ΠΛΕΩΝ ΕΠΙ ΟΙΝΟΠΑ ΠΟΝΤΟΝ
Collana di studi di archeologia e storia del Mediterraneo

COMMON SUSTAINABLE GOVERNANCE MODEL FOR ARCHAEOLOGICAL PARKS

edited by
Roberto Perna

eum

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An Archaeological Park is a territorial area where a predominantly archaeological value of the landscape has been identified, integrated with the presence of historical, cultural, and environmental values, an object of a project for an integrated and sustainable development, in close cooperation with the local community.

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INTRODUCTION by Roberto Perna

Premises

Although the idea that archeology must deal with the contemporary world by changing its relations with society is increasingly shared, it is common that Public Archaeology is treated almost like a new discipline. New specialists are confronted on issues that essentially do not concern the archaeologist as we traditionally know: pre-protohistoric, classical, late antiquity, topographer, numismatist, etc.

Instead, we must affirm and reiterate that in archeology the comparison with the present is unavoidable precisely to give meaning to the study of past societies and therefore to find new functions; by mediating with the past, archeology obtains an active and positive impact on reality and on the processes linked to its transformation.

Dealing with the present and with large communities of users also means assuming ethical responsibility for the fact that our work is financed with public resources, imposing on us the obligation to share the results with a wider community than that of specialists and to assume, as operators in the cultural sector, an ethical and civil commitment at the service of contemporary society.

Archeology can and must deal with the present, becoming more and more public. By setting for itself the objectives of improving the quality of the present and contributing to the planning of the future, it in fact realizes in a more effective way its traditionally proper aims and purposes, such as the research, protection and valorization. Thus, avoiding the risk of returning to being a discipline for scholars, increasingly reduced in number, and becoming sclerotized by returning to a new era "of the artefact and of the collection". In particular, the comparison with the problems related to the transformation of the territory is one of the fields in which these relationships seem more evident.

The built landscape is in fact a complex system, made up of subsystems and relationships, defined over time thanks to constructive and destructive processes. The urban settlements, concentrated and scattered, as well as the open, cultivated, uncultivated, marginal and mountainous areas, and the roads are among the many signs, diachronically stratified, of the communities that have followed one another and impose a global approach to landscapes. Despite this, the restriction, by its nature a punctual obligation not to act, is still the most useful tool through which protection is exercised everywhere, even though it is increasingly perceived as an autocratic, in some cases incomprehensible and therefore unjustifiable, imposition. For its purposes, public officials apply interpretative categories that are legitimate even if not always understood by those who are called to follow their indications and consequences. Even worse, the processes of protection and enhancement, despite the macroeconomic data explicitly enhancing their significance in terms of income production, are often perceived as limits to the economic development of territories.

On the contrary, the ongoing democratization processes are moving towards a progressive enlargement of the decision-making basis involved in the management of the territory, with the protection as its priority aspect. Bottom-up processes are now the essential tool of every initiative that seeks to have an effective ability to influence decision-making processes.

It is a long process that has nevertheless had important accelerations in the field of cultural heritage. Think only of the European Landscape Convention (CEP) which calls for the protagonism of the subjects involved in the definition and implementation of landscape policies, and the Framework Convention of the Council of Europe on the value of cultural heritage for society, presented in Faro which assigns a significant role to "heritage communities". Therefore, an archaeologist who, having specific knowledge and skills on the basis of which he recognizes the cultural value of the heritage and imposes protection, must necessarily be supported by another archaeologist who provides a broad base of interested parties with the tools useful for the recognition of the values of which the asset is the bearer. In that way the communities involved in those decision-making processes themselves become bearers of the need for protection and enhancement.

Contributing to the growth of communities also means acknowledging that this growth has already begun some time ago, but also that if the essential and burdensome responsibility of protection laid with the public officials, by now it belongs also to all other public and private subjects that the legislation involves in projects of management and enhancement. An audience and a community of interested parties that could be addressed already exists and if one

does not respond to them and does not deal with them with the use of tools and an effective and efficient approach, there is a risk of remaining isolated in an elitist manner and failing, first in the phase of protection and then in the phase of management and valorization.

It is therefore necessary to include the protection and valorization of the heritage within the framework of coherent policies for the management and planning of the territory. The Convention for the protection of the European Archaeological Heritage, signed in Malta in 1992, already entrusted the heritage itself with an important leverage role in economic and development and social cohesion policies. The Convention established that the needs for the protection of archaeological evidence must be integrated into the programs of territorial planning through the sharing of objectives, consultation and participation of the communities in the decision-making process. If planning and design are essential methods of governance, integrating archaeology into it means valorizing it as a tool for sustainable growth and development. It is therefore thanks to a proactive activity of the archaeologist in the framework of inter-institutional co-planning processes that it will be possible to maintain the centrality of the relationship between archaeological assets and the socio-economic and territorial context.

However, in order for this to be achieved, it is necessary to take note of some limits that can characterize the way of being an archaeologist today: the first is that of the hyper-specialization of historical-archaeological disciplines has led to progressively addressing specific themes in an increasingly in-depth manner. This is certainly a positive outcome of the processes of refinement and articulation of the interpretative categories, but it has often resulted in a lack of acknowledgment of the need for comparison with the global reality.

A related theme is that archaeologists still have difficulties in acquiring interpretative categories and models of data representation and communication that can be shared with specialists of different disciplines involved in common planning and design processes.

On the other hand, multi-disciplinarity is a fundamental aspect of contemporary action when one wants to intervene directly and actively participate in its transformation. Participating in urban and territorial co-planning processes means being able to work in a team, be engaged in dialogue with specialists from other disciplines (geologists, demographers, economists, botanists, ...) generally coordinated by an architect planner, that share responsibilities and skills on those processes. For this, therefore, it is necessary to use clear, normalized, and shared languages. For example, GIS has been a clear demonstration of this limitation for years as a goal and not as a tool.

A dialogue within the framework of a common project also means having the ability to face the responsibilities for an affective integration that the simultaneous implementation of the policies of subjects of different institutional, national, regional, and local level impose. Otherwise, the risk is that the reality, with the ever more pressing requests for transformation expressed by private and public entities, will take charge regardless of the priority need for protection. An elitist approach, in which culture is antithetical to territorial management and the connected economic processes, not confronting itself with the public community, can only interest a small elite and is consequently doomed to fail.

However, questioning and discussing to affirm and underline what is essential for us, and should be for everyone, also means claiming the right for archaeologists to participate in decision-making processes in a structured way. This means to impose, for example, that the teams formed for the realization of urban and territorial planning projects always include the archaeologist not only for the composition of knowledge frameworks or in the function of imposing or reaffirming the constraints, but also the in function of the analysis of scenarios of reference of individual plans and, above all, for the identification of the strategic lines. This is precisely because the archaeological assets are a primary resource for the cultural and socio-economic growth of the territories.

This different way of doing archaeology, which must therefore concern the archaeologist as such and not a new specialist in “public archaeology” or “archaeology for planning”, would also be a way to give job opportunities to graduates and those who are trained in archaeological disciplines.

Objective

The general objective of the TRANSFER project was to develop a new Common Sustainable Governance Model for Archaeological Parks with Guidelines towards enhancing the preservation and valorization of archaeological heritage within the ADRION area. The identification of an elastic model can also go beyond the limits of the ADRION area and propose itself as a common European and Mediterranean approach. Moreover, the governance model will be inspired by an innovative concept of preservation and valorization that takes into account the way in

which the Archaeological Park can interact with the prospective cultural, social and economic development of local communities living nearby and throughout the territorial surroundings, even outside the Park.
The TRANSFER Project will also release an innovative model for managing Archaeological Parks with the aim to overcome the passive protection of Cultural Heritage (CH) and placing the integration between its protection, enhancement, and the economic growth at the center of economic and social development, in a fully and coherently integrated way. The Model must therefore be inspired by an integrated approach to the territory analyzed as a whole and in all its aspects, identifying and outlining development processes that bring all resources into play.
The Management Plan and the Project (MP) are the tools by which it will achieve the proposed objectives. The plan allows each subject operating in line with their own purposes on the territory to come together in a joint project aimed at the full and best possible functioning of the cultural container. In order for the Project outputs to be applicable in different contexts, the TRANSFER Project implementation method also requires that the Common Sustainable Governance Model for Archaeological Parks and the Guidelines be applied in some pilot cases, before their definitive elaboration.

The TRANSFER Project

12 Partners from 6 countries of the Adrion area contributed to the realization of the TRANSFER Project, and in particular: University of Macerata, Lead Partner, and PlayMarche srl, (I) Εφορεία Αρχαιοτήτων. Ιωαννίνων and Computer Technology Institute and Press "Diophantus" (GR), Municipality of Omišalj and Public institution development agency of Šibenik – Knin County (HR), Horizont Association and Institute of Archeology (Akademy for Albanological Studies) (AL), European Youth Center and Institute for Philosophy and Social Theory of the University of Belgrade (SR), Post-graduate school of the Research Center of the Slovenian Academy of Sciences and Arts and City of Ptuj (SL).
The Project was funded with € 1,664,336.80 under the ADRION Program of the European Union (Programme Priority "Sustainable Region") and started on February 1, 2020.

The three topics or thematic project areas

The achievement of the main objective was linked to the achievement of three instrumental objectives linked to three thematic areas (or topics), the first of which can be defined as "development of coordinated and integrated policies and management plans or strategies" which addresses the lack of a model for valorizing and exploiting archaeological heritage integrated into wider local territorial development planning.
The governance model proposed by TRANSFER also seeks to be inspired by an innovative concept of preservation and valorization, which takes into account the way in which an Archaeological Park can interact with socio-economic development of the local communities living nearby and with the potential economic growth of all the activities connected to the Parks. This will directly or indirectly affect the territory starting from new ways of exploitation through the connection of research, management, and enhancement with ICT tools.
It is therefore an objective that requires the linking of the plan policies to two further thematic areas that must be valorized within the management plans:

- identification and enhancement of economic sustainable activities able to conciliate and integrate economic growth with cultural preservation;
  The aim of this thematic area is to identify economic sustainable activities that the management process in an Archaeological Park can generate, being able to combine the growth of local communities with the preservation and valorization of the archaeological heritage. This goal can be achieved both through the identification and analysis of the services and/or products that Archaeological Parks can generate in the territory together with other sectors (e.g. tourism sector, through new tourist routes; cultural industry, with festivals held in archaeological sites; local handcraft and food sector; digitalization and virtual reality sector, publishing and educational industry) and by analyzing how the external socio-economic context can influence the management processes of the Park.
- Identification and enhancement of information and communications technology (ICT) tools able to help in all phases of management processes, from research to enhancement and to better analyze the characteristics and needs of visitors to Archaeological Parks.

In order to manage an Archaeological Park and enhance the fruition of archaeological heritage and to broaden its audiences (especially of young people and disadvantaged categories), innovative ICT-based tools have been developed and applied, also to better analyze features and needs of Archaeological Parks' visitors and to evaluate the effects of management processes.

In particular, the Project TRANSFER will introduce, thanks to the implementation of a Pilot Action for each Park, modern ICT tools and develop and apply innovative management systems for the management of the Park, from research to better monitoring of user behavior and needs.

Archaeological Parks and Sites of the TRANSFER Project as pilot cases and an example for the possible and different situations existing in the Adriatic area

The TRANSFER project includes 6 different countries of ADRION area, with 6 Archaeological Parks as pilot cases in the project: Antigonea Archaeological Park in Albania; Archaeological Sites Velika Mrdakovica and Bribirska Glavica, inside the Network Park of Šibenik City Museum and Mirine-*Fulfinum* Archaeological Park (Omišalj) in Croatia; Archaeological Park of the Site of Dodona in Greece; Archaeological Park of *Urbs Salvia* (Urbisaglia) in Italy; Archaeological Park *Poetovio* (Ptuj) in Slovenia.

The said localities are on a different development level regarding management, infrastructure and relationship with the community as well as the degree of urbanization and socio-economic situation related to the surrounding area. Therefore, their diversity serves as an opportunity to develop a flexible, yet common, management model that would be applicable beyond the TRANSFER project and on a wider area.

Urban Parks in centers with settlement continuity, excluding just partially *Poetovio*, were excluded. These are in fact areas with largely different management problems.

The Archaeological Parks and their surrounding territories in the TRANSFER Project are analyzed 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 related to the three thematic areas.

The interpretative and evaluative categories used in this specific experience are independent of a precise historic-site and idealistic approach but are instead connected to reconnaissance frameworks extended to a wider territorial/ thematic area, in which the problems are complex and intertwined.

The comparison among the different analyses has been made to the adoption of a common scheme of criteria and evaluation categories that can be compared.

The final publication is divided into four parts. The first is dedicated to the methodological approach and the implementation methods of the TRANSFER Project. The second specifically concerns the Common Sustainable

Fig. 1. Location of the areas involved in the TRANSFER Project (© Progetto TRANSFER)

Governance Model for Archaeological Parks. The third part summarizes the results of the Park management plans identified as exemplary cases and, finally, the fourth part relates to the final strategy shared by all partners, being the outcome of the project.

All information on the Project can be consulted on the website: **https://transfer.adrioninterreg.eu**

PART I

Omišalj 12/10/2022

I - THE METHODOLOGY AND THE THREE TOPICS/ THEMATIC AREAS [R.P.]

I.1. The ESAs and the GPs

In the first phase the partners worked for the purpose of acquiring and exchanging information regarding the three thematic areas or topics. Knowledge exchange was anticipated and ensured by the realization of two Reports regarding the Existing Situation Analysis and the identification of Good Practice. In particular, the following have been implemented:

a. Existing Situation Analysis (ESA). This report is a key document, useful to share information, knowledge and experiences regarding partners' Archaeological Parks and their surrounding territory and concerning the three thematic topics or thematic project areas.
b. A Good Practice (GP) is an exemplary initiative, practice, action, method, or an implemented project that positively influenced the systems and which is worth transferring and exploiting in different contexts and environments by new users.
   The Good Practice Report elaborated in the initial phases of the project was based on the collection of various good practices - both present in the territories of the Partnership and in Europe. The aim was to add value and bring innovation from local, national and European territories from relevant practices, related to the three mentioned topic of the TRANSFER project.
   As the project focuses at developing a Common Sustainable Governance Model for Archaeological Parks to be applied mainly at local or regional level using bottom–up approach, selected case studies took note of different socio-economic contexts and variables previously highlighted so that they can be transferred to other territories.
c. An important moment was the exchange of experiences through specific meetings where all the PPs directly discussed, analyzed and shared the contents of the ESA report and the GPs.

I.2. The WGs and the three topics

Initial phases of the project comprised of forming three working groups. Each of the three working groups worked on one thematic area that was recognized as crucial for sustainable preservation and valorization of Archaeological Parks.
In order to have quality, concrete and comprehensive final work outcomes in the Working groups, the work in all thematic areas was separated into three main methodological steps:

1. Analysis and synthetic interpretation of the relationships between Archaeological Parks and territories;
2. Analysis of the reference scenarios;
3. Ideas and projects for Common Sustainable Governance Model ideas.

Following the steps above, each Working group covered different topics relevant to their thematic area in order to elaborate the final reports of their work. Integrated work of the three Working groups served as a basis for the Common Sustainable Governance Model, organized in Common Model (CM) and Guidelines (GL).
Representatives of the 12 partner organizations from six different countries participated in the work of the Working groups, together with the representatives of Stakeholders and Associated Partners.
Thus, the results of the work of the Working Groups also sought to provide a basis for the development of a flexible Common Sustainable Governance Model that can be applied in different Archaeological Parks, sites and scenarios.

I.3. Dialogue with Stakeholders (SH)

The dialogue with the Stakeholders was fundamental for guiding the processes that led to the definition of the Common Sustainable Governance Model. They were given a questionnaire related to the main issues that were under discussion within the WGs.
The questionnaires aimed first at verifying whether the data that emerged during the ESA and the study of GPs were shared and perceived in the same way by the community. Secondly, the responses from the SH made it possible to guide the analysis of the WGs and subsequently the development of the Common Sustainable Governance Model.

There were 180 interviewed SH, most of them (53) were from the field of higher education or research, while 35 were local public authorities.

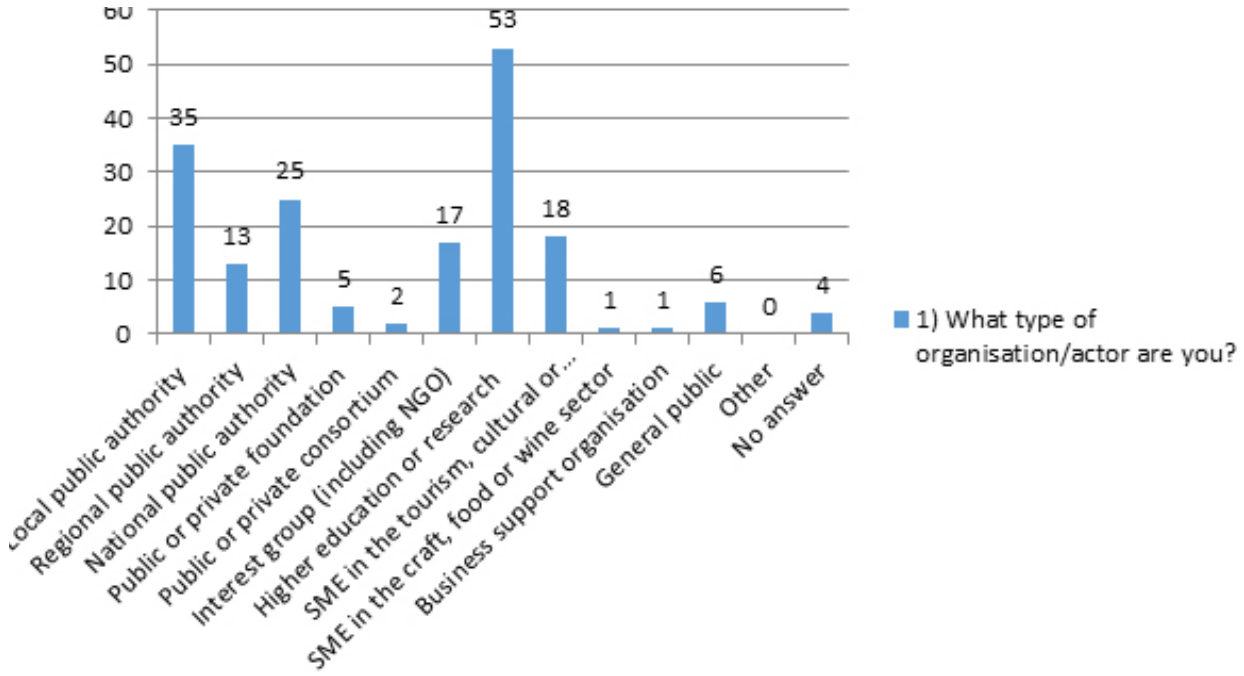

Fig. 2. Type of Stakeholders who replied to the questionnaire (© Progetto TRANSFER)

The majority of them were from Italy (53), followed by Croatia (43) and Slovenia (39).

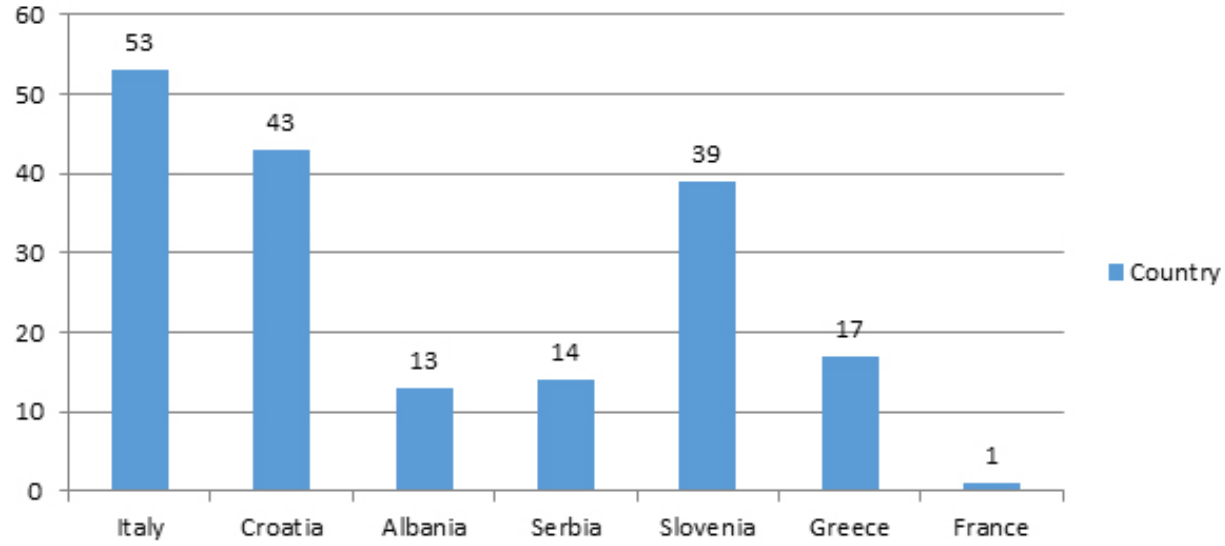

Fig. 3. Origin of the Stakeholders who answered the questionnaire (© Progetto TRANSFER)

Only 18 interviewees manage archaeological parks.

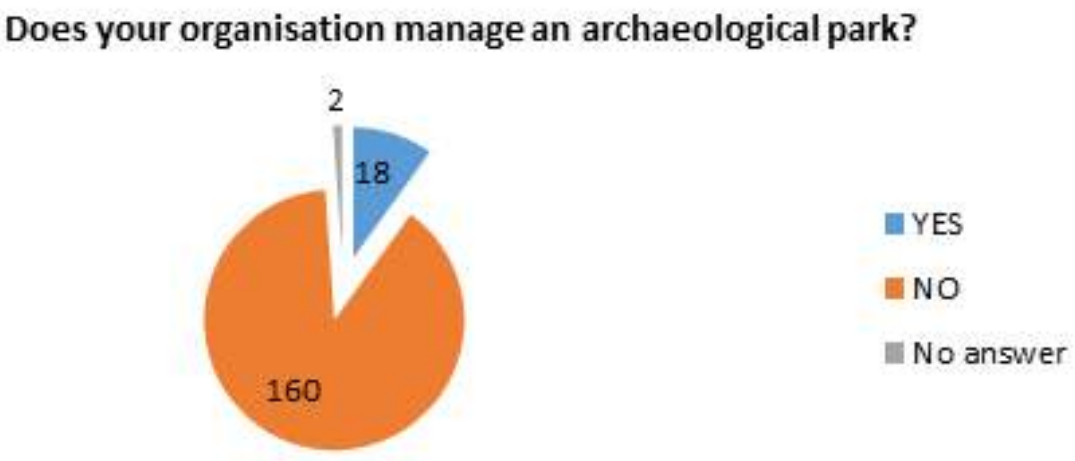

Fig. 4. Stakeholders who have direct competences in the management of Archaeological Parks (© Progetto TRANSFER)

I.4. The Common Sustainable Governance Model: Common Model and Guidelines

The work of the WGs, taking into account the assessments that emerged from the analysis of the questionnaires relating to the comparison with the SHs, was the basis for the elaboration of the Common Sustainable Governance Model. The numerous contributions produced by the WGs have been therefore collected in Part II of this publication. The aim of this document is to become an effective management manual for archaeological parks, available to those who are responsible for these places of culture.
The manual indicates, in a simple and schematic way, the methods, operational steps, necessary documentation and other useful material for tackling the complex problems of integrated planning and management of archaeological parks.
To facilitate the reading and practical use of the Common Sustainable Governance Model it was decided to organize it into two distinct parts.
The proposed Model consists of a methodological part entitled "The Common Model" (CM) and practical guidelines entitled "The Guidelines" (GL). The CM takes into account the theoretical and methodological setting at the basis of the proposed approach. The GL provides concrete steps on how to translate the proposed methodological approach into an executive archaeological management plan.

I.5. Elaboration of Management Plans and the Pilot Action

The TRANSFER Project foresees the application of the Common Sustainable Governance Model in six selected pilot cases in order to verify both its feasibility and application problems as well as its effective ability to flexibly confront and interact with different contexts. This will also guarantee the effectiveness of the governance model and its replicability. Therefore, six Management Plans (MP) were elaborated, which are briefly described in Part III.
An important aspect of the application of the MPs was the implementation of Pilot Action (PA) for each of them. In particular, the focus of the PAs was on the exploitation of the ICT solutions in various phases of research, management and enhancement of the Archaeological Park and consequently on the evaluation of the economic impact of their application. The objective of the PAs was also to test and revise, if necessary, the MPs, before their adoption.

II - RESULTS OF THE EXISTING SITUATION ANALYSIS (ESA) AND THE ANALYSIS OF GOOD PRACTICES (GP) [J.H.]

II.1. The analysis of the existing situation

The Analysis of the Existing Situation (ESA) is considered a key document useful for sharing information, knowledge and experience. It was carried out in the six Archaeological Parks of the following partners: *Urbs Salvia* (Italy), Dodona (Greece), Antigonea (Albania), Network Park of Šibenik City Museum (Archaeological Sites Bribirska glavica and Velika Mrdakovica in Croatia), Mirine-*Fulfinum* (Croatia) and *Poetovio* (Slovenia) (Fig. 1).
The Archaeological Parks and their surrounding areas were studied in terms of historical and cultural features, archaeological monuments, natural and economic aspects, management plans, methods and applied practices. Particular interest of the analysis was related to three thematic project areas, which are:

- Development of coordinated and integrated policies and management plans or strategies; Identification of economically sustainable activities to balance economic growth and cultural preservation;
- Identification and enhancement of information and communications technology (ICT) tools able to help in all phases of management processes, from research to enhancement and to better analyze the characteristics and needs of visitors to Archaeological Parks.

Each individual analysis was organized according to the same system. The analysis was based on the evaluation of "structuring factors", the set of components and relationships that exist concretely in the organization of local systems of each archaeological area.

II.1.1. Structuring factors:

1. Presentation of the Archaeological Park
    1.1 Legislation in force
    1.2 General presentation
    1.3 Infrastructure
    1.4 Position in the natural system
    1.5 Position in the human system
2. Management plans and strategies
    2.1 General presentation
    2.2 Management plan or management priorities
    2.3 Cooperation and coordination among local Stakeholders
    2.4 Involvement of the public
    2.5 SWOT Analysis of the management plan and strategies
3. Economically sustainable activities and products
    3.1 Cultural heritage policies and priorities
    3.2 Existing initiatives or measures
    3.3 New or innovative initiatives or measures
    3.4 Target groups and Stakeholders
    3.5 SWOT Analysis of sustainable economic activities
4. Identification of ICT tools
    4.1 Existing ICT tools
    4.2 Authorities and institutions involved in ICT activities
    4.3 Target groups and Stakeholders
    4.4 SWOT Analysis of ICT instruments

Taking into account all structuring factors, main problems, constraints and threats affecting the individual Archaeological Park as well as the challenges and opportunities were summarized. The following components were also identified for each Archaeological Park:

1. Characterizing factors;
2. Qualifying factors;
3. Critical situations;
4. Challenges and opportunities.

II.1.2. Characterization and quality of Archaeological Parks

The six Archaeological Parks presented in the analysis share many common characteristics. All the Parks cover relatively large areas, usually a large part or an entire area of an ancient settlement. In Antigonea, *Urbs Salvia*, and Ptuj, the entirety of the very extensive Greek and Roman city is included in the Park.
In the case of Šibenik City Museum (Bribirska glavica and Velika Mrdakovica) and Antigonea (Antigonea and Hadrianoplis) it is possible to organize network projects within a larger area.
The Archaeological Parks always include unique archaeological sites, which are at the same time historically important points - at a regional, national and European level. Thus, the Parks have the opportunity to offer a glimpse into the period of Greco-Roman antiquity, when Europe was first united into a single cultural area.
The areas of the Parks were not built on in modern times, so the heritage is very well preserved. The remains, even if they are still covered with earth, are very informative. Archaeological research usually has a long tradition, so a large amount of high-quality data has already been obtained, allowing for a good presentation to the public. Most of the multidisciplinary research is either still in progress or their continuation is planned. The Parks are located in naturally attractive environments, sometimes in the middle of or near nature reserves. Some of them are located far from major modern settlements, while others are in close proximity to urbanized centers.
All the presented Archaeological Parks are typically located in areas developed for tourism and transportation or in areas with rich tourist potential. The regions with Archaeological Parks are rich in monuments of historical and cultural importance. Thus, the Parks are already an important part of the cultural network in the region or one of its central poles, or they have a possibility to become one.
They may be very well or somewhat less well connected to the social environment. The connections become visible mainly through the organization of cultural events in the Park areas, the importance of which may go beyond the actual goals of the Parks.

II.1.3. Critical situations

The most obvious critical situations are related to the preservation of ancient monuments: the monuments are easily exposed to environmental degradation. Some risks are related to the relationship between the Park and the local environment and its socio-economic dynamics, which could eventually lead to an increasing “isolation” of the Park. Parks should be placed in a context of profound economic, social, and cultural changes in the regions where they are located. The rich heritage in the surrounding regions is often characterized by a high degree of fragmentation and is not sufficiently integrated into the systems of education and tourist services.
Critical situations in some Parks concern unresolved ownership issues (part of the land is owned by private individuals). A critical element is a lack of standardized rules and procedures for expansion and upgrading and, in some cases, an unclear responsibility of the institutions that manage the Parks or could be their future managers. The lack of comprehensive and high-quality management plans is a common problem. The lack of a permanent and high-quality funding program is another problem, as is low stakeholder interest. There are some problems related to the accessibility of Parks and individual monuments, lack of public transportation, and inadequate infrastructure in the Parks. The deterioration of environmental conditions in the immediate vicinity of the Parks could be considered another possible threat.

II.1.4. Challenges and opportunities

All Parks have the opportunity to become important parts of large areas with a system of interconnected cultural monuments, exceptional from a national and European point of view. They have excellent conditions for the development of cultural tourism, education and connection with outdoor activities. Local differences and peculiarities should be included in Park programs.

The development of management plans is the most important task, as well as the involvement of various local Stakeholders. Continuity of research is another prerequisite for the long-term development of the Parks and their integration into contemporary life. The valorization of the Parks requires transformation, not only of the areas strictly included in the Parks, but also of certain local contexts. Parks can stimulate development processes and strengthen local systems by providing the basis for active stabilization of resources.
There is an opportunity to establish relationships and links between the conservation needs of visible ruins and underground structures with economic and social development. The coordinated organization of the six Parks involved can be the beginning of a network system at the Adriatic level, and then at the European level.

II.2. Good Practice report

The Good Practice Report is based on a collection of various best practices that exist both in the Partnership areas and in the Adrion area/Europe. The aim was to add value and gather innovations from local, national and European areas with relevant practices on the following topics:

- Coordinated and integrated management strategies and plans;
- Economically sustainable activities and products;
- Innovative ICT tools.

The report provides a brief overview of the state of the art in the Adrion area and in Europe in terms of the level of innovation in the three thematic project areas mentioned above.
The selection of the good practices was made after establishing a set of criteria that allowed collecting and classifying the examples of good practices.

These criteria include:

- innovation;
- replicability and transferability;
- significant contribution to mainstreaming or system development;
- sustainability;
- impact;
- coherence.

As the project focuses on the development of the Common Sustainable Governance Model for Archaeological Parks to be applied mainly at the local or regional level (bottom-up approach), it is important that the selected good practices be transferable to local and regional areas. The presentation of each good practice follows the same system: identification of good practice;

- background;
- goals;
- resources;
- implementation;
- stakeholder and audience involvement;
- results and impact;
- learning points and conclusions;
- contact and links;
- sources.

The following best practices were presented by topic.

II.2.1. Coordinated and integrated management strategies and plan

- Enhancing Cultural Heritage with a new perspective through BlueMed: the Underwater Museums, Greece
- Management plan of the Butrint National Park, Albania
- Tourist upgrading of the Fortress of St. Nicholas in the Canal of St. Anthony, Croatia
- Simonov zaliv Archaeological Park: management strategy and plan, Slovenia
- Management plan for the Roman town of Siscia, Croatia
- Integrated approach to Cultural Heritage conservation - *Bač* Fortress (Centuries of *Bač*), Serbia
- Management model for the Pivka Military History Park, Slovenia

- "Playmarche: a regional heritage area 2.0", Italy

II.2.2. Economically sustainable activities and products

- Revenue sharing – "*Io nel pensier mi fingo"* - Leopardi's house, Italy
- Restoration and promotion of the First Ancient Theatre of Larissa, Greece
- Joint Programme for Culture and Heritage for Social and Economic Development, Albania
- Project for the Revival of the Fortress of St. Michael, Croatia
- Cultural and Tourist Route "The Routes of the Frankopans", Croatia
- Board Game: The Secret of the Emperor's Death, Serbia
- European Youth Card (EYCA Card)
- Rogatec Open Air Museum, Slovenia

II.2.3. Innovative ICT tools

- APP Playmarche2.0, Italy
- The Civic Guide of the Epirus Region, Greece
- Revitalization of the Barone Fortress - Šibenik, Croatia
- *Vižula* Archaeological Park - Medulin, Croatia
- 3D virtual reconstructions of the Roman complex - sanctuary and thermal baths in Aquae Iasae (Varaždinske Toplice), Croatia
- Archaeostereoscopy and 3D reconstructions, Slovenia
- The Cooper Hewitt interactive pen
- Social Meaning Mapping SMM
- WUNDER: All-in-one blockchain-based solution

III - SYNTHESIS WG 1: DEVELOPMENT OF COORDINATED AND INTEGRATED POLICIES AND MANAGEMENT PLANS/STRATEGIES [I.K.; P.F.]

III.1. Analysis and synthetic interpretation of relation and interactions between archaeological areas and territories

The countries that belong to the Adriatic-Ionian macro-region possess archaeological heritage of great cultural and historical importance. However, even though the region is full of archaeological wealth, it is still not adequately exploited from all its socio-economic perspectives.

Although they have different legislation, the states participating in the TRANSFER project have a similar legislative and political approach to the issue of archaeological heritage. At the national level of the member countries, there is a traditional approach that focuses on conservation and protection. A modern approach has not yet been implemented on a larger scale, and it implies strategic and innovative heritage management. However, there are also some lower-level acts that regulate the management of Archaeological Parks. National laws of all countries related to environmental protection are coordinated with regional and/or local acts and policies related to territorial development and spatial planning. Of all the countries, only Italy has an instrument that is intended for the area where the Archaeological Park is located, called "Schema direttore", without legal value. In Croatia and Slovenia, local self-government units adopt local or regional acts aimed at protecting cultural treasures of significant importance. In any case, everyone has a common need to establish a set of rules and guidelines that will guide the management, adequate valorization and financing of Archaeological Parks in the right direction (Fig. 1).

Looking at the general situation in the member states, the laws concerning the protection of Cultural Heritage and those concerning management and maintenance are not unified; more precisely, the same bodies do not enforce both types of laws. As a rule, the bodies in charge of managing Archaeological Parks are ministries in charge of the cultural sector. Within these ministries, there are numerous offices and sub-offices that are in charge of managing various aspects of Cultural Heritage. Local and regional self-government units in the member states have strategic tools that enable the recognition of the potential of Archaeological Parks, which facilitates the identification of future activities that need to be implemented in the work of Archaeological Parks. This is important from the aspect of sustainability of cultural and economic development because of the protection and the manner of tourist and economic exploitation of Archaeological Parks. In the example of the member states, it can be seen that many of these strategies were implemented without proper supervision of planned and finalized activities, and the financial unsustainability of these strategies is a big problem.

Therefore, it is necessary to direct the legislative framework towards an approach that will enable the holistic planning necessary to overcome all challenges in management as well as the involvement of the local community and all relevant participants, in a way that will be socially, financially and environmentally sustainable. One of the key factors are the links between Park management and territorial planning. Those connections in the Archaeological Parks are not adequate and of insufficient quality.

Considering this, it is necessary to establish legal and administrative conditions in order to be able to cover all aspects of territorial planning and to be able to carry out quality research and protection in the area of Parks and to reach an adequate level of economic and tourist valorization. The most important elements are the improvement of the visitor infrastructure, access roads, pedestrian paths, bicycle paths and the expansion of the parking lot. Also, for the purpose of the functioning of the entire system, it is necessary to realize the synergy of all participants (national, local and regional authorities, institutions in charge of Park management, various associations and NGOs, small and medium-sized enterprises and the local population) who could, in cooperation with spatial planners and in dialogue with the public, offer the highest quality solutions.

The cooperation between the subjects involved in the Park's management has not yet reached a sufficiently high level. The involvement of stakeholders from the private sector is still a weakness. As a matter of fact, even though the need for an effective collaboration with the private sector is always stressed in the management plans developed by competent institutions, the cooperation between the latter and local stakeholders is often non-existent. Moreover, the management of Archaeological Parks and all activities of the Park should be in synergy with the Cultural Heritage located nearby in order to satisfy all components of development (social, economic and environmental).

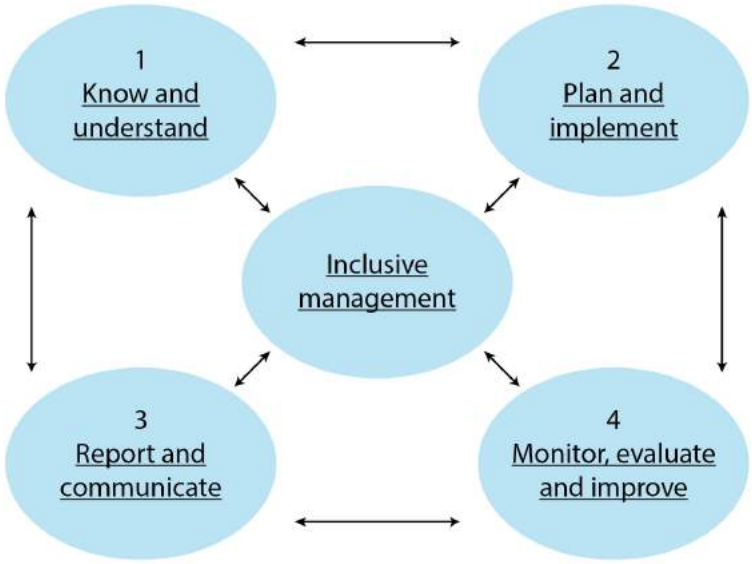

Fig. 5. Four phases of Cultural Heritage Management (© Elizabeth Bradshaw (a cura di), *Why Cultural Heritage matters A resource guide for integrating Cultural Heritage management into Communities work at Rio Tinto*, Melbourne, Rio Tnto limited, 2011)

III.2. Analysis of the reference scenarios

In the development of reference scenarios, Archaeological Parks should be viewed as a resource that is needed to improve the economic and social development of the community, and not as an obstacle to that development. In order to achieve this, it is necessary to integrate the management of archaeological areas into the framework of territorial and urban area management. The cooperation of all interested Stakeholders is also crucial, which can result in some kind of joint agreement in which the management structure of the Archaeological Park will be specified and which will be followed by indicators of progress. All participants must participate equally and be informed in order to achieve positive results in the processes of valorization and interpretation of the projects themselves. This bottom-up approach, apart from being essential for recognizing historical and archaeological importance, also enables the improvement of the quality of analyses of archaeological areas and their contexts, it facilitates the promotion of administrative innovative processes, enhances the mobilization of resources and social capital of the area, reduces conflicts and strengthens trust in institutions and integrates performance management into the decision-making process. The bottom-up approach also includes numerous educational activities, which are mostly maintained by the organization of outdoor school and day trips, which creates a basis for the long-term involvement of the local population in activities related to the preservation and protection of Cultural Heritage. The processes of networking Archaeological Parks into a wider regional or global network also play a very important role in territorial development dynamics, which ensures better cooperation and communication of participants from the field of archaeology and culture, easier adaptation to numerous challenges, increasing the recognition of archaeological sites and the number of visitors, promoting archaeological values, raising public awareness and better economic valorization.

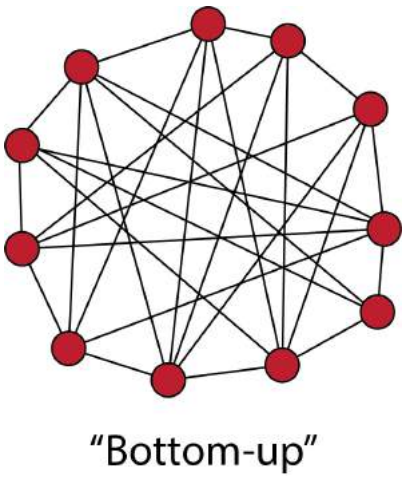

Fig. 6. Model of bottom-up approach (© Organizational Physics)

In the whole process, the role of archaeologists is very important since they constantly maintain a balance between continuity and change. They conduct archaeological research and present their results, and promote the importance of archaeological sites to the public, thus stimulating public awareness. Archaeologists can propose the ways of using parts of the Park and carry out the zoning of the parts of the Park, thus becoming an important aspect of the entire process of Park management.

IV - SYNTHESIS WG 2: IDENTIFICATION OF ECONOMIC SUSTAINABLE ACTIVITIES CAPABLE TO CONCILIATE ECONOMIC GROWTH WITH CULTURAL PRESERVATION [B.F.; E.C.; S.D.; M.Sp.]

IV.1. Analysis and synthetic interpretation of relation and interactions between Parks and territories

IV.1.1 Characteristics and functions of economic activities taking place at the archaeological site and linked with the management

The reflections elaborated by the specific analysis of different archaeological areas considered (Antiquity of Ioannina [GR-EFAI) – Greece], the Archaeological Park of *Urbs Salvia* and the municipality of Murter-Kornati within the EU project HISTORIC) have highlighted and defined examples of "functional matrices". Outlining a synthetic picture of the history and of the enhancement interventions carried out over the years allows to bring out some significant shared aspects:

1. The importance of the contribution of patron-entrepreneurs in financially supporting excavations and researches (as it happened, for example, in the Greek area in the years 1875-1876 first and in the decade 1929-1939 later, under the auspices of the Archaeological Society of Athens);
2. The role of private individuals such as NGOs and companies that - in close contact with the Municipalities (as it is the case in Murter-Kornati), with greater economic and organizational autonomy of external subjects in the promotion and management of cultural tourism (as it is the case in the Archaeological Park of *Urbs Salvia*) and with the financial support of the Ministry of Culture (as it is the case in Omišalj) - carry out projects, initiatives and interventions aimed at the enhancement of the areas, viable and usable implementations, and the dissemination of reference cultural contexts;
3. The indispensable scientific coordination by the universities which must be protagonists of the conservation, restoration, reconstruction and arrangement of archaeological sites;
4. The crucial nature of the European Funds through which the policies for the development of the communicative and educational potential of Archaeological Parks are to be implemented through a program of interventions that are studied and articulated;
5. The decisiveness of strategies for visits, openings and ticketing that encourage maximum usability of the Parks;
6. The involvement of various actors, researchers, restorers, urban planners, architects, archaeologists but also public and private tourism promotion bodies that collaborate in the development of projects and the promotion of sites;
7. The infinite need to elaborate and experiment, in addition to the classic theatrical and musical *in situ* evening visits, installations made through the ICT that, with greater incisiveness, allow to draw attention to the areas and promote suggestive images whose memories are echoed.

IV.1.2. Interrelation between the economic activities linked to the site management and the territorial economic entities

Both weaknesses and opportunities stand out from the analysis of the relation between the economic activities connected with the Archaeological Parks' management and the economic dynamics of the territories where they are located. A monitoring activity was essential and preliminary to the definition of the operational strategy. In some cases, the monitoring highlighted the sporadic nature of economic activities linked with the management and use of the archaeological parks examined, in others it observed the scarce effectiveness of the existing activities. Therefore, a methodological indication that will allow envisaging solutions in the short, medium and long-term is necessary and that starts from two fundamental considerations that:

- These places can be exceptional fields of experimentation of communication strategies;
- An archaeological site can enhance and redevelop the entire urban context in which it is inserted.

With this objective, attention to the more purely archaeological aspects cannot fail to integrate with other activities that, owned or managed by local authorities or other public and private entities (called to exercise their interests in harmony with the needs of protection), must be present. It is clear that, in order to define any future promotion strategy, it is necessary to take into account the critical issues present and that, therefore, in

order for the planning to be common and shared it is essential to reach a basic level of usability (for example, archaeological areas must be fenced and accessible with public transport). Therefore, the respective spaces around the actual excavations must be equipped with services, parking lots, refreshment points; the Park, in addition to the archaeological remains, in synergy with local authorities, should host structures, located near the site, dedicated to accommodation and study for the teams involved in the restoration and conservation of archaeological remains (laboratories, libraries and conference rooms) thus integrating visitors and scholars. In order to seize new financing opportunities, it will be necessary to establish privileged relationships with the activities of the territory by proposing agreements with accommodation and catering facilities in the areas according to simple concepts of concrete networks. Necessary for this purpose is therefore a project that is an expression and synthesis of different sectoral aspects, all concurrent with the enhancement of the Cultural Heritage and the spatial contexts of reference. However, it is important that in addition to the more visible and immediate tourist effects, the impact that the management activities of Archaeological Parks have on the development of other economic sectors be assessed. Restoration, ordinary maintenance, enhancement interventions through publishing or ICT have in fact repercussions both on other economic sectors and on the processes related to the training and growth of professions in the area.

Therefore, it is evident how the presence of the archaeological park and the related management and enhancement activities can spread positive outcomes on the territory where the park is located. The majority of Stakeholders consider the presence of a Park to be quite positive (52) or very positive (52) for the economic development.

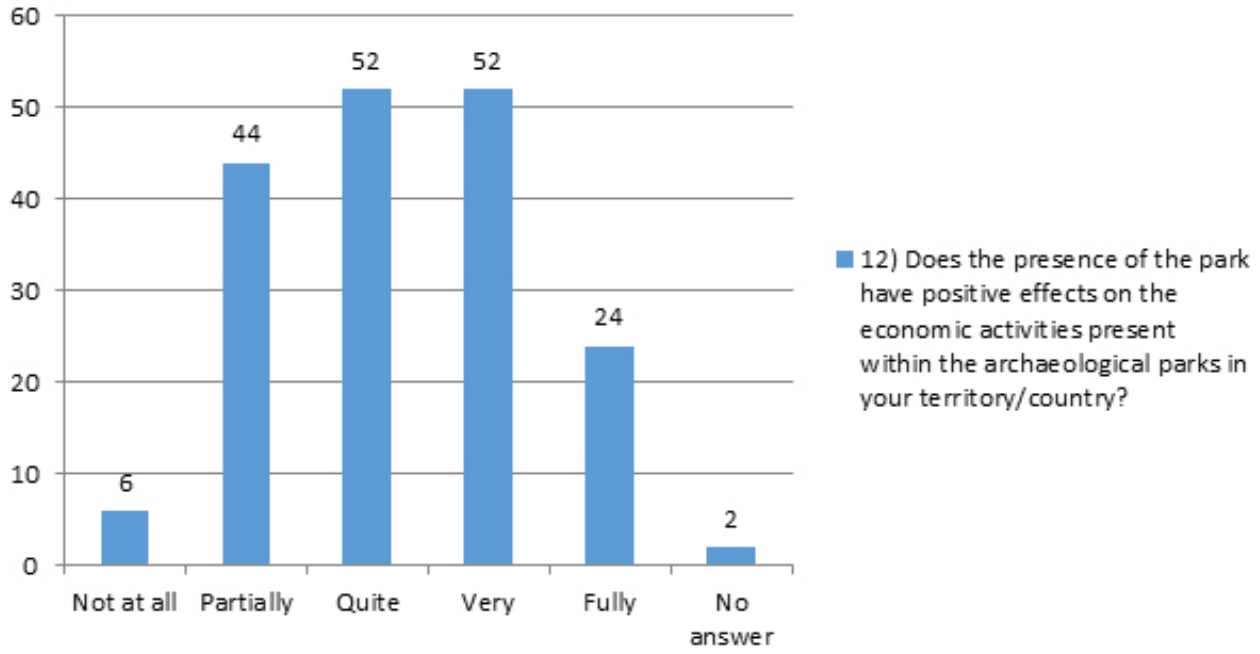

Fig. 7. Stakeholders' views on the economic effects of the presence of Parks in the area (© Progetto TRANSFER)

Consequently, it is essential to evaluate the social and economic impact of resources devoted for Archaeological Parks in the development of the territory. In particular, 91 representatives coming from the stakeholder group find this evaluation very important, while 44 of think that it is fully important.

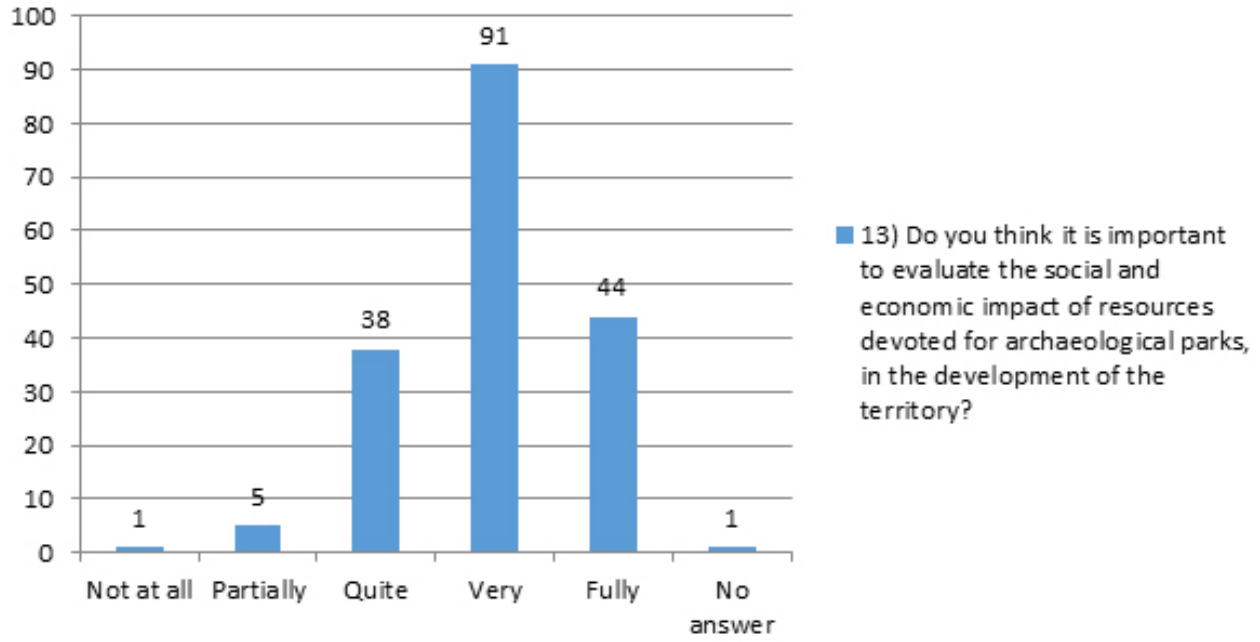

Fig. 8. Stakeholders' views on the need to evaluate the social and economic impacts of the management of parks in the area (© Progetto TRANSFER)

IV.1.3. *Ex-ante* evaluation of economic and financial sustainability of Archaeological Parks promotion activities and policies

It was shared that the management activities of Archaeological Parks generate positive effects on the revenue of local businesses.

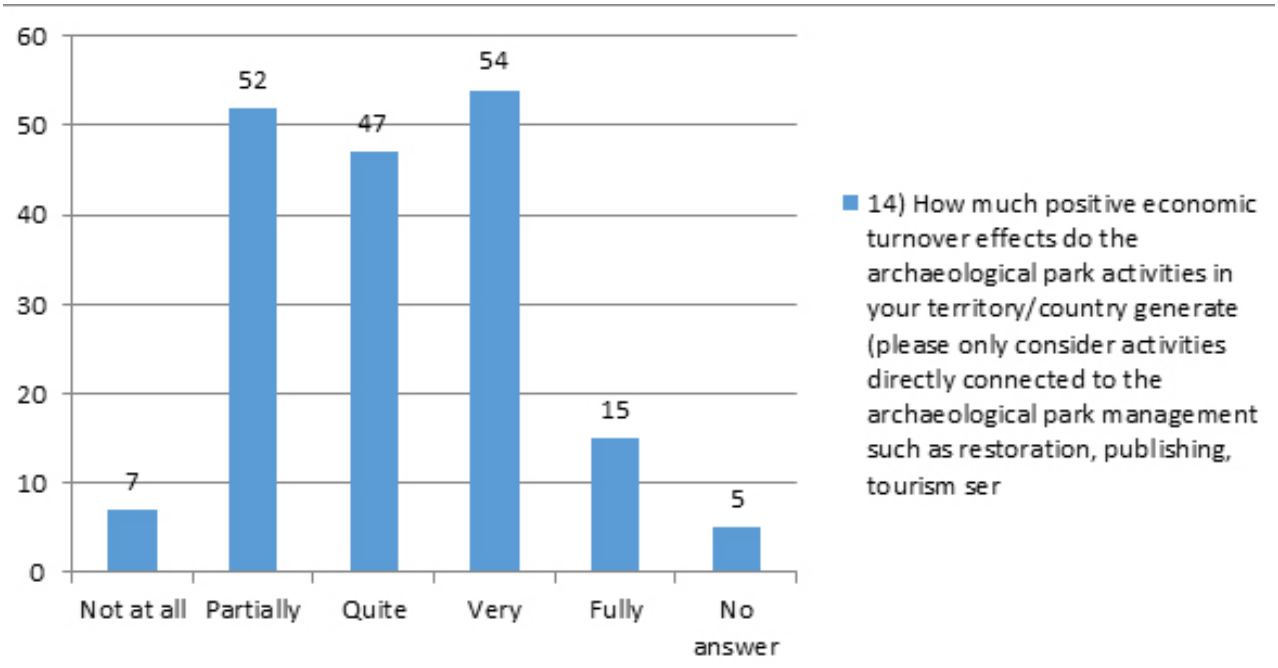

Fig. 9. Stakeholders' views on the economic effects of the activities of an archaeological park on the territory (© Progetto TRANSFER)

Consequently, for 104 stakeholder representatives it is very useful to identify management methods of Archaeological Parks which could have a positive impact on local economic development, and for 43 of them this is fully important.

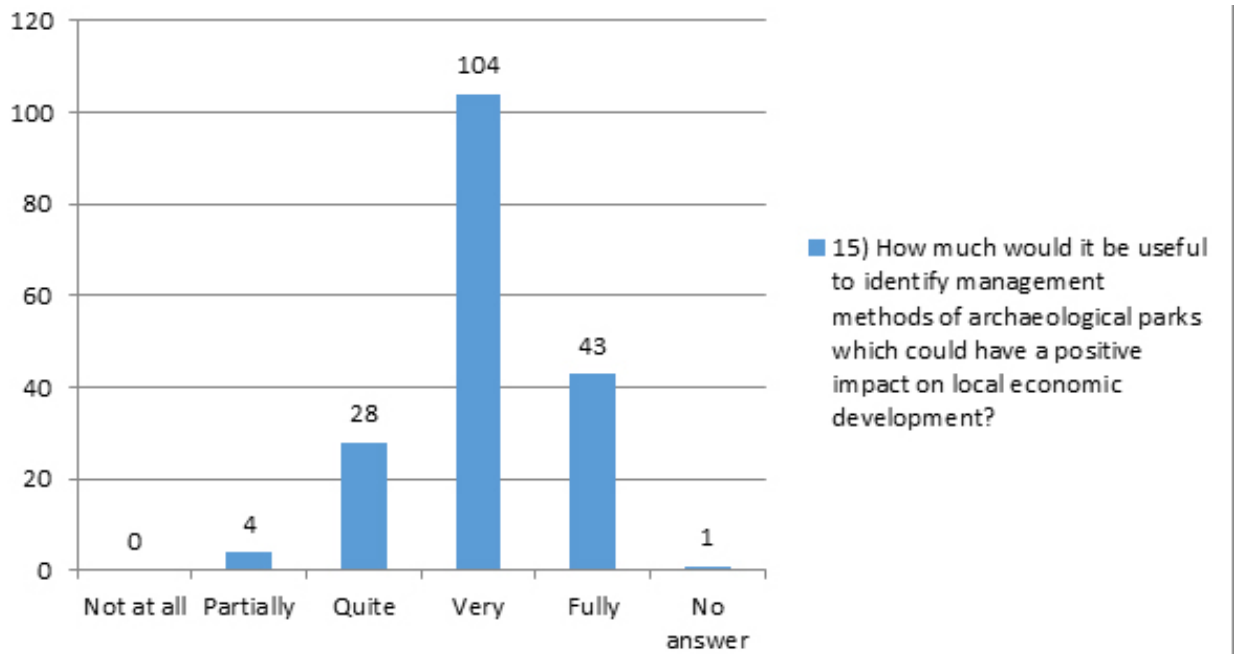

Fig. 10. Stakeholders' opinion on the importance of defining management models connected to the evaluation of positive economic effects (© TRANSFER Project)

Archaeological Parks, the underrated sources of wealth like the artistic heritage in general, certainly cannot boast of financial self-sufficiency. An *ex-ante* measurement of economic and financial sustainability that can reveal strengths and weaknesses of the management of archaeological sites is indispensable and cannot be separated from performance evaluation. Too often, in fact, the cultural sector, despite its immense value, fails to satisfy the end user. And this criticality depends precisely on bad management that does not allow the achievement of the set goals. It is therefore necessary to approach the logic of results. The objectives of an economic-financial perspective are to increase the number of attendees, keep the cost-effectiveness of collateral activities under control (hosting events, reviews, shows, and/or creating educational and playful environments) and increase the revenues through additional economic activities (restaurants, bookshop). We therefore start from the need to cover operating costs and obtain a balance between revenues and operating income. One must be attentive to the trend of income-revenues by activity, the trend of users for each activity, the cost-effectiveness of production processes and the composition of the financial income. In relation to the dissemination purpose, from the user's perspective, it is necessary to increase the number of direct visitors but also of those who wish to pay a visit for other reasons (events, for example) and from the point of view of Stakeholders from that territory where the goal is to create partnerships with institutions. And it was precisely the creation of these partnerships that proved successful for the realities taken into consideration. Indeed, it should be emphasized that:

- The vision of the Colentum archaeological site was generated by small pioneering projects carried out by a local NGO in collaboration with the Museum of the city of Šibenik. Then the partnership with the Municipality of Murter - Konati enabled the implementation of hard and soft activities.
- The management plan of the *Urbs Salvia* Park, drawn up by a working group established by the University of Macerata and then shared by all other public entities (Marche Region, Archaeological Superintendence for the Marche, Province of Macerata, Municipality of Urbisaglia) (private foundations, for example) identified the priorities of excavations and restoration, and defined the additional cultural services and tourism promotion.
- Coordination between the Hellenic Ministry of Sports Culture and private individuals has given rise to a cross-border IPA Greece-Albania 2007-2013 Program "From the neighborhood to the partnership", a joint action for the promotion of common cultural characteristics focused on the two ancient Theatres of Dodona and Foiniki (Albania), co-financed by the European Union and national funds of Greece and Albania; and the National Strategic Reference Framework (NSRF) 2014-2020 (Regional Operational Program of Epirus) the "Ancient Theatres of Epirus", a cultural itinerary whose main stops are the five archaeological sites (Dodona, Nikopolis, Gitana, Ambracia, Kassope) and their Theatres.

- Archaeological site of the Municipality of Omišalj has identified a field manager-archaeologist, a person who, with his mashup of skills, takes the utmost care of the professional management, conservation and enhancement of the excavations with financial support (for archaeological works *in loco*) on an annual basis by various institutions (Ministry of Culture, Municipality of Omišalj and its Tourist Board, foreign institutions).

A careful economic analysis should also consistently evaluate economic and social costs associated with tourism development policies.
The relationship of management policies with the growth of tourism is certainly important as highlighted by the survey with the Stakeholders. 94 stakeholders think that it is quite useful or partially useful to concentrate the resources intended for the Archaeological Parks exclusively, or as a priority, for measures to foster economic development of the tourism sector.

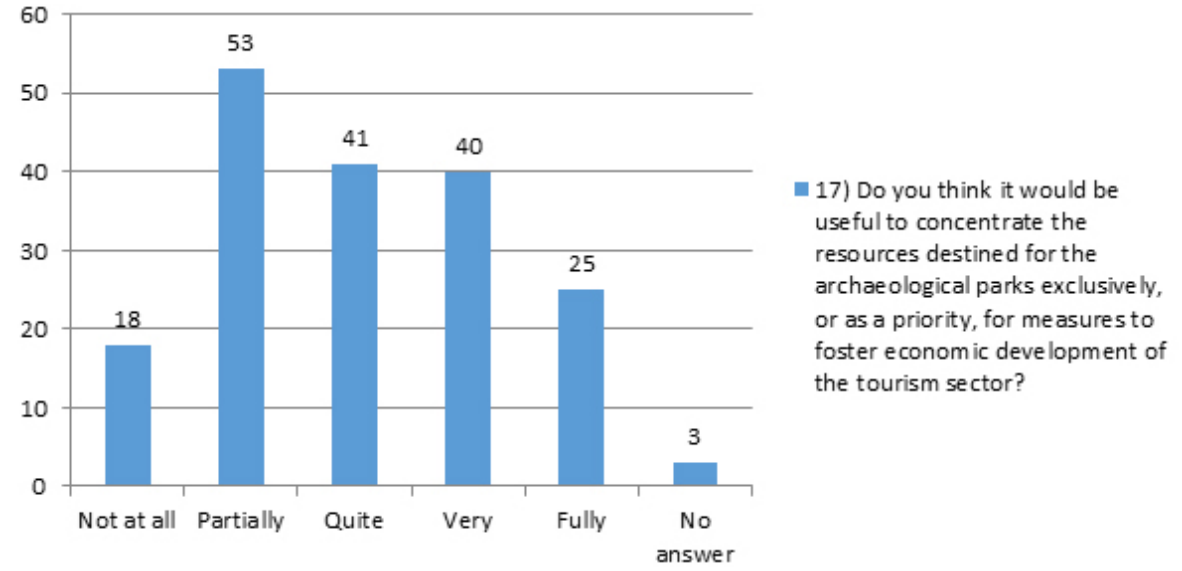

Fig. 11. Stakeholders' views on the importance of investments linked exclusively to the tourism sector (© Progetto TRANSFER)

But the importance that the management policies of the area can have on other economic sectors is also evident.

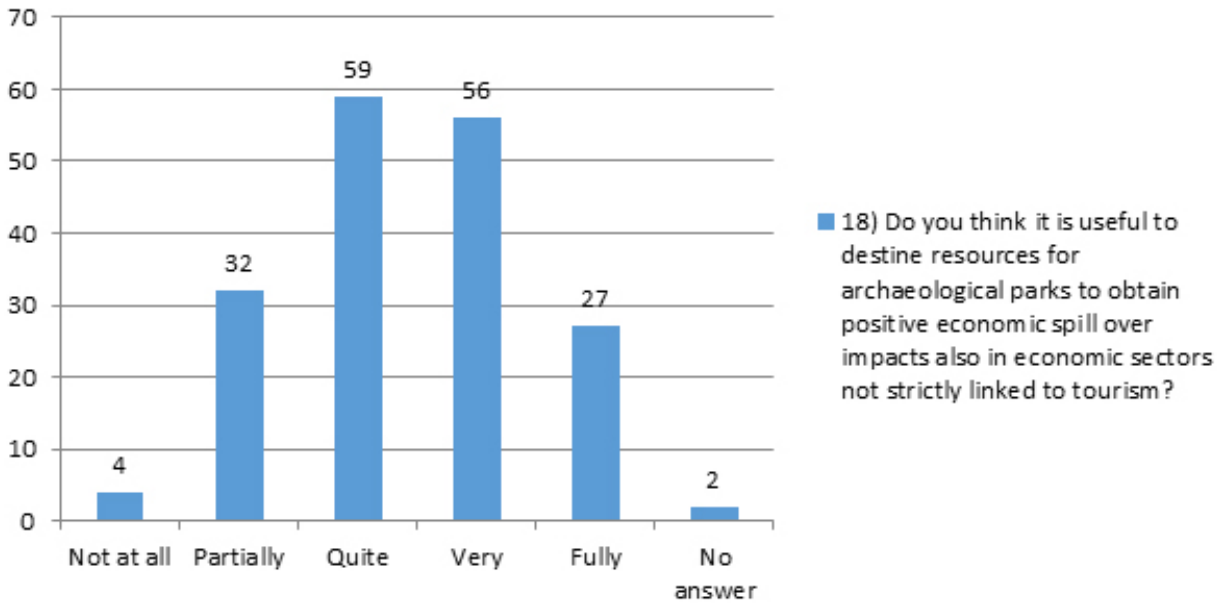

Fig. 12. Stakeholders' views on the importance of investments linked to economic sectors in addition to the tourist one (© Project TRANSFER)

Consequently, it is useful to have tools in decision-making processes in order to assess the economic/financial sustainability of the policies and promotion activities of Archaeological Parks. 83 stakeholders found it very important and 50 of them considered it necessary.

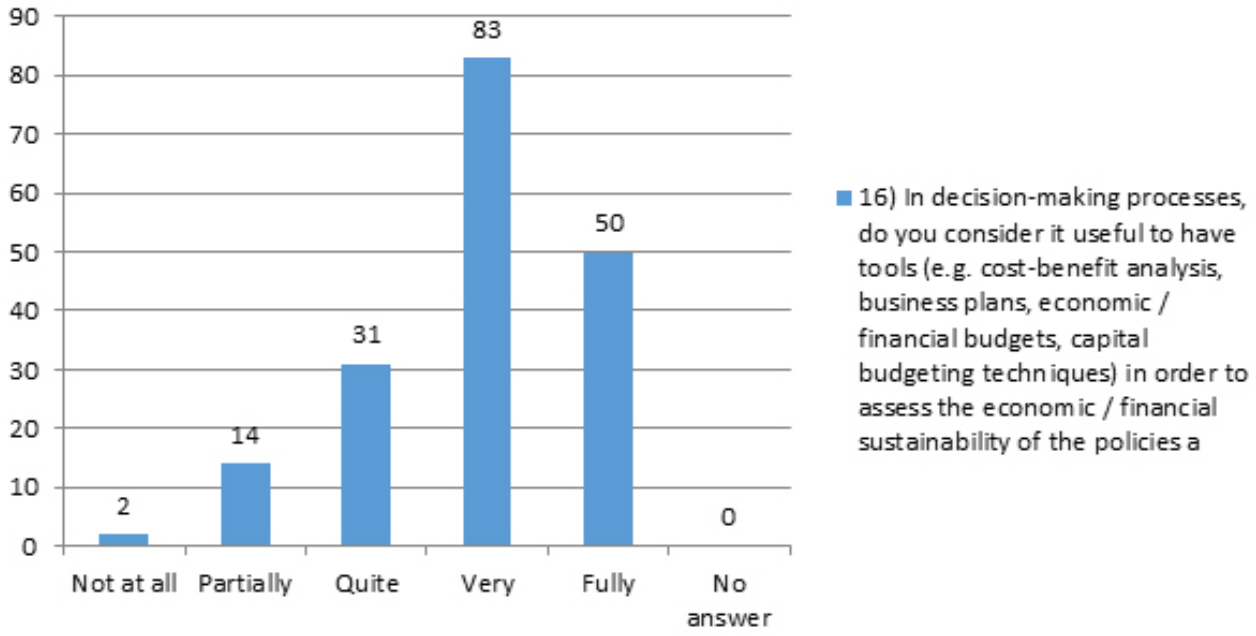

Fig. 13. Stakeholders' views on the importance of tools for the financial evaluation of investments (© Project TRANSFER)

IV.1.4. *Ex-post* evaluation of social and economic impact of investments in the Park's activities

Performance measurement is an essential requirement for a governance which, in addition to evaluating the effectiveness of its initiatives, wants to demonstrate the positive impact it may have had on the territory in which it operates and it constitutes a fundamental premise for making informed choices, having an objective criterion useful to choose how and to whom to confer public funding and for any private lenders who are interested in assessing whether their specific requests have been met. An *ex post* evaluation requires an overall and detailed analysis of the results in relation to the objectives from which to develop judgments regarding the use of resources and the effectiveness and efficiency of the strategies implemented. Identifying and investigating the factors that contributed to the success or failure of development policies is useful for giving suggestions and making useful proposals for improving the quality and implementation of predefined objectives. In this sense, this type of evaluation is a functional tool for the project monitoring activity. Since quantitative and qualitative data are the raw materials of evaluation, their identification and treatment are the fundamental prerequisite for the credibility of evaluative judgments. The primary data are obtained through direct observation of things or facts (with field visits, but also through photographic images) and the investigation of direct and indirect beneficiaries and subjects able to express their opinions qualified for their role and/or knowledge (carried out, for example, through telephone interviews or questionnaires). The secondary sources, within the evaluation process, take on different values: they are used to measure direct effects of an intervention, as in the case of data monitoring; they are used to estimate the indirect effects of an intervention, the results and impacts as, typically, for macroeconomic data; they are used as a reference parameter (e.g. context data, pre-intervention and counter-factual situations, benchmarks; etc.). Concretely, the evaluations may concern the impact that the projects, by increasing the number of visitors, have on the profits of local businesses (hospitality and catering businesses, service businesses, as well as artisan, agricultural and tourism businesses), on employment, on the conservation of resources and on new programs of revitalization and territorial development.
Finally, among the data to be taken into consideration is the importance that the management of Archaeological Parks be consistent with the job offer and employment policies of the surrounding territory.

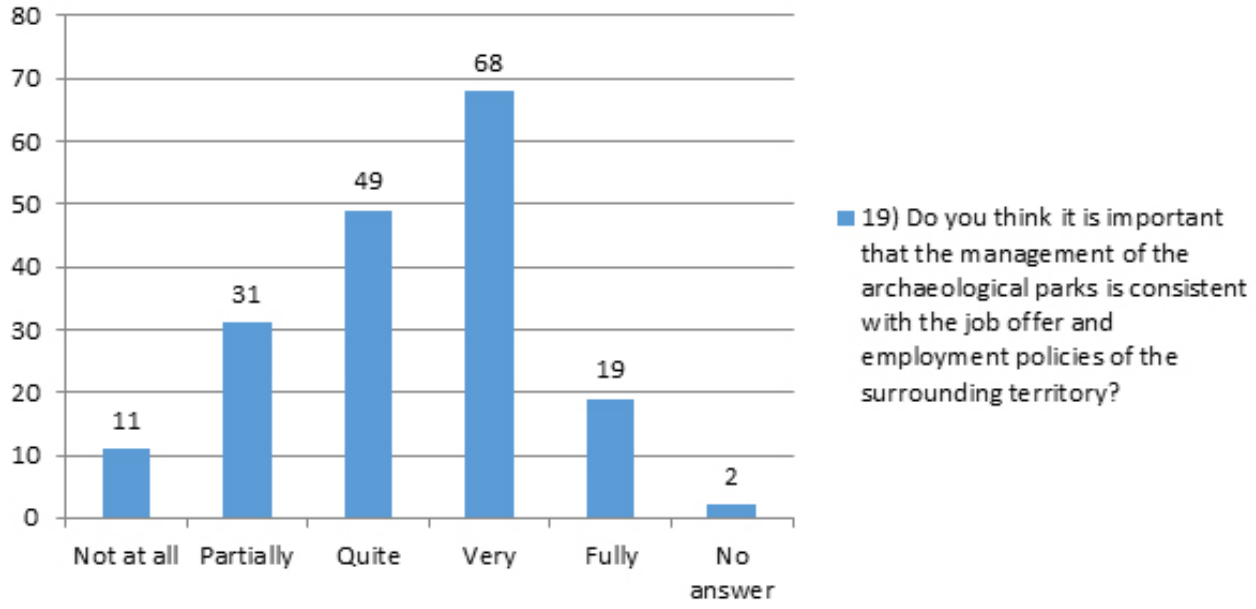

Fig. 14. Stakeholders' views on the importance of external relations in terms of employment (© TRANSFER Project)

IV.2. Analysis of the reference scenarios

IV.2.1. Feedback on the local economic development

The impact of the investments in the archaeological site pours out on the local territory and its community. At the first level, the impact may be analyzed in terms of the economic, social and environmental results observed in the local area. The level of interaction (synergy) among the different parts of the ecosystem is a valuable indicator given that the Stakeholders involved in the system and their "characteristics", quantity (number), quality (role, education, etc.), political influence (span of action, reputation, eligibility, economic and institutional power, etc.) are significantly correlated to the final impact assessment of the cultural investment. These elements may be significantly useful to determine the "extent" of the system (market and community) to be considered for measuring a second level of effects and consequences of the heritage site: the level of attraction and reputation, its positioning in the scientific community and potential effectiveness. This second level of analysis takes into consideration the indirect and intangible effects of the investment. Besides the visible consequences, measurable in terms of the development of economic activities, the improvement of the heritage site may determine an increased attention to it with consequences on the relations and identity of the communities living there in terms of higher visibility and reputation at the regional and national level. The investments could foster or revitalize the interest for a specific archaeological site and transform it into a powerful driving force for educational activities, for example, or for social projects aiming at inclusion (solidarity and inter-generational support) and job opportunities. High references play positively in public/private negotiations as well as in international projects and partnerships. If coherently managed, the heritage site might play a "hub" role and attract the net of relations that contribute to the economic and sustainable development of the local ecosystem. Moreover, the attention for positive spillover effects derived from the cultural investment is valuable for strategic planning. Tangible and intangible effects must be measured by valuable indicators in order to offer comparative assessments of different projects. A third level of analysis addresses the level of governance. Local, regional and national level imply different levels of intervention. They may turn out isolated or fragmented and proceed separately or in mutual conflict if not settled in a systemic approach. The partners refer to a variety of perceptions about the role of their archaeological sites in the local ecosystem and a prevalent consciousness of the positioning of the heritage site into their regional history and tradition. The Archaeological Parks contribute to the diversification and specialization of tourism flows and activities (cultural tourism, religious tourism, etc.) and represent a valuable asset for the local brand and the regional competitiveness, for mitigating the seasonality of tourism, to enhance the decentralization of development and to job creation. In terms of social impact, this

means the enhancement of the community participation, social cohesion, continuity of social life, reinforcement of identity. The analysis of direct and intangible effects of cultural investments and their convenient measurement is an open question. The partners highlight a sensible consciousness of the direct and indirect results deriving from the presence of the archaeological site and list a series of indicators for a quantitative assessment, The parameters for the evaluation of the impact of cultural investment are quantitative, i.e. the presence of native or foreign visitors/ tourists, the amount of payments received for services by foreign travelers; the amount of overnight accommodations in the area surrounding the site; the number and quality of accommodation facilities. Surveys at local level (Ptuj) and questionnaires are generally used for collecting data. Anyway, there is no evidence of a systemic approach in collecting data and analyzing information for statistics and strategic aims. In terms of this, it can be noticed that there is a significant room for deepening and improvement of the analysis both vertically, in terms of clustering analysis of the visitors' targets, and horizontally, such as the data related to collateral sectors, intangible effects. The analysis of the role and the relative positioning of the heritage sites in the local context or region presented the evidence on the weak and threat points of different cases. Fear of isolation and fragmentation that would take the Park out of the economic and social ecosystem is one of the major weaknesses for Antigonea. More specifically, 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 region, although rich in values and evidence, is still characterized by a strong economic and political fragmentation that would benefit from integrated enhancement projects. As for the overall group of partners, the systemic approach has not been implemented yet as a cultural setting for the driving strategy, the actor's involvement, the Stakeholders' participation and as a methodology for collecting and measuring data for the planning. The cooperation among the local Stakeholders is somewhere present, like in the case of Omišalj where the Tourist Board works with the Municipality for the site's promotion and the organization of events with the idea of supplying a complex service/ product, but it could be more heavily reinforced at the regional, national and international level. The partners are aware that the Stakeholders 'cooperation (public, private and NGOs) would lead to the fostering of community-based strategies and to realizing projects aimed at achieving economic (developing the economic system), cultural (resourcing conservation) and social (revitalizing villages and communities) results.

IV.2.2. Enhancement of the archaeological site and tourism development

The interdependence between the management of Archaeological Parks and the development of the tourism sector is generally widely recognized. The eco-systemic approach goes further and analyses how and to what extent the relevant actors of the local system are coordinated and to what extent the relation is based on asymmetric relationship or mutual synergy. The partners are aligned in considering that tourism is not the unique or prevalent output of the cultural investment. An Archaeological Park nurtures and maintains unique connections with the wide range of actors in various sectors of social and economic activity. They note that tourism is one of the direct opportunities to be acquainted with the heritage of a space. But not the unique sector to consider (Šibenik, Knin/Croatia). Ptuj highlights the importance of the Archaeological Parks especially in cities/destinations where they build their cultural identity and tourism on history and archaeology, The management of the Colentum archaeological site on the island of Murter in the Šibenik-Knin region is one of the good practice examples for the links between the archaeological site and complementary activities, such as oceanography, sports and recreational tourism. Tourism is an effective means of reorganization for local production chains when the increasing demand for local products, initiated by the flows of visitors, exerts an incentive to transform or reposition high quality production (dairy, honey, agricultural). The possibility to connect archaeological excavations on site to the local communities encourages the increasing of the social interest, so far that schools are getting more and more involved with different educational programs. In the Slovenian case, benches and hiking trails were installed between the archaeological sectors and they brought different/other interest groups to visit the site. The projects referred by partners show different levels of relationships between the tourism development and the management of Archaeological Parks. In some cases, the perception of an asymmetric relationship arises from the statement that "tourism enhancement should come first." Risks and inefficiencies may arise when asymmetric relations prevail. The exclusive focus on tourism and on its economic benefits can jeopardize the conservation of the archaeological site, especially in cases of overcrowd. In these cases, tourism-driven local development could become detrimental to environmental sustainability. Not surprisingly, this specific risk is perceived as significant in partners located in larger cities whereas in less congested areas this kind of risk is perceived as being lower. Typically, those risks are related to environmental, social, and economic costs. To mitigate these vulnerabilities, it is important that the access to the archaeological sites comply with the "Tourism

Carrying Capacity", that is, the maximum number of people who can use a site without causing an unacceptable alteration to the physical environment and without an unacceptable decline in the quality of the experience gained by the visitors. While providing a vision of mutual synergy between the heritage site and the tourism sector, their actions are reinforcing their respective aims and results. The partners list a range of "good practices" for the best interaction of actors in the ecosystem, namely: close collaboration between the tourism sector, professionals and archaeologists; visitors-friendly infrastructure and traffic connections; shared information and circular transfer of knowledge among academic and research centers, civil institutions, economic agents, community. Communication is a strong point for the interaction: scientific discoveries should be communicated and shared with a wide public and the tourism sector could better suggest and transfer to the archaeologists the way of making history and heritage culture the most attractive in order to draw visitors' attention. In the eco-system approach, tourism is viewed as one part of the broader strategy of sustainable local development. The partners identify specific target of actions for a sustainable local development strategy, such as:

- supporting the infrastructure development and the land use regulation by introducing the environmental impact assessment and implementing a legislation based on international agreements and declarations;
- reinforcing mutual sharing of information among Stakeholders by enhancing the continuity of contacts to inform each other about initiatives, projects and events;
- reinforcing the rules for the regulation and control of the visitors' behavior in order to contribute to the preservation of archaeological sites, their values and usability for the locals and visitors;
- facilitating or supporting private entrepreneurship to organize tourist packages in collaboration with foreign operators;
- adapting the scale of economic activities on the effective capacity of the territory. The impact of tourism on the local physical environment should be the object of a realistic assessment in terms of strengths and weaknesses, opportunities and threats and risks.

Under the perspective of sustainable local development, a lot of economic activities can be correlated with the enhancement of an archaeological site: agricultural and food chain, handicraft, local crafts, industries, ICT services, professional services related to cultural events, scientific activities strictly connected to the Archaeological Sites, etc. The development of economic activities (beyond tourism) connected to the Park's management is reported differently according to the partners' experiences:

- Dodona outlines the scientific-related and education activities, such as educational programs and visits, seminars and conferences in the archaeological site.
- In Šibenik-Knin, the activities are predominantly tourism-related. The archaeological site of Colentum on the island of Murter offers a positive mix of enhancement of the archaeological site and its tourist valorization, which positively contributes to the local economic development. The management of this archaeological site links the cultural values of the area with complementary activities, combining history, archaeology, oceanography and cultural, sports and recreational tourism.
- For Ptuj and Gjirokaster, the agriculture and the industries correlated to the products (local food and wine), the local crafts and the cultural events are the main economic activities linked to the archaeological sites.
- Specifically, the UNESCO site of Gjirokaster promotes the organization of various forms of widespread hospitality (i.e. the organization of pedestrian, cycle, equestrian paths) in close connection with the tourist promotion of the UNESCO site.

IV.2.3. Research of economic profitability

The purpose of this question was to see if, in realization of enhancement strategies, the economic and financial best practice principles were taken into consideration. We talked about the importance of the inter-relationships of Archaeological Parks with other economic sectors, to encourage this relation it is essential to consider the economic-financial sustainability of the enhancement strategies. Archaeological Parks are sources of wealth, but are not generally financially self-sufficient. The objectives of an economic-financial perspective are to increase the number of attendees, keep the costs of collateral activities under control and increase the revenues. We therefore start from the need to cover operating costs and obtain a balance between revenues and operating income. However, this is not sufficient. The strategies must generate cash flows able to compensate the amount invested, but also to generate financial surplus that can be used for future investments. There are investment evaluation tools that allow us to balance positive with negative financial effects, these tools are increasingly requested in the calls for proposals for European projects (for example NPV, IRR, business plan), but in the cultural investments we cannot forget that

costs and benefits cannot be measured only in economic and financial terms. It is useful to consider both aspects, the economic/financial on the one hand, and the social/cultural on the other, which are the costs-benefit analysis or the input-output models, which allow us to estimate *ex-ante* effects (all effects, economic-financial-cultural-social) of the enhancement strategies. Regarding these aspects, more can be done and must be done. Indeed, the contributions of the WG2 members highlighted some very positive aspects but also the fact that some needs and issues still require further activity. Much has been done in terms of cultural promotion of the sites; all of them described very important actions to enhance the cultural site, but all highlighted the necessity to improve those actions. Here are some examples:

- In the City of Ptuj experience, the work was done in terms of attractive marketing and connection with cultural events (historical re-enactment festivals, music festivals, sport events).
- In Albania, promotion of socio-economic opportunities for communities in cultural activities needs a better coordination between the DRTK-Gjirokaster, the Institute of Archaeology and the Institute of the Cultural Monuments. The excavations programme should keep in mind also the tourist necessities that the site has.
- Greek partners shared that in the last two decades, namely since 2001, a huge amount of restoration works has been carried out funded mostly by the European Fund (over EUR 10 million) on the preservation, restoration, and promotion of the Ancient Theatre of Dodona, of the Monuments of the Archaeological Site of Dodona, and of other monuments of Dodona. Specifically, for the period 2000-2014, some studies estimated that the cultural investments would yield 3.44 million of overall economic growth in the area. This estimate needs verification, based on the data within the last five years.

Various partners assert that greater economic profitability would automatically mean the improvement of other activities on the site, that greater development of one element would consequently lead to the development of others. Their actions were taken on with a belief in their efficacy to increase collateral economic activities' productivity and sustainability, but generally, the enhancement strategies were taken without an *ex-ante* evaluation of direct and indirect costs/benefits. These are the considerations of the partners involved:

- The Municipality of Omišalj asserts that for now it cannot speak to the profitability of the Park and the special impact on employment.
- In PTUJ's actions, it was hard to measure the costs in relation to benefits because the site is still developing to become a complete and functional Archaeological Park with additional offer on site, but a tentative one was done and it used public surveys (local environment), input-output models.
- The Croatian partners believe that the development of an archaeological site can contribute to increasing the value of the surrounding area.
- In the future development of the archaeological site Colentum on the island of Murter in Šibenik-Knin County, it is planned to revive agricultural production. The new agricultural activity that would be developed in this locality would encourage creativity and employment. This would further increase the possibilities of marketing local products in local restaurants. The connection between archaeology, educational activities, and catering was fostered at the archaeological site Colentum. The positive developments would consequently provide more financial resources for further development of activities and activities for the protection of archaeological values, which is a feature of sustainable management.

Regarding the tools used to evaluate and to balance positive financial effects with negative in cultural investment decisions, the only experiences have been those of the PlayMarche srl and of University of Macerata in managing Archaeological Park of *UrbiSalvia* and in the DCE project. In these two experiences, regional funds were used to manage a cultural site (Archaeological Parks, Museum, attractive cultural areas etc.) only after an *ex-ante* evaluation of the consequences in terms of costs, benefits, cash flow generation and governance. For example, the DCE project (evolved cultural district) was governed in an innovative way: a spin-off of the University of Macerata, participations from local stakeholders (municipality, museums, firms, private entities), managed the project's actions, with a network built between the researchers, professionals, and users. Every action was evaluated within a budgeting process, the expected increase in revenues (ticketing, sales of products, partner-guaranteed services, income from events etc.) and costs (fixed structural costs, management costs, labor costs, administrative expenses, general expenses etc.) were estimated in business plans. These processes have made it possible to anticipate financial needs and provide instruments for their hedging. In these processes, the created wealth was estimated and performance indicators – such as net present value and internal rate of returns – were calculated.

IV.2.4. Archaeological Parks and human resources: labor market and education

For the proper management of Archaeological Parks, several professional profiles are required, such as archaeologists, curators, architects, technicians, conservators, specialized workers, guards. Beyond these core competences, transdisciplinary knowledge and skills are particularly valuable. An ideal profile would be a person with both knowledge of history/archaeology and tourism/management skills. Such professional profiles are usually recruited at the regional job market since they are endowed with tacit knowledge on those specific local assets that are particularly valuable for the promotion of the territorial development. For some recruitment procedures, people from all over the country can apply. One of the main challenges of a successful management of archaeological sites is to ensure the involvement of all relevant Stakeholders in the valorization of sites and in the organization of the management process. Education and participation of the local population is a crucial factor in creating sustainable management of an archaeological site. In addition, the development of educational tourism programs represents a great potential for tourism targeted at school excursions, camps for children and youth and families with children. Different educational tools are already available at some sites, such as education programs and visits to the Archaeological Site, museums, educational material available in print and in digitalized version, as well as in Braille system, a museum kit with 3D puzzle and printed aerial photo of the site, an educational application in Greek and English available both at Google Play and App Store (Dodona – Greece). Beyond formal education provided by schools and university, even civil associations may contribute. In one case, an important role in the design and implementation of development activities was played by civil associations that participated in arranging pedestrian and bicycle hours around the site, cleaning the environment of the site, designing educational activities, etc. (archaeological site Colentum-Croatia). Some Archaeological Parks are close to a university or a specialized school, such as in the cases of Urbisaglia-University of Macerata (Italy), Dodona-University of Ioannina (Greece), the UNESCO site of Gjirokaster - University of Gjirokaster (Albania). Geographical proximity to a research or educational institution brought further advantages to the enhancement of the archaeological site. This proximity has also facilitated the training processes related to the management and enhancement of Cultural Heritage. It is an opportunity not only for human resources in terms of both labor market opportunities and education and capacity to manage and preserve Cultural Heritage, but also for improved access to Cultural Heritage and participation in Cultural Heritage decision-making.

V - SYNTHESIS WG 3: IDENTIFICATION OF ICT TOOLS ABLE TO ENLARGE ARCHAEOLOGICAL GOODS' AUDIENCES AND IT SYSTEMS ABLE TO BETTER ANALYSE FEATURES AND NEEDS OF ARCHAEOLOGICAL PARKS' VISITORS [E.V.; S.M.]

V.1. Analysis and synthetic interpretation of relation and interactions between Parks and territories

Archaeological Parks are not only an integral part of their territories but also the main testimony of interactions between humans and their environment and of interventions transforming the area into a cultural landscape. Thus, their preservation and sustainable valorization are vital cultural, social, environmental and economic assets.
Considering the broader European framework, as well as the generalized digital transformation, and reckoning with the recent restraints of the COVID-19 pandemic and their consequences in the current scenario (European Heritage Alliance 2020, NEMO 2020) in order to transform them into opportunities, we conclude that the relation between ICT and CH becomes increasingly strong and complex:

- facilitating and expanding access and interpretation;
- raising awareness on issues of cultural and environmental protection;
- fostering new forms of multi-level and multi-stakeholder participatory governance;
- encouraging creative industries, SME and community-led initiatives for the development of the territory.

Under this perspective, interactions between Archaeological Parks and territories could strongly benefit from the digital shift, creating synergies and cross-sectoral cooperation.

V.1.1. Specific ICT tools for on-site visits

The adaptation of ICT technologies and tools to the needs of archaeological research and documentation (geographical prospecting, mapping, laser scanning, photogrammetry, 360° photography, ultra-high resolution images etc.) at the same time offers extensive possibilities for the development of specific ICT tools for on-site visits. 3D scanning, modelling and reconstructions are used in advanced VR imaging technologies, adding layers of understanding and interpretation of the ruins. Mixed Reality (MR) and Augmented Reality (AR), blending virtual with the real, have found ideal application areas in archaeology and heritage.
These tools offer different approaches and degrees of engagement:

1. guided or self-guided site tours, with various degrees of personalization and interaction,
2. virtual compensation of objects, reconstruction of structures and of the environment, 3D-prints, animation, holograms etc.,
3. storytelling, gaming, treasure-hunting, RPG,
4. immersion, combining AR, MR and interactive panoramas, and stimulating the sense of presence by addressing more than one of the senses (sound-scape, haptic technologies, olfactory triggers, etc.),
5. Analysis and feedback in relation to the quality of visits.

These tools are accessible either via personal devices, or via on-site equipment.

V.1.2. Specific ICT tools for remote communications

Tools developed for remote communications can have multiple uses: pre-visit - helping visitors prepare and organize their experience; post-visit - consolidating the experience; substitute to a real visit; gaming, social networking etc.

V.1.3. Other tools

The edutainment approach can actually transform Archaeological Parks into stages that mediate the relationship between the contemporary visitor and archaeology, new media and technology: video and projection mapping techniques; AR/ MR/ VR apps; use of "personas"; Image recognition/AI; Holograms; 3D modelling and 3D printing; user-generated content.

V.1.4. Conclusions

One of the most important benefits of ICT is that they can connect the site to the wider territory, in the context of a networking strategy that can help integrate other "tourist attractions" into a comprehensive valorization circuit, proposing various itineraries and promoting different aspects of the area through a holistic "pack" of experiences.
A main aspect to be considered is the possibility of ICT to provide feedback, assessment and evaluation of various aspects of the AP management and operation.

V.2. Analysis of the reference scenarios

V.2.1. Current state of digitalization

The reference scenarios correspond to three main levels of digitalization:

- Level 1: Antigonea, Poetovio: no infrastructure/ internet connection; no digitalization; no ICT tools.
- Level 2: Mirina, Šibenik City Museum: Digitalization mainly for purposes of documentation.
- Level 3: Dodona, *Urbs Salvia*: Digitalisation in the service of the management. Leveraging ICT tools to enhance the accessibility, communication and promotion of the site.

Yet, despite the disparities, some common observations emerge from the basic SWOT analysis:

Strength	Weakness
The intrinsic value, and in many cases the visibility/ recognizability of the site/ territory.	Lack of a comprehensive digital policy and of an integrated tool for the management of the site.
Opportunity	Threat
The project TRANSFER: a management model including ICT tools with multiplying effects for both the site and the territory.	Lack of continuity in projects, policies and strategies.

V.2.2. Relationship between the Parks and surrounding landscape in relation to the ICT tools

The analysis of the reference scenarios highlights not only different levels of interaction, but also different perceptions of the very nature of this relationship, hence the defining of the most useful ICT tools in this direction.

- ICT as a facilitator: Landscape is an integral part of archaeological sites, essential for their perception.
- ICT as a mediator between the archaeological site, the surrounding territory and the (potential) users.
- ICT as an awareness-raising tool: New technologies in the service of landscape education and Cultural Heritage education.

For the integration between the site enhancement processes and territorial infrastructures, the first step was a PEST analysis. Then, it was the development of the integrated and sustainable governance model, made possible by a series of tools made available in an integrated and implementable form (including ICT). The enhancement process started with the implementation of relevant digitalization methodologies and ICT tools.
A series of joint projects should be planned and implemented after the adoption of the ICT tools in order to conclude the planning.
Finally, as for the user interest tracking system, user profiling, decision-making tools related to fruition analysis and management, decision-making tools should be developed, within the spirit of the World Heritage Convention. This will drive to 'encourage everyone to participate in the process of identification, study, interpretation, protection, conservation and presentation of the Cultural Heritage' (Article 12a of the Faro Convention).

V.2.3. General conclusion

The use of ICT tools can be crucial in the management and organization of the plan for the Archaeological Park. New technologies allow us to optimize working time and to enhance the preservation of the Cultural Heritage as well as its safety and, eventually, to manage and share information and data in a more efficient and safe way (on this account it could be useful to remind of the importance of GDPR for the general regulation for data protection).

In relation to the work of WG3, we can highlight the importance of ICT tools for the quantitative and qualitative monitoring *ex ante* and *ex post* of the activities promoted by the Park. The use of new technologies, if well planned, can also save some resources in the long run.
Eventually, it is important to underline that the implementation of ICT tools in the Park can lead to the creation of new jobs and foster the development of creative industries. In both cases, it is essential to ensure the training and LLL of the AP staff, so that they can make the maximum profit of the ICT.

VI - COMUNICATION TOOLS WITH ICT [S.M.; G.T.]

VI.1. Objectives and methods

The Participatory Online Platform that has been developed by the TRANSFER project, allowing continuous communication among the partners, as well as engaging relevant stakeholders in a two-way communication exchange. It is a tool aiming to enhance participatory approach and the elaboration of a Strategy for sustainable preservation and valorization of Archaeological Parks.
As the main outcome of the project, it will become:

- A permanent European platform for networking, exchange and transfer of knowledge.
- A Knowledge bank where project results will be made available for transnational use.
- An interactive tool providing European-wide promotion of archaeological areas.

The Participatory Online Platform contributes to ensure continuous local and transnational dialogue and cooperation after the end of the project, and it will be an excellent and useful instrument to promote the Governance model identified by TRANSFER and the Strategy for sustainable preservation and valorization of Archaeological Parks.
Through this, all project results (deliverables, internal documents such as guidelines, recommendations, promotional material) have already been publicly available and can be used easily for additional archaeological areas where one would like to undertake the same strategy, towards an integrated approach to the management of archaeological areas.
In this sense, it must be underlined that the Partnership fully endorses the principles of the Open data supported by the European Union. Therefore, the Platform will be a powerful instrument to be used as a leverage for future initiatives in the preservation of Cultural heritage, thus supporting "the overall objective of the ADRION Programme of acting as a policy driver and governance innovator".

VI.2. Tools developed

In the Main Menu, considered as first level, there are the links for the four main sections as well as a short presentation of the project, project partners, the platform and project logos. The main four sections of the Participatory online platform are organized as stated below.

1. Explore Parks: In this part of the platform, it is possible to take virtual tours of the Archaeological Parks. Tourists will therefore be able to visit each Park and its surrounding area through a list and a map of the Adriatic-Ionian area. A new page, considered as Level 2, containing a map of such Park appears on the screen showing the many attractions present within the Park and its relevant surrounding area. It is then possible to click on one of the attractions after which a new page, considered as Level 3, will open with a description of such place. It contains photos (in color) or videos.
2. Knowledge Bank: In this part of the platform, project results are made available for transnational use. It contains Good Practices, Case studies, Publications, Reports, Articles, Legislation on Archaeological Parks. The logged in users can upload documents through the button "Share a document". At the Home page, there is documents list divided, in thematic sections, with free access.
3. Transfer Chatrooms: A chatroom area where project partners are able to communicate with Stakeholders (and among themselves) in order to discuss, receive input and feedback on current topics concerning the project or exchange and transfer knowledge.
4. Transfer Intranet: This is a restricted area, intended for Project Partners and Associated Partners only. It contains project documents, outcomes and deliverables that were uploaded for easy access at any time.

There are also some more sections regarding general information about the TRANSFER Project, a Survey that took place during project period to support the development of the Common Sustainable Governance Model for Archaeological Parks (in 7 languages), as well as contact details of the Project Management team.
The official web address of the online platform is **https://adriontransferplatform.cti.gr/.**

VI.3. Management

TRANSFER foresees an important and direct participation of the related Stakeholders, who are closely involved in each project phase in order to guarantee a co-design approach through the three transnational working groups, transnational meetings, study visits, mainstreaming workshops, concertation meetings, info days and through the Participatory Online Platform.
The Participatory Online Platform will continue its working period for at least five years after the end of the project in order to guarantee the established network of relationships and a direct system of communication among all the PPs and relevant Stakeholders. Potential new users will have free access to publicly available outputs and will rely on the exchange of information and mutual support delivered by the partnership through the same Platform.
The LP will fund the maintenance of the Platform with own resources.

PART II

Macerata 24/06/2022

VII - COMMON MODEL

In the Chapters VII and VIII, we should integrate, in a coherent way, the innovative models and practical tools of governance elaborated during the WGs' activity. The aim will be to face the complexity of the system we are working on (Park-territory) in order to sustain the development of economic relations and interactions with the territory and promote the project hypothesis for an enhanced use of the ICT technologies in the Archaeological Parks.
The common model and the Guidelines are the result of the work of three WGs. For this reason, chapters VII and VIII must be read taking into account the previous ones, to which one must refer for any further in-depth information on specific topics.
Chapter VII is dedicated to Methodological Approach, and Chapter VIII is dedicated to Technical Guidelines.
Park Planning is seen as a plan between the plans, which aims to build a dialogue with other planning strategies involved in the whole territorial context.

VII.1. Premises, objectives, method and definition of an "Archaeological Park"

VII.1.1. Territorial context [I.P.; C.G.; R.P.; S.C.; S.F.; E.C.; S.D.; F.C.]

VII.1.1.1. Premises

The first possible conclusion one can draw from the premises is that all archaeological parks participating in the project have many common features. The legislation concerning the management of archaeological parks is uniformly administered at the national level in all countries participating in the Objectives and, at some levels, it regulates attitudes towards the protection and preservation of cultural heritage.
In each park, we can identify a long tradition of archaeological research that allows a good presentation to the general public. Likewise, in the majority of cases, the areas of the parks were not built up in modern times, so the preservation of the heritage is quite good and the six parks are situated in naturally attractive environments.
All the presented archaeological parks are located, as a rule, in tourist and traffic-developed areas, inside the regions rich in monuments of historical and cultural importance. The examined archaeological parks/sites are well or slightly less connected to the socio-economical context. On the other hand, the difference among pilot-cases is most clearly visible at the development level, regarding the management of the sites and the built infrastructures and facilities.
These differences are in most cases in line with the overall context (i.e. socio-economic and urbanization) of the territory where the parks/sites are located. These are evident throughout the territorial system and in particular in relation to: the rules relating to the protection and enhancement of the archaeological heritage; the level of territorial and urban planning processes, subjects involved in the management of the territory and archaeological parks; amount of investments in management and enhancement processes of the archaeological heritage; sources of financing and methods of disbursement of resources; ability of the economic system to interact with the management processes of archaeological parks; technological infrastructures; skills and experience in the application of ICT to heritage management and enhancement processes; endowments and individual knowledge of the public in relation to ICT. The planning and management activities of an archaeological park must take into account the need to deal with numerous components that interact within a territory, effectively requiring to identify the specific methods of intervention on a case-by-case basis.
A process of valorization of Archaeological Parks should foresee the overcoming of the state of isolation of archaeological remains. A wider, long-term approach introduces a new vision of archaeological parks as places of functional, biological, and cultural relationships between the different internal and external - sometimes conflicting - components at the perimeter of the archaeological site. The purpose of a process of valorization must be to outline new managerial balances and force us to rethink the traditional conception of the Museum area, in favor of an increasingly wider interpretation of the park, also in terms of the economic impacts it can generate.
Even in the presence of an incessant succession of reflections and research on the landscape and historical and cultural heritage, which do not neglect the important functions of general interest contributing to economic activity, it is appropriate to highlight how the urban planning tools in force often address the issue still with a defensive approach. That is, the attention to the natural or cultural asset as a heritage to be preserved, conserved, and defended from human activities that could compromise its essence still prevails.

The Park Plan must overcome the concept of conservation of heritage (cultural or natural) based only on defensive, minimization or impact compensation strategies. It must therefore not stop at the mere preservation of the good. It is therefore not just a passive protection plan, but also a real project of the territory, on the territory.
Site managers are not used to direct their look outside and to the effect of their activities on the territory and equally to the potential that the activities that take place outside have or may have on the management processes of the site. The integration processes between the site and the territory can, on the other hand, operate on three lines:

1. Create a supply chain that operates in relation to site management.
2. Generate connections between the enhancement of the archaeological site and that of the territory.
3. Integrate the site enhancement processes with the infrastructural equipment of the territory.

To increase the attractiveness of an archaeological site, it is therefore necessary to both enhance its qualities and improve its relations to the territorial context. The presence of qualified training and research centers, such as universities, with direct relations with the management bodies responsible for the Parks, is consequently a fundamental element for the strengthening of management activities. In fact, continuous research is the basis of the progressive qualification and expansion of the offer, on the one hand and, on the other hand, the basis of the scientific project that underlies and conditions all management and development activities.
Taking into account that the Park must interact with the territory in the definition of the Management Plan of an Archaeological Park, an important methodological issue is the identification of relevant geographical area that should be the reference for the evaluation of economic and social impacts of the actions implemented, both on the short-distance scale, and on the wider territorial scale to eventually evaluate the effects beyond the local dimension.
The Park Plan should promote enhancement strategies based on integration processes that take place on several levels. That is, it must favor the integration between what is "outside" and what is "inside" the Park itself. The strategies of the Plan, for example, must aim at the development of forms of use capable of generating important local effects. The first form of use is for educational and/or scientific research purposes, which are particularly relevant. Archaeological Parks, however, must not only aim at a form of use capable of attracting particular social "elite" but also a wider number of visitors interested in other specific values of the sites (natural, cultural, enogastronomic, etc.).
The Archaeological Park should not be seen only as an "open-air" Museum, or rather as an *en plein air* Museum, where the activities take place in the conservation, research, enhancement and exhibition through visits to the archaeological heritage. The new perspective on Parks and Museums and the current public interest lead to a new strategy where "the Museum and the Park become places for active production of culture, proposing themselves not only as knowledge-oriented sites but also as places devoted to entertainment, experience, and social activities".

VII.1.1.2. Definition

With the above premises, the definition of Archaeological Park that we propose refers to the main European conventions related to cultural heritage and landscape, and in particular the Malta Convention, the European Landscape Convention, and the Faro Convention. This theoretical and methodological framework is constantly compared with national and regional practices and laws that uniquely regulate and define the characteristics of the areas subject to specific constraints and management methods.

The Archaeological Park is:
a territorial area where a predominantly archaeological value of the landscape has been identified, integrated with the presence of historical, cultural and environmental values, object of a project for an integrated and sustainable development, in close cooperation with the local community.

It is therefore clear that the definition itself can overcome the arbitrary distinction between archaeological parks, archaeological areas and archaeological sites, shifting the problem to the predominantly archaeological value of the landscape**,** meaning the landscape as a homogeneous part of the territory whose characteristics derive from nature, human history and mutual interrelationships.

VII.1.1.3. The Plan

The tool to achieve the goal of activating procedures and methods aimed at making all the subjects involved in the management of the park and the surrounding area share intentionally a common project, choices and objectives that have a broader impact on the territory: on the one hand, on the natural-cultural assets, on the other, on the economic

and social context. The realization of a shared Plan allows each subject operating on the territory to converge on a unitary project aimed at the full and best possible functioning of the cultural container, while still acting each for their own purposes.
The "plan and the project" are the only viable option in the form of active protection and therefore anchored to the transformative dynamics and local socio-economic growth that allows for overcoming a policy of conservation of heritage (cultural or natural) that comes exclusively from strategies of defensive, minimizing (or worse still, offsetting) impact, or risk. The plan and the project, therefore, make it possible to make sense of the legacies received from the past, even in an area that is limited to the preservation.
The interpretation of areas of cultural and natural value as areas that are not unconditionally associated with the concept of passive protection and therefore reserve, as well as those not entailing a reduction in the availability of the asset, is the first step in overcoming the gap between the protection and the plan.
The gradual shift of attention from rules and constraints to plans and projects, from individual emergencies to territorial cultural systems, increasingly gives: i) the landscape the role of indispensable glue between the various resources, and ii) the plan the role of an irreplaceable tool to go beyond the defensive management policy toward the sustainable project of the landscape.
The Plan must therefore develop a synergistic relationship between the overall strategic framework
and single interventions to be carried out by opening up to the management of natural and cultural resources that are no longer considered areas "to be subtracted" from planning, but cornerstones and anchors of the main territorial choices.

VII.1.2. Economy [M.Sp.; B.F.; E.C.; S.D.]

The management plan must guarantee stability, efficiency and the economic resources necessary to achieve the objectives of protection and enhancement of an Archaeological Park. In order to optimize the investment and financing choices to be implemented on the latter, an assessment of the conditions of economic and financial sustainability is necessary in which costs and revenues are defined so as to quantify the extent of the need for economic resources necessary to create, improve or make more efficient the management of an Archaeological Park.
The activities enhanced by the Park have positive externalities on local economic development. They act as a "shuttlecock", directly through job creation, but also indirectly through the activation of other economic sectors linked to the main activities undertaken for the management of the Park and the implementation of the strategies described above. They also allow the strengthening of the relationship between the Park and the surrounding territory and, particularly, among the ecosystem Stakeholders.
Tourism is certainly the main sector that could benefit from the investments on the Archaeological Sites, both in terms of employment, but also for the promotion of local attractiveness and competitiveness. The incoming of flows significantly improves when usability of the Park and the visibility of its actions improves.
Investments in the site and the related tourism development engender positive intangible effects and contribute to the brand reputation of the specific area. The territory acquires an identity on which it is possible to build a reputational brand that involves the entire community and from which various production chains of the territory benefit. If coherently managed, the heritage site might play a "hub" role and attract Stakeholders and relations that contribute to the economic and sustainable development of the local ecosystem.
A wide range of activities is connected to the socio-economic sustainability of the Park in terms of: conservation, recreation, and economic purposes.
Conservation and protection are fundamentally related to the long-term economic sustainability of archaeological sites. The sectors involved vary from the construction works for detecting or preventing environmental damage or other risks to the modernization and environmental upgrading of existing facilities, including technological monitoring and training of surveillance personnel.
Recreation is one of the attractive requisites of the Park which may be reinforced by upgrading the quality of services provided to tourists and visitors and more generally by fostering synergies between Cultural Heritage, contemporary cultural and creative activities, education and digital technology. Tourism and its wide range of connected activities (gastronomic tourism, open air and natural tourism, hotels and restaurants, travel agencies, etc.) is the first but not unique sector of investments for recreation.
The economic sustainability of the Archaeological Park management is guaranteed and maintained by the effective functioning of complex and interrelated ecosystems of production activities offering both products and services.
The activities related to the enhancement of an Archaeological Park are, for example:

- reception and orientation point;
- comfort, toilets, rest stops;
- signs and tracks for disadvantaged categories (blind, disabled, ...);
- creation of further activities such as shop-bookstore, cafeteria-restaurant and areas for children;
- logistic structures for research such as libraries, documentation center, laboratories;
- programming of events or historical re-enactments;
- didactic and educational activities.

VII.1.3. ICT tools [L.X.d.S.; R.Q.]

In recent years, there has been a significant evolution of the fruition processes in which the role and needs of the visitors to Museums and archaeological areas have been deeply transformed. Technology has been a decisive and stimulating factor in this evolution and it is an extraordinary element to meet in responding to the new needs of knowledge, use, conservation and communication of heritage. ICTs are tools that support, create, and accompany various activities of a Museum and an archaeological site such as documentation, management, conservation and restoration of collections; they are used to communicate with visitors and to promote the activities of the Museums, also making use of devices "familiar" to the public such as smartphones, tablets, and computers. They directly contribute to the "education and enjoyment" purposes of Cultural Heritage and to the improvement of digital accessibility, that is the ability to be inclusive and accessible through digital means as well, increasing access and use of the cultural offer in all contexts, both on-site and in a way mediated by technological devices and thus guaranteeing an ever-greater involvement for people with specific needs. The use of ICTs, increasingly frequent in recent years, responds to fundamental and multiple needs and to ever wider applications not only for the protection and conservation of archaeological heritage but also and above all for the improvement of its use and communication, and thus for the improvement of the relationship with visitors.
Similar considerations encourage the use of the ICTs and to take advantage of the digital transformation of Cultural Heritage as a whole. It is not to be forgotten, though, to respect the general rules of use and communication of the Cultural Heritage, even when implementing ICTs in the design of new visiting paths inside archaeological parks and museums or in the improvement of the existing ones.
From the point of view of the development of ICT tools and their implementation in a Park, the first step must be the analysis of the specific context. One must first analyze the specific context, its strengths and its weaknesses. Targeting the public is also a mandatory phase in the process, followed by a design phase that deals with the improvement of use and communication. It is therefore essential to deal with the improvement of usage and communication in the design phase, which should be followed by a further executive and interdisciplinary stage designated to the development of contents and tools. These phases should be followed by a prototypal one where a mandatory phase is then the knowledge of the public; in dealing with the improvement of use and communication, a design phase is needed, to be followed by an executive and interdisciplinary contents and tools preparation phase, a prototypal phase should be useful then, the prototype is tested for the purpose of usability as well as user satisfaction. At the end of this process, the output can be released finally.
Thus, to summarize, an integration of ICT tools in a management plan for an Archaeological Park must proceed from an exhaustive analysis of the existing situation, territorial and normative context, the public the Park wants to address, local institutions and enterprises the Park wants to involve and, therefore, the needs identified for the management itself, the economic development as well as the conservation, valorization and enhancement of the visit. No ICT implementation plan can be started without this integrated approach, otherwise one risks developing the tools and experiences that end up being unused.

VII.2. How to organize a Plan [C.G.; I.P.]

VII.2.1. Training methods and characteristics of the working group and expertise involved

Creating a Park Plan that goes "beyond the constraints" also means having a heterogeneous and multidisciplinary working group at your disposal, able to cooperate and combine the demands of protection with those of governance and changes in the territory.

The challenge will be to merge all the contributions that will come from all the subjects, integrating the "bottom-up" approach, typical of local territorial planning, with the "top-down" constraints imposed from the legislation at the national level.
Thus, the protection and enhancement of heritage ceases to be only a constraint and embraces a programmatic value by posing the problem of the resources to be invested also to encourage the implementation of projects and best practices.

VII.2.2. Modalities for the co-planning

Cooperation and public consultation in the management of resources and in the governance of the territory is a theme that involves not only the institutions but also the plurality of social actors and stakeholders in various capacities affected by management decisions. This process must be able to bring together all the contributions that will derive from a multitude of subjects who operate in the Archaeological Park and in the surrounding area in various capacities.
The centrality of the relationship between the Park and the socio-economic and territorial context is therefore evident as well as the complexity of the intertwining of interests and problems that must be faced; for this reason here, more than elsewhere, the perspective of inter-institutional co-planning seems to impose itself, with the aim of comparing and promoting the dialogue between the obligations of protection and enhancement with the life of the territory, linked to the needs imposed by agricultural management and building development. This perspective makes indeed a division between the "Museum" area and the territory completely unrealistic.
To achieve the goals, it is useful to use an external facilitator: a neutral outsider, who is trained in managing conflicts and bringing people with diverse interests together. The facilitator can also be helpful in negotiating particularly difficult relationships and sharing the economic analysis: determining the site's potential economic benefit to the local community or ways to ensure that profits from tourism stay in the community.

VII.3. Mission of the Plan

VII.3.1. Preserving systems with a specific archaeological interest [S.C.; S.F.; R.P.]

Archaeological Park is established in a territory in which, taking into account the European Landscape Convention, a predominantly archaeological value of the landscape has been identified. Consequently, having been properly analyzed and taking into account the dynamics and pressures that modify it, the goal is to qualify it taking into account the specific archaeological values.
Recognizing the prevalent, but not the only, archaeological vocation of the Park territory, the objective of a Plan must be to identify the methodological and technical guidelines useful for the development of our knowledge for the primary purpose of protection.
The archaeological heritage within the Park acquires much of its value from its internal relations - creating a culturally coherent system - and from those it maintains with the historically modified territory and, through this, with the communities.
The objective of preserving the specific qualities of the areas of greater archaeological value and enhancing the specific differences with all the other areas must therefore be pursued with global and eco-system strategy that integrates protection with sustainable management. The traces and elements of the historical-archaeological heritage must interact with the continuation of human activities, overcoming the obsolete idea of the Park seen as a "sanctuary" area.

VII.3.2. Promoting scientific research [L.X.d.S.; R.P.]

One of the main objectives of a Management Plan for an Archaeological Park should be the promotion of scientific research. To start with, the planning strategy should list and categorize all the different institutions and actors that have a role in research, protection, enhancement, education, and cultural activities both at a local and national level. The goal is to promote good interaction between the characteristics and needs of archaeological sites, the legislation in force, the issues and needs of the communities that should profit from a cultural and educational point of view from

their local heritage and the methods and processes of scientific research. A good fruitful practice consists in involving, for instance, Stakeholders with the aim of encouraging wider participation in many aspects of the scientific research. Good and accessible communication of the heritage and history connected to the Park as well as the development of new forms of interaction with the site and its goods should help establish a virtuous circle of interest and promotion that can reach communities, institutions, and enterprises from scientific research and *vice versa*.

VII.3.3. Promoting public fruition and public service through access policies and raising awareness of the value of Cultural Heritage [L.X.d.S.; S.C.]

The European framework within which we operate promotes a stronger engagement toward a more democratic access to Cultural Heritage. Documents, policies, and recommendations such as the Faro Convention also foster a democratic participation through the use of digital technology, whose potential in this area has been recently highlighted by the European Year of Heritage.
In this scenario, the use of ICT tools in the development of a Management Plan for the Archaeological Parks should primarily aim at the following objectives, regarding the fruition of Cultural Heritage and public service:

- facilitating and expanding access and interpretation of archaeological goods and history of the site and territory;
- raising awareness on issues of cultural and environmental protection in the perspective of creating a common sense of identity linked to the local Cultural Heritage that will ultimately foster an easier conservation and preservation policy that would include more participants;
- providing tools and platforms that enable easier and more fruitful forms of multilevel and multi-stakeholder participatory governance also encouraging creative industries, SME and community-led initiative for the development of the territory.

Due to the current pandemic emergency but also in a wider and further consideration of the future development of the approach new generations may have to the Cultural Heritage, promotion of fruition should provide remote accessible contents. These should be integrated with social media, specific apps and website devoted to the communication of the heritage and a dedicated and targeted knowledge dissemination connected to the Archaeological Park.
Interactions between Archaeological Parks and territories could strongly benefit from the digital shift, creating synergies and cross-sectoral cooperation.
Integrated apps and tools that provide possible interactions between the services offered by the territory can have the effect of enhancing the connections between different local actors, promoting common patterns of both fruition and possible collaborations.

VII.3.4. Promoting enhancement and educational-recreational activities with the use of ICT tools [L.X.d.S.; S.C.]

The Park's objective is the development of ways of use and enjoyment that can lead to the creation of forms of use capable of generating important local effects. Clearly, the implementation of educational activities and/or scientific research goes in this exact direction. In the past, natural and cultural sites represented an interest mostly for a certain social élite yet now they attract larger masses of people, and it is only advisable to implement new forms of fruition that take into account the aforementioned purposes.
The type of development that the Park should encourage should not be limited to public awareness of the importance of the CH, the creation of training opportunities, including the scientific ones, and cultural and archaeological subjects. Archaeological Parks should also provide for socio-economic growth, taking into account a demand for recreational activities connected to the CH as well.
The use of ICT tools in creative industry perspective needs to be based on a solid and conscious interaction between technology and archaeology. Preservation and enhancement of the Cultural Heritage should also take into account the principles of what is now known as *edutainment*. Native digital generations should be one of the main targets for the projects conceived in this perspective. The goal should be the establishment of a stronger relationship between the Cultural Heritage and these new generations and their peculiar interests, skills and inclinations, also encouraging new projects and support for digital storytelling and forms of shared narration.

VII.3.5. Planning and structuring of governance models [S.D.]

As quoted by the fifth World Parks Congress, governance plays a key role for "the effective management of protected areas of all kinds in the 21st century" and according to the Convention on Biological Diversity and various authors' poor governance would be one of the major threats for the misleading of Parks and Stakeholders objectives.
The governance model actually designs and shapes the roles and the relations among the Park management actors and the Park organization itself and its external context made up of multiple Stakeholders. Moreover, social and political contexts affect the Park governance system directly and indirectly through governing bodies at regional and national level.
The quality and effectiveness of Park governance is guaranteed by the right identification and coherent involvement of the Stakeholders.
Starting from a general classification in state and private management models, a variety of governance models (including a co-existence of the two) may be planned and structured according to the local and cultural specificities of the Park.

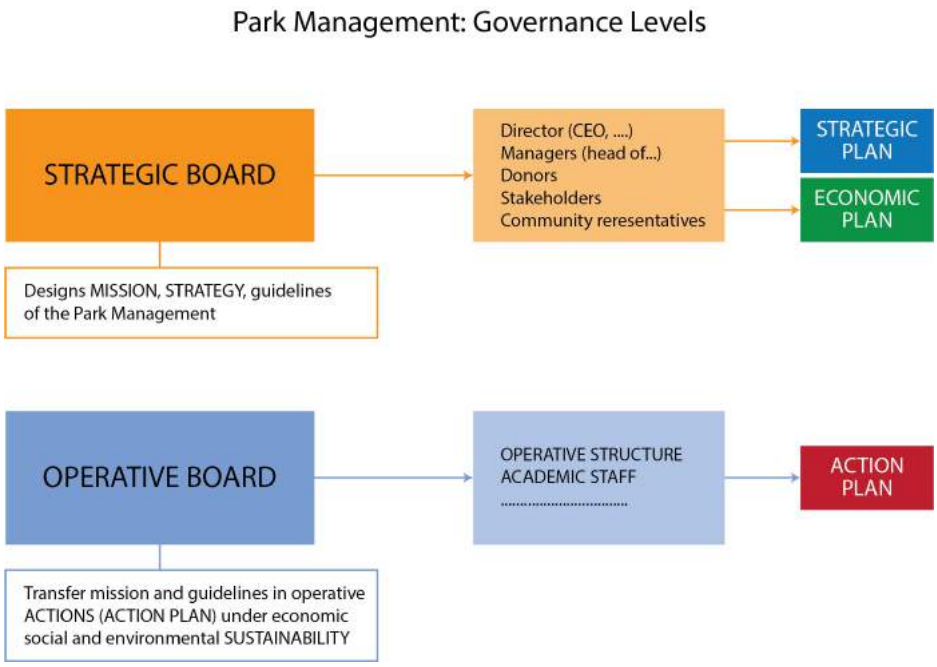

Fig. 15. Government level of Park management (© DO SKC)

VII.3.6. Modelling a sustainable economic development [B.F.]

To ensure a sustainable economic development it is necessary to follow some principles. It is necessary:

- to ensure an open Park model: inclusive, guaranteeing environmental protection and connected to the surrounding economic system, encouraging its development and job creation;
- to ensure the financing of the Park's socio-cultural and recreational/educational activities through the profitability of the economic and productive activities linked to the Park;
- to ensure the availability of external financing from sponsors and various investors as well as participation in European calls for tenders;
- to favor forms of tourism with low environmental impact;
- to combine visiting activities with nature-historical conservation actions in a structured and continuous manner;
- to guarantee the accessibility of the Park and the usability of the services connected to the vulnerable.

VII.4. Phases of the Management Plan development

VII.4.1. Elaboration of documents and knowledge frameworks [R.P.; C.G.; I.P.]

A knowledge framework, understood as an organic and exhaustive representation and evaluation of the state of the territory and its evolutionary processes, must take into account aspects that will flow into the subsequent elaboration of the synthetic frameworks.
Main components of the knowledge framework are:

1. Archaeological System;
2. Environmental naturalistic;
3. System of fruition;
4. Historical and cultural context;
5. Economic context.

VII.4.1.1. The Archaeological System

In particular, the archaeological investigations for the readability of the main components of the landscape are the basis of the Scientific Project. The study of the archaeological reality, from the monumentally visible one to the one yet to be investigated, will also have the objective to contribute to the general organization of the territory aimed at its articulation in areas or parts characterized by different forms of use, enjoyment, and protection. Moreover, it also aims at the elaboration of the design frameworks included in the Plan itself.
Another objective will be to elaborate a research and excavation plan linked to the overall needs for the enhancement and use of the archaeological site and organized over a multi-year time horizon, which is also fundamental for the achievement of the objectives related to communication and the recreational educational dimension.

VII.4.1.2. Environmental naturalistic

The naturalistic report must provide an accurate picture of the geological and botanical-vegetation structure and must pay particular attention to the evaluation of the landscape context in its various degrees of anthropization.
In the case of networked Parks it allows one to provide territorial homogeneity of the widespread archaeological heritage. In this case, it is necessary to evaluate the methods of interconnection between the various sites of specific archaeological and cultural value.

VII.4.1.3. The system of fruition and visit

The distribution in the territory of all the components that can be connected in a "system of use", material and immaterial, determines the system of functional relationships between the goods to be connected.
Understanding the meaning of the Park's role in the "network" of interconnection between these assets for recreational purposes means identifying the organization of current use by investigating the state of the infrastructure and its relationship with the forms and use of the land.

VII.4.1.4. Historical and cultural context

Archaeological Park is established in a territory in which a pre-eminently archaeological value has been identified which must however be contextualized in the territory also with the aim of starting fruitful relationships with other and different elements of the landscape.
In particular, the historical context assumes particular importance for the purposes of activating local and regional enhancement processes as well, useful for stimulating integrated fruition projects at a territorial level.

VII.4.1.5. Economic context

Culture of management is closely intertwined with the themes of the use of goods, resources, expenditures, administrative capacity and professional skills. The choices that will be made for the constitution of an Archaeological Park will have to take into account a plurality of factors, also on account of the sustainability of the project and its cultural, social and economic impact.

VII.4.1.6. The GIS

The formation of the Plan is a process of inter-sectoral and interdisciplinary synthesis, aimed at offering a systemic understanding of the reality of the Park and at defining a management strategy that is as "integrated" as possible. The analytical and strategic contributions of various specialists cannot simply be combined, but must be compared to interact throughout the entire process.
The development of the Plan is also a co-planning process in which knowledge, analysis and design, first, and then the management are dynamically intertwined.
Different phases of the planned activities, starting from the construction of knowledge frameworks, should not be conceived sequentially but as a process of mutual interaction. This being considered, the development of the Territorial Information System, managed through the GIS, plays a fundamental role.

VII.4.2. Summary interpretation of knowledge [R.P.; C.G.; I.P.]

The decomposition and the re-composition of different profiles of estimative analysis in a vision that is deliberately holistic of the area analyzed are oriented to the localization of the territorial structural reading targeted to support alternative strategical options according to different reference backgrounds. The synthetical interpretation of the territory analyzed represents the natural landing place of the analysis and the interpretations of the sectors briefly mentioned in the previous paragraph. It represents a fundamental moment of the Archaeological Park Plan as it is the base of its regulation function in respect to other plans and programs and a reference framework for the strategical orientation it must express. The outcome of this analysis will be the identification of the strategies and projects aimed at their implementation, and contents of the regulatory text.

VII.4.3. Elaboration of the Project: Archaeological Project and the contents of the regulatory text [R.P.; S.C.; S.F.; C.G.; I.P.]

Archaeological Park is therefore a territorial area where a predominantly archaeological value of the landscape has been identified, an area characterized by important archaeological evidence and by the presence of historical, cultural and environmental landscape values, an object of enhancement.
Since the most relevant requirement for the construction of an Archaeological Park is constituted by the archaeological evidence that justifies specific management, the archaeological interest must be the pivot of the definition of the Common Model and the Guidelines for Planning and Management. For this reason, the basis of the management project must be the **Scientific project**, capable of identifying the contents of the Park and the themes to be exploited (diachrony, monuments, relationship with the landscape) and determining subsequent choices. From the Scientific Archaeological Project emerge the **Contents of the regulatory text**.

VII.4.3.1. The Archaeological Project [R.P.]

The first level of elaboration will lead to the organization of the Archaeological Project. The archaeological project constitutes the basis and the backbone of the entire plan project. The reasons underlying the constitution of the Park will be illustrated in the archaeological project as well as the elements that have led to the identification of a pre-eminently archaeological value of the landscape. This data will be objectified through the preliminary illustration of the consistency, type, characteristics and state of conservation of the archaeological remains. The archaeological project will therefore be the basis of the perimeter definition of the Park and the setting of different rules for different areas.

VII.4.3.2. Contents of the regulatory text [C.G.; I.P.]

On the basis of what has been said above in the regulatory text, some regulatory architectures must be used that do not stop at zoning, but aim to provide references, addresses, guidelines, directives and specific determinations for the implementation of the plan, notwithstanding the essential role of the division into zones in identifying different degrees of protection. Traditional rules for areas are flanked by rules for projects and rules for resources; both normative categories tend to overcome the classification in zones in order to grasp relational design aspects capable of going beyond any rigid subdivision.

VII.4.3.3. Mosaic of urban and territorial planning [C.G.; I.P.; R.P.]

To increase the attractiveness of an archaeological site, it is necessary both to enhance its qualities and to improve the territorial context. The project for the archaeological area must consequently deal with current planning and programming. The site management processes must therefore be coordinated with the following processes:

- management of the landscape and the urban and territorial environment;
- enhancement of the cultural and environmental heritage;
- conservation of historic centers and the quality of settlements.

However, these processes refer to different subjects and to different urban and territorial forecasts for which objectives and coordination tools are needed.

VII.4.3.4. Rules for areas [C.G.; R.P.; I.P.]

In defining the rules for areas, and in order to apply concretely a dialogue between the plan for the park and urban and territorial planning, it is necessary to proceed with the definition of the regulatory content after a careful examination of what has already been defined by local, sectoral and supra-local plans. The goal is to conceive the park plan as a tool with complementary and supplementary (rather than substitutive) actions to the existing planning system.
It is not necessary to impose zoning of the territory modulated on different levels of protection, but to start a dialogue with other plans (and the subjects responsible for them) in order to integrate the protection into the regulation and management of permissible transformations within the parks, in line with the quality objectives of the Plan.

VII.4.3.5. Strategies and indication for the realization and management of Projects [R.P.]

The breakdown and re-composition of different profiles of evaluation analysis in an overall vision of the area under study are aimed at identifying a structural reading of the territory aimed at supporting various strategic lines.
A few questions are essential at this stage:

1. What is the capacity of our area under study to absorb external perturbations without excessive structural damage?
2. Is the type of development that the Park in the project can induce essentially a raised awareness an opportunity for didactic-scientific training and, more generally, cultural training on the themes of archaeology, or even socio-economic growth?
3. Can the enhancement of traces, fragments and ruins of the ancient city turn into anchorage and reference for the reorganization of a wider and more extensive territorial area that interacts with the same management purposes of the Archaeological Park?

To achieve this objective, the Plan must act simultaneously on different strategic lines; some essential, other strategic lines must be evaluated case by case and refer to the objectives and specific context of each Park. Each of these strategic lines is subsequently implemented through Actions/Projects (Plan Documents) which must be assessed case by case.

VII.4.3.6. Plan documents/Indication for project management [R.P.]

In order to promote some actions necessary for safeguarding and conservation of the emergencies present and to favor the educational and recreational use of the Park, the Plan must provide for the formation of programs and

projects aimed at promoting and coordinating initiatives and interventions to implement, enhance or qualify the archaeological resources, services and infrastructures on which the functionality and social usability of the Park depend, involving the plurality of institutional subjects and, possibly, the operators and local actors concerned.

VII.5. Critical issue for Guidelines development [R.P.; C.G.; I.P.; S.C.; S.F.; E.C.]

Critical issues for guidelines development pertain to the following domains:

- regulation;
- strategy;
- shared values and community building;
- economic impact.

Regulation aims to institutionally protect sites, resources, and landscapes with appropriate rules, constraints and prescriptions. Thus, regulation prevails, where necessary, over the discipline that could be put in place by the other planning instruments.
Strategy aims to identify methodologies for coordinating the actions and intervention programs under various subjects, public and private, operating in the area.
Shared values and community building aim to clarify the issues and reference values, the reasons behind the choices and their margins of negotiation, conditions for the dialogue and confrontation between different interested institutional subjects, operators and Stakeholders.
Economic impact aims to evaluate the reasons and the economic impact of the interventions taking into consideration other sectors that may be developed from a socio-economic sustainability point of view.

VII.6. Economic approach to management

VII.6.1. Skills and professionalism required for the realization of the Park [S.D.]

Once the management structure has been precisely defined, it is necessary to train staff and operators involved in the economic activities. Several skills are required for the management of an Archaeological Park. Training activities that should be put in place for an upgrading of the site relate to the following areas: monitoring and risk management of the site; training tourist guides to enable organized and systematic individual or group visits; digital competences for the use of augmented reality; training staff for the organization of staging events and international archaeology students' campuses, initiatives to exchange experiences and similarities between localities from the same historical period; training activities for the implementation of projects co-financed from the EU development programs; specific courses for local entrepreneurs; communication skills: storytelling workshops.
Skills might be grouped into four competence units:

A. Management;
B. Promotion and communication;
C. Architecture and construction;
D. Hosting and catering services.

A. Management

The management area requires: organizational skills, leadership and collaborative skills (people management, teambuilding and team working), financial skills (accounting, fundraising, etc.). The governance should take into consideration the nature of the organization (archaeological site) and give preference to a person with specific sectoral experience (preferably an archaeologist) with managerial attitude and proved team attitudes. The sustainability of the Park would be assured by a team of experts/collaborators including a financial manager who is an expert in accounting, tax standards and regulations. It is desirable that the team for the management of the Archaeological Park also consist of experts for the management and implementation of development projects.

B. Promotion

The visibility of an archaeological site and its reputation are fundamental assets for the market positioning strategy of the Park. The partners agree that promotion and communication require intense and focused investment of resources.

For promotion and communication skills: marketing and publishing sector experts with completed postgraduate degrees – either economy or social sciences; multi-year work experience with the development of quality destination content, development and promotion of new content and destinations. The presence of experts in marketing and publishing sector is highlighted by partners together with a series of activities which are strictly connected to the Cultural and Creative Industries (CCIs). An effective promotion of the cultural investment would positively act for the enhancement of the touristic attractiveness of the site and the reputation of the local ecosystem. Marketing professionals can occasionally be hired as external collaborators.

C. Architecture and Construction

Experts in the field of architecture and construction are required for planning and arranging of the Archaeological Park. In the restoration sector, a wide range of job skills from higher to basic education is needed. In detail, the labor market would offer opportunities for the following:

- university degrees in archaeology, architecture, cultural management, conservation, mechanical engineering etc.
- secondary education diplomas as conservators, specialized workers, monitoring/safeguarding personnel – unskilled workers as cleaners, operative skills.

Working experience, knowledge of specific locality and region are valuable selection criteria in this area.

D. Hosting and Catering Services

Economic sustainability of an Archaeological Park is guaranteed by the effective functioning of complex ecosystems of production activities. Tourism and enogastronomic activities, hospitality and entertainment industry, green and sustainable agriculture are valuable supply chains connected to the development of an archaeological site. The connection to the production chains is reinforced by selected professional skills in the following areas: hospitality (hotels, restaurants, catering, etc.); agri-food and circular economy; enogastronomic tourism; travel agencies; tourist guides. Tourism specifically requires professional knowledge of the relevant archaeological, cultural and historical facts of the site, effective communication skills and foreign languages competencies.

VII.6.2. Core and collateral activities for the management of an ideal Archaeological Park [B.F.]

a) Production activities (various supply chains)

Agri-food chains and creative industries are the economic activities that can best connect the Archaeological Site to the wider territory in a sustainability perspective. Furthermore, as for tourism development, a targeted approach for specialized groups, in several forms of niche tourism and associated services, would allow a sustainable valorization to be implemented, complying with the "Tourism Carrying Capacity" limitations described above.

b) Activities related to the training for the professionalization of the required skills

Once the management structure has been precisely defined, it is necessary to train staff and operators involved in the economic activities. Several skills are required for the management of an Archaeological Park. Training activities that should be put in place for an upgrading of the site relate to the following areas: monitoring and risk management of the site; training tourist guides to enable organized and systematic visits of individuals or groups; digital competences; training staff for the organization of staging events and international archaeology students' campuses, initiatives to exchange experiences and similarities between localities from the same historical period; training activities for the implementation of projects co-financed from the EU development programs; specific course for local entrepreneurs; communication skills: storytelling workshops.

c) Protection and maintenance

Activities of continuous maintenance of archaeological sites are very important and related to the long-term economic sustainability of archaeological sites. Priorities to be implemented relate to those "core competences" of an ideal archaeological site management that were highlighted above, namely: Monitoring and risk management of the site; Conservation and maintenance; Detecting or preventing environmental damage, or other damage, for example, through video surveillance; Modernization; Environmental and quality upgrade of existing facilities and services; Use of augmented reality; Accessibility of the archaeological area for expanded and equal fruition, for example, arranging a part of pedestrian paths to facilitate the access for people with disabilities. Moreover, to connect the

archaeological heritage with other Cultural Heritage of the wider area, trail maintenance, securing the site with safety fences and the entire infrastructure of the archaeological sites.

d) Promotion and enhancement (ICT, technological infrastructure, digitization, virtual tour)

Promotional activities require significant financial investment but consequently lead to an increase in the number of visits, increased spending and higher financial revenues. ICT tools can increase the attractiveness of archaeological sites and thus increase the number of visitors, their consumption at the archaeological site out of curiosity, improving the overall experience of the site and fascination with new knowledge after visiting the archaeological sites. The promotion strategy should adopt a targeted approach to different target groups. This includes the use of specialized channels and methods of promotion, such as advertising the Archaeological Park on websites and gathering places for adventurers (hikers, cyclists) while emphasizing a favorable environment for these activities to take place near the sites. This approach would include the offer of archaeological education, workshops and tours to school groups or the offer to the elderly for workshops and education. The basis for building brand recognition are the elements of differentiation that will have to be defined in the document Brand Promotion Strategy.

Further channels and means for promotional activities are proposed:

- Support to research, study and scientific documentation and promotion of the Cultural Heritage by specialists, such as archaeologists, curators, architects, conservators, museum educators, researchers and representatives of academic institutions.
- Organization of thematic events enhancing local traditions at various historical periods.
- Insertion of the archaeological site within cultural itineraries.
- Signalization activities in places that increase the visibility of archaeological sites such as strategic places.
- Elaboration of a complex system of visual identity.
- Design of promotional products and souvenirs.
- Website and app development.
- Social media promotion.
- Advertising on the local radio stations.
- Encouraging tourists in sharing their experiences on social media (visitors as ambassadors) through the app.
- Establishment of a partnership with tourist agencies, tourist boards and accommodation providers – to introduce the visitor to the Archaeological Park and directions towards it.

The installation of technological infrastructure in the archaeological sites could serve promotional activities and equal access to the sites.

e) Other network activities

The informed participation of all the relevant Stakeholders is of major importance in order to plan an effective management plan. Particularly, Stakeholder networking in culture and archaeology can contribute to the transfer of ideas, information, and examples of good practice and ultimately increase the economic viability of archaeological sites. Furthermore, to implement a sustainable local development strategy able to conciliate economic growth with cultural preservation, it is of great importance to establish comprehensive collaboration with tourism Stakeholders, hospitality and HoReCa industry Stakeholders.

VII.6.3. Economic-Financial characteristics of the activities [B.F.]

Analysis of the situation

The promotional activities must be continuous on local national and international level and be delivered by collaboration among local Boards. Obviously, all these activities need to be supported by analyses in order to highlight:

- which economic objectives are to be achieved;
- which actions allow these objectives to be achieved;
- what costs/investments need to be made to achieve the desired results;
- how to obtain the resources to cover the costs.

Here are some reflections for each question, starting from the experience of the Transfer Project.

A. What costs do you think are connected to the activities stated above? How can they be optimized?

For the planned activities the costs associated with the activities are reflected in:

- costs of performing protective and systematic archaeological research;
- costs of infrastructural adjustments of Archaeological Sites for visitors;

- costs of employees' wages;
- costs of conducting educational workshops and trainings of conservation and restoration of archaeological heritage for professionals, relevant Stakeholders and local community;
- costs of forming tourist educational program for kids and young people;
- costs of education for guides on archaeological sites;
- costs of capacity building and training for managing development projects;
- costs of creating brand strategy and marketing plan;
- costs of regular maintenance of Archaeological Parks;
- costs of establishing free Wi-Fi connection in Archaeological Parks.

B. How do you evaluate the economic and financial sustainability of the Park?

Park organization based on sustainability principles must be priority to all. It is fundamental that in the future Park management be partly self-sustainable. In the long run, smart and targeted investment in promotion will be justified by a bigger number of visitors that will bring more revenues through sales of tickets, souvenirs, and location rental for private and business events.

C. How can ticketing policies be organized?

Some archaeological sites have developed an integrated market for visitors. This market includes electronic payment systems for buying tickets and other services. It also includes a distribution system for various materials related to the site, such as species, photographs, and digital publications. Additionally, economic packages are available that include visits to multiple sites and monuments of archaeological and historical interest in the same territory.
The digitalization aims to reduce personnel costs, so the online ticket sales is a priority.
Some archaeological sites are completely free of charge to visit. There are neither working hours nor an organized visit/guide to the site. Given that the visitor infrastructure is currently not regulated, ticket sales, especially without organized guidance, are not realistic at the moment. The prerequisites for organized ticket sales are the improvement and modernization of the infrastructure of archaeological sites, arrangement of the management structure and competencies over the sites, organization of permanent thematic management of sites and thematic connection with other attractions and introduction of joint ticket sales. In this case, based on different types of visitors, but also the context and the wider area in which the archaeological sites are located, the organization of ticket sales should be possible in several ways:

- at the arranged entrances to archaeological sites;
- in cities with Archaeological Parks - in tourist offices;
- online ticket sale.

D. Income from other activities (events, workshops, publications, products, different services)?

- revenues from the sale of tickets, casts, copies, replicas, ceramic objects, works of art, jewelry, toys, games, applications with archeologically inspired themes, books, guides;
- fee revenues from production of professional photographs, films (documentaries, international productions etc.) air-photography, production of digitals and 3d images, etc.;
- the revenues provided by the exploitation of every building.

Some Park plans to gain revenues from location rental for private and business events (weddings, celebrations, workshops, photo-shootings etc.). Additional revenues are planned from sales of souvenirs, pastry, digital transformation contents and other attractive contents that we will produce.
The Park is currently completely free of charge for visitors to come, hold cultural and gastronomic events, concerts, drama plays, sales events and presentations of handicrafts, etc., and they represent potential sources of funding that could be used in further development and valorization of the potential of the archaeological sites. Such sources of funding can later be directed to regular and developmental activities and thus contribute to the economic and financial sustainability of Archaeological Parks. To make this possible, it is necessary to take care of the arrangement of the site, for the site to be ready for the organization of such events and to provide all the organizational prerequisites and consider the cost-effectiveness of the organization.

E. How to find external financing (European funds, ministerial calls, private partners, etc.)?

External financing:

- presupposes solid documented proposals where the economic evaluation of the investment in an archaeological site must follow three phases:
  1. identification of financial, social, cultural, and environmental objectives of the interventions;

2. definition of the criteria to measure the ability of the projects to pursue the objectives;
3. attribution of a performance indicator to each criterion.
    - is connected to the area of the investment, where income, infrastructure and services play a crucial role.

In some experience emerge that the best way to ensure continued opportunities for ancillary external co-financing is to hire experts to prepare, write and implement development projects. Also, it is necessary to establish strong links in continuous cooperation with county and local development and tourism agencies and with cultural institutions with which it will be possible in partnership to apply for and implement development projects. This also contributes to the creation of links between individual elements of Cultural Heritage which then leads to the development of cultural tourism and the recognition of cities and counties as cultural tourist destinations. Such relationships and processes form important segments for achieving long-term economic sustainability.

VII.7. Models and means for evaluation of economic-financial sustainability of Park enhancement [B.F.; E.C.; S.D.]

Economic impact assessment raises several critical issues. Most of them are general challenges that all sites must address. Some of them are related to the specific needs of some Archaeological Parks. The main critical aspects can be summarized as follows:

- identification of the economic activities to be included in the evaluation process;
- identification of the costs and revenues centers, where this choice depends on the governance model chosen;
- estimates of indirect costs and indirect revenues;
- identification of the timeline to consider for the economic/financial feasibility;
- availability of data;
- territorial scale.

VII.8. Methods and strategies for monitoring results of the economic impact and evaluation and review [E.C.]

Monitoring the implementation and results of the management plan is a process that entails collecting, analysing and comparing indicators that systematically monitor the success of the implementation of programs and plans. Objectives in strategic planning documents must be clearly defined and the relevant indicators should be defined for each objective. Performance indicators allow to monitor the implementation process and contribute to maintaining quality communication with Stakeholders. The main purpose of reporting is to inform Stakeholders about the implementation of the management plan and potential constraints and needs identified during the implementation process. Likewise, reporting serves to consolidate the results achieved by individual stages of implementing the management plan. By evaluating the results through performance indicators, it is possible to identify challenges and needs that may not be foreseen during the development of the management plan. Moreover, the monitoring process allows for an update of the management plan when necessary. Finally, the importance of reporting is also reflected in ensuring the transparency of the entire implementation process.

VIII - GUIDELINES

The technical Guidelines will develop executive management plans for archaeological areas using the above mentioned methodological approach. This chapter VIII, so, is a useful Guideline on which documents summarize all objectives and goals, planned activities and implemented actions, interim and final results, outputs, and the monitoring and evaluation of the adopted Common Sustainable Governance Model.

VIII.1. Knowledge framework [R.P.; C.G.; I.P.]

It will have to be developed on a larger portion of the territory than that directly affected by the archaeological heritage. Two main territorial scales could be considered:

1. The first one, short-distance scale with the aim to evaluate the economic and social impact of the implementation of the Management Plan of the Archaeological Park, for example, the municipality where the Archaeological Site is located.
2. The second wider territorial scale to eventually evaluate effects beyond the local dimension (e.g. region).

As a first approximation, the option (1) should be adopted for all the sites while the option (2) may be part of the flexible solutions of the common model. It can be noted that proper territorial scales for evaluation and impact assessment should consider the governance structure of the Park, its internal/external organization, the institutions responsible for managing the Park, and the extent of their relations with other Stakeholders.
The specific analysis must precede by the collection of information relating to the regulations and management projects in progress:

- laws and legal acts that protect Cultural Heritage;
- data on cultural Stakeholder (institutional and non-institutional);
- data and documentation on projects that are currently being implemented, and are relevant for planning the development of the Archaeological Park area.

For each of the main components of a knowledge framework, specific documents must be prepared. The documentation, when possible in relation to the local context, must be prepared in compliance with overarching national standards (see: ICCD in Italy for cultural heritage).

VIII.1.1. Archaeological System [R.P.]

Archaeological map of the site: the detailed survey of the ancient remains is the initial and essential prerequisite for the realization of the Plan. It must consider both elements emerging from the ground. It must be digital, in 3d and structured in such a way as to support all the analyzes on the state of conservation and the projects necessary for maintenance and restoration.
Archaeological map of the territory (map of absolute potential): by archaeological potential we mean the probability that in a territory there are preserved archaeological remains buried. The map records all the archaeological evidence known in the area. The map must consider the emerging and buried structures known based on bibliographic, archival and survey data. It will have to be geo-referenced and constantly updated.
Archaeological predictivity map of the site and the territory (map of the estimated potential): the archaeological potential is configured as a predictive action when it is estimated for the areas in which there is no archaeological evidence. To do this, an in-depth study of the territory is necessary, taking into consideration various parameters (historical and environmental) and analyzing the spatial relationships between the known archaeological sites.
Map of the archaeological vulnerability of the site and of the territory: vulnerability is the parameter that must be taken into consideration for the determination of the risk of damage to the archaeological heritage in relation to anthropogenic events (public or private building works that include actions handling the soil) or natural occurrences (landslides, floods, earthquakes).

VIII.1.2. Environmental naturalistic [C.G.; I.P.]

The geological analysis must provide information on the geological, morphological, pedagogical and hydrographic nature of the Park area and the surrounding area. The aim is also to highlight the major phenomena of optional danger in action (landslides, floods, earthquakes, etc.)
The analysis of the vegetation-botanical system provides information on vegetation and agricultural systems, considering the layout of the territory and the relationship between human action and the natural context, from whose dialogue the current landscape arises.

VIII.1.3. Receptivity (hotels, restaurant, etc.) [F.C.]

For preparing the management plan correction, a study must be envisaged concerning the reconnaissance of the reception activities present in the Archaeological Park to develop a complete tourist offer. The plan must contain the data on all accommodation facilities and extra-hotel accommodation to determine the actual number of beds available in the reference zone.
The term extra-hotel facilities refers to: bed-and-breakfast facilities (B&B), guest houses, residences, apartments for tourist use, inns, hostels, farmhouses, country houses, study Center, lodges, and mountain refuges.
It is also important to look at all the facilities on the temporary rental market that can be found online through tourist intermediation websites as well as, for example, the Airbnb platform. Moreover, the accommodation facilities may include restaurants, so the plan must include a catalogue of the all the facilities in the subject area.

VIII.1.4. Viability and connection (airport, road, stations, etc.) [F.C.]

It is necessary to gather information about the existing infrastructures outside the Park, referring to accessibility, both in relation to the major communication routes (railways, harbors and highways), and in relation to the urban context (roads, parking, means of transport).
The plan will need to be harmonized with the urban plans of the cities involved in the management and use of the Archaeological Parks. Regulatory plans represent the basic tool for land management and regulate urban changes within the territory.

VIII.1.5. Evaluation of the type of visitors, actual or potential [L.X.d.S.; S.C.]

In order to develop an effective management plan, it is necessary to evaluate the touristic context–tourists' movement (arrivals and overnight stays) for the city area and the territory in which the Archaeological Park is located, as well as the data on the share of culturally motivated tourists. It is also important to evaluate the type of actual and potential visitors, in order to develop an effective communication plan, necessary, also for the purposes of preparing the future communication plan.
These analyses will have to consider not only the local communities (with particular attention to schools and cultural institutions in the area), but also the tourist potential, in order to focus on suitable strategies to meet the needs of the different audiences and promote the widest participation possible.
In this context, the collaboration between the institutions involved is crucial to provide data about tourism in the territory and in the specific cultural sector. This way, it will be possible to identify targets and strategies to attract new audiences or enhance those already existing.

VIII.1.6. Historical and cultural context [R.P.]

VIII.1.6.1. Historical road map: must take into account direct and indirect archaeological data and sources.

VIII.1.6.2. Cultural emergencies: cultural emergencies that are not archaeological, but which in any case refer to the cultural context of the territory, must also be taken into consideration. Particular attention will be paid to the built heritage and in particular to Museums and buildings of architectural interest, like rural buildings heritage.

VIII.1.7. Economic context [E.C.]

Relevant economic data collection may pose several challenges. These challenges should be addressed to develop evidence-based and result-oriented monitoring, reporting, and evaluation.
We have already mentioned the problems related to the setting up of reliable indicators and outcome variables. Evaluation and impact assessment may inadvertently lean towards those variables that are easier to quantify, for instance, the number of visitors. Yet, there is no obvious solution to the identification of indicators related to more intangible social benefits, such as welfare or quality of life, or even sustainability in the fruition of Archaeological Parks and Sites.
Moreover, sometimes available official data are too coarse for a detailed spatial analysis and thus useless to properly evaluate progresses towards the objectives of the Common Sustainable Plan (e.g. the number of visitors). In these cases, it is important to complement official data with other well-designed primary sources, such as questionnaires and surveys that can detect qualitative information of the sites and visitors. Furthermore, to evaluate changes over times, it is important that these qualitative tools are designed in a continuous and systematic way. Also, relevant information should be collected continuously.
ICT tools are of great importance for the quantitative and qualitative monitoring of the activities promoted by the Park. The growing availability of Big Data and the higher granularity at which those data are available represent both a great opportunity and at the same time, a challenge. In particular, the potentialities in using Big Data require further investigation. In fact, some of the information available is open-source, free to use, but usually general-purpose. It is important to consider the specific needs of each site when using Big Data. For example, a great opportunity is offered by the data drawn from Volunteered Geographical Information (VGI) Systems such as the OpenStreetMap project (OSM). The approach could be to start from the assumption that some relevant proxies for socioeconomic metrics useful to monitor and evaluate the activities of the Park might be based on the OSM geodata.
Another challenge to define a Common Sustainable Governance Model is the different availability of data at the local level (either structured, official data or unstructured such as Big Data retrieved from satellite images or VGI systems). This is a source of heterogeneity across Archaeological Sites. The Common Model should include a general proposal as "common indicators/Common Evaluation Toolbox". The general proposal is limited to those indicators that can be easily available in several locations. It should be considered as a flexible arrangement as it can also be integrated and adapted in relation to the specific objectives and challenges of each site. Therefore, The Archaeological Site may decide to add some additional quantitative and qualitative outcome indicators closer to the desired results not included in the common proposed set. In this way, a more specific system of indicators can be designed. Besides, after a careful collection of the relevant information available at the local level, the specific indicators identified - both qualitative and quantitative- can be refined based on the knowledge base that is available locally.
This type of analysis must be preceded by a careful study of the local context from a multifocal perspective - economic, social and demographic perspective.

VIII.1.8. Management of information through GIS [L.X.d.S.; R.Q.]

In order to manage all the different documents and contributions that can be useful for the management plan of the Park, the use of a GIS is highly recommended. Also, some new applications of HBIM for archaeological heritage have proven useful for managing different information granularity and level of detail. These last tools also enable a proper link with GIS platforms. Proposing documents elaborated by the different specialized professionals that are involved in the management plan should by inserted in the GIS.
Whenever possible, basic information must be collected according to standard, normalized and official models. If this is not possible, wider and more original codifications are necessary. If possible, however, it is necessary to start from standardized bases.
The GIS must also provide for the normalization of cartographic and alphanumeric data, preparing a user manual. The GIS of the Park must include as much information as possible from the existing official and recognized databases, and avoid the overlapping of the information itself.
Analytical, evaluative, proposing documents elaborated by the different specialized professionals that are involved in the management plan should not be simply added to one another but integrated and compared through all the processes of the plan's elaboration. GIS is therefore a useful and essential tool in order to systematize, organize, interpret and plan, putting together all the different information and data about the Park into a geo-referenced system.

VIII.2. Synthetic interpretation and summary interpretation of knowledge [C.G.; R.P.; I.P.]

The comparison among the different analysis has been made easier thanks to the adoption of a common scheme of criteria and evaluation categories that can be compared. The different analysis profiles have been simplified and mainly traced back to 3 systems: physical-naturalistic system, archaeological resources system, and didactic-recreative enjoyment system. The scheme comprises an evaluation grid defined by the intersection of the different sectoral evaluation profiles with 4 factors, the identification of components or situations, namely:

1. **structuring factors**, intended as the set of components and relationships with which the organization of local systems is manifested concretely and adaptively;
2. **characterizing factors**, intended as components and relationships that connote each local system giving it an identity that distinguishes it from others, even of similar structures;
3. **qualifying factors or situations**, intended as elements or conditions that give a local system a certain quality or importance or value without changing its structure or characteristics;
4. **critical factors or situations**, such as the set of elements or conditions, in place or potential, of degradation or de-qualification or alteration, more or less acute, not likely to compromise the structure or character or quality of the systems.

It should not be forgotten that as part of a planning project, the value of the historical-Cultural Heritage must also be defined with the contribution of the population concerned. The place of value judgment imposed from above, by a specialty, must be accompanied by justification, forcing us to resort to inter-subjectively shared arguments rather than only affirmed truths.

VIII.3. Elaboration of the Project: Archaeological Project and contents for the regulatory text [R.P.; S.C.; S.F.]

The various actions, relating to the various strategic lines, should converge in the planning documents that the local government bodies are planning to launch ("implicit plan") or are already in place. The coordination of strategies is crucial in the coordination of each government body.

VIII.3.1. Scientific Archaeological Project [R.P.; S.C.; S.F.]

The Scientific Archaeological Project will have to argue some of the main activities envisaged in the Park including those relating to the critical elements in relation to the conservation of the heritage, its relations with the territory, the need to increase the number of visible archaeological assets to enrich the quantity of offer and increase historical-archaeological knowledge about the city and the territory. The goal is also to better define the visit itineraries and educational projects.
The objective will also be to contribute to the general organization of the territory aimed firstly at the articulation in areas or parts characterized by different forms of use, enjoyment and protection, but above all after the elaboration of the design frameworks included in the Plan itself.
Another objective will be to elaborate a research and excavation plan linked to the overall needs for the enhancement and use of the archaeological site, organized over a multi-year time horizon.
The Scientific Archaeological Project will also have to provide

- The definition of the areas to be excavated.
- The scientific research plan.
- The cataloging program for warehouses' management connected with the digitalization plan.
- The archaeological map realization and the territorial surveys.
- The brickworks mensiochronological analysis.
- The project for the archaeological Antiquarian or Museum.
- The remote sensing surveys.
- Other specific archaeological problems analyzed case-by-case.

VIII.3.2. Contents for the regulatory text [C.G; I.P.]

The regulatory text, to overcome the classification in zones, is organized by Mosaic of urban and territorial planning, Rules for areas, and Strategies which are the basis of the Plan Documents.

VIII.3.2.1. Mosaic of urban and territorial planning [C.G; I.P.]

The project for the archaeological area must deal with current planning and programming, regarding which common perspectives and potential synergies can be recorded, but also inconsistencies and negative interferences. In both cases, a dialogue with the bodies responsible for planning and programming on the area under study must be sought, not for a simple adaptation to current planning, but for a reciprocal contamination.
Relations with existing planning must be structured based on a common interpretative grid.

- structural aspects which, through interdisciplinary readings and interpretations, produce a systematic vision of the area under study: structures, characters, values and fragility;
- strategic aspects that outline project hypotheses not yet sufficiently defined to be supported by technical-normative contents, but sufficiently sketched to initiate and configure forms of co-planning and shared participation;
- operational aspects strictly connected to the administrative milieu in which they are located and therefore to the greater or lesser efficiency of the systems;
- technical-administrative aspects that translate into norms.

VIII.3.2.2. Rules for areas [C.G; I.P.]

The areas must be identified through a series of "recognition measures": perimeter and representation on a cartographic and cadastral basis; drafting of the updated map of constraints; filing and evaluation of individual monuments. In this way we can speak of protecting the archaeological landscape, which protects not only the emerging or underground asset and does not end in the individual areas in which there are direct archaeological constraints, but also includes and protects the surrounding areas that make up the environmental context in to which the areas are inserted, connoting the relative landscape. These areas must be equipped with rules for use intended to ensure the conservation of distinctive features and their enhancement.
Therefore, for each zone destination, two descriptive levels must be summarized (description of the zone; description of the existing forecasts affecting that specific zone) and a third propositional level, in which supplementary rules are introduced with respect to those already in place.

VIII.3.2.3. Strategies [R.P.; C.G; I.P.]

If the decomposition and recomposition of the different evaluation analysis profiles are aimed at identifying a structural reading of the territory, the Plan must act simultaneously on different strategic lines.
Among the essential strategic lines, we highlight:

- the protection, study, restoration and static consolidation of the archaeological heritage;
- the management of the natural heritage and existing infrastructures;
- the organization of forms of didactic-recreational use;
- development and management.

Other strategic guidelines, referring to the specific objectives and the territorial context of each Park, can evidently be evaluated on a case-by-case basis and included in the planning.
The different actions identified in the strategic lines will converge in different projects, activities and initiatives (Plan Documents) which, together, will contribute to the enhancement and proactive conservation of the Archaeological Area.
As highlighted in each of the strategies, there are three transversal lines that affect all the strategic guidelines and which become indispensable especially in the processes of analysis, monitoring and enhancement of the individual archaeological assets and, more generally, of the Archaeological Are. The three transversal lines are:

A. **Use of ICTs, research, and innovation**
B. **Models and means for evaluation of economic financial sustainability of Park enhancement strategies**
C. **Accessibility**

VIII.3.3. Plan documents [R.P.; C.G; I.P.]

The specific documents, to which reference must be made, always taking into account their flexible application, i.e. the contest of reference and to the situation of the Park itself are:

VIII.3.3.1. Management and implementation of the main infrastructure [C.G.; I.P.; S.F.; S.C.]

It is essential that the Archaeological Park Plan contributes to the enhancement of the territory and therefore also of the infrastructural system, to make the link between the effectiveness of the Park and the infrastructure profitable. The project will have to consider or envisage new interconnection hubs between various types of infrastructures, allowing the smooth transition from a fast system that connects with more distant and slower territories. This cannot be separated from the study of "green infrastructures", understood as a multifunctional "network system" of interconnected parts, such as the ecological network, the accessibility and use network, the historical-cultural network, the network of agricultural fabric, the network of infrastructures and human settlements, the social network. The Plan must make the archaeological area a key component of the historical-cultural network, thus improving the entire green infrastructure, helping to create an equipped network that performs multiple connective functions. This strategic plan is implemented through actions that concern in particular:

- the restructuring of service structures;
- the construction of new buildings and infrastructures for use.

The maintenance of the natural heritage within the Park is also of considerable importance, as the heritage does not only serve as a furnishing of the area but also as a "tool" to highlight the recognizability of the urban texture of the archaeological remains.

VIII.3.3.2. Restoration and static consolidation of the archaeological heritage: activities that need to be implemented to maintain physical preservation of the Archaeological Park [C.G.; I.P.; S.F.; S.C.]

This strategic plan is implemented through actions that concern, in particular, the encouragement of interventions to recover the archaeological heritage after:

- analysis and monitoring of the main monumental components of an archaeological nature, their maintenance, restoration and enhancement;
- archaeological investigations of the legibility of the main morphological and historical ancient components of the city and the territory. In this phase, the perspectives regarding possible research developments will also be explained, so that, starting from the knowledge gained, a program can be developed aimed at developing the still unexpressed potential of the area with the prefiguration of times, forms and actors of their promotion.
- interventions for the restoration and consolidation of the artefacts present, even if in a state of ruin.

VIII.3.3.3. Systems of equipment and services for the management of the social function of the Park, (Visitor Management Plan) [R.P.; C.G.; I.P.; S.C.]

The enhancement project will clearly define the choices to be made to make the various components of the Park usable, to restore meaning to the visible remains and contextualize them in the historical landscape. The enhancement project envisages the use of the system of infrastructures and services of various kinds which concur to implement the overall aims of the Archaeological Park, promoting the general settlement quality of the places in a social and cultural sense.
It is necessary to consider the catchment area of the area during the year (resident population, permanent or seasonal presences of workers, students, tourists) and, based on the data gathered in the analysis phase, the project must include elements considered essential for physical access and movement inside the Park, for the knowledge and understanding of the historical and cultural value and for safety, and the other services that can help the visit.
The main useful services are exemplified here, regarding the various objectives, highlighting those considered indispensable.

1. Preliminary organization of the visit, promotion
Website or web page in institutional, social, press office, newsletter and Call center for information and booking of individual and group visits.

2. Welcome, orientation and aids to the visit
- Reception and orientation point: illustrative brochures
- Signage outside and inside the Park
- Paths, including paths for the blind and disadvantaged categories of people
- Didactic panels (also with QRCode), with plans and captions
- Guided tours and / or audio guides, PDAs, etc.
- Educational workshops, conference rooms and audiovisual projections
- Antiquarium/Museum.

3. Comfort, ease of movement within the areas
- Sanitary facilities, including facilities for the disabled.
- Resting points: refreshment points, including in case of rain

4. Further opportunities for study or entertainment
- Shop-bookstore
- Cafeteria-restaurant
- Guest quarters.
- Entertainment areas for children.

5. Services
Library, Documentation Center / Photo Library.

6. Logistic facilities for research
- Offices.
- Warehouses and archaeological deposits with alarm system.
- Archives.
- Laboratories.
- Restoration laboratory.

VIII.3.3.4. Interpretive Plan [L.X.d.S.]

Taking into account the data mentioned before, and the topics of the Archaeological Project, the elaboration of an interpretive plan that identifies and addresses the interpretive topic and subtopics that would best serve the educational purposes of the Park is required.
All the presentations and the informative tools developed for the Park must reflect the current advancement of the research on the topics identified, and be coherent and consistent regarding the communication plan of the Park. In order to do so, a specific strategy for the knowledge transmission and community education must constantly be updated and corrected.
Educational and recreational activities involving the Park or carried out in it and for it (guided tours, educational workshops, experimental archaeology, etc.) must be included in the plan, together with the strategies envisaged to put in place the essential synergies with the subjects involved and responsible for the different stages of education (from childhood to third age).
In order to provide effective initiatives, infrastructures and services should also be included in the plan: ticket offices, toilets, routes, furnishing, and support structures for research, development and training should be designed taking into account the activities the Park wants to provide. Special attention should be devoted to on-board-areas in order to shape and define the relation with the external context (access routes, transport, parking lots, rest areas, fences, et).
An interpretive plan should be prepared that identifies the interpretive topics and subtopics that best serve the didactic function of the place. Presentations and information must reflect the current scope of knowledge and need to be constantly updated and corrected.
Any didactic and educational activities intended to be carried out within the Park (guided tours, educational workshops, experimental archaeology, etc.) will also be taken into consideration, employing all the synergies with the bodies responsible for the different levels of training (from childhood to third age).

VIII.3.3.5. Public Awareness and Organization of Educational and Recreational Functions [S.C.; S.F.; R.P.; L.X.d.S.]

Activities consistent with the characteristics of the Archaeological Park must be planned. They will help the fruitful and lasting dialogue between specialists, scholars and users involving, local communities and cultural institutions of the territory and in particular schools. Public illustration activities can be carried out on aspects relating to the excavation, classification, documentation and restoration of archaeological finds. It is particularly useful to take a cue perhaps from ongoing research. Archaeology courses or stages, environmental education seminars, natural science laboratories, conferences relating to disciplines or issues related to the history of the site or the peculiar characteristics of the Park can be carried out periodically, also based on specific collaborations. As part of the fruition project, temporary events may also be planned and scheduled, such as shows within the preserved structures aimed at recreating the ancient environment, or courses dedicated to the illustration of technical or artisanal aspects of the production of objects through methods of experimental archaeology. The Park will be able to organize exhibitions, parties, traditional and folkloric events.
The strategy should create prerequisites for the time spent by visitors in the Park to be extended by creating the infrastructure to formulate an integrated offer for archaeological visits and accommodation near the area to facilitate functional relations and strong interdependence (based on mutual and complementary interests, primarily in terms of services for tourists) between the Park and other places of interest.

VIII.3.3.6. Communication Plan for the Communication-Participation Strategy [S.C.; L.X.d.S.]

Particular attention must be paid to the communication plan which must contemplate the specific ways in which the Park decides to "explain" itself to its visitors. One objective of the archaeological park must be to transmit its contents to the widest possible range of the public, making the visit simple and rewarding. The choice of itineraries, contents and key themes of the individual itineraries, preliminarily identified based on the purposes highlighted in the Museum's statute and, specifically, based on a scientific project, must be calibrated and defined based on different levels of detail only after an accurate analysis of the real public and of the potential public targets that intended to reach. This should also be accompanied by "bidirectional" analyzes, as it is also important to consider the impact of the park on the surrounding area and vice versa. Regardless of the categories of the public most involved, the communication plan must adopt an inclusive perspective, providing for communication that can be enjoyed and understood by all (different ages, origins, social backgrounds, psycho-physical conditions). To this end, the various applications provided by ICTs play a fundamental role. Digital technologies are, in fact, a useful aid for the **communication** and **teaching** of **cultural heritage**. In particular, the opportunities, also in terms of **accessibility** and participation, offered by the physical dimension and experience (visiting or working) in which the physical presence is enhanced by digital, which thus represents a language or a tool, will have to be carefully evaluated. This will enrich meaning and improve the visit by increasing engagement. Digital resources therefore, represent an increasingly fundamental component in the relationship between the park and its visitors and contribute substantially to redefining the fruition experience. It will therefore be important that the objectives of the communication plan also include the objectives linked to increasing the offer of digital resources.
The communication plan must therefore include at least:

- Analysis of the real audience and potential target audiences and user implementation strategies and strategic planning with indication of the objectives to be achieved, and the methodologies chosen (identification of levels of detail).
- Result tracking.
- A plethora of usable supporting information (panels, totems, captions, multimedia supports) including dimensions, material, heights.
- Project graphic identity. The latter will include a user manual for the logo and internal communication (with the relevant supporting information, e.g. totems, panels, captions, multimedia support, the languages used, writing fonts, font size, color codes) and outside the park communication (printed and digital communication, social media, website).

The multidisciplinary nature of the activities required for the creation of a communication plan makes it advisable to create a working group composed not only of archaeologists but also of a communication expert, an architect, a graphic designer, a computer scientist and other staff required for the individual case.

VIII.3.3.7. Accessibility plan [S.C.]

In line with the statute, the medium-to-long term planning of the park must include, among its priority objectives, the proper progressive removal of architectural barriers, not only as physical barriers but also as psycho-sensory obstacles so that the park will become truly open to everyone, without distinction of age, origin, or psycho-physical conditions.
It is a long and complex process which requires, right from the start, close contact with and support from the entire local community and stakeholders to provide for careful implementation in successive steps happening simultaneously with business as usual activities of the park and through economically sustainable interventions. For this reason, it is essential to plan collaboration with bodies and/or organizations that specifically deal with accessibility. In consideration of the complexity of the interventions and the importance of proceeding gradually and hand in hand with the needs that will gradually emerge also from the discussion with the community concerned, the opportunity to undertake sustainable interventions both from an economic and a more properly environmental, it is advisable to articulate the accessibility project by successive steps.
As already mentioned, the theme of accessibility concerns not only the removal of architectural barriers but also extends to the removal of all those barriers that hinder full and complete fruition. To this end, the accessibility plan is not aimed specifically at individual categories of users, but must be designed as a means of implementing truly inclusive strategies. The plan must therefore include a preliminary analysis aimed at recognizing the current situation and the main criticalities, for example the presence of dedicated parking lots, accessible routes for people with physical disabilities, exclusive toilet facilities, seats and rest areas, aids to the visit (e.g. communication devices represented by audio guides downloadable with QR-code, and route cards with texts in Braille, visits with interpretation/language facilitation, with sign language, tactile tours or website with LIS/ASL/IS window). Once the critical points have been identified, the plan can be structured through long-term planning aimed at remedying the existing problems and pursuing a series of objectives aimed at improving the conditions of accessibility.

Preparation for the visit. Website: Information, story telling, involvement. Of fundamental importance for visitors is the possibility of preparing for the visit, not only by acquiring all the basic information on the place you are going to visit (opening hours, parking possibilities nearby, presence of barriers, presence of personnel with specific training, presence of aids to the visit, type of routes) but also being able to have specific material to aid the visit. This is particularly important where there are physical and/or psycho-physical limitations, but not only. To this end, the creation of a website will have the aim of directing the public towards the Museum, making all the basic information available and prefiguring the visit experience to make it attractive and engaging. The material, which can be downloaded from the site, will allow everyone, without distinction, to prepare the type of visit desired with the appropriate support (videos in LIS language for the deaf, vocal indications for the blind, texts in Easy to read language for the disabled by psychic type, narrated and playful texts and videos for children, in-depth videos on themes dealt with within the Museum or on specific territorial contexts).
The ultimate aim will be to create involvement by a varied category of users, including the most demanding groups of visitors represented by young people, children, the disabled and the elderly.

Hospitality. The reception reflects another relevant aspect, and it is therefore essential that, in addition to simple and easy orientation materials to be made available upon the visitor's arrival and to the aids to the visit (see infra pathway information devices), visitors can be welcomed and followed by trained personnel. It is equally important, also in order to promote social cohesion and a sense of belonging and participation, that the Museum itself proposes and organizes courses on the theme of inclusiveness aimed at teachers, tourist guides and operators in the sector. It is advisable to provide training courses on the dynamics of inclusiveness for internal personnel.

Spatial and temporal orientation. Regarding the design of spaces and their management, there are currently no precise regulatory references. The theme is also very important for an easy way around the site by anyone, not referring only to people with visual impairment. Not knowing the best direction to move in, or the time necessary to visit a site, may cause an increase in physical and mental fatigue in anyone. To facilitate easy orientation, the environment must provide as much information as is useful for determining one's position with reasonable accuracy in relation to the environment itself and for identifying the most effective route for reaching the desired destination. Within an archaeological park, in addition to the spatial orientation, the temporal orientation also gains fundamental importance to allow the visitor to contextualize their position within a time frame and be aware of the times of visit and the duration of the visit. The design of adequate signage and the use of maps that effectively represent the environment in which we find ourselves can be helpful. For this reason, the recommended interventions include the

creation of tactile maps showing the route; the identification of natural signposts and the design and installation of physical "rest points"; orientation signs.

Improvement of the tour, information devices, rest areas. The objective of improving and extending the site use to all possible categories of visitors is crucially supported by the type of content that is made available and which must place the visitor at the center of the visit, allowing them to estimate the time it will take them to see the location, to choose the path based on the time available and the different degree of detail about the site . Fundamental to the achievement of this objective will be the website, which will make available to all users (the able-bodied, the sensory and cognitively disabled, and children) the information material suited to their needs. Furthermore, the staff providing the information and orientation signs, and simple and easy information material at the entrance, prepare the visitor for the visit and thus raise the perceived site quality. Finally, another important element contributing to the improvement of the overall experience is the setting up of resting places which enable, in particular, the elderly and children to rest between sections.

VIII.3.3.8. Research, documentation, maintenance and protection of the archaeological resources through digital supply chain [L.X.d.S.; R.Q.]

Digital cataloging of the archaeological findings (including all earlier phases of the research) and of all the metadata linked to the research, study, and maintenance of the Archaeological Park, is the most important initiative in this category. Many software solutions are available. More specifically:

1. Collective Access is a free, open source cataloging tool and web-based application for Museums, archives and digital collections. Its primary focus/strength is on cataloging and metadata.
2. Collection Space is web-based, open-source collections management software for Museums and more.

New technologies have provided through the years advance tools and methods of investigations of the archaeological heritage.

- **(Aerial) photography.** Collection of several aerial photograms or images from drones in different seasons, from a sufficiently large time span is considered a compulsory data set in order to monitor the AP, for preventive archaeology and guiding further excavations plans.
- **Photogrammetry.** Terrestrial and UAVs photogrammetry is nowadays the most relevant survey technique in order to establish an adequate and reliable 3d digital documentation for AP.
- **3d scanning.** Terrestrial laser scanning and other remote sensing technique (such as LIDAR and topographical support acquisition) are relevant to establish a correct documentation workflow.
- **Geophysical surveys useful in archaeology.** These surveys provide data about underground remains. As there are many limitations to the technology (poor ground conditions, no chronological / stratigraphic data, unreliable interpretation, this method needs to be combined with at least one more method (i.e. scanning or photography)).
- **Digital replica of the AP.** The granularity and level of detail and information of the so-called Digital Twin can largely vary. Here, there are still no robust and standard solutions, but it is a promising field for researchers, scholars and practitioners.

VIII.3.3.9. Project for the use of ICT and the digitization plan [L.X.d.S.; R.Q.]

Planning the enhancement and integration of ICT systems in a Park should consider what is more suitable for each Park depending on the possibilities the technologies offer and the characteristics of the Park itself. Depending on the level of digitization owned and the one to be planned but also on the specific needs of each Park, it is important to envisage a use of ICTs that takes into consideration the role they can have in a Park:

- ICTs as a facilitator.
- ICTs as a mediator between the archaeological site, the surrounding territory and the (potential) users.
- ICTs as an awareness-raising tool.

Having stated this, ICT tools offer numerous possibilities for enhancement and personalization of the experience of the visit. In order to fully develop their potential, it is recommended to ensure Wi-Fi coverage of the AP. Moreover, at least the most expensive or complex support or devices (tablets, audio-guides, headsets etc.) should be provided by the Park itself, while for an easier interaction the logic of BYOD (bring your own device) can be followed.

Depending on the Park's needs, objectives and means, tools, and professionals available, each Park should consider which kind of immersive experience they want to develop/provide. The various possibilities are listed below:

- **High immersion**
  - VR headsets.
  - Architectural projections / Light design.
- **Medium immersion**
  - AR/MR apps.
- **Low immersion**
  - Podcasts and Apps for smart devices.
  - QR codes.
  - Video on screens.
  - Website.
  - Social media.
  - Personal devices.
  - On-site equipment.

Most of the contents listed above result from the collaboration between different professionals and the combination of traditional research and different new technologies which, in most cases, like the video mapping or the VR, can give birth to amazing sensory journeys in the CH. Video and projection mapping techniques, projecting lights and images on existing surfaces, result from cross-sectoral collaborations, involving researchers, ICT professionals, artists, directors, light designers etc. The combination of images, lights and sounds can give birth to sensory journeys.
One of the most important benefits of ICT is that it can connect the site to the wider territory, in a networking strategy that can help integrate other "tourist attractions" into a comprehensive valorization circuit, proposing various itineraries and promoting different aspects of the area through a holistic "pack" of experiences.

VIII.3.3.10. Economic sustainability [B.F.]

The analytical-assessment process of the economic and financial sustainability of a Park's enhancement strategies should be undertaken before the strategic choices are made. The critical note for the assessment of these conditions is the evaluation of the internal and external conditions for the research and preparation of an implementation model capable of translating the set objectives into an organizational and functional set-up for the management of the asset or activity.
Starting from the management set-up, it is necessary to:

a) define the set of management functions highlighting the specificities from the point of view of costs and revenues;
b) outline resource management in a dynamic and multi-year time horizon;
c) outline the nature of management (profit/no profit);
d) contribute to the definition of the institutional form (direct public, mixed, SpA, foundation, etc.).

The economic-financial evaluation cannot disregard a profound knowledge of the management structure and, once the socio-cultural objectives have been set, must make it possible to:

a) classify, plan and size the functions and activities (functional set-up based on objectives);
b) identify the strategic management variables (human resources and their level of qualification and professionalism, for example);
c) examine the impact of cost and revenue items on the economic structure of management (to define the financial requirements and the cost of the various functions);
d) provide indications of processes, options and initiatives that affect the economic-financial structure of management (towards network logics, integrated management models or the trend towards global service for large attractions).

The financial evaluation is a methodological tool for estimating and evaluating the cash flow generated by an investment. It should be included in the analysis's framework of the feasibility/sustainability conditions (Feasibility Study), as it allows the evaluation of the capacity and financial return of a project through the aggregation of cost and revenue items in an integrated plan of forecast accounts. It is aimed at defining and determining the costs and revenues that will be generated during the operating phase by the activities linked to the management of a

valorization system, in order to foresee the need for resources, hypothesize the sources of supply and, ultimately, direct the form of management, depending on the conditions that will be realized in the future. This analysis must take the form of an economic and financial planning tool (forecast income statement and balance sheet - functional forecast balance sheet).
The correct and exhaustive definition of cultural functions is one of the most important phases of the decision-making process: the more the forecast of the structure of functions and activities is carried out with coherence and realism, the greater the possibility of identifying and implementing an appropriate and sustainable management model, able to maximize the positive effects of the enhancement of one or more cultural resources on the community.

VIII.3.3.11. Economic and financial sustainability of the Park [B.F.]

Considering that the Cultural Heritage sector is characterized by scarce resources, where profit margins are hardly produced, it is even more necessary to immediately address the problem of economic and financial sustainability of the cultural enhancement system in order for it to be implemented, since the financial aspects are a crucial element in the process of building the management structure. For an adequate assessment of the economic and financial sustainability of the project it is necessary, after defining an analytical evaluation period, to draw up a business plan structured in at least five parts, as follows a brief description of the content of each of them.
Investment plan - A list of all future expected expenditures, broken down by year and with detailed reference to the actions, measures and activities that justify them.
Budget - An analytical description of the sources of revenue and cost of operation, foreseen in each year of the analytical evaluation period.
Financing - Description of any feasible partnerships, i.e. public-private financing options.
Financial sustainability - Examination of the dynamics of the cash flows generated by current operations also in relation to the hypotheses on the investment and financing plan.

The purpose of this section of the business plan is to reconstruct the dynamics of cash flows (liquidity) in order to certify the expected financial sustainability of investments in the medium to long term. The cash flow of current operations can be determined by adjusting the operating result after tax for non-cash costs and any disinvestments/investments in working capital.
Financial performance evaluation/Multi-criteria analysis - Calculation of parameters that allow for a financial assessment of performing investments. In the section below there is a brief description of the most commonly used techniques. The purpose of this section of the business plan is to reconstruct the dynamics of cash flows (liquidity) in order to certify the expected financial sustainability of investments in the medium to long term. The cash flow of current operations can be determined by adjusting the operating result after tax for non-cash costs and any disinvestments/investments in working capital.

VIII.3.3.12. Organization chart [S.D.]

The management of the Park requires adequate personnel from a quantitative and a qualitative point of view. This is a must requirement for any organization, especially for a cultural organization.
According to the various scenarios, i.e. the characteristics and constraints specific to any management model (public/private, direct/indirect, etc.) safeguarding the management autonomy, hiring of qualified and professional personnel must be guaranteed from the site's constitutional act onward.
The project of enhancement for the Park requires continuous research, study, planning, monitoring, communication and event organization.
It goes beyond the regular management of visits and services to the public.
Those responsible for the enhancement of the Park should select a person with the appropriate cultural background, experience and expertise in the archaeological discipline relevant to the Park to lead the scientific direction.
This role would eventually be shared by other Archaeological Parks in the near territorial community.
It is also desirable that, according to the size, the importance of the archaeological and environmental heritage, the catchment area, and the financial investment, additional roles be recruited for the following areas: accounting and administration, security, care and maintenance, surveillance, education and training, marketing and brand communication.

The establishment of the Park will be accompanied by a Statute and Regulations, which will define, besides the aims and objectives, the legally responsible subjects and the executive-management bodies with their respective competences. The Regulations will also define the organizational structure, the professional profiles, the criteria for the recruitment of personnel or for the assignment of qualified assignments, etc.
The Regulations of the organizational structure responsible for managing the Archaeological Park must specify:

- the organization chart: functions, number;
- minimum number of employees, contractual form envisaged;
- competence profiles and the methods of recruiting the director and the scientific staff; the levels of responsibility and autonomy towards the Entity/owner;
- the potential use of stable forms of interinstitutional collaboration (through agreements with local authorities, universities, etc.) or with private non-profit organizations (voluntary associations, cooperatives, etc.);
- the procedures for entrusting services under management to private companies. In this case the service contract must define the cultural requirements of the staff involved and the forms of control by the institution.

Specific roles and competencies are designed for the following five structural functions of the Archaeological Park: economic sustainability, recreation, conservation, innovation and R&D, external relations and networking.

Fig. 16. Park's functional structure (© S. Dubbini)

Economic sustainability refers to the economic profitability of the Park in order to guarantee its ordinary functions: management, conservation and innovation. The management of the Park requires professional skills in: business administration, people management, finance and accountability, marketing and sales management, logistic and process management. Outsourcing professional experts might be considered to support the areas of: EU programs and funding, sustainability, fundraising.

Recreation is closely related to touristic and educative, hosting and restoration, and promotional activities aiming at providing a consistent and steady flow of visitors to the Park. Therefore, the recreation function requires a wide range of competencies, from high and professional to middle and low (operative) skills, depending on the services offered by the Park.

- Touristic and Educational activities require: tourist guides to organize tourists' and students' visits; staff in charge of the organization of staging events to attract scholars and researchers from national and international archaeological sites and universities. International students and researchers enhance Park's visibility and the international network of scholars for academic development purposes.
- Hosting and Catering services demand employees specialized in the hotel industry and ethno-gastronomic sector. The interest toward the outdoor sports and hobbies, the natural tourism, the trekking routes, the circular and green economy should receive a consistent attention from the Park's management and community.
- Promotional activities include the promotion of the Park through communication (media and social media) and the enhancement of its brand reputation. The competence profiles should thus include: audio-visual and media skills, web programming and publishing, English and other international languages.

The Conservation refers to the heritage care and preservation of the archaeological site (collections, monuments, excavations, archives, etc.), the heritage promotion (exhibitions, publications, licenses and permissions) and the heritage security (Park's security norms.)

Continuous **Innovation and R&D** activities are a basic prerequisite for the future survival of the Park. Information technology and Digital innovation are the strategic processes of transformation for adapting and empowering

any organization in the social and economic community. The Park's structure should be transversally crossed and supported by competencies of digital management, data collections and analysis, cybersecurity, and scientific and operative research.

External relations and networking: the Park plays a consistent social and political role in the community where is located because of the cultural and economic connections with its public and private Stakeholders. The Archaeological Park is embedded in a circular process since it attracts resources from the community (shareholders, sponsors and investors, local agencies and associations, national and international networks, NGOs, private and public schools and universities) and, conversely, it gives identity, vocation and opportunities to the community itself (training, business networks, cultural projects and development). This circular relationship implies a strong action of scouting and networking with actors and collective agents at various levels of governance in the territory. External Affair office should support Park's organizations with professional and specialized skills such as territorial marketing and management, brand management, national and international partners scouting, media and social communication.

VIII.3.3.13. Contingency planning study for cultural heritage risks [R.P.; C.G.; I.P.]

A part of the monumental archaeological heritage is preserved in a fragile territory because of natural and anthropogenic risks. For this reason, a study is needed for the definition of guidelines aimed at the creation of Civil Protection Plans for the securing of movable and immovable cultural heritage exposed to risk in the event of a disaster.
In order to deal with the potential emergencies of natural disasters, which have direct or indirect repercussions on the heritage (seismic, hydrogeological, fire risk, et), it is essential to establish the collaboration of various subjects called to intervene in the event of a natural disaster and there is therefore a need for these subjects to prepare guidelines for the protection of the archaeological heritage in cases of emergencies, integrated, when existing, to the Municipal Civil Protection Plan.
The Project in connection with the Safety Plan (VIII.3.3.14) must be organized through separate documents with at least all foreseen steps.

Regulatory framework
The general framework of the civil protection plan must include a synthesis of the fundamental and specific reference legislation of national, regional and local nature. The following must be taken into consideration: legislative acts, operational circulars, directives, technical guidelines and other useful documentation.

Characterization of the territory regarding the natural hazard
An in-depth study of the environmental analysis concerns the study of potential hazards associated with natural disasters (landslides, earthquakes, floods, etc.) and atmospheric events.

Outlines of planning (report and cartography)
Charter of cultural heritage also contains any containers of movable property of cultural interest as well as:

- accesses and escape routes;
- emergency storage for recovered assets;
- warehouses for the storage of rescue materials and vehicles;
- areas identified to operate: areas for the recovery of cultural assets.

Descriptive report of the Cultural Heritage Charter which contains:

- priority intervention to secure the cultural heritage;
- indications of accesses and escape routes;
- emergency storage for recovered assets;
- warehouses for the storage of materials and means of rescue
- materials and means available and resource holders:
    - municipal and public vehicles;
    - private means available;
    - municipal, provincial, regional materials
    - manufacturers and resellers of material

Intervention model
The telephone numbers of the subjects involved, public and private, must be immediately available, in particular, for example:

- Public bodies at national, regional and local level.
- Bodies and institutions responsible for the protection of cultural heritage
- Owners of assets
- Managers of the heritage
- Fire fighters
- Volunteer associations
- Order guardians

Emergency activations, organized in four phases

- Attention stage
- Early warning phase
- Alarm phase
- Post-emergence phase

Damage assessment models

Model form for detecting damage to cultural heritage - movable property.
Model form for detecting damage to cultural heritage - archaeological building assets.

VIII.3.3.14. Safety plan [S.C.]

The park must adopt, in connection with the "Protection plan in case of natural disaster" (VIII.3.3.13), safety protocols, including the set of measures and activities aimed at guaranteeing the protection of people (users, staff and anyone present), archaeological monuments and internal structures from any type of risk, danger or damage. A good security policy must therefore provide for a global approach to security problems based on risk analysis, followed by an adequate prevention program and emergency protocols that can be implemented and can deal with the various critical situations. The protocols identified and adopted for safety must provide, within the park, for an organizational structure based on the presence of a safety manager and on the involvement of all staff and, at the same time, a periodic monitoring of critical issues.
The plan in line with the legislation of the individual States, may basically include:

- park identification data and location;
- general description of the site;
- description and location of the control devices if any (electrical, hydraulic, gas, alarms, video surveillance);
- identification of areas subject to specific risks and fire prevention and control;
- contracted activities to external companies;
- fire risk assessment;
- risk assessment for anthropic events;
- measures of prevention and protection;
- identification of emergency exits (indoor premises) and collection points;
- identification and composition of the emergency team;
- safety organization chart;
- general guidelines related to emergency management, instructions and procedures;
- plans of the site and of the indoor premises.

The plan will also have to regulate the protocol regarding external users, compliance with regulations and safety provisions, define the opening hours of the park, regulate access, and protect the order and safety of the park and archaeological monuments.

VIII.4. Guidelines for co-planning [I.P.; C.G.]

It is therefore a question of preparing a management plan for the archaeological park capable of intercepting and interpreting, regulating, managing, and planning the transformations of the landscape.
To start this process, it is necessary to have analyzed many needs, subjects and values involved in an archaeological park to identify a common work plan.
In the co-planning phase, it is necessary to involve:

1) those responsible for managing the site;

2) local authorities with direct governance over the area;
3) the public management system;
4) the system of private companies;
5) civil society.

In the co-planning phase it is necessary:

- to raise the curiosity and awareness of public–expectations of locals and Stakeholders about what the plan is and what is necessary to include in the management plan;
- to define participatory activities–workshops, meetings with Stakeholders, interviews;
- to create a communication-participation strategy;
- to define deliveries, project requirements and scheduling project activities;
- to define participatory activities for securing the inclusion of public and evaluation of creation of the management plan;
- to define a set of development objectives, measures and activities;
- to define implementation indicators.

To achieve the goals, it is useful to use an external facilitator: a neutral outsider, who is trained in bringing people with diverse interests together, can be helpful in negotiating difficult relationships and share the economic analysis: determining the site's potential economic benefit to the local community, or ways to ensure that profits from tourism stay in the community, which displays a commitment to Stakeholders.

VIII.5. *Ex-ante* impact evaluation [B.F.; E.C.]

***Ex-ante* evaluation: how can the economic and financial effects of the planned management activities of an Archaeological Park be assessed during the design phase? Using what indicators and tools?**

The economic and financial effects of the planned management activities of an archaeological site could be assessed by implementing a multicriteria analysis model, based on the following criteria:

- The compatibility of interventions with conservation needs in terms of prevention, maintenance and restoration.
- The level of use of the site following the realization of the investment.
- The ability of the project to guarantee the promotion of the historical and cultural value of the archaeological site.
- The pursuit of financial results.

In the context of assessing the economic and financial effects of potential activities planned to be carried out at archaeological sites, it is also proposed to conduct a benchmarking analysis that can identify potentially economically viable patterns and ways of planning development. Quality monitoring of activities can be achieved by defining implementation indicators that can be used to measure progress and success. An important point of reflection is the following example of an implementation indicator table.

Indicator	Measure	Base value	Target value
Number of concluded cooperation agreements with local family farms/agricultural producers	number	x	y
Establishment of a souvenir shop	Has a souvenir shop been established?	no	yes
Conducting employee training for the interpretation of archaeological heritage, leading development project etc.	number	x	y
Number of implemented attraction presentations and interpretation projects	number	x	Y
Share of financial resources for development projects sourced through national and international development programs	percentage (%)	x	Y

Number of implemented projects for arranging access to public and social facilities for people with disabilities	number	x	Y
Number of projects related to improving the promotion of Archaeological Parks	number	x	Y
Number of projects related to the improvement of technological infrastructure	number	x	Y

Based on the conducted situation analysis, it is also proposed to conduct a demand analysis and a cost-benefit analysis. Given that an archaeological site needs to conduct additional archaeological research, it is necessary to perform an analysis of research costs, which should include total labor costs (Cw) (including labor costs, machinery and ancillary costs), material costs and equipment for research (Cm&e), documentation and processing costs (Cd&p) and other (unforeseen) costs (Coth). Since the research will be conducted after securing funds from various national and international development programs, the research costs will not financially burden the manager of archaeological sites and will create new knowledge and outcomes that can be used in the presentation of archaeological sites. The cost of research can be calculated as follows:

$$Cr = (Cw \times Ndays) + Cm\&e + Cd\&p + Coth$$

The costs of presentation include costs of creating the products for visitors (Cvp), costs of material and equipment (Cm&e), costs of creating souvenirs (Cs), costs of work (Cw), costs of site maintenance (Cmain), costs of branding (Cbr) and other costs (Coth). The costs of presentation are possible to estimate as to the sum of all the costs, or respectively:

$$Cpres = Cvp + Cm\&e + Cs + Cw + Cmain + Cbr + Coth$$

Revenues from the presentation can be presented as the sum of ticket revenue (It), service revenue (Iser), souvenir revenue (Is) and other sources of revenue (Ioth) (e.g. fees for early usage of the site such as movie production, scenography for plays, concerts, etc.) respectively:

$$Ip = It + Iser + Is + Ioth$$

After the CBA analysis is conducted, another possibility is suggested – an implementation of scenario analysis and multicriteria analysis of the choice of the best development possibilities.

Data sources

Several problems have been experienced in the collection of relevant data for developing evidence-based and result-oriented monitoring, reporting and evaluation. Sometimes available official data are too coarse and thus useless to properly evaluate progresses towards the objectives of the common sustainable plan (e.g. n. of visitors). In these cases, it is important to complement official data with other well-designed primary sources, such as questionnaires, and surveys that can detect qualitative information of the sites and visitors. Moreover, the information must be gathered in a continuous and systematic way. ICT tools are of great importance for the quantitative and qualitative monitoring of the activities promoted by the Park. The potential of big data should be further investigated: some of the information available are open-source, free to use, but usually general-purpose. Nevertheless, specific indicators based on big data could be developed, case by case, with respect to the needs of each site and taking into account issues of data quality.

Territorial scale

Another important methodological issue is the identification, case by case, of the relevant geographical area of interest that should be the reference for ex-post evaluation of the economic and social impacts.
A general view is that two main territorial scales may be considered in the Common Model:

1. The first short-distance scale aiming to evaluate what the local effects of the integrate management of the Archaeological Park are, (e.g. municipality, county, provincial, regional);
2. The second wider territorial scale to eventually evaluate effects beyond the local dimension.

As a first approximation, the option (1) should be adopted for all the sites while the option (2) may be part of the flexible solutions of the common model. In fact, it can be noted that proper territorial scales for evaluation and its boundaries should consider the internal/external structure of the institution responsible for managing the Park and the extent of its stable relations with other Stakeholders on the territory. In this respect, another challenge to define a Common Sustainable Governance Model is the different availability of data at the local level, which is a possible source of heterogeneity across Archaeological Sites. The Common Model may have a general proposal in the form of "common indicators/Common Evaluation Toolbox" and a more specific set of evaluation tools, considering the information (both qualitative and quantitative) that can be available at the local level. In more details, the partners made proposals for specific indicators on the economic, social and environmental impact. Most of the partners of the TRANSFER Project recognized the importance of assessing the general economic impact on the territory, in terms of traditional indicators of economic growth, public investment, and job creation. According to some partners, economic effects should be assessed by comparing the state of the indicators before and after the implementation of the management plan as regards incoming tourist flows and related economic activities. Further areas of evaluation have been mentioned. Particularly, from a sustainable perspective it is also important to assess the social impacts such as the involvement of the local community, the protection of the Archaeological Sites and the protection of related economic activities. Furthermore, an additional area of relevant ex-post evaluation is the potential knowledge spillovers in neighboring areas, culture development and skill upgrading. The following tables presents a summary of the proposals from the partners of the TRANSFER Project for the evaluation of the economic and social effects and the related socio-economic indicators. They are distinguished in terms of basic economic outcomes such as economic growth, job creation, infrastructure development and investment and tourism development (Table 1) and further socio-economic outcomes related to Social impact, protection, knowledge and culture (Table 2).

Table 1 - Ex-post evaluation: basic economic outcomes and associated indicators

Relevant outcomes	Associated socio-economic indicators
General economic development and	- Total production - Gross value added (infrastructure and services provided) - Overall economic growth of the territory
Job creation	- Labor income - Number of employees - Number of people directly involved in management activities
Investment realized and financial resources allocated	- Amount of investments in the Archaeological Park - Realized projects on site, infrastructure, and cultural activities - Amount of received nonrefundable financial means
Tourism incoming flows and related economic activities	- Number of tourist arrivals and overnight stays in the cities - Number of visits to the city Museums - Share of culturally motivated tourist arrivals in the County (how to measure it?) - Tourist incomes on the destination level - Number of visitors - Number of guided tourist visits - Number of new tourist products related to the site

Table 2 - Ex-post evaluation: Social impact, protection, knowledge and culture

Relevant outcomes	Associated socio-economic indicators
Social impact	- Public participation
Protection of sites and related economic activities	- Condition of preservation of buildings - Level of protection of local handicraft and agro-food heritage
Knowledge spillovers, culture and skill upgrading	- Level of knowledge growth related to the Park area - Realized cultural activities (exhibitions, conventions, conferences, performances, etc.) - Level of professionalism of employees directly involved in management activities - Development of professionalism and economy related to the management and improvement of Cultural Heritage in neighboring areas - Technology innovation set

In conclusion, monitoring of the outputs and results is crucial for the proper management of a Common Sustainable Governance Model. Actual practices about monitoring, both quantitative and qualitative, could be improved significantly. This implies to strictly connect the objectives of the Common Model with relevant, measurable and reliable indicators. More advice and guidance on the general definition of the evaluation toolbox are required. These need to cover not only the results of the measures concerned, but a greater focus on their wider effects on local/ regional development.

VIII.6. Documents and methodology for the ex-ante economic evaluation [B.F.]

Regarding the previous sections, once budgets and investment plans have been drawn up, it is possible to assess whether the investment is acceptable or not. Below are the main methodologies used for this purpose.

Net Present Value (NPV)
It is a methodology based on the discounting of the net cash flows of the operation, i.e. the NPV of the project is defined as the value to date of all the positive cash flows (benefits) produced by the project net of the value to date of the negative cash flows (costs) justified by the dynamics of the investments, hence the following definition with reference to the eight years of the project:

$$NPV = \sum_{t=1}^{N} \frac{positive\ cash\ flow_t}{(1+k)^t} - \sum_{t=1}^{N} \frac{negative\ cash\ flow_t}{(1+k)^t}$$

K is a discount rate that must be an expression of the cost of capital and that adequately takes into account the variability of the results (risk) of the sector in which the investment is being made. It can also be defined as the minimum acceptable return on the investment.

If it is reasonable to expect that cash flows will be produced beyond the period of detailed analysis (eight years), it is worth to add their present value (Value at Term). Generally, the evaluation made is prudential; it tends to believe that the project, without significant strategic changes, can be considered in stable conditions capable of producing a cash flow equal to at least the EBIT after tax.

The NPV of the operation is an expression of the capacity of the project to remunerate according to market parameters the operators and the capital involved, and therefore of the feasibility of the operation, according to the following decision rule:

- an NPV > 0 implies the feasibility of the investment with reallocatable liquidity;
- an NPV = 0 implies the feasibility of the investment without reallocatable liquidity;
- an NPV < 0 implies the unfeasibility of the investment.

Internal rate of return (IRR)
The IRR is an index of the financial profitability of an investment, which is identified with the composite annual rate of return that an investment generates. Mathematically, it is defined as the discount rate that makes the NPV equal to zero. In general, a project should be pursued when the IRR is greater than the cost of capital employed in the investment project.
In other words, the IRR represents the maximum financial cost associated with the sources of finance that a company can assume in relation to the given project. Consequently, an investment project is desirable if its IRR is higher than the opportunity cost of the capital employed, whatever its nature.

Multi-criteria analysis
Multi-criteria analysis considers simultaneously a variety of objectives in relation to the intervention being assessed. It allows objectives to be considered in the investment analysis which cannot be included in the financial and economic analysis, e.g., enhancement of culture and environmental protection.
In general, the multi-criteria analysis can be organized as follows:

1. definition of the objectives - the objectives must be expressed in measurable variables, must not be redundant, but may be alternative;
2. construction of the "vector of objectives" - a technique must be "found to aggregate the information and make a choice; the objectives must be given, if possible, a "weight" that reflects their importance;
3. definition of judgment criteria - these criteria may refer to the priorities pursued by the various actors involved or may refer to particular aspects of evaluation;
4. analysis of impacts - this activity consists of carrying out an analysis for each chosen criterion of the effects it produces; the results may be quantitative or qualitative;
5. detection/assessment of the effects of the intervention in terms of the selected criteria - from the results of the previous analysis (both in qualitative and quantitative terms) a score is given for each criterion
6. identification of the types of subjects involved in the intervention and detection of the respective preference functions (weights) accorded to the various criteria;
7. aggregation of the scores of the various criteria based on the preferences expressed - the individual scores can then be aggregated providing a numerical evaluation of the intervention which can be compared with other similar ones.

VIII.7. Methods and strategies for monitoring results [C.G.; R.P.; I.P.]

The measurement and assessment of performance are fundamental processes to monitor and evaluate the performance of the Park management on the basis of past and present results.

VIII.7.1. Methods and strategies for monitoring results of the economic impact and evaluation and review [E.C.]

Monitoring and ex-post evaluation involve the evaluation of the results when plans and actions have been implemented, at least in part. It is thus necessary to identify a set of indicators strictly linked to the strategies, to the actions that will be adopted and to associated expected results.
While it is recommended that the definition of strategies involves all Stakeholders, it is equally important that the process of identifying the indicators is open to contributions of the operators directly involved in the implementation of actions and in the activities being assessed, in a participatory way.
It is therefore crucial to include in the Management Plan for an Archaeological Park a logical scheme that explains the links between strategies, actions, expected results, and indicators associated with them as summarized in Figure 17.

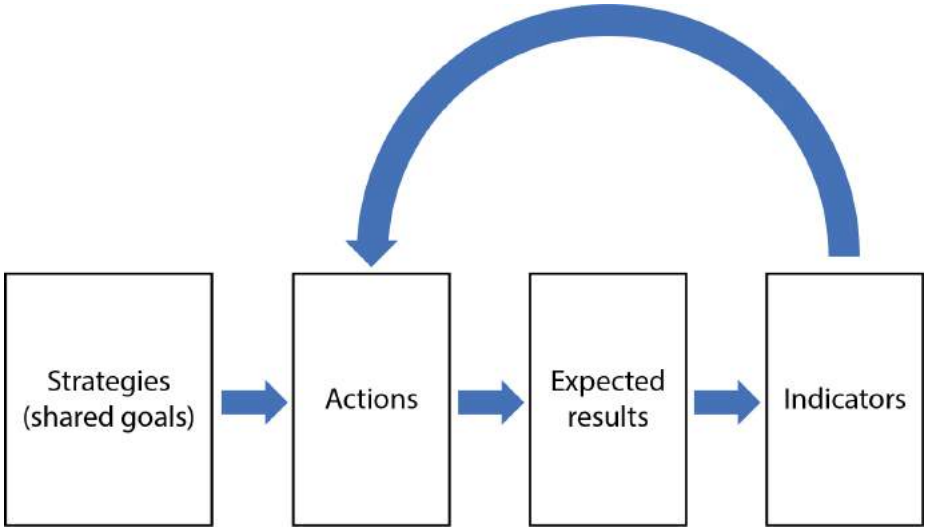

Fig. 17. Strategies-Actions-Results-Indicators (© University of Macerata)

In fact, an effective monitor and impact assessment of the Management Plan requires the identification of shared objectives, actions - i.e. the interventions or classes of interventions necessary to fulfill these strategies – and the expected results that are the outcomes of the actions to be implemented.
The identification of the most appropriate result indicators is, therefore, an important step in the drafting of the Management Plan because indicators allow the prospective goals to be translated into concrete and measurable facts. The indicators are also important to enable a communication about the progress of the strategy in a way that is both understandable and immediate towards Stakeholders and citizens.
Moreover, an effective system of collection of statistical data and definition of result indicators is essential when a Management Plan for an Archaeological Park and related activities are benefiting from European Structural and Investment Funds. In fact, it is worth reminding that, with the aim of ensuring adequate measurement quality standards, the Community Regulations in the programming period 2014-2020 introduced a specific ex ante conditionality on "Statistical systems and result indicators" for European projects.
In particular, an effective system of result indicators must guarantee solidity and statistical validation, clarity of their interpretation and sensitivity to policies. Furthermore, each result indicator must be associated with objectives which, according to a methodology suggested by the European Commission (SMART), should have the following characteristics:

- (S) Specific, the criterion emphasizes the need for a specific objective rather than a more general one. This means that the objective behind the indicator must be clear and unambiguous.
- (M) Measurable: the second criterion emphasizes the need for concrete systems to measure progress towards achieving the goal. If a goal is not measurable, it is not possible to know if the policy pursued is making progress.
- (A) Achievable, the third criterion emphasizes the importance of realistic and achievable goals. That is, they must not be either above or below, in which case there is a risk that they may be considered insignificant.
- (R) Relevant, the fourth criterion emphasizes the importance of choosing objectives that matter, that is, at the basis of which desired changes are generated.
- (T) Time bound, the fifth criterion emphasizes the importance of achieving the objectives within a time limit beyond which they lose relevance.

VIII.7.1.1. Basic economic outcomes [E.C.]

Examples of possible economic and social effects and the related socio-economic indicators are included in the following tables. They relate to the basic economic outcomes such as economic growth, job creation, infrastructure development and investment and tourism development (Table 1) and further socio-economic outcomes such as impact, site's protection, knowledge and culture (Table 2).

VIII.7.1.2. Methodology for the ex-post economic evaluation [E.C.]

Ex-post evaluation in the Common Sustainable Model should be based on indicators able to assess the:

- economic impact;
- social impact/Knowledge and culture/Human resources upgrading;
- environmental impact.

Selected indicators should be:

- defined in relation to the purposes of the Common Sustainable Governance Model;
- meaningful for monitoring results;
- measurable;
- objective;
- robust/comparable over time and ideally across space.

To define a suitable evaluation toolbox, a proposal is to first define relevant outcomes, then collect all the official available information, and finally to elaborate possible indicators on the basis of qualitative information, when statistical data available at the local level are not sufficient to monitor and assess progress towards the expected outcomes of the identified strategies. The proper identification of result indicators is crucial, and ICT tools can be used for both a quantitative but also a qualitative approach to measure outcomes. Economic effects should be assessed by comparing the state of the indicators before and after the implementation of the Management Plan as regards tourism incoming flows and connected economic activities.
Several methodologies drawn from the economic literature can be applied to this specific impact assessment exercise to evaluate whether the changes in the relevant indicators from before to after the implementation of the Management Plan are significantly different from zero.
Further areas of evaluation are important. Particularly, from a sustainable perspective it is also important to assess the social impacts such as the community involvement, the awareness of local population on the cultural values that the Archaeological Park represents, the protection of the Archaeological Sites and the protection and enhancement of related economic activities. Furthermore, an additional area of relevant ex-post evaluation are research outcomes, the potential knowledge spillovers in neighboring areas, culture development and skill upgrading.
It is worth noting that these last areas of evaluation – social, and cultural impacts – are highly challenging in terms of the appropriate methodologies to use. Furthermore, they can hardly rely on quantitative methods while, instead, they usually require the collection of primary information through interviews and in-deep field work.

VIII.7.2. Models and means for monitoring results and evaluation [S.D.]

The measurement and assessment of performance are fundamental processes to monitor and evaluate the performance of the Park management on the basis of past and present results. Monitoring the ongoing activity by analyzing what is going well and what is not aligned with the programmed results is a good exercise for learning and taking decisions on where and how to intervene with corrections. The evaluation process measures the progresses achieved to obtain the intended output.
Monitoring and evaluation activities contribute to the engagement and the responsiveness of the people involved in the organization.
The measurement and assessment are integrated in the reporting activity that is the periodical and systematic document providing the data and information on the overall performance of the Park.
The monitoring and evaluation processes will be closely referred to the above mentioned Park Plan where tasks, timeframes and responsibilities are specified with reference to the five structural functions of the Park management: economic sustainability, recreation, conservation, innovation and R&D, external relations and networking (see 6.4.4.12)
For each function the following issues will be tackled:

- What are the most important elements to keep track of?
- Which progress or success indicators are feasible, consistent and transparent?
- At what level are the partners and Stakeholders involved in the final outcome?
- How do they participate in the ideation of the indicators?
- Is monitoring focusing on key issues for efficiency?
- To which extent have the intended results been achieved?

- Are there possibilities for greater efficiency and coordination?

Indicators are a significant element for measurement; they have to be consistent with the activity to be measured, meaningful, clear, transparent in the connection with the effort, the productivity, the efficiency and the quality of the outcome.

Outcome indicators are both quantitative and qualitative: they will be meaningful and consistent if the definition, the quantitative scale (unit of measurement), the target value and the sources of verification are clearly defined. The source of monitoring data mainly depends on what the indicator has to measure. Once the indicators are identified, the methods for gathering data and the frequency of recording them will be shared by the managers, the staff and the Stakeholder. It may be recommended that the monitoring process should be based on semi-annual reporting in the process of implementing the management plan.

Objective 1:											
Measure 1.1.	Implementation indicators					Implementation time					
	Indicator name	Scale (unit)	Initial value (year)	Target Value (year)	Source for monitoring	Y1	Y2	Y3	Y4	Y5	...
Activity 1.1.1											
Activity 1.1.2											
...											

Fig. 18. Scheme for a annual reporting (© TRANSFER Project)

The indicators must refer to all the relevant areas of the Archaeological Park in order to monitor the current state of the archaeological site, the quality of its services and the customer satisfaction, the impact of the structural functions (economic sustainability, recreation, conservation, innovation and R&D, external relations and networking) on the development, valorization and visibility of the Park, the impact on the local community and the Stakeholder, the management methods adopted, and the promotion of the Cultural Heritage values.

Different types of indicators might be considered: input indicators, output indicators, result indicators and influence indicators. All of these are important but not exhaustive for assessing performance and results, whereas it is necessary to collect more information about: how they were achieved; which factors influenced the final outcomes; whether the achievements were exceptionally good or bad; who was mainly in charge of it.

Tools used in the monitoring process might be: direct observation, data collecting and analysis, feedbacks from beneficiaries, reviews by outcome groups, analysis and surveys, field visits, annual project reports, and client surveys. Key partners should be involved in every step of the evaluation process and likewise the Stakeholder, even if not directly involved in the program or outcome.

VIII.7.3. Minimum quality requirements [S.C.]

In order to improve the fruition system as a whole, guarantee the accessibility and safety of the assets and the sustainable management of the cultural heritage, it is essential that the archaeological parks guarantee the achievement of the minimum quality requirements defined by law and/or, in absence of legislation, the principles established and shared by the international museum community (ICOM Code of Ethics for Museums). The minimum requirements represent a measurable verification parameter of the achievement of minimum quality standards and, at the same time, a support for the definition of improvement objectives in an ongoing process of continuous development, capable of generating an added value in the social and cultural long-term impact of the park both on people and communities. Therefore, the strategic planning of the park can be based on the actual achievement of those minimum requirements or on the fixed improvement objectives.

VIII.7.4. Quantitative and qualitative monitoring through ICT [L.X.d.S.]

Decision-making tools should be developed within the spirit of the World Heritage Convention, in order to «*encourage everyone to participate in the process of identification, study, interpretation, protection, conservation and presentation of the Cultural Heritage*» (Article 12a of the Faro Convention).
Approaching the "public", we need to distinguish:

- **real public:** people who not only go to the Park, but also take part in its activities. For these users specific forms of membership and fidelity programs can be designed;
- **potential public:** those who could be interested in the Park but have not established a relation with it yet. Expansion strategies should be directed to this group;
- **non-public:** those are the users who do not consider that the Park can meet their expectations associated with their free time.

Moreover, not all the information obtainable from user tracking and profiling are useful. Thus, it is necessary to focus only on those relevant for operational activities.
What we really want to get information about is:

- **user's socio-demographic profile** (age, gender, origin, educational qualification, etc.);
- **motivation** (i.e.: cultural, tourism, socialization or relaxation): useful to evaluate the effectiveness of marketing and communication;
- **experience:** its evaluation is needed to improve the weaknesses and emphasize the most appreciated aspects;
- **ICT and other communication strategies:** the analysis of their use and effectiveness is essential in evaluating what is already in place and what needs to be implemented;
- **cognitive learning process:** it is crucial to understand whether the visit has contributed to increasing knowledge or interest;
- **behavior during the visit:** useful for evaluating the effectiveness of the path and the communication apparatus such as captions and panels.

In order to verify the effective improvement of the Park, the monitoring of users' feedback and interest is essential. Some of the most common tools used for quantitative and qualitative monitoring are:
Visitor survey–used for quantitative and qualitative monitoring. Depending on the contents of the document we can get reliable information (profiling of visitors). Digital survey is possible but there must be an efficient system to motivate visitors to fill it in.
Counters–counters are used often in transition AP areas. It positive side is that every visitor is counted, but there cannot be control over double counts and it gives us no information about profiling.
Application profiling–used for quantitative and qualitative monitoring. Depending on the contents of the document we can get reliable information (profiling of visitors). This method requires access to internet and communication device. Even if it is available in AP, a significant part of visitors do not use it (do not know how or do not want to).
Google analytics – method for counting visitors based on Google account users. This method is based on the fact that many visitors have a smart phone with an internet connection and Google account with tracking settings. So it works on the principle of Google Traffic map. Method is limited to a very specific type of visitors.
Smart devices and Apps –enable the study of users analytics, tracking visitors path and behavior; some include digital tools for expressing opinions (e.g. discussion forums) and material exchange, digital writing tools for using personal stories and narrative information to give the experience of visiting a personal and emotional touch, and tour and navigation support applications using mobile devices.
In situ advanced tracking technologies based on video streams and analysis of user and visitor behavior should be considered for a next generation of users' profiling.

PART III
THE MANAGEMENT PLANS AND THE PILOT ACTIONS

Belgrade 24/01/2023

IX. MANAGEMENT PLAN AND PILOT AREA OF ANTIGONEA [M.L.; L.P.; R.P.]

IX.1.Description of the archaeological site

Antigonea (Fig. 19) was born on the hill of Jerme, southwest of the village of Saraquinishte, in the district of Gjirokastra. Archaeological excavations are currently underway by an Italian-Albanian mission of the IAT and the University of Macerata. It carries the name of the first wife of its founder, the Molossian king Pyrrhus, and it was founded between 297 and 295 BC. Thanks to its dominant position, which allowed control of the surrounding area, and its proximity to the route then traced by the Via Egnatia, which connected Durres, Apollonia and Oricum with the southern highlands, Antigonea had a great political, cultural and economic development, reaching its peak towards the end of the same century or the beginning of the next and following which it assumed a hegemonic role within the entire Drino valley.
It was the Albanian archaeologist Dhimosten Budina who discovered, between 1960 and 1980, the plan of the city and its name, thanks also to the discovery of a series of bronze tiles inscribed with the name ΑΝΤΙΓΟΝΕΩΝ.
The city was equipped with a mighty 4,000 meter - long wall, built with large parallelepiped blocks. Inside, the city dominated by a fortified acropolis, developed at an area of about 40 hectares, according to a regular urban plan articulated around two large parallel arteries cut by an orthogonal one. It adapted to the impervious terrain by means of terraces. One of the terraces was used for the public activity of the agora, which was bordered by a long stoà to the south and other buildings to the north (Fig. 20).

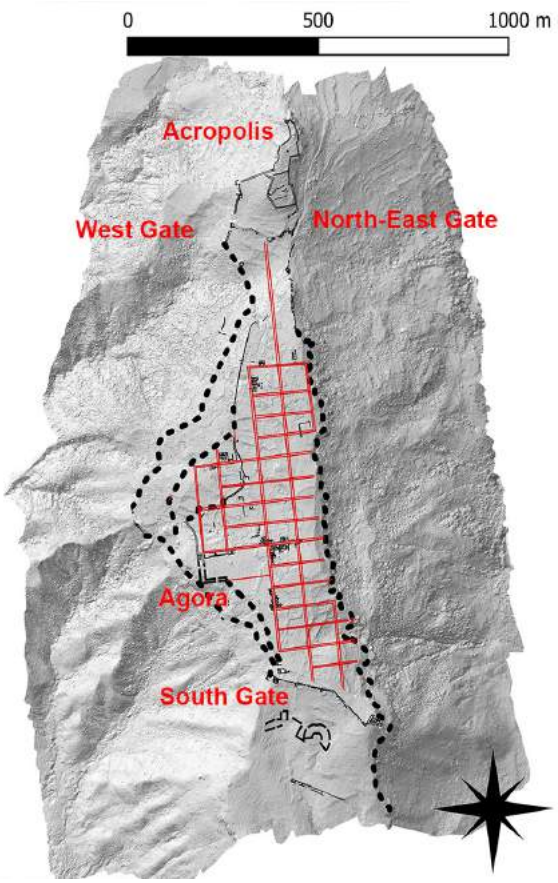

Fig. 19. Plan of Antigonea (© IAT and University of Macerata)

Fig. 20. An excavation phase of the buildings on the north side of the agora of the city (© IAT and University of Macerata)

Fig. 21. Residential districts of Antigonea (© IAT)

The good state of conservation of the residential areas has made it possible to identify many of the houses (Fig. 21). Signs of the growing economic vitality of the city are the development of handicraft production, ceramic and metallurgical in particular, as well as activities related to agriculture and breeding. The numerous coins found attest to commercial contacts with the Epirote League, Corinth, Corcyra, Larissa, Taranto and other cities of the Peloponnese, Asia, the Macedonian kingdom and the Adriatic coast. In the 2nd century BC, perhaps after 167 BC the crisis of the city occurs but, probably, not the definitive abandonment of the city.
Traces relating to the settlement phases of the Roman, Late Antiquity and Byzantine eras have been found both in the surrounding area and within the city area, including: the small early Christian church with triconco and mosaic floor dating back to the 5th-6th century AD South; the Church of S. Michele (Shën Mëhillit) datable between the 6th and 9th century AD on the hill of the acropolis; 8th-9th century AD church with an attached small cemetery in the central area of the city, near the agora. Most of the archaeological discoveries of Antigonea are now kept in the National Museum of History of Tirana, the Archaeological Museum of Tirana and, since 2012, in the Historical Museum of Gjirokaster in the Castle.

IX.2. Elaboration of documents and knowledge frameworks

IX.2.1. Archaeology

From an archaeological point of view, in view of enhancement Projects, the proximity of Antigonea to the archaeological area of *Hadrianopolis* (Sfratike, in the municipality of Dropull) and of that of Palokaster should be evaluated as a significant resource.

Fig. 22. Vertical image of the *Hadrianopolis* excavation area (© IAT and University of Macerata)

The Roman city of *Hadrianopolis* (Fig. 22) stands on the site of a previous settlement of the late Classical-Hellenistic age, perhaps with the function of a service center in the Drino valley.
Starting from the Roman conquest of Epirus, in 168 BC, the ancient center began acquiring proto-urban characteristics. Among the main buildings of this settlement in the early imperial age are the small temple on a podium in opus quadratum, the first phase of the baths, and a building with a theatroid plan.
During Hadrian's rule (117-138 AD), the ancient center became a city with the name of *Hadrianopolis*, becoming the capital and administrative center of reference for the Roman community of the Drino valley. Located along the road that connected Apollonia to Nikopolis (Tab. Peut. VII, 3) *Hadrianopolis* spread over a rectangular area of 300-350x400m marked by roads that crossed at right angles, and was equipped with major public buildings that include the theater and the thermal baths. After an urban crisis, which characterizes the 5th century AD, a recovery was recorded during the Justinian empire (527-565 AD), when the city was refounded with the name of Ioustianoupolis, before its definitive abandonment during the 7th century AD.

Fig. 23. Vertical image of the Palokaster castrum, the defensive perimeter, a quarter and the 6th century AD church are visible (© IAT and University of Macerata)

The Palokaster castrum (Fig. 23) is located near the SH 4, at the height of Kardiq, where the road detour starts towards the Muzina valley and the coast (Saranda). It was built in the early 4th century AD and is characterized by a quadrangular plan of which most of the walls with square and semicircular towers are preserved. Recent excavations

conducted by the IAT and the University of Macerata have uncovered a large part of the barracks system, currently clearly legible in their planimetry. Between the end of the 5th and the beginning of the 6th century AD a cult building dedicated to Cosma and Damiano was installed on an older settlement.

IX.2.2. Environmental naturalistic

The most characteristic elements refer to the persistence of the clear traces of an ancient city still visible in the original forms of the manufactured goods preserved, although sometimes in poor condition.
This set of ancient urban elements is located in a substantially intact environmental context with a deep value.
The Archaeological Park is at the center of a system of villages and cultural heritage that is unique in terms of social and monumental characteristics.
The geological, climatic, and botanical conditions of the Drino valley are discussed in the strategic plan (Fig. 24).

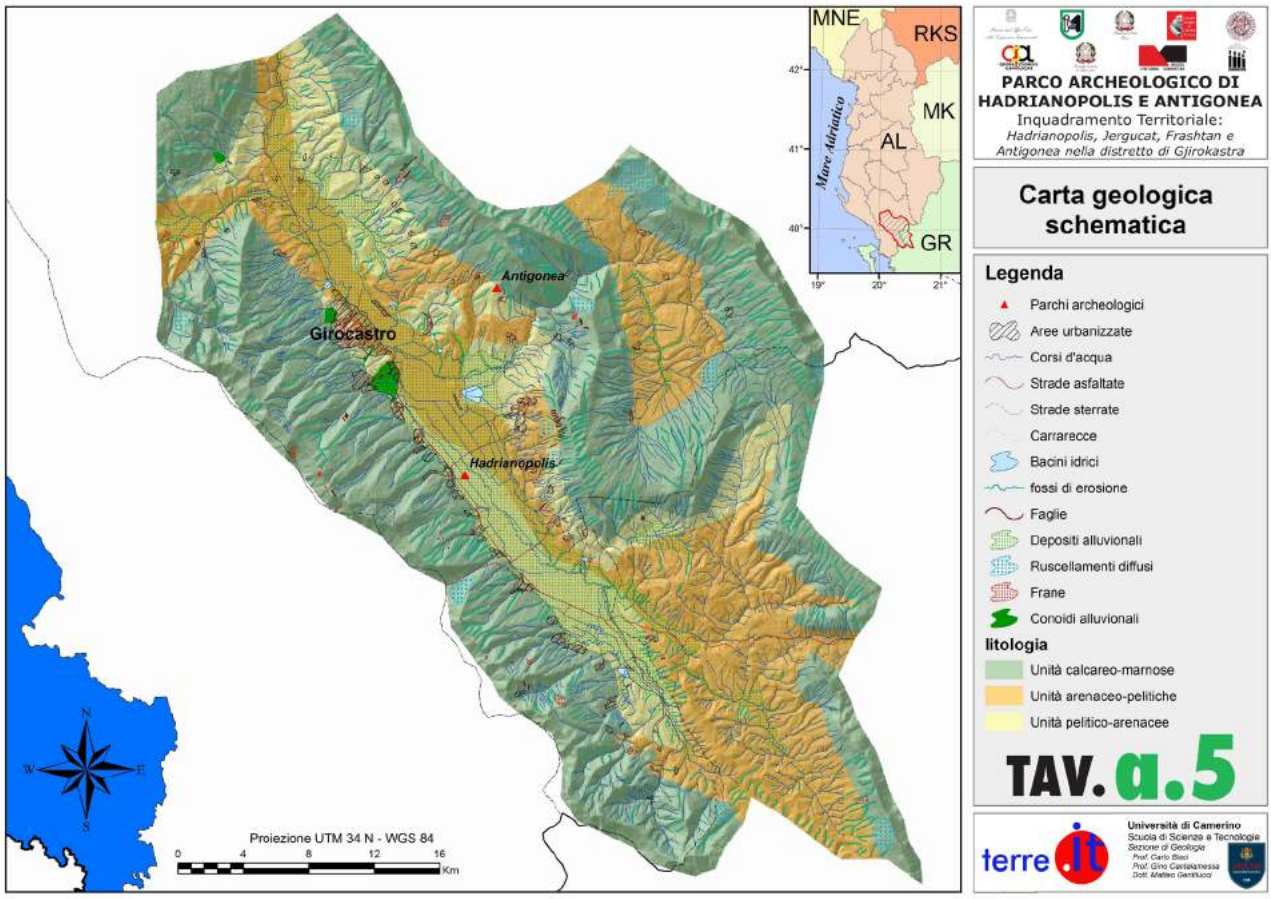

Fig. 24. Strategic Plan for the Drino valley, geological overview of the Drino valley (© IAT and University of Macerata)

IX.2.3. Historical cultural context

The Drino valley is also characterized by a rich cultural heritage whose valorization could be centered precisely on the two poles of Gjirokastro and Antigonea, to which must be added an articulated system of places of culture, among which the aforementioned archaeological sites of *Hadrianopolis* (Sofratikë) and Palokaster emerge.
Gjirokaster is one of the most important cultural and tourist centers of Southern Albania. Because of its unique characteristics and historical and architectural values since 2005 Gjirokaster has been a part of the world centers protected by UNESCO. The Castle is the largest building in the historic center. Located on a cliff overlooking the city, it preserves galleries covered with barrel vaults that occupy the central part of the fortification. The characteristic Bazaar represents the center of the historic city.
The Museums that can be visited are the National Weapons Museum at the castle, the Ethnographic Museum, the

Historical Museum of Gjirokaster at the Castle and some historic houses. Of artistic value are also the architectural complexes in the historic districts and the Italian-style buildings of the 1900s.

IX.2.4. System of use

The territory of the Drino valley is characterized by a rapid infrastructural development both in terms of reception and road conditions. It is characterized by the presence of the center of Gjirokaster which serves as a fundamental service center. The road system is centered on the north-south axis which connects the valley to Northern Greece through the Kakavia pass (SH 4).

IX.2.5. Economic, administrative and political context of the Park

The National Parks Authority is set up as a collective supervisory element for a broader democratic and professional control over key actions relating to archaeological parks.
The National Archaeological Parks Council is a decision-making body that oversees the activities of the Archaeological Parks Office and approves development strategies and programs for eight national archaeological parks. It prioritizes documenting cultural heritage and decides on the final destination of administration, protection and exhibition of national cultural movable property of unique value in national Museums. The Council is chaired by the Minister and comprises representatives of: the Ministry of Tourism and the Environment, the Ministry of the Interior (local government), the Directorate of National Heritage at the Ministry of Tourism and the Environment, the Institute of Archeology at the Albanological Studies, Institute of Cultural Monuments. National Park directors are non-voting Council members. Administrative structures have been established for the archaeological parks of Shkodër, Lezha, Apollonia, Byllis, Amantia, Orikum, Antigonea, Finiq and Butrint. They implement programs and projects and approve and direct the administration and budget of the park. They are financed by the state through the Ministry. In general, their staff is made up of: a director, a financial administrator and experts in archeology, restoration, environment, and management. The Director is appointed and revoked by the competent Minister for Cultural Heritage according to the criteria for the office established by the National Authority for Archaeological Parks.
The Administration and Coordination Offices of the Archaeological Parks have the task of preparing and implementing development and administration programs approved by the National Archaeological Parks Authority, to be coordinated with central and local institutions, and organizing meetings with consultants from specific areas.
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 voting rights.
The Administrative structures of the archaeological parks 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: a director, a financier, and experts for archaeology, restoration, environment, management. The Director is appointed and dismissed by the Minister responsible for Cultural Heritage.

Currently, an archaeological park in *Hadrianopolis* has not been institutionalized, although even within the remit of the Regional Directorate of Monuments of Gjirokaster (DRKK), the Directorate of the Archaeological Park of Antigonea also deals with *Hadrianopolis* (Fig. 25).

Fig. 25. Plate at the entrance to the Antigonea Park headquarters (©University of Macerata)

IX.3. Synthetic interpretation

The data analysis, having noted structuring factors, characterizing factors, qualifying factors or situations and critical factors or situations, allows us to identify some opportunities in the identification of a new management model of the archaeological park of Antigonea.

- Territorial proximity of the Antigonea, *Hadrianopolis* and Paleokaster archaeological areas and their chronological continuity.
- Possibility of integration with active national and international policies aimed at sustainable development.
- Presence of the University of Gjirokaster which has launched training processes related to the management and enhancement of cultural heritage.
- Strengthening institutional and civil society capacities and policy support in the field of cultural heritage and promoting intercultural dialogue and social cohesion.

IX.4. Elaboration of the Project

Phase II and phase III of the Management Plan implemented with the TRANSFER Project articulated what was already proposed in the context of the Strategic Plan for the Drino valley, elaborated within the REBED Project of the Marche Region and coordinated by Prof. R Perna and Prof. M. Sargolini, which saw the collaboration of a large and articulated group of stakeholders including the IAT, the DRKK and the Municipality of Gjirokaster.
In this planning phase, rules divided into areas have not yet been developed. In fact, the project stopped at the elaboration of the strategic lines for the master plan of Piani dei Parchi. A more in-depth analysis for the complete implementation of the Park plan is being awaited.

IX.4.1. Mosaic of urban and territorial planning

The archaeological work focused on the first step and deferred the comparison with current planning for a later phase. It used the Strategic Plan for the Drino valley as the only point of reference (Fig. 26).

IX.4.2. Rules for areas

The first cognitive step made it possible to divide the territory of the Antigonea Park into areas characterized by specific "archaeological values".
Starting from this zoning, it will be possible to propose constraints, destinations for public or private us and implementing rules for various areas or parts of the plan, identifying useful rules for regulating transformations of each area and for defining the relationships between important social and economic human activities, and the archaeological context.

IX.4.3. Zoning of Antigonea

Zone A: Zone with "high archaeological potential", in which the archaeological value is absolutely predominant compared to any other type of specificity. It concerns the urban area of the ancient city.
However, it is an area in which the archaeological emergencies are dense and continuous. In zone A, both the areas with the presence of outcropping and visible structures whose antiquity was confirmed by autopsy checks, and the structures identified based on the DSM which, because of their planimetric and topographical characteristics, can certainly be dated back to ancient times, and places rich in findings known based on the bibliography and previous research in which the geomagnetic surveys have highlighted structures which, because of planimetric and topographical characteristics, and significant morphological elements in continuity with the ancient world, can certainly be dated to ancient times.
Zone B: Contiguous "peri-urban" zone, in which it is possible to identify a rarefaction of emergencies. For the precise delimitation of this area it would be essential to avail oneself of the exact location of the necropolises which have never been surveyed and mapped on an adequate scale but which, in all probability, based on what is known today, were certainly linked to the direct road network towards the south and to the east. Areas presenting evidence and

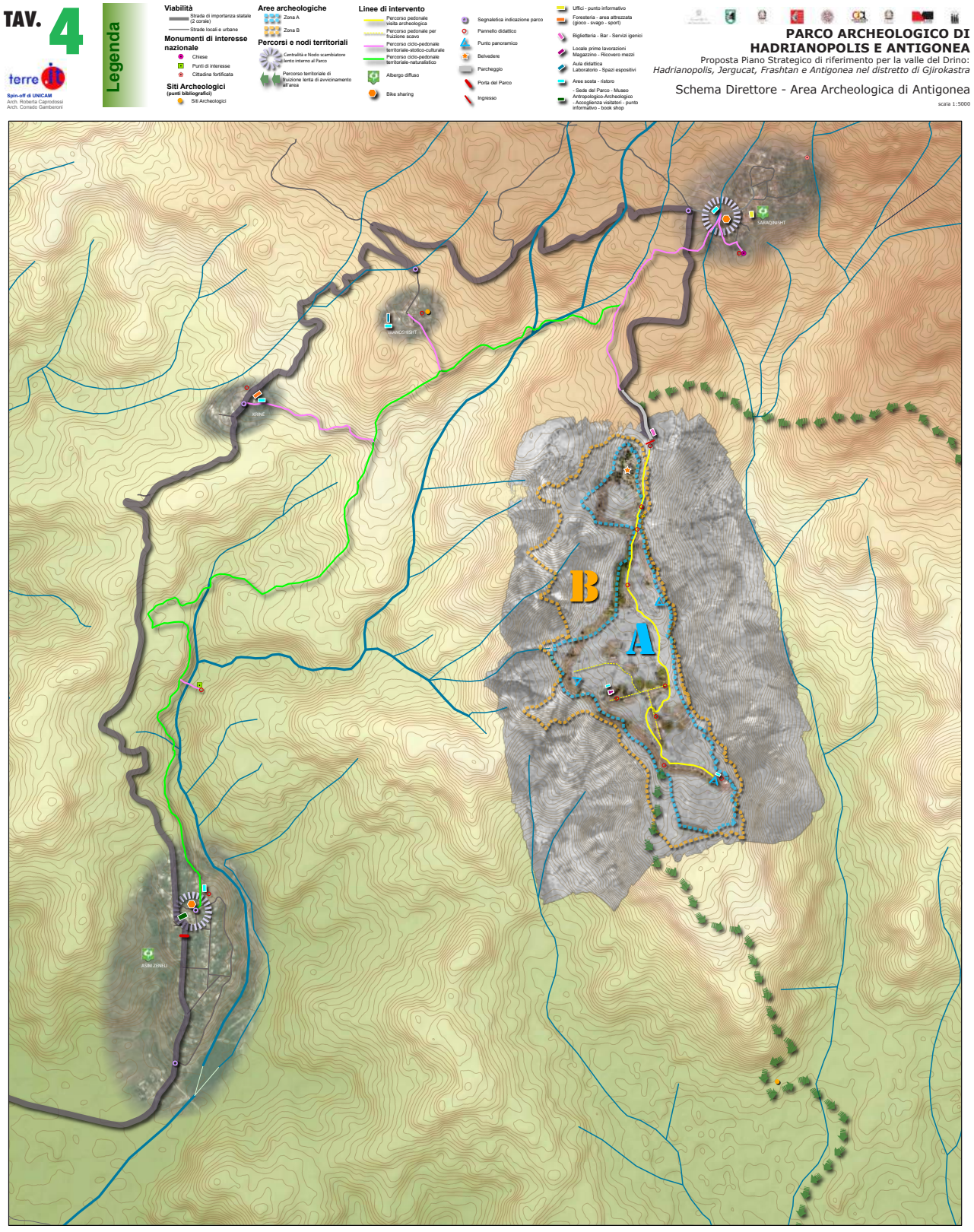

Fig. 26. Strategic Plan for the Drino valley (© IAT and University of Macerata)

distinguishable anomalies based on the DSM were also evaluated and, because of their characteristics, can only be hypothetically dated back to the ancient age and areas immediately surrounding zone A which, evaluated based on morphology, are particularly suitable for an ancient settlement, in particular as connected to the viability.

Considering what was subsequently stated in the strategic lines, zoning was also proposed for the archaeological area of *Hadrianopolis.*

IX.4.4. Zoning of *Hadrianopolis*

Zone A, an area with "high archaeological potential", concerns the hypothetically intramural urban area of the ancient city and the immediate and richer peri-urban areas. Both the area delimited based on the discontinuities found during the geoseismic investigations and an external band, for now only hypothetically peri-urban and extramural, in which significant archaeological structures are identified, converged in this zone. The necropolis (Fig. 27) should also be included in the same Zone A, delimited in particular thanks to georadar investigations, which confirm the data that can be collected thanks to surface archaeological investigations.

Fig. 27. Monumental tomb in the necropolis of Hadrianopolis (© IAT and University of Macerata)

Zone B, contiguous peri-urban area, in which it is possible to assume a rarefaction of emergencies. The definition of this area is more hypothetical than the definition of the previous area, and it was also defined starting from comparisons with the peri-urban areas of known cities comparable from a chronological and typological point of view to ours.
The limits have also been defined taking into account the divisions of the properties in order to avoid the limit of the area to fall in the center of a piece of land.

IX.4.5. Strategies

The primary aim of this paper must be contextualized in relation to the larger area surrounding Antigonea. For this reason, strategic lines have been identified for the development of a cultural matrix of the territory which seek to integrate the individual archaeological emergencies with each other and in the broader territorial context. It is therefore considered appropriate to clarify them for a more adequate understanding of the Project.
As a premise for the identification of the strategy, there is the idea of Landscape understood (European Landscape Convention) as a specific part of the territory characterized by the union of natural and anthropic factors and their relationships. Cultural resources and natural resources, if exploited, can contribute together to the development

of the territory. The hypothesis from which the project idea started is the belief that protecting the archaeological resource and its sustainable valorization in terms of tourism must also be achieved through a better integration of the archaeological area with the urban and territorial context. The historic site must be considered a landscape element of particular value, in order to generate new opportunities and prospects for development and, indirectly, contribute to the definition of transformation and development policies.
The first strategic line envisages the integration of the Antigonea Park with that of *Hadrianopolis* as part of a development plan for the entire Drino valley, centered on the city of Gjirokaster. This fundamental and priority strategic line also contains the following:

- Reorganization not only of the area strictly included in the park, but also of the surrounding area characterized by a strong environmental and cultural value.
- The enhancement of the Park, the improvement of its visibility and social use to stimulate internal development processes and strengthen local systems, laying the foundations for an active conservation of resources, necessary for their valorization.
- Developing relationships between public and private entities in relation to the enhancement and management of cultural heritage.
- Organizing the balance between public control, often divided as already mentioned between different competent subjects and a variety of private subjects.
- Besides the two archaeological areas, integration into the Project of other archaeological sites and monuments of national interest.
- Improved access to cultural heritage and participation in cultural heritage decision-making.
- Promotion of socio-economic opportunities for communities in culture-based activities.
- Increased skills in the management and conservation of cultural heritage.

IX.5. Plan documents

The Plan documents must show the main interventions through which to enhance not only the archaeological area, but the surrounding area and, above all, to rediscover the paths to physically connect Antigonea with *Hadrianopolis*.
The first aim of Piano's documents must be the continuation of archaeological stratigraphic investigations, both in Antigonea and in *Hadrianopolis*. The excavation must be accompanied by an in-depth study of all those remote sensing investigations which may be useful for defining zone B in greater detail.
As regards Antigonea, at the entrance to the area, near the existing car park, whose expansion must be evaluated, a building should be built to be used as a ticket office.
Within the area, the reorganization of the Reception area will have to be envisaged through the re-functionalization of the existing building and the construction of a new building aimed at bars, toilets, info points, laboratories and offices for the Park.
The pedestrian route to be used for the visit has been placed in the archaeological area. As for excavations, a further route must be inserted in order to bring the tourist closer to the otherwise invisible archaeological remains; in the specific case, the straight section should retrace and resume the alignment of the underlying ancient road.
In the Project for Antigonea, the rural villages that are crossed by the local road, the existing vehicular one, which goes up to Antigonea and by the cycle-pedestrian-equestrian path that can be planned to be arranged, play an important role. To strengthen the relationships between the different places, and based on the characteristics of each country, it is proposed to distribute interventions and services to all four villages.
Asim Zeneli is the seat of the Park and a place where the bus stops are still concentrated today, but also stops of other minibuses which, in the small square, collect people heading towards the villages further upstream, or, vice versa downstream. It has been referred to as the Gateway to the Park. The existing building, the seat of the Park, can also be identified as the information point, the place for welcoming visitors and the seat of an Antiquarium.
In Krine, the building, surrounded by a flat open space, which is located along the main road, near a partially restored church, could be re-functionalized for accommodation facilities. For this reason, it has been marked as the site for the guesthouse with an area equipped for games and sports.
In Treneshisht, a large one-story building, now disused, overlooking a large flat open 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 marked in this building.

Fig. 28. Delivery of photovoltaic panels (© IAT)

Saraqinishte, the highest village, is the closest to the archaeological area; a building to be restored, not directly visible from the street, but equipped with an open courtyard and accessible through an arch, could be used as an office site for excavation workers and an information point for tourists.
Rest areas can be located in all four countries; in Asim Zeneli and Saraqinishte some buildings could be renovated and used as a widespread hotel.
Outside the Antigonea area, two possible territorial scale routes have been identified. One of the two routes involves the old road that connected the Church of Antigonea with the Drino valley and which could be recovered and restored as a direct connection between *Hadrianopolis* and Antigonea for light use (on foot, on horseback etc.).

As far as *Hadrianopolis* is concerned, a fruition must be foreseen that the archaeological site can extend and also involve the surrounding area, in particular Sofratikë and the other towns along the western side to make them become nodes of the fruition system.
Within these nucleuses, it is possible to identify the cycle-pedestrian-equestrian routes, the panoramic points from which it is possible to admire the entire valley and, in particular, the archaeological area of *Hadrianopolis*, and the refreshment points. In them, buildings could also be renovated to be used as a hotel.
The main tourist services (parking, information point, refreshments, billboards, bike sharing, teaching room, laboratories, etc.) can be located in Sofratikë, using existing buildings when possible. This area would serve as an entry point to the Park for those using the state road (SH 4).
Besides the territorial fruition routes, the pedestrian route to be used for the archaeological visit must be provided. In correspondence with the excavations, a further route must be inserted in order to bring the tourist closer to the archaeological remains.
Within the fenced archaeological area, the construction of structures (for example in wood) must be envisaged both for tourists (ticket office, bar, toilets) and for excavation workers (offices, raw materials room, warehouse, etc.).

IX.6. Pilot Action

The Pilot Action envisaged two specific lines of intervention:

The first concerns the purchase of a photovoltaic panel (Fig. 28) useful for bringing electricity to the Antigonea site, currently without a connection to the electricity grid. This energy is functional to the use of the spaces that must be set up for hospitality on the site.

The second involves the acquisition of instrumentation for the vision of virtual reality to be created within the Park in order to facilitate the reading of the structures in a state of ruin.

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X - MANAGEMENT PLAN AND PILOT ACTION FOR THE ARCHAEOLOGICAL SITE OF DODONA [V.P.; P.Y.; I.K; E.V.; T.S.]

X.1.Description of the archaeological site

Fig. 29. View of the Archaeological Site of Dodona (© EFAI)

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 Mount Tomaros (Fig. 29). 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 entire area is scattered with ruins, including an imposing Theatre, the Sanctuary and an Acropolis enclosed by fortified Walls, occupying an area of 164.659,43m^2 (Fig. 30).

The first signs of building activity date to the end of the 5th , or early 4th BC, when the first small temple of Zeus (Sacred House) (E1) and three ionic stoas were erected. In the immediate vicinity of the Sacred House other religious buildings were also developed. According to the prevailing opinion, the earlier temple was dedicated to Dioni (Γ). When the sanctuary was reconstructed after 219 BC, a new temple-like structure sacred to Dioni (Θ) was erected to the south, visibly diverging from the temple of Zeus. Among the three buildings that surrounded the sacred oak of Zeus, was the so-called temple of Themis, goddess of justice (Z). A temple dedicated to Hercules (A) was also built at the southernmost end of the sanctuary, roughly 30m westwards from the gate of the enclosure. The so-called temple of Aphrodite (Λ), centrally positioned within the Dodona sanctuary, is situated near the temple of Themis.

The remaining buildings in the sanctuary's west sector reflect the program of monumental reconstruction orchestrated by King Pyrrhus in the early 3rd century BC. These are the Theatre, the Bouleuterion (E2), where the representatives of the Epirots conferred, the Prytaneion (O), and the Stadium (ΣΤ).

The priests' residence (M), located between the Bouleuterion and the Theatre, was the sanctuary's earliest building, built after the Sacred House. It served as a dwelling for the priests of Zeus or for the leaders of the Molossians.

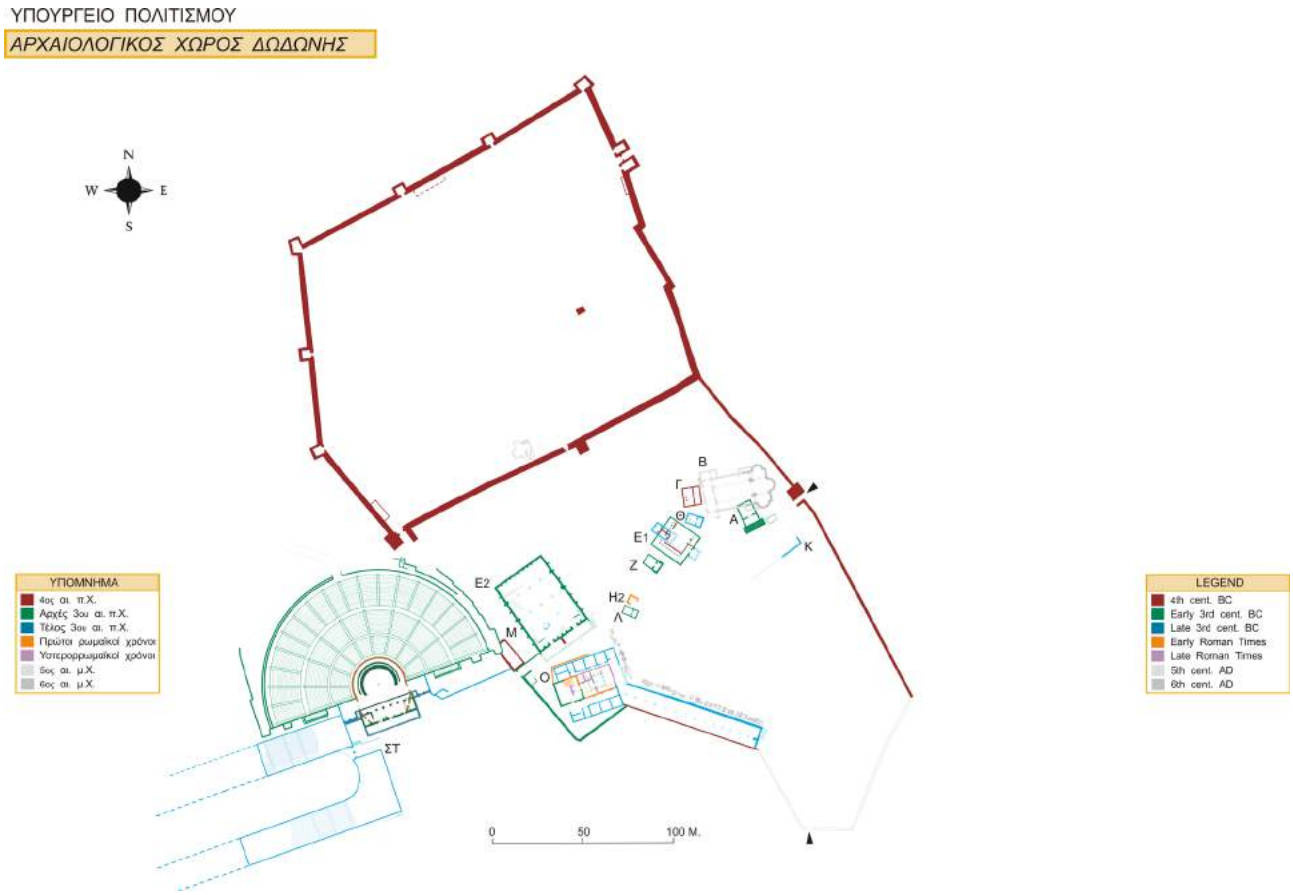

Fig. 30. Topographical Plan of the Archaeological Site of Dodona (© EFAI)

X.2. Elaboration of documents and knowledge frameworks

X.2.1. Archaeological System (Plan)

The Archaeological Site of Dodona was mentioned by several travelers of the nineteenth century. In 1875, Konstantinos Carapanos was the first who excavated the sanctuary. Before Carapanos' excavations, the only visible monument in the site was the Theatre. From the decade of 1930 until the beginning of the twentieth century, professors Dimitrios Evangelidis as well as Sotiris Dakaris, and his collaborators conducted excavations on behalf of the Greek Archaeological Society. Since the early nineties, excavation and restoration works have been conducted by the Ephorate of Antiquities of Ioannina. Nowadays, the focus of research is placed on the conservation of the ancient Theatre. In 2022, the restoration of the lower part of the koilon/auditorium has been completed. Furthermore, excavations took place in the basilica's area and the interior of the Bouleuterion. The area of the acropolis remains unexcavated.

X.2.2. Environmental naturalistic

Dodona is situated on a semi-mountainous col at an elevation of about 620-650 m in the hinterland's heart of Epirus. The Dodonaean valley stretches for at least 6 km between the villages Meliggoi and Dramesioi on a southeast-northwest axis (Fig. 31). Along this axis, it connects the mountainous ranges of Tomaros/ Olytsika (1.974 m.) to the southwest, Agios Nicolaos (1.076 m.) to the east, Megali Tsouka (1.173 m.) to the north, and Kourenta (1.172 m.) to the northwest. Natural openings and river passes disrupt the rugged geomorphological relief and allow bilateral movements to and from Epirus' hinterland areas and the coasts. To the northeast, a passage leads to the Ioannina basin, across the modern Egnatia Road motorway that connects Igoumenitsa to Alexandroupoli. To the south lie the springs of the Louros River, which flows into the Ambracian Gulf. To the northwest, the tributaries of Tyrias

and Smolitsas join the Kalamas river, which empties into the Ionian Sea. Secondary connections with the Acheron watershed valley to the southwest and with the area of Thesprotiko to the south facilitate communication with the coastal areas of Epirus in the Ionian Sea and the Ambracian Gulf, respectively.
In the Dodona region, the rocks belong to the Adriatic-Ionian Geodetic Zone where limestone and flysch dominate. 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.
Dominant species of vegetation in the area are holly, phrygana and oak. To the east, on the outskirts of Tomaros, grow the black and rough pine, which for the most part come from reforestation, while in the western part there are clusters of firs. Many species of flora that have not been studied at all grow in the area. The fauna consists of birds, some small mammals, a few hares and foxes.

Fig. 31. View of the Dodonaean valley (© EFAI)

X.2.3. System of use

The current management plan is proposed to create a sustainable fruition system between the Archaeological Site of Dodona and the societies of the surrounding settlements, economically and socially. As far as the archaeological site is concerned, its use in multiple ways, as a cultural event site, a conference hosting infrastructure and an integrated experience site through augmented reality (AR) systems, will transform it to a tourist and cultural pole, much more than it is today. This will bring along the development of the wider area, while its further connection with local businesses through the dissemination to the public of information either with printed and informative signs or with electronic sources will encourage visitors to visit local businesses for food, accommodation, buying souvenirs, etc. Moreover, it will increase the sense of belonging of local people.

X.2.4. Historical cultural context

Harsh-wintered Dodona was the main cult place of Zeus in Epirus probably since the Bronze Age. The oldest reference to the shrine derives from Homer in the eighth century BC. Herodotus, (5th century BC) refers to the foundation myth of the sanctuary, according to which: “two black doves 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". It is difficult to define when the oracular activity emerged at the site, but following the historian Herodotus, it seems that Dodona is the most ancient oracle in Greece. For centuries, the shrine remained rather rudimentary. The sanctuary was open-air and various ceremonies were performed around the sacred oak tree. The first signs of building activity date to the early 4th BC, when the first small temple of Zeus and three ionic stoas were erected. The votive sounds were replaced by two columns topped by a statue of a boy with a whip in his hand, and a bronze cauldron, respectively. When the wind blew, the whip would strike against the cauldron, creating the prophetic sounds. The enclosure of the Dodona acropolis, further north, dates back to the same period.

The monumentalization of the sanctuary took concrete form during Pyrrhus' reign (297-272 BC) (Fig. 32). It was enriched with monumental buildings, as the Theatre, the Bouleuterion, the Prytaneion, the temple of Hercules, the Acropolis at the top of the hill, the outer isodomic precinct and the so-called temples of Aphrodite, Themis and Dione. At the end of 3rd century BC, after the Aetolian disaster in 219 BC, Dodona was repaired and reformed. It was about that time that a big stone Stadium was also built.

The sanctuary was destroyed by the Aetolians in 219 BC, but was soon reconstructed and functioned again until 167 BC, when it was destroyed by the Romans. It suffered again in 88 BC under Mithridates VI Eupator, King of Pontus, and his Thracians warriors. During the reign of Augustus, the Theater was transformed into an arena for wild beast fights and gladiatorial shows. In its lower part a wall which cut off the proscenium and the scene was constructed to protect the spectators. During the latter half of the 4th century AD the oracle fell into disuse and the area that lay between the Theater and the former sacred precincts was used for other purposes, possibly the manufacture of a purple dye. During the 6th century AD Dodona was described as bishopric and a town. By this time, a basilica was also built.

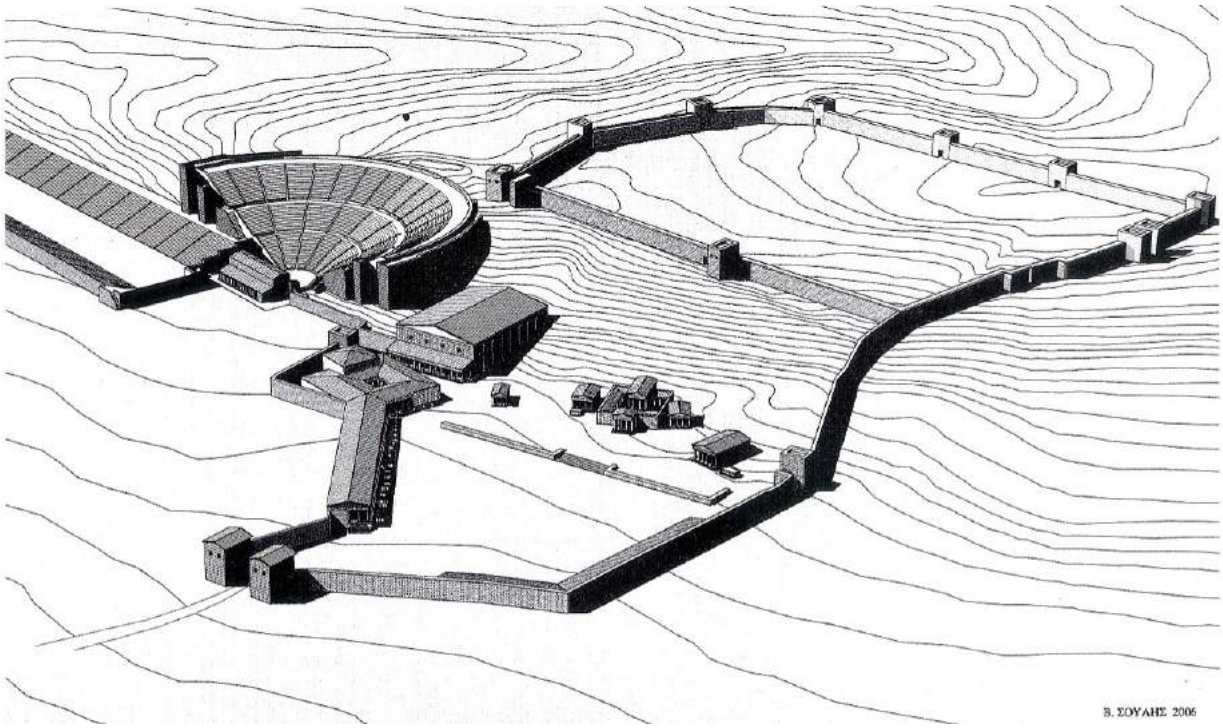

Fig. 32. Representation of the Archaeological Site of Dodona (© EFAI)

X.2.5. Economic context

The sources of income for the operation of the Archaeological Site of Dodona are: a. the regular budget of the Ministry of Culture and Sports, b. the participation of the Ephorate of Antiquities of Ioannina in national, European and international programs and c. private sponsorships in extremely rare cases. Therefore, the research, conservation of findings, education, and other activities of the Ephorate of Antiquities of Ioannina are funded from the above sources.

X.3. Synthetic interpretation

The current management plan includes the following:

- SWOT Analysis;
- legal framework;
- vision Statement;
- mission Statement;
- general objectives;
- specific priorities;
- the economic context;
- involved Stakeholders;
- cooperation modalities;
- needs to be covered and actions to be implemented;
- assessment of the economic impact of management activities;
- risk management;
- marketing strategy;
- evaluation.

X.4. Elaboration of the Project

X.4.1. Scientific Archaeological Project

The aim of the project is to make the Archaeological Site of Dodona a global cultural center, open and accessible to all people of all ages and all ethnicities. A place where the achievements, wisdom, and lessons of the past help modern well-being.
The mission of the Ephorate of Antiquities of Ioannina is to get everyone involved, to highlight the uniqueness of the Archaeological Site of Dodona, which, in a natural environment of unique beauty, contains, among others, the largest Theatre of ancient Greece.

X.4.2. Mosaic of urban and territorial planning - Rules for areas

The owner of the Archaeological Site of Dodona is the Greek state. The Law 4858/2021 is the fundamental law for protecting Antiquities and Cultural Heritage. 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 5315641.26 m^2 (Fig. 33). This resulted in imposing regulations 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 and 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, as long as they exceed neither size, nor 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. The Ephorate of the Antiquities of Ioannina is responsible for monitoring agricultural and building activities in the area, and its permission overrules any other permission granted by any other authority.
Needless to say, that simple designation and delimitation of such zones is never enough, if not followed by implementing 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.

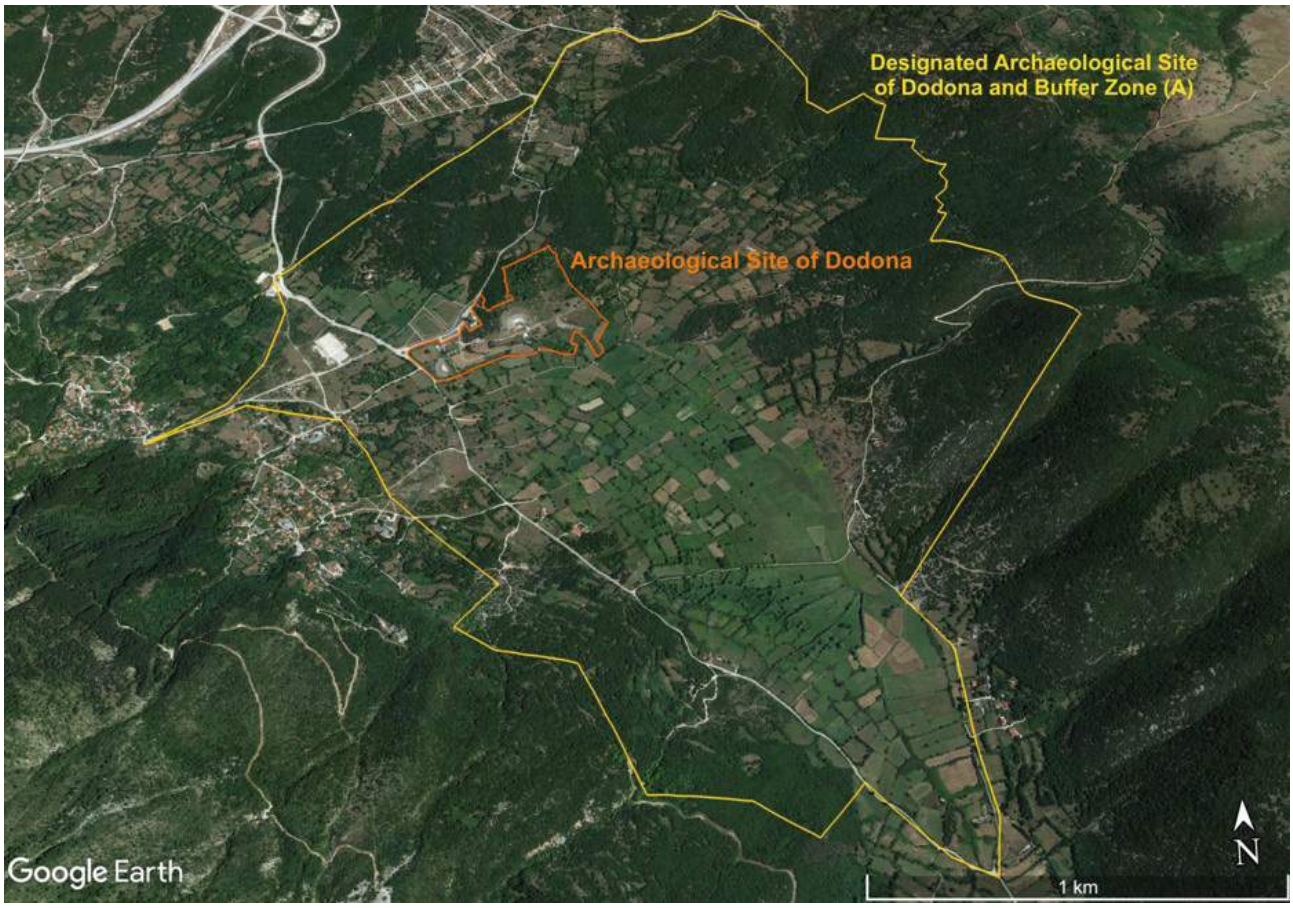

Fig. 33. Designated Archaeological Site of Dodona and Buffer Zone (A) (© EFAI)

X.4.3. Strategies

In designing the strategy for the management of the Archaeological Site of Dodona, focus should be given to the enhancement of the natural and cultural environment. Of major significance are the following actions:

- improvement of public transportation to the site;
- enhancement of the villages around the archaeological site;
- promotion of volunteer work and of donations;
- synergies with local enterprises and the local Municipality.

X.5. Plan documents

X.5.1. Management and implementing of the main infrastructure

To this direction the Ephorate will:

- undertake actions related to the utilization of the site as a space for cultural events;
- organize activities aimed at familiarizing pupils and students with the site ;
- try to gather people at specific points in time, such as the Full Moon of August or the solstices and equinoxes;
- attempt to engage sponsors and volunteers;

Every step will include the following:

- setting up sustainable economic activities;
- adoption of innovative ICT tools, including specific instruments which need to be activated;
- financial resources;
- timeline, involved human resources, roles and responsibilities, etc…;
- training of Ephorate staff, business people and locals.

X.5.2. The restoration and static consolidation of the archaeological heritage: activities that need to be implemented as to maintain physical preservation of the Archaeological Park/site

The Archaeological Site of Dodona is secured with a safety fence and so is its entire infrastructure. Furthermore, the Ephorate has installed an internal and external video surveillance system covering most of the archaeological site.
One severe weakness of the Archaeological Site of Dodona is the nature of the site itself· an "open-air" site with dense vegetation and wet climate with rain and thunders. Significant weathering has occurred in the majority of the monuments of Dodona. The deterioration process is mainly of physical weathering type, due to structural and chemical characteristics of the limestone as well as climate factors, temperature fluctuations and humidity in particular. For that reason, there is a need to monitor environmental conditions in a regular manner.
Furthermore, there is a great risk of fire due to the frequency of lightning. For that reason, the Ephorate decided to install a lightning protection system (LPS).

X.5.3. Civil protection plan in case of natural disaster

Civil protection in Greece is organized as a coordinated resource system where national, regional, and local authorities work together with local and public institutions and services. The Greek bodies responsible for the implementation of civil protection measures include the General Secretariat for Civil Protection (GSCP) and several authorities, organizations and institutions, e.g. the ministries, the fire service, the Hellenic police, the armed forces, health authorities, the decentralized administrations, the regions, and the municipalities. Each ministry is responsible for prevention plans and taking preventive structural measures in their competency. The General Secretariat for Civil Protection issues circulars with guidelines not only on prevention, but also in preparedness and disaster response. Thus, the Greek Ministry of Culture and Sports which is responsible for the Archaeological Site of Dodona through the local Ephorate of Antiquities issues, on each case (fire, high temperature, earthquake etc.), warnings including instructions for protection.

X.5.4. Systems of equipment and services for the management of the social function of the Site (Visitor Management Plan)

The Archaeological Site of Dodona is the most popular archaeological site of Epirus. It is open throughout the year. More than 40.000 people visit Dodona every year. Most of the visitors are on organized tours. Groups mainly arrive by coaches from Egnatia and Ionia highways. There is a large parking lot right in front of the entrance of the archaeological site (Fig. 34). Restrooms are available near the ticket office at the entrance. There are information panels in situ and a free brochure (In Greek and English). Opposite to the ticket office there is also a gift shop of the Hellenic Organization of Cultural Recourses Development (H.O.C.RE.D) where the visitor can buy guides, cards, etc. There is also a cafeteria for the visitors to rest or to have a quick snack.

Fig. 34. View of the parking of the Archaeological Site of Dodona (© EFAI)

Regarding the movement of people inside the archaeological site there is a safe pathway throughout most of the site leading to the main monuments, designed in a way to allow people with mobility difficulties to use it as well.

X.5.5. The Interpretive Plan

An interpretative plan generally serves the didactic function of the place. Some of the initiatives that the Ephorate will try to introduce are the following:

- collect stories related to site, inspiring kids and youth to explore the surroundings and help fund small-scale trans-border projects like Erasmus+;
- disseminate heritage toolkit for the schools promoting knowledge and kids' activities related to the site;
- elaborate educational programs for local guides in connection with increased archaeological site visits;
- plan itineraries and visits with animation, interactive games and virtual reality. More specifically, a publication of a comic book on the site's history is going to be available to kindergarten and elementary school students;
- heritage festivals. Cultural heritage festivals are widely well-thought-out and contribute to the economic development of the local organizers by providing employment, attracting tourists and promoting heritage;
- participating in scientific conferences and temporary exhibitions in collaboration with other Museums, both in Greece and abroad that will definitely help in promoting the history and archaeology of Dodona.

X.5.6. Public Awareness and Organization of Educational and Recreational Functions

Public awareness and organization of Educational and Recreational Functions should mobilize local and international visitors and their interest for the site's protection and conservation.
That is:

- schools through educational visits to the archaeological site and the surrounding area, will participate in educational programs that allow students to get to know the history of Dodona;
- general public through theatre performances, music concerts and other entertainment events, or other types of actions such as sports competitions that resemble the games of antiquity, conferences etc. from time to time in the archaeological site.

X.5.7. Communication Plan for the Communication-Participation Strategy, with reference to the use of ICT (Internet Communication Technology)

During the last couple of years a couple of research projects have been developed related to the 3D representation of the site, a digital application for children of 10-12 years old, (NSRF) 2007-2013, available at Play Store: https://play.

google.com/store/apps/details?id=com.useappility.mio&hl=el and App Store: https://itunes.apple.com/gr/app/to-taxidi-toutimodamou/id953558057?l=el&ls=1&mt=8, a video with the succeeded phases of the Sacred House (Interreg IIIA Greece-Italy) (Fig. 35), and one with the representation of the oracular procedure (http://www.vroracle.co.uk/).
The municipality of Dodona is planning a digital center for visitors near the site where digitized photos, maps and pictures of the findings would be accessible before or after a visit to the site.

Fig. 35. 3D representation of the final phase of the Sacred House (© EFAI)

X.5.8. Accessibility plan for disadvantaged categories

ICT tools promise to "revolutionize our lives" by breaking down barriers and expanding access to culture for disabled people. Thus, the aforementioned applications can be used by people with special abilities e.g., smart phones for hearing aid compatibility or with screen reading applications.

X.5.9. Research, documentation, maintenance and protection of the archaeological resource through digital supply chain. Plan for the enhancement and promotion policies

The Plan of the Ephorate of Antiquities of Ioannina for the enhancement and promotion includes the following:
- a digitalisation of the Ephorate's archive (photos, sketches, diaries etc.);
- aerophotagraphs of the archaeological site using the drone the Ephorate bought through the project;
- 3d replicas of findings used for educational purposes on site.

X.5.10. The project for the use of ICT and the digitization plan

ICT tools offer numerous possibilities to improve and personalize the visit experience. In Dodona there is a Wi-Fi coverage and the site itself provides visitors with five tablets. A facebook page (https://www.facebook.com/ierododonis) allow the site to share its news with a global and wider audience. Finally, the development of a 3D representation of the site initially based on available 3D models from a past digitization will offer new experiences to Dodona's visitors. These 3D models have been processed and with the addition of several new details (based on the updated archaeological research of the site), the final 3D model of the site will represent a correct "snapshot", projected in the 3rd century BC. The AR application will finally be compiled for use on Android and Ios mobile devices.

X.5.11. The economic sustainability

The expected results of the Management Plan for the Archaeological Site of Dodona.

- The improvement of the already existing specialized and branded tourist destination.
- The organization of a structured "experiential" exploration of the archaeological site.
- The increase in the number of visitors to the archaeological site.
- The creation of a "social contract" between the Ephorate of Antiquities and local businesses to enhance the competitiveness of the participating companies while improving the natural and cultural environment in the vicinity of the archaeological site.
- The connection of the archaeological site with the local community of the Municipality of Dodona but also the social and business environment of the Prefecture of Ioannina
- The utilization of ICT.
- Publicly accessible archaeological sites can generate economic benefits in sustainable and unsustainable ways.

X.5.12. Organization chart

The Archaeological Site of Dodona according to Greek legislation is under the jurisdiction of the Ministry of Culture and Sports (Constitution of Greece, Government Gazette, 85/A/18-4-2001, Art. 24). The responsibility for the Archaeological Site of Dodona falls on the Director of the Ephorate of Antiquities of Ioannina who is in close cooperation with local authorities.

X.5.13. Safety plan

1. For archaeological resources: Plan and execute the digitation of the Ephorate's archive about the Archaeological Site of Dodona and secure them in different places.
2. For the site per se: a. train the staff to be ready in case of emergency (fire, earthquake etc.) and b. annual checks of safety alarms.

X.5.14. Methods and strategies for monitoring results of the economic impact and evaluation and review

SWOT analysis is used to monitor the results of the economic impact and evaluate them. The main strength of the project lies in the multifarious nature 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. Moreover, the number of visitors at the airport of Ioannina and Action and the seaport of Igoumenitsa will also increase. This can be an opportunity for the local businesses to ameliorate their services taking the needs of the visitors into account. Furthermore, it can act as a motive to open 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 as well. Other people may be inspired and incentivized to work in the aforementioned sectors of economy. New, innovative method and productive processes, branding, marketing, advertisement through modern media.

X.6. The Pilot Action

The main problem concerning the implementation of the pilot action is the lack of modern methods that allow the visitor to reach a comprehensive understanding of buildings and their functions, as well as a broader perspective of the site and the Dodonaean valley.

A 3D representation of the Archaeological Site of Dodona was developed based on ready 3D models from a past digitization (Fig. 36). These 3D models have been processed and with the addition of several new details (based on the updated archaeological research of the site), the final 3D model of the site represent a "snapshot", projected in the 3rd century BC (King Pyrrhus' era). The whole manipulation process was realized using the 3D CAD software "Rhinoceros 3D". After the 3D manipulation stage, the final 3D model of the site was imported in the software package, named "Keyshot", in which the materials and lighting conditions were added. The next stage was the AR application production. This was realized in the Unity environment, using the 3D model from the previous stage as input. The AR application is to be compiled for use on Android and iOS mobile devices.

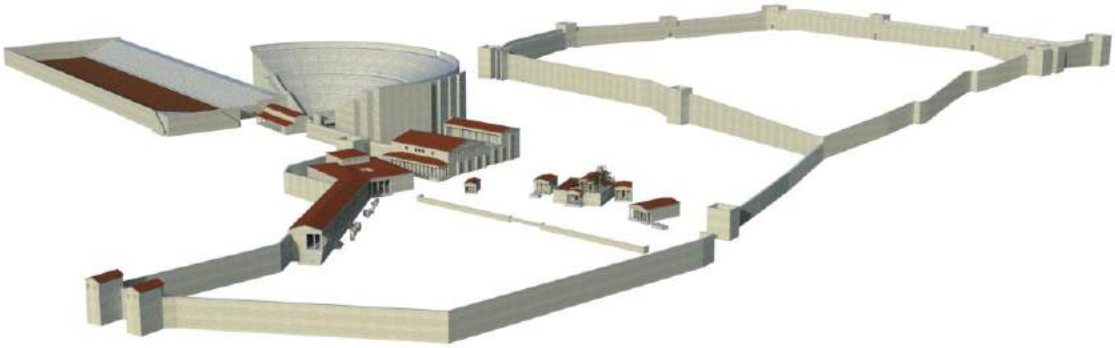

Fig. 36. 3D representation of the Archaeological Site of Dodona (© EFAI)

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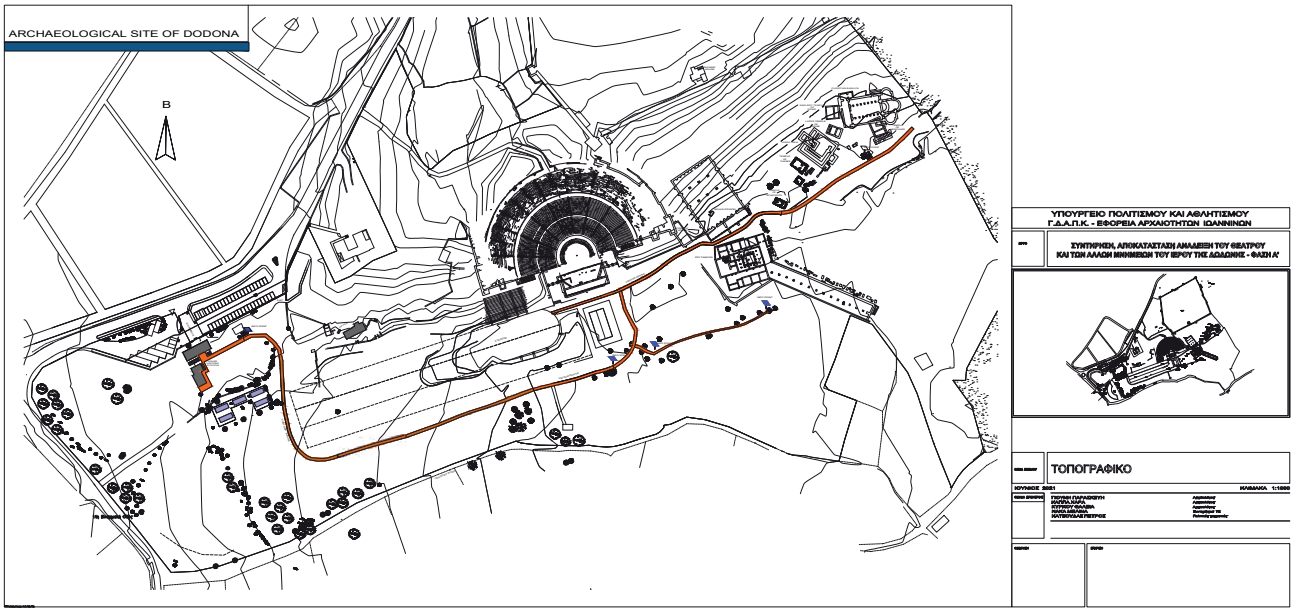

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XI - MANAGEMENT PLAN AND PILOT ACTION FOR THE ARCHAEOLOGICAL PARK OF MIRINE-*FULFINUM* (OMIŠALJ) [M.K.; M.H.]

XI. 1. Description of the archaeological area

The Archaeological Park of Mirine-*Fulfinum* is located at the foot of the thousand-year-old fortress of the Omišalj hill, on the island of Krk, in the neighboring bay of Sepen (Fig. 37). Its location is a part of the Municipality of Omišalj which includes northern part of the island of Krk and the islet of Sveti Marko by which it is connected to the mainland via the Krk bridge. The whole area of the Municipality of Omišalj is mostly a karst plateau, inclined towards the southwest and with an altitude between 60 and 70 meters. The plateau in the southwest is limited by depressions: the Omišalj Bay, the Sepen Bay, the lake near Njivica, Veliki Lug, Mali Lug and the Velo Potok valley with the Soline Bay. The archaeological area extends along the entire southern surface of the Ert peninsula. The archaeological zone includes several distinct localities marked as sectors, which together form the whole of the Archaeological Park Mirine- *Fulfinum*. According to the Spatial Plan the construction land for the Archaeological Park is on one side determined by the boarder of the archaeological area and on the other by a natural beach. It includes both land and sea surface. The sea area of the locality is no more than 17.45 ha, and the area of the part on land is no more than 39.20 ha. The area is outside the tourist centres, but the settlements of Omišalj and Njivice are about three kilometres from the park. Rijeka airport is about five kilometres away. There are no buses or other public transport lines for organized tourist visits to the park.

Fig. 37. Location of the Archaeological Park of Mirine – *Fulfinum* (© M. Hranilović and M. Karzen)

XI.2. Elaboration of documents and knowledge frameworks

XI.2.1. The Archaeological System

The archaeological zone includes several distinct localities marked as sectors, which, although they form the whole of Mirina - *Fulfinum*, can also be presented separately. The following localities are part of the Park: 1) The core of the ancient city of *Fulfinum*; 2) Sector 7 - port zone; 3) Sector 3 – Castrum; 4) Sector 6 – Domus; 5) Sector 5 – tower; 6) Sector A – Mirine; 7) Sector 2 – necropolis; 8) Sector 4 – suburban villa; 9) Sector 8 - late antique building.

XI.2.2. Environmental naturalistic

Area of the Municipality has significant natural heritage as it is home to a nature reserve Lake and a number of protected species (Easter butterfly, Swallowtail butterfly). Horticultural arrangements as planned in the Archaeological Park Mirine- *Fulfinum* are designed to clean the environment with attention to the protective vegetation.

XI.2.3. The system of use

Visitors to the site can explore individual parts of the ancient Roman city of *Fulfinum* from the 1st century and the early Christian complex of Mirine from the 5th century, including the necropolis. The beaches of the Sepen bay are a popular destination for local residents in the summer months. Opening hours are every day from May to October from 10 am to 1 pm and from 6 pm to 9 pm. The site is not enclosed by a fence, so it is accessible at any time from the seaside or the footpath, and entry for sightseeing is free. Professional guidance is possible during working hours and after making an appointment.

XI.2.4. The historical cultural context

Throughout the entire period of classical antiquity, i.e. during the period of the Roman Empire, the island of Krk had two city - municipal poles. One was Curicum, the city of Krk, to which the entire southern part of the island gravitated, and the other was *Fulfinum* (Greek name Fulfinion [Φουλφίνιον], Ptolemy's Geography, 2, 16, 8), which controlled the northern side. Although there are almost no traces of parcelization today, it is clear that in antiquity the island was divided into at least two large agera publicus - arable land belonging to a city, and the city of *Fulfinum* was the very center of one. The territory of the ancient city was adjacent to that of Krk and occupied the entire north-western part of the island, up to the imaginary line that connects today's capes Glavotok and Sveti Marak. Several ancient and late antique sites had been established within the *Fulfinum* territory, such as Voz, the islet of Sveti Marko, Mohorov, Njivice, Dubašnica, and even Soline, where the recent discovery of a ceramic workshop connects this part of the island more closely with the continent and the Roman ceramic workshop in Crikvenica. Numerous archaeological findings indicate that the city core spread over a large area, i.e. from the zone defined by the sea coast on the south side, towards the northwest where it is defined by cadastral parcels 4724 and 4719, then towards the southeast (and east) of the tower (sector 5) and k. 4764, while the border to the north still remains unclear.

XI.2.5. The economic context

According to the data from the Tourist Board of the Municipality of Omišalj from 2021 the total number of visitors at Mirine-*Fulfinum* location can be estimated at around 14,000. The number of visits depends on the season and on the individual events held at the location with numbers significantly increasing during summer months. The average number of visitors during summer months is on average 100 per day and during winter months 10 per day (for reference Fig. 38). The number of future visits in depends on the overall development and potential of the Municipality of Omišalj and the Archaeological Park Mirine-*Fulfinum* as a tourist destination and an attraction of special importance.

Periods and events during which visitors visit Mirine	Average number of visitors
Winter months	an average of 10 per day
Summer months	on average up to 100 per day
Events	
Antique	about 1000 people per day (x3 days)
Classical concert	130 per concert (six per season)
School and kindergarten groups	around 200 a year
Journalists and study groups	Around 50 in a year

Fig. 38. Average number of visitors during summer months (© M. Hranilović and M. Karzen)

XI.3. Synthetic interpretation

The Archaeological Park is located in the Municipality of Omišalj on the island of Krk. Its location is determined by the border of the archaeological area and a natural beach. It is divided into several archaeological zones: 1) The core of the ancient city of *Fulfinum*; 2) Sector 7 - port zone; 3) Sector 3 – Castrum; 4) Sector 6 – Domus; 5) Sector 5 – tower; 6) Sector A – Mirine; 7) Sector 2 – necropolis; 8) Sector 4 – suburban villa; 9) Sector 8 - late antique building. There is no fence on the site, therefore the site is accessible and sightseeing is free while professional tours are charged. In the antiquity the island of Krk was divided into two areas with ancient *Fulfinum* dominating the northern site of the island. Today several ancient and late antique sites have been discovered in the area of *Fulfinum* indicating that the city core spread over a large area. Currently there are several different events during which the locality attracts visitors in summer and winter months. These are Antiquity days, classical concerts, school and kindergarten groups and journalists/study groups. The possibility to increase the number of visits, from a strategic point of view, is quite achievable considering that the Archaeological Park is situated right at the entrance to the island of Krk and is one of the first destinations/attractions to visit regardless if one is visiting the island of Krk or going further to the islands of Cres or Lošinj. Based on the current increase in the number of visitors in the area of the Municipality of Omišalj and the surrounding locations, which has been gradual for the past three years, it is possible to predict three different scenarios for the future: 1. increase of 10% (business as usual), 2. an increase of 20%, which assumes certain investments in the location, 3. an increase of 30%, which assumes significant investments in the location.

XI.4. Elaboration of the Project

XI.4.1. The Scientific Archaeological Project

The vision for the project is to develop the Archaeological Park Mirine – Fulfilum to a recognizable heritage attraction with a variety of contents (as visible on the Fig. 39) to offer visitors and connect to the local heritage but also to the heritage of the island of Krk in general. The Archaeological Park shouldn't be just a tourist attraction but also an important determinant in the economic, social and cultural life of the local community, visited both in summer and winter months.
Strategic goals, measures and activities, i.e. key strategic projects are determined in accordance with the development priorities stated in the Project for the overall development of the municipality of Omišalj, aimed at the development of tourism, i.e. the valorization and protection of cultural and natural heritage. In the first stage, the focus is on the infrastructural development of the Archaeological Park of Mirine-*Fulfinum*, but also on strengthening the capacity of other Stakeholder as carriers of culture and Cultural Heritage (e.g. .the Tourist Board of the Municipality of Omišalj), and on the development and expansion of the tourist offer through selective forms of tourism that promote Cultural Heritage and traditional heritage. Examples of tourist activities that fall into these forms are workshops for students and adults, manifestations which enrich the tourist offer of the locality and make public aware of the cultural and historical heritage (such as Antiquity days, Ancient Evenings, Solo Positivo Film Festival), cycling routes (that connect cultural and natural heritage) etc.

Fig. 39. Example of contents in the Archaeological Park Mirine – *Fulfilum* (© M. Hranilović and M. Karzen)

In addition to investments in cultural-tourism and entrepreneurial infrastructure, the development of new products, promotion and the creation of a unique tourist destination, investments are also needed in strengthening human capacities, especially in key organizations such as the PPM of the Croatian Littoral in all segments of the protection, valorization and development of new cultural tourist products, but also officials of the Municipality of Omišalj and other Stakeholder (TC of the Municipality of Omišalj, associations, entrepreneurs and restaurateurs who can also offer their products). The potential market where the new products of this locality can be offered are especially the gravitating locations of the surrounding tourist destinations of the islands of Krk, Rijeka and Kvarner, but also the wider area of Primorje-Gorski Kotar and other neighboring counties, as well as potentially other markets in Croatia and Europe. The spread of the market is very likely due to the high potential of the whole area of the Municipality of Omišalj and global trends where tourist demand is shifting to lesser-known destinations, rural areas and a mix of cultural and historical contents.
In the following stages archaeological research and preparation of documentation will be carried out in cooperation and under the leadership of the chief archaeologists Morana Čaušević-Bully who is familiar with the location as she had led previous archaeological research on the site and had proposed the direction of the revitalization of the Archaeological Park area (Fig. 40). Archaeological research can be conducted in parallel with the infrastructural arrangements of the locality and can serve as an additional educational center for visitors. After the renovation of the Park, the archaeological collection will be stored within the Maritime and Historical Museum of the Croatian Coast in Rijeka.

Fig. 40. Archaeological research on the site of the Archaeological Park area (© M. Hranilović and M. Karzen)

XI.4.2. Mosaic of urban and territorial planning

In terms of urban and territorial planning, as a wide natural area in the locality has been left unattended, it is first necessary to clean up the surroundings and the Sepen cove as planned for in the Conceptual Solution and the Main Project for the landscaping of the locality. Secondly, it is necessary to build public lighting and sewage and other necessary public infrastructure. The area is not covered by Internet, which should be introduced, so that other digital solutions and products can be implemented later on. An interpretation/visitor center has been proposed for the Archaeological Park Mirine-*Fulfinum* with specifications for medium and large centers as presented:

- medium-sized interpretation/visitor centers (50 - 200 square meters) can contain a multi-purpose hall as a central space in which the main functions are unified, but they can also be classified into separate areas of the lobby with information and sanitary facilities, exhibition and educational halls, and catering and sales facilities; there must be at least one full-time employee, but with the option of extending operational activities to archaeological teams that can work permanently or occasionally at the site; Archaeological Park Mirine-*Fulfinum* belongs to medium-sized interpretation centers; the reception capacity of visitors who can stay in the space at one time is about one bus (about 40 people).
- large interpretation/visitor centers (more than 200 square meters) must have an entrance lobby with an information zone and sanitary facilities accessible to people with special needs (public toilets + one for

people with disabilities), program areas with interpretive media in the form of exhibition spaces, classrooms and/or meeting hall, game room, etc., relaxation zones, catering and sales facilities for consumption and promotion of local products and souvenirs; the minimum number of full-time employees is two; the reception capacity of visitors who can stay in the space at one time is approximately two buses (60 - 80 people).

Graphic illustration of the interpretation infrastructure is visible in Fig. 41.

In order to improve transportation to the locality it is necessary to provide a station with a public bicycle/e-bike system and to renovate the existing (currently neglected) pedestrian/bicycle paths leading to the locality. Minibus/train is also planned for the tourist transport. Accompanying signage and markings that ensure information and communication, as well as the safety of visitors are also necessary. Access solutions for the disabled should also be implemented.

Fig. 41. Graphic illustration of the interpretation infrastructure (© M. Hranilović and M. Karzen)

XI.4.3. Rules for areas

Archaeological Parks are primarily archaeological sites and as such are subject to very strict legislation: in order to become an Archaeological Park, the site must be protected. 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 Media and its protective departments and the Directorate for Archival Activities and Archaeological Heritage of the same ministry. Any archaeological research must be approved in advance by the Directorate for Archaeological Heritage of the Ministry of Culture and Media. The Law on the Protection and Preservation of Cultural Heritage and the Rulebook on Archaeological Research deal with issues of archaeological research.

Data from the Register of Cultural Assets of the Ministry of Culture and Media for the Mirine-*Fulfinum* complex with an archaeological site:

- Mark: Z-5016;
- Legal status: Protected cultural property;
- Type: Immovable cultural property - cultural and historical area;
- Classification: archaeological heritage.

XI.4.4. Strategies

Considering the current state of cultural tourism and other offers, there are four strategic goals aimed at achieving concrete and realistic results in a period of five years (2022 - 2027):

XI.4.4.1. Carrying out significant infrastructural and horticultural improvements on the site

Within the framework of this strategic goal, and on the basis of already conducted archaeological research and content proposals, the site will be infrastructurally and horticulturally improved in the following stages and through the following activities:

Fig. 42. temple, forum and basilica of Mirine-*Fulfilum* (© M. Hranilović and M. Karzen)

- Implementation of measures of emergency rehabilitation and development of the locality:
  - cleaning up the environment and the bay of Sepen according to the Conceptual Solution and the Main Landscaping Project; introducing public lighting and sewerage and other necessary public infrastructure; introducing Internet; solving accessibility by minibus or, in the future, by tourist train; setting up a bicycle/e-bike station;
  - implementation of the main Project of architectural and conservation works on the site on the chosen locations (three-apsidal church, thermal baths, necropolis near Mirina, mausoleums, Mirine, Forum (Fig. 42) – temple, Forum – basilica);
  - construction and arrangement of the Mirine Interpretation Center - *Fulfinum*
- Implementation of horticultural arrangements on the site:
  - as part of this measure and based on the existing Main and Conceptual Landscaping Project of the locality, a plan will be implemented for the arrangement and maintenance of the vegetation of the wider included area from Forum to Mirin, as well as the planned route around Fulfinum.
- implementation of archaeological research and the creation of documentation:
  sector 4 (two more years necessary to complete); sector 8 (not yet started);
  - creating a unique conservation and partial reconstruction for the overall remains of masonry (the Roman city and the later remains of the medieval monastery);
  - creation of a 3D model of the reconstructed Forum;
  - exploration of the space between Forum and Mirin with the aim of joining them.

XI.4.4.2. Enriching the cultural-tourist and scientific-educational offer with continuous measures of protection, valorization and interpretation

This strategic goal will aim at establishing a mechanism for continuous protection, preservation and its valorization, the development of a rich and varied cultural-tourist, as well as a scientific-educational offer. For the realization of this strategic goal, the following measures and activities will be implemented:

- Preparation and implementation of program content:
  - creation of cultural and thematic routes, implementation of workshops, events and other offers;
  - the use of ICT tools in the digital interpretation of heritage;
  - preparation and implementation of educational programs for schools and kindergartens but also for adults;
  - development of volunteerism and activation of volunteer culture.

XI.4.4.3. Establishing a mechanism for sustainable locality management

- Establishing the management structure of the locality:
  - defining the management model as well as the role of an implementing body;
  - creating a marketing and communication plan that would ensure the sustainability of the Museum by activating its activities on the market;
  - developing the commercial activities.
- Strengthening the professional capacities of employees and other key Stakeholder in culture and tourism:
  - creating an education plan; conducting professional development through online educations and webinars; participation on conferences.
  - Establishing a network of local and other partners:
  - implementation of occasional events that encourage the involvement of the local community (workshops, info days, fairs, etc.);
  - launching the Heritage Friends Club in cooperation with local associations;
  - participation and networking with other Archaeological Parks through various lectures and joint events.

XI.4.4.4. Developing the visibility and continuous promotion of the locality as a unique destination on the island of Krk

This strategic goal will be achieved through strengthening the visibility and better promotion of cultural content and activities, as well as ensuring better administrative and publicity capacities of key cultural institutions and associations, with a special emphasis on strengthening the capacities of employees of the Archaeological Park in the domain of publicity and other activities, but also involving the local community in the process of co-creating new cultural products (content of workshops, souvenirs, events...) through following measures and activities:

- Raising awareness and educating the local population about heritage care:
  - analysis of needs and possibilities and creation of a plan for inclusion and education of the local community;
  - implementation of various activities (education and community involvement);
  - launching initiatives such as a club of friends of heritage, etc.
  - Strengthening the visibility and branding (logo of the Archaeological Park Mirine-Fulfinum as on the Fig. 43) of the locality:
  - Creation of the website of the Archaeological Park and the optimization of the website of the Municipality of Omišalj;
  - Creating a marketing and communication plan;
  - Promotion and branding of products and destinations.

Fig. 43. Logo of the Archaeological Park Mirine-*Fulfilum* (© M. Hranilović and M. Karzen)

XI.5. Plan documents

XI.5.1. Management and implementing of the main infrastructure

The Archaeological Park Mirine- *Fulfinum* Management Plan describes the management and implementation of the main infrastructure, the proposed Interpretation/Visitor Centre and archaeological ruins in detail. Subchapters 4.4.5. *Proposal for infrastructural improvements and cultural-tourist and educational offer of the Archaeological Park*

Fig. 44. Archaeological Park Mirine-*Fulfilum*: activities and contents for visitors (© M. Hranilović and M. Karzen)

Mirine – Fulfinum and 4.4.5.1. *Proposal for an interpretation/visitor center* describe the basic standards according to which the center should be built. Subchapter 4.4.6.1. *Proposal for the synopsis of the line-up* details the description of individual interpretation points such as center for visitors, Forum, Tabernae etc. Further subchapters (e.g. 4.4.6.3. *Manifestations and other contents)* describe management of the Interpretation center and the manifestations and events planned to take place at the location as a part of the work of the Interpretation center. Strategic goals, measures and activities of the Archaeological Park are described in chapter 8.

XI.5.2. The restoration and static consolidation of the archaeological heritage: activities that need to be implemented as to maintain physical preservation of the Archaeological Park

The Archaeological Park Mirine- *Fulfinum* Management Plan Action Plan includes strategic steps and goals for the revitalization of the area and reconstruction of historical remains, as well as other steps necessary for archaeological research.

XI.5.3. Systems of equipment and services for the management of the social function of the Park, (Visitor Management Plan)

The Archaeological Park Mirine- *Fulfinum* Management Plan describes activities and contents for visitors (as visible on Fig. 44), as well as all the steps necessary for their arrangement (e.g. Action plan, Strategy goals, subchapter Creating visitor experiences)

XI.5.4. Public Awareness and Organization of Educational and Recreational Functions

The Archaeological Park Mirine- *Fulfinum* Action Plan and Strategic goals are introducing steps to raise public awareness of cultural and historical heritage, as well as to educate local population, visitors, employees and Stakeholder.

XI.5.5. Communication Plan for the Communication-Participation Strategy, with particular reference to the use of ICT

Appendix 2 of the Archaeological Park Mirine- *Fulfinum* Management Plan details presentation of ICT tools aimed at raising communication and promotion of the locality as well as introducing ways for visitors to participate and engage with the contents of the Park through innovative ways.

XI.5.6. Research, documentation, maintenance and protection of the archaeological resource through digital supply chain. Plan for enhancement and promotion policies.

Chapter 14. *Communication and promotion* details the improvement of communication, visibility and the promotion of the locality.

XI.5.7. The project for the use of ICT and the digitization plan

Appendix 2 and Strategy goals of the Archaeological Park Mirine- *Fulfinum* Management Plan detail the digitalization plan for the locality/Interpretation Centre.

XI.5.8. Economic and financial sustainability of the Park

Economic and financial sustainability of the Park is described in the chapter 12. *Financing options.*

Strategic goal 1. Carry out significant infrastructural and horticultural improvements on the site Mirine-*Fulfinum*					
Description of the activity with steps	Priorities (1-3)	Principal holder/ partners	Expenses	Sources of finance	Performance indicators
1.1. Measures of emergency rehabilitation and development of the locality Activities: - **to clean up the surroundings and the bay of Sepen according to the Conceptual Solution and the Main Landscaping Project** - **introduce public lighting and sewerage and other necessary public infrastructure** - **introduce the Internet** - **solve accessibility by minibus or in the future by tourist train** - **set up a bicycle/e-bike statio**n	Priority 1 Priority 2 (alternative transport)	Municipality of Omišalj	According to the Main Project	EU funds Municipality of Omišalj, especially for activities related to landscaping and maintenance - private plots	Solved public utility infrastructure (lighting, Internet, sewerage, sanitary facilities, etc.) Bicycle/e-bike station installed Alternative transportation to the location has been arranged (by minibus or tourist train)
1.2. Horticultural arrangements on the site according to the Main Project (Project 1) Zone A. **Mirine and Forum** Zone B. **Touring area of the Forum, Mirine and the Thermal baths complex and the three-apsidal church** Zone C. **Overgrown area between Forum and Mirin** Zone D. **Protective vegetation** Zone E. **Belt along the planned paths northeast of Forum and Mirine** **Renovation of the shopping area**	In stages, depending on resources and according to the Main Project Priority 1 and 2	Municipality of Omišalj	According to the Main Project	EU funds Municipality of Omišalj, especially for activities related to landscaping and maintenance - private plots	#cleared overgrown areas #cleaned swimming pools #m2 track #m2 of arranged protective vegetation and other horticultural solutions #repaired drywall
1.3. Archaeological research and preparation of documentation (in stages) - **sector 4 (two more years are necessary before completion)** - **sector 8 (not yet started)** - **creating a unique conservation and partial reconstruction for the overall remains of masonry (the Roman city and the later remains of the medieval monastery) (Project 1)** - **creation of a 3D model of the reconstructed Forum** - **exploration of the space between Forum and Mirin with the aim of joining them**	Priority 2 and 3 (in stages according to the Conceptual Solution and the Main Project)	Municipality of Omišalj Maritime and History Museum of the Croatian Coast External experts	According to the Main Project	EU funds Municipality of Omišalj Primorje- Gorski Kotar County Ministry of Culture and Media	#archaeological research carried out in stages #made a 3D model of the reconstructed Forum
1.4. Infrastructure arrangements on site (Project 2)					

Strategic goal 1. Carry out significant infrastructural and horticultural improvements on the site Mirine-*Fulfinum*					
1.4.1. Implementation of the Main Project of architectural and conservation works on the site **Works on the following facilities:** **- three-apsidal church** **- Terme (future design depends on the results of additional underwater research)** **- necropolis near Mirine** **mausoleums** **- Mirine** **- Forum - temple** **- Forum - basilica** **- paths and roads**	Priorities 2 and 3 Priority 1 (trails)	Municipality of Omišalj Maritime and History Museum of the Croatian Coast External experts Primorje- Gorski Kotar County	According to the Main Project	EU funds Municipality of Omišalj Primorje- Gorski Kotar County Ministry of Culture and Media	Completed at least 30% of the works by 2023 and 50% by 2025. All works carried out until 2027.
1.4.2. Construction and arrangement of the Mirine Interpretation Center - *Fulfinum* Activities (in stages) **- purchase of land from the current owners (the ownership of individual cadastral parcels has been established)** **- announcing a separate tender for the design of the exhibition and storage area** **- preparation of technical documentation (ideal, dedicated, main project)** **- space preparation** **- bringing in installations - running electricity and water** **- introduction of telephone network, fast Internet** **- introduction of sanitary system and sewerage** **- placement of billboards** **- program-content arrangement (collection, mock-ups, projections, etc.) (detailed in section 2.2.6 of the Management Plan)** **- arrangement of accompanying content (souvenir shop, cafe, multimedia space for projections, workshops, etc.)** **- arrangement of the archaeological collection depot** **- arranging the storage of the Interpretation Centre** **- implementation of the procedure for establishing an archaeological collection**	Priorities 1-3, depending on the stage	Municipality of Omišalj Maritime and History Museum of the Croatian Coast External experts Primorje- Gorski Kotar County	According to the Main Project	EU funds Municipality of Omišalj Primorje-Gorski Kotar County Ministry of Culture and Media Ministry of Tourism and Sports	Completed at least 30% of the works by 2023 and 50% by 2025. All works carried out until 2027.
Strategic goal 2. Enrich the cultural-tourist and scientific-educational offer with continuous measures of protection, valorization and interpretation					
2.2. Preparation and implementation of program content					
2.2.1. Creation of cultural and thematic routes, implementation of workshops, events and other offers **- creation of a plan and calendar of events in cooperation with the tourist board of the Municipality of Omišalj and other Stakeholder (e.g. the Society for the Beautification of Omišalj) - from annual to monthly or quarterly events for kindergartens and schools** **- creation of cultural-tourist routes and other products (guided workshops of co-creation of products with users and the local community)** **- creation of integrated products by connecting cultural and natural heritage (cycling routes, Camino Krk...)** **- workshops and contests for making souvenirs, etc.** **- preparation and implementation of scientific- educational content (archaeological and other camps, research, team building programs, etc.)**	Priorities 1-3, depending on the stage	Municipality of Omišalj Maritime and History Museum of the Croatian Coast Municipality of Omišalj Tourist Board, Tourist Board of Primorje- Gorski Kotar County and other tourist boards Croatian Tourist Board External experts Associations	From EUR 5,000 for smaller to EUR 100,000 for larger events - at least one major and three minor events per year	EU funds Municipality of Omišalj Primorje- Gorski Kotar County Ministry of Culture and Media Ministry of Tourism and Sports Municipality of Omišalj Tourist Board Croatian Tourist Board Own income	#cultural and other events #sport--recreational events #visitors (foreign and domestic) #scientific-educational contents an increase of 10% in the first to 30% for the next five years

Strategic goal 1. Carry out significant infrastructural and horticultural improvements on the site Mirine-*Fulfinum*					
2.2.2. The use of ICT tools in the digital interpretation of heritage - **creation of a detailed Interpretation Plan and Museum Program - supplementing the existing ones** - **selection of appropriate ICT tools** - **preparation of documents and publication of the call** - **implementation**	Priorities 1-3, depending on the stage	Municipality of Omišalj Maritime and History Museum of the Croatian Coast Municipality of Omišalj Tourist Board External experts Associations	According to the Interpretation Plan and Museum Program about 250,000 EUR	EU funds Municipality of Omišalj Primorje-Gorski Kotar County Ministry of Culture and Media Ministry of Tourism and Sports Municipality of Omišalj Tourist Board Croatian Tourist Board Own income	a 10% increase in the first year to a 30% increase in five years
2.2.3. Preparation and implementation of educational programs for schools and kindergartens - **create a program in cooperation with kindergartens, schools and other Stakeholder (co-creation with target groups)** - **connect with key tourist agencies, offer to local and regional educational institutions** - **hire a marketing/digital marketing company or experts to promote the offer** - **create a program booklet with visit programs for different target groups and prices**	Priority 1 and 2	Municipality of Omišalj Maritime and History Museum of the Croatian Coast Municipality of Omišalj Tourist Board External experts Associations Schools and preschools	Around EUR 50,000 per year	EU funds Municipality of Omišalj Primorje-Gorski Kotar County Ministry of Culture and Media Ministry of Tourism and Sports Municipality of Omišalj Tourist Board Croatian Tourist Board Own income	an increase of 10% in the first to an increase of 30% in five years
2.2.4. Development of volunteerism and activation of volunteer culture - **analysis of possibilities and ways of involving Stakeholder** - **creation of a plan for the implementation of volunteer tourism actions**	Priority 2 and 3	Municipality of Omišalj Maritime and History Museum of the Croatian Coast Municipality of Omišalj Tourist Board External experts Associations Schools and preschools	Around 20,000 EUR per year	EU funds Municipality of Omišalj Own income	an increase in volunteer activity of 10% in the first year to an increase of 30% in five years
Strategic goal 3. Establish a mechanism for sustainable locality management					
3.1. Establishing the management structure of the locality - **define the management model, the role of Maritime and History Museum as an implementing body - meetings with the main partners (Municipality of Omišalj, Primorje-Gorski County, Maritime and History Museum, Tourist Board of Omišalj Municipality), create an agreement and rulebook on the work and role of individual parties** - **create a marketing and communication plan that would ensure the sustainability of the Museum by activating its activities on the market** - **develop commercial activities and other means of financing** - **hire one person full-time**	Priority 1 - top priority	Municipality of Omišalj Maritime and History Museum of the Croatian Coast Municipality of Omišalj Tourist Board External experts as process moderators	According to the agreement and rulebook on the distribution of funding	EU funds Municipality of Omišalj Primorje-Gorski Kotar County Municipality of Omišalj Tourist Board Own income	Defined and implemented Participatory Management Model Developed marketing and communication plan Prepared business plan with commercial activities One person employed full-time

Strategic goal 1. Carry out significant infrastructural and horticultural improvements on the site Mirine-*Fulfinum*					
3.2. Strengthening the professional capacities of employees and other key Stakeholder in culture and tourism - **education plan** - **professional development through online education and webinars** - **participation in conferences**	Priority 2, continuous	Municipality of Omišalj Maritime and History Museum of the Croatian Coast Municipality of Omišalj Tourist Board	According to the education plan	EU funds Municipality of Omišalj Primorje-Gorski Kotar County Municipality of Omišalj Tourist Board Own income	At least one education per year outside the Republic of Croatia At least five online educations per year At least one live conference and others online
3.3. Establishing a network of local and other partners - **identification and organization of ways to involve key Stakeholder** - **implementation of occasional events that encourage the involvement of the local community (workshops, info days, fairs, etc.)** - **launching the Heritage Friends Club in cooperation with local associations** - **participation and networking with other Archaeological Parks through various lectures and joint events**	Priority 2, continuous	Municipality of Omišalj Maritime and History Museum of the Croatian Coast Municipality of Omišalj Tourist Board	According to the plan	Municipality of Omišalj Primorje-Gorski Kotar County Municipality of Omišalj Tourist Board Own income	#number of participants involved #number of events An increase of at least 20% in the next two years and 50% in five years
Strategic goal 4. Develop the visibility and continuous promotion of the locality as a unique destination on the island of Krk					
4.1. Raising awareness and educating the local population about heritage care - **analysis of needs and possibilities and creation of a plan for inclusion and education of the local community** - **implementation of various activities - education and community involvement** - **launching initiatives as a club of friends of heritage, etc.**	Priority 2, continuous	Municipality of Omišalj Maritime and History Museum of the Croatian Coast Municipality of Omišalj Tourist Board	According to the education plan	EU funds Municipality of Omišalj Primorje-Gorski Kotar County Municipality of Omišalj Tourist Board Own income	#number of participants involved #number of events #launched a new initiative of friends of heritage An increase of at least 20% in the next two years and 50% in the next five years
4.2. Strengthening the visibility and branding of the locality					
4.2.1. Create the website of the Archaeological Park and optimize the website of the Municipality of Omišalj - **preparation and implementation of a public tender** - **implementation**	Priority 1, continuous	Municipality of Omišalj Maritime and History Museum of the Croatian Coast Municipality of Omišalj Tourist Board Croatian Tourist Board	Around 10.000 EUR	EU funds Municipality of Omišalj Primorje-Gorski Kotar County Municipality of Omišalj Tourist Board Own income	#number of visitors #number of online visitors An increase of at least 20% in the next two years and 50% in five years
4.2.2. Create a marketing and communication plan - **preparation and implementation of a public tender** - **implementation**	Priority 1, continuous	Municipality of Omišalj Maritime and History Museum of the Croatian Coast Municipality of Omišalj Tourist Board Croatian Tourist Board	Around 20.000 EUR	EU funds Municipality of Omišalj Primorje-Gorski Kotar County Municipality of Omišalj Tourist Board Own income	#number of visitors #number of online visitors An increase of at least 20% in the next two years and 50% in five years
4.2.3. Promotion and branding of products and destinations - **continuous activity based on visual identity and brand proposals** - **participation in fairs, conferences, scientific gatherings** - **networking with other localities in the Republic of Croatia and Europe - inclusion in the EU routes** - **connection with European routes**	Priority 1-2, continuous	Municipality of Omišalj Maritime and History Museum of the Croatian Coast Municipality of Omišalj Tourist Board Croatian Tourist Board	Around 100.000 EUR	EU funds Municipality of Omišalj Primorje-Gorski Kotar County Municipality of Omišalj Tourist Board Own income	#number of visitors #number of online visitors #number of events An increase of at least 20% in the next two years and 50% in five years

XI.6. Methods and strategies for monitoring results of the economic impact and evaluation and review

For the implementation and continuous monitoring of the implementation of the plan, an Implementation Body - implementation coordinator will be formed, composed of key representatives from the Archaeological Park, PPM, Omišalj Municipality, Omišalj Municipality Tourist Board, aIPAK association and a few expert representatives. The structure, mode of operation and responsibilities will be determined by a special act proposed to the mayor of Omišalj Municipality. According to the principles of integrated development management, the executive body will be responsible for coordinating the implementation of the Management Plan, monitoring and periodic reporting. The implementation and supervision of the Plan will be carried out on the basis of the strategic framework - goals and measures, that is, on the basis of the operational, action plan that defines key activities/projects with holders, cost estimates, funding sources and implementation indicators. Monitoring of the implementation will be carried out continuously during the entire implementation period (2022 - 2027), and the results will be reported to the mayor and the Municipal Council once a year, unless otherwise stated by the Act. At the end of the implementation period, the independent evaluation of the Management Plan of the Archaeological Park of Mirine-*Fulfinum* will be carried out by independent evaluators, experts from the relevant professions related to culture and tourism. Evaluators will be selected on the basis of a public tender.

XI.7. The Pilot Action

Firstly, it is proposed to take measures of emergency rehabilitation and development of the locality which would include cleaning up the surroundings, introducing public lightning and sewerage as well as other necessary public infrastructure (internet, bike stations etc.). Secondly, horticultural arrangements should be made according to the Main Project. Thirdly, archaeological research and preparation of documentation, as well as the conservation and partial reconstruction of the remains. This text should be followed by arrangements for infrastructure on the site, including the implementation of the main architectural and conservation project and the construction of an Interpretation Centre.

Moreover, program content for the Archaeological Park should be prepared and implemented (routes, educational programs, workshops as on Fig. 45, digital tools and other products). Management structure of the locality should be defined including educating employees and Stakeholder and establishing a network of local partners. Lastly, visibility of the location should be increased through promotion, heritage education, marketing and communications plan etc.

Fig. 45. Workshops on the Archaeological Park Mirine-*Fulfilum* (© M. Hranilović and M. Karzen)

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XII - MANAGEMENT PLAN AND PILOT ACTION FOR THE ARCHAEOLOGICAL PARK *POETOVIO* (PTUJ) [J.H.; J.K.]

XII.1. Description of the archaeological area

The importance of *Poetovio* (today's Ptuj) lay in its strategic location at the crossroads of the Drava River. It was located at the crossroads of the Amber Road, which connected the northern Adriatic Sea and the Baltic Sea, as well as the water and land routes along the river. The Roman town extended for a length of about 3.5 km along the main road and on both banks of the river. Throughout the Roman period, the city kept its original shape with an irregular perimeter and several quarters. The most important parts are located near the bridge on the left bank of the river Drava, in the Vičava district and on the panoramic hill. Here are located a forum, various public buildings and residences of the city elite. *Poetovio* far surpassed the modern settlement of Ptuj in terms of size, wealth and military and political importance.
The archaeological remains that form the Archaeological Park *Poetovio* have been preserved and presented in various locations in Ptuj. The most important archaeological site and the center of the Park is Panorama Hill. It is located in the immediate vicinity of the mediaeval town, but already on the edge of the modern settlement. It rises above the historical crossing over the Drava River and offers a wonderful view of the mediaeval castle and town, the river and its plain, and the peaks of the Alps in the distance (Fig. 46).

Fig. 46. Panorama with a view of the excavation field in 2020 and Ptuj Castle. View towards the southeast (© ZRC SAZU)

XII.2. Elaboration of the documents and the knowledge framework

XII.2.1. The archaeological system

The Panorama is the best preserved archaeological area of Ptuj. It is a place where the role and characteristics of *Poetovio*, one of the most important Roman cities in Central Europe, can be seen. At the same time, it offers the possibility to show the functioning of the Roman Empire as an important civilizational precursor of modern Europe. Archaeological findings prove that the Panorama hill was one of the central districts of *Poetovio*. The gentle southeastern and eastern slopes were built up only during the Roman period. The Roman cemetery was located on the northern

Fig. 47. Ground plan of the Roman settlement on Panorama (Ptuj) (© ZRC SAZU and Pokrajinski Muzej Ptuj Ormož)

slope. Geophysical surveys revealed an urban structure with a rectangular grid of streets, residential lots, and buildings. GPR imagery and small archaeological excavations were used to identify various types of infrastructure and the function of several buildings.

The archaeological monuments of Panorama are not visible on the surface, even the previously excavated remains are now covered with soil. The idea is to explore certain structures and present them to the public in the future. Since it is an archaeological monument of the highest category, any intervention in Panorama must take into account three aspects: the protection of the remains, the understanding based on research and the presentation of the heritage to the public. The archaeological area of Panorama is divided into five zones based on the shape of the hill. They also represent the zones with different research, presentation and use regimes.

The Archaeological Park of Panorama is created step by step. The newly laid out paths follow the course of the Roman roads. Marble replicas of stone monuments and information panels give visitors a first impression of the hidden archaeological heritage. After the initial landscaping work, the Archaeological Park at Panorama immediately became popular with locals as a pleasant promenade.

The mediaeval town and castle have many visitors - locals and tourists. Since the Panorama is located in the immediate vicinity, the Archaeological Park there should contribute to the tourist offer of Ptuj and thus to the economic growth of the city.

XII.3. Synthetic interpretation

The legionary fortress of *Poetovio* was built on the area of Panorama Hill, probably at the beginning of the 1st century. The defensive wall with towers was built of earthen ramparts and wood in the first half of the 1st century and partially replaced by a stone wall in the second half of the 1st century. The remains of the barracks can be seen in the GPR images.

At the end of the 1st century the army moved to the border on the Danube AD and Emperor Trajan founded a colony *Poetovio* in the civil settlement in the period between 98 and 102. The Panorama hill was built with a rectangular street grid, squares and residential plots. Most of the buildings date back to the 2nd and 3rd century. Large, elongated buildings with a number of smaller rooms probably housed stores, craft workshops, and modest dwellings. Three large buildings with numerous rooms were probably luxurious residences of the urban elite. A large temple is believed to have been built on top of the hill. An aqueduct supplied water from springs 5 km away (Fig. 47).

XII.4. Elaboration of the project

The management priorities of the Archaeological Park *Poetovio* are defined in the *Archaeological Park Conservation Plan*. The area is defined as an archaeological site of the highest category; therefore, any intervention must be in accordance with the protection of the archaeological heritage. At the same time, the needs of society for education, recreation and identity development must be taken into account and the public presentation of the site must be made possible.

The Municipality of Ptuj has enacted several municipal laws for the protection of Cultural Heritage. The Panorama area has been designated by decree as a cultural and historical monument and as a special planning unit in the

Municipal Spatial Plan. The area has been included in the contract on the design and cleaning of public areas in the Municipality of Ptuj.
The management of the Archaeological Park *Poetovio* has not yet been organized in detail. The administrator of the Archaeological Park is the Municipality of Ptuj, represented by the Mayor, in cooperation with the Regional Museum Ptuj Ormož, represented by the Director. The Mayor of the Municipality of Ptuj appoints a professional committee to assist him in the execution of the administrative tasks. Cooperation between professionals and the public is developed in the policy and administration of the Park.

The main goals of the Archaeological Park *Poetovio* are:
- protection, conservation and presentation of the archaeological heritage;
- conservation and restoration of the newly discovered archaeological heritage;
- maintenance of the archaeological structures, copies and Park infrastructure;
- enabling all groups of visitors to visit the Park.

XII.4.1. The Scientific Archaeological Project

The archaeological evidence of Panorama has recently been evaluated within the framework of several research projects and published in a monograph, which includes the history of research, the results of geophysical surveys, the interpretation of various types of archaeological remains, the evaluation of epigraphic stone monuments and detailed archaeological maps.
The research will continue with the aim of preparing detailed guidelines for the design of the Archaeological Park in Panorama. Based on new findings, it will be possible to adjust the basic plan and add new themes. The more detailed GPR surveys will provide better ground plans and insights into the stratigraphy. The small archaeological excavations will contribute to a better understanding of the chronology and functions of the various structures. Current research is focused on the remains of the military fortress and the presumed temple on the summit of Panorama. Future plans include larger fieldwork in areas explored in the early 20th century, as well as in areas with interesting, well-preserved buildings that are clearly visible in the GPR image.

XII.4.2. Mosaic of urban and territorial planning

The archaeological area is divided into five zones. Zone 2 represents the settlement area with the best preserved archaeological structures, Zones 1 and 3 are located on the steep slopes of the hill, Zone 4 is the settlement area where the archaeological structures are poorly visible on the GPR images. The cemetery is located in Zone 5.
There are 4 categories of Archaeological Monuments.
1. The architectural remains are well preserved and clearly visible on the GPR images.
2. Architectural remains are located but poorly visible on GPR images.
3. Architectural remains with known function but inaccurately located; degree of preservation is unclear.
4. Stone monuments that are from Panorama, but from a secondary location, or information about their primary location has been lost.

XII.4.3. Rules for areas

Panorama is a protected area and archaeological research may be carried out only in accordance with legal regulations and with prior consent of the Public Service - Institute for the Protection of Cultural Heritage of Slovenia
The Conservation Plan establishes various regulations for the five zones. The best preserved archaeological structures are located in Zone 2, which has the greatest potential for interpretation and presentation and is therefore most protected. In Zone 3, the protection regime allows deliberate interventions and a more relaxed use and reinterpretation of the space ("outdoor classrooms", playgrounds, etc.). In Zone 5, which includes the area of the necropolis, the interpretation must be based on the preservation of the original sacred meaning of the space. Zone 4, on the north side, is less sensitive and could serve as an area for experimental archaeology (Fig. 48).

Fig. 48. Archaeological Park *Poetovio*, the hill Panorama (© ZRC SAZU)

XII.4.4. Strategies

XII.4.4.1. General strategies

The mission of the Park is to preserve the archaeological heritage, provide public access and involvement, and promote sustainable development by creatively and economically exploiting the Park's cultural and tourism potential through effective management and collaboration
The vision of the Archaeological Park *Poetovio* is to include all archaeological monuments of Ptuj.

XII.4.4.2. Strategies for presentation

The Archaeological Park in Panorama is intended to provide a multi-faceted insight into the significance, functions and features of the Roman city of *Poetovio*. The following topics will be covered in the Park's presentations:

1. Way of life in a Roman city, organization of society.
2. Technical culture (architecture, construction techniques, heating, water supply, defense systems, etc.).
3. Spiritual life (sanctuaries, early Christian church).
4. Functions of the city (administration, production, trade).
5. Historical development from the 1st to the 5th century.
6. Characteristics that distinguish *Poetovio* from other cities of the Roman Empire:
   a. broader administrative functions (Illyrian customs),
   b. Defense structures (in early and late Roman period),
   c. local and regional characteristics (worshiping the Nutrices and Jupiter Depulsor).

XII.4.4.3. Strategy for public and tourist use

The strategy has two general objectives: the creation of a new tourist product and the improvement of the visibility of the Panorama area and its archaeological remains.

To achieve this, the following is planned:
- To also include other Roman monuments of Ptuj in the Archaeological Park *Poetovio*;
- To establish an interpretation center of the Archaeological Park *Poetovio* as a part of the Regional Museum Ptuj Ormož;
- Preparation of the new permanent archaeological exhibition in the Regional Museum Ptuj Ormož, which will be connected with the Archaeological Park *Poetovio*;
- Presentation of archaeological monuments with the help of ICT equipment;
- Elaboration of an educational program and activities;
- Collaboration with various public and private partners;
- Enabling the recognition of the Park at local and national level and beyond;
- Linking the Park with the tourist offer in Slovenia and abroad.

XII.4.4.4. Economic strategies

As an area with significant archaeological heritage and an exceptional natural environment, Panorama has the potential to become a complex cultural tourism destination closely linked to the other significant Cultural Heritage of Ptuj.

XII.4.4.5. Strategic goals for the development of the monument

Qualitative goals:
- Protection, preservation, revitalization and presentation of the archaeological heritage;
- Research activity;
- Education, information and promotion of the archaeological heritage;
- Public programs and tourist use of the monument;
- Linking the Archaeological Park to modern life, promoting cooperation and connections with interested public and private partners.

Quantitative goals:
- Increase in the number of visitors;
- Expansion of the tourist offer in cooperation with the Ptuj Public Tourist Office;
- Increase in the number of events.

XII.4.4.6. Strategic implementation objectives

1. Management, preservation and protection:
- Appointment of a manager and a management structure;
- Appointment of a coordinating expert committee;
- Cleaning, maintenance and conservation of the Archaeological Park;
- Ensure safety for the visitors of the Archaeological Park.

2. Comprehensive design of the Archaeological Park:
- Elaboration of the detailed municipal spatial planning plan (SPPA);
- Elaboration of the Landscape Plan for Panorama;
- Inclusion of the other Roman monuments of Ptuj in the Archaeological Park *Poetovio*.

3. Planning and implementation of systematic archaeological research.

4. Development of activities in the fields of research, culture, tourism, economy, education, recreation; organization of events.

5. Presentation and interpretation:
- Conservation and presentation of archaeological monuments in the Park;
- Establishment of a permanent exhibition in the Regional Museum Ptuj Ormož;
- Digital presentations, printed guides, brochures, books; production of souvenirs.

6. Increasing visibility and popularization:
- Establishment of an interpretation center in the immediate vicinity of Panorama;
- Communication plan for the communication participation strategy;
- Creation of a comprehensive cultural tourism offer and linkage with other heritage elements;
- Promotion of the archaeological monument (scientific, cultural, recreational);
- Organization of various activities (educational, cultural, recreational);
- Involvement of the local population and their services/products in the presentation program and events.

XII.5. Plan documents

XII.5.1. Conservation Plan of the Archaeological Park

The document defines Panorama as an archaeological site of the highest category. It establishes the priorities of management. Any intervention must be in accordance with the protection of the heritage, taking into account the needs of society and allowing for the public presentation of the site. It establishes the zones of different regimes.

XII.5.2. Interpretation plan

The plan defines the structures that are most suitable for presentation and interpretation. Their functions are known, they can highlight the specifics of *Poetovio* and have a broader cultural-historical or aesthetic significance. Buildings that are clearly visible on geophysical images are also preferred for presentation.
The central portion of the site with the most archaeological remains - Zone 2 - offers the greatest potential for interpretation and presentation.
Presentation priorities are:
- road network;
- sacred site at the top of Panorama;
- legionary fortress,
- Early Christian church;
- selected residential buildings;
- craft and trade complexes;
- aqueduct;
- Roman cemetery.

XII.5.3. ICT plan

The basic tools for research and documentation that are used or can be used in the Archaeological Park *Poetovio* have been presented.
The analysis of ICT tools is divided into four groups, depending on their basic purpose:
- presentation and interpretation;
- information and promotion;
- monitoring and analysis of visitors;
- research and documentation.

XII.5.4. Vision and Strategy of the Municipality of Ptuj 2015-2025

This is the basic development document of the municipality, in which tourism was defined as one of the four main strategic orientations for development. In 2016, the City Council of the Municipality of Ptuj adopted the ordinance on the establishment of the Public Institute of Tourism Ptuj as a superior institution responsible for the comprehensive strategic management of the destination.

XII. 6. The pilot action

Three replicas (copies) of the relief panels dedicated to the Nutrices, locally worshipped deities, were placed in the Park. The tower of the legionary fortress with the walls is made as a new surface construction, representing the original foundations 2 m below the surface. The drawing of the ideal reconstruction of the tower is displayed on a transparent information panel. It visually overlaps with and complements the built contour on the ground. An information board about the Roman roads and the signpost are placed in the place with the excellent panoramic view. They clarify the strategic location of Panorama. The already existing information boards are renovated and supplemented with the new research results.

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XIII - MANAGEMENT PLANS AND PILOT ACTION FOR THE NETWORK PARK OF ŠIBENIK CITY MUSEUM: ARCHAEOLOGICAL SITES OF VELIKA MRDAKOVICA AND BRIBIRSKA GLAVICA (ŠIBENIK) [I.K.; P.F.]

XIII.1. Description of the Archaeological Sites

This project covers two archaeological sites in the area of Šibenik-Knin County in the Republic of Croatia, namely the localities in the area of Velika Mrdakovica and Bribirska Glavica (Fig. 49).

Fig. 49. Location of Archaeological Sites Velika Mrdakovica and Bribirska Glavica (© https://www.google.com/maps, 7.11.2022)

Velika Mrdakovica Site is located in the western part of Šibenik-Knin County, near the town of Vodice. It is located on a hill whose height is about 100 m above sea level. The total area of the site is 1.5 hectares. The primary environmental factor consists of fields and olive groves cultivated by residents of nearby villages. The basic karst landform that prevails in this area are karst plateaus and karst depressions, and the valleys of the Krka River and its tributaries surrounded by hills and mountains. The vegetation in this area consists of sub-Mediterranean forests of oak and hornbeam, as well as thickets. Also, it is important to note that the locality itself is located in the area of the Natura 2000 ecological network.

The Archaeological Site of Bribirska Glavica (Fig. 50) is located in the village of Bribir, in the eastern part of Šibenik-Knin County, not far from the town of Skradin. The area of the site is 7 ha. The site is located on an elevated area at approximately 300 m above sea level. The primary forms of relief are analogous to those in the area of Velika Mrdakovica (Fig. 51), therefore, karst plateaus with depressions, valleys of the Krka River with its tributaries and the surrounding hilly-mountainous area predominate. In the area itself, there are also a large number of smaller surface and underground watercourses, given the proximity of the Krka River. The vegetation is dominated, as in the area of Velika Mrdakovica, by oak and hornbeam forests and thickets, and the area is located within the Natura 2000 ecological network.

Fig. 50. Archaeological Site of Bribirska Glavica (© https://www.travelholidayscroatia.com/daily-tours-in-croatia/archeological-site-bribirska-glavica, 9.11.2022)

Fig. 51. Archaeological Site of Velika Mrdakovica (© Velika Mrdakovica: Arauzona - Vodice: All You Need to Know BEFORE You Go (tripadvisor.com) 8.11.2022)

XIII.2. Elaboration of documents and knowledge frameworks

According to the available documentation, the area of the Velika Mrdakovica archaeological site was first inhabited in the 7th century BC. The area was inhabited by the Illyrian tribe Liburni (until the 2nd century AD), and they named the settlement Arauzona.
The site is located in a well-developed tourist area rich in cultural and natural heritage, which is very well connected by traffic at the national and international level, but there is still no organized transport to the Archaeological Site itself. Also, in the vicinity of the site there are several family farms that offer an abundance of domestic agricultural products.
The archaeological structure consists of the remaining visible buildings. 17 rooms are arranged in an orthogonal grid, and the streets in the Roman cistern at the foot of the hill have been preserved. It is assumed that the purpose of the rooms was residential, while some rooms were used for storing harvest and goods. Traces of production were also found in many rooms, which took place mainly for personal needs.
Since the site was the subject of research from 2014 to 2016 within the framework of the HERA project - "Preparatory - archaeological work at the Site of Velika Mrdakovica", certain features were developed, such as a panoramic coin telescope, information boards and signposts, and solar lighting. However, the area of the site still does not have a developed visitor's infrastructure or exhibition space, which would valorize this site.
Bribirska Glavica, according to available data, began its rich life in the 1st millennium BC as a Liburnian settlement called Varvaria. At the end of the 1st century BC the area was conquered by the Romans and they founded their

municipium of the same name. In the seventh century, the area was settled by Croats, and since the 10th century, the old name Bribir has been used for Varvaria. The site reached its greatest importance in the 13th and 14th centuries when it was the seat of the Šubić family.
The site is located in an area surrounded by tourist macro-destinations and full of sites of natural and Cultural Heritage. The proximity of important roads such as the A1 highway and the Adriatic highway ensure quality transport connections at the national and international level.
The archaeological structure consists of numerous buildings and monuments such as the megalithic prehistoric city walls, the Roman nymphaeum, the forum, funeral facilities, the remains of medieval monasteries and churches, and the architectural remains of the Šubić family yard and Venetian fortifications. There are also two newer buildings on the site that serve as storage and exhibition space.
Visiting the site is free of charge, and there are information panels on the locality itself with a display of all important remains. There is still no visitor's infrastructure, and access to the site is provided by a winding gravel road from the foot of the hill.

Fig. 52. Plate of the Conservation Department in Šibenik (© TRIS portal – Šibenik – 'Slučaj peškarija' – Uskok u šibenskom Konzervatorskom odjelu! (8.11.2022)

XIII.3. Synthetic interpretation

The Archaeological Sites of Velika Mrdakovica and Bribirska Glavica are located in a historically significant area that has numerous features suitable for economic valorization. However, the main problem of these sites is that management plans that would define the basic guidelines for the activities needed to be carried out in this area have not yet been adopted. Lack of financial capacity, lack of human capacity and unresolved property-legal relations represent the basic obstacles for the development of the Archaeological Sites. Solving these issues opens up space for adequate exploitation and management of this high socio-economic potential possessed by both sites.

XIII.4. Elaboration of the project

The scientific archeological project of creating management plans for the Archaeological Sites of Velika Mrdakovica and Bribirska Glavica is a project that includes a wide range of interested participants, from local and regional authorities, through interested members of the private sector and the local population to non-governmental associations and organizations.
In order to ensure the highest quality process of development of management plans, it is necessary to understand the legal framework within which cultural assets function in the Republic of Croatia.
"The Act on the Protection and Preservation of Cultural Heritage of the Republic of Croatia" defines archaeological sites, zones and landscapes that have the value of cultural property. Administrative bodies and local self-government bodies are also defined, which are responsible for the protection and preservation of cultural property, as well as for determining protection measures and supervising their implementation.
The "Ordinance on Archaeological Research of the Republic of Croatia" prescribes the conditions for carrying out archaeological research in the Republic of Croatia. All research conducted on protected cultural assets must be approved by the local Conservation Department of the Ministry of Culture and Media. After approval, the cultural asset is registered in the "Register of Cultural Assets of the Republic of Croatia".
The areas of Velika Mrdakovica and Bribirske Glavica are managed by the "Conservation Department of the Ministry of Culture and Media" in Šibenik. In the case of Velika Mrdakova, the town of Vodice and the Tourist Board of the town of Vodice are included, while in the case of Bribirski Glavica the town of Skradin and the Tourist Board of the town of Skradin are included. The Museum of the City of Šibenik supervises archeological research at these sites. In the area of Bribirska Glavica, the interested side is represented by the Museum of Croatian Archaeological monuments, since it possesses parts of the visitor's infrastructure (Fig. 52).

Fig. 53. Register of Cultural assets of the Republic of Croatia (© https://min-kulture.gov.hr/izdvojeno/kulturna-bastina/registar-kulturnih-dobara-16371/16371 (9.11.2022)

Since both sites are registered in the "Register of Cultural assets of the Republic of Croatia" (Fig. 53), there are certain legislation that stipulates the performance of activities in these areas:

- No construction works or works aimed at preserving the integrity of the archaeological site are allowed;
- It is not permitted to install assembly facilities without approval by the competent authority;
- Social, economic and other activities are allowed only with the approval of the competent authority;
- The soil may be cultivated only up to a depth of 30 cm without prior approval from the competent authority;
- In case of discovery of residues or structures, the trader must inform the competent body and the competent Museum to which he/she is obliged to submit the object;
- Any research is allowed only with prior consent of the competent authority and provided that all findings are professionally preserved and the movable findings are submitted for storage to the competent Museum.

The strategic framework at the national level is represented by the Strategic Plan of the Ministry of Culture 2020-2022 (Ministry of Culture and Media, 2019). It emphasizes two general objectives, namely general objective 1 Development of cultural and artistic creativity and production, and general objective 2 Protected and preserved Cultural Heritage. Within general objective 2, specific objectives are defined:

- development of the service for the protection and preservation of the Cultural Heritage of the Republic of Croatia;
- ensured optimal model of protection and management of cultural assets;
- development of Museum activities;
- development of the archival service while ensuring the conditions for regular retrieval of archival material;
- availability of Cultural Heritage in the digital environment.

This project supports all the specific goals defined within this Strategic plan.
For the purposes of the project, the basic strategic objectives of the Management Plans for the Archaeological Sites Velika Mrdakovica and Bribirska Glavica were defined:

1. continuous research, protection and preservation;
2. establishing education, interpretative and visitors center (Fig. 54);
3. socio-economic integration.

XIII.5. Plan documents

XIII.5.1. Continuous research, protection and preservation

Continuous research, protection and conservation is planned to be achieved with the planned implementation of several activities. Preservation and protection of the existing heritage is planned to be achieved through the organization of educational workshops and forums, which will be aimed at raising the awareness of the local population about the preservation of Cultural Heritage. Also, the use of ICT tools for the implementation of protection measures is

foreseen. The implementation of these activities also implies an increase in human, logistical and financial capacities for the Park area. Sustainable forms of activity that will not damage the physical condition of the Parks will be encouraged.

XIII.5.2. Establishing education, interpretative and visitors

Within the Strategic objective 2. Establishing education, interpretative and visitors' center will implement activities in order to achieve different objectives

- **The valorization of Cultural Heritage** is intended to be achieved through the construction of a visitor infrastructure. The key issue is the resolution of property rights relations that will be resolved by buying land or expropriating it. Also, adequate restoration of found archeological remains will contribute to the achievement of the objective. All activities will be preceded by preparation of project and technical documentation
- **Presentation and dissemination of knowledge** implies a wide range of activities which include the organization of numerous cultural events that connect the site with other forms of local Cultural Heritage, the implementation of educational activities in the area of locality and ensuring the accessibility of Parks and the usability of services. One of the main preconditions is the construction of a virtual Museum. All interpretation and education infrastructure will be built in line with the green economy postulates.
- **Maintenance and monitoring** are planned to be carried out in several ways. The Park's infrastructure and the surrounding infrastructure will be regularly maintained to prevent its failure. The installation of a sufficient number of garbage cans will ensure the cleanliness of the environment and infrastructure. Security will be established using modern ICT surveillance tools.
- **Financial sustainability** as one of the most important aspects of the project is planned to be achieved by drafting a financial plan and creating budgetary policies first. Accordingly, ticket prices will be regulated and economic and production activities related to the Park will be planned. A number of cultural events will also be organized, bringing together the Park and local small and medium-sized enterprises. The interpretation center will also be financed by applying for tenders and external sources of financing.
- **Communication strategy** is based on the development of marketing activities such as preparation of marketing plan, development of communication and promotion strategy and strengthening of human capacities in marketing, which will strengthen and optimize cooperation with relevant Stakeholder (Fig. 55).

Fig. 54. Archaeological findings from the Bribir area (© Konzervatorski odjel u Šibeniku) (9.11.2022)

Fig. 55. Info table in the Archaeological Site of Bribirska Glavica (© Hrvatska Troja: Znate li što je Bribirska glavica? (dnevnik.hr) (8.11.2022)

XIII.5.3. Socio-economic integration

Strategic objective 3 Socio-economic integration includes the achievement of several goals

- **Involving local community** by organizing educational workshops on the importance of Cultural Heritage and promotional activities aimed at raising public awareness of the value of archaeological heritage. The public will also be presented with scientific results related to Archaeological Parks, as well as numerous visits combined with environmental protection activities.
- Another way to achieve **economic sustainability** is through **integration into tourist flows**, which will be achieved by strengthening cooperation with all interested participants, organizing cultural and thematic trails, including the offer of an Archaeological Park in elaborated tourist packages, building thematic bike routes, organizing gastro workshops and archaeological workshops for children and youth, and creating a program of tourist guides.
- **Creating a bond through ICT tools** will be developed through a multi-level and multi-stakeholder participatory governance platform. ICT tools will also be used for innovative presentation of archaeological heritage, while the most important part of tourist offer is the use of VR glasses. ICT tools will help expand access to and interpretation of sites, which will play a special role in the elderly and people with disabilities.

XIII.6. Methods and strategies for monitoring results of the economic impact and evaluation and review

Results monitoring is a process that includes the collection, analysis and comparison of indicators that systematically monitor the success of projects. The management monitoring strategy is focused on defined activities within the Action Plans. The result indicators should be related to specific goals, which were evaluated using the SMART methodology, that is, they must be specific, measurable, achievable, relevant and time-bound.
Also, the defined indicators ensure the transparency of the entire implementation process in such a way that they enable communication about the progress of the strategy so that it is understandable and immediate for all participants and citizens.
Therefore, the proposal is to base the results monitoring process on half-yearly reporting on the implementation of Management Plans through the Program Evaluation and Review Technique (PERT). This tool is divided into five steps, namely identifying specific activities and milestones, determining the proper sequence of activities, constructing a network diagram, estimating the time required for each activity, and determining the critical path. This principle is quite flexible, since, while the management plan is being developed, the estimated time can be replaced by the actual time spent, and in cases of delays, the need for additional resources may be required in order to stay within the planned time frames.

XIII.7. The Pilot Action

Training module (Fig. 56), which took place on 30th June, 2022, in live and online format in the premises of the Development Agency of Šibenik-Knin County, was organized with the purpose of proposing pilot activities in the area of Archaeological Sites Velika Mrdakovica and Bribirska Glavica. The main pilot activity was testing test QR code that will be placed on locations and will enable visitors to read all the most important information about the sites themselves. The extended reality effect (AR) will be achieved with this tool.
Another activity selected for implementation is testing of virtual reality tools. In particular, these are VR glasses. Testing of VR glasses was carried out in the premises of Tourist Boards of the town of Skradin and the town of Vodice. The VR glasses aim to provide the possibility of "reconstruction" of the buildings that existed at these sites in order to gain an insight into the basic socio-historical factors of the development of archaeological sites. It is also planned to install various tools (cameras, sensors, analysis software) in order to test their quality.
Among other activities, the installation of a stand-alone solar system and non-technological equipment is planned as part of the archaeological sites.
The conclusion of the pilot action is that digital content will greatly improve the development of Archaeological Parks, but that older people might have problems with the use of ICT.

Fig. 56. Training module on new economic activities in Archaeological Parks (©DO SKC)

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XIV - MANAGEMENT PLAN AND PILOT ACTION FOR THE ARCHAEOLOGICAL PARK OF *URBS SALVIA* (URBISAGLIA) [R.P.; S.F.; S.C.; I.P.; C.G.; L.X.d.S.]

XIV.1. Description of the archaeological area

The site where the Roman colony of *Pollentia - Urbs Salvia was built* was, perhaps already at the end of the 3rd century BC, occupied by a *conciliabulum* of Roman citizens aggregated around an industrial area organized along the Salaria Gallica, a diverticulum of the Via Salaria and axis of penetration of Rome towards the Gallic territories.
At the end of 2nd century BC a colony was founded on the site (Fig. 57). Of this colony it is still conserved a small area, oriented along the road axis, occupied by the forum, the capitolium.

Fig. 57. Plan of the Archaeological Park of *Urbs Salvia* (© University of Macerata)

Of the Capitolium (5 in Fig. 49) there remain traces of the podium in cement (11.00 x 1.8m, which is preserved in height for 1.30 m) incorporated in a modern building.
The southwest corner of the forum was bordered by the so-called. (Fig. 58) Republican building (7 in Fig. 49), a cult building which obliterates the area previously occupied by kilns for the production of ceramics, formed by two identical rectangular spaces (3.7 x 6.3 m) preceded by a portico (7.4 x 4.9 m) bordered on the outside simply by a low wall decorated with 1st Pompeian style paintings
A first phase of monumentalization of the Augustan age is documented by the excavation of the porticus duplex, (6 in fig. 49) a portico with two L-shaped naves, the construction of which archaeologically defines the northern limit of the forensic square. It is only with the end of the Augustan age that the city acquires the buildings (Fig. 59) visible today starting from the Walls (1 in Fig. 49) which enclose an area of more than 420,000 m2 and draw an almost quadrangular path, approximately 2,700 m. long. Of these, parts of 3 entrances are preserved, including the so called Porta Gemini.
The buildings that make up the urban image include the Theater (3 in Fig. 49) located on one of the highest terraces in the city and was built in 23 AD by *C. Fufius Geminus*, a high magistrate of Urbisalvian origins; the (Fig. 60) Temple-Cryptoporticus complex (8 in Fig. 49) built in the Tiberian age and centered on the temple dedicated to the Salus Augusta. The Temple develops

Fig. 58. Republican temple of *Pollentia-Urbs Salvia* (© University of Macerata)

Fig. 59. 3D localization of the main public buildings of *Urbs Salvia* (© University of Macerata)

Fig. 60. M.Sp. reconstruction of the temple-cryptoporticus complex of *Urbs Salvia* (© University of Macerata)

above a covered U-shaped portico which still retains most of the paintings (Fig. 61) with which it was decorated; the rectangular Tempietto (9 in Fig. 49), which stands on a podium preserved in height for 2.16 m. and which can be interpreted as a sacred building or as a Curia.

The city was organized on a system of terraces like the one delimited by the building with niches and upper cryptoporticus (4 in Fig. 49), that is, a supporting wall characterized by six semicircular niches functional to support, regularize and expand the slope and a cryptoporticus, which preserves traces of paintings intended to cover it and to delimit a rectangular square. Of the infrastructure system remains the Reservoir (2) for collecting, settling and distributing the aqueduct which is located in an elevated position and is formed by two long barrel-vaulted corridors.

The Amphitheater (10 in Fig. 49) of the Flavian age rises (Fig. 62) outside the Walls. The cavea, divided in a first phase into two sectors by a *praecinctio*, is conserved along its entire perimeter. Only in a later phase did the *summa cavea* develop above it, supported by an external annular portico, which has now disappeared.

Fig. 61. Paintings of the cryptoporticus of *Urbs Salvia* (© University of Macerata)

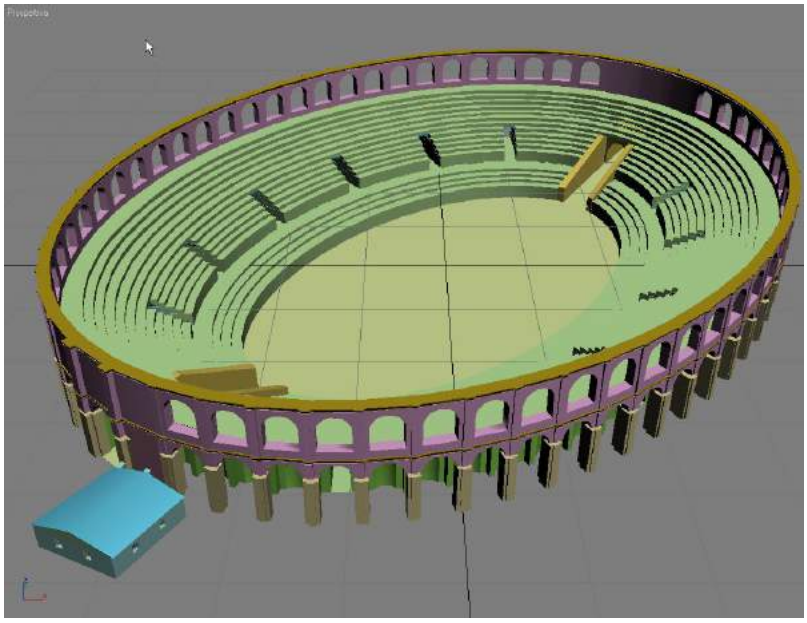

Fig. 62. M.Sp. reconstruction of the *Urbs Salvia* amphitheater (© University of Macerata)

XIV.2. Elaboration of documents and knowledge frameworks

The analysis, on the basis of different approaches and interpretative categories, of the archaeological system that characterizes the area of the park and the surrounding context was fundamental.
The Mapping of archaeological resources first of all envisaged the analysis of those inserted within the area of the Roman city, organizing this study on the basis of three levels of analysis and description: the underground and non-visible structures relating to the conciliabulum; the traces of the colonial foundation in the Gracchan age in the area of the Forum and the city of the late Republican age; the city of the early Imperial age and the main monuments visible in the Archaeological Park.
A specific study was dedicated to the mensiochronological analysis of the walls of the monuments inside the Park area.

Also the territory referable to the Roman city and the one on which the management activities can impact was the subject of a specific analysis and in particular the following were carried out:
The Absolute/Potential archeological map of the territory. By archaeological potential we mean the probability a territory might contain further preserved and buried archaeological remains. The map records all the archaeological evidence known in the area. Map of the remains of the centurial limits, Ancient road map.
The absolute data were integrated with the settlement potential Map (Fig. 63) which provides, based on the settlement vocation, an estimate (probability) based on the observation of the recurrences between the position of the known sites and other geographical and environmental parameters. The potential Map takes the form of an interpretative work in which it is necessary that the territorial units with different settlement potential (low, medium and high), once defined and bounded, are evaluated also taking into consideration the archaeological evidence.
The documents also include the Map of the archaeological vulnerability of the site and the territory. Vulnerability is the parameter that must be taken into consideration when determining the risk of damage to the archaeological heritage in relation to anthropogenic events (public or private building works that include earth handling) or natural events (landslides, floods, earthquakes).

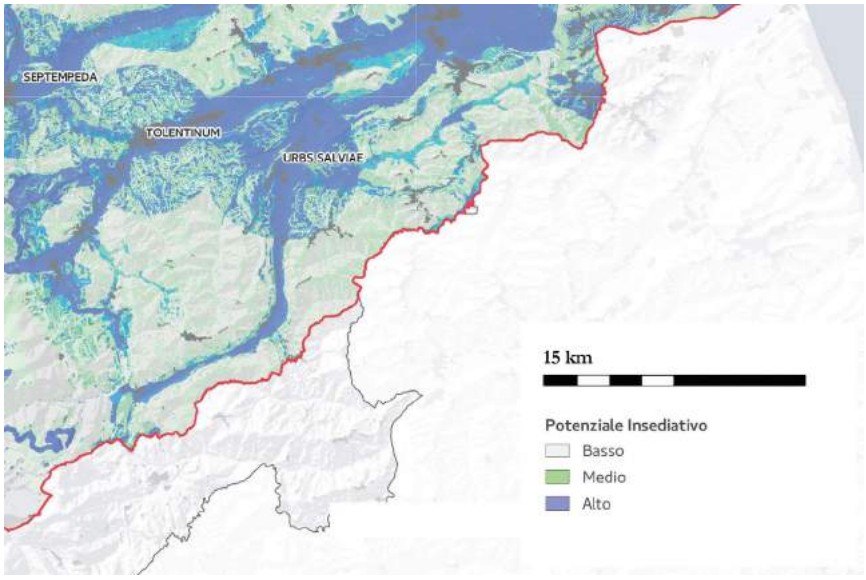

Fig. 63. Map of the absolute archaeological potential of the *Pollentia-Urbs Salvia* area (© University of Macerata)

For this work, the observations on the widespread analysis of the damage were fundamental.
The context analysis envisaged the study of the geomorphological system by evaluating geology and geomorphology, hydrogeology and hydrological characteristics and elements of hydro-geomorphological vulnerability.
The analysis of the botanical-vegetational system has instead concentrated on the types of vegetation and floristic species, paying particular attention to the elements of botanical-vegetational vulnerability.
A separate chapter was dedicated to cultural and landscape emergencies with particular reference to the anthropic system structured on settlements, as well as on infrastructures related to accessibility and use, including services, equipment and accommodation.
Finally, an in-depth analysis concerned information, communication and marketing services as well as existing ICT projects, with particular reference to the promotion of the Web, social media, apps and networks.
The socio-economic framework analysis envisaged three specific themes, the first of which related to the study of the territorial system of reference in the broadest sense (Fig. 64).
The economics of the territorial system of Urbisaglia in a territorially narrower sense envisaged the study of productive specialization, organization of economic activity and tertiary.
An in-depth study finally regarded the dynamics of demographics and human capital, with a specific focus on population aging and migratory flows. Finally, a specific study was aimed at the regulatory and programming framework, with particular attention to the regulatory framework on the subject of Archaeological Parks which is particularly complex in Italy.

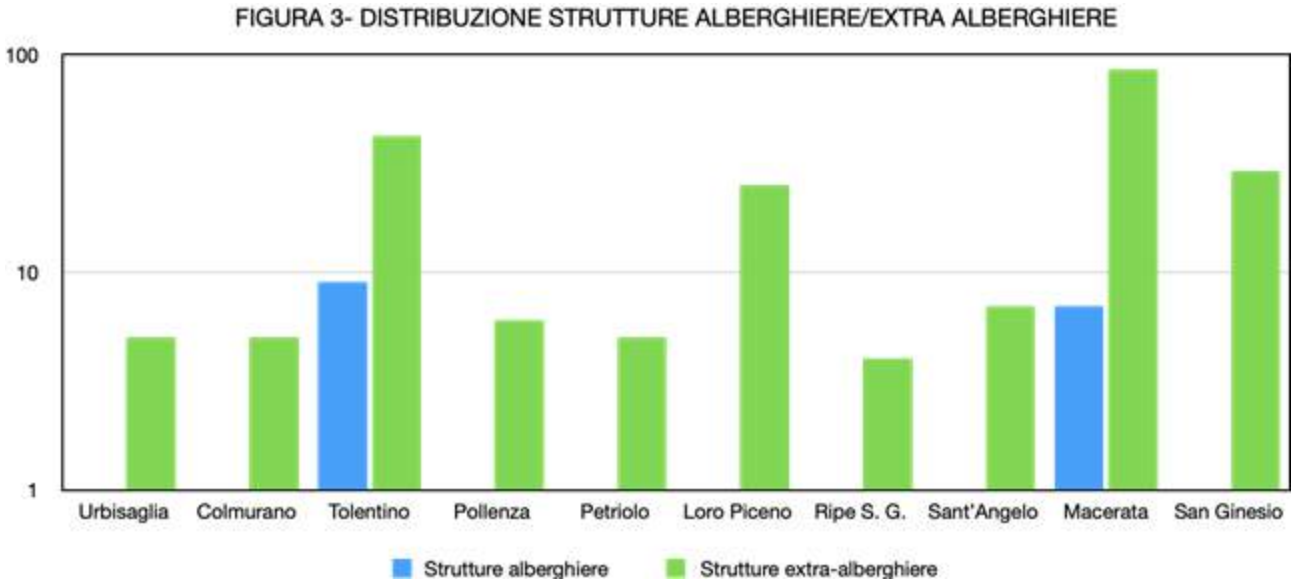

Fig. 64. Distribution of hotel and non-hotel facilities in the Municipalities surrounding Urbisaglia (© University of Macerata)

XIV.3. Synthetic interpretation

The interpretative synthesis was preceded by an articulated process of listening and participation. It should be recalled as a preliminary point that the directly involved working group ensured the involvement of all the public subjects institutionally involved in the management of the park in all its work phases: Regional Directorate of the Marche Museums (DRM), Superintendence of Archaeology, Fine Arts and Landscape Authority for the provinces of Ascoli Piceno, Fermo and Macerata (SABAP AP-FM-MC), Municipality of Urbisaglia and University of Macerata. Also a direct relationship has been established with the Marche Region.
Comparison and sharing of project methodologies and means were therefore carried out through roundtables and technical-institutional consultation with the local Stakeholders, the Abbadia di Fiastra Nature Reserve, and the surrounding municipalities and also with other municipalities of the Marche Region in which the presence of a complex archaeological system imposes the need to address similar problems.
The set up framework foresees a first scenario which concerns the possibility that the park becomes an integral part of a true regional and national system of archaeological areas.
The second scenario describes the park's relationship with the local context and the related socio-economic dynamics.
The third scenario describes the use of ICT, whose integration in archaeological parks is essential for the contextualization of archaeological assets.

XIV.4. Elaboration of the Project

XIV.4.1. The Scientific Archaeological Project

The Scientific Project intends to make explicit the scientific motivations at the basis of the establishment of the Archaeological Park of *Urbs Salvia,* enhancing the characteristics of the area and identifying those which will serve as a base for the management plan choices.
In the case of *Pollentia-Urbs Salvia,* at least two aspects related to vision should be highlighted: "diachronic and synchrony".

1. In a diachronic dimension it is an archaeological park where it is clearly possible to recognize the overlapping of three settlements, each of which, although in continuity with the others, is characterized by a clearly recognizable archaeological, topographical and historical dimension.
2. In a synchronic dimension, the state of conservation of the monuments of the last phase of the imperial age makes the site one of the few cases in which all the main public buildings of a Roman city are preserved, giving a real vision of the past.

XIV.4.2. Mosaic of urban and territorial planning

In a really dialogical process, the regulative function must guarantee the maximum responsibility of the interlocutors with the minimum rigidity. This means that it cannot rely on obligatory orders only targeted to state "what must not be done".
The site management processes are therefore be coordinated with the processes of:

- management of the landscape and the urban and territorial environment;
- enhancement of the cultural and environmental heritage;
- conservation of historic centers and the quality of settlements.

However, these processes refer to different subjects and to different urban and territorial forecasts for which objectives and coordination tools are needed.

XIV.4.3. Rules for areas

When articulating the standards per areas, with the aim of concretely applying the expected dialogue between the plan and the Park and the municipal urban planning, it was possible to define the standard contents after a careful analysis of what was already arranged by the municipal PRG. This allows for the consideration of the plan for the Park as an instrument that has both complementary and integrative (instead of substitutive) features within the municipal PRG.

XIV.4.4. Strategies

In the light of the three scenarios identified, which pose different but deeply interacting challenges, the Management Plan identifies 5 strategic lines (1. Conservation of the cultural and natural heritage; 2. Community and participation; 3. Educational-recreational use; 4. Development and management; 5. Towards the creation of a Cultural Park) and 3 transversal lines (A. Research and innovation; B. Use of ICTs; C Economic sustainability), which transversally affect the first 5 and become strategic above all in the processes of analysis, monitoring and enhancement of archaeological assets. But also, more generally, in the analysis of the relationship between the Archaeological Area and its context.
The strategic lines intend to align with the minimum standards required for the National Museum System and the related improvement objectives (Ministerial Decree 113 of 21 February 2018 "*Adoption of uniform minimum quality levels for museums and places of culture belonging to the public and activation of the National Museum System").*
Strategic line 1: Conservation of cultural and natural heritage.
Strategic line 2: Equipment and services.
Strategic line 3: Didactic-recreational use.
Strategic line 4: Development and management.
Strategic line 5: Towards the creation of a Cultural Park.

The various actions identified in the 5 strategic lines will therefore converge in various projects, activities and initiatives, which will jointly contribute to the enhancement and proactive conservation of the Archaeological Area. As highlighted before, there are three transversal elements which affect all the strategic lines and become indispensable especially within the processes of analysis, monitoring and enhancement of the individual archaeological assets and, more generally, of the Archaeological Area in relations with the context:

A. Research and innovation.
B. Use of ICTs.
C. Economic sustainability.

XIV.5. Plan documents

XIV.5.1. Conservation of cultural and natural heritage

The strategic line 1 foresees actions that concern the conservation of the archaeological heritage, also in relation to a careful management of the environmental system and of the naturalistic emergencies present.
The first action to be implemented is the deepening of the knowledge frameworks which is achieved through a series of operations.

1) Archaeological investigations for the legibility of the main ancient morphological and historical components of the city and the territory
   - Geophysical surveys.
   - The cataloging program for the management and use of the warehouses.
   - The relief of monuments.
   - The creation of the archaeological map.
   - The mensiochronological analysis of the masonry.
   - The identification of methods for carrying out the excavations connected to the implementation of public works.
2) Extraordinary restoration plan.
3) Monitoring plan.
4) Ordinary maintenance plan, which is implemented through:
   - good practices for maintenance and extraordinary management and methodological lines of intervention on exposed structures;
   - good practices for maintenance and extraordinary management and methodological lines of intervention on underground structures or to be buried.
5) Management and enhancement of the botanical-vegetational system.

XIV.5.2. Equipment and services

The strategic line 2 foresees actions aimed at increasing and qualifying the supply of functional equipment and services: i) for excavation, analysis, research and conservation of archaeological assets; ii) for use by scholars and visitors.
In particular, various actions are foreseen within the framework of this strategic line.

1) Maintenance and requalification interventions of buildings and service equipment, in situ also through the application of the most modern technologies related to energy efficiency, in order to reduce consumption and promote the green transition.
2) Creation of new artifacts and infrastructures for public fruition. This action, in addition to indicating the objectives of the individual projects, foresees the identification of reference Models and Schedules.
3) Enlargement and re-functionalization of the Archaeological Museum.

XIV.5.3. Didactic-recreational use

Strategic line 3 foresees actions aimed at increasing, qualifying and diversifying the offer for didactic-recreational use.
In particular, the following projects are envisaged under this strategic line:

1) improvement of access roads;
2) creation of the conditions to extend the time visitors spend in the park;
3) creation of spaces for rest and recreation also outside the park area, in contiguity and complementarity with the recreational offer of the Abbadia di Fiastra Nature Reserve, in order to capture a large demand for outdoor recreation;
4) development of enhancement and promotion activities with the involvement of local communities;
5) promotion of educational activities;
6) use of ICT tools to highlight and enhance the identity characteristics of the area and its context through the completion of a digital supply chain;
7) involvement of the scientific community and protection Bodies (University, Superintendency, DRM; Research Centers, Scholars, etc…) in the definition of programs and themes for the use of the archaeological area;
8) improvement of accessibility and fruition conditions, starting from the Museum.

XIV.5.4. Development and management

Strategic Line 4 foresees actions aimed at placing the *Urbs Salvia Park* at the center of a process of enhancement and management of the regional archaeological system which, on one hand, activates fruition forms capable of generating important local effects, and on the other hand, promotes synergistic actions in relation with the other parks and archaeological areas of the Marche region.

It is accomplished through different actions:

1) Elaboration of a Project for the new institutional identity (logo) and communication concept of the *Urbs Salvia Archaeological Park/System*, elaborated in three phases:
   - visual identity of the Park;
   - logo;
   - communication plan.
2) Organization chart and ex-ante economic evaluation

XIV.5.5. Towards the creation of a Cultural Park

Strategic line 5 is specifically oriented towards the integration of the Archaeological Area with the nearby Abbadia di Fiastra State Nature Reserve, with the aim of creating a Cultural Park in the Municipality of Urbisaglia and effectively enhancing the extraordinary natural and cultural resources that this part of Valle del Fiastra offers. To do this it is necessary to strengthen the functional relationships and close interdependence based on reciprocity of interests and complementarity (especially in terms of services for tourists) between the city of Urbisaglia, the Abbadia di Fiastra State Nature Reserve and the Archaeological Area.

XIV.6. Methods and strategies for monitoring results of the economic impact and evaluation and review

A part of the Plan is in particular dedicated to the measurement and evaluation of the effects of the application of the management plan, both in economic terms and in terms of effectiveness of the actions envisaged by the plan's objectives.
The latter are specifically aimed at achieving the minimum quality requirements established by law for places of culture.

XIV.7. The Pilot Action

The Piloct Action for the Archaeological Park of *Urbs Salvia* has been identified and developed with the aim of enhancing the visit of the Park through the use if ICTs and, at the same time, building a cultural and digital chain made of institutions and enterprises that could use their competences and be involved in the cultural and economic development of the area.
In order to offer the public an experience of the Park which would otherwise be impossible, we chose to work on the Republican kilns of *Pollentia-Urbs Salvia*, now covered by the later Republican Building and, therefore, invisible during the visit (Fig. 65). The work started with a reassessment of the documentation collected during the archaeological excavations carried out by the University of Macerata and Abaco in the 2000s and a focus on the phase showing two of the three kilns being used contemporarily as part of the same artisanal complex. A study of similar pottery workshops in antiquity, together with the contribution of experimental archaeology, lead to a hypothetical reconstruction of the working environment and two possible annexes where artisans must have modelled and sold the pottery they were producing.

In order to involve the user in the process of making and firing pottery we chose to develop a VR experience made up of three main moments. After a brief introduction, users find themselves in the potter's workshop where a voiceover explains all the furniture and tools used to create pots. The core of the experience is a 360° video at the kilns, showing two workers in the process of loading the kiln, firing it and unloading it. These scenes have all been carefully designed through a specific storytelling developed in a way which takes archaeological data, experimental archaeology, as well as communication needs and issues into account. The last scene of the experience has been developed following the principle of engagement through edutainment and gaming. The users will find themselves in a selling building where they can touch the pots produced from the kilns while a voice explains the function of each pot. The pots shown in the experience have been chosen among the studied production of the site and reproduced in 3D, both virtually and printed, and by a ceramist using ancient techniques.
The experience will be implemented in the Park by the Direzione Regionale Musei Marche involving the local guides of the company Meridiana, who will be specifically trained to use the VR headsets.

Fig. 65. Reconstruction in VR of the *Pollentia-Urbs Salvia* kilns (© University of Macerata)

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PART IV

Ptuj 23/05/2022

XV - CONCLUSION AND STRATEGIC LINES [R.P.; M.Sa.; V.P.; P.Y.; I.K.; E.V.]

XV.1. Premises

It is now recognized and shared that archeology can and must deal with the present, becoming more and more public. In fact, by setting itself the objective of improving the quality of the present and therefore contributing to the planning of the future, it effectively achieves goals and objectives that are traditionally closest to it, such as, for example, research, protection, and enhancement.
The confrontation with problems related to territorial landscape and enviromental transformations is one of the fields where the connections with the present appear to be most visible.
The landscape, whether built or not, is in fact a complex system made up of subsystems and relationships that have been defined over time thanks to both constructive and destructive processes. In urban settlements, concentrated and scattered, as well as open, cultivated, uncultivated, marginal, and mountainous areas, the viability is among the many signs, diachronically stratified and synchronically related to each other, of the successive communities, from which it follows that the study of landscapes cannot but be holistic, and that the approach to the study of ancient landscapes can only be global.

XV.1.2. European legislation

The European legislation highlights that the approach to protection is a negative approach, which starts when the damage is done or when there is a risk of damage.
Legislation and urban planning instruments concerning and interrelated to the management of Archaeological Parks are uniformly administered at the national level in all countries participating in the TRANSFER project, a consideration that we can extend to the European level. Thus, all Archaeological Parks are governed in accordance with various laws and acts that, in a broader sense, regulate attitudes towards the protection and preservation of Cultural Heritage.
Despite the progress of the debate and the positions expressed in the community, a substantially monumental conception of the cultural resource still remains, which tends to identify from their context those cultural assets to which the protection devices apply.
It is appropriate to highlight how current legislation and urban planning instruments often still address the issue in a defensive manner. That is, attention is given to the cultural and archaeological heritage as an asset to be preserved, conserved, and defended from human activities that could tamper with it and therefore compromise its essence.
The Archaeological Park is also still considered for some European legislation an "open-air Museum," basically a Museum "*en plain air",* which is a portion of the territory delimited and separated from the territorial context, dedicated solely to the protection, custody, research, exhibition, and, more broadly, enhancement of the finds. This is despite the fact that most archaeological remains are placed in settled, if not urbanized, areas with a thriving population.
The monumentalist conception, the logic of defensive protection, and that of the open-air Museum tend to prevail over every vision of programming and planning interventions and measures in which the protection and connected enhancement of the cultural and archaeological heritage are inserted in integrated processes of planning and management of the territory and landscape that involve both local communities in terms of cultural, social, and economic growth and users interested in cultural deepening, entertainment, socialization, and relaxation.

The analysis carried out within the TRANSFER Project revealed significant differences in the socioeconomic contexts in which the Park examples are structured.
These differences are visible throughout the territorial ecosystem, particularly in relation to: rules relating to the protection and enhancement of the archaeological heritage; the level of territorial and urban planning processes; subjects involved in the management of the territory and Archaeological Parks; the amount of investments in the management and enhancement processes of the archaeological heritage; sources of financing and methods of disbursement of resources; the ability of the economic system to interact with the management processes of Archaeological Parks; technological infrastructures; skills and experience in the application of ICT to heritage management and enhancement processes; endowments and individual knowledge of the public in relation to ICT.

XV.1.3. European Conventions of Malta, Landscape and Faro, and Euro-Mediterranean policies

Reference to the European conventions of Malta, Landscape and Faro, and to Euro-Mediterranean policies highlight the relationship between archaeological heritage, territory, landscape and community and the economic impact of the policies for the enhancement of Cultural Heritage.
We must recall an ongoing series of reflections and considerations on the theme of the relationship between landscape and historical Cultural Heritage, which range from the Convention for the Protection of European Archaeological Heritage (Valletta, 1992), to the European Landscape Convention (Florence, 2000), to the Council of Europe Framework Convention on the Value of Cultural Heritage (Faro, 2005), its important functions of general interest and contribution to economic activity are not neglected.
In particular, this regulatory framework emphasizes the need for the creation of administrative structures capable of managing development projects related to archeology; the development of adequate legal regulations for the defense of the heritage in the urban planning stages; the definition and implementation of landscape policies aimed at safeguarding, managing and arranging landscapes through the adoption of specific measures; the integration of the landscape into policies relating to territorial and urban planning, in cultural, environmental, agricultural, social and economic policies, and in any other policy that may have a direct or indirect impact on the landscape; and that public and private actors commit themselves, in order to increase awareness of the economic potential of Cultural Heritage, by implementing practices aimed at its protection and responsible management, taking into account the principles of sustainability, efficiency and social cohesion.
The same framework places "heritage communities," as defined by the flagship convention, at the center of these processes while enhancing public awareness processes and democratic participation in identifying the values of Cultural Heritage and in the definition and implementation of landscape.
The sharing of objectives between public, institutional, and private actors and the consultation or participation in the decision-making process at the basis of planning policies are seen as instrumental objectives for the purposes of integrated archaeological conservation, which must therefore be targeted, having acknowledged the essential obligation of protection, at the compromise or balancing between the needs of archaeology with those of planning.
The democratization processes underway throughout Europe are therefore moving towards a progressive expansion of the decision-making base involved in the management of the territory, of which protection is clearly one aspect. Bottom-up processes are now the essential tool for any activity that wants to have an effective ability to affect decision-making processes.
The operational framework stresses that the goal of the conservation and management of Cultural Heritage and its sustainable use is human development and quality of life and the enrichment of economic, political, social, and cultural development processes. The enhancement of Cultural Heritage has therefore acquired ever greater importance in those development models based on local identities and the enhancement of territorial resources, going well beyond the educational, participatory, and didactic aspects but also with the ability to generate externalities in other sectors.
These assumptions are also at the heart of the Euro-Mediterranean approach to the protection and enhancement of Cultural Heritage, in which the "integrated conservation" of heritage aims at economic and social development with an important multiplier effect, and the Cultural Heritage itself is considered an important lever in economic development and social cohesion policies, also in relation to globalization processes.

XV.1.4. Economy enhancement

The site managers, while managing the park, often fail to consider the external effects of their actions on the surrounding territory. These effects include direct impacts such as job creation, as well as indirect impacts, such as the stimulation of other economic sectors related to the main activities of the park.
The same site managers and the same politicians are equally not used to observing the Park itself to analyze the potential that the external activities have or may have on the site management processes.
Conservation enhancement is fundamentally related to the long-term economic sustainability of archaeological sites. The economic sustainability of the Archaeological Park management is guaranteed and maintained by the effective functioning of a complex and interrelated ecosystem of production activities offering both products and services.

XV.1.5. Use of ICT Tools

The European framework within which we operate, cultural policies, trends, and recommendations that recognize the individual and collective right to access and engage with Cultural Heritage while also fostering democratic participation through the use of digital technology EU's perception of Cultural Heritage as a source of sustainable development, improve people's lives and living environment.
In recent years, there has been a significant evolution of the fruition processes through which the roles and needs of those visiting Museums and Archaeological Sites have been profoundly transformed. Technology has been a decisive and stimulating factor in this evolution, and it is an extraordinary component in responding to new needs for heritage use and communication.
ICTs are tools that support, create, and accompany the various activities of an archaeological site, such as the research, documentation, management, conservation, and restoration of collections; they are used to communicate with visitors and to promote the activities of the Museum, also making use of devices "familiar" to the public such as smartphones, tablets, and computers.
They directly contribute to the "education and enjoyment" purposes of Cultural Heritage, as well as to the improvement of digital accessibility, that is, the ability to be inclusive and accessible also through digital, increasing access and use of the cultural offer in all contexts, both on-site and through technological devices, and ensuring an ever greater involvement for people with specific needs.

XV.2. Strategic lines

XV.2.1. Refusal of a logic that favors the single good over the relationships between the goods

Is necessary to refuse a precise logic that favors the single good over the relationships between the goods that become effective in the territory. There is a need to integrate protection and enhancement policies into landscape policies that become effective in the territory, as well as the need to integrate protection and enhancement policies into landscape policies.
Cultural and archaeological assets derive their value from the relationships they are able to establish among themselves, with the surrounding anthropized and historically stratified territory, and with people. It is therefore necessary to step away from a logic still permeated by idealism and historicism that considers a single asset in order to arrive at a vision of protection, management, and enhancement focusing on the territory and the landscape, considered as "a homogeneous part of the territory whose characters derive from nature, from human history, and from reciprocal interrelations."
The Park Plan must overcome the concept of conservation of Cultural Heritage based only on defensive, minimization, or impact compensation strategies. It must therefore go beyond the mere preservation of the good. As a result, it is not just a passive protection tool, but a true territorial project on the territory.
The Archaeological Park should not be seen only as an "open-air" Museum, or rather as an *en plein air* Museum Museum, where the activities take place in the conservation, research, enhancement and exhibition through visits to the archaeological heritage. The new perspective on Parks led to a new strategy that wanted "the Park to become a place for the active production of culture, socialization, and economy for the territory."
The Archaeological Park must overcome the state of isolation in which archaeological remains risk being inserted and becoming the "container" and "generator" of functional, biological, cultural, social, and economic relationships between the various internal and external components at the perimeter of the archaeological area. Its purpose must be to outline new managerial balances and force us to rethink the traditional conception of the Museum area in favor of an increasingly widespread interpretation of the Park as "production equipment".

XV.2.2. Landscape policies

Landscape policies increasingly require the participation of local communities in management and need to empower local communities in the protection and enhancement. Citizens are interested in protecting Cultural Heritage when they understand its value. The value of a historical-cultural asset, which retains the meaning of a landscape asset and also follows the innovations introduced in this field by the European Landscape Convention, is believed to be defined by the contribution of the population concerned. The place of judgment tends to be taken by justification, forcing one to resort to intersubjectively shared arguments rather than truths affirmed by a specialist.

It is therefore necessary to review the current administrative processes from this point of view, conditioned by the traditional figure of a single interpreter of the value of the resource, and rethink the analytical and evaluation methods of the asset itself. Indeed, new variables must be introduced into the interpretation of quality, ranging from symbolic significance to testimonial value, from figurability and representativeness to population perception.
The interpretative and evaluative categories must be linked to extended reconnaissance frameworks.
And to an enlarged territorial area in which the problems become complex and intertwined.
The archaeologist, endowed with specific knowledge and skills on the basis of which he or she recognizes the cultural value of the asset and imposes its protection or management models, must necessarily support the archaeologist who provides a wide base of interested parties with the tools useful for recognizing the values the asset possesses, so that the communities involved in those bottom-up decision-making processes themselves become bearers of the need for protection and enhancement.
Supporting the growth of communities also involves recognizing that this growth has already begun. While the primary responsibility for protection falls on the state and its territorial public bodies, there are also interests and skills among other public and private entities that are involved in management projects as outlined by national legislation.

XV.2.3. Limits of hyperspecialistic archaeological culture

Without shared interpretative categories to deal with the dynamics of Landscape Planning and management the limits of hyperspecialistic archaeological culture are evident, there is a need to open a new front in the broader theme of public archeology.
Archaeologists need to participate in decision-making processes in a structured way. It must be mandatory that an archeologist be present within teams created for the realization of projects with an impact on the territory, as he or she is an essential professional figure who should be present and active in all phases, not only for the composition of the knowledge frameworks or as a function of the sole imposition or reaffirmation of constraints but also in relation to the analysis of the reference scenarios of the individual plans and, above all, to the identification of strategic lines, precisely because archaeological assets are a primary resource for the cultural and socio-economic growth of territories.
Archaeologists must overcome the limits imposed by the hyperspecialization of the historical-archaeological disciplines, which has led to addressing increasingly specific themes in an increasingly in-depth way while also acquiring interpretative categories and models of representation and communication of data that can be shared with specialists of different disciplines involved in common planning and design processes.
To participate in the decision-making processes that regulate and manage transformations, and thus in processes of urban and territorial co-planning, archaeologists must develop methodologies for working in groups and communicating with specialists from other disciplines (geologists, demographers, economists, botanists, etc.) who share responsibilities and competences for those processes.
For archaeologists, communicating in the context of a common project also means having the ability to face the responsibilities that the simultaneous implementation of the policies of subjects at different institutional, national, regional, and local levels impose in terms of integration.
Failing to do so may result in a lack of integration and prioritization, leading to conflicting demands for transformation from private and public entities, regardless of the needs for protection.
An elitist approach, in which culture is in antithesis to land management and related economic processes by not confronting the public community, can only interest a small elite and consequently is doomed to fail.
It is necessary to avoid the risks that the desire to reach as wide an audience as possible entails: the excessive simplification of the contents, the difficulty in making people understand the rigid criteria that the methodology of historical-archaeological research imposes, the search for spectacularization, if not even of the scoop.
This different way of doing archeology, which must therefore concern the archaeologist as such and not a new specialist in »public archeology« or »archeology for planning«, would also be a way to give job opportunities to graduates and to those who are formed in archaeological disciplines.
For the archaeologist, the right and necessary search for increasingly professional skills, in order to establish fruitful and direct relationships with the contemporary context, cannot ignore the process of historical evaluation, which, starting from the study and documentation of the materials, is instead at the base and the very objective of the archaeologist, who engages primarily in the analysis and communication of the cultural value of the heritage.

XV.3. Definition of Archaeological Park

The process of transition from the management of the individual asset to that of the context and landscape has undergone a further definition of Archaeological Park. **The Archaeological Park is therefore**:

«a territorial area where a predominantly archaeological value of the landscape has been identified, integrated with the presence of historical, cultural and environmental values, object **of a project for an integrated and sustainable development, in close cooperation with the local community**»

This definition of Archaeological Park develops the premises and approaches of some of the main European conventions related to Cultural Heritage and landscape, in particular the Malta Convention, the European Landscape Convention, and the Faro Convention.
This definition makes it possible to overcome the principle of preventive protection, which is also the basis of the Malta Convention, precisely because it aims to manage the transformations rather than the effects, in the context of which the conservation of the archaeological heritage was not an integral part of the territorial development policies.

XV.3.1. The Plan and the Project as tools to overcome an exclusively binding logic and share the choices with local communities.

It is necessary to think about the protection and enhancement of the archaeological heritage in the context of coherent territorial management and planning policies, and therefore to consider planning and designing as a central method of governance.
To activate a close comparison between the multiple needs, subjects, and values involved in the area of an Archaeological Park with the aim of identifying a common work plan, it is necessary to prepare a management plan for the Archaeological Park capable of regulating, managing, and planning the transformations of the landscape that are increasingly accelerated today.
The plan does not respond only to a state of necessity but primarily to the desire to operate in the area with effectiveness, timeliness, and foresight.

Cooperation between the various actors—public and private—operating in various capacities on the territory can thus enable the complementarity and the initiation of synergies required to achieve those goals that the sum of separate and sectorial actions cannot achieve.
In the plan, the purposes strictly related to conservation and teaching must confront and take into account the complexity of the active interrelationships of people with each other and with the environment, recognizing that the protection, management, and planning of the landscape imply rights and responsibilities that involve all citizens. Obviously, it is not a question of overshadowing the need for protection, which in an Archaeological Park is not only essential and mandatory, but also the very purpose of its existence.

XV.3.2. Role of ICT, Economy

The use of ICT tools must be a tool in all phases of Archaeological Park research, management, and enhancement, with a particular focus on developing democratic participation processes in the planning and management phases and Archaeological Park enhancement.
For the purposes of sharing information between different specialists in the planning stages of the plan and its implementation, it is necessary to use clear, standardized, and shareable languages. GIS as a tool and not as an objective, is the basis for the exchange of information.
In this scenario, a conscious use of ICT tools can be highly effective in creating a bond between the community and the Park on multiple levels, according to the concept of heritage communities.
It can also enhance the communication of scientific results as well as the ruins and monuments themselves, which are frequently difficult to read by the public or users. Technology, when used to enhance rather than overshadow Cultural Heritage, can help the Park by providing immersive and/or educational experiences that make it a place where culture is produced and shared alongside experiences, education, and formation.
The use of ICT is therefore fundamental for the development of any policy that must favor access to Archaeological Parks in the logic of an "inclusive Park."

The management plan must ensure stability, efficiency, and the economic resources necessary to achieve the objectives of protection and enhancement of the Archaeological Park. In order to optimize the investment and financing choices to be implemented on the latter, an assessment of the conditions of economic and financial sustainability is necessary, in which costs and revenues are defined so as to quantify the extent of the need for economic resources necessary to create, improve, or improve management efficiency of the Archaeological Park. The management activities of an Archaeological Park must take into account the need to deal with the numerous variables that interact in a territory, effectively obliging one to identify the specific methods of intervention on a case-by-case basis.
It is therefore illusory to think of developing common manuals, methods, and guidelines that can be applied uncritically in each area, obviously having to provide for different "missions" and different strategies that take into account the reference context.

XV.4. Targets

The Transfer Project partners, who share its theoretical premises, agree to apply the principles, methods, and processes shared and explained in the Common Sustainable Governance Model for Archaeological Parks, the Project's outcome, in their policies and activities of archaeological heritage research, management, and enhancement, as well as territorial development.
They undertake to solicit and encourage, according to their roles and competences, the application of the principles, methods, and processes shared in the Common Sustainable Governance Model for Archaeological Parks in the context of the policies and activities of research, management, and enhancement of the heritage and archaeological and territorial development of the respective nations.
They undertake to solicit and promote, according to their roles and skills, the application of the principles, methods, and processes shared in the Common Sustainable Governance Model for Archaeological Parks in the context of research, management, and enhancement policies and activities related to the archaeological heritage and territorial development of the European Union.

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