

## inTegRated mAnagement modelS For archaEological paRks TRANSFER

INTERREG V-B Adriatic-Ionian ADRION Programme 2014-2020, Priority Axis 2,  
project No 1071

### **EXISTING SITUATION ANALYSIS (ESA) REPORT (Activity T1.1 - Deliverable T1.1.1)**

Università degli Studi di Macerata / University of Macerata  
Ephorate of antiquities of Ioannina  
Computer Technology Institute and Press “Diophantus”  
Institutii Arkeologjise / Institute of Archaeology  
Horizont-Albania  
Javna ustanova Razvojna agencija Šibensko-kninske županije / Public  
institution development agency of Šibenik - Knin County  
Općina Omišalj / Municipality of Omišalj  
Mestna občina Ptuj / City of Ptuj  
Podiplomska šola ZRC SAZU / Postgraduate School ZRC SAZU

## CONTENTS

Introduction.....	2
Archaeological park of <i>Urbs Salvia</i> - Urbisaglia, Macerata (Italy) .....	7
Archaeological site of Dodona (Greece) .....	26
Antigonea archaeological park (Albania) .....	42
Sibenik City Museum (Croatia). .....	60
Bribirska glavica .....	61
Velika Mrdakovica .....	75
Mirine - Fulfinum archaeological park (Croatia) .....	86
Archaeological park Poetovio in Ptuj (Slovenia) .....	106
General conclusions .....	120

## INTRODUCTION

The Existing Situation Analysis (ESA) is regarded as a key document useful to share information, knowledge and experiences. It was realized in the six partners' archaeological parks: Urbs Salvia (Italy), Dodona (Greece), Antigonea (Albania), Bribirska glavica (Croatia), Velika Mrdakovica (Croatia), Mirine - Fulfinum (Croatia) and Poetovio (Slovenia).



The archaeological parks and their surrounding territories were studied regarding the historical and cultural features, archaeological monuments, natural and economic aspects, management plans, methods and practices in use, etc.

The special interest of analysis was connected to the three thematic project areas that are:

- development of coordinated and integrated policies and management plans or strategies;
- identification of economic sustainable activities able to conciliate economic growth with cultural preservation;
- identification of information and communications technology (ICT) tools able to enlarge the audiences of archaeological heritage (especially of young people and disadvantaged categories) and IT systems able to better analyse features and needs of archaeological parks' visitors.

Each individual analysis was organized according the same system. The analysis is carried out on the basis of the evaluation of the STRUCTURING FACTORS - the set of components and relationships which concretely exist in the organization of local systems of each archaeological area (Chapters 1-4). The structuring factors and the results of analysis are summarized in the Conclusion (Chapter 5).

## STRUCTURING FACTORS

### 1. Presentation of the archaeological park

#### 1.1 *Relevant legislations in force*

Short description of the relevant legislations in force in the country at national/regional/local level regarding management/protection/valorisation of archaeological sites as well as parks.

#### 1.2 *General presentation*

- Location of the site.
- View of the site.
- Map/plan of the archaeological park with the historical structures and modern infrastructure.
- Size of the park (in ha).
- Short description of the environment or landscape of the park.
- Historical meaning.
- List of visible historical monuments.
- Short descriptions of each monument or group of monuments.
- Images of the most important monuments.
- Present condition of the monuments.

#### 1.3 *Infrastructure*

- Opening of the area.
- Access of the visitors to the entrance.
- Moving through the park.
- Information for visitors on site.

- Museum and/or exhibition place.
- Public facilities.

#### *1.4 Position in natural system*

Position of the archaeological park in natural system at territorial/municipal level:

- Description of geological and geomorphological characteristics as well as of botany and fauna.
- Classification of environmental problems.
- Choices made for the conservation and enhancement of the landscape and the environment.

#### *1.5 Position in human system*

Position of the archaeological park in human/anthropogenic system at territorial/municipal level:

- Catchment area of the possible users/visitors.
- Accessibility by roads.
- The system of museums, monuments of cultural interest etc.
- The system of tourist facilities.

## **2. Management plans and strategies**

### *2.1 General presentation*

The general organisational structure was presented regarding planning and management of archaeological park. Different bodies involved in the planning and management were listed and briefly described, including their role, competencies and tasks. The relationship with the national level was briefly specified as well.

### *2.2 Management Plan or management priorities*

In the case of the already existing Management Plan, its priorities were described as well as vision, management objectives, expected results, existing and potential opportunities and problems.

In the case of no Management Plan, the management objectives set out in any other specific document (e.g. policy document) were presented as well as the priorities and activities.

### *2.3 Cooperation and coordination among local actors*

Level and extension of cooperation and coordination among local actors both in the setting up of the Management Plan or policy and in the management. Who are involved, how and to what degree (process/type/method of involvement, activities).

### *2.4 Involvement of the public*

Level and extension of involvement of the public in the setting up the Management Plan or policy and in the management of sensitive and protected areas (who, how and to what degree is the public involved). The participatory framework was described (process of involvement, activities).

### *2.5 SWOT analysis of management plan and strategies*

The opportunities, strengths, challenges and needs were specified as well as the problems (weaknesses, constraints, threats) in relation to coordination and coordinated management policies and plans.

## **3. Economic sustainable activities and products**

### *3.1 Heritage policy and priorities*

The local and regional heritage policy and priorities were described, with regards to economic development and economic activities, formulated or implemented in the protected archaeological area concerned, including any interrelation with other policies when related (sustainable development, protection of archaeological sites, economic development, employment policy, etc.).

### *3.2 Existing initiatives or actions*

The existing initiatives as well as methods, actions and projects were described that are already implemented in the archaeological park aimed at valorising and promoting heritage as well as to strengthen its economic sustainability.

### *3.3 New or innovative initiative or activity*

The new or innovative activities were presented that could have concrete possibilities to be introduced in the archaeological park to strengthen the economic sustainability. The main conditions and requirements were specified for the concrete realisation of such new initiative(s), e.g. economic resources, etc.

### *3.4 Target groups and stakeholders*

Target groups and stakeholders were listed that should be involved in the framework of new policies and approaches for economic sustainable activities and products in connection with archaeological park. It was explained why they are the ones to be involved.

### *3.5 SWOT analysis of sustainable economic activities*

The opportunities, strengths, challenges and needs were described as well as the problems (weaknesses, constraints, threats) of archaeological park in relation to economic sustainable activities and products.

## **4. Identification of ICT tools**

### *4.1 Existing ICT tools*

The ICT tools already used in the archaeological park were described that have the aim:

- to improve or enlarge presentation and interpretation of the archaeological heritage, to enhance the territorial and cultural identity, to promote the protection of archaeological heritage;
- to enlarge audiences (especially of young people and disadvantaged categories);
- to better analyse features and needs of archaeological parks' visitors.

#### *4.2 Authorities and bodies involved in ICT activities*

- The public or private authorities and bodies involved in ICT activities are listed and briefly explained their respective role, competencies and tasks.

#### *4.3 Target groups and stakeholders*

The target groups and stakeholders are listed to which ICT activities are targeted. It is explained why they are the ones addressed. The methods and strategies that are used in the framework of ICT activities are described as well as types of activities implemented for each target group. The tools and instruments used in ICT activities are presented at the end.

#### *4.4 SWOT analysis of ICT tools*

The opportunities, strengths, challenges and needs are presented as well as the problems (weaknesses, constraints and threats) concerning ICT.

### **5. Conclusions**

Having taken into account all the structuring factors, the major problems, constraints and threats affecting the individual archaeological park were summarised as well as challenges and opportunities.

The following components were specified for each archaeological park:

**CHARACTERIZING FACTORS:** The components and relationships that characterize each local system giving it an identity such as distinguish it from others.

**QUALIFYING FACTORS:** The elements or conditions that give a local system a certain quality or importance or value without changing its structure or characters.

**CRITICAL SITUATIONS:** The set of elements or conditions of degradation or de-qualification or alteration that can endanger the structure, the characters or the quality of the archaeological park.

**CHALLENGES AND OPPORTUNITIES:** Potential areas and sectors of development.

## ARCHAEOLOGICAL PARK OF *URBS SALVIA* URBISAGLIA, MACERATA (ITALY)

### 1. PRESENTATION OF THE ARCHAEOLOGICAL PARK

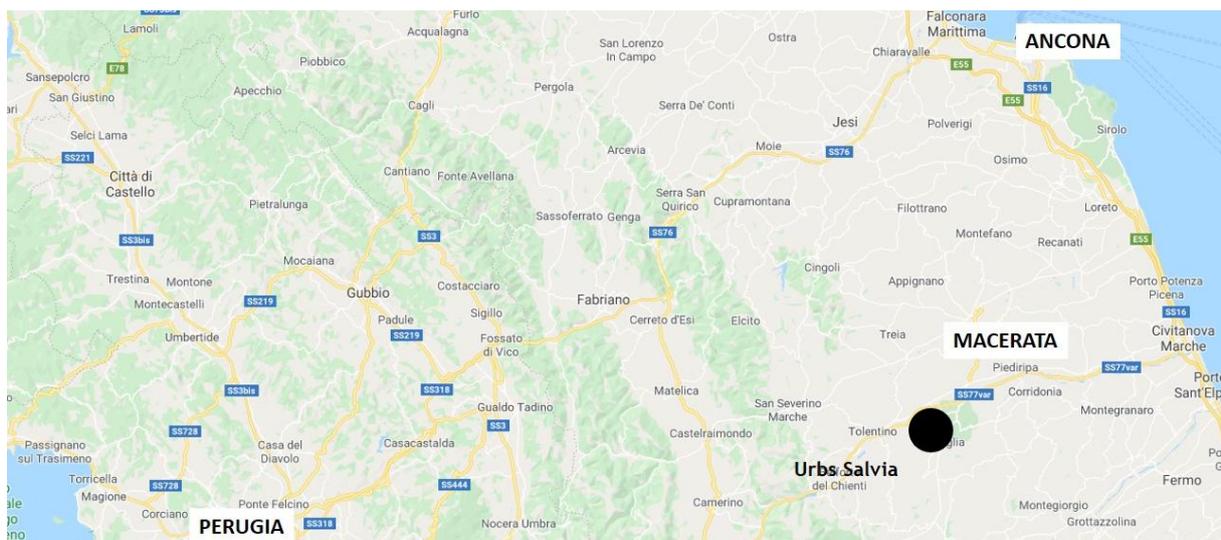
#### 1.1 Relevant legislations in force

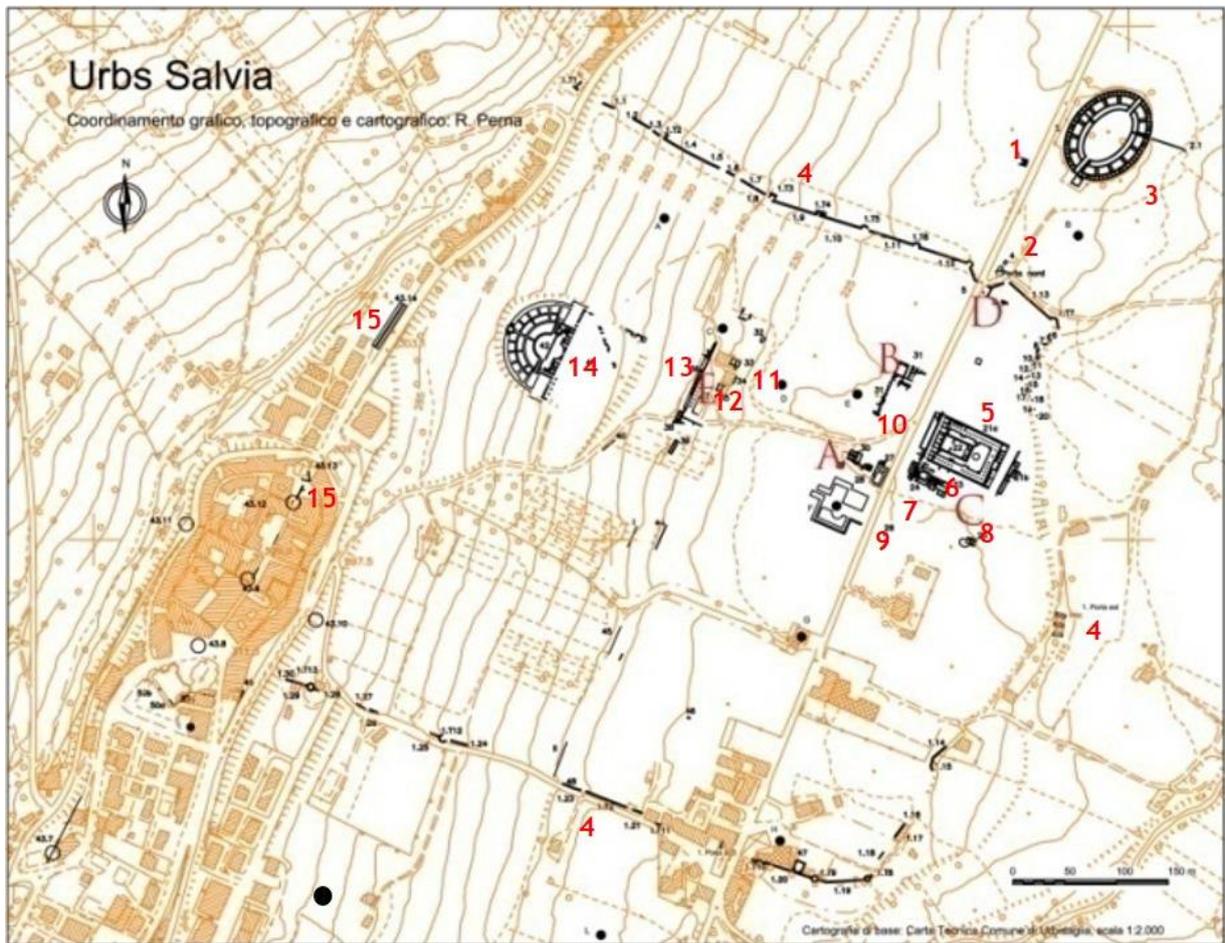
The essential legislative asset for the preservation of the archaeological areas and parks can be read in the National Code for Cultural Heritage: Codice dei beni culturali e del paesaggio (Decreto Legislativo 22 gennaio 2004, n. 42). Also important are the guidelines for the establishment and enhancement of archaeological parks: Linee guida per la costituzione e valorizzazione dei parchi archeologici (DM 18 aprile 2012).

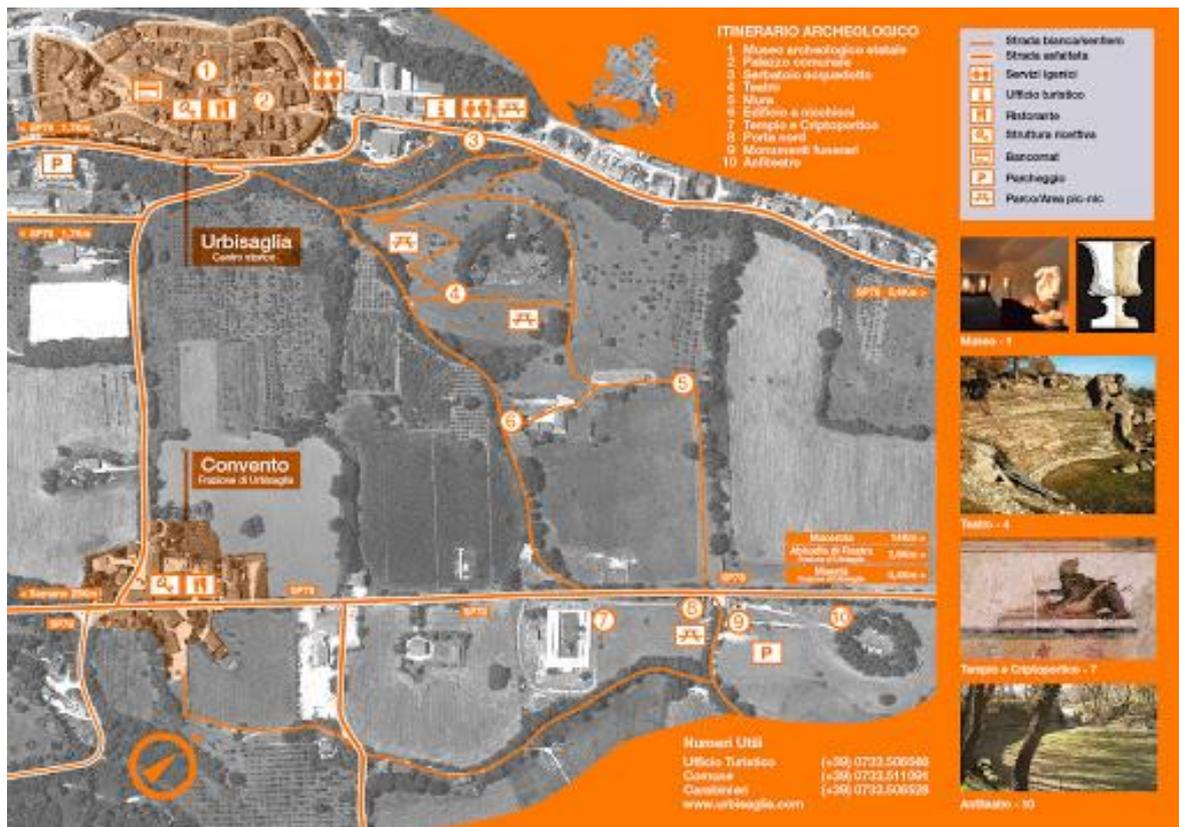
On a regional level, the Law of Marche Region n. 16 of 1994 (Legge Regionale delle Marche n. 16 del 1994), concerning the frame of the Archaeological Park and Areas, has established the Marche Archaeological System (Sistema Archeologico Marchigiano). Fundings destined to enhancement projects and parks management are ruled by another regional Law (LR Marche n. 4 del 2010).

#### 1.2 General presentation

The archaeological park of Urbs Salvia is located on the provincial road that leads to Macerata, in the municipality of Urbisaglia, just at the foot of the historical centre of the modern city.







The park measures today more than 40 ha and includes the most important monuments of the ancient city of Urbs Salvia.

The park is located in the medium valley of the river Fiastra, in an area characterised by gentle rolling hills developing on the sides of the Chienti and Fiastra Valleys. Just above the park, the medieval centre of the modern Urbisaglia developed on top of San Biagio hill. Less than 4 km from the city and the park is the Natural Reserve of Fiastra where, in the XII century, an Abbey was founded.

### Historical meaning

Due to literary (Plinius, Nat. Hist. III, 13, 111) and archaeological evidence, it is now known that the origin of the settlement is to be placed in the late republican period (2nd century BC) when a first colony, Pollentia, was founded in the strategic point of a road network that later will be dominated by the well-known Salaria Gallica. The choice of the site is probably to be researched also in the proximity of an ancient sanctuary. Some evidences of the first settlement could be brought to light in the last decade, especially in the forum area, where a productive complex, including a kiln for the local production of pottery, was identified under some later buildings.

Most of the archaeological evidences, though, belong to the later period which is to be identified in the Augustan era that underlines a moment of profound changes in the urban planning and setting of Pollentia, which in this period takes the name of Urbs Salvia. In this phase most of the earlier building have been obliterated under the monuments of the renovated city plan which is now characterised by a delimitation and functionalisation of the space starting from the main viability axe of Salaria Gallica. This being the case, most of the monumental buildings we now

can appreciate belong to the first imperial era, which is definitely to be identified as the most flourishing moment of the colony: the city walls, for instance, are dated to the Augustan period, the theatre foundation is to be settled between 22 and 23 AD, while the templar complex of Salus Augusta is chronologically placed between the reigns of Tiberius and Claudius.

The building of the amphitheatre, one of the most visible and important monuments of the site, does not belong, however, to the period just mentioned. It is rather linked to an exceptional evergetic act: the building, inaugurated in the year 81 AD, is, as a matter of fact, a donation to his natal city from Flavius Silva, an important roman senator who had made a brilliant carrier sealed by the successful campaign in Judea.

From the 2nd century AD the floridity of the city starts to slowly decline, coherently with the regional context. Archaeological evidences show that some architectural interventions were still engaged by the community, but they can all be classified as modifications, restorations and renovations of existing structures, while we have no proof of new building foundations.

Eventually, at the beginning of the 6th century, by the time of the Gothic wars, the city was pillaged by Alaric I, even if the destruction was not absolute and the city survived long after. The archaeological data related to Late Antiquity on the site are scarce up until the news concerning the foundation of an episcopal seat.

#### **List of visible historical monuments:**

##### ***1-2 - Funerary Monuments***

Close to the Northern Gate, there are two ruins related to tower-type funerary monuments, generally dated between the foundation and the 1st century AD. To these evidences it needs to be added a structure which is interpreted as the chamber of another funerary monument.

##### ***3 - Amphitheatre***

Monument built after 81 AD, outside the city walls. Measurements of the entire building are: 58,67 m (length) x 73,45 m (width). It is partially excavated in the earth and partially built both with the earth-embankment and substructures techniques. The *arena* is separated from the first rows of seats only by the *podium* wall. The building was surrounded by a vaulted corridor resulting from pillars sustaining arches.

The amphitheatre is today highly restored (main anastylosis intervention between 1989 and 1993), allowing visitors to clearly understand and visit the monument (also used for modern shows) but, at the same time making more difficult a detailed analysis of the structures.

Maintenance problems are mainly linked to the building's realisation in *opus cementitium* and the presence of some oaks inside it which weigh on the outside walls.



#### **4 - City Walls and 'Gemina' Gate**

The city walls are built in *opus testaceum* and have an *emplekton* made of bricks. On the North, East and South sides 13 polygonal towers (7 of which in the Park area) and evidences of 3 gates are preserved.

Generally, the *emplekton* of the walls is well-preserved; some more static issues have been detected on the Northern side of the walls.

The Eastern Gate, named *Gemina* Gate, is in an unstable condition, a colonial house having been built on it, endangering the entire structure. What is still visible of the building let us know that it was a double-arched gate.

#### **5 - So-called Temple-Crypto porch Complex**

This West-oriented complex is formed by a monumental crypto porch, decorated with III Pompeian-style paintings, which surrounds an hexastyle temple with a wide *pronaos* and a squared *naos*. The building is formed by three galleries divided into two aisles by rectangular pillars, forming a  $\Pi$ -shape closed on the front by the staircase leading to the temple. The complex is dated between the Tiberian era and the beginning of the second half of the 1st century AD.



The building suffers from horizontal thrusts, also provoked by the concrete structure sustaining the cover. The cheap realisation of the entire complex, made with poor cement, results in a very problematic maintenance strategy.

### **6 - 'Waters' Building'**

A complex of many rooms, located on top of a 2nd century BC phase. During the Augustan era, the rooms must have been decorated. Some evidences suggest that the building was dedicate to the use and, maybe, the worship of Waters, also connected to the nearby *Salus* temple.

The building shows the same structural problems as the Crypto porch complex. Exposed walls needs to be covered.

### **7 - Small Temple**

A small rectangular building, characterised by a staircase in front of a *podium*, is located South of the Crypto porch complex. The two long sided are characterised by some rectangular niches, while the short side is apse shaped.

The building has not been restored. The visible evidences are covered in vegetation.

### **8 - Non identified Building (Mithraeum)**

Non identified building with vaulted structures, possibly two-storeyed.

### **9 - Sundial**

Ruins of a triangular-based pillar realised in *opus testaceum*.

### **10 - Forum and related buildings**

Series of structures and buildings defining the *forum* area of *Urbs Salvia*. They include: a North-oriented temple, on the South side (Augustan era); a squared basement related to an honorary monument, on the West side (Augustan era); some structures of a building formed at least by two rooms (2nd-1st century BC); evidences of a monumental staircase leading to the building facing the Northern side of the *forum*; remains of the foundation wall of the West-side porch.

Most of the structures related to the *forum* area are yearly covered with earth after excavations in order to preserve the most fragile elements (mainly republican).

### **11 - Vaulted substructures**

Vaulted structures built in order to define and monumentalise the terrace on the West side of the *forum*.

### **12 - Non identified rooms and temple?**

Some evidences of two buildings surrounding a monumental building probably to be identified with a temple.

### **13 - So-called 'Edificio a nicchioni'**

Two different buildings, functionally connected, are identified with this name: one is a long, L-shaped, wall while the second is a crypto porch.

Some structural interventions have been conducted between 1989 and 1992 in order to stabilise the buildings.

The structures are realised in a solid technique and they still carry out the function they have been realised for which is to sustain the embankment. Nevertheless, there are some structural damages and problems related to the vegetation growing in the area.

### **14 - Theatre**

The building is located on the North-West side of the area included in the city walls. The theatre has a 86 m-wide *cavea*, divided into 3 *moeanania*, which is partially built against the hillside with a free-standing complex structure for the *summa cavea*. The building is flanked by two *basilicae*, decorated with III Pompeian-style paintings as the Crypto porch complex. Behind the scene building are the remains of a *porticus post scaenam*.



As soon as the first excavations started (1950), the theatre has constantly been object of restoration and stabilisation interventions. Nonetheless, the instability issues concerning the building have determined a problematic maintenance planning which needs to take into account numerous aspects such as the exposition to the atmospheric agents, the fractures detected in the building as well as continuous geological tensions and instabilities.

### **15 - Aqueduct and tank**

Part of the aqueduct system of *Urbs Salvia* is still visible and some of the descendant springs are preserved along the modern road named Corso Giannelli. The aqueduct's tank is also accessible to visitors thanks to some interventions made between 1947 and 1949.

## **1.3 Infrastructure**

The archaeological park of Urbisaglia is open all year long on booking and with different hours for each season.

Saturdays, Sundays and Holidays the Park is open from 10 am to 1 pm and from 3 pm to 6 pm. From June to September it is open every day from 10 am to 1 pm and from 3 am to 7 pm.

The access requires the purchase of a ticket and includes a guided tour of the Park. The park is also opened to schools, families, children and elderly: for them easier routes have been thought.

Two different tourist routes are normally proposed: a brief route and a complete one. The first one includes the visit of the Amphitheatre and the Crypto porch Temple, the second adds also the Theatre and the tank of the aqueduct.

The park is accessible on foot, with bikes and pushchairs; the Crypto porch temple and the Amphitheatre are also accessible by people with disabilities.

All the area is provided with a wide network of dedicated paths which allows the visitors to reach every monumental building and also to securely cross the state road 78.

At the entrance of the Amphitheatre an easily accessible and visible InfoPoint has been set up. Nearby there are toilets, a parking area and a bicycle shed.

The tourists can ask in place for every kind of information regarding the site: to this end, they can indeed find qualified tourist guides, paper information material (brochures, flyers), maps and plans of the site, digital material and 3D reconstructions of the main monuments, information panels and hypothetical reconstructions of the ancient city of *Urbs Salvia*. Materials and information are available in the main European languages.

The archaeological park is linked with the Archaeological Museum of Urbisaglia, now temporary closed due to the damages occurred during the last earthquake and awaiting some restoration works in order to be accessible again.

#### **1.4 Position in natural system**

Due to its peculiar characteristics, the Park has also an important environmental and landscape value. The fluvial system plays a crucial, yet underestimated, role in the historical evolution of the territory as well as in the preservation of the biodiversity in the area.

The Fiastra river has shaped the valley dictating its vocation and many characteristics or interventions can be traced back to its action: the cistercium and the later bonified marshland, the continuous yet variable water flow, later canalised and regulated, have left a mark on the territorial environment and also characterised the history of human activities. Moreover, the proximity of the Natural Reserve of Fiastra Abbey and the existence of a discontinuous yet connected vegetation system between the two protected areas implement ecological interactions on a large scale.

The natural heart of the Fiastra Reserve has a wooded character: the existence of “La Selva” forest, oak woods with extended for almost 100 ha, paired with the riparian vegetation all along the sides of the Archaeological Park, plays a role in the diffusion of the local wildlife.

The strip of riparian vegetation close to the park is mainly composed by willow trees, poplar, alder and oak trees and it is connected with small formations of various broadleaves arboreal species, reforestations, woods strips and scrubs: this

is the vegetation grid that innervate the territory and finds La Selva forest as a natural core.

This partially natural system, resulting from centuries of deforestation, is combined with a rich rural system, highly dominant concerning its extension, including all the cultivated areas around the Park. The vast agricultural areas, mostly cultivated with an alternation of cereals and forage plants or legumes, as typical of the sharecropping culture, have the characteristic aspect of the Marche countryside: farmhouses, fields geometries, ditches, shrubs, bushes and hedges of hawthorn, blackthorn and rosehip, “camporile” oaks, elms together with mulberries, maples, olive trees, all of these elements contribute to define the local landscape.

The largest part of the area stands on a terraced floodplain on top of which flood wastes, consolidated gravels and clayey-sandy soil of the Early Pliocene emerge. Regarding the geomorphological system, it is possible to identify, starting from the present riverbed, the different layers of floodplains.

Climate definition is problematic, due to the lack of data and systematic analysis, yet is possible to assess that the prevalent climate of the region shows milder characteristics compared to the Mediterranean one: warm and dry summers, not excessively cold and relatively wet winters, rainfall pattern mainly touching the intermediate seasons, with peaks in autumn. Generally speaking, we can ascribe the Archaeological Park to the temperate climate zone.

All the characteristics shown above, concerning both the climate and the vegetation and wildlife, play a role in the definition of the valuable biodiversity of the entire area.

### **1.5 Position in human system**

As already mentioned, the Archaeological Park of Urbisaglia is located in the hinterland of Macerata province, in a strategic position with respect to the regional territory.

The city of Urbisaglia, together with Sforzacosta, is served by a train station that connects it with the National Railway and many local bus routes include the city in their network. The main tourist attractions of the region and the coast are easily accessible by car as Urbisaglia stands very close to Civitanova Marche-Fogliano highway and, consequently, is well connected to A14 motorway.

The Regional County Seat of Ancona is 76 km away from Urbisaglia: the city is the destination of many cruises and, more generally, is the regional landmark for the maritime connections in the Adriatic Sea; in the nearby Falconara Marittima is also located the only regional airport (*Aeroporto Raffaello Sanzio*, approximately 80 km from Urbisaglia).

Ascoli Piceno, with its famous historical centre, is also only 70 km away from the Park. The natural attraction of Frasassi Caves is also accessible with a short trip of

approximately 63 km, while the Renaissance city of Urbino is located a bit farther, almost 170 km from Urbisaglia.

Focusing on the immediate vicinities, we can find the already mentioned Natural Reserve of Fiastra Abbey, other two Abbeys of great interest, San Claudio al Chienti and Santa Maria a piè di Chienti, Recanati, the native city of one of the most important Italian poets, Giacomo Leopardi and the Monti Sibillini National Park, where the better preserved medieval towns of the region can be visited.

All the territory is also well known for a peculiar gastronomy of an acknowledged excellent quality, which tourists can appreciate thanks to the great number of restaurants and agritourism facilities. The area is not equipped with big hotels but is well served by a network of small hotels, bed & breakfasts, country houses.

## **2. MANAGEMENT PLANS AND STRATEGIES**

### **2.1 General presentation**

Touristic information and welcome services are assigned to a private society, Meridiana srl, which cooperates with the town administration in order to promote Urbisaglia's culture and heritage.

The Municipality of Urbisaglia takes also care of the groundskeeping, as stated by a written agreement with the Superintendency for Cultural Heritage of Marche Region.

Scientific research and excavations on the site are carried out by the Department of Humanities of the University of Macerata together with the Superintendency for Cultural Heritage (Soprintendenza Archeologica Belle Arti e Paesaggio), by permission of MIBACT.

### **2.2 Management Plan or management priorities**

Regarding a Management Plan, a collaboration between the Municipality of Urbisaglia, the University of Macerata, the Marche Region as well as the Macerata city Administration (Provincia di Macerata) and the Superintendency of Cultural Heritage (Soprintendenza Archeologica Belle Arti e Paesaggio) has recently elaborated a 'Schema Direttore' as a common agreement for the development of a common and more coordinated organisation and enhancement of the Archaeological Park.

This non-binding document (G de Marinis - G.M. Fabrini - G. Paci - R. Perna - M. Sargolini - S. Teoldi (edd.), Verso un Piano per il Parco Archeologico di Urbs Salvia, Ancona, 2006), with the aim of defining a better management integrated system, focuses on some essential aspect that can be synthetised as follows:

- Planning the Park management in the frame of the national and local laws concerning parks and cultural heritage but also considering the potentialities of the European Convention on Landscape in order to develop a complex

yet functional system which is capable of integrating the competences and the strenghts of each one of the institutions involved

- Developing a better and upgraded interaction between the historical-archaeological and the geological-naturalistic components in order to be able to exploit all the different and valuable characteristics of the Park in an integrated territorial system
- Implementing the GIS system as an instrument for a more detailed knowledge and a more developed planning strategy
- Focusing on the archaeological and historical research in order to enhance the knowledge on the ancient city of *Urbs Salvia* and it's territory as well as to be able to perform better solutions for it to be accessible to the public
- Implementing maintainance, restoration and preservation practices
- Working toghether with actors and institutions in the direction of an implemented ICT activities system that can be at the core of an enhanced and more updated accessibility to the cultural heritage that the Park represents
- Focusing on the interaction with local productions, economic system, touristic routes and enogastronomic values
- Implementing infrastructures that can help a more valuable touristic route network on the Park

### **2.3 Cooperation and coordination among local actors**

As already stated, an acknowledged common agreement between the different subjects operating on the territory and, more specifically, on the Park, does not exist yet. Only some of the relations and cooperation between two or more actors are ruled.

Nonetheless, the collaborative inclinations as well as the specific competences make still possible for the Park to be a valuable tourist attraction as well as a point of reference for the participation to international and national projects for the cultural, social and economic development.

### **2.4 Involvement of the public**

All the actions and interventions mentioned above are in hands of public authorities which engage in management activities at the many administrative levels such as the municipal, the provincial and regional one. This processes also imply a bottom-up approach which is ruled by specific laws.

The Superintendence is responsible for the protection and conservation of the cultural heritage and it carries on these activities independently.

## **2.5 SWOT analysis of management plan and strategies**

The major strengths related to the Archeological Park of Urbisaglia are for sure to be identified, primarily, in its valuable cultural and historical heritage, in the accessibility of its main monuments and in the extremely wide potential of its spaces, as the modern city of Urbisaglia does not stand on the ancient one. The possibilities of interactions with the many other important and valuable heritage systems of the nearby territory are also to be stressed out as an important opportunity to enhance the Park.

Challenging, yet foreseeing many interesting possibilities, is the existence of a complex and ramified touristic network as well as the numerosity of the institutions and bodies involved in the management activities.

This last characteristic of the territory, more specifically, alongside with the lack of some regulations can cause the overlapping of jurisdictions and consequent issues in the management as many times stated in this document.

As a matter of fact, unfortunately, despite being one of the most prominent archaeological parks of the region, the Archaeological Park of Urbisaglia keeps representing a fringe touristic destination.

## **3. ECONOMIC SUSTAINABLE ACTIVITIES AND PRODUCTS**

### **3.1 Heritage policy and priorities**

In the last years, the Marche Region has identified the cultural activities and heritage as a source of economic growth, also through initiatives as the Project for an Advanced Cultural District (Distretto Culturale Evoluto - L.R. 28 dicembre 2010 n. 20). Thus, the institution has promoted specific policies concerning the cultural heritage with two main targets:

- Promoting and enhancing tourism;
- Supporting economic activities linked to the enhancement of the cultural heritage.

The Municipal administration has started a set of propaedeutic interventions for the consolidation of cultural and touristic values on the territory, through some coherent actions that focus on the setting, maintenance, and management of a touristic welcome system integrated also with the urban asset of the city of Urbisaglia. These interventions and strategies all look forward to the future of the city and the Park focusing on a sustainable and integrated kind of tourism which can be also respectful of the more genuine characteristics of the territory. Specific interventions such as the restoration of the Gemina Gate (Porta Gemina) or the works promoted on the youth hostel are all carried on in the aim of a collective planning strategy where the Archaeological Park becomes place of experimentation and discussion, a useful approach that allows to verify the coherence, the effectiveness and the relevance of the proposed ideas.

### 3.2 Existing initiatives or actions

The initiatives, the projects and the multiple actions carried on or planned and having the Archaeological Park as their centre or, at least, as one of the targets, do not claim to have covered all the needs and issues related to the Park's management and enhancement, yet they have been thought as a starting point for a more complex and articulated planning, aiming for a strategic project which could be able to promote a solid and long-lasting development of the Archaeological Park in its integrated territorial system.

A list of the main actions and intervention measures follows, with the eventual indication of the subject funding or taking care of each project:

- Art bonus used for funding the restoration of the Crypto porch paintings (Fondazione Carima)
- ARCUS project: it involves the re-functionalisation of Porta Gemina, the musealisation of the republican building and some other enhancement activities (Municipality of Urbisaglia)
- MUMO project for the realisation of new informative panels including QR-code technology
- Project for a more inclusive accessibility with specific focus on blind and visually impaired people (Municipality of Urbisaglia and Museum System Association of Macerata)
- Solidary SMS Project for the preservation and enhancement of the Northern area of the *forum*
- Gal Integrated Local Plan Project for the restoration and maintenance of some sections of the touristic routs and paths (Municipality of Urbisaglia and Municipality of Fiastra Valley)
- Gal Project for the restorative and implementing interventions on the walkway that connects the Archaeological Park with Fiastra Abbey (Fondazione Giustiniani Bandini and Municipality of Urbisaglia)
- Gal Project for the rebuilding of the walkway in order to safely connect the Archaeological Park with the medieval fortress of Urbisaglia (Municipality of Urbisaglia)
- Archaeological excavations carried on in the *forum* area of *Urbs Salvia* and in the extra-urban site of Villamagna (University of Macerata)
- CIPE Project for the restoration of the theatre and the Temple-Crypto Porch Complex (Superintendency of Cultural Heritage)
- Classical Theatre Season (Municipality of Urbisaglia)
- Landscape education activities (Municipality of Urbisaglia)

### 3.3 New or innovative initiative or activity

In order to promote activities and strategies that could actually enhance the role of the Archaeological Park in an integrated regional economic growth, it is essential to take into account the prevalent distribution of the economic activities as well as the main targets of the proposed initiatives, considering their representation in each of the main productive and economic sectors. As a matter of fact, the primary sector is still prevalent in terms of employability, yet the new generations tend to

increasingly abandon the agricultural activities with the consequence of shifting the interest on the other sectors.

The new activities that the identified stakeholders could be involved in are:

- Strengthening and upgrading of the sensory routes imagined for people with disabilities as well as implementing the route networks that could also include specific and dedicated paths such as horse riding and cycle paths, pedestrian routes focused on an environmental respectful mobility. These projects would give anyone the opportunity of meeting and appreciating the cultural values of the territory
- Thinking and planning a suitable connection with the existing touristic walkways of the nearby municipalities
- Creating new thematic routes, mainly focused on history, that could create a more interesting connection between the nearby historical and cultural monuments and ruins
- Realising the musealisation of Porta Gemina
- Thinking and organising historical re-enactments as well as implementing and enhancing the existing Ancient Classical Theatre Season Founding of an Ancient Theatre School
- Developing workshops in cooperation with local artisan enterprises with the aim of involving schools, young people and families
- Participating and sharing events and activities on the occasion of international days dedicated to specific, relevant and related themes

### **3.4 Target groups and stakeholders**

Stakeholders and target groups in an economic and productive perspective need to be identified taking into account the specific and characterising activities existing on the territory as well as their interactions with the locals and the cultural heritage.

This being considered, the identified stakeholders are the following:

- Economic activities directly involved in the Cultural Heritage management
- Economic activities linked to tourist welcoming services
- Economic activities and local citizens that can profit from the general enhancement of the territory and its cultural attractions

### **3.5 SWOT analysis of sustainable economic activities**

Urbisaglia has always been a community extremely rich in knowledge, competences, relations between public institutions and private bodies, exchanges between different organisations, enterprises, associations and citizens, this being a great opportunity in the process of imagining and planning an innovative and advanced project system.

Yet the scattered shape of this network needs a good management in order to become actually valuable also from an economic point of view.

Thus, it is important to consider an effort towards the implementation and alimentation of the social capital networks. The opening to new stakeholders together with the inclusion of specific knowledge, competences and expertise are essential elements for the social and economic growth of the territory.

Eventually, it is useful to point out that the area, as well as the nearby territory, is included in the seismic crater identified after the earthquake of 2016 that caused important damages to the tourist-welcoming infrastructures but also to many other aspects and areas connected to the cultural and social development.

## **4. IDENTIFICATION OF ICT TOOLS**

### **4.1 Existing ICT tools**

There are many projects already started, ongoing or planned that involve the ICT tools and the development of a more technologic approach to the communication, the promotion and the accessibility of the Park. Those projects can be synthetised as follows:

- Project for the 3D recontruction of the main historical buildings of the Aracheological Park (theatre, amphitheatre, Temple-Crypto porch Complex, republican building)
- 3D printing of the main historical buildings of the Park (theatre, amphitheatre, Temple-Crypto porch Complex, republican building)
- Realisation of interactive panels with the implementation of QRCode technology for the access at supplementary insights and information
- Production of videos uploaded on the main web channels
- Virtual model of the site and the territory concerning the Roman city of *Pollentia-Urbs Salvia*
- PlayMarche 2.0 project: development of an App for the enhancement of the site through edutainment

### **4.2 Authorities and bodies involved in ICT activities**

The following are the main bodies involved in the ICT activities ideation, realisation, promotion, funding:

- University of Macerata: having at its core historical and archaeological competencies, the University has a major role in the ideation, creation, design and actual realisation of ICT activities, promoting also close collaborations with other specialised institutions and bodies and, ultimately, funding some of these projects
- Museum System Association of Macerata (Associazione Sistema Museale della Provincia di Macerata): the Association takes part and promotes the ideation and realization of ICT projects, also funding them
- Municipality of Urbisaglia: the municipality mainly takes part in the realization activities and in funding the ICT activities and projects

- Superintendency of Cultural Heritage (Soprintendenza archeologica, belle arti e paesaggio): the institution has often a role in the ideation and realisation of ICT projects
- Marche Region: the regional administration of the territory mainly takes part in the funding activities
- Municipality of Macerata (Provincia di Macerata): it also mainly plays its role in the funding process

### 4.3 Target groups and stakeholders

The main targets for which ICT activities are thought and realised are children, young people and adults but also people with disabilities. For each of the target groups different ICT activities and supports have been and will be considered and implemented, taking into account their daily-basis interaction with these systems, their inclinations and abilities.

This being said, a list of the target groups with the relative activities follow:

- School-age children up to 12 years-old: the ICT activities must start from a play-based language, able to grab children attention and easing their way into the knowledge of the cultural and historical frame of the Park
- Teenagers: taking into account their everyday life interaction with technologies, their prevalent means of communication and their inclinations and curiosities, 3D reconstructions of historical buildings and Youtube videos are the ICT activities thought for them
- Adults: this is the most heterogenic group in terms of interests, technology interactions and abilities. They are, like the teenagers, a good target for 3D reconstructions of buildings and city planning but for them insights on texts and information are needed
- Blind and visually impaired people: sight disabilities make this target group suitable for the development and the enhancement of 3D prints which allow them to have a tactile experience of the most important buildings of the Park.

### 4.4 SWOT analysis of ICT tools

First of all, ICT tools and activities give the opportunity to reconstruct and communicate the scattered architectural and environmental context of the roman city of *Urbs Salvia*. Moreover, they offer the possibility of a solid integration of knowledge and expertise in a result that can be far more effective from a communicative point of view: more specifically, it is possible to put together data coming from the findings stored or exposed in the museums with the documentation and the results of the ongoing scientific researches.

ICT tools are also essential, as many times stated, in order to involve, in the Park experience, users with special needs, definitely making the Archaeological Park a more inclusive touristic attraction.

The possibility of a new sensorial or motoric language has enormous potential as an alternative and/or an integration to the symbolic one.

However, it is essential to stress out the need of involving all the different local expertise and competences during the development process of new ICT tools and activities. Also, it is never to be forgot that preliminary scientific research is imperative in order to produce a result that could be, not only attractive, but accurate, actually being able to carry with it the knowledge and cultural background needed. That, of course, implies the necessity of extensive surveys and data digitalisations. Eventually, the process just exposed has high costs that are not easy to cover.

## **5. CONCLUSIONS**

### **5.1 Characterizing factors**

A quick comprehensive overview of the Park territory stresses out an area defined by an ancient Roman urban planning of which only some feeble traces of ancient routes and squares and vestiges of the main monuments that allow a better understanding of the original architectonic shapes (theatre, Temple-Crypto porch Complex, funerary monuments, walls, gates ...) together with some worse-preserved buildings, yet still showing the original forms and dimensions (amphitheatre, tank...).

This set of urban pre-existences, whose border is partly marked by the ancient walls, is divided in two parts by the ex SS. 78 Picena and surrounded by that part of the modern town that appears as a diffused system and belongs to the middle Valle del Chienti, where commercial and productive spaces alternate with residential areas, rural residual funds and abandoned areas in which a re-wilding process is undergoing.

### **5.2 Qualifying factors**

As already mentioned, the site where the Roman town was built is not among those which have a continuity of settlement, where the modern built-up area insists on the old one but at the same time is not far from strongly anthropized and inhabited areas, condition that does not allow to think about a total isolation and a complete museification of the archaeological elements.

Looking at the immediate vicinities, the contiguity with the nature Reserve of the Abbazia di Fiastra, whose main emergencies are represented by the Cistercian Abbey and by the overlooking wood, represents a power point for the hypothesis of use for recreative and didactic purposes that may develop through potential synergies between the two protected areas.

Moreover, the site is also an important part of a network system of cultural Goods that is characterized by the presence of some emergencies and attraction poles of a particular historical importance.

To conclude, the whole general framework is that of a region which is rich in museums, archaeological areas and buildings of cultural interest which is also enhanced by the quality of the naturalistic and environmental context in which the Park is inserted and of the surrounding area.

### **5.3 Critical situations**

The most evident and urgent critical situations are related to the ancient building preservation: the monuments are characterized by building techniques easily subject to environmental degradation.

Another remarkable issue is the presence of a remarkable linear structure such as the one of the walls that, even if characterized by towers and visible doors on almost all the area, must anyway be organically and unitarily described without forcing the visitor to a high number of stops. Related to this is the problem concerning the accessibility and enjoyability of some monuments in the frame of the existing touristic routs: one example of this situation can be Porta Gemina, which is not easily reachable through the main routes.

Some risks are also connected with the relationships the park has with the context and the relative socio-economic dynamics which could eventually proceed towards a growing “isolation” of the park with the consequence that the good itself will be no more inserted in the valorisation networks. On this account it is important to stress that the wrong idea of the archaeological Park conceived ‘as a small town’, autonomous and independent from the city of Urbisaglia, with its own facilities and services, makes even higher the risk of inevitably cutting the weak relationship between the Park and the Town.

The strategies for the valorisation of our area have to be identified and placed in a context of deep economic, social and cultural changes only partly checked by the local Associations. Such changes configure different backgrounds, even alternative, that it is necessary to consider when defining the Plan strategies as they could lead to different effects, according to their location.

The whole general framework is that of a region which is rich in values and evidences, but characterized by a strong fragmentariness around which the local differences and peculiarities sometimes seem not sufficiently considered in the system of stand structures such as: museums, picture-galleries, collections, galleries and photographic archives, historical theatres, libraries and archives, abbeys and forts and not sufficiently integrated in the system of tourism and school enjoyment.

### **5.4 Challenges and opportunities**

One of the main goals concerns the possibility that the park becomes an important part of a real archaeological areas regional and national system. Despite the well-known difficulties (institutional and cultural) that are at the basis of concrete policies in this direction, the Park is anyway focused in giving value to its own

‘competitive advantages’ in a regional and European perspective in order stimulate an appropriate enjoyment of its spaces and peculiarities, also taking into account, and so facing, that the above mentioned system is still far from being concretised and that the individualism seem sometimes to be prevailing.

The reorganization not only of the area that is strictly inserted in the park but also of a significant local context (including different residential, rural and industrial factories all around) and the relative reuse of the infrastructural and residential wide heritage needs to be stressed out as one of the main focuses of the enhancement project.

The enhancement of the Park, improving its visibility and social enjoyment can stimulate the internal development processes and reinforce the local systems, putting the basis for an active preservation of the resources, also necessary for their own valorisation.

Moreover, the archaeological resources could implement a remarkable internal valorisation processes if well interlaced with the local socio-economic dynamics and therefore with the other resources of the area.

It is also to be foreseen the possibility to establish relations and connections among the preservation needs of the visible ruins and the underground structures with the economic and social development common to many archaeological sites. A challenge can therefore be seen in the organisation and building process of a balance between public control, often divided, as already mentioned, among different subjects, and a variety of private initiatives. This balance is indeed what has been at the base of the creation of the precious modern landscape and its preservation and valorisation must be considered at the centre of the project planning processes.

## ARCHAEOLOGICAL SITE OF DODONA (GREECE)

### 1. PRESENTATION OF THE ARCHAEOLOGICAL SITE

#### 1.1. Relevant legislations in force in Greece

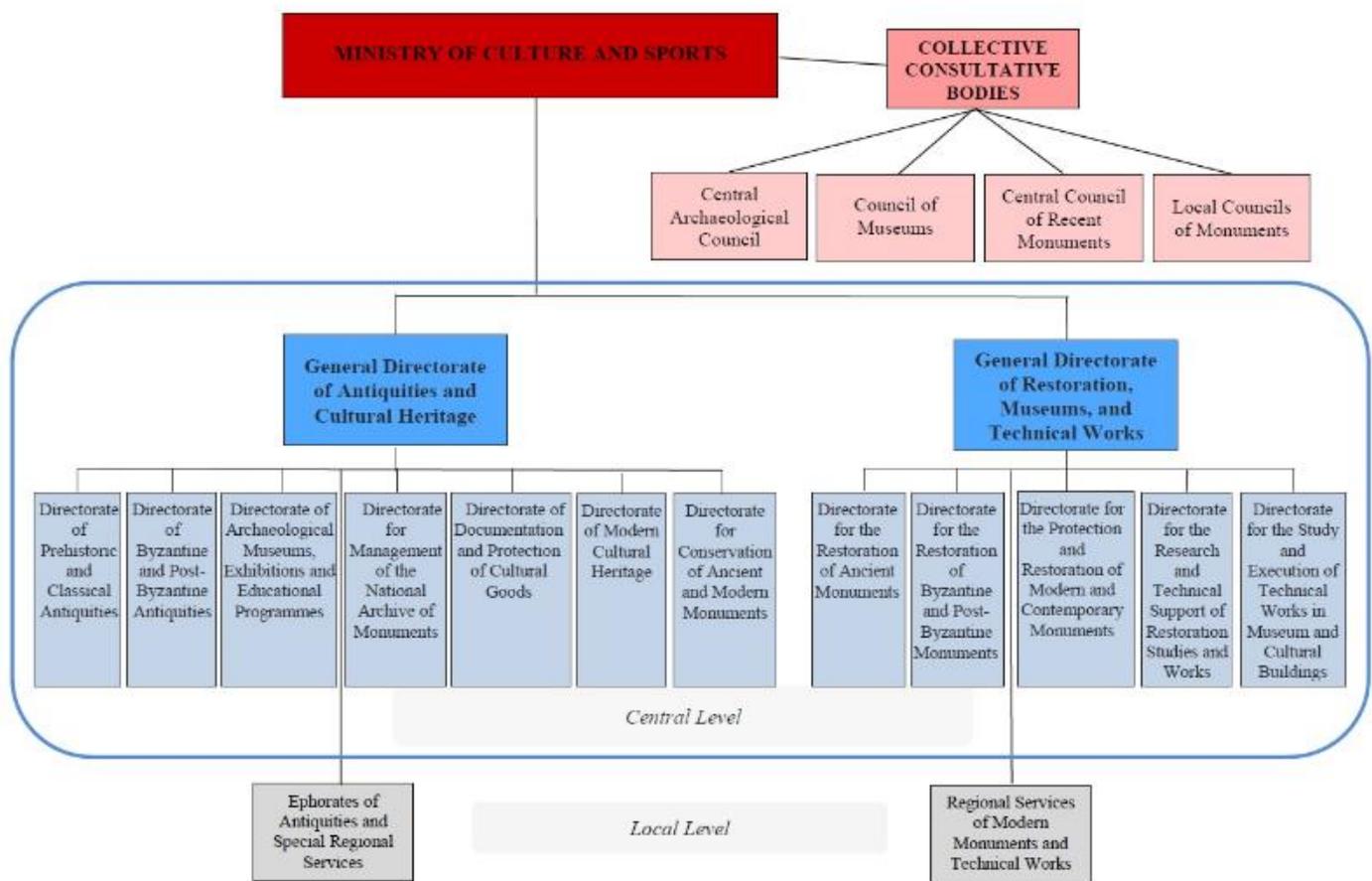
The protection of cultural heritage became a State responsibility from very early on in the creation of the Modern Greek State. Today, according to the Constitution, *"the protection of the natural and cultural environment constitutes a duty of the State and a right of every person"* (Constitution of Greece, Government Gazette, 85/A/18-4-2001, Art. 24).

The main legislation governing the protection of cultural heritage is Law 3028/2002, *"On the Protection of Antiquities and Cultural Heritage in general"* (Government Gazette 153/A/28-6-2002), which develops a comprehensive and detailed system of protection regarding movable and immovable monuments and artifacts and the intangible heritage.

Preservation of the cultural heritage is, to a large extent, related to land use and residential growth policies, and in general the monitoring of building activity and construction of infrastructure works in *"monument-sensitive"* areas. The legislation provides that *"the protection of monuments, archaeological sites and historical places shall be included among the goals at every level of land use, developmental, environmental and urban planning"*. Furthermore, the law explicitly forbids any action affecting a movable or immovable monument *"which could result, directly or indirectly, in the destruction, harm, pollution, or alteration of its form"*. It is also possible to delimit special protection zones within archaeological sites, namely Zones A (totally protected, non-construction zones) and Zones B (with special constraints on building, land uses, and other activities).

#### Ministry of Culture and Sports

The main state agency for the protection of cultural heritage is the Ministry of Culture and Sports. The services of the Ministry responsible for the management and protection of monuments are divided into:



## Legal framework

According to Greek legislation, the responsibility for granting permission for the use/ management of an archaeological site belonging to the state lies on the Archaeological Service Ministry of Culture and Sports. Relevant requests are addressed to regional authorities, namely the Ephorates of Antiquities.

Depending on the monument and the type of use, requests are normally dealt with on a local level, according to a Ministerial Decree which allows the transferring of certain responsibilities of the central services to regional services of the Ministry of Culture and Sports. However, in some cases, requests are forwarded to central services, the General Directorates, particularly when the requested site or the request itself is considered as too important to be dealt with locally. The responsible General Directorate, in turn, refers the matters for discussion to the Central Archaeological Council (CAC), a top-rank advisory board consisting of academics and experts on archaeological heritage. According to article 46 of Law 3028/2002, in order the state administration to grant permission for using an archeological site, two basic requirements must be fulfilled; protecting the site from any potential physical damage, and secondly ensuring that the use should be compatible with the character of the site. The notion of ‘character’ is, however, elusive, as it transcends material and relates more to symbols and ideals, therefore making it open to subjective interpretation.

## 1.2. General presentation of Dodona

Dodona lies in the northwest of Greece, south of Ioannina. It is situated in the midst of a lovely, peaceful green valley, overlooked by the twin peaks of Mt. Tomaros. It is acclaimed by the ancient writers as the oldest oracle in ancient Greece, with researchers placing its origins as far back as the Bronze Age between 2600 and 1900 BC. The whole area is scattered with ruins, including an imposing theater, the sanctuary and an acropolis enclosed by fortified walls, occupying an area of 164.659,43 sq. m. The first mentions of Dodona occur in Homer's epics of the 8th century BC and several ancient philosophers and geographers referred to it in subsequent works.



The cult of Zeus, brought to Dodona by the Selloi, a tribe from Thesprotia, soon became the main cult. Zeus Naios was worshipped together with Dione, his wife, according to local tradition. Later, the cult of Aphrodite, their daughter, was also introduced, together with that of Themis. Dione and Themis were worshipped as “naian gods” - that is, gods who shared the same house (*synoikoi*) and temple (*synnaioi*) as Zeus.

Herodotus relates a myth regarding the establishment of the sanctuary, narrated to him by the sanctuary's priests on his visit to Dodona: “*two black pigeons flew from Thebes of Egypt, one to Libya and the other to Dodona. The second perched on a beech-tree, and uttered human speech admonishing the people of the place to set up an oracle of Zeus*”.

By observing the rustling of the leaves on the sacred oak tree (phegos) and the flight of the doves nesting in it, the prophets explained Zeus' will.

The oracles were based on the murmuring of the waters from the ancient spring and on the sound produced by bronze cauldrons standing on tripods around the sacred tree. According to ancient sources, the priests of the oracle were originally only men, but priestesses, the so-called *Peleiades*, appear in later times. The

priests were famous for walking barefoot and for sleeping on the ground so as to be in immediate contact with the earth.

Originally it was an open-air sanctuary and various ceremonies were performed around the sacred tree.

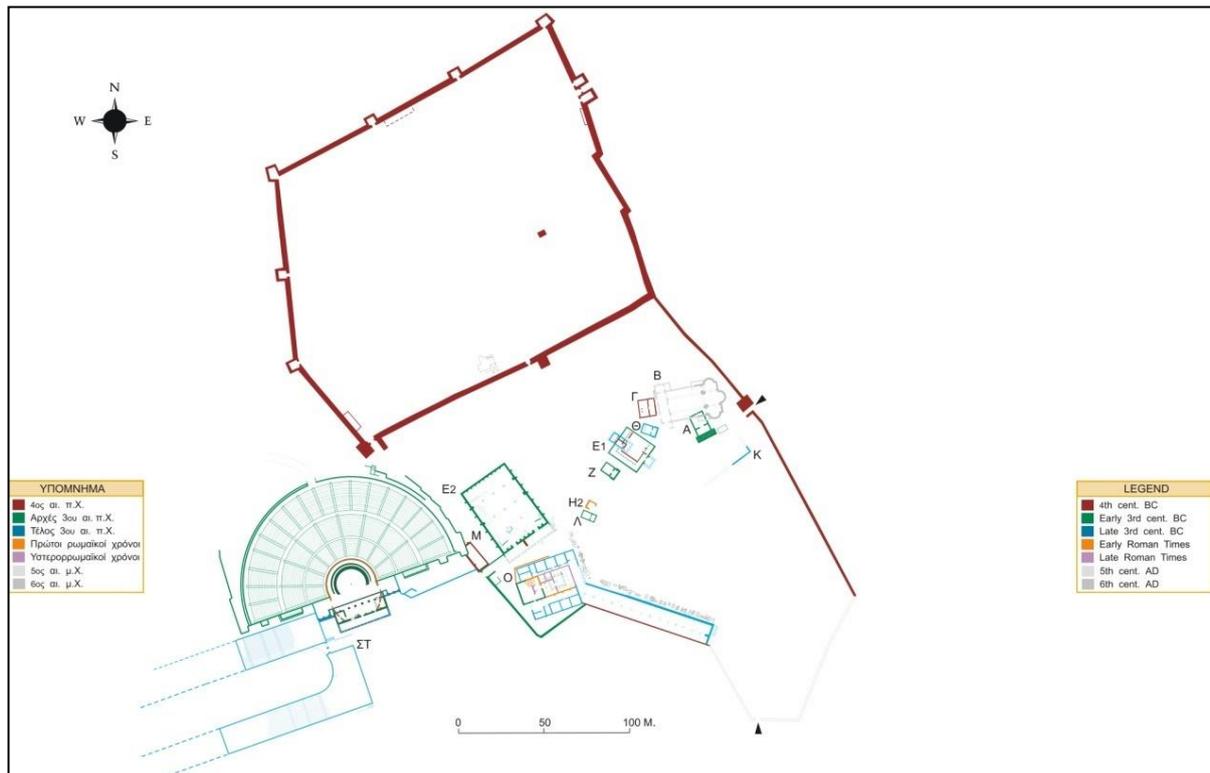
From the 8th to the beginning of the 4th century BC, it is believed that the oak tree was surrounded by cauldrons, which rested on bronze tripods. As all of the cauldrons were touching each other, whenever one of them was struck, the sound would reverberate through all the rest.

The first signs of building activity date to the early 4th c. BC, when the first small temple of Zeus, the Sacred House, as it was called by Polybius (2nd century BC) was erected. The tripods were replaced by two columns topped by a statue of a boy with a whip in his hand, and the second of a bronze cauldron. When the wind blew, the whip would strike against the cauldron, creating the prophetic sounds. The enclosure of the Dodona acropolis, further north, dates to the same period.



Alexander the Great has planned to rebuild six (6) Greek sanctuaries, including Dodona, to which he allocated the huge sum of 1500 talents (9.000.000 ancient drachmas). But his premature death prevented him from carrying out his plans.

These were put into effect by King Pyrrhus, who considered the favor of the oracle an important factor in the success of his political ambitions. In the temple of Zeus, a circuit wall was erected with three Ionic colonnades along the north, the west and the south side. The east side of the forecourt remained free, without a stoa, because there stood the oracular oak. On the south side of the building there was a porch in antis.



In the immediate vicinity of the Sacred House other temples were also developed. The earlier temple dedicated to **Dioni** was situated near the Sacred Residence to the north. Built in the second half of the 4th century or in the early third century BC, the temple was set on fire by the Aetolians in 219 BC and was subsequently abandoned. Oriented from east to west, it has an almost square plan (9.80 x 9.40 m) and was about half as big as the adjacent temple of Zeus. It consists of a cella and a pronaos with four ionic columns of sandstone at the facade; the superstructure was made of unfired bricks. When the sanctuary was reconstructed after 219 BC, a new temple sacred to Dioni was erected to the south, visibly diverging from the temple of Zeus. It was an ionic tetrastyle (four-columned) with a frontal portico temple, with a pronaos (anteroom) and a cella, measuring 9.60 x 6.35 m. The columns, made of conglomerate, were externally plastered with fine lime mortar that rendered to the surfaces the whiteness and smoothness of marble.

Among the three most ancient temples, which surrounded the holy oak of Zeus, one of them was dedicated to **Themis**. The temple, measuring 10.30 x 6.25 m, was built along NW-SE axis. It had a frontal colonnade with four ionic columns, a pronaos and a cella. In front of the temple, there were the foundations of a large altar (4.20 x 3.30 m) and a square pedestal to the east, which presumably supported a votive offering of significance. On the southwest of the temple stands a small square edifice (Building H) not yet identified.

In the southernmost end of the sanctuary, roughly 30 m westwards from the gate of the enclosure, rests the temple of **Hercules**, part of which lied under the Christian Basilica B. It was built in the early 3rd century BC, in the years of Pyrrhus. This is the largest temple after that of Zeus, and the only known temple of Doric order within the sanctuary. It is oriented from northwest to southeast and measures

16.50 x 9.50 m. It has a pronaos (front section) and a cella with four or six Doric columns at the facade. After being set on fire by the Aetolians in 219 BC, and the destroyed architectural members of soft sandstone (triglyphs, capitals, cornice) were used for the construction of the wall that separates the pronaos from the cella.

The temple of **Aphrodite**, centrally positioned within the Dodona sanctuary, is situated near the temple of Themis. This is a small temple in Doric order, measuring 8.50 x 4.70 m. It has a pronaos and a cella; between the pilasters of the pronaos are two eight-sided Doric columns instead of four Ionic columns, which is the case of the other temples. Two of the column drums are built-in into the square edifice, dated to the Roman times that stand immediately to the east.

One of the most important buildings was the **Prytaneion**, which had monumental proportions. The Prytaneion, in whose sacred hearth the eternal fire burned, was where the prytaneis and distinguished persons dined and the resolutions of the Boule and the state officials were kept. It was, in a way, the home of the city-state or city-tribe.

The Prytaneion comprises the original nucleus, 31.50 m wide, dating to the beginning of the 3rd century BC and a series of rooms to the north side built at the end of the 3rd century BC. This consists of three rooms with nine couches each and with service areas, where the government officials dined, and on the east side, of a large extended colonnade that extended nearly as far as the south-west main gate of the west perimeter wall. These additions were considered necessary when the Epirote Alliance was succeeded by the Epirote League, which was joined by all Epirote tribes from southern Albania to the Ambracian Gulf. The excavations, brought to light a peristyle court with 4 x 4 Doric columns on the east side, where the entrance was. After the Roman destruction in 167 BC, the Prytaneion was roughly repaired in the 1st century BC, but the north wing remained buried beneath the rubble. The Doric peristyle belonging to the beginning of the 3rd century BC was replaced by a larger one (4 x 7 columns) carelessly constructed of various materials. The bases of the peristyle, which was now built on a larger scale, consisted of slabs taken from the destroyed pedestals that had been on the east facade of the Ionic Stoa. One of these bases preserves part of a decree by the Epirote League according which the League honors a certain person with a bronze statue made by Melissos, son of Epikrates, from Corcyra, a hitherto unknown sculptor.

The **Bouleuterion**, is built on the south side of the hill, to the east of the theater. It had an administrative and political character. The building was burned twice. Once by the Aetolians (219 BC) and the second time by the Romans (167 BC). It appears that the building was somewhat repaired and it functioned till the time of Augustus. The building consists of a large hall measuring 1,260 m<sup>2</sup>, with a Doric colonnade (stoa) in front. The identification of this building as the Bouleuterion is confirmed by the stone altar, near the south wall, dedicated to Zeus Naios and Bouleus (Counsellor) and to Dione by Charops, the son of Machatas, a Thesprotian that assisted Flamininus in Epirus during the campaigns in 198 BC against the Macedonians.

The **isodomic enclosure** of the sanctuary was strengthened by rectangular towers, mainly in its west and north side which were more accessible.

The ancient **stadium** accommodated the Naia festival, which like the Olympian Games, was held every four years. It lies to the southwest end of the sanctuary, adjacent to the theater. It was built after the sanctuary was destroyed for the first time by the Aetolians in 219 BC and is immediately related to the second building phase of the theater, since the retaining walls of the stadium seats join the propylon (porch) of the theater, which was built in the same period. This is one of the few ancient stadiums with stone tiers, which reside upon sloping earth fills retained by walls, on both the north and the south side. Narrow staircases cut across 21 or 22 rows of seats. Under the south seats extended probably a conduit for rainwater. On the same side, a stone rill with small bowls at intervals, for the passage of fresh water coming from a spring on Mt. Tomaros, ensured water supply for competing athletes as well as spectators. A gate with two continuous arcs to the theater and to other buildings of the sanctuary.

The **theater** with a capacity of 15000-17000 spectators is one of the largest ancient theater. It was built in the early 3rd c. BC during the reign of Pyrrhus. It is built in a natural cavity. The main building material is the limestone. For the creation of a larger cavea (135 m diameter) a retaining wall has been constructed in its periphery with towers in the front which it has been calculated that in antiquity were 10 m higher.

Four horizontal corridors divided the cavea into three sections with a total of 55 ranges of seats. The two lower parts are divided with staircases into 9 cunei and the upper one in 18. The towers of the cavea had also stairs for the entrance and the exit of the spectators. In the lower corridor there were seats destined for officials and guests of honour (*prohedria*).

The orchestra does not form a complete circle. A leveled rock in the centre was the base of the altar of Dionysus (*thymele*).

The rectangular scene had two square rooms (*parascenia*) and four square columns for the timbers of a wooden proscenium. On the east and the west side were the entrances to the orchestra respectively. After the destruction by the Aetolians the front of the proscenium had 18 elegant Ionic semi-columns and two smaller rectangular annexes in front of the two parascenia. Two monumental propyla, with Ionic semi-columns and two gates each, had built on either side of these annexes. Part of the scene to the south is a Doric stoa with octagonal columns, which communicated with the scene through an arched gate.

During the reign of Augustus the theater was transformed to an arena for wild beast fights and gladiatorial shows. In its lower part it has been constructed a wall to protect the spectators, which cut off the proscenium and the scene.

During the latter half of the 4th century AD the area that lay between the theater and the former sacred precincts was utilized for other purposes, possibly the manufacture of a purple dye. During the 6th century AD Dodona is described as bishopric and a town. By this time, a basilica was also built.

### 1.3. Infrastructure of Dodona

The archaeological site of Dodona is extended over an area of **150.000** m<sup>2</sup>, defined by an enclosure, 2 km long.

The site is open to the public from Monday to Sunday, for the period from the 1st of April till the 31st of October, 8.00-20.00 while from the 1st of November to the 31st of March, 8.00-15.00. The entrance fee is: 6 euros (full) and 3 euros (reduced). There is a ticket office at the entrance of the site. The visitors can get to the site by car. There is a large parking lot measuring 1500m<sup>2</sup> right in front of the entrance. There is no public transport.

There are no amenities inside the archaeological site (e.g. vending machine), but there is access for disabled persons.



Restrooms are available near the ticket office at the entrance. There are information panels about the site in situ and a free brochure. Opposite to the ticket office there is also a gift shop of the Greek Archaeological Receipts Fund where the visitor can buy guides, cards, etc.

During the last ten years the number of visitors in Dodona dropped from 60.028 in 2010, with minor fluctuations in between, to 45.071 in 2019.

### 1.4. Position in natural system

The archaeological site is situated in the homonymous valley, which is defined westward by Tomaros or Olytsika Mountain (alt. 1816 m) and east by the hill of Agios Nikolaos-Manoliasas (alt. 800-1000 m). In the Dodona region, the rocks belong to the Adriatic-Ionian Geodetic Zone where limestone and flysch dominate. Both the theater and most of the buildings of the sanctuary are built of calcareous rocks (thin bedded, micro-breccia and breccia) which belong to a newer formation of the Eocene period.

The climate of the site is wet with rain, humidity and frost during winter. It is characterized as continental with features of both the Mediterranean and the

Central European climate with frequent rainfall, especially during the winter months. The temperature varies on average per day in a range of 20°C, and the four seasons in a year are followed by smooth temperature changes. During the winter months though, heavy frosts and snow-fall often occur. The highest variation in relative humidity is observed in February and in the summer months, while the lowest was observed in the autumn months.

Dominant species of vegetation in the area are holly, phrygana and oak. To the east, on the outskirts of Tomaros, is the black and rough pine, which for the most part comes from reforestation. While in the western part there are clusters of firs. Many species of flora that have not been studied at all are growing in the area. *Campanula spatulata*, *Lythrum salicaria*, *Iris sintenisii*, *Calystegiasilvatica*, *Anemone coronaria* and *Primula vulgaris* are found. In the spring, as the snow melts, the tops of the mountains are filled with yellow and blue violets.

The fauna consists of birds, some small mammals, a few hares and foxes. Once upon a time, eagles and vultures ruled the mountain, but unfortunately today they do not even exist as a sample. One of the few bird species still found on the mountain are partridges.

### 1.5. Position in human system

The archaeological site of Dodona lies close to the city of Ioannina, the capital city of Epirus (20 km). It is also half an hour away from the international seaport of Igoumenitsa, which constitutes the main gate of communication with Italy, France, Germany etc. The site is very easily accessible by car via Egnatia and Ionia highways. Unfortunately, there is no public transportation.

Furthermore, the ancient theater of Dodona is part of a cultural route called "Ancient theaters of Epirus" (<https://www.ancienttheatersofepirus.gr/theaters/theatro-Dodonas/?lang=en>). Near the site there are three small villages (Manteio, Dodona, Meligoi) where the visitor can find hotels and restaurants.

## 2. MANAGEMENT PLANS AND STRATEGIES

### 2.1. General presentation

Dodona was designated as an archaeological site by an official act of 1927, followed by a series of acts in 1992, 1994, 1995 and 2006. It is listed in the Ongoing Catalogue of the Listed Archaeological Sites and Monuments of Greece, compiled and published since 1993 by the Directorate of the National Archive of Monuments of the Hellenic Ministry of Culture and Tourism: <http://listedmonuments.culture.gr/monument.php?code=6701>

In 1992, a totally protected, non-construction Zone, namely Zone A was applied in the perimeter of the archaeological site, extending over an area of 5.315,6 km<sup>2</sup>. This had as a result the imposition of conditions regarding allowed uses and activities within the aforementioned boundaries. More specifically, the act of 1992

strengthened by the supplementary acts of 1994, 1995 and 2006, prohibited all kinds of interventions and constructions, such as building activities, road constructions, quarrying, greenhouses, namely every construction that required a permit from the local Urban Planning Service.

The permitted uses include cultivation of annual crops, installation of irrigation pipes, cleaning and maintenance of the existing drainage channels, small-scale stock breeding as well as maintenance work on the existing road network. Tree planting and logging remain under the auspices of the appointed public services for forests and agriculture. Additional building activities are allowed only on legally preexisting buildings and constructions, mostly for maintenance purposes, as long as they do not exceed either size, or height of the aforementioned building. Furthermore, all the buildings constructed without a license from the Urban Planning Service ought to be vanished.

All the aforementioned limitations fall under the jurisdiction of the Ephorate of the Antiquities of Ioannina, which is responsible for monitoring every agricultural/building activity in the area. Granting or no, permission for any of those activities, overrules any other permission granted by any other co-responsible authority.

Needless to say that simple designation and delimitation of such zones is never enough, if not followed by the implementation of spatial restrictions. Therefore, collaboration among Spatial Planners and Archaeologists and among competent bodies is not only necessary but also indispensable, if monumental heritage is to be appropriately and adequately protected.

## **2.2. Management Plan or management priorities**

The management of the archaeological site follows the regulations, posed by the Ministry of Culture and Sports for all the archaeological sites in Greece.

## **2.3. Cooperation and coordination among local actors**

The local actors do not intervene in the management of the site. However, there is a close collaboration between the Ephorate of Antiquities of Ioannina with the local authorities. It is worth mentioning that during the last years the Ephorate was engaged in series of cultural activities, namely theatrical plays of the Ancient Greek Tragedians, music festivals, full moon recitals, sports activities, (the revival of the ancient Naia) even the hosting of a Psychiatric Congress, held in 2018 and 2019.

## **2.4. Involvement of the public**

The public do not involve in the setting up of the Management Plan/policy of the archaeological site of Dodona. Regarding the management of sensitive and protected areas before the enactment of the Zone A all the stakeholders involved

have been asked for their proposals and opinions which have been taken into account.

## 2.5 SWOT analysis of management plan

**Strengths:** Dodona has a rich archaeological and historical background. Around the site the landscape remains intact and the Mount Tomaros offers to the visitors a lot of choices for sports activities, namely (camping, climbing, walking routes). More than 40.000 visitors, come to Dodona every year. There are two new roads (Egnatia and Ionia highways) which facilitate the access to the site from North and South. There is a large parking space, measuring 1500 m<sup>2</sup>, while a new one measuring 2000 m<sup>2</sup> is now under construction. Near the site there are restaurants with local foods and hotels offering good quality services. The site is near the capital city of Ioannina where there is an international airport and also near the city of Igoumenitsa where the homonymous port acts as a gate of entrance from visitors of Western Europe.

**Weaknesses:** There are no amenities in the archaeological site except of rest rooms and a cafe (at the moment out of function). There is no public transportation to the site. Thus, the visitor who does not have a car is obliged to take a taxi and pay a considerable amount of money.

**Opportunities:** The construction of Egnatia and Ionia Highways increased in a significant percentage the number of visitors. The site is near two large cities, the one with an international airport and the other with an international port. The local community is interested in promoting its culture and there is a considerable number of enterprises which produce local products.

**Threats:** Epirus is generally a poor region and thus there is a lack of money. The population is mainly engaged with agricultural activities and is a bit cautious regarding the forbiddance of activities around the archaeological site.

## 3. ECONOMIC SUSTAINABLE ACTIVITIES AND PRODUCTS

### 3.1. Heritage policy and priorities

For the last two decades, namely since 2001, a huge amount of restoration works has been carried out in the site, funded mostly by the European Fund, (over 10 million euros). These projects involved a large number of people of different specialties (workmen, conservators, architects, archaeologists). Moreover, for the protection and the preservation of the site every year- mostly during summer- the Ministry of Culture and Sports hires people (guards, cleaning persons, workmen). On the route from the Egnatia and Ionia there is a sufficient number of signs which inform the visitor for the local enterprises (restaurants and hotels).

### 3.2. Existing initiatives or actions

Regarding the site per se, there is a number of projects that have taken place:

1. *Milestones I. IPA Cross-Border Programme Greece-Albania 2007-2013. From Neighborhoods to Partnership.* Joint action for the promotion of the common cultural characteristics focused on the two ancient theaters of Foiniki and Dodona. The Project was co-funded by the European Union and the National Funds of Greece & Albania. The main objective of the project was to ensure the ancient theaters in terms of physical, cultural and socio-economic aspects by endorsing proper management actions in this direction. Through innovative techniques, the project aimed at the connection of the two ancient sites and eventually the formation of a cultural tourism network. The project aimed at bringing together the two Cultural Heritage Milestones under an umbrella-project that will protect the ancient theaters from natural disaster and human invasion and eventually promote their intrinsic cultural and touristic value and invigorate Cultural Tourism.
2. *Ancient Theaters of Epirus. National Strategic Reference Framework (NSRF) 2014-2020 (Regional Operational Program of Epirus).* The “Ancient Theaters of Epirus” is a cultural route promising many travels in one, travels through time, places, the five senses. Five archaeological sites (Dodona, Nikopolis, Gitana, Ambracia, Kassope) and their Theaters are the main stops, the starting points from where everyone can collect and compose experiences that interest and inspire them. According to the project’s promo: “Everything is here: enthralling monuments and historically fascinating archaeological sites, architecture, the crafts and flavors of an ancient unique tradition, the magnificent landscapes of Epirus”.
- 3.1. *Preservation, restoration, promotion of the Ancient Theater of Dodona, (CFS) 2001-2004, (Community Support Network).*
- 3.2. *Preservation, restoration, promotion of the Monuments of the Archaeological site of Dodona, (CFS) 2001-2004, (Community Support Network).*
- 3.3. *Preservation, restoration, promotion of the ancient theater and the monuments of the Sanctuary of Dodona. National Strategic Reference Framework (NSRF) 2007-2013 (Regional Operational Program of Epirus).*
- 3.4. *Preservation, restoration, promotion of the theater and the other monuments of Dodona - Phase A. National Strategic Reference Framework (NSRF) 2014-2020 (Regional Operational Program of Epirus).*
4. *Nomination for the UNESCO’S Documentary Heritage; The Memory of World.* The great majority of the lead oracular tablets, which have preserved from oblivion the questions, and sometimes also the answers, addressed to the oracle of Zeus Naios (and Dione), are kept in the Archaeological Museum of Ioannina. The oracular tablets of Dodona are truly unique in Graeco-Roman Antiquity. They are containing the questions that ordinary people addressed to the gods of Dodona, constituting thus a unique source of information concerning almost every aspect of life in Classical and early Hellenistic Greece (ca. 600-167 BC): the worries and emotions of people, religious beliefs and practices, society, economy, legal institutions, linguistic diversity, education, medicine, and festivals. They represent the largest corpus of similar texts (more than two thousand meaningful texts and another two thousand fragments) from one single site and a closed,

homogeneous historical context. What is equally important is the fact that the overwhelming majority of texts were written by ordinary people (and by other agents for them). These texts give voice—a personal voice—to hundreds of people who did and could not express themselves with other media (e.g. literature), people about whom the great literary sources (historiography, poetry, oratory) remain silent.

### 3.3. New or innovative initiative or activity

A potential activity that could be introduced in the vicinity of the archaeological site of Dodona is a coordinated series of interpretive signage, guide maps and public information centers situated in different points around the archaeological site. Moreover, the reconstruction of the ancient sacred route to the sanctuary from South Greece. This can be fulfilled through the construction of trail with respect to the character of the landscape. Across the route can be placed info signs and maps.

### 3.4. Target groups and stakeholders

Nr.	Character	Name
1	Public Sector	Municipality of Dodona
2		Municipality of Ioannina
3		Region of Epirus
4		Cultural Centre of Dodona
5		Greek Tourism Organization, local office of Epirus
6		Municipal Theater of Ioannina, (Di.P.The.Ioanninon) Festival of Ancient Tragedy)
7		University of Ioannina
8		Youth Center of Epirus
9		Tourist Promotion Office of the Municipality of Ioannina
10		Tourism-Entrepreneurship and Civil protection of Municipality of Ioannina
11		Department of Culture, Sports, Youth and Gender Equality Policies, Municipality of Ioannina
12		Office for Matters of Culture, Municipality of Dodona
13		Directorate for Lifelong Learning, Employment, Trade and Tourism, Region of Epirus
14	Private sector	Owners of local restaurants and hotels
15		Owners of local enterprises connected to culture and tourism
16		Local artisans and producers
17		Visit Ioannina Official Visitor Guide

### 3.5 SWOT analysis of sustainable economic activities

**Opportunities, strengths, challenges and needs:** The main strength of the project is the multifarious aspects of the archaeological site of Dodona. The project will contribute to the profits of local enterprises (hotels and restaurants) as it will raise the number of visitors to the site. In addition to this, travel agencies of the area will have a great profit as well as the companies that rent cars, as there is no public transport to the site. Moreover, the number of visitors at the airport of Ioannina and the seaport of Igoumenitsa will also grow. This can be an opportunity for the local businesses to ameliorate their services taking into account the needs of the visitors. Furthermore, it can act as a motive for the opening of new stores. The possible increase in the number of visitors can also have an indirect impact to the local producers, as the demand for local and traditional products of high quality (dairy, honey, agricultural) may increase too. Other people may be inspired and provoked to work to the aforementioned sectors of economy. New innovative method and productive processes, branding, marketing, advertisement through modern media.

There are going to be opportunities for open air activities, like trekking and mountaineering in the paths of Mt Tomaros, agrotourism and gastronomic tourism. In combination with that many visitors can practice their hobby of photography by taking amazing pictures of the valley of Dodona from the peak of the Mt. Tomaros. Cooperation among the public, private sector and NGO's will lead to foster community-based strategies for economic development projects, resource conservation and village revitalization projects.

Finally, religious tourism can benefit as tourists can visit a network of churches in the area. One of the most important is the byzantine church of Taxiarches at Kostaniani built in the second half of the 13th century during the Epirus Despotate. The church has wall paintings dating back to the 13th century.

**Weaknesses, constraints, threats:** Epirus is generally a poor region and thus there is a lack of money. Moreover, the enactment of the Protection Zone A around the archaeological site of Dodona functions for some people repulsively. However, the distance of the three villages (Dodona, Manteio and Meliggoi) is too short, someone can even reach them on foot, a fact that make them a "fertile ground" for people who want to activate in the sector of tourism (restaurants, hostels, tourist agencies).

Another problem is the population decrease and aging as well as the fall of the percentage of productive ages. Furthermore, there is a lack of successive connection between tourism and primary and secondary section of economy, while agricultural land has been abandoned during the last fifty years.

Finally, many times it has been noted that there is an inability to maintain the infrastructures created during a European or International project because of the lack of money.

## **4. IDENTIFICATION OF ICT TOOLS**

### **4.1. Existing ICT tools**

At the moment at the archaeological site of Dodona there is a wireless internet network.

### **4.2. Authorities and bodies involved in ICT activities**

The Region of Epirus installed a wireless network. Moreover, OTE Group in cooperation with the Greek Ministry of Culture and Sports, has launched the provision of free WiFi at a number of archaeological sites and museums throughout Greece, among which is Dodona. The project includes the study, design and development of wireless network infrastructures, provision of the necessary equipment, operation and maintenance of the networks, and free wireless Wi-Fi internet for three years.

### **4.3. Target groups and stakeholders**

Tourists, young people, children, University of Ioannina, Municipality of Dodona, Municipality of Ioannina.

### **4.4 SWOT analysis of ICT tools**

The main weakness and at the same time threat at Dodona is the fact that the climate is wet with rains and thunders that often cause damages to the wireless network. Moreover, the nature of the site itself (open-air with dense vegetation) functions negatively to the use of the wireless network.

## **5. CONCLUSIONS**

### **5.1. Characterizing factors**

The archaeological site of Dodona is unique because of its long history in combination with the natural environment surrounding it. More particularly there is a close relationship between the archaeological site and the local communities. The ancient theater stands as the most significant monument of the valley for the local communities, while on the part of the academic archaeology the oracle, namely the lead tablets of Dodona, signifies the uniqueness of the site.



Drawing from the archaeological interpretation of the oracle, local communities described the landscape as a “Sacred Soundscape” which have been historicized through institutional archaeology and adopted by modern Dodoneans.

## **5.2. Qualifying factors**

The elements that give a certain quality or importance or value without changing the structure or character of Dodona are mainly those that link it with the natural environment and the monuments.

## **5.3. Critical situations**

It is of major importance to maintain the natural landscape of the site. All the interventions that would be scheduled should take into account this. Actions that harm the environment and change the image of the landscape should be prevailed.

## **5.4. Challenges and opportunities**

The site offers the opportunity of many activities both for children (excavations, treasure hunting, reenactment of the ancient Naia games etc.) as well as for adults (theatrical workshops, joga lessons, conferences etc).

## ANTIGONEA ARCHAEOLOGICAL PARK (ALBANIA)

### 1. PRESENTATION OF THE ARCHAEOLOGICAL PARK

#### 1.1 Relevant legislations in force

The system of archaeological parks in Albania is managed by the Ministry of Culture from the Directorate of National Heritage.

Albanian law is in line with European legislation (like Italian, Greek, Spanish and French ones).

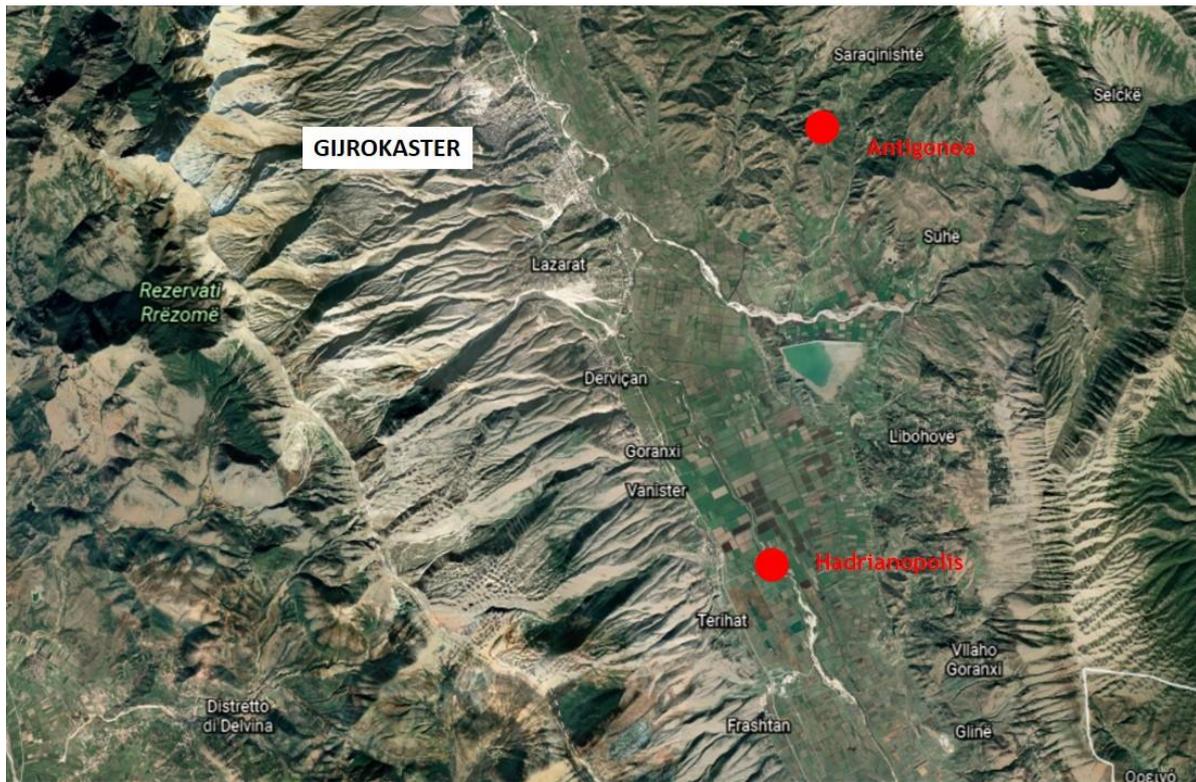
The *National Parks Board* is established as a collective element of supervision for a broader democratic, and professional control over key actions related to archaeological parks.

The *National Board of Archaeological Parks* is a decision-making body that supervises the activities of the Office of Archaeological Parks and approves development strategies and programs for eight archaeological national parks. It gives priority to the process of documenting cultural heritage and decides on the final destination of administration, protection and exposure of mobile objects of national culture of unique value in national museums. The Board is chaired by the Minister and is composed of his representatives from: Ministry of Tourism and Environment, Ministry of Interior (local government), Directorate of National Heritage in the Ministry of Tourism and Environment, Institute of Archaeology at the Centre for Albanological Studies, Institute of Cultural Monuments. The directors of the National Parks are members of the Board without the right to vote.

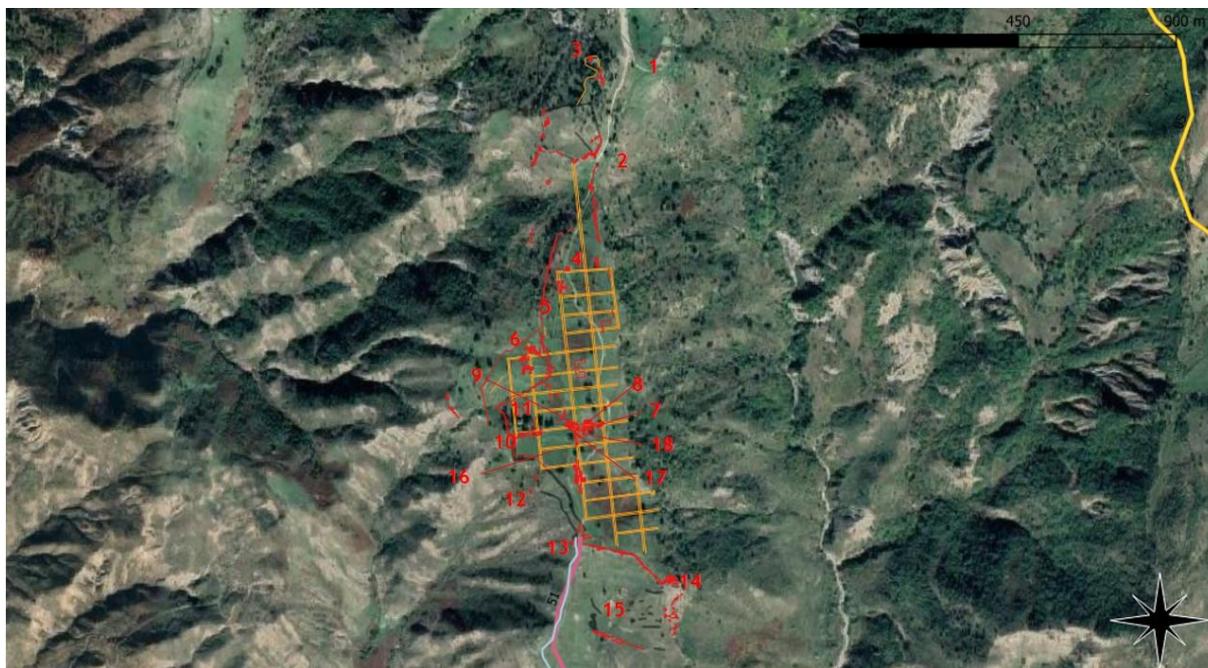
Administrative structures have been set up for archaeological parks in Shkodra, Lezha, Apollonia, Byllis, Amantia, Orikum, Antigonea, Finiq and Butrint. They implement programs and projects, approve and direct administration and budget of the park. They are funded by the state through the Ministry. In general, their staff consists of: director, financier, and experts for archaeology, restoration, environment, management. The Director is appointed and dismissed by the Minister responsible for Cultural Inheritance according to the criteria for the position set by the National Board of Archaeological Parks.

The *Archaeological Parks Administration and Coordination Offices* have duties to prepare and implement development and administration programs approved by the Board National Archaeological Parks, to coordinate with central and local institutions and to organize meetings with consultants in specific areas.

## 1.2 General presentation

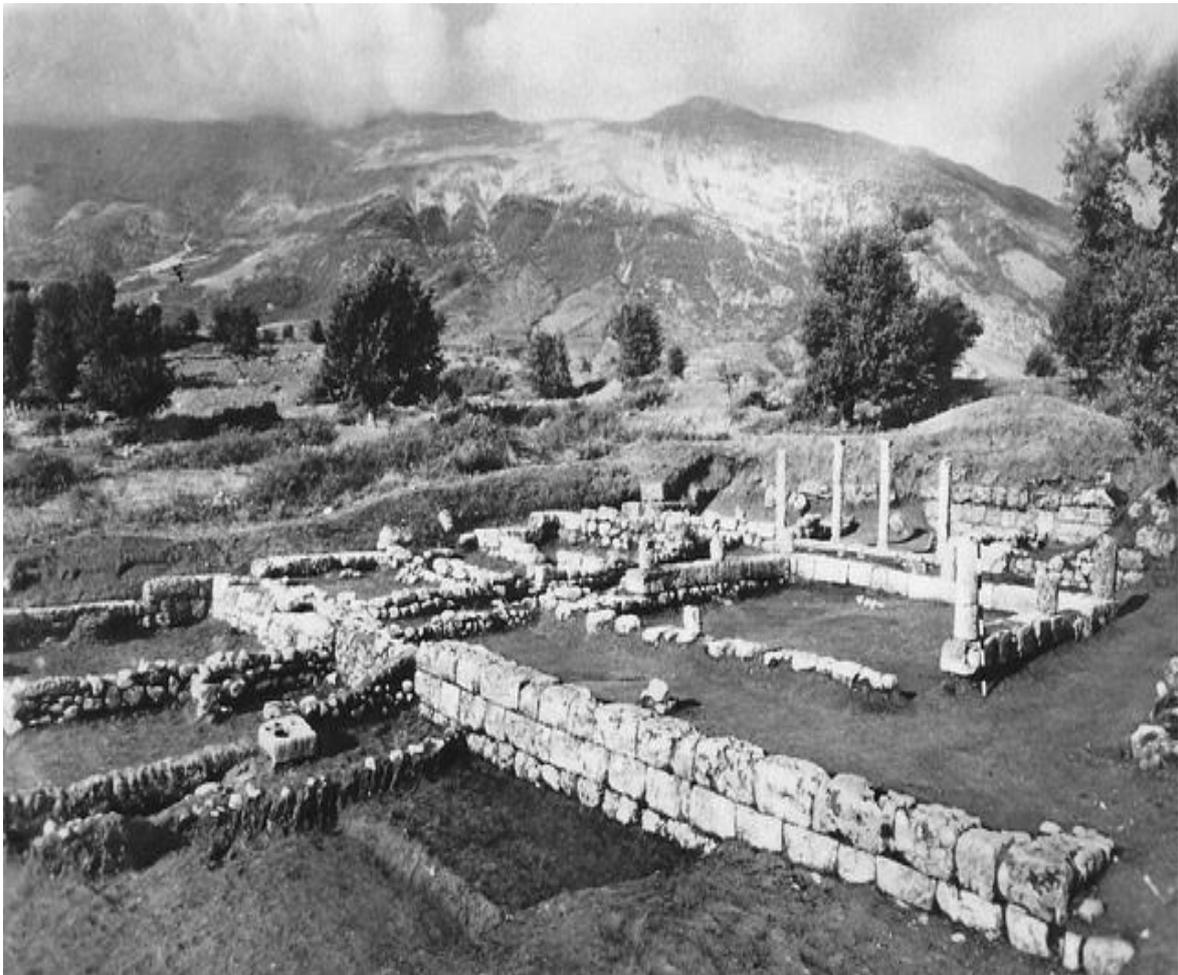


Location of Antigonea and Hadrianopolis on the modern maps



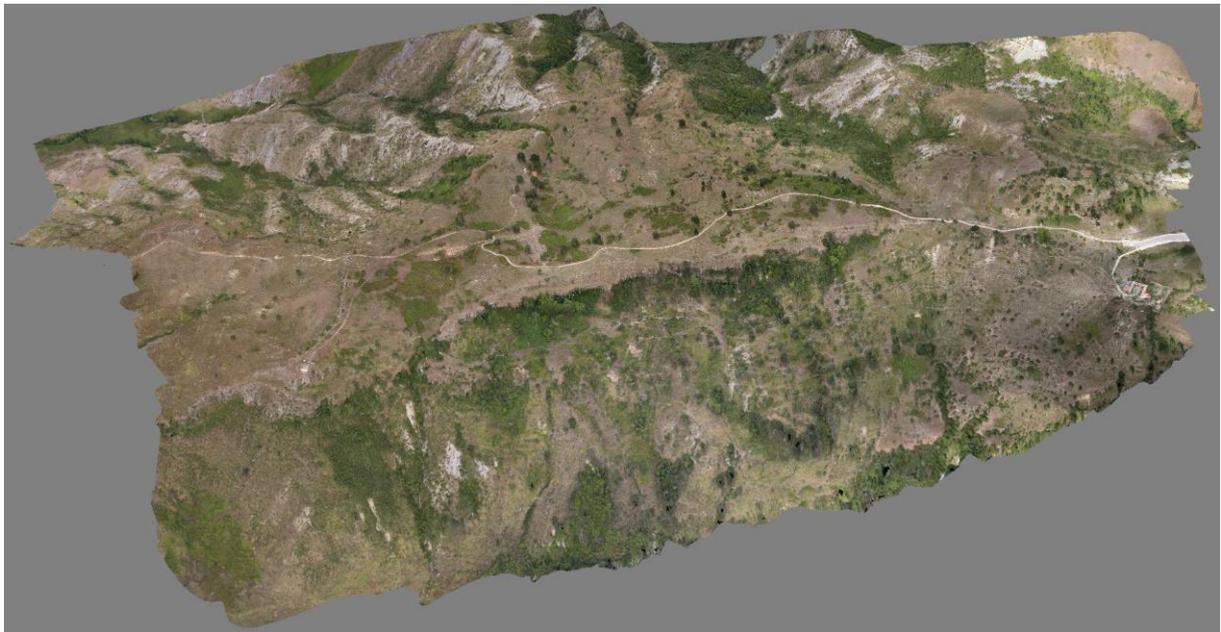
Plan of the Antigonea archaeological park

Antigonea archaeological park has a surface of 92 hectares





Views of Antigonea



Antigonea: 3D model

## *Landscape*

The Drino River valley is some 85 km long and up to 7 km wide. It originates near Delvinaki (village in the Ioannina district, Greece) and flows toward NNW to reach the Vjose River near Tepelene. Its tributaries - such as the Kserias, the Suhës and the Belisa Rivers - all show a torrential regime.

The valley is impressively sided to the west by the Mali i Gjerë mountain range (up to 1.800 m at Mali i Frashërit and 1.598 m at Mali i Nikollaqit) and to the east by the Mt. Lunxhëri (2.156 m) - Mt. Bureto (1.763 m) ridge. They are both part of the Albanides, which together with the Dinarides, to the North, and the Hellenides, to the South, form the southern branch of the Mediterranean Alpine belt. Apart from the wide valley bottom, the area is rather impervious, slopes being almost always steeper than 10% and frequently exceeding 20%.

The area is characterized by typically Mediterranean climate (CSa) - progressively colder but not very significantly more humid at higher altitudes, fading further up into H climate - with a cold and wet winter and a very dry and warm summer season that doesn't favour the growth of arboreal vegetation: as a result, the plain is almost exclusively covered by grass, withering at the beginning of summer, while the Drino river bed is almost completely dry for some months. On the other hand, the high precipitation rates typical of the intermediate and cold seasons determine high fluxes in the main stream, with rather frequent floods.

The principal town on the area is Gjirokaster, important UNESCO site, surrounded by small villages. In the neighbourhood of Antigonea, the important settlements are Saraqiniste and Asim Zeneli.

## *History*

Antigonea represents its challenging history with remnants from the 3rd to the 2nd century BC, and some buildings which belong to the initial period of Christianity. It is not always easy to determine the ancient name of the ruins of a city, but a number of round cards made of bronze with the inscription "ANTIGONEON" are the first epigraphic documents allowing safe identification.

Archaeological expeditions have excavated a great number of artefacts for daily needs made of metal or clay. The rich inventory related to handicrafts and agriculture indicates that these sectors played an important role in the economic life of the city. Artefacts found include scythes, hooks, chisels, adzes, hammers, compasses and different vessels made of bronze decorated with figurines of animals or mythological beings such as Poseidon, the Sphinx or sirens. At least part of these objects is of local production, which is proven by the discovered workshops.

Other branches, such as tanning leather, carving stones, woodcraft etc. were developed as well. Numerous and varied examples of ceramics for daily use, artistic objects, molds for their production, a huge bulk of tiles and pithoi were found in the excavations and indicate a large production of pottery.

Also discovered in Antigonea were over 500 coins, most of which are from Epirus and others from Ambrakia (Arta), Kerkyra (Corfu), Macedonia, Dyrrachium (Durrës), Apollonia, Oricum, Corinth, etc. These numismatic finds clearly indicate close trade relations between Antigonea and other Hellenistic cities and states.

Trade relations are also reflected in various items imported from Greece, such as black-glazed ceramics, amphora from Rhodes etc., through routes like the famous Via Egnatia and others which passed along the coast.

The largest part of the inventory of archaeological findings of Antigonea is preserved today in the National Historical Museum and in the Archaeological Museum of Tirana.

### *The most important monuments*

1. Remnants of the Fortified Wall (beginning of the 3rd cent. BC/ 6th cent AD) is a double line stretching up the hill on the top of a steep slope. Its view is particularly good from the Acropolis.



2. Ancient Nymphaeum of the Acropolis (beginning of the 3rd cent. BC). A Nymphaeum was a spring and the sacred dwelling place of its female spirit (nymph). It was rimmed and used to provide water.

3. Church of Saint Mëhill (Saint Michael) (6th - 9th cent. AD). Measuring 8 m x 7.3 m and composed of two sections, it was discovered in 1973 at the highest point on the hill of the Acropolis. Construction materials have been taken from the Acropolis' defensive walls.

4. Defensive Fortification of the Acropolis (beginning of the 3rd cent. BC / 6th cent AD). The fortification is formed by three defensive belts of walls narrowing up to the peak of the hill. The exterior wall belt has been formed by defensive walls and seven reinforced towers.

5. Dwelling (Leather Workshop) (second half of 3rd cent. BC). Discovered during archaeological excavations in 1968, it is a dwelling with an irregular floor plan

consisting of a corridor and five sections of various functions. Discoveries made here include ceramics, such as pithoi, kitchen dishes, bricks, bronze dishes and iron work tools which are thought to have been used for treating leather

**6.** Fragments of the Surrounding Fortified walls (beginning of 3rd cent. BC). Remnants of the northern gate with two towers.



**7.** Dwelling (Carriage Driver's House) (second half of the 3rd cent. BC). Discoveries made here include a wagon wheel, coins etc.

**8.** Dwelling (second half of the 3rd cent. BC). Residential house with an L-shaped floor plan, consisting of an atrium and five alcoves. The discoveries made here in 1968 have been meaningful and in large numbers: bronze dishes, work tools, bronze and silver coins, clay stamps, a mini-statuettes of Poseidon (god of the ocean), voting identification cards and 14 bronze tablets with the name of the city on them. It is at this house that the mysterious bronze figurine of a harpy was found which has become the symbol of Antigonea. In Greek mythology, a harpy ("snatcher") was one of the winged spirits best known for constantly stealing all food from the prophet Phineas. They were usually seen as personifications of the sapping nature of wind.



**9.** Dwelling with peristyle and floor covered with a mosaic (beginning of 3rd cent. BC). In Greek and Roman architecture, a peristyle is an open colonnade surrounding a court or garden inside a building. Discoveries: ceramics, bronze objects and coins.

**10.** Ancient fountain head. (Date unknown)

**11.** Monumental tomb (3rd - 2nd cent. BC). Ancient grave of the Macedonian type consisting of two settings that are connected to each other. The walls had been plastered, the ceiling is a vault structure created with an arch. Discovered during the excavations in 2005. Discoveries made include ceramics and bronze objects.



**12.** Main Gate, or Great Gate, of the Ancient City with two fortified towers (3rd - 2nd cent. BC). Discoveries: traces of the installation of two moving wings of the Great Gate.



**13.** Stoa with beautiful multi-cornered wall (beginning of the 3rd cent. BC). Located approximately 250 m away from the main defensive wall of the city to the South. Discoveries include ceramics and coins. There

used to be a Nymphaeum in the vicinity.

**14.** Palaeo - Christian Basilica (a triconch church) with a unique, multi-colored mosaic (5th - 6th cent. AD). The layout of the building is a triconch (having three apses on the sides of the central square area of the church), measuring 13.8 m in length and 4.6 m in width. The basilica is composed of two parts: the main hall and the altar section, which the three apses.

**15.** The Southern Fortification System (3rd - 2nd cent. BC) is a linear structure of 800 meters, with five defensive towers and the small Southern Gate. It was the most significant defensive section of the city's fortification system and dates back to the beginning of the 3rd century BC. The style used in its construction is "isodomic" (regular, almost quadratic stone blocks in horizontal lines). The five towers were comprised of two metallic constructions reinforced through crossbeams. They were built in the shape of rectangles more than 6 m high and wide, in a distance of 60 m from each other.

**16.** The Agora (market place) and Main Stoa (roofed promenade) (2nd - 3rd cent. BC) has a rectangular plan of 59.6 m by 8.6 m and has been decorated with columns in Doric style. A unique drainage channel crosses it. In 1987 bronze figurines of Poseidon and a Mollos Dog, and bronze fragments of a monumental statue of a horseman (helmet, horse mane and horseman's hand with a ring on its finger) have been found here.

**17.** Dwelling and public building (3rd - 2<sup>nd</sup> cent. BC). A dwelling of peristyle form was discovered next to the medieval church during the excavations of 1986, measuring 18 m by 8.5 m. Based on its location in the center of the town, its architecture and the lack of objects for daily use, this building is assumed to be a public building or a villa.

**18.** Christian church from the Byzantine Period, built between the 7th - 9th cent. AD with stones and columns from ancient houses. The medieval church of the 9-11th centuries has a single nave measuring 11 m by 3.5 m. Thirteen tombs were discovered in the cemetery next to the church, with partial inventories.

**19.** Large block of peristyle houses in various tapes (3rd - 2nd cent. BC). This part of the town, with its houses and channels, displays almost in full the urban development of the city. The buildings and structures are from the first half of the 3rd cent. AD and they are represented by an Artisan's House, a Weaver's House, the Measuring Stone and an above-ground drainage system. Ceramic dishes for daily use, ceramic roof tiles, artisan work tools, counterweights for loom threads, bronze coins, bronze decorative items and agricultural work tools have been found here.

#### *Present condition of the monuments*

The structures are almost all visible and good interpretable.

The fortifications and the stoà, built in isodomic work, are overall in a good state of conservation.

The structures of the houses and those of the Byzantine churches, of which often only the stone foundations linked by clay are preserved, are subjected above all to physical attacks related to the temperature range and exposure to rain.

The triconch church with its mosaic has been the subject of a recent restoration intervention.

### 1.3 Infrastructure

The Park is open every day from 9.30 am - 7.30 pm.

The Admission fee to visit the Archaeological Park of Antigonea is 300 ALL.

It is not fenced but there is an info point where you can get the admission tickets at its entrance.



It is possible to get to the park by car. Within the park, the only options are walking and hiking. The access for certain categories of disabled persons is not possible since the terrain does not allow it.

There are Information Panels provided from Cultural Heritage Without Borders.

There is no museum or exhibition place in Antigonea.

### 1.4 Position in natural system

The mountain slopes siding the valley show a remarkable scarcity of forests and vegetation, with wide rocky outcrops diffusely affected by intense slope wash and soil erosion.

From a geological point of view, the area belongs to the Alpine domain. In the study area only sedimentary terrains crop out, strikingly similar to those typical of the well-known Umbria-Marche succession (some 800 km to the NNW, in Italy).

The area is an important crossroads for floristic migration in the Balkan peninsula. Its geographical position, bordering countries with a central European climate and countries with a Mediterranean climate, has determined numerous microclimates that isolate areas characterized by intense speciation processes.

The vascular flora is made up to a greater extent of Mediterranean and Balkan elements. Numerous Central European and Mediterranean species have their distribution limit in this area.

Studies carried out in this regard indicate the presence of a strong floristic connection with the countries located in the north. More than 550 species distributed in ex-Yugoslavia or even further north have their southern limit here. The connection of the flora with the flora of the southern countries is instead weaker and can also be described through the penetration of the Mediterranean species especially when these species have their northern distribution limit here. The vegetation consists of Mediterranean scrub, oak groves, Mediterranean beech and fir forests or mountain pine.

### **1.5 Position in human system**

The park is situated only 15 km far from Gjirokastra City which is a large urban area and also a UNESCO site. It has a great number of monuments of cultural interest: Castle of Gjirokastra, Museum of Weapons in Castle of Gjirokastra, Museum of History and Archaeology in Castle of Gjirokastra, Ethnografic Museum in Gjirokastra, Archaeological Park of Hadrianopol Gjirokaster and National Park of Butrint in Saranda.

Airport of Rinas, Tirana Albania, is 250 km away and can be reached by car in 3 hours. Airport of Ioannina in Greece is only 80 km away. Antigonea is located at a distance of 60 km or an hour drive from Saranda, which has good boat connections with the Harbour of Igumenitsa and Corfu Island in Greece.

The info for the system of tourist facilities can be found in Gjirokastra or Saranda Tourist Info Points close to the city centres.

## **2. MANAGEMENT PLANS AND STRATEGIES**

### **2.1 General presentation**

The administration of the Antigonea park are funded by the state through the Ministry. The Director is appointed and dismissed by the Minister responsible for Cultural Inheritance. The administration has to prepare and implement development and programs approved by the Board National Archaeological Parks. The structure of the Antigonea park depends on the Regional Monuments Directorate of Gjirokaster (DRKK) as regards the aspects directly related to management.

Archaeological excavations and scientific research are entrusted to the Archaeological Institute of Tirana. In recent years also in collaboration with the University of Macerata.

The area of Antigonea is included in the Gjirokaster Region, to which territorial management coordination tasks are entrusted. It is also a part of the territory of the Municipality of Gjirokaster to which the management functions are entrusted.

## 2.2 Management Plan or management priorities

The Park has a Master Plan for integrated management with the archaeological system of the Drino valley and in particular with the Roman site of Hadrianopolis elaborated by the University of Macerata, the Archaeological Institute of Tirana and the DRKK of Gjirokaster.

Rural countries play an important role in the master scheme for Antigonea.

The village of Asim Zeneli has been indicated as the "The entrance/gate of the park" due to the headquarters of the park, information point, the place of reception of visitors and the seat of the Archaeological Museum. It also location of bus stops and vivid traffic.

In Krine, the building, surrounded by a flat open space, located along the main road, near a partially restored church, could be re-functionalized in a receptive key. For this reason, it has been indicated as a location for the guesthouse with an area equipped for play and sport.

In Treneshisht, a large one-story building (probably an ex school), now in disuse, overlooking a large open flat space near the Church, could be used for educational and recreational activities. For this reason, the teaching room, the laboratory and any exhibition spaces are indicated in this building.

Saraqinishte, the country on the other side, like Asim Zeneli, has been indicated as the second Exchanger Node equipped with bike sharing. Inside the village, which appears to be the closest to the archaeological area, a building to be restored, not directly visible from the road, but with an outdoor courtyard and accessible through an arch. It could be used as an office building for excavation workers and tourist information point.

There is also a "*Strategic Plan Proposal for the Drino Valley*" drawn up by the same working group which provides for the identification of strategic lines at a territorial level:

1. the identification of three possible nodes for fast modal exchanges, meaning the points of contact and intersection between the main road between Gjirokaster and Tirana and the local access roads to the park. These are the points where tourists will have to find reception and information services for visiting the area, also having the possibility to change the means of transport.

The main node is should be the urban centre of Gjirokaster.

2. The indication of slow modal exchanges within the territory of the Park, that is the points where, at a smaller territorial scale, the user must also be able to choose to use some services and to change the means by which to cross a part of the park itself.

Among the most important, certainly the one at the village of Asim Zeneli, where the Park Management is located, and the one at the village of Sofratikë.

3. The enhancement of the Drino river and of the spaces close to it near both the city of Gjirokaster and the archaeological area of Hadrianopolis. The

enhancement of the river area can take place through the creation of a river park which, in the vicinity of the capital, can become a real urban park, while in the vicinity of the Hadrianopolis area a more natural park, for example for sports activities.

Within these areas, the spaces where paths to approach the river could be created, coming from Gjirokaster and from the archaeological area of Hadrianopolis.

4. The indication of the paths for slow use, that is the paths that could be used more on foot and, hopefully in the near future, by bicycle or on horseback, to connect the two archaeological sites with each other and the city of Gjirokaster and through them, the rich system of cultural and natural heritage of the area of the "Archaeological Park of Antigonea and Hadrianopolis".

### **2.3 Cooperation and coordination among local actors**

Local private actors are substantially excluded from the area's management and organization processes that have been elaborated in the aforementioned plans.

### **2.4 Involvement of the public**

The integration between the various parties involved is relatively small due to obvious national regulatory gaps.

Recently, a joint archaeological mission between the Archaeological Institute of Tirana and the University of Macerata gives an opportunity to start coordinated processes of enhancement that have involved both the DRKK, the IMK, and the Municipality of Gjirokaster and the Italian Embassy in Tirana.

The outcome of this activity was the "Master Plan of the Archaeological Park of Antigonea", the " Master Plan of the Archaeological Park of Hadrianopolis", and the "Proposal of a strategic plan for the Drino valley".

The Plan envisaged the activation of three main phases carried out through a participatory process which directly involved the Regional Directorate of Culture Monuments of Gjirokaster (DRKK), the Municipalities of Sofratikë and Asim Zeneli, the Gjirokaster Region, with close collaboration with the IMK of Tirana. Alongside the public bodies, some of the main economic players in the area were listened to, starting from those related to tourism and the enhancement of cultural heritage.

### **2.5 SWOT analysis of management plan and strategies**

- Numerous subjects involved with skills that are not always well defined.
- Lack of national regulations related to territorial planning and the management of archaeological sites.
- Low involvement of the private sector in the management and enhancement processes of the archaeological park.

- Low involvement of the research leaders and therefore lack of coordination in the enhancement phases between profession and management.
- Opportunity to identify management models for archaeological parks to be applied throughout Albania.
- Territorial proximity of the archaeological areas Antigonea, Hadrianopolis and Palokaster and their and chronological continuity.
- Possibility of integration with active national and international policies aimed at sustainable development.
- Presence of a university in Gjirokaster which has initiated training processes related to the management and enhancement of cultural heritage

### **3. ECONOMIC SUSTAINABLE ACTIVITIES AND PRODUCTS**

#### **3.1 Heritage policy and priorities**

- Strengthening of institutional and civil society capacity and policy support in the field of cultural heritage and promotion of intercultural dialogue and social cohesion
- Improved access to cultural heritage and participation in cultural heritage decision making.
- Fostering of socio-economic opportunities for communities in culture-based activities.
- Increased capacities to manage and preserve cultural heritage.

#### **3.2 Existing initiatives or actions**

- "REBED" Project - admitted for funding as part of the announcement provided by the PT funds of the Marche Region for the continuation of archaeological research (excavation and archaeological map), the restoration and construction of the Archaeological Park of Hadrianopolis-Antigonea (Albania).
- Restoration of Antigonea Mosaic, Gjirokastra from Cultural Heritage without Borders.
- Information Boards in Antigonea from Cultural Heritage without Borders.
- Project of the Italian Embassy and the Albanian Ministry of Culture "Progetto integrato per la valorizzazione dei siti archeologici oggetto della ricerca delle Missioni Archeologiche italiane in Albania - Sistema archeologico della valle del Drino".
- Italian Development Cooperation Project for the enhancement of the Apollonia and Antigonea sites.

#### **3.3 New or innovative initiative or activity**

- Organization of pedestrian, cycle, equestrian paths, etc., in close connection with the tourist promotion press oil UNESCO site of Gjirokaster.

- Preparation of a new panelling and tools for the enhancement, e.g. ICTs use.
- Organization of events and shows.
- Realization of restorations involving local professionals trained at the University of Gjirokaster.
- Support to private entrepreneurship for:
  - ✓ Organization of tourist packages in collaboration with foreign operators;
  - ✓ Enhancement of local food and wine as well as artisan products;
  - ✓ Organization of forms of widespread hospitality.

### **3.4 Target groups and stakeholders**

- Young people trained at the University of Gjirokaster.
- Operators in the tourism and hospitality sector.
- Local producers.

### **3.5 SWOT analysis of sustainable economic activities**

- Distance of the Park from the main visit routes.
- Overall economic crisis affecting the internal territory.
- Absence of a local market and easily identifiable food and wine products.
- Possibility of inserting the scattered villages around Antigonea in the markets and tourist circuits, linking this activity to the tourism and economic enhancement policies of Gjirokaster and UNESCO sites in general.

## **4. IDENTIFICATION OF ICT TOOLS**

### **4.1 Existing ICT tools**

Currently no ICT tools are used. An explanatory panel in the archaeological area of Hadrianopolis refers to some of the main archaeological sites of the Drino valley.

### **4.2 Authorities and bodies involved in ICT activities**

DRKK and IMK: subjects entrusted with the management and enhancement.  
 Archaeological Institute of Tirana and University of Macerata: subjects to whom scientific research is entrusted in the Drino valley (also in Hadrianopolis and Palokaster) and in Antigonea.

### **4.3 Target groups and stakeholders**

- Tourists mainly from European countries.
- Teens through 3D reconstructions and videos uploaded on youtube that must be involved through greater awareness raising activities in schools.

- Adults through 3D reconstructions, in-depth analysis of texts.

#### **4.4 SWOT analysis of ICT tools**

- Possibility to reconstruct and communicate the fragmented architectural and environmental context of the ancient city.
- Possibility of integrating the architectural and environmental context into a multimedia project both with the data and materials preserved in the Gjirokaster museum and in the warehouses of Tirana, and with the results of scientific research.
- Ability to involve weak groups of users.
- Possibility to use a motor-sensory language compared to a symbolic one.
- Involvement of many local skills starting from those being developed at the University of Gjirokaster.
- Need to carry out in-depth preliminary scientific research starting from articulated archaeological excavations.
- Need to start a thorough survey and digitization campaign of the existing cultural heritage.
- High costs.

### **5. CONCLUSIONS**

#### **5.1 Characterizing factors**

The most characteristic elements refer to the persistence of the evident traces of an ancient city still legible in the original forms of the manufactured good, although in some cases in poor condition.

The set of ancient urban elements is located in a substantially intact environmental context with a very deep value.

The Archaeological Park is at the centre of a system of villages and cultural heritage that is unique in terms of social and monumental characteristics.

#### **5.2 Qualifying factors**

Antigonea gives insight into the organization of a Hellenistic city without evident subsequent overlapping of the Roman age.

The most qualifying elements are connected to the rural countries that are crossed by the local road, the existing vehicular road, which climbs to Antigonea and the cycle-pedestrian-equestrian path that could be settled.

It is therefore possible to differentiate the more natural route from the historical-cultural one that leads to churches or monuments of national interest within villages.

### **5.3 Critical situations**

The construction techniques of the ancient buildings are easily subject to environmental degradation.

A problem is the presence of a remarkable linear structure such as that of the walls which, although characterized by towers and gates visible over almost the whole area, must in any case be organically and jointly described without forcing the visitor to a large number of stops. Similar is the problem related to the need for enhancement and insertion in the enjoyment of some monuments, such as the triconch church, distant and not easily accessible by following the normal runs.

The relationships that the park has with the context and the related socio-economic dynamics could evolve towards a growing "isolation" of the park with the consequence that the asset itself will no longer be included in the enhancement networks.

The distance of the park from the main road is an evident critical element

The strategies for the enhancement of the area are located in a context of profound economic, social and cultural changes.

The whole general picture is that of a region that is rich in values and evidence, but characterized by a strong economic and political fragmentation that makes integrated enhancement projects difficult.

### **5.4 Challenges and opportunities**

The first background concerns the possibility that the park becomes an important part of a regional and national system of real archaeological areas. In particular, as far as archaeology is concerned, together with the poles of Hadrianopolis and Palokaster it could be one of the vertices of a triangle of archaeological enhancement.

The Drino valley is also characterized by the presence of a rich cultural heritage whose enhancement could be centred precisely on the two poles of Gjirokaster and Antigonea.

The possibility of reorganization not only of the area which is closely included in the park, but also the surrounding area characterized by a strong environmental and cultural value.

The enhancement of the Park, the improvement of its visibility and social enjoyment can stimulate internal development processes and strengthen local systems, laying the foundations for an active conservation of resources, necessary for their enhancement.

Possibility to experiment profitable relationships between public and private subjects in relation to the enhancement and management of cultural heritage.

It is a challenge to organize the balance between public control, often divided as already said between different competent subjects and varieties of private individuals.

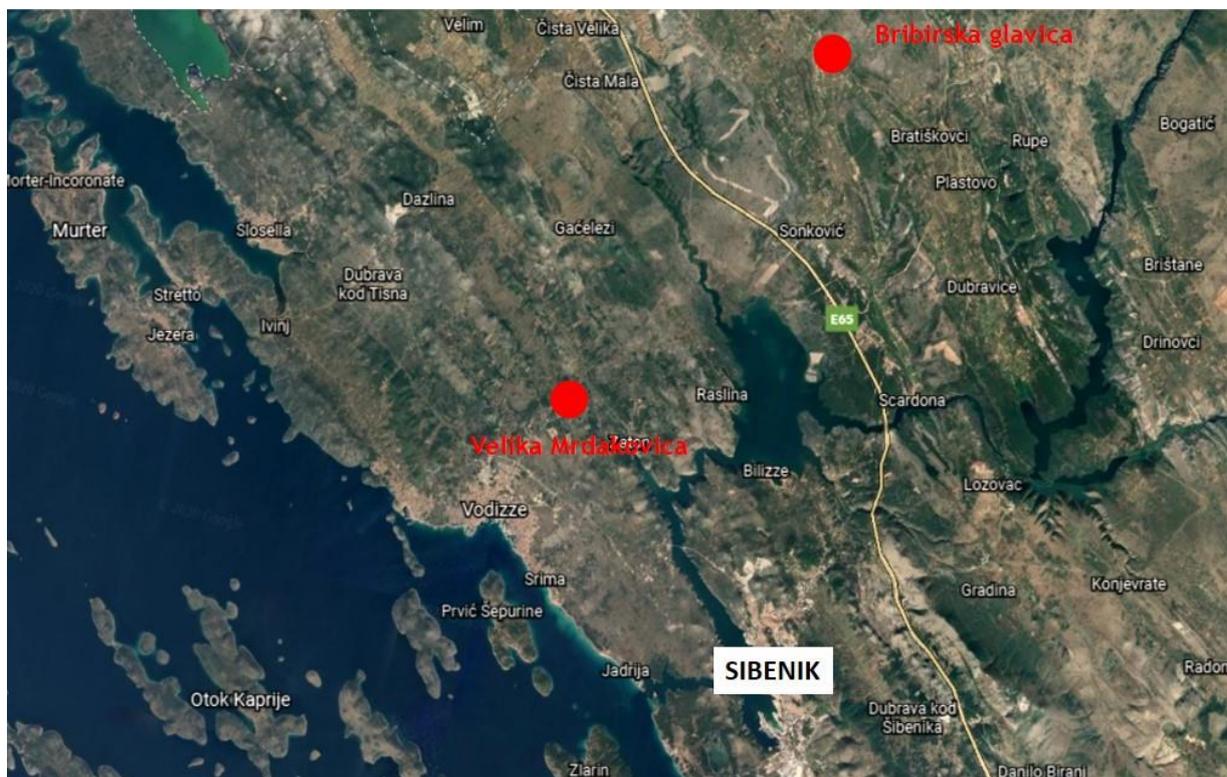
## SIBENIK CITY MUSUEM (CROATIA)

The Sibenik City Musuem (SCM) has an important role in the management of 20 archaeological sites of the Sibenik-Knin county. As part of the TRANSFER Project, the experience of the Sibenik City Museum will have its own value in that it will also allow to face the network park systems problem.

Among the sites that are included within the Sibenik City Museum (at this stage already identified Crkvina site, Bribirska site, Prizba site, Velijka Mrdakovica site, Gradina site and Sveti Spas site) in this phase they assume a role of particular relevance those of Bribirska glavica and Velika Mrdakovica.

Therefore, as far as the project envisages their integration into a network management model, at this stage it was preferred to deal with the analysis in a separate form.

For this reason an ESA will be dedicated to Bribirska Glavica and an ESA to Velika Mrdakovica; the conclusions will be common



# BRIBIRSKA GLAVICA

## 1. PRESENTATION OF THE ARCHAEOLOGICAL PARK

### 1.1. Relevant legislations in force in Croatia

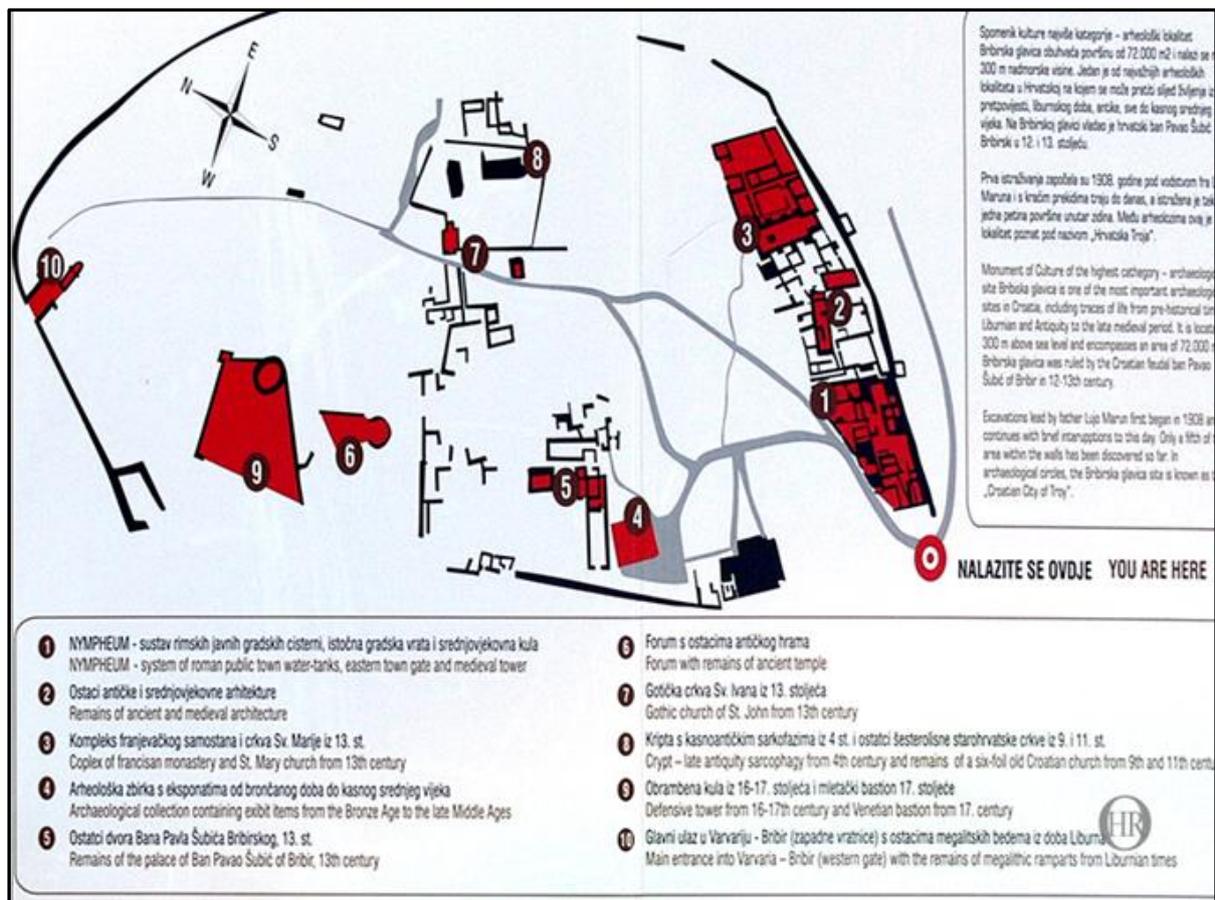
In the Republic of Croatia, at the national level, the management, protection and valorisation of archaeological parks and sites is regulated by the "Law on the Protection and Preservation of Cultural Heritage". This law defines cultural goods as archaeological sites and archaeological zones, landscapes and their parts, that testify to human presence in space, and have artistic, historical and anthropological value. For the protection and preservation of cultural goods, for determining protection measures and supervision over their implementation, are responsible state administration bodies, local self-government bodies and local self-government bodies in the field of culture, spatial planning, environmental protection, construction, housing and communal services, tourism, finance, internal affairs and justice in accordance with the law and other regulations.

In addition to the "Law on the Protection and Preservation of Cultural Heritage" as a basic act, the "Ordinance on Archaeological Research" is in force, which prescribes the conditions for conducting archaeological research in the Republic of Croatia. All research that is planned to be performed in a certain area of the Republic of Croatia is allowed only with the approval of the Conservation Department of the Ministry of Culture in whose area the sites or finds are located.

### 1.2. General presentation of Bribirska glavica

The archeological site BRIBIRSKA GLAVICA - ancient Varvaria and old Croatian Bribir is located in the village of Bribir, in the eastern part of Šibenik-Knin County, near the border with Zadar County. The town of Skradin (known as the starting point for visiting the Krka National Park) is located approx. 14 km in a southeast direction, and the well-known tourist destination of the town of Vodice is about 18 km away, in direction south. The county seat, city of Šibenik is about 23 km away, in the southeast direction. As for traffic connections, Bribirska glavica is only 8 km away from the A1 highway, specifically the Pirovac junction. It is also worth mentioning the Adriatic tourist road, which stretches along the entire coast of Croatia, and which is at a distance of about 17 km.





Ground plan of the archaeological site Bribirska glavica

A list of important buildings / monuments:

1. NYMPHEUM - System of city cisterns, eastern city gate and medieval tower.



2. remains of Roman and medieval architecture;

3. the complex of the Franciscan monastery and the church of St. Mary from the 13th century is the best preserved building on the head. Thick stone walls with particularly strong buttresses suggest that this was an impressive building. It is also famous for the ordination of the first Croatian saint, St. Nikola Tavelić, in 1375;



4. archaeological exhibition of the material from the Bronze Age to the late Middle Ages;
5. remains of the court of Ban Pavle Šubić Bribirski from the 13th century;
6. FORUM with the remains of a temple;



7. gothic church of St. John of the 13th century;
8. crypt with late antique sarcophagus from the 4th century and the remains of a six-leafed old Croatian church from the 9th-11th century - on the foundations of the Orthodox Church of St. Joachim and St. Anne with a cemetery was later built;



9. defensive tower from 16-17th century and a Venetian bastion from the 17th century;
10. the main entrance to Varvaria (western gate) with the remains of megalithic walls from the Liburnian period - well-preserved megalithic walls dating back to around 1500 BC - Bronze Age.



The site covers an area of about 7 ha and is located at an elevation of approximately 150 m compared to the surrounding area and at about 300 m above sea level. The hill is located in the middle of a fertile karst field, surrounded by numerous fields and vineyards which, after the Homeland War, were mostly neglected. Near the archaeological park, there are several smaller villages and hamlets, mostly rarely populated.

Bribirska glavica began its rich life in the first millennium BC (in the Iron Age) as a settlement called Varvaria, inhabited by the Illyrian tribe Liburni. In the 1st millennium AD, due to the Roman conquests, the settlement became a Roman municipium - Municipium Varvariae. At the beginning of the 7th century, Varvaria was inhabited by Croats, and since the 10th century it has been mentioned as the Croatian town of Bribir. The greatest historical importance of this locality lies in the fact that Bribir in the 13th and 14th century was the seat of the powerful Šubić family who were the rulers of Croatia and Bosnia at the time.

### 1.3 Infrastructure

Bribirska glavica is free of charge for visitors to see and visit. Since there is no visitor infrastructure such as well-maintained footpath, movement is a bit difficult for pedestrians, while the movement of people with disabilities is completely impossible.

Access to the location from the foot of the hill is possible with poorly maintained footpaths, as well as a gravel serpentine road that is partially adapted to driving a car and mountain bike or possibly some type of motorcycle (enduro or quad).

Considering that the location has been constantly researched in recent history (especially in the period from 2014 to the present), the park is marked with info boards showing all important buildings / monuments. There are also two more recent buildings on the site (under the jurisdiction of the Museum of Croatian Archaeological Monuments in Split) that serve as storage and exhibition space for numerous artefacts, but have been closed for several years for unknown reasons. There are no additional facilities on the site, such as cafes, restaurants, toilets, children's playground, arranged parking, etc.



### 1.4 Position in natural system

The basic relief forms that prevail in this area are the karst plateau, karst depressions, the valleys of the river Krka and its tributaries, and the surrounding hilly and mountainous area. The vegetation in this area is dominated by sub-Mediterranean forests of oak and white hornbeam and underbrush. In the vicinity of the archaeological site, the river Krka flows in the east, and the river Zrmanja flows in the northwest, both belongs to the Dalmatian basin. In addition to these larger surface waters, there are a significant number of smaller surface as well as underwater watercourses. Also, this area is located within the ecological network Natura 2000, whose main goal is to preserve or restore the favourable status of more than a thousand endangered and rare species and about 230 natural habitat

types. Natura 2000 supports the principle of sustainable development and its goal is not to stop all development activities, but to set benchmarks according to which they will be able to take place, while preserving biological diversity. As such, Natura 2000 can provide new opportunities to rural areas, for example eco-tourism, recreation or nature-friendly agriculture and forestry.

### 1.5 Position in human system

Considering that the area of Šibenik-Knin County is excellently positioned on the central part of the Croatian Adriatic coast, the coverage of possible users / visitors of the archaeological park is very wide. The whole area is well connected by traffic, both with the rest of the country and neighbouring countries (Italy by ferry from Split and Zadar) and very grateful for future tourist / cultural exploitation. In the immediate vicinity of the site are the A1 motorway and the Adriatic tourist road, and also at a relatively short distance of 50-70 km are the airports of Zadar and Split, and in the city of Šibenik, Zadar and Split there are ferry and tourist ports.

In the vicinity (10-30 km) there are several other archaeological sites such as Velika Mrdakovica (Vodice), Prižba (Srima), Maraguša (Skradin), Burnum (Ivoševci) etc. Of the major museum institutions, there is only the Museum of the City of Šibenik, and several smaller local ones such as the Drniš City Museum and the Knin Knin Museum.

In the immediate vicinity of the site there are no tourist or catering facilities, except for a few family farms (OPG) that mainly offer domestic agricultural products (vegetables, fruits, meat, wine, olive oil, etc.). The nearest important tourist seat is the town of Skradin, which is located about 14 km to the southeast and which, thanks to the nearness of the Krka National Park, is excellent touristic infrastructural equipped (restaurants, apartments, marina, a small family hotel).

<p><b>STRENGTH</b></p> <ul style="list-style-type: none"> <li>- large area</li> <li>- site is partially very well preserved</li> <li>- continuity of research works over 100 years</li> </ul>	<p><b>WEAKNESS</b></p> <ul style="list-style-type: none"> <li>- difficult physical access to the location itself</li> <li>- unresolved property and legal relations</li> <li>- unclear jurisdiction of the institution over the site</li> <li>- - problem of site management</li> </ul>
<p><b>OPPORTUNITIES</b></p> <ul style="list-style-type: none"> <li>- near the tourist centers of Vodice, Skradin, Šibenik</li> <li>- good traffic connection with all important roads</li> <li>- availability of EU funds to finance further activities</li> </ul>	<p><b>THREATS</b></p> <ul style="list-style-type: none"> <li>- lack of financial sources for further archaeological research</li> <li>- interest of the competent institutions for further development of the site</li> </ul>

## 2. MANAGEMENT PLANS AND STRATEGIES

### 2.1 General presentation

In the Republic of Croatia, all actions performed at an archaeological site must have an approval (decision) issued by the competent Conservation Department of the Ministry of Culture in whose territory the archaeological site is located. After the approval, the cultural property is entered in the Register of Cultural Heritage of the Republic of Croatia - List of Protected Cultural Heritage. Within the zone covered by the decision, no construction works are allowed, as well as interventions in the area in order to preserve the integrity of the archaeological site. It is not allowed to install prefabricated buildings without the approval of the competent authority. No social, economic or other activities are allowed without the prior approval of the competent authority. Without the prior approval of the competent authority within the spatial boundaries of the site, the soil may be cultivated only to a depth of 30 cm. If the remains of buildings or objects are found during the permitted works, archaeological or conservation research, the finder is obliged to inform the competent body and the competent museum, and hand over the objects to the competent museum. Exploration of cultural property and excavation of finds is allowed only with the prior approval of the authority and provided that all finds are professionally preserved, and movable finds are handed over for safekeeping to the competent museum.

In addition to the local conservation department as a representative of the state, the further process of planning and management of the archaeological site includes the local government, in this case the city of Skradin, then the local body managing the archaeological site - Šibenik City Museum and the regional government Šibenik-Knin County, Administrative Department for spacial planning and construction.

### 2.2 Management Plan or management priorities

There is no management plan for the archaeological site Bribirska glavica. There is also no other consolidated document related to management objectives / priorities / activities. The biggest problem with the non-existence of these documents is the unclear and unregulated jurisdiction of various institutions around the site, so that the city of Skradin, Skradin Tourist Board, Šibenik-Knin County, Šibenik City Museum, Museum of Croatian Archaeological Monuments in Split and others are involved in the archaeological site management processes, and whose interests and plans are often in conflict. However, talking to all the relevant factors involved in the whole process we came to the following conclusion.

**The management plan for the archaeological site should be defined through the following specific areas:**

*Management* - ensuring effective management of the archaeological site through mutual cooperation and communication of all stakeholders.

*Protection* - ensuring adequate conditions for protection and conservation of the archaeological site according to modern standards of protection.

*Research* - ensure the continuity of scientific research.

*Spatial planning* - to create legal and administrative preconditions for the smooth functioning of research and protection and economic exploitation of the archaeological site.

*Security of cultural goods* - create security conditions for protection against illegal construction, theft and illegal trade in antiques.

*Interpretation* - make the archaeological site accessible and visible using various means of interpretation / media.

*Education* - increase interest in the archaeological site through educational programs for children, youth and students.

*Engagement and empowerment of the local community* - encourage the local community to use the archaeological heritage in the socio-economic development of the city of Skradin and surrounding areas.

*Branding* - increase the recognisability of Skradin and Šibenik-Knin County through the development of the archaeological brand Bribirska glavica.

*Tourism* - to develop tourist infrastructure as well as a complex cultural and tourist product that would enable the development of tourism at the archaeological site.

*Visitor safety* - increase site safety for visitors and tourists.

### **2.3 Cooperation and coordination among local actors**

The city of Skradin, Skradin Tourist Board, Šibenik-Knin County, Šibenik City Museum and Museum of Croatian Archaeological Monuments in Split are all involved in the management of the archaeological site.

During the development of the Archaeological Park Management Plan, as an official document, the following actors / participants should be additionally included:

- local tourist board of the town of Skradin,
- regional tourist board of Šibenik-Knin County,
- small and medium entrepreneurs in culture and tourism from the county,
- interested groups and non-governmental organizations and associations,
- consulting companies specializing in culture and tourism,
- institutions of higher education, polytechnics, universities, colleges.

## 2.4 SWOT analysis of management plan and strategies

<p><b>STRENGTH</b></p> <ul style="list-style-type: none"> <li>- existence of long-term organized works and preservation on the site</li> <li>- existence of institutions motivated for sites management</li> </ul>	<p><b>WEAKNESS</b></p> <ul style="list-style-type: none"> <li>- no management plan</li> <li>- unclear jurisdiction of different institutions</li> <li>- lack of a permanent source of funding</li> <li>- insufficient involvement of other important stakeholders in the decision-making process</li> </ul>
<p><b>OPPORTUNITIES</b></p> <ul style="list-style-type: none"> <li>- development of tourism and bodybuilding in the region</li> <li>- great potential of visitors / tourists</li> <li>- great potential for the use of EU funds</li> </ul>	<p><b>THREATS</b></p> <ul style="list-style-type: none"> <li>- due to unclear jurisdiction, the possibility of devastation of the site</li> <li>- natural threats-possibility of natural disasters</li> </ul>

## 3. ECONOMIC SUSTAINABLE ACTIVITIES AND PRODUCTS

### 3.1 Heritage policy and priorities

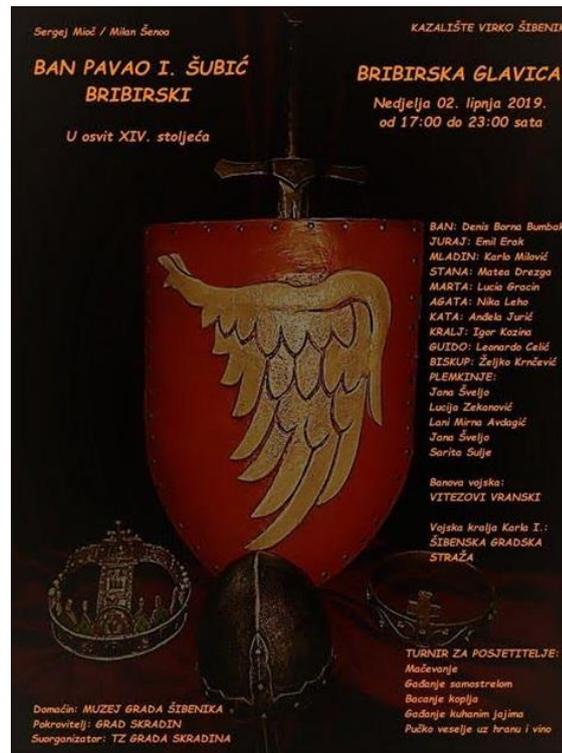
In the "Development Strategy of Šibenik-Knin County", along with the development of entrepreneurship and crafts, development of industry and agriculture, the orientation towards the development and improvement of tourism is clearly defined. One of the measures to improve the existing tourist offer is the development of new selective forms of tourism and the sustainable development of tourism in protected areas. These groups can certainly include the development of agritourism, recreational tourism, construction of attractive promenades, bicycle paths and the development of cultural tourism.

As proof of this claim, we can point out existing projects such as Tourist valorisation of the St. Anthony channel, HEREDITAS - project of protection of drywall traditional construction, project "HERA-Sustainable tourism management of the Adriatic heritage", project HERCULTOUR, etc. Also in the strategic document "Master Plan for Tourism Development in Šibenik-Knin County" as important determinants of tourism development in the future are mentioned evaluation and valorization of tangible cultural heritage, active tourism and ecotourism.

### 3.2 Existing initiatives or actions

Apart from projects / initiatives of archaeological and anthropological nature that have been implemented in the area of Bribirska glavica continuously since 1959, there are currently (and never have been) any systematic and continuous projects related to economic exploitation and economic valuation of sites. There are exclusively individual initiatives of local tourist agencies that occasionally take smaller groups of tourists to tour the site, and rare cultural events such as plays

about life on Bribir in certain historical periods, organized by local theatre Virko, local tourist board and local authorities.



### 3.3 New or innovative initiative or activity

Since, apart from the above-mentioned projects, there are no other projects / events, practically every new initiative launched is a kind of innovation. These include organized and systematic visits by individuals or groups, organized performances of events from the rich history of the locality (such as the above-mentioned play), constant presence of hosts / guides at the locality, opening of two buildings for visitors and offers of local souvenirs and handicrafts, introduction of new information and communication technologies (VR devices and audio guides), arrangement of a part of pedestrian paths for access for people with disabilities ...

At the foot of the site: arrangement of parking, arrangement of children's playground with educational facilities for the youngest, catering facilities. Part of these facilities would be exclusively seasonal (e.g. from March to October), due to the unfavourable climatic conditions in the winter months.

The main conditions for achieving this are existence of a plan and strategy for site management, then legal and property-legal regulation of both territorial area and planned economic activities, involvement of the private sector (SME) in these initiatives / activities and finally providing financial resources for all this.

### 3.4 Target groups and stakeholders

Target groups and stakeholders that should be involved in the above activities are local, regional and national government institutions (cities, municipalities, counties, state), then institutions that manage archaeological parks (museums), interested associations and non-governmental organizations (e.g. tourist guides associations, associations of persons with disabilities), small and medium entrepreneurs in culture and tourism (tourist agencies, hoteliers, caterers), higher education institutions (local polytechnics, universities, colleges). All these stakeholders should be involved for reasons specific to their roles, so that government institutions will participate in policy-making at the local, regional and national levels. Institutions that manage archaeological parks as professional and advisory support, associations and NGOs as participants that will be directly involved in the consumption of these products and services, SMEs as initiators and creators of new services and products, higher education institutions as scientific support and the like.

### 3.5 SWOT analysis of sustainable economic activities

<p><b>STRENGTH</b></p> <ul style="list-style-type: none"> <li>- great tourist potential of the area</li> <li>- involvement of certain associations and non-governmental organizations in economic activities</li> <li>- existence of projects / activities of tourist / economic nature</li> <li>- existence of strong tourist infrastructure</li> </ul>	<p><b>WEAKNESS</b></p> <ul style="list-style-type: none"> <li>- difficult physical access to the location itself, relatively small / narrow area</li> <li>- unresolved property and legal relations</li> <li>- unclear jurisdiction of the institution over the site</li> <li>- problem of site management</li> <li>- no tradition of economic valorisation of the archaeological site</li> </ul>
<p><b>OPPORTUNITIES</b></p> <ul style="list-style-type: none"> <li>- close to tourist centres Vodice, Šibenik</li> <li>- good traffic connection with all important roads</li> <li>- availability of EU funds to finance further activities</li> <li>- motivation of other stakeholders for further investments in economic activities</li> </ul>	<p><b>THREATS</b></p> <ul style="list-style-type: none"> <li>- lack of financial sources for further archaeological research</li> <li>- lack of interest of the competent institutions for further development of the site</li> </ul>

## 4. IDENTIFICATION OF ICT TOOLS

### 4.1 Existing ICT tools

Apart from information boards and signposts in Croatian and English language, there is also an info board in Braille for the blind and partially sighted. There are also two solid buildings that have been partially arranged for the purpose of receiving visitors and presenting archaeological artefacts, but for some reason have not been open for several years.

In order to present and interpret the rich archaeological heritage, as well as the generally rich history of this area, in 2019 a theatre play was launched organized by the local theatre Virko, the town of Skradin and the local tourist board. Due to the coronavirus this year, the show is unlikely to take place or will be postponed. In order to increase the audience of children and young people and people with special needs, occasional gatherings of school children and children with special needs with archaeologists are organized.

### 4.2 Authorities and bodies involved in ICT activities

- Public and private bodies involved / should be involved in ICT activities are:
- *Museum of the City of Šibenik* - in charge of professional support for creating new innovative ICT activities.
- *Museum of Croatian Archaeological Monuments Split* - in charge of professional support for the creation of new innovative ICT activities.
- *Public institution Development agency* - in charge of preparation and implementation of EU-funded projects.
- *Šibenik-Knin County* - creating policies and laws at the regional level.
- *City of Skradin* - creating policies and regulations at the local level.
- *Skradin Tourist Board* - development of a promotion program for the archaeological site, production and distribution of information and promotional materials.
- *SME* - creation of new economic products and services.

### 4.3 Target groups and stakeholders

The mentioned ICT tools and activities at the archaeological site are focused primarily on the general population of visitors and tourists (all age groups), then on those interested in sports and outdoor activities and cultural heritage, and then on specific target groups (especially blind and partially sighted, people with special needs) and school-age children.

### 4.4 SWOT analysis of ICT tools

STRENGTH	WEAKNESS
- the existence of already defined ICT activities	- the problem of financing new activities

<ul style="list-style-type: none"> <li>- existence of organizations / associations that have motivation to invest and organize ICT activities</li> </ul>	<ul style="list-style-type: none"> <li>- problem of competence of different institutions</li> </ul>
<p><b>OPPORTUNITIES</b></p> <ul style="list-style-type: none"> <li>- possibility of financing from EU funds</li> <li>- great potential of visitors/tourist</li> </ul>	<p><b>THREATS</b></p> <ul style="list-style-type: none"> <li>- bad traffic accessibility of the site</li> <li>- natural threats, weather disasters</li> </ul>

# VELIKA MRDAKOVICA

## 1. PRESENTATION OF THE ARCHAEOLOGICAL PARK

### 1.2 General presentation

The archaeological site of Velika Mrdakovica is located in the western part of Šibenik-Knin County, in the hinterland of the town of Vodice (approx. 4 km north) and approx. 15 km northwest of the county seat of Šibenik. It is situated very close to the Adriatic tourist road (approx. 4 km) and near the A1 motorway (approx. 10 km). The archaeological park is located on a hill at a height of about 100 meters above sea level, and about 50 meters in relation to the surrounding area. The whole site has surface of about 1500 m<sup>2</sup>. The environment is dominated by fields and olive trees cultivated by the inhabitants of the surrounding villages of Zaton, Gačelezi, Srima and the town of Vodice.



The area was inhabited from about the 7th century BC to the 2nd century AD. The first inhabitants were the Illyrian tribe Liburni, followed by the Romans who founded the settlement of Arausona. A defensive wall with a tower survived in the length of 120 m. The buildings that are still visible are represented by 17 residential or commercial rooms in an orthogonal network, several streets and a Roman cistern at the foot of the hill. Considering that archaeological research and conservation have been constantly carried out in the last few years, these buildings are in satisfying condition.



### 1.3 Infrastructure

The area of Velika Mrdakovica is always open and available to visitors free of charge. The park can be reached by a wide gravel road, which can be accessed partly by car and partly due to the large slope of the trail, exclusively on foot or by off-road vehicle. Access for people with disabilities is not possible. There is no organized public transport to the site. Given that the site in the period 2014-2016 was the subject of research within the project HERA - "Preparatory and archaeological works at the site of Velika Mrdakovica", a panoramic coin-operated telescope, three information boards, four signposts and solar lighting were installed.



In the area of the park there is no solid object of museum or exhibition type and there are no additional facilities (toilet, children's playground, arranged parking lot).

### 1.4 Position in natural system

The basic relief forms that prevail in this area are the karst plateau, karst depressions, the valleys of the river Krka and its tributaries, and the surrounding hilly and mountainous area. The vegetation in this area is dominated by sub-Mediterranean forests of oak and white hornbeam and underbrush. In the vicinity of the archaeological site, the river Krka flows in the east, and the river Zrmanja

flows in the northwest, both belongs to the Dalmatian basin. In addition to these larger surface waters, there are a significant number of smaller surface as well as underwater watercourses. The area is located within the ecological network Natura 2000, whose main goal is to preserve or restore the favourable status of more than a thousand endangered and rare species and about 230 natural habitat types. Natura 2000 supports the principle of sustainable development and its goal is not to stop all development activities, but to set benchmarks according to which they will be able to take place, while preserving biological diversity. As such, Natura 2000 can provide new opportunities to rural areas, for example eco-tourism, recreation or nature-friendly agriculture and forestry.

### 1.5 Position in human system

Considering that the area of Šibenik-Knin County is excellently positioned on the central part of the Croatian Adriatic coast, the coverage of potential users / visitors of the archaeological park is very wide. The whole area is well connected by traffic, both with the rest of the country and neighbouring countries (Italy by ferry) and is very grateful for future tourist / cultural exploitation. In the immediate vicinity of the site are the A1 motorway and the Adriatic tourist road, and also at a relatively short distance of 50-70 km are the airports of Zadar and Split, and in the city of Šibenik, Zadar and Split there are ferry ports and tourist ports.

In the immediate vicinity (10-30 km) there are several other archaeological sites such as Bribirska glavica (Bribir), Prižba (Srima), Sveti Martin (Ivinj), Colentum (Murter), etc. There are few museum institutions nearby, a smaller, local Museum of Maritime Tradition in Vodice and the Museum of the City of Šibenik in Šibenik.

In the immediate vicinity of the site there are several family farms (OPG) that mainly offer domestic agricultural products (vegetables, fruits, meat, wine, olive oil, etc.). The nearest important tourist seat is the town of Vodice (about 6 km to the south) which is a one of the most popular tourist centres on this part of the Adriatic and thanks to this fact is excellent tourist infrastructural equipped (numerous restaurants, apartments, marina, several larger hotels.)

<p><b>STRENGTH</b></p> <ul style="list-style-type: none"> <li>- the large part of the site is very well preserved</li> <li>- long-term continuity of research works</li> <li>- the existence of projects / activities of tourist / economic nature</li> </ul>	<p><b>WEAKNESS</b></p> <ul style="list-style-type: none"> <li>- difficult physical access to the location itself, relatively small / narrow area unresolved property and legal relations</li> <li>- unclear jurisdiction of the institution over the site</li> <li>- problem of site management</li> </ul>
<p><b>OPPORTUNITIES</b></p> <ul style="list-style-type: none"> <li>- very close to tourist centres Vodice, Šibenik</li> <li>- good traffic connection with all important roads</li> </ul>	<p><b>THREATS</b></p> <ul style="list-style-type: none"> <li>- lack of financial sources for further archaeological research</li> <li>- low interest of the competent institutions for further development</li> </ul>

- availability of EU funds to finance further activities	of the site
--	-------------

## 2. MANAGEMENT PLANS AND STRATEGIES

### 2.1 General presentation

For the general policy of the archaeological site protection in Croatia see presentation of the archaeological site Bribirska glavica.

### 2.2 Management Plan or management priorities

In addition to the local conservation department as a representative of the state, the further process of planning and management of the archaeological site includes the local government, in this case the city of Vodice, then the local body managing the archaeological site - Šibenik City Museum and the regional government Šibenik-Knin County, and Administrative Department for spacial planning and construction.

There is no management plan for the archaeological site of Velika Mrdakovica. There is also no other consolidated document related to management objectives / priorities / activities. The biggest problem with the non-existence of these documents is the unclear and unregulated jurisdiction of various institutions around the site, so that the city of Vodice, Vodice Tourist Board, Šibenik-Knin County, Šibenik City Museum, Museum of Croatian Archaeological Monuments in Split and others are involved in the archaeological site management processes, whose interests and plans are often in conflict. However, talking to all the relevant factors involved in the whole process we came to the following conclusion.

**The management plan for the archaeological site should be defined through the following specific areas:**

*Management* - ensuring effective management of the archaeological site through mutual cooperation and communication of all stakeholders.

*Protection* - ensuring adequate conditions for protection and conservation of the archaeological site according to modern standards of protection.

*Research* - ensure the continuity of scientific research.

*Spatial planning* - to create legal and administrative preconditions for the smooth functioning of research and protection and economic exploitation of the archaeological site.

*Security of cultural goods* - create security conditions for protection against illegal construction, theft and illegal trade in antiques.

*Interpretation* - make the archaeological site accessible and visible using various means of interpretation / media.

*Education* - increase interest in the archaeological site through educational programs for children, youth and students.

*Engagement and empowerment of the local community* - encourage the local community to use the archaeological heritage in the socio-economic development of the city of Skradin and surrounding areas.

*Branding* - increase the recognisability of Skradin and Šibenik-Knin County through the development of the archaeological brand Velika Mrdakovica.

*Tourism* - to develop tourist infrastructure as well as a complex cultural and tourist product that would enable the development of tourism at the archaeological site.

*Visitor safety* - increase site safety for visitors and tourists.

### 2.3 Cooperation and coordination among local actors

The city of Vodice, Vodice Tourist Board, Šibenik-Knin County, Šibenik City Museum, Museum of Croatian Archaeological Monuments in Split are all involved in the archaeological site management processes.

The following actors / participants should be additionally included in the development of the Archaeological Park Management:

- local tourist board of the town of Vodice,
- regional tourist board of Šibenik-Knin County,
- small and medium entrepreneurs in culture and tourism from the county,
- interested groups and NGOs,
- consulting companies specializing in culture and tourism,
- institutions of higher education, polytechnics, universities, colleges.

### 2.5 SWOT analysis of management plan and strategies

<p><b>STRENGTH</b></p> <ul style="list-style-type: none"> <li>- existence of long-term organized works and preservation on the site</li> <li>- existence of institutions motivated for sites management</li> </ul>	<p><b>WEAKNESS</b></p> <ul style="list-style-type: none"> <li>- no management plan</li> <li>- unclear jurisdiction of different institutions</li> <li>- lack of a permanent source of funding</li> <li>- insufficient involvement of other important stakeholders in the decision-making process</li> </ul>
<p><b>OPPORTUNITIES</b></p> <ul style="list-style-type: none"> <li>- development of tourism and bodybuilding in the region</li> <li>- great potential of visitors / tourists</li> <li>- great potential for the use of EU</li> </ul>	<p><b>THREATS</b></p> <ul style="list-style-type: none"> <li>- due to unclear jurisdiction, the possibility of devastation of the site</li> <li>- natural threats - possibility of natural disasters</li> </ul>

### **3. ECONOMIC SUSTAINABLE ACTIVITIES AND PRODUCTS**

#### **3.1 Heritage policy and priorities**

In the "Development Strategy of Šibenik-Knin County", along with the development of entrepreneurship and crafts, development of industry and agriculture, the orientation towards the development and improvement of tourism is clearly defined. One of the measures to improve the existing tourist offer is the development of new selective forms of tourism and the sustainable development of tourism in protected areas. These groups can certainly include the development of agritourism, recreational tourism, construction of attractive promenades, bicycle paths and the development of cultural tourism. As proof of this claim we can certainly point out existing projects such as Tourist valorisation of the St. Antony channel, "HEREDITAS - project of protection of drywall traditional construction, project" HERA - Sustainable tourist management of the Adriatic heritage ", project HERCULTOUR etc. Also in the strategic document "Master plan of tourism development in Šibenik-Knin County" as important determinants of tourism development in the future are mentioned evaluation and valorisation of tangible cultural heritage and cultural, active and ecotourism.

#### **3.2 Existing initiatives or actions**

In the period 2014-2016, the archaeological site of Velika Mrdakovica was the subject of archaeological research within the HERA project, which was then continued in the organization of the Museum of the City of Šibenik, Šibenik-Knin County and the City of Vodice in the following years. Within the project, a cultural tourist route "WATER - a powerful creator of history" was designed, which unites the most important tourist attractions in Šibenik-Knin County, and includes about twenty attractions at six sites throughout Šibenik-Knin County. In addition to these projects of an archaeological nature, tourist events of the Vodice "Summer and Autumn bakanalije" have been held regularly on Velika Mrdakovica since 2014 (performances of an ancient Roman feast with a music concert and a tour of the site with expert guidance). This event is organized by the Public Open University of Vodice and the Tourist Board of Vodice. Also, some local tourist agencies organize cycling and walking tours, and individual visits of tourists are also possible.



### 3.3 New or innovative initiative or activity

New innovative ideas / initiatives are as follows:

- 3D animation of the possible appearance of the site at the peak of its existence with audio for the blind as a QR solution;
- organization of archaeology campuses for students and experts - for further research of settlements and necropolises, for analysis of the settlement role in the network of the Roman Empire, trade links, Roman land and sea routes;
- establishment of a permanent archaeological exhibition in the Old School in Vodice, which would present the cultural and historical heritage of Vodice and enhance the development of archaeology, research and cultural tourism;
- organized and systematic visits of individuals or groups;
- performances of events from the rich history of the site (such as the above-mentioned bakanalije);

- constant presence of hosts / guides at the site;
- introduction of new information and communication technologies guides;
- footpaths for access for people with disabilities;
- children's playground with the possibility of educational facilities for the youngest;
- a small cafe or restaurant and a parking lot for cars at the nearest accessible location.

Most of these facilities would be exclusively seasonal (e.g. from March to October), due to unfavourable climatic conditions in the winter months.

The main conditions for achieving this are the existence of a plan and strategy for site management, then legal and property regulation of both territorial area and planned economic activities, involvement of the private sector (SME) in these initiatives / activities and finally providing financial resources for all this.

### 3.4 Target groups and stakeholders

Target groups and stakeholders that should be involved in the above activities are local, regional and national government institutions (cities, municipalities, counties, state), then institutions that manage archaeological parks (Šibenik City Museum), interested associations and NGOs (e.g. Association of Tourist Guides, Association of Persons with Disabilities), Small and Medium Entrepreneurs in Culture and Tourism (travel agencies, hoteliers, caterers), primary and higher education institutions (schools, local universities, polytechnics, faculties). All these stakeholders should be involved for reasons specific to their roles, so that government institutions will participate in policy-making at the local, regional and national levels. Institutions that manage architectural parks as professional and advisory support, associations and NGOs as participants that will be directly involved in the consumption of these products and services, SMEs as initiators and creators of new services and products, higher education institutions as scientific support and the like.

### 3.5 SWOT analysis of sustainable economic activities

STRENGTH	WEAKNESS
<ul style="list-style-type: none"> <li>- great tourist potential of the area</li> <li>- involvement of certain associations and non-governmental organizations in economic activities</li> <li>- existence of projects / activities of tourist / economic nature</li> <li>- existence of strong tourist infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>- difficult physical access to the location itself, relatively small / narrow area</li> <li>- unresolved property and legal relations</li> <li>- unclear jurisdiction of the institution over the site</li> <li>- problem of site management</li> <li>- no tradition of economic valorisation of the archaeological site</li> </ul>

OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> <li>- close to tourist centres Vodice, Šibenik</li> <li>- good traffic connection with all important roads</li> <li>- availability of EU funds to finance further activities</li> <li>- motivation of stakeholders for further investments in economic activities</li> </ul>	<ul style="list-style-type: none"> <li>- lack of financial sources for further archaeological research</li> <li>- lack of interest of the competent institutions for further development of the site</li> </ul>

## 4. IDENTIFICATION OF ICT TOOLS

### 4.1 Existing ICT tools

In addition to the already mentioned (in the introductory part) information boards and signposts in Croatian and English and solar posts with lighting, a panoramic coin-operated telescope (Fig. 16), there is also an info board in Braille's letter for the blind and partially sighted. There are also surveillance cameras on the lamp post, but they have not been in operation for some time. For the purpose of presentation and interpretation of the rich archaeological heritage, as well as the generally rich history of this area, since 2014 the Vodice Bacchanalia event (bakanalije) is regularly held, organized by the Public Open University Vodice and the Tourist Board of Vodice (also mentioned above). In order to increase the audience of children and youth, visits of children from local primary schools and children with special needs are occasionally organized.

### 4.2 Authorities and bodies involved in ICT activities

Public and private bodies involved / should be involved in ICT activities are:

- *Museum of the City of Šibenik* - in charge of professional support and supervision for creating new innovative ICT activities.
- *Public institution Development agency* - in charge of preparation and implementation of EU-funded projects.
- *Šibenik-Knin County* - creating policies and regulations at the regional level.
- *City of Vodice* - creating policies and regulations at the local level.
- *Public Open University Vodice* - creation and development of new innovative ICT activities
- *Vodice Tourist Board* - development of a promotion program for the archaeological site, production and distribution of information and promotional materials.
- *SME* - creation of new economic products and services.



### 4.3 Target groups and stakeholders

The ICT tools and activities are aimed primarily at the general population of visitors and tourists (all age groups), especially those interested in sports and outdoor activities and cultural heritage, and then at specific target groups (specifically blind and partially sighted, people with special needs) and school-age children.

### 4.4 SWOT analysis of ICT tools

<b>STRENGTH</b> <ul style="list-style-type: none"> <li>- existence of certain ICT activities</li> <li>- existence of organizations / associations that have motivation to invest and organize ICT activities</li> </ul>	<b>WEAKNESS</b> <ul style="list-style-type: none"> <li>- problem of financing new activities</li> <li>- problem of competence of different institutions</li> </ul>
<b>OPPORTUNITIES</b> <ul style="list-style-type: none"> <li>- possibility of financing from EU funds</li> <li>- great potential of visitors</li> </ul>	<b>THREATS</b> <ul style="list-style-type: none"> <li>- bad traffic accessibility of the site</li> <li>- - natural threats, weather disasters</li> </ul>

## 5. BRIBIRSKA GLAVICA AND VELIKA MRDAKOVICA: CONCLUSIONS

Based on all the data listed in the previous pages, and in relation to the following aspects, we draw conclusions.

*(Since the sites Bribirska glavica and Velika Mrdakovica are physically close to each other, are in the same or very similar natural and human environment, they have approximately the same characteristics (degree of preservation, degree of economic valorization, issues of property relations and management) the conclusions apply to both of these sites.)*

## **5.1 Characterizing factors**

Characterizing factors of archaeological sites Bribirska glavica and Velika Mrdakovica are excellent physical preservation of the sites themselves, i.e. buildings and artefacts, then existence of a long tradition of archaeological research (over 100 years), existence of certain economic valorization (existence of certain economic activities, ICT tools), existence of certain cultural activities, the constant involvement of sites in local community projects through the central government to EU funds. It is also characteristic of both localities that they are located in a well-developed tourist and traffic area and thus they have excellent preconditions for the development of tourism, cultural tourism, educational and outdoor activities.

## **5.2 Qualifying factors**

Qualifying factors that give the site a certain value are the excellent preservation of the sites, the recognition of the importance of the sites by relevant institutions, local governments (cities of Vodice and Skradin, Šibenik-Knin County), central government (Ministry of Culture), some interested groups and NGO's and the existence of some activities, mostly of cultural nature.

## **5.3 Critical situations**

Critical situations in which the sites currently are and may have an impact on further exploitation and development of the sites are unresolved property issues (a part of the land is owned by private persons), unclear jurisdiction of certain institutions that manage the area, lack of management plan, lack of permanent and quality financing program.

## **5.4 Challenges and opportunities**

First of all, it is necessary to resolve the issues and problems listed under number 3. (Critical situations), i.e. to regulate the use of land owned by private persons, to regulate the competence of institutions and local government over the site, and to adopt a comprehensive and quality management plan. In addition to this, it is very important to find a quality and permanent way of financing (in this sense, try to make the most of the funds available through EU programs). In the end, involve other stakeholders in the whole process, such as small and medium-sized enterprises, interested groups, scientific institutions, local tourist boards... so that everyone in their domain contributes to the preservation and development and economic valorisation of archaeological areas.

## **MIRINE - FULFINUM ARCHAEOLOGICAL PARK (CROATIA)**

### **1. PRESENTATION OF THE ARCHAEOLOGICAL PARK**

#### **1.1 Relevant legislations in force in Croatia**

Croatia has a long tradition of protecting cultural, historical and archaeological heritage in the context of urban and spatial planning since the 1960s. Documents dealing with the protection of cultural, historical and archaeological heritage emphasize the principle of integral protection. Archaeological heritage is protected by law and is in most situations owned by the state or public institutions.

The area of culture and cultural heritage is regulated with regulations and laws, those that it is done directly by those who do it indirectly. A lot of regulations make sense normative determination of structural norms and rules in certain areas. The goal is to constant improve governance in the field of culture, and in the process decide to increase influence local self-government unit and the same profession in order to ensure the highest possible quality and transparency of the management process and created conditions for strengthening the infrastructure in culture and systematic encouragement of cultural life and creativity.

**The Tourism Development Strategy of the Republic of Croatia until 2020** emphasizes the richness of Croatian cultural and historical heritage as a great strength of the resource-attraction basis of Croatia. Among other things, it defines especially relevant cultural tourism products for Croatia which include: urban tourism, cultural heritage tourism, event tourism, creative tourism and religious tourism.

**Strategic plan of the Ministry of Culture for period 2019 - 2021** is dealing with ensuring normative, organizational, financial, material and other conditions for the development of cultural and artistic creativity, participation in culture, protection and preservation of cultural heritage in the Republic of Croatia and presenting Croatian culture in Europe and the world and supporting a comprehensive international cultural cooperation.

**The Law on the Protection and Preservation of Cultural Heritage** and the **Law on Physical Planning and Construction** prescribe the obligation to include conservation measures and conditions for the protection of cultural and historical heritage (including archaeological) in the content of all spatial and urban plans. It is necessary to continuously research the issue of integral protection of cultural, historical and archaeological heritage and inclusion in the active space of human life.

Archaeological parks are first of all archaeological sites. As such, they are put under a very strict legislation - in order to become an archaeological park, the site

is protected. There are two major levels of protection: preliminary and permanent protection; furthermore, the site can be treated as a protected area, or as an isolated site. The fact that an archaeological site is protected as a national heritage opens the perspectives for the finances and the realization of the park itself.

The protection and preservation of archaeological heritage is carried out by the **Directorate for the Protection of Cultural Heritage of the Ministry of Culture** and its conservation departments and the **Directorate for Archival Activities and Archaeological Heritage of the Ministry of Culture**. Archaeological research in Croatia is carried out by ten institutions of archaeological profile (six archaeological museums, one institute, two departments at the faculties in Zagreb and Zadar and one department at the Croatian Academy of Sciences and Arts). Archaeologists employed in museums are also engaged in research. They cooperate with private archaeological companies and their work is mainly focused on preventive archaeological excavations. The archaeological research has to be previously approved by the **Directorate for Archaeological Heritage of the Ministry of Culture**.

The Ministry of Culture has a law and ordinance dealing with issues of archaeological research, entitled "Law on the Protection and Preservation of Cultural Heritage" and "Ordinance on Archaeological Research." They provide research funding, details on applying for a research authorization, and commitments upon completion of the research.

**Development Strategy of Primorje-Gorski Kotar County for period 2016-2020** is a fundamental document at the regional level. It is also a framework for the adoption of a number of regional and local sectoral strategies, and represents a common vision and action plan of all entities from the public, private and civil sectors in the County.

The County is developing one particular program - The "Kasteli of Frankopan family". Other archaeological projects are not privileged at present point.

Sustainable development and effective management of natural and cultural resources are among the strategic goals of the **Overall development project for the period -2016 - 2020** of the Municipality of Omišalj.

When searching for a cultural property, i.e. an archaeological site that is the object of research in progress, the following data are displayed in the Register of Cultural Property on the website of the Ministry of Culture:

**Omišalj, Mirine-Fulfinum Complex with an archaeological site**

- Label of good: Z-5016
- Legal status: Protected cultural property
- Type: Immovable cultural good - cultural - historical area
- Classification: Archaeological heritage
- UNESCO protection: No
- Position: Omišalj

- County: Primorsko-goranska

## 1.2 General presentation

The municipality of Omišalj covers the northern part of the island of Krk and the islet of St. Marko, where the island is connected to the mainland by the Krk Bridge.

As the main entrance corridor to the island itself, it has a very important transport role, which is evident in connecting the islands of Krk, but also the islands of Cres and Lošinj with the mainland via the Krk Bridge. The location of the Rijeka International Airport in the Omišalj municipality also gives it wider traffic importance.

Northern part of the island, which is almost entirely occupied by the municipality of Omišalj, is the lowest part of the island. The total land area of the Municipality of Omišalj is 39.5 km<sup>2</sup>, accounting for 8.9% of the island's surface. This area is basically a karst plateau, sloping southwest, and its elevation is generally between 60 and 70 m above sea level. The plateau in the southwest is limited by the recesses: Omišalj Bay, Sepen Bay, Lake near Njivice, Veliki and Mali lug and the valley of Veli Potok with Soline Bay.

The archaeological park "Mirine - Fulfinum", is located at the foot of the millennium hill fort Omišalj, island of Krk, in the adjacent Sepen bay. The locality extends along the entire southern surface of the Ert Peninsula. The entire archaeological zone comprises several well distinguished localities, marked as sectors, which, although forming the whole of Mirine-Fulfinum, may be represented separately.



Photo credit: Kaducej d.o.o.

According to the Spatial Plan, the building land for the Archaeological Park is defined by the boundary of the archaeological area and the natural beach and includes land and sea surface. The surface of the marine area (waters) is no more than 17.45 ha, and the surface of the terrestrial part not more than 39.20 ha. They are formed within the area marked on the cartographic plan views.

The building plot of the future Visitor Centre is formed within the surfaces of the existing cadastral plot no. 4561, 4562, 4563, 4564 cadastre Omišalj, the maximum allowed area is about 8.100 m<sup>2</sup>.



Chronologically, the sites in Sepen Bay can be listed in the following order.

On clear terrain, the city of *Fulfinum*, with all its infrastructure, was created in the first half of the 1st century AD, and the prestigious status of the Roman *municipium* acquired during the second half of the 1st century - in the time of the Flavians, as its full name suggests - *Municipium Flavium Fulfinum*. Research to date has shown that city owned the main town square - the Forum - with its facilities, such as a temple, an urban basilica and *tabernae*. Furthermore, a warehouse and part of the port were explored near the coast, as well as certain parts of its urban structures. The City had a well-managed port, which was unfortunately destroyed during the construction of the DINA industrial plant. There are the remains of the old road that led further to the Roman town of Krk (*Curicum*), or in other direction, perhaps to the scaffolding on Voz, which could connect the island with the mainland since Antiquity. Along this road two necropolises were organized between 1st and 3rd c. AD. The remains of *Fulfinum* are hardly visible today because they are still mostly underground, and partly under the sea, which was one to two meters below today's level at the time of its flourishing.

A small necropolis with mausoleums was located on the outskirts of the city, during the Late Antiquity. It is of the unique funerary architecture in the whole region of Primorje-Gorski kotar. The necropolis also exhibits an interesting range of Late Antique grave architecture typology.

In the first half of the of the 5th century, a church was built in Mirine on the outskirts of the above mentioned necropolis. It is an imposing single-nave church structure with a simple cross-shaped floor plan. It is preserved up to the roof height and is the only Early Christian sacral object preserved at this degree not only on the island of Krk, but on the entire Croatian coast.

Further to the north-west, another Late Antiquity complex was excavated in the last years (since 2016). The residential and economic building belonged beyond doubt to the larger Church complex of Mirine.

## PARK AREA



## SECTOR A - MIRINE

The church at Mirine is undoubtedly the most striking monument of the entire archaeological zone and it is not only extremely well preserved, but also partly reconstructed. Three masonry tombs were found near the church, one of which was

certainly vaulted. An early Christian atrium was discovered that is unique on the Eastern Adriatic coast.



#### SECTOR 1 - FORUM

The central part of the forum is almost completely explored and the forum temple and the city basilica are visible for visitors. Some parts are yet to be excavated, such as the south-eastern part, where a portico with colonnade is expected.



## SECTOR 2 - NECROPOLIS

Two mausoleums have been discovered in this sector, preserved in the height sufficient for presentation (up to 1.20 m before conservation).



## SECTOR 3 - CASTRUM

Castrum represents an unexplored area that could form an integral part of the park in the future, as its walls are very well preserved (more than 1 meter in height, before excavations).

## SECTOR 4 - THERMAL COMPLEX AND TRIAPSAL CHURCH

This part of the site has been explored recently, since 2016. Sector 4 is currently ready for presentation, knowing that the excavations can take place parallel, as an integral part of “live activities” of the Park.



### SECTOR 5 - TOWER

This area has not been researched, nor can it attract a large number of visitors for now. However, the tower is very attractive because of its good preservation, and it certainly needs to be worked on in the future.

### SECTOR 6 - ROMAN HOUSE

The zone was explored in 1977, but unfortunately, during that excavations the earth deposits were not removed, making it impossible for the time being to include it into the representative part of the Park. However, this part of the ancient city is potentially interesting for its inclusion in the representative part of the Park, since the floors and the structures of the building are well preserved. In the near future, the revision of archaeological excavations should be organized, as well as the removal of earth piles.

### SECTOR 7 - URBAN VILLA

An urban villa type building was located in one of the southern *insulae*, situated along the coast. It possibly had a porticoed court yard. Only the north-western part of the building with an internal courtyard measuring 13x17.5 m was discovered. A 1.5 m wide porch was also established in the west side of the courtyard. The excavations that took place in the 80-ies revealed that the building was probably built around the mid-1st c. AD.

### SECTOR 8 - LATE ANTIQUITY BUILDING OF UNKNOWN PURPOSE

This area has been only recently recognized in archaeological surveys. It has not yet been excavated, but it will be treated in the near future as a part of “live activities” of the Park, including excavations opened to the visitors.

## 1.3 Infrastructure

The information boards are placed at key points so that visitors have an opportunity to find out where they are. These are to be changed in near future, as they are now obsolete. There is also a need for more dashboards, since only few existing ones provide basic information and directions. The site lacks modern information boards, (didactic, 3D solutions, in larger numbers) that would show some dislocated sites and artefacts. There is room for improvement in this type of signalling/informing which is planned in the new general plan for the Archaeological park *Mirine-Fulfinum*.

A chemical toilet is installed on the site and there are no accompanying catering facilities (cafe bars, shops, restaurant). The major problem is the lack of the basic infrastructure - electricity, water, sewage. The electricity and water connection currently in use is not owned by the municipality and it is necessary to build the entire infrastructure, including public lighting and sewage. The area is not covered by the internet, which is of great importance for the installation of modern technological solutions on the site. All of the above mentioned issues are planned to be solved by the construction of the interpretation centre.

Public transport does not reach the locality as it is far dislocated from the urban area, although a tourist mini bus / train is planned for tourist transport in the

future. The site can be accessed by an unclassified road where, at the end, there is a parking area for several vehicles. Visitors can access the archaeological area through the seafront promenade.

Moving through park is currently possible by foot and eventually bike although the terrain is not completely correspondent.

Although there are no difficult conditions for people with reduced mobility and disabled in one part (access to the site - promenade), there is a need to incorporate additional elements and arrange paths for this group of visitors to fully enable sightseeing.

Visitors can explore some parts of the ancient Roman city of *Fulfinum* from the 1st century as well as the early Christian complex of Mirine from the 5th century, including the necropolis. Opening hours are every day from May to October from 10 to 1pm and 6pm to 9pm. The site is not closed with a fence so for now it is accessible anytime from sea or walking trail. Admission for site-seeing is free. Expert guidance is possible during business hours and by appointment. The site does not have an information centre but there is temporarily an info point provisionally organized within the church in Mirine.

#### **Events during the year**

“Days of Antiquity” - a two-day event takes place every year in July, featuring life in antiquity, gastronomic offer and ancient music, and interactive educational sessions, workshops (“Roman School”, “Roman Hospital”, “Roman games”, “Little Archaeologists”) and lectures and presentations for popularization of ancient culture and localities.

Contemporary culture Concerts of popular and classic music are held in the early Christian Basilica of Mirine during the summer months, as well as theatre plays, and “Solo Positivo Film Festival”, an international music documentary festival.

Hiking and biking trails in the municipality of Omišalj include cultural, historical, natural and archaeological sites.

#### **1.4 Position in natural system**

The largest surface of the site is occupied by olive groves at different stages of neglect. Few well-maintained olive groves appear as pockets clearing within larger overgrown areas of neglected olive groves. The olive groves are bounded by drywalls at different stages of damage. Area adjacent to archaeological sites it is mostly overgrown with tall macchia, except in the area maintained by mowing. A large number of individual or small groups of trees appear in the maintained area, most of them deciduous. A coastal sit habitat specific vegetation protected through Natura 2000 Programme grows on the south-western edge of the site. It should be protected as much as possible from possible negative influences and presented as an interesting botanical element.

Within the wider area of the Archaeological Park, land use should be directed towards the preservation of the existing pattern of combined olive growing and grazing, which is a timeless Mediterranean category that links antiquity to the present day. Part of the land should also be used for the presentation of Roman vegetable gardening and horticulture.

Removal is planned in the area of minimal vegetation that defines the former urban space all shrubby vegetation, thinning of trees and intensive maintenance of grass by mowing and grazing.

The area of sparse vegetation outside the former city, which includes the sectors of Mirine with its mausolea, the thermae and the triapsal church, envisaged a slightly milder reduction regime vegetation. The immediate space and views of the monuments should be refined with the presence of shrubby vegetation as contrast to adjacent urban space. In the background of the archaeological park is a space intended for supervised agriculture and grazing, which would preserve the timeless ambience of the Mediterranean traditional landscape bounded by drywalls.

At the moment, care for horticulture, waste and water system is managed by a utility company owned by a local government unit, all within the existing capabilities (infrastructure, finance).

### **1.5 Position in human system**

Area is located outside the tourist centres, but the settlements of Omišalj and Njivice are approximately 3 km away from the site. Rijeka Airport is about 5 km away. There are no buses and similar public transport lines organized for tourist visits to the site. The visits are organized individually or through travel packages of agencies.

It would be necessary to establish a regular tourist line at least once a day leading to the location (in consultation with hotels, camps, travel agencies and the Tourist Board).

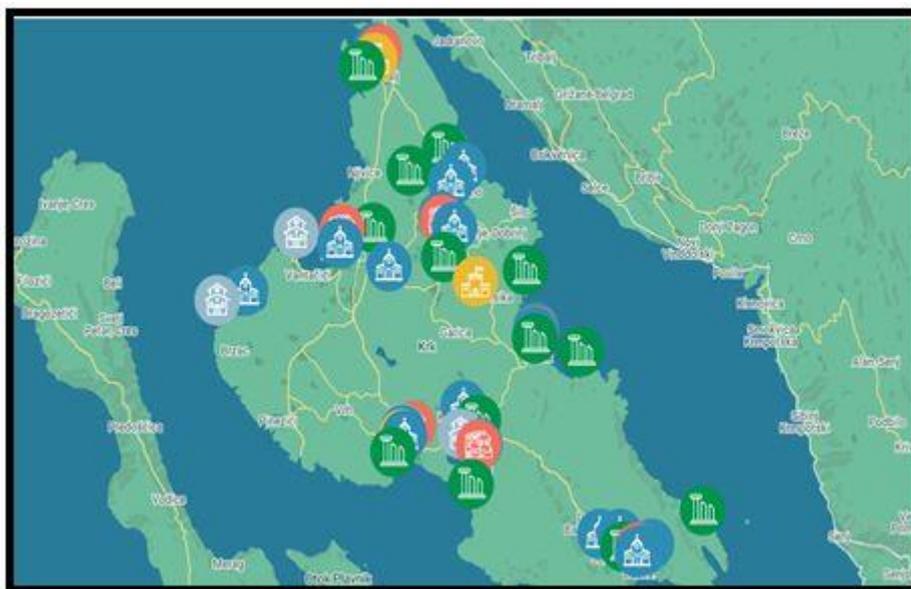
It is possible to meet a much larger number of tourists and increase the number of visitors of site due to the favourable position and transport connectivity of the Omišalj municipality, its proximity to the airport, nearby city of Rijeka, tourist centre of Region - city of Opatija. Omišalj represents gates to other Croatian islands. Tourism in the county is well developed, with quality site promotion, information flow and great engagement of target stakeholders.

The closest major city of Rijeka has numerous cultural monuments, sites and several museums: City of Rijeka museum, Natural history museum, Maritime and History Museum of the Croatian Littoral Rijeka, Rijeka Museum of Natural History, Museum of Modern and Contemporary Art, Permanent exhibitions at the Faculty of Maritime Studies in Rijeka, Peek & Poke - Museum of Informatics, The Mažuranić-Brljić-Ružić Memorial Library and Collection, Sacred Collection of the Cathedral of St.Vid, Treasury and Gallery of the Shrine of Our Lady of Trsat, University Library Rijeka - Glagolitic Exhibition. Of the cultural monuments in the city of Rijeka, the

most significant ones are Church of St. Jerome and Dominican Monastery, Church of Our Lady of Lourdes and Capuchin Monastery, Cathedral of St. Vid, Old Gate or Roman Arch, Judgment Palace, City Tower, Stendarac - stone pillar for the flag erected by Emperor Maximilian, Church of St. Fabian and Sebastian, Synagogue, Church of the Assumption of the Blessed Virgin Mary and Kosi (skewed) Tower.

The city of Rijeka is part of a great European cultural project - European Capital of Culture 2020, which roll speaks in favour of how culturally oriented this entire area is. In 2020, when Croatia presides over the European Union, the largest Croatian port, Rijeka, is the centre of a rich national and European cultural and artistic program, the city hosting artists from the world, European and Croatian cultural scene.

The whole island of Krk is very rich in immovable cultural heritage, so the site can be further enhanced with other sites and monuments. The dynamic history of the island of Krk has been determined by its favourable geographical position (the intersection of trade routes), mild climate, sufficient arable land and a considerable number of elevations to determine settlements. Its earliest traces date back to prehistoric times. Although still unexplored, ancient remains have been found on strategically positioned hills (around St. Peter's Church in Gabonjin) and in the caves of the island of Krk.



(display of cultural heritage/monuments in the island of Krk, source: <http://www.visitkrk.hr/>)

The Baška tablet is an ancient Croatian monument, written in the transitional form of Glagolitic script, around 1100 AD. It was found in year 1851, in the church of St. Lucius in Jurandvor near Baška on the island of Krk and is a significant source for the history of the Croatian people, the language and the development of Croatian Glagolitic script.

The island of Krk is rich in historical monuments, from prehistory to the present. However, there are so many that it is simply not possible to list them.

Cultural and historical tourism, given its position on the island and the developed tourist tradition, is also marked through numerous events, especially in the summer months (tourist season). Therefore, tourism and cultural heritage on the island and the municipality area are very closely connected and going in favour to each other. Numerous excursions, tours, accommodation and events are organized as a link between these two aspects.

In the area of the municipality where tourism is the leading branch, everything is adapted to the further development of tourism. Thus, in Omišalj and Njivice, there are numerous accommodation units, private apartment and holiday renters, guesthouses, villas, hotels, campsites that have the capacity to accommodate a large number of domestic and foreign tourists.

Accommodation in permanent beds:

#### *Njivice*

- Hotels: 1,202
- Apartment complex: 210
- Private accommodation: 2335
- Camp: 1998

In 2018, there were 104,707 arrivals (6% domestic and 94% foreign) and 606,621 overnights (5% domestic and 95% foreign).

#### *Omišalj*

- Hotels: 736
- Private accommodation: 803
- Camp: 900
- Resorts: 84

In 2018, there were 39,366 arrivals (11% domestic and 89% foreign) and 200,792 nights (12% domestic and 88% foreign).

A large number of small and large tourist accommodation and travel agencies operate in the municipality and the whole island. Tourism is managed by the tourist Boards of each municipality, Krk island and County. The Ministry of Tourism and the Ministry of Culture play a very important role in promoting tourism and its development, as well as specific forms of tourism, which with their financial and strategic incentives support new projects in the field of tourism and cultural heritage. The budget of these ministries supports the project of research, excavation and valorisation of the archaeological site on an annual basis, as well as part of cultural events taking place on the site. The support of ministries, municipalities and other stakeholders is not sufficient to cover larger and more extensive site work needed, therefore the opportunity provided by the Interreg Adrion Cross-Border Cooperation Project enables greater development of the site itself and implementation of new solutions that would otherwise not be possible.

## 2. MANAGEMENT PLANS AND STRATEGIES

### 2.1 General presentation

A number of actors, from the Ministry of Culture, conservationists, museum, municipal services, project coordinator of archaeological park, external experts and associations, universities, volunteers are constantly collaborating on the development and improvement of the archaeological site as members of the expert council. The park should positively influence the development of sustainable tourism and local economy and contribute to the productive tourist seasons with its contents. Fulfinum - Mirine should be a place that, in addition to tourist attractions, is also an important destination in the social and cultural life of local communities and the entire region.

The archaeological park is managed by the Municipality of Omišalj, in whose area the park is located. The idea of an archaeological park was conceived when starting new research into the forum of the ancient city. The work towards its realization was at a very slow pace, which is depended, of course, on many parameters, but mostly financial. The ultimate goal of all archaeological excavations was the landscaping the park. An important role has been played by the Association for archaeological research and promotion of the archaeology of Kvarner (alPAK Association, established in 2006 in Omišalj), which supported research, documentation, took care of archaeological material and the state of the site, with the coordination of the Municipality of Omišalj and its Tourist board. After the renovation of the park, a constant care should be taken by the employee of archaeological collections, to be established within the museum institution - the intention is to temporary submit the archaeological collection to the Maritime Museum of the Croatian Littoral in Rijeka. Future archaeological collection should be bound along the Mirine-Fulfinum Archaeological Park and in the future returned and stored in its own Interpretation centre within the locality from which it originates. The Interpretation Centre of the "Archaeological Park Mirine-Fulfinum" would have multiple roles including a storage site and space for further processing of archaeological material within the collection.

### 2.2 Management Plan or management priorities

Due to its planned role in the archaeological collection, the **Maritime and Historical Museum of the Croatian Littoral in Rijeka** would be one of the main stakeholders in the project within the definition and management plan. Its participation in the Management Plan is foreseen through a working group, with expert support through the exchange of information and practices and the definition of management methods and strategies. The museum is organized into five departments: Department of Archaeology, Ethnographic Department, Cultural History Department, Department of Maritime History and the Pedagogical department so it has at its disposal all the necessary experts in the above mentioned fields and would play a large role in developing methods and strategies to support coordinated decisions and actions among different actors responsible for park management, identification of possible support measures and actions that can support cooperative approach, standards and concrete guidelines for development

and integrated plan, indicators for monitoring and evaluation, efficient use of financial instruments.

**Conservation Department in Rijeka for the Primorje-Gorski Kotar County / Ministry of Culture** performs inspection tasks in the field of protection and preservation of cultural property, ensures co-operation with other bodies of local and regional self-government units, as well as legal and physical persons in order to promote and encourage the protection of cultural heritage. It has advisory role in legal aspect of defining possible actions and ventures on project management.

From the national level, there is support through the conservation department and financial support for site work and various events, both Ministry of Culture.

Although here is no general Management Plan for archaeological park Mirine-Fulfinum, some components are elaborated in several different projects.

**Overall development project for the period -2016 - 2020** of the Municipality of Omišalj listed sustainable development and effective management of natural and cultural resources as one of the strategic goals. One of main priorities is seen in efficient disposal of natural and cultural-historical resources through an integrated approach to the valorisation and interpretation of natural and cultural and historical heritage for the purpose of tourism. This is planned through projects for the implementation of archaeological research at the Mirine site and innovative projects for the interpretation of cultural and natural heritage (e.g. digital interpretation, revived history, visitor centres). It also envisages further development of cooperation with the Rijeka Conservation Department and others key stakeholders in culture and tourism

The Municipality of Omišalj has prepared **conceptual design - landscaping project, preliminary museology program for archaeological park, architectural - conservation project, and landscaping project**. There is also **basic study for the future presentation of the archaeological park (2014-2016)**, made by dr. sc. Morana Čaušević-Bully. This study provided guidelines for the further development of the park, a proposal for the content of the interpretation centre, proposals for setting up billboards, for arranging promenades and guidelines on how to take care of the archaeological park from the beginning onwards, arranging land-property relations and dynamics. It is stated that after the works of arranging the park, it should be constantly taken care of by an employee of archaeological collection, which should be established within the museum institution. The beginning of negotiations with the Maritime Museum of the Croatian Littoral in Rijeka is suggested.

### **2.3 Cooperation and coordination among local actors**

The initial stage in the development of the archaeological heritage management plan is the involvement of all important stakeholders in its design and planning. These include: local communities, tourism workers, city administration, archaeologists, scientists, ministries of culture and tourism, urban planners and others interested. A very important item of valorisation of the site itself is the

cooperation of all stakeholders who care about its valorisation. Archaeologists are researching the site, conserving it, collecting the remains, analysing them, documenting them and exhibiting them to the public in the museum. Other important participants are the local community, the tourist board, the competent museum, the ministries of culture and tourism, caterers, landowners, local entrepreneurs, etc.

Furthermore, the role of the Ministry of Culture of the Republic of Croatia, the competent archaeological museum, island local municipalities, the owners of land / real estate in the area, local entrepreneurs / associations of entrepreneurs is of great importance. These stakeholders can be involved in the project, in accordance with their interests, through various project activities: info days, workshops, working groups, publications, public calls and similar.

## **2.4 Involvement of the public**

Despite some and isolated positive developments, the knowledge of archaeology as a significant potential segment of the domestic cultural and tourist offer has not yet been sufficiently adopted in Croatia, in the part where it is accessible and acceptable to the general public.

Civil society is interested in the sustainable use of cultural - historical heritage finds. A number of civil associations operate in the area of the municipality and the island in the fields of dramatic arts, dance, musical arts, books and publishing activities, fine arts and exhibition activities, audio-visual activities etc. that will be possible include in the concept of sustainable use of the cultural heritage. In such a way, their work and values could be visible to a wider circle of visitors / tourists. Recognizing the fact that developed civil society is one of the preconditions and measures of democracy and stability of local self-government units, associations are invited to cooperate in creating, involving, implementation and monitoring of projects for the restoration and economic use of cultural heritage.

Public can be involved in the project, in accordance with their interests, through various project activities: info days, workshops, different cultural events, giving opinions through survey questionnaires and social networks.

It is necessary to strengthen the local community and raise capacities and knowledge in the management, presentation, and use of heritage for the development of local economic products, souvenirs and services. In the use of ancient heritage, the local community also plays a major role in complementing and telling stories about the relationship with ancient heritage, through memories and legends. This would raise awareness, a sense of ownership, pride and responsibility for the heritage of the site and encourage communities to use the heritage for development purposes.

## 2.5 SWOT analysis of management plan

The **strength** of the site lies in values such as the preserved structures of the ancient city, the diversity of remains, as well in the current planning, compliance with legal regulations and documentation of archaeological excavations. The archaeological park is built into the spatial planning documentation. There is already existing cooperation between researchers and higher education institutions and the Ministry of Culture has recognized the potential of the site.

**Weaknesses** include insufficient space for processing and storage of archaeological material, insufficient cooperation and communication between competent institutions of different levels and departments, lack of management structure and site managers.

Undoubtedly, there is great **potential** for the development of the site and many opportunities:

- Connecting archaeological, architectural and industrial heritage and creating a specific management plan, methods and strategies for the improvement and better management of the site and the valorisation of cultural property.
- Creating learning opportunities from each other - institutions, organizations and individuals who care for and work on a daily basis on the conservation and use of the site
- Training that would increase the managerial potential of those responsible for running and managing the site in the future.

As **threats** to the management plan, there may be disagreements about methods and strategies and the application of generalized instead of specific, unique, adapted to the site. Also, superficial cooperation of stakeholders relevant to this part of the project is possible treat.

## 3. ECONOMIC SUSTAINABLE ACTIVITIES AND PRODUCTS

### 3.1 Heritage policy and priorities

The inclusion of the historical environment and heritage in development policies and plans has been done at the local, regional level, in order to connect with tourism, which is one of the most developed and growing branches in the region. It is necessary to encourage and support the implementation of policies and guidelines through new cultural heritage projects.

### 3.2 Existing initiatives or actions

Several participants from various sectors, researchers, conservators, urbanists as well as the municipality of Omišalj have been working on the development project documentation of the site for many years, the tourist board works on the promotion and organization of events at the site and the public is involved through various events (workshops, ancient days, concerts, presentations).

### 3.3 New or innovative initiative or activity

It is important to develop infrastructure, superstructure and a complex cultural-tourist product based on connecting the site with other heritage facilities that would enable tourist accessibility, safety and enjoyment and increase the number of visitors/tourists.

Continuous installation and updating of contemporary tourist-traffic signals, better connection with destinations within the county and at the national level, increasing visibility at the national and regional level by making leaflets, info desks, presence on social networks and fairs, connecting with tourist agencies in the island of Krk, county, countries and regions. Networking with other heritage content of similar and different profile, development of walking and cycling routes that connect natural and cultural heritage.

### 3.4 Target groups and stakeholders

The tourist board has a very important role in promoting the site itself. It needs to constantly devise new ways to attract visitors. It can cooperate with economic and non-economic institutions where it focuses on activities related to tourism infrastructure and logistics, organization of various events, promotion and provision of all information related to the site. Its cooperation with public bodies, public services, cultural and other organizations is important. It has capacities and strength for branding the destination and developing, improving cultural tourism offer.

Other participants have their role in this part of project: tourist and travel agencies, hotels and camps, private renters and caterers, tourist's guides, animators as well as small crafts, manufacturers, companies and merchants.

### 3.5 SWOT analysis of sustainable economic activities

Tradition of tourism and rich cultural heritage of area are the greatest **strengths** and basis regarding to development of specific economic products and activities. The existence of a large number of professional tourist staff, excellent geostrategic position and initiatives that recognize heritage as a resource for development, developed network of cycling and walking routes on the island, high degree of ecological progress and development on the island of Krk, all speak in favour of the development of the site.

In addition to the above strengths, there are numerous **opportunities** for further development of the destination and locality, primarily raising awareness and capacity of the local community for preservation, interpretation and use of heritage through a series of educational activities and workshops:

- Organizing information days for the local population and schools by archaeologists in new research, encouraging the creation of events and programs by the local community.

- Education for heritage interpretation, tourist guides and animators and local population to provide accommodation and food services in households, make souvenirs and various authentic products.

The perspective of tourism development lies in the territorial marketing strategy and connecting resources and facilities within the county, which would combine an active vacation with a visit to cultural facilities and specific gastronomy. Thus, in the foreseeable future, it would be possible to develop a complex tourist product that will combine numerous heritage and cultural facilities, tourist routes, creative events, souvenirs, a fusion of ancient and local gastronomy and natural resources.

**Threats** that could arise are insufficiently successful promotion in terms of shading culture with general tourism, superficiality in the interpretation of heritage, insufficient connection of sites with other tours at the regional and national level or poorly defined, uninteresting tours as well as lack of interest of stakeholders. One of the most important threat is the growing obsolete oil and gas industries - especially LNG facilities situated 150 meters from the church of Mirine, across the Sepen Bay.

## 4. IDENTIFICATION OF ICT TOOLS

### 4.1 Existing ICT tools

ICT tools are already used in the archaeological park with the aim:

- to improve/enlarge presentation/interpretation of the archaeological heritage, to enhance the territorial/cultural identity, to promote the protection of archaeological heritage;
- to enlarge audiences (especially of young people and disadvantaged categories);
- to better analyse features and needs of archaeological parks' visitors.

No special ICT tools have been implemented at the site so far. The municipality of Omišalj and the Tourist board as well as different associations provide promotion and information about park through websites and social networks. During the seasonal period, a summer cinema and various cultural events are held at the site, and the tourist board also recorded a promotional video.

### 4.2 Authorities and bodies involved in ICT activities

*Industrial Heritage Centre (CIB), Rijeka* - valorisation and appropriate presentation of cultural heritage in an interactive, innovative and multimedia-based way.

*Faculty of Engineering, University of Rijeka* - advisory role, educational aspect cooperation, support in the implementation of ICT solutions.

*Private companies* in the field of ICT technology will participate through a call for tender for the development and implementation of specific ICT tools at the site.

### 4.3 Target groups and stakeholders

The target groups are residents of the municipality of Omišalj and its surroundings, pupils from the local schools (island and the County), excursionists and tourists from the region and the rest of the country, neighbouring countries, Europe and the world who pass or come to the island of Krk, cultural workers, students, scientists, ICT companies and experts, while indirect target groups include providers' services and producers of goods in tourism and / or related to tourism.

Idea is to set an **interactive panels or viewing points for tablets of 3D reconstructions** of what the visitor sees exactly in front of him. As the panel (or a visitor with a tablet) moves, so does the 3D reconstruction. The viewing points would be set through the entire archaeological area, near the remarkable spots, such as forum (temple, basilica), Mirine (atrium, sanctuary, nave...), mausolea, urban villa, etc. For instance, the panel / viewing spot near the temple will permit to the visitor to visualise at the same time the real remains of the temple, as it looks in its current state, and on the panel an identical view of the temple, but in full reconstruction. An alternative are tablets that can be borrowed at the entrance. Also **"talking benches"** that work on solar energy would be interesting to set up on site.

### 4.4 SWOT analysis of ICT tools

ICTs have found their way to life of each individual and thus they have become an indispensable part in all other segments of society. The site with its cultural richness provides an ideal basis for the development of 3D models of reconstruction, but it is necessary to ensure all other conditions for implementation (infrastructure) and quality production of the appropriate model. There is generally a problem of insufficiently fast adaptation of services used by the community to this new one digital world. It is not just about slow reaction but is inevitably to emphasize the problem with finances, staff training, technical support and providing the necessary infrastructure on the field.

## 5. CONCLUSIONS

### 5.1 Characterizing factors

Rich cultural heritage and tradition of tourism due to excellent geostrategic position of island of Krk are the **greatest strengths** and base regarding to development of archaeological park, also as fact that a number of actors are constantly collaborating on its development and improvement. Mirine - Fulfinum archaeological park is entered into the register of cultural goods of the Republic of Croatia as a protected immovable cultural property of the Republic of Croatia managed by the Ministry of Culture, so from the national level there is regular annually support through the conservation department and financial support for site work and various events through Ministry of Culture.

## **5.2 Qualifying factors**

The greatest value today is certainly the cultural property, i.e. the archaeological remains and the recognition of the location as exceptional heritage value on a national level.

There is already a certain promotion of the park by the Tourist board and the Municipality of Omišalj as well by associations from the area and different kind of events on site, involvement of researchers, the public and associations through various workshops, festivals, ancient days etc.

## **5.3 Critical situations**

One of the major drawbacks is the fact that the part of the land through which the park extends is privately owned and is a long process of ownership conversion and land acquisition by the municipality. It is very necessary to provide all the communal infrastructure on the site. The threat is insufficient interest and incoherence of all project participants, landowners, local authorities, cultural institutions, private companies etc. and lack of financial resources. When it comes to ICT technologies, it is a very important to set quality process that will ensure a newly created digital product a sustainable future.

## **5.4 Challenges and opportunities**

It is necessary to make a specific management plan (determine the vision, goals and measures of management), and to better arrange the site to be ready to visit in a new guise. By readiness is meant placing adequate road signs /important directions, the creation of the contemporary archaeological park that will rich offer with adequate application of modern technology and inventions (audio-visual presentation of remains, etc.). It is necessary to educate employees and all those who will participate in the work of the site (starting with employees in museums, specialized guides, travel agencies, etc.). Without proper and good designed marketing is difficult to achieve high traffic, and consequently revenue. It is necessary to make a website, promotional flyers, printed guides, brochures, etc.

In addition to the above, this analyse sought to explore the possibilities of transforming the site into the modern archaeological-tourism product with good management policy and use of innovative ICT tools, and point to the potential of participation of the local population and all other stakeholders in the project.

## ARCHAEOLOGICAL PARK POETOVIO IN PTUJ (SLOVENIA)

### 1. PRESENTATION OF THE ARCHAEOLOGICAL PARK

#### 1.1 Relevant legislations in force in Slovenia

The archaeological heritage is protected at the national level by the Cultural Heritage Protection Act (Zakon o varstvu kulturne dediščine, ZVKD-1). Integrated heritage conservation is implemented through development planning and other measures undertaken by the State, regions and municipalities by including heritage in sustainable development, while respecting its special nature and social significance. Heritage protection in the public interest comprises identification, documenting, conservation, presentation and promotion of heritage.

Public service for immovable heritage protection is provided by Institute for the Protection of Cultural Heritage of Slovenia, which covers through its organisational units (Cultural Heritage Service) the territory of entire state. Among others, the institute participates in drawing up the heritage protection strategy and proposes measures for its implementation.

Municipalities adopt municipal acts on the protection of cultural monuments of local importance. The Government of the Republic of Slovenia can declare an archaeological site of special significance to be a cultural monument of national importance.

Public service for movable heritage is provided by national and authorized (regional, local etc.) museums.

#### 1.2 General presentation

##### *Development of the archaeological park*

With the awareness that Panorama in Ptuj is one of the most important as well as the last remaining unspoiled district of the Roman town of Poetovio, the municipality of Ptuj decided to create an archaeological park here with the intention of improving the quality of life in the town and offering a new tourist attraction for both the local inhabitants and the visitors. The municipality commissioned extensive geophysical investigations in 2015, created temporary pathways in 2017 and commissioned a conservation plan in 2018.

##### *Size of the park area*

16 ha.

## *Landscape*

Panorama in Ptuj is an elongated foothill of the Slovenske gorice (267 m asl). It runs northwest-southeast and has two rounded peaks. Together with the adjacent castle hill (Ptujski grad), it rises above the historical passage across the River Drava. It offers a wonderful view over the medieval castle and town of Ptuj, over the river and its plain and over the eastern fringes of the Alps in the distance. It is located in the immediate vicinity of the medieval town, however already at the edge of the modern settlement.

Chance finds and small-scale excavations have revealed the existence of significant archaeological remains on Panorama. After World War II, a water cistern was constructed on top of the hill and a plantation of fruit trees set up on the slopes that involved earthworks such as deep planting holes and terraces; it appeared that these works completely destroyed the Roman layers.

Less than a decade ago, the fruit tree orchard was removed and the hill again became accessible to the public. The hill is now open grassland with some small isolated trees.

## *Historical meaning of Poetovio*

The oldest settlement in Ptuj is dated to the Early Eneolithic. During the 1<sup>st</sup> century BC, several small Celtic settlements were situated there that belonged to the larger community of the Taurisci. The main settlement was probably already named 'Poetovio'. Prior to Roman occupation, the territory of Ptuj was incorporated in the Norican Kingdom (*regnum Noricum*).

The Roman town of Poetovio was located in the province of Upper Pannonia and sprawled underneath a large part of the modern town of Ptuj. At the beginning of the 1st century AD, an army fort was built here and occupied first by *legio VIII Augusta* followed by *XIII Gemina*. After the abandonment of the fort, *Colonia Ulpia Traiana Poetovio* was established between 98 and 102, rapidly developing into an important administrative centre hosting the archives and the records office (*tabularium*) for the province of Upper Pannonia, as well as the central offices of the Illyrian customs and of inheritance tax for both Upper and Lower Pannonia (*XX hereditatum ultrarumque Pannoniarum*). In the early 4th century, Poetovio was included in the province of Noricum Mediterraneum. It was abandoned before the mid-5th century, together with most towns in the exposed areas along major roads crossing the eastern fringes of the Alps.

The significance of Poetovio lay in its strategic location at the river crossing. It was situated at the crossroads of the Amber Route that connected the northern Adriatic and the Baltic and the navigable and mainland routes along the River Drava. Habitation remains stretch some 3.5 km along the main road and on both banks of the river. Throughout the Roman period, the town retained its initial layout along the road with an irregular perimeter and several habitation areas or districts. Among the most important parts are those located near the bridge on the left bank of the Drava at Vičava and on the hill of Panorama. It is here that we may expect to find the forum, various public buildings and the houses of the town's elite.

### *Archaeological monuments on Panorama hill*

Archaeological evidence shows that Panorama was one of the central districts of Poetovio. Its sunny and elevated location directly above the centre of the town with forum, overlooking the river crossing and the main thoroughfare, made it an attractive habitation area.

In the Roman period, the gentle south-eastern and eastern slopes of Panorama were built-up. A cemetery was located on the north slope. The geophysical investigations have revealed the urban design with a rectilinear grid of streets and building plots.

The archaeological monuments are visible only on GPR images. They seem to be in good condition, however none of them is exposed on the surface.

#### **Streets and insulae**

Panorama was built-up according to a preconceived plan and had a well-organized infrastructure: parallel streets with gravel or stones surfaces and drainage canals, two squares and a water supply system. The streets divide the space into several large insulae. The buildings were constructed on low terraces to adapt to the slightly inclined terrain. Most are narrow and long with evenly arranged rooms that suggest production-commercial activities. Three large buildings with numerous rooms (I, VII and XIV) were probably lavish houses, particularly the highest lying Building XIV with associated baths and a peristyle (XVI).

#### **Aqueduct**

Water was supplied along the valley of the Grajena stream to reach the northern slopes of Panorama at the approximate altitude of 245 m, where it appears to have terminated in large Building XXVIII.

#### **Main thoroughfare**

The main road that came to Poetovio from the west crossed the river and the town centre with the forum and continued across the saddle between the Panorama hill and the castle.

#### **Presumed fortification wall**

The GPR images show a long, variously wide and in some places interrupted anomaly along the edge of the north-eastern slope that probably represents the remains of a thick wall.

#### **Cult centre**

Panorama yielded numerous votive monuments and images that show it was one of the cult centres of Poetovio.

Constructed on the summit of the hill, Building XVIIa with a square central space surrounded by a triple corridor might be an ambulatory sanctuary, that can as yet not be connected with one particularly divinity.

Two rooms intended for the worship of different deities were discovered in Building X (or XI). They provided a certain number of votive monuments belonging to the cults of the Danube Horsemen and Silvanus.

The votive slabs for Nutrices recovered from one of the Late Roman graves as well as a statue of a Nutrix indicate that a sanctuary dedicated to them must have stood on Panorama as well. The cult of Nutrices, protectors of children and the family, was the most important cult with roots in the Poetovio area.

The cult centre on Panorama was active into the Late Roman period, when a church was constructed near the summit.

### **Cemetery**

Burials have come to light on the lower, north peak of Panorama and the northern slope as well as within the ruins of the abandoned buildings on the summit. Burial began in the 3rd century at the latest. Fragments of decorated stone pieces, funerary inscriptions and the foundations of masonry tombs represent the remains of imposing funerary monuments. However, most burials are inhumations and date to the Late Roman period.

### **Chronology**

The absence of modern and more extensive archaeological investigations hinder any certainty as to the beginnings of Roman-period habitation on Panorama. The earliest stray finds date to the 1st century AD and are associated with the army. The first construction phase of some buildings visible on the GPR images may also be associated with the army. In ground plan, Buildings X, XI, XII and XIII in the central part of the south-eastern slope are similar to army barracks.

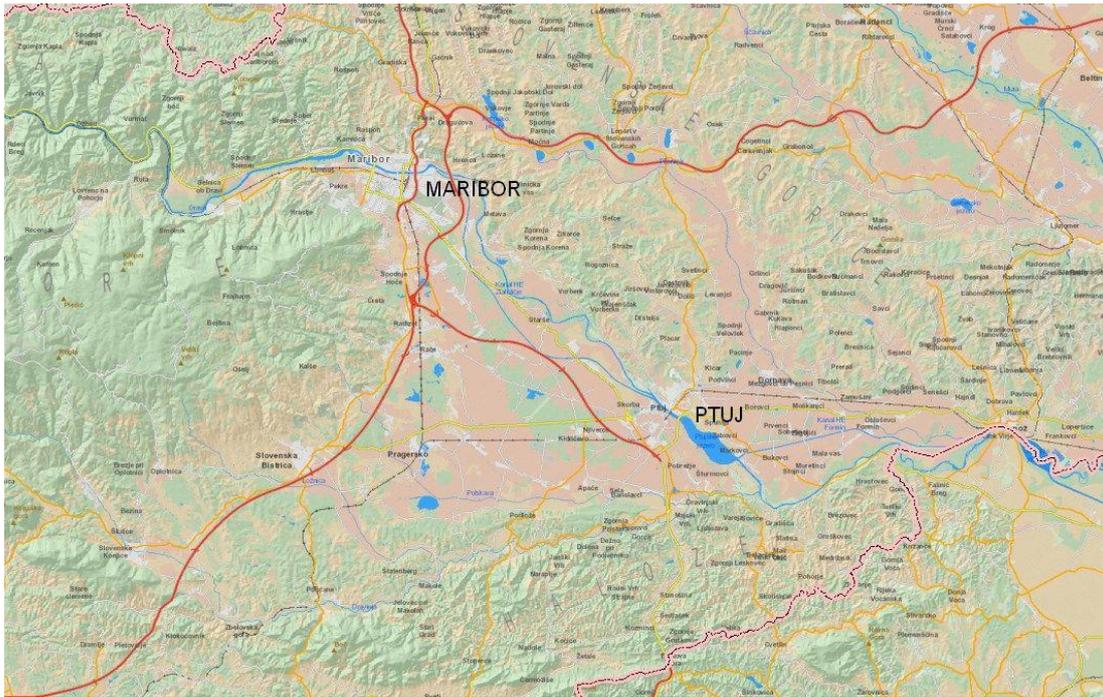
The disposition of streets and buildings shows construction according to a preconceived plan. This regular street grid probably dates to the 2nd century at the latest, possibly soon after the colony had been founded. The habitation district on Panorama had its heyday in the 2nd and 3rd centuries.

The last reliably dated habitation find is the remains of a church from the beginning of the 5th century. After the buildings on Panorama had been abandoned, the cemetery spread among their ruins. The end of habitation came roughly contemporaneously with most other lowland settlements in the south-eastern Alps - in the second quarter or middle of the 5th century.

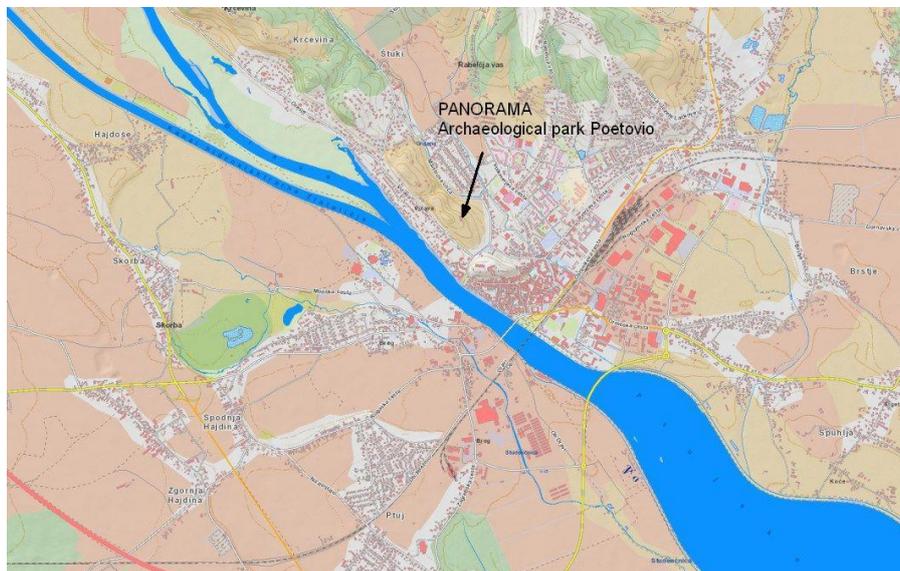
After the end of the Roman period, Panorama was never again inhabited.

### *Present condition of the monuments*

Archaeological monuments on Panorama are covered with soil and not visible on surface. The recently constructed pathways follow the direction of the Roman streets. The marble copies of stone monuments and the information tables give the visitors the first impression of the hidden archaeological heritage.



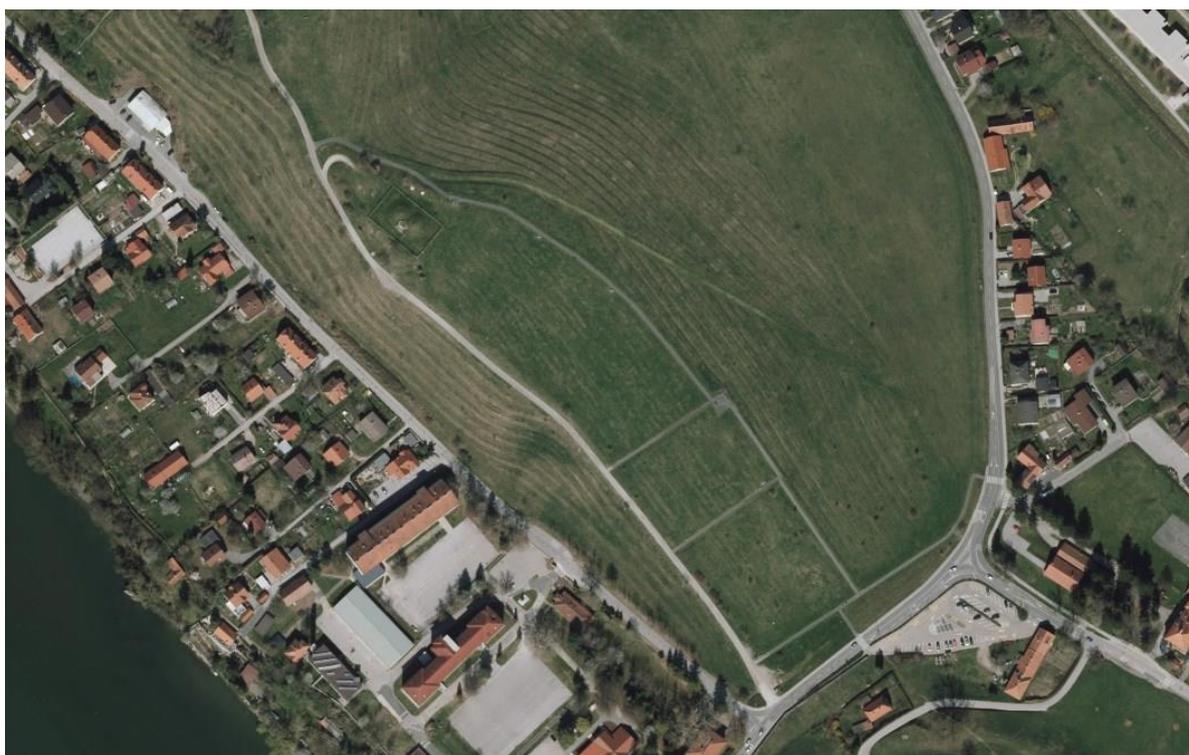
Location of Ptuj. Scale 1:150 000.  
 © Slovenian Environment Agency, *Atlas okolja*;  
[gis.arso.gov.si/atlasokolja/profile.aspx?id=Atlas\\_Okolja\\_AXL@Arso](http://gis.arso.gov.si/atlasokolja/profile.aspx?id=Atlas_Okolja_AXL@Arso)



Position of the Panorama archaeological area and the Archaeological park Poetovio in Ptuj.  
 Scale 1:25 000.  
 © Slovenian Environment Agency, *Atlas okolja*;  
[gis.arso.gov.si/atlasokolja/profile.aspx?id=Atlas\\_Okolja\\_AXL@Arso](http://gis.arso.gov.si/atlasokolja/profile.aspx?id=Atlas_Okolja_AXL@Arso)



Panorama. View towards the northwest (Photo B. Mušič)



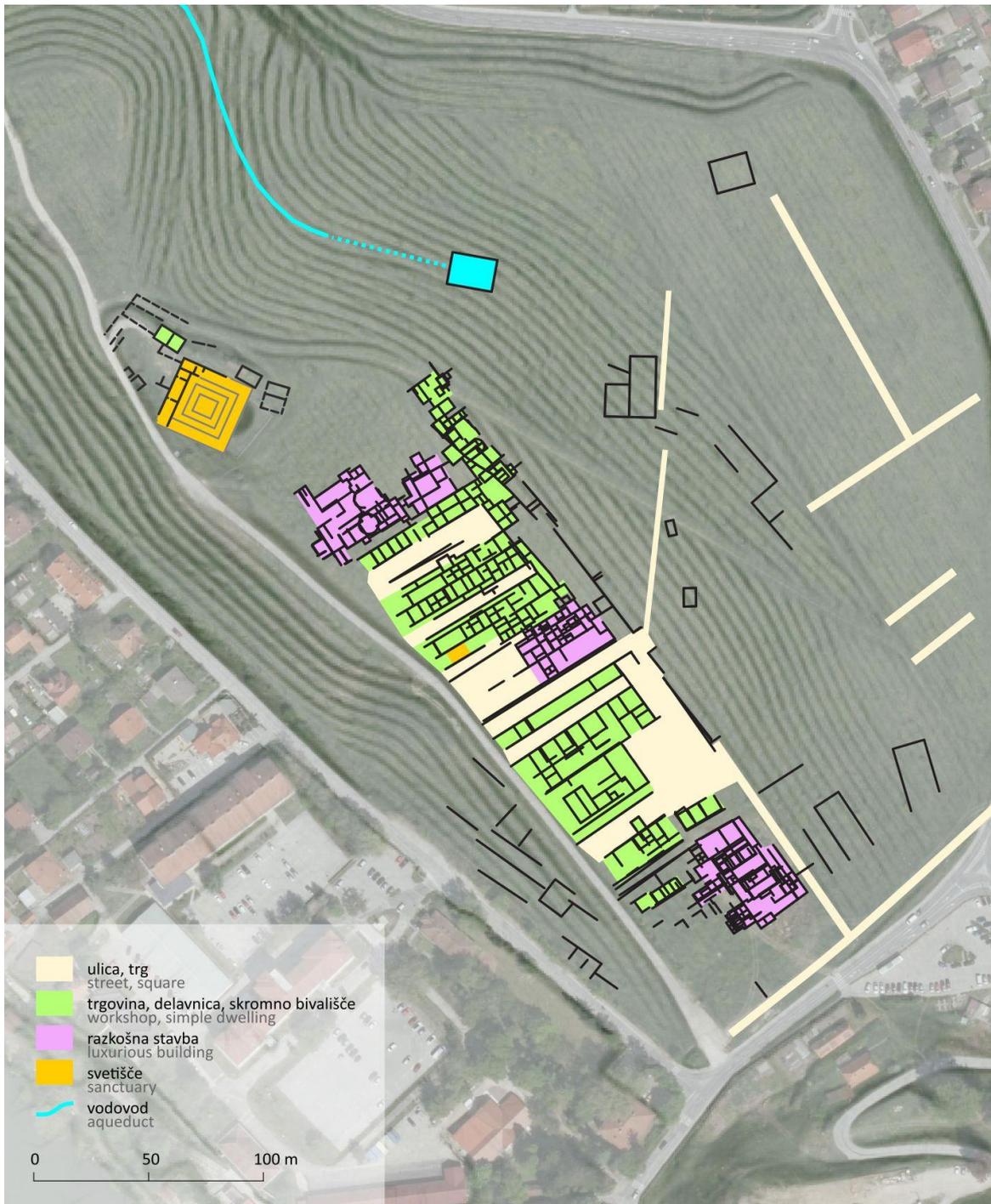
Pathways in the Archaeological park Poetovio, orthophoto.  
© Slovenian Environment Agency, *Atlas okolja*;  
[gis.arso.gov.si/atlasokolja/profile.aspx?id=Atlas\\_Okolja\\_AXL@Arso](https://gis.arso.gov.si/atlasokolja/profile.aspx?id=Atlas_Okolja_AXL@Arso)



Archaeological park Poetovio, pathways. View towards the southeast. (Photo: Archives of the Municipality of Ptuj)



Archaeological park Poetovio. Copy of the votive marble monument and the information table. (Photo: Archives of the Municipality of Ptuj)



Archaeological park Poetovio. Grid of Roman streets and walls as revealed by the subsurface ground penetrating radar (GPR) survey (B. Mušič; elaboration V. Bitenc).

### 1.3 Infrastructure

- Opening of the area: free all the time, no fence.
- Access of the visitors to the entrance: by foot, by bicycle, by car (large parking possibilities in the vicinity), by public transport.
- Moving through the park: mainly by walking along the pathways; moving of disabled persons is possible.

- Information for visitors on site: information tables, copies of stone monuments.
- Museum and/or exhibition place: regional museum with its exhibition places is located in the immediate vicinity.
- Public facilities:
  - ✓ A part of the archaeological area is used as a place for special events, with temporary infrastructure.
  - ✓ Thematic children playground is in preparation.
  - ✓ There are no public toilets on the site.
  - ✓ Bars or restaurants are found outside the archaeological area, but not far away.

#### **1.4 Position in natural system**

The area is covered by a meadow with individual trees. A part of the park is intended for beekeeping. The current weakness is the lack of shade.

Future planting of the park will be in line with the conservation plan. Plants with shallow roots will be selected that do no damage to the archaeological strata. The vegetation will be harmonized with the archaeological presentation, at the same time arranged as a park, suitable for relaxation and other activities.

#### **1.5 Position in human system**

The Archaeological park Poetovio is located in the town of Ptuj (about 18.000 inhabitants), which is important regional historic, economic, education and tourist centre.

The historical and cultural monuments are concentrated in Ptuj and in its immediate surroundings (archaeological sites, medieval town, castles, churches, historical memorials, ethological heritage). Regional Museum Ptuj-Ormož is keeping the largest archaeological, historical and ethnological collection in Slovenia.

Ptuj is easy accessible by all types of roads and public transport.

As tourism is one of the main economic activities, there is a well-developed system of tourist facilities.

## **2. MANAGEMENT PLANS AND STRATEGIES**

### **2.1 General presentation**

Management of the Archaeological Park Poetovio has not been organized yet. However, Municipality of Ptuj adopted several municipal acts on the protection of heritage. The area of Panorama is defined by a decree as a cultural and historical monument and as a spatial planning unit in the Municipal Spatial Plan. It was

included in the contract for the arrangement and cleaning of public areas in the Municipality of Ptuj.

## **2.2 Management Plan or management priorities**

There is no Management Plan for the Archaeological Park Panorama.

The Panorama archaeological site is a monument of local significance, proclaimed by the Decree of the Municipality of Ptuj (2010).

It is included into the Municipal Spatial Plan (2015).

In November 2019, the Municipality of Ptuj signed an agreement with the state of the transfer of land ownership on the Panorama hill to the city of Ptuj.

Management priorities are set out in the Conservation Plan of the Archaeological Park (2018), in which the area is defined as an archaeological site of the highest category, so any intervention must be in accordance with the protection of heritage, while the needs of society for education, leisure and identity building must be taken into account. It is necessary to enable a public presentation of the site. In the first phase, a management plan and an interpretation plan need to be prepared. Landscape design of the area, a plan for the presentation and interpretation of archaeological structures and an interpretation centre are needed. The priorities for presentation and interpretation have already been set as well as the areas of special activities (e.g. attractive viewpoint, thematic children playground, area of experimental archaeology, etc.).

## **2.3 Cooperation and coordination among local actors**

There is a well-developed cooperation among local actors in the setting up policy and management of the park:

- Zavod za varstvo kulturne dediščine Slovenije, OE Maribor (Institute for the Protection of Cultural Heritage of Slovenia - Maribor Regional Office): preservation and protection of the monument, professional support for the proper interpretation of the archaeological site;
- Pokrajinski muzej Ptuj-Ormož (Regional Museum Ptuj-Ormož): interpretation of heritage, popularization of movable cultural heritage in the field of archaeology;
- Javni zavod za turizem Ptuj (Public Institute for Tourism Ptuj): planning of integral cultural and tourist products, promotional activities, development of a boutique cultural and tourist destination;
- Znanstveno-raziskovalno središče Bistra, Ptuj (Scientific Research Centre Bistra Ptuj): connections with good practices abroad, professional support in the field of management / implementation of EU projects;
- Javne službe Ptuj (Public services Ptuj): participation in the preparation of the management plan.

## **2.4 Involvement of the public**

Involvement of professional and general public is planned in the process of preparation of the management plan with workshops, consultations, by real-time communication with the public through social networks, information on the websites of the main actors (Municipality, Museum, others). Cooperation with the Panorama District Community already takes place as well as with various associations (such as Beekeeping Society), public and private institutions.

## **2.5 SWOT analysis of management plan and strategies**

### **Opportunities:**

- involving the public in the process of development of the management plan,
- transfer of good practices and knowledge,
- professional and financial support,
- Ptuj is shortlisted for the European Capital of Culture 2025,
- positioning of Ptuj as a cultural tourist destination in Slovenia and abroad.

### **Advantages:**

- proximity to the old town, castle and residential as well as educational part of the city,
- a popular walking/relaxation location with a beautiful view,
- Ptuj is already a recognizable tourist destination,
- tourist offer is well-developed in town (events, festivals, artistic activity, public institute for tourism, local providers, souvenirs),
- possibility to expansion and upgrade of the tourist offer.

### **Weaknesses:**

- no management plan,
- insufficient interpretation of the archaeological heritage,
- no investments,
- no marketing products.

### **Threats:**

- conflict of interests,
- lack of financial resources,
- no continuity of management.

## **3. ECONOMIC SUSTAINABLE ACTIVITIES AND PRODUCTS**

### **3.1 Heritage policy and priorities**

Ptuj is one of the oldest cities in Slovenia and a great emphasis is placed on the preservation and protection of cultural heritage. One of the key challenges, which is defined in the municipal development document, is the tourist development of the city, the establishment of innovative tourist products and effective promotion.

The establishment of the Archaeological Park Poetovio in the area of Panorama is regarded as one of the key projects.

### **3.2 Existing initiatives or actions**

Ptuj is known as a city of festivals and many other cultural events. A part of the Arsana Music Festival - Opera Night - is already taking place in the area of the archaeological park. Very popular is also a celebration of the First of May by lighting a large bonfire.

### **3.3 New or innovative initiative or activity**

There is a desire for several Ptuj cultural events to take place in the area of the park in the future. Among those events, which have also impact on the national level, are the Roman Games, the Medieval Games, the Ptuj Castle Games, the Days of Poetry and Wine, the Festival of Contemporary Art - Art Stays and various music festivals.

The area is suitable for various educational activities.

It is necessary to establish an infrastructure for thematic children's playground.

### **3.4 Target groups and stakeholders**

- LOCAL COMMUNITY AND LOCAL POPULATION
- VISITORS, TOURISTS
- TOURISM AND ECONOMIC SECTOR: Območna obrtno-podjetniška zbornica Ptuj, Terme Ptuj, Ptujška klet, Perutnina Ptuj, small-sized tourist enterprises in town
- PUBLIC AUTHORITIES: Municipality of Ptuj, Regional Museum Ptuj-Ormož, Institute for the Protection of Cultural Heritage of Slovenia - Maribor Regional Office, Historical Archive Ptuj, Public Institute for Tourism Ptuj, Public Fund of the Republic of Slovenia for Cultural Activities
- INTEREST GROUPS AND NON-GOVERNMENTAL ORGANISATIONS: Znanstveno raziskovalno središče Bistra Ptuj (Scientific Research Centre Bistra Ptuj), Turistično društvo Ptuj (Tourist Society Ptuj), Poetovio LXIX - Društvo za rimsko zgodovino in kulturo Ptuj (Poetovio LXIX - Society for Roman History and Culture Ptuj), Slovensko arheološko društvo (Slovene Archaeological Society), Čebelarsko društvo Ptuj (Beekeeping Society Ptuj), Rotary Club Ptuj, Društvo žena in deklet občine Hajdina (Association of Women and Girls of the Municipality of Hajdina)

### **3.5 SWOT analysis of sustainable economic activities**

#### **ADVANTAGES:**

- An extraordinary location on the outskirts of the old town.
- Ptuj is a well-known tourist destination.
- Attractive green public area.
- Already established events in the area of archaeological park.
- Continuity of archaeological research in the area.

#### **OPPORTUNITIES:**

- Development of innovative and sustainable products with a clearly defined cultural content.
- Use of modern information and communication technologies for the presentation of cultural heritage.
- Attracting domestic investors.
- Preparation of a landscape design competition, which will be the basis for the preparation of the Municipal Detailed Spatial Plan.

#### **WEAKNESSES**

- Unrecognized tourist offer.
- No tourist products.
- No management plan.

#### **DANGERS**

- Lack of financial resources for further development.
- Development of new tourist products and facilities without a pre-known manager.
- Insufficient attention to the preservation of the monument.
- Conflict of interests.

## **4. IDENTIFICATION OF ICT TOOLS**

There is no ICT tool installed in the park.

## **5. CONCLUSIONS**

### **5.1 Characterizing factors**

- The Panorama area in Ptuj is an important archaeological site and at the same time a historically significant settlement area. It is an attractive point in the landscape with a beautiful view of the medieval town, the river Drava and the distant plains and mountains. The proximity of the medieval town, modern residential areas and educational centres contributes to its excellent position.
- The city of Ptuj and its surroundings have a lot of cultural heritage and organize regularly cultural events that have a wider national significance.

- The well-preserved archaeological remains offer great potential for historical interpretation and presentation.
- The archaeological field research could be easily focused on topics that can be presented well to the general public.

## 5.2 Qualifying factors

- The main qualifying elements of the park are interesting archaeological remains, their good preservation and beautiful natural environment.
- Important themes on ancient way of life and historical events could be presented in the park (e.g. military history, the beginnings of settlement, urbanism, buildings, technological development, sanctuaries and cults). These are topics that once and today connected Europe.
- It is possible to integrate park with other archaeological and historical monuments of Ptuj.
- It will complement the already varied cultural life of the city and the tourist offer.

## 5.3 Critical situations

- The current problem is that there is no management plan yet and no manager has been selected yet.
- It is difficult to obtain investments for the park. The municipality is relatively small and has limited financial resources.
- It is difficult to achieve continuity of archaeological research, which is also connected to financing.
- Archaeological heritage is relatively poorly received at the local level, as a large part of the local population sees it only as an obstacle to development and not as an opportunity.

## 5.4 Challenges and opportunities

- A good landscape design will be basis for the higher quality of living in Ptuj. It will represent an attractive the area for education and relaxation.
- New tourist destination will be established.
- Different cultural monuments will be integrated into the comprehensive presentation of Ptuj heritage with the Archaeological Park Poetovio being one of its central points.
- Modern information and communication technologies will be used for the presentation of cultural heritage.
- Development of innovative and sustainable products will be possible with a clearly defined cultural content.
- A well-designed archaeological park can attract local investors.
- Archaeological park gives the possibility that the general attitude towards the archaeological heritage will be improved. It will contribute to the enhancement of the national, regional and local identity.

# GENERAL CONCLUSIONS

## Characterization and quality of archaeological parks

Six archaeological parks presented in the analysis have many common features.

All parks cover relatively large areas, mostly a large part or entire surface of ancient settlement. In Antigonea, Urbs Salvia and Ptuj, the total of very extensive Greek and Roman town are included into the park.

In the case of Sibenik City Museum (Bribirska glavica and Velika Mrdakovica) and Antigonea (Antigonea and Hadrianopolis) is possible to organize network projects within a larger territory

The archaeological parks always incorporate the unique archaeological sites that are at the same time historically important points - at the regional, national and European level. Thus, the parks have the possibility to open up an insight into the period of Greco-Roman antiquity, when Europe was first connected into a unified cultural space.

The areas of the parks have not been built up in modern times, so the preservation of the heritage is very good. The remains, even those still covered with earth, are therefore very informative.

A long tradition of archaeological research is a rule, so that a large amount of high quality data has been already obtained, which enables a good presentation to the general public. Research, usually of a multidisciplinary nature, is still ongoing or its continuity is planned.

The parks are situated in a naturally attractive environment, sometimes in the middle or near protected natural areas. Some of them are far from larger modern settlements, the others in the immediate vicinity of urbanized centres.

All the presented archaeological parks are located as a rule in tourist and traffic developed areas or in the areas with rich tourist potential. The regions with archaeological parks are rich in the monuments of historical and cultural importance. Thus, the parks are already or have the possibility to become an important part of the cultural network in the region or even one of its central poles.

They can be very well or slightly less connected to the social environment. The links are mainly visible e.g. in the organization of cultural events in park areas, the significance of which may exceed the very objectives of the parks.

## **Critical situations**

The most evident critical situations are related to the ancient building preservation: the monuments are easily subject to environmental degradation.

Some risks are associated with the relationships the park has with the local context and its socio-economic dynamics which could eventually proceed towards a growing “isolation” of the park. The parks should be placed in a context of deep economic, social and cultural changes in the regions where they are positioned. Rich heritage in the surrounding regions is often characterized by a strong fragmentariness and it is not sufficiently integrated into the systems of education and tourist offer.

Critical situations in some parks are unresolved property issues (a part of the land is owned by private persons).

A critical element is the absence of standardized rules and procedures for the extension and enhancement and in some cases also the unclear jurisdiction of the institutions that manage the parks or could be the future managers.

Lack of comprehensive and quality management plans is a common problem. The lack of permanent and quality financing program represents another problem as well as the poor interest of stakeholders.

There are some problems concerning the accessibility of the parks and individual monuments, the lack of public transport and insufficient infrastructure in the parks.

Environmental degradation in the immediate vicinity of the parks could be regarded as another possible threat.

## **Challenges and opportunities**

All the parks have the possibility to become important parts of large areas with a system of connected heritage monuments, that are outstanding in the national and European perspective. They have excellent preconditions for the development of cultural tourism, education and the connection with outdoor activities. The local differences and peculiarities should be incorporated into the park programs.

Development of management plans is the most important task as well as the inclusion of various local stakeholders.

The continuity of research represents another precondition for the long-term development of the parks and their integration into the present-day life.

The reorganization is needed for enhancement of the parks, that not only of the areas that are strictly inserted in the parks but also of certain local contexts. The parks can stimulate the development processes and reinforce the local systems, putting the basis for an active preservation of the resources.

There is the possibility to establish relations and connections among the preservation needs of the visible ruins and the underground structures with the economic and social development.

The coordinated organization of the six parks involved can be the beginning of an Adriatic-level network system, first, and European, after.