



Julijske
Alpe



Alpi
Giulie



Nomination Form
for Transboundary Biosphere Reserve
MAB UNESCO

Candidature of the JULIAN ALPS TRANSBOUNDARY BIOSPHERE RESERVE (Italia-Slovenija)

- September 2023 -



Cover picture: « Ibex » by Marco Di Lenardo, Julian Prealps Natural Park photo archive.

Coordinators of the nomination:



Triglav National Park (Slovenia)



Julian Prealps Natural Park (Italy)

Special thanks to the Julian Alps Transboundary Biosphere Reserve Nomination Working Group : Tit Potočnik, Mojca Smolej, Marko Pretner, Antonio Andrich, Alessandro Benzoni, Cristina Comuzzo, Patrizia Zanetti.

In collaboration with the Slovenian and Italian MAB Committee, the Slovenian Ministry of Natural Resources and Spatial Planning and the Italian Ministry of Environment and Energy Security – General Directorate for the natural heritage.

Nomination Form realized by :



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INTRODUCTION

As reported in the Nomination Form for Transboundary Biosphere Reserve (2013)

Biosphere reserves are areas of terrestrial and coastal/marine ecosystems, or a combination thereof, which are internationally recognized within the framework of UNESCO's Programme on Man and the Biosphere (MAB). They are established to promote and demonstrate a balanced relationship between humans and the biosphere. Biosphere reserves are designated by the International Coordinating Council of the MAB Programme at the request of the State concerned. Individual biosphere reserves remain under the sovereign jurisdiction of the State where they are situated. Collectively, all biosphere reserves form a World Network in which participation by States is voluntary.

The Seville Strategy (1995) recommends that « the creation of transboundary biosphere reserves, as means to conservation of organisms, ecosystems and genetic resources crossing natural boundaries » should be encouraged. Nevertheless, neither the Seville Strategy nor the Statutory Framework defines the criteria for transboundary biosphere reserves (TBR). This was done by the international experts meeting on the implementation of the Seville Strategy, held 5 years later (October 2000) in Pamplona, Spain, which adopted the recommendations for the establishment and functioning of transboundary biosphere reserves.

A TBR is an official recognition of the political will of two or more States to cooperate on key issues related to conservation and sustainable use of shared ecosystems through a coordinated management. It also represents a commitment of these States to apply together the Seville Strategy for biosphere reserves and its objectives. However, it should be kept in mind that, although the biosphere reserve provides the general framework for action in a transboundary context, the real-world situation will vary much from a place to another and flexibility is needed even more than in a national context. This is why this nomination form is complementary, **but does not replace**, the national nomination form which needs to be fulfilled for each biosphere reserve being part of the TBR. This nomination form is based on the Pamplona recommendations and only focuses on the transboundary aspects of the proposed biosphere reserve.

The information presented on this nomination form will be used in a number of ways by UNESCO:

- (a) for examination by the International Advisory Committee for Biosphere Reserves and by the Bureau of the MAB International Coordinating Council;
- (b) for use in a world-wide accessible information system, notably for the UNESCO-MABnet and publications, facilitating communication and interaction amongst persons interested in biosphere reserves throughout the world.

Kindly indicate if any part of this report should remain confidential.

The form consists of three parts:

- Part one is a summary highlighting how the proposed area meets the Pamplona recommendations for the establishment and functioning of transboundary biosphere reserve;
- Part two is more descriptive and detailed, referring to the on-going and planned implementation of the Pamplona recommendations, including institutional and financial aspects;

Part three consists of 3 annexes, the first will be used to update the directory of biosphere reserves on the MABnet, once the site has been approved as a transboundary biosphere reserve. The second annex will be used to provide promotion and communication materials of the biosphere reserve and the third annex comprises the Pamplona recommendations.

Please provide as many quantitative data as possible as well as supporting documentation to complete the information provided, especially:

- Map(s) clearly showing the zonation of the proposed TBR;
- The cooperation agreement(s) for the TBR, if appropriate;
- The official agreement between the governmental authorities;
- A common workplan between the countries.

The form should be completed in English, French or Spanish. Two copies should be sent to the Secretariat, as follows:

1. The original hard copy, with the original signatures, zonation map and supporting documents. This should be sent to the Secretariat through the Official UNESCO channels, i.e., via the National Commission for UNESCO and/or the Permanent Delegation to UNESCO.
2. An electronic version (on diskette, CD, etc.) of the periodic review form and of maps (especially the zonation map). This can be sent directly to the MAB Secretariat :

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Division of Ecological and Earth Sciences
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www.unesco.org/mab

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PART I : SUMMARY

a) Proposed name of the transboundary biosphere reserve:

- Julian Alps Transboundary Biosphere Reserve (Slovenjia-Italy)

b) Countries and individual biosphere reserves:

- SLOVENIA: Slovenian Julian Alps Biosphere Reserve (2003)
- ITALY: Italian Julian Alps Biosphere Reserve (2019)

c) Geographical coordinates of transboundary biosphere (all projected under WGS 84):

Cardinal points:	Latitude	Longitude
Most central point:	46.331921°	13.686035°
Northernmost point:	46.572223°	13.203366°
Southernmost point:	46.005015°	13.868379°
Westernmost point:	46.244636°	13.091877°
Easternmost point:	46.272805°	14.272965°

d) Human population of the transboundary biosphere reserve (based on national figures):

Considering the total area of the proposed Julian Alps Transboundary Biosphere Reserve and summing the number of residents recorded in the 20 concerned municipalities, the total human population is composed by **109.060 people**¹.

Core Area(s) (permanent and seasonally)	37
Buffer Zone(s) (permanent and seasonally)	2.403
Transition Area(s) (permanent and seasonally)	106.620

The seasonal population occurring in the Julian Alps TBR varies depending on the month and the national side considered. Currently, the available data² shows no changes in the human population living in the Core Areas, while in the Buffer Zones and Transition Areas the seasonal population is approximately 1,8 million³, concentrated in the latter ones, where the number of structures and facilities are predominant.

¹ The data on population of the Transboundary Biosphere Reserve are update to 2021. Sources: SURS (<https://www.stat.si/StatWeb/en>); ISTAT (<https://demo.istat.it/>).

² National Biosphere Reserves' Nomination Forms.

³ Overnight stays recorded in the months of July and August 2019 in the Slovenian Julian Alps National Biosphere Reserve. The Italian Julian Alps Biosphere reserve's seasonal population is included in the estimation (around 13.290 people).

e) Estimated Budget for transboundary activities and initiatives (main sources of funds, special capital funds) and international, regional or national relevant projects/initiatives completed or carried out:

For the implementation of the cooperation actions and activities defined in the Work Plan of the Julian Alps Transboundary Biosphere Reserve, there is not a fixed budget. When necessary, the Triglav National Park and the Julian Prealps Natural Park, as referees of the future TBR, will agree on how to support expenses equally, as already did during the application process. The main financial and human resources provided for the Julian Alps Transboundary Biosphere Reserves functioning and coordination will be primarily coming from the **ordinary budgets and staff** of the Triglav National Park (National budget) and the Julian Prealps Natural Park (Regional budget).

To implement specific activities and initiatives, **European financial instruments** are primarily considered (e.g., Interreg Italy-Slovenia), as well as **European/national/regional grants and funds** (e.g., European Green Belt Association, Research institutes) and **private entities financial support** that will be utilized, when possible, according to the Transboundary Biosphere Reserve coordinating principles and objectives.

Currently the two National Julian Alps Biosphere Reserves, have benefited of the funding of the *Interreg* (European Territorial Cooperation) programmes, financed by the European Regional Development Fund. Specifically, the relevant projects/initiatives completed or carried on thanks to the *Interreg* programmes and involving the transboundary area are:

- PLANTOCONNECT project (Interreg Alpine Space) 2022-2025
- DINALPCONNECT project (Interreg Adrion) 2020-2022
- NAT2CARE project (Interreg Ita-Slo) 2014-2020
- ALPBIONET 2030 project (Interreg Alpine Space) 2014-2020
- GREENALPS project (Interreg Alpine Space) 2013-2014
- CLIMAPARKS project (Interreg Ita-Slo) 2010-2013
- ERA project (Interreg Ita-Slo) 2004-2006

Further initiatives developed in the concerned territory have been financed by local organizations and privates. Currently, 2 further initiatives financed by European entities which have been submitted by the National Biosphere Reserves and/or in the process of being started:

- BEST BELT PROJECT (European Green Belt) 2022-2024
- INTERREG ITALIA-SLOVENIJA PROJECT (2023-2025)

f) Estimated budget for the coordinating structure:

The main financial and human resources provided for the Julian Alps Transboundary Biosphere Reserves' coordinating structure are primarily coming from the **ordinary budgets and staff** of the Triglav National Park (National budget) and the Julian Prealps Natural Park (Regional budget).

Two permanent employees per each park (tot. 4) will be destined to the TBR organizational and management activities, with a part time commitment of 8 hours/week each one on average.

The current budget used for the Julian Alps Transboundary Biosphere Reserve candidature process is reported below, comprehending the working hours and all the expenses dedicated to the organization and the implementation of the stakeholders' engagement activities described in Chapter 1. The estimate future budget is illustrative and correspond to an average annual estimation foreseen for the next 5 years⁴.

Current budget	Future budget (estimated)
106.355 €	49.400 €

⁴ As specified in Chapter 7, there is no a fixed budget for the implementation of the Transboundary Biosphere Reserve activities. The two Parks will agree on how to support expenses equally, as they already did during the application process.

PART II : DESCRIPTION

1. TRANSBOUNDARY BIOSPHERE RESERVE

1.2 Countries and individual biosphere reserves:

The proposed Transboundary Biosphere Reserve of the Julian Alps involves 2 countries, Italy and Slovenia, and it would be the result of merging the existing National Julian Alps UNESCO Biosphere Reserves (BRs):

- Slovenia: Slovenian Julian Alps Biosphere Reserve (2003)
- Italy: Italian Julian Alps Biosphere Reserve (2019)

The use of the same name highlights the common desire to become a unique transboundary site, that has been pursued in the last 10 years by the two National Biosphere Reserves and already reported to the MAB Secretariat in occasion of the Italian Julian Alps BR's submission in 2019. Both Italy and Slovenia already cooperate in other MAB UNESCO Transboundary Biosphere Reserves (TBRs), in particular the 2-countries Mont-Viso TBR (Italy-France, 2014) and the 5-countries Mura Drava Danube TBR (Slovenia, Austria, Croatia, Hungary and Serbia, 2021).

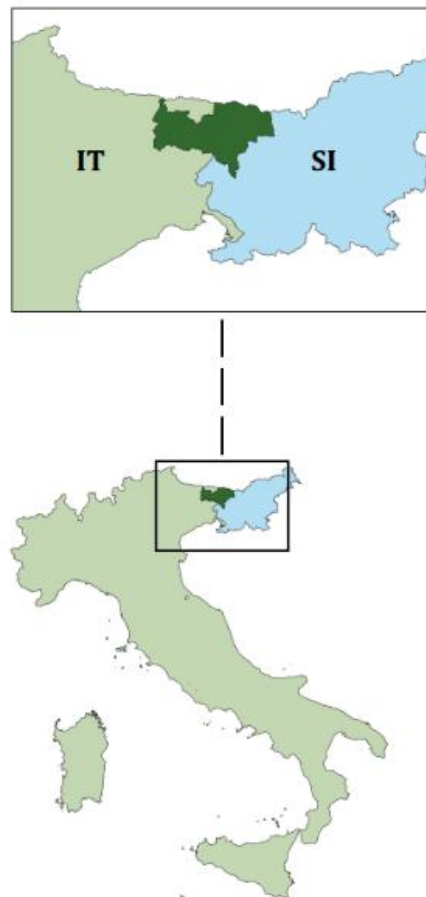


Figure 1 Candidate Julian Alps TBR position on the Slovenian-Italian border

1.3 Describe in detail the process by which this nomination was developed:



Figure 2 Kick-off Meeting, 6th of December 2022, Slovenian Alpine Museum in Mojstrana (Slovenija)

The Italian and Slovenian sides of the Julian Alps have been cooperating for more than twenty years in several projects and initiatives concerning the natural and cultural heritage conservation and the sustainable development of the local communities. Specifically, the pathway toward the nomination to the UNESCO MAB Programme as transboundary site is rooted in the establishment of the Julian Prealps Natural Park in Italy (1996) and the positive relations that have linked the two protected areas ever since. Thanks to the efforts of the Triglav National Park and the Julian Prealps Natural Park, the principles of sustainability, transboundary cooperation and exchange have been disseminated also in the Slovenian and Italian Julian Alps Biosphere Reserve territories, recognized by UNESCO in 2003 and 2019. Therefore, the most significant steps toward the nomination of the Julian Alps Transboundary Biosphere Reserve are listed below:

- **1981** - Establishment of the **Triglav National Park** protected area (Slovenia)
- **1996** – Establishment of the **Julian Prealps Natural Park** protected area (Italy)
- **2003** - Establishment of the **Slovenian Julian Alps Biosphere Reserve** (UNESCO Man and the Biosphere Programme)
- **2006** – Establishment of the **Val Alba Nature Reserve** (Friuli Venezia Giulia, Italy)
- **2009** - Establishment of the **Julian Alps Transboundary Ecoregion** (EUROPARC's Transboundary Parks Programme): the Transboundary Ecoregion comprehends the Slovenian Julian Alps UNESCO Biosphere Reserve, and the Julian Prealps Natural Park areas)

- **2014** - Re-evaluation of the Slovenian Julian Alps Biosphere Reserve and recognition of the Julian Alps Ecoregion as **transboundary pilot region** for ecological connectivity by the Alpine Convention.
- **2016** – Achievement of the **European Charter of Sustainable Tourism (ECST)**: the Julian Alps Transboundary Ecoregion became the first European Transboundary Park awarded with the ECST certificate.
- **2019** - Establishment of the **Italian Julian Alps Biosphere Reserve** (UNESCO Man and the Biosphere Programme): after a joint consultation with the coordinators of the Slovenian Julian Alps Biosphere Reserve and the Slovenian Technical MAB Committee, the name “Julian Alps” was chosen in order to anticipate the future merging with the Slovenian BR.
- **2021** - Signature of the **Cooperation Agreement** between the Triglav National Park and the Julian Pre-Alps Natural Park on behalf of the Italian and Slovenian Julian Alps Biosphere Reserves, in Trenta (Slovenia, July 24th 2021), expressing the mutual interest in establishing a Transboundary Biosphere Reserve in the framework of the UNESCO MAB programme, formalising and reinforcing the positive collaboration that these organisations have had since 1996, when the Italian Park was established (annexed to this Dossier).
- **2023** - Signature of the **Cooperation Agreement** between the Triglav National Park and the Julian Pre-Alps Natural Park (Resia/Bled, June 15th 2023), reaffirming their commitment to a cooperative management of the candidate Julian Alps Transboundary Biosphere Reserve (annexed to this Dossier).
- **2023** – Signature of the **Official Agreement between the Governmental Authorities** (June 20th 2023) by the Ministry of Natural Resources and Spatial Planning (Slovenija) and the Ministry of Environment and Energy Security (Italy), in occasion of the meeting of the European Environment Council held in Luxembourg, supporting the Julian Alps Transboundary Biosphere Reserve nomination to UNESCO MAB Programme (annexed to this Dossier).

Starting from the signature of the first Cooperation Agreement (Trenta, July 24th 2021), the Triglav National Park and the Julian Prealps Natural Park have formally committed to initiate the nomination process of the Julian Alps Transboundary Biosphere Reserve to the MAB UNESCO Programme.

In 2022, during the ECST annual Forum held in Venzone (Italy) on the 15th of October, this intention was made public and the candidacy process actually started with the **Kick-off meeting** held the **6th of December 2022** in Mojstrana (Slovenia). After that date, the nomination process was developed following different lines of actions:

JULIAN ALPS TRANSBOUNDARY BIOSPHERE RESERVE NOMINATION PROCESS

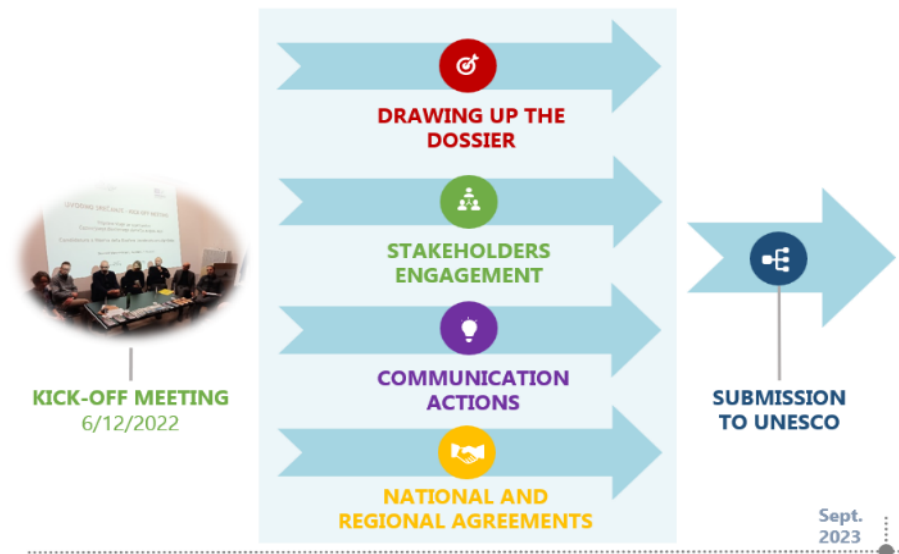


Figure 3 Scheme of the nomination process, presented during the public meeting with the stakeholders

1. **DOSSIER DRAFTING:** drawing up the nomination form, consulting existing literature, collecting information and updating data.
2. **STAKEHOLDERS' ENGAGEMENT:** involving the local stakeholders through 6 online meetings (Section 1.3.3.)
3. **COMMUNICATION ACTIONS:** disseminating the nomination progress through the publications of news on local newspapers, online magazines and the webpages/social medias of the Triglav National Park and the Julian Prealps Natural Park.
4. **NATIONAL AND LOCAL AGREEMENTS:** drafting the Official Agreement between the Governmental authorities through the consultation with the Italian Ministry of Environment and Energy Security and the Slovenian Ministry of Natural Resources and Spatial Planning of Slovenia, and the Cooperation Agreement between the Triglav National Park and the Julian Prealps Natural Parks, responsible for the nomination procedures.

For the design and management of all phases of the candidature process, a working group was established. It consisted of 6 officers from the Triglav National Park (2) and the Julian Prealps Natural Park (4), which have been supported by a specialized agency.

The **Julian Alps TBR Working Group** met regularly, about once a month, to implement the required documentation and organize the public meetings. These internal meetings also included some encounters with the Italian and Slovenian ministries, as well as with the National MAB UNESCO committees, to discuss over technical issues concerning the proposed Transboundary Biosphere Reserve. In particular, the table below shows all the dates of the meetings held in the period September 2022 - September 2023:

	Date	Meeting	Modality
1	22/09/2022	Internal meeting (Julian Alps TBR WG)	Online
2	24/10/2022	Internal meeting (Julian Alps TBR WG)	Online
3	08/11/2022	Internal meeting (Julian Alps TBR WG)	Online
4	19/11/2022	Meeting of the Italian BRs with the Italian Ministry	In presence
5	28/11/2022	Internal meeting (Julian Alps TBR WG)	Online
6	06/01/2023	Meeting of the Julian Alps TBR WG with Slovenian Ministry	Online
7	10/01/2023	Internal meeting (Julian Alps TBR WG)	Online
8	25/01/2023	Meeting of the Julian Alps TBR WG with Slovenian Ministry	Online
9	31/01/2023	Internal meeting (Julian Alps TBR WG)	Online
10	27/02/2023	Internal meeting (Julian Alps TBR WG)	Online
11	09/03/2023	Meeting of the Julian Alps TBR WG with Italian Ministry	Online
12	16/03/2023	Internal meeting (Julian Alps TBR WG)	Online
13	12/05/2023	Internal meeting (Julian Alps TBR WG)	Online
14	22/05/2022	Meeting of the Italian MAB Technical Committee	Online
15	12/6/2023	Internal meeting (Julian Alps TBR WG)	Online
16	30/8/2023	Internal meeting (Julian Alps TBR WG)	Online
17	11/9/2023	Internal meeting (Julian Alps TBR WG)	Online

1.3.1 Which stakeholders were involved?

National, regional and local-level stakeholders have been involved in the nomination for a total of **176** different Institutions/Organizations engaged: **76** coming from Italy, **95** from Slovenia and **5** from an international level. In fact, besides the national, regional and local authorities, the nomination process implemented a series of territorial animation initiatives that engaged the Julian Alps' stakeholders from various sectors and of different categories, such as local development agencies, NGOs and associations, touristic agencies and operators, cultural institutes and foundations, museums, research institutes and Universities, Schools of different grades, local enterprises, as well as professionals in the field of agriculture, dairy production, tourism, education, cultural animation, research and some privates and young people representatives. The list below reports all the

national/regional/local authorities and organizations that have been involved in the nomination process⁵.

SLOVENIA:

- **National Authorities/Institutes**
 - KGZS - ZAVOD KR - Chamber of Agriculture and Forestry of Slovenia
 - Ministrstvo za naravne vire in proctor - Ministry of Natural Resources and Spatial Planning
 - Ministry of Higher Education, Science and Innovation, Office for UNESCO
 - Slovenian Julian Alps Biosphere Reserve – Triglav National Park
 - Slovenian MAB National Committee
 - Slovenian National Commission for UNESCO
 - Zavod za gozdove Slovenije - Slovenian Forest Service
 - ZRSVN - ZRSVN - Institute of the Republic of Slovenia for Nature Conservation
 - ZVKDS - Institute for the Protection of Cultural Heritage of Slovenia

- **Universities and research centers**
 - NIB - Nacionalni Inštitut za Biologijo
 - University of Ljubljana
 - University of Primorska
 - ZRC SAZU - Center for Scientific Research of the Slovenian Academy of Sciences and Arts

- **Local Authorities/Local development groups**
 - Kranjska Gora Tourist board
 - Kulturno tehnično turistično društvo Baška dediščina
 - Občina Bled (Municipality)
 - Občina Bohinj (Municipality)
 - Občina Gorje (Municipality)
 - Občina Jesenice (Municipality)
 - Občina Kobarid (Municipality)
 - Občina Kranjska Gora (Municipality)
 - Občina Radovljica (Municipality)
 - Občina Tolmin (Municipality)
 - Občina Zirovnica (Municipality)
 - Park Skocjanske Jame
 - Planinsko Društvo Javornik Koroška Bela
 - Posoški Razvojni Center
 - Radovljica Tourist Board
 - Razvojna Agencija Zgornje Gorenjske
 - TD Gorje
 - Turizem Bohinj
 - Turizem Dolina Soče
 - Turizem Kranjska Gora
 - Zavod za turizem in kulturo Žirovnica

⁵ Further analysis on stakeholders' representation is provided in Section 1.3.4.

- **Schools**
 - Gimnazija Tolmin
 - OŠ Bovec
 - OŠ dr. Janeza Mencingerja Bohinjska Bistrica
 - OŠ F.S. Finzgarja Lesce
 - OŠ Franceta Bevka Tolmin
 - OŠ Gorje
 - OŠ Most na Soči
 - OŠ Poldeta Stražišarja Jesenice
 - OŠ Simona Kosa Podbrdo
 - OŠ Staneta Žagarja Lipnica
 - SŠ Jesenice

- **Museums and educational centers**
 - CŠOD Bohinj
 - CŠOD Planica
 - Gornsesavski Muzej Jesenice
 - Kobariški Muzej
 - Slovenski Planinski Muzej

- **NGOs and local associations**
 - Društvo podeželske mladine Primorska
 - Društvo rejcev drobnice Zgornjega Posočja
 - Fundacija Poti Miru (Walk of Peace)
 - Javornik-Koroška Bela Mountaineering Association
 - Network of Associations of the Julian Alps
 - Planinska Zveza Slovenije
 - PZS - Komisija za planinske poti
 - Youth representatives of the Triglav National Park

- **Local enterprises**
 - ALPIK Chalets Bohinj d.o.o.
 - Astra Montana Chalet, Penzion Kobala
 - Bohinj ECO Hotel SHD d.o.o.
 - Camp ŠPIK, HIT LARIX d.d.
 - Domen Ovsenik s.p.
 - Eco Camp Korita Soča, Camp Korita d.o.o.
 - Ekokmetija d.o.o.
 - Ekološka kmetija Černuta
 - Ekološka kmetija Gorjup
 - Ekološka kmetija Korošec
 - Ekološka kmetija Pr'Ukco
 - Ekološka kmetija Stgar
 - Ekološka kmetija Vrbank
 - Ekološka turistična kmetija Pri Lovrču
 - Ekološka turistična kmetija Pri Plajerju
 - HIKE&BIKE, Turistična agencija
 - Hotel & Vila Stare, Impel d.o.o.
 - Kamp Danica, Turistično Društvo Bohinj
 - Kamp Jelinc
 - Kamp Koren Kobarid

- Kamp Šobec
- Kmetija pri Fatu
- Kmetija PSNAK Gostilna, apartmaji, prevozi s.p.
- Kmetijski zavod Bric, Soča
- Koča Suha, Pac d.o.o.
- Lesbled, trgovina in prevozi d.o.o.
- Pehtra.si
- Planina Duplje
- Planina Kranjska dolina, AS Kranjska dolina
- Planina Pretovč
- Planina Zaprikraj
- Počitniška domačija Škvor
- Sirarstvo Lepočer
- Sunrose 7 SHD d.o.o
- Turistična kmetija Gartner Pr Odolneku
- Turistična kmetija JELINČIČ
- Turistična kmetija pr' Anžiču

ITALY:

- **National and Regional Authorities**

- ARPA FVG - Regional Agency for the Environment Protection of Friuli Venezia Giulia
- Ente Tutela Patrimonio Ittico FVG
- Friuli Venezia Giulia Region (Services: Biodiversity, Forestry and agrifood resources)
- Italian Julian Alps Biosphere Reserve – Julian Prealps Natural Park
- Italian MAB Technical Committee
- Ministero dell'ambiente e della sicurezza energetica (Ministry of Environment and Energy Security)

- **Local Authorities/Local development groups**

- Comune di Artegna
- Comune di Chiusaforte
- Comune di Dogna
- Comune di Gemona del Friuli (Municipality)
- Comune di Lusevera
- Comune di Moggio Udinese
- Comune di Montenars (Municipality)
- Comune di Resia (Municipality)
- Comune di Resiutta (Municipality)
- Comune di Taipana
- Comune di Taipana (Municipality)
- Comune di Udine - Servizio Cultura e Istruzione
- Comune di Venzone
- Comunità di montagna del Gemonese
- Comunità di montagna della Carnia
- Consorzio Pro Loco Friuli Nord Est
- ERSA FVG – Regional Agency for rural development of Friuli Venezia Giulia
- ISK Benečija - Institute for the Slovenian Culture
- Local Action Group - GAL Open Leader

- Local Action Group - GAL Torre Natisone
 - Pro Loco Alta Val Torre
 - Pro Loco Moggese
 - Pro Loco Pro Glemona
 - Pro Loco Prossenico
 - Pro Loco Val Resia - IAT Office Val Resia
 - PromoTurismo FVG
 - Transboundary Geopark of Alpi Carniche
 - Youth Advisory Board of the Italian Julian Alps Biosphere Reserve
- **Universities and Research Centres**
 - ISP – CNR (Polar Science Institute of the National Research Centre)
 - University of Trieste
 - University of Udine
- **Schools**
 - ISIS Fermo Solari (Tolmezzo)
 - ISIS Magrini-Marchetti (Gemona del Friuli)
 - ISIS Paschini-Linusso (Tolmezzo)
 - Istituto Comprensivo (Gemona del Friuli)
 - Istituto Comprensivo di Trasaghis (Moggio Udinese)
 - Istituto Omnicomprensivo I. Bachmann (Tarvisio)
- **Museums and educational centres**
 - Casa delle farfalle (Bordano)
 - Ecomuseo delle Acque del Gemonese
 - La Tana (Val Resia)
 - Museo del terremoto (Venezia)
 - Museo dell'Arrotino
 - Museo della gente della Val Resia
 - Museo Friulano di Storia Naturale di Udine
- **NGOs and local Associations**
 - AAMS – Alpine-Adriatic Meteorological Society
 - Associazione Culturale La Cort dai Gjats
 - Associazione per la Conoscenza e Protezione dell'Ambiente Naturale del Friuli
 - Associazione per l'Ape Carnica Friulana
 - CAI TAM – Italian Alpine Club
 - Confartigianato Udine
 - ConfcooperativeFVG
 - Federazione speleologica regionale del FVG
 - Gruppo Folkloristico Val Resia
 - Legambiente FVG
 - Rete Italiana Pastorizia
- **Local enterprises**
 - Albergo Ristorante Alle Alpi
 - Alimentari Valente
 - Bela Soc. Agr.
 - Cramars Soc.Coop.

- eFrame Srl
- ESTplore Srl
- EUROSERVIS srl
- Farfalle nella Testa Soc. Coop.
- Geomok Srl
- Guarnerio Soc. Coop.
- NatureForYou
- Parco Avventura Sella Nevea
- Tiere Viere Az. Agr.
- Veasyt Conference
- Wild Routes APS

In addition to the Slovenian and Italian stakeholders listed above, the Julian Alps Transboundary Biosphere Reserve nomination processes engaged the following international and intergovernmental organizations:

- UNESCO Regional Bureau for Science and Culture in Europe
- EUROPARC Federation - Federation of Nature and National Parks of Europe
- ALPARC - Alpine Network of Protected Areas
- CIPRA – International Commission for the Protection of the Alps
- Alpe Adria - Amt der Kaerntner Landesregierung Abt. 1-EU/ Alpe Adria

1.3.2 What methodology was used to involve stakeholders in the process (e.g., workshops, meetings, consultation with experts)?

The methodology used to involve local stakeholders in the process mainly concerned the organization of **public meetings**, held mostly on-line using the platform *GoToMeeting* to facilitate participation from both sides of the Julian Alps. During these events a simultaneous Italian-Slovenian translation was provided, in order to enable everyone to express their opinion without linguistic barriers.

In particular, the public meetings were **7 in total**: 1 Kick-off meeting and a series of 6 on-line meetings dedicated to the stakeholders of different sectors, which will be affected the most by the establishment of the Julian Alps MAB Transboundary Site.

Throughout this period, information about the events and the candidature process has been disseminated via different **medias** (such as local newspaper, newsletter, the Park's websites and social media), for a total of **39** published news and posts on Facebook/Instagram. A table of the articles is annexed to the dossier.

The **Kick-off Meeting** was the only event in presence, since it initiated the candidature process to UNESCO and it involved 66 Italian and Slovenian participants (see Section 1.3.3) gathered in the Slovenian Alpine Museum in Mojstrana (Slovenia) on the 6th of December 2022 (Figure 2). The participants were addressed by the Slovenian Minister of Natural Resources and Spatial Planning. The event was chaired by the Director of Triglav National Park and the President of Julian Prealps Natural Park, and comprehended few interventions made by the representatives of national, regional and local authorities concerning the nomination of the Julian Alps Transboundary Site to UNESCO. The second part of the event was dedicated to the participants' questions and proposals and it gave the Italian and Slovenian stakeholders the chance to meet and exchange visions and proposals.

The series of **6 on-line meetings**, named “*Toward the Julian Alps Transboundary Biosphere Reserve: stakeholders’ engagement*” was carried out in the months of March and April and was been dedicated to the 6 sectors described in Section 1.3.3. The meetings were organized with the aim of illustrating the candidature processes to the concerned stakeholders, by presenting the vision of the future Julian Alps Transboundary Biosphere Reserve, by defining the common objectives and collecting all the initiatives, projects and events carried out in the national territories to be added in the Cooperation Actions (Work Plan, Section 4). At the end of each meeting, an English **minute** was sent to all participants and was made available for possible interested stakeholders who had not be able to participate. These reports are also annexed to the present Dossier.

The stakeholders’ involvement was further stimulated through individual phone calls and e-mails, sent after the on-line meetings, which helped the Working Group to collect materials and data for the present Dossier. In addition, all stakeholders were encouraged in providing a letter of endorsement to formalize their support to the nomination of the Julian Alps Transboundary Biosphere Reserve to UNESCO and, possibly, send useful materials, data and express their commitment in the future. The letters, annexed to this Dossier, proved to be a useful tool in raising stakeholders' awareness and in enhancing their role during the application process. A total of **82 letters of endorsement** from as many stakeholders were gathered in the past months. In the next two letters of endorsement signed by the Slovenian National Institute of Biology and the Department of Life Sciences of the University of Trieste (Italy) are reported to provide an example. More details about the letters of endorsement (list of senders and other information) are provided in Section 1.3.4.

Julian Alps MAB UNESCO Transboundary Biosphere Reserve's nomination process coordinators:

Št.: 616/2023
Ljubljana, 7. 04. 2023

Triglav National Park
triglavski-narodni-park@tnp.gov.si

and

Prealpi Giulie Natural Park
info@parcoprealpijulie.it

OBJECT: Endorsement for the Julian Alps Transboundary Biosphere Reserve's candidature to the UNESCO's MAB (Man and the Biosphere) Programme

I, Prof. dr. Maja Ravnikar, as the legal representative of the organization National institute of biology, headquartered in Večna pot 111, 1000 Ljubljana, tajnistvo@nib.si, intends to express interest, appreciation and endorsement for the Julian Alps Transboundary Biosphere Reserve's candidature to the UNESCO's MAB (Man and the Biosphere) Programme (<http://www.julianalps-mab.eu/>), coordinated by the Triglav National Park and the Prealpi Giulie Natural Park, representatives of the Slovenian and Italian National Julian Alps Biosphere Reserves.

The goals of biodiversity protection, sustainable development and cultural enhancement that the Julian Alps National Biosphere Reserves (BRJA) are pursuing are fully shared by National institute of biology and establishing the transboundary site would implement them even more. We appreciate that the nomination emphasizes the involvement of communities and stakeholders in the territorial vision and objectives definition, beside pursuing a balanced relationship between the Julian Alps inhabitants and the natural environment.

The National institute of biology express its interest in supporting the Julian Alps Transboundary Biosphere Reserve candidature process, providing information, documentation and technical support, which can be useful for the drafting of the final dossier, as well as participating in the initiatives that will be scheduled. This availability and active contribution are not limited to the candidature process, but may be extended to the management phase of the Transboundary Biosphere Reserve, once the recognition will be, hopefully, obtained.

Date and signature of legal representative

7.04.2023

prof. dr. Maja Ravnikar, director of National institute of biology

MAJA
RAVNIKAR

Digitalno podpisal MAJA
RAVNIKAR
Datum: 2023.04.11
14:45:06 +02'00'



**UNIVERSITÀ
DEGLI STUDI
DI TRIESTE**



Dipartimento di
Scienze della Vita

Tit. III Cl. 13
Allegati n. 0

To
Julian Alps MAB UNESCO Transboundary
Biosphere Reserve's nomination process
coordinators:
Triglav National Park
triglavski-narodni-park@tnp.gov.si

and
Prealpi Giulie Natural Park
info@parcoprealpigiulie.it

OBJECT: Endorsement for the Julian Alps Transboundary Biosphere Reserve's candidature to the UNESCO's MAB (Man and the Biosphere) Programme.

I, prof. Mauro Tretiach, as the legal representative of the organization Department of Life Sciences of the University of Trieste, headquartered in Italy, Trieste, Via Weiss n. 2, 34128, TS, protocollodsv@units.it, dsv@pec.units.it, intends to express interest, appreciation and endorsement for the Julian Alps Transboundary Biosphere Reserve's candidature to the UNESCO's MAB (Man and the Biosphere) Programme (<http://www.julianalps-mab.eu/>), coordinated by the Triglav National Park and the Prealpi Giulie Natural Park, representatives of the Slovenian and Italian National Julian Alps Biosphere Reserves.

The goals of biodiversity protection, sustainable development and cultural enhancement that the Julian Alps National Biosphere Reserves (BRJA) are pursuing are fully shared by Department of Life Sciences of the University of Trieste and establishing the transboundary site would implement them even more. We appreciate that the nomination emphasizes the involvement of communities and stakeholders in the territorial vision and objectives definition, beside pursuing a balanced relationship between the Julian Alps inhabitants and the natural environment.

The Department of Life Sciences of the University of Trieste express its interest in supporting the Julian Alps Transboundary Biosphere Reserve candidature process, providing information, documentation and technical support, which can be useful for the drafting of the final dossier, as well as participating in the initiatives that will be scheduled. This availability and active contribution are not limited to the candidature process, but may be extended to the management phase of the Transboundary Biosphere Reserve, once the recognition will be, hopefully, obtained.

Date and signature of legal representative

Firmato digitalmente da: Mauro Tretiach
Organizzazione: UNIVERSITA' DEGLI STUDI DI TRIESTE/80013890324
Unità organizzativa: AREA SERVIZI ICT
Data: 12/05/2023 12:05:22

Legge 241/1990 – Responsabile del procedimento: dott.ssa Gabriella Orazi

Università degli Studi di Trieste
Dipartimento di Scienze della Vita
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I - 34128 Trieste

Tel. +39 040 558 8785
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Figure 5 Letter of endorsement from the University of Trieste (Italy)

1.3.3 How many meetings, workshops, etc. occurred throughout the nomination process?

The nomination process counts:

- **17 Internal meetings** held by the Working Group for organizational reason (Section 1.3);
- **1 Kick-off meeting** in presence (in Mojstrana, Slovenia);
- **6 On-line meetings** dedicated to the stakeholders from different sectors.

Following, a brief summary of the attendance to the public events dedicated to the Julian Alps Transboundary Biosphere Reserve's nomination process is given⁶.

1) KICK OFF MEETING:



Figure 6 Stakeholders participating the Kick-off Meeting, 6/12/2022

The participants of the Kick-off Meeting were **66 in total**, belonging to **44** Institutions/Organizations/Associations from the Italian and Slovenian sides of the Julian Alps, and one from the neighbouring Austrian region. Below there is a list of the stakeholders involved and annexed to this dossier, a copy of the attendance sheets is provided.

Interventions:

- Triglav National Park (SI)
- Julian Prealps Natural Park (IT)

⁶ In this section other meetings, events and workshops held by the Triglav National Park and the Julian Prealps Natural Park, referees of the two National Biosphere Reserves, related to other projects or initiatives (such as the EURPARC Transboundary Ecoregion of Julian Alps) are not listed. The most significant of these latter was the ECST annual forum held in Venzone on the 15th of October 2023, anticipating the Kick-off Meeting and the Julian Alps TBR nomination process.

- Slovenski planinski muzej (SI)
- Slovenian Ministry of Natural Resources and Spatial Planning (SI)
- Italian Ministry of Environment and Energy Security (Dep. of Nature and Sea protection) (IT)
- UNESCO Regional Bureau for Science and Culture in Europe
- Ministry of Higher Education, Science and Innovation, Office for UNESCO (SI)
- Friuli Venezia Giulia Region (Biodiversity sector) (IT)
- Slovenian Nature Conservation Institute (SI)

Contributions:

- Poti Miru Foundation (Walk of Peace) (SI)
- Svet Slovenskih organizacij (IT)
- Turizem Dolina Soče (SI)
- PromoTurismo FVG(IT)
- Pososki Razvojni center (SI)
- GAL Open Leader (IT)

Other participants:

CSOD Bohinj (SI); CSOD Planica (SI); Associations of the Julian Alps (SI); Gimnazija Tolmin (SI); Gornsesavski muzej Jesenice (SI); Kobariški Muzej (SI); Občina Bled (SI); Občina Bohinj (SI); Občina Gorje (SI); Občina Kranjska Gora (SI); Legambiente FVG (IT); Občina Radovljica (SI); OŠ Bovec (SI); Associazione per l'Ape Carnica Friulana (IT); OŠ F.S. Finzgarja Lesce (SI); OŠ Gorje (SI); OŠ Most na Soči (SI); OŠ Simona Kosa Podbrdo (SI); TD Gorje (SI); Bela Agr. Soc. (IT); Geomok Srl (IT); Wild Routes APS (IT); Comune di Taipana (IT); Casa delle farfalle (Bordano) (IT); La Tana (Val Resia) (IT); Museo del terremoto (Venezia) (IT); Zavod za gozdove Slovenije (SI); ZRSVN (SI) OE KR (SI), ZVKDS OE Kranj (SI); Amt der Kaerntner Landesregierung Abt. 1-EU/Alpe Adria (AT).

2) ON-LINE MEETINGS:

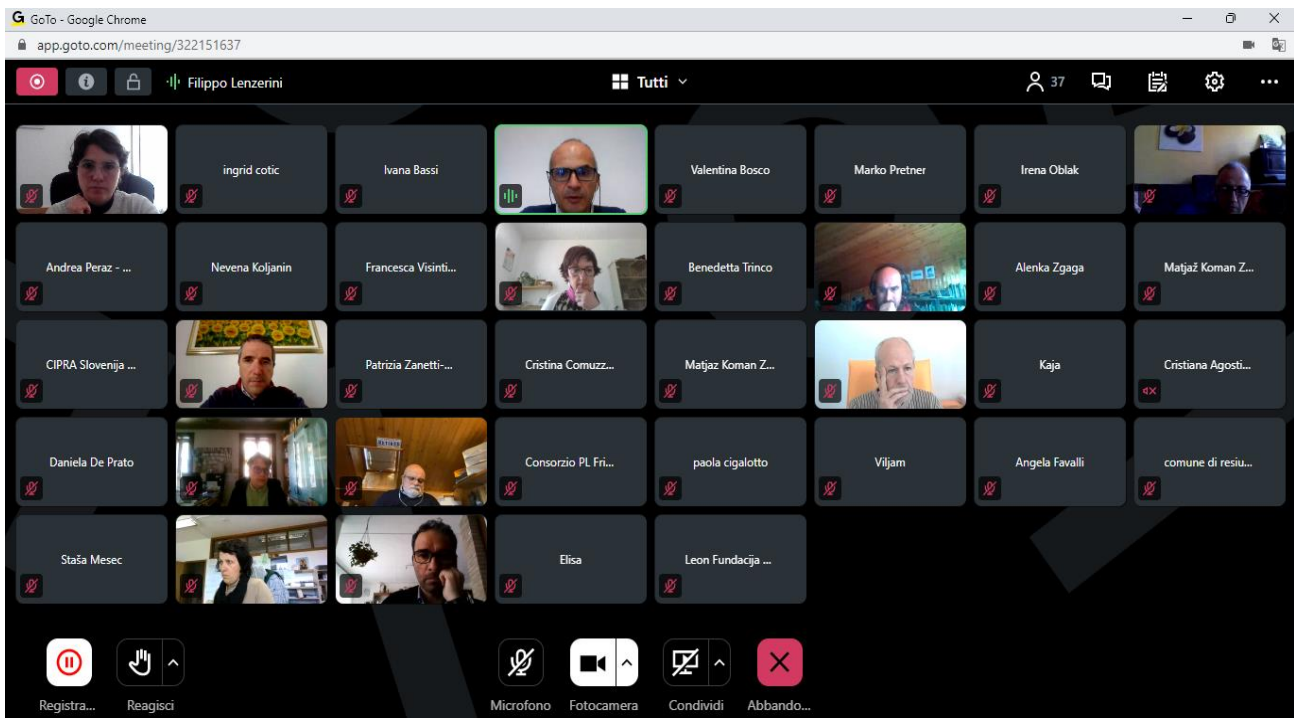


Figure 7 Screenshot of the 3rd On-line Meeting "Tourism and outdoor activities"

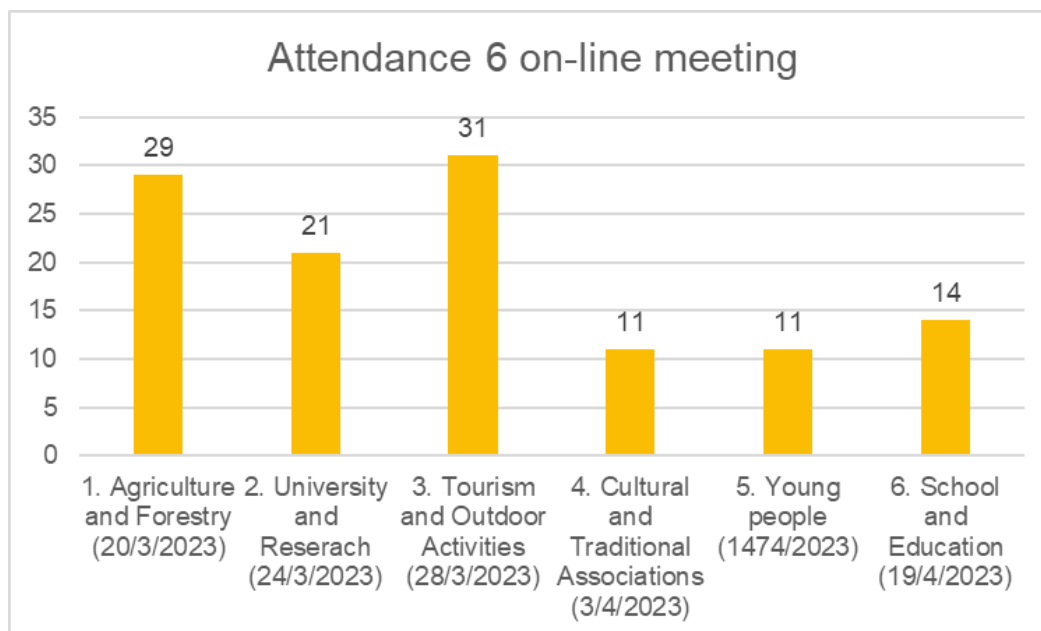
The on-line meetings series, named “*Toward the Julian Alps Transboundary Biosphere Reserve: stakeholders’ engagement*” consisted in a total of **6 encounters**, which have been carried out with the aim to bring together the stakeholders of different fields, to illustrate the candidature procedure and foster an interactive discussion. The on-line meetings were also a good occasion for the stakeholders already involved in the two National Biosphere Reserves and other interested participants to present their ongoing or planned initiatives at transboundary level, providing some proposals and projects that can find synergies and collaborations within the framework of the future Julian Alps Transboundary Biosphere Reserve. The sectors involved and the date of each meeting was the following:



Figure 8 Leaflet of the 6 On-line Meetings, Julian Prealps Natural Park

1. Agriculture and Forestry - 20/3/2023
2. University and research groups - 24/3/2023
3. Tourism and outdoor activities - 28/3/2023
4. Cultural and traditional associations - 3/4/2023
5. Young People - 14/4/2023
6. School and education – 19/4/2023

Attendance at the meetings was varied, as shown in the table below due to different factors. Excluding the TBR Working group, consisting in 2 officers of the Triglav National Park and 4 of the Julian Prealps Natural Park, the 2 members of a specialized agencies and the Italian-Slovenian translator, the total number of participants involved was **98**⁷.



Specifically, the stakeholders engaged during the 6 on-line meetings belongs to the following Institutions/Organizations/Associations (in alphabetical order):

1. Agriculture and Forestry - 20/3/2023:

- Bela Agr. Soc. (IT)
- CIPRA – International Commission for the Protection of Alps - Slovenija (SI)
- Comunità di montagna della Carnia (IT)
- Ecomuseo delle Acque del Gemonese (IT)
- Friuli Venezia Giulia Region (IT)
- KGZS - ZAVOD KR - Chamber of Agriculture and Forestry of Slovenia (SI)
- Kmetijski inštitut Slovenije (SI)
- La Cort Dai Gjats Cult. Ass. (SI)
- LAG Terre del Natisone (IT)
- Ministrstvo za naravne vire in prostor - Ministry of Natural Resources and Spatial Planning (SI)
- Občina Jesenice (SI)
- Razvojna agencija Zgornje Gorenjske (SI)
- Rete Italiana Pastorizia (IT)
- Tiere Viere Agr. Soc. (IT)
- Turizem Bohinj (SI)

⁷ There are 5 participants who attended more than one meeting.

- University of Trieste – Dep. of Architecture and Engineering (IT)
- ZRSVN OE Kranj - Slovenian Institute of Nature Conservation (SI)
- ZVKDS - Institute for the Protection of Cultural Heritage of Slovenia, OE Kranj (SI)

2. University and research groups - 24/3/2023

- ISP – CNR (Polar Science Institute of the National Research Centre) (IT)
- AAMS – Alpine-Adriatic Meteorological Society (IT)
- ARPA FVG - Regional Agency for the Environment Protection of Friuli Venezia Giulia (IT)
- Ministrstvo za naravne vire in prostor - Ministry of Natural Resources and Spatial Planning (SI)
- Museo Friulano di Storia Naturale of Udine (IT)
- NIB - Nacionalni inštitut za biologijo (SI)
- Rete Italiana Pastorizia (IT)
- University of Primorskem (SI)
- University of Trieste (IT)
- University of Udine (IT)
- ZRC SAZU - Center for Scientific Research of the Slovenian Academy of Sciences and Arts (SI)

3. Tourism and outdoor activities - 28/3/2023

- Association of the Julian Alps (SI)
- CIPRA Slovenija (SI)
- Comunità di montagna della Carnia (IT)
- ConfcooperativeFVG (IT)
- Consorzio Pro Loco Friuli Nord Est (IT)
- Domačija Škvor (SI)
- eFrame srl (SI)
- ESTplore (SI)
- Fundacija Poti Miru (Walk of Peace) (SI)
- ISK Benečija/DMO Benečija (IT-SLO)
- Komisija za planinske poti PZS (SI)
- Kulturno tehnično turistično društvo Baška dediščina (SI)
- Občina Jesenice (SI)
- Planinsko društvo Javornik Koroška Bela (SI)
- Pro Loco Moggio Udinese (IT)
- Pro Loco Prossenico aps (IT)
- Radovljica Tourist Board (SI)
- Slovenski planinski muzej (SI)
- Transboundary Geopark of Alpi Carniche (IT)
- Turizem Dolina Soče (SI)
- Turizem Kranjska Gora (SI)
- Ufficio IAT Val Resia - Pro Loco Val Resia (IT)
- University of Trieste – Dep. of Architecture and Engineering (IT)
- University of Udine (IT)
- Zavod za turizem in kulturo Žirovnica (SI)

4. Cultural and traditional associations - 3/4/2023

- Komisija za planinske poti PZS (SI)
- OŠ Bovec (SI)
- Pro Loco Alta Val Torre (IT)
- Pro Loco Moggio Udinese (IT)
- Pro Loco Prosseniccò aps (IT)
- University of Ljubljana (SI)
- ZVKDS - Institute for the Protection of Cultural Heritage of Slovenia, OE Kranj and OE Nova Gorica (SI)

5. Young People - 14/4/2023

- Društvo podeželske mladine Primorska (SI)
- Friuli Venezia Giulia Region (IT)
- Ministrstvo za naravne vire in prostor - Ministry of Natural Resources and Spatial Planning (SI)
- OŠ Poldeta Stražišarja Jesenice (SI)
- Youth Advisory Board of the Italian Julian Alps Biosphere Reserve (IT)
- ZRSVN OE Kranj - Slovenian Institute of Nature Conservation (SI)

6. School and education – 19/4/2023

- CAI TAM – Italian Alpine Club (IT)
- Istituto Comprensivo - Gemona del Friuli (IT)
- Istituto Comprensivo - Tarvisio (IT)
- OŠ Franceta Bevka Tolmin (SI)
- OŠ Most na Soči (SI)
- OŠ Simona Kosa Podbrdo (SI)
- Primary School of Moggio Udinese – Istituto comprensivo di Trasaghis (IT)
- Regione Autonoma Friuli Venezia Giulia – Forest service (IT)
- Srednja šola Jesenice (SI)
- Technical Institute of Fermo Solari, Tolmezzo (IT)

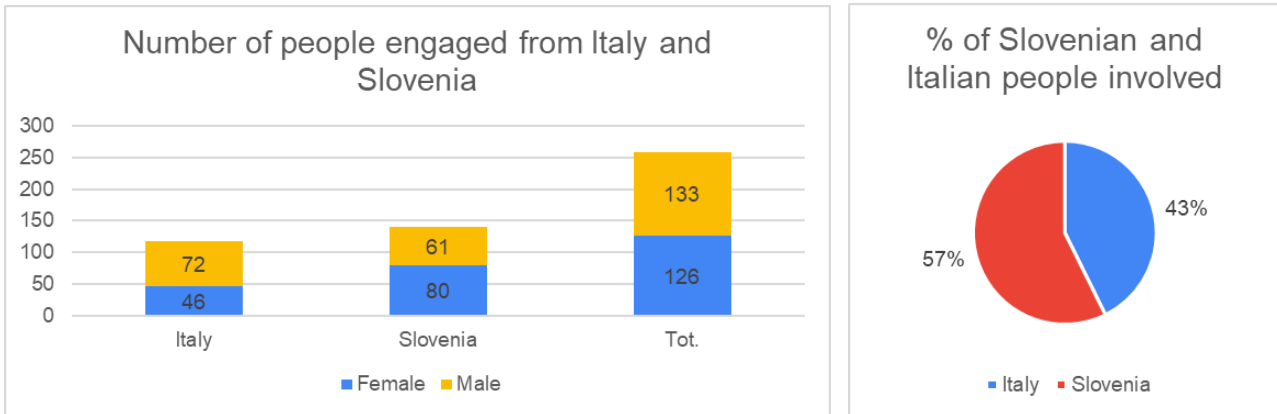
1.3.4 Were they well attended, with full and balanced representation?

[Describe participation and stakeholders.]

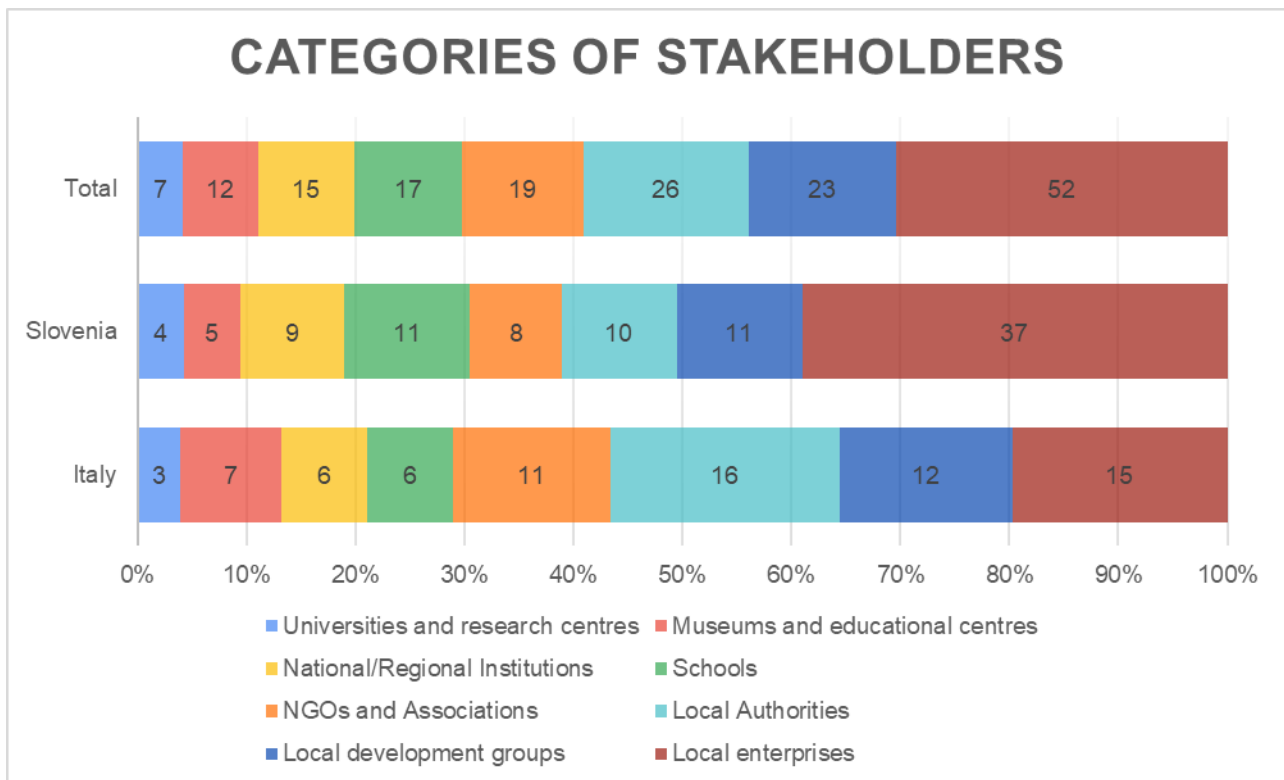
Considering the total number of people involved (**267**) during the entire nomination process (comprehending the Kick-off meeting and the 6 on-line meetings attendees, the senders of materials/letters of endorsement received during the drafting of the Work Plan and the final Dossier, and other interested people regularly informed by the Parks) an analysis of the representation is provided in this section. The 6 officers of the Working Group (4 from the Julian Prealps Natural Park and 2 from the Triglav National Park) and the 2 members of a specialized agency that supported the Parks in the organizational activities are not considered in the analysis.

During the nomination process, stakeholders from the national, regional and local level were well represented. Participation from Italy and Slovenia was also quite balanced, counting **141** people from

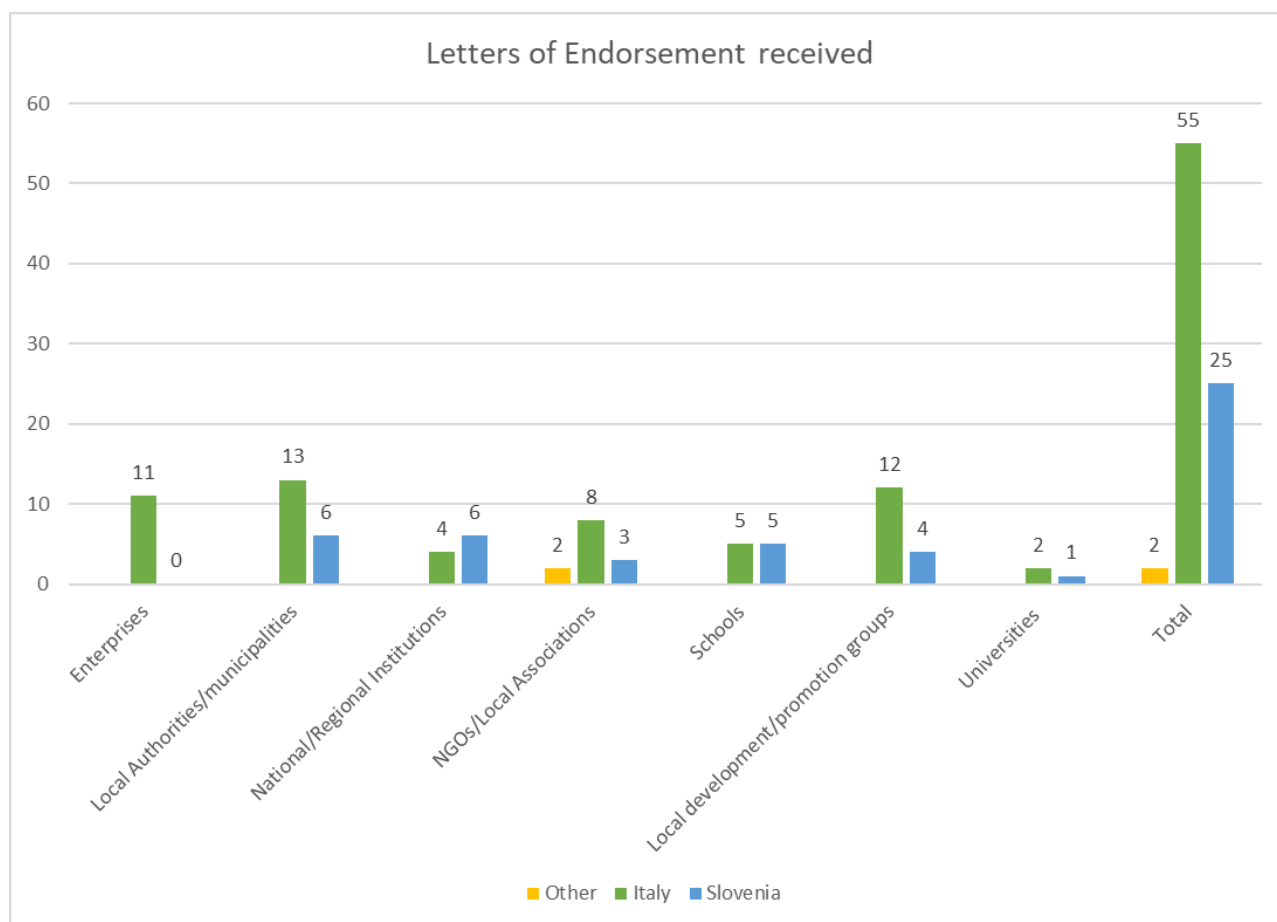
Slovenia, **118** from Italy and **5** of other nationalities. The number of women and men was quite balanced, with **50,2%** of women and the **49,8%** of men overall.



As reported in Section 1.3.1, during the nomination process **171** different Italian and Slovenian Institutions/Organizations/Associations were engaged (specifically **76** from Italy, **95** from Slovenia). The graph below shows the major categories to which the engaged stakeholders belong, divided by nationality.



Finally, the nomination of the Julian Alps Transboundary Biosphere Reserve obtained the engagement of **82 stakeholders**, which sent the letters annexed to this Dossier. Specifically, the letters came from the institutes and organizations listed below in alphabetical order. The graph also provides some information on the nationality and type of organisations from which the letters came from.



Senders of the letters of endorsement⁸:

- ACPANF - Associazione per la Conoscenza e Protezione dell'Ambiente Naturale del Friuli (IT)
- Albergo Ristorante Alle Alpi (IT)
- Alimentari VALENTE (IT)
- ALPARC (EU)
- Alpine-Adriatic Meteorological Society (AAMS) (IT)
- ARPA FVG - Regional Agency for the Environment Protection of Friuli Venezia Giulia (IT)
- Ass. Cult. La Cort dai Gjats (IT)
- Ass. Pro Loco Pro Glemona APS (IT)
- Comune di Artegna (IT)
- Comune di Chiusaforte (IT)
- Comune di Dogna (IT)
- Comune di Gemona del Friuli (IT)
- Comune di Lusevera (IT)
- Comune di Moggio Udinese (IT)
- Comune di Montenars (IT)
- Comune di Resia (IT)
- Comune di Resiutta (IT)

⁸ In alphabetical order.

- Comune di Taipana (IT)
- Comune di Udine - Servizio Cultura e Istruzione (Museo Friulano Storia Naturale) (IT)
- Comune di Venzone (IT)
- Comunità di montagna del Gemonese (IT)
- Comunità di Montagna della Carnia (IT)
- Confartigianato (IT)
- Cramaris Soc.Coop. (IT)
- Ecomuseo delle Acque del Gemonese (IT)
- eFrame S.r.l (IT)
- Ente Tutela Patrimonio Ittico (IT)
- ERSA FVG – Regional Agency for the Rural Development of Friuli Venezia Giulia (IT)
- EUROPARC (EU)
- EUROSERVIS srl (IT)
- Farfalle nella Testa Soc. Coop. (IT)
- Federazione speleologica regionale del FVG (IT)
- Fundacija Poti Miru (Fondazione Walk of Peace) (SI)
- FVG - Direzione centrale risorse agroalimentari, forestali e ittiche (IT)
- Gruppo Folkloristico Val Resia (IT)
- Guarnerio Soc. Coop. (IT)
- I.C. di Trasaghis (IT)
- I.C. Gemona del Friuli (IT)
- Institute for the Protection of Cultural Heritage of Slovenia (SI)
- Institute of Republic of Slovenia for Nature Conservation (SI)
- ISIS Magrini-Marchetti (Gemona del Friuli) (IT)
- ISIS Paschini-Linusso (IT)
- ISK- Istituto per la Cultura Slovena (IT)
- Istituto Omnicomprensivo I. Bachmann (Tarvisio) (IT)
- Javornik-Koroška Bela Mountaineering Association (SI)
- Kranjska Gora tourist board (SI)
- LAG Open Leader (IT)
- Lag Torre Natisone (IT)
- Legambiente FVG (IT)
- Museo dell'Arrotino APS (IT)
- National Institute of Biology – NIB (SI)
- NatureForYou (IT)
- Občina Bled (SI)
- Občina Bohinj (SI)
- Občina Jesenice (Kabinet Zupana) (SI)
- Občina Kobarid (SI)
- Občina Tolmin (SI)
- Občina Zirovnica (SI)
- OŠ Bovec (SI)
- OŠ dr. Janeza Mencingerja Bohinjska Bistrica (SI)
- OŠ Most na Soči (SI)
- OŠ Simona Kosa Podbrdo (SI)
- OŠ Staneta Žagarja lipnica (SI)
- Parco Avventura Sella Nevea (it)
- Planinska Zveza Slovenije (SI)

- Posoški razvojni center (SI)
- Pro Loco Alta Val Torre – Lusevera (IT)
- Pro Loco Moggese (IT)
- Pro Loco Pro Val Resia (IT)
- Pro Loco Prossenico (IT)
- PromoTurismo FVG (IT)
- RAGOR - Development agency for upper Gorenjska (SI)
- Rete Italiana European Green Belt (IT)
- Slovenian National Commission for UNESCO and the National Committee for MAB Programme (SI)
- Soc. Agr. Bela (IT)
- Soc. Agr. Tiere Viere (IT)
- Tourism Bohinj (SI)
- University of Trieste (IT)
- University of Udine (IT)
- Univerze na Primorskem (SI)
- Zavod za kulturo in turizem Žirovnica (SI)
- ZRC SAZU - Research Centre of the Slovenian Academy of Sciences and Arts (SI)

2. ZONATION

2.1 Please provide an (updated) zonation map on a topographic layer of the precise location and delimitation of the three zones of the transboundary biosphere reserve. (Map(s) must be provided in both paper and electronic copies). Shapefiles (also in WGS 84 projection system) used to produce the map must be attached to the electronic copy of the form.

If possible, also provide a link to access this map on the internet (e.g., Google map, website...).

Annexed to this Dossier, a **Cartographic Atlas** is provided in pdf format, giving a detailed overview of the zonation of the proposed Julian Alps Transboundary Biosphere. Specifically, the Cartographic Atlas focuses on **12 quadrants** (4 for the Italian side and 8 for the Slovenian one). It is specified that due to an incompatibility of scales, for the Italian and Slovenian quadrants two different cartographic bases are used: for the Italian side the scale used is the scale **1: 25,000**, while for the Slovenian ones the scale is **1: 50,000**.

The Julian Alps TBR has a total extent of **267,007 ha** and includes the mountainous territories of the Julian Alps and Prealps, as well as the surroundings foothills and lowland areas. The overall map of the Transboundary Biosphere Reserve is shown below:

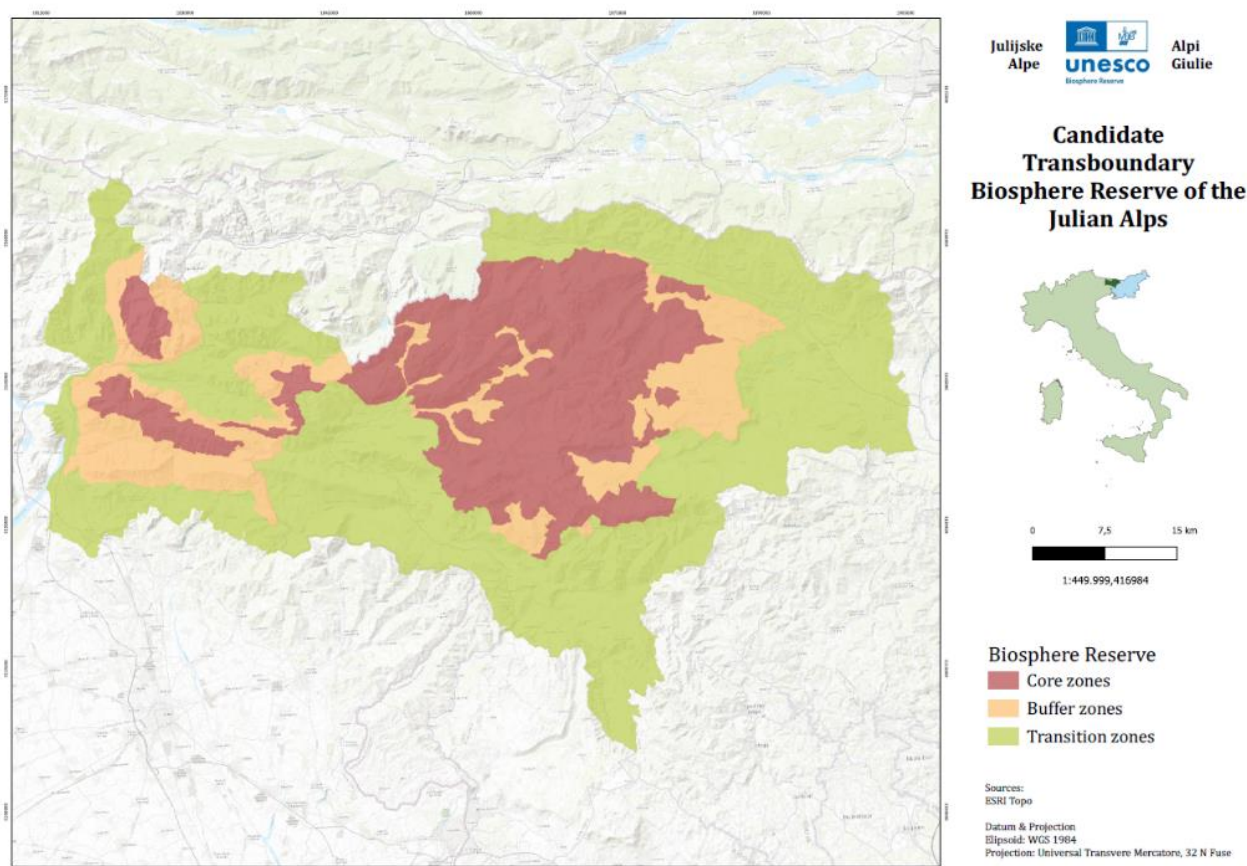


Figure 9 Proposed zonation for the Julian Alps Transboundary Biosphere Reserve

A copy of the map in pdf format will be available on the Julian Alps Transboundary Biosphere Reserve's landing page via this link: <http://www.julianalps-mab.eu/>.

2.2 Area and spatial configuration of the transboundary biosphere reserve:

	Total (ha)
Area of terrestrial Core Area(s)	73.527
Area of terrestrial Buffer Zone(s)	43.753
Area of terrestrial Transition Area(s)	149.727
Area of marine Core Area(s)	0
Area of marine Buffer Zone(s)	0
Size of marine Transition Area(s)	0

The candidate Julian Alps area is already recognised worldwide as an international hotspot of biodiversity and as a region rich in historical and socio-cultural features. The Julian Pre-Alps and Alps constitute a unique preserved mountain territory surrounded by the anthropized plains. Within the transboundary area, there are numerous biological and geological features, habitats, species and ecosystems of incredible value (Chapter 4), which the establishment of a unified Transboundary Biosphere Reserve would help preserving through a cross-border cooperative management.

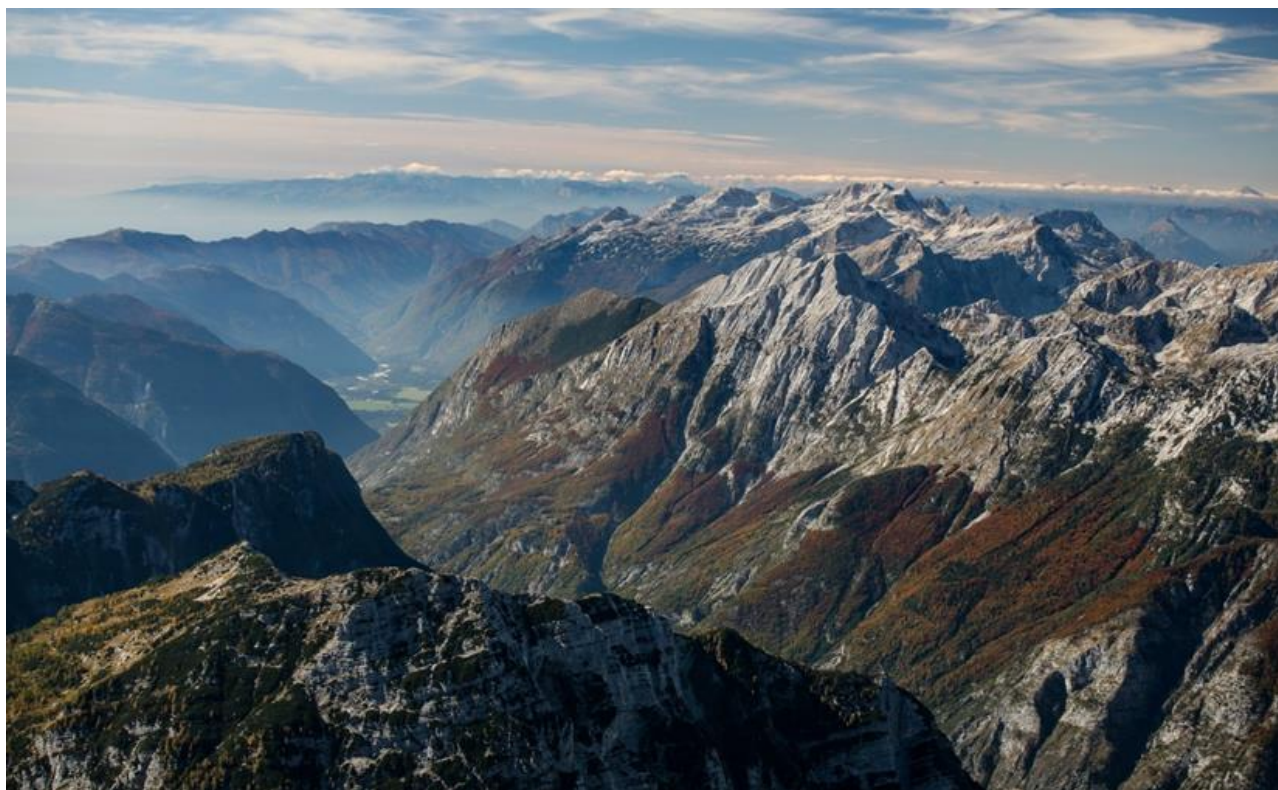


Figure 10 Julian Alps landscape

2.3 Brief justification of the zonation and interaction between the three zones:

Following the Seville Strategy (1995) that encourages “the creation of transboundary biosphere reserves, as means to conservation of organisms, ecosystems and genetic resources crossing natural boundaries” and the Pamplona recommendations (2000), this nomination is carried out with the prior aim to strengthen the existing cooperation between the Italian and Slovenian sides of the Julian Alps and improve the local bio-cultural conservation through a **shared vision** (Chapter 3).

Considering the Julian Alps Transboundary Biosphere Reserve area, the proposed Zonation is the result of merging the Core, Buffer and Transition Areas of the two National Julian Alps Biosphere Reserves, without modifying their extension and locations. Therefore, the following is a brief description of the reasons for the zoning from a national perspective, as indicated in the respective nomination forms.

According to the Pamplona recommendations (2000), the three zones individuated in the Transboundary sites should carry out the main goals of cultural and biological conservation; sustainable development/land management; and logistic, research and education, as defined for all the national MAB Reserves. Moreover, these functions are addressed differently depending on the Core, Buffer and Transition Areas: starting from the Core areas, that are the ones in which the most rigid protection regimes are applied, the Buffer and the Transition Areas are progressively dedicated to the other two cross-cutting functions, primarily focusing on the sustainable development and environmental awareness of the local communities.

A) CORE AREAS:

The Core areas of the proposed Transboundary Biosphere Reserve cover **73,527 ha**, which represent the **27.5 %** of the total area. These territories are the ones subjected to rigid and multi-level protection regime, aimed at preserving primarily the natural ecosystems and the significant species on the long run. In the case of the Italian Biosphere Reserve, the Core Areas coincide with the Val Alba Nature Reserve and the “RN” (Nature Conservation) zones of the Julian Prealps Natural Park’s Conservation Plan. The same principle is applied for the Slovenian Julian Alps Biosphere Reserve that includes in its Core areas the territories identified by the Triglav National Park as “First” and “Other” “Protection Areas” (TNP Management Plan 2016 – 2025). In these territories the Parks’ regulations, as well as the national norms on environmental protection are applied. Moreover, the Core areas comprises the Natura 2000 Network’s sites, described in Chapter 4, which are defined by the two European Directives “Habitats” (92/43/CEE) and “Birds” (2009/147/CE) and are therefore subjected to the European conservation measures envisaged for the habitats and species of the Alpine Biogeographical Region⁹. In particular, the glacier and peri-glacial areas represent two of the most characteristic and valuable environments to be protected and monitored due to the risks linked to the current climate changes. In addition, the Core Areas host typical **alpine habitats**, such as rocky environments and **rock cliffs, grasslands, forests ecosystems, rivers and subterranean environments**.

⁹ Under the Habitats Directive, the European Member States designate *Special Areas of Conservation* (SACs), while under the Birds Directive are defined the *Special Protection Areas* (SPAs) for threatened and migratory bird species.

Table of the significant naturalistic areas occurring in the Core Areas of the two National Julian Alps Biosphere Reserves:

Italian Julian Alps BR	Slovenian Julian Alps BR
SAC IT3320012 – Prealpi Giulie Settentrionali	SAC SI3000253 - Julijske Alpe
SPA IT3321002 – Alpi Giulie	SPA SI5000019 - Julijci
Val Alba, SAC IT3320009 - Zuc dal Bor	Mt. Triglav
Mt. Canin	Soča spring
Musi Mountains	Bohinj Lake
Plauris-Lavara Massif	

B) BUFFER ZONES:

The Buffer Zones of the proposed Transboundary Biosphere Reserve cover **43,753 ha**, the **16.4 %** of the total area. As for the Core areas, no modifications have been applied compared to the National Biosphere Reserves' zonation. As foreseen for the MAB Reserve, the regulations in these areas are less rigid, since the main function pursued in the concerned territory is the communities' sustainable development. Therefore, the Buffer Zones are territories presenting natural and semi-natural ecosystems of high biological and cultural diversity. Taking in to account the Italian side, the Buffer Zones derived from General Protection Zones of the Julian Prealps Natural Park's Conservation Plan and the E and F areas defined by the urbanistic plans of the 11 municipalities involved, which are mainly agricultural and forest areas. On the other hand, Slovenian Buffer Zones extend up to the Triglav National Park borders, falling in the "Third Protected areas" defined by the Park's management plan. The areas usually include **small pastoral settlements, grazing lands and alpine huts**, small **valleys settlements** and other semi-natural environments.

Table of the significant naturalistic areas occurring in the Buffer Zones of the two National Julian Alps Biosphere Reserves:

Italian Julian Alps BR	Slovenian Julian Alps BR
Gran Monte e Sorgenti del Natisono Park, SAC IT3320017 Rio Bianco di Taipana e Gran Monte	SAC SI3000018 - Bohinjska Bistrica in Jereka
SPA IT3321002 - Alpi Giulie	SAC SI3000133 - Radovna most v Sr. Radovni - jez HE Vintgar
SAC IT3320012 - Prealpi Giulie Settentrionali	SAC SI3000253 - Julijske Alpe
SAC IT3320010 - Jof di Montasio e Jof Fuart	SAC SI3000278 - Poključka barja
SAC IT 3320013 - Lago Minisini e Rivoli Bianchi	SPA SI5000019 - Julijci

SAC IT3320014 - Torrente Lerada	
SAC IT3320016 - Forra del Cornappo	

C) TRANSITION AREAS:

The Transition areas of the proposed Transboundary Biosphere Reserve cover **149,727 ha**, the **56.1%** of the total area. Hence, these are the wider zones defined for the Julian Alps TBR comprehending the foothills and the plain areas which surround the Julian Alps and Prealps. Pursuing the functions of logistic, research and education, the Transitions areas individuated for the Julian Alps Transboundary Biosphere Reserve include the largest settlements and anthropized territories. They cover the remaining areas of the 20 Municipalities not included in the Parks' perimeters (11 Italian and 9 Slovenian, which respectively constitutes the two National Biosphere Reserve areas). Specifically, the Slovenian municipalities covered are Bled, Bohinj, Bovec, Gorje, Jesenice, Kobarid, Kranjska Gora, Radovljica, Tolmin, Žirovnica (falling in the administrative units of Tolmin, Radovljica and Jesenice), while the Italian ones are Artegna, Chiusaforte, Dogna, Gemona del Friuli, Lusevera, Moggio Udinese, Montenars, Resia, Resiutta, Taipana, Venzona. Therefore, in these zones all the areas mainly dedicated to the economic development are present, showing the highest rate of **anthropisation** with settlements and urbanized centres of modest size, extended agricultural lands, farms and other facilities linked to tourism and the winter sport activities. However, the Transition Areas also host minor areas of naturalistic significance¹⁰, beside including the majority of **schools, education centres, museums** and other **facilities** designated to promote and to preserve the socio-cultural heritage of the Julian Alps.



Figure 11 Detail of the map, showing the territories beyond the northern boundary of the candidate Julian Alps TBR

A key aspect to be noted in the proposed map of the Julian Alps transboundary Biosphere Reserve (Section 2.1) is the zonation occurring along the northern border. The Core Areas highlighted in the figure are not surrounded by any Buffer and Transition Zones, highlighting the shared intention of the two National Biosphere Reserves to enlarge the overall area in the future, primarily including the missing northern Italian territory and then reaching the neighbouring Austrian region. The ongoing trilateral projects concerning ecological connectivity and involving the Dobratsch Nature Park in Austria, as well as other project proposals over a shared sustainable tourism strategy, are a good starting point for a process that could include and encourage Austrian region to be part of a **three-countries Transboundary Biosphere Reserve** in the next future.

¹⁰ In the Transition Areas fall some portions of other Slovenian and Italian Natura 2000 Network Sites. A complete list of the Sites and further information about the biological features occurring in the transboundary area is provided in Chapter 4.

3. COMMON WORK PLAN

Main common objectives and measures of the proposed TBR as described in the common workplan(s) including timetable, vision statement, goals and objectives and its duration (Please add a copy).

As designed in the Work Plan (annexed) the **vision** of the proposed Julian Alps Transboundary Biosphere Reserve focuses on the importance of “*going beyond administrative borders between Nations and rather focusing on communities, histories and ecosystems, which [...] share a common past and a challenging future*” (Julian Alps Transboundary Biosphere Reserve Work Plan 2023)

This is particularly crucial to consider the Julian Alps as a whole and work jointly to pursue the common objectives individuated during the candidature process. Following the vision provided in the work plan, the Julian Alps Transboundary Biosphere Reserve aspires to become an environmental, economic and social model of sustainable development, as well as provide a good example of cooperation between countries.

In particular, the Transboundary Biosphere Reserve intends to regenerate and promote valuable relations between people and their territory, encouraging local stakeholders’ participation and increasing awareness on Julian Alps relevant environmental and socio-economic issues (such as ecological and traditional knowledge, climate change, habitat connectivity, local productions, socio-economic trends, and so on). Furthermore, as a reference point for other national and international protected areas, the proposed Transboundary Biosphere Reserve aims to develop sustainability strategies that address current and future challenges, through the privileged involvement of younger generations. Involving young people in the Transboundary Biosphere Reserve governance and activities represents, in fact, a significant aspect in preserving and renovate cultural traditions and practices, by paying attention to the new environmental sensitivities and lifestyles.

Among the activities that the Transboundary Biosphere Reserve will encourage there are: forms of sustainable tourism and ecotourism, the enhancement of ECTS propositions, as well as responsible productions, education programs and exchange of good practices between local authorities, schools, research communities and all the stakeholders that will be actively involved.

The **common objectives** developed during the nomination process are 18 in total and they are divided in the three main functions of the MAB Biosphere Reserve as follows:

Goal	Function	Common Objectives	
Goal I	C Conservation of the Biological and Cultural Diversity	a	Strengthening the coordination of Natura 2000 Network sites management pursued by the two Parks to protect endangered species and habitats.
		b	Reinforcing the wildlife management strategy for relevant species living in the Julian Alps territories, focusing in particular on big mammals and carnivores in order to find a balance with the agro-pastoral activities.
		c	Conserving the cultivated and spontaneous and indigenous biodiversity linked to the agro-pastoral activities and landscapes through an adaptative perspective, considering the current climate change.
		d	Collaborating in joint European initiatives to increase cross-border ecological connectivity, extending the involvement of surrounding regions (such as Austria).
		e	Preserving and promoting different aspects of the tangible and non-tangible Julian Alps cultural heritage (languages, local products, manufacturing, histories, cultural landscapes, architectures...).
Goal II	S Sustainable Development and Land Management	a	Strengthening and concretizing a sustainable tourism strategy through the European Charter for Sustainable Tourism (ECST).
		b	Increasing environmental awareness among the agro-forestry and other economic field to promote responsible practices and productions.
		c	Encouraging territorial revitalization through supporting positive links between tourism and remote agriculture areas (i.e., village as “dispersed hotel” and valuing of agriculture practice in slow tourism experiences).
		d	Connecting different sides of the Julian Alps by reinforcing the public transport system, increasing transboundary connectivity, promoting sustainable mobility and slow tourism (experiential and outdoor activities, eco-tourism offers, etc.).
		e	Supporting the Julian Alps community’s resilience to climate change, leading them towards an ecological transition, encouraging energy efficiency, environmental sustainability and carbon neutrality.

Goal	Function	Common Objectives	
		f	Engaging young people in different activities concerning the Transboundary Biosphere Reserve and in realizing the Julian Alps sustainable development to pursue innovative solutions and to decrease the phenomenon of depopulation.
		g	Stimulating social cohesion and inclusiveness through the valorisation of associations' ongoing activities.
Goal III	L Logistic – Research, Monitoring and Education	a	Promoting positive networking at local and international level, encouraging professional exchanges between Parks staff, stakeholders, communities, Universities and Schools, and participating jointly to the MAB network to exchange good practice.
		b	Conducting joint research projects and monitoring activities concerning biological, ecological, socio-cultural, historical, economic issues and involving research communities and stakeholders.
		c	Developing a common monitoring methodology to assess the environmental impact of the economic activities, (specifically touristic activities and visitors flows), and providing mitigation measures.
		d	Increasing common communication and territorial marketing for the Transboundary Biosphere Reserve at local and international level.
		e	Implementing awareness among local communities and visitors through education initiatives in order to transmit the value of the Julian Alps biocultural diversity and inform them about relevant sustainability topics.
		f	Ensuring economic affordability and accessibility to the Transboundary Biosphere Reserve's main points of interest and activities for people with specific needs and disabilities.

The Work Plan of the proposed Julian Alps Transboundary Biosphere Reserve also provide a list of cooperation actions (ongoing, planned or proposed activities) that the local stakeholders intend to carry on in the next future. In particular, at the time of application there are **49 Cooperation Actions** collected, of which **13** are foreseen for the conservation function, **17** for the sustainable development purpose and **20** are related to educational, logistic and research activities. Among the priorities, the first actions and stakes to be undertaken by the candidate Julian Alps Transboundary Biosphere Reserve are:

- **COOPERATION:** Engaging stakeholders from the field of agriculture and forestry, University and research, tourism, culture, school and education through the establishment of the Transboundary Cooperation Tables that will meet at least one per year online or in presence (one for each field) to give the possibilities to dialogue and exchange good practices across the Julian Alps area.
- **ENVIRONMENTAL IMPACT MONITORING:** Developing a shared monitoring strategy to evaluate the impact of tourism and other relevant economic sectors with the help of local tourist operators and associations.
- **COEXISTENCE OF LARGE MAMMALS/CARNIVORES AND HUMAN ACTIVITIES:** Dealing with the big mammals/carnivores – agricultural activities conflicts through the active involvement of local stakeholders at transnational level in the development of management strategies.
- **COMMUNICATION:** Implementing a common communication strategy, by working on Julian Alps territorial marketing, the joint visual identity and related activities.
- **YOUNG PEOPLE:** Valuating the possibility to establish a Transboundary Youth Council to better involve the young people in the transboundary decision-making processes and activities.

The Work Plan will have a total duration of **10 years** and provide for a periodic monitoring and reevaluation of the cooperative actions and the common objectives. In particular, every 2 years the status of the cooperation actions will be checked and update, while every 5 years the effectiveness of the Work Plan will be assessed by an evaluation of the general objectives that, if necessary, will be implemented or modified. Finally, in 10 years a new work plan will be designed. For more details on the Work Plan, see also Chapter 7 of the present dossier.

TIME TABLE:

Work Plan Definition		Monitoring of the Cooperation Actions		Evaluation of the WP Effectiveness		Monitoring of the Cooperation Actions		Monitoring of the Cooperation Actions		Evaluation of the WP Effectiveness + New WP
2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033

4. GOAL I: USE BIOSPHERE RESERVES TO CONSERVE NATURAL AND CULTURAL DIVERSITY, PAMPLONA (2000)

[This refers to progress and achievements on cooperative programs that seek to protect biodiversity at landscape and site levels and/or ecological functions that provide ecosystem goods and services in the proposed transboundary biosphere reserve. Ecosystem dynamics occur across a range of spatial and temporal scales throughout the transboundary biosphere reserve and beyond. (Note how these cross-scale phenomena are being addressed).]



Figure 12 *Rosalia alpina*

The Julian Alps and Prealps are part of the South-Eastern Alps, presenting typical characteristics of this mountain range, such as deep valleys, slopes and peaks that reach 2,860 m above sea level (Mount Triglav) and treasuring an incredible variety of habitats and biodiversity. Historically, the presence of different human communities contributed to define the natural ecosystems as well as the cultural landscapes present in this area, which are also strongly influenced by the co-presence of features characteristic of the Alpine, Mediterranean and Illyric Biogeographical regions. Ecosystems and habitats spanning both sides of the Julian Alps include widespread forests of beech, spruce, larch, hornbeam and dwarf ash, fresh streams and rivers, high-altitude lakes, meadows and the typical cliffs. These diverse habitats and environments host several species belonging to the characteristic alpine fauna (i.e., red deer, chamois, alpine ibex, red fox, brown bear, alpine marmot, alpine salamander, golden eagle, white-throated dipper, owls, *Rosalia longicorn* and several others) and flora (edelweiss, alpine eryngo, king of the Alps, Zois' bellflower, etc...). The Julian Alps and Prealps, as the Alps in general, represent one of the richest European biodiversity hotspots, providing important ecosystem services which have to be protected and valorised.

In this Chapter the major biological features of the proposed Transboundary Biosphere Reserve area are briefly reported, highlighting the shared natural heritage of the two existing National Julian Alps Biosphere Reserves, besides providing the requested information about ongoing conservation programs (4.1), shared management plans (ongoing and planned) (4.2) and possible factors that may

influence the cooperative effort between the two Biosphere Reserves in achieving the Transboundary goals (4.3). In fact, this framework is important to provide a unified overview over the Julian Alps biological uniqueness and to better understand the cooperative efforts foreseen by the proposed Transboundary Biosphere Reserve area. Specifically, as indicated in the Pamplona Recommendations (Annex III), regarding the Goal I of the Sevilla Strategy “Use the Biosphere Reserve to Conserve Natural and Cultural Conservation”, this chapter will focus on the coordination measures, policies and actions implemented in the Julian Alps territory in order to:

- harmonize regulatory measures on protection, by giving priority to the European regulations and the shared conservation objectives for the Alpine ecosystems and cultural heritage protection;
- follow shared policies for threatened and protected species, ecosystems, migratory species, and control of invasive alien species, through the implementation of joint monitoring and research projects;
- implement the actions of the two National Biosphere Reserves in restoring high valued habitats, if degraded;
- prevent illegal activities such as poaching and logging in the Transboundary Biosphere Area through the application of the national legislation and the existing land protection systems.

The information related to the conservation strategies, measures and programmes specifically related to the cultural heritage are reported in the section 4.4. Finally, the cooperative initiatives and actions described in the following paragraphs are just part of the countless cooperation programmes in which the two National Biosphere Reserves are already involved. The ones related to different fields (e.g., tourism, mobility, agriculture...) will be described in Chapters 5 and 6. Thus, it is paramount to consider that even if not cited in this Chapter, these initiatives are also essential to the area’s bio-cultural conservation, promoting responsible practices and sustainable approaches in the Julian Alps.

Main habitat types and species of community importance:

To introduce the main cooperative programme and actions implemented in the proposed Transboundary Biosphere Reserve area it is useful to give a general overview on the natural heritage that is possible to find in it. In fact, at national level, numerous sites of the *Natura 2000 Network* have been identified in the two Julian Alps Biosphere Reserves. The *Natura 2000*, as described in the following paragraphs, is the most important environmental conservation network in Europe, defined by the Directives Habitat 92/43/CEE and Birds 79/409/CEE (mod. 2009/147/CE) (4.2). The ecological Network includes sites that contains habitats of community importance, prioritized because of their vulnerability or because their protection is necessary to preserve the endangered species in the European context.

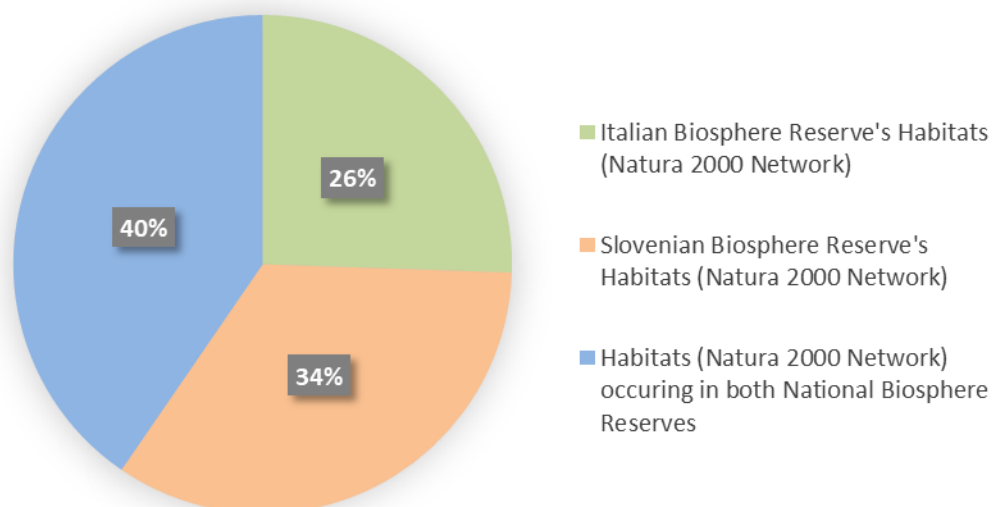
Natura 2000 Network – Habitats



Figure 13 View from the top of the Julian Alps range

Following the Annex I of the Habitats Directive the proposed area for the Transboundary Biosphere Reserve consists of a total of 47 *habitats of community importance*, of which 19 are in common between the Slovenian and Italian sides. In addition, among the priority habitats (12), 5 occur in both National Biosphere Reserves (Habitat 4070, Habitat 6230, Habitat 8240, Habitat 91E0, Habitat 9530). The following table shows all the habitats that are present in the proposed Transboundary Biosphere Reserve and their location (whether they are in the Italian, Slovenian or both National Biosphere Reserves). Beside pointing out the commonalities between the two sides, these data also provide an overview of the distinctive characteristic of the two National Biosphere Reserves, giving a more complete picture of the habitats occurring in the Julian Alps territory when considering as a whole.

Julian Alps Transboundary Biosphere Reserve's Habitats (Natura 2000 Network)



n.	Code	Habitat types	Priority	Slovenia	Italy
1	3140	Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara spp</i>		x	x
2	3150	Natural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition-type</i> vegetation			x
3	3160	Natural dystrophic lakes and ponds		x	
4	3220	Alpine rivers and the herbaceous vegetation along their banks		x	x
5	3230	Alpine rivers and their ligneous vegetation with <i>Myricaria germanica</i>		x	
6	3240	Alpine rivers and their ligneous vegetation with <i>Salix elaeagnos</i>		x	x
7	4060	Alpine and Boreal heaths		x	x
8	4070	<u>Bushes with <i>Pinus mugo</i> and <i>Rhododendron hirsutum</i> (<i>Mugo-Rhododendretum hirsuti</i>)</u>	x	x	x
9	4080	Sub-Arctic <i>Salix</i> spp scrub			x
10	5130	<i>Juniperus communis</i> formations on heaths or calcareous grasslands			x
11	6110	<u>Rupicolous calcareous or basophilic grasslands of the <i>Alysso-Sedion albi</i></u>	x	x	
12	6150	Siliceous alpine and boreal grasslands		x	
13	6170	Alpine and subalpine calcareous grasslands		x	x
14	6210	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco Brometalia) (*important orchid sites)		x	
15	6230	<u>Species-rich <i>Nardus</i> grasslands, on silicious substrates in mountain areas (and submountain areas in Continental Europe)</u>	x	x	x

n.	Code	Habitat types	Priority	Slovenia	Italy
16	6410	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>)		x	
17	62A0	Eastern sub-mediterranean dry grasslands (<i>Scorzoneretalia villosae</i>)			x
18	6430	<i>Hydrophilous</i> tall herb fringe communities of plains and of the montane to alpine levels		x	x
19	6510	Lowland hay meadows		x	x
20	6520	Mountain hay meadows		x	
21	7110	<u>Active raised bogs</u>	x	x	
22	7140	Transition mires and quaking bogs		x	x
23	7150	Depressions on peat substrates of the <i>Rhynchosporion</i>		x	
24	7210	<u>Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i></u>	x	x	
25	7220	<u>Petrifying springs with tufa formation (<i>Cratoneurion</i>)</u>	x		x
26	7230	Alkaline fens		x	
27	8120	Calcareous and calcshist screes of the montane to alpine levels (<i>Thlaspietea rotundifolii</i>)		x	x
28	8130	Western Mediterranean and thermophilous scree			x
29	8160	<u>Medio-European calcareous screes of hill and montane levels</u>	x	x	
30	8210	Calcareous rocky slopes with chasmophytic vegetation		x	x
31	8220	Siliceous rocky slopes with chasmophytic vegetation		x	
32	8240	<u>Limestone pavements</u>	x	x	x
33	8310	Caves not open to the public		x	x
34	8340	Permanent glaciers		x	x
35	9110	Luzulo-Fagetum beech forests		x	
36	9180	<u><i>Tilio-Acerion</i> forests of slopes, screes and ravines</u>	x		x
37	91D0	<u>Bog woodlands</u>	x	x	
38	91E0	<u>Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>)</u>	x	x	x
39	91F0	Riparian mixed forests of <i>Quercus robur</i> , <i>Ulmus laevis</i> and <i>Ulmus minor</i> , <i>Fraxinus excelsior</i> or <i>Fraxinus angustifolia</i> , along the great rivers (<i>Ulmenion minoris</i>)			x
40	91K0	Illyrian <i>Fagus sylvatica</i> forests (<i>Aremonio-Fagion</i>)		x	x
41	91L0	Illyrian oak-hornbeam forests (<i>Erythronio-Carpinion</i>)			x
42	9260	<i>Castanea sativa</i> woods			x

n.	Code	Habitat types	Priority	Slovenia	Italy
43	9340	<i>Quercus ilex</i> and <i>Quercus rotundifolia</i> forests		x	
44	92A0	<i>Salix alba</i> and <i>Populus alba</i> galleries			x
45	9410	Acidophilous <i>Picea</i> forests of the montane to alpine levels (<i>Vaccinio-Piceetea</i>)		x	x
46	9420	Alpine <i>Larix decidua</i> and/or <i>Pinus cembra</i> forests			x
47	9530	(Sub-) Mediterranean pine forests with endemic black pines	x	x	x

Main animal species

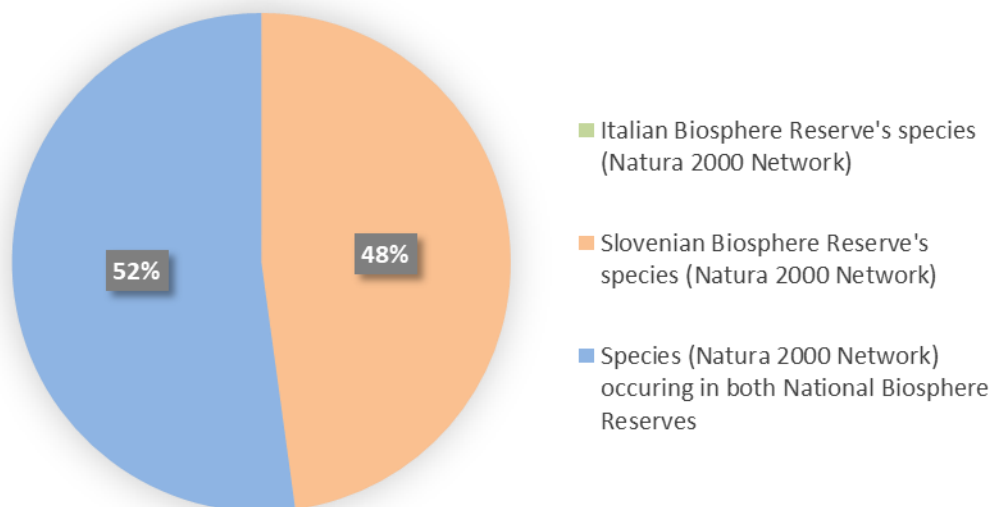


Figure 14 *Alectoris graeca*, symbol of the Julian Prealps Natural Park

The Julian Alps represents a large mountain territory almost inhabited (the majority of residential areas are concentrated in the lowland and piedmont areas), in which the presence of humans is mostly limited to touristic and agricultural/forestry activities. Therefore, low human population density together with rich variety of natural ecosystems, have allowed the presence and transit of numerous species in the area, including migratory ones. The Julian Alps is in fact a well-

established *ecological corridor* for several animals, in particular large carnivores (such as bears and wolves) and birds, which regularly cross the Italian-Slovenian border. Specifically, among the many faunistic and floristic elements occurring in the Julian Alps cross-border area, only considering the species of European community interest listed in Annex I of Birds Directive 2009/147/CE and Annex II of the Habitats Directive 92/43/CEE, there are **31 bird species** in total (respectively, 18 of them are present in the Italian Biosphere Reserve and all of them in the Slovenian one) and **44 other animal species** (18 in the Italian side). The table below shows the significant animal species that it is possible to find in the proposed area for the Julian Alps Transboundary Biosphere Reserve. When the species is present in the Slovenian or Italian sides, it is also indicated the common name (there are few cases, included with the symbol “-” representing the species that live in the respective Julian Alps side but is missing of a common name, i.e., *Erebia calcaria*). The species of priority importance, according to the European Directives, such as *Ursus arctos*, *Rosalia alpina* and the *Austropotamobius torrentium*, are indicated in the relative column.

Julian Alps Transboundary Biosphere Reserve's Animal Species (Natura 2000 Network)



n.	Species	Italian name	Slovenian name	Priority
Invertebrates				
1	<i>Austropotamobius pallipes</i>	Gambero di fiume	Primorski koščak (koščenic)	x
2	<i>Austropotamobius torrentium</i>	Gambero di torrente	Navadni koščak	x
3	<i>Callimorpha quadripunctaria</i>		Črtasti medvedek	x
4	<i>Carabus (variolosus) nodulosus</i>		Močvirski krešič	
5	<i>Coenagrion ornatum</i>		Koščični škratec	
6	<i>Cerambyx cerdo</i>	Cerambice della quercia	Hrastov kozliček	
7	<i>Erebia calcaria</i>	-	Lorkovičev rjavček	
8	<i>Euphydryas aurinia</i>		Travniški postavnež	
9	<i>Euplagia quadripunctaria</i>	Falena dell'edera	črtasti medvedek	
10	<i>Hypodryas maturna</i>		Gozdni postavnež	
11	<i>Leptodirus hochenwarti</i>		Drobnovratnik	
12	<i>Leucorrhinia pectoralis</i>	-	Dristavični spreletavec	
13	<i>Lucanus cervus</i>	Cervo volante	Rogač	
14	<i>Lycaena dispar</i>		Močvirski cekinček	
15	<i>Maculinea teleius (Phengaris teleius)</i>		Strašničin mravljiščar	
16	<i>Morimus funereus</i>	Cerambice funereo	Bukov kozliček	

n.	Species	Italian name	Slovenian name	Priority
17	<i>Osmoderma eremita</i>		Puščavnik, eremit	x
18	<i>Rosalia alpina</i>	Rosalia	Alpski kozliček	x
19	<i>Stephanopachys substriatus</i>		Zrnasti kapucar	
20	<i>Vertigo angustior</i>	-	Ozki vrtenec	
21	<i>Vertigo geyeri</i>		Geyerjev vrtenec	
Fishes				
22	<i>Leuciscus souffia</i>	Vairone	Blistavec	
23	<i>Barbus plebejus</i>	Barbo padano	Grba	
24	<i>Cottus gobio</i>	Scazzone	Kapelj	
25	<i>Barbus balcanicus</i>		Pohra	
26	<i>Salmo marmoratus</i>	Trota marmorata	Soška postrv	
27	<i>Hucho hucho</i>		Sulec	
Amphibia				
28	<i>Proteus anguinus</i>		Človeška ribica	x
29	<i>Bombina variegata</i>	Ululone dal ventre giallo	Hribski urh	
30	<i>Rana latastei</i>		Laška žaba	
31	<i>Triturus carnifex</i>	Tritone crestato meridionale	Veliki pupek	
Mammals				
32	<i>Miniopterus schreibersii</i>		Dolgokrili netopir	
33	<i>Myotis capaccinii</i>		Dolgonogi netopir	
34	<i>Rhinolophus euryale</i>		Južni podkovnjak	
35	<i>Rhinolophus hipposideros</i>		Mali podkovnjak	
36	<i>Myotis myotis</i>		Navadni netopir	
37	<i>Lynx lynx</i>	Lince	Navadni ris	
38	<i>Myotis blythii</i>		Ostrouhi netopir	
39	<i>Ursus arctos</i>	Orso	Rjavi medved	x
40	<i>Barbastella barbastellus</i>		Širokouhi netopir	
41	<i>Myotis bechsteinii</i>		Veliki navadni netopir (velikouhi netopir)	
42	<i>Rhinolophus ferrumequinum</i>		Veliki podkovnjak	

n.	Species	Italian name	Slovenian name	Priority
43	<i>Lutra lutra</i>		Vidra	
44	<i>Canis lupus</i>		Volk	x
Birds				
45	<i>Aegolius funereus</i>	Civetta capogrosso	Koconogi čuk	
46	<i>Alectoris graeca</i>	Coturnice	Kotorna	
47	<i>Aquila chrysaetos</i>	Aquila reale	Planinski orel	
48	<i>Bonasa bonasia</i>	Francolino di monte	Gozdni jereb	
49	<i>Bubo bubo</i>	Gufo reale	Velika uharica	
50	<i>Buteo buteo</i>		Kanja	
51	<i>Caprimulgus europaeus</i>	Succiacapre	Podhujka	
52	<i>Circaetus gallicus</i>	Biancone	Kačar	
53	<i>Circus aeruginosus</i>		Rjavi lunj	
54	<i>Circus pygargus</i>		Močvirski lunj	
55	<i>Crex crex</i>	Re di quaglie	Kosec	
56	<i>Dendrocopos leucotos</i>		Belohrbti detel	
57	<i>Dryocopus martius</i>	Picchio nero	Črna žolna	
58	<i>Falco peregrinus</i>	Falco pellegrino	Sokol selec	
59	<i>Falco tinnunculus</i>		Postovka	
60	<i>Ficedula parva</i>		Mali muhar	
61	<i>Glaucidium passerinum</i>	Civetta nana	Mali skovik	
62	<i>Gyps fulvus</i>	Grifone	Beloglavi jastreb	
63	<i>Lagopus mutus helveticus</i>		Belka	
64	<i>Lanius collurio</i>		Rjavi srakoper	
65	<i>Monticola saxatilis</i>		Slegur	
66	<i>Oenanthe oenanthe</i>		Kupčar	
67	<i>Pernis apivorus</i>	Falco pecchiaiolo	Sršenar	
68	<i>Phoenicurus phoenicurus</i>		Pogorelček	
69	<i>Phylloscopus bonelli</i>		Hribska listnica	
70	<i>Picoides tridactylus</i>	Picchio tridattilo	Triprsti detel	

n.	Species	Italian name	Slovenian name	Priority
71	<i>Picus canus</i>	Picchio cenerino	Pivka	
72	<i>Saxicola rubetra</i>		Repaljščica	
73	<i>Strix uralensis</i>	Allocco degli Urali	Kozača	
74	<i>Tetrao tetrix</i>	Fagiano di monte	Ruševec	
75	<i>Tetrao urogallus</i>	Gallo cedrone	Divji petelin	

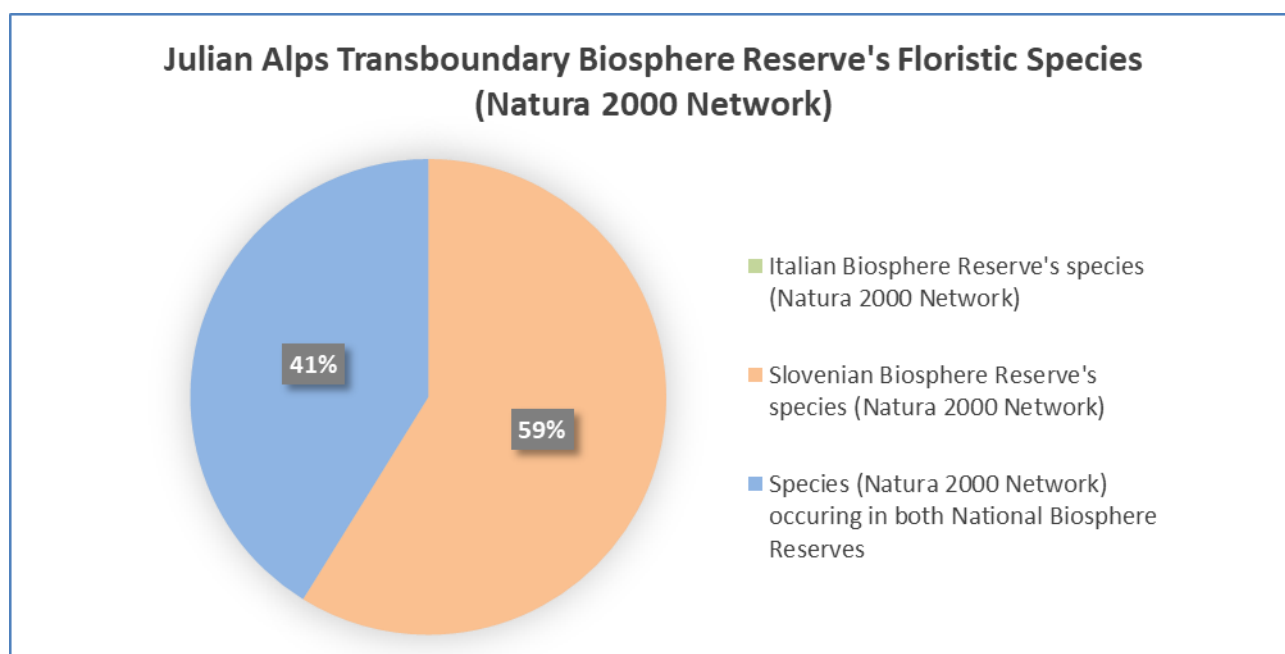
Main floristic species



Figure 15 *Campanula zoysii*

The Julian Alps Flora present numerous species typical for the Alpine Biogeographical Region, starting from the Triglav rose (*Potentilla nitida*), one of the symbols of Triglav National Park, and including several species of community importance (Annexes II, IV and V of the “Habitat” Directive 92/43/CEE). The two Parks are the main responsible entities of the monitoring and reporting of the species present in the respective protected areas.

As in the case of animal species, the Table 3 shows the name of the floristic species of community importance that can be observed in one or in both sides of the proposed Transboundary Biosphere Reserve area.



n.	Species	Italian name	Slovenian name	Priority
1	<i>Aquilegia bertolonii</i>		Bertolonijeva orlica	
2	<i>Arabis scopoliana</i>		Scopolijev repnjak	
3	<i>Botrychium simplex</i>		Enostavna mladomesečina	
4	<i>Campanula zoysii</i>	Campanula di Zoys	Zoisova zvončica	
5	<i>Cypripedium calceolus</i>	Scarpetta della Madonna	Lepi čeveljc	
6	<i>Dicranum viride</i>		-	
7	<i>Drepanocladus vernicosus</i>		-	
8	<i>Eryngium alpinum</i>	Regina delle Alpi	Alpska možina	
9	<i>Genista holopetala</i>		Primorska košeničica	
10	<i>Gentiana lutea subsp. vardjanii</i>	Genziana gialla di Vardjan	Vardjanov košutnik	
11	<i>Gladiolus palustris</i>	Gladiolo di palude	Močvirski meček	
12	<i>Hladnikia pastinacifolia</i>		Rebrinčevolistna hladnikija	
13	<i>Liparis loeselii</i>		Loeselova (Loeselijeva) grezovka	
14	<i>Moehringia villosa</i>		Kratkodlakava popkoresa	
15	<i>Physoplexis comosa</i>	Raponzolo di roccia	Šopasti repušnik	
16	<i>Primula carniolica</i>		Kranjski jeglič	
17	<i>Senecio gaudinii</i> (<i>Tephroseris longifolia</i> subsp. <i>Gaudinii</i>)	Senecio di Gaudin	Obirska sivica	

4.1 Actions and cooperative programmes on-going or planned in the main habitat types, ecosystems, species or varieties of importance identified for the transboundary biosphere reserve.

The Triglav National Park and the Julian Prealps Natural Park are the two national and regional authorities in charge of the protection and management of the natural environment present in the designated conservation areas. They are situated on the Slovenian and Italian side of the Julian Alps and are representatives of the two National UNESCO MAB Biosphere Reserves since 2003 and 2019. The Parks, according to their own environmental National regulations and in collaboration with the local municipalities, institutions and stakeholders coordinate and promote several conservation, research and monitoring activities in the Julian Alps area (which are better described in Chapter 6). Moreover, thanks to the establishment of the *Transboundary Julian Alps Ecoregion* in 2009 (EUROPARC Federation) the cooperation efforts to enhance the natural connectivity between the two countries and preserve the functioning of the shared natural ecosystems have been carried out by the Parks through the application of a coordinated Action Plan.

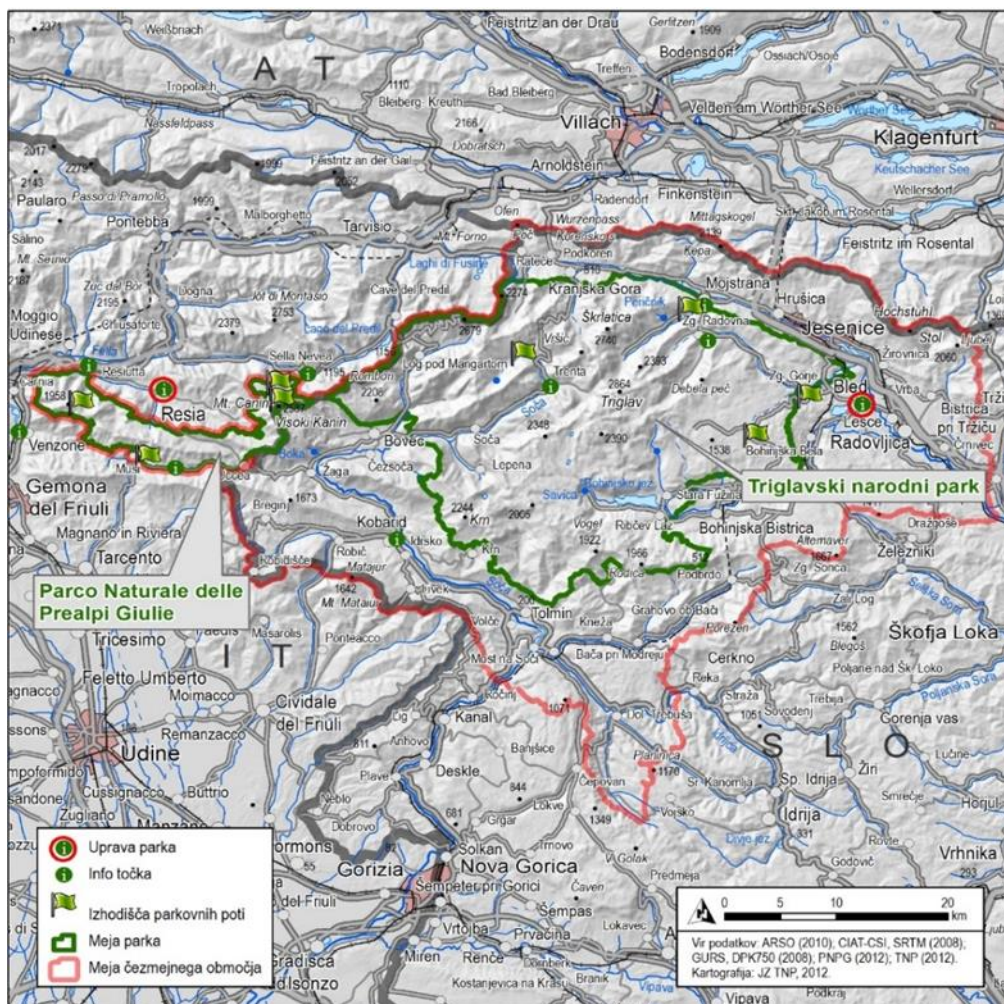


Figure 16 Map of the Transboundary Ecoregion of the Julian Alps

The current *5-year Action Plan (2020-2024)* of the Transboundary Ecoregion of Julian Alps includes a series of cooperative actions that aim to:

- strengthen the cooperative efforts in managing the sites of the Natura 2000 Network and sites of natural heritage
- combine existing data to prepare a joint report on Flora and Fauna and monitoring the states of cross-border ecosystems;
- implement the strategies and activities related to wildlife management (particularly, the species of chamois, alpine ibex and large predators);
- promote common involvement in European projects and programmes regarding the Alpine space natural heritage.

Concerning the common involvement in European programmes, the two National Julian Alps Biosphere Reserves, coordinated by the natural Parks, are already engaged in several conventions and projects linked to the Alpine ecosystems and biodiversity, as well as the European natural heritage. In particular, the following is a list of the most relevant ones in which Italy and Slovenia and the protected areas concerned are involved:

ALPINE CONVENTION



It consists in a cooperation agreement between the countries of the Alpine Range (Austria, France, Germany, Italy, Liechtenstein, Monaco, Slovenia, and Switzerland). The Convention provides a

series of protocols and a Multi-Annual Work Programme in order to implement common objectives and principles in the territories involved. The new cooperation framework of the Alpine Convention (2023-2030) is based on three priority areas : biodiversity and ecosystems, climate change and quality of life, which should be considered mutually interdependent.

Moreover, the Multi-Annual Work Programme pursues a cross-sectoral approach and underlines the importance of addressing the three priority areas in a holistic way. Therefore, the bodies of the Alpine Convention are encouraged to carefully consider these interlinkages when formulating, carrying out and communicating their specific activities. Moreover, it is important to note that the Permanent Committee of the Alpine Convention, formed by the representatives of the parties, is currently chaired by the Slovenian Ministry of Natural Resources and Spatial Planning, showing the current involvement of the concerned territories.

In 2014, the Alpine Convention proclaimed the whole area of the Triglav and the Julian Prealps Natural Parks as a “*Transboundary Pilot Region for Ecological Connectivity*”, after the certification as Transboundary Ecoregion was confirmed by EUROPARC Federation (Website : <https://www.alpconv.org/en/>).

GREEN ALPS (INTERREG ALPINE SPACE)



involves the Triglav National Park and the Julian Prealps Natural Park as *two of the 5 pilot areas*.

It is a framework for a sustainable European nature and biodiversity conservation policy for the Alps that considers the evaluation of ecosystem services on a long-term basis, and moves beyond national borders. It is co-funded by the Interreg Alpine Space Programme and

In the frame of this project, the common goals for the pilot region are: involving local stakeholders in a better knowledge of the significance and importance of ecoconnectivity and ecosystem services; raising awareness of the outstanding natural potential in the Julian Alps and Prealps region; strengthening attention to nature, especially among young generations; enforcing joint cooperation between the two protected areas. The activities that are carried out include:

- Analyzing ecological connectivity situation in the transboundary area;
- Drafting of a specific brochure about the project to be distributed to stakeholders during meeting and workshops and to general public in visitors' centres;
- Identifying local experts and stakeholders to involve in meetings and workshops about project goals and activities ;
- Disseminate the project and its activities through local medias.

(Website: <http://www.greenalps-project.eu/>).

INTERREG ALPINE SPACE



Since 2000, this European initiative has encouraged cohesion between the Alpine Countries prioritizing 4 main goals: a) climate resilience; b) carbon neutrality and resource sensitivity; c) innovation and digitalization; d) cooperative management and development. Specifically, the Triglav National Park and the Julian Prealps National Park have already been involved in the *GreenAlps* project, which is co-funded by this Programme, constituting two of the 5 pilot areas in which a series of conservation actions are

implemented (Website: <https://www.alpine-space.eu/>).

ALPBIONET2030



Ecological connectivity is the basis of Alpine and global habitat and species protection. However, with the fact that different regions have varying tools to measure and improve biodiversity, it becomes difficult to create an integrative concept for the protection of ecosystems and biodiversity within the Alps; beautiful and unique European landscape rich in valuable habitats and structures, but endangered by over-exploitation and development. The overall objective of

this project is to consolidate and enhance transnational cooperation in the field of nature conservation while providing a harmonized concept of preserving natural habitats and common planning tools to produce a high level of ecological connectivity for biodiversity conservation (Website: <https://www.alparc.org/alpbionet2030>).

Other cooperation programmes, not directly involving the Alpine habitats and biodiversity, but in which the two National Julian Alps Biosphere Reserves are currently involved are:

INTERREG V-I ITALY-SLOVENIA



It is a European cooperation programme between Italy and Slovenia which encourage transboundary cooperation in different fields (environment, social, research and education, etc.), providing financial support and involving the territories shown in the map (Figure 6). Within the proposed Transboundary Biosphere area, this programme led to the development of different projects, such as the *Walk of Peace*

(Paragraph 4.4) and, related to the conservation of the Julian Alps biodiversity, the project **Nat2Care**. The general aim of this latter project was to improve the quality of biodiversity in the sites of Natura 2000 Network by reducing species loss, implementing connectivity and restoring different habitats through targeted actions. In the case of the Julian Prealps Natural Park, collaborating with the Friulan Dolomites (Italy) and the Triglav National Park (Slovenia), the actions have been focused on the ecosystem services and on the implementation of a common assessment methodology. Currently the Parks are implementing a new initiative related to the capitalization of Nat2Care (Website: <https://www.ita-slo.eu/>).

EUROPEAN GREEN BELT



“*Borders divide, Nature unites*”. The European Green Belt traces the line of the former Iron Curtain and has been established to conserve and restore the shared natural heritage whilst respecting the economic, social and cultural needs of local communities. The Iron Curtain divided the European continent into East and West for nearly 40 years. It extended for more than 12,500 Km along 24 countries from the Barents Sea - at the Russian-Norwegian border -, along the Baltic Coast - through Central Europe and the Balkans - to the Black and the Adriatic Sea. This border allowed nature to flourish, preserving a great number of landscapes, which now have to be conserved and promoted through local stakeholders’

engagement in sustainable development (Website: <https://www.europeangreenbelt.org/>). The two National Biosphere Reserves recently applied for a new pilot project linked to the EGB, called **BESTBelt** (<https://www.europeangreenbelt.org/bestbelt/>), which aims to connect and preserve unique landscapes throughout Europe by empowering local stakeholders. Besides providing funding for conservation projects and sustainable development, these initiatives also support training and guidance on project management, involving younger generation and encouraging young conservationists’ exchanges and networking.

Finally, to fulfil the objectives indicated in the Transboundary Biosphere Reserve's Work Plan, specific joint projects regarding the relevant species and habitats will be defined in the future. As occurred in recent years, special attention will be given on the collaboration with Italian and Slovenian Universities, Research Institutions and Associations that intend to carry out species monitoring, conservation, and reintroduction initiatives at transboundary level. Some relevant cooperative projects, which recently ended, are: DinAlpConnect (Interreg Adrion), PlantoConnect, Nat2Care, and other minor initiatives. Ongoing or planned projects and studies linked to nature conservation will be further deepened in Chapter 6.

4.2 Are there coordinated management plans, conservation programmes policies or measures in place in order to protect biodiversity (including landscapes/ecosystems)? If so, please name them.

The proposed Julian Alps Transboundary Biosphere Reserve comprehends the two existing Julian Alps National Biosphere Reserves. These territories are therefore primarily governed by the respective national, regional and local environmental regulations of Slovenia and Italy. The national authorities in charge of the environmental protection are, respectively, the Slovenian Ministry of Natural Resources and Spatial Planning and the Italian Ministry of Environment and Energy Security, which define national conservation strategies and measures¹¹ following the European Directives. In both countries the management plans adopted in the protected natural areas are the main land management instrument to pursue the conservation of significant habitats and species, through the implementation of sustainable policies and economic approaches within the territory concerned.

The Slovenian Julian Alps Biosphere Reserve almost corresponds to the Triglav National Park protected area, that is its coordinator, falling in the Slovenian regions of Goriška and Gorenjska. Meanwhile, the Italian Julian Alps Biosphere Reserve includes 3 different and multi-level protected areas: the Julian Prealps Natural Park (which is the coordinator of the Biosphere Reserve), the regional natural reserve of “Val Alba” and the reserve of “Gran Monte e Sorgenti del Natisone”, established by the municipality of Taipana (Friuli Venezia Giulia region). In fact, while in Slovenia it is possible to find larger preserved areas, in the Italian context it is more frequent to count numerous and smaller territories that are safeguarded. This fragmentation at the national level makes particularly important for Italy to enhance ecological connectivity and management at national and international scales in order to better conserve its natural heritage. Therefore, the cooperation with the Slovenian Biosphere Reserve would be a significant example that will hopefully incentivize cooperation at national level between other Biosphere Reserves, as well as prelude other international collaboration (i.e., with Austria). At regional level, the Italian and Slovenian bordering regions are involved in the *Interreg (2021-2027)* transnational cooperation programme (4.1), that includes in its objectives the promotion of greener economies, sustainable lifestyles and ecosystems connectivity between countries. In particular, the Italian region currently cooperates with the neighbouring Austria, Slovenia and Croatia concerning the 5 thematic areas of the European Cohesion Policy: innovation, carbon neutrality and sustainability, mobility, sociality and local development.

The proposed transboundary area is primarily subjected to the European conservation policy and measures. Foremost, the EU Biodiversity Strategy for 2030, defined from the IUCN Global Biodiversity Strategy, includes a series of objectives and actions mainly focused on the restoration and conservation of important European natural habitats and ecosystems, through the extension of the existing Natura 2000 Network and the implementation of financial instruments, such as the LIFE, to stimulate conservation projects and initiatives in the State Members. Furthermore, for the Alpine range (one of the world major biodiversity hotspots), there are specific international policies and conventions that aim to implement cooperation between countries, and thereby to increase the effectiveness of conservation, such as the Alpine convention (14.1).

¹¹ Besides the Italian and Slovenian Biodiversity Conservation Strategies are comprehended in the environmental legislations the normative linked to other environmental topics, such as landscape conservation, land and water protection and management.

NATURA 2000 NETWORK



As cited in the previous sections, it is possible to identify several sites of the European Natura 2000 Network within the proposed Transboundary Biosphere Reserve, which include habitats mainly related to the Alpine Biogeographical area. Natura 2000 is the largest coordinated network of protected areas in the world, comprehending all the Europe's most valuable and threatened ecosystems. The aim of the network is to ensure the long-term survival of Europe's natural heritage, encouraging the sustainable use and conservation of the European habitats and species listed under the Birds Directive 2009/147/CE and the Habitats Directive

92/43/CEE. Following these two directives, it is possible to identify 3 typologies of sites within the Natura 2000 Network: the Special Areas of Conservation (SACs) (Habitats Directive), the Special Protection Areas (SPAs) (Birds Directive) and the ones that are simultaneously SAC and SPA. Therefore, these individuated Sites contain habitats and species that are characteristic of the Biogeographical Regions in which they are included - in case of the Julian Alps the Alpine one -, and that consequently need to be protected following specific conservation measures and obligations.

Altogether, there are 355 *Natura 2000 sites* located in **Slovenia**, of which 324 are designated under the Habitats Directive (SACs) and 31 under the Birds Directive (SPAs). The Slovenian Natura 2000 sites cover approximately **37.46%** of the national territory (7,681 km²)¹², meanwhile in **Italy** it is possible to find 2,639 *sites*, of which 2,302 are SACs and 639 are SPAs. Although the greater number of sites, the Italian ones approximately cover the **19.3%** of the national territory surface (5,877.71 km²)¹³, confirming a more fragmented situation. The maps below show the national sites of the Natura 2000 Network that are present in Italy and Slovenia (*European Environmental Agency: <https://www.eea.europa.eu/data-and-maps/data/natura-14>*).

¹² <https://www.gov.si/en/news/2020-06-12-natura-2000-in-slovenia/>

¹³ https://annuario.isprambiente.it/sys_ind/13

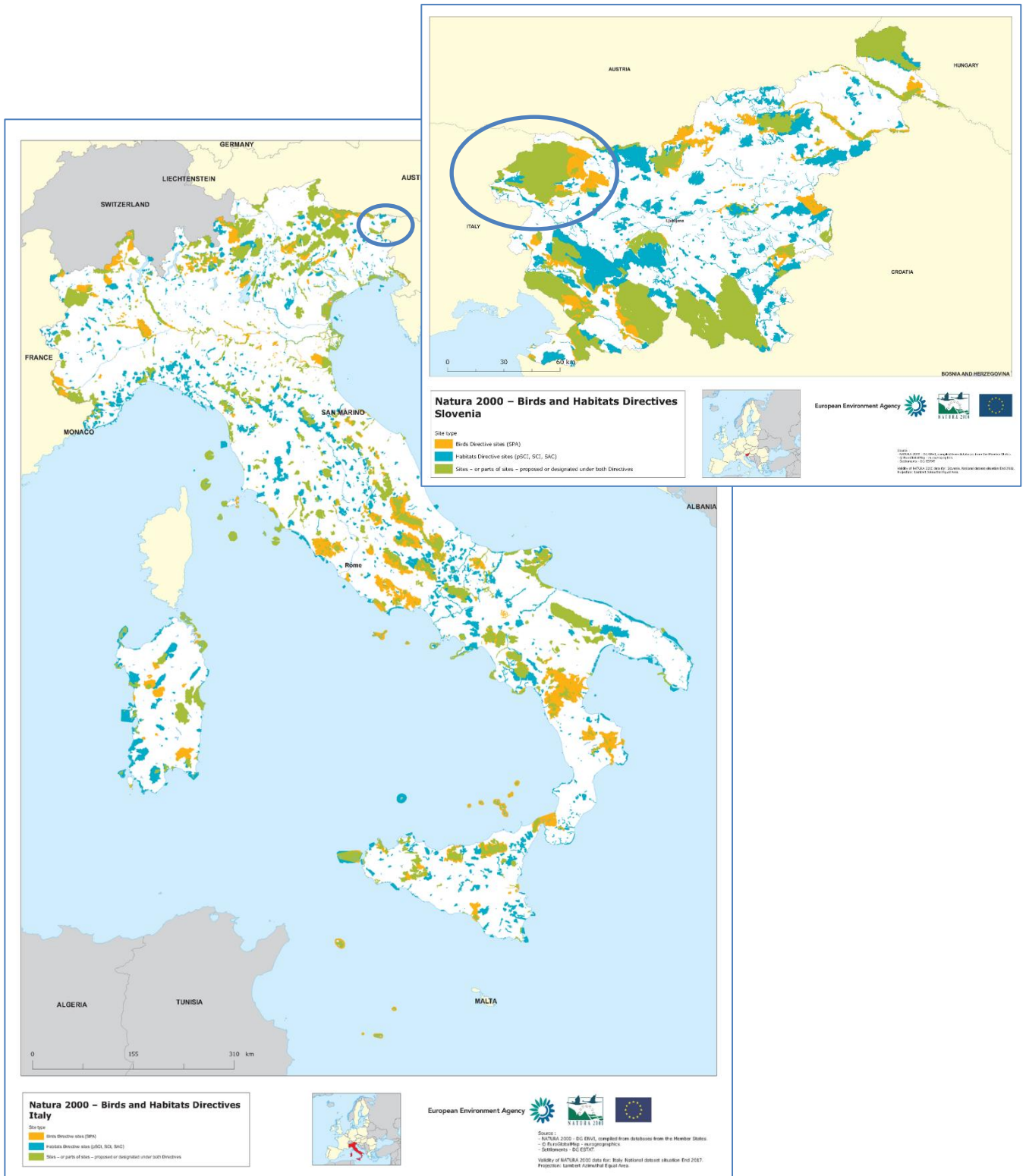


Figure 17 Natura 2000 Network in Italy and Slovenia, with the Julian Alps region circled in blue

Within the proposed Transboundary area, there are the following Sites of Community Importance, which are entirely or partially included in the National Biosphere Reserves:

Italian Natura 2000 Network sites:

- SAC IT3320012 Prealpi Giulie Settentrionali
- SAC IT3320009 Çuc Dal Bôr
- SAC IT3320010 Jof di Montasio e Jof Fuart
- SAC IT 3320013 Lago Minisini e Rivoli Bianchi
- SAC IT3320014 Torrente Lerada
- SAC IT3320016 Forra del Cornappo
- SAC IT3320017 Rio Bianco di Taipana e Gran Monte
- SPA IT 3321001 Alpi Carniche
- SPA IT 3321002 Alpi Giulie

Slovenian Natura 2000 Network sites:

- SAC SI3000010 Koritno izvir - izliv v Savo Dolinko
- SAC SI3000019 Nemški Rovt
- SAC SI3000027 Lipovšček
- SAC SI3000031 Pod Bučnico - melišča
- SAC SI3000032 Pri Modreju - melišča
- SAC SI3000033 Pod Mijo - melišča
- SAC SI3000045 Bohinjska Bela - skalovje
- SAC SI3000047 Koritno
- SAC SI3000087 Zelenci
- SAC SI3000090 Pesjakov buden
- SAC SI3000103 Blato na Jelovici
- SAC SI3000105 Kropa
- SAC SI3000107 Breznica
- SAC SI3000110 Ratitovec
- SAC SI3000119 Porezen
- SAC SI3000124 Krasnica
- SAC SI3000127 Grahovo ob Bači
- SAC SI3000128 Znojile
- SAC SI3000133 Radovna most v Sr. Radovni - jez HE Vintgar
- SAC SI3000154 Bled - Podhom
- SAC SI3000167 Nadiža s pritoki
- SAC SI3000169 Povirje vzhodno od Bodešč
- SAC SI3000180 Rodine
- SAC SI3000196 Breginjski Stol
- SAC SI3000201 Nakelska Sava
- SAC SI3000209 Jama pod Smogodnico
- SAC SI3000210 Častiteljiva luknja
- SAC SI3000230 Idrijca s pritoki
- SAC SI3000236 Kobariško blato
- SAC SI3000253 Julijske Alpe
- SAC SI3000254 Soča z Volarjo
- SAC SI3000255 Trnovski gozd - Nanos

- SAC SI3000277 Podbrdo - skalovje
- SAC SI3000278 Poključka barja
- SAC SI3000285 Karavanke
- SAC SI3000334 Berje - Zasip
- SAC SI3000339 Višnar - povirje
- SAC SI3000348 Bohinjska Bistrica in Jereka
- SAC SI3000349 Peračica
- SAC SI3000381 Slatnik
- SPA SI5000001 Jelovica
- SPA SI5000019 Julijci
- SPA SI5000020 Breginjski Stol
- SPA SI5000025 Trnovski gozd
- SPA SI5000030 Karavanke

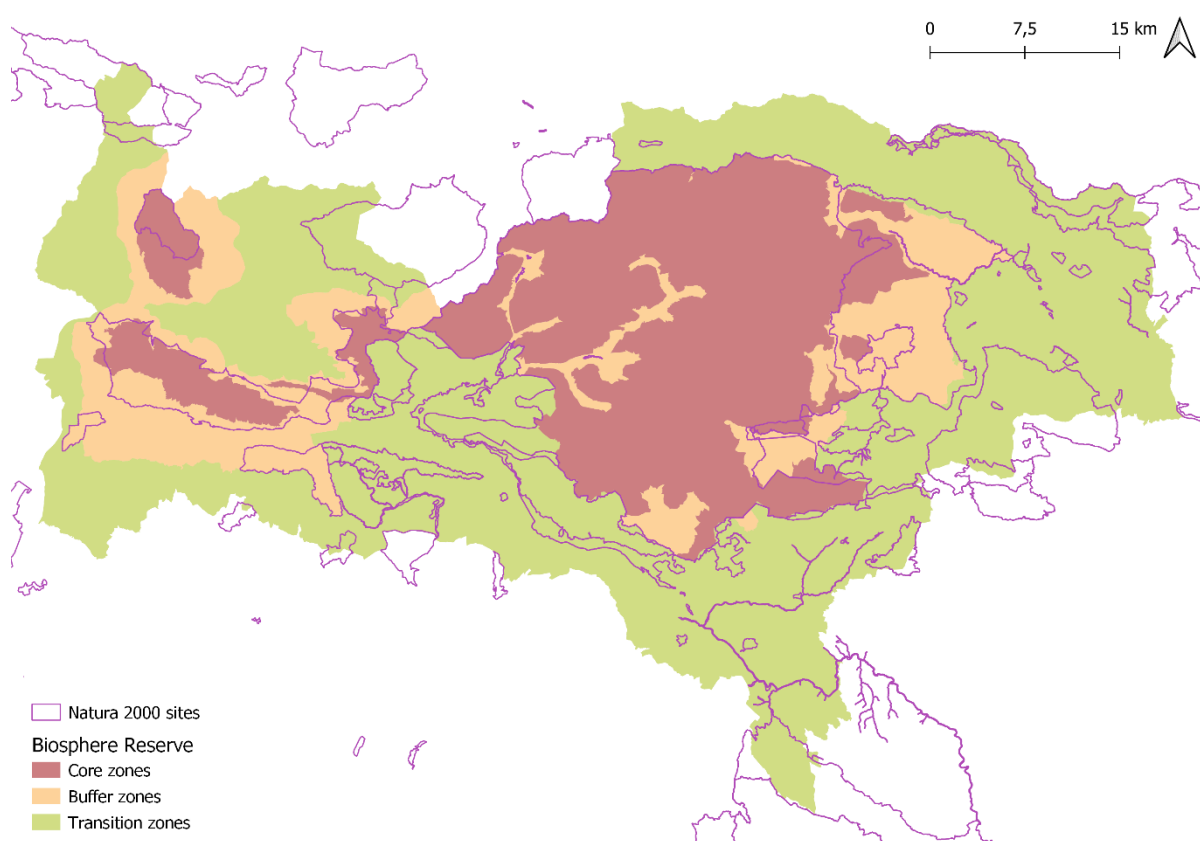


Figure 18 Map of the sites of the Natura 2000 Network included in the candidate Julian Alps TBR

As shown in the map, on the Italian and Slovenian border, the Italian SAC IT 3320012 Prealpi Giulie Settentrionali, the Slovenian SAC SI 3000253 Julijske Alpe and SPA SI 5000019 “Julijci” are adjacent, representing a transboundary ecological corridor. Therefore, the Transboundary Biosphere Reserve establishment would facilitate the coordinated management of the Alpine Natura 2000 Network sites included in the Julian Alps range, following the very first aim of the network: increase ecological connectivity to prevent habitat and biodiversity loss. This objective has been already addressed in the proposed area, by implementing several cooperative conservation projects, such as the *Nat2care* (Interreg V-A Italia-Slovenia) which is now been implementing with further monitoring and management actions.

4.3 Describe, if possible, the main stakes for future management and cooperation, including what are the main factors that influenced the successes for future management and cooperation with regard to the proposed transboundary biosphere reserve? What new specific transboundary measures will be considered to improve conservation?

Since the two National Biosphere Reserves' responsible entities, the Triglav National Park and the Julian Prealps Natural Park, the local authorities and stakeholders have been cooperating for almost 15 years in projects, programmes and initiatives related to the Julian Alps territory's conservation (as described in paragraphs 4.1 and 4.2), sustainable development (Chapter 5) and research/education (Chapter 6), there is great confidence in the continuation of this positive cooperation. As individuated in the Work Plan, the principal stakes for future management and cooperation will be addressed by the Transboundary Biosphere Reserve *Cooperating Committee*. In fact, as foreseen by the MAB recommendations, this non-institutional body aims to connect the two National Biosphere Reserves, through the promotion of cooperative objectives and actions. It will be therefore composed by an equal number of members from the Italian and Slovenian sides, chosen between the representatives of the Triglav National Park and the Julian Prealps Natural Park, the main governmental authorities (at national, regional and local level), the principal territorial stakeholders belonging to the field of interests for the Transboundary Biosphere Reserve (i.e., youths, scientific experts and other representatives of the National Biosphere Reserves' advisory boards).

The main stakes for future management and cooperation will primarily concern the positive exchange and dialogue between the parties involved. In fact, the establishment of the Transboundary Biosphere Reserve will help in strengthening the existing National Biosphere Reserves specific objectives, while stimulating the implementation of larger-scale initiatives and projects. Priority will be given to the involvement of the neighbouring Austrian region in the MAB UNESCO programme, to further enlarge the Julian Alps transboundary site. In order to do this, it will be important to spread the MAB principles, to implement international cooperation and to increase environmental awareness in the Alpine territories, both internally and in the Transboundary Biosphere Reserve's surrounding areas.

Communication and interchanges will be foreseen at different level and in different sector encouraging multisectoral strategies, to foster and inspire sustainable communities in the Julian Alps. In particular, the conservation of habitats and ecosystems, as well as the associated cultural heritage within the Transboundary Biosphere Reserve will be considered one of the first objectives to cope with the most significant and collective societal challenges, such as the current climate-change related issues, which could strongly impact local communities in the future.

4.4 Other comments/observations on conservation from a transboundary biosphere reserve perspective, if appropriate.

Besides sharing geomorphological, ecological or climatic features, the Slovenian and Italian Julian Alps host local communities that present a great number of similarities regarding the socio-cultural relationships in this territory. In fact, in the past centuries the area has experienced several cultural exchanges, often sharing common historical events. In particular, the Julian Alps are connotated by Latin and Slavic cultural influences, which it is possible to notice in the linguistic, gastronomic, architectural and other cultural aspects maintained by these cross-border alpine communities. The common area is recognizable for its Alpine way of life, which historically revolved around Alpine livestock farming, milk processing, forestry, and mining. Common elements can also be found in architecture, traditional fine arts (wood and stone craftsmanship, painted furniture, religious symbols in the landscape), culinary heritage, and clothing culture. Today, these elements constitute part of the shared and individual local identities as well as contribute to tourism promotion.

The two National Biosphere Reserves have particularly focused on the conservation of their historical and collective *memories* and the promotion of *local traditions* through specific research and conservation actions. For example, in the protected areas of the Triglav National Park and the Julian Prealps Natural Park, as well in numerous municipalities involved in the National Biosphere Reserves there are several museums, memorials, permanent exhibitions and touristic trails especially dedicated to the Great War's events, cultural heritage protected objects and sites present in the Italian-Slovenian border. Moreover, in the Julian Alps protected areas, the local *gastronomic and artisanal specialities* are also well promoted, stimulating a positive exchange of products, practices and traditions between the two sides. Some of the main typical products, such as dairies (i.e., the Slovenian Tolminc, Bovec, Mohant and the Italian Malga Montasio cheeses) and other local varieties (such as the Resia garlic or the Venzone pumpkin) are sponsored through periodic markets and events that attract people from both countries (such as the Transboundary Uniqueness Marketplace in Resiutta).



Figure 19 Slovenian Jualan Alps typical dairy product

Among all the material and immaterial cultural heritage existing in the proposed MAB area, it is significant to mention the *linguistic minorities* and dialects that span across the border and contribute to connect the Slovenian and Italian communities (Section 5.1). This is why one of the main objectives of the proposed Transboundary Biosphere Reserve is the conservation and promotion of the tangible and non-tangible heritage that, as well as the natural cross-border ecosystems, connect the two sides of the Julian Alps. In particular, the common management of the *historical trails* and the reciprocal promotion of traditional events and exhibitions are the main actions held by the Triglav National Park, the Julian Prealps Park with the support of several territorial associations to conserve the cultural heritage. Following are listed the main cooperative actions, programmes or measures that the cross-border territories are implementing to keep these shared memories, languages and practices alive.

PARK OF PEACE

The Peace Park is an open-air museum situated on the Slovenian-Italian Border on the Mt. Sabotin. It consists in an itinerary that includes several sites of interests (such as the Cabin Museum, a network of tunnels and many caves) retracing the Great War Austro-Hungarian defensive line. This trail is part of the Walk of Peace from the Alps to the Adriatic, promoted by the Walk of Peace in the Soča Region Foundation (Kobarid Museum) (<https://www.thewalkofpeace.com/locations/the-park-of-peace/>).

5. GOAL II: UTILIZE BIOSPHERE RESERVES AS MODELS OF LAND MANAGEMENT AND OF APPROACHES TO SUSTAINABLE DEVELOPMENT, PAMPLONA (2000)

[This refers to the collaborative programs that address sustainability issues at the individual livelihood and community levels, including economic trends in different sectors that drive the need to innovate and/or adapt, the main adaptive strategies being implemented within the transboundary biosphere reserve, and initiatives to develop new sectors to compensate for losses in others, employment, and community well-being.]



Figure 20 Alpine hut with cattle

5.1 Briefly describe the prevailing trends on social and cultural aspects in the transboundary biosphere, if specific to the transboundary aspects.

The cultural heritage of the Julian Alps is very rich and variegated, since it has been enriched by the influences of different cultures and habits. There is a high awareness of complex historical and cultural influences in the region. One of the biggest stories of the area is linked to the Great War, as evidenced by many monuments, sites and trails that commemorate this common history and therefore, there is a high awareness of the complex historical influences in the region. It is possible to observe a change in the main economic activities, land uses and lifestyles in both sides of the Julian Alps considering the last decades (Section 5.3), but the local communities remain linked to the forestry, agricultural and pastoral economy and traditions, as shown by the countless festival and initiatives held regularly in the territory (Section 5.2). In fact, besides the natural habitats and ecosystems, what distinguishes both sides of the Julian Alps are the practices and techniques historically deployed to live within the mountainous area, in addition to local gastronomic uniqueness, mostly dairies, that are strongly connected to the bio-cultural landscapes. The actual socio-cultural trends of the Julian Alps communities are described in the following sections.

POPULATION

The proposed Julian Alps Transboundary Biosphere Reserve will be composed by **20 Municipalities** (11 Italian and 9 Slovenian, which respectively constitute the two National Biosphere Reserve areas). The Italian ones (Artegna, Chiusaforte, Dogna, Gemona del Friuli, Lusevera, Moggio Udinese, Montenars, Resia, Resiutta, Taipana, Venzona) are all included in Udine province, falling in the Friuli Venezia Giulia Region, that is the Italian bordering area with the Slovenian statistical regions of Goriška, Gorenjska and Obalno-kraška. On the other side, the Slovenian Biosphere Reserve territory, falling in the first two statistical regions, includes three administrative units of Tolmin, Radovljica and Jesenice and the 9 municipalities of Bled, Bohinj, Bovec, Gorje, Jesenice, Kobarid, Kranjska Gora, Radovljica, Tolmin, Žirovnica.

The total population living in the Transboundary Biosphere Reserve area is **109,060**, of which 20,573 (2021) are resident in the Italian Biosphere Reserve and 88,487 (2021) in the Slovenian one.¹⁴

Municipality	Population (in)	Density (in/ km ²)
Bled	8.239	114
Bohinj	5.771	17
Bovec	3.204	9
Gorje	2.800	24
Jesenice	21.653	285
Kobarid	4.061	21
Kranjska Gora	7.970	31
Radovljica	19.342	163
Tolmin	10.969	29
Žirovnica	4.478	105
Tot. (Average) for Slovenian BR	88.487	79.8
Artegna	2,830	257
Chiusaforte	621	6.13
Dogna	156	2.19

¹⁴ The data on population of the Transboundary Biosphere Reserve are update to 2021. Sources: SURS (<https://www.stat.si/StatWeb/en>); ISTAT (<https://demo.istat.it/>).

Municipality	Population (in)	Density (in/ km ²)
Gemona del Friuli	10,634	188
Lusevera	605	11
Moggio Udinese	1,630	11
Montenars	495	23
Resia	937	7.82
Resiutta	135	13
Taipana	554	8.63
Venzone	1,976	36
Tot. (Average) for Italian BR	20,573	51.25
Tot. (Average) for the whole TBR	109,060	64.85

In both sides of the Julian Alps, a progressive contraction of the number of inhabitants was registered, also resulting in an overall aging of the resident population. For example, in the case of the Slovenian statistical region of Goriška the aging index is the second highest at national level (158 persons over 65 vs 100 children under 15 years old), showing a typical situation of the alpine areas, which are nowadays subjected to high depopulation rates. Meanwhile on the Italian side, the variation in population registered in the Italian Biosphere Reserve Candidature Dossier for the period 2011-2017 was -4.6%.

In addition to an overall ageing in population and decrease in birth rates, the migration phenomena are further reducing the total resident population in the Julian Alps and surroundings areas. For example, the migration rates recorded in Goriška and Gorenjska in 2021 were positive in both regions. Furthermore, in these territories the average density of population is low (64.85 in/km² considering the whole Transboundary Biosphere Reserve area).

LINGUISTIC MINORITIES IN THE JULIAN ALPS¹⁵

Since the Julian Alps are a meeting area of three countries (Italy, Austria and Slovenia) it is possible to find, in these territories, the presence of several languages and dialects. On the Italian side, in addition to Italian, Friulian, German and Slovenian, other languages used by the local population in both literary and dialectal forms are spoken. In particular, Friulian (“Furlan”) is included in the UNESCO’s Atlas of the World's Languages in Danger¹⁶, and it is spoken by about 600,000 people

¹⁵ Text edited with the scientific advice of Han Steenwijk, Associate Professor of Slovenian Language and Literature at the University of Padova (DiSLL - Department of Linguistic and Literary Studies).

¹⁶ <https://unesdoc.unesco.org/ark:/48223/pf0000187026>

throughout the Friuli Venezia Giulia Region, excluding the province of Trieste and the non-mountainous border areas. Friulian is part of the Ladin languages within the framework of the Romance or Neo-Latin languages. Relevant language minorities are also well represented in the municipalities included in the proposed Transboundary Biosphere Reserve. In particular, the Italian Republic recognizes and protects the rights of Italian citizens belonging to the Slovenian linguistic minority present in the former provinces of Trieste, Gorizia and Udine. The measures for the protection of the Slovenian linguistic minority, provided by the Laws 482/1999, 38/2001 and the Regional Law 26/2007, apply in the territory where it is traditionally present. With regard to the area of the proposed Transboundary Biosphere Reserve, the Slovenian language minority is historically settled in the municipalities of Lusevera, Resia and Taipana.

The main dialects of the Slovene language present in this area are all derived from "Alpine Slavonic" or "Old Slovene": a linguistic variant that arose at the time of the first diversifications of the Slavic languages and from which all present-day Slovene dialects and consequently also literary Slovene are derived. In the area of our interest, they are divided into: "Rezijansko" (Resian dialect), which is spoken only in the municipality of Resia and includes four main variants and "Tersko" (dialect of the Torre Valleys), which is spoken in the municipalities of Lusevera, Taipana and some hamlets of Nimis, Attimis and Faedis, also subdivided into several local variants. According to the UNESCO Language Atlas (<https://en.wal.unesco.org/>) the Rezijansko is listed among the endangered languages.¹⁷

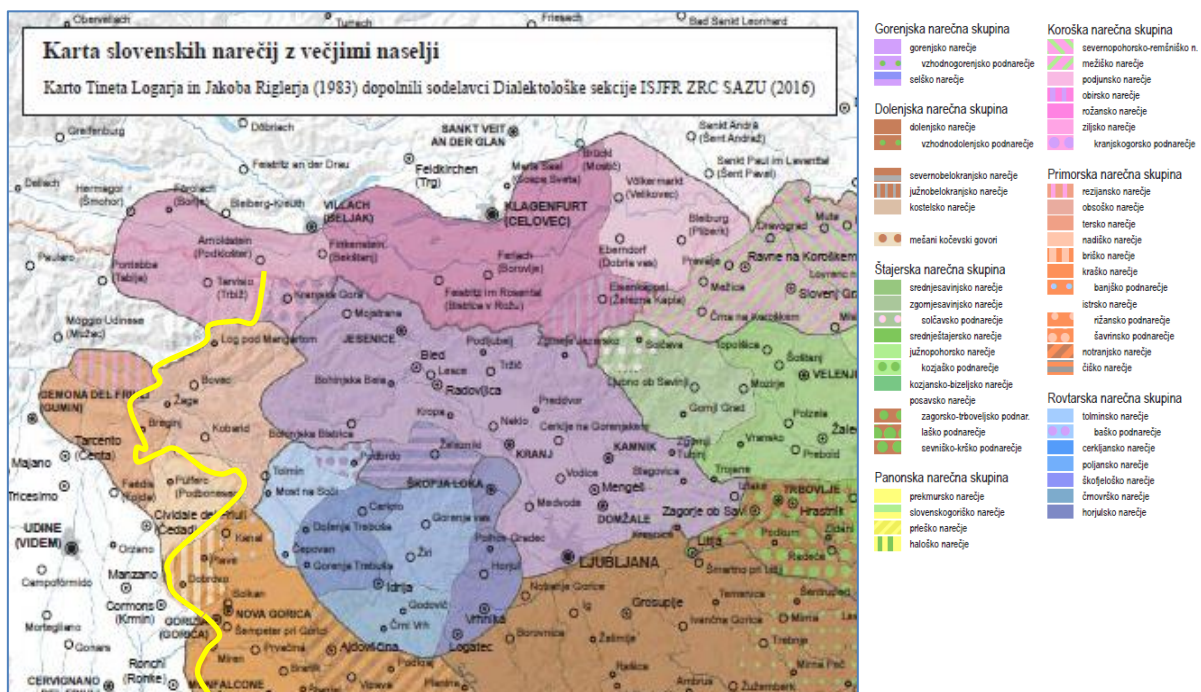


Figure 21 Map of the Slovenian dialects (the Italian-Slovenian border is highlighted in yellow). Mod. from https://fran.si/204/sla-slovenski-lingvisticni-atlas/datoteke/SLA_Karta-narecij.pdf

In Slovenia the Italian national minority, recognized as a "national community" in the Slovenian Constitution, is most concentrated in the nation's southern and coastal regions. In fact, in the municipalities of Piran, Koper, Izola, and Ankaran, Italian is a co-official language.

¹⁷ For more details about the Slovenian dialects, an interactive map is available on the webpage: <https://narecija.si/>

5.2 Describe the common social or cultural activities with regard to the proposed transboundary biosphere reserve and its goals.

[Programmes, events, round tables within the transboundary biosphere reserve.]

As briefly mentioned in Chapter 4, the National Biosphere Reserves are already committed in promoting several common activities linked to the Julian Alps socio-cultural heritage and its enhancement. In particular, it is fundamental to mention the initiatives carried out within the Transboundary Ecoregion context, which represent one of the most important cooperation frameworks in which the two sides of the Julian Alps operate. In fact, in the last years a joint event calendar has been implemented with the aim to involve cross-border communities in numerous fairs, markets and events. Considering the current year (2023) the agenda consists in various initiatives that foreseen the participation of both the Triglav National Park and the Julian Prealps Natural Park, such as the Opening of an Exhibition in Trenta and Resia, the annual Forum of the European Charter of Sustainable Development (ECST) (Section 5.3) and the attendance to the Concert Alpine Choirs in Trenta. Moreover, linked to the agro-sylvo-pastoral culture of the Julian Alps, within the bordering area there are numberless markets which encourages the exchange of Italian and Slovenian typical products, and that the Transboundary Biosphere Reserve's Work Plan intend to promote and enhance. Two examples of positive exchange are the Transboundary Uniqueness Marketplace occurring during the Festival of Agriculture in Resiutta (Italy), in which the two Parks jointly promote the typical products of the Transboundary Ecoregion and the Alpine Trenta Open Market, that invites and hosts Italian farmers and manufacturers.



Figure 22 Transboundary Uniqueness Marketplace in Resiutta, Festival of Agriculture

Harvest – Art, Agriculture And Community



Figure 23 Leaflet of Harvest 2021

Another relevant event regarding the promotion of the local agropastoral culture is the biennial festival called *Harvest – Art, Agriculture and Community*, organized in Dordolla by the cultural association of Val Apua La Cort Dai Gjats, in collaboration with the municipality of Moggio Udinese, the Julian Prealps Natural Park and several local and transboundary associations. The festival takes place in the month of September and last one week, during which artists from all Friuli Venezia Giulia Region and bordering countries (especially Austria and Slovenia) perform alongside producers, intertwining arts, traditional practices and gastronomic products in this slow tourism initiative. This

represents a great opportunity for territorial animation and cohesion, that makes use of art to “translate” the agricultural tradition of the alpine territory, and engages different communities in a common celebration. This year (2023) the sixth edition of the festival will be held from 18th to 24th of September.

The dairies adopting the “turnario” model



Figure 24 Historical picture of the Delle Acque Place

The Acque del Gemonese Ecomuseum is implementing a project focused on the enhancement of the “turnario” model, a traditional system occurring in the Alpine regions that consist in a local-scale dairies milk management¹⁸. The system usually involves a network of farmers spread in different villages that cooperate together. In 2019, in Gemona del Friuli, a collaboration agreement between the Latteria turnaria di Campolesi (Udine), the Caseificio turnario di Peio (Trento), the Latteria turnaria di Valmorel (Belluno), and the Community of Livestock Farmers of the Tolmin/Tolmino district (Slovenia) was signed, with the aim to share best practices, resources, and projects and to ensure a future for an ethical and sustainable milk processing model

that is at risk of extinction.

Smuggling trails recovery



Figure 25 Fontanone Barman, Ph author Marco di Lenardo

The ancient Julian Alps “smuggling” trails are another cultural heritage that the Transboundary Biosphere Reserve intends to recover and promote. These pathways, crossing the Julian Alps area, have been used in historical times for smuggling trades, connecting Italian and, in some cases, Slovenian areas. Nowadays, the Pro Loco Alta Val Torre and Wild Routes, in collaboration with other touristic operators and cultural associations are committed to recover the trails and promote them through guided tours, combining history and tourism.

¹⁸ Source : <https://www.latterieturnarie.it/il-modello-turnario/>

Slow Food Travel



The Valli del Natisone and Carso Las Kras LAGs' territories have been selected by Slow Food as one of the destinations of the *Slow Food Travel* initiative that aims to offer an alternative model for tourism, made up of meetings and exchanges with local farmers, cheesemakers, herders, butchers, bakers, winegrowers and chefs. This project “Sentieri e Cibi locali” (Trails and Local Food) has been developed on the Alpe Adria Trail to connect gastronomic and cultural tourism to the cycling experience on the Slovenian-Italian border, and promote local uniqueness.

Figure 26 Slow Food Logo

In the proposed Transboundary Biosphere Reserve sports and outdoor activities are very common, representing a precious occasion of social cohesion. Outdoor activities (hiking and cycling) and other extreme sports, such as skiing, snowboarding, skydiving and other winter sports are typical hobbies carried out by the inhabitants and the visitors of the Julian Alps. Therefore, transboundary hiking and cycling trails are constantly maintained and implemented by the concerned protected areas and other stakeholders to better connect the two sides of the Julian Alps, and to further develop cross-border experiences (such as the Juliana and the AlpeAdria Trails, also involving the neighboring Austria). For several years, the Triglav National Park and the Julian Prealps Natural Park have participated as a team to the *International Danilo Re Memorial*, an initiative that every year involves international protected areas in different sports competitions.



Figure 27 Danilo Re Memorial, winter 2023

Regarding the shared cultural and historical aspects of the Julian Alps communities, the proposed Transboundary Biosphere Reserve intend to support the ongoing local initiatives that aim to increase a culture of peace in the transboundary area. For example, in the framework of Peace Park (Section 4.5) a series of 11 events it is currently taking place, in collaboration with local NGOs.

Nature Beats



Figure 28 Nature Beats leaflet 2022

It is important also to mention the efforts undertaken by the young people living in the Julian Alps municipalities in animating the territory, both by actively participating to the numerous festival and events and developing specific initiatives. For example, since 2018, the Youth Council of the Italian National Biosphere Reserve have been implementing countless initiatives, one of which is *Nature Beats*, a series of experiences, workshops and events involving different stakeholders from various fields to promote Julian Alps natural and cultural uniqueness. This initiative is openly transnational and one of the main objectives of the Transboundary Biosphere Reserve is to further encourage and support these kinds of events. Nature Beats is designed and carried on by the Youth Council's members with the financial and operational support of the Julian Prealps Natural Park.

5.3 Briefly describe the prevailing trends in each main sector of the economic base of the transboundary biosphere reserve (e.g.; agriculture and forest activities, renewable resources, non-renewable resources, manufacturing and construction, tourism and other service industries) if specific to the transboundary aspects.

a) Agriculture and Forestry

Agriculture, dairy farming and crop production, especially cheese-making, haymaking and honey making are still among the main economic activities within the Julian Alps communities, even if the total amount of farms and livestock has decreased over the last 50 years. Also, the abandonment of agricultural land has slightly increased in recent years on both sides of the Julian Alps. In the case of Slovenia, the decrease in the number of farms resulted in an expansion in the remaining ones, recently taking under control by national regulations and more sustainable socio-economic policies.

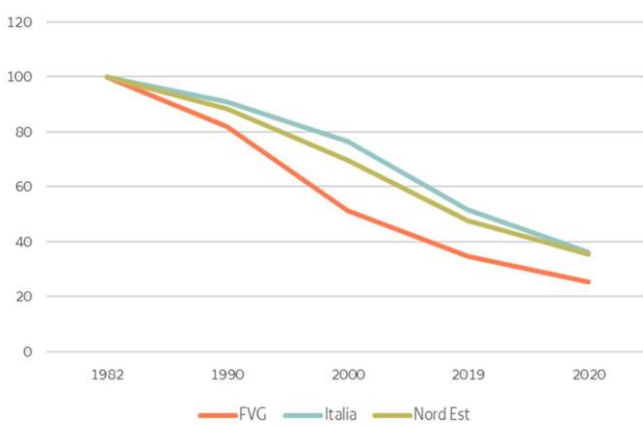


Figure 29 Percentage of agricultural holdings in the Friuli Venezia Giulia Region referring to the year 1982 (100%) -2020. Source : Censimento Generale dell'Agricoltura in FVG (2022)

In the case of the Italian context, only in the period between 1990 and 2010 there was a massive abandonment of the traditional practices and agricultural activities that led to a decrease in the percentage of Utilized Agricultural Area (UAA) by 80%. Considering the municipalities' total area, in 1982 the **number of farms** were more than 2,164¹⁹, 523 in 2010 (ISTAT 6th agricultural census) and only **153** in 2018 (Registry of the Italian Chamber of Commerce). Currently, the first available data from the 7th agricultural census (ISTAT 2021)²⁰ show a further contraction of the total number of agricultural holdings for the entire Friuli Venezia Giulia Region, as reported in the graph.

The main uses of land are arable land in the municipality of Artegna and Gemona del Friuli, while for the remaining municipalities of the Italian Biosphere Reserve, the main destination is represented by permanent meadows. The largest **cattles** (no. heads/farm, mostly dairies) are in the municipalities of Chiusaforte, Artegna, Gemona del Friuli and Montenars. The main pig farms are located in Artegna, Lusevera and Gemona del Friuli, while the sheep farms are in Taipana, as well as Venzone and Moggio. Poultry farms, intended mainly for self-consumption, are not very substantial and are present in the municipalities of Chiusaforte, Moggio Udinese, Lusevera and Dogna.

Within the Slovenian Julian Alps Biosphere Reserve, there are around **160 agricultural companies** and the most common livestock are cattle and sheep, with some pig and poultry farms as well. Before the beginning of industrialization, land use and cultivation for agricultural purposes were at the highest possible level. Since the 1950s the entire Triglav National Park area has experienced a rapid urbanization and industrialization resulting in a progressive abandonment of traditional farming activities together with an increase in extensive agriculture. Nowadays, this trend was taken under control by the raised awareness among consumers on quality and sustainable productions, but also due to the agricultural policy measures adopted. The Julian Alps, as other mountainous regions, are actually unfavourable for agriculture activity itself, but it is widely recognized that a socially oriented

¹⁹ The data for the Municipalities of Lusevera and Taipana are missing for the year 1982.

²⁰ <https://7censimentoagricoltura.it/>.

agricultural policy could serve as a stabilizer of employment opportunities and settlement. In fact, in the world of global markets, agriculture in the Triglav National Park (and the whole Julian Alps area in general), due to the numerous preservation limitations, is non-competitive without added value (e.g., certified organic food production) that the UNESCO recognition would be able to acknowledge. The importance of agriculture has not decreased, but its role, especially in mountainous and hilly areas, is changing. The future lies primarily in the **organic production** and processing of **higher quality food**. Traditional knowledge and skills are crucial, and could be marketed more through tourism and educational activities. In fact, among the added values of agriculture, the main socio-economic potentials that it is important to develop in the TBR area there are the “services” provided by rural activities in maintaining the bio-cultural landscapes and diversity, its role in supporting new forms of experiential and slow tourism, in providing an experimental ground where to develop outdoor education actions and skills, knowledge training, etc. It is also important to maintain agriculture at current level, in order to maintain the agricultural cultural landscape through grazing and mowing of hay meadows.



Figure 30 Julian Alps forests

Forestry activities are especially implemented in the Slovenian Julian Alps and are managed in a sustainable way, considering the nature conservation and forestry legislation. The Slovenian Forest Service as a public institution is the competent authority for the forest management, irrespective of the ownership, even if the owners are the actual loggers and wood traders. Two basic strategic documents concerning forest management are The Act of Forests and The Forest Development Programme. The **Norway Spruce** (*Picea abies*) and **Beech** (*Fagus sylvatica*) are commercially the most important tree species in the Slovenian Julian Alps Biosphere Reserve. Considering the available data for the Triglav National Park area (related to 2015), there have not been significant changes in forest coverage, consisting in the **57%** of the park territory (47.722 ha), but there are

significant differences according to the region. share of 66% in the first protection area and 64% in the third protection area of the park. Slovenia owns less than a quarter of the forests, with the smallest share in the first protection area (20%). Local communities own a good fifth of the forests in the Triglav National Park area. Half of the forests belong to the category of forests with a special purpose, where measures are allowed and active management is applied, two-fifths are protected forests, under nature conservation regulations. Within the Italian 11 municipalities, forestry played a key role in historical times and was often associated with agro-sylvo-pastoral systems and shared management. Forests in the Italian side of the Julian Alps are currently expanding due to the abandonment of agricultural lands and activities.

Organic farms:

According to the most recent available data for the Slovenian statistical regions of Gorenjska and Goriška (2022)²¹, and for the Italian Friuli Venezia Giulia Region (2019)²² the organic farms in these areas are quite developed. Respectively, the total UUA under organic control is 2,572 ha (Gorenjska), 8,011 ha (Goriška) and 13,000 ha (Friuli Venezia Giulia).

Region	The scope of UAAs under organic control (ha)	Growth 2009 /2020 (%)	ABs ²³ under organic control with regard to all ABs (%)	Number of ABs under organic control	Growth 2009 /2020 (%)	ABs under organic control with regard to all ABs (%)
Gorenjska	2.572	38	8,2	259	37	5,9
Goriška	8.011	126	25,9	361	53	6,8
Friuli Venezia Giulia	2.800	n.a.	n.a.	300	n.a.	n.a.

Alpine dairy farming and typical products:

The alpine dairy farming is a typical practice in the Julian Alps area. In the territory of the proposed Transboundary Biosphere Reserve territory, it is possible to find plenty of scattered alpine huts where shepherds graze their cows during the summer season and where the different cheese are made, using traditional practices. The total number of active alpine huts in the Transboundary Biosphere Reserves are over 200. Among the typical local products there are some unique ones that are particularly promoted at level of Transboundary Ecoregion of the Julian Alps, and are often recognized by quality marks provided by the Julian prealps Natural Park and the Triglav National Park and other local initiatives. Nowadays these products (mainly cheese and local variety of vegetables) that are still well known and appreciated. Below, a list of the most famous ones:

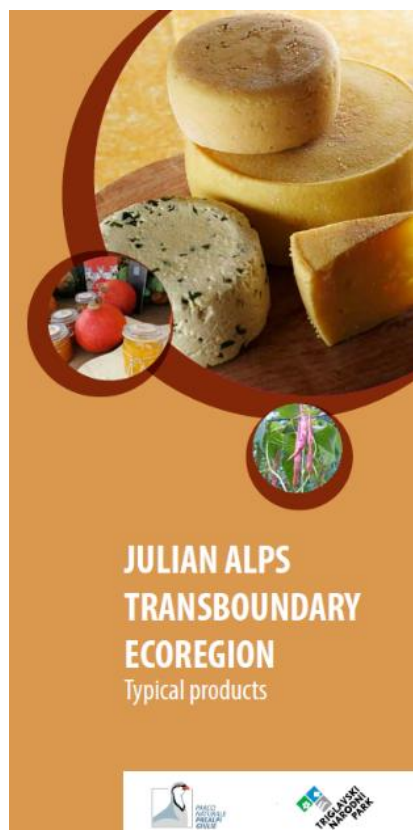
Tolminc Cheese: (Southwestern area of the Triglav National Park) it is a hard, full-fat cheese. The Society of Cheese Producers Tolminc is the bearer of the certification mark of this product.

²¹ “Action plan for the Development of Organic Farming until 2027” (2022).

²² Source : <https://www.ilfriuli.it/edicola/agricoltura-biologica-in-fvg-linizio-di-una-nuova-era/>.

²³ AB = Agricultural Business.

Bovec Cheese: (Bovec, western area of the Triglav National Park) hard, full-fat cheese, produced from raw sheep milk, often a 20% goat or cow milk is added.



Mohant cheese: (Bohinj area, in the center of the Triglav National Park). Its distinctive, slightly tangy and bitter taste and a strong smell make it different from other cheeses produced in Slovenia.

Malga Montasio Cheese: It is produced in the Malga (Mountain farm) Montasio and it is characterized by a typical straw yellow colour and a mild and tasty flavour.

Resia garlic: it is cultivated only in Resia Valley and preserved by local people from generation to generation. It has been Slow Food Presidium since 2004.

Moggio Udinese Brovadâr: it is a traditionally gastronomic preparation, the main ingredient is a variety of small, late-sown field turnip. Used for typical soups or as side dish.

Venzone pumpkin: this colourful vegetable dominates the scene and is widely used in dishes served every year in Venzone during the traditional “Festa della Zucca” (Pumpkin Festival).

Lusevera Fiorina Bean: It takes its name from a lady who selected and preserved the variety. It is also used as ingredient for the “Stak” (a typical puree made from beans, potatoes and lard).

Figure 31 Julian Alps Transboundary Ecoregion leaflet

b) Tourism

Tourism is one of the most important economic sectors for the Julian Alps communities, even if there are some differences between the two national contexts. The majority of the information related to tourism in the transboundary area is collected in the framework of the Transboundary Ecoregion of the Julian Alps, thanks to the development and achievement of the *European Charter for Sustainable Development (ECST)* (Section 5.5). Therefore, the data concerns specifically the Slovenian Julian Alps Biosphere Reserve area (including the Triglav National Park) and the Julian Prealps Natural Park.

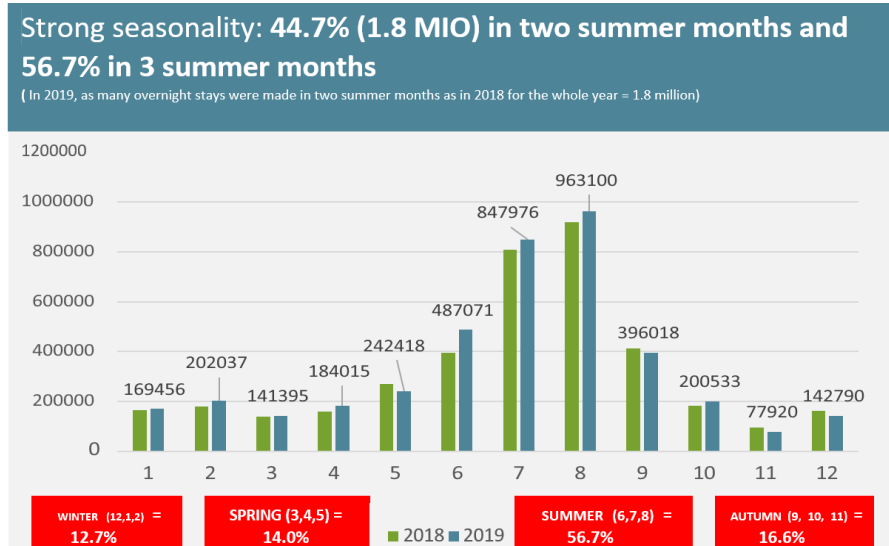
In proposed Transboundary Biosphere Reserve area, tourism has a long tradition, primarily linked to **pilgrimage** (for example in Bled, Brezje, Kranjska Gora), **mountaineering** (the first man from Bohinj successfully conquered Mt. Triglav at the end of the 18th century) and **winter sports**. Also, botanical and geological researches brought many naturalists in these areas for more than two centuries. In Primorska (Trenta and Soča) and Gorenjska (Bohinj, Mojstrana) at the end of 19th century there were mountain guides to lead people up to the mountains, officially starting tourism in the actual Triglav National Park. Tourism in Bohinj started with mountaineers, but significantly increased when the railway was implemented in the area, opening the access from Vienna (Austria) or Trieste (Italy). The construction of the railways at the end of the 19th century also gave a major boost to tourism in the Friulian mountains. The first initiatives were promoted in Tarvisio and spread after the annexation to Italy in various towns of the Val Canale. In the early years of the 20th century,

tourists' flows remained limited due to the presence of few accommodation facilities and the restricted economic availability of Friulian people. However, trips and Sunday excursions were frequent and in the 1950s - 1960s arose the ski resort of Sella Nevea. In September 1976, the territory of the Italian Julian Alps Biosphere Reserve was hit by violent **earthquakes**. Reconstruction of the destroyed areas was the occasion to build new structures, such as museums and permanent exhibitions, to enhancing and promoting the local heritage, rich in terms of history, art, culture and architecture. The establishment of the Julian Prealps Natural Park in 1996 gave another boost to the touristic sector and, since then, the territory has been gaining increasing interest in **ecotourism** and in experiencing the local traditions.

Thanks to the coexistence of different natural parks close to the administrative Slovenian-Italian-Austrian borders, **cross-border tourism** is well developed, consisting in flows of hikers interested in sports opportunities and experiences to discover wild nature. Nowadays, tourists can easily find activities: from cultural and natural heritage, museums, culinary experiences from the simple ones to high gastronomy, festivals, all sorts of activities as: mountaineering, paragliding, all kinds of watersports, cycling, etc. **School tourism** is also well developed in the proposed Transboundary Biosphere Reserve area, especially in the Triglav National Park and the Julian Prealps Natural Park, and among the numerous museums, visitor centers. Tourists "visiting relatives/returning to the homeland" are responsible for the main tourist movements in the concerned areas.

Following the available data from the last ECST re-evaluation (2016), arrivals, overnight stays and numbers of beds have seen a substantial increase in the area. In Slovenia **overnight stays per year** are **3.8 million** and have more than doubled in the last few years. In the Julian Prealps Natural Park, the activities linked to ecotourism and long-distance trails have also slowly increased, reaching **57,000** overnight stays per year. Visitors tend to stay in the considered area, the Transboundary Ecoregion of Julian Alps, **2.5 days** on average, but this varies widely.

Tourism is primarily focused on **outdoor activities** and **sports** (e.g., rafting, canyoning, hiking, climbing, mountaineering or skiing), counting numerous specialized tour operators. Another well-established form of tourism in the Julian Alps area is the experiential tourism linked to **nature exploration**, but also **cultural and gastronomic experiences**, often related to local and traditional festival, products' markets and other initiatives (Section 5.2). A significant data on touristic flows is that a great percentage of visitors are **young** (under 40 years) and this is strictly connected to the shift toward different forms of tourism (in particular ecotourism and outdoor activities). Other visitors' profiles reported highlight the increasing presence of **families** with young or teenage children that willing to enjoy nature-based touristic activities.



Another relevant aspect of the tourism sector in the Julian Alps is its **seasonality**. The types of touristic activities, in addition to the characteristic features and conditions of the alpine environment, lead to a strong seasonality in the touristic flows, as shown by the graph below, concerning the Slovenian Biosphere Reserve data for 2019.

Annual visitors' numbers are usually gathered through the monitoring of the available information from the main visitor centres, museums and other points of interests spread in the territory, as well as the ones coming from municipalities and accommodation infrastructures. Moreover, the Slovenian Julian Alps Biosphere Reserve utilizes a **common platform** implemented with territorial touristic stakeholders and local authorities in order to monitor and implement sustainable tourism strategies in the area. The total number of **beds** in the Julian Alps Ecoregion are **43,353** (2019), considering the Slovenian Julian Alps Biosphere Reserve, while in the Italian Julian Prealps Natural Park municipalities (Resia, Chiusaforte, Moggio Udinese, Venzona and Resiutta) these were around 1,111 in 2014 (considering ECST data) and **734** in 2016, showing a slight decrease in the recorded period.

c) Sports

The proposed Transboundary Biosphere Reserve area is also well known for sports and outdoor activities. Starting from the already mentioned mountaineering traditions, that start increasing thanks to the construction of the Vršič pass road during the Great War, that connected Kranjska Gora with Trenta - Soča valley. Around the 1930s many ski jumping and other **skiing competitions** started (such as the one in Planica). In particular, Kranjska Gora represents the most famous destination for skiing activities, since it hosts a **world ski cup competition** and a ski resort for families. **Water sports** are typical in the Soča valley (like rafting, canyoning, hydrospeed, etc.) as well as other outdoor activities like zipling, paragliding etc. Also, in Bovec, Kranjska Gora and partly in Bled and Bohinj there are ski slopes and the Kanin and Vogel mountains (in Bovec and Bohinj) are among the most attractive destinations in whole of Slovenia, where visitors can enjoy high mountains and alpine skiing.



Figure 32 Danilo Re Memorial skii competition

On the Italian side, the first ski lifts were installed in the 1970s. Hiking and other outdoor activities, such as canoeing and rafting activities in the municipality of Resiutta and **mountain bike excursions** in Val Resia or road cycling along the bicycle route Alpe Adria, are widely practiced. In the ski resort of Sella Nevea, in the municipality of Chiusaforte, it is possible to practice alpine skiing and ski mountaineering, snowboarding, trekking, hiking and caving. In Sella Nevea, hikers from Friuli, Austria and Slovenia are frequent and now this area houses several alpine skiing competitions for speed disciplines including the **European Cup**. Its accommodation capacity, however, is significantly reduced compared to the years of greater development.

d) Infrastructures and Mobility

Within the proposed Transboundary Biosphere Reserve area, the road system includes two main ways connecting the territory. On the West side of the proposed TBR, there are a main highway and a railroad that connects Udine to Tarvisio, and extends up to Villach (Austria). On the East side, another principal highway connects Villach to Ljubljana. It is possible to cross the Italian-Slovenian border using the road network in different access points, the main one is the stretch of road going from Tarvisio to Kranjska Gora in the northern part and the one between Udine and Kobarid. Considering the Transboundary Biosphere Reserve area there are two main railroads: one on the Italian side connecting Villach and Udine crossing the Italian National Biosphere Reserve and the one in the Slovenian side connecting Jesenice to Nova Gorica. There is no direct passage that make it possible to cross the Italian Slovenian border by train in the considered area. In Jesenice there is also the major airport of the proposed TBR. In addition to these major routes, the territory is crossed by the regional-scale road systems and a well-developed cycling trail network, which are particularly enhanced by sustainable mobility and tourism strategies. In the Friuli Venezia Giulia Region, for example, some trails of regional interest have been implemented through the Cycling Mobility Regional Plan (PREMOCI 2018), including important stretches falling in the proposed TBR, such as the Alpe Adria.

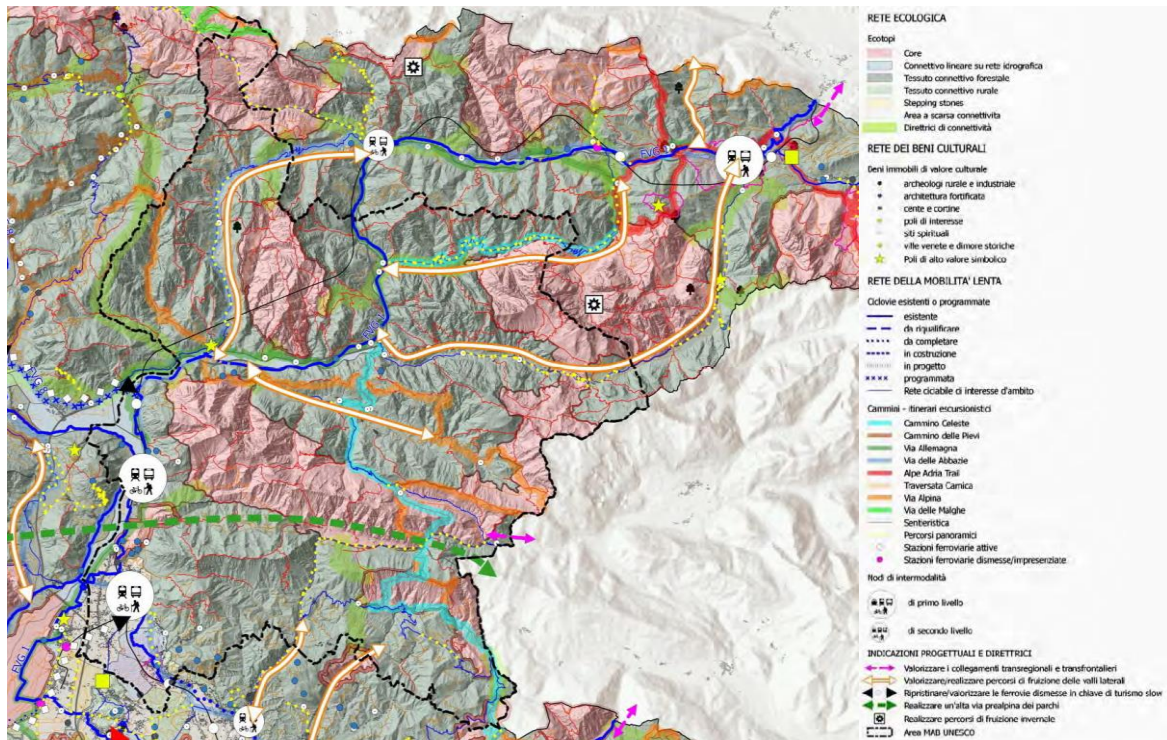


Figure 33 Mobility map in the Italian Julian Alps Biosphere Reserve area

In the TBR, mobility strategies are being developed that aim to improve the efficiency of the public transport especially in period when the visitors flows are more concentrated. In particular, a sustainable mobility plan has been particularly implemented on the Slovenian side to allow visitors and inhabitants to enjoy the Julian Alps main sites of interest by means of a coordinated and potentiated public transport network. This strategy was implemented thanks to the collaboration of many touristic stakeholders to pursue ECST goals concerning sustainable tourism in protected areas (Section 5.5). Moreover, on the Italian side, the 5 municipalities belonging to the Mountain Community are currently implementing a flexible transportation service, which before 2025 will enable inhabitants to activate on-demand buses when needed. This project will facilitate mobility among the younger and older generation, and make the territories involved more accessible.

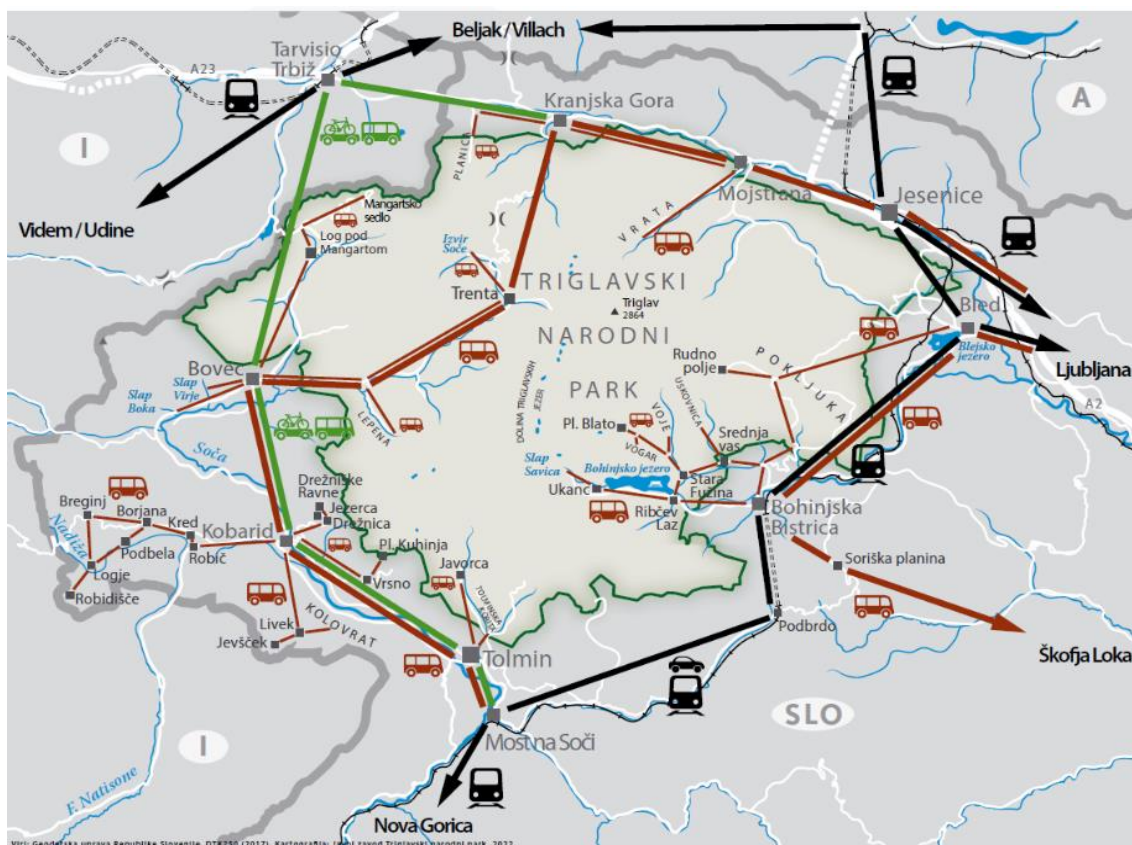


Figure 34 Sustainable mobility plan of the Slovenian Julian Alps Biosphere Reserve

e) Minor economic sectors

In this section, there will be a brief description of the minor economic sectors' trends occurring in the concerned area, that are not considered for the Transboundary Biosphere Reserve cooperation objectives, due to their limited influence on the overall economy.

Renewable – non-renewable energy:

In the proposed TBR area, energy production is not significant, but it is possible to observe positive trends in the production of electric energy from renewable sources (especially, hydropower and photovoltaic). The European policy on Renewable Energy, based on Directive 2018/2001/EU and the REPowerEU Plan are the common references for specific national and regional-scale Slovenian and Italian energy transition strategies. Considering the Alpine regions, in the period 2012-2015 the Triglav National Park has been involved in the cooperation project *recharge.green* (co-funded by the European Regional Development Fund in the **Alpine Space Programme**), including different Slovenian, Italian, Austrian and other countries' institutes, local authorities and organizations. The project aims to build a positive dialogue about the great potential for the use of renewable energy in the Alps, providing a valuable contribution to mitigating climate change at broader scale and at the same time preserve natural environment from increasing human pressures. The project *recharge.green* brought together 16 partners to develop strategies and tools for decision-making on such issues. The analysis and comparison of the costs and benefits of renewable energy, ecosystem services, and potential trade-offs were a key component in this process (<https://www.alpinetowns.org/recharge-green/>).

Mining activity:

Historically, mining and iron industry were among the major economic activities in the Julian Alps area. Important iron, bauxite and other mineral mining centres were concentrated on the Slovenian side, in the Bohinj, Jesenice, Radovna, Mojstrana and Trenta. One of the largest that was still open in 20th Century was in Rabelj (Italian side). In the Italian Julian Prealps, these activities were less developed and nowadays on both sides some ancient caves persist, even if not active. The mining products were important for trade between the Alps and the Mediterranean. Today, the remains are visible in the cultural landscape (ore pits), as preserved millennial routes used for the trade in iron products, which are now part of the intangible heritage.

Enterprises and Industry:

In the proposed area there are few and small-scale industrial centres occurring in the valleys and the Transition Areas. Nowadays, these are linked to food processing and manufacture industries, however the tertiary sector is the one that in recent years is mostly developing (touristic, hotel industry and other services), as well as heavy industry as successor to traditional ones.

5.4 Describe the community economic development initiatives within the proposed transboundary biosphere reserve. What shared programmes exist to promote comprehensive strategies for economic innovation, change, and adaptation, and the extent to which they are being implemented within the transboundary biosphere reserve?

At European level, different programmes and initiatives exist to promote comprehensive and cooperative strategies for economic innovation, change, and adaptation (of which the most important are the INTERREG and the EUSALP). As mentioned in Chapter 4, the two Julian Alps National Biosphere Reserves are already involved in European initiatives concerning the ecological connectivity and enhancement of the common natural heritage. Specifically for the socio-economic field, the cooperation programme, strategies and specific projects are described below:

EUSALP – EU STRATEGY FOR THE ALPINE REGION



It consists in a European “Macroregional strategy” to address common challenges faced by defined areas of the Alpine range. The aims of this strategy are promoting cooperation within this territorial units with the aim to pursue achievements in the fields of economic, social and territorial cohesion. Since the alpine area presents numerous demographic, social and economic trends, as well as cultural and linguistic diversity, an Alpine macro-regional strategy would provide an opportunity to improve cross-border cooperation in the Alpine States and to identify common goals, while respecting regional specificities.

The major challenges individuated for the Alpine region are: economic competition and innovation; demographic trends (combined effects of ageing and new migration models); climate change and its foreseeable effects on the environment, on biodiversity and on the living conditions of its inhabitants; sustainable, secure and affordable energy management; its specific geographical position in Europe, as a transitional region, but also as an area with unique natural features and resources, essential for all Europe. Moreover, in the framework of the Alpine Convention (INETRREG Alpine Space, Chapter 4), Italy and Slovenia have been involved in the **EUSALP Action Group 6 (AG6 – To preserve and valorise natural resources, including water and the cultural ones)**²⁴ which in the period 2020-2022 was focused on the theme of cooperation for landscapes in times of climate crisis. The topics addressed were the land development and soil conservation, as well as the management of natural resources (food, water and timber) (Website: <https://www.alpine-region.eu/>).

INTERREG ITALIA-SLOVENIA

As described in Chapter 4, it is a European cooperation programme between Italy and Slovenia which encourages transboundary cooperation in different fields (environment, social, research and education, etc.), providing financial support to the territories involved. In addition to the initiatives developed in the field of ecological connectivity and natural/cultural conservation (such as Nat2Care and PeacePark), within the proposed Transboundary Biosphere this programme represents the main

²⁴ For more details, visit: <https://www.alpconv.org/it/home/progetti/eusalp-gruppo-di-azione-6/>.

founding opportunity for cooperation projects between Italy and Slovenia also in social and economic sectors (Website: <https://www.ita-slo.eu/>).

As described in the Work Plan, among the cooperation actions planned for the Transboundary Biosphere Reserve there is a **new Interreg project**, that has been submitted in summer 2023, and that will concern the themes of sustainable development, peace, sustainable tourism and engagement of young generations. This initiative will therefore involve all the interested stakeholders in the definition of objectives and actions.

ALPINE NETWORKS

The Alpine territories, are particularly engaged in international networks and conventions that aims to facilitate transnational dialogue and cooperation, following the shared goals and actions defined by the **Alpine Convention** (Chapter 4). Important organizations that support the implementation of the Alpine Convention by facilitating transnational cooperation are listed below:

- International Commission for the Protection of the Alps (CIPRA)²⁵, which is an autonomous non-governmental organization that since 1952 has connected institutions, organizations and associations of these mountain range in order to support positive exchange and sustainability.
- The Alpine Network of Protected Areas (ALPARC)²⁶, that includes more than 800 protected territories in the European context, operating in various fields (ecological connectivity, regional development, quality of life amelioration, sustainable education and younger generations).
- The Club Arc Alpin (CAA)²⁷, that reunites the alpine clubs of Germany, France, Italy, Liechtenstein, Austria, Switzerland, and Slovenia.

ERA (ECOREGIOALPEADRIA) PROJECT



The Alpe Adria is a bioregion in Central Europe, including Slovenian, Austrian and Italian regions. The ERA project, since 2003 is involving 3 Parks of the Eastern Alpine range, the Triglav National Park (Slovenia), the Julian Prealps National Park (Italy) and the Nockberge National Park (Austria) and is focused on reinforcing the cooperation between regions that deal with similar socio-economic challenges. In particular, it encourages the development of mountain areas through sustainable approaches, incentivizing exchange of good practices. The project concerns three main fields: environmental education, promotion of typical products and touristic cooperation. Since 2003, Environmental education activities have been carried out through trilateral exchanges between school groups for the purpose of improving knowledge of the environment and the role of protected areas among young people.

²⁵ For more details, visit: <https://www.cipra.org/it/>

²⁶ For more details, visit: <https://alparc.org/>

²⁷ For more details, visit: <https://www.club-arc-alpin.eu/>

5.5 Local business or other economic development initiatives within the proposed transboundary biosphere reserve. Are there any shared specific “green” alternatives being undertaken to address sustainability issues? Relationships (if any) among these different activities.

Within the two National Biosphere Reserve areas, several territorial entities, associations and organizations operate to carry out community economic development initiatives for the Julian Alps. Starting from the Italian and Slovenian LAGs (Local Action Groups), such as the Gorenjska košarica and the Soča Valley in Slovenia or in the Open Leader in Italy²⁸. These are primarily focused on rural development and are therefore funded by the European Agricultural Fund for Rural Development (EAFRD). They are composed by representatives of the local public and private socio-economic interests, and they define local development strategies of their respective territory, through projects and small-scale initiatives. In addition to the LAGs, there are also other territorial entities involved in the proposed Transboundary Biosphere Reserve and that participate in the definition of local sustainable development strategies (such as the Mountain Community of Canal del Ferro and Val Canale²⁹ and the Mountain Community del Gemonese.³⁰

As anticipated in Section 5.3 tourism intend to be a leading sector of Julian Alps economy. In the proposed Transboundary area, the most relevant sustainable development strategy implemented is therefore linked to this field. Local touristic strategies and action plans, as the ones designed for the Slovenian Biosphere Reserve community (2021) and the “Benecia” region in Italy are adopted following shared values and vision, in order to promote the Julian Alps as sustainable destination. On the Italian side, where the tourism aims to grow in the next future, these strategies are particularly important to ensure environmental sustainability. The Benecia touristic strategy (2023-2028), promoted by Slovenian Cultural Institute (ISK) in collaboration with the Friuli Venezia Giulia Region and involving the three Valleys of del Torre, Natisone and Resia, represents a positive example of responsible economic development plan in a territory of high natural and cultural value.

The commitment of the Julian Alps community to greener and responsible forms of tourism lead to the achievement of the European Charter for Sustainable Tourism (ECST) recognition at European level. In 2014, the Alpine Convention also recognized the Transboundary Ecoregion of Julian Alps as Transboundary Pilot Region of Ecological Connectivity, thus highlighting the good example provided in the last few years.

EUROPEAN CHARTER FOR SUSTAINABLE TOURISM (ECST)



Since 2009, the Julian Prealps Natural Park, the Triglav National Park and the Slovenian Julian Alps Biosphere Reserve area have been designed by the EUROPARC Federation as cross-border protected area under the "Transboundary Parks" initiative that

²⁸ LAG Gorenjska košarica (Slovenia) - <https://www.las-gorenjskakosarica.si/>; LAG Soca Valley (Slovenia) - <https://seic.ee/regioon/lag-soca-valley/>; LAG Open Leader (Italy) - <http://www.openleader.it/>.

²⁹ Comprehending the municipalities of Chiusaforte, Dogna, Moggio Udinese, Resia, Resiutta of the Italian Biosphere Reserve (together with Malborgetto Valburna, Pontebba and Tarvisio) - <http://cdferro-vcanale.comunitafvg.it/aree-tematiche/progetti/strategia-aree-interne>.

³⁰ Comprehending the municipalities of Artegna, Gemona del Friuli, Montenars, Venzona of the Italian Biosphere Reserve (in addition to Bordano, Trasahis) - <https://www.gemonese.comunitafvg.it/it>.

counts 13 sites in total³¹. In 2016 the Ecoregion has been recognized as a virtuous example of collaboration between the two Parks and a sustainable tourism destination, leading the Julian Alps to be the first transboundary protected area in Europe that achieved the European Charter of Sustainable Tourism (ECST). This is the most important European strategic tool to address sustainable and inclusive approaches within protected areas, encouraging sustainable and responsible forms of tourism.

The underlying aims of the ECST are:

- to increase awareness of, and support for, Europe's protected areas as a fundamental part of our heritage, which should be preserved for and enjoyed by current and future generations;
- to improve the sustainable development and management of tourism in protected areas, which takes account of the needs of the environment, local residents, local businesses and visitors.

It requires the active engagement and participation of stakeholders in the definition of objectives and actions in order to achieve the general aims cited above. Therefore, it encourages the realization of networks and partnerships among local and regional authorities, stakeholders and other territorial organizations, also influencing other sectors. Tourism in the Julian Alps cannot be separated from its territorial uniqueness and it is strongly connected to the communities' relationships with the natural and cultural landscapes. Through the ECST, it was possible to support forms of tourism linked to the local culture, history and typical gastronomic products, promoting festival, exhibitions and events. Since this recognition is provided at transboundary scale, this allows to better connect and coordinate the initiatives carried out by local stakeholders.

The shared commitment to pursue sustainable tourism in the Julian Alps also means that the proposed area is already focused on raising awareness both in people living in these territories, and the visitors about the significant cultural and biological heritage to be preserved, the impact of these activities on the alpine environment and the innovative ways to reduce it. The ECST is a comprehensive strategy that aims to drive Julian Alps transboundary community towards an ecological transition in many fields. Besides pursuing sustainability and energy efficiency in touristic facilities, accommodation and infrastructures, it also encourages sustainable mobility to visit the territory.

³¹ For more detail on the Transboundary Parks : <https://www.europarc.org/nature/transboundary-cooperation/discover-our-transboundary-areas/>

5.6 Describe the main stakes for future cooperation in the transboundary biosphere reserve? What new strategies or approaches will be considered?

The main challenge for the proposed Julian Alps Transboundary Biosphere Reserve is being able to lead its communities to become an international example of sustainability, according to the Goal 11 of the Agenda 2030 “Sustainable cities and communities”. As unite “quality district” for sustainable tourism, this alpine territory intends to strengthen its current and numerous efforts in reaching its sustainability goals by working at a broader scale and including cooperation among its priority. Therefore, the Work Plan provides 7 shared objectives and 17 cooperation actions related to the function “Utilize Biosphere Reserves as Models of Land Management and of Approaches for Sustainable Development” that the two National Biosphere Reserves will pursue together through the Transboundary Coordinating Committee. Regarding the two main economic sectors under consideration by the Julian Alps Transboundary Biosphere Reserve, the main stakes and cooperation approaches are summarized below.

Agriculture and Forestry:

Particular attention will be paid to raising the environmental awareness among the local communities to promote responsible practices and productions. A crucial topic that has been highlighted during the online meeting with the agriculture and forestry stakeholders is the *coexistence between fauna and flora and the human activities*. In particular, special attention should be given to the coordinated management of large mammals, especially carnivores (bears and wolves) that are protected by national and European legislations, but are responsible of several agricultural damages and livestock losses. About this issue, the two Parks have already committed to find transboundary solutions and coordinated management strategies to prevent those risks, as attested by the project concluded in 2022 focused on a pilot cross-border area (DinAlpConnect) (Chapter 6), that gave the opportunity to discuss with stakeholders and to define a common management plan for large mammals (in this case, mainly chamois and ibex). This kind of cooperation actions will be further developed to encompass the entire Julian Alps Transboundary area, including other significant species, with the aim to directly involve the concerned stakeholders (mostly farmers and breeders) in a positive debate.

On the other hand, it is also important to address the opposite situation, dealing with the positive and negative impacts of forestry and agricultural practices on faunistic and floristic species. It is for example the case of the typical *meadows*, traditionally used for pastoral activities and dairy production, that are nowadays subject to progressive reforestation and a simplification of their vegetation composition, due to limited human management. Specific actions to preserve this habitat and avoid its disappearance are necessary both for species conservation goals and active adaptation to progressive climate and environmental changes. The retrieval of traditional grazing activities, will be pursued to preserve those habitats and all the linked cultural practices, and, to revitalize a positive relationship with the alpine environment. Finally, considering the negative impact of human activities on ecosystems, mainly linked to *forestry management*, the prior challenge will be finding cooperative strategies that raise awareness in this field while respecting the different national management plans and regulations.

The specific objectives defined in the Work Plan to deal with the main challenges of the agriculture and forestry sector are:

- Cb) Reinforcing the wildlife management strategy for relevant species living in the Julian Alps territories, focusing in particular on big mammals and carnivores in order to find a balance with the agro-pastoral activities;

Cc) Conserving the cultivated and spontaneous and indigenous biodiversity linked to the agro-pastoral activities and landscapes through an adaptative perspective, considering the current climate change;

Sb) Raising environmental awareness among the agro-forestry and other economic field to promote responsible practices and productions;

Sc) Encouraging territorial revitalization through supporting positive links between tourism and remote agriculture areas (i.e., village as “dispersed hotel” and valuing of agriculture practice in slow tourism experiences).

Tourism:

According to the ECST re-evaluation held in 2019, the stakes reported are mainly related to sustainable communication strategies that should be more visible on both sides of the Transboundary Biosphere Reserve. They highlight the strong commitment of stakeholders, tour operators, info centres, LTO and other entities and organizations, but the challenge will be finding innovative ways to facilitate cross-border dialogue and connection. This is why the Triglav National Park and the Julian Prealps Natural Park, responsible for the two national Biosphere Reserves, have develop in the past years a joint event calendar and other promotional activities (Section 5.2). To mention only one example of inputs collected during the online meeting on Tourism and Outdoor activities, it has been proposed to better link agro-pastoral practices to the touristic offers, revitalizing villages and remote areas as slow tourism and cultural destinations. On the other hand, another relevant challenge for the Transboundary Biosphere Reserve will be finding a balance between tourism and natural preservation, through the implementation of CETS actions. In fact, an increased number of visitors, even if positive for local economy, would require an additional effort in monitoring their impact on the environment, and communication and educational activities will be crucial to raise awareness.

The specific objectives defined in the Work Plan to deal with the main challenges of the tourism sector are:

Ce) Preserving and promoting different aspects of the tangible and non-tangible Julian Alps cultural heritage (languages, local products, manufacturing, histories, cultural landscapes, architectures...);

Sa) Strengthening and concretizing a sustainable tourism strategy through the European Charter for Sustainable Tourism (ECST);

Sc) Encouraging territorial revitalization through supporting positive links between tourism and remote agriculture areas (i.e., village as “dispersed hotel” and valuing of agriculture practice in slow tourism experiences)

Sd) Connecting different sides of the Julian Alps by promoting sustainable mobility and slow tourism, (experiential and outdoor activities, eco-tourism offers, etc.);

Lc) Developing a common monitoring methodology to assess the environmental impact of the economic activities, (specifically touristic activities and visitors flows), and providing mitigation measures;

Ld) Increasing common communication and territorial marketing for the Transboundary Biosphere Reserve at local and international level.

5.7 Other comments/observations on development from a transboundary biosphere reserve perspective.



Within the protected areas that are included in the proposed Transboundary Biosphere Reserve, the Parks' quality mark is widely used to ensure sustainability in the agricultural, touristic and related sectors. Both the Julian Prealps Natural Park and the Triglav National Park have developed quality certificates that aim to recognize sustainable products and people's activities. In term of territorial marketing, it would be also a good chance to define a united Transboundary Julian Alps Quality Mark to enhance this non-tangible heritage and promote the area as destination of "quality" in a broader sense. In fact, as explained in the Triglav National Park Quality Mark website the "quality" of the Julian Alps *"lies in its nature, environment and the people who have lived and worked here for centuries"*. Therefore, the development of a united Transboundary certificate will further enhance the bio-cultural relationships characterizing the local communities as positive example of responsible nature management and co-existence at international level

6. GOAL III: USE BIOSPHERE RESERVES FOR RESEARCH, MONITORING, EDUCATION AND TRAINING, PAMPLONA (2000)

[This refers to programs that enhance the capacity of people and organizations in the biosphere reserve to address both conservation and development issues for sustainable development as well as research, monitoring, demonstration projects and education needed to deal with the specific context and conditions of the biosphere reserve.]

6.1 Research and Monitoring:



Figure 35 Speleological exploration, ph author Marco di Lenardo

6.1.1 Brief description and list of publications of common research and/or monitoring activities/programs or partially initiated research and/or monitoring activities/programs with regard to the proposed transboundary biosphere reserve.

The complete list of publications of common research and/or monitoring activities/programmes developed in the TBR area reported in the Annex 9.a) *List of main bibliographic references*. In fact, within the concerned area numerous activities are carried out by Universities, Research Institutes and organizations, often in collaboration with the two Parks. In this section there is a list of the common publications resulted from the studies and works implemented during cooperation programmes/projects, since 2004, providing a brief description of each.

a) PLANTOCONNECT project (Interreg Alpine Space) 2022-2025



PlanToConnect³² (PTC) is an ongoing project presenting synergies with the AlpBionet2030, the OpenSpaceAlps and the DinAlpConnect projects. It follows up policy recommendations of the EUSALP Joint Paper for Spatial Planning referring to GBI networks and ecological connectivity and a shared ecological network, also in the cross-border dimension (4.3.1, 4.3.2 of JP). Partners and observers of PTC are members of AG7, thus consultation

loops are ensured. PTC covers the geographical interface of EUSALP/Alpine Convention perimeters (Chapters 4 and 5) where ecological network planning is particularly important for the alpine biodiversity. By addressing connectivity and corridor implementation, the project contributes to the aims of protecting, conserving and enhancing the EU's natural capital under the policy area "Preserving and protecting biodiversity". In particular, it contributes to the realization of target 2 "maintain and restore ecosystems" of the EU Biodiversity strategy 2030 and directly supports the realization of the EU strategy on Green Infrastructures. The Dobratsch Nature Park, Austria, the Julian Prealps Natural Park, Italy and the Triglav National Park, Slovenia, which comprise a transboundary natural space featuring biosphere reserves and nature parks, are involved as observers in a case study of the Work Package2.

b) DINALPCONNECT project (Interreg Adrion) 2020-2022



The project was cofinanced by EU, Bund and Land Kärnten Sustainable Regional Development and held in Nockberge National Park (Austria), Triglav National Park (Slovenia) and the Julian Prealps Natural Park (Italy). As defined in the Action Plan (2021a) :

« The DINALPCONNECT project³³ aimed to strengthen and improve ecological connectivity throughout the Dinaric Mountains, connecting them with the Alps and thus enabling long-term protection of biodiversity in view of current and future climate changes. Due to exceeding fragmentation of the landscape, the European protected areas especially need targeted cross-border connectivity. Cross-border cooperation is an instrument for the effective preservation of the common nature and landscape, but it is also a basis for achieving regional development, promoting mutual understanding and reconciling interests and goals. The four cross-border areas were selected as the project's pilot regions, for achieving the main goal that would be planned and implemented over a 10- year period.

The Triglav National Park and the Julian Prealps Nature Park, as one the project pilot regions, form the official Alpine pilot region for ecological connectivity within the framework of the Alpine

³² For more details, visit : <https://www.alpine-space.eu/project/plantoconnect/>

³³ For more details, visit : https://www.kis.si/en/Project_collection/DINALPCONNECT_EN/

Convention. To preserve and improve ecological connectivity between the two parks, the priority habitats and species of the pilot region were considered in terms of forest management, as well as harmonised management of two species: the chamois and Alpine ibex. With the action plan, we aim to improve ecological connectivity, identify common needs of the pilot region and present appropriate and applicable steps for improvement of ecological connectivity in the transboundary area ».

Publications:

- Benussi E., Favalli M & Genero F., 2021, *L'Allocco degli Urali tra Italia e Slovenia*, docufilm - Parco Naturale delle Prealpi Giulie, Dinalpconnect project (Interreg Adrion).
- Nève Repe A., Arih A., Pretner M., Ferfolja S., Andrich A., Goi G., 2022, *Action Plan for Improving Ecological Connectivity in the Slovenia–Italy Pilot Region*, Triglav National Park, Julian Prealps Nature Park, Dinalpconnect project (Interreg Adrion).
- Pretner M., Ferfolja S., 2022, *Joint Report on SWOT Analyzes Carried Out for the Pilot Area Between Slovenia and Italy Cross-border Chamois and Ibex management as well as Sustainable Forest Management in the Julian Alps*, Dinalpconnect project (Interreg Adrion).

c) NAT2CARE project (Interreg Ita-Slo) 2014-2020



The project was funded by the European Regional Development Fund involving the following partners: the Julian Prealps Natural Park (IT), Triglav National Park (SI), Nature Park of the Friulian Dolomites (IT), University of Udine (IT), Slovenian National Institute of Biology (SI) Biotechnical Centre Naklo (SI). The NAT2CARE project³⁴ aimed to stimulate citizen involvement in recovery and conservation action in the transboundary Natura 2000 areas by :

- 1) Reinforcing integrated management of the Natura 2000 areas involved through co-funding of habitats and transboundary pilot actions to support the biodiversity;
- 2) Improving the assessment and promotion of ecosystem services through the development of new instruments and services to identify and map them;
- 3) Promoting awareness, environmental education and citizen involvement through educational and informative events.

Publications:

- Žunič Kosi A. (ed.), V.V.A.A., 2020 *Approccio Transfrontaliero alla Conservazione e Gestione dei Siti Natura 2000 /Čezmejni Pristop k Ohranjanju in Upravljanju z Območji Natura 2000/ Transboundary Approach to Conservation and Management of Natura 2000 Sites*, Nat2care project (Interreg Ita-Slo)
- Visintin F., Marangon F., Troiano S., 2020, *Identificazione, mappatura e condivisione di una metodologia per la valutazione dei servizi ecosistemici (Prima parte) = Identificiranje, kartiranje in razdelitev metodologije za vrednotenje ekosistemskih storitev (Prvi del) = Identification, mapping and sharing of a methodology for the assessment of ecosystem services (Part one). Manuale dei servizi ecosistemici e la coesistenza tra uomo e natura*

³⁴ For more details, visit: <https://2014-2020.ita-slo.eu/nat2care>

nei siti Natura 2000 = Priročnik o ekosistemskih storitvah ter sobivanju med človekom in naravo na območjih natura 2000 = Manual on ecosystem services and co-existence between man and nature in Natura 2000 sites.
 NAT2CARE, Interreg V-A Italia-Slovenia 2014-2020 = Interreg V-A Italija-Slovenija 2014-2020 = Interreg V-A Italy-Slovenia 2014-2020, 90 pag. = 90 str. = 90 p.

d) ALPBIONET 2030 project (Interreg Alpine Space) 2014-2020



Integrative Alpine wildlife and habitat management for the next generations. Ecological connectivity (EC) is the basis of habitat and species protection at global and regional level. This project aimed to realize an integrative concept of ecosystem and biodiversity protection for the Alps through the enhancement of transnational cooperation in the field of nature conservation and the establishing of an integrated Alps-wide

system of biodiversity conservation, that by definition requires a transnational approach. The initiative involved areas with high potential of connectivity in which cooperating formats and common wildlife management strategies have been tested. Within the Strategic Alpine Connectivity Areas (SACA), local pilot regions have been implemented, among which there is the Julian Alps Transboundary Ecoregion. In this area, a shared wildlife management strategy focused on two species (chamois and ibex) has been implemented³⁵.

Publications:

Kahlen J., Svadlenak-Gomez K., Walzer C., 2019, *Wildlife Management within the EUSALP perimeter Albionet2030 – Work Package 2 Deliverables D.T 2.1.1 & D.T 2.3.1*, Research Institute of Wildlife Ecology (FIWI) - University of Veterinary Medicine Vienna (Austria), Albionet 2030 project (Interreg Alpine Space)

e) GREENALPS project (Interreg Alpine Space) 2013-2014



It is a framework for a sustainable and efficient European nature and biodiversity conservation policy for the Alps. Collecting different results from key European projects covering essential issues on the alpine biodiversity and ecosystems (e.g. *ECONNECT*, *recharge.green*, *SILMAS*, *SHARE*, etc.)

greenAlps provided strategical policy recommendations to be implemented in chosen pilot areas, specifically: the National Parks of Triglav (Slovenia), Kalkalpen and Gesäuse (Austria), Berchtesgaden (Germany) and the Julian Prealps Natural Park (Italy). The policy strategies developed are based on the evaluation of ecosystem services and on a reliable definition of the carrying capacity of Alpine natural habitats, with a long-term oriented spatial and land use planning. Lead partner: ALPARC (Alpine Network of Protected Areas). The project was co-funded by the European Regional Development Fund (ERDF) in the frame of the Alpine Space Programme and involved many NGOs, research institutes and protected areas³⁶.

³⁵ For more details, visit : https://www.kis.si/en/Project_collection/ALPBIONET_2030/Porocila_o_delu_2

³⁶ For more details, visit: <http://www.greenalps-project.eu/>

Publications:

- Svadlenak-Gomez K., Badura M., de Bortoli I., Favilli F., Gerritsmann H., Kohler Y., Plassmann G., Ullrich-Schneider A., Walzer C., 2014, *Connecting Mountains, People, Nature - Shaping the Framework for an Efficient European Biodiversity Policy for the Alp*, GreenAlps project (Interreg Alpine Space).

f) CLIMAPARKS project (Interreg Ita-Slo) 2010-2013



The project highlighted the effects of climate change on protected areas and defined a range of management strategies and concrete actions to face these changes and to become a reference for the entire territory. Lead partner: Triglav National Park (SLO); other institutions involved: Julian Prealps Natural Park (ITA), Friulan Dolomites Nature Park (ITA), Veneto Po

Delta Regional Park (ITA), Emilia Romagna Po Delta Park (ITA), Krajinski park Sečoveljske soline (SLO), Regijski Park Škocjanske jame (SLO), Krajinski Strunjan (SLO).

Publications:

- Vranješ M., Škornik I., Santi S., Costa M., 2013, *Cambiamenti climatici e gestione delle aree protette: gli studi sulla biodiversità, i flussi di visitatori e l'efficienza energetica*, Climaparks project (Interreg Ita-Slo).

g) ERA project (Interreg Ita-Slo) 2004-2006



The Alpe Adria is a bioregion in Central Europe, including Slovenian, Austrian and Italian regions. Since 2003, the ERA project³⁷, has involved 3 Parks of the Eastern Alpine range - the Triglav National Park (Slovenia), the Julian Prealps Natural Park (Italy) and the Nockberge National Park (Austria) - and is

focused on reinforcing the cooperation between regions that deals with similar socio-economic challenges. In particular, it encourages the development of the mountain areas through sustainable approaches, incentivizing exchange of good practices. The project concerns three main fields: environmental education, promotion of typical products and touristic cooperation. Since 2003 environmental education activities have been carried out through trilateral exchanges between school groups for the purpose of improving knowledge of the environment and the role of protected areas among young people (See also Chapter 5).

Publications:

- Bogner D., Morandi V., Voglauer O., Mohl I., 2007, *Eco Regio Alpe Adria 2004-2006 - Final report*, ERA project (Interreg Ita-Slo).

³⁷ For more details, visit: <https://www.parcoprealpigiulie.it/it/principale/iniziative-e-progetti/progetti-europei/era>

6.1.2 Brief description of on-going common research and/or monitoring activities or planned research and/or monitoring activities with regard to the transboundary biosphere reserve respectively (please refer to variables in Annex I).

Thanks to their ecological, geological and cultural features, the Julian Alps are well studied by national, regional research institute and universities. In this section, the research and monitoring activities, ongoing or planned, will be listed and briefly described, according to the main variables cited of Annex I. In particular, these projects and studies have been collected during the nomination process, thanks to the cooperation and engagement of the territorial stakeholders and researchers. All bibliographic references are collected in Annex 9.a) *List of main bibliographic references*.

Ongoing project and activities:

Project name/topic of research and institution	Main variables (Annex I)	Brief description
LIFE Seed Force University of Udine Prof. Francesco Boscutti	Biodiversity, endemic species, conservation, genetic resources, Rare/Endangered species, monitoring	It is a LIFE project led by MUSE of Trento and involves Italy, France, Slovenia and Malta. In the territory of the Julian Alps is carried out in collaboration with the Julian Pre-Alps Park, the FVG Region and the University of Udine. It aims to study at the genetic level and increase some populations of significant plant species (such as <i>Eryngium alpinum</i>) within transboundary Natura 2000 Network sites (Italy and Slovenia). https://www.ufficiostampa.provincia.tn.it/Comunicati/MUSE-ente-capofila-del-progetto-europeo-LIFE-SEEDFORCE
Studies on farmed and wild animal species University of Udine Prof. Stefano Filacorda	Biodiversity, wildlife, mammals, conservation, ecology, ethology, agriculture, people-nature relations, management issue, monitoring	These studies aim to investigate the relationships between big mammals, large carnivores and the farming activities in order to help finding solutions and strategies for their responsible management in the Julian Alps area.
FORTER project and forest therapy studies University of Udine Prof. Ivana Bassi	Human health, non-timber forest products (services), people-nature relations, social/socio-economic aspects, tourism	These researches aim to study the effectiveness and potentials of new forms of tourism and experiences (such as “forest bathing” and “forest therapy”) in promoting health and wellbeing, as well as creating opportunities of sustainable local development.
“I Patrimoni Territoriali nelle Aree Interne” University of Trieste Dr. PhD Andrea Peraz	Local participation, social/economic aspects, anthropological studies, stakeholders’ interests, recreation	This PhD research project focuses on the territorial heritage and the inhabitants’ engagement in Spatial Planning and restoration processes to promote local development.
Cultural heritage and ethnological studies University of Ljubljana ZRU SAZU (Research Centre of the Slovenian Academy of Sciences and Arts) Prof. Miha Kozorog Dr. Špela Ledinek Lozej	Anthropological studies, ethnology/traditional practices/knowledge, Pastoralism, Social/Socio-economic aspects	In collaboration with other Italian and Slovenian universities, museums and institutes, within the alpine cross-border area several ethnological and anthropological studies are developed, in order to investigate the social and cultural heritage and its representation in the concerned area. Example of past cooperation initiatives: <ul style="list-style-type: none"> • ZBORZBIRK: http://zborzbirk.zrc-sazu.si/

Project name/topic of research and institution	Main variables (Annex I)	Brief description
		<ul style="list-style-type: none"> • <u>100% Local</u>: https://www.zrc-sazu.si/en/programi-in-projekti/100-local • <u>AlpFoodway (Interreg Alpine Space)</u>: https://www.alpine-space.eu/project/alpfoodway/ • <u>Heritage in dynamic border regions</u>: https://dediscina.zrc-sazu.si/en/category/heritage-in-dynamic-border-regions/#page-content
<p>Mt. Canin research activities: a) Meteorological Network b) CrioKrast FVG CNR ISP (National Research Institute – Institute of Polar Science), AAMS (Alpine Adriatic Meteorological Society, University of Trieste)</p> <p>Prof. Renato Colucci</p>	Abiotic factors, climatology, glaciology, global change, groundwater, meteorology, speleology	The research and monitoring activities of the CNR ISP are mainly related to the Mt. Canin area and aim to investigate the changes and dynamics of alpine glaciers linked to the current climate and meteorological shifts. The projects illustrated during the 2 nd Online meeting concerned the establishment of monitoring networks in the concerned area to better study the meteorological conditions and the underground glacial environments status on Mt. Canin.
<p>Underground water monitoring and speleological exploration ZRU SAZU (Research Centre of the Slovenian Academy of Sciences and Arts)</p> <p>Dr. Jure Tičar</p>	Abiotic factors, groundwater, hydrology, monitoring, pollution/pollutants, speleology, mountain and highland systems	The centre is currently involved in speleological research, and in particular they are doing research on the waters of the Karst, to learn about the course and flows of the underground waters. Another issue they are dealing with is pollution in caves where underground waters flow, because these provide drinking water for the valley.
<p>Water monitoring and nature restoring initiatives ARPA FVG (Regional Agency for Environmental Protection of Friuli Venezia Giulia)</p> <p>Dr. Raffaella Zorza</p>	Abiotic factors, hydrology, monitoring/methodology, indicators, meteorology, ecosystem functioning/structure, fresh water systems, restoration	The Agency operates in various environmental fields to monitor environmental status and ensure its protection at regional level. In the Julian Alps territory, the water monitoring constitutes a crucial topic to address due to the widespread climate changes and related issues. As ARPA they also follow the process of renaturation of regional rivers to pursue the ecological restoration goals and increase connectivity and biodiversity.
<p>Nat2Care project and Biodiversity monitoring activities Slovenian National Institute of Biology Dr. Alenka Žunič Kosi</p>	Biodiversity, conservation, rare/endangered species, fauna, invertebrates, mountain and highlands systems, natural resources, ecosystem services, forest systems	The Institute constantly cooperate with the TNP and bordering territories in carrying out conservation and monitoring activities. NIB particularly deal with endangered and protected animal species, as well as the management of their habitats. The Institute is currently implementing new tools for monitoring insects, amphibians and reptiles in the transboundary area.

Project name/topic of research and institution	Main variables (Annex I)	Brief description
<p>Nat2Care Enhancing cross-border management for the protection and restoration of Natura 2000 sites in the Julian Alps and Karst MAB area Julian Alps National Biosphere Reserves (IT-SI)</p>	<p>Biodiversity, conservation, rare/endangered species, fauna, management issues, mountain and highlands systems, natural resources, ecosystem services, forest systems</p>	<p>After the previous actions implemented with the Interreg Italy-Slovenja (2014-2020) (Section 6.1.1) a new proposal has been founded by the Interreg 2021-2027. The new actions, implemented in the Julian Alps transboundary area will be focused on enhancing cross-border management of the Natura 2000 sites.</p>
<p>National Natura 2000 sites monitoring Slovenian MNVP and ZRSVN</p>	<p>Biodiversity, conservation</p>	<p>Annual monitoring of qualifying plant and animal species and habitat types is carried out in most Natura 2000 areas in Slovenia. It is financed by the Ministry of Natural Resources and Spatial Planning and implemented by various professional institutions.</p>
<p>Historical and Economy studies in the Area of the Julian Alps National Museum of Slovenia Dr. Oitzl Gašper,</p>	<p>Agriculture/Other products system, Cultural aspects, Ethnology, traditional practices, knowledge, Socio/socio-economic aspects, Land use/Land cover</p>	<p>The National Museum of Slovenia is frequently involved in the study of cultural and historical aspects of the communities living in the Julian Alps. A valid example is the works of Dr. Oitzl Gašper « <i>Medieval Economy in the Area of the Julian Alps</i> », focused on the mountainous and a hilly landscape, which is often unsuitable for the agrarian land use. Animal husbandry became the main sector of agrarian industry, while arable farming had greater importance in more favourably situated areas. The flourish of the ironwork industry from the 14th Century onwards brought about the area's economic progress, which was significantly improved by the presence of numerous traffic routes via the Julian Alps. The ironwork industry and trade were the most important factors in the development of urban centres on the fringes of the Julian Alps.</p> <p>Another important study of the same author « <i>Julian Alps, Middle Ages, human and alpine world, colonization, economy</i> » investigated why and how human arrived at the area of Julian Alps, why did he permanently settle there and eventually establish new settlements, how he lived and survived, and how connected he was with his neighbours and the outside world. Throughout Middle Ages the intensity of human influence was changing, however it was persistently increasing since the period of expansion of settlements. Additionally, different ways of survival in mountainous area were an important factor of human influence on nature.</p>

Project name/topic of research and institution	Main variables (Annex I)	Brief description
Studies on knowledge of meadows and pastures in the southeast of the Alps University of Ljubljana Ass. Prof. Žiga Zwitter	Agriculture/Other products system, Cultural aspects, Ethnology, traditional practices, knowledge, Socio/socio-economic aspects, Land use/Land cover	The Faculty of Arts, Department of History of the University of Ljubljana is particularly interested in the study of the knowledge of meadows and pastures in the area. The article « <i>A history of knowledge of meadows and pastures in the southeast of the Alps in the 16th and early 17th centuries</i> » for example analyses the court records of one seigneurie, rent-rolls (Urbare) of five seigneuries, and personal notes of one landlord. By placing this information into the context of additional sources, it manages to offer a partial reconstruction of the traditional ecological knowledge of farmers in the past as well as the knowledge of landlords or seigneurie officials about grasslands, although the knowledge analyzed was predominately communicated orally. The article also addresses the dynamic development of farmers' traditional ecological knowledge, evidence for landlords' or seigneurie officials' familiarity with agricultural publications, and the interest of these last two groups in agricultural practices, environmental conditions, and the changes they underwent.

In addition to the ongoing research and monitoring activities described above, as defined in the Work Plan, the proposed Transboundary Biosphere Reserve plans further to develop studies in the field of ecosystem services, climate change adaptation and homogenization of monitoring strategies between Italian and Slovenian areas. In particular, as indicated in the Work Plan, the Triglav National Park and the Julian Prealps Natural Park are already designing the following activities:

- Mt. Canin monitoring and research activities on the peri-glacial flora and other species status;
- Common monitoring strategies and scientific data exchange between the two National Biosphere Reserves's research communities about endangered species/habitats;
- Shared monitoring strategy to evaluate the environmental impact of visitor flows (and the touristic sector in general).

It is noteworthy to mention that the two Parks have been selected as case study for the European research project **TRANSNATURE**³⁸ (funded by Biodiversa+), which aims to study the transboundary governance of biodiversity in selected sites. Besides the Julian Alps transboundary area, it will focus on the following case studies: (1) ZASNET EGTC, which contributed to the creation of the MAB Transboundary Biosphere Reserve Meseta Ibérica (Spain/Portugal); (2) Westerschelde, an estuary with rare habitats and species whose use is regulated through a bilateral commission (Netherlands/Belgium); (3) Baltic to Barents, an area which includes the Sami region of Lapland where indigenous peoples are involved in the conservation of the transboundary area (Finland/Sweden/Norway). It will be a relevant opportunity for reflection that will combine and compare different governance strategies in the biodiversity conservation field at transboundary level.

³⁸ For more details, visit : <https://www.biodiversa.eu/2023/04/19/transnature/>

6.1.3 Has there been any supporting scientific exchange (e.g.: equipment, geographical mapping, staff)

The Julian Prealps Natural Park and the Triglav National Park have been cooperating for many years in various programmes and projects, organizing different forms of exchanges between staff members, territorial stakeholders, schools and other important institutions. Since these are natural protected areas, the main scientific efforts have concerned the fields of biodiversity conservation, ecological connectivity and sustainability. In particular, data and information exchange are frequent to strengthen the coordinated management of the natural heritage. For example, a positive dialogue led to the implementation of Nat2Care project, related to the Transboundary Natura 2000 sites and the monitoring of the associated ecosystem services. In the Action Plan of the Transboundary Ecoregion, it was expressly intended to promote exchanges of staff through the implementation of internal call once per year, and of experts (depending on EU Projects) between the two Parks. Moreover, during the running of the candidature process, some touristic stakeholders already involved in the Slovenian Biosphere Reserve, offered to cooperate with the Italian side and share their experience in the field of digitalization to implement a unified transboundary platform and communication strategy.

6.1.4 Indicate the main stakes for future scientific cooperation and monitoring in the transboundary biosphere reserve? What new strategies or approaches will be considered?

The main stakes for the future cooperation in scientific research and monitoring are addressed by the proposed Julian Alps Transboundary Biosphere Reserve through 3 specific objectives, listed below:

- La) Promoting positive networking at local and international level, encouraging professional exchanges between Parks staffs, stakeholders, communities, Universities and Schools, and participating jointly to the MAB network to good practice exchanges
- Lb) Conducting joint research projects and monitoring activities concerning biological, ecological, socio-cultural, historical, economic issues and involving research communities and stakeholders
- Lc) Developing a common monitoring methodology to assess the environmental impact of the economic activities, (specifically touristic activities and visitors flows), and providing mitigation measures

Moreover, research activities and initiatives in the Julian Alps will be crucial for the achievement of other objectives, especially concerned the conservation of the natural and cultural diversity, such as:

- Ca) Strengthening the coordination of Natura 2000 Network sites management pursued by the two Parks to protect endangered species and habitats;
- Cb) Reinforcing the wildlife management strategy for relevant species living in the Julian Alps territories, focusing in particular on big mammals and carnivores in order to find a balance with the agro-pastoral activities;
- Ce) Preserving and promoting different aspects of the tangible and non-tangible Julian Alps cultural heritage (languages, local products, manufacturing, histories, cultural landscapes, architectures...)

Cd) Supporting the Julian Alps community's resilience to climate change, leading them toward an ecological transition, encouraging energy efficiency, environmental sustainability and carbon neutrality

As described in the Work Plan and reported in Chapter 7, in order to pursue the Julian Alps Transboundary Biosphere Reserve's aims, the Coordinating Committee will be supported by the ECST Annual Forum (on sustainable tourism), the Young Advisory Board, and 5 Cooperation Tables that will be established to promote cross-border dialogue between Italian and Slovenian stakeholders in the field of: Agriculture and Forestry, Cultural associations, Young people, School and education and, finally, University and Research. This latter table will be composed by representatives from the CC (in particular from the TNP and PGNP), the Italian and Slovenian local authorities, the national and regional research institute and centres, researchers and academic coming from universities, experts in the different fields concerning the main functions of the MAB Biosphere Reserves, such as environmental, cultural, and socio-economic.

The idea of the cooperation tables has been implemented during the candidature process thanks to the stakeholders' insights and proposal. In particular, besides the biological conservation goal, research stakeholders pointed out the importance of implementing scientific investigations with an adaptive perspective. Current climate and environmental changes in the Alps require further studies and monitoring on the ecological and meteorological shifts alongside studies on good practices, strategies and innovative solutions to cope with local and broad-scale challenges, according to global Agenda 2030 SDGs.

Finally, given the bio-cultural balance present in the Julian Alps landscapes, that led to a higher species richness as well as cultural diversity, another stake for the future scientific research and monitoring will be developing studies on socio-anthropological aspects, such as human-environment relationships and socio-ecosystems dynamics, alongside the environmental and biological ones; as well as exploring what we can learn for the future from traditional sustainable practices and the use of cultural landscapes. During the online meetings, it was specifically asked to involve more experts (e.g., anthropologist, sociologists, economists, historians...) in the scientific dialogue, in order to strengthen the socio-cultural sphere in scientific research, as already done in the field of territorial promotion/animation.

6.2 Common education, training and public awareness programmes:

6.2.1 Describe the types of common activities related to education and public awareness on-going or planned.

Both the Triglav and the Julian Prealps Natural Parks carry out different educational activities with the aim to disseminate the ecological and cultural knowledge of the Julian Alps territory. These activities mainly involve schools and younger generations, but numerous workshops and training are frequently organized to raise environmental awareness among the stakeholders of different economic sectors. The two National Biosphere Reserve have long been engaged in promoting responsible practices and sustainability through the implementation of workshops and seminars dedicated to specific topics and socio-environmental challenges. Moreover, the MAB UNESCO Network, as well as the other shared European programmes in which these territories are involved (e.g., Alpine Convention, ECST) constitute an important framework for the exchange of good practices and common solutions.³⁹

Among the educational initiatives, the following are the ones dedicated to young people that aim to increase transboundary experiences and exchanges between different sides of the Julian Alps.

a) Belar Days



Figure 36 Belar Days participants walking the Soča Trail

This initiative, organized every year in May by the Triglav National Park consists in a guided hiking tour along the Soča Trail to commemorate the first themed trail implemented in the protected area. The excursion crosses several educational points, designed to show the nature and cultural heritage of the Trenta valley from a professional and appealing point of view. The *Belar days*, named after Albin Belar, the first initiator of the TNP, are intended for 10 to 11 years old primary schools' students coming from the Julian Alps Biosphere Reserve and other groups of children from the national and natural parks in Austria, Italy and Croatia. The

educational initiatives also include a visit to the Juliana Alpine Botanical Garden in Trenta, which is managed by the Slovenian Museum of Natural History, that is the Slovenia's oldest cultural and scientific institution.⁴⁰

b) Junior Rangers

It is an Europarc Federation initiative involving the young inhabitants of the European protected areas in educational activities and environmental camps. The main aims are encouraging younger generations in discovering their territory through floristic explorations, training activities and sharing of ecological knowledge. The Prealpi Giulie Natural Park initiated Europarc's Junior Rangers program on its territory in 2007, extending the initiative to the 11 municipalities of the National Julian Alps Biosphere Reserve in 2019. Young participants between 12 and 14 years old are



³⁹ It is possible to find detailed information about the environmental educational offers of the Triglav National Park and the Prealpi Giulie Natural Park visiting the dedicated webpages, respectively: <https://www.tnp.si/sl/obiscite/nepozabna-doivetja/programi-za-sole/>; <https://www.parcoprealpigiulie.it/it/principale/attivita/offerta-didattica>.

⁴⁰ For more details about Belar Days, visit: <https://www.triglavskazakladnica.si/asset/8ronty3JybtBnyz4L>.

welcomed and there is the intention to engage also young people from the Slovenian Julian Alps Biosphere Reserve in activities dedicated to the Transboundary area.⁴¹

c) EcoCamp: Young meeting (Peace Parks)

The Julian Prealps Natural Park in cooperation with the Friulian Dolomites Nature Park (Italy) and the Weissensee Nature Park (Austria), within the framework of the Interreg *Italy-Austria* is organizing a first meeting involving young people (aged between 18 and 30) coming from the territories of the three parks and also from the Triglav National Park (Slovenia) in order to promote exchanges and connectivity among the three alpine countries. It is held in May and it consists in a series of visits, exchange of experiences, seminars and meeting between young people, to increase awareness on different environmental, social and economic topics. A goal of this meeting is to create a link among the youth people in the transboundary region and to start a first dialogue among the four parks focused on involving the next generation.⁴²



Figure 37 ECO CAMP leaflet 2023

d) University exchanges and opportunities

The universities operating in the proposed Transboundary Biosphere Reserve area, frequently cooperate with the Triglav National Park, the Julian Prealps Natural Park and other local institutions. They promote students exchanges in the neighbouring regions through cooperation programmes (such as the Erasmus+) and organise winter and summer schools. A relevant example is the summer school promoted by the Alpen Adria University of Klagenfurt, held in Bovec (Slovenja), that is related to socio-cultural studies and involve students from Italy, Slovenia, Austria and Croatia. These initiatives constitute an important occasion to meet academic peers, share experiences and learn different languages, while deepening the territorial knowledges and raise awareness on nowadays topics.⁴³

In addition, the candidate Julian Alps transboundary Biosphere Reserve intends to improve the academic opportunities for the students coming from the Italian and Slovenian universities by encouraging traineeships and thesis concerning the transboundary areas. As example, the Julian Prealps Natural Park already provides an award for the best thesis conducted in the National Biosphere Reserve and for the year 2023, two of the submitted works were related to cross-borders themes and studies:

- Buzzulini E., 2020, *La natura oltre i confini: esperienza didattica presso il Parco Nazionale del Triglav*, Corso di laurea magistrale a ciclo unico in Scienze della Formazione Primaria, Università di Udine: A study aimed at investigating the educational experience at Triglav National Park concerning environmental education methodologies for schools and non-schools contexts.

⁴¹ For more details on the Junior Ranger initiative, visit: <https://www.parcoprealpigiulie.it/it/principale/iniziative-e-progetti/junior-rangers>.

⁴² For more details on the Eco Camp initiative, visit: <https://www.parcoprealpigiulie.it/it/principale/parco/il-parco-informa/avvisi-e-news/eco-camp-2023-incontro-dei-giovani-peace-parks-jugendtreffen-peace-parks#>.

⁴³ For more details on the Bove Summer School, visit: <https://www.units.it/news/aperto-il-bando-la-bovec-summer-school-2022>.

- Micelli A., 2021, *Sostenibilità, percezione di valore e reputazione della destinazione turistica. Il caso delle Alpi Giulie Patrimonio della Biosfera Unesco*, Corso di laurea in Comunicazione integrata per le imprese e le organizzazioni, Università di Udine: This sociological study investigates the perception and the level of awareness of the Julian Alps stakeholders related to the mountain territory value as sustainable touristic destination.

6.2.2 Indicate whether there are common facilities for education and training activities, exchange by schools or academic institutions, as well as common visitors' centres for the public.

The nominated Julian Alps MAB TBR already arranges a Transboundary Information Centre and museum in Trenta, called “Dom Trenta” (Figure 4), that is managed by the Triglav National Park. Within the info centre there are permanent and occasional exhibitions, as well as accommodations. Moreover, in the wide rooms and halls of the centre, several seminars, meeting and workshops (up to 100 people) are frequently organized. This constitutes the main facility for education and training activities in the Transboundary area and currently also on the Italian side there is the intention to implement another transboundary info centre in Resia.



Figure 38 Info Centre Dom Trenta (Slovenia)

Besides this principal structure, several minor info centres, museum and facilities are spread within the Triglav National Park and the Prealpi Giulie Natural Park areas. In these centres, it is also possible to find information about the National Biosphere Reserves and, in the future, they will be supplied by the common leaflets, maps and other informational material dedicated to the TBR, provided in Slovenian, Italian and English. The main visitor centres located in the concerned Julian Alps area are listed below:

- Visitor Centre “Dom Trenta” (Trenta)
- Info center Triglavška Roža (Bled)
- Center TNP Bohinj
- Pocar Homestead (Mojstrana, Kranjska Gora)
- Info Point Tourist Information Centre (Kobarid)
- Slovenian Alpine Museum (Mojstrana, Kranjska Gora)

- Civic Museum “Palazzo Elti” (Gemona del Friuli)
- Moggio Udinese, (Piazzetta Pertini No. 5)
- PGNP Visitor Centre (Prato di Resia)
- Hiking Shelter “Pian dei Ciclamini” (Lusevera)
- Venzone (Via Glizoio di Mels No. 5/4)
- Mostra miniera del Resartico (Resiutta Via Roma n. 32)

In addition to these info centres there are also numerous museums, point of interests, accommodation facilities and municipal touristic centres that can provide useful information to visitors about the Julian Alps TBR.

6.3 Internal and external communication channels and media used by the proposed transboundary biosphere reserve:

6.3.1 Is there a website for the transboundary biosphere reserve? If yes, what is its URL?

Yes, a landing page dedicated to the Julian Alps Transboundary Biosphere Reserve already exists and allows visitors to directly access to the Two National Biosphere Reserves webpages and find contacts for additional information.

Julian Alps MAB TBR's landing page	www.julianalps-mab.eu
Slovenian Julian Alps MAB BR's page (on Triglav National Park website)	https://www.tnp.si/sl/spoznajte/biosferno-obmocje-julijske-alpe/
Italian Julian Alps MAB BR's page (on Triglav National Park website)	https://www.parcoprealpigiulie.it/it/principale/iniziativa-e-progetti/riserva-mab-unesco-alpi-giulie-italiane

Moreover, as mentioned in the Work Plan, a common communication strategy will be implemented in the next future. It will be decided by the two National Biosphere Reserves if the TBR's website should be implemented once the shared visual identity of the TBR will be defined.

6.3.2 Is there a common electronic newsletter? If yes, how often will it be published?

Currently there is not a common electronic newsletter. Newsletter and information concerning the Transboundary Biosphere Reserve are disseminated through the Triglav National Park's and the Prealpi Giulie Natural Park's medias and information can be asked directly to the National Biosphere Reserves' contact persons (Annex I). The creation of a dedicated TBR newsletter will be discussed during the development of the common communication strategy, as indicated among the cooperation actions of the Work Plan.

6.3.3 Does the transboundary biosphere reserve belong to a social network (Facebook, Twitter, etc.)?

The two National Biosphere Reserve have a coordinated communication system to promote the TBR news and initiatives on the social network pages managed by the Triglav National Park and the Prealpi Giulie Natural Park. The creation of a dedicated TBR page on social network will be discussed during the development of the common communication strategy, as indicated among the cooperation actions of the Work Plan. Following the current Facebook and Instagram pages of the two Nature Parks.

Triglavski narodni park / Triglav National Park	Facebook	https://www.facebook.com/triglav.national.park.official
	Instagram	https://instagram.com/triglav.national.park?igshid=YmMyMTA2M2Y

Parco Naturale Prealpi Giulie	Facebook	https://www.facebook.com/parconaturale.prealpigiulie
	Instagram	https://instagram.com/parcoprealpigiulie?igshid=YmMyMTA2M2Y=

6.3.4 Are there any other (shared) internal communications systems? If so, describe them.

The Julian Alps Transboundary Biosphere Reserve has an internal communication system based on a frequent and dynamic exchange of information between the 4 designated referees of the Triglav National Parks and the Prealpi Giulie Natural Park. Relying on their long-lasting interpersonal relationship and cooperation, the Park's staff will continue to communicate via e-mail, phone calls WhatsApp messages, organizing periodic internal meetings (online or in presence) to develop the actions agreed.

6.3.5 Is a communication strategy envisaged for the transboundary biosphere reserve including different approaches and tools geared towards the community and/or towards soliciting outside support.

Currently, there is not a unique Transboundary Biosphere Reserve's communication strategy. This is one of the main actions that has to be implemented following the cooperation actions defined in the Work Plan. An integrated strategy will be designed in coherence with the UNESCO MAB programme's Global Communication Strategy that is based on three main goals (inspire, belong and empower). The UNESCO MAB communication strategy will also be the point of reference for understanding in what occasions the Transboundary site will be able to communicate and through which tools. The Julian Alps Transboundary Biosphere Reserve's communication will address both internal and external targets, focusing in particular on the promotion of the Julian Alps as a unique reality at international level. Therefore, it will be mainly used to pointing out the ecological and socio-cultural unity and connectiveness characterizing this cross-border area.

7. INSTITUTIONAL AND FINANCIAL ASPECTS OF THE TRANSBOUNDARY BIOSPHERE RESERVE

7.1 Indicate if the the official agreement between the governmental authorities regarding the transboundary biosphere reserve has been signed: indicate the signatories titles and date of signature (provide a copy of the agreement).

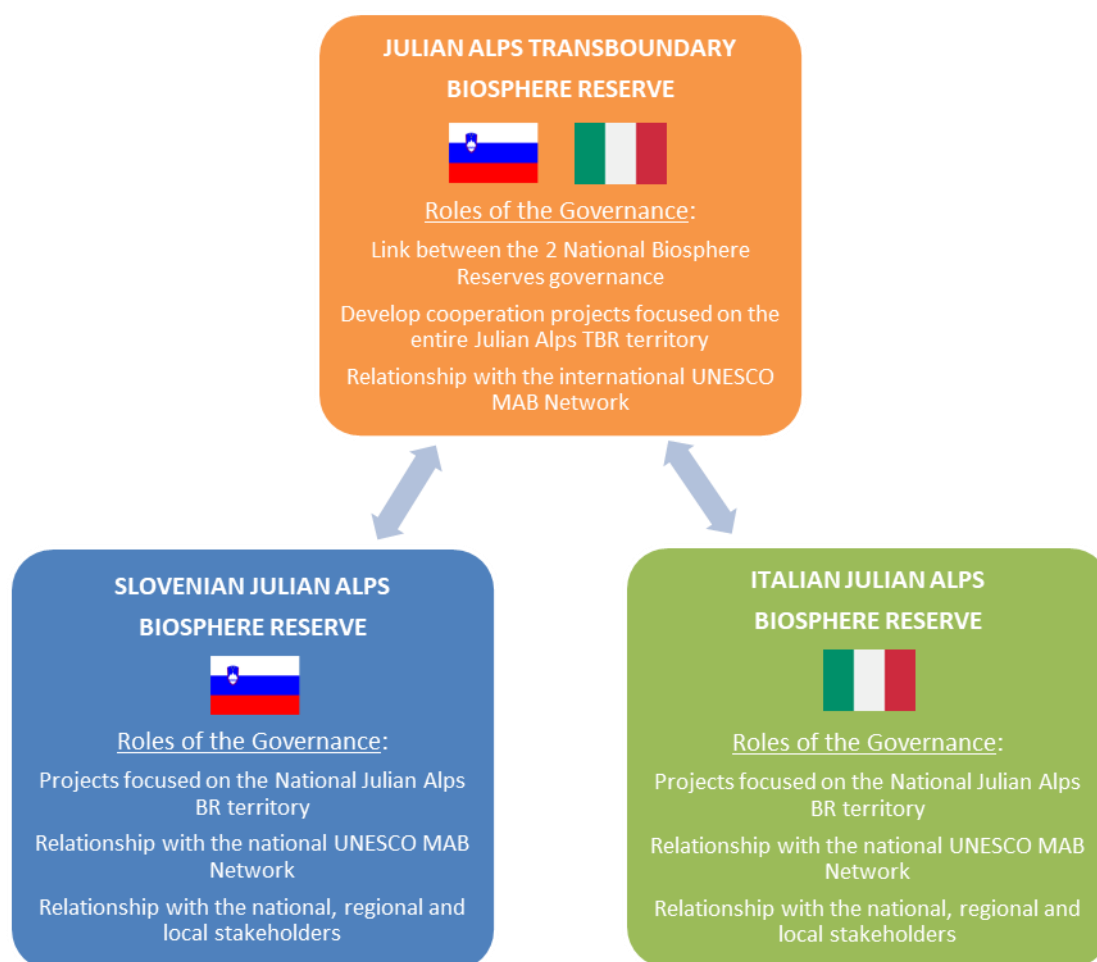
The Official Agreement between the Governmental Authorities has been signed on 20th June 2023 in occasion of the meeting of the European Environment Council held in Luxembourg, by the Ministry of Natural Resources and Spatial Planning (Slovenija), Uroš Brežan, and the Ministry of Environment and Energy Security (Italy), Gilberto Pichetto Fratin. A copy of the Agreement is annexed to the present Dossier.

7.2. Coordinating structure of the proposed transboundary biosphere reserve

Since the Biosphere Reserves, including the Transboundary ones, are not a new institution but a recognition defined by MAB UNESCO programme and an international agreement, they do not have a legal status to take decisions, impose regulations or carry out projects independently. The MAB UNESCO Biosphere Reserve recognition should be an incentive for the local stakeholders to pursue sustainable development, both by changing their own actions, enhancing their skills, and creating synergies and collaborations. This is why for each Biosphere Reserve, including the Transboundary ones, it is necessary to identify a governance, as indicated in the UNESCO MAB Technical Guidelines. This governance can no be limited to the Biosphere Reserve coordinating subject, but must include a plurality of territorial stakeholders, involving those who wish to participate actively in achieving the MAB programme's objectives and to carry out concrete sustainable projects in the territory. The Biosphere Reserves governance has a relative autonomy, because the stakeholders that constitute and participate in it are subjected to the mandates and prerogatives of the organizations and institutions they represent.

Thus, with regard to the Julian Alps Transboundary Biosphere Reserve, the governance structure intends to ensure: a) the full involvement of the most significant territorial stakeholders in the pursue of the MAB objectives and main functions (Conservation, Development, Logistic); b) the coordination and interlinking between the two National Biosphere Reserves governance structures, acting as a wide point of connection, dialogue and exchange between the communities living on the Italian and Slovenian slopes of the Julian Alps.

The relationship between the three governance structures (the two nationals and the transboundary ones) will be always open and cooperative, never rigid and non-communicative. In particular, to identify the respective specific responsibilities, the model can be simplified as follows:



Therefore, the two National Biosphere Reserves governance structures (Italian and Slovenian) will be primarily responsible for stimulating, supporting, and implementing projects that focus on the local level, regarding only one side of the Julian Alps; and interacting with the national MAB Biosphere Reserves Network and, more generally, with institutions and stakeholders that affect their own Region and Nation.

The **Transboundary Biosphere Reserve** governance structure, instead, will be primarily responsible for:

- stimulating, supporting and realising cooperative projects between the two sides of the Julian Alps, involving stakeholders of both countries with the aim at highlighting common elements for the entire Julian Alps territory, in the fields of ecology, culture, society and economy;
- interacting with the MAB Biosphere Reserves International Network, representing in this context the Julian Alps as a unique ecological, social and economic region;
- carrying on a dialogue with the neighbouring Austrian region, that shares a similar ecological, cultural and economic identity with the Julian Alps, encouraging it to obtain the Biosphere Reserve recognition at national level, so that in the future it could also be part of the Transboundary Biosphere Reserve.

7.2.1 Name the structure, give the memberships and describe the functioning (incl. financing and staff). Who are the authorities in charge of the coordination/management of the proposed transboundary biosphere reserve, does it have a permanent secretariat and who are the focal points for coordination in each individual biosphere reserve.

The governance of the Julian Alps Transboundary Biosphere Reserve consists of a single body which is called *Coordinating Committee*. It is composed by the following **12 members**:

- 1 Representative of the Triglav National Park (Slovenia)
- 1 Representative of the Julian Prealps Natural Park (Italy)
- 6 Representatives chosen between the Regional/Local Authorities and/or the members of the National Julian Alps Biosphere Reserves' boards: 3 from Slovenia and 3 from Italy
- 2 Youth representatives: 1 from Slovenia and 1 from the Youth Council of the Italian Julian Alps Biosphere Reserve
- 1 Representative of a Professional Nature Conservation Institute (Slovenia)
- 1 Representative from the Scientific Board of the Italian Julian Alps Biosphere Reserve (Italy)

The Coordinating Committee main aims will be:

- Defining and developing a “Julian Alps Transboundary Biosphere Reserve” Work Plan which illustrates the common objectives and measures to conserve natural and cultural diversity; providing a model of land management and of approaches to sustainable development; sustaining research, monitoring, education and training. The “Julian Alps Transboundary Biosphere Reserve” Work Plan will focus exclusively on topics and issues of common interest among the Julian Alps Biosphere Reserves and will not duplicate existing national Action Plans.
- Realizing joint activities concerning conservation/ monitoring/ education/ training/ information/ public awareness mainly in the field of biodiversity, landscape, climate change, circular economy, ecological connectivity, cultural heritage (tangible and intangible).
- Stimulating the implementation of participatory processes involving local communities and stakeholders (in particular young people implementing a “Julian Alps Transboundary Biosphere Reserve” Youth Council), in joint projects and actions, in order to achieve the JA TBR sustainable goals.
- Promoting measures and activities to make the “Julian Alps Transboundary Biosphere Reserve” function effective in accordance with UNESCO recommendations.
- Developing sustainable tourism strategies and actions enhancing what has already been done thanks to the European Charter for Sustainable Tourism (ECST) recognition, that already covers the entire Julian Alps area.

The general modes of operation of the Coordinating Committee are described below:

- It is chaired by the Triglav National Park or the Julian Prealps Natural Park members, based on a two years rotation principle. The first chair is up to the Triglav National Park.

- Triglav National Park and the Julian Prealps Natural Park jointly deliver, on the basis of a signed specific agreement, the permanent secretariat of the Coordinating Committee, identifying three persons on each side to act as the JA TBR focal point for local communities (the Director of the Park and two chosen employees).

The persons designed for the first two years are:

- Triglav National Park – Director⁴⁴, Mojca Smolej, Marko Pretner
- Julian Prealps Natural Park – Director⁴¹, Alessandro Benzoni, Cristina Comuzzo
- The “Julian Alps Transboundary Biosphere Reserve” Coordinating Committee will decide its own operating rules and decision-making process.
- The “Julian Alps Transboundary Biosphere Reserve” Coordinating Committee will be convened regularly, at least once a year, and it will be complemented by a Young Advisory Board, the ECST Forum and 4 Cooperation Tables (Section 7.2.2), in order to create a platform for discussion among stakeholders from the countries concerned, with a view to promote all opportunities for exchanging views and knowledge (Section 7.2.2).

Every 10 years, a Periodic Review is scheduled to evaluate the effectiveness of the “Julian Alps Transboundary Biosphere Reserve” to achieve its goals and realize what was set in the Work Plan. This document will have a total duration of 10 years and the timetable provides a periodic monitoring of the cooperation actions (every 2 years) in order to update their status and add new occurred actions. Moreover, after 5 years, the effectiveness of the Work Plan will be assessed by an evaluation of the general objectives that, if necessary, will be implemented or modified. In 10 years, after a final re-evaluation, a new version of the Work Plan will be provided.



7.2.2 Other mechanisms of consultation and co-ordination among the different stakeholders in the transboundary biosphere reserve, including mechanism for involvement of local communities into common activities and programmes of the proposed transboundary biosphere reserve

[Indicate how and to what extent local people living within or near the biosphere reserve participate to the decision process and management resource.]

In addition to the modes of operation described in Section 7.2.1, the Transboundary Biosphere Reserve’s Coordinating Structure provided for the following mechanisms of consultation and coordination among the different stakeholders, as well as for the involvement of local communities:

⁴⁴ During the nomination procedures the Directors in charge are dr. Tit Potočnik (TNP) and dr. Antonio Andrich (PGNP).

- Transboundary Cooperation Tables: the TBR Work Plan foresees the development of a series of discussion tables, either in-person or online to facilitate participation, with the aim of fostering dialogue between Italian and Slovenian stakeholders in a given sector, in order to find synergies, encourage collaborations, exchange of good practices and strengthen cross-border cooperation. One/two meeting(s) per year will be organized for the following sectors and stakeholders:
 - Agriculture and Forestry – Coordinating Committee representatives (in particular the TNP and PNRG), the Italian and Slovenian concerned local authorities, farmers, breeders, producers, other interested participants.
 - University and Research groups - Coordinating Committee representatives (in particular the TNP and PNRG), the Italian and Slovenian concerned local authorities, Researchers coming from Universities, Research Institute and Centres, experts in the different fields concerning the main functions of the MAB Biosphere Reserves, such as environmental, cultural, and socio-economic.
 - Cultural and Traditional associations - Coordinating Committee representatives (in particular the TNP and PNRG), the Italian and Slovenian concerned local authorities, Superintendencies and institutions, local territorial operators, Local Action Groups (LAGs), associations, non-governmental organizations and other experts in the field of historical, artistic and socio-cultural heritage.
 - School and Education - Coordinating Committee representatives (in particular the TNP and PNRG), the Italian and Slovenian concerned local authorities, school referees (school directors and teachers of different school grades, students' representatives, educators, etc.).
 - Young people: this cooperation table, as planned in the cooperation actions of the Work Plan, will be established with the aim to support the Transboundary Biosphere Reserve's Coordinating Committee in providing precious insights for the future of the Julian Alps. It will be composed by Slovenian and Italian young people's representatives (under 30) living in the Transboundary Biosphere Reserve and it will cooperate to define specific objectives, strategies and actions. Possibly, it can be formalized in a Transboundary Young Advisory Board.
- ECST annual forum: A permanent forum, or equivalent arrangement, established between the protected-area authorities, national and regional bodies, local municipalities, conservation and community organizations and representatives of the tourism industry that is already developed in the framework of the European Charter of Sustainable Tourism (Chapter 5).

7.3 Financial source(s) and yearly budget of the coordinating structure of the transboundary biosphere reserve and of workplan and common programmes, shared staff respectively: Budget and staff support, including approximate average annual amounts (or range from year-to-year); main sources of funds (including financial partnerships established (private/public), innovative financial schemes); special capital funds (if applicable); number of full and/or part-time staff; in-kind contribution of staff ; volunteer contributions of time or other support.

7.3.1 for the coordinating structure:

The main financial and human resources provided for the Transboundary Biosphere Reserve's Coordinating Committee are primarily coming from the Triglav National Park's and the Julian Prealps Natural Park's ordinary budgets and staff. Two permanent employees per each Park (tot. 4) will be destined to the TBR organizational and management activities, with a part time commitment of 8 hours/week each one on average. In fact, according to the timetable, there will be periods requiring a greater commitment for the Transboundary Biosphere Reserve coordination and management and other in which the activities to be carried out will be less.

7.3.2 for the workplan and common programmes:

In addition to the financial sources and human resources defined for the Coordinating Committee (Section 7.3.1), for the implementation of the cooperation actions and the Work Plan, the European financial instruments and programmes are considered (e.g., *Interreg Italy-Slovenia*). Moreover, national/regional grants and private entities financial support will be utilized, when possible, according to the Transboundary Biosphere Reserve coordinating principles and objectives. Therefore, there is not a fixed budget for the development of the Work Plan and the common activities, but when necessary, the two Parks will agree on how to support expenses equally, as they already did during the application process.

Approximately a half of the cooperation actions and common projects foreseen in the Work Plan (Chapter 5) are already financed by the Parks' and the other territorial institutions/organizations/associations' economic resources. The remaining ongoing activities do not require additional funding, as well as some planned actions. For the proposed initiatives, depending on the activities envisaged, it will be evaluated the necessity and modes of funding.

7.4 Does the proposed transboundary biosphere reserve have cooperative activities with other transboundary biosphere reserves (exchanges of information and personnel, joint programmes, etc.)?

The proposed Julian Alps Transboundary Biosphere Reserve does not have any structured agreement with other MAB UNESCO Transboundary Biosphere Reserves, but during the candidature process it was helpful to confront and take information from the existing Mont-Viso (Italy-France) and Mura-Drava-Danube (Slovenia, Austria, Hungary, Croatia and Serbia) TBRs on how to pursue the application.

Moreover, it is a common intention to establish a dialogue with the neighbouring Austrian region, with which the two parks and the local stakeholders have already been cooperating for many years, to further involve it in the Transboundary Biosphere Reserve and, hopefully, extend the concerned area to build a 3-countries TBR.

8. CONCLUSION

In your opinion, what will ensure that both the functioning of the transboundary biosphere reserve and the structures in place will be satisfactory? Explain why and how, especially regarding the common management of the shared ecosystems according to the three functions of biosphere reserves (conservation, development, logistic) and the participation of local communities?

In conclusion, the nomination referees and the 82 stakeholders who supported the candidacy through the letters of endorsement (Chapter 1) are confident of the future functioning of the candidate Julian Alps Transboundary Biosphere for the reasons described in the previous Chapters of the dossier and summarized below:

- The long-lasting friendship and **cooperation** between the Triglav National Park (Slovenia) and the Julian Prealps Natural Park (Italy), referees of the National Julian Alps Biosphere Reserves and responsible for the coordination of the transboundary site, that have been carried on for over 20 years (Chapter 1).
- The existing efforts of the concerned territories and communities in pursuing a **sustainable and responsible development**, in accordance with the international SDGs of the ONU's Agenda 2030, the UNESCO MAB Programme principles and functions, as indicated in the Seville Strategy, the Lima and Madrid Action Plans, and recommended in the Pamplona recommendations.
- The common desire to consider the ecological connectivity and cohesiveness of the Julian Alps' natural environment as a priority, going beyond administrative borders, as demonstrated by the numerous **programs, initiatives and research/monitoring projects** aiming at conserving and promoting the cross-border natural environment, such as the coordinated management of the Natura 2000 Network's sites and of the relevant wild species (Nat2Care, DinAlpConect, AlpBioNet), and the establishment of the Julian Alps Transboundary Ecoregion in 2009, awarded by the ECST certificate (Chapters 4, 5 and 6).
- The positive **involvement of local stakeholders** in the National Julian Alps Biosphere Reserves and the presence of events, festivals, markets and other initiatives designed to promote the socio-cultural uniqueness of the territory and to engage inhabitants from the two sides of the Julian Alps (Chapter 5).
- The **82 letters of endorsement** received from local, regional, national and international Institutes/Associations/Organizations, showing the Slovenian and Italian stakeholders' commitment in the future Julian Alps Transboundary Biosphere Reserve and their desire to cooperate at transboundary level (Chapter 1).
- The common vision and the **18 objectives** designed in the **Work Plan** annexed to the Dossier, specifically dedicated to the three main functions of the Biosphere Reserves (natural and cultural conservation, sustainable development and logistic), and which address the main challenges of the transboundary area. In addition, the Work Plan already collected **49 cooperation actions** (ongoing, planned or proposed) carried on by different stakeholders in the concerned territories (Chapter 3 and 7).
- The choice to develop a **multi-level Transboundary Biosphere Reserve's governance** that aims to respect the national individuality of the existing Italian and Slovenian Julian Alps

Biosphere Reserves, while coordinating the transboundary functions, objectives and actions as a unified entity, ensuring an equal representativeness from both sides.

The establishment of **5 Transboundary Cooperation Tables** that will enable stakeholders of the Julian Alps to dialogue and exchange ideas and good practices concerning the main sectors and issues of the Julian Alps area (Chapter 7).

9. SUPPORTING DOCUMENTS

[List of the annexes submitted with periodic review report.]

All the documents listed in the following sections are available in the “Supporting Document” folder annexed to this Julian Alps Transboundary Biosphere Reserve Nomination Form.

(1) Location and zonation map with coordinates

[Provide the transboundary biosphere reserve’s standard geographical coordinates (all projected under WGS 84). Provide a map on a topographic layer of the precise location and delimitation of the three zones of the transboundary biosphere reserve (Map(s) shall be provided in both paper and electronic copies). Shapefiles (also in WGS 84 projection system) used to produce the map must also be attached to the electronic copy of the form. If applicable, also provide a link to access this map on the internet (e.g., Google map, website...)]

Annexed to this Dossier a **Cartographic Atlas** is provided (**Annex 1**), including information about the zonation of the Julian Alps Transboundary Biosphere Reserve (Italy-Slovenija), as well as the shapefiles used (WGS 84). The Cartographic Atlas also shows a detailed map of the 12 quadrants into which the map has been divided.

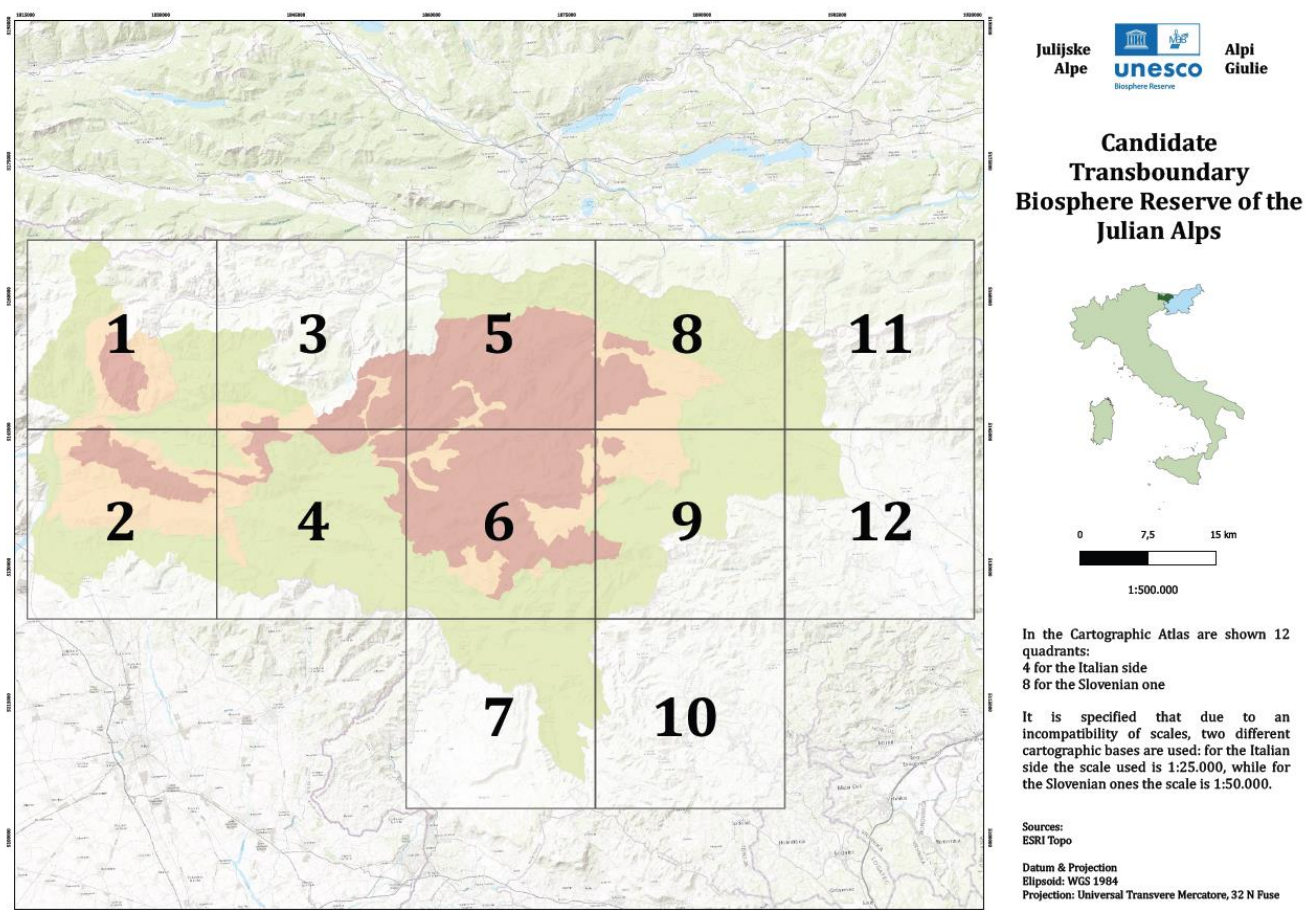


Figure 39 Map of the proposed Julian Alps TBR divided in quadrants, from the Cartographic Atlas

The **link** to access to the map on the internet is: <https://www.julianalps-mab.eu/> (Julian Alps Transboundary Biosphere Reserve’s landing page).

(2) Cooperation plans and common workplan(s)

[List existing land use and management/cooperation plans (with dates and reference numbers) for the administrative area(s) included within the proposed transboundary biosphere reserve. Provide a copy of these documents. It is recommended to produce an English, French or Spanish synthesis of its contents and a translation of its most relevant provisions.]

Annex 2) Julian Alps TBR Work Plan (2023): Triglav National Park, Julian Prealps Nature Park (2023), *Julian Alps Transboundary Biosphere Reserve Work Plan*.

Annex 2a) Action Plan of the Transboundary Ecoregion “Julian Alps” (2020-2024): Triglav National Park, Julian Prealps Nature Park (2019), *5 years Action Plan (2020-2024) for Transboundary Ecoregion Julian Alps*.

Annex 2b) ECST Strategy and Action Plan: Triglav National Park & Julian Prealps Natural Park (2019), *5 years Action Plan (2020-2024) for ECST*.

Annex 2c) DINALPCONNECT Action Plan: *Action Plan for Improving Ecological Connectivity in the Slovenia–Italy Pilot Region*, Interreg Adrion.

Annex 2d) NAT2CARE Final Publication: Žunič Kosi A. (ed.) (2020), *Approccio Transfrontaliero alla Conservazione e Gestione dei Siti Natura 2000 /Čezmejni Pristop k Ohranjanju in Upravljanju z Območji Natura 2000/ Transboundary Approach to Conservation and Management of Natura 2000 Sites*, Interreg V-A Italia-Slovenja, Nacionalni inštitut za biologijo, Ljubljana.

(3) Official agreement between the governmental authorities, if appropriate

Annex 3) Official Agreement between the Governmental Authorities: *Joint declaration between the Minister of Environment and Energy Security of the Italian Republic and the Minister of Nature Resources and Spatial Planning of the Republic of Slovenia on Julian Alps -MAB UNESCO Transboundary Biosphere Reserve candidature* (June 20th, 2023).

(4) List of main bibliographic references (to be annexed)

[Provide a list of the main joint publications and articles of relevance to the proposed transboundary biosphere reserve.]

The complete list of bibliographic references and sitography utilized for the writing of the nomination form is provided as **Annex 4**. The Annex 4 also contains all the list of studies and publications received from the engaged stakeholders. Following the list of the main joint publications and articles is provided⁴⁵:

- Benussi E., Favalli M., Genero F., 2021, *L'Allocco degli Urali tra Italia e Slovenia*, docufilm - Parco Naturale delle Prealpi Giulie, Dinalpconnect project (Interreg Adrion).

45 For more details about the projects cited in the list, see Chapter 6.

- Bogner D., Morandi V., Voglauer O., Mohl I., 2007, *Eco Regio Alpe Adria 2004-2006 - Final report*, ERA project (Interreg Ita-Slo).
- Cultural Institute of Slovenia, 2023, *Strategia dello Sviluppo Turistico del Territorio di Benecia e Resia per il periodo 2023-2028*.
- Friuli Venezia Giulia Region, L.R.42/96, *Piano di conservazione e sviluppo del Parco Regionale delle Prealpi Giulie (PCS)*.
- Kačičnik Jančar M., Žitnik D., Kosor N., Naglič M., Vukelič E., 2022, *Pregled stanja vrst in habitatnih tipov omrežja Natura 2000*, LIFE IP NATURA.SI : LIFE Integriran projekt za okrepljeno upravljanje Nature 2000 v Sloveniji LIFE17 IPE/SI/000011.
- Kahlen J., Svadlenak-Gomez K., Walzer C., 2019, *Wildlife Management within the EUSALP perimeter Alpblionet2030 – Work Package 2 Deliverables D.T 2.1.1 & D.T 2.3.1*, Research Institute of Wildlife Ecology (FIWI) - University of Veterinary Medicine Vienna (Austria), Alpblionet 2030 project (Interreg Alpine Space)
- Nève Repe A., Arih A., Pretner M., Ferfolja S., Andrich A., Goi G., 2022, *Action Plan for Improving Ecological Connectivity in the Slovenia–Italy Pilot Region*, Triglav National Park, Julian Prealps Nature Park, Dinalpconnect project (Interreg Adrion).
- Pretner M., Ferfolja S., 2022, *Joint Report on SWOT Analyzes Carried Out for the Pilot Area Between Slovenia and Italy Cross-border Chamois and Ibex management as well as Sustainable Forest Management in the Julian Alps*, Dinalpconnect project (Interreg Adrion).
- Odar M., 2021, *Development Plan for the Julian Alps Biosphere Reserve (BOJA) as sustainable tourist destination 2025+*, Triglav National Park Public Institution.
- Julian Prealps Natural Park, 2018, *UNESCO MAB Julian Alps Biosphere Reserve Nomination Form*.
- Strategia nazionale per le aree interne e i nuovi assetti istituzionali, 2021, *Dossier d'area organizzativo Canal del Ferro - Val Canale Comunità, Regione Autonoma Venezia Giulia*.
- Svadlenak-Gomez K., Badura M., de Bortoli I., Favilli F., Gerritsmann H., Kohler Y., Plassmann G., Ullrich-Schneider A., Walzer C., 2014, *Connecting Mountains, People, Nature - Shaping the Framework for an Efficient European Biodiversity Policy for the Alp*, GreenAlps project (Interreg Alpine Space).
- Triglav National Park & Julian Prealps Natural Park, 2015, *ECST Application Report*.
- Triglav National Park & Julian Prealps Natural Park, 2019, *Transboundary Ecoregion Action Plan (2020-2024)*.
- Triglav National Park & Julian Prealps Natural Park, 2019, *ECST Strategy and Action Plan for Sustainable Tourism in Transboundary Ecoregion Julian Alps*.
- Triglav National Park, 2003, *UNESCO MAB Julian Alps Biosphere Reserve Nomination Form*.
- Triglav National Park, 2016, *Triglavskega narodnega parka 2016–2025*.
- Visintin F., Marangon F., Troiano S., 2020, *Identificazione, mappatura e condivisione di una metodologia per la valutazione dei servizi ecosistemici (Prima parte) = Identificiranje, kartiranje in razdelitev metodologije za vrednotenje ekosistemskih storitev (Prvi del) = Identification, mapping and sharing of a methodology for the assessment of ecosystem services (Part one). Manuale dei servizi ecosistemici e la coesistenza tra uomo e natura nei siti Natura 2000 = Priročnik o ekosistemskih storitvah ter sobivanju med človekom in naravo na območjih natura 2000 = Manual on ecosystem services and co-existence between man and nature in Natura 2000 sites. NAT2CARE, Interreg V-A Italia-Slovenia 2014-2020 = Interreg V-A Italija-Slovenija 2014-2020 = Interreg V-A Italy-Slovenia 2014-2020, 90 pag. = 90 str. = 90 p.*
- Vranješ M., Škornik I., Santi S., Costa M., 2013, *Cambiamenti climatici e gestione delle aree protette: gli studi sulla biodiversità, i flussi di visitatori e l'efficienza energetica*, Climaparks project (Interreg Ita-Slo).

- Žunič Kosi A. (ed.), V.V. A.A., 2020 *Approccio Transfrontaliero alla Conservazione e Gestione dei Siti Natura 2000 /Čezmejni Pristop k Ohranjanju in Upravljanju z Območji Natura 2000/ Transboundary Approach to Conservation and Management of Natura 2000 Sites*, Nat2care project (Interreg Ita-Slo).

(5) Further supporting documents.

Annex 5) Cooperation Agreement between the Triglav National Park and the Julian Prealps Natural Park, Resia/Bled (2023 June 15th).

Annex 5a) Cooperation Agreement between the Triglav National Park and the Julian Prealps Natural Park, Trenta (2021 July, 24th).

Annex 5b) Press review of the published news and articles concerning the Julian Alps Transboundary Biosphere Reserve's nomination process

Annex 5c) Letters of Endorsement

Annex 5d) Promotional Materials (Pictures, Video and the two copies of the Agreements granting Non-Exclusive Rights signed by the Triglav National Park and the Julian Prealps Natural Park as requested in Annex II)

10. ADDRESSES

[Contact address of the proposed transboundary biosphere reserve for all official correspondence.]

10.1 Contact address of the proposed transboundary biosphere reserve:

Slovenia:

Name: Triglavski narodni park (Triglav National Park), referee of the Slovenian Julian Alps Biosphere Reserve

Street or P.O. Box: Ljubljanska cesta 27

City with postal code: 4260 BLED

Country: Slovenia

Telephone: +386(0)4 / 578 02 00

E-mail: triglavski-narodni-park@tnp.gov.si

Web site: <https://www.tnp.si/en/home-2/>

Italy:

Name: Ente Parco Naturale Regionale delle Prealpi Giulie (Julian Prealps Natural Park) referee of the Italian Julian Alps Biosphere Reserve

Street or P.O. Box: Piazza del Tiglio 3

City with postal code: 33010 RESIA - Frazione Prato

Country: Italy

Telephone: +39 0433 53534

E-mail: info@parcoprealpigiulie.it

Web site: <https://www.parcoprealpigiulie.it/it/>

Annex I to the Transboundary Biosphere Reserve Nomination Form

January 2013

MABnet Directory of Biosphere Reserves

Administrative details

Countries: Slovenija (SI) - Italia

Name of TBR: Julian Alps Transboundary Biosphere Reserve

Year designated: -

Administrative authorities: (7)

Slovenia: Triglavski Narodni Park (Triglav National Park)

Italy: Ente Parco Naturale Regionale delle Prealpi Giulie (Julian Prealps Natural Park)

(As described in Chapter 7 and in the Work Plan (annexed), the candidate Julian Alps Transboundary Biosphere Reserve's coordination will be carried out with a two years rotation principle starting with the Slovenian authority.)

Name Contact: (10.1)

- a) Mojca Smolej (SI)
- b) Dr. Marko Pretner (SI)
- c) Dr. Alessandro Benzoni (IT)
- d) Dr. Cristina Comuzzo (IT)

Contact address: (Including phone number, postal and email addresses) (10.1)

- a) Informacijsko Izobraževalna Služba
Javni Zavod
Triglavski Narodni Park
Ljubljanska cesta 27, 4260 Bled
+386 4 5780 226
mojca.smolej@tnp.gov.si
- b) Informacijsko izobraževalno središče
Triglavskega narodnega parka Dom Trenta
Na Logu v Trenti, 5232 Soč
+386 5 93 34 311
Marko.pretner@tnp.gov.si
- c) Servizio amministrazione e bilancio
Parco Naturale Regionale delle Prealpi Giulie
P.zza del Tiglio 3, 33010 RESIA (UD)
+39 0433 53534
alessandro.benzoni@parcoprealpigiulie.it
- d) Servizio educazione ambientale-promozione
Parco Naturale Regionale delle Prealpi Giulie
P.zza del Tiglio 3, 33010 RESIA (UD)
cristina.comuzzo@parcoprealpigiulie.it

Related links: (web sites)

- **Slovenia:** Triglavski Narodni Park - <https://www.tnp.si/en/home-2/>
- **Italy:** Parco Naturale Regionale delle Prealpi Giulie - <https://www.parcoprealpigiulie.it/it/>
- **Landing Page Julian Alps Transboundary Biosphere Reserve:** <https://www.julianalps-mab.eu/>

Social networks: (6.3.3)

- **Slovenia:** Triglavski narodni park / Triglavski Narodni Park (Facebook page)
<https://www.facebook.com/triglav.national.park.official>
- **Italy:** Parco Naturale Regionale delle Prealpi Giulie (Facebook page)
<https://www.facebook.com/parconaturale.prealpigiulie>

Description

General description:

Approximately 25 lines

The candidate Julian Alps TBR comprehends the Julian Alps and Prealps in the South-Eastern portion of the alpine range, covering a total area of 267.006 ha on the Slovenian-Italian border. Falling in the Alpine Biographic Region, the TBR presents typical mountain environments, such as, deep valleys, slopes and peaks that exceed 2.000 m a.s.l. (2.860 m Mount Triglav), and all the typical alpine ecosystems and habitats (temperate forests, rivers, springs, high altitude lakes and meadows) and landscapes (high-altitude grasslands, agricultural lands, dairy huts and villages). The mountainous elevations are surrounded by the anthropized plain, representing a significant biodiversity hotspot, providing important ecosystem services at European and international level.

The Italian and Slovenian communities of the Julian Alps share a common history (memories and events of the WW I), have experienced linguistic and socio-cultural exchanges, which enriched the local cultural heritage. These mountains are rich of foods, products of excellences and uniqueness linked to agrarian traditions and dairy farming. The Julian Alps host a long tradition of winter sports (skiing, snowboarding, climbing) and outdoor activities (trekking, mountaineering), rooted in the deep relation existing between the inhabitants and the mountains.

The two protected areas of the Triglav National Park and the Julian Prealps Natural Parks, referees of the national Julian Alps UNESCO Biosphere Reserves, have been cooperating for 20 years to strengthen the ecological connectivity between the two sides of the Julian Alps thanks to the joint participation to several European projects and programmes (e.g., Interreg Italia-Slovenija, Interreg Alpine Space, EGB). In 2009 the Julian Alps Transboundary Ecoregion was recognized by the EUROPARC Federation, becoming in 2014 a transboundary pilot region for ecological connectivity (Alpine Convention). In 2016 the Julian Alps Ecoregion became the first transboundary parc awarded with the ECST certificate. Now the candidate Julian Alps TBR intends to become an international example of positive cooperation between neighbouring countries, going beyond administrative borders to pursue the common goal of preserving and enhancing the precious alpine ecosystems while developing sustainably.

Major ecosystem type: terrestrial ecosystems, temperate forests

Major habitats & land cover types: Beech, spruce and larch forests, rock cliffs, aquatic environments (streams, rivers, alpine lakes), high altitude meadows, grasslands, agricultural lands.

Bioclimatic region: Alpine

Location (latitude & longitude):

Geographic coordinates: WGS84 EPSG 4326

	LAT	LONG
Centroid	46.331921°	13.686035°
Most Northern point	46.572223°	13.203366°
Most Southern point	46.005015°	13.868379°
Most Western point	46.244636°	13.091877°
Most Eastern point	46.272805°	14.272965°

Total Area (ha): 267.006,54 ha

Core area(s): 73.526,92 ha

Buffer zone(s): 43.752,48 ha

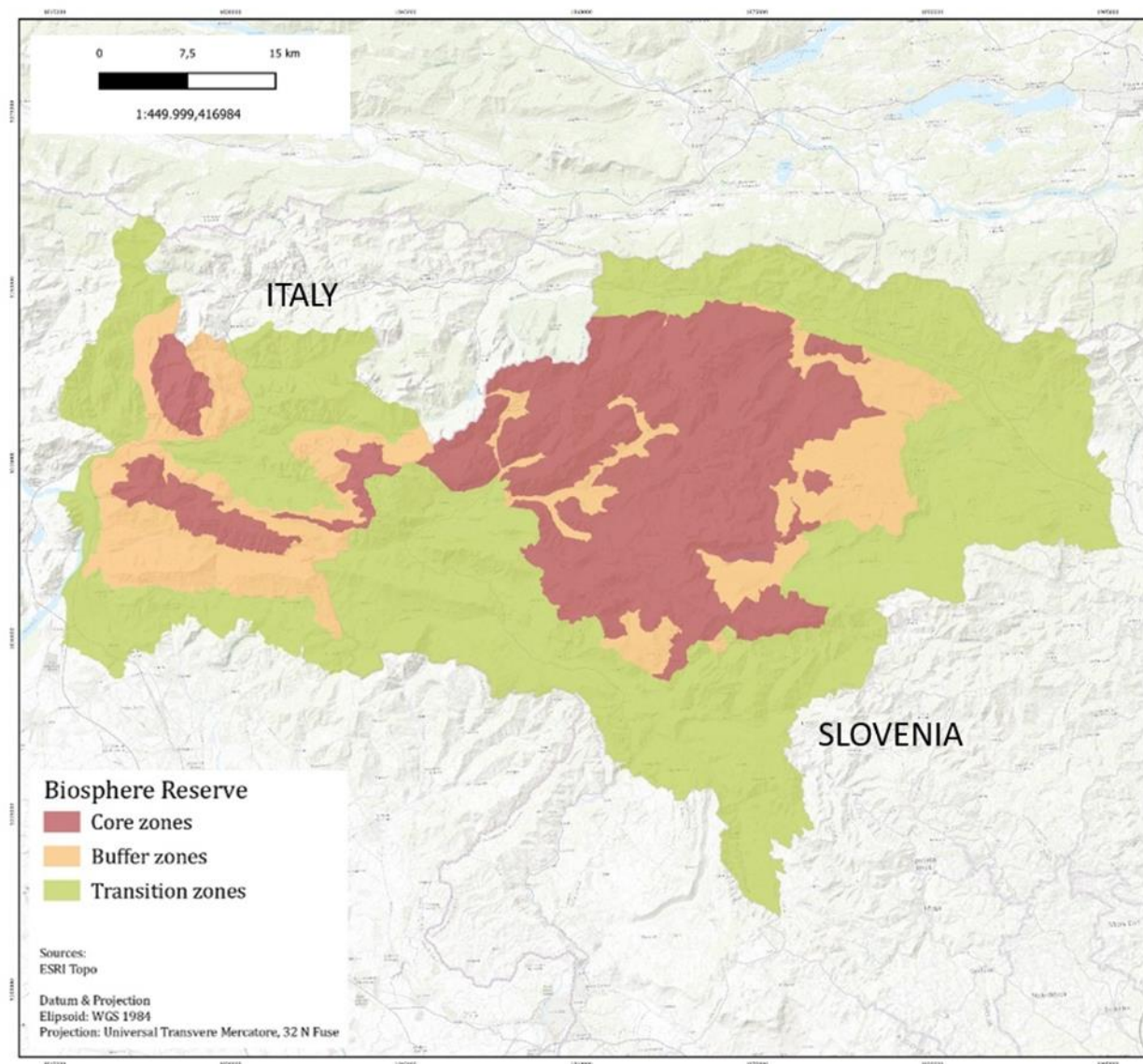
Transition area(s): 149.727,14 ha

Altitudinal range (metres above sea level):

2.864 m a.s.l. (Mt. Triglav, Slovenia)

177 m a.s.l. (Gemona del Friuli, Italy)

Zonation map(s) (refer to section 2.1):



Main objectives of the transboundary biosphere reserve

Brief description

Approximately 5 lines

The 18 objectives of the Julian Alps TBR focuses on strengthening the existing cooperation between Italy and Slovenia, enhancing the connectivity and the joint management of the alpine ecosystems and wild species; encouraging positive relations between the local communities and the environment, promoting sustainability in different economic fields (especially tourism and agriculture); valorising the common history and traditions; encouraging research, monitoring and education activities, involving young people and stakeholders in a cooperative dialogue, through the establishment of the 5 transboundary cooperation tables.

Research**Brief description**

Approximately 5 lines

Research activities will be implemented thanks the collaboration of universities and research centres, already existing. Exchange of data and information will be facilitated by the establishment of a periodic Cooperation Table that will gather Italian and Slovenian experts and researchers to discuss over environmental, biological, socio-cultural and economic issues considered relevant for the transboundary area. The Julian Alps TBR will cooperate at international level participating jointly in European projects and programmes.

Monitoring**Brief description**

Approximately 5 lines

The Julian Alps TBR intends to carry on the monitoring activities concerning the protected habitats and species of the Natura 2000 Network, such as large mammals and carnivores living in the transboundary area, as well as the alpine environments, which are most vulnerable to climate change (e.g., glaciers and water courses). A common strategy and methodology to evaluate the environmental impacts of the visitors and the tourism sector will be implemented, aiming to find a balance between conservation and local development.

Specific variables (fill in the table below and tick the relevant parameters)

Abiotic		Biodiversity	
Abiotic factors	x	Afforestation/Reforestation	x
Acidic deposition/Atmospheric factors	x	Algae	
Air quality	x	Alien and/or invasive species	x
Air temperature	x	Amphibians	x
Climate, climatology	x	Arid and semi-arid systems	
Contaminants		Autoecology	
Drought		Beach/soft bottom systems	
Erosion	x	Benthos	
Geology	x	Biodiversity aspects	x
Geomorphology	x	Biogeography	x
Geophysics	x	Biology	x
Glaciology	x	Biotechnology	
Global change	x	Birds	x
Groundwater	x	Boreal forest systems	
Habitat issues	x	Breeding	x
Heavy metals		Coastal/marine systems	
Hydrology	x	Community studies	x
Indicators	x	Conservation	x
Meteorology	x	Coral reefs	
Modeling		Degraded areas	
Monitoring/methodologies	x	Desertification	
Nutrients		Dune systems	
Physical oceanography		Ecology	x
Pollution, pollutants	x	Ecosystem assessment	x
Siltation/sedimentation		Ecosystem functioning/structure	x
Soil	x	Ecosystem services	x
Speleology	x	Ecotones	x
Topography		Endemic species	x
Toxicology		Ethology	x
UV radiation		Evapotranspiration	
		Evolutionary studies/Palaeoecology	
		Fauna	x
		Fires/fire ecology	x
		Fishes	x
		Flora	x
		Forest systems	x
		Freshwater systems	x
		Fungi	x
		Genetic resources	
		Genetically modified organisms	
		Home gardens	
		Indicators	x
		Invertebrates	x
		Island systems/studies	
		Lagoon systems	
		Lichens	x
		Mammals	x
		Mangrove systems	
		Mediterranean type systems	
		Microorganisms	

	Migrating populations	
	Modeling	
	Monitoring/methodologies	x
	Mountain and highland systems	x
	Natural and other resources	x
	Natural medicinal products	
	Perturbations and resilience	
	Pests/Diseases	
	Phenology	
	Phytosociology/Succession	x
	Plankton	
	Plants	
	Polar systems	
	Pollination	x
	Population genetics/dynamics	
	Productivity	
	Rare/Endangered species	x
	Reptiles	x
	Restoration/Rehabilitation	x
	Species (re) introduction	x
	Species inventorying	x
	Sub-tropical and temperate rainforest	
	Taxonomy	
	Temperate forest systems	x
	Temperate grassland systems	x
	Tropical dry forest systems	
	Tropical grassland and savannah systems	
	Tropical humid forest systems	
	Tundra systems	
	Vegetation studies	x
	Volcanic/Geothermal systems	
	Wetland systems	x
	Wildlife	x

Socio-economic		Integrated monitoring	
Agriculture/Other production systems	x	Biogeochemical studies	x
Agroforestry		Carrying capacity	x
Anthropological studies	x	Climate change	x
Aquaculture		Conflict analysis/resolution	x
Archaeology	x	Ecosystem approach	x
Bioprospecting		Education and public awareness	x
Capacity building		Environmental changes	x
Cottage (home-based) industry		Geographic Information System (GIS)	x
Cultural aspects	x	Impact and risk studies	x
Demography		Indicators	x
Economic studies	x	Indicators of environmental quality	x
Economically important species		Infrastructure development	x
Energy production systems		Institutional and legal aspects	
Ethnology/traditional practices/knowledge	x	Integrated studies	x
Firewood cutting		Interdisciplinary studies	x
Fishery		Land tenure	
Forestry	x	Land use/Land cover	x
Human health		Landscape inventorying/monitoring	x
Human migration		Management issues	x
Hunting	x	Mapping	
Indicators	x	Modeling	
Indicators of sustainability	x	Monitoring/methodologies	x
Indigenous people's issues	x	Planning and zoning measures	x
Industry		Policy issues	
Livelihood measures	x	Remote sensing	
Livestock and related impacts	x	Rural systems	x
Local participation	x	Sustainable development/use	x
Micro-credits		Transboundary issues/measures	x
Mining		Urban systems	
Modeling		Watershed studies/monitoring	x
Monitoring/methodologies	x		
Natural hazards	x		
Non-timber forest products	x		
Pastoralism	x		
People-Nature relations	x		
Poverty			
Quality economies/marketing	x		
Recreation	x		
Resource use	x		
Role of women	x		
Sacred sites	x		
Small business initiatives	x		
Social/Socio-economic aspects	x		
Stakeholders' interests	x		
Tourism	x		
Transports	x		

**Annex II to the Transboundary Biosphere Reserve Nomination Form January
2013**

**Promotion and Communication Materials
for transboundary biosphere reserve**

Provide some promotional material regarding the site, notably high-quality photos, and/or short videos on the site so as to allow the Secretariat to prepare appropriate files for press events. To this end, a selection of photographs in high resolution (300 dpi), with photo credits and captions and video footage (rushes), without any comments or sub-titles, of professional quality – DV CAM or BETA only, will be needed.

In addition, return a signed copy of the following Agreements on Non-Exclusive Rights for photo(s) and video(s).

The Promotional and Communication Materials (4 photos and 1 video), as well as the copies of the *Agreements Granting Non-Exclusive Rights for photo(s) and video(s)* signed by the Triglav National Park and the Julian Prealps Natural Park are attached to this Julian Alps Transboundary Biosphere Reserve Nomination Form as **Annex 5d “Promotional Materials”**.

**Annex III to the nomination form
for transboundary biosphere reserve
January 2013
Pamplona Recommendations (Spain, 2000)**

**RECOMMENDATIONS
For the Establishment and Functioning of
Transboundary Biosphere Reserves**

As borders between states are political and not ecological, ecosystems often occur across national boundaries, and may be subject to different, or even conflicting, management and land use practices. Transboundary Biosphere Reserves (TBR) provide a tool for common management. A TBR is an official recognition at an international level and by a UN institution of a political will to co-operate in the conservation and sustainable use through common management of a shared ecosystem. It also represents a commitment of two or more countries to apply together the Seville Strategy for biosphere reserves and its objectives. It corresponds to the increasing recognition of the appropriateness of the ecosystem approach, for conservation and sustainable use of biological diversity.

The recommendations presented below deal with the establishment of TBR, the measures which can be taken to respond to the MAB principles and in particular the goals of the Seville Strategy and the way of ensuring that a TBR is truly operational. However, it should be kept in mind that, although the biosphere reserve provides a general framework for action in a transboundary location, the real-world situations will vary very much from a place to another, and flexibility is needed even more than in a national context.

The process leading towards the official designation of a TBR can include many forms of cooperation and co-ordination among the existing areas on either side of a border. These serve as a basis for formalising the TBR proposal and should be encouraged.

Procedure for the establishment of a TBR

Up until now, all existing TBR were established as separate biosphere reserves in individual countries before being designated as TBR. However, it could be envisaged in the future that a TBR be established jointly by the countries concerned in one step. In both cases, the ultimate aim should be to have one *functional biosphere reserve*.

In these two different scenarios, the following respective procedures are recommended:

- Establishment of a biosphere reserve on each side of the border;
- or, when the TBR is established in one step, definition of the zoning of the area according to the general criteria for designation of biosphere reserves.
- Identification of local and national partners and establishment of a working group to define the basis and identify key issues for co-operation.
- Signing of an official agreement between governmental authorities regarding the TBR.
- Nomination of the various parts by the respective State authorities;
- or, when the TBR is established in one step, joint nomination for the whole area by the concerned State authorities.
- In both scenarios, indication of the main components of a plan for co-operation in the future.
- Official designation by ICC MAB of UNESCO.

Functioning of the TBR

Among the measures recommended to make the TBR function effectively, priority should be given to:

- Preparation and adoption of a zonation plan for the whole area and implementation of the zonation by strict protection of core areas, delimitation of the buffer zones and coordinated objectives for the transition areas; this implies that the countries concerned have a common understanding of the

characteristics of each of the zones, and that similar management measures are in place for each zone.

- When the zonation plan is defined, publication on a joint map of the zonation.
- Definition of common objectives and measures, work plan, time table, and required budget; this should be a demand driven process, based on perceived needs or management requirements. This work plan should take into account the elements listed under the goals of the Seville Strategy as suggested below.
- Identification of potential funding sources for the work plan and joint or simultaneous application for these funds.
- Establishment of a means of communication between the co-ordinators/managers of the different parts of the TBR, including electronic mail when feasible.
- Efforts towards harmonised management structures on each side.

Institutional Mechanism

The TBR will not function without a joint structure devoted to its co-ordination. Although this structure can vary greatly from one TBR to another, the following points can be recommended:

- The co-ordinating structure is representative of various administrations and the scientific boards, as well as the authorities in charge of the protected areas, the representatives of local communities, interested and affected groups, including youth, and of the private sector.
- The NGO sector in the area is also represented in the structure.
- This structure has a permanent secretariat, and a budget is devoted to its functioning.
- A person is designated on each side to act as a focal point for co-operation.
- General and regular meetings of the co-ordinating structure are complemented by thematic groups, on an *ad hoc* basis, in order to create a platform for discussion among stakeholders from the countries concerned, with a view to promote all opportunities for exchanging views and knowledge.
- Joint staff teams are operational for specific tasks.
- An association is set up with the specific aim of promoting the TBR.

Responding to the goals of the Seville Strategy

Goal I: Use Biosphere Reserves to Conserve Natural and Cultural Diversity

In order to develop a concerted strategy for conservation, the following measures can be recommended:

- Co-ordination of regulatory measures on protection and, in case of incompatibility, their harmonisation.
- Common or co-ordinated policies for threatened and protected species and ecosystems, migratory species, as well as control of invasive alien species.
- Common or co-ordinated policies for rehabilitation and restoration of degraded areas.
- Co-ordinated action against illegal activities such as wildlife poaching and unauthorised logging.

Goal II: Utilize Biosphere Reserves as Models of Land Management and of Approaches to Sustainable Development

The human component of biosphere reserves and their role in promoting approaches to sustainable development can lead to a variety of forms of co-operation, ranging from the use of natural resources to the protection of cultural heritage. Among the measures that can be recommended in TBR are the following:

- Co-ordination of management practices, for example in forestry, logging, forest regeneration, or in the field of pollution control.
- Identification of possible perverse incentive and promotion of viable sustainable alternatives.
- Elaboration and supporting of the implementation of a joint tourism policy.
- Promotion of partnership among various groups of stakeholders having the same interests, in order to make the TBR a common project.
- Promotion of participation of local communities in the TBR, including local NGOs.
- Promotion of joint cultural events and fostering of co-operation on cultural and historical heritage preservation.
- Developing of common strategies for planning based on research and monitoring.

Goal III: Use Biosphere Reserves for Research, Monitoring, Education and Training

Joint activities on research and monitoring should be led by scientific boards and planned in joint sessions; these activities could be carried out along the following lines:

- Define and implement joint research programmes.
- Develop common data collection formats, indicators, monitoring and evaluation methods.
- Exchange existing data, including maps and geographical information, and facilitate access to results of research.
- Share scientific information, including through the organisation of workshops, conferences, etc.
- Share equipment when feasible.
- Jointly publish results of common research.
- Develop joint mapping and GIS.

Many joint activities in the field of education and training can be recommended, such as:

- Organisation of joint training courses and technical meetings for managers and field staff.
- Promotion of staff exchanges.
- Promotion of understanding of neighbouring country's culture.
- Organisation of linguistic training when needed.
- Exchanges of scientists between universities and academic and research institutions of each country.
- School exchanges.
- Launching of participatory training programmes for various groups of stakeholders.

Information and public awareness are crucially important to develop a common understanding and build support for and appropriation of the objectives of the TBR by the different stakeholders. Therefore, the rationale and objectives of the TBR should be explained by varied means to different target groups (decision makers, local populations, visitors, schools, scientists, managers, etc). Among other activities, the following can be recommended:

- Develop a common public relations' strategy with the aim of raising awareness and promoting the TBR.
- Produce information material, brochures, books, etc.
- Organise exhibits and events around the TBR.
- Develop a common logo for the TBR, as well as a common design for published material.
- Implement joint demonstration projects.
- Set up a common internet site.