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# BIODIVERSITY INFORMATION MANAGEMENT AND REPORTING (BIMR) POLICY PAPER

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**Reviewed and endorsed by**

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On behalf of the  
German Federal Ministry for Economic Cooperation and Development (BMZ)

# LIST OF ACRONYMS

<b>ABCD</b>	Access to Biological Collections Data
<b>BDTF SEE</b>	Biodiversity Task Force of South East Europe
<b>BIMR</b>	Biodiversity Information Management and Reporting
<b>BIMR RP</b>	BIMR Regional Platform
<b>DiSSCo RI</b>	Distributed System of Scientific Collections Research Infrastructure
<b>EEC</b>	European Economic Community
<b>EU</b>	European Union
<b>GBIF</b>	Global Biodiversity Information Facility
<b>GEF</b>	Global Environment Facility
<b>GIZ</b>	Deutsche Gesellschaft für Internationale Zusammenarbeit
<b>GIZ/ORF-BDU</b>	GIZ Open Regional Fund for South East Europe – Implementation of Biodiversity Agreements
<b>IPA</b>	Instrument for Pre-Accession Assistance
<b>NCIS</b>	Nature Conservation Information System
<b>RCC/RWGE</b>	Regional Cooperation Council – Regional Working Group of Environment
<b>SEE</b>	South East Europe
<b>SIDA</b>	Swedish International Development Cooperation Agency

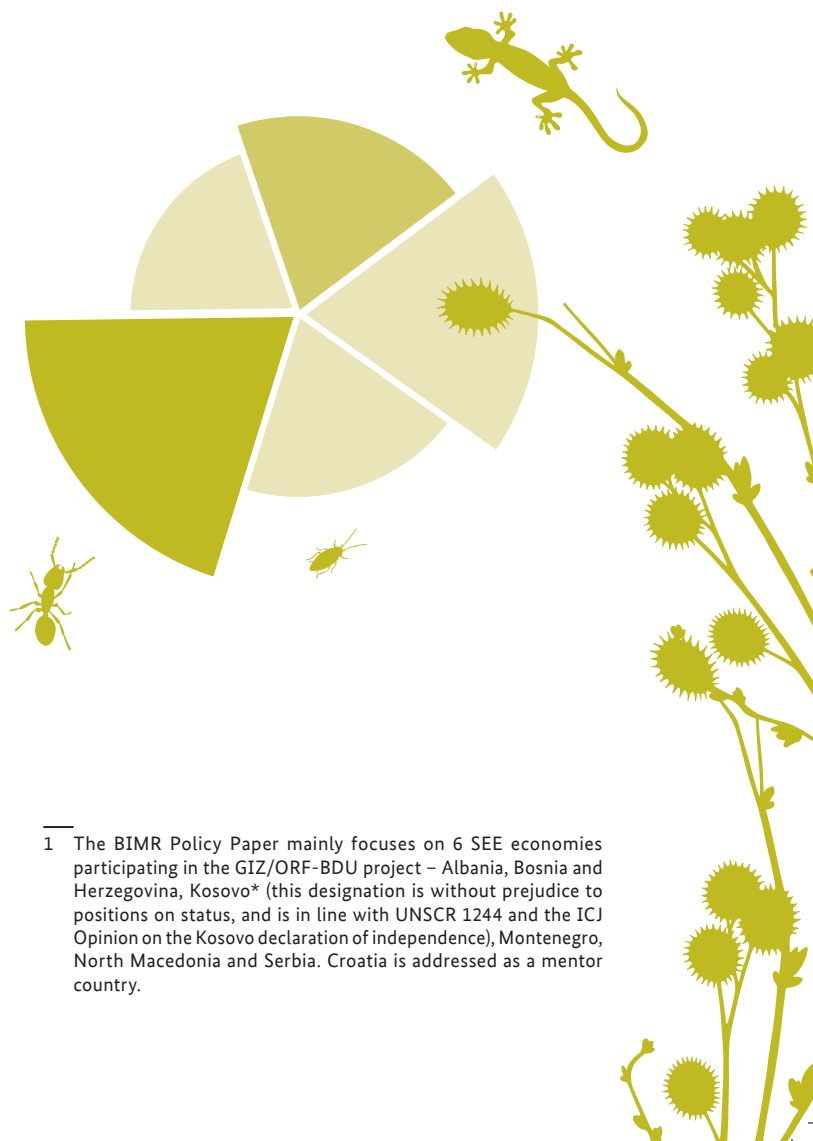
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Information and knowledge about biodiversity are crucial for the development and implementation of both nature conservation and sector policies. This is particularly relevant for South East Europe (SEE), a region so rich in biodiversity and endemism.

The Open Regional Fund for South East Europe – Implementation of Biodiversity Agreements (ORF-BDU), commissioned by the German Federal Ministry for Economic Cooperation and Development (BMZ) and implemented by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH is – among other activities – focussing on biodiversity information and knowledge. It aims at establishing a functional system for biodiversity information management and reporting in the region via the Regional Network for Biodiversity Information Management and Reporting (BIMR) sub-project (with two phases – BIMR 1 and BIMR 2), which runs until March 2021. This sub-project makes an important contribution to the harmonization of regional practices with the requirements of the Convention on Biological Diversity (CBD) and the relevant directives of the European Union, such as the INSPIRE Directive (2007/2/EC), Birds Directive (2009/147/EC) and Habitats Directive (92/43/EEC).

Furthermore, BIMR Regional Platform (BIMR RP) was established to ensure long-term regional cooperation and strengthening of partnerships. However, there was a need to raise BIMR issues higher on the political agenda in the SEE region. The BIMR Policy Paper is envisaged as a step towards this goal. This paper, developed with support of the GIZ/ORF-BDU BIMR 2 sub-project, should serve as a strategic plan for biodiversity information management and reporting activities in the SEE region<sup>1</sup> in the period 2020 – 2025, particularly BIMR RP activities and the GIZ/ORF-BDU BIMR 2 sub-project in general, and beyond. As such, it aims to facilitate access to international funding available for the region and to enable active regional contribution to international policies (post-Aichi targets), networks and initiatives.

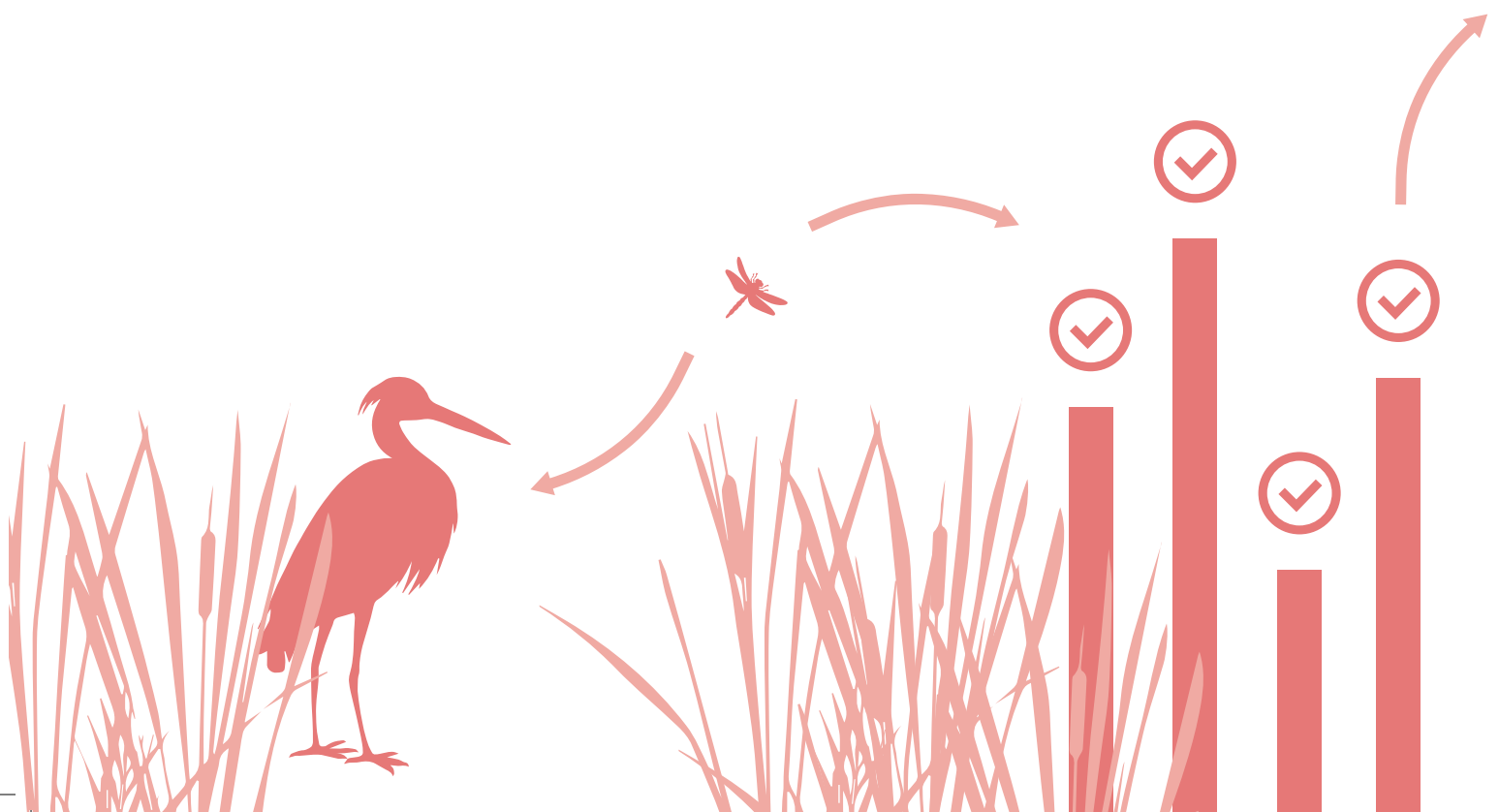


<sup>1</sup> The BIMR Policy Paper mainly focuses on 6 SEE economies participating in the GIZ/ORF-BDU project – Albania, Bosnia and Herzegovina, Kosovo\* (this designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo declaration of independence), Montenegro, North Macedonia and Serbia. Croatia is addressed as a mentor country.

## POLICY PAPER DEVELOPMENT PROCESS

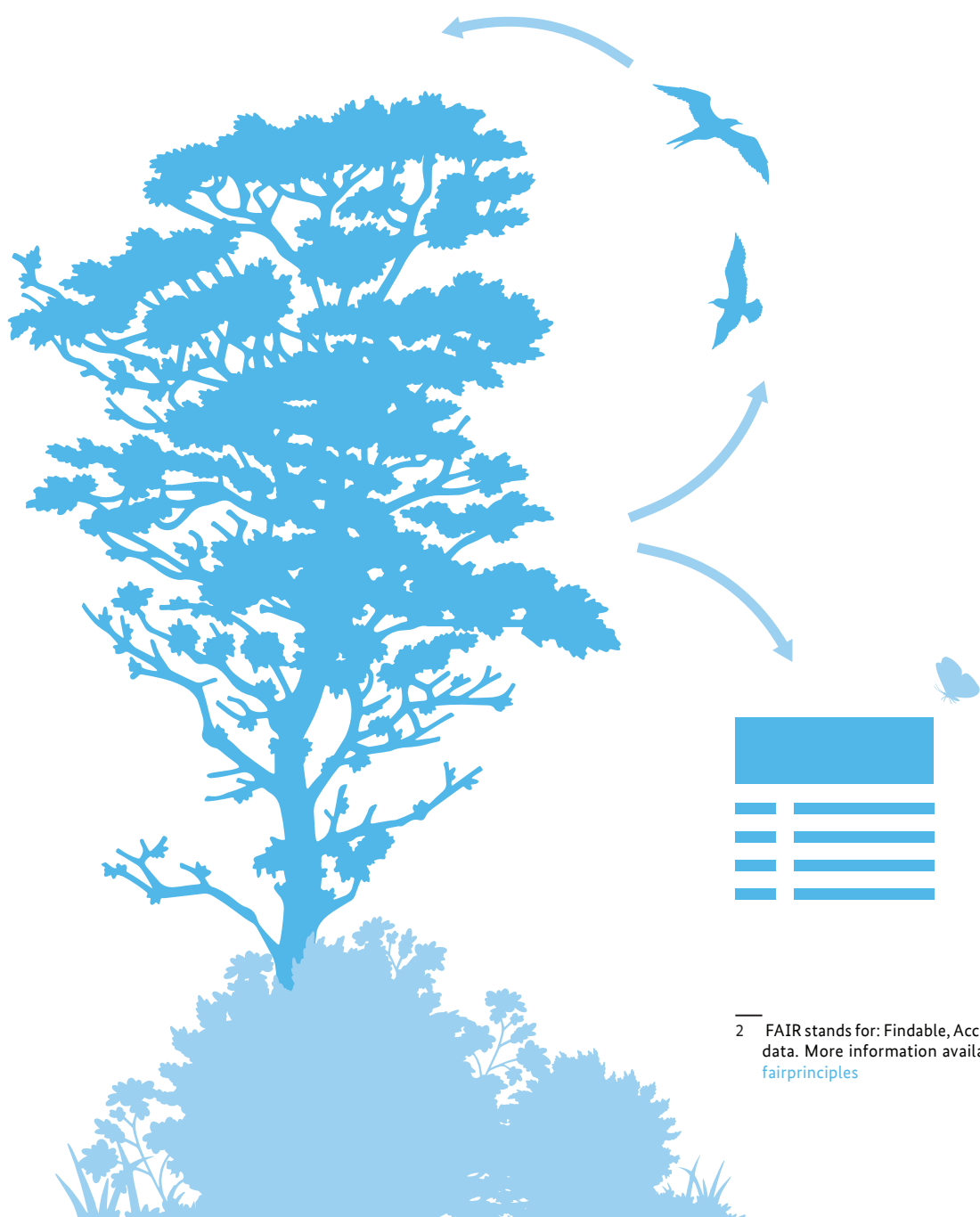
The BIMR Policy Paper is being **prepared through a facilitated process** with the participation of relevant stakeholders – representatives of 19 institutions and GIZ/ORF-BDU BIMR 2, SEE economies – members of the BIMR RP, the Biodiversity Task Force of South East Europe (BDTF SEE) operating under the Regional Cooperation Council – Regional Working Group for Environment (RCC/RWGE), the Global Biodiversity Information Facility (GBIF) and the Distributed System of Scientific Collections Research Infrastructure (DiSSCo RI) (Annex 1).

Stakeholders could give their inputs in two facilitated workshops organized as part of BIMR RP meetings (29 and 30 May 2019 in Belgrade and 2 December 2019 in Sarajevo) and could also provide comments between sessions. The concept of the BIMR Policy Paper was also presented at the 4<sup>th</sup> meeting of the BDTF SEE (Tirana, 21 November 2019). The BIMR Policy Paper was reviewed and approved by the BIMR RP at its 3<sup>rd</sup> meeting (Podgorica, 12 March 2020) and endorsed by the BDTF SEE at its 5<sup>th</sup> meeting (20 May 2020). It will be presented for discussion to the RCC/RWGE.



The long-term objective for biodiversity information management and monitoring in the SEE region that will guide further activities is:

*“Sufficient biodiversity information is systematically collected, processed, stored and easily accessible (according to FAIR principles<sup>2</sup>) through regional and international cooperation, to provide scientific evidence for sound decision-making for conservation of nature in SEE, as one of the biodiversity hotspots, and beyond.”*



<sup>2</sup> FAIR stands for: Findable, Accessible, Interoperable and Reusable data. More information available at: <https://www.force11.org/fairprinciples>

## PRESENT STATE

Certain preconditions for functional biodiversity information management and reporting in the SEE region are already in place, such as an established institutional framework for nature conservation, the ongoing process in regional economies of harmonizing national legislation with the relevant EU *acquis*, as well as the active role of international organizations such as GIZ (Table 1). On the other hand, there are many setbacks, including the lack of national legislation on nature conservation/biodiversity information systems, insufficient human, technical and financial capacities, lack of systematic data collection, processing and data access/sharing. Different funding programmes are already available for the region, so their utilization should be improved. However, nature conservation is still not high on the regional economies' political agenda and is not coordinated with sector policies, resulting in weak and fragmented implementation of existing policies.

► **Table 1.** Overview of strengths, weaknesses, opportunities and threats (SWOT), providing a snapshot of present state of biodiversity information management in the SEE region





## STRENGTHS

- Institutional frameworks for nature conservation exist, with responsibilities for biodiversity information management and reporting of related issues
- The tradition of cooperation between researchers in the region already exists
- Regional economies are parties to relevant international nature conservation conventions and agreements
- The majority of economies are harmonizing national legislation with the EU environmental acquis (as official and potential candidates for EU membership)
- International organizations active in the region, such as GIZ, already offer support for BIMR 1 and 2
- Some biodiversity data and databases are already available and operational

## WEAKNESSES

- No specific regulations on national nature protection/biodiversity information systems
- Lack of personnel specialized/skilled for data collection, management, analysis and reporting
- Lack of knowledge of GIS and other data processing tools/skills at all levels (data collectors, data processors and data integrators)
- Lack of technical infrastructure/capacities, such as personnel for IT infrastructure maintenance
- Lack of financial capacities in the institutions involved (lack of long-term sustainable funding)
- Lack of digitized and structured biodiversity data (i.e. data from herbarium etc.)
- Lack of systematic data collection and processing
- Lack of standardized data collection and quality control of collected data
- Lack of backup for already stored data
- Existing data are scattered across different institutions and formats
- Existing data are not available to all stakeholders – fear of misuse (lack of compliance with the EU INSPIRE Directive)
- (Existing) Data provenance is not clear

## OPPORTUNITIES

- Funding is available through international funds, such as EU funds (IPA, LIFE and transboundary programs), global funds (GEF, World Bank) and regional and bilateral programs (German Federal Ministry for Economic Cooperation and Development - BMZ, Swiss Development and Cooperation Agency - SDC, Swedish International Development Cooperation Agency – SIDA)
- Rich biodiversity and endemism is good for attracting interest in the region in terms of biodiversity knowledge and nature conservation in general, which may increase investments in BIMR
- Migratory and flagship species are good for joint projects related to BIMR
- International initiatives and networks active at the European and global level can provide support for capacity enhancements and technical developments (i.e. GBIF, DISSCO RI, etc.)
- Biodiversity data should be used as the basis for sustainable development
- Existing good practices can be used and replicated in the region (economies of scope and scale)

## THREATS

- Biodiversity information management related issues are still not considered a priority in the national and regional political agendas
- Lack of implementation of related policies due to the lack of political willingness
- Lack of understanding of the importance of knowledge about biodiversity
- Frequent change of nature protection institutional framework, particularly cancellation or merging of expert institutions in charge of data management
- IT security breaches may represent a challenge for data storage and management

## FOCUS AREAS AND TARGETS

Considering the gap between the desired vision and the present state of biodiversity information management and reporting in the region, eight focus areas (FAs) were identified, together with 13 specific targets to be achieved in the period 2020–2025 (Table 2) through implementation of the Action Plan with 30 activities (Chapter 6 and Annex 3).

▼ **Table 2.** Overview of BIMR Policy Paper focus areas and specific targets

<b>FA 1. National legislation on the nature conservation information system (NCIS)</b>
Target 1.1. Specific national legislation frameworks on the nature conservation information system (NCIS) are set
<b>FA 2. Nature conservation information system (NCIS)</b>
Target 2.1. At least two structured thematic databases (i.e. protected areas, species/habitats) are established in each SEE economy, and development of at least one additional thematic database has started
<b>FA 3. Standardization of biodiversity data collection</b>
Target 3.1. Standardized biodiversity collection for at least 5 species taxonomic groups (EU Habitats Directive Annex 2 and Annex 4) is set pursuant to biodiversity data standards – Darwin Core and Access to Biological Collection Data scheme
Target 3.2. Standardized biodiversity collection for habitat types (EU Habitats Directive Annex 1) is set
<b>FA 4. Biodiversity data usage and authorship rights</b>
Target 4.1. Procedures for data usage and authors' rights are in place
<b>FA 5. Biodiversity data sharing and exchange (compliance with the EU INSPIRE directive)</b>
Target 5.1. Functional national portals to access biodiversity data in accordance with the EU INSPIRE Directive are in place
Target 5.2. Procedures and outlined conditions for data sharing and exchange are set
<b>FA 6. Capacity enhancement</b>
Target 6.1. A pool of skilled and operational experts for biodiversity information collection, processing and management is established in each SEE economy
Target 6.2. Adequate hardware and software infrastructure for efficient functioning of the nature protection/ biodiversity information system is established and maintained in each SEE economy
<b>FA 7. Regional and international cooperation</b>
Target 7.1. Regular cooperation, communication and exchange of knowledge between SEE economies continues
Target 7.2. Partnerships between SEE economies and international organizations and initiatives - GBIF and DiSSCo RI – are formalized
<b>FA 8. Financing</b>
Target 8.1. Sufficient long-term funding for management and maintenance of the nature conservation information system is ensured in the national budgets
Target 8.2. BIMR related activities, as stipulated in the BIMR Policy Paper, are supported through available funding structures in the SEE region

## FA 1. National legislation on the nature conservation information system (NCIS)

**Target 1.1.** Specific national legislation frameworks for the nature conservation information system (NCIS) are set

No.	Activity	Responsible actors	Expected outputs	Possible financial sources <sup>3</sup>	Priority level <sup>4</sup>	Relevant SEE economies	Links to other activities and targets
1.1.1.	Prepare specific national legislation on the nature conservation information system (NCIS) or develop amendments of existing ones in order to integrate provisions on biodiversity data management and other relevant issues, based on proposed legislation prepared as part of the BIMR 2 sub-project (Annex 2)	Responsible national authorities and expert institutions	NCIS legislation draft proposals	NF	Very high	5 SEE economies (except North Macedonia <sup>5</sup> )	
1.1.2.	Review and adopt specific national legislation on NCIS	Responsible national authorities	NCIS legislation officially adopted and published	NF	High	All 6 SEE economies	

<sup>3</sup> GIZ = ORF-BDU implemented by GIZ; OIF = Other sources of international funding (public or private); NF = national co-funding (including in-kind through logistics support)

<sup>4</sup> Very high = implementation of activity should start immediately at the beginning of the BIMR Policy Paper period – mid-2020; High = activity should start in 2021 at the latest; Medium = activity should start in 2022 at the latest; Low = activity should start in 2023 at the latest; Ongoing = activities implemented regularly during the set period

<sup>5</sup> North Macedonia has already developed the NCIS Rule Book proposal, planned for adoption in 2020

## FA 2. Nature conservation information system (NCIS)

**Target 2.1.** At least two structured thematic databases (i.e. protected areas, species/habitats) are established in each SEE economy, and development of at least one additional thematic database has started

No.	Activity	Responsible actors	Expected outputs	Possible financial sources	Priority level	Relevant SEE economies	Links to other activities and targets
2.1.1.	Develop functional thematic database(s) for storage, maintenance and access to spatial and non-spatial data on protected areas (including ecological network, where available)	GIZ, responsible national authorities, expert institutions and organizations, other relevant experts	Protected areas databases are functional	GIZ, OIF	Very high	All 6 SEE economies	Targets 6.1., 6.2., Targets 8.1., 8.2.
2.1.2.	Develop functional thematic database(s) on species taxonomy, conservation/endemism/threat status and occurrences, in accordance with biodiversity data standards (i.e. Darwin Core, Access to Biological Collections Data (ABCD), Catalogue of Life)	GIZ, responsible national authorities, expert institutions and organizations, other relevant experts	List of Endemic Taxa for selected taxa is finished  Species thematic databases are functional	GIZ, OIF	High	All 6 SEE economies	Activity 2.1.4., 3.1.1., Targets 6.1., 6.2., Targets 8.1., 8.2.
2.1.3	Start developing a thematic database for storage, maintenance and access to spatial and non-spatial data on habitats (including habitat map and habitat catalogue containing the national habitat classification (if available) and a system for re-coding to the EUNIS habitat classification)	GIZ, responsible national authorities, expert institutions and organizations, other relevant experts	Habitat catalogue is prepared, established and available for online access  Technical foundations are prepared for further development of geospatial and other module functionalities	GIZ, OIF	High	All 6 SEE economies	Activity 3.2.2., Targets 6.1., 6.2., Targets 8.1., 8.2.
2.1.4.	Explore the possibility of extended use of existing thematic databases that could be applicable at regional level (i.e. Flora Croatica Database - FCD)	GIZ, responsible national authorities, expert institutions and organizations, other relevant experts	Proposal for further steps	GIZ, NF	High	All 6 SEE economies	Targets 7.1, 7.2.

## FA 3. Standardization of biodiversity data collection

**Target 3.1.** Standardized biodiversity data collection for at least 5 species taxonomic groups (EU Habitats Directive, Annex 2 and Annex 4) is set pursuant to biodiversity data standards – Darwin Core and Access to Biological Collection Data scheme

No.	Activity	Responsible actors	Expected outputs	Possible financial sources	Priority level	Relevant SEE economies	Links to other activities and targets
3.1.1.	Develop detailed guidelines for standardized data collection for each of the 5 species taxonomic groups (birds, mammals, amphibians, reptiles and vascular plants - EU Habitats Directive Annex 2 and Annex 4) in accordance with biodiversity data standards - Darwin Core and ABCD scheme and BIMR Regional Guidelines	GIZ, responsible national authorities, expert institutions and organizations, other relevant experts	Guidelines for standardized species data collection, including specific data collection protocols	GIZ, OIF, NF	High	5 SEE economies (except North Macedonia)	Targets 8.1., 8.2.
3.1.2.	Test standardized data collection protocols for each selected species group from 3.1.1. and revise if necessary	GIZ, responsible national authorities, expert institutions and organizations, other relevant experts	Data collection protocols tested and, if necessary, revised	GIZ, OIF, NF	High	All 6 SEE economies	Activity 3.1.1. Targets 8.1., 8.2.

**Target 3.2.** Development of standardized biodiversity data collection for selected habitat types (EU Habitats Directive Annex 1) has started

No.	Activity	Responsible actors	Expected outputs	Possible financial sources	Priority level	Relevant SEE economies	Links to other activities and targets
3.2.1.	Identify priority habitat types for standardized data collection (starting with habitat types from Annex I of the EU Habitats Directive)	GIZ, responsible national authorities, expert institutions and organizations, other relevant experts	List of priority habitat types	GIZ, OIF, NF	High	All 6 SEE economies	Targets 8.1., 8.2.
3.2.2.	Develop detailed guidelines for standardized data collection for selected habitat types, in accordance with BIMR Regional Guidelines	GIZ, responsible national authorities, expert institutions and organizations, other relevant experts	Guidelines for standardized data collection for selected habitat types, including specific data collection protocols	GIZ, OIF, NF	High	All 6 SEE economies	Targets 8.1., 8.2.

## FA 4. Biodiversity data usage and authors' rights

**Target 4.1.** Procedures for biodiversity data usage are in place

No.	Activity	Responsible actors	Expected outputs	Possible financial sources	Priority level	Relevant SEE economies	Links to other activities and targets
4.1.1.	Develop and implement detailed guidelines on authors' rights for biodiversity data at the national level, based on BIMR Regional Guidelines	GIZ, responsible national authorities, expert institutions and organizations, other relevant experts	Guidelines for regulation of authors' rights for biodiversity data	GIZ, NF	High	All 6 SEE economies	Targets 3.1., 3.2.
4.1.2.	Apply authors' rights regulation guidelines from 4.1.1. at the national level	Responsible national authorities, expert institutions and organizations, other relevant experts	Agreements with biodiversity data providers	NF	High	All 6 SEE economies	Targets 3.1., 3.2., Activity 4.1.1.

## FA 5. Biodiversity data sharing and exchange (compliance with the EU INSPIRE Directive)

**Target 5.1.** Functional national portals to access biodiversity data in accordance with the EU INSPIRE Directive are in place

No.	Activity	Responsible actors	Expected outputs	Possible financial sources	Priority level	Relevant SEE economies	Links to other activities and targets
5.1.1.	Develop national portals to access spatial and non-spatial biodiversity data, in accordance with the EU INSPIRE Directive, including establishment of web services for spatial data sharing, in line with the Open Geospatial Consortium (OGC) standard	GIZ, responsible national authorities, expert institutions and organizations, other relevant experts	National portals are developed	GIZ, NF	High	All 6 SEE economies	Targets 2.1., 2.2., 3.1., 3.2., 8.1., 8.2.

No.	Activity	Responsible actors	Expected outputs	Possible financial sources	Priority level	Relevant SEE economies	Links to other activities and targets
5.2.1.	Develop procedures and outline general terms and conditions for data access, usage and sharing	Responsible national authorities, expert institutions and organizations, other relevant experts	Procedures developed and applied	NF	High	All 6 SEE economies	Targets 2.1., 2.2., 3.1., 3.2., 8.1., 8.2.

## FA 6. Capacity enhancement

**Target 6.1.** A pool of skilled and operational experts for biodiversity information collection, processing and management is established in each SEE economy

No.	Activity	Responsible actors	Expected outputs	Possible financial sources	Priority level	Relevant SEE economies	Links to other activities and targets
6.1.1.	Continue to organise trainings for data providers and data use for decision makers, in cooperation with GBIF and DiSSCo RI	GIZ, GBIF, DiSSCo RI, responsible national authorities, expert institutions and organizations	At least 2 trainings are organised, with at least 5 newly trained experts	GIZ, OIF (including DiSSCo RI)	High	All 6 SEE economies and Croatia	Target 7.2, 8.2.
6.1.2.	Continue organising trainings for GIS and related analysis	GIZ, responsible national authorities, expert institutions and organizations, other relevant experts	At least 2 trainings are organised, with at least 5 newly trained experts	GIZ, OIF, NF	High	All 6 SEE economies	Targets 8.1., 8.2.
6.1.3.	Organise study tours on BIMR-related topics, in cooperation with Croatia and other European countries	GIZ, responsible national authorities, expert institutions and organizations, other relevant experts	At least 1 study tour is organised	GIZ, OIF	High	All 6 SEE economies and Croatia	Targets 7.1., 7.2., 8.2.
6.1.4.	Formulate and define the duties of personnel working on BIMR issues in the relevant national institutions, taking into account the need for sufficient human resources dedicated to BIMR	Responsible national authorities, expert institutions and organizations	Institutions' internal organizational and work plans, with adequately planned and organized positions responsible for BIMR issues	NF	Very high	All 6 SEE economies	All targets

**Target 6.2.** Adequate hardware and software infrastructure for efficient functioning of the nature conservation information system is established and maintained in each SEE economy

No.	Activity	Responsible actors	Expected outputs	Possible financial sources	Priority level	Relevant SEE economies	Links to other activities and targets
6.2.1.	Assess hardware and software needs in each of the 6 SEE economies for support to NCIS development	Responsible national authorities, expert institutions and organizations, other relevant experts	Analysis of national hardware and software needs in each SEE economy	OIF, NF	High	All 6 SEE economies	Targets 8.1., 8.2.
6.2.2.	Based on 6.2.1., hardware and software needs are included in the planning of future NCIS-related projects	Responsible national authorities, expert institutions and organizations, other relevant experts	Hardware and software is procured through NCIS-related projects	NF	Medium	All 6 SEE economies	Targets 8.1., 8.2.

## FA 7. Regional and international cooperation

**Target 7.1.** Regular cooperation, communication and exchange of knowledge between SEE economies continues, with active support of GIZ

No.	Activity	Responsible actors	Expected outputs	Possible financial sources	Priority level	Relevant SEE economies	Links to other activities and targets
7.1.1.	Maintain functionality of the BIMR Regional Platform	GIZ, responsible national authorities, expert institutions and organizations	2 BIMR RP meetings per year	GIZ, NF	Ongoing	All 6 SEE economies and Croatia	Targets 8.1., 8.2.
7.1.2.	Use the BIMR Regional Platform as a mailing list for exchange of information on BIMR-related events in the region and beyond	GIZ, responsible national authorities, expert institutions and organizations, other relevant experts, GBIF, DiSSCo RI	Exchange of information via BIMR RP mailing list	GIZ, NF	Ongoing	All 6 SEE economies and Croatia	Targets 8.1, 8.2.
7.1.3.	Continue using the Balkan Green Energy News website (BGEN) for visibility of BIMR related activities and events	GIZ, responsible national authorities, expert institutions and organization, other relevant experts, GBIF, DiSSCo RI	Regular articles published on the BGEN website	GIZ	Ongoing	All 6 SEE economies and Croatia	Target 8.2.



No.	Activity	Responsible actors	Expected outputs	Possible financial sources	Priority level	Relevant SEE economies	Links to other activities and targets
7.2.1.	Establish formal partnerships between eligible SEE economies, including Croatia, and GBIF	GBIF, responsible national authorities	National authorities from eligible SEE economies, including Croatia, are members of the GBIF	NF	High	All eligible SEE economies and Croatia	
7.2.2.	Establish formal partnerships between national natural history collections in the SEE region and DiSSCo RI	DiSSCo RI, responsible national authorities, expert institutions - natural history collection holders, other relevant experts	National authorities and national institutions – natural history collection holders from each SEE economy, including Croatia, are members of the DiSSCo RI	NF	Very high	All 6 SEE economies and Croatia	
7.2.3.	Regularly share information on BIMR-related work in the SEE region with the international community	GIZ, responsible national authorities, expert institutions and organizations, other relevant experts	Participation in relevant international conferences (i.e. Biodiversity Next) and other relevant events	GIZ, NF	Ongoing	6 SEE economies and Croatia	

## FA 8. Financing

**Target 8.1.** Sufficient long-term funding for management and maintenance of the nature conservation information system is ensured in the national budgets

No.	Activity	Responsible actors	Expected outputs	Possible financial sources	Priority level	Relevant SEE economies	Links to other activities and targets
8.1.1.	Embed BIMR Policy Paper targets and activities into national nature conservation strategies and related policy documents	Responsible national authorities and expert institutions	National strategies with integrated elements from the BIMR Policy Paper	NF	Depending on the timeline for development of national strategies	All 6 SEE economies	
8.1.2.	Negotiate the inclusion of long-term funding needed for NCIS maintenance into national budgets	Responsible national authorities and expert institutions	NCIS maintenance funds ensured in the national budgets	NF	Very high	All 6 SEE economies	

**Target 8.2.** BIMR related activities, as stipulated in the BIMR Policy Paper, are supported through available funding structures in the SEE region

No.	Activity	Responsible actors	Expected outputs	Possible financial sources	Priority level	Relevant SEE economies	Links to other activities and targets
8.2.1.	Continue with the implementation of the ORF-BDU BIMR 2 sub-project until March 2021 and consider possibilities for project extension	GIZ, responsible national authorities, expert institutions and organizations, other relevant experts	BIMR 2 sub-project results	GIZ, OIF	High	All 6 SEE economies and Croatia	
8.2.2.	Implement other joint BIMR related projects in the SEE region (with participation of at least two SEE economies)	Responsible national authorities, expert institutions and organizations, other relevant experts	At least 1 joint project proposed and started to be implemented	OIF	Medium	All 6 SEE economies and Croatia	

# IMPLEMENTATION, MONITORING AND REVISION

The BIMR RP and BD TF SEE will be the main supervisors of BIMR Policy Paper implementation during their known mandates (2020-2021). Namely, BIMR RP functionality at the moment greatly depends on the implementation of the GIZ/ORF-BDU BIMR 2 sub-project, which is running until March 2021. Furthermore, BD TF SEE currently has a mandate until December 2020. After March 2021, supervision of the BIMR Policy Paper will depend on the future arrangements for the BIMR sub-project, BIMR RP and BD TF SEE.

In their capacity as supervisors, BIMR RP and BD TF will be regularly informed at their meetings about the progress of the BIMR Policy Paper. Updates will be prepared by GIZ/ORF-BDU BIMR 2 with the assistance of SEE economies, GBIF, DiSSCo RI and other relevant stakeholders.

At the operational level, the main actors in charge of implementation will be GIZ/ORF-BDU BIMR 2,

responsible national authorities, expert institutions and organizations, other relevant experts, GBIF and DiSSCo RI. There is also a possibility to involve other partners willing to support the activities operationally and/or financially.

The required **financing** should be ensured through national and international funds, as shown under FA 8. In this regard, SEE economies and Croatia are recommended to integrate BIMR Policy Paper focus areas, targets and activities into their strategies related to nature conservation and to consider them when applying for other international sources of funding, such as EU pre-accession funds.

A detailed **revision** of the BIMR Policy Paper implementation should be carried out in 2025 as the basis for preparation of a BIMR Policy Paper for the period 2026 – 2030, if the need for extension of the BIMR Policy Paper is confirmed. As already indicated, the parties responsible for this task should be identified in the course of 2021.

## Annex 1. List of institutions participating in the preparation of the BIMR Policy Paper

Institution/organization title
Distributed System of Scientific Collections Research Infrastructure (DiSSCo RI)
Environmental Fund of the Federation of Bosnia and Herzegovina
GIZ/Integrated Biodiversity Management, South Caucasus - IBiS
GIZ/Open Regional Fund for South East Europe – Implementation of Biodiversity Agreements (GIZ/ORF-BDU)
Global Biodiversity Information Facility (GBIF) Secretariat
Institute for Nature Conservation of Serbia
Institute for the Protection of Cultural, Historical and Natural Heritage of Republika Srpska
Institute of Nature Conservation of Vojvodina Province
Kosovo <sup>6</sup> Environmental Protection Agency
Ministry of Physical Planning, Civil Engineering and Ecology of Republika Srpska
Ministry of Environment and Energy of Croatia, Institute of Environment and Nature Conservation
Ministry of Environment and Physical Planning of North Macedonia
Ministry of Environmental Protection of Serbia
Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina
National Agency for Protected Areas of Albania
National Environment Agency of Albania
Nature and Environmental Protection Agency of Montenegro
Serbian Environmental Protection Agency
Stenella consulting d.o.o., Croatia

<sup>6</sup> This designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo declaration of independence.

## Annex 2.

### Proposed main components of NCIS legislation

#### Nature conservation information system legislation

Clearly defined, well-developed legislation that regulates the establishment, maintenance and data provision obligations, data use, as well as funding and any other operational aspects of the NCIS is a **prerequisite for the establishment and operability of an effective information system.**

There are several topics that need to be clearly defined in national legislation (laws or secondary legislation, depending on national specificities), including:

- What is the purpose and what are the main thematic components of the NCIS?
- What data and information are contained and maintained in the scope of the NCIS?
- Who is responsible for system administration and maintenance?
- How is the system financed?
- Who is responsible for data collection?
- Who is obligated to provide data to the system?
- How is data managed?
- What mandatory data exchange exists between different institutions and organizations?
- What are the national reporting obligations towards the EU and other international organizations?<sup>7</sup>

The following section provides a more detailed overview of all components that should be covered by the nature conservation/ information system legislation.

#### Section 1 – NCIS definition

Definition of the nature conservation information system, including a description of thematic components of the main information system and a visual diagram of the system.

Detailed descriptions of data and information contained and maintained in the NCIS.

#### Section 2 – NCIS purpose

Description of the purpose of the nature conservation information system, which should include:

- Ensuring data availability and accessibility to users at source in an open and transparent manner;
- Data exchange with the relevant institutions/ organizations and information systems/networks on the national and international level;
- Collection and provision of information and data processed and analysed in accordance with international and European methodologies.

The purpose and the aim of the NCIS should be based on the principles of the EU INSPIRE directive:

- Data should be collected only once and kept where it can be maintained most effectively;
- It should be possible to combine seamless spatial information from different sources across Europe and share it with many users and applications;
- It should be possible for information collected at one level/scale to be shared with all levels/scales; detailed for thorough investigations, general for strategic purposes;
- Geographic information needed for good governance at all levels should be readily and transparently available;
- Easy to find what geographic information is available, how it can be used to meet a particular need, and under which conditions it can be acquired and used.

<sup>7</sup> Biodiversity Information Management and Reporting Guidelines for South-East Europe - Topic 9. National legislation related to BIMR

## Annex 2.

### Proposed main components of NCIS legislation

#### Section 3 – NCIS administration and maintenance

Description of the NCIS set-up (centralized/decentralized system) and operational organization of administration and maintenance of NCIS components.

Who is responsible for data quality control and assurance and what data quality control methods will be implemented?

Which organization(s) are responsible for maintenance of NCIS components and how is this collaboration formally regulated?

#### Section 4 – NCIS users and data accessibility

Who are the main users of the NCIS (on the national and international level) and how is data accessibility to users ensured (through web portals, web services, other means of data exchange, etc.)?

#### Section 5 – Data providers

Who are the data providers and which entities are obligated to provide data and under what terms and deadlines?

Description of data providers' obligations, including:

- Data collection and data quality control;
- Ensuring information system interoperability;
- Ensuring smooth flow and access to data and information;
- Responsibility for the accuracy and authenticity of data and information for which the data provider is responsible;
- Responsibility for determining the level of availability of data and information.

#### Section 6 – Obligation to develop specific implementation documents

For the purposes of establishment, further development, coordination and maintenance of the NCIS, the institution responsible for NCIS prepares an Implementation Programme.

#### NCIS Implementation Programme

An important step necessary for effective implementation of the NCIS regulation is to develop an operational programme (**NCIS Implementation Programme**). The NCIS Implementation Programme will provide strategic and operational guidelines with a set of concrete actions, responsible parties and necessary funding for establishment, administration, coordination and maintenance of a functional NCIS. As such, it represents the basis for implementation of various projects aimed at further development and improvement of biodiversity data quality and data exchange within the nature conservation information system, as well as for planning of the necessary seed funding for NCIS maintenance in the national budget. This programme is usually developed for a period of 3-5 years.

Its contents should cover the following:

- Legal foundation for the implementation of the Programme (laws, secondary legislation, strategy documents, international legislative framework);
- Organisation, method of administration and maintenance of the NCIS;
- List of stakeholders and institutions responsible for NCIS implementation;
- List of NCIS users (international and national, direct and indirect users);
- List of reporting entities and method of data submission for each thematic area;
- Method and deadlines for submission of data and information;
- Method of data and information management;
- Overview of targets, results and measurable indicators for NCIS implementation;
- Links to other systems, programmes and projects;
- Detailed overview of activities and deadlines for implementation of the Programme;
- Cost estimate, including a cost estimate for NCIS design, establishment, coordination and monitoring and a cost estimate for maintenance of each NCIS component.

## Annex 3. Timeline of activities

Focus area	Target	No	Activity
National legislation on nature conservation information system (NCIS)	Target 1.1. Specific national legislation frameworks for nature conservation information system (NCIS) are set	1.1.1.	Prepare specific national legislation on the nature conservation information system (NCIS) or develop amendments of existing ones in order to integrate provisions on biodiversity data management and other relevant issues, based on proposed legislation prepared as part of the BIMR 2 sub-project (Annex 2)
		1.1.2.	Review and adopt specific national legislation on NCIS
Nature conservation information system (NCIS)	Target 2.1. At least two structured thematic databases (i.e. protected areas, species/habitats) are established in each SEE economy, and development of at least one additional thematic database has started	2.1.1.	Develop functional thematic database(s) for storage, maintenance and access to spatial and non-spatial data on protected areas (including ecological network, where available)
		2.1.2.	Develop functional thematic database(s) on species taxonomy, conservation/endemism/threat status and occurrences, in accordance with biodiversity data standards (i.e. Darwin Core, Access to Biological Collections Data (ABCD), Catalogue of Life)
		2.1.3.	Start developing a thematic database for storage, maintenance and access to spatial and non-spatial data on habitats (including habitat map and habitat catalogue containing the national habitat classification (if available) and a system for re-coding to the EUNIS habitat classification)
		2.1.4.	Explore the possibility of extended use of existing thematic databases that could be applicable at regional level (i.e. Flora Croatica Database - FCD)
Standardization of biodiversity data collection	Target 3.1. Standardized biodiversity data collection for at least 5 species taxonomic groups (EU Habitats Directive Annex 2 and Annex 4) is set pursuant to the biodiversity data standards Darwin Core and Access to Biological Collection Data scheme	3.1.1.	Develop detailed guidelines for standardized data collection for each of the 5 species taxonomic groups (birds, mammals, amphibians, reptiles and vascular plants - EU Habitats Directive Annex 2 and Annex 4) in accordance with biodiversity data standards - Darwin Core and ABCD scheme and BIMR regional guidelines
		3.1.2.	Test standardized data collection protocols for each selected species group from 3.1.1. and revise if necessary
	Target 3.2. Development of the standardized biodiversity data collection for selected habitat types (EU Habitats Directive Annex 1) has started	3.2.1.	Identify priority habitat types for standardized data collection (starting with habitat types from Annex I of the EU Habitats Directive)
		3.2.2.	Develop detailed guidelines for standardized data collection for selected habitat types, in accordance with BIMR Regional Guidelines
Biodiversity data usage and authorship rights	Target 4.1. Procedures for biodiversity data usage are in place	4.1.1.	Develop and implement detailed guidelines on authors' rights for biodiversity data at the national level, based on BIMR Regional Guidelines
		4.1.2.	Apply authors' rights regulation guidelines from 4.1.1. at the national level
Biodiversity data sharing and exchange (compliance with the EU INSPIRE Directive)	Target 5.1. Functional national portals to access biodiversity data in accordance with the EU INSPIRE Directive are in place	5.1.1.	Develop national portals to access spatial and non-spatial biodiversity data, in accordance with the EU INSPIRE Directive, including establishment of web services for spatial data sharing, in line with the Open Geospatial Consortium (OGC) standard
	Target 5.2. Procedures and outlined conditions for data sharing and exchange are set	5.2.1.	Develop procedures and outline general terms and conditions for data access, usage and sharing
Capacity enhancement	Target 6.1. A pool of skilled and operational experts for biodiversity information collection, processing and management is established in each SEE economy	6.1.1.	Continue to organise trainings for data providers and data use for decision makers, in cooperation with GBIF and DiSSCo RI
		6.1.2.	Continue organising trainings for GIS and related analysis
		6.1.3.	Organise study tours on BIMR related topics, in cooperation with Croatia and other European countries
		6.1.4.	Formulate and define the duties of personnel working on BIMR issues in the relevant national institutions, taking into account the need for sufficient human resources dedicated to BIMR
	Target 6.2. Adequate hardware and software infrastructure for efficient functioning of the nature conservation information system is established and maintained in each SEE economy	6.2.1.	Assess hardware and software needs in each of the 6 SEE economies for support to NCIS development
		6.2.2.	Based on 6.2.1., hardware and software needs are included in the planning of future NCIS-related projects
Regional and international cooperation	Target 7.1. Regular cooperation, communication and exchange of knowledge between SEE economies continues, with active support of GIZ <sup>8</sup>	7.1.1.	Maintain functionality of the BIMR Regional Platform
		7.1.2.	Use the BIMR Regional Platform as a mailing list for exchange of information on BIMR related events in the region and beyond
		7.1.3.	Continue using the Balkan Green Network (BGEN) for visibility of BIMR related activities and events
	Target 7.2. Partnerships between SEE economies and international organizations and initiatives - GBIF and DiSSCo RI - are functional	7.2.1.	Establish formal partnerships between eligible SEE economies, including Croatia, and GBIF
		7.2.2.	Establish formal partnerships between national natural history collections in the SEE region and DiSSCo RI
		7.2.3.	Regularly share information on BIMR related work in the SEE region with the international community
Financing	Target 8.1. Sufficient long-term funding for management and maintenance of the nature conservation information system is ensured in the national budgets	8.1.1.	Embed BIMR Policy Paper targets and activities into national nature conservation strategies and related policy documents
		8.1.2.	Negotiate the inclusion of long-term funding needed for maintenance of the NCIS into national budgets
	Target 8.2. BIMR related activities, as stipulated in the BIMR Policy Paper, are supported through available funding structures in the SEE region	8.2.1.	Continue with the implementation of the ORF-BDU BIMR 2 sub-project until March 2021 and consider possibilities for extension
		8.2.2.	Implement other joint BIMR related projects in the SEE region (with participation of at least two SEE economies)















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