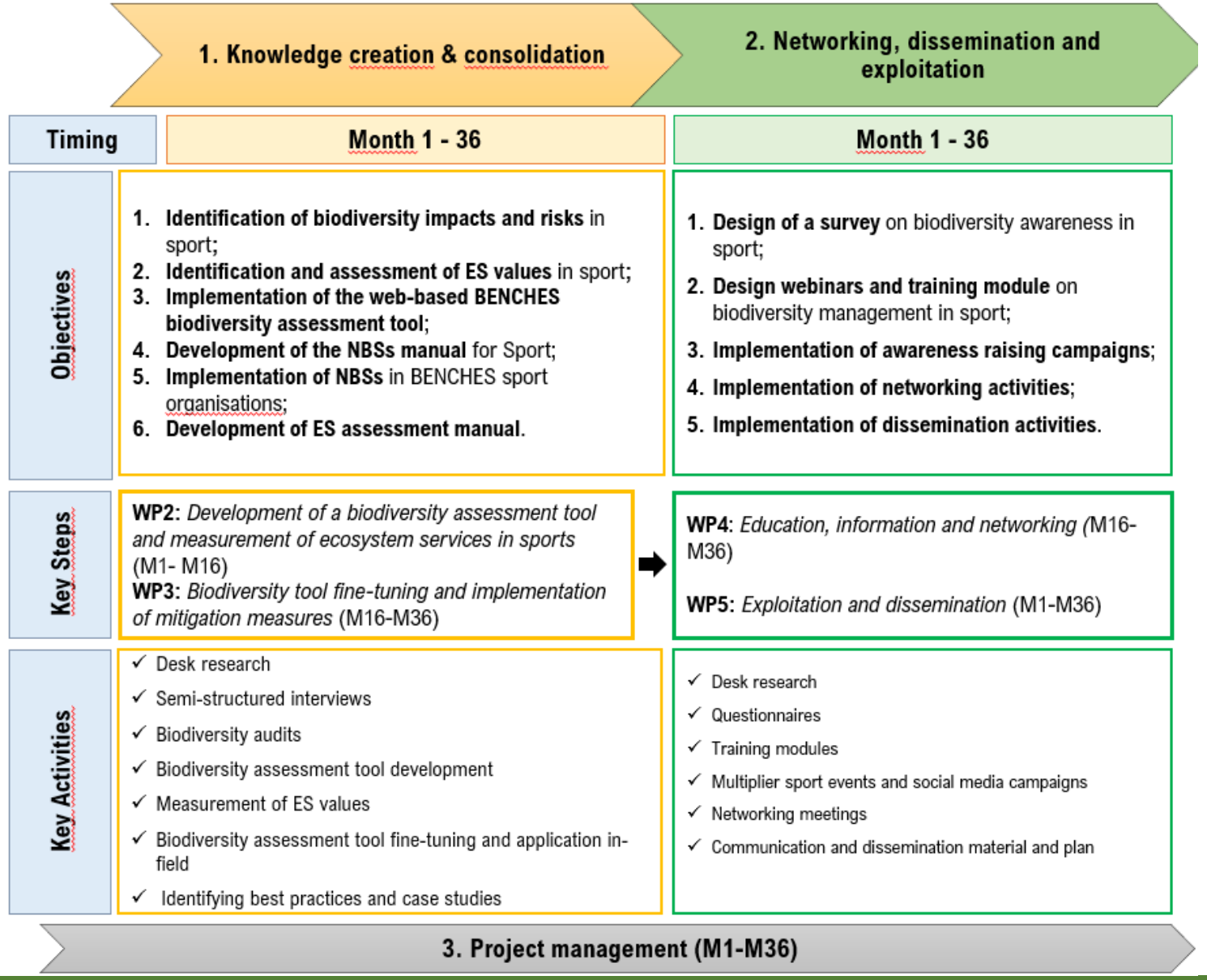
BENCHES ecosystems

BENCHES involves five different sports that have a **close link with nature** and which take place in **different terrestrial and aquatic ecosystems.** Moreover, BENCHES involves international and national federations as well as clubs.

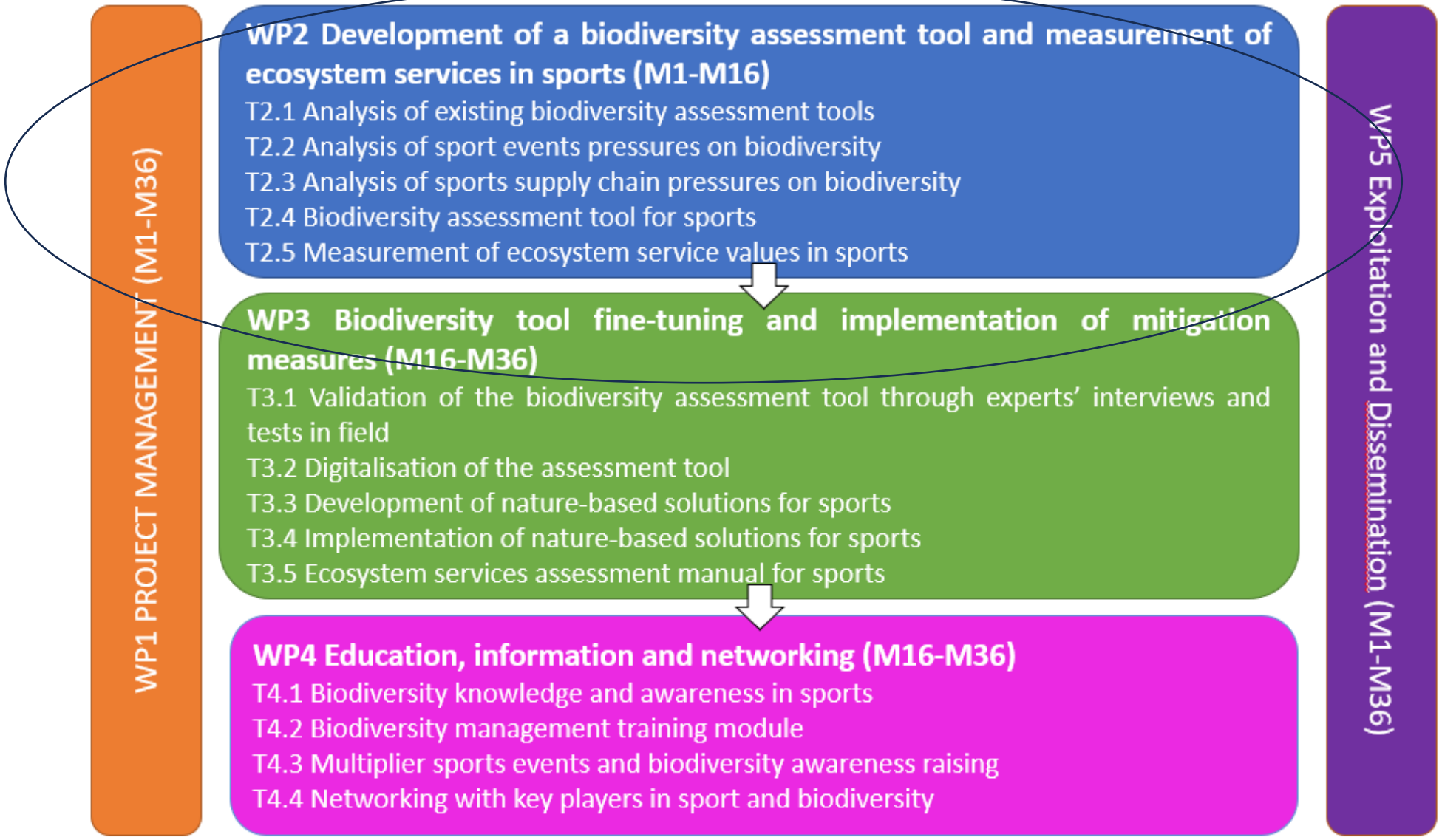
Ecosystem	Terrestrial / Aquatic Ecosystem	Outdoor / Indoor	Sport	Partner sport organization
Mountain (summer period)	Terrestrial	Outdoor	Athletics (Mountain running)	World Athletics (WA)
River, lake, sea	Aquatic	Outdoor	Canoe and kayak	Italian Canoe Kayak Federation (FICK)
Mountain (winter period)	Terrestrial	Outdoor	Biathlon	International Biathlon Federation (IBU)
Urban biodiversity	Terrestrial	Indoor*	Football	SL Benfica (BEN)
Sea, ocean	Aquatic	Outdoor	Sailing	World Sailing (WS)

*professional football is considered as "indoor sport" as it is performed in facilities (i.e. stadia) that share many of the technical and infrastructural characteristics of those facilities where indoor sports disciplines are practiced.

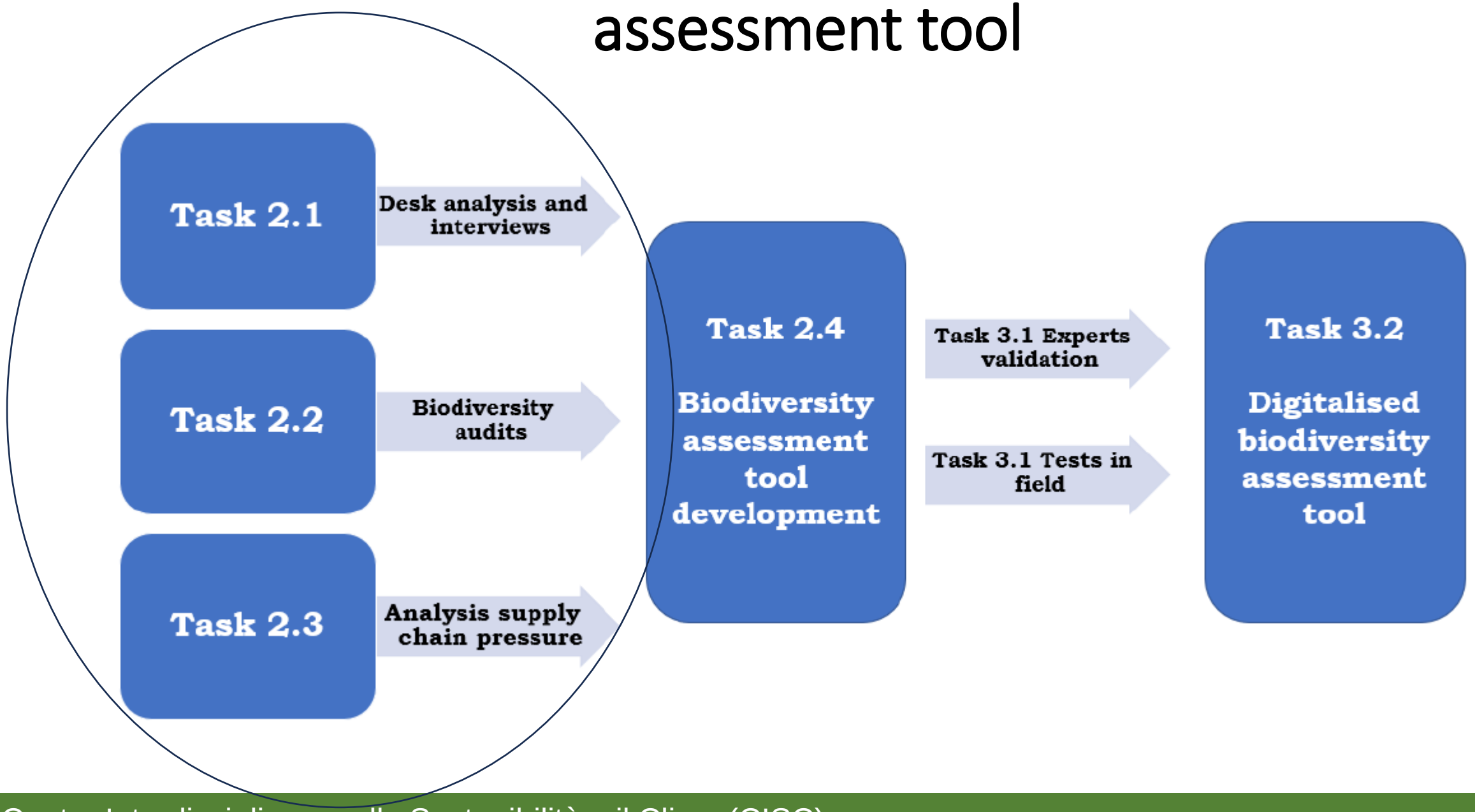
Specific objectives & Methodology



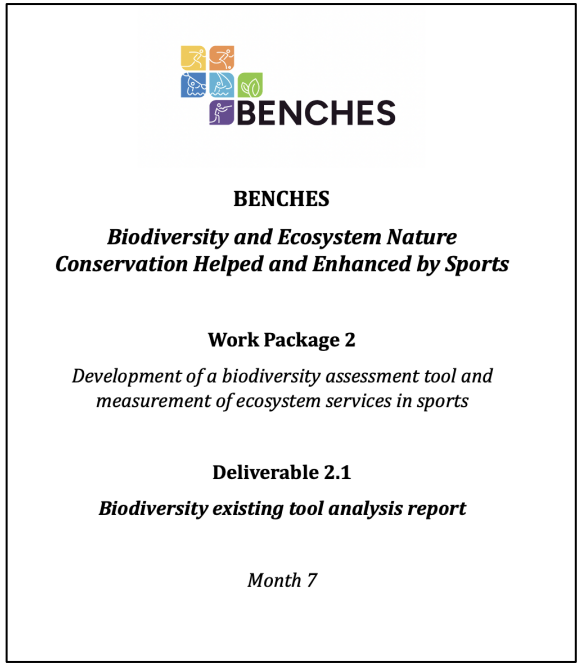
Work packages



Approach for the development of a biodiversity assessment tool



What have we done so far?



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Biodiversity and Ecosystem Nature Conservation Helped and Enhanced by Sports

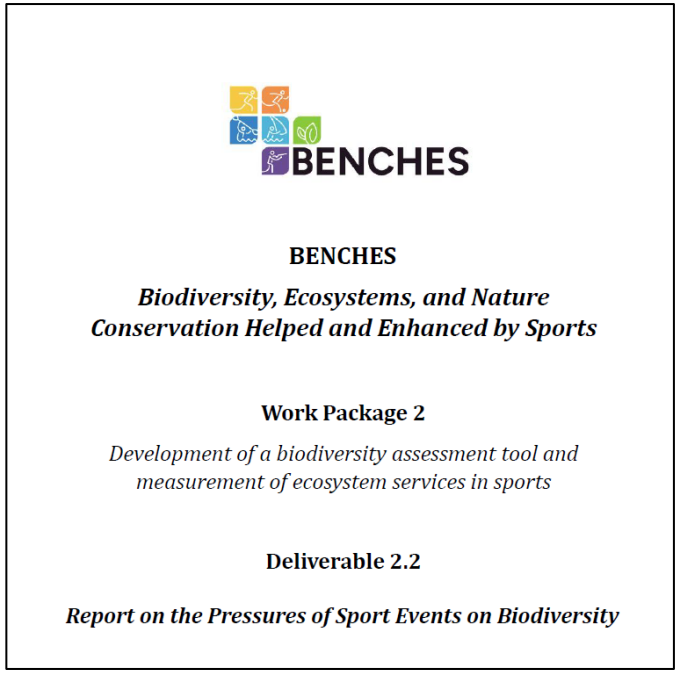
Work Package 2

Development of a biodiversity assessment tool and measurement of ecosystem services in sports

Deliverable 2.1

Biodiversity existing tool analysis report

Month 7



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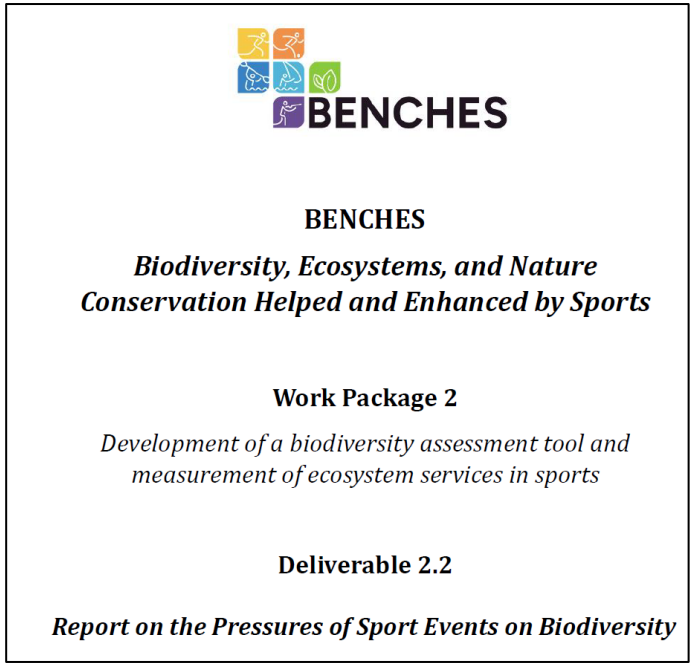
Biodiversity, Ecosystems, and Nature Conservation Helped and Enhanced by Sports

Work Package 2

Development of a biodiversity assessment tool and measurement of ecosystem services in sports

Deliverable 2.2

Report on the Pressures of Sport Events on Biodiversity



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Biodiversity, Ecosystems, and Nature Conservation Helped and Enhanced by Sports

Work Package 2

Development of a biodiversity assessment tool and measurement of ecosystem services in sports

Deliverable 2.2

Report on the Pressures of Sport Events on Biodiversity

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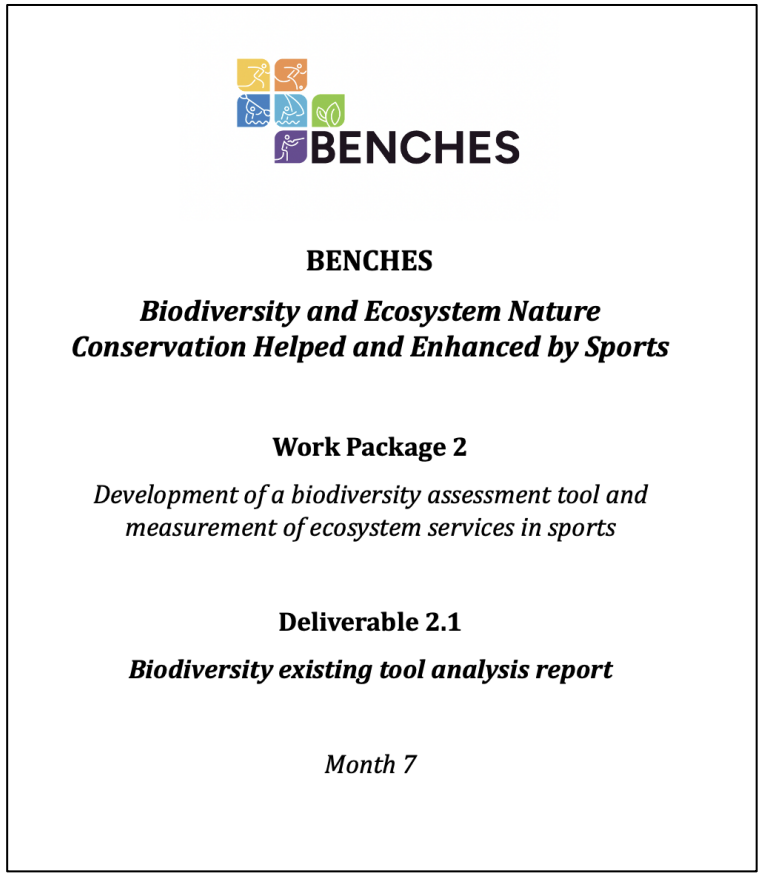
Results from the analysis of existing biodiversity assessment tools



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Biodiversity and Ecosystem Nature Conservation Helped and Enhanced by Sports

Work Package 2

Development of a biodiversity assessment tool and measurement of ecosystem services in sports

Deliverable 2.1

Biodiversity existing tool analysis report

Month 7

95 biodiversity impact assessment tools
from both the private and the public sectors

In-depth analysis of 7 biodiversity assessment tools
including both frameworks/guidelines and tools

Final remarks on biodiversity assessment in the sports sector
and relevance of certain aspects of the selected sources

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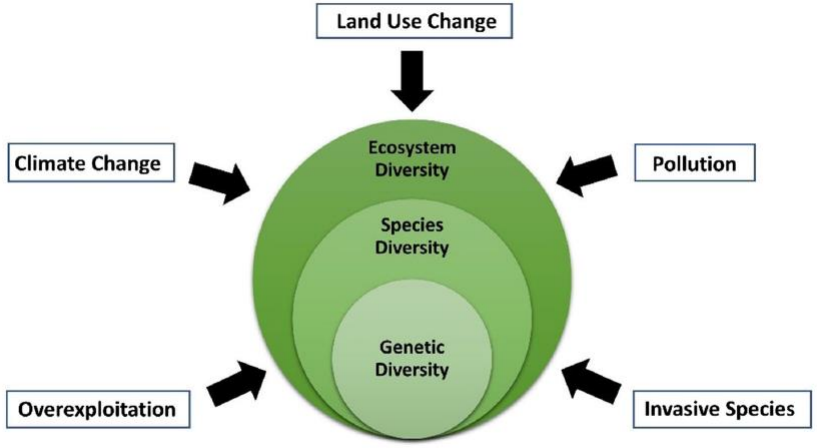
Methodology

The desk analysis involved a thorough study of both **scientific and grey literature** to understand how biodiversity measurement tools are developed, which metrics are used, and which environmental pressures are considered.

Identification of pressures/drivers



Panwar et al. (2023)

Map and analysis of existing biodiversity assessment tools

Iterative and collaborative approach

General information

Name | Owner | Link | Type | Description

Characteristics of the tool

Industrial sector | Accessibility | Adaptability | Scientific method | Easiness of use | Relevance for BENCHES aims

(terrestrial and aquatic ecosystems; on-site and supply chain impacts)

In-depth analysis of 7 biodiversity assessment tools

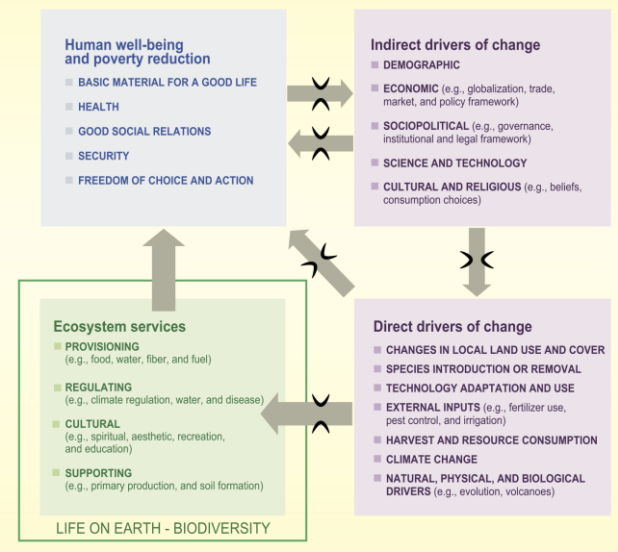
Criteria

Accessibility | Adaptability | Scientific method | Relevance

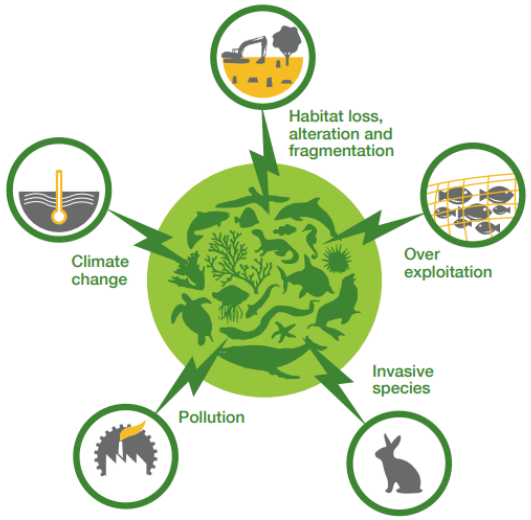
Analysis

Target | Boundaries | Metrics | Methodology | Environmental pressures

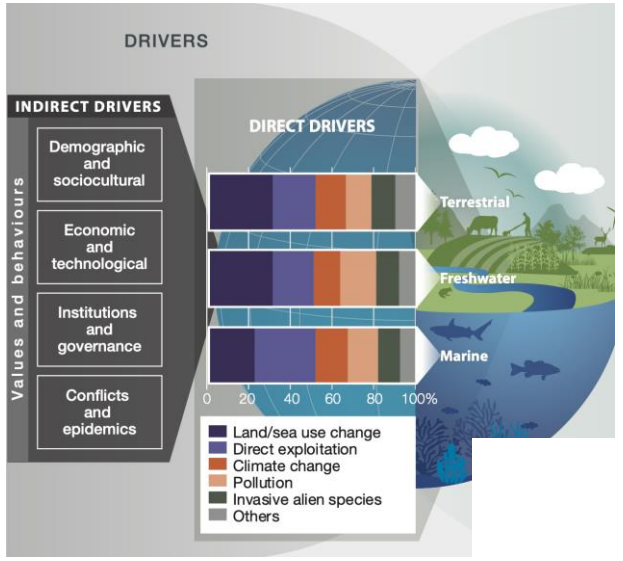
Identification of pressures/drivers



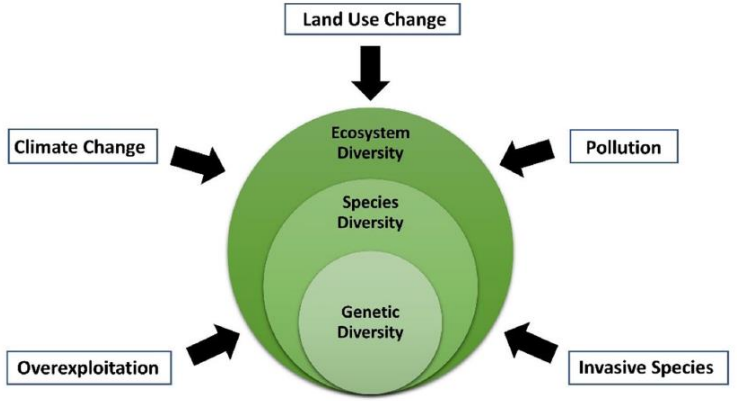
Millennium Ecosystem Assessment (2005)



IUCN (2018)



IPBES (2019)



Panwar et al. (2023)

There appears to be a general consensus on the direct pressures/drivers impacting biodiversity and ecosystems; however, how to effectively assess them remains unclear.

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Map and analysis of existing biodiversity assessment tools

"A tool can be any resource, methodology or approach that is relevant to natural capital measurement and valuation"
(Capitals Coalition)

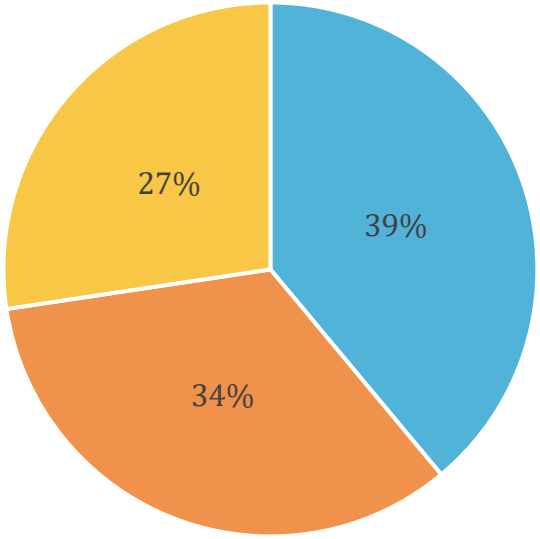
Tools	Frameworks/Guidelines	Databases
37	**32**	**26**

In total, we have identified 95 sources*

*Biodiversity assessment tools which exclusively refer to the valuation of ecosystem services were excluded from the mapping

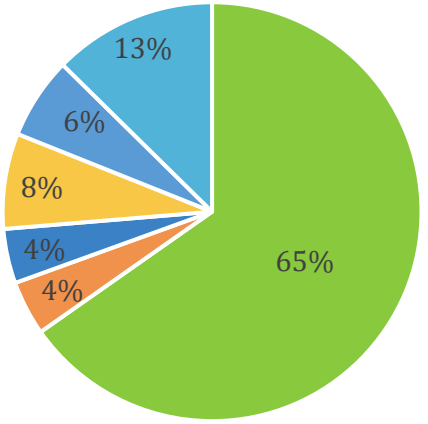
Map and analysis of existing biodiversity assessment tools

Type of source



- 37 tools
- 32 frameworks/guidelines
- 26 databases

Target (type of business)

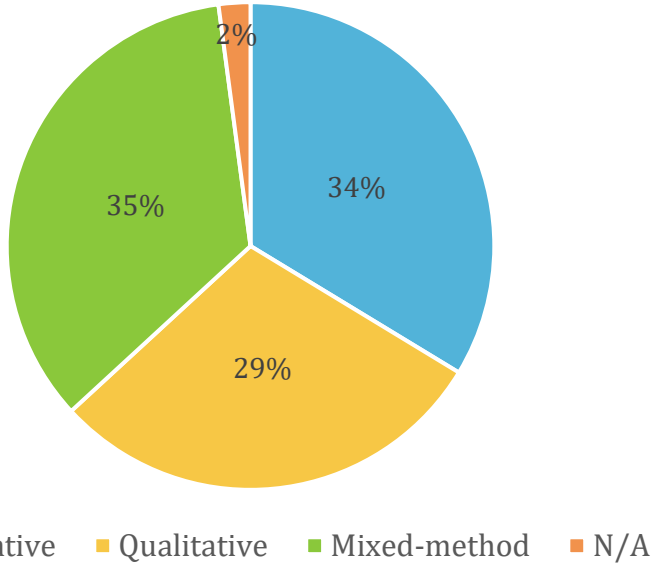


(Biotechnology and Agri-food; Chemistry and Plastics; Extractive; Logistics; Marine; Oil and Gas; Textile)

6 sources specifically refers to the sports sector.

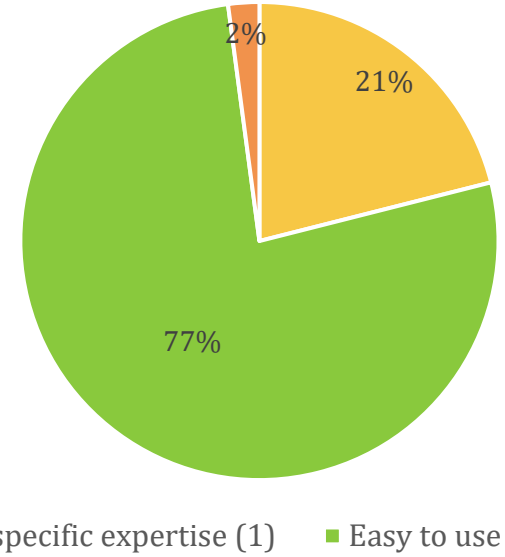
Map and analysis of existing biodiversity assessment tools

Scientific method



Quantitative approaches are preferred for the assessment, but qualitative approaches are often integrated to overcome barriers and provide a framework/guideline or a description of the items of the database.

Easiness of use



In most of the case, it is not necessary to ask for technical expertise.

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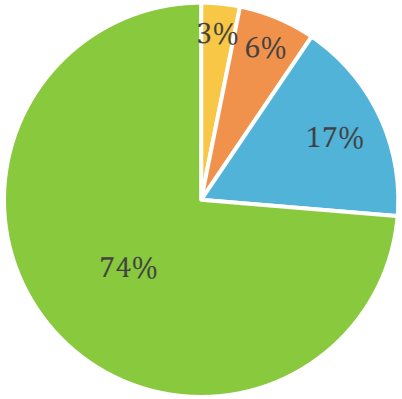
Map and analysis of existing biodiversity assessment tools

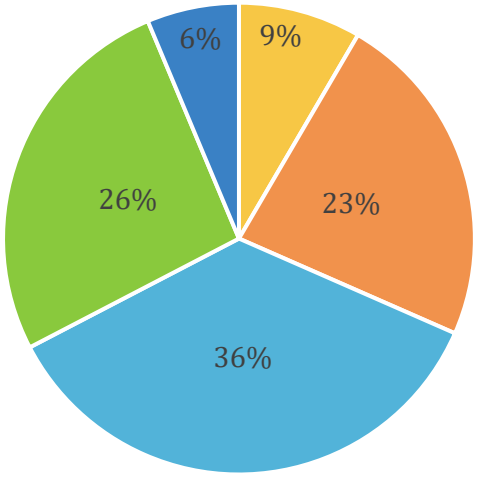
Accessibility for BENCHES partners (1-4)



- Paid version (1)
- Free basic version, Premium version for a fee (2)
- Possibility to request a demo/training material/interview (3)
- Totally free (4)

Most of the sources are totally free or offer the possibility to request a demo/training materials/interview for free.

Adaptability to the sport context (1-5)

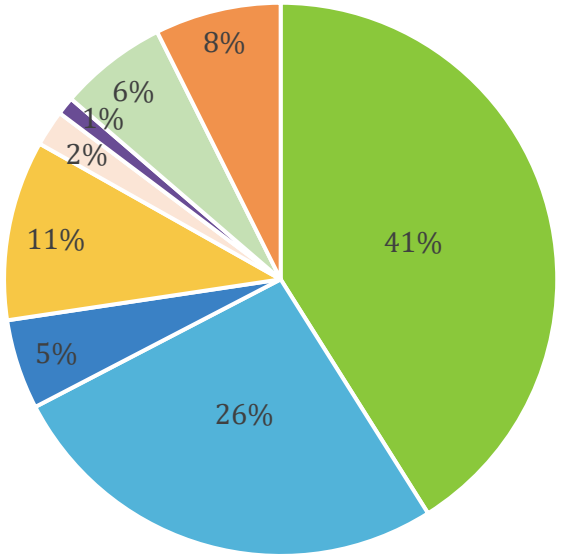


- Not adaptable (1)
- Not very adaptable (2)
- Potentially adaptable (3)
- Very adaptable (4)
- Totally adaptable (5)

6 sources specifically refers to the sports sector (totally adaptable), and most of them are potentially or very adaptable.

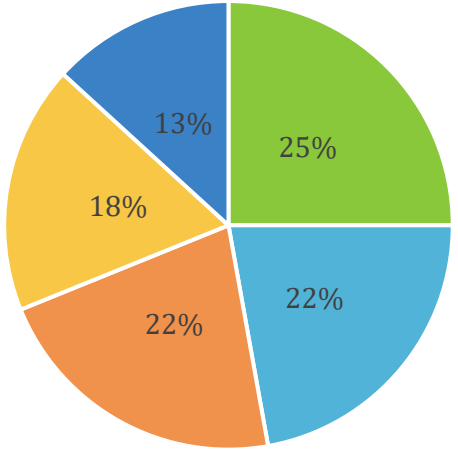
Map and analysis of existing biodiversity assessment tools

Relevance for BENCHES aims (terrestrial/aquatic; on-site/supply chain)



- Terrestrial; Aquatic; On-site; Supply chain
- Terrestrial; Aquatic; On-site
- Terrestrial; On-site; Supply chain
- Terrestrial; On-site
- Terrestrial; Supply chain
- Aquatic; On-site; Supply chain
- Aquatic; On-site
- N/A

Biodiversity pressures



- Climate change
- Land use (change)
- Pollution
- Overexploitation
- Invasive species

Climate change and land use change are well investigated, while pollution and overexploitation are assessed in different manner, and invasive species are more rarely investigated.

In-depth analysis of 7 biodiversity assessment tools

General information			Biodiversity pressures				
Name	Organisation	Type	Climate change	Land use (change)	Pollution	Overexploitation	Invasive species
Biodiversity Risk Scan	CSR Europe	Framework /Guidelines	X	X	X	X	X*
Natural Capital Protocol	Capitals Coalition	Framework /Guidelines	X	X	X	X	X
Science Based Targets (SBTs) for Nature	Science Based Target Network (SBTN)	Framework /Guidelines	X	X	X	X	X
Global Biodiversity Score (GBS)	CDC Biodiversité	Tool	X	X	X*	X*	
BioScope	PRé Sustainability, Arcadis and CODE	Tool	X	X	X	X*	
Product Biodiversity Footprint (PBF)	I Care & Consult and Sayari	Tool	X	X	X	X*	X
Natural Capital Measurement Catalogue (NCMC)	Climateworks Australia	Tool	X	X	X*	X*	

*Partially

- Each source covers **at least 3 biodiversity pressures** and, all together, they allow to cover all the five pressures.
- The sources are **available for free**, allowing to have a complete overview of the methodology applied, and they are **potentially adaptable or very adaptable to the sport context**.
- Tools mainly use **quantitative approaches** and are based on **existing initiatives, frameworks, or tools**.
- The sources cover **both terrestrial and aquatic impacts** and can be applied at **both on-site and supply chain levels**.

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In-depth analysis of 7 biodiversity assessment tools

General information		Characteristics of the tool				
Name	Type	Structure/ Approach	BENCHES aims (terrestrial/aquatic; on-site/supply chain)	Pressures	Impact assessment method	Additional guidelines/ supporting tools
Biodiversity Risk Scan	Framework/ Guidelines					
Natural Capital Protocol	Framework/ Guidelines					
Science Based Targets (SBTs) for Nature	Framework/ Guidelines					
Global Biodiversity Score (GBS)	Tool					
BioScope	Tool					
Product Biodiversity Footprint (PBF)	Tool					
Natural Capital Measurement Catalogue (NCMC)	Tool					

Not relevant
Partially relevant
Relevant

Final remarks on biodiversity assessment in the sports sector

- Impacts on biodiversity are increasingly addressed by both the private and the public sectors through **tools, frameworks/guidelines, and databases**.
- Academics have started to recognise the importance of the **business-biodiversity relationship**, which is now understood in terms of **impacts, dependencies, and risks**.
- However, to the best of our knowledge, **it does not exist a biodiversity assessment tool for the sports sector**, and the **relationship between biodiversity and sports** remains underexplored.
- Impact assessment methods used within the analysed biodiversity assessment tools should be **re-adapted to fit the specificities** of the operations of sports organisations and their upstream and downstream activities.

BENCHES Biodiversity Assessment Tool for Sport

- A **scientific-grounded** tool specific for the **sports sector**, considering both **terrestrial and aquatic ecosystems**.
- It will include both **quantitative and qualitative** KPIs and questions.
- To **identify, assess and measure** drivers and pressures of **sports events** and **supply chains** on biodiversity.
- It will allow for **comparisons** between alternative **sites** and alternative **suppliers** and **materials** based on biodiversity risks.

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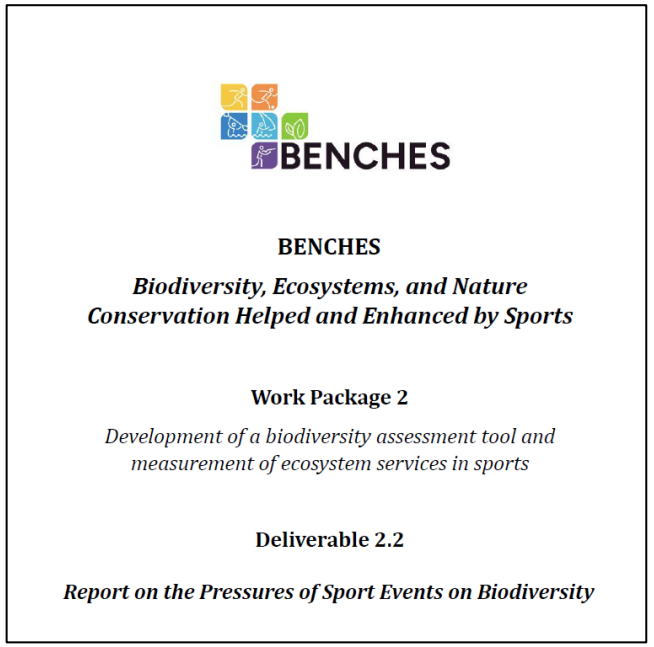
Biodiversity Audits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Biodiversity, Ecosystems, and Nature Conservation Helped and Enhanced by Sports

Work Package 2

Development of a biodiversity assessment tool and measurement of ecosystem services in sports

Deliverable 2.2

Report on the Pressures of Sport Events on Biodiversity

Table 1: Events selected for the on-site visits.

Ecosystem	Outdoor/ Indoor	Sport	Partner Sports Organisation	Event	Date
Aquatic: Sea, ocean	Outdoor	Sailing	World Sailing (WS)	Last Chance Regatta, Hyerès (FR)	20-27 April 2024
Aquatic: River, lake, sea	Outdoor	Canoe and Kayak	Federazione Italiana Canoa e Kayak (FICK)	2024 ICF Canoe Slalom World Cup,Ivrea (IT)	12-15 September 2024
Terrestrial: Summer	Outdoor	Athletics	World Athletics (WA)	World Masters Mountain Running Champsionship, Canfranc-Estación (ES)	13-15 September 2024
Urban	Indoor	Football	Sport Lisboa e Benfica (SL Benfica)	SL Benfica - FC Porto football match, Lisbon (PT)	10 November 2024
Terrestrial: Winter	Outdoor	Biathlon	International Biathlon Union (IBU)	Kontiolahti Biathlon World Cup 2024, Kontiolahti (FI)	30 November - 8 December 2024

- Learning
- State of the art
- Improving

World Sailing: Hyerès Last Change Regatta 2024

Biodiversity supply chain management

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Biodiversity, Ecosystems, and Nature Conservation Helped and Enhanced by Sports

Work Package 2

Development of a biodiversity assessment tool and measurement of ecosystem services in sports

Deliverable 2.2

Report on the Pressures of Sport Events on Biodiversity

Table 1: Interview protocol for procurement managers of sports organisations

N.	Topics	Questions
1	**Introduction**	Please describe your organisation and introduce your role within the organisation. Briefly describe the main activities foreseen by your position and work group / department.
2	**Training, Policy, and Commitment**	• Are there people in the procurement/supplier's department with an education in sustainability management? • Are there policies that you have adopted to integrate biodiversity management into your supply chains? • How are these commitments communicated and monitored within the organisation and towards your suppliers?
3	**Sustainable Practices**	• Could you describe the sustainable sourcing practices you have implemented to mitigate impacts on biodiversity? • What are the main challenges you face in integrating biodiversity management into your supply chain?
4	**Certifications and Standards**	• What standards or certifications do you require to your suppliers to ensure biodiversity protection? • How do you verify compliance with these standards?
5	**Supplier Management**	• Do you select suppliers based on their impact on biodiversity? Are there differences among your supply chains? • Do you have procedures in place to manage or penalize suppliers who do not comply with your environmental • policies?
6	**Licensed Events and Event Organisers**	Only for national or international federations: • Do event organisers have to comply with biodiversity procurement criteria during the bidding procedure? If yes, what • types of criteria? • Do event organisers have to comply with biodiversity procurement clauses in contracts? If yes, what types of clauses? • How do you monitor the compliance to biodiversity procurement criteria by event organisers?

Table 2: Interview protocol for procurement managers of event organisations

N.	Topics	Questions
1	**Introduction**	Please describe your organisation and introduce your role within the organisation. Briefly describe the main activities foreseen by your position and work group/department.
2	**Supplier Selection and Biodiversity Criteria**	• Which are your main suppliers and products? • How do you select suppliers for the event? • Are there biodiversity requirements that you must comply with and are they required by the international/national sport federation? • Are there specific guidelines/criteria/suggestion on biodiversity that your suppliers are required to comply with? If yes, what are they?
3	**Contracts and Monitoring of Biodiversity**	• Once you have selected the supplier do you include biodiversity rules to follow in the contract? • Could you provide an example of contract? • How do you monitor the implementation of these requirements by suppliers?
4	**Supply Chains**	Questions (e.g., certifications, recyclability, reusability, monitoring process etc.) on specific supply chains, such as the ones covered by the EU Deforestation Regulation (EUDR): • Wood • Coffee • Cocoa • Palm oil • Rubber • Soy • Cattle (meat) In addition: • Food and beverage • Metals for items, gadgets, and electronic devices • Paper for office, communication materials, and packaging • Plastic materials for gadget, communication materials, and packaging • Textile materials (e.g., t-shirts, flags) • Cleaning agents/chemical products

Main results

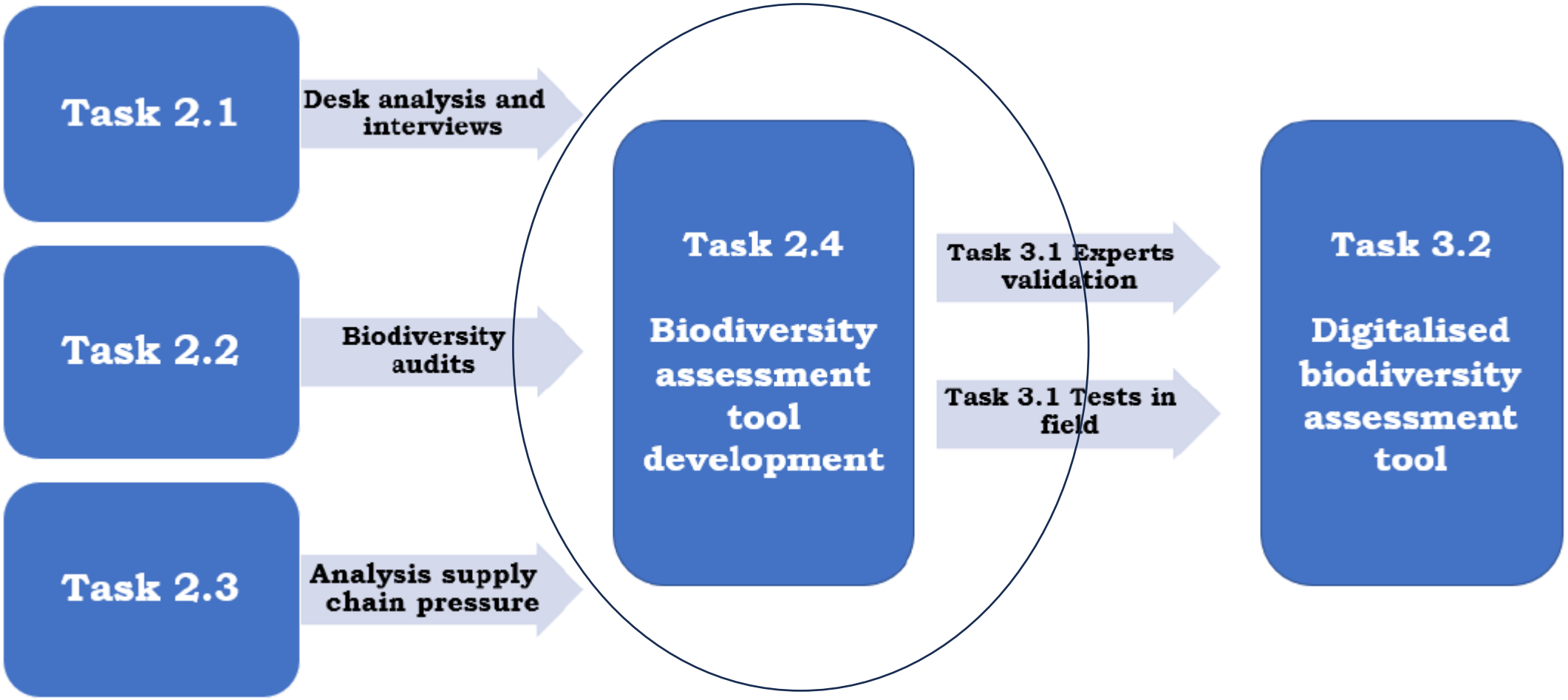
Many improvement opportunities

Lack of formalized supply chain evaluation

Outsourced and non-internalized procurement management

Limited visibility of materials origin

Approach for the development of a biodiversity assessment tool



What features should this tool have?

Public and without costs

CLEAR: it cannot create misunderstandings

OBJECTIVE: the results cannot be linked to subjective knowledge or feeling

INDIPENDENT AND REPRODUCIBLE: if two different persons apply it, the same result is achieved

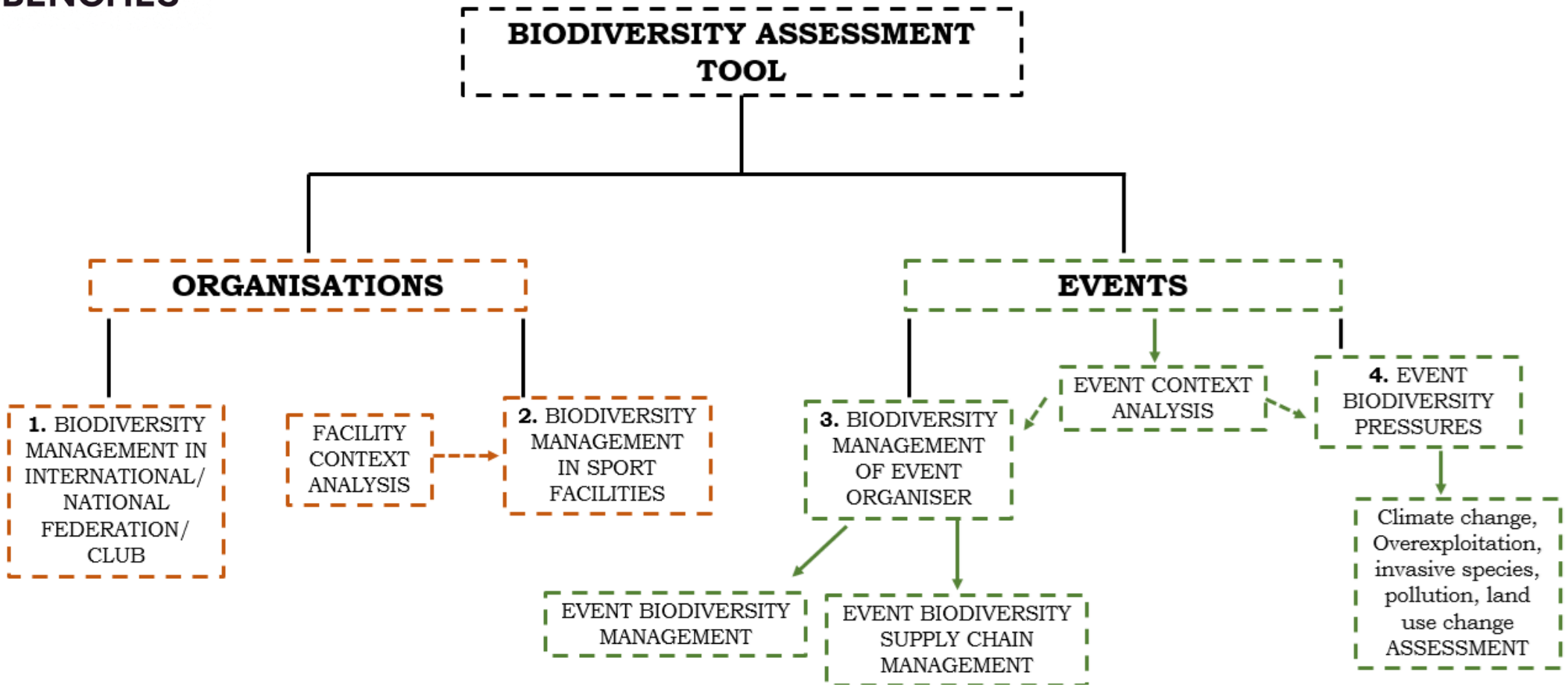
EASY-APPLICABLE: low effort (economic or time resources) to apply it

LONG-TERM VALIDITY: the criteria of the definition can be used for several years

TECHNICAL/SCIENTIFIC BASED: the criteria used and applied should be relevant and reliable

VERSATILE: it must be adaptable to different ecosystems (including urban contexts) and to different sports

Assessment tool structure proposal



Assessment tool use cases

The approach based on 4 different Evaluation Axis (EA) will give a **wide applicability and replicability** to the tool as requested in BENCHES and by Erasmus + Programme.

Example 1 a club without ownership and management of facilities: will use the EA n.1

Example 2 a canoening club that has the ownership of some facilities (e.g. training center) but it does not manage events: will use the EA n.1 and n.2

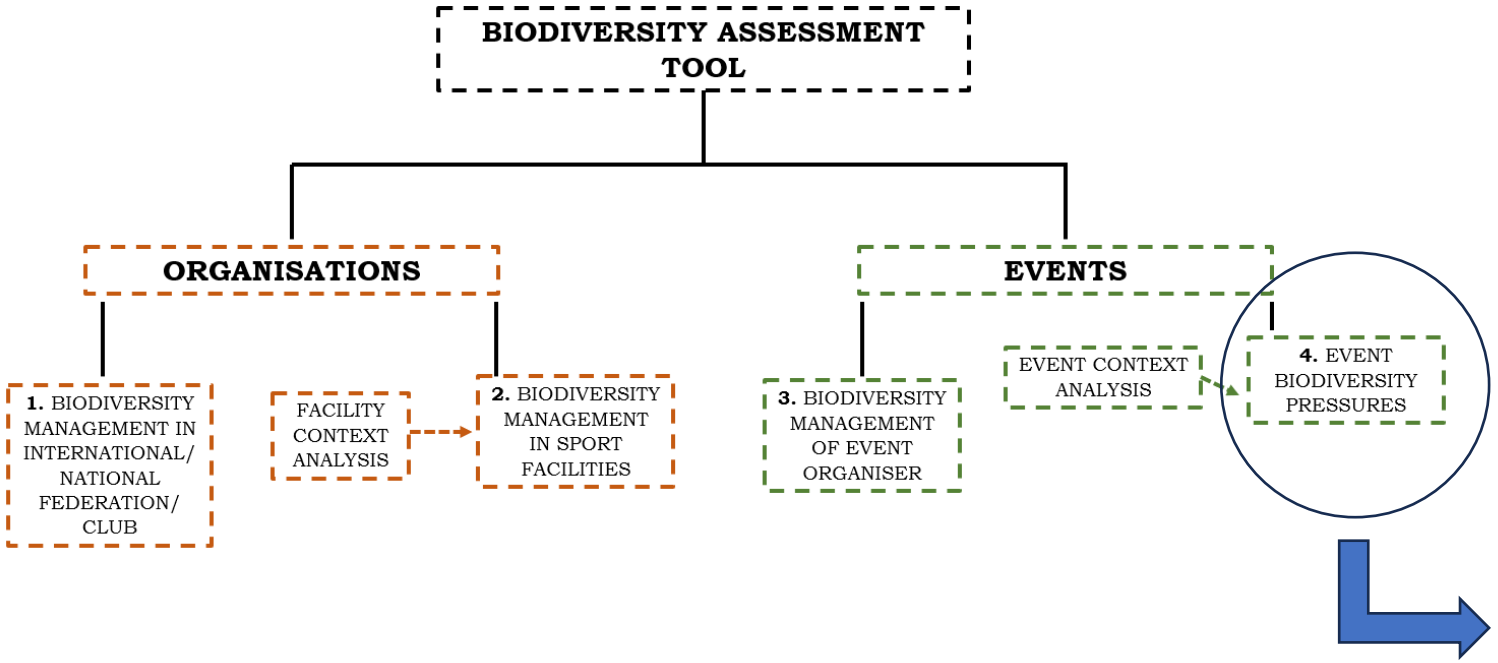
Example 3 an international Federation that also manages an event as event organiser: will use the EA n.1, n.3, n.4.

Example evaluation axis 1

N°	Assessment question	Measurement	Answers and scores	Scores
1	Do you have a system/tool/method in place in order to assess the impact of the activities of your organisation on biodiversity?	Score 0-5	A) Yes, we have a method/tool explicitely linked with biodiversity management (5) B) We have a tool to assess the impacts on sustainability topics. There is not a biodiverstiy section but indirectly it allows to assess biodiversity impacts (e.g. assessing climate change or pollution aspects) (2) C) No, we have never assessed the impacts of our organisation on biodiversity and we don't have any method/tool (0)	A) 5 B) 2 C) 0
2	Has your organisation carried out an assessment of the economic value of dependencies (ecosystem services) provided by nature in your sport?	Score 0-5	A) Yes, we have a study that provides an assessment of the economic value of the services provided by ecosystems in our sport. (5) B) We don't have a study specific to our sport, but in the last three years, we have participated in workshops or projects focused on this topic, discussing it with some stakeholders. (3) C) We don't have such studies, but we are part of initiatives (e.g., Sports for Nature), and we expect to discuss this topic in that context. (2) D) We haven't adopted any initiatives on this topic in the last three years. (0)	A) 5 B) 3 C) 2 D) 0
3	Do you have a focus on biodiversity in the sustainability strategy of your organisation?	Score 0-5	A) Yes, we have mentioned biodiversity as a key topic in our strategy, and/or at least one improvement objective related to biodiversity is present in our sustainability action plan. (5) B) We don't have a sustainability strategy, but we have an environmental policy where biodiversity is clearly mentioned. (4) C) We have a sustainability strategy, but biodiversity protection is not explicitly mentioned. However, it is indirectly targeted since we address aspects such as pollution and climate change. (2) D) No, we have not defined a sustainability strategy. (0)	A) 5 B) 4 C) 2 D)0

Assessment tool example evaluation axis 4

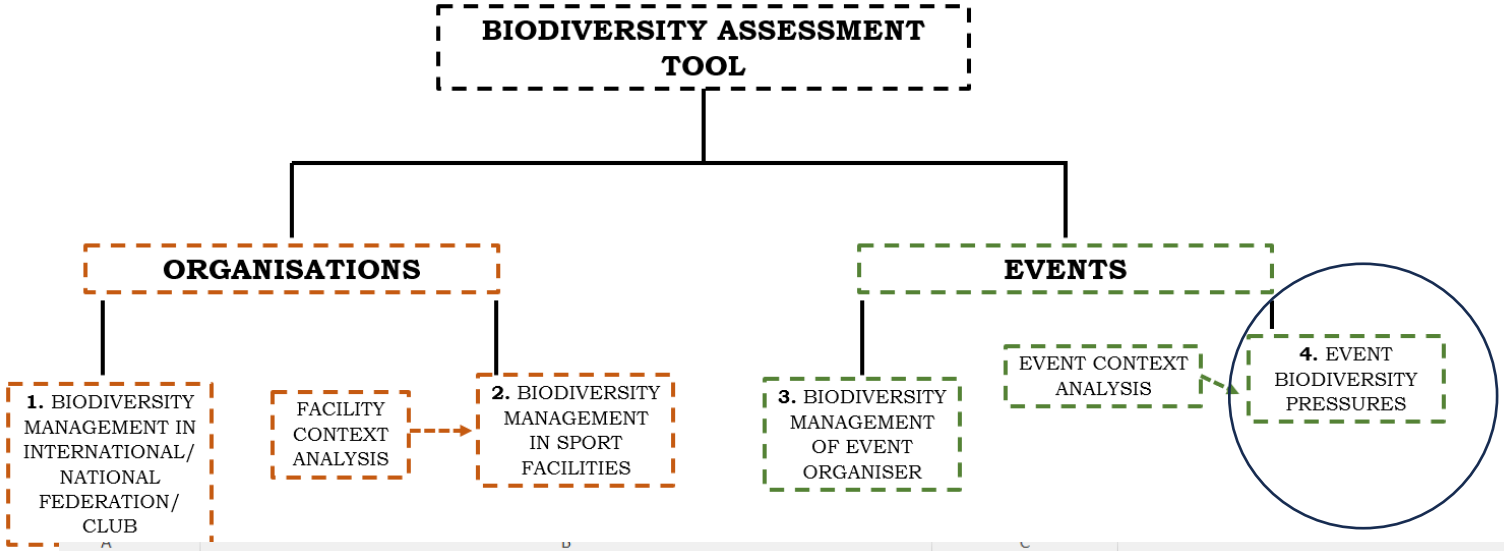
Assessment tool structure proposal



EVALUATION AXIS 4 - EVENT BIODIVERSITY PRESSURES	
A) CLIMATE CHANGE	
B) OVEREXPLOITATION	
C) INVASIVE SPECIES	
D) POLLUTION	Noise emissions
	Light pollution
	Water emissions
	Waste
	Air emissions
E) LAND USE CHANGE	
F) DIRECT BIODIVERSITY PROTECTION MEASURES	Mountain ecosystem (summer)
	Mountain ecosystem (winter)
	Aquatic Ecosystems (Rivers, Lakes, Coastal Areas)

Assessment tool example evaluation axis 4

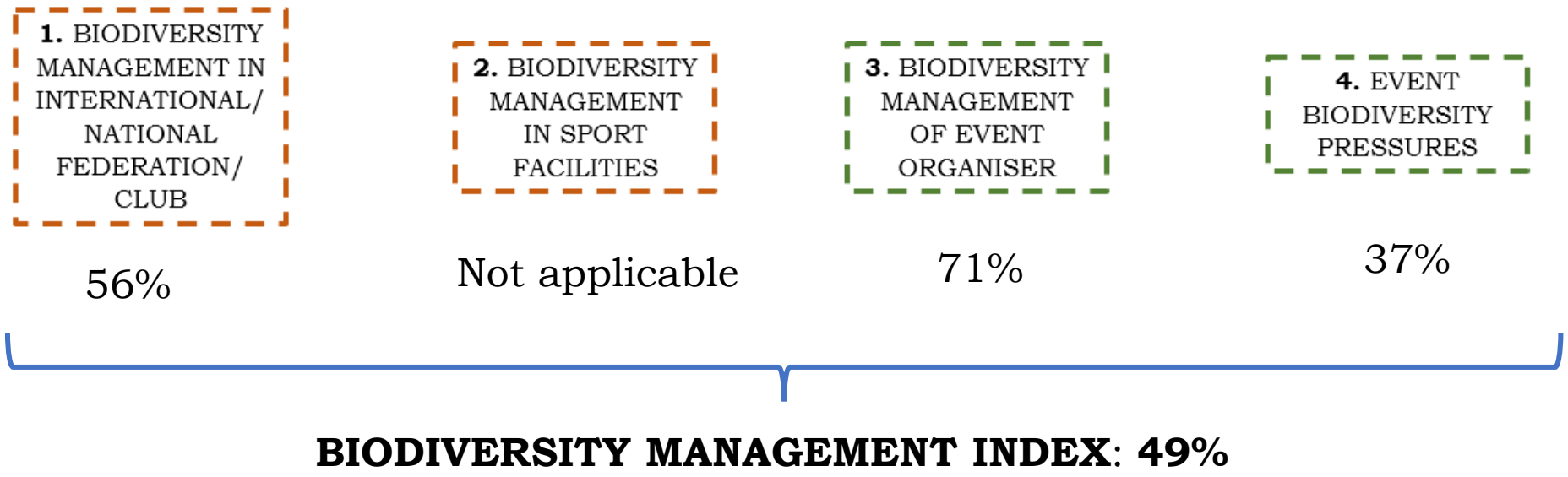
Assessment tool structure proposal



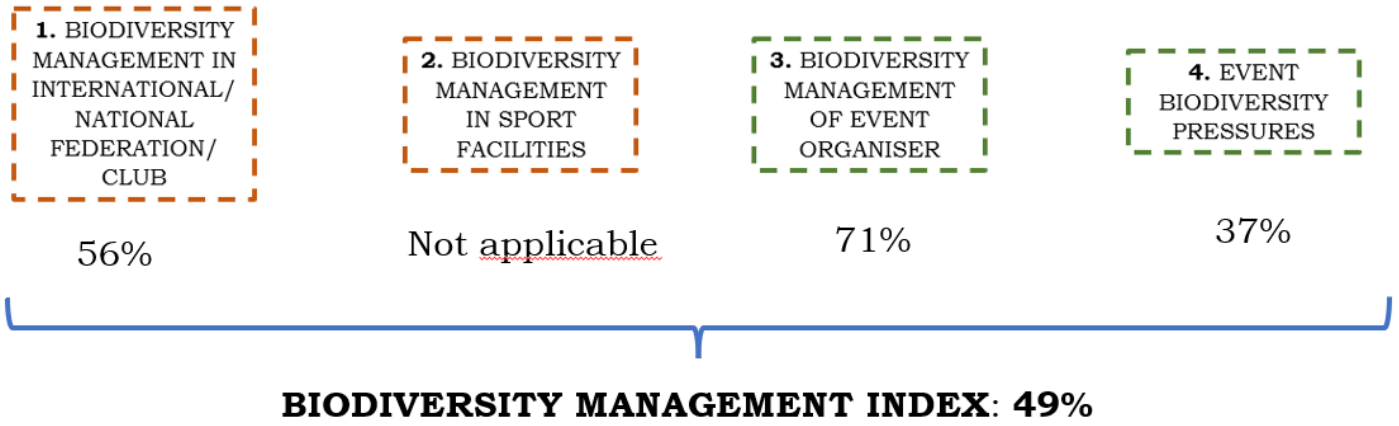
N°	Assessment question	Measurement	Answers	Scores
1	To what extent are low-impact transportation options (e.g., public transport, electric vehicles, cycling) prioritized to reduce greenhose gas emissions?	Score 0-5	Please, select actions taken to prioritize low impact transportation options during the event (5 = all actions; 0 = no actions) - The location of the event and the accommodations for athletes and staff have been chosen based on proximity to public transport. - Low-emission vehicles (such as bicycles or electric vehicles) have been made available for participants to move between event locations. - Agreements with public transportation and city actors such as increasing the number of trains, busses, and providing free transportation with events tickets (combined tickets) have been arranged - Mobility routes for staff, athletes and supporters have been identified and prioritized in order to minimize the impact of transportation on local ecosystems and biodiversity (for example routes that avoid the passage of cars, bus, shuttles through protected or natural areas)	All actions = 5 3 actions = 4 2 actions = 3 1 actions = 2 No actions = 0
2	What percentage of energy used during the event comes from renewable sources (included energy from green certified supplier)?	Score 0-5	A) more than 80% B) between 80% and 60% C) between 60% and 40% D) between 40% and 20% E) less than 20%	A) 5 B) 4 C) 3 D) 2 E) 0

Results presentation

Results are summarised as % of the maximum score achieved.
The representation is linked to the single Evaluation Axis or to a single score associated with multiple axis



Results presentation, proposal



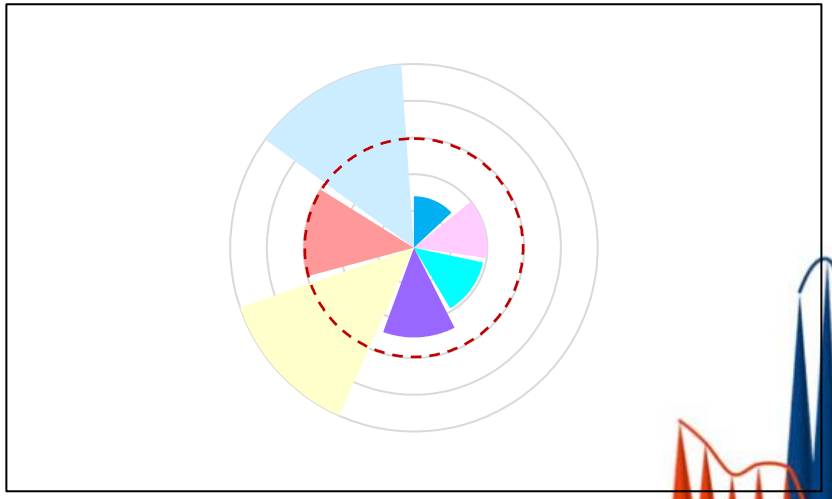
→ The final result (Biodiversity Management Index) is a **weighted average** where the Evaluation Axis with more questions and scores available (e.g. EA 4) will have a higher weight;
→ The software will provide a feedback on **quality of data** (for example based on the number of answers skipped as not applicable)
→ We adopt also a **classification** based on the results of the scores

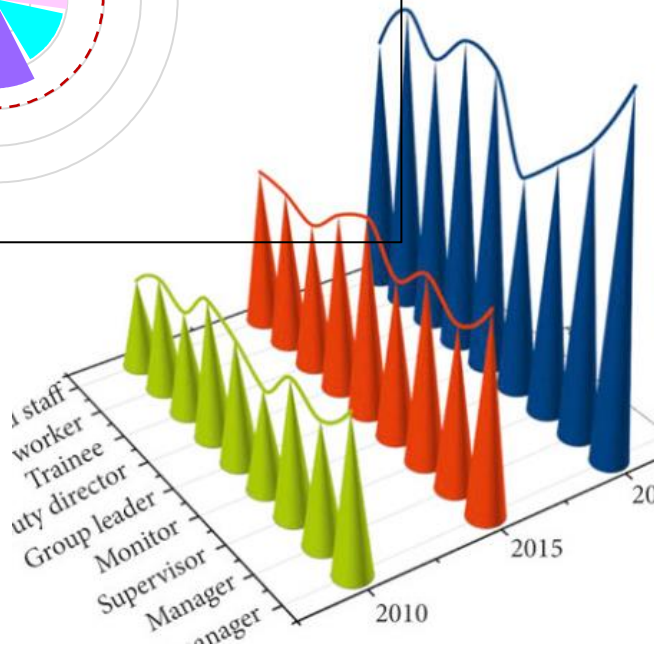
SINGLE ASSESSMENT

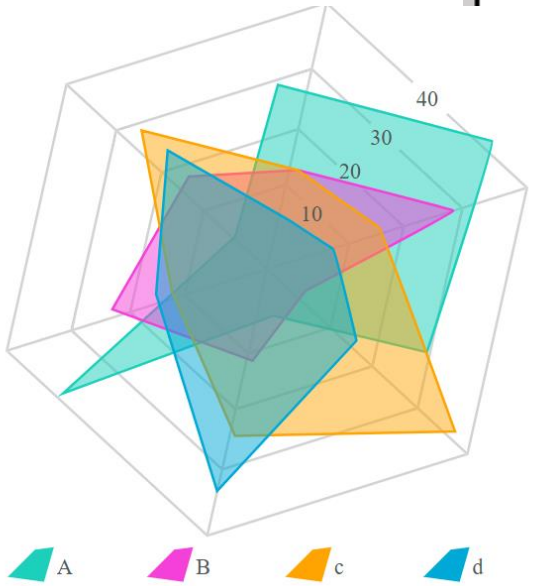
UNDER 25% OF THE MAXIMUM SCORE	BEGINNER
from 25% TO 60% OF THE MAXIMUM SCORE	INTERMEDIATE
OVER 60% OF THE MAXIMUM SCORE	ADVANCED

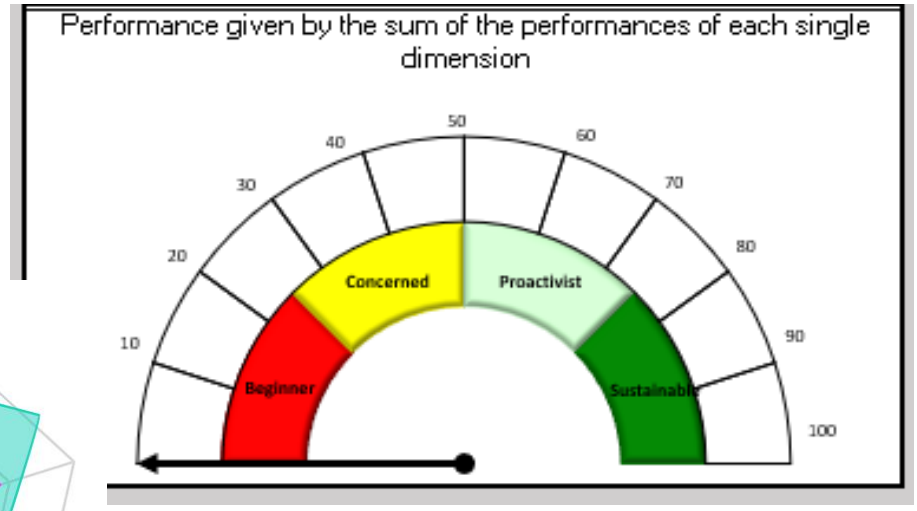
Results presentation

Graphically the software could provide a lot of **different ways** to present the results.







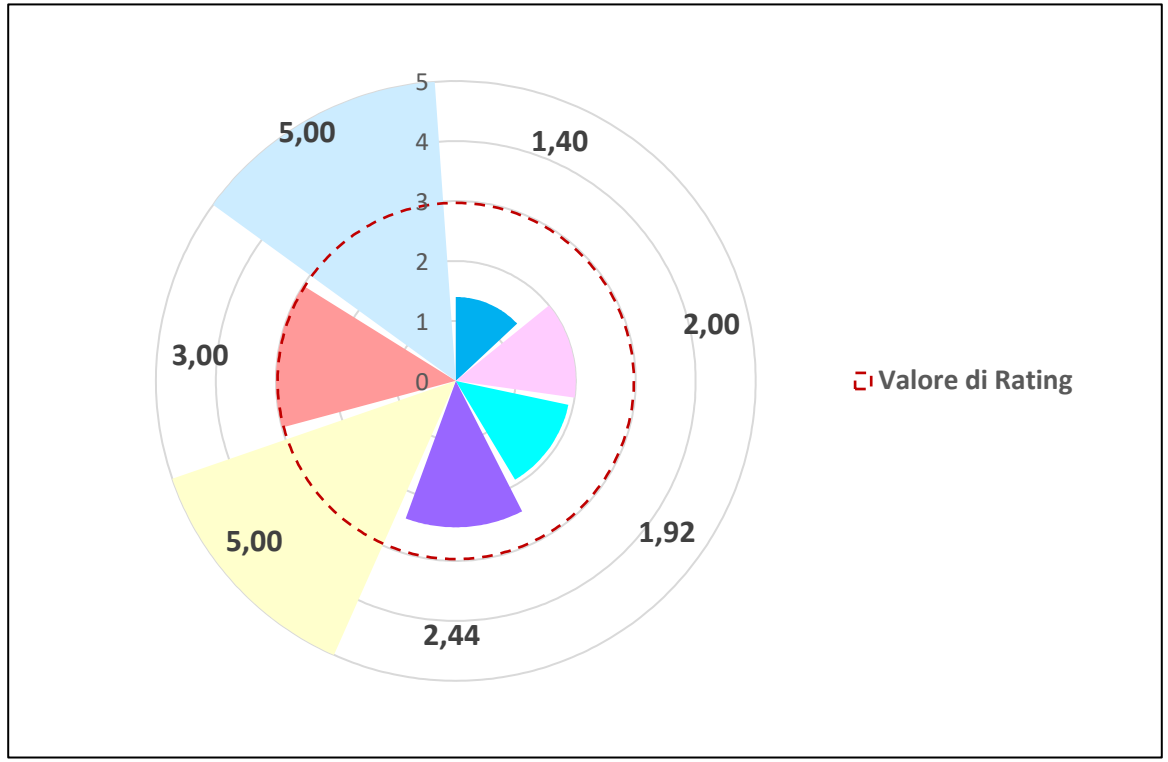


Results presentation

First level results

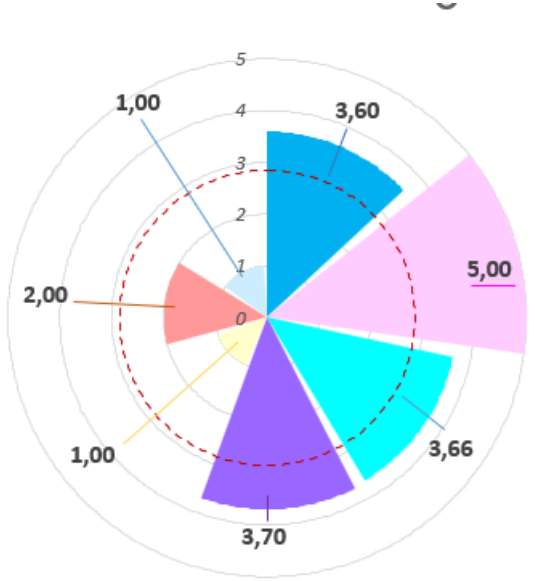
The 4 sections are indipendent, it means that it can be decided to apply only 1 of them.

N°	Assessment axis	Value
1	BIODIVERSITY MANAGEMENT IN INTERNATIONAL/ NATIONAL FEDERATION/ CLUB	1.40
2	BIODIVERSITY MANAGEMENT IN SPORT FACILITIES	2.00
3	BIODIVERSITY MANAGEMENT OF EVENT ORGANISER	1.92
4	EVENT BIODIVERSITY PRESSURES	3.44



Results presentation
Second level results events

N°	Indicatori	Valore
3.1	Biodiversity management of event organiser	2.2
3.2	Event biodiversity supply chain management	27
4.1	Climate change	3.60
4.2	Overexploitation of resources	5.00
4.3	Alien and invasive species	3.66
4.4	Pollution	3.70
4.5	Land use change	1.00



BENCHES: Next steps

- The Biodiversity Assessment tool will be validated by experts and tested in the next months
- In March 2026 it will be digitalised and run online on the BENCHES website
- The tool can be used by any sailing organisation and the results can be used to improve biodiversity management of sailing events and organisations

WP2: *Development of a biodiversity assessment tool and measurement of ecosystem services in sports*

WP2- Task 2.5 goal is to carry out an assessment of the **economic ecosystem services value for the sport industry**. The aim is to identify ,thanks to the Willingness to Pay directly expressed by the athletes, the economic value attributed to a natural ecosystem using as a proxy the possibility to perform outdoor sport activity. This is the first study to assess the cultural ecosystem service from the athletes' perspective in the sport industry.

Methodology 2/3

The survey has involved:

Two different ***sports***:

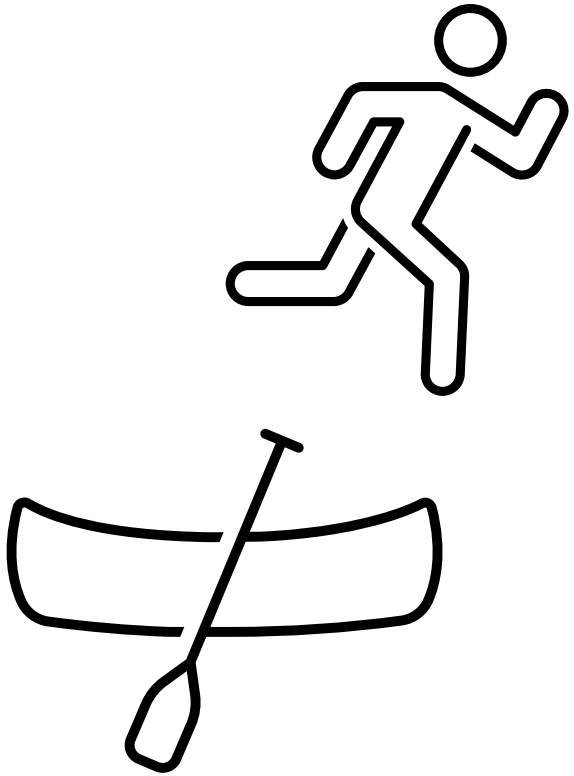
- Canoe/Kayak (FICK)
- Athletics (WA)

Two different ***biomes***:

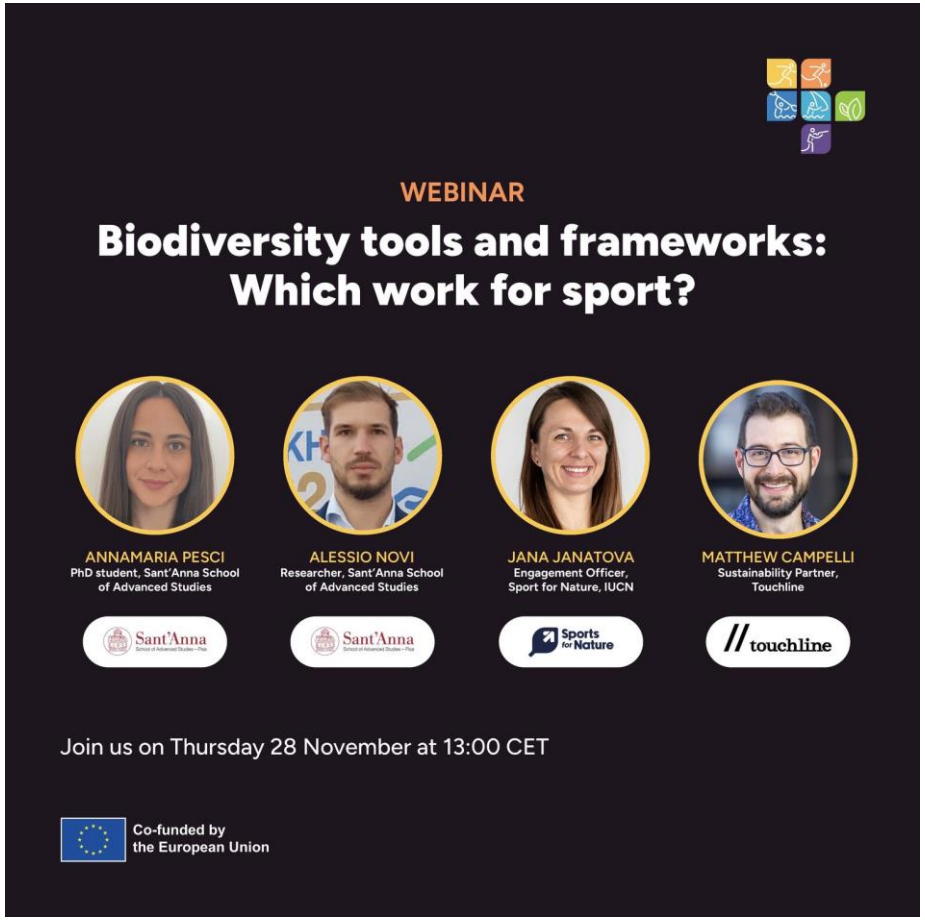
- Aquatic
- Terrestrial

Two different ***ecosystems:***

- Freshwater
- Mountain



BENCHES webinars



Next one will be on ecosystem services.
22/05/2025 (biodiversity day)

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