

# LOGO: NATIONAL PARK GALICICA SHORT VERSION

OF

# GALICICA NATIONAL PARK MANAGEMENT PLAN FOR THE PERIOD 2021 - 2030

**OHRID, DECEMBER 2020** 

Galicica National Park is located in the southwestern part of Republic of North Macedonia, on the Galicica mountain massif, including parts of its branches East and Prechna Mountain, including the island of Golem Grad in Lake Prespa.

The park was declared by law in 1958, in order to preserve the flora and fauna and the natural appearance of Mountain Galicica. Galicica National Park covers an area of 24,151 hectares. Almost 72% (17,385 ha) of the park territory is within the boundaries of the World Natural and Cultural Heritage Site in the Ohrid region, recorded in the UNESCO World Natural and Cultural Heritage at the UNESCO Convention (or 20.87% of the total area of the area - 83,350 ha).

#### **Ownership**

Most of the land within the park boundaries is state-owned. Currently, the Public Institution National Park Galicica (PINPG) does not have an updated inventory of state-owned cadastral parcels within the park, i.e., an inventory of privately owned parcels prepared by the state Agency for Real Estate and Cadaster. According to the data held by PINPG, the area of the parcels within the borders of the park of state-ownership is 19 502 ha, and the area of the privately owned parcels is 5 180 ha. Currently 79% of the total area of the park is state owned.

#### **Legal rights**

According to Article 136 paragraph 1 of the Law on Nature Protection (LNP), in order to perform the activities of management and protection of the Park, the Government of Republic of North Macedonia establishes PINPG. According to the Government Decision on the establishment of PINPG, the main activity of the institution is management and protection of nature, biological and landscape diversity and natural heritage through:

- Protection of natural habitats of national and international importance for cultural-scientific, educational and tourist-recreational purposes;
- Establishing stability of ecological processes as well as of biological and landscape diversity through permanent preservation of the representative physical-geographical regions, biocenoses, genetic resources and species in authentic condition;
- Creating conditions for tourism development in accordance with the principle of sustainable development;
- Study, research and processing with scientific methods of the issues of interest for the protection of the national park;
- Keeping records and documentation for natural and other values and beauties in the national park (position, degree of threat, protection measures);
- Adoption and implementation of strategies, programs, management plans, conditions and measures for protection of the national park;
- Prevention of harmful activities of individuals and legal entities and disturbances in the national park as a consequence of technological development and performance of activities, i.e. providing maximum favorable conditions for protection and development of nature;

#### Status of the area

According to Article 66 of the LNP and Article 3 of the Law on proclamation, the category of protected area is "national park". The categories of protected areas in the Republic of North Macedonia prescribed

by the LNP largely coincide with the Categories of protected area management of the International union for conservation of nature (IUCN). Accordingly, the category "national park" from LNP corresponds to Category II (National Park) according to IUCN. It is important to note, however, that the IUCN categorization is based on the principle that the basic management objective should apply to at least two-thirds of the total territory of the area (rule 75%) which is not the case with the categorization of protected areas in Republic of North Macedonia according to the LNP.

#### Natural and Cultural Heritage Management Plan of the Ohrid Region

From the territory of the park, 17 382 ha (or about 72%) are within the World Natural and Cultural Heritage of the Ohrid Region (with a total area of 83 350 ha). The status of the region as a world natural and cultural heritage derives from the Convention for the Protection of the World Cultural and Natural Heritage (Paris, 1979/80). According to paragraph 108 of the Operational guide for the Implementation of the Convention, "every nominated good should have an appropriate management plan ... which will determine how the exceptional universal value of the good will be protected, taking into account the opinions of the participants" (UNESCO, 2005).

Following such directions, in 2020, a Plan for management of the world natural and cultural heritage of the Ohrid Region was adopted, in which, among other things, it is noted that:

- The natural heritage is concentrated within the NPG and Lake Ohrid.
- The management of the natural heritage within the NPG, according to the Plan is envisaged to be implemented in accordance with the NPG Management Plan.
- PINPG is responsible for the protection and management of natural heritage within the boundaries of the Park.
- The protection regime and zoning in the Management Plan for the world natural and cultural heritage of the Ohrid Region are taken over from the NPG Management Plan on the territory of the park.
- PINPG conducts biodiversity monitoring in accordance with the Management Plan and the Program for long-term biodiversity monitoring.
- PINPG, in accordance with this Management Plan, will conduct monitoring of visitors to the Park.

#### **Environmental information**

The unique combination of a set of geological, climatic and anthropogenic factors distinguishes the Balkan Peninsula among the most biologically significant and intriguing areas of the northern hemisphere and is a "hotspot" for European biodiversity. The extremely high level of endemism on the Balkan Peninsula, compared to other areas in Europe, is perhaps the most impressive element of the comparative features of biodiversity (Griffiths, 1998).

As a complex whole, the Park, together with Lakes Ohrid and Prespa, is a relatively limited area with very rich biodiversity, high degree of heterogeneity and endemism and in that sense is considered a really impressive location in Europe (Gaston & David, 1994).

#### Relics and endemism

With the absence of the main stages of glaciation in the Pleistocene, conditions were created for certain ecosystems (especially cave and aquatic ecosystems) and the fauna elements that are part of these ecosystems to survive for longer periods. Thus, the Park is an area in which ancient groups (relict species of fauna) survived and spread, without much influence of the extinction waves that followed the glaciation.

The long-term stability of the environment enabled the further distribution of the species through a process of evolution where from one species two or more genetically independent species are formed (speciation) which resulted in numerous local endemic species.

#### Vegetation and ecosystems (habitats)

Vegetation (vegetation cover) is a totality of all plant communities that develop in the Park. The vegetation diversity of the Galicica mountain is rich and diverse and is represented by a large number of plant communities (associations) which are subordinated to appropriate, superimposed syntaxonomic categories - alliances, rows and classes, i.e.to different vegetation types, which are part of the forest, shrub and grass vegetation.

An overview of the types of dwellings that enjoy legal protection under the Housing Directive of the European Council of the European Union is given in the table below.

No	Habitats Directive			EUNIS classification of types of habitats (2017)				
INO	Code	Title of the type of habitat	Code	Title of the type of habitat				
1.	6170	Alpine and subalpine calcareous grasslands	E4.41723	Pelagonija closed calcareous pastures with sesleria				
1.	6170	Alpine and subalpine calcareous grassiands	E4.437	Elino-Balkan bare pastures				
			E4.43821	Pelagonian bare calciferous pastures				
2.	6210	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)	E1.21	Elino-Balkan steppes with Satureja montana				
3.	5110	Stable xerothermophilous formations with Buxus sempervirens on rock slopes	S3-52	Habitats with shrubs of Buxus sempervirens				
4.	5130	Juniperus communis formations on heaths or calcareous grasslands	S3-14	Pre-Mediterranean habitats with blue spruce bushes				
5.	9180	* Tilio-Acerion forests of slopes, screes and ravines	T1-F6232	Pelagonija forests with wild chestnut in gorges				
			T1-77	Mezic beech forests				
6.	91W0	Moesian beech forests	T1-7712	Southwest Mezic pre-mountain beech forests				
			T1-772	Southeast Mezic beech forests				
7.	91K0	Illyrian Fagus sylvatica forests	T1-7A223	Illyrian beech forests with Acer obtusatum				
8.	9250	Quercus trojana woods	T1-981	Hellenic-Balkan forests with Macedonian oak				
9.	9270	Hellenic beech forests with Abies borisii- regis	T1-781	Hellenic beech forests with Abies borisii- regis				
10.	9560	* Endemic forests with Juniperus spp.(9560)	T3-D73	Peony forests with foyer				

11.	8140	Eastern Mediterranean screes	H2.6	Limestone and ultrabase hot-exposed sipars	
12.	8210	Calcareous rocky slopes with cxasmophytic vegetation		Pelagonian calcicol hazmophytic communities	
		vegetation	H3.2A131	Balkan cliffs with ramonda	
			H1.1	Cave entrances	
		Caves not open to the public	H1.221	Continental caves with subtroglophilic	
13.	8310			vertebrates	
			H1.231	Moderate caves with troglophilic	
				invertebrates	

#### **KEY VALUES OF THE GALICHICA NATIONAL PARK**

NPG is a "hotspot" of biodiversity in Europe and beyond. The exceptional richness of habitats and species sets the Park apart from other areas of similar size. In an area of 24 151.4 ha, there are more than 35 types of habitats, 40 plant communities, about 1740 taxa of vascular plants, over 143 species of lichenoid fungi, more than 480 species of fungi and over 3 231 taxa of fauna.

The rich biodiversity of the Park is of great national, European and global significance. Of the habitats that are rare or endangered in Europe, ten types of forest, two types of shrubs, four types of grass and two types of hazmophytic vegetation can be found in the Park. Two types of aquatic habitats and three types of habitats related to underground geomorphological forms are of European importance. The number of species of global, European and national importance is really large.

In the Park there are 4 taxa of invertebrates and 13 of vertebrates that are considered globally endangered. Hundreds of rare and protected species in the Park are represented by significant populations. Numerous endemic species give the Park a special feature. Some of them are found only within the boundaries of the Park, namely: 29 taxa of algae, 13 species of vascular plants, 61 taxa of invertebrates and 4 taxa of vertebrates. In addition, the Park is inhabited by a large number of taxa found only in Macedonia or the Balkans, as follows: 46 taxa of higher plants, 97 taxa of invertebrates and 14 taxa of vertebrates. There is a large number of species in the Park that are strongly attractive and easily recognizable to visitors and locals and as such are the basis for tourism development.

The international importance of biodiversity in the Park has been confirmed by numerous nominations, such as: "Emerald Area", "Significant Plant Area", "Primary Butterfly Area", "UNESCO World Heritage", and potentially "NATURA 2000 area".

Other natural values of the Park are: Stara Galicica and the island of Golem Grad, which by their overall geomorphological characteristics are rare or unique forms in Southeast Europe, as well as the grass terraces of Stara Galicica which with their certain characteristics are unique or extremely rare in the Euro-Mediterranean region, but also globally.

A rich cultural heritage is registered in the Park, including several cultural monuments, such as the monastery "St. Naum", the churches "Assumption of the Holy Mother of God", "St. Stefan-Panzir", "Holy Mother of God-Zahumska", i.e., the cave church "St. Bogorodica-Pestanska" and the cultural heritage of the island Golem Grad. The spring of St. Naum with its immediate surroundings stands out with its unique combination of natural and cultural values, which makes it one of the most important tourist destinations in Macedonia and beyond.

#### Pressures on key values

The main pressures on key values are:

#### Pasture changes

Habitats in the Park belonging to the grass vegetation include indigenous communities whose distribution is in accordance with the climatic conditions in the area, then relict communities, which are preserved in separate refugial areas of the mountain, as well as communities of secondary origin, whose distribution is related to the way of using the land in the past. With the long-term use of the forests of the lowland belt, for firewood or other needs, those habitats gradually turned into hilly pastures, while with the gradual use of the forests from the upper forest belt, they were purposefully turned into mountain pastures, for livestock needs. It should also be taken into account that man has actively contributed to their further maintenance, by preventing the succession of forests through regular grazing of cattle, but also by controlled regular fire.

In the last few decades, with the drastic reduction of livestock activities and continuous and active management of the same, and in the absence of significant populations of wild herbivores, it is possible to continue the process of natural succession through continuous processes of competition, interaction, etc. As a result of the succession, in the last few decades, a large part of the areas under pastures, both in the area of hilly pastures and in the area of mountain pastures, are turning into forests again. In the zone of mountain pastures, the pre-Mediterranean habitats with blue spruce bushes, gradually extrude the habitats of Pelagonija closed calcareous pastures with sesleria and Pelagonija closed calcareous pastures with fescue. Similarly, the habitat of the Hellenic-Balkan steppes with Satureja montana gradually transforms into forests with black hornbeam (EUNIS 2017: T1-9B11) or Elino-Pelagonian oriental forests with white hornbeam (EUNIS 2017: T1-9B221).

The progress of natural succession of forests at the expense of pastures is occasionally slowed down thanks to the fires in the Park. Some of the fires in the Park are still caused by some of the few active farmers who are struggling to prevent or slow down the process of natural forest succession. Some fires caused by human negligence or other motives have the same effects. Both cases differ from the traditional regular and controlled fire for maintenance of pastures. In the past, due to regular grazing and burning, the amount of (dry) organic matter was insignificant, and fires were of lower intensity and easy to control. In the absence of regular grazing, accumulated (dry) organic matter, but also flammable juniper shrubs, contribute to an increased risk of large-scale fires, such as the 2007 fire that affected most of the pastures and vegetation of shrubs, as well as part of the forests in the mountain zone of the Park.

In accordance with Annex I to the Habitats Directive, the above-mentioned pastures are included among the types of natural habitats of Community interest which, according to the applicable criteria, are considered to be key values of the Park. These are habitat types that are in danger of extinction in their natural area or which have a small natural area (due to regression or originally small area), i.e., habitats that are exclusively representatives of the characteristics of one of the nine biogeographical regions in Europe. Pursuant to Article 3 of the Habitats Directive, members of the community are required to take measures to maintain or, if necessary, restore them to a favorable conservation status.

In addition to their internal importance (importance by themselves), these habitats are also important for the conservation of species from other annexes to the Habitats Directive or other key values. For example, the Elino-Balkan steppes with Satureja montana are an important habitat for some species of the orchid family (Orchidaceae). Also, in the habitat of Pelagonija closed calciferous pastures with fescue, typically there are 11 endemic species of the class of insects, the order of butterflies, 6 of which belong to the group of small butterflies (Microlepidoptera): Parachronistis lunaki, Caryocolum xuthellum, Pantacordis pantsa, Coleophora macedonica, Coleophora scabrida and Bucculatrix pseudosylvella; while 5 species belong to the group of predators and twilight: Zygaena purpuralis bukuwkyii, Zygaena achilleae winneguthi, Zygaena laeta orientalis, Zygaena brizae ochrida and Cymbalophora rivularis dannehli. These pastures are also home to the significant population of Libelloides lacteus, an insect of the order Neuroptera, which is also one of the key species of the Park (rare species). In addition to this, a significant population of the evening kestrel (Falco vespertinus) is retained in these habitats. These are just some of the many examples that point to the significance of pastures for biodiversity conservation in the Park.

On the other hand, the example of the red-backed urchin (Lanius collurio) which is found in an area that is a mosaic of grass and shrub vegetation should be mentioned. In the Park, this species nests in the habitat Pre-Mediterranean habitats with blue juniper bushes, and feeds on large insects from the habitat Pelagonija closed calciferous pastures. In fact, a lot of species in the Park depend on many types of habitats that represent different stages of the succession of vegetation.

In the meantime, human activities have appeared in these habitats that were not present until then or were of significantly lower intensity. For example, with the increase in the area of pre-Mediterranean habitats with blue juniper bushes in the mountainous zone, in the past decades there has been a significant increase in the population of blue juniper (Juniperus communis). Given the market value and quantities of spruce, the interest in exploiting this natural wealth among the local population is significant. However, it seems that this way of using the former pastures does not significantly affect the dynamics of forest succession. On the other hand, with the penetration of an increasing number of roads in the area and the possibility of using motor vehicles, in the past significantly increased the interest in collecting Ohrid tea (Sideritis raeseri) - for commercial purposes or for domestic use.

From the above examples it can be concluded that the consequences for biodiversity of forest succession at the expense of pastures are really complex, multiple and may have contradictory links with the objectives of protection.

#### Changes in forest ecosystems

In the period after the proclamation of the park in 1958, significant changes took place in the forests, which were reflected in the increase of the forest area (quantitative changes), but also in the change of the composition, structure and biological diversity of the forests (qualitative changes). This was achieved not only through active management measures, but also thanks to spontaneous succession processes.

The changes in the forest ecosystems are mainly determined by the imposed principle of self-financing of the park, which due to the circumstances mainly relied on the direct use of forests through the production of firewood. Although the use of forests was sustainable, the ten-year plans and the measures prescribed by them usually included protection of forests from fires, plant diseases, insects, forest management in cuttings, protection of forests from uncontrolled grazing, ban on grazing cattle in

cuttings, ban to light a fire in the forest, prevent illegal logging and more. The ultimate goal was to improve the wood masses (in quality and quantity) and the growth that, ultimately, will enable more intensive use. In this regard, the measures taken favored species with higher growth potential and better quality of wood, for example beech, fir and "noble" deciduous species, in the beech region, i.e. several species of oak, in the region of white and black hornbeam. In the past, coniferous species have also been afforested with higher market value and high growth potential, in order to improve and translate into higher economic form the degraded and low-productive forests.

It can be concluded that the effects of the changes in the way and the goals of forest management in the Park are multiple and have not been sufficiently known yet. Thereby, it should be borne in mind that the final effects will depend on the processes that take place at the level of the area, i.e.the entire territory of the area or beyond, in the region and of course on the processes that take place over a long period of time.

#### Changes in aquatic habitats

Due to the karst character of Mount Galicica, the water habitats in the Park are rare and extremely sensitive to the impact of human activities. There are only a few permanent watercourses in the Park, a number of permanent and occasional springs and 19 ponds that are of natural origin or built by man, mostly to feed the cattle.

The interventions that humans have taken in the past on surface standing and running water have had different and opposite effects on the biodiversity of the Park. In 1936, the waters from the Summer Springs were occupied for the needs of the hydro power plant in the village of Ramne, and later for the water supply system of Ohrid. It can be assumed that these interventions have contributed to the extinction of the springs crab (Austropotamobius torrentius) and the springs trout (Salmo lumi) which have the status of globally endangered species. In the last few decades, the waters from most of the springs have been occupied, for the needs of the villages in the Park. Fountains or troughs have been built on some of the remaining springs, but in this case the negative consequences for biodiversity are smaller.

On the other hand, by building puddles man has directly contributed to the preservation of a large number of aquatic invertebrates and amphibians. With the drastic decline of livestock in the Park, the interest in maintaining them has significantly decreased. Today the water is retained permanently or occasionally in only some of them: the puddle near Gorni Istok, the puddle Gjafa, Crvena Lokva, the puddle in Sharbojca, Simonceska Lokva (built of stone), two puddles in the field Studino, Meckina Lokva, the puddle above the village Konjsko (Ohrid region), the puddle near Kosto bachilo (concrete bottom), the puddle near Chavkalica (Varnicine) and the puddle near Popov Izvor, above the village. Ljubanishta (built of stone). Other ponds in which the water does not stay for a long time or at all, are the pond in Gorna Buka, the pond of Lipona Livada (concrete bottom), the pond at Ervenika Niva (concrete bottom), the pond above Kosto Bacilo, the pond at Dva Bunari (walled, with concrete bottom, completely grassed) and the small puddle in Studino. There are data that during the 70's and 80's other ponds were used, such as in the area of Voje and below Elen Vrv, above the village Shipokno. In addition, a number of wells were built in the Park in the past, but most of them are now demolished or dry.

The park's natural and man-made ponds are important habitats for many groups of animals in the Park, especially some species of invertebrates, amphibians, birds and large mammals. Due to the reduction of

livestock activities, there is no interest in maintaining them and today many of them are dried up or with reduced capacity. This directly affects part of the wildlife in the Park.

#### Urbanization and infrastructure

In parallel with the abandonment of the marginal agricultural land in the Park, intensive urbanization of the fertile areas in the coastal zone is taking place. Namely, at the end of the 60s of the last century, an intensive process of internal migration of the population began - from the mountain villages in the Park towards the cities or the lower parts of the Park, along the shores of Lake Ohrid. As a result of that process, completely new settlements were built, such as: Racha, Sveti Stefan, Istok, Dolno Konjsko, Sirhan, Lagadin and Eleshec. Part of the newly formed settlements, such as Eleshec and Lagadin, are mainly inhabited by occasional residents. At the same time, the old settlements, such as Leskoec, Oteshevo, Ramne, Shipokno and Konjsko, were almost completely abandoned.

In the last two decades, there has been a large increase in urbanization, in the coastal part, but also in the mountainous part. The old, abandoned villages are gradually growing into weekend settlements, and while changing the ownership structure, there is a process of pressure to increase the urbanized part of almost all villages and settlements. Most of the new residents have a permanent place of residence outside the borders of the Park, and stay in the area mainly in the summer season or on weekends. The modernization of the settlements in the mountainous part of the Park is accompanied by increased infrastructure, higher water consumption and increased pollution, such as municipal wastewater and solid waste (municipal waste and construction waste). Due to the great interest for construction parcels in these settlements, the price of the former agricultural land is constantly growing, which further contributes to reducing the interest in agriculture or other traditional economic activities among the local population.

It is important to note that accelerated urbanization has consistently been accompanied by numerous attempts at illegal construction, usurpation of state-owned land, and inadequate infrastructure. Of particular concern are the constant attempts for illegal construction of buildings along the shores of Lake Ohrid, especially in and around the zone for strict protection of the stretch from Peshtani to Gradishte, from Gradishte to Trpejca, Nadol locality, south of the village Trpejca and around the village Konjsko (Prespa).

Particularly worrying are the attempts for urbanization of the Park initiated by senior state and local authorities, such as the case with the imposed procedure for amending the Management Plan 2011 - 2020, in the area of zoning, to enable the realization of the five development projects of the Government of the Republic of Northern Macedonia, started in 2013, which fortunately was stopped.

Growing urbanization in the Park, although concentrated in a relatively small area, has major implications for biodiversity. The negative effects of urbanization include the destruction and fragmentation of habitats, through the expansion of existing and construction of new infrastructure (roads, electricity, water and telecommunications installations, etc.), increased seizure of natural resources (especially water) and pollution (solid waste, construction waste, wastewater, air pollution, noise, eutrophication, etc.).

Therefore, current trends suggest that, in the future, urbanization expansion will be one of the most serious threats to the integrity of biodiversity, especially in some parts of the Park, including those that

are extremely important for the preservation of some of the key values in the park. For example, the coastal cliffs along Lake Ohrid are home to the scaly lizard (Algyroides nigropunctatus) which is one of the key values in the Park (Balkan endemic). This species has a disjunctive area, and the small population in the Park is located on the eastern border of its distribution. Hence, small habitat pressures can have a major effect on this vulnerable population. With the construction of facilities and infrastructure along the cliffs on the stretch from Peshtani to Gradishte and near the village. Trpejca the communication of the metapopulations in the Park becomes more difficult, thus endangering the survival of this species in the area.

#### Limitations

#### Legal framework

One of the main tasks of the LNP is to ensure integral protection of nature, while preserving the position of a basic law that will provide protection and management of natural values in our case of the national park and at the same time allow the application of other laws regulating the use of natural resources.

However, due to differences between protected areas and their needs, especially in the use of natural resources and Government efforts through provisions in the law to compensate for the lack of funding from the state budget often compromises the basic purpose of the law for protection of natural values through integral protection and management.

Bearing this in mind, PINPG, as preparation for the process of adopting this Management Plan, prepared a serious analysis of the legal framework that provided valuable guidance that avoided the ambiguities and contradictions of the positive legal regulations that regulate our work.

#### Capacity of institutions

In order to perform the functions prescribed by the LNP, PINPG needs to have a diverse, professional, highly capable and motivated staff. This primarily refers to staff with the capacity for efficient and effective conservation of biodiversity, conducting regular monitoring of biodiversity, management of information systems, environmental education, support for visitors to the Park, tourism development, public relations, general and administrative affairs and others. In addition, PINPG needs additional training of existing employees.

These preconditions will be met through the already started reorientation of sustainable financing of nature protection, by providing revenues from indirect use of natural resources. Also, during the implementation of this management plan, the direct financial support from the Nature Fund in Ohrid and Prespa (PONT), which started in 2018, is expected to continue. In carrying out its activity, PINPG also needs close cooperation and support from the MoEPP, and especially the SEA, which like the park are facing a lack of professional staff and appropriate material and technical means. The MoEPP and the SEA play a key role in completing and implementing the legislation mentioned in the previous chapter. In the area of implementation of the CAP and other relevant legal acts, other state bodies and local self-government units certainly have their place, primarily the State Inspectorate of Environment and the authorized environmental inspectors of the municipalities of Ohrid and Resen, which are also facing problems in staffing and material and technical equipment.

#### Sustainable funding of PINPG

According to the IUCN, "financial sustainability of protected areas can be defined as the ability to provide adequate, consistent and long-term sources of funding and to direct them in a timely and appropriate manner so as to fully cover the total costs of protected areas and ensure effective and efficient management of protected areas in terms of conservation and other purposes."

From the proclamation until today, the provision of sustainable financing for the preservation of the Park, was entirely the responsibility of the Directorate of NPG, OOZT National Park "Galichica", i.e. their successor - PINPG. In the past, efforts have been made on several occasions to secure funding from multiple sources, but unfortunately, revenues from the sale of firewood have proven to be the most stable. The share of this source of income in the total budget of the institution ranged from 80 to 90% by 2017, and from 2018, thanks to the reorientation mentioned above, this percentage has been reduced to 50-60%.

One of the main goals of the KfW / NPG project and the previous management plan was to shift the focus from sustainable forest use to comprehensive and integrated nature conservation and fulfill the other functions of the Park. As stated above, starting from 2018, the Park is reorienting itself in increasing the revenues from additional activities, which proved that the shift of focus is feasible, and through investments in funds and materials for environmental education, sustainable tourism and partnership with PONT this way of financing is expected to be sustainable in the long run.

#### According to the LNP, PINPG is financed by:

- fee for entry and visit to the Park,
- fee for parking in the Park,
- fee for visiting special facilities in the Park,
- fee for controlled shooting of wild animals and collection of wild species of plants and fungi and other forest fruits in the Park,
- fee for stay in the Park,
- fee for performing an activity or activity in a national park,
- fee for sailing in a national park,
- fee for the use of the logo of the national park of products and services for commercial use,
- fee for ecosystem services,
- the budget of the Republic of North Macedonia and the units of local self-government on whose territory the national park is located and
- other sources (donations, grants, loans, gifts, legacies, etc.).

#### Lack of information

Given the complexity of natural systems, modern approaches to protected area management emphasize the importance of making informed decisions. Hence the need for effective public participation, especially of key stakeholders and interested parties. Among them, of course, is the professional public, and the use of quality and scientifically based information in decision-making is an imperative.

In the preparation of the previous management plan, the most extensive activities were undertaken to collect the available information (published and unpublished) about the key values of the Park, as well

as field research with which they were supplemented or updated. Thanks to that, PINPG has an extensive database as a good basis for informed decision making. Additionally, in the implementation of the NPG Management Plan 2011 - 2020, within the Long-term Biodiversity Monitoring Program, data were provided on some of the key values of the park that are used in the preparation of the Management Plan 2021 - 2030.

At present, PINPG does not have data on several groups of lower plants, mosses, fungi (e.g. myxomycetes) and invertebrates (e.g., Neuroptera, Cerambycidae, etc.). The data on the plant communities are not fully revised and harmonized with the International Code of Phytocenological Nomenclature, and some of the identified habitat types in the Park are not phytocenologically determined. Also, data on the distribution of plant communities, habitat types and many species are incomplete. Particularly scarce are the quantitative data on the condition, structure and processes in ecosystems and habitats, i.e. the size and structure of populations of species.

#### Low public awareness of the need to preserve the key values of the Park

In the past three decades, a number of activities have been carried out, mainly by non-governmental organizations in the region, aimed at raising public awareness on certain environmental issues and problems. Such activities were supported by several international donors, especially the World Bank, within the Ohrid Lake Protection Project, and more recently by the European Union, PONT and other donors. These projects were mainly focused on the problems of wastewater pollution and solid waste, and in rare cases on the conservation of biodiversity.

In the absence of a developed strategy and operational plans, the activities of PINPG in this field in the past were not regular, and the financial means for their realization were modest. Awareness raising activities on the importance and role of the Park and other protected areas in the region were carried out by other organizations and institutions and were often intended primarily for the professional public.

In general, it can be said that the local population is convinced of the benefits and the need for direct use of natural resources, i.e., the aesthetic values of the landscape, especially lakes and forests. For example, there is a high interest of the local public to expand the scope of urbanization and still high support for initiatives for construction of large infrastructure facilities, such as roads, winter sports centers in the highland part of the Park and similarly. For a large part of the local population, especially from the settlements along Lake Ohrid, but also in Prespa, the idea of the Park as a territory with many restrictions and obstacles to economic development prevails. There is also still a lot of interest in the firewood produced in the Park, but also in other forest products. Recently, the local public has great interest and support for the development of tourism, including some new or currently underdeveloped forms, such as rural tourism, health tourism and the like. Such a change gives hope that the awareness of the need for nature protection is growing unstoppably.

#### Low cross-border cooperation

The southern border of the NPG is at the same time a border with three countries, i.e. Albania, Greece and Macedonia. Given that a significant part of the key values of the park are present in neighboring countries, the exchange of knowledge and experience between the administrations of the three

countries is necessary. Isolated PINPG initiatives to improve cross-border cooperation through the signing of a memorandum of cooperation have proven to depend in large part on the affinities of the management staff in the institutions. Due to that, the scope and quality of the cooperation in periods is at an enviable level but unfortunately, there are periods in which it completely stops.

PONT's presence in the region and the activities it supports are likely to contribute to improve cooperation between institutions in charge of protecting and managing of protected areas. PINPG has an interest and will assist in this process.

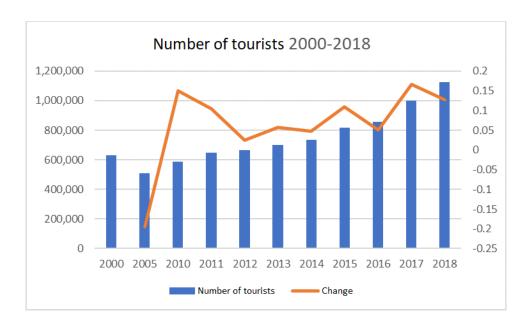
#### **Opportunities**

Development of sustainable tourism in the Park

Pursuant to Article 72 of the LNP, the category of protected area national park is intended primarily for the preservation of natural resources, but also for scientific research, culture, education and tourism-recreational purposes.

The quality of the natural environment is increasingly a major attraction for tourists and many protected areas around the world attract numerous visitors. This opens great opportunities for raising public awareness and support for nature conservation, but also an incentive for sustainable development of local communities through the development of new forms of tourism. On the other hand, improper management of visitor activities and uncontrolled development of tourism can lead to degradation or endangerment of natural values in protected areas. Such risks would be avoided if the ten principles of the European Charter for Sustainable Tourism in Protected Areas were followed.

The Ohrid-Prespa Region is one of the most important tourist destinations in Macedonia and beyond. According to the data of the Agency for Tourism Support and the Statistical Office of Macedonia, in the Republic of North Macedonia we have continuous growth in tourism from 2000 to 2018, we have a continuous increase of domestic and foreign tourists graphically shown in the following graph.



#### Evaluation of the effectiveness and efficiency of management and management capacities

PINPG started evaluating the efficiency and effectiveness of management, through the application of the METT tool for management evaluation, in 2006. Assessment using this tool was done in 2008, 2009, 2018 and 2019. Having in mind the information, data and recommendations provided by this tool and the usefulness of the data obtained through the implementation of this type of assessment, PINPG plans to implement this Management Plan regularly, every year, to conduct the assessment using the METT tool. The last evaluation report in 2019 is given in the following table.

The implementation of the assessment for 2019 was organized through a group workshop and participation of stakeholders. The public consultations were conducted through holding meetings of the Stakeholder Council and the Scientific Council.

**METT grade 2018 - 2019** 

No.	Question	Max. No. of points	2019	2018	Managing element
1	Does the protected area have legal status (or in the case of private reserves is it covered by a vow or similar)?	3	3	3	Context
2	Are there appropriate regulations established to control land use and activities (such as hunting)?	3	2	2	Planning
3	Can staff enforce protected area rules well enough? (Staff = those responsible for managing the site)	3	2	2	Inputs
4	Is it managed according to agreed goals?	3	2	3	Planning

	T.				
5	Is the protected area the right size and shape to protect species, habitats, ecological processes?	3	2	3	Planning
6	Is the border known and marked?	3	2	2	Processes
7	Is there a Management Plan and is it being implemented?		2	2	Planning
7а-с	Additional points: Planning process	3	1	2	Planning
8	Is there a regular work plan and is it being implemented?	3	2	2	Planning
9	Do you have enough information for area management?	3	2	3	Inputs
10	Is the use of / access to resources sufficiently controlled in accordance with the stated objectives?	3	1	2	Processes
11	Is there a program for managing scientific research work?	3	1	3	Processes
12	Are resources actively managed?	3	3	2	Processes
13	Are there enough employed people to manage the protected area?	3	2	1	Inputs
14	Are employees adequately trained to meet management objectives?	3	2	2	Inputs
15	Is the current budget sufficient?	3	2	1	Inputs
16	Is the budget safe?	3	3	1	Inputs
17	Does the budget manage to meet critical management needs?	3	2	2	Processes
18	Is the equipment sufficient for management needs?	3	3	2	Inputs
19	Is the equipment properly maintained?	3	2	2	Processes
20	Is there a planned education / environmental education program related to the goals and needs?	3	1	2	Processes
21	Does land and water use planning (outside the protected area) recognize the protected area and help achieve the goals?	3	1	3	Planning
21a-c	Additional points: Land and water planning	3	0	3	Planning
22	Is there cooperation with neighboring land and water users?	3	1	2	Processes
23	Do indigenous and traditional peoples who live or regularly use the protected area contribute to management decisions?	0	0	0	Processes
24	Do local communities and residents in the vicinity of the protected area participate in management decisions?	3	2	2	Processes
24а-с	Additional points: Local communities / indigenous people	3	1	2	Processes
25	Does the protected area provide economic benefits to local communities, e.g., income, employment, payment for environmental services?	3	3	2	Results
26	Are efficiency management activities monitored?	3	1	1	Planning
Add.	Is the protected area consciously able to adapt to climate change?	3	0	0	Processes
27	Are the visitor facilities suitable?	3	2	2	Exits
28	Do tour operators contribute to the management of protected areas?	3	1	2	Processes

29	If charged (such as tickets, etc.), do they assist in the management of the protected area?	3	3	3	Inputs
Add.	Are the threats to the core values of the protected area identified, classified and addressed?		2	0	Exits
30	What is the state of the important values of the protected area in relation to when it was first declared?	3	2	2	Results
30a-c	Additional points: Condition assessment	3	2	3	Results
Add.	Has the status of key indicator species changed in the last 5 years?	3	0	0	Results
Add.	dd. Has the status of the dwellings changed in the last 5 years?		0	0	Results
	Total result	111	63	71	

#### **STRATEGY**

# JOINT VISION FOR THE FUTURE OF GALICICA NATIONAL PARK (for the period 2020 - 2035)

Our NPG is widely known for its rich and rare nature and unique beauty. In most of the Park, the natural processes take place smoothly, which provides long-term protection of the characteristic ecosystems and the species that depend on them.

We, the visitors, take care of the Park and enjoy its natural, cultural and landscape richness. Apart from the coastal parts, there are lots of us in the interior, where there are numerous opportunities for inspiration, unforgettable experiences and recreation in a natural and non-urban environment. The direct contact with nature arouses great interest in our conservation and acquaintance with it. In our activities we prefer to use modest infrastructure in order to avoid significant disturbances of the natural environment.

We, the local communities are proud of our Park. We participate in the protection and management decision-making process. We understand that by preserving its natural and cultural values, the tourist offer is enriched. We advocate for limited and controlled urbanization to ensure long-term prosperity and a high quality of life for us and our future generations.

We, the civil associations, recognize and respect the values of the Park. We actively cooperate for their protection and participate in all decision-making processes. We contribute to the promotion of the Park by organizing events and manifestations in cooperation with the public institution.

We, the employees of PINPG, are strongly motivated and committed to the preservation of our Park in the interest of current and future generations. Our skills and knowledge enable us to work effectively and efficiently. Funds for our operations are provided from our regular activities, and partly from public revenues. In our work we enjoy great support from the central and local authorities and the general public.

Our Park is an important and functional part of the European ecological network "NATURA 2000" and we are all proud of our contribution to nature conservation in Europe and in the world.

### Objectives of protection of the area

The basic goals of the Park management are derived from the main themes and statements in the Vision. They are more specific statements about the effects to be achieved through the implementation of the MP in the next ten years. For each of the basic goals, specific goals are proposed that describe in more detail the results to be achieved. They are defined as measurable standards, conditions, values, trends or degrees of change and provide an objective assessment of progress towards achieving the general goals, i.e., the Vision for the Park.

Basic and special goals of NPG management 2021 - 2030

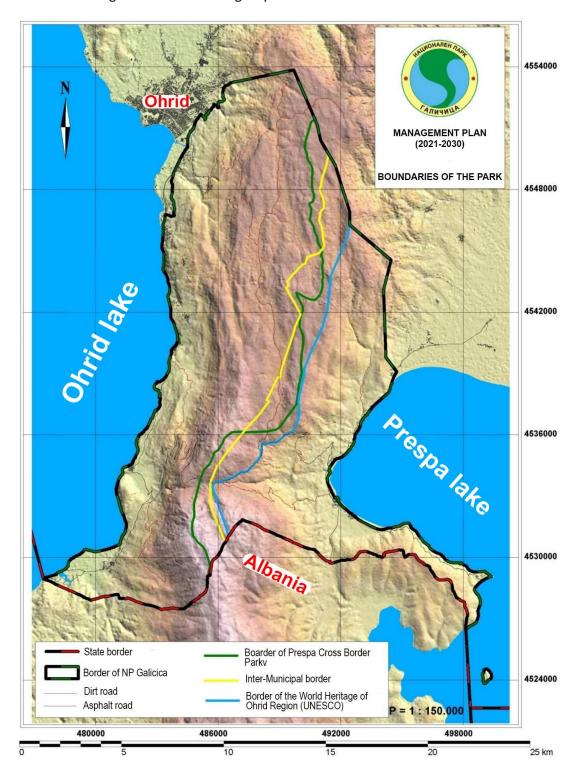
BASIC OBJECTIVE	SUB-PROGRAM	SPECIFIC OBJECTIVE
	Biodiversity monitoring of species	The species diversity is in a preserved natural state with stable populations of important species.
The preserved diversity of species and habitats,	Biodiversity monitoring of habitats	The habitat diversity is in a preserved natural state with stable populations from important communities.
as well as the stable ecological processes, provide the unique beauty of the natural landscape, and thus preserve the universal value of the Park, for	Implementation of activities for protection and conservation of species and habitats	Appropriate activities have been carried out to protect important species and habitats.
current and future generations.	Methodology for monitoring the condition of habitats and species	An appropriate methodology for monitoring species and habitats that is internationally accepted has been developed and applied.
	Monitoring and protection of NPG geological diversity	An applied methodology for monitoring geological diversity has been developed.
NPG natural resources are used sustainably. Their	Sustainable use of forests in NPG in accordance with the Special Plans for cultivation and protection of forests	The use of forests in the Park is controlled and sustainable.
use provides income for local communities and stable funding of PINPG.	Assessment of the state of wildlife populations collected for commercial purposes	PING has information on the status of wildlife populations collected for commercial purposes.
	Support for plantation cultivation of Ohrid tea (Sideritis raeseri)	The pressure on wildlife collected for commercial purposes has been reduced, and local development supported and improved.
	Forest mapping in accordance with the Habitats Directive	PINPG has habitats information in accordance with EU Directives in an appropriate format.
Forest habitat and ecosystem management in accordance with the Habitats Directive.	Use of part of the forests in the zone for sustainable use to meet the needs of firewood for the vulnerable categories of the local population	PINPG is a socially responsible institution that helps vulnerable groups through a strictly defined way of forest management.
	Encouraging scientific research	PINPG actively participates in the creation and implementation of scientific research in accordance with the objectives of management.
The visit does not endanger the natural and cultural values of the Park, offering visitors a	Socio-economic and market research and marketing	The park is a sustainable destination model for other protected areas and tourist destinations in the region, where preserved nature, cultural heritage and local population are intertwined in a sustainable way.
smooth and comprehensive experience, which is presented in the best possible way, while	Development and implementation of a visitor monitoring system	Various visit programs enhanced by the offer of the local population enable safe visit and presentation of the preserved values of the Park.

providing the revenue needed for its preservation, building public support for nature	Construction and maintenance of infrastructure	The appropriate and modern tourist infrastructure is continuously maintained and upgraded.
conservation and opening opportunities for sustainable development of the local community.	Improved tourist offer and activities for alternative tourism	The stay of the visitors is supported by appropriate, interesting and modern activities and offer.
The management encourages the cooperation of	Contribution of NPG to local development	PINPG provides information and data on the Park's contribution to the development of sustainable tourism.
PINPG with the local communities, to build a mutual relationship full of trust, which will contribute to strengthening and promoting sustainable local development.	Extended and enriched stay of visitors	PINPG contributes to the extended and enriched stay of the visitors in the local communities in the Park, in the direction of sustainable development of tourism.
	Active participation of local communities in NPG management	Local communities take an active part in the development planning and management of tourism in the Park.
Functional infrastructure, developed communication strategy for regular information	Maintaining and upgrading the existing infrastructure for environmental education	The existing infrastructure for information and environmental education of the visitors is continuously maintained and upgraded.
of target groups, various information content and knowledge of biodiversity and other important natural features, provides an educational	Establishment of a public information system	The general public is regularly informed about the activities of PINPG in the field of nature protection.
platform for achieving positive experiences with nature, as well as emotional and scientific basis needed for responsible behavior for nature	Preparation and distribution of informative and educational material	Promotional material with educational and informative character is regularly prepared and distributed.
protection.	Raising public awareness for nature protection	The activities of PINPG contribute to raising public awareness of the need for nature conservation.
PINPG has all the management resources, and uses them to continuously improve all segments	Provide the legal and planning framework needed for governance	The internal regulations of the public institution are harmonized with the legal obligations.
of management and organizational culture, while building cooperation with stakeholders.	Development of institutional and human resources and competencies	Institutional and individual capacities necessary for efficient and effective management of the Park and for affirmation of the public institution are provided through continuous improvement, knowledge management and development of organizational culture.

Infrastructure	Adequate transport and communal infrastructure without negative impact on the values of the Park is provided through cooperation with stakeholders.
Financing	The main activity of PINPG is financed from public revenues, while the development of the Park is financed from public revenues or from revenues generated by the institution, donations and projects.

#### **Boundaries and zones**

According to Article 4 of the law for declaring part of the mountain Galicica a National Park oNPG boundaries are given on the following map.



#### Zoning

According to the CAP, the protection regime in the protected areas is regulated by the zoning and spatial plan. With the act for declaring the area (Article 93) "especially the following four zones may be established": (1) zone for strict protection; (2) active management zone; (3) sustainable use zone and (4) safety belt. The activities and activities that can be performed in the zones established by the proclamation act are determined by that act or the management plan (Article 93 of the LNP). Pursuant to Article 105 of the LNP, the activities and activities that can be performed in the zones are as follows:

- 1. **Strict protection zone**. Scientific research activities are allowed in the strict protection zone, if they do not contradict the primary goals of protection of the area.
- 2. **Active management zone.** In the active management zone, management activities related to habitat manipulation and species manipulation can be performed. In the zone for active management are allowed activities of economic character that do not have a negative impact on the primary purpose of protection, such as ecotourism or traditional extensive agriculture.
- 3. **Zone for sustainable use**. The zone for sustainable use is a significant part of the protected area that does not have high values for protection, where there are infrastructure facilities, cultural heritage sites, types of forest plantations that are not typical for the area, as well as settlements with surrounding agricultural land. Prolonged undertaking of interventions and measures can lead to the acquisition of characteristics of the active management zone.
- 4. **Protective belt.** When performing economic activities within the protection zone, the protection measures determined by this Law shall be obligatorily applied.

In accordance with the LNP and the management goals set out in this management plan, the following zones are established in the Park:

- 1. Strict protection zone on an area of 2117 ha (9%);
- 2. Zone for active management of an area of 12 275.ha (51%);
- 3. Zone for sustainable use of an area of 9612 ha (40%);
- 4. Protective belt on an area of 147 ha (1%).

The zone for strict protection includes several parts, as follows: Stara Galicica (126 ha protection belt) on about 2,040 ha, Stenjsko Blato on about 17.5 ha (21 ha protection belt), the cliffs from the village Konjsko to the border with Albania, the cliffs from the village Peshtani to Gradishte, the cliffs from Gradishte to Trpejca, part of the cliffs and the coastal belt from the village Trpejca to the cave church of St. Nicholas, part of the cliffs of the church of the Most Holy Mother of God (Prechista) near the village Stenje to the Church of St. Ilija, near the village Konjsko, the whole territory of the island Golem Grad and part of the spring of St. Naum.

The zone for active management includes several parts: high mountain pastures at the sites Baba, Lako Signoj, Bajrache, Bugarska Chuka, Kosto Bacilo, Suvo Pole, Tomoros, Diva Jasika, Goga, Zdravec, Samar, Sharaplica, Bigla and Petrinsko, the forests and pastures on the localities Prechna Planina, Pljuska, Sirhansko Kale, Cheremushana, Vojtino, Golem Osoj, Chokolsko, Raven, Crno Brdo, Elen Vrv, Pogled and Golabinec.

The zone for sustainable use covers the urbanized parts of the settlements with the surrounding agricultural land, the tourist settlements and part of the high mountain and hilly pastures that have

been intensively used in the past and in which significant changes of the natural ecosystems have occurred.

A more detailed description of the zones and the activities and activities that can be performed in them is given below.

# Zone of strict protection

	Zone of strict protection
Size	2 117 ha (9% of the Park)
Attributes	Natural zone with insignificantly changed habitats of primary origin and insignificant human influence after the proclamation of the Park. A number of key habitats, species and geomorphological phenomena are present. There are no infrastructure facilities, with the exception of the (inert) radio communication panel.
Primary goal of management	Smooth running of natural processes for long-term protection of characteristic ecosystems and associated species.
Secondary goal of management	Scientific research activities. In some parts of this zone, visits are allowed under strictly regulated conditions, such as: walk on the trail on the island of Golem Grad, boat ride on the spring of St. Naum organized by PINPG and climbing the top of Magaro along the marked mountaineering trail.

# Zone for active management

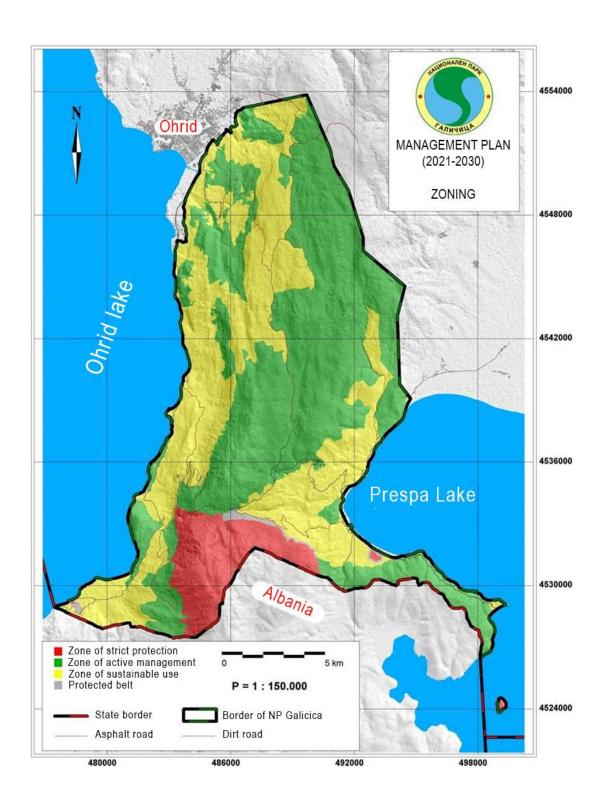
	Zone for active management
Size	12 275 ha (51% of the Park)
Attributes	Natural zone in which most of the habitats are of secondary origin. After the proclamation of the Park, the human influence gradually decreases to an insignificant level. A number of key habitats and species are present. From the infrastructure there are telecommunication towers with accompanying facilities, asphalt and dirt roads and smaller facilities owned by PINPG.
Primary goal of management	Smooth running of natural processes for long-term protection of characteristic ecosystems and associated species.
Secondary goal of management	Environmentally friendly scientific, educational and recreational activities

## Zone for sustainable use

	Zone for sustainable use			
Size	9612 ha (40% of the Park)			
Attributes	Zone intended for housing and economic activities. There are several key habitats and species that are also, for the most part, covered by the natural zone. There are several settlements, tourist complexes and significant infrastructure.			
The primary goal of management	Ecological connection of habitats and control of human impact on the natural zone.			
Secondary management objectives	<ul> <li>Housing</li> <li>Tourist activities</li> <li>Production of (firewood)</li> <li>Collection of medicinal plants and fungi</li> <li>Agricultural production</li> </ul>			

## **Protection belt**

	Protection belt
Size	147 ha (1%)
Attributes	Natural or semi-natural habitats or urban areas with or without significant infrastructure and human impact.
The primary goal of management	Control of human impact from the zone of sustainable use on the zone of strict protection.
Secondary management objectives	Ecologically compatible spiritual, scientific, educational and recreational activities.



# Allowed and forbidden activities in the zones

	ZONES			
ACTIVITIES	Strict	Active	Sustainable	Protection
	protection	management	use	belt
Scientific research (only with prior	YES	YES	YES	YES
permission from the MoEPP)	123	123	123	123
Archaeological excavations (only after prior				
notification and consent from PINPG and		VEC	VEC	VEC
permission from other competent	YES	YES	YES	YES
institutions)				
Hiking (along marked paths)	YES	YES	YES	YES
Hiking (off marked trails)	NO	NO	YES	YES
Ski touring	NO	YES	YES	YES
Setting up info boards	NO	YES	YES	YES
Setting signposts	YES	YES	YES	YES
Arranged places for rest (tables, benches,	NO	YES	YES	NO
canopies)				
Camping and overnight outdoors and under	NO	YES	YES	NO
a tent (only in designated areas for that				
purpose)				
Observers and lookouts	NO	YES	YES	YES
Outdoor fire (except in designated areas)	NO	NO	HE	NO
Collecting wild species (fungi, fruits, plants,	NO	NO	YES	NO
etc.)				
Collecting animals (e.g., butterflies, turtles,	NO	NO	NO	NO
etc.)		1		
Cattle grazing	NO	YES <sup>1</sup>	YES	NO
Growing crops in a traditional way	NO	NO	YES <sup>3</sup>	NO
Mowing grass	NO	YES <sup>1</sup>	YES	NO
Beekeeping - temporary placement of hives	NO	YES	YES	NO
Beekeeping - ancillary facilities	NO	NO	YES	NO
Commercial forestry	NO	NO	YES	NO
Modern agricultural production	NO	NO	YES	NO
Collecting trees and branches	NO	NO	YES	NO
Fishing	NO	NO	NO	NO
Hunting	NO	NO	NO	NO
Alpinism in arranged places	NO	YES	YES	NO
Mountain biking on arranged trails	NO	YES	YES	YES
Take-off for paragliders	NO	YES	YES	NO
Motor vehicles (cars, quads and motorcycles)	NO	YES	YES	YES
on existing asphalt and dirt roads				
Snowmobiles	NO	NO	YES	YES
Riding	NO	YES	YES	YES
Walking pets	NO	NO	YES	NO
Editing unregulated sources	NO	NO	NO	NO
Arranging existing puddles	NO	YES	YES	YES

Arrangement of wells	NO	YES	YES	YES
New facilities for catching water from springs	NO	NO	NO	NO
and watercourses in the Park				
New housing facilities	NO	NO	YES	NO
New facilities for tourist purposes (hotels,	NO	NO	YES	NO
restaurants, camps, etc.)				
New ski infrastructure (ski lifts and cable	NO	NO	NO	NO
cars)				
New facilities for other purposes (PINPG	NO	YES	YES	YES
management facilities)				
New facilities for agricultural activities	NO	NO	YES	NO
(warehouses, sheepfolds, troughs, stables)				
New infrastructure - water supply pipelines	NO	NO	YES	NO
New infrastructure - tourist purposes	NO	NO	YES	YES
New infrastructure - electricity	NO	NO	YES	YES
Wind farms	NO	NO	NO	NO
Solar power plants	NO	NO	NO	NO
Biomass power plants	NO	NO	NO	NO
Photovoltaics on roof surfaces	NO	YES	YES	YES
Small hydropower plants	NO	NO	NO	NO
Transmission lines	NO	NO	YES	NO
New infrastructure - asphalt roads	NO	NO	YES	YES
New infrastructure - dirt roads	NO	NO	YES	YES
New infrastructure - sewerage	NO	NO	YES	YES
New infrastructure - erosion control	NO	YES <sup>2</sup>	YES <sup>2</sup>	NO
structures		163	163	NO
Conducting geological research and	NO	NO	NO	NO
exploitation of mineral resources				

<sup>&</sup>lt;sup>1</sup> Allowed in the zone for active management in the period May-August after a previously issued permit from PINPG in the traditional ways of performing this activity.

<sup>&</sup>lt;sup>2</sup> Erosion control activities can be carried out on the basis of previously acceptable nature protection solutions.

<sup>&</sup>lt;sup>3</sup> Cultivation of genetically modified organisms is prohibited on the entire territory of the National Park Galicica

#### Protected area management programs

1. Preservation and monitoring of the natural heritage

In order to maintain and enhance the overall value of the Park area, the conservation of biodiversity and its key natural values should be the highest management priority. According to the rulebook for preparation of plans for management of protected areas, the following components are separated from the program for preservation and monitoring of the natural heritage:

- Biodiversity with special measures for conservation of wild species;
- Preservation, protection and revitalization of important habitats and ecosystems;
- Methodology for monitoring the condition of habitats and species;
- Significant elements of the physical environment (geological, geomorphological, pedological and hydrological characteristics);
- Significant landscape or landscape values.

Consequently, a logical framework was developed for the main goal of the program and specific goals of the sub-programs that were developed in the preparation of the operational plan for this program.

Program	Basic Purpose	Sub-program	Special purpose
Preserved diversity of species and habitats, as well as stable ecological	Biodiversity monitoring of species	The species diversity is in a preserved natural state with stable populations of important species	
	Habitat biodiversity monitoring	The habitats are in a preserved natural state with stable populations of the accompanying species	
Preservation and monitoring of	monitoring of the natural	Implementation of activities for protection and conservation of species and habitats	Appropriate activities have been carried out to protect important species and habitats
natural heritage  landscape, and thus preserve the universal value of the Park, for current and future generations.	Methodology for monitoring the condition of habitats and species	An appropriate methodology for monitoring species and habitats internationally accepted has been developed and applied	
	Monitoring and protection of geological diversity and landscape values of NPG	A methodology for monitoring the geological diversity and landscape values has been developed and applied	

#### 2. Sustainable use of natural resources in the area

According to the LNP, natural resource is any integral part of nature that man uses to achieve economic goals. Pursuant to Article 75, paragraph 2, of this Law, natural resources can be used in a national park for tourist-recreational activities, as well as their sustainable use in a way that does not endanger the survival of the species and their natural balance. This paragraph of the LNP distinguishes two ways of sustainable use of natural resources: (1) direct, in which NPG includes the sustainable use of forests to meet the needs of firewood and the collection of wild-growing medicinal herbs and other forest products and (2) indirect use of natural resources mostly for tourism-recreational activities.

The direct use of natural resources has a significant impact on the basic goals of park protection. Planning for their sustainable use in the next ten years takes into account the other basic goals of protection, especially in terms of the transformation that has taken place in the management of NPG in the last few years. The decades-long sustainable use of the forests in the Park for providing funds that financed the protection of the nature of the Park as well as the habits of the local population for providing firewood from the surrounding forests are carefully analyzed to enable the set management goals.

As in the previous Management Plan for the period 2011-2020, sustainable direct use of natural resources is limited to the sustainable use zone. Sustainable indirect use of natural resources for tourist and recreational activities as well as some activities of traditional agriculture or cultivation of medicinal plants is implemented in addition to this zone and the zone of active management.

Program	Basic Purpose	Sub-program	Special Purpose
Sustainable use	Natural resources	Sustainable use of forests in	The use of forests in the Park
of natural	in the NPG are	NPG in accordance with special	is controlled and sustainable
resources in the	used sustainably.	plans for cultivation and	
area.	Their use provides	protection of forests	
	income for local	Assessment of the state of	PINP holds information on the
	communities and	wildlife populations collected	status of wildlife populations
	stable funding of	for commercial purposes	collected for commercial
	PINPG		purposes
		Support for plantation	Pressure on wildlife collected
		cultivation of Ohrid tea (Sideritis	for commercial purposes has
		raeseri).	been reduced, and local
			development supported and
			improved

#### 3. Management of forest habitats and ecosystems

Organized forest management in the Park begins with the development of the first ten-year programs / plans for forest management in 1972, and in accordance with the Law on Forests. The methodology and content of the plans intended primarily for commercial forests were used. Due to the imposed method of financing through sustainable use / exploitation of forests, they were in the focus of interest of the Park administration. However, aware of the need for a different approach to forest management in national parks, the developers of these programs tried to give greater meaning to the term "protection".

Nevertheless, judging by their content, approach and methodology, they undoubtedly represent "forest-economic bases" or plans for forest management. In other words, so far, the gap between the approach-

based planning and the methodology for forest management and the need for integrated forest management to preserve biodiversity is obvious. These shortcomings in planning have their consequences which mainly refer to the change in the species composition, i.e., forcing species that are suitable for the production of firewood, removal of old trees which destroys habitats of many species of fauna, as well as inadequate protection of biological diversity and naturalness of the landscape.

Recognizing such shortcomings, in recent years the need for a new, different approach to forest management has become increasingly apparent to PINPG staff. In fact, with the adoption of the LNP, formal legal assumptions were created for that.

Having this in mind, but of course the transformation in management and financing that takes place in the NPG, opens the possibility for this Management Plan to define a different set of goals, measures and activities for the management of forest habitats and ecosystems. Of course, the forest management goals in the park are in line with the LNP and zoning.

Program	Basic Purpose	Sub-program	Special Purpose
	Forest mapping according to the Habitats Directive	PINPG has housing information in accordance with the EU Directives in an appropriate format	
Forest habitat and ecosystem management	Forest habitat and ecosystem management in accordance with the Habitats Directive	Use of part of the forests in the zone for sustainable use to meet the needs of firewood for the vulnerable categories of the local population	PINPG is a socially responsible institution that helps vulnerable groups through a strictly defined way of forest management
		Encouraging scientific research	PINPG actively participates in the creation and implementation of scientific research in accordance with the objectives of management

#### 4. Cultural heritage management

According to its natural and cultural values, the Ohrid-Prespa Region is one of the most representative regions in the Republic of North Macedonia. For these reasons, the region is inscribed on the UNESCO list, under the name: "Natural and cultural heritage of the Ohrid region". First, in 1979, Lake Ohrid was inscribed on the UNESCO World Heritage List, and in 1980, cultural heritage was added to the list. At the proposal of the competent institutions, MoEPP and the Ministry of Culture, the Institute for Protection of Cultural Monuments and Museum - Ohrid, the Office for Protection of Cultural Heritage and the SEA, a new name of the nomination - Natural and Cultural Heritage of the Ohrid Region is proposed. The proposal was adopted in 2006 at the 30th session of the World Heritage Committee.

When the Ohrid Region was inscribed on the World Heritage List in 1980, the boundaries were not precisely defined in the nomination documents. In 2009, a new demarcation of the boundaries of the protected area was made and it was accepted by the World Heritage Committee at its meeting in Seville-Spain.

The area of natural and cultural heritage of the Ohrid Region is 83 350 ha, of which 17 974 ha are within the borders of the Park.

With the independence of the Republic of North Macedonia, the statehood of the Republic of North Macedonia was restored and with the international recognition Macedonia gained conditions for direct participation in all international associations and organizations dealing with the protection of cultural and natural heritage. This enabled us to effectively implement international standards in all areas of protection as well as in all entities that are responsible for preserving the region as a world natural and cultural heritage.

In the twentieth century, with the change of economic, social and community circumstances, the function of certain buildings changes so that some of the profane buildings are oriented towards the development of culture (museums and museum buildings), tourism and catering and other activities, and some of the sacred buildings function as needed, i.e. on the respective religious holidays.

Consequently, although the cultural heritage is diverse and rich on the territory of the National Park, still the competencies for managing this cultural heritage do not belong to PINPG, but to the Office for Protection of Cultural Heritage - Skopje, institutes and museums. PINPG has in detail elaborated and described the cultural heritage at its disposal in its Management Plan.

#### 5. Development of sustainable tourism and recreation

The program for development of sustainable tourism and recreation in NPG is related to the fourth basic management goal which refers to the support, development and promotion of tourism activities and projects aimed at increased and sustainable local economic development.

Namely, the development and improvement of the tourist activities and their sustainability are based on the existence of the protected area NPG. Local communities, the municipalities on whose territory the national park extends, as well as the national economy have direct and / or indirect benefits from the existence and proper management of NPG.

The direct benefits are due to the development of the tourism sector in the region which relies on the natural and cultural values that characterize the area, as well as the multitude of national and international designations that characterize the NPG. These benefits are evident over the years, but are expected to continue and increase in the future. Therefore, the Public Institution National Park Galicica, the local population, the municipalities, but also the state should and strongly strive for the development of sustainable tourism in this area.

The goal of NPG management, among other things, is to maintain itself as a prosperous place where the quality of stay is high, the control of urbanization and maintaining the authentic appearance of the space are in function of the development of alternative forms of tourism, and the nurturing of local traditions will contribute to attracting an adequate number of tourists.

In general, the activities of the local population and economic operators are not contrary to the goals of protection and preservation of natural values in the area. These activities are in the direction of tourist-recreational development in accordance with the zoning of the National Park.

Program	Basic Purpose	Sub - program	Special Purpose
	The visit does not endanger the natural and cultural values of the Park, offering visitors a smooth and comprehensive experience, which presents it in the best possible way, while providing the revenue.	Socio-economic and market research and marketing	The park is a sustainable destination model for other protected areas and tourist destinations in the region, where preserved nature, cultural heritage and local population are intertwined in a sustainable way.
Development of sustainable tourism and recreation		Development and implementation of a visitor monitoring system	Various visit programs enhanced by the offer of the local population enables safe visit and presentation of the preserved values of the park
		Construction and maintenance of infrastructure	The appropriate and modern tourist infrastructure is continuously maintained and upgraded
		Improved tourist offer and activities for alternative tourism	The stay of the visitors is supported by appropriate, interesting and modern activities and offer

#### 6. Local development

The Local Development Program aims to encourage PINPG cooperation with local communities, to build a relationship of mutual trust, which will contribute to strengthening and promoting the sustainable development of tourism and will help achieve the vision of the Park.

On the territory of the Park, in the municipalities of Ohrid and Resen, are located several settlements, with permanent or temporary residents. Tourism and service activities, but also agriculture and forestry are the main economic activities of the local population. One of the goals of the Park is to support these activities, in order to properly use natural resources and improve opportunities for sustainable development of tourism activities. But meeting the park's management goals is impossible without the support of local communities as well as central and local governments. Among them, however, local

communities feel most directly the effects of protected area management activities and measures. Support for the Park from local communities should stem from the direct and indirect benefits of having the Park.

In the Park, this would be achieved by gradually abandoning activities related to the exploitation of natural resources (cutting trees, collecting medicinal plants and other fruits for sale, hunting, etc.). The use of natural resources should be based on the principles of sustainable development and be limited to a small part of the Park (up to 25% of the territory). For example, in parts of the Park, plantation organic production of local mountain tea and other medicinal plants of commercial interest should be encouraged. This would reduce the pressure on the natural populations in the Park. The direct use of natural resources is limited only to the zone for sustainable use and to meet the needs of firewood only for residents of vulnerable categories. Some of the traditional pastures should be available for livestock, but also to preserve the biodiversity components associated with these habitats.

PINPG, the state and donors should support and assist the local population in finding and developing other sources of income, especially from activities to achieve sustainable tourism development, which relies on the natural values of the area. In that way, the lost income from exploitation of natural resources should be compensated. Over time, the number of family businesses that profit from the existence of the Park should be constantly increasing. The prosperity of the communities in the Park should contribute to the development of the wider Ohrid-Prespa Region. In the future, there should be an opportunity for local communities in the vicinity of the Park to also feel the benefits of the Park's existence.

Local communities should also strongly advocate for the restriction and control of further urbanization. It should contribute to socially acceptable, environmentally friendly and sustainable economic development. The settlements in the Park should be maintained as vital and prosperous places, where the quality of life is high in every respect (economic, social and environmental). The control of the urbanization and the care for achieving and maintaining the authentic appearance of the settlements should be in function of the development of the tourism in the Park. The identity of the settlements should be based on nurturing the local traditions (food, customs), as well as the traditional architecture in the settlements that have not undergone major changes. The control of the urbanization and the expansion of the infrastructure (roads, electrical, water supply and telecommunication installations, etc.) should contribute to the preservation of the beautiful landscape and the natural condition.

Program	Basic purpose	Sub-program	Special purpose
Local development	The management encourages the cooperation of PINPG with the local communities, to build a mutual relationship	Contribution of NPG to local development	PINPG provides information and data on the Park's contribution to the development of sustainable tourism
Local development	full of trust, which will contribute to strengthening and promoting sustainable local development.	Extended and enriched stay of visitors	PINPG contributes to the extended and enriched stay of visitors, in the direction of sustainable tourism development

	Active participation of local communities in NPG management	Local communities take an active part in the development planning and management of
		tourism in the Park

#### 7. Informing, raising public awareness and education

The Information, Public Awareness and Education / Educating Program aims to enable transparent information sharing, provide an educational platform for experiencing positive experiences with nature, and provide the emotional and scientific basis needed for responsible behavior and public awareness to protect nature. Regular informing of the target group, especially the local community, schools, neighboring protected areas, visitors, etc., will contribute to raising public awareness and uninterrupted environmental education, which will help achieve the vision of the Park.

Thanks to its natural and cultural values, NPG attracts a large number of visitors. Attracting visitors to the Park opens the opportunity for them to learn more about it through direct contact with nature, especially about the interrelationship between man, i.e. social systems and natural systems. By raising awareness of nature and the environment in general, human behavior is expected to conform to the processes in natural systems and the constraints that result from it. This will increase the support and participation of local residents and the general public in solving the problems in the Park related to urbanization, solid waste, forest fires, water pollution, uncontrolled collection of herbs and other impacts that adversely affect its natural values. Protected areas have a role not only in educating people about the natural values of the areas themselves but also in the wider environment in general.

To support the visitors, PINPG in cooperation with the local communities and other stakeholders, has built a comprehensive network of properly arranged and marked paths with accompanying infrastructure. To enrich the contents for the visitors, picnic places, lookouts, mountain huts and parking lots have been arranged. PINPG also has visitor centers and information points, which are in function of presentation and interpretation of the key values of the Park, i.e., environmental education of the visitors. The infrastructure should be quality and functional, but above all simple, in order to preserve the natural appearance of the environment. It should contribute to better management and control of the activities of the visitors in the Park (e.g., lighting fires in properly marked, arranged and equipped places, movement on marked paths, etc.). This should protect nature, i.e., not to disrupt the ecological capacity of certain sites in the Park.

Program	Basic Purpose	Sub-program	Special purpose
Information, public awareness and education / educating program	Functional infrastructure, developed communication strategy for regular information of target groups, various information content and knowledge of biodiversity and other important natural features,	Maintaining and upgrading the existing infrastructure for environmental education	The existing infrastructure for information and environmental education of the visitors is continuously maintained and upgraded
	provides an educational platform for achieving positive experiences with	Establishment of a public information system	The general public is regularly informed about the activities of PINPG in

nature, as well as the emotional and scient basis needed for	
responsible behavior nature protection	for Preparation and distribution of with educational and informative character is educational material described distributed
	Raising public awareness for nature protection  PINPG activities contribute to raising public awareness of the need for nature conservation

#### 8. Governance, management, financing and administration

The Governance, management, financing and administration program is related to the fifth basic management goal which refers to the personal, material, institutional capacities of PINPG required for the management of the national park, as well as the membership and status of PINPG nationally and internationally.

PINPG was established by the Government of the Republic of North Macedonia for the purpose of protection and management of the NPG protected area. However, it is obvious that in management it is necessary to establish and maintain cooperation with other institutions, such as the Ministry of Environment and Physical Planning, the Environmental Inspectorate, etc. Networking and membership are also needed, as well as activities in the field of building the personal capacities of the employees in order for PINPG to perform the NPG management easier, more successfully and more efficiently.

Furthermore, the entity in charge of the management of the protected area, in accordance with the Law on Nature Protection, should establish a Stakeholder Council and a Scientific Council as consultative bodies, an activity that is performed by PINPG. Also, in accordance with this Law, for the purpose of achieving integral and efficient management, the entities in charge of the management of the protected area conclude agreements for regulation of mutual rights and obligations with the entities performing activity or activity in the protected area, approved by the Government of the Republic of North Macedonia.

Finally, in order to ensure effective management of the protected area, the entity in charge of managing the protected area needs to have optimal human, technical and financial resources.

A very important element for effective management of the protected area is the provision of sustainable financing. Revenues for the protected area are realized from fees for entry and visit, sustainable use of natural resources, visits to special facilities and stay in the protected area, fees for performing activity or activity in the protected area and other sources (donations, grants, etc.).

The purpose of the management of PINPG, among other things, is to maintain itself as a prosperous place managed by an efficient and effective institution in charge of that purpose, with a highly developed personal capacity of its employees.

Program	Basic Purpose	Sub-program	Special Purpose
Governance, management, financing and administration	PINPG has management resources, and uses them to continuously improve all segments of management and develop organizational culture, while building cooperation with stakeholders.	Provide the legal and planning framework needed for governance	The internal regulations of the public institution are harmonized with the legal obligations
		ources, and uses them ontinuously improve all ments of management	
		Infrastructure	Adequate general, transport and communal infrastructure without negative impact on the values of the Park is provided through cooperation with stakeholders
		Financing	The main activity of PINPG is financed from public revenues, while the development of the Park is financed from public revenues or revenues generated by the institution, donations and projects.

# Specific management objectives and indicators for their evaluation

Special purpose	Indicator
The species diversity is in a preserved natural state with stable populations of important species	<ul> <li>Populations of important species are in stable condition</li> <li>There is information on the types of monitoring according to the Program for long-term monitoring of biodiversity and the additionally added species in this Program</li> <li>Number of significant species according to EU directives in stable condition</li> </ul>
Habitat diversity is preserved in a natural state with stable populations of significant communities	<ul> <li>Significant habitats are in stable condition</li> <li>There is information on the monitored habitats according to the Program for long-term monitoring of biodiversity and additionally added species in this Program</li> <li>Aquatic habitats have a good or very good ecological status</li> <li>Data on forest communities represented in NPG are available to all concerned and interested</li> <li>Significant species are in stable condition</li> </ul>
Appropriate activities have been carried out to protect important species and habitats	<ul> <li>Number of in-situ and ex-situ conservation activities</li> <li>Number of species for which conservation activities have been carried out</li> <li>There is new and continuous information on the invasive and non-invasive species on the territory of the NPG in an appropriate format</li> <li>Number of recommendations for dealing with invasive and non-invasive species as a threat to the Park's biodiversity</li> <li>Favorable impact of reintroduced species in the park is measurable</li> </ul>
An appropriate methodology for monitoring species and habitats that is internationally accepted has been developed and applied	<ul> <li>There is a developed, internationally accepted and applied methodology for monitoring of all species and habitats in accordance with the Program for long-term monitoring of the biodiversity of the park</li> <li>Number of employees trained to implement biodiversity monitoring activities</li> <li>Working hours used to carry out biodiversity monitoring activities</li> </ul>
An applied methodology for monitoring geological diversity has been developed	<ul> <li>Methodology developed and implemented for assessment of the condition of the landscape and landscape values of the park</li> <li>Developed and implemented methodology for assessment of the state of geomorphological forms in the Park</li> <li>Growing share of preserved identified and recorded geomorphological forms in the Park</li> <li>Increased number of started initiatives, established programs and implemented projects to promote the preservation and revitalization of traditional landscape elements</li> <li>Increased number of settlements in the area of the Park where the local community is actively working on the conservation of the landscape in cooperation with PINPG</li> <li>Increased number of households and renovated buildings in private ownership in a way that preserves their traditional characteristics</li> </ul>

The use of forests in the Park is controlled and sustainable	<ul> <li>There is a special plan for cultivation and protection of forests in NPG developed and implemented</li> <li>The quantity of cut and sold wood mass is reduced</li> <li>Natural processes are actively protected or actively managed in the forests and forest ecosystems in the Natural Zone</li> <li>Forests and forest ecosystems in the sustainable use zone are managed in a way that protects biodiversity</li> </ul>
PINP holds information on the status of wildlife populations collected for commercial purposes	<ul> <li>There is information on wildlife collected for commercial purposes</li> <li>There is information on collectors who are active in collecting wild species for commercial purposes</li> <li>Relations with collectors are regulated</li> <li>Wildlife collection quotas are set for commercial purposes</li> <li>The collection of wild species is recorded in accordance with the specified quotas</li> </ul>
Pressure on wildlife collected for commercial purposes has been reduced, and local development supported and improved  PINPG has housing information in accordance with EU Directives in an appropriate format	<ul> <li>The collection of wild species is recorded in accordance with the specified quotas</li> <li>Increased income of collectors of wild species for commercial purposes</li> <li>The number of collectors is stable or decreasing</li> <li>The number of recorded violations by collectors is stable or decreasing</li> <li>PINPG has information on forest communities in the park</li> <li>All forest communities in the park are recorded in the PINPG database</li> <li>There are maps made in the appropriate program and format to show the distribution of forest</li> </ul>
PINPG is a socially responsible institution that helps vulnerable groups through a strictly defined way of forest management	<ul> <li>communities</li> <li>Quantity of cut wood mass is reduced annually</li> <li>The number of households that procure firewood from PINPG is decreasing</li> <li>Revenue from the sale of firewood decreases</li> <li>The standard of living of socially disadvantaged households is improving</li> </ul>
PINPG actively participates in the creation and implementation of scientific research in accordance with the objectives of management	<ul> <li>Prepared list of priorities for scientific research in accordance with the management objectives</li> <li>Number of requests for opinions for scientific research activity in the Park</li> <li>Number of requested opinions for scientific research activity in the Park in accordance with the list of priorities of PINPG</li> <li>Number of conducted scientific researches that shared the obtained results with PINPG</li> <li>Number of activities for scientific research activity in which PINPG employees are involved</li> </ul>

The park is a sustainable destination model for other protected areas and tourist destinations in the region, where preserved nature, cultural heritage and local population are intertwined in a sustainable way.	<ul> <li>The visit is in accordance with the specified NPG load capacity</li> <li>There is a proper distribution of attendance on all hiking trails and the pressure to certain points and places is reduced</li> <li>Revenues from NPG visits have increased</li> <li>The preferences of the tourists who visit the NPG are determined and activities are undertaken to satisfy their needs</li> <li>The pleasure with NPG visits by domestic and foreign visitors is stable or increasing</li> </ul>
Various visit programs enhanced by the offer of the local population which enables safe visit and presentation of the preserved values of the park	<ul> <li>The use of nature by visitors does not endanger the values of the park or the quality of the target experience for visitors; i.e., Impacts on visitor use are maintained within acceptable standards set by standards as a result of active management</li> <li>The number and variety of programs throughout the area of the Park are tailored to the needs of presenting values, interests and opportunities to visitors and managing the dynamics of visits</li> <li>The infrastructure is safe for visitors, tailored to the needs of preserving the outstanding universal value and other values of the park, while providing the desired experience for visitors</li> <li>The number of local providers of catering and tourism services included in the offer of the Park is growing (traditional ethno restaurants, crafts, services, etc.)</li> <li>The number of visitors staying in the park longer than one day is growing, as well as the average length of stay of the visitors</li> <li>Visit revenue is stable or growing</li> </ul>
The appropriate and modern tourist infrastructure is continuously maintained and upgraded	<ul> <li>The sustainability of the park is certified by obtaining and maintaining relevant certificates for a globally recognizable level of business operation of the institution, individual facilities of HOREKA, the destination and the partners within the destination         The offer of the park is harmonized with the preferences of the target markets         The share of direct sales and sales through partners in the total sales of the Park is growing         Internal and external information and communication channels are established and used regularly         The participation of domestic visitors in the visit to the Park is growing         The share of visitors from the international primary target markets is growing         The involvement of the local population and the employees in the park in the marketing activities of the public institution is growing         The number of visitors staying at the destination longer than one day is growing, as well as the average length of stay of the visitors         The length of the working season and the average length of stay in the destination is growing</li> </ul>

The stay of the visitors is supported by appropriate, interesting and modern activities and offer  PINPG provides information and data on the Park's contribution to the development of sustainable tourism	<ul> <li>Number of activities offered by PINPG</li> <li>Number of offered tourist activities in NPG</li> <li>Revenues from the offered goods and products from the info centers of PINPG are growing</li> <li>The number of visitors staying at the destination longer than one day is growing, as well as the average length of stay of the visitors</li> <li>The length of the working season and the average length of stay in the destination is growing</li> <li>The quality of accommodation per building is profiled in accordance with the expectations of the target markets</li> <li>HOREKA facilities are eco-friendly and their ecological footprint is reduced</li> <li>The volume of content in the HOREKA facilities used to present the values of the park is growing (food offer, exhibitions, events, decorations and equipment, etc.)</li> <li>Growing number and value of purchased local products provided to visitors through the HOREKA offer</li> </ul>
PINPG contributes to the extended and enriched stay of visitors in the local communities in the Park, in the direction of sustainable tourism development	<ul> <li>Employee numbers and productivity per employee are stable or growing</li> <li>The length of the working season and the average length of stay in hotels and camping places is growing</li> <li>The income of HOREKA facilities is stable or growing</li> <li>Built, put into operation and maintained souvenir shops and ticket collection that have been renovated in accordance with the highest architectural and environmental criteria</li> <li>A growing number of products representing park values at souvenir shops and toll booths</li> <li>Revenue is profiled by facility</li> <li>The value and share of local products in the sale of shops and souvenirs is growing</li> <li>Consumption in souvenir shops per visitor is growing</li> <li>The revenue per facility from shops and souvenir shops is stable or growing</li> </ul>
Local communities take an active part in the development planning and management of tourism in the Park  The existing infrastructure for information and environmental education of the visitors is continuously maintained and upgraded	<ul> <li>The number of initiatives and proposals from the representatives of the Stakeholder Council and the Environment Forum is increasing and they are incorporated in the annual nature protection programs</li> <li>The percentage coverage of the total population living on the territory of the park represented by the number of their representatives in the bodies that cooperate with the park is stable or increasing</li> <li>The educational path is constantly maintained and upgraded</li> <li>Number of newly incorporated elements in the educational path</li> <li>The time used by PINPG staff to maintain this type of infrastructure as a share of the total working time is stable or decreasing</li> <li>The number of event participants and the number of events organized in the Green Classroom is stable or increasing</li> </ul>
	<ul> <li>New thematic trails have been established and appropriate programs for environmental education and interpretation have been prepared for visitors who are interested in visiting these trails.</li> </ul>

	The number of visitors to the thematic paths is increasing
The general public is regularly informed about the activities of PINPG in the field of nature protection	<ul> <li>The number of press releases is increasing</li> <li>The number of media with which PINPG cooperates is stable or growing</li> <li>The number of information, news articles or shows dedicated to NPG is stable or increasing</li> <li>The number of informed citizens is increasing</li> <li>IT solutions developed for informing the public are regularly maintained and in continuous application</li> <li>The number of individual visits to the PINPG website is stable or increasing</li> <li>The number of downloads of the smartphone application is stable or increasing</li> <li>The number of NPG reports is stable or increasing</li> </ul>
Promotional material with educational and informative character is regularly prepared and distributed	<ul> <li>Produced and distributed appropriate promotional material in quantities that are stable</li> <li>Environmental education packages are in constant application and the number of users increases during the organized workshops and events</li> <li>The number of HOREKA facilities that have a sufficient amount of promotional material is stable or increasing</li> </ul>
PINPG activities contribute to raising public awareness of the need for nature conservation	<ul> <li>The number and variety of opportunities for educational, informational and educating programs is growing</li> <li>Environmental education services in the Park are aligned with the needs of established visit programs</li> <li>The total number of participants in educational programs is growing</li> <li>Visitor support for preserving the values of the Park is growing</li> </ul>
The internal regulations of the public institution are harmonized with the legal obligations	<ul> <li>All mandatory internal regulations and plans of the public institution are in accordance with the legal obligations and needs of the park management</li> <li>All major business processes and procedures of the public institution are regulated by appropriate internal regulations (protocols, instructions, programs, etc.)</li> <li>No differences are observed, or rarely observed, between the provisions on external regulations and plans on the one hand and the needs of the park management on the other hand</li> </ul>
Institutional and individual capacities necessary for efficient and effective management of the park and for affirmation of the public institution are provided through continuous improvement, knowledge management and development of organizational culture	<ul> <li>The capacities of the human resources are in accordance with the needs of the management and the structure of PINPG</li> <li>The competencies of the staff are continuously developed in accordance with the identified needs and priorities</li> <li>All existing knowledge and information relevant to the management of the park is stored in the information systems of the public institution, taking into account the topics and problems in an organized manner and are available to staff.</li> <li>The information systems of the public institution are constantly updated with information and knowledge that arise as a result of activities in terms of management</li> </ul>

	<ul> <li>The achieved management solutions, plans and practices are based on the best available knowledge</li> <li>The organizational culture of the public institution (which includes sharing a common vision, established accepted norms of behavior, effective communication, leadership and cooperation, organizational learning, etc.) contributes to the motivation and effectiveness of staff in performing their duties</li> <li>In scientific circles, the Public Institution is recognized as an example of good management of protected areas, and its employees actively participate in national and international exchange of experiences and projects as relevant experts in their fields.</li> </ul>
Adequate transport and communal infrastructure without negative impact on the values of the Park is provided through cooperation with stakeholders	<ul> <li>The road leading through Galicica has been renovated and maintained with the active participation of representatives of the Park in the planning and execution of activities</li> <li>Reduced negative impact of the settlements in the Park on the preservation of the values of the park</li> <li>Arranged and expanded resort and parking at Baba for greater safety of visitors and transit passengers</li> <li>The retention period of Baba Resort is increasing</li> <li>Number of checks and shares from visitors to Baba resort is increasing</li> </ul>
The main activity of PINPG is financed from public revenues, while the development of the Park is financed from public revenues or from revenues generated by the institution, donations and projects.	<ul> <li>PINPG revenues are stable or growing</li> <li>Revenues from direct use of natural resources are reduced or completely eliminated</li> <li>Donation income is stable or growing</li> <li>Budgeting and financial planning are improved</li> <li>Reduced differences between budgeted and actually spent funds on an annual basis.</li> </ul>

#### **GOVERNANCE AND MANAGEMENT**

#### Management bodies

In accordance with Article 137, paragraph 2 of the LNP, the bodies of PINPG are: board of directors, executive body, professional collegial body and board for control of material-financial operations. Additionally, for the purpose of efficient management of the protected area, PINPG in accordance with Article 135-a, paragraph 4, has established a Scientific Council and a Council of Stakeholders, as consultative bodies of the institution. The competencies of the PINPG bodies, determined by the LNP and the Decision for establishment of PINPG, have been fully undertaken and specifically specified in all internal acts of the institution.

# Management board

The management in PINPG is realized through the work of the Management Board. The Management Board of PINP is composed of 5 (five) members appointed by the Government of Republic of North Macedonia. Two are at the proposal of the MoEPP, two at the proposal of the Professional Collegiate Body and one at the proposal of the municipalities on whose territory the NPG is located.

The Board of Directors adopts the Statute of the institution, Management Plan, Annual programs for nature protection, financial plan and other general acts determined by law and the Statute of the institution. The Board of Directors determines the final account.

## Board for control of material-financial operations

The Board for control of material-financial operations obligatorily reviews the inventory, the financial plan and the final annual accounts of the institution, prepares an opinion and submits it in writing to the Board of Directors.

## Director

The director of PINPG organizes and manages the labor process and leads the operation of the institution, makes decisions, represents the institution to third parties and is responsible for the legality of the work of the national park. It implements the decisions of the Management Board, elects and dismisses the heads of departments.

On the basis of a public announcement, the director of the institution is appointed and dismissed by the Government of Republic of North Macedonia.

# Professional collegial body

In order to effectively manage and coordinate the performance of work in the institution, the director convenes a Professional Collegium in which, in addition to the director, the heads of departments and two other members who have at least secondary education and experience in professional work are members.

Mechanisms and procedures for consultation and stakeholder participation in governance

In accordance with Article 135-a paragraph 4, of the LNP, PINPG in 2019, establishes the Council of Stakeholders and the Scientific Council as consultative bodies. At their constitutive sessions, the councils adopted rules of procedure previously approved by the Board of PINPG. In addition to the constitutive sessions, the councils met twice more and discussed the working version of this Management Plan at the sessions and evaluated the effectiveness of the NPG management with the help of the METT tool. The difficult scheduling of Stakeholder Council sessions due to a lack of motivation among members should be taken into account (other national parks also have this problem with the Stakeholder Council).

From the experience that PINPG has from the past, the participation of the local population in the management of PINPG can be more effectively ensured by the reactivation of the Environmental Forum that was established in 2008, but due to the strong politicization of society in that period its existence was at rest. Otherwise, the Environmental Forum is formed by the presidents of the local communities within the park, who already have the legitimacy of representatives of the local population. The forum has adopted a Statute and already has experience in working. PINPG did the administrative work of the forum. Due to the positive experiences that PINPG has with the Environment Forum, it has been proposed to reactivate it.

# Administering the Management Plan

Evaluation and reporting on the implementation of the Management Plan

The evaluation and reporting on the implementation of the Management Plan for the period 2021-2030 is in accordance with the LNP. The evaluation and reporting will be done, as before, with the help of the following tools and documents:

- Annual programs for nature protection;
- Reports on the annual programs for nature protection;
- METT assessment;

The cycle of operational planning in PINPG begins at the beginning of November with the preparation of the Report on the Annual Program for Nature Protection. In accordance with the information in this report, as well as in accordance with the Management Plan for the current period, PINPG prepares an Annual Nature Protection Program at the end of November. PINT in 2019 and 2020, was supported by PONT with funds that covered part of the operating costs, and according to the announcements from the MoEPP and PONT, we expect to receive financial support by 2030. We receive the funds to cover part of the operating costs on the basis of an application that largely coincides with the content of the Annual Nature Protection Programs placed in a format prepared by PONT. This format of PONT in addition to the Annual Programs has indicators and a significantly developed budget that allows us to make objective and accurate financial planning. The planning cycle designed in this way helps the public institution to prepare real Annual programs for nature protection as well as Reports that correspond to the implemented activities.

During the implementation of this Management Plan, PINPG will continue to timely submit to the MoEPP the Annual Nature Protection Programs and the Reports for their implementation in a standard format in accordance with the Rulebook on the content of the Management Plans and the Annual Nature Protection Programs.

Furthermore, in October of each year, a participatory method of assessing the efficiency of the management of the protected area is implemented by using the METT tool for assessing the efficiency of the management. Starting from 2019, PINPG uses the advanced METT tool to assess the effectiveness of management, which contributes to a better process of evaluation of the work done, but also better planning of next activities that will improve the situation in the fields where there are shortcomings, and effective management will be maintained in the fields where the institution is successful. Namely, with the application of this advanced tool, the employees in the institution are able to evaluate the effectiveness of the work based on written documents and procedures that can be repeated from year to year. This provides significant information that is comparable and that makes it easier to assess the effectiveness of management over the years. Also, the advanced METT tool introduces narrative explanations of the assessment for each of the individual issues, so that employees and stakeholders are able to more easily identify the weaknesses but also the strengths of management. Based on that, and in the part that requires the foreseen activities for improvement of the management, the employees are able to give concrete proposals with which it will be done and to work in accordance with their proposals and suggestions.

# Adding and revising / updating the plan and preparation of a new plan

In accordance with the Law on Nature Protection LNP, PINPG will start updating and supplementing the Management Plan after the end of the fifth year of its implementation. The abovementioned documents and tools have a key role for the success of this process, but also the acquired new knowledge and experiences during the implementation of this Management Plan.

The management plan is carried out for a period of 10 years. Given that the vision contained in the Plan covers a longer period of time for NPG management, so the goals of the Plan are relevant for a longer period of time. New knowledge, changing socio-economic circumstances may affect the change of management priorities and require taking additional measures, especially given the fact that the principle of management is an evolutionary and dynamic process that does not stop with the adoption of the Management Plan.

In that regard, the revision of the Plan needs to be performed every five (5) years. In case of changes that directly or indirectly affect the priorities of the Management Plan, it is mandatory to revise the Plan and protection measures, in accordance with the changes and the effects of such changes on the national park. The revision of the Plan may be conditioned by the changes in the positive legislation. The audit of the Management Plan is performed by: a planning team composed of part of the employees in the institution who are appointed for that function by the director of the institution and a team of external collaborators who also contribute to the audits. The team of external collaborators is composed of eminent experts in the field of nature protection and they are part of the Scientific Council of PINPG. The audit is performed on the basis of the updated data for the implementation of the objectives and the implementation of the Action Plan of the Management Plan.

The success cycle for the implementation of the Management Plan is measurable through the phase of planning, implementation, monitoring (accompanied by assessment of the effect of the implemented measures) and its revision / evaluation, re-approaching the planning process (or preparation of a new Plan if the need for it is indicated).

#### Organizational and personnel structure

According to Article 17, paragraph 7, of the Law on Public Employees ("Official Gazette of the Republic of Northern Macedonia no. 27/14, 199/14 and 27/16) and Article 11 of the Statute of the Public Institution" Galicica National Park ", Ohrid, Republic of North Macedonia, the director of the institution on May 28, 2018, adopted a Rulebook for internal organization of PINPG and a Rulebook for systematization of jobs in PINPG.

According to the Rulebook for internal organization of PINPG, the institution has four organizational units - Departments, as follows:

- 1. Department for Legal, Economic and General Affairs
- 2. Department for nature protection
- 3. Department for sustainable use of natural resources
- 4. Department for Alternative Activities and Environmental Education

Each of the departments has a manager and employees. The number of executors, the special conditions required for the execution of the works and tasks in certain jobs, as well as the description of the jobs by tasks and organizational parts are determined by the Rulebook for systematization of jobs in PINPG.

According to this rulebook, 19 jobs are systematized in PINPG plus a director, of which 17 jobs are for executors with permanent employment and 2 jobs for seasonal workers. In order to completely fill all the work places with the foreseen number of executors, 21 executors with permanent employment and 15 executors with seasonal work base are needed. Currently, 16 vacancies have been filled with executors, while 5 vacancies have not been filled yet. The table below provides an overview of the jobs, the number of executors and the filling of the jobs.

# Tabular overview of jobs and number of executors

Ordin			Number of s	ystem jobs	Number of jobs filled		
al No.	Code NAP	Job Title	Adm. officer	Assist. Tech. staff	Adm. officer	Assist. Tech.	
1.	0102Б04001	Head of the Department of Legal, Economic and General Affairs	1		1		
2.	0102Γ01001	Independent Officer - Treasurer	1		1		
3.	0102Γ01	Independent clerk - storekeeper	1		1		
4.	0102Γ02	Technical Secretary - Archivist	1		0		
5.	0405A01	Hygienist		1		1	

6.	0401A01	Head of nature protection department	1	1
7.	0401A03	Associate for habitats and plant species	1	0
8.	0401A03	Associate for animal species and guard service	1	0
9.	0401A04	Associate, responsible for guards in a protected area	1	1
10.	0402A01001	Guard in a protected area	2	2
11.	0401A01	Head of Department for Sustainable Use of Natural Resources	1	1
12.	0401A03	Associate for sustainable use of natural resources	1	1
13.	0401A06001	Forestry technician - responsible for the area	3	2
14.	0401A07001	Forest worker	10	seasonal
15.	0401A01	Head of the Department for Alternative Activities and Environmental Education	1	1
16.	0401A03	Associate for environmental education	1	0
17.	0401A03	Associate for alternative activities	1	1
18.	0402A07	Infrastructure maintainer	1	1
19.	0405A01	Ticket collector	5	seasonal

It should be borne in mind that these two rulebooks are adopted in accordance with the Management Plan for the period 2011-2020 and the management programs determined by that plan which was prepared before the adoption of the Rulebook on the content of protected area management plans and annual nature protection programs (Official Gazette of RSM no. 26/12). This Management Plan has been prepared in accordance with the Rulebook from 2012 and for its more efficient implementation it is necessary to make an analysis of the Rulebook for internal organization and the Rulebook for systematization and if necessary, to amend them. According to the positive legal regulations, PINPG

should conduct a functional analysis in which concrete measures will be proposed to improve the fulfillment of the goals and tasks of the institution. In addition, the Management Plan for the period 2021-2030 provides for continuous training for employees to improve their skills and knowledge for fulfilling job tasks.

Reason plus for analysis and possible amendment of the rulebooks is the significant change in the management of the park, i.e., the financing of protection, mainly due to the decision to end the practice of direct use of natural resources (felling and sale of firewood) and reorientation to indirect use of natural resources (collection of fees and concluding agreements with performers of activity).

### Budget of the NPG Management Plan 2021 - 2030

During the preparation of the budget for the implementation of the NPG Management Plan 2021 - 2030, several assumptions were taken into account that significantly affect the financial performance of the institution in the future. Those assumptions are:

- The institution will produce and sell firewood only for a vulnerable category of citizens belonging to the local population. Revenue from these sales will be stable over the next 10 years and will neither increase nor decrease.
- The institution will work to increase revenues from tickets, vessels and the like in the coming years. With the exception of 2020, when a 70% reduction in this type of income is projected (due to the economic and social crisis as a result of the spread of Covid 19), this type of income is expected to increase by 5% per year in the coming years.
- The institution will continue to sell souvenirs and maps. These revenues are expected to grow
  significantly in the coming years because as of 2019 the revenues from this type of activities are
  quite low and insignificant, and there is a real possibility and demand that guarantee that such
  revenues can grow in the future. They are expected to grow by 50% during 2021, followed by
  growth of 5% per year.
- The institution will start generating new revenues. Under new revenues are classified the
  revenues that the institution plans to receive from the realized cooperation with Booking, where
  a percentage from the realized overnight stays that are charged (anywhere in the world), and
  are made through the site of the national park, will be added to the total income of the
  institution. Such revenues are expected to amount to 100,000 denars during 2021, and then
  increase.
- Donations play a significant role in the revenue side of the PINPG budget. Namely, with the
  reduction of the revenues from the sale of firewood, it is necessary to supplement the revenue
  side with additional revenues that will annul the negative effect of this decision on the financial
  performance of the institution. Therefore, according to the information and the cooperation
  with PONT, donations in the amount of 50% of the revenues of the institution (excluding
  revenues for firewood) during the planning period are envisaged.
- The stock of the institution will be 37.34% of the total sales revenue at the end of each year during the planning period.
- The expenses of the institution (all except expenses on the basis of personal income) will
  increase in proportion to the increase in income explained above. It should be noted that the
  costs of transport and production of firewood are expected to decrease with the reduction of
  production.

- Personal income expenditures will remain the same during the planning period, i.e., no increase
  in personal income or increase in these costs is planned.
- The time required for collection of receivables is 15 days, while the time required for payment of liabilities is 12 days for liabilities based on operations, and 30 days for liabilities based on personal income.

In addition to the above assumptions, also during the preparation of the budget for the implementation of the NPG Management Plan 2021 - 2030, the necessary investments (single and multiple) were taken into account during the planning period. In addition, the last year was taken as the basic year for financial planning, i.e., 2019, and during the analysis of the financial indicators, a historical analysis was made for the last three years, i.e., 2017, 2018 and 2019.

The following table presents the basic historical analysis of the financial operations of the institution for the last three years.

Financial analysis of operations 2017 - 2019

Assets	2019	2018	2017	2019	2018	2017
Cash and cash equivalents	15,573,894 den	13,861,278 den	9,000,777 den	173%	154%	100%
Receivables	7,478,605 den	7,815,564 den	8,497,202 den	88%	92%	100%
Stock	2,821,287 den	7,279,892 den	8,887,369 den	32%	82%	100%
Total Assets	25,873,786 den	28,956,734 den	26,385,348 den	98%	110%	100%
Liabilities	2019	2018	2017			
Obligations	1,300,811 den	969,711 den	112,511 den	1156%	862%	100%
Total current liabilities	1,300,811 den	969,711 den	112,511 den	1156%	862%	100%
Founding capital	108,345,832 den	108,345,832 den	108,345,832 den	100%	100%	100%
Total liabilities	109,646,643 den	109,315,543 den	108,458,343 den	101%	101%	100%
	2019	2018	2017			
Revenue	19,833,182 den	21,657,135 den	17,116,747 den	116%	127%	100%
Cost price	5,255,109 den	4,932,217 den	5,034,879 den	104%	98%	100%
Gross margin	14,578,073 den	16,724,918 den	12,081,868 den	121%	138%	100%
Expenses	19,231,718 den	13,665,931 den	12,101,709 den	159%	113%	100%

As can be seen from the historical financial analysis, the cost of production is 26.5% in 2019, 22.8% in 2018 and 29.4% in 2017. Consequently, the gross margin follows an unbalanced flow and changes over the three analyzed years. This is primarily due to the high dependence of revenues on activities related to the production of firewood. The cost of firewood production has varied and will vary in the future, but it should be borne in mind that the gross margin after the decision to stop generating this type of revenue will stabilize, because the cost of other revenues is either non-existent or is stable (in the case of souvenirs). Another feature of the financial operations of the institution is the unbalanced flow of other costs. As can be seen, they accounted for 97% of total revenues in 2019, 63.1% in 2018 and 70.7% in 2017. The amount of costs in the last year is due to the activities related to the implementation of the project funded by the EU and UNDP.

Table 34: Budget of the Public Institution "National Park Galicica" for implementation of the Management Plan 2021 - 2030

				Budget: Public	Institution Nation	nal Park Galicica			
Income	2019	2020	2021	2022	2023	2024	2025	2026	20
Sale of firewood	10,870,470den	3,261,141 den	2,717,618 den	2,717,618 den	2,717,618 den	2,717,618 den	2,717,618 den	2,717,618 den	2,717
Tickets, Vessels	8,933,550 den	2,680,065 den	10,720,260 den	12,864,312 den	15,437,174 den	16,209,033den	17,019,485den	17,870,459den	18,76
Souvenirs	29,162 den	29,162 den	45,566 den	68,348 den	102,523 den	103,343 den	108,510 den	113,935 den	119
New income	0 den	375,000 den	425,000 den	475,000 den	525,000 den	575,000 den	625,000 den	675,000 den	725
Donations	9,383,536 den	10,955,487 den	5,595,413 den	6,703,830 den	8,032,349 den	8,443,688 den	8,876,497 den	9,329,697 den	9,804
Total revenue	29,216,71den	17,300,855 den	19,503,856 den	22,829,108 den	26,814,663 den	28,048,681den	29,347,110den	30,706,709den	32,13
Annual growth		-41%	13%	17%	17%		5%	5%	
Total salary costs									
Total salary costs	14,833,152den	14,833,152 den	14,833,152 den	14,833,152 den	14,833,152 den	14,833,152den	14,833,152den	14,833,152den	14,83
Total salary costs	14,833,152den	14,833,152 den	14,833,152 den	14,833,152 den	14,833,152 den	14,833,152den	14,833,152den	14,833,152den	14,83
Other costs	9,665,981 den	2,899,794 den	3,189,774 den	3,827,728 den	3,827,728 den	3,971,319 den	4,122,089 den	4,280,398 den	4,446
Operating profit	-4,665,951 den	-11,387,578den	-4,114,483 den	-2,535,603 den	121,434 den	800,522 den	1,515,371 den	2,263,462 den	3,046
Earnings before tax and interest	-4,713,306 den	-11,391,525den	-4,118,429 den	-2,582,958 den	74,079 den	753,167 den	1,511,425 den	2,259,516 den	2,999
Net profit	-4,713,306 den	-11,391,525den	-4,118,429 den	-2,582,958 den	74,079 den	<b>753,167</b> den	1,511,425 den	2,259,516 den	2,999
Working capital:	2019	2020	2021	2022	2023	2024	2025	2026	20
Receivables	9,916,591 den	3,172,684 den	6,954,222 den	8,062,639 den	9,391,157 den	9,802,497 den	10,235,306den	10,688,506den	11,16
Stock	4,059,033 den	1,014,758 den	1,014,758 den	1,014,758 den	1,014				
Liabilities	18,699,544den	15,993,070 den	16,109,061 den	16,364,243 den	16,364,243 den	16,421,680den	16,481,988den	16,545,311den	16,63

Working capital	-4,723,920 den	-11,613,764den	-8,339,555 den	-7,486,319 den	-6,157,801 den	-5,604,425 den	-5,241,163 den	-5,041,520 den	4,633
Cash flow:	2019	2020	2021	2022	2023	2024	2025	2026	202
Free cash flow									
Net profit / loss	-4,713,306 den	-11,391,525den	-4,118,429 den	-2,582,958 den	74,079 den	753,167 den	1,511,425 den	2,259,516 den	2,999
+ Amortization	0 den	0							
+ Increase liabilities	-4,713,306 den	-11,391,525den	-4,118,429 den	-2,582,958 den	74,079 den	753,167 den	1,511,425 den	2,259,516 den	2,999
- Capital investments	47,355 den	3,946 den	3,946 den	47,355 den	47,355 den	47,355 den	3,946 den	3,946 den	47
Free cash flow	1,558,295 den	1,332,756 den	1,342,422 den	1,363,687 den	1,363,687 den	1,368,473 den	1,373,499 den	1,378,776 den	1,384
Operating cash flow									
Net profit / loss	-4,713,306 den	-11,391,525den	-4,118,429 den	-2,582,958 den	74,079 den	753,167 den	1,511,425 den	2,259,516 den	2,999
+ Amortization	47,355 den	3,946 den	3,946 den	47,355 den	47,355 den	47,355 den	3,946 den	3,946 den	47
- Changes in working capital	-393,660 den	-956,355 den	-682,669 den	-611,149 den	-499,812 den	-455,577 den	-425,305 den	-408,668 den	-374
Cash flow from operating activities	-4,272,291 den	-10,431,223den	-3,431,813 den	-1,924,454 den	621,246 den	1,256,099 den	1,940,676 den	2,672,131 den	3,421
Investment cash flow									
Capital investments	4,735,500 den	4,735							
Cash flow from investment activities	-4,735,500 den	4,735							
Initial monetary amount	15,573,894den	6,566,103 den	-8,600,620 den	-16,813,767den	-23,473,721den	0 den	-3,479,401 den	-6,274,224 den	8,337
Cash changes	-9,007,791 den	-15,166,723den	-8,167,313 den	-6,659,954 den	-4,114,254 den	-3,479,401 den	-2,794,824 den	-2,063,369 den	1,314
Final amount of money	6,566,103 den	-8,600,620 den	-16,767,933den	-23,473,721den	-27,587,975den	-3,479,401 den	-6,274,224 den	-8,337,594 den	9,651

I do hereby certify that the above translation is true and conforms to the original document submitted to me in Macedonian language. Tanja Georgieva authorized court interpreter from Macedonian into English and vice versa for the area of the Basic court in Ohrid, Republic of North Macedonia.