

MANAGEMENT PLAN

FOR THE UNESCO WORLD HERITAGE SITE OF THE OLD CITY OF

DUBROVNIK



United Nations
Educational, Scientific and
Cultural Organization



Old City of Dubrovnik
inscribed on the World
Heritage List in 1979

MANAGEMENT PLAN 2021–2026

DUBROVNIK

FOR THE UNESCO WORLD HERITAGE SITE OF THE OLD CITY OF

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Dubrovnik, October 2021

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FOREWORD

Foreword to the Management Plan for the World Heritage Site of the Old City of Dubrovnik

We are proud of our rich and diverse cultural and natural heritage, particularly that part of our heritage whose values have been recognized not only within our national borders but beyond, through UNESCO's Convention for the Protection of the Cultural and Natural World Heritage. While geographically small, Croatia is one of the richest countries in the world in terms of the number of registered monuments of tangible and intangible cultural heritage. Ten urban and architectural masterpieces and unique natural phenomena of exquisite beauty, seventeen cultural phenomena on the list of intangible world heritage, and fourteen cultural and natural goods on the Tentative List are truly impressive numbers which make us not only proud, but also responsible heirs of those values.

The unique integrity of the urban-architectural complex of Dubrovnik, as a civilizational achievement in the art of architecture and in urban culture, has made Dubrovnik among the first locations, not only in Croatia but in the world, to be inscribed on the UNESCO World Heritage List, in 1979. The value of Dubrovnik's architectural, as well as literary, music, theatre, and visual arts is unique to Croatia's cultural heritage, and the addition of the Festivity of St. Blaise to the UNESCO List of Intangible Cultural Heritage in 2009 underscores the importance of the spiritual culture which the citizens of Dubrovnik have nurtured and preserved throughout the centuries.

We are proud of our unique artistic, cultural, and spiritual heritage and wish to be responsible heirs and careful custodians of this treasure. Precisely for this reason, I am pleased by the adoption of the Management Plan for the World Heritage Site of the Old City of Dubrovnik, which is the first plan in Croatia to be adopted for a location inscribed on the world heritage list before the development of a plan became a requirement for inscription.

The plan was developed in line with the Act on the Protection and Preservation of Cultural Property and has entirely been aligned with the methodologies UNESCO recommends. Although the document's development took time, the importance of the adopted plan is that much more important, as it included the participation of citizens and numerous experts. The implementation of the Management Plan will contribute to the raising of the awareness and knowledge

of all the world regarding Dubrovnik as a unique cultural heritage. This is because, alongside the implementation of the plan, its educational role is also important and will serve as a yardstick of the plan's success as well as an example to other world heritage sites in Croatia which will be faced with the same task.

As an active participant in the preparation, development, and adoption of this plan, the Ministry of Culture and Media has from the start involved in the project its best experts and will continue to carefully follow and assist in the plan's successful implementation. I thank the Administration Board of the City of Dubrovnik, all national and international experts, and all citizens who were involved in the plan's development with their various contributions.

In an age of modern-day dangers and global challenges such as the pandemic, an age in which we also faced the consequences of the devastating earthquakes which hit Croatia, Dubrovnik can again serve as an example with its history of diplomacy and wise decisions in which the interest of the public prevails, but also with the restoration, preservation, and revitalization of its monuments and, above all, its enduring spirit and vitality.

MINISTER OF CULTURE AND MEDIA
Nina Obuljen Koržinek

The publishing of the Management Plan for the UNESCO World Heritage Site of the Old City of Dubrovnik comes after its adoption by the City Council of Dubrovnik on 29 March 2021 and less than a year after the concept of a management plan for world heritage sites was introduced in the Act on the Protection and Preservation of Cultural Property.

The City Council of Dubrovnik entrusted the Institute for the Restoration of Dubrovnik with the coordination of the development of the Management Plan as early as December of 2014. The entire team at the Institute has welcomed the assignment, taking it as an acknowledgement of our decades-long continuous care for the cultural and historic heritage of the Dubrovnik region. Considering the significance of the document within the context of preserving and improving the universal and timeless values of the UNESCO-protected world heritage, we are at the same time also honoured to

have been entrusted with the obligation and responsibility the assignment entails.

The public administration and local community greatly contributed to the development of the plan, and the plan's greatest value lies precisely in this active participation of all its stakeholders. The contribution of numerous citizens, associations, and institutions who formed the vision, objectives, and action plan during the extensive participation process is invaluable.

The expert advisory role of the Monitoring Board in the development of the Management Plan was particularly useful and important. The members of the Monitoring Board selflessly contributed with their knowledge, time, and effort, all with the aim of helping make the plan identify as well as possible the challenges this city faces. Their efforts resulted in well-thought-out activities in order to meet the objectives of responsible management.

The management plan is required to ensure that the restoration and management of the heritage, its buffer zone, and setting are carried out properly and appropriately with the application of the principles of the historic urban landscape. Six priorities have been identified with that objective: Site management and capacity building, Protection, preservation and maintenance, Sustainable development, Tourism management, Traffic management, and Risk management. The diversity of the thematic areas that impact the historic urban landscape of Dubrovnik facilitate the understanding of the complexity of the action plan, the implementation of which is yet to come.

The adoption of the Management Plan offers the challenge of examining knowledge and formulating activities and measures which will, we hope, bring greater urban discipline and self-discipline that will spur the beginning of the process of the gradual rehabilitation of this city. The Management Plan is expected to be a key document and guide the continuous preservation of the living city and its Outstanding Universal Values as its most significant attributes due to which the city, aside from being our own cultural heritage, is also that of the world. As such it was inscribed on UNESCO World Cultural Heritage List as far back as 1979.

DIRECTOR OF THE INSTITUTE FOR THE RESTORATION OF DUBROVNIK
Mihaela Skurić

What Dubrovnik possess is hard to find—I believe, in fact, impossible—anywhere else. The city bestows upon those who were born here and have become one with it a deep sense of belonging. Travellers who visit and crack open its doors discover the enchanting beauty of the most magnificent works of art and a harmonious balance akin to that of the most carefully crafted verses. They, too, are left breathless at the unparalleled marvels they discover.

Life in a city with a centuries-long history and numerous achievements brings with it privileges and benefits which one must be aware of. Life in Dubrovnik also obliges one to be dedicated. That is why it was of crucial importance to adopt a strategic framework which would ensure guidelines for the adequate protection of the cultural and historic heritage of the ancient city and the improvement of the quality of life within it as well as to serve as a guidepost for the valorisation of the cultural heritage and its surroundings as our most valuable resources based on the tenets of overall sustainability and responsible management.

The Management Plan for the historic complex of Dubrovnik is the first such foundation to be developed in the Republic of Croatia, a zero-category strategic document which is the result of not only the extensive participation of an array of stakeholders, particularly the expert public, citizens, and the civil sector, but which is also the result of undivided political goodwill. It is precisely the determination of the management structures that will be crucial to the successful implementation of the provisions and objectives of the plan. The Management Plan must come to life and be the foundation upon which the city will continue to develop. Unconditional political goodwill and the art of good management will be of crucial importance in the process.

GRADONAČELNIK DUBROVNIKA
Mato Franković

DECISION ON THE ADOPTION OF THE MANAGEMENT PLAN FOR THE WORLD HERITAGE SITE OF THE OLD CITY OF DUBROVNIK

OFFICIAL GAZETTE OF DUBROVNIK
NUMBER 6 / LVIII
DUBROVNIK, 01 APRIL 2021

CITY COUNCIL

Based on Article 35 of the Act on Local and Regional Self-Government (Official Gazette of Dubrovnik no. 33/01, 60/01, 129/05, 109/07, 125/08, 36/09, 150/11, 144/12, 19/13, 137/15-consolidated text, 123/17, 98/19 and 144/20), Article 39 of the Statute of the City of Dubrovnik (Official Gazette of Dubrovnik, no. 2/21), Article 76a of the Act on the Protection and Preservation of Cultural Property (Official Gazette no. 69/99, 151/03, 157/03, 100/04, 87/09, 88/10, 61/11, 25/12, 136/12, 157/13, 152/14, 98/15, 44/17, 90/18, 32/20, 62/20), Conclusion of the City Council CATEGORY: 612-01/14-01/211, REG.NO.: 2117/01-09-14-4, dated 5 December 2014, Conclusion of the Management Plan Development Monitoring Board dated 18 March 2021, as well as the approval of the Ministry of Culture and Media of 19 March 2021, the City Council of the City of Dubrovnik issued at its 38th session, held 29 March 2021, the following:

DECISION

on the adoption of the Management Plan for the UNESCO World Heritage Site of the Old City of Dubrovnik.

ARTICLE 1

The Management Plan for the UNESCO World Heritage Site of the Old City of Dubrovnik is adopted.

ARTICLE 2

The Management Plan for the UNESCO World Heritage Site of the Old City of Dubrovnik forms an integral part of this Decision.

The Management Plan for the UNESCO World Heritage Site of the Old City of Dubrovnik shall be published in the Official Gazette of Dubrovnik and on the internet pages of the City of Dubrovnik (www.dubrovnik.hr).

ARTICLE 3

This decision enters into force on the eighth day following its publication in the Official Gazette of the City of Dubrovnik.

JUSTIFICATION

Based on the provisions of Article 76a of the Act on the Protection and Preservation of Cultural Property (Official Gazette no. 69/99, 151/03, 157/03, 100/04, 87/09, 88/10, 61/11, 25/12, 136/12, 157/13, 152/14, 98/15, 44/17, 90/18, 32/20, 62/20, further: the Act), the Management Plan is passed with the objective of managing cultural property, and it contains an analysis of the current situation, management objectives, actions for achieving the objectives, and indicators for measuring the implementation of its objectives and actions.

The process of developing the Management Plan for the UNESCO World Heritage Site of the Old City of Dubrovnik (further: the Plan) began in 2014 with a Decision of the City Council of Dubrovnik dated 5 December 2014 on initiating the process of developing a Management Plan for the protected heritage complex of the

Old City of Dubrovnik. The same decision put the Institute for the Restoration of Dubrovnik in charge of coordinating activities within the scope of the development of the Plan. At the session of the Management Plan Development Monitoring Board held on 18 January 2021, the name of the document was changed and defined as: the Management Plan for the UNESCO World Heritage Site of the Old City of Dubrovnik. The change was adopted due to the fact that the new name is a translation of the name used in UNESCO documents, as well as because, in territorial terms, the Plan refers to the area under UNESCO protection which has the status of a world heritage site and is registered under the name “the Old City of Dubrovnik”. The phrase “the Old City of Dubrovnik” is used as a term referring to the world heritage site in the documents of the Ministry of Culture, which is in line with the recent Conservationist base for the buffer zone of the world heritage site of the Old City of Dubrovnik.

The Management Plan arises from the requirements of the UNESCO Operational Guidelines and is the first such document intended for the overall historic urban landscape of Dubrovnik which makes up the world heritage—the living urban historic city core and the island of Lokrum, the adjoining maritime zone, and the buffer zone of the world heritage site together with its setting.

The purpose of the Management Plan for the world heritage site and its setting is to ensure a long-term management system which will enable the preservation of the authenticity and integrity of the world heritage site as well as all its elements of Outstanding Universal Value while at the same time focusing on management objectives regarding the quality of life of citizens and the active, multi-functional purpose of the city centre.

The development of the Management Plan stems from the need to establish a system for the continuous management of the site that will ensure the solving of all challenges defined by the Action Plan according to their priority level, all with the objective of preserving the Outstanding Universal Value of the World Heritage Site.

A panel discussion on the Draft Proposal of the Management Plan was held from 04 February to 06 March 2021, according to the provisions of the Planning and Development Act. Two public presentations were held as part of the panel discussion: the first on 08 February 2021 both in the Main City Hall of Dubrovnik and online, and the second one exclusively online, on 01 March 2021. After the panel discussion was completed, a Report on the Panel Discussion was developed and published on the webpages of the Institute for the Restoration of Dubrovnik and the Republic of Croatia’s Ministry of Culture and media on 11 March 2021.

The Proposal of the Management Plan was developed in line with the Report on the Panel Discussion.

The Proposal of the Management Plan was submitted to the Management Plan Development Monitoring Board for review, and the Board approved the Draft Proposal of the Plan with a Decision issued at their session held on 18 March 2021, recommending it to the City Council for adoption.

In accordance with the provisions of Article 76 of the Act, the Institute for the Restoration of Dubrovnik submitted a request for the prior approval of the Draft Proposal of the Plan by the Ministry of Culture and Media, and the Ministry submitted its approval on 19 March 2021.

Following the above stated, it has been decided as in the dictum herein.

CATEGORY: 612-01/21-02/01
REG.NO.: 2117/01-09-21-14
Dubrovnik, 29 March 2021

President of the City Council:
Marko Potrebica

SUMMARY

Dubrovnik, a city on the southern Croatian coastline of the Adriatic Sea, has for centuries preserved an urban ensemble character of exceptional heritage value. The Old City of Dubrovnik, as a World Heritage Site (WHS), is an example of a well-preserved, planned medieval city, a unique urban area with a historic core surrounded by city walls on the coast and slopes of Mount Srd. The WHS encompasses the historic core, smaller parts of the Ploče and Pile suburbs and Lokrum Island. Nearby Lokrum is protected as a special reserve of forest vegetation with historic monastic and fortification ensembles and is part of the Natura 2020 ecological network. Together with its setting, the WHS in Dubrovnik forms an integral whole, where different components contribute to the overall significance of the site. The WHS is a living part of the entire urbanised area, and the city is a symbol of Croatian culture, traditions, and outstanding achievements in the fields of urbanism, architecture, fine arts and literature. The nurturing provided by its citizens helped preserve and pass on to this day local customs from the Middle Ages and the Renaissance. Located in the southern part of Dalmatia, Dubrovnik is the administrative seat of Dubrovnik-Neretva County and one of the most important historic and tourist centres of Croatia.

Nonetheless, **UNESCO** and **ICOMOS** reports point to problems caused by the excessive development of tourism and tourism-related services, an increased cost of living, and gentrification, resulting in a decreased quality of life for the local population and Dubrovnik's WHS status being put in jeopardy. Problems have also been identified in the approach to and scope of construction in the urbanised area, the shrinking of public spaces and green areas and the congestion of traffic infrastructure. As a consequence, the adjustment of development priorities and integration of sustainable principles of development are crucial topics covered by the Management Plan.

As in many western European cities, the management system is characterised by complex relations between different stakeholders. When it comes to urban areas, as is the case with the WHS in Dubrovnik, property ownership in parts of the site and their purpose are crucial elements. There are several property owners in the area who, in addition to public bodies, have significant control over the way the site is being used in

terms of its purpose, thus directly impacting public aspects of the site. It is therefore important to involve the owners in the decision-making processes concerning the purpose and functional imprint of their properties on the overall condition and development of the WHS. Involving the local community and the civil sector in the WHS management provides an opportunity to exchange information and knowledge and develop collective responsibility, as well as to obtain the community's support for actions aimed at protecting and improving the WHS's value. The walled city needs to remain an urban centre from which the city's identity stems and gives rise to an appreciation and understanding of it, among the entire local community, as part of their municipal heritage and identity. Only then will the community be able to preserve the heritage and pass it on to new generations. For this reason, the Management Plan's primary focus is on the preservation of the living city and development of an adequate management structure.

The Management Plan for the Old City of Dubrovnik UNESCO WHS is the first WHS management plan in Dubrovnik (and the first of its kind in the Republic of Croatia). It represents both a basis and guidance for future processes related to the creation of next generation of plans, including the very way sites are managed. The need to develop the Management Plan is a key prerequisite for the adequate management of all WHS and in the case of Dubrovnik, it has been based on the recommendations of the World Heritage Committee and the UNESCO/ICOMOS Reactive Monitoring Mission in 2015. The development of a Carrying Capacity Plan for the WHS was foreseen and it is included in the Management Plan implementation process. In line with the recommendations, the buffer zone has been expanded to provide effective protection of the qualities that have justified its Outstanding Universal Value (**OUV**) and inscription on the UNESCO List. As a consequence, the need for an efficient system of coordinated management of the WHS has been identified. As part of the Management Plan and preparation of the management system, a comprehensive participation process has been implemented. The purpose of this process was to identify and determine problematic issues and potential solutions together with the local community and the numerous stakeholders. This plan relies heavily on the results of the participation process.



A SITE MANAGEMENT AND CAPACITY BUILDING

OBJECTIVE 1: ESTABLISH SOUND MANAGEMENT STRUCTURE AND CONTINUOUS CAPACITY BUILDING



B PROTECTION, PRESERVATION AND MAINTENANCE

OBJECTIVE 2: HISTORIC URBAN LANDSCAPE MANAGEMENT

OBJECTIVE 3: ENSURE THAT PROTECTION AND MAINTENANCE OF THE SITE ARE CONSISTENT WITH THE OUV PRINCIPLES

OBJECTIVE 4: ENSURE EFFICIENT AND TIMELY SITE CONTROL

OBJECTIVE 5: ENHANCED AWARENESS RAISING THROUGH EFFICIENT EDUCATION ON WHS PROTECTION AND MAINTENANCE

OBJECTIVE 6: VALORISATION AND APPROPRIATE ENVIRONMENTAL PROTECTION



C SUSTAINABLE DEVELOPMENT

OBJECTIVE 7: DUBROVNIK AS A *LIVING* CITY

OBJECTIVE 8: PRESERVATION OF PUBLIC GOOD AND THE PROTECTION OF PUBLIC INTEREST AND PUBLIC SPACES

OBJECTIVE 9: IMPLEMENTING AND MONITORING ENVIRONMENTAL PROTECTION ASPECTS



D TOURISM MANAGEMENT

OBJECTIVE 10: DEVELOPMENT OF INFORMED TOURISM THAT CREATES ADDITIONAL ECONOMIC, ECOLOGICAL AND HERITAGE VALUE FOR THE LOCAL COMMUNITY WITH AN EMPHASIS ON DIVERSIFICATION AND QUALITY IMPROVEMENT



E TRAFFIC MANAGEMENT

OBJECTIVE 11: TRAFFIC SYSTEM DEVELOPMENT AND STRENGTHENING SUSTAINABLE MOBILITY



F RISK MANAGEMENT

OBJECTIVE 12: MITIGATE POTENTIAL RISKS AND DEVELOP A SUCCESSFUL RESPONSE SYSTEM IN CASE OF RISK ACTIVATION

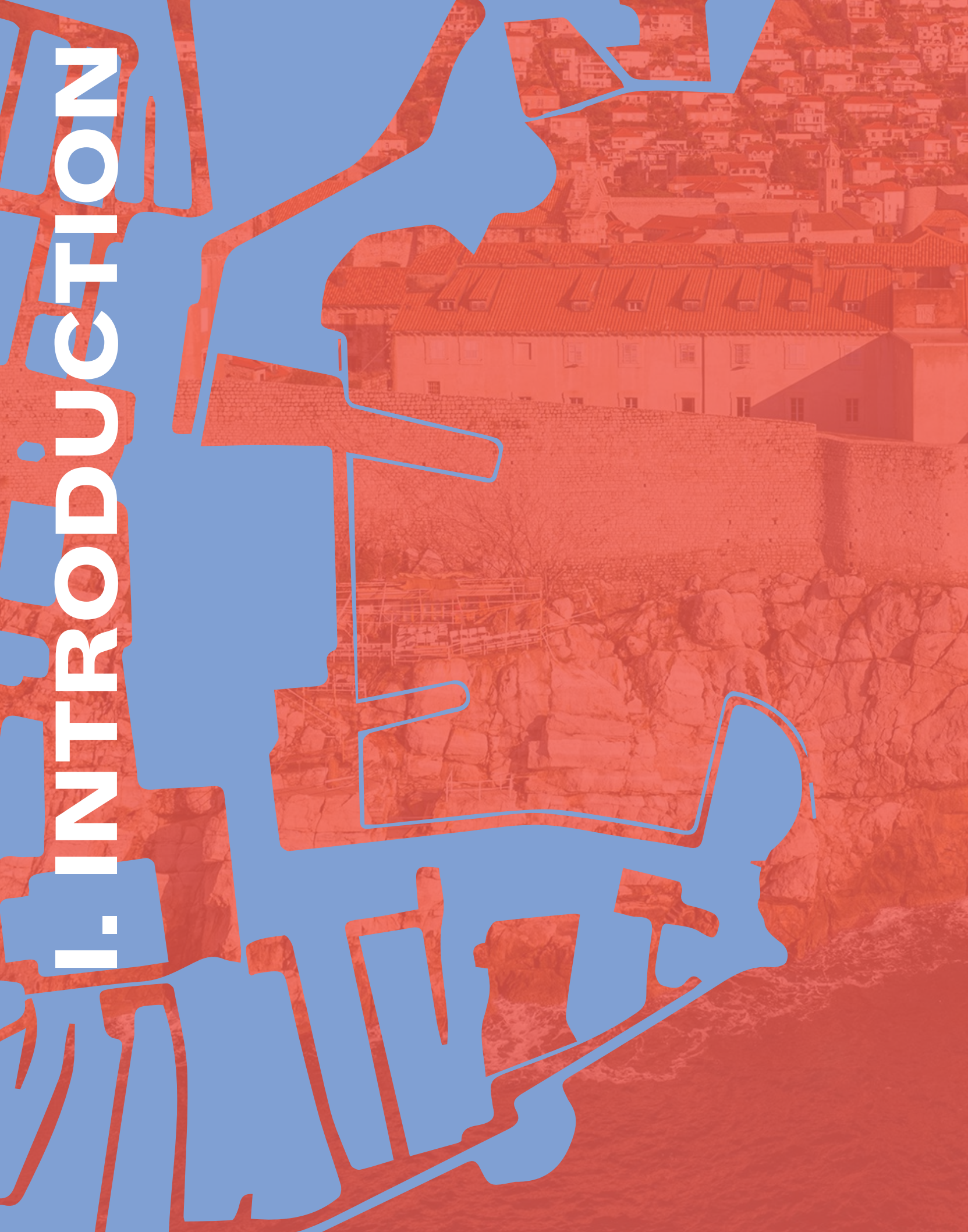
An Action Plan for the implementation of strategic actions was developed along with monitoring indicators for measuring the implementation of objectives and actions.

VISION

The City of Dubrovnik protects and manages the WHS respecting social, environmental and economic sustainability requirements. Management is carried out with the aim of enhancing and protecting the heritage, people and environment in agreement with the local community and other stakeholders, taking into account their needs as well as objectives related to sustainable cultural, environmental, demographic, economic, tourism, infrastructure and plan development.

- 1.** Protect, preserve, enhance and plan the use of the site and its setting.
- 2.** Preserve the living city as well as the quality and way of life of the local population.
- 3.** Develop adequate infrastructure systems and networks.
- 4.** Create added social, economic, environmental and heritage benefits for the local community through informed tourism, with special emphasis on diversifying and improving the quality of tourism services.
- 5.** Organise a sustainable traffic system and increase traffic flow.
- 6.** Ensure a healthy and safe environment in line with modern tendencies related to the prevention of harmful climate change.
- 7.** Strengthen the capacities of all involved stakeholders and enhance the WHS management system through a strong foundation of cooperation among stakeholders.
- 8.** Continue caring for the state of the buildings through organised and strictly supervised interventions as well as through strengthening construction structures for earthquake resistance and risk reduction.

THE MAIN STRANDS OF SITE MANAGEMENT INCLUDE THE NEED TO



I.1. Reasons and needs behind Management Plan development

This Management Plan is developed in response to the requirements of the Operational Guidelines (Articles 108 and 109)¹, but also due to the need to develop synergies and enhance the current management system, as confirmed through the participation process. The Management Plan for the UNESCO WHS of the Old City of Dubrovnik represents the first such document aimed at the historic urban landscape (HUL) of Dubrovnik as a whole. This area encompasses the WHS, including the historic city core, Lokrum Island and the adjoining maritime zone as well as the WHS buffer zone together with its setting.

The purpose of the Management Plan is to ensure a long-term management system that will enable the preservation of the quality, authenticity, and integrity of the World Heritage Property with the elements that confirm its OUV. At the same time, the property needs to maintain the citizens' quality of life of and the active multifunctional purpose of the city centre. The basic principle of the Management Plan is to harmonise the institutional, social, and economic processes that affect the values of the WHS. The consultation process and the strengthening of consensus during the development process are a basis for the long-term and successful management of the WHS and its setting.

The Management Plan provides general and specific guidelines for preservation management and refers to internationally accepted standards and tools for heritage management. The Management Plan aims to show the correlation between values associated with the tangible and intangible heritage values and the sustainable development needs of the city of Dubrovnik along with the active participation of all stakeholders.



VIEW OF DUBROVNIK – UNESCO WORLD HERITAGE SITE
Source: Institute for the Restoration of Dubrovnik

¹ “Each nominated property should have an appropriate management plan or other documented management system which should specify how the outstanding universal value of a property should be preserved, preferably through participatory means. The purpose of a management system is to ensure the effective protection of the nominated property for present and future generations.” (UNESCO Operational Guidelines)

Dubrovnik is today, like many other WHS, exposed to different development challenges: tourism pressure, development projects, and socioeconomic and environmental changes. One of the key tourism-related problems today is the depopulation of the historic core.

Tourism is considered Dubrovnik's most important economic activity, one that the city almost entirely depends on. Even though tourism predominantly relies on the city's heritage, the question that arises is how to reconcile such tourism with heritage protection through the creation of new sociocultural motifs. The implementation of the Management Plan also provides an opportunity to determine the impact of climate change and natural and anthropogenic risks (earthquakes, fires, pandemics, etc.) and propose adequate monitoring and mitigation systems. At the same time, tourism growth has a significant impact on the predominant way of life in the historic core, the attitude residents have towards tourists and visitors and the predominant way space is used. It also impacts the effectiveness and availability of vital municipal infrastructure and traffic systems.

The observed area consisting of the narrow corridor between Mount Srđ and the sea (the city core and other historic parts of the city excluded) is where the majority of residential and business properties are located. This area also has important public amenities and city functions, including the Gruž Bay with its maritime port, all access and transit road infrastructure, and a key part of the city's traffic network. The reception and transfer of thousands of visitors from large cruise ships to the city core requires traffic and infrastructure solutions that can have a significant spatial impact. Over the past decade these processes have actually been identified as a serious challenge for the city, not only by conservationists and UNESCO, but also by many citizens, civil society organisations and local authorities. The latter have already started implementing different intervention measures. The pressure of new construction in the area surrounding the WHS as well as interventions on historic buildings in the area of the historic city's suburbs (often for the creation of new accommodation units) represent a challenge to the preservation of the integrity of the World Heritage property.

For the preparation and implementation of the Management Plan, it is necessary to establish a continuous management system that will steer the solution-seeking processes for the various challenges recognized in the implementation priorities. These are defined by the Action Plan, with the aim of preserving the OUV of the WHS. The COVID-19 pandemic outbreak affected the development of the Management Plan by limiting the participatory activities as well as

the implementation of the analyses identified before the pandemic outbreak. The economic impact of the pandemic on the city of Dubrovnik is significant, especially in the sector of tourism, but its real and measurable results are still unavailable. It is currently impossible to determine future developments in this regard, meaning that the impact of this risk needs to be considered during the implementation of the first actions of the Management Plan. Action 12.1. (Develop a Risk Preparedness and Management Plan for the WHS) pays particular attention to this issue. This Action will be developed as part of the implementation of the Management Plan in order to determine in greater depth both the challenges and solutions to natural as well as anthropogenic risks.

I.2. Management Plan scope

The Management Plan encompasses the entire WHS area, its buffer zone and the adjoining setting.

The WHS consists of the historic core with the City Walls, parts of the Pile district with the Lovrijenac Fortress, the Lazaretto complex and the Revelin Fortress, Lokrum Island and the adjoining maritime zone. The **buffer zone** primarily encompasses the Historic Urban Landscape (HUL) of Dubrovnik, including the historic districts of Kono, Boninovo and Gruž (west of the city core), Ploče and Sveti Jakov in the east, the peak zone and the southern slope of Mount Srđ. The **wider setting** includes the landscape of the Rijeka Dubrovačka inlet, dotted with summer residences, the fortified landscape of the Srđ plateau, the tourist landscape of Lapad and Babin Kuk, the preserved natural rocky coast and the wooded hilltops of Montovljerna, Velika Petka and Mala Petka.

The buffer zone area and its boundaries are primarily determined on the basis of historic, visual, functional, aesthetic and other relationships between the World Heritage area and its broader setting. This category is the basis for the assessment of the vulnerability and endangerment of the site. Particular attention is paid to the construction of residential, tourist and business capacities and traffic and energy infrastructure as well as their impact on the authenticity and integrity of the Old City of Dubrovnik, recognised as a **WHS**. Encompassing the southwestern slopes of Mount Srđ, from the administrative city limits

on the east (including the Belvedere Hotel) to Rijeka Dubrovačka, as well as 50 metres inward from the ridge of the hill, the site controls the entire image of the city, both from the mainland and from the sea, in line with the 2015 UNESCO/ICOMOS Reactive Monitoring Mission Report. The establishment of this buffer zone enables the prediction and management of potential spatial changes that might negatively impact the physical, spiritual and visual integrity of the entire WHS Historic Urban Landscape (HUL).

I.3. Management Plan preparation

The development of the Management Plan was preceded by years of preparatory activities and initial research coordinated by the Management Plan Development Monitoring Board and the Institute for the Restoration of Dubrovnik (*Zavod za obnovu Dubrovnika — ZOD*). In the period from 2016 to 2019, sociodemographic surveys and comparisons with previous surveys were conducted, especially those concerning the impact of tourism and traffic on life in the city. An internal census was undertaken by the residents of the Grad City District, based on a methodical template created by scientists from the Department for Sociology of the University of Zagreb's School of Humanities and Social Sciences. Prior to the development of the Management Plan, numerous activities increasing the expectations of the local population were also implemented with the involvement of both the local population and the civil sector. Participation and communication processes soon became one of the most important ways for citizens to express the need to solve problems related to all aspects of life in the WHS area. The data and information obtained were characterised by a high level of detail and were taken by the Management Plan Development Monitoring Board as a reference point for the **Programme Development of the Management Plan of the City of Dubrovnik Project Task**. The aforementioned programme defined the main problems and determined the initial vision as well as the objectives and priorities. The main objective of the Management Plan development is to identify all the material and immaterial qualities and values of the city, including the different aspects of recognised heritage resources as well

as the ways of life (economic, defensive, humanistic, etc.) and to encourage the recognition of heritage as a whole as a foundation for future development based on spatial integrity. One of the objectives is therefore to strike a balance between the protection and restoration of material heritage on the one hand and the economic development, functionality and liveliness of the city on the other. The following initial objectives and priorities were identified based on participation activities:

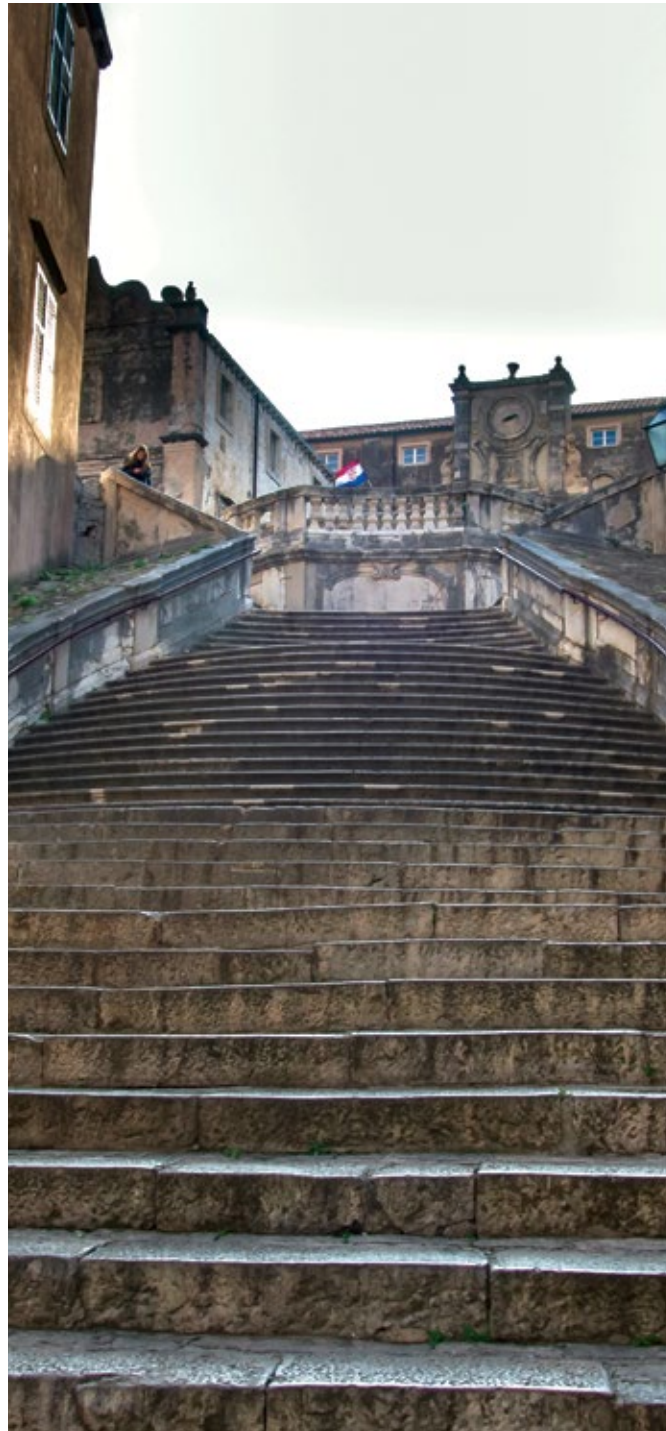
1. Preservation and improvement of the condition of the protected urban ensemble
2. Preservation and affirmation of the city's cultural identity
3. Life in the city
4. Sustainable tourism development
5. Safety and traffic connections
6. Risk management
7. The modern Dubrovnik Statute (protecting public interest, ensuring the transparent management and involvement of civil society, citizens and residents)

The aforementioned activities already started being implemented during the development of the Management Plan, and were initiated with the capacity building processes that will lead to the realisation of objectives. Numerous workshops, discussions, meetings, round table discussions and interviews with experts were organised to show the difference between the plan and the planning process. The first phase of the capacity building and awareness raising process focused on understanding the Management Plan as a document and what can be achieved with this document as an instrument for sustainable, socially responsible, and balanced development. An important item in the document preparation process was the coordination and synthesis of expectations the residents and stakeholders had about what the plan is and what the plan should become.

The development of the Management Plan began with an analysis of the current situation by experts, in cooperation with the public authorities of the City of Dubrovnik, coordinated by the Management Plan Development Monitoring Board and ZOD. The process was evaluated in the first participation round, which identified the needs and potentials related to further management. The first draft of strategic actions was prepared as a result. During the second participation and communication round, the draft of strategic actions and the Action Plan were evaluated by all stakeholders and citizens involved. The participation process is presented in more detail in Appendix V.3. The second participation round included workshops, a film screening, an exhibition and interviews with an international expert and local stakeholders, all with the aim of integrating citizens into the decision-making process better and preparing citizens and stakeholders for the implementation phase of cooperation. The process of drafting the document ends with a public discussion and the adoption of the document by the City Council of the City of Dubrovnik. The development process is supervised by the Management Plan Development Monitoring Board.

The Management Plan is developed for a five-year period (2021–2026). It meets the UNESCO standards defined by the Operational Guidelines for the Implementation of the *World Heritage Convention*, and it is also based on the 2011 UNESCO Recommendations on the *Historic Urban Landscape*.

The Management Plan will be revised every five years. The heritage description and its management system will not necessarily change from one period to another, but the Action Plan will be revised in line with new priorities and requirements after five years of management.



JESUIT STAIRS
Source: Pixabay, mzphotos

II. WORLD HERITAGE SITE AND ITS SETTING

II.1. WORLD HERITAGE SITE AND BUFFER ZONE DESCRIPTION

II.1.1. Dubrovnik as a World Heritage Site

The Convention Concerning the Protection of the World Cultural and Natural Heritage was adopted by the General Conference of UNESCO in 1972. The Convention recognises that “parts of the cultural or natural heritage are of outstanding interest and therefore need to be preserved as part of the world heritage of mankind as a whole”. For this purpose, the Convention established the World Heritage List.

The historic core of Dubrovnik was among the first to be inscribed on the World Heritage List, in 1979, under the name Old City of Dubrovnik. The inscription was based on documentation created by the Institute of Art History (IPU) in Zagreb justified under criteria (i), (iii), and (iv). At the time of inscription, the WHS mainly comprised the fortified historic core of the Old City.

The Old City of Dubrovnik is justified under CRITERION (I) as “a masterpiece of human creative genius: The historical urban and architectural complex of Dubrovnik has retained to date the essential elements of the medieval structure of a fortified City: the ramparts, the lay-out of the streets and squares, impressive public edifices and a great many private dwellings. Regardless of any considerations on the particular artistic value of the edifices, here we find primarily a complex of outstanding value which demonstrates the will to create, develop and embellish an urban landscape as if it were a work of art.” It also meets the CRITERION (III) bearing “a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared,” as well as CRITERION (IV) representing “an outstanding example of a type of architectural ensemble which

illustrates significant stages in human history.” Moreover, Dubrovnik meets the requirements of authenticity and integrity, including all built and spatial components inside and outside the City Walls that contribute to the Outstanding Universal Value of the Old City of Dubrovnik within its Historic Urban Landscape setting. The scope of the Management Plan is to provide the framework required for the conservation of Dubrovnik’s outstanding universal values for the generations to come.

The very same year Dubrovnik was inscribed on the UNESCO List (1979), an earthquake of 7° (MCS) hit Dubrovnik, causing severe damage to its architectural heritage. During the Independence War between 1991 and 1992, further damage was suffered by the Old City and it was inscribed on the List of World Heritage in Danger from 1991 to 1998. In 1994, at the suggestion of an advisory committee that included UNESCO experts, the site was expanded to include areas outside the City Walls: Pile suburb, Lovrijenac Fortress, Lazaretto, the Kaše breakwater and Lokrum. As a result, the new heritage area grew to include 96.7 ha, and a smaller, 53.7 ha buffer zone was established.

During the second cycle of periodic reporting, in 2015, the need to expand the buffer zone was identified in order to preserve the spatial and visual integrity of the WHS, as well as to protect it from growing pressures of modern development. The need to expand the buffer zone was confirmed by the experts of the joint UNESCO/ICOMOS Reactive Monitoring Mission in October of 2015.

The expanded the buffer zone was adopted in 2018 and it covers an area of 1188.6 ha, including the surrounding urban and landscape areas: the historic districts of Gruž, Boninovo and Kono (west of the historic core), Ploče and Sveti Jakov to the east, the peak zone and the southern slope of Mount Srd.

The Spatial Plan of the Dubrovnik-Neretva County established the status of the **WHS setting** in 2019, thereby defining a wider spatial framework for institutional control



VIEW OF THE OLDEST CORE OF DUBROVNIK ON THE CLIFF ABOVE THE SEA AND THE MEDIEVAL BLOCK STRUCTURE
Source: Institute of Art History, Paolo Mofardin

of interventions in the sensitive surrounding of the WHS. The setting corresponds to the HUL of Dubrovnik and presents an area in which changes or development could impact the OUV of the WHS (development projects, environmental changes, etc.). It encompasses the area of Rijeka Dubrovačka, the area of Mount Srd with its slopes, and the maritime area with its islands.

A more detailed description of the characteristics of these categories is presented in the chapter **Urban, architectural and spatial characteristics of the World Heritage Site and its buffer zone.**



TERRITORIAL COVERAGE OF THE WORLD HERITAGE SITE, BUFFER ZONE, AND SETTING
Source: UNESCO, Dubrovnik-Neretva County Spatial Plan

KEY

- WORLD HERITAGE SITE
- BUFFER ZONE
- SETTING



TERRITORIAL COVERAGE OF THE WORLD HERITAGE SITE, BUFFER ZONE, AND SETTING
Source: UNESCO

KEY

- WORLD HERITAGE SITE
- BUFFER ZONE

II.1.2. History of Dubrovnik: A brief outline

Dubrovnik, a medieval planned city on the southern part of the Croatian coast, has for centuries preserved its urban ensemble character of exceptional heritage value, particularly in the areas delimited by the City Walls. Its history was conditioned by its geographical and geopolitical position on the southern coast of the eastern Adriatic, at the junction of the Mediterranean area and the Balkan hinterland, characterised by a turbulent history.

The earliest traces of human activity in the area of Dubrovnik are recorded from as early as the Prehistoric Period, and the first evidence of continued habitation in the historic core, specifically, in the modern-day city port area, dates back to the Hellenistic Age. Since Late Antiquity the rise of Dubrovnik was related to the decline in the economic and political power of the nearby Roman colony of Epidaurus (modern-day Cavtat). The relocation of the seat of the bishop of Epidaurus to Ragusa stipulated the gradual construction of an ecclesiastical complex located on the site of today's

Baroque Cathedral and Bunić Square. Dubrovnik's further development under centuries of Byzantine protection was rooted in a Roman and Croatian-Slavic ethnic background as well as Christian tradition. The City owed its economic rise during the Middle Ages to shipping, intermediary trade and diplomatic skills as well as its military power.

Towards the end of the 10th century, Pope Gregory V elevated the Diocese of Dubrovnik to the rank of archdiocese and metropolitan see. Tradition has it that it was in one of many conflicts with the Venetians – which the annals of Dubrovnik date back to the year 972 – that the city got its patron saint, Saint Blaise (other research reveals that Saint Blaise became the patron saint between 1153 and 1158). During the 12th century, Dubrovnik concluded a series of trade and political agreements with other cities, Mediterranean ports, and the rulers of neighbouring areas, which ensured free trade and navigation in exchange for certain concessions.

Like other medieval cities, Dubrovnik systematically developed independent administrative and judicial institutions and expanded its autonomy. In 1272, the Dubrovnik Statute was adopted, codifying legal norms concerning citizens and the city. Regulations resulting from the developed administrative system are visible in the morphological structure of the city. They are authentic urban regulations that not only define construction interventions, but also public space.



VIEW OF THE SOUTHERN PART OF THE CITY ON A CLIFF AND OF THE MEDIEVAL WALLS
Source: Institute of Art History, Paolo Mofardin



ST. BLAISE WITH A SCALED MODEL OF THE CITY, MID-15TH CENTURY, CHURCH OF ST. BLAISE
Source: Institute of Art History, Paolo Mofardin

During the second half of the 13th and the beginning of the 14th century, Dubrovnik appointed its first consuls who took care of trade organisation in the trading colonies on the Balkan Peninsula. Due to the development of the credit and monetary markets, Dubrovnik began minting its own money in the Sponza Palace in 1337. In that period, the city owned a large granary (Fontik) and built the Arsenal building in the port. Further development of the city was somewhat slowed down by the bubonic plague pandemic in 1348, when almost half of the population perished. After being defeated in the conflict with the Croatian-Hungarian King Louis I, Venice was forced to give up the entire eastern Adriatic coast under the provisions of the Treaty of Zadar (1358). That is when Dubrovnik was permanently freed from Venetian supremacy, becoming what was then the only free Croatian coastal city.

The year 1358 was a turning point in Dubrovnik's history. By signing the Višegrad Treaty with King Louis I, Dubrovnik gained the protection of the Hungarian-Croatian crown and became part of the Kingdom of Dalmatia and Croatia. The strongest economic, political, and cultural rise of the Republic followed in the early 15th century, at the time of the Ottoman invasion. At the 1433 Council of Basel, citizens of Dubrovnik were granted the **Privilegium navigationis ad partes Orientis**, giving them the exclusive right to trade with countries under Ottoman rule.

The new governmental and legal framework gave Dubrovnik full political independence, with all the internal governmental elements of a sovereign state, which the city retained up until Napoleon's campaign in the early 19th century. Gradually acquiring all attributes of statehood



UNKNOWN ARTIST, CITYSCAPE OF DUBROVNIK, 17TH CENTURY, OIL ON CANVAS, 126 X 151 CM
Source: Dubrovnik Museums

(territory stretching 50 km south and north of Dubrovnik, citizenship, money, coat of arms, seal, flag, independent administration, judiciary and legislation, its own diplomatic missions, and foreign policy), the community of Dubrovnik began to be called a republic – **Respublica Ragusina**. This enabled Dubrovnik to become one of the most important intermediaries in the trade between the East and the West. Keeping up with the development of the merchant fleet, the Republic established more than 20 consulates during the 15th century, mostly in ports on the Apennine Peninsula and on Sicily.

The devastating earthquake of April 6, 1667 was not only a major event in Dubro+ survival. A thirty-year struggle for survival followed, during which the Republic managed to overcome the most difficult period of its history with the perseverance and self-sacrifice of all its classes. After the reconstruction of the city after the earthquake, Dubrovnik continued its rise during the 18th century. This included the creation of a large fleet of merchant ships and increasing the number of consular representatives to over 80. In the 1790s, the city sought to adjust to the events following the French Revolution, earn trust of the new civil authorities, and at the same time suppress all revolutionary and democratic ideas at home.

In 1806 Dubrovnik surrendered to the French troops, and in 1808 Marshal Marmont abolished the independent Republic of Ragusa, annexing the city to Illyrian provinces under French rule. After the Congress of Vienna in 1815, the area of Dubrovnik came under the rule of the Habsburg Monarchy, retaining a significant geostrategic importance.

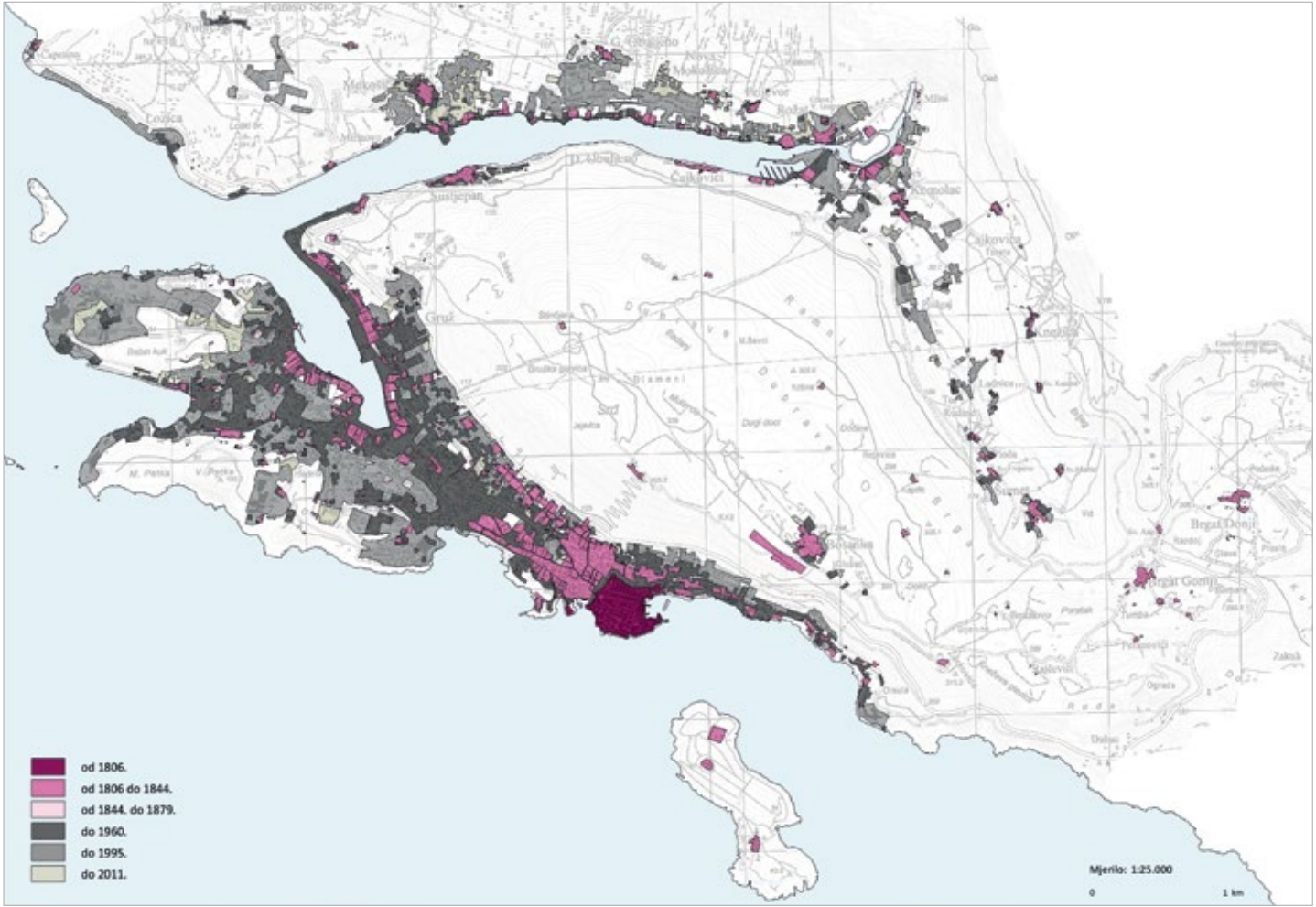
Dubrovnik functioned as a fortified city up until 1886. Today the fortified systems and related military facilities, further developed by the Habsburg military authorities, make up part of its fortified landscape.

Having lost its independence in the face of different geopolitical and social circumstances, Dubrovnik's economy was however solidified during the 19th century. The city gradually expanded outside the limits of the fortified city core and into suburban areas and attained a new spatial outline and contemporary urban features.

During the 20th century, Dubrovnik was part of Yugoslavia, and in 1979 — the very same year the city suffered severe damage in the earthquake — it was nominated for inscription on the UNESCO World Heritage List. In 1991, Dubrovnik became part of the independent Republic of

Croatia. During the Independence War (1991–1995), it was exposed to extensive shelling that caused severe damage to the urban fabric of the historic core. In 1993, at Croatia's proposal, the World Heritage Committee adopted the expansion of the WHS, adding a buffer zone. At the same time, the WHS was inscribed on the List of World Heritage in Danger. This allowed UNESCO to assist in the reconstruction and restoration efforts that continued until 1998, when the site was removed from the List of World Heritage in Danger. Today Dubrovnik is the economic, cultural and administrative centre of Dubrovnik-Neretva County and one of the most visited tourist destinations in the Mediterranean.²

² *Povijesni pregled razvoja Dubrovačko-neretvanske županije – izvadak* (Historical Overview of the Development of the Dubrovnik-Neretva Region – excerpt), Maja Nodari, Dubrovnik, 2017.



DEVELOPMENT OF THE URBAN AREA, AUTHORS – LISITZIN, K.; MLAKAR, A.; BERLENGI, G.: "IDENTIFICATION AND VALORISATION OF THE NATURAL AND CULTURAL LANDSCAPE ON THE PILOT AREA OF THE CITY OF DUBROVNIK", DUBROVNIK, 2015.
Source: Dubrovnik-Neretva County Institute for Spatial Development

II.1.3. Urban, Architectural and Spatial Characteristics of the World Heritage Site and Its Buffer Zone

WHS features, as described in the Statement of Outstanding Universal Value, determine the elements that justify the inscription of Dubrovnik on the World Heritage List. Here it is recognized that important elements of the medieval structure of the fortified city have been preserved, including the City Walls and the medieval pattern of the urban fabric with important public buildings and private residential ones. The area of the fortified city was established in the 13th century, but the defence system — consisting of walls with pre-walls and a moat, towers, fortresses, bastions and the Kaše breakwater protecting the city port — was further developed and perfected over the following centuries. The City Walls were built in stone and are 1940 metres long.

The urban structure of the city, with its predominantly orthogonal street grid, followed strict norms with regard to street width, the surface area of residential and public spaces, construction materials for buildings, streets and squares, and municipal infrastructure. The Old City's main street, Placa, forms the east-west axis of the city and is the main focus of public life. Placa is bordered by residential buildings, while Luža and its southern extension consist of administrative, commercial, sacral and municipal buildings.

Important architectural monuments of the city include the Rector's Palace, the Customs Office (Sponza Palace), the Franciscan and Dominican monastery complexes, the Cathedral of the Assumption of the Virgin Mary, the Church of St. Blaise (the city's patron saint), and the Jesuit Church of St. Ignatius with the Collegium Ragusinum. The palaces of nobility and also other residential houses are distinguished by their quality. The advanced municipal infrastructure and health system enabled a water supply and drainage for the buildings as well as the construction of special buildings, such as Rupe (a granary building), Lazareti (a quarantine complex), a building for medical services, a pharmacy, a poorhouse hospital and an orphanage.



DUBROVNIK, GROUND FLOOR-LEVEL LAYOUT OF THE CITY
Source: Institute of Art History, Ivan Tenšek et al.

The buffer zone and the WHS setting can be divided into three characteristic areas: Mount Srđ, the urban area, the coast and the sea zone.

MOUNT SRĐ rises steeply from the sea and ends with ridges in a series of prominent points. It is dominated by a natural landscape with a rocky, steep southern slope with sparse natural vegetation in the upper part and areas of coniferous forest in the lower zone. It consists of a fortified landscape on the plateau with a system of fortifications, redoubts and batteries. One of its essential attributes is the panoramic view from the fortifications. Fort Imperial is located on the central hilltop, Strinčjera Fortress on the



VIEW OF THE CHURCH OF ST. BLAISE, CITY HALL, RECTOR'S PALACE AND CATHEDRAL
Source: Institute of Art History, Paolo Mofardin

west, and Fort Delgorgue on Žarkovica on the east. Apart from the importance of the view, Srđ is an indivisible part of the urban landscape of Dubrovnik and its southern slopes are an integral part of the buffer zone.

THE URBAN AREA consists of different types of urban patterns that surround the WHS, including the historic suburbs, the city garden of Pile and Kono, Ploče, the Sveti Jakov, Boninovo, Montovjerna, Gruž and Lapad districts, a contemporary area with family houses, apartment blocks, commercial buildings, the port area, green public areas and infrastructures. Furthermore, it also includes the landscape of Rijeka Dubrovačka, dotted with summer residences, and the rural patterns of Šumet and Bosanka.

THE DUBROVNIK MARITIME ZONE is divided into the outer coastal zone with the adjoining part of the open sea and the Ombla estuary and Gruž Bay. Lokrum Island, located in the outer coastal zone, forms part of the WHS, and its position in relation to the city core defines the WHS maritime zone. There are two characteristic types of shores: natural shores with steep cliffs, and urbanised shores with the port and hotel services. The island of Lokrum is a special example of natural, cultural, and historical values with fortifications, monastic ensembles, and historic gardens. Lokrum is also protected as a special reserve of forest vegetation with a botanical garden and it is part of the Natura 2000 network of protected areas. The island is also home to many oral traditions and legends associated with its cultural and natural heritage.

II.1.4. Historic urban landscape

Over the last decades an affirmative approach to the management of the Historic Urban Landscape (HUL) has been taking hold, one which takes into account the historic city as a living organism that keeps changing within its spatial, social and economic context. This approach comes as a response to the planning and management of historic cities being under new types of development pressures aiming to preserve the heritage and identity of a city. In 2005, due to various problems detected in and around World Heritage cities, an international conference meeting in Vienna adopted the Vienna Memorandum on “World Heritage and Contemporary Architecture – Managing the Historic Urban Landscape” (2005) proposing a new approach to the analysis and valorisation of historic cities. These ideas were the basic reference for the UNESCO Recommendation on The Historic Urban Landscape (HUL), which was adopted in 2011. As opposed to the earlier approach that perceived historic buildings as independent structures, it introduces contextuality and looks upon the city as a spatial ensemble – HUL. It’s premised on the belief that the planning and management of urban landscapes requires an understanding of the history, culture and architecture of a city in its spatial and temporal context,

and on the introduction of contemporary construction that acknowledges inherited patterns.

Besides its conceptual approach, the notion of HUL also comprises the historic urban area consisting of layers of cultural and natural values and characteristics, constructions, and open spaces (squares and green areas) as well as its spatial organisation and visual relations. It associates the historic core with its wider territorial context and its geographic location. This includes social and cultural practices and values, economic processes, and intangible heritage that contribute to the city's specificity and identity. In fact, the idea of a historic urban landscape stresses the importance of the functions, the spiritual and intangible traditions and the visual relations that contribute to its character. These include the needs and requirements of the local community and culturally and environmentally sustainable development as well as the transparency of the management system.

The Historic Urban Landscape of Dubrovnik encompasses the World Heritage property with its buffer zone and setting. The latter contributes to the preservation of its spatial and visual integrity. This links the objectives related to urban heritage preservation to those related to social and economic development. Due to uncontrolled development in the setting, the 2011 UNESCO Historic Urban Landscape Recommendation puts forward the preservation of the quality of the entire urban area, guaranteeing a balanced and sustainable relationship between the urban and natural

landscape, and the strengthening of the productive use and promotion of social and functional diversity.

In order to strengthen the approach to HUL management, the UNESCO manual³ identifies activities that require the participation of three key groups of stakeholders: the public, private and civil sectors.

³ UNESCO, 2013. New life for historic cities – The historic urban landscape approach explained.



MOUNT SRĐ ABOVE DUBROVNIK
Source: Dubrovnik Tourist Board



URBAN AREA OF DUBROVNIK, DISTRICT OF LAPAD
Source: Dubrovnik Tourist Board

LINDO FOLKLORE ENSEMBLE
Source: Lindo Folklore Ensemble



II.2. STATEMENT OF OUTSTANDING UNIVERSAL VALUE (OUV)

II.2.1. CRITERIA ⁴

CRITERION (I): TO REPRESENT A MASTERPIECE OF HUMAN CREATIVE GENIUS: The historic and urban and architectural complex of Dubrovnik has retained to date the essential elements of the medieval structure of a fortified town: the ramparts, the layout of streets and squares, impressive public edifices and a great many private dwellings. Regardless of any considerations on the particular artistic value of the edifices, here we find primarily a complex of outstanding value which demonstrates the will to create, develop and embellish an urban landscape as if it were a work of art.

CRITERION (III): TO BEAR A UNIQUE OR AT LEAST EXCEPTIONAL TESTIMONY TO A CULTURAL TRADITION OR TO A CIVILIZATION WHICH IS LIVING OR WHICH HAS DISAPPEARED: The urban historic complex of Dubrovnik is a unique creation of medieval architecture and town planning, which has exerted considerable influence in the area of the Adriatic Coast and the Balkans. It provides unique evidence of the power of the Republic as a trading centre on the Adriatic coast. Among all medieval European cities, Dubrovnik stands out due to the mutual relationship which has been established between the individual edifices and the whole complex and by the enormous archival documentation allowing each stage of its growth to be studied in the light of history.

CRITERION (IV): TO BE AN OUTSTANDING EXAMPLE OF A TYPE OF BUILDING, ARCHITECTURAL OR TECHNOLOGICAL ENSEMBLE OR LANDSCAPE WHICH ILLUSTRATES (A) SIGNIFICANT STAGE(S) IN HUMAN HISTORY: Almost all phases of the city’s development over the centuries have been preserved in its structure, especially extensive urban interventions from the 13th century that gave the city its unity. Among outstanding medieval, Renaissance and Baroque structures inside magnificent forts with monumental city gates, the following stand out: Rector’s Palace (built in the 15th century, through a Gothic and Renaissance-style transformation of a medieval castle); the Gothic-Renaissance customs office of Sponza (16th century); Franciscan monastery (14th century) with a Romanesque-Gothic cloister, bell tower and Baroque-style church; spacious Dominican Gothic monastery (13th century) with an impressive cloister, bell tower and church; Baroque Cathedral of the Assumption of the Virgin (restored after the 1667 earthquake on the site of the previous Romanesque cathedral) and many other Baroque churches, such as the Church of St. Blaise (the patron saint) and the Jesuit Church of St. Ignatius with its monumental stairs.

⁴ The criteria and justification for inscription of Dubrovnik on the World Heritage List were revised in 2015.

II.2.2. Justification

The city of Dubrovnik, on the southern part of the eastern Adriatic coast, is a remarkably well-preserved example of a medieval planned city. Founded in the 7th century AD, the city eventually combined Roman and Slavic areas into a city-state that survived until its conquest by Napoleon in 1808.

Its walled historic core situated at the foot of Mount Srđ has preserved its character as a unique urban area defined by the city walls, despite the consequences of the 1667 earthquake. The city has a **significant place in the history of urban planning**. Owing its development and survival to trade and navigation, Dubrovnik developed into a **strong maritime and trading hub** on the eastern coast of the Adriatic and an important centre of the Mediterranean. It reached its peak in the 15th and 16th century, when its commercial and maritime success was accompanied by great achievements in the arts and sciences. Dubrovnik boasted a highly advanced **municipal infrastructure and health care system**: it had a municipal sewerage and water supply system, a granary at Rupe, quarantine protection, medical service, pharmacies, hospitals – hospices and an orphanage. The **1272** Dubrovnik Statute made precise provisions for planned urban development based on a high degree of rationalisation in the use of space.

The orthogonal street grid design strictly prescribed the widths for the streets as well as the residential and public areas layout, building materials (stone instead of wood), street and square pavement and highly advanced municipal infrastructure. Housing construction had to conform to regular blocks of houses. The axis of the city and the focal point of public life is the main street – Placa, running from east to west and ending in Luža, the central city square. While Placa is lined with patrician and municipal mansions, Luža and its southern extension are bordered by administrative, office, sacral and municipal buildings. Among outstanding medieval, Renaissance and Baroque buildings inside the powerful fort, the following stand out: Rector's Palace (15th century), the Franciscan monastery with its church (14th century), the Dominican monastery with its church (13th and 14th century), an impressive cathedral (17th and 18th century), the customs office of Sponza (16th century), the city clock, Arsenal and a number of other churches, such as that of St. Blaise, the patron saint of the city (early 18th century), and the Jesuit church (18th century). The city is encircled by its 1940-meter-long monumental stone walls. The impressive defence system was given its present-day shape in the

13th century and was expanded by a Renaissance pre-wall in the 15th century, while its fortifications were completed in the 17th century. The system consists of the main city wall with its towers, keeps and bastions, barbicans, moat and the Kaše breakwater that protects the port.

The world heritage site was expanded in 1994 to include areas outside the city walls which are integral to its history and development. These include the medieval industrial suburb of Pile, developed systematically in the 15th century, and the Lovrijenac Fortress, located on a cliff (its construction most likely began as early as the 11th century, but it gained its present-day appearance in the 15th and 16th centuries). Also included then were the Lazareti, built in the early 17th century to house potential plague-carriers from abroad, the late 15th century Kaše breakwater, built to protect the port against south-easterly gales, and the Revelin Fortress, dating from 1449. The WHS was expanded to include Lokrum Island, around 500 metres from the coast, with its 11th-century Benedictine monastery 19th-century Fort Royal.

During the Independence War, the site suffered significant damage and was inscribed on the List of World Heritage in Danger in the period between 1991 and 1998.

Despite the 1994 expansion, there was a need to further extend the *buffer zone* area in order to achieve a better presentation of the site in its *wider setting* through the inclusion of areas functionally related to the WHS and to provide an additional layer of protection from the growing pressures of development and tourism.

II.2.3. Conditions of integrity and authenticity

II.2.3.1. STATEMENT OF INTEGRITY

The World Heritage property includes all the significant elements that form the functional and visual integrity of the site. The Old City stands out as a unique, monumental, and entirely preserved complex with its city walls, towers, bastions, pre-wall, moats and city gates (13th to 17th century). The covered and open spaces of the urban areas justify its significance in terms of medieval urban planning and architectural achievements with public, sacral and residential buildings of high quality dating from the Middle Ages, Renaissance, and the Baroque. Despite damage caused by the 1667 and 1979 earthquakes and during the Independence War (1991–1995), the elements expressing its OUV are sufficiently intact. In addition to the constant seismic hazard, potential future threats include tourism pressure, depopulation, and inadequate development in the setting of the inscribed property.

II.2.3.2. STATEMENT OF AUTHENTICITY

Despite the passing of centuries, shifts in wealth and varying lifestyles, Dubrovnik's historic core has preserved its late medieval urban matrix that – due to the principle that each building must be in harmony with the ensemble – includes different building styles in perfect harmony, from the Romanesque to the Baroque period. This harmony is the result of the residents' highly developed awareness of the values and beauties of their city. Although it was badly damaged in the 1667 earthquake, Dubrovnik managed to preserve wonderful Gothic and Renaissance churches, monasteries, palaces, and fountains, and the restoration after the earthquake wove Baroque elements into the urban fabric. Once again damaged during the Independence War of 1991–1995, the historic areas continue to be subject to an important conservation programme.

The initial nomination for inscription on the UNESCO World Heritage List in 1979 was limited to the historic core inside the city walls. Later, in 1994, external defence structures, parts of the coastal area, and Lokrum Island were included. In 2018, the buffer zone was expanded to include the entire

setting on the mainland in the north as well as the coastal areas. Considering that the focus of WHS recognition is on the nominated area, the conditions of integrity and authenticity must be the principal point with regard to monitoring and protection. Furthermore, the buffer zone forms an integral part of the HUL of Dubrovnik. The basis of its management requires that any element of sustainable development be planned in reference to the WHS. The new buffer zone was justified as essential for the visual integrity of the HUL's spatial character:

The main criterion for extending the buffer zone is the historic agglomeration of the city with which the OUV makes a functional whole, together with the criterion of preserving the visual integrity of the world heritage area. (...) The aim of management is to maintain the character of the cultural and natural landscape surrounding the city of Dubrovnik. The most effective area management mechanisms are spatial planning documents that will appropriately regulate interventions in construction areas with regard to capacity, typology, purpose and impact on the environment; to preserve the authenticity of undeveloped natural areas, regulate the use of maritime zone, and preserve the elements of the historic setting.

In conclusion, from the management point of view, the Old City of Dubrovnik must be understood as a whole, where the setting with its cultural and natural elements is an integral part of the HUL of Dubrovnik in regards to its functional and visual integrity.

II.2.4. Description of constituent elements justifying the Outstanding Universal Value of the World Heritage property

URBAN STRUCTURE OF THE HISTORIC CORE (I, III, IV)

The fortified medieval town on the Eastern side of the Adriatic Sea with its preserved integrity is a unique example of a 13th-century planned urban ensemble. Even though natural disasters and stylistic and social changes have profoundly affected the urban fabric and individual structures, the original medieval planned matrix has remained clearly visible until today, harmoniously integrating all later interventions. The long line of continuity, as one of the basic features of Ragusa's government, is visible in the city's urban and architectural appearance, its public spaces and administrative, sacral and private buildings. All the political, cultural and spiritual aspirations of generations of the republic's governors come together in the carefully planned, balanced and steady ensemble, a clear symbolic reflection, a message that can easily be read today.

FORTIFICATION SYSTEM (I, III, IV)

The 1940-meter-long City Walls and their forts form an impressive fortified complex that encircles the entire city core and defines its extent. This unique fortification system consists of the main city wall and sixteen towers, three fortresses, six bastions, two corner fortifications, a pre-wall area with a series of low semi-circular towers (*toreta*), the city moat, two pre-forts – fortresses, the Kaše breakwater and two city bridges leading to the city gates. Up to 25 metres high, the main city wall facing inland is four to six metres thick, while the wall along the sea is 1.5 to 3 metres thick. The system has been upgraded and perfected over a long span of time. Even though these processes were implemented above all in line with changes in the fortification doctrine and armament development, its



VIEW OF THE PLANNED MEDIEVAL BLOCKS SOUTH OF PLACA AND PLANNED DOUBLE ROW HOUSES NORTH OF PLACA IN THE SUBURB OF PRIJEŠKO
Source: Dubrovnik Tourist Board



NORTHERN WALLS WITH MEDIEVAL TOWERS AND RENAISSANCE PRE-WALL
Source: Dubrovnik Tourist Board

appearance in all segments cannot be justified by utilitarian reasons alone, as it also possesses both strong symbolic and aesthetic components.

PUBLIC ADMINISTRATION AND HEALTH CARE BUILDINGS (I, III)

The Rector's Palace with the City Hall above the Great Arsenal, a naval vessel storage facility, was the cornerstone of Ragusa's government. The origins of the Rector's Palace date back to the earliest centuries of urban community formation, and its buildings reflect many changes – from reconstruction in the Middle Ages followed by changes during the Renaissance (due by two gunpowder explosions in the 15th century) and reconstruction after the 1667 earthquake. Attached to the administrative complex on Luža Square (the City Hall and Arsenal were replaced with a new Town Hall and theatre in the 19th century) are the City Guard (the façade was designed in the early 18th century), City Bell Tower (mid-15th century, renovated in 1929) and the Sponza Palace (customs office and mint, built between 1516 and 1522). The relevance of Ragusa's social and health care system on a European scale is reflected in a number of institutions and buildings, such as the Domus Christi Hospital (built in 1540, on the site of the 14th century hospital), orphanage (founded in 1432), Rupe granary (16th century), and the 17th-century Lazareti quarantine complex in the Ploče district (Ragusa introduced the quarantine as early as the 14th century).

RESIDENTIAL BUILDINGS (I, III)

The majority of housing underwent significant changes both in structure and form following the devastating 1667 earthquake. A relatively small proportion of Dubrovnik's houses and palaces have managed to preserve the earlier Romanesque, Gothic and Renaissance features in their exterior design and spatial disposition. The mixture of Gothic and Renaissance elements that are characteristic of Dubrovnik are reflected in the design of the Bračičević Palace on Priješko and Ragnina Palace on Pustijerna (Braće Andrijića 10). The Tomo Stjepović Skočibuha Palace (Restićeva 1), Ghetałdi and Stay Palace (Između Polača 9 and 11) and Bona Palace (Marojice Kaboge 8) stand out in the High Renaissance layer due to their monumentality. The Baroque layer of representative residential architecture, almost always integrating older, pre-earthquake structures, includes more than 50 palaces. In addition to individual examples with well-preserved exteriors and valuable



RECTOR'S PALACE, ATRIUM
Source: Institute of Art History, Paolo Mofardin

BISHOP'S PALACE
Source: Institute for the Restoration of Dubrovnik



interior design, such as Sorkočević Palace (modern-day Bishop's Palace), Vlačić Palace (Od Sigurate 7), Gučetić Palace (Bunić Square 5), and Bassegli Palace (Cvijete Zuzorić 4), a separate urban and architectural endeavour can be found in the balanced design of front-facing façades of the houses and palaces along Placa. The innovations introduced to residential architecture after the 1667 earthquake include the design of green terraces and gardens where old, demolished houses once stood and adjoining Baroque palaces. More modest residential architecture which is more difficult to date due to the absence of stylistic attributes is an equally important factor in the urban fabric of Dubrovnik and often reflects, in the structural sense (size of plots, number of floors and disposition) the continuity of the planned medieval matrix.

SACRAL BUILDINGS AND COMPLEXES (I, III)

The genesis and development of the city, as well as its spiritual and cultural continuity, are also reflected in a number of preserved bigger and smaller sacral structures dating from the pre-Romanesque to the Baroque period. The abundance of sacral architecture in Dubrovnik also includes private chapels, most often attached to the palaces of noble families. Archaeological research has found the first episcopal complex beneath the modern-day Cathedral of the Assumption of the Virgin and the Bunić Square. The complex represents a major source of knowledge about Dubrovnik's earliest history, and together with archaeological remains of the later Romanesque cathedral and the modern-day Baroque cathedral, it is a remarkable testimony of spiritual and building continuity. Of all the monastic complexes from the Ragusa period, today some are preserved only as archaeological remains, some have had their original purpose changed, and those that are largest in terms of area – the Dominican and Franciscan monasteries and Jesuit college – have mostly preserved their original purpose. The latter ones, due to their functional and architectural complexity, artistic quality and abundance of inventory, have also preserved their position as focal points of spirituality, culture and science. Even though Christian affiliation was one of the fundamental spiritual, identity and political determinants in the Republic, there has been a Jewish community inside the fortified city since the mid-16th century, with a well-preserved synagogue. The rise of the Orthodox civil community is reflected in the monumental church erected in the centre of the city in the mid-19th century.



CATHEDRAL, REMAINS OF FRESCOES ON THE APSE OF THE BYZANTINE CATHEDRAL
Source: Institute of Art History, Paolo Mofardin



CHURCH OF ST. BLAISE
Source: Institute of Art History, Paolo Mofardin



GUNDULIĆ SQUARE
Source: Dubrovnik Tourist Board

PUBLIC SPACES (I, III)

With certain street routes that date back to the earliest periods of city development and attest to its genesis and development in the first centuries, most of the street grid of Dubrovnik is based on 13th-century statutory provisions. The cornerstone of the city and its most representative public space is Placa with Luža Square and its nearby Rector's Palace. New and bigger public spaces were formed in the period after the devastating 1667 earthquake (Gundulić and Bošković Square, connected by a monumental late-Baroque staircase, and Držić Square in front of the Cathedral's new front-facing façade), and they are in terms of both design and urbanism marked entirely by Baroque features. During the 19th and 20th centuries, new and bigger free spaces and public communication routes continued being formed through the filling in and creating of a new coastline for the city port.

HISTORIC INFRASTRUCTURE (I, III)

The sewerage water and rainwater drainage systems are based on the 13th-century statutory provisions and have been improved and maintained up until today. Open canals (klončine), laid longitudinally in the middle of double residential blocks, and networks of closed vaulted canals that follow the street grid testify to the high municipal awareness of medieval Dubrovnik. The construction of the water supply system (1436–1437) brought water to the city from the springs in Šumet, almost 12 km away from the city, in just 16 months. Built by Onofrio Giordano from Cava, it is the embodiment of the Renaissance spirit and the self-awareness and self-confidence of the community. Though it is mainly out of function today, the Renaissance water supply system path is still outlined in the urban structure of former suburban zones. The Small and especially the Large Onofrio Fountain, which with its dedicated inscription is one of the masterpieces of early Renaissance epigraphy, testify to the significance of this endeavour. The well-preserved water sources and tanks in public buildings, monasteries, palaces, and houses also serve as evidence of the city's water requirements.

PILE SUBURB (I, III)

Located west of Dubrovnik's fortified core, Pile was an organised production zone of the medieval and early modern city, one with a developed manufacturing and craft industry and complex manufacturing plants as well as residential and smaller sacral buildings. Even though changes in terms of function, architecture and design made inside the suburb in



LARGE ONOFRIO FOUNTAIN
Source: Dubrovnik Tourist Board



INDUSTRIAL SUBURB OF PILE
Source: Dubrovnik Tourist Board

modern history are more evident than those made inside the walled city, the dense urban structure of the Pile suburb still testifies to its medieval origins and unbreakable ties with the city centre. In the Mannerism and Baroque periods, Pile was where impressive suburban summer residences (villas) with large gardens were built.

LOKRUM ISLAND (I, IV)

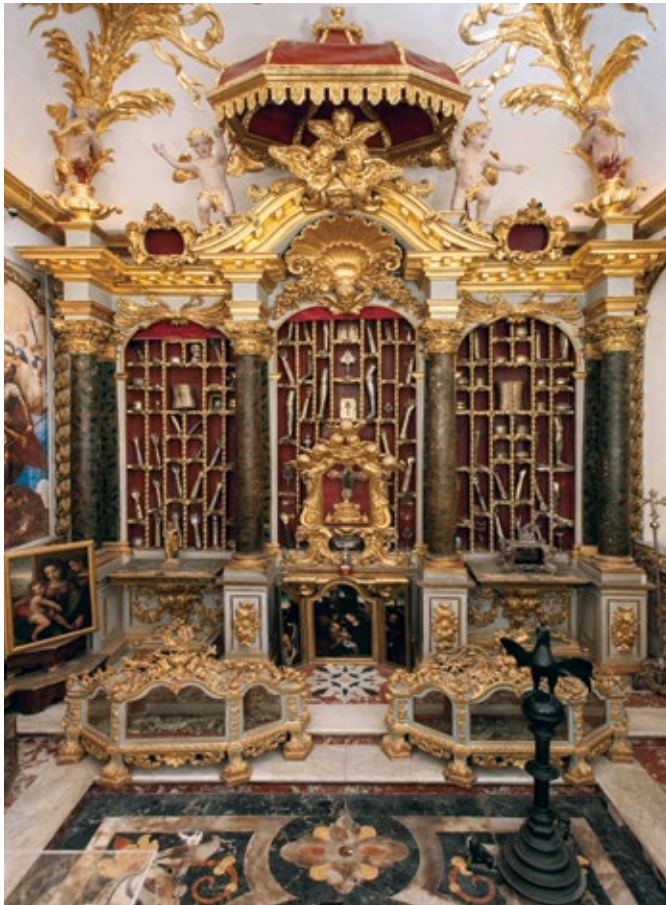
Located approximately 600 metres southeast of the fortified city, the island is geomorphologically and historically inextricably bound to both the genesis and the development of Dubrovnik. The Benedictine abbey on the island was founded in 1023. The complex—including the preserved Romanesque church and structures of the original monastery, and Gothic and Renaissance-style cloister dating from the 15th and 16th century —was converted into a residence in the 19th century and served as that of Archduke Maximilian of Habsburg. In addition to the geometrically shaped park areas alongside the former monastery, in this period the entire island was interlinked with manicured paths and ancillary buildings. The never completed 16th-century Lazaret quarantine building has been preserved on Lokrum and is testimony to the continuous development of health and sanitary care in Ragusa. Fort Royal on the island's highest point is an important part of 19th-century Dubrovnik's fortification landscape. Lokrum was named a protected reserve of forest vegetation in 1948 and it is today also part of the network of Natura 2020 nature protection reserves.

MOVABLE HERITAGE (III)

The well-preserved archive of the Republic of Ragusa, located today in Sponza Palace, is an inexhaustible source for the study of not only Ragusan history, but also national and world history. It is complemented by the rich archives and library collections of the Franciscan and Dominican monasteries, the archives of the Dubrovnik Diocese and the collection of the Scientific Library. The political, cultural and scientific importance of the Republic of Ragusa is reflected in museum collections located in historic areas of the WHS – the Culture and History Museum in the Rector's Palace, the Maritime Museum in the Fortress of St. John, the Ethnographic Museum in the Rupe granary, the Archaeological Museum in the Revelin Fortress, and a series of museum collections of church communities. Especially rich movable heritage (altars, monuments, paintings, liturgic artefacts and garments) can be found in numerous churches in Dubrovnik, including the cathedral reliquary, which houses over 200 relics.



LOKRUM ISLAND
Source: Dubrovnik Tourist Board



THE CATHEDRAL RELIQUARY
Source: Institute of Art History, Paolo Mofardin

II.2.5. Constituent elements of broader significance

II.2.5.1. HISTORIC LANDSCAPE

The Republic of Ragusa's administration, due to several centuries of continuity in its existence, firmly structured life at all levels throughout its territory: from the Pelješac peninsula to the west to Konavle to the east, including the Elaphites and the islands of Mljet and Lastovo. A combination of special socio-political circumstances and natural phenomena resulted in particularities that differentiate the area from other parts of the Adriatic and Mediterranean basin and that can be perceived as the particular heritage of the Dubrovnik region.

The inhabitants of this areas have, within the national context, retained to this day a feeling of familiarity and togetherness in terms of their culture and identity, and the structure and organisation of both the administration and the lives of the residents of all social strata in the Republic of Regusa have left deep and visible traces on the spatial image of the entire territory. The administrative organisation is reflected in the well-preserved corpus of administrative buildings – regional rector's palaces. Another recognisable architectural component of the territory are its many villas which served as summer residences for landowners who lived in the centre of the city. During the Republic's fastest economic and cultural rise in the 15th and 16th centuries, the

summer residence-style construction weaved together and to a great extent structured the area, both the mainland and the islands. Even though there are significantly fewer of them and they are less architecturally complex and representative in areas that are more remote from the city core they can be found in all parts of the territory, and they reflect the way the territory was run and maintained. The organisation of ecclesiastical governance, which was also strongly tied and subordinated to the interests of the Republic, also represents a recognisable element of territorial planning and administration. Whereas the parish churches of bigger regional centres (usually dedicated to the patron saint, St. Blaise) are spatially tied to rector's palaces, symbolically mirroring the unbreakable bond between spiritual and political government, locations chosen for monasteries in the 14th and 15th centuries, especially by the Franciscan order, mirror strategic interests and efforts to integrate newly acquired territories into the state as a whole on all levels.

Finally, the construction of planned settlements and a complex fortification system in Ston is a separate topic in terms of territorial organisation and administration. After the Pelješac peninsula was made part of the Republic's territory, Ston began its development as the second urban centre of the Republic of Ragusa in the first half of the 14th century. Due to republic-wide importance of salt production, the urban landscape of Ston, where human existence has been documented since prehistory, has since the 24th century had unbreakable ties to Dubrovnik and continued to mirror all its experience with administration, urban planning and fortification.

As a result of historic development, the city of Dubrovnik and the surrounding area, formerly part of the Republic of Ragusa, form a strong functional unit that continues to exist today.



SOKOL TOWER, KONAVLE
Source: Society of Friends of Dubrovnik Antiquities



STON, VIEW OF THE CITY AND SALT WORKS FROM THE PODZVIZD HILL
Source: Dubrovnik Tourist Board

II.2.5.2. INTANGIBLE HERITAGE AND IDENTITY

Intangible heritage as an integral part of Dubrovnik's urban landscape, a testimony to the continuity of the city's life, is an element vital to the survival of its physical substance, even though it was not recognised in the 1979 inscription on the World Heritage List. Owing to new policy approaches to cultural heritage, it is evident today that the intangible heritage and community identity form an inseparable element of the condition of integrity and authenticity of heritage.

The Festivity of Saint Blaise has been recognised and made part of the UNESCO Intangible Cultural Heritage in 2009, summing up the importance of the thousand-year cult of the patron saint in Dubrovnik's heritage as a whole.

On a national level, the Dubrovnik dialect, the Dubrovnik kolenda (traditional carol singing) and the Mala braća Pharmacy have been recognised as intangible heritage. The recognition of the intangible heritage of Dubrovnik does not stop here and will definitely be a topic of further elaboration.

A citizens' association called the Friends of Dubrovnik Antiquities Society has been managing and taking care of the City Walls. Their work is based on the broader interest amateurs and volunteers have for Dubrovnik's heritage and the way they operate represents a local specificity. Similar interest in the literary and artistic heritage of Dubrovnik underpin the work of many associations and societies (such as Art Workshop Lazareti, Deša Dubrovnik, Student Theatre Lero, and many more.

In the context of heritage, it is also important to point out the famous Ragusan diplomacy that helped to position the Republic on the geopolitical map of the world.

II.2.5.3. SIGNIFICANCE OF THE DUBROVNIK STATUTE

Created in 1272 and based on existing legal provisions and the common law of the community, the Dubrovnik Statute holds the most prominent place among the components of Dubrovnik's legal order. Expanded by new provisions ever since it was created and edited several times to mirror important political changes, such as the end of the Venetian reign in 1358, the statute was finally completed in the early 15th century. Even though over time it came to be perceived as anachronistic for legal practice, it was not dismissed until the abolishment of the Republic of Ragusa, becoming an everlasting symbol of national order and government.



MALA BRAĆA PHARMACY
Source: Dubrovnik Tourist Board



FESTIVITY OF ST. BLAISE
Source: Dubrovnik Tourist Board



OPENING CEREMONY OF THE DUBROVNIK SUMMER FESTIVAL
Source: Dubrovnik Summer Festival

The rector and other officials used the text of the pledge from the statute, as did all city councilmen once a year. Preserved copies of the statute that belonged to individual patrician families reaffirm the position of the document as a symbol of class identity and tradition.

Statutory provisions referring to the regulation of existing parts of the city and the development of new ones are an indispensable source of knowledge for understanding the city's development, a reflection of the self-awareness of its government and general aspirations of the period in terms of city construction. Among many provisions regarding construction entered into the Fifth Book of the 1272 Statute, some were certainly created long before the codification and refer to construction in the oldest parts of the settlement. The most important are, however, those referring to construction in the new parts of the city, dating to the 13th century. Even though it is difficult to establish the precise chronological order of the provisions, a gradual increase in interventions that reflect the interests of the community as being more important than those of individual owners is quite evident. The tendency to subjugate the individual to the communal, above all for the streets to be given importance as public and common spaces, is especially underscored in the provision added to the Statute after the great fire of 1296 that regulates construction in over two thirds of the city area. Through the regulation of the streets that traverse the city and connect all its parts, the medieval settlement was transformed from a group of individual buildings into a unified urban organism.

II.2.5.4. SCIENTIFIC AND ARTISTIC SIGNIFICANCE

Throughout its long existence, marked both by periods of prosperity and welfare and occasional profound crises, the Republic of Ragusa, as an area oriented by virtue of its self-determination towards the Western European cultural sphere, was home to many significant scientists and thinkers, some of whom enjoyed high prestige at a European level. Under the influence of European, and especially Italian, literature, Dubrovnik developed a rich literary tradition in the local vernacular ever since the 15th century. Alongside the contemporary, distinguished achievements of Dubrovnik's Latinists, this tradition would become the crucial link in the formation of the Croatian standard language in the 19th century.

MARIN GETALDIĆ (1568–1626), mathematician and physicist, received his early education in Dubrovnik. He spent the greater part of his life in his hometown, as a



UNKNOWN ARTIST, PORTRAIT OF MARIN GETALDIĆ,
1ST HALF OF 17TH C. OIL ON CANVAS, 109 X 88 CM
Source: Dubrovnik Museums

nobleman holding numerous state positions. Nevertheless, due to business trips and stays in European capitals (London, Antwerp, Paris, Padua and Rome), he established contacts with respectable scientists of the day and developed a wide spectrum of scientific interests that he later elaborated on in a number of influential works published in Rome and Venice.

RUĐER BOŠKOVIĆ (1711–1787), mathematician, physicist, astronomer, philosopher, diplomat and poet, is surely one of the most significant and most influential European scientist of his age. After receiving his early education in Dubrovnik, he continued his studies in Rome. Though continuously in touch with his hometown, including by engaging in diplomatic assignments, he only once visited Dubrovnik before he died. A Dubrovnik commoner and member of the Jesuit order, Bošković travelled to numerous European capitals on scientific and diplomatic assignments and published his work there.



FRANO ŠIMUNOVIĆ, PORTRAIT OF RUĐER BOŠKOVIĆ, 1940, OIL ON CANVAS, 62.5 X 50 CM
Source: Dubrovnik Museums

The complexity and innovativeness of the dramas of **MARIN DRŽIĆ (1508–1567)** in the national context, but even beyond, was not fully recognised until the 20th century. Based on contemporary Italian achievements, but also on a thorough knowledge of ancient classics, his opus is marked by unrest and critique characteristic of the Mannerist period. The personal life of this Dubrovnik commoner and priest was marked by the same spirit. Consequently, irreconcilable differences towards the oligarchy of the Dubrovnik government led him to self-imposed exile.



UNKNOWN ARTIST, PORTRAIT OF ĐIVO FRAN GUNDULIĆ, 1622, OIL ON CANVAS, 101 X 78 CM
Source: Dubrovnik Museums

Dubrovnik nobleman **IVAN GUNDULIĆ (1589–1638)** spent his entire life in his hometown, assuming numerous administrative duties in the government of the Republic. The soaring achievements in his literary work and his use of an exquisite poetic language that fully embodied the richness of Baroque expression and the spirit of Catholic Counter-Reformation were already recognised during his lifetime and have been celebrated since the 19th century and canonised as part of Croatian national literature.



IVAN RENDIĆ, BUST OF MARIN DRŽIĆ, 19th C.
Source: The House of Marin Držić

There were many other Dubrovnik natives who stood out in the arts and sciences, making valuable contributions to the general development of mankind. These immeasurable achievements earned Dubrovnik a special place on the world's arts and sciences map.

Even though the course of development in the 18th and 19th centuries lessened the importance of maritime traffic and Dubrovnik's role in trade on the Mediterranean, the city continued to develop, building on the social and cultural capital created in the renowned Republic of Ragusa's period



UNIVERSITY OF DUBROVNIK BUILDING
Source: University of Dubrovnik

of economic and political prosperity. Neither the downfall of the Republic in the 19th century nor the historical turmoil that ensued could stop that.

When considering the perspective of this plan, it is important to bear in mind that Dubrovnik positioned itself as the cultural and educational centre of Croatia's far south as early as the late 19th century, and since the beginning of the development of tourism on the Adriatic coast, as its centre of tourism excellence. In the 20th century, the dimensions of social and cultural capital enabled Dubrovnik to maintain its own theatre, become a summer culture centre (Dubrovnik Summer Festival), maintain numerous educational institutions, and become the seat of the Inter-University Centre. In addition to that, the care for heritage protection was permanently rooted in the local institutional culture, enabling the city to preserve its historical and cultural identity and make significant economic progress in spite of a very dynamic period of tourism development.

It is also important to recall historic events that took place in Dubrovnik in the 20th century. For example, the 1956 meeting of the *Congrès Internationaux d'Architecture Moderne (CIAM)*, the 10th and final meeting of this influential organisation whose conclusions, charters and guidelines affected for decades the theories and models of architecture and urbanism in numerous cities worldwide. Dubrovnik also hosted, under the presidency of H. G. Wells, the *11th PEN Congress (Poets and Playwrights, Essayists and Editors, Novelists)* in 1933 where the Nazi regime, book burning, and the persecution of writers who did not support Hitler were condemned.

Dubrovnik today is a university centre with one of the youngest Croatian universities and an international academic centre where students from all parts of Croatia, the wider region, and abroad acquire knowledge in the field of the economics of tourism and other related activities.

II.2.5.5. TOURISM AS
A MODERN TRADITION

The more serious development of tourism in Dubrovnik dates back to the end of the 19th century and the construction of the first modern hotel – Grand Hotel Imperial on Pile (1897). Despite weak railway and ship connections, several larger hotels were built in the period before the start of World War I. This enabled Dubrovnik to become an important tourist destination before the start of World War II with a partially developed tourist infrastructure. What followed was a period of intensive tourism development. The number of beds in accommodation units kept growing and amounted to 17,690 in 1949. At the same time, the number of overnight stays kept increasing in the period between 1946 and 1949, reaching 606,758 overnight stays in 1949. A new record was set in 1950 (745,307 overnight stays), a number that was surpassed 15 years later (1964).⁵ Different socio-political circumstances and the planned economy of the the country at that time led to the development of the project Northern

and Southern Adriatic (1964), which focused on the Southern Adriatic and permitted growth in the construction of accommodation units. Due to flexible and stimulating policies that included incentives such as beneficial interest rates and land consolidation, the development of the hotel industry rapidly increased after 1965. Hoteliers in the Dubrovnik area first built 12 new hotels, followed by another nine by 1980 (Croatia, President, Argosy, Tirena, Plakir, Kupari, Goričina 2, Odisej and Šipan). The period between 1965 and 1975 was marked by a continuous growth in tourism turnover, with the exception of 1972, when the number of overnight stays decreased compared to the previous year. Up until 1991 and the Independence War, tourism in Dubrovnik was the driving force of social development in general. The tourism and hospitality industry’s share in the gross domestic product of the Municipality of Dubrovnik amounted to 36.6%, and 40.3% in the employment structure.⁶ Hotel accommodation units in the Dubrovnik area in the period between 1981 and 1990 increased to 4030 beds.⁷ In 1990 the Independence War broke out in Croatia, stopping

the development of tourism overall for a few years and resulting in a change in the market and political model. The consolidation and recovery of tourism in Dubrovnik started after the end of the war. Evident growth in tourism turnover began in 1996 and didn’t stop until the 2020 COVID-19 pandemic outbreak. The growth was accompanied by an increase in accommodation units, which amounted to over 39,000 beds in 2020.⁸ The period after the recovery was also marked by the development of cruise ship tourism. The number of entries into the Gruž Port, as well as the number of passengers, increased year after year.

In conclusion, tourism in Dubrovnik has been marked by growth and development for over five decades, with an evident and continuous growth in both tourism supply (all segments of the hospitality industry) and demand (stationary tourists, cruise ship passengers and day-trippers). At the same time, supply and visitor monitoring and management was missing, indicating that tourism management in Dubrovnik was very limited during those five decades.

Present-day insight into the processes of planning and tourism development in the city of Dubrovnik gives the impression that tourism is taking place as a mere reaction to demand, without a clear vision of sustainability or the systematic and continuous monitoring and informed steering of tourism development and its externalities in any particular direction. The professional audience seems concerned that if the city keeps expanding the number of accommodation units and enabling a more comfortable, faster and more mass approach (ex., the expansion of cruise ship and airport facilities and offer, but also the construction of the Pelješac Bridge, the highway corridor through Bosnia and Herzegovina), Dubrovnik could soon be faced with symptoms of collapse, as has already been the case with other UNESCO sites on the Mediterranean.



5 Šubić, N., Dubrovački turizam od 1857. do 2005. (Dubrovnik Tourism from 1857 to 2005), Alfa 2., Dubrovnik, 2008, p. 213.
6 Ibidem, p. 222–224.
7 Ibidem, p. 268.
8 Dubrovnik Tourist Board.

SOUTH ADRIATIC PROJECT
(PICTURE OF THE CONSTRUCTION OF THE PRESIDENT HOTEL IN BABIN KUK)
Source: Dubrava – Babin Kuk Hotel and Tourism Center Newspaper

II.3. EXISTING MANAGEMENT SYSTEM

II.3.1. Stakeholder network

The area of Dubrovnik and the former Republic of Ragusa has a long spatial planning history, from a medieval legislative system to the present-day developed national planning policy. Though embedded in the national planning and protection system, the WHS management system has significant local specificities due to specific provisions (laws and decrees) exclusively regulating the long-term material goods reconstruction process after the earthquake.

The current management system is characterised by complex relations between various stakeholders and the overlapping of their jurisdictions on the one hand, and the insufficient involvement of some stakeholders in management and decision-making processes on the other. As already mentioned, the complexity of setting up a management system is further complicated by the non-existence of a regulatory framework that the system would refer to. It is precisely for this reason that the proposed management system is based on a model that has feasibility, functionality, and sustainability capacities and also involves the interaction of public government and self-government,

the institutional, civil, and private sectors as well as citizens. During the process of developing and drafting the Management Plan, a **Management Development Plan Monitoring Board** was formed under the coordination of the Institute for the Restoration of Dubrovnik. The Board is set up in a way that opens up opportunities for key stakeholders to participate in the process, and it consists of representatives of the Ministry of Culture and Media of the Republic of Croatia, the Conservation Department in Dubrovnik, the City of Dubrovnik, the Institute for Physical Planning of the Dubrovnik-Neretva County, the University of Dubrovnik, and representatives of the scientific and professional public, citizens, and civil society organisations (NGOs).

The stakeholder network that needs to be included in the implementation of the Management Plan and that could impact the WHS through its activities is very complex and diverse. The existing management system is underdeveloped both at the regional and local level. At the national level there is the UNESCO Office of the Ministry of Culture and Media’s Directorate for International Cultural Cooperation and European Affairs, led by Secretary General of the Croatian Commission for UNESCO. The management system should imply the participation of a wide range of stakeholders on all levels (international, national, regional and local) through the coordinated efforts of the public, civil and private sectors.

It is essential to work on improving public-civil-private partnerships in order to achieve a level of management that enables a balance between social and economic objectives on the one hand and between common and individual objectives on the other. The synergy of all stakeholders is a prerequisite for good management, decision-making, protection, and also the development of the site.

In addition to the aforementioned stakeholders, there are other initiatives and individuals that focus their activities on the preservation and promotion of the WHS value, thereby also making a significant contribution.

The WHS in Dubrovnik is, in terms of ownership, characterised by a high share of private ownership, as well as a significant share of institutional ownership, both by secular and religious institutions. The management thus depends on the way the owners use their property. Owners should therefore participate equally in the decision-making process together with the other stakeholders involved in the management process. Both private and institutional owners use their property for housing or commercial purposes, with the majority of the space being used for accommodation, food preparation and service, and retail. Financial service activities and personal service activities are somewhat less represented. Institutional owners accommodate important formal and cultural institutions in their properties (such as those of public administration, education, health care and social welfare, and the arts).

The WHS currently has four major groups of owners. The first group are private owners. The second major group are institutional owners, including the City of Dubrovnik, Dubrovnik-Neretva County, the Republic of Croatia, and other related legal entities. The third group of owners consists of religious communities: the Diocese of Dubrovnik,

the Serbian Orthodox Church and the Jewish community, which in addition to religious buildings, also own real estate that is leased for commercial purposes (housing or the accommodation of public institutions). The fourth group of owners is the Good Deeds Foundation (*Zaklada Blaga djela*), dating from the time of the Republic of Ragusa (14th to 18th century). Some of the mentioned owners do not have a representative body in the existing management system and it is necessary to create conditions for their involvement.

The local community is represented by the residents who inhabit the WHS and civil society organisations. WHS Management implies a sense of mutual belonging between the heritage and the local community. Involving the local community in the management of the site provides an opportunity to exchange information and knowledge, develop collective responsibility, and obtain locals’ support for activities aimed at the protection and improvement of the WHS’s value.

Since tourism is the dominant theme and the backbone of sustainable development that relies largely on a WHS as a resource, tourists and visitors can be considered indirect stakeholders. It is possible to transfer and/or recover information about the value of the site based on their experience.

It is proposed that stakeholders directly responsible for site management, i.e. stakeholders at the national, regional and local level that directly impact the preservation and development of the WHS, be involved in the governing body, where the public, civil and private sectors should be represented at a local level.



II.3.2. Legal and strategic framework

The area of the city of Dubrovnik and parts of the Dubrovnik-Neretva County that once lay within the boundaries of the Republic of Ragusa have a long history of spatial planning – from the medieval legislative system to modern-day planning policies developed on a national level.

It is necessary to position the Management Plan within the legal and strategic framework of the planning (strategic and spatial) and protection of the WHS while detecting the strengths and weaknesses of the system in order to make recommendations for its improvement.

The systems of strategic planning, spatial planning, and the protection of nature, the environment and cultural property, which must be mutually harmonised, have a decisive influence within the legal framework for the development of the Management Plan. Administrative areas related to adapting to and mitigating climate change are of particular importance, as well as those related to natural disaster risk reduction. In the case of Dubrovnik, given the seismicity of the area, there is a constant risk of earthquakes, which have already, on several occasions, caused significant damage to cultural heritage that required thorough restoration.

The overall connectedness of strategic principles from all sectoral strategic documents at a national, regional or local level is achieved through the spatial planning system. Special attention is paid to the spatial planning system and the role of spatial plans in the planning and realisation of strategic objectives in the space.

All special legislation related to planning and protection stipulate that the strategies, programmes and plans of all sectors should be in line with their umbrella strategies.

The basic model of cultural heritage management includes the interaction of the main levels: the legislative/representative body, the executive/managing body, advisory bodies, and the cultural sector.



FACSIMILE OF THE ORIGINAL CHARTER ON THE INSCRIPTION OF DUBROVNIK ON THE UNESCO LIST OF WORLD CULTURAL HERITAGE
Source: Institute for the Restoration of Dubrovnik

II.3.2.1. INSTRUMENTS FOR WORLD HERITAGE SITE PROTECTION AND MANAGEMENT

The protection of the WHS is ensured through international conventions and charters as well as legal norms at national and local levels. At the national level, protection is primarily achieved through the application of the Act on the Protection and Preservation of Cultural Property. Legislation related to construction, spatial planning and environmental protection also affects the protection of the WHS. Regulations at the local level, such as decisions on municipal order, decisions on advertising, and so on, are of special importance for the protection of property.

The institutional framework for the protection and preservation of the WHS consists of the Ministry of Culture and Media of the Republic of Croatia, the City of Dubrovnik, the Conservation Department in Dubrovnik, the Institute for Physical Planning of the Dubrovnik-Neretva County and the Institute for the Restoration of Dubrovnik (ZOD). This Management Plan demands the strengthening of the institutional framework by building the capacities of ZOD and other stakeholders.

INTERNATIONAL FRAMEWORK FOR PROTECTION AND MANAGEMENT

The protection of the WHS is regulated by policies contained in the following UNESCO, ICOMOS and Council of Europe conventions and charters:

- CONVENTION FOR THE PROTECTION OF CULTURAL PROPERTY IN THE EVENT OF ARMED CONFLICT (1954)
- CONVENTION ON THE MEANS OF PROHIBITING AND PREVENTING THE ILLICIT IMPORT, EXPORT AND TRANSFER OF OWNERSHIP OF CULTURAL PROPERTY (1970)
- CONVENTION CONCERNING THE PROTECTION OF THE WORLD CULTURAL AND NATURAL HERITAGE (1972)
- EUROPEAN LANDSCAPE CONVENTION (2000)
- CONVENTION ON THE PROTECTION OF THE UNDERWATER CULTURAL HERITAGE (2001)
- CONVENTION FOR THE SAFEGUARDING OF THE INTANGIBLE CULTURAL HERITAGE (2003)
- CONVENTION ON THE PROTECTION AND PROMOTION OF THE DIVERSITY OF CULTURAL EXPRESSIONS (2005)
- COUNCIL OF EUROPE FRAMEWORK CONVENTION ON THE VALUE OF CULTURAL HERITAGE FOR SOCIETY (2005)
- INTERNATIONAL CULTURAL TOURISM CHARTER: MANAGING TOURISM AT PLACES OF HERITAGE SIGNIFICANCE (1999)

The Operational Guidelines of the World Heritage Centre (2005) stipulate the development of management plans for all nominations for the World Heritage List as well as commitment of all convention signatories to develop management plans for sites already inscribed on the list.

The Recommendation on the Historic Urban Landscape (2011) complements and expands the notion of cultural heritage protection, especially from the aspect of management, preservation and development.

NATIONAL PROTECTION AND MANAGEMENT FRAMEWORK

WHS protection and management

Basic administrative protection of the most significant part of the spatial scope of the WHS – the historic core with its City Walls and Lokrum Island – is achieved in line with the Act on the Protection and Preservation of Cultural Property.

The Act provides a legal framework for the management of all changes to protected cultural heritage – both inside the WHS and in the buffer zone and the setting. The Act also regulates the management of the Register of Cultural Heritage of the Republic of Croatia, the system of measures and special conditions regarding cultural heritage protection, the development of conservation databases, reports and plans for cultural heritage management, the obligations and authority of cultural heritage owners, cultural heritage protection, and preservation institutions and protection financing. Under the Act, the protection of cultural heritage is implemented by the Ministry of Culture and Media of the Republic of Croatia, through the Directorate for Protection of Cultural Heritage and the competent Conservation Department in Dubrovnik.

Among topics crucial for the management of cultural heritage as well as the adjoining buffer zones (identified in the participatory process with the stakeholders, but neither included in nor described by the Act and its by-laws), the following stand out: pre-emption rights, the absence of cross-sectoral cooperation protection mechanisms through spatial and physical planning documentation, the protection of the cultural landscape, and the absence of a regulation on Heritage Impact Assessment (HIA).

The historic core of Dubrovnik was first protected and inscribed in the Register of Cultural Monuments of the then Council of the Municipality of Dubrovnik on January 15, 1966. The protection encompassed the city with its walls and forts and the fortress moat. As part of the compliance process with the Act on the Protection and Preservation of Cultural Property and the introduction of a unique Register of Cultural Heritage of the Republic of Croatia, the Ministry of Culture issued the Order on Determination of Cultural Property Status (Zagreb, 10 September, 2008). Based on that, the historic ensemble of the city of Dubrovnik and its immediate surrounding were included in the Register of Cultural Heritage of the Republic of Croatia under the name Cultural and Historic Urban Ensemble of Dubrovnik (Z-3818). Protection measures from the Order for Zone A (**Complete Protection of Historic Structures**), encompassing the WHS, read as follows:

Protection measures for Zone A – complete protection of historic structures

The protection measure system in this zone is conditioned by the comprehensive protection and preservation of all cultural and historic values, with utmost respect for tradition and the function of space and content. The introduction of new structures and content that are foreign or incompatible with the cultural and historic values in this zone is strictly controlled. The adaptation of existing historic functions and content to modern needs can be acceptable, provided that physical interventions to historic structures are minimal.

Conservation documentation with an architectural record of the existing situation and the implementation of conservation research are essential for quality restoration and revitalisation. These must be developed according to the adopted methodology for documenting cultural heritage (“Content and Processing of the Architectural Record of the Existing State of Architectural Heritage, Split 1993”) and in line with values and state of conservation of individual cultural heritage items within **zone A** of the historic ensemble in the process of restoration.

Existing structures can undergo methods of conservation, restauration, conservation reconstruction and presentation. The only interventions allowed, in line with the conclusions from the conservation documentation, are those that relate to the restoration of constructions, roof reconstruction, and old carpentry replacement, exclusively using traditional material and traditionally designed construction details. The layout and dimension of structures must be retained, and merging smaller construction units into larger ones or building balconies, loggias, and roof terraces is not permitted. During reconstruction work on houses inside the historic ensemble it is necessary to provide a complete construction consolidation, while the reconstruction project needs to take into account historic building principles and apply modern protection methods based on the opinions and professional expertise of builders specialised in work on cultural heritage. Restored construction between floors needs to be preserved in its original state and can only be replaced based on a conservation study and in line with the competent conservation authority guidelines. In cases where valorisation allows for renovation, restored constructions between floors can be wooden or composite with a wooded soffit. Floor joist support needs to be in line with the original state, depending on the style valorisation of the house.

Roof construction needs to be preserved, whereas new ones, if needed, must be wooden and use traditional details, with prior conservation approval.

All infrastructure needs to be underground and in line with conservation conditions and prior archaeological research results. Public space paving cannot take place without a conservation study, and the project needs to be certified by the competent conservation department.

For the reconstruction and restauration of the architectural design of front-facing façades and stone inventory of interiors, it is necessary to make architectural drawings of all openings, displaying damage or possible recent interventions, and restore them in line with conservation guidelines, with work performed in line with restauration techniques.

Zone A stipulates the preservation of historic and traditional construction details as symbols of identity of the historic ensemble. This refers to the protection of stone copings, water supply and drainage chamber copings, stone grids on sewers, characteristic window design, preservation of details such as narrow openings in doors or walls (“špijun” and “špijončina”), toilettes above street level (“gajfun”), wall chimneys (“kominata”), wrought-iron window grids (“infer”), metal decorations in the lunettes of houses and palaces, exterior carpentry (door fittings), door knockers, bolts (“kračun”), metal balcony fences and supports (especially if they are artistically designed or have characteristics of a certain style period), and the traditional typology of woodwork on house and palace openings as well as all other elements of monumental value.

Window coverings on buildings (“persijana”) and window frames without coverings, front doors, and other openings inside the historic core must be painted using the colour determined by the competent conservation authority.

It is not permitted to install new elements on the front-facing façades of houses or inside the fort system of Dubrovnik (mobile telephony devices, solar connectors, outdoor air conditioning units, billboards, satellite dishes and inadequately designed lighting systems).

In order to adequately organise the restoration of the WHS in Dubrovnik after the 1979 earthquake, a special Law on the Renewal of Dubrovnik's Architectural Heritage and Other Immovable Cultural Property in the Dubrovnik Area was adopted (OG 21/86, 33/89, 26/93, 128/99, 19/14, 32/14, 99/14). This act is the legal basis for the activities of architectural heritage restoration carried out by the Institute for the Restoration of Dubrovnik (ZOD). The Institute continuously implements restoration programmes and performs professional and other preparation, organisation and implementation tasks related to restoration in the WHS area and to cultural property in the buffer zone and the setting.

Other documents related to defining and protecting the WHS area in Dubrovnik are:

- NOMINATION FOR INSCRIPTION ON THE WORLD HERITAGE LIST, DUBROVNIK (1979, 1993)
- REVISED STATEMENT OF OUTSTANDING UNIVERSAL VALUE – OLD CITY OF DUBROVNIK (2015)
- PROPOSAL FOR EXTENSION OF THE BUFFER ZONE, DUBROVNIK (2018)
- ORDER ON DETERMINATION OF CULTURAL PROPERTY STATUS OF THE CULTURAL AND HISTORIC URBAN ENSEMBLE OF DUBROVNIK, Z-3818
- CONSERVATION DATABASE FOR THE WHS BUFFER ZONE, MINISTRY OF CULTURE AND MEDIA OF THE REPUBLIC OF CROATIA, ZAGREB (2020)
- SPATIAL AND PHYSICAL PLAN OF THE CITY OF DUBROVNIK
- SPATIAL PLAN OF DUBROVNIK-NERETVA COUNTY

Protection of nature and environment

Success in the preservation of the HUL of Dubrovnik depends on the state and preservation of the environment, and the Management Plan must therefore respect the principles of environmental protection. In practice, this means that it is necessary to examine the impact that every planning and strategic document and every intervention in the environment has on the environment through special environmental procedures in which the competent authorities participate.

One particularity of the WHS environment lies in the fact that the buffer zone includes areas with specific characteristics – the slopes of Srđ, the maritime area, and the island of Lokrum⁹ as an area of special protection in accordance with the Act on Nature Protection (OG 80/13, 15/18, 14/19, 127/19). This configuration of the terrain conditions a different spectrum of possible human impacts on the environment that, in the absence of planning and management procedure synchronisation, can have negative consequences both on the environment and on the WHS. In order to mitigate negative impacts, it is necessary to comply with the basic legal framework that regulates the topics of environmental and nature protection in the Republic of Croatia, i.e., the Act on Environmental Protection (OG 80/13, 153/13, 78/15, 12/18, 118/18) and the Act on Nature Protection (OG 80/13, 15/18, 14/19, 127/19).

Strategic Environmental Assessment (SEA) is conducted as a single procedure in accordance with the aforementioned acts for all strategies, plans and programmes at all levels of management. This applies when these are adopted in the fields of agriculture, forestry, fisheries, energy, industry, mining, transport, electronic communications, tourism, spatial planning, regional development, waste management and water management, if they: a) provide a framework for interventions that are subject to environmental impact assessment; and b) according to nature protection regulations, can have a significant negative impact on the ecological network.

The aim of the SEA procedure is to enable relevant decisions on the adoption of the strategy, plan and programme to be made taking into account possible significant impacts that the implementation of these documents could have on the environment. At the same time, it should provide the leading bodies with an action framework and the opportunity to involve important elements of environmental protection in the decision-making process.

Since the Management Plan does not plan interventions that are subject to assessment, that is, that may have a significant impact on the ecological network, it was assessed that it is not necessary to carry out the SEA procedure.

In spite of that, all interventions carried out within the scope of the Management Plan will have an impact on the environment (the environment comprises natural or created surroundings in which humans and other beings live, the totality of all natural and created values managed by human activity, meaning that, in addition to the natural environment, the term also implies cultural heritage), and the body determining whether assessments need to be made or not will have to take into account not only the ecological network and nature but also the overall cultural heritage, since all of them together make up the environment.

Landscape protection

As one of the signatories of the European Landscape Convention (2000), Croatia passed the Act on Ratification of the European Landscape Convention (OG 12/02). Even though there is no legal basis for landscape planning at the national level, Dubrovnik-Neretva County developed a landscape study that classified landscapes typologically. Its results have been incorporated into the Spatial Plan of the Dubrovnik-Neretva County. A series of studies that recognised and valorised the cultural and natural landscapes of the county served as a basis for amendments to the plan, which resulted in the protection of these landscapes through provisions in the plan.¹⁰ The following groups and

types of landscapes have been recognised: coastal and maritime, urban and rural, agrarian, fortification, sacral, tourist, production, and the associative landscape of the Republic of Ragusa. These are categorized according to their values, ranging from local to world significance.

- 9 Lokrum Island is protected as a special reserve of forest vegetation and is part of the network of Natura 2020 nature protection areas. In line with the Act on Nature Protection, a special reserve is a protected area of nation-wide importance. A special reserve is an area of land and/or sea of particular importance due to its unique, rare or representative natural values, or an endangered habitat or a habitat with endangered species, and its primary aim is the protection of these values. Special reserves allow interventions and activities that maintain or improve conditions necessary for the preservation of features leading to its nomination. In line with the Act on Nature Protection, an ecological network is a system of interlinked or spatially close ecological areas of significance that, due to their balanced biological and geographical distribution, significantly contribute to the preservation of natural balance and biodiversity. Ecological networks are recognised with the aim of the preservation and creation of a favourable status for wild birds species and their habitat and other wild animals and plants and their habitats as well as types of habitats of particular significance for the European Union and the Republic of Croatia.

10 Recognition and valorisation of cultural landscapes of Dubrovnik-Neretva County – basis for protection, 2018.; Identification and valorisation of natural and cultural landscapes of the pilot area of the city of Dubrovnik, 2017.; Features of the area from the perspective of nature protection including a proposal of protection measures, Dubrovnik-Neretva County, 2018.



VIEW OF LOKRUM FROM MOUNT SRĐ
Source: Dubrovnik Tourist Board

II.3.2.2. NATIONAL PLANNING
FRAMEWORK

STRATEGIC PLANNING

The Act on the System of Strategic Planning and Development Management of the Republic of Croatia (OG 123/17) sets the basic structure and hierarchical relationship between strategic documents for development at all levels and systemises their basic structure and method of drafting. The 2030 National Development Strategy of the Republic of Croatia was adopted based on this act. Many of the strategic and planning documents currently in force will need to be aligned with the new strategic planning framework.

Regional development planning is based on the Act on Regional Development (OG 147/14, 123/17, 118/18), that in turn was the basis for the adoption of the Regional Development Strategy of the Republic of Croatia, as were the development strategies of the counties and local administrative units that should be linked to their respective spatial plans. Regional development documents for the WHS area are the Development Strategy of the Dubrovnik-Neretva Region and the Development Programme of the City of Dubrovnik.

The City of Dubrovnik developed a Strategy of Culture Development that includes the development of the Management Plan. One of the goals of the first strategic objective (Sustainable management of cultural heritage: to protect space and develop infrastructure for cultural needs) is to strengthen the sustainable use of tangible and intangible cultural heritage. One measure related to this objective is to initiate and implement urban revitalisation and historic core regeneration projects as well as to promote the preservation and use of intangible cultural heritage and the traditional culture of living. The following stand out among other sectoral strategies: Strategy of Tourism Development of the Republic of Croatia, Strategy of Tourism Development of Dubrovnik-Neretva County, and Strategy of Tourism Development and Provisions on Cruise Ship Tourism in the Dubrovnik Area.

SPATIAL PLANNING SYSTEM

The Act on Physical Planning (OG 153/13, 65/17, 114/18, 39/19, 98/19) is the legal framework for the implementation of spatial and physical planning.

The umbrella strategic document is the Spatial Development Strategy of the Republic of Croatia (OG 106/17) which needs to be aligned with the National Development Strategy and provide a framework for the development of a National Plan of Spatial Development as the fundamental spatial plan in Croatia. The Spatial Development Plan of the City of Dubrovnik and the urban plans are instruments for its implementation and basis on which all permits for building and spatial interventions are issued.

The relationship between the spatial planning system and other administrative areas (sectors) is regulated by special acts which establish vertical and horizontal cooperation. Although individual sectors participate in the process of drafting and adopting spatial planning documents, they draft their own sectoral documents independently. The previously adopted sectoral documents first undergo serious examination in relation to space in the process of drafting and adopting spatial plans.

Considering the interconnectedness of the protection and conservation of cultural property and spatial planning issues, it is necessary to define the method of implementation (strengthen spatial plans through special acts as a tool for cultural heritage protection and preservation).

SPATIAL AND URBAN DEVELOPMENT PLANS

Spatial and urban development plans are legally binding for all interventions in a space. Plans are developed at national, regional and local levels. In order to clarify the role of key sectors in integrated spatial planning, a short overview of the legally prescribed procedure for the development of spatial plans is provided.

Spatial plan development begins with a decision on its development that has been adopted by a representative body at the appropriate level—in the case of the General Urban Plan (GUP), it is the City Council. Topics from the draft of the decision are the result of reporting on the status of the space, planning of the realisation of objectives/priorities from strategic documents for development, the interest of individuals/groups (Act on Physical Planning, Article 85) and/or updates to the legislative and strategic framework. The decision on development is forwarded to bodies governed by public law which have a certain interest in the area that the plan encompasses. These bodies provide special conditions related to the development of the spatial plan that are not part of the information system.

Bodies governed by public law are again included in the legal procedure during the public consultation process, when they give an opinion on whether their requirements have been properly incorporated (Article 101 of the Act on Physical Planning). After processing the remarks from the public consultation on the spatial plan proposal and the strategic study, the final proposal of the plan is drafted (in the case of the City of Dubrovnik, the final proposal is adopted by the Mayor). The final proposal is sent to the competent ministry to provide consent signifying that it has been developed in line with the provisions of the Act on Physical Planning. Once the ministry issues consent, the Mayor sends the final proposal to the City Council for adoption.

According to the Act on Protection and Preservation of Cultural Property, spatial and urban development plans must contain data from the conservation database providing a system of measures for the protection of cultural property within the boundaries of the plan. The conservation database is determined by the body responsible for the area covered by the spatial plan and it determines the general and special conditions for the protection and preservation of cultural property and the boundaries and manner of protection of the buffer zone. In the event that no conservation database has been prepared, a system of measures for the protection of cultural property located in the area covered by the spatial plan is determined, including boundaries of the cultural

property buffer zone and manner of protection in the buffer zone (Articles 56 and 57).

The Act on the Protection and Preservation of Cultural Property stipulates that a spatial planning document may not be adopted without the prior consent of the competent authority, confirming that it complies with the conservation database or the established system of protection measures.

However, the Act on Physical Planning (OG 153/13, 65/17, 114/18, 39/19, 98/19) does not foresee the possibility of consent being issued by the competent Ministry of Culture and Media.

Plans include the protection and preservation not only of protected and preventively protected cultural property and landscapes under the Act, they also protect the overall cultural heritage, including documented cultural property and landscapes. The Act on Protection and Preservation of Cultural Property does not have provisions on the protection and preservation of documented cultural heritage and it does not apply to them. The same is true with regard to protection through spatial and physical planning documents. If the Act stipulated that that protection of documented heritage, including landscapes, were to be implemented using spatial plans, heritage protection would be more complete. The plan is the only mechanism for the protection of documented cultural heritage that is in danger of damage or extinction, and this is often insufficient.



OVERBUILDING IN THE BUFFER ZONE – SUBURB OF PLOČE
Source: Dubrovnik-Neretva County Institute for Spatial Development


**SPATIAL AND URBAN DEVELOPMENT
PLANS RELEVANT FOR THE WORLD
HERITAGE SITE IN DUBROVNIK**

The entire area of the inscribed site together with the buffer zone is within the scope of several hierarchical spatial planning documents¹¹:

The disadvantage of this system is the lack of spatial and physical planning regulations appropriate for cultural and historic ensembles.

The conservation database for the WHS buffer zone (September 2020) gives a detailed overview of conservation measures and guidelines for each area with common features located outside the protection limits of the WHS. After its integration into the General Urban plan of the City of Dubrovnik, it will be the basis for issuing construction-related documents by the competent administrative department. In this way the spatial and physical planning documentation becomes the main instrument for the implementation of interventions in the buffer zone area, with the exception of the area encompassed by the national protection of the cultural, historic and urban ensemble of Dubrovnik, where the Act on Protection and Preservation of Cultural Property is applicable.

It is necessary to insist on the requirement to implement urban and architectural tenders for public locations and buildings as well as for all other interventions in public spaces that are important for the city’s contours, even if they are related to the reconstruction of existing buildings.

 **11** Dubrovnik introduced the Implementation Urban Plan related to the old historic core (scale 1:1000, 1:500) in 1986, the only such plan for a historic core in what was then Yugoslavia. In 1988, Dubrovnik also introduced the Implementation Urban Plan Pile-Ploče-Sveti Jakov. Both were in use for many years (until around 2000). These plans protected the space from devastation and solved functional and organisational issues in ways favourable to citizens.

12 Numerous studies were carried out before the adoption of the Conservation Plan for the WHS buffer zone, including the results of the project Baština – pokretač razvoja (Heritage: Driver of Development). The study on the outline of the city, Mount Srđ, and the walkway along the ancient water supply system meant that the area was for the first time being considered as a whole. This 2019 project created the necessary conditions for integrative cultural and historic valorisation and space management.

- **STATE PLAN ON SPATIAL DEVELOPMENT**
– offers basic guidelines as described in Article 67 of the Act on Physical Planning
- The Spatial Plan of the Dubrovnik-Neretva County Official Gazette of Dubrovnik-Neretva County, 6/03, 3/05, 3/06, 7/10, 4/12, 9/13., 2/15., 7/16, 2/19, 6/19, 3/20) is an “old-fashioned” plan that can be characterised as strategic, but it includes a number of recommendations and measures for the protection and preservation of cultural and natural heritage and landscape. Amendments to the county’s spatial plan adopted in 2019 recognised the WHS setting as a category otherwise not recognised in any of the other lower-category plans nor by the Order on Protection of World Heritage Site. The databases and studies that served as the basis for the development of physical and spatial planning guidelines form an integral part of the spatial plan¹²
- **SPATIAL PLAN OF THE CITY OF DUBROVNIK**
(Official Gazette of the City of Dubrovnik, 07/05, 06/07, 10/07, 3/14, 9/14, 19/15, 18/16, 25/18, 13/19, 15/19)
- **GENERAL URBAN PLAN OF THE CITY OF DUBROVNIK**
(Official Gazette of the City of Dubrovnik, 7/05, 6/07, 10/07, 03/14, 9/14) – These plans for the WHS have not been updated and aligned with the Spatial Plan of Dubrovnik-Neretva County. The scope of the existing General Urban Plan takes into account immovable cultural heritage and introduces general guidelines and provisions for its preservation that are not of crucial importance in the process issuing construction permits. Construction requests in the vicinity of both individual cultural property and the WHS as a whole are a significant issue. They can have a significant impact on the site’s visual and spatial integrity. One of the most sensitive issues that, from the point of view of conservation, can be recognised in the urban area of Dubrovnik is the regulation of construction in the unbuilt construction area on the slopes of Mount Srđ, especially in the districts of Ploče, Sveti Jakov and Bosanka. The latest amendments will integrate the conservation database for the WHS buffer zone from September 2020 into the GUP in line with the Act on Physical Planning with measures for the protection of the WHS. The process will be led by the Administrative Department for Issuance and Implementation of Physical Planning and Construction Documents as the competent authority.
- Urban development plans are plans of local significance and their development is prescribed by the spatial development plans of cities and municipalities (both for undeveloped and unregulated areas).

II.3.2.3. PROCESSES

For every intervention in the WHS area and its setting located inside the limits of national protection, it is necessary to obtain special conservation conditions and approval for the implementation of the project in addition to the conditions stipulated by the spatial and physical planning documentation. These need to be obtained before the final building permit is issued and the entire process is carried out by the Conservation Department in Dubrovnik.

When drafting their opinion, the Ministry of Culture and Media of the Republic of Croatia – Directorate for Protection of Cultural Heritage and the Conservation Department in Dubrovnik recommend the development of a HIA for projects that may have an impact on the WHS.

A lack of more detailed spatial plans such as the former implementation urban plans, detailed development plans, and so on, especially for the WHS area, creates a great burden on various professional services of the Ministry and/or the City in charge of the protection and preservation of cultural property.

Spatial and physical planning documents are often the only place where a large number of cultural and landscape values which are not protected by any other legal acts are recorded. Unfortunately, the implementation of the protection of these values (according to the conditions in the provisions for the implementation and cartographic representations of the plan) is not unambiguous and the process of implementing protection needs to be upgraded. In other words, it is necessary to involve other stakeholders (ministries responsible for the protection of cultural heritage, natural features, landscapes, etc.) in the process of implementing plans.

Stakeholders point to the issue of the impact the application of the Ordinance on Simple and Other Construction Works has on the WHS. They believe that the misapplication of this ordinance has led to frequent inappropriate undertakings in spaces and also point out there is frequent non-compliance with procedures defined by the ordinance.

**II.3.2.4. HERITAGE AND
ENVIRONMENTAL IMPACT
ASSESSMENTS**


For all interventions in the buffer zone and the WHS setting that may have an impact on its Outstanding Universal Value (OUV), a Heritage Impact Assessment (HIA) has to be carried out in accordance with the 2011 ICOMOS guidelines.

Particular attention should be paid to the provisions of the current General Urban Plan (GUP), which planned the WHS setting uncritically, particularly with an arbitrary interpretation that can generate construction that endangers OUV. The current GUP proposes construction on the natural slopes of Srđ, in the buffer zone in the immediate vicinity of the WHS. This could potentially have a significantly negative impact on the spatial and visual integrity of the site. Also, an additional problem with the provisions of the GUP in the buffer zone is the mass construction and high-rise buildings, while terraced construction is overlooked. The GUP neglects green and open public areas, the lack of which also greatly affects the visual integrity of the WHS (with additional negative impacts, such as on the quality of life, time spent in public spaces, pedestrian connectivity as well as on environmental and social aspects, etc.).

The HIA is considered a good tool that should be developed in advance for any proposed intervention and combined with an Environmental Impact Assessment (EIA). It is important to emphasize that the Strategic Environmental Assessment (SEA) and EIA must contain a separate chapter on intangible heritage as important constituent parts of the environment.

Even though regulations stipulate the integration of natural and cultural heritage in EIA and SEA, environment still only refers to the natural and ecological network, and cultural heritage is neglected even though it has the possibility of being considered integrally, not just as protected cultural heritage, but as cultural heritage in general.

It is necessary for the Ministry of Culture and Media to horizontally align the Act on Protection and Preservation of Cultural Heritage to the Act on Environmental Protection and the Act on Physical Planning. At the same time, the Ministry of Culture and Media should draft a protocol for the implementation of the HIA in accordance with the UNESCO principles.¹³

 **13** In 2011 ICOMOS developed a document *Guidance on Heritage Impact Assessments for Cultural World Heritage Properties*. It needs to be taken into account when integrating HIA into the management system.

III. CHALLENGES

The challenges of spatial development and management were identified in previous analyses by the experts involved as well as by the extensive participatory process during and before the process of drafting the Management Plan. The following is a summary overview of the basic spatial challenges and challenges in the management concept.

III.1. Legal challenges

Legal challenges have been identified as challenges of WHS management that arise from shortcomings in the existing legal and regulatory framework and spatial planning system. There are three main shortcomings of the legal framework that affect the implementation of the Management Plan: the lack of a regulatory framework for the implementation of the Management Plan in the legislative system of the Republic of Croatia, the overlapping of competencies in the public sector in the WHS area, and the lack of a mechanism for intersectoral cooperation in cultural heritage protection through spatial and physical planning documentation. The insufficient alignment of the Act on Protection and Preservation of Cultural Heritage to the Act on Environmental Protection and the Act on Physical Planning was identified as a problem as well. Alignment would strengthen these acts in their protection of documented cultural heritage and landscapes. In order to address these obstacles, the Management Plan has to establish a management system that will, in cooperation with the stakeholders, encourage the process of adjusting the legal as well as spatial and physical planning framework. For this reason, the Management Plan includes amendments to relevant acts in its Action Plan.

UNESCO's examples of good practice include preparation of a *HIA*, and this is currently not included in the legislative system of the Republic of Croatia. In the current format, the Strategic Environmental Assessment (SEA) and Assessment of Intervention Environmental Impact (EIA) do not adequately consider cultural heritage as part of the environment, and assessments of the need to implement these evaluations often only consider the impact of the project or plan on natural rather than cultural heritage. In order to open up the possibility for quality HIA, the Management Plan envisages encouraging the development of protocols for HIA implementation. Also, there is a lack of regulations for the preservation of HUL.

During the participatory process, numerous stakeholders pointed out the lack of a more detailed spatial plans (such as an Implementation Urban Plan, Detailed Development Plan, etc.) for the UNESCO WHS of the Old City of Dubrovnik. The Management Plan envisages the development of a detailed Implementation Urban Plan for the World Heritage Site area in order to minimize the divide regarding the above-mentioned issues.

More detailed solutions to the problems identified as legal challenges are presented in Chapter IV.1. Strategic actions. Due to multisectoral issues, they are structured through different objectives.

III.2. Social, territorial and environmental challenges

An important aspect of the Management Plan is to encourage and continuously involve the local population and the local community in development planning and decision-making that affects the quality of life of residents, environmental protection, and tangible and intangible heritage. The objectives of the Management Plan's sociological and demographic part are primarily related to the revitalisation of the historic core of Dubrovnik and its surrounding area (the WHS as a whole), an area that is, from a sociological and demographic aspect, in many ways endangered. It is necessary both to attract new and retain current inhabitants, significantly improve the quality of life (the availability of content and services needed for everyday life; solving the problems of traffic and delivery of goods in the WHS area and those of waste collection and separation; improving the municipal infrastructure; solving the problem of tourism overload etc.) and reduce pollution (air, sea, and light pollution, noise, etc.) as well as protect

and improve the state of the environment (urban green areas and parks, air, sea, Lokrum, slopes of Srđ, etc.). Among the development priorities, the following stand out: preservation of the living city in the context of the development and strengthening of the local community; preservation of tangible and intangible heritage from excessive and inadequate use and/or commercialisation; growth and preservation of the population and their living space and natural environment from excessive pollution; preservation of public goods and public space; and active participation of citizens. In order to solve these problems, the strategic actions of the Management Plan offer solutions that need to be applied during the implementation of this document.

The tourism developed over the last decade in Dubrovnik is marked by a high level of concentration both in space and time, with an emphasis on private tourist accommodation owned by individuals and mass cruise ship tourism. Despite the request made by the UNESCO/ICOMOS Reactive Monitoring Mission, the second part of the tourism development study (Action Plan) with special reference to cruise ship tourism was not completed, and that study has neither been implemented nor monitored. Also missing is the Carrying Capacity Plan, which is an indispensable document for sustainable management of the WHS, including the tourism sector. During the participatory process conducted as part of the Management Plan development process, stakeholders emphasised that tourism development is based on maximizing the share of profits, without mutual synergy and overall optimisation, which creates a sense of uncoordinated development, improvisation, and the neglect of other elements of sustainable tourism development (society, culture and environment). There is a lack of a system of continuous and comprehensive data monitoring and monitoring positive (ex. economic) effects and negative physical and financial indicators as well as monitoring related environmental and sociological parameters. What stands out in this context is the essential need to harmonise the needs of the local population and the protection of cultural heritage and its tourist valorisation in order to ensure long-term sustainable development. In order to offer adequate solutions for the creation of a sustainable tourism sector, a specific topic has been defined within the Action Plan, one focused on tourism management. The development of carrying capacity in accordance with all social and territorial components, and also the development of an acceptable visitor management system, must be a priority. The correct response to the challenges that arise from the tourism sector is visible in the development of tourism that creates additional economic, environmental and heritage value for the local community, with special attention being paid to reducing its negative impact on heritage, identity, society and the environment of the WHS.

Environmental challenges are mostly related to congestion caused by tourists and visitors and the correlated traffic congestion, resulting in a negative impact on the environment. Also, public green spaces and certain elements of urban greenery, according to stakeholders involved in the participatory process, are at risk due to air pollution and the impact of construction, and therefore better management is required. The basis for this should be the creation of a Green Cadastre, which is related to the objectives of the green and digital transition of the EU. The establishment of this tool would open the door to the better organisation and valorisation of environmental components, but also to more adequate monitoring of the state of the environment. The environment is also affected by infrastructure that requires modernisation. What was also pointed out was the need to achieve greater environmental and economic efficiency through saving water and energy, recycling waste, and reducing the environmental footprint of products and services in order to reduce the consumption of natural resources, hazardous and toxic substances and emissions into air, water and soil as well as to reduce and prevent waste generation at the place of origin. An increased amount of waste due to a rise in number of temporary residents and tourists presents a significant challenge. The need to modernise infrastructure and protect the environment is visible due to public drainage which is based on a system dating from the 14th century. Problems that are tied to this include unpleasant odours in the main channels of the drainage system, the problem of the maintenance of pumping stations due to the composition of wastewater, sea infiltration, the lack of a rainwater network, leakage problems during heavy rainfall, etc. In the summer months there are power failures — the key relevant topics are the effects of surges and the correlation of trends in consumption, seasonality, tourism specifics (air conditioning units, heaters, restaurants, hotels, etc.). In the context of the environment, but also within the topic of society, the challenge of the negative impact of noise on the citizens' quality of life has been noted. In order to establish solutions to improve the environment as a whole, the Management Plan offers an implementation framework for valorisation and appropriate environmental protection, the implementation and monitoring of environmental aspects, the preservation of public goods, the protection of public interest, and public space. In order to improve the citizens' quality of life, along with the topic of sustainable development, the Management Plan offers a framework for preserving the local community inside the WHS area through the creation of an environment that would be pleasant both to stay and live in. Objectives and activities are structured within the topic of Sustainable Development.

In terms of traffic, the City of Dubrovnik is extremely congested. The insufficient capacity of the city roads causes daily traffic jams, especially in the summer months. The lack of parking space further worsens the situation on the city roads. Dubrovnik is mainly an airplane destination, so the airport is the main point of arrival for tourists. However, the airport is 20 kilometres away and the main connecting road is the Adriatic Highway, which passes right above the WHS. It is therefore necessary to observe the entire HUL, buffer zone and environment and find the most favourable transport solution to the WHS within that perimeter. For all interventions in the buffer zone, special attention needs to be paid to the visual component of the intervention in relation to the WHS OUV. In order to adequately address the challenges within the traffic sector, Traffic Management has been defined as a specific topic within which special emphasis has been placed on the development of a Sustainable Urban Mobility Plan (SUMP) as a prerequisite for the more successful organisation of transport and of the space as a whole.

The General Urban Plan of the City of Dubrovnik covers most of the setting area, including the WHS and the buffer zone. A conservation database for both the WHS and the buffer zone has been developed but has not been integrated into the plan. Analyses have shown that changes to slopes in terms of new construction in the vicinity of the site (the Ploče area) and other parts of the buffer zone, based on the current General Urban Plan (the document in line with which



PLACA (STRADUN STREET) DURING THE TOURIST SEASON
Source: Dubrovnik Tourist Board

construction permits are issued) can negatively impact the OUV. The conservation database ascertained the need to ban new construction in the unbuilt construction areas on the slopes of Srđ and preserve nature and green areas that are part of the WHS cultural landscape.

Among other social, spatial and environmental challenges, the following stand out:

- **THE PRESSURE OF NEW CONSTRUCTION IN THE WHS SETTING (POTENTIAL THREAT TO THE WHS THROUGH PLANNED CONSTRUCTION ON THE SLOPES OF SRĐ)**
- **UNACCEPTABLE CONSTRUCTION WORKS IN THE AREA OF THE NARROW ZONE AND GARDEN SUBURB OF THE WHS THAT ARE A THREAT TO THE PRESERVATION OF ITS INTEGRITY**
- **INADEQUATE CONSTRUCTION AND INFRASTRUCTURE INTERVENTIONS ON INDIVIDUAL BUILDINGS IN THE WHS AREA**
- **THE CONSERVATION DATABASE FOR THE WHS BUFFER ZONE IS NOT INCLUDED IN THE GENERAL URBAN PLAN**
- **THE MISAPPLICATION OF THE ORDINANCE ON SIMPLE AND OTHER CONSTRUCTION WORKS**
- **THE LACK OF A CONSERVATION DATABASE FOR THE WHS OF THE OLD CITY OF DUBROVNIK (INCLUDING THE ISLAND OF LOKRUM)**
- **INSUFFICIENT MONITORING OF THE STATE OF THE WHS, ITS BUFFER ZONE AND THE HUL**

- **THE EMERGENCE OF COMMERCIALISATION AND PRIVATISATION OF THE WHS'S PUBLIC SPACE**
- **TRAFFIC SYSTEM OVERLOAD**
- **THE DANGER OF THE NEGATIVE IMPACT OF THE TRAFFIC SYSTEM ON THE WHS (THE SLOPES OF MOUNT SRĐ)**
- **THE OUTFLOW OF PERMANENT RESIDENTS FROM THE WHS CITY CORE**
- **INSUFFICIENT INVOLVEMENT OF ALL STAKEHOLDERS IN THE WHS MANAGEMENT**
- **THE LACK OF EDUCATION OF STAKEHOLDERS ON THE VALUES OF THE WHS, ITS BUFFER ZONE AND HUL**
- **A LACK OF MATERIALS FOR STAKEHOLDER EDUCATION**
- **A DECREASE IN THE QUALITY OF LIFE OF THE WHS INHABITANTS**

These challenges are further clarified and explained in Chapter IV.1. Strategic actions.



FIGURE 1. WORLD HERITAGE SITE: RESIDENTIAL AREA
 PROBLEM DETECTED: there is a need to zone the residential areas and determine a corridor for tourist movement and the spatial arrangement of hospitality and tourism facilities.
 Source: Authors

III.3. Management challenges

Dubrovnik as a WHS is faced with numerous problems and challenges that affect its management. Heritage preservation requires the involvement of a broad range of stakeholders who need to have the necessary competencies and knowledge in order to be able to fully recognise the qualities of heritage and its condition within the physical, social, cultural and economic context. The current state of the management system is the result of several factors, the first of which is the lack of a legal regulatory framework for the management of urban monumental ensembles that would enable and guide the **establishment of an adequate management structure and system**. Management thus becomes an *ad hoc* practice that relies on relationship and communication between mostly local stakeholders and disputes within the levels of political and institutional authorities on the one hand and

the social responsibility, legitimacy and democracy that comes with the citizen engagement process on the other. The current state is characterised by the existence of many stakeholders whose responsibilities and competencies occasionally overlap, leading to a collision on the one hand and bureaucratisation and an “institutional vacuum” on the other. This points to the **need for coordination and the development of a meaningful management system** and structure that will ensure the effective process of WHS management. During the participatory process numerous stakeholders cited a lack of more active participation by the civil sector and citizens in the decision-making processes as a pressing problem.

Active civil society, citizens, and community gathered around the WHS should be equal partners in the management process, thereby both achieving the objective of the preservation of the living city and meeting the European standards of the *good governance* of heritage goods. Also identified during the participatory process was a lack of capacities and knowledge about the potential, opportunities and needs of the WHS and of the local stakeholders – from political actors and institutional representatives, to

representatives of civil society organisations and citizens. The majority of stakeholders demand a systematic and long-term approach to strengthening the capacities of stakeholders and bodies involved in management.

One specificity of the Dubrovnik WHS lies in the fact that it seeks to harmonise the needs of the local population with regard to strengthening the much-needed social functions of the protected area on the one hand and the organization and structuring of tourism, whose market demand keeps growing and generating income-oriented interests, on the other. If this **trend of tourism development** continues, the attributes of the OUV may be far more endangered than they currently are. One of the obstacles in the organisation of a management system, as well as sustainable spatial planning, is the lack of a unified spatial database for the area of the WHS. A single database would bring together all relevant data for the WHS, the buffer zone, and its setting in the context of the purpose of the buildings and areas, statistical, demographic and socioeconomic indicators, environmental quality indicators, residents’ quality-of-life indicators, tourism indicators, preservation and state of cultural heritage indicators, etc. Having such a base would enable the improvement of the visitor management system and monitoring all indicators that affect the achievement of balance between the needs in space. Such an approach would also enable quality sustainable development.

The 2015 UNESCO/ICOMOS Reactive Monitoring Mission pointed out the urgent need to improve the situation with regard to WHS preservation management. In the context of cultural heritage management, the term HUL often appears. In this regard, the buffer zone and the setting area have already been defined. To ensure adequate protection of these areas, it is necessary to strengthen existing and develop new planning instruments, orders, and protocols. Obstacles include **spatial and physical planning documents** in which the conservation database has not yet been integrated, the lack of a conservation database for the WHS, and an undefined protocol for conducting HIA. Besides that, the Croatian spatial planning system lacks planning levels that are standard in EU countries and include historic ensemble plans and plans at the former level of the PUP.

An additional issue that appeared during the participatory process is the issue of WHS **monitoring**, especially in the scenario of an increasing influx of visitors.¹⁴ The negative sides of excessive and uncontrolled tourism development are that it diminishes citizens’ quality of life and introduces serious hazards in the field of the protection and preservation of the social and natural environment, thereby directly

limiting the possibilities for WHS preservation. The current situation indicates a lack of efficiency in the implementation of existing regulations, limitations regarding municipal wardens’ areas of competence, and the overburdening of conservers with continuous inspections that, due to the legal framework, require complicated procedures. Simplifying procedures, strengthening capacities, and aligning competencies would allow for more efficient monitoring of the WHS. In connection with the above, a need to harmonise the competencies of numerous institutions and public bodies as well as representatives of citizens (city districts) and civil society organisations to create a sustainable and efficient management system is also emphasised. Rather than sanctioning violations in the WHS, a more efficient method would be to develop a spatial plan for the WHS, as well as continually educate all stakeholders, which relates back to the previous issue of strengthening the capacities of stakeholders, citizens and public bodies. By creating a spatial plan that would define everything necessary and increase the level of education, awareness, and communication of all stakeholders, the number of violations in the area would potentially decrease, thereby contributing to the conservation management objectives.

It is necessary to point out that, at the present, there is no visitor management system in place, and that there is a certain overlap in the responsibilities of the public authorities in the WHS area.

¹⁴ During the development of the document, it was impossible to estimate the complexity and scope of future trends in the tourism sector after the ongoing COVID-19 pandemic. A wide spectrum of different scenarios for tourism trends and demand is possible. (author’s comment)

III.4. Risk management challenges

The history of Dubrovnik makes it possible to identify the principal risks that need to be understood and considered when planning risk preparedness in the WHS area and its setting. It can be observed that risks in the past included earthquakes, floods, fire and armed attacks. Consequently, the Risk Preparedness and Management Plan should consider these as potential threats. Research and

documentation related to the WHS and its setting should pay particular attention to identifying the vulnerabilities of the buildings and different components of the HUL. The question of vulnerability is relevant for the condition of individual structures and the capacity of the owners or occupants to deal with the risks of their property within its setting. Vulnerability is also a question of the whole environmental context, including both urbanised and natural areas.

Heritage, in its various features, is exposed to numerous risks. A common practice is to divide them into natural and technical-technological risks. We accept many natural risks as occasionally inevitable, although we cannot predict them (for example, earthquakes), neither in terms of where they occur, nor in terms of how intense and destructive they are (damage). Technical-technological risks are constantly produced by modern society, but modern society also creates many measures for their suppression or exclusion. In the most global sense, multiplying the consequences of risk and combining the high intensity consequences, the known and unknown of numerous consequences, helps in the distribution of disaster risk. Disasters are risks due to a lack of preventive measures and they can often be of enormous magnitude and with consequences that may lead to significant problems for society.

The Dubrovnik WHS is exposed to many risks. With regard to the development of the Management Plan, all potential risks have to be presented in advance and a series of activities has to be organised in order to be subject to preventive measures and to increase resilience for recovery. The city as a whole is exposed to the risk of damage, either due to the impact of the climate (the aging process of building materials, most often stone walls, sidewalks, stairs), or due to the way the WHS and the city is being used (for example, many daily visitors/tourists to the walls, other areas and city facilities, wear and tear caused by pedestrians, etc.). Therefore, the number of daily visitors is also one of the factors considered when estimating the carrying capacity of the entire WHS with respect to the daily flow of visitors. Limiting the number of visitors per unit of time for certain city locations and dispersing tourists is a measure that can mitigate the risk for the city as a whole, but also its special elements - locations.

The City of Dubrovnik and its wider surroundings are a high seismic risk area and need continuous maintenance and preventive measures to earthquakes and to other natural and anthropogenic risks. The danger of fire and the need to adjust the infrastructure (inflow and water pressure for firefighting, accessibility to fire trucks, etc.) need special emphasis.

There are three main stages of risk management: before, during and after risk activation. Risk-preparedness activities include risk assessment, prevention and mitigation measures for specific hazards (maintenance and monitoring as well as the formulation and implementation of various disaster management policies and programmes). Emergency preparedness to be undertaken before a disaster includes measures such as creating an emergency team, a warning system, drills, evacuation plans, and clearly marked evacuation ways as well as temporary storage.

Principles with regard to disaster risk preparedness include the following:¹⁵

- **IDENTIFY POTENTIAL HAZARDS IN THE AREA SUBJECT TO MANAGEMENT. VERIFY THE VULNERABILITY OF INDIVIDUAL PROPERTIES AND POSSIBLE RISKS IN REFERENCE TO DIFFERENT TYPES OF HAZARDS.**
- **THE KEY TO THE EFFECTIVE PROTECTION OF HERITAGE AT RISK IS TIMELY PLANNING AND PREPAREDNESS. PLANNING SHOULD BE CONCEIVED IN TERMS OF THE ENTIRE HUL, PROVIDING SOLUTIONS FOR ITS COMPONENTS WITHIN ASSOCIATED CONTEXTS.**
- **HERITAGE SITES, THEIR SIGNIFICANT ATTRIBUTES, AND DISASTER RESPONSE HISTORY SHOULD BE CLEARLY DOCUMENTED FOR APPROPRIATE DISASTER RESPONSE, AND RECOVERY. MAINTENANCE SHOULD ALSO LOOK AT CULTURAL HERITAGE FROM A RISK PERSPECTIVE.**
- **FOLLOWING A DISASTER, EVERY EFFORT SHOULD BE MADE TO ENSURE THE RETENTION AND REPAIR OF STRUCTURES OR FEATURES THAT HAVE SUFFERED DAMAGE OR LOSS. CONSERVATION PRINCIPLES SHOULD BE INTEGRATED WHERE APPROPRIATE IN ALL PHASES OF DISASTER PLANNING, RESPONSE, AND RECOVERY.**

15 For more information, see H. Stovel, 1998. Risk Preparedness: A Management Manual for World Cultural Heritage, ICCROM.

It should be noted that there is no Risk Preparedness and Management Plan that may have an impact on the WHS. Its development is needed and foreseen by the Management Plan.

During the process of drafting the Management Plan, the COVID-19 global pandemic broke out and had a negative impact on both society and the economy due to the epidemiological measures and need to protect the health of the population. The consequences of the pandemic are not yet fully measurable, so the challenge of recovery from this pandemic, as well as the topic of preparedness and resilience to future similar risks, is very important for future WHS management. However, the greatest impact is visible in the tourism sector, and significant changes in trends and demand are possible if the pandemic continues, which can negatively affect society and the economy in general.



1667 EARTHQUAKE, RECONSTRUCTION
Source: Dubrovnik Museums

16 Internally developed diagnostic document for Management Plan purposes.

17 TOMAS Dubrovnik 2018., Stavovi i potrošnja turista i jednodnevnih posjetitelja u Dubrovniku u 2018. godini, (Attitudes and consumption of tourists and one-day visitors in Dubrovnik in 2018), Institut za turizam, Zagreb 2018.

III.5. Tourism-related and carrying capacity challenges

In addition to positive effects, the increasing development of tourism at the global level has produced a negative impact on environmental resources, the economy, culture and society. The city of Dubrovnik, known as a world-famous tourist destination, is also facing the negative impacts of tourism. In the tourism system, more than in any other activity, the positive effects are visible in the short term, while the negative ones leave permanent consequences and can only be detected in the longer term. In order to maximise the positive effects of tourism and minimise the negative ones, planned, coordinated, monitored, controlled, and sustainable tourism development is necessary.

Tourism in Dubrovnik is characterised by uncontrolled development, with highly concentrated tourist traffic in limited time and space. Tourism is based on maximising profits without mutual synergy and overall optimisation, creating a feeling of uncoordinated development, improvisation, and the neglect of other elements of sustainable tourism development (society, culture, landscape, and environment). This is supported by the tourist destination management efficiency indicator, measured by the number of maximum capacity days. It was extremely low in 2018 (106, that is, 91 days, the limit being 120 days). Due to the lack of clear and visible data and indicators, longitudinal research and quality monitoring, according to key stakeholders and the public, tourism is “relativised” and simply “happens” in the City, while its management is “banalised”, “improvised” and based on short-term “ad hoc” decisions.¹⁶ One of the most prominent problems in the WHS area, whose OUV has been recognised, is the excessive number of tourists and day trippers who overflow the area. Stationary passengers/tourists who spend an average of 170 euros a day in Dubrovnik¹⁷ do not burden the WHS and the life of its inhabitants with the same intensity as one-day excursionists, who are much weaker consumers (visitors and crew from international cruise ships spend an average of 51 EUR, while for excursionists there is no recorded amount of daily consumption). By zoning Dubrovnik according to the UNESCO instructions (WHS, buffer zone, and setting), it is possible to stratify and differentiate the problems that burden a particular zone. In addition to

quantitative indicators, qualitative research can confirm the problem of **overtourism**, which is articulated through pain points at different levels: at the level of key attractions (the problem of entering the historic core through the gates of Pile and Ploče, the problem of parking around the WHS), at the level of traffic centres and hubs (Gruž Port, airport), at the level of visitor management (ex. visitors to the Walls) and at the level of waste management.

Hectic, unplanned and uncontrolled mass tourism in Dubrovnik has resulted in a series of negative changes in the form of population decline in the WHS area, gentrification of the WHS, touristification, commodification of heritage, high dependence on tourism (monoculture) and degradation of autochthony, authenticity, and tradition.

The solution to the problem is **sustainable tourism management** according to the recommendations and steps proposed by UNESCO¹⁸ as well as the development and implementation of a **Carrying Capacity Plan for the WHS**. The basis of sustainable tourism management in an area of OUV is the availability of statistically measurable data on the effects of tourism on the society, culture, environment, and economy (*“If you can't measure it, you can't manage it”*¹⁹) and the existence of a tourism development strategy (*“If you have no existing strategy, even developing a simple one is a step forward and worth doing”*).²⁰ Insisting on an idea of success based only on numbers of overnight stays and arrivals indicates decision makers' skewed understanding of tourism metrics. Not only do numbers on arrivals and overnight stays not take into account all aspects of physical tourism activity in the City, such as one-day stays and stays in non-commercial accommodation facilities, but they omit the extremely important monetary and structural aspects of tourism impact on a city's economy, including total tourism expenditures or the realised gross added value and gross added value of tourism.

The **1st phase of Dubrovnik's Tourism Development Strategy** was carried out without action plans, which implies the need to prepare a continuation of the document. Given the current situation with the COVID-19 pandemic and realistic expectations for the 2021, 2022 and 2023 tourist seasons, and before drafting the continuation of the document with action plans, it is necessary to revise the existing document. The need to develop a Carrying Capacity Plan arose from the instructions of the World Heritage Committee and the 2015 UNESCO/ICOMOS Reactive Monitoring Mission, and its development is envisaged by the implementation of the Management Plan.

With regard to visitor overload in the historic core and the importance of carrying capacity implementation, the need to establish a system of analysis of the spatial and temporal distribution of visitors and **real-time** data systems that would continuously support the visitor management system and the implementation of carrying capacity has been identified. Here it should also be pointed out that the topic of carrying capacity in the future should also look at pandemic aspects of the use of space and tourism infrastructure.

During the participatory process, stakeholders stated that there had been attempts to develop a Carrying Capacity Plan, but their development had not been transparent and had not considered the needs of the local population and the preservation of the protected historic ensemble. The development of the Carrying Capacity Plan must be in accordance with the UNESCO guidelines. Managing visitor flows and influencing visitor behaviour are critical aspects of developing sustainable tourism. Not only is it often crucial for the protection of the values and attributes of the WHS, but it is also a contributing factor to a high quality visitor experience. Managing visitor flows can minimise the negative effects on the host and the community and maximise opportunities for them to achieve benefits.²¹

Here are some of the guidelines offered by UNESCO and other relevant institutions:

- **IT IS NOT POSSIBLE TO MANAGE VISITOR BEHAVIOUR WITHOUT FIRST MEASURING KEY VARIABLES:**
wider trends, seasonality, monthly and daily analysis, public holidays and special days, time of day

Some ways to gather this information:
ticket sales data, accommodation data, observation, surveying, etc.

- **IT'S NECESSARY TO CAREFULLY THINK ABOUT THE DESTINATION'S 'CARRYING CAPACITY' OR 'CARRYING CAPACITY RANGE' AND THE VARIABLES THAT AFFECT ITS ABILITY TO ACCOMMODATE PEOPLE**

18 UNESCO World Heritage Sustainable Tourism Online Toolkit – UNESCO
19 Guide 1 Understanding tourism at your destination, in UNESCO World Heritage Sustainable Tourism Online Toolkit
20 Guide 2 Developing a strategy for progressive change in UNESCO World Heritage Sustainable Tourism Online Toolkit
21 Guide 8, Managing visitor behaviour, UNESCO World Heritage Sustainable Tourism Online Toolkit

– The idea of a single number identifying how many visitors a site can accommodate – its 'carrying capacity' – is problematic. Recent research has suggested that a better way to think about 'carrying capacity' is to consider the constraints upon the numbers and variables that, if surpassed, are likely to be unsustainable and socially, ecologically, economically, or culturally damaging. The number of people a destination or site can accommodate sustainably can be increased if the people are managed more effectively with better and more sustainable facilities.

- **DEVELOP A CARRYING CAPACITY PLAN AND APPROACH** – Some WHS have invested in guidance to develop their Carrying Plan and have developed new infrastructure to manage visitor flows more effectively. The most sophisticated computerised systems change visitor flows and dwell times as key variables change in real time.

Some methods to be considered for visitor management:
limit visitor access

spread out visitors spatially and across time to minimise the intensity of negative impacts
advance ticketing system
congestion-related pricing systems
disperse visitors across the destination
offer visitors other experiences, products and services to lessen the urgency and focus on a smaller number of “must-see” elements

- **PROVIDE PEOPLE WITH THE INFORMATION THEY NEED TO MAKE GOOD CHOICES** – Give visitors and tourism operators the real-time information they need to make good choices. Develop a system for guides and other actors in tourism to make them aware of issues and solutions.

- **INCREASE DWELL TIME WHERE LOCAL BUSINESS CAN SECURE BENEFITS FROM VISITORS** – Visitor flows can be designed so that the local community can secure the benefits. People do not have to sell things in the most vulnerable areas – retail purchases can be offered outside the sensitive zones to increase dwell-time there.²²

In addition, it is necessary to emphasise the need to check the infrastructure's carrying capacity, especially in relation to the number of visitors (water, drainage, electricity and waste management). Through the development of reception guidelines, it is necessary to include buffer zones, pre-entrance areas to the City, relocation of traffic, public

transport buses, and those functions that could not be satisfied within the walls (underground parking and storage and trans-shipment of goods – the *Iza Grada* area, nightclubs, larger catering and entertainment facilities, etc.).

These guidelines must be integrated into the Carrying Capacity Plan development process (the development of the plan is foreseen for the implementation phase of the Management Plan). Other challenges include:

- **THE WHS AREA BEING OVERBURDENED WITH AN EXCESSIVE NUMBER OF VISITORS**
- **THE LACK OF A WHS CARRYING CAPACITY PLAN - THE NEED FOR A CARRYING CAPACITY PLAN AROSE FROM THE INSTRUCTIONS OF THE WORLD HERITAGE COMMITTEE AND THE 2015 UNESCO/ICOMOS REACTIVE MONITORING MISSION, AND ITS DEVELOPMENT IS FORESEEN FOR THE IMPLEMENTATION PHASE OF THE MANAGEMENT PLAN).**
- **CRUISING TOURISM – ACCORDING TO THE 2015 UNESCO/ICOMOS REACTIVE MONITORING MISSION, CRUISE SHIP TOURISM IS ONE OF THE PROMINENT TOPICS (WITH A NOTE ON THE TREND OF INCREASE OF DAY TRIPS AS A RESULT OF ROAD, SEA AND AIR INFRASTRUCTURE CONSTRUCTION). IT IS THEREFORE ESPECIALLY IMPORTANT TO CONTINUOUSLY, RELIABLY AND TRANSPARENTLY MEASURE VARIOUS ASPECTS OF THE IMPACT OF CRUISE SHIP TOURISM ON ECONOMIC, SOCIOCULTURAL, ENVIRONMENTAL AND SPATIAL INDICATORS.**
- **A LACK OF THE INVOLVEMENT OF THE LOCAL COMMUNITY IN THE PROCESSES OF PLANNING AND DECISION-MAKING IN TOURISM**²³
- **AN INSUFFICIENT EMPHASIS ON TRADITION, ORIGINALITY AND AUTOCHTHONY OF PRODUCTS AND SERVICES**²⁴
- **A LACK OF CLEAR DATA ON ECONOMIC BENEFITS AS WELL AS ECONOMIC DEPENDENCE ON TOURISM (FOR EXAMPLE, MONOCULTURE).**

22 Guide 8, Managing visitor behavior, UNESCO World Heritage Sustainable Tourism Online Toolkit
23 Guide 4 Engaging local communities and business in UNESCO World Heritage Sustainable Tourism Online Toolkit
24 Guide 7 Adding value through products, experiences and service in UNESCO World Heritage Sustainable Tourism Online Toolkit

IV. MANAGEMENT ACTION PLAN

IV.1. STRATEGIC ACTIONS

This first-generation Management Plan of the Old City of Dubrovnik needs to be seen in reference to the complex structure of the existing system of administration of the Old City and its surrounding area. Its aim is to establish an adequate, inclusive and applicable management structure and develop the main management objectives. The Management Plan is a key document within the overall management system and provides a concise picture of the territory concerned and its significance. It describes the management system and gives an outline of the Action Plan with priorities for a specified period.

The development of the Management Plan was approached in a participatory and comprehensive manner, which is described in Chapter **I. Introduction**. As part of the development of the Management Plan, a number of participatory activities involving citizens and stakeholders were held. The organisation of workshops of associations and citizens began in December 2015. In the preparatory phase, workshops were organised with citizens and associations, with institutions located in the areas of the historic city core and buffer zones Pile-Ploče-Sveti Jakov, as well as those institutions that directly affect the quality of life of the population of these areas. At the workshops, the participants presented a number of problems they faced, be it in regards to functional living or the organization of work. These meetings resulted in numerous proposals and suggestions aimed at improving the life and work of the population.

The Management Plan does not provide detailed solutions to specific problems, but it defines the framework for WHS management in line with the 2011 UNESCO Historic Urban Landscape Recommendation. The Management Plan is superior to other strategic development documents and spatial plans and provides guidelines and a framework for their improvement. The broad management structure ensures the coherence of activities with other tools and mechanisms. The Action Plan in this context ensures the flexibility of the implementation of the envisaged documents.

The feasibility of the Management Plan is a major challenge. It can be achieved through joint activities to simplify control and monitoring while working on education and capacity building. Unfortunately, due to the COVID-19 pandemic, the national and local budgets have been significantly reduced. It is therefore important to build a management model that ensures economic, environmental and social resilience. For this reason, it is envisaged that the Executive Board will prepare a draft financial plan each year in order to align the budget and external sources of funding for the implementation of the document.

The management plan is adopted for a period of five years. Based on the assessment of the success of solving current issues, priorities and objectives will be redefined.

Dubrovnik's HUL is a great example of the great diversity of heritage resources, including more than a thousand years of history and elements that refer to both cultural and natural heritage, each with their specificities. Heritage preservation requires the involvement of a variety of stakeholders who need to have the required competence and knowledge to fully recognise the WHS potential and its position within the physical, social, cultural and economic development context. Consequently, it is necessary for national, regional and local governing authorities to take necessary steps to elaborate and apply implementation and strategic instruments required for WHS management.

The following are considered priority actions to be undertaken for the WHS recognised for its OUV, as well as the **buffer zone** and **setting**, which together form the HUL of Dubrovnik, a fundamental context that supports WHS features. Strategic actions are divided into priorities under the following topics:



The Administrative Department for Environmental Protection, Property and Legal and Municipal Affairs of the Dubrovnik-Neretva County issued an opinion that the Management Plan does not require an assessment procedure, i.e. strategic HIA, because the established objectives and actions do not plan interventions subject to these procedures, that is, they do not have a potentially negative impact on the environment and the ecological network.

Horizontal actions

In addition to the objectives and actions defined by the Management Plan's Action Plan, two horizontal topics that are in line with new EU objectives for the period 2021–2027 stand out: green transition with climate change adjustment and digitalisation. The consequences of climate change are becoming increasingly visible and pose a significant risk to the future protection, preservation and valorisation of the WHS and its setting. Climate change adaptation measures need to be integrated in a timely manner to create an adequate level of resilience. This topic is horizontal within the strategic framework and is recognised through the definition of a series of activities. Digitalisation presupposes the improvement of public digital services as supporting elements for the functioning of management and the protection of cultural heritage and strengthening of the participatory segment. Both horizontal topics are shown in tables below to make it easier to indicate the activities that can be applied and funded through EU tenders to be opened under the framework of climate change adaptation and digitalisation.

Among horizontal topics, it is important to point out Action 10.1. Develop a Carrying Capacity Plan for the entire World Heritage Site Area. This includes the development of a **Carrying Capacity Plan** that will bring together all aspects of space capacity, including the needs of the local population, limiting current tourism development to a sustainable level, needs for socioeconomic population development (especially in the WHS area), preservation of the population's cultural and local identity, and preservation of the environment and public space as well as all other elements important in the context of space capacity. The focus in the process of the Carrying Capacity Plan definition and implementation must be on the preservation of the living city.

IV.1.1. World Heritage Site Management and capacity building

A large number of stakeholders are involved in the management of the site and its individual components, while their responsibilities are not sufficiently coordinated. Therefore, it is necessary to build an adequate management structure and ensure effective progress in the process of site management. It is necessary to take into account the specific role and advantages of the Institute for the Restoration of Dubrovnik and further build the management system on that basis. Active civil society, citizens, and community gathered around the WHS should be equal partners in the management process.

All stakeholders identified in Chapter 3 require a systematic and long-term approach in their capacity building. It is therefore necessary to develop and adopt a **capacity-building strategy** based on Dubrovnik's specific requirements. Programmes should be developed and adjusted for diverse needs. Some of them could benefit from the existing training opportunities currently being offered by international organisations, such as ICCROM and by many universities and vocational schools. However, it is essential to involve the members of local institutions, NGOs, and private enterprises in the development of specific programmes.

UNESCO's Operational Guidelines for the Implementation of the World Heritage Convention encourage the State Parties to guarantee the preparation and implementation of appropriate capacity building strategies within its scope. It should build on the reciprocal benefits for both heritage and the society. This involves education and synergy with the local economic system as well as providing education for all types of experts whose involvement is relevant for the protection, restoration and use of cultural heritage. An additional challenge in Dubrovnik is the need to interpret the site and establish the physical space required for the education and capacity building of the community. This should follow the capacity-building strategy for local stakeholders and diverse needs of visitors. These aspects could be achieved through the development of a World Heritage Centre, as a network of areas located in the city that fulfill various functions (interpretation, education, capacity building, community area, and others).

The Institute for the Restoration of Dubrovnik, established by a separate act following the 1979 earthquake, was identified as an important stakeholder. The Institute has ensured the continuity of the conservation process and it has a sound basis to anchor the further management process once the necessary upgrades are made. The institute will need significant support to increase or upgrade its capacity from the perspective of data collection, analysis, surveys, the application of IT and AI innovations, database management, etc.

OBJECTIVE 1: ESTABLISHING A STABLE MANAGEMENT STRUCTURE AND CONTINUOUS CAPACITY BUILDING

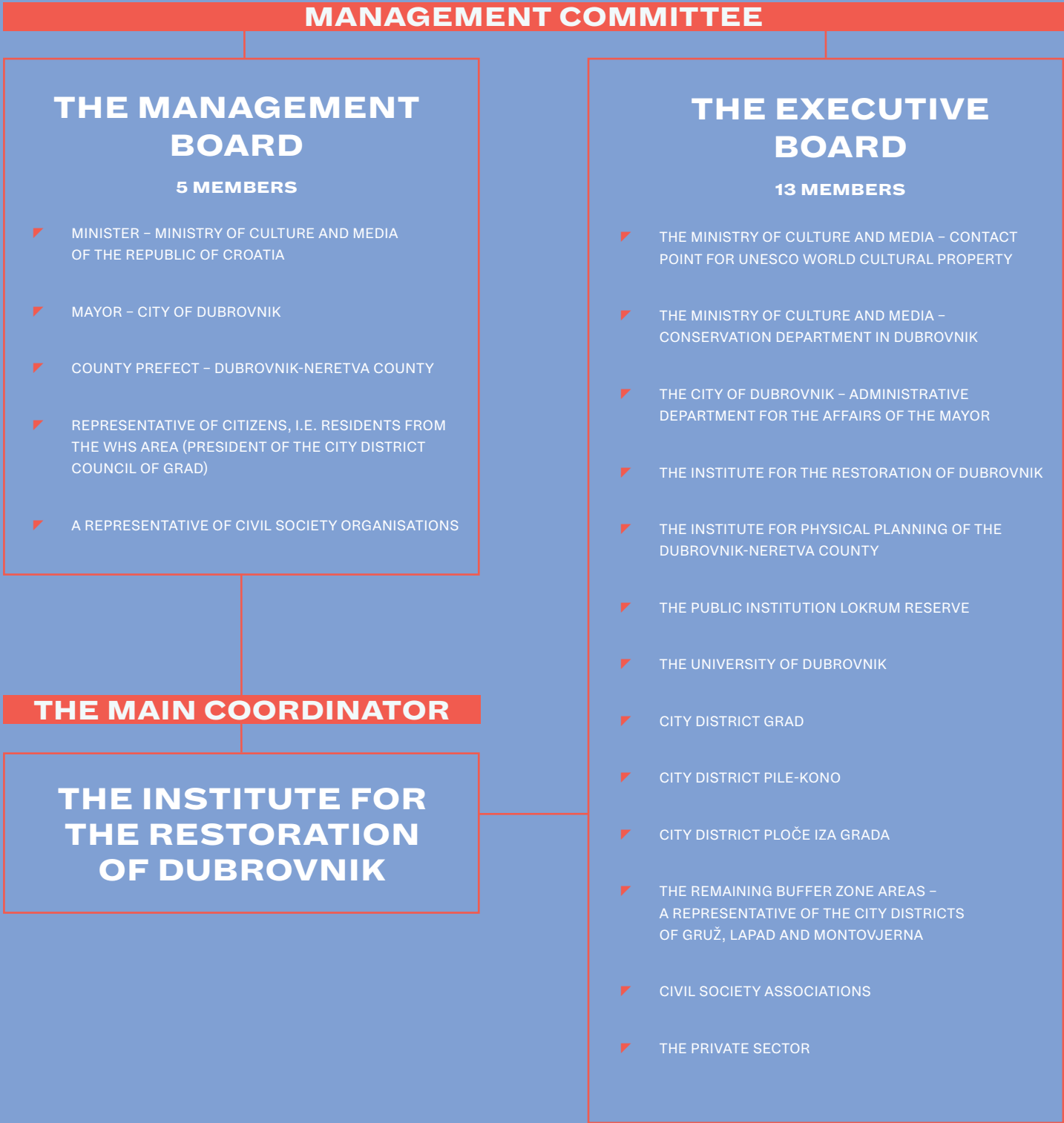
ACTION 1.1.: Establishing a management system

The main coordinator for the implementation of the UNESCO World Heritage Management Plan of the Old City of Dubrovnik is **The Institute for the Restoration of Dubrovnik**.

The Institute for the Restoration of Dubrovnik is a body that, according to UNESCO principles and determinants, performs tasks and duties that can be considered those of a WHS manager. It also performs the tasks of the management system coordinator.

In order for the Institute to take over the role assigned to it by this Act, and in order to successfully implement the Management Plan, urgent changes to regulations which form the legal framework for activities related to the restoration of Dubrovnik as well as those related to the scope and manner of work of the Institute.

The management system is executed and implemented by the **Management Committee**, which is its management body. Due to the need to perform tasks within its competence, tasks which are different in terms of organisational and other requirements, the Management Committee consists of the **Management Board** and the **Executive Board**. The Management Committee accomplishes the tasks and management duties in a way that advances the preservation and sustainable development of registered WHS areas and their settings for the benefit of the community, respecting the OUV and the overall integrity and authenticity of the space. The Management Committee is obliged to provide the conditions for the preservation of heritage resources and for the possibility of heritage serving the public interest where it has the ability to. It also has the obligation of consulting experts in relevant fields. Members of the Management Board and the Executive Board are not remunerated for their work and participation in the work of the Management Committee.



The Management Board is responsible for monitoring the implementation of the Management Plan as a whole.

The Management Board usually meets twice a year. The Management Board meets with the Executive Board, as the Executive Board reports to the Management Board on implemented activities and implementation problems as well as on future steps and necessary interventions planned.

Members of the Executive Board are appointed by the City Council of the City of Dubrovnik at the proposal of the mayor. Representatives of the city districts of Grad, Pile-Kono and Ploče iza Grada are elected from the councils of those city districts, as are the representatives of the remaining buffer zone areas – from the councils of the city districts of Montovjerna, Gruž and Lapad.

A representative of civil society organisations and a representative of the private sector within the Management Committee are elected through the World Heritage Dialogue, at an assembly based on a public call aimed at all representatives of civil society organisations and representatives of guilds and other professional organisations of private sector stakeholders.

It is under the authority of the Executive Board as its main task to ensure the direct application of the Management Plan and to the coordination of all stakeholders involved in the implementation of the Management Plan. Through its work, the Executive Board is responsible for the effective coordination and implementation of the actions of the Management Plan, on which it reports to the Management Board. Each year the Executive Board prepares a financial plan proposal for the implementation of the document.

The Executive Board meets at least six times a year (every two months), of which at least two meetings are held jointly with the Management Board.

If necessary, the Executive Board may further structure working groups according to the topics and priority areas to be addressed during the implementation of the Management Plan. The proposal of the criteria for the appointment of members to the working groups is made by the Executive Board with the consent of the Management Committee.

ACTION 1.2.: Establishment of World Heritage Dialogue

During the implementation of the Management Plan, a **World Heritage Dialogue** will be established, as a multisectoral platform that includes the widest range of stakeholders from all sectors. It will present a tool for citizens and NGOs, who themselves are a source of exceptional potential and an important link in the implementation of the Management Plan. The World Heritage Dialogue is at the same time the main tool for awareness raising among stakeholders and members of the local community as well as visitors and tourists. Its activities need to be aimed at the promotion of awareness and strengthening public knowledge about the site's outstanding universal value and the need to preserve the WHS and heritage in general. The purpose of the World Heritage Dialogue will also be to promote actions during Management Plan implementation. The involvement of civil and private sector stakeholders is voluntary. Civil society and private sector representatives in the Management Committee (Action 1.1.) will be selected through a World Heritage Dialogue public call that will target representatives of civil society organisations, but also of guilds and other professional organisations of private sector stakeholders.

The World Heritage Dialogue is a permanent multisectoral platform that functions in coordination with other bodies. It is involved in capacity building and management and can appoint volunteers to assist in specific implementation actions. The World Heritage Dialogue would be organised several times a year in the form of a series of multi-day events (professional meetings, conferences, workshops, roundtables etc.).

During the first year of implementation, the task of the Dialogue is an open public debate on the state of WHS, identifying the needs of citizens related to the preservation and protection of WHS and conducting discussions on the future development of the WHS area (organisation of professional meetings, conferences, workshops, discursive activities etc.). These will be held in World Heritage Centres, located throughout Dubrovnik, functioning at the same time as community gathering spots.

ACTION 1.3.: Develop and implement a stakeholder capacity-building strategy

The development of an efficient management system requires the possibility of uniting the interests of all involved stakeholders with the aim of implementing sustainable development and balancing the needs of all components involved. The basis for capacity building requires awareness with regard to areas of OUV, active forms of dialogue, stakeholder participation and involvement, as well as the protection of public goods. Stakeholders and citizens need to be informed about the opportunities provided by the WHS inscription and the preservation of the cultural heritage of Dubrovnik.

The stakeholder capacity-building strategy is focused on strengthening the capacity of stakeholders through Management Plan implementation in line with the strategic guidelines of the World Heritage Convention (credibility, conservation, capacity building, communication and community involvement).

The stakeholder capacity-building strategy aims to organise a regular activity targeting relevant themes and issues related to WHS preservation. The strategy can include various activities, including public lectures and conferences, thematic workshops addressing specific technical or management issues, youth programmes, etc. It is necessary to ensure direct and continuous forms of knowledge transfer to stakeholders (website with available information, education, counselling, use of modern technology, etc.) There is a need for a strategy addressing property owners and a strategy for the care and maintenance of their properties. Another important benefit is that of permanent job positions and the organisation of visits to different types of interest groups, such as community members, technicians, professionals, and administrators.

Through such a strategy, it is necessary to inform stakeholders and members of the community about preservation policies and strategies and to raise public awareness about the values of the area in which they live. The strategy should target different interest groups, introducing relevant topics according to the needs of each group. It is necessary to obtain support from different public authorities (national, regional and local) and private NGOs, who can also participate in educational activities in their specific areas of interest. Cooperation should be established with areas of cultural heritage in Dubrovnik-Neretva County, and the wider region, including the WHS, in order to exchange information, experiences, and lecturers at seminars and workshops.



CONTRIBUTION TO GREEN OBJECTIVES AND CLIMATE-CHANGE ADAPTATION

The strategy will strengthen the capacity of stakeholders in the field of environmental protection and the prevention of negative anthropogenic impacts, achieving the effect of future climate change mitigation.



CONTRIBUTION TO DIGITALISATION

Implementation of education and capacity building related to digital skills in cultural heritage management, preservation, and valorisation.

The City of Dubrovnik is already engaged in an active dialogue with its citizens, but it is necessary to introduce systematic education with regard to the relationships between public administration and non-institutional and non-political actors, communication with the civil sector, and citizen participation in decision making in order to improve public awareness about WHS management. In addition, it is necessary to emphasise the need to make relevant information publicly available and to encourage innovative and transparent ways of participating in decision making (from participatory budgeting to the overall encouragement of city districts and local committees to define and solve the current problems residents have).

One of the objectives of education and training is to develop an understanding of preservation culture and expertise in traditional construction and the modern use of traditional techniques and materials in the WHS area and its setting as well as the integral preservation of the former Republic of Ragusa in both the broader and narrower sense. This is a precondition for the implementation of preservation-oriented interventions and the implementation of modern preservation and restoration principles in building renovation.

This action foresees the development of a stakeholder capacity-building strategy but also its implementation, encompassing all actions that are currently planned and those that will be planned during the development of the strategy. Actions will involve all stakeholders and will define specific activities required for each stakeholder category to ensure quality support for the implementation of the Management Plan.

It is necessary to pay special attention to the capacity building of the Institute for the Restoration of Dubrovnik as the main coordinator of the Management Plan's implementation.

ACTION 1.4.: Establish the Dubrovnik World Heritage Centre for interpretation, education, and research, together with capacity building among the local community

It is proposed to create a network of Dubrovnik World Heritage centres, a capillary-like system for interpretation, education and strengthening of all involved stakeholders. It would consist of spaces located inside the WHS area, but also in other parts of the city. Their function will be threefold—to interpret the WHS area, to educate different levels of users, and to serve as new-generation community centres. According to the purpose typology, they would be a combination of a World Heritage Centre and an urban centre. Their function in the context of stakeholder education and empowerment is primarily as a network of spaces that supports the implementation of the capacity-building strategy. It is proposed that the centre serves as a **participatory platform**, as is the case with already established urban centres in many European cities. Urban centres can be viewed from two aspects. The first aspect includes activities that represent the “window of the city”, i.e., where it represents an open public space, most often in the area of the historic core, where communication, information and changes in the city are presented and discussed. The second aspect includes activities that accompany individual projects and the process of managing the WHS in Dubrovnik. The internal structure of centres includes four sets of activities: a space for community activities (citizens); a space for working meetings of the envisaged management bodies; documentation and exhibition activities that present the WHS OUV; and participatory planning and education processes.

ACTION 1.5.: Upgrade the functions of the Institute for the Restoration of Dubrovnik as a body for dynamic data management and monitoring

In terms of spatial information, there is no unified database for the Dubrovnik area. In order to create an information system that would bring together all relevant data concerning the WHS and its buffer zone and setting, the Institute for the Restoration of Dubrovnik, as the main coordinator of the Management Plan’s implementation, needs to expand its activities. The new functions of the Institute should include data collection and analysis, documentation, and education. A unique database integrating all data necessary for the Management Plan’s implementation will enable a simplified and transparent decision-making process. The unique database will consist of all data necessary for the Management Plan’s implementation.

The database and the geographic information system shall have up-to-date data on the WHS’s existing and planned condition (architectural recordings of all blocks and all houses in them, conservation studies, reports and recordings of archaeological research, reconstruction projects, adaptations of individual buildings inside the WHS area, seismological, sociological, infrastructure studies, etc.) and shall monitor the state of the preservation, restoration and supervision of works inside the UNESCO area as well as maintain a database on public and private property and public facilities (with an integrated link to other databases, displaying **real-time data** on the state and changes to it). It is necessary to enable the sharing of information and data among institutions; create an information network of archives, a web platform for the exchange, communication and promotion of information about the site, its management plan and content; establish an information system that will enable the interoperability of urban and regional planning data; and establish web Geographic Information System (GIS) platforms for publishing and exchanging data regarding the WHS and the setting.

In its development, it is necessary to improve the system of data collection and processing with regard to the WHS, the buffer zone and its setting. This is also in line with actions related to the development of a Resilience Plan that includes all aspects of possible economic, environmental, social and other hazards or risks, with a particular focus on climate change.

ACTION 1.6.: Start the amendment process with regard to the Law on the Renewal of Dubrovnik’s Architectural Heritage and Other Immovable Cultural Property in the Dubrovnik Area and create an amendment proposal for the Act on Preservation and Protection of Cultural Property

Law on the Renewal of Dubrovnik’s Architectural Heritage and Other Immovable Cultural Property in the Dubrovnik Area regulates the activities of the Institute for the Restoration of Dubrovnik. In accordance with the objectives and actions of the Management Plan, it is necessary to make amendments to the Act as well as the Statute of the Institute for the Restoration of Dubrovnik so that it obtains the legal authority to coordinate the implementation of the Management Plan.

It is also necessary to create an amendment proposal for the Act on Preservation and Protection of Cultural Property in order to align it with the Act on Physical Planning and the Act on Environment Protection as well as the HIA protocol. This should provide a framework for cultural heritage protection through spatial and physical planning documentation.



CONTRIBUTION TO GREEN OBJECTIVES AND CLIMATE-CHANGE ADAPTATION

One of the functions of the Institute for the Restoration of Dubrovnik is to integrate the database, including the database on the state of the environment in the city. This will provide insight into risk activities and their potential impacts on climate change.



CONTRIBUTION TO DIGITALISATION

Strengthen capacities and increase knowledge about the potential digital tools have for dynamic data management and monitoring, as well as increase the availability of data on all elements related to the management of the WHS.

IV.1.2. Protection, conservation and maintenance

With the aim of protecting the OUV of both the WHS and its setting, it is necessary to ensure continuous maintenance and restoration of the site in line with the highest conservation standards, continuing the long tradition of the national approach to protection and the international principles and recommendations by UNESCO, ICOMOS and the Council of Europe.

In order to address this priority, several objectives are defined and shown below:



OBJECTIVE 2: HISTORIC URBAN LANDSCAPE MANAGEMENT

The importance of the Historic Urban Landscape in relation to the Outstanding Universal Value of the World Heritage Site has been recognised. The decision to extend the buffer zone was the first step in this process. All actions have the aim of preserving the qualities of the Historic Urban Landscape. It is therefore necessary to improve planning instruments, procedures and protocols. The General Urban Plan (GUP) of Dubrovnik covers most of the setting area, inside of which lie both the WHS and its buffer zone. The conservation database for the latter has been developed, but not yet integrated into the plan. Analyses have shown that some of the developments on the slopes in the vicinity of the WHS (Ploče area) and in other areas of the buffer zone, based on the current GUP (in line with which construction permits are issued), may have a negative impact on the OUV. It is necessary to ban new construction on the unbuilt parts of building areas on the slopes of Srđ and preserve the nature and green areas which are parts of the WHS cultural landscape.

The entire buffer zone needs to be protected by the GUP, based on the prepared conservation plan.

The Act on Protection and Preservation of Cultural Property stipulates the development of a conservation database for the buffer zone, prohibiting interventions that might negatively impact the WHS. Interventions should be reviewed in line with urban criteria and these can and should be regulated by the GUP.

This plan defines the main areas of activity to address these matters as follows:

- A/ CHANGES TO THE GENERAL URBAN PLAN, IN LINE WITH THE WHS BUFFER ZONE CONSERVATION DATABASE
- B/ HIA IMPLEMENTATION PROCEDURE (REGULATION OF THE MINISTRY OF CULTURE AND MEDIA – IT DETERMINES FOR WHICH INTERVENTIONS HIA IS DEVELOPED, HOW, AND BY WHOM, I.E., WHICH EXPERTS WITH WHICH SPECIALISATION IN ACCORDANCE WITH THE ICOMOS GUIDELINES)
- C/ INTRODUCING A PROFESSIONAL COMMITTEE TO MONITOR NEW CONSTRUCTION, IN LINE WITH THE ADOPTED ARCHITECTURAL POLICIES (OR EXPANDING THE AUTHORITY OF THE PROFESSIONAL ADVISORY COMMITTEE)
- D/ IT IS NECESSARY TO CONSIDER THE IMPLEMENTATION OF SPATIAL AND PHYSICAL PLANNING DOCUMENTS, SUPERVISION OF INSPECTION SERVICES AND ILLEGAL CONSTRUCTION, AND LEGALISATION AND APPROPRIATE URBAN REHABILITATION.

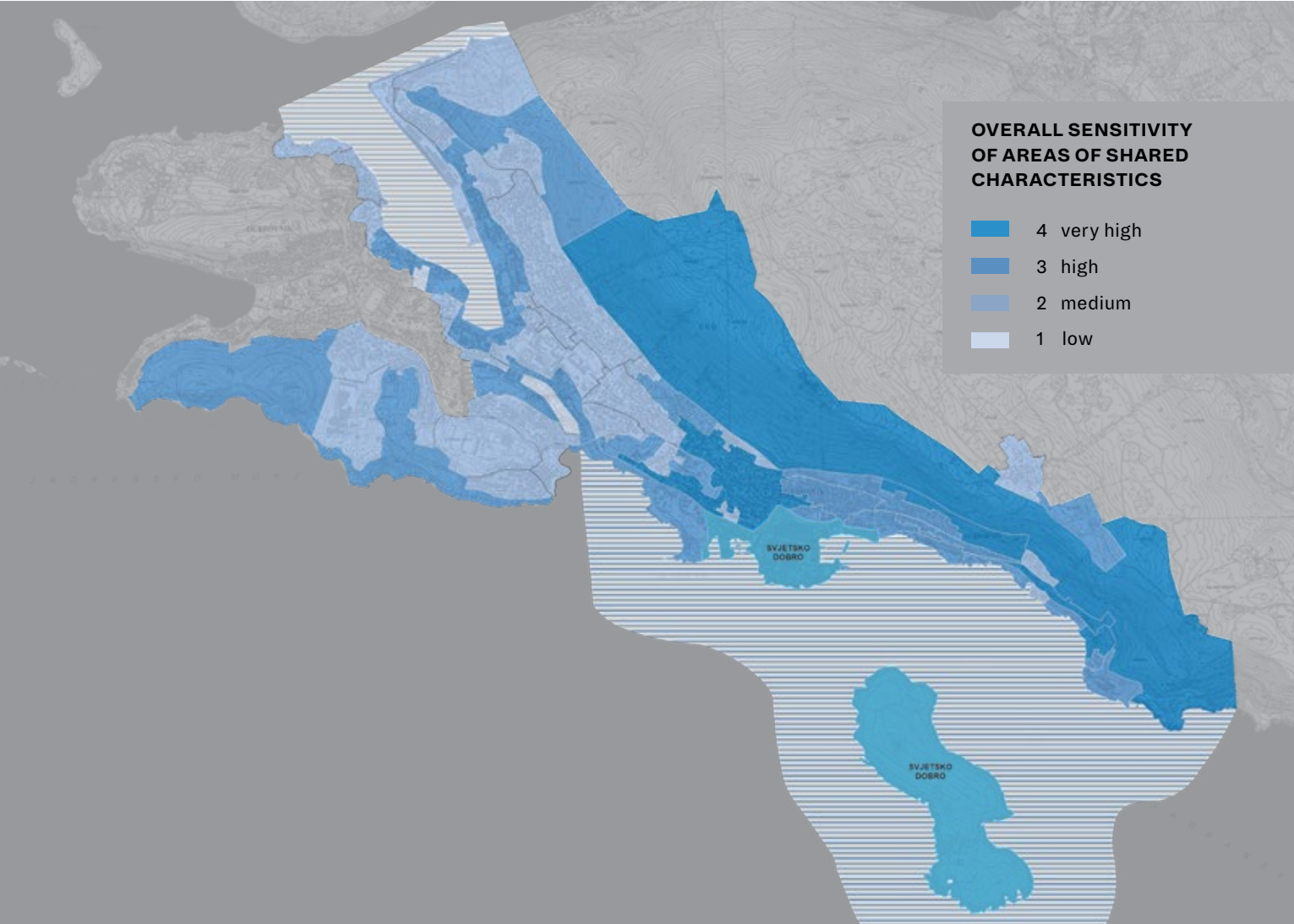
ACTION 2.1.: Integration of the conservation database for the World Heritage Site buffer zone in the General Urban Plan (GUP)

Under the Act on Physical Planning, a conservation database is a professional document that serves as a starting point for the creation of spatial and physical planning documents in the protected area.

The conservation database for WHS and its buffer zone was prescribed by Articles 56 and 57 of the Act on Protection and Preservation of Cultural Property and contains identification, analysis of situation, valorisation, and measures for the preservation of cultural and historic values, and it consists of a graphic and textual part. The Ministry of Culture and Media has published guidelines, whereas its basic elements – content, scale, and presentation of the conservation database – are already defined by the internal instructions. However, they need to be standardised by means of regulations, i.e., by-laws, that regulate it in the same way as spatial and physical planning documentation.

One of the results of a pilot project implemented by the Ministry of Culture and Media in partnership with the City of Dubrovnik and the City’s and county’s administrative departments responsible for spatial and physical planning was a study titled Conservation Database for the Buffer Zone of the World Heritage Site Old City of Dubrovnik. It was published in September 2020 and, for the first time, it created conditions for the establishment of long-term solutions related to spatial and physical planning as well as mechanisms for the implementation and control of interventions in space that impact the value and status of the WHS.

“OVERALL SENSITIVITY OF AREAS WITH SHARED CHARACTERISTICS” FROM THE “CONSERVATION BASE FOR THE CONTACT ZONE OF THE OLD TOWN DUBROVNIK WORLD HERITAGE SITE”
Source: Ministry of Culture and Media, September 2020



Based on the methodological approach that connects the HUL concept with tools for HIA and integral planning, the database provided a full-scale analysis of the HUL area, valorised the susceptibility of the area, and established guidelines for mitigation or removal of negative impacts on the OUV and other components of the area.

General principles of preservation, maintenance, enhancement and change management define the strategy for the preservation of the historic core setting from negative impacts on the authenticity and integrity of the WHS.

The implementation of the conservation database into spatial and physical planning documentation legitimises the guidelines based on the Act on Physical Planning and it is therefore necessary to integrate it into the General Urban Plan (GUP) of the City of Dubrovnik, that is, into the protection measures, regulation of construction conditions, and other elements of spatial and physical planning documents. It is necessary to ban new construction in the unbuilt areas of the construction zone on the slopes of Srđ and protect the nature and green areas that are part of the cultural landscape of the WHS.

The actions of Objective 3 are defined in line with the conservation database guidelines and the implemented analysis of visibility, susceptibility, pressures and threats.

ACTION 2.2.: Development of protocols for the implementation of the Heritage Impact Assessment

The HIA for some major interventions have been implemented as part of the development of Urban Development Plan in the buffer zone and the setting. ICOMOS guidelines for development of HIA need to be integrated into national legislation. The protocol development needs to integrate participatory activities.

ACTION 2.3.: Strengthening professional competences for historic urban landscape planning and strengthening spatial and physical planning documentation in the protection and preservation of cultural property

A lack of understanding with regard to the relation between the WHS and its setting and the concept of HUL is evident. This has resulted in inappropriate construction with a particularly negative visual influence on the integrity of the WHS. The Conservation Department of the Ministry of Culture and Media has the legal grounds to issue special conservation conditions, prior approvals, and verifications of major projects exclusively inside the scope of national protection of the cultural and historic ensemble of Dubrovnik. In order to ensure a wider framework of protection of OUV outside the scope of national protection, conservation database guidelines will be integrated into the General Urban Plan and other lower-level plans. It is based on these that construction permits are issued.

With the aim of the consistent implementation of the integral protection of the entire HUL of Dubrovnik, it is necessary to build the capacity of administrative services of the City of Dubrovnik.

For successful implementation of spatial interventions in line with the conservation database guidelines and criteria of architectural and urban efficiency (A – policy strategic guidelines), it is necessary to involve organisations and associations



CONTRIBUTION TO GREEN OBJECTIVES AND CLIMATE-CHANGE ADAPTATION

The protocol will determine the relationship between the environmental impact assessment procedures – the Environmental Impact Assessment (EIA), Environmental Impact Assessment Screening (EIA Screening), and Strategic Environmental Assessment (SEA) – and the HIA procedure. The overlapping of these two levels of protection provides a realistic level of World Heritage environment status and directs managing authorities in a coordinated action that prevents negative impacts on climate change.

of local professionals (Dubrovnik Association of Architects and others) through ad-hoc panels, roundtable discussions, or a permanent and regulated protocol with the City.

It is also important to give special consideration to the need to establish a building inspector’s office with a seat in Dubrovnik.

ACTION 2.4.: Initiate the establishment of a Directorate for Historic Cities

During the Management Plan’s implementation, it is necessary to initiate the establishment of institutional ties between the Ministry of Culture and Media and the Ministry of Physical Planning, Construction and State Assets. Institutional ties and cooperation between the two national bodies would result in the establishment of a Directorate for Historic Cities with the Ministry of Physical Planning, Construction, and State Assets. The indirect cooperation of this directorate with the competent conservation departments would connect spatial and physical planning with landscape perspectives. The tendency is to recognise historic cities as a key spatial resource and to this end develop spatial and physical planning documentation.

OBJECTIVE 3: ENSURE THAT CONSERVATION AND MAINTENANCE OF THE WORLD HERITAGE SITE ARE CONSISTENT WITH THE OUTSTANDING UNIVERSAL VALUE

ACTION 3.1.: Develop a conservation and landscape database for the World Heritage Site

A conservation and landscape database for the WHS (Old Town, Pile, and Lokrum) needs to be developed in line with the valid Ministry of Culture and Media’s professional standards. It will be the basis for the development of the Urban Development Plan. Methodology aimed at structural, visual and morphological analyses and the valorisation of the urban fabric is based on urban characterisation, that is, the recognition of areas with common features and an assessment of the situation, degraded areas, threats, and pressures as well as the development of guidelines for maintenance and use. Specific urban medieval patterns enclosed by city ramparts define closed block structures that alternate with public open spaces (streets and squares). These accentuate representative public and sacral buildings and form recognisable urban images and city experiences. It also includes the analysis of visual features, main city views, spatial accents, and degrading features. In addition to the textual part, the database contains graphic images with construction typologies and valorisation, urban structures, public open spaces, archaeological sites and areas, municipal infrastructure and small-scale objects, parterre plating, green areas, visual components, and visual and morphological qualities. Further, the database also contains an assessment of the situation, use and occupation of public spaces, as well as maintenance guidelines and necessary interventions on buildings and outside areas.

The database should also contain open spaces and guidelines for their protection – inclusion and valorisation of gardens and parks, as well as other public open areas, as it is the best way to prevent their further degradation. The databases must determine the protection of green areas and natural environment as well as prohibit tree harvesting (except in the case of diseases or safety threats for citizens).

Until the adoption of the conservation database for WHS Old City of Dubrovnik, the protection measure system from the Order on Determination of Cultural Property Status of the Cultural and Historic Urban Ensemble of Dubrovnik (Z-3818) is to be applied.

ACTION 3.2.: Preparation of an Urban Development Plan for the World Heritage area with a detailed breakdown

Even though national legislation does not recognise the specificities of urban plans for historic ensembles, it is necessary to enhance the existing planning system. The Act on Physical Planning does not exclude the possibility of Urban Development Plans being developed in greater detail (the former Implementation Urban Plan and Detailed Development Plan) that would fit the needs of a constructed and consolidated historic urban ensemble. The amendments to the General Urban Plan should introduce Urban Development Plan limits that correspond to the WHS boundaries and provide guidelines for its development in line with the level that corresponds to the Detailed Development Plan.

This level of detail of the urban plan should solve many important issues related to the functioning of the city core with Lokrum Island – from purpose and space use, traffic infrastructure, water supply system, electricity supply, protection measures, and construction conditions to questions that arise from contradictory orders related to spatial planning and the use of the Ordinance on Simple and Other Construction Works. In addition to the conservation database, such a plan for the WHS should be based on studies such as sociodemographic and economic ones, as well as those on tourism carrying capacity, energy efficiency, safety, traffic, etc.

As expert bases for the development of this plan, it would be necessary to develop a Carrying Capacity Plan for the city, a tourism strategy, and a risk preparedness plan as well as to develop a programme for the Urban Development Plan for the WHS area during the participatory process. It is also necessary for the City Council to adopt an order on its development that define the aforementioned studies as expert bases for plan development.



CONTRIBUTION TO GREEN OBJECTIVES AND CLIMATE-CHANGE ADAPTATION

The adoption of the proposed document is subject to strategic assessment of environmental impact procedures and the identification of positive and negative impacts on climate change that are part of studies in said procedures.

ACTION 3.3.: Develop new-generation local decrees for standardisation of design and installation of small structures, urban equipment and other interventions in the World Heritage Site public space

Decisions related to municipal order adopted on the city council level define different aspects of public space design, such as the position and dimensions of terraces, catering establishments, street window design, or the design of temporary structures (e.g.: kiosks). As an expert basis for its adoption, the Ministry of Culture and Media created General Conservation Guidelines for the Public Space Management of Cultural and Historic Ensembles of Urban Character. The City of Dubrovnik integrated these to a great extent.

Everything that has its own spatial imprint or that can be found on the map needs to be regulated by the cartographic representation of the Urban Development Plan, whereas the level of detail should correspond to that of the PUP. Without the Urban Development Plan these decrees often contradict each other and leave space for ambiguity and inconsistent interpretation, as well as the overlapping of competences between decision makers. This can result in the very poor state of public spaces.

The Urban Development Plan and the new-generation decrees on the standardisation of design and the installation of simple facilities and urban content in public spaces have to include clear standards for the following categories:

- **THE INSTALLATION OF PREFABRICATED CONSTRUCTIONS WHICH CAN BE DISMANTLED FOR TEMPORARY EVENTS (STAGES, SKATING RINKS, TENTS, KIOSKS, STANDS, ELEMENTS OF FILM SETS, ETC.)**
- **THE USE OF PUBLIC AREAS, STREETS, AND SQUARES FOR CATERING ACTIVITIES**
- **THE INSTALLATION OF DEVICES, EQUIPMENT, AND TECHNICAL SYSTEMS (AIR CONDITIONING UNITS, VENTILATION SYSTEMS AND CHIMNEYS, ANTENNAS, SOLAR PANELS)**
- **THE PLACEMENT OF ADVERTISEMENTS, DEPENDING ON SPACE CHARACTERISTICS**
- **THE INSTALLATION OF DEVICES FOR CASH WITHDRAWALS AND DEPOSITS (ATM'S, ETC.)**
- **THE INSTALLATION OF CATERING EQUIPMENT (DECK CHAIRS, UMBRELLAS, STANDS, ETC.) ON CITY BEACHES AND BATHING AREAS**
- **OTHER INTERVENTIONS SUCH AS STREET DECORATION, PUBLIC ART, ETC.**



CONTRIBUTION TO GREEN OBJECTIVES AND CLIMATE-CHANGE ADAPTATION

It is necessary that all regulations consider the aspect of environmental protection and integrate it during the spatial planning and use of urban space.



CONTRIBUTION TO DIGITALISATION

Possible integration of digital tools.



PREFABRICATED KIOSKS AT THE WINTER FESTIVAL OF ADVENT ON STRADUN
Source: Dubrovnik Tourist Board

These standards can be integrated into a new decision on the standardisation of design and installation of simple facilities and urban content in public areas.

There are issues related to the monitoring of implementation of current and new decrees, reactions to citizens' complaints, and the educational capacity building of citizens. The need for the continuous monitoring of the implementation of this decision, in order to reduce the abuse of space was emphasized – monitoring and control mechanisms are explained in the following action.

Special attention needs to be given to the interpretation and implementation of the Ordinance on Simple and Other Construction Works, i.e., its repeal inside the WHS area.

ACTION 3.4.: Create a list of priorities for interventions related to the protection and preservation of individual cultural property inside the World Heritage Site and its buffer zone

In order to determine priorities with regard to actions and interventions related to the protection and preservation of individual cultural property inside the WHS and its buffer zone, a list of priorities will be created. The list of priorities takes into account long-term and short-term actions that need to be implemented with the aim of adequate protection and preservation of individual cultural property. The list will determine buildings to which the maximum preservation of their original structure applies as well as their interiors, to a certain degree, in line with its valorisation, all with the aim of construction, rehabilitation and full-scale restoration. The list will encompass construction rehabilitation, conservation, and restoration work on valuable interior furnishing, etc. The Action will be jointly implemented by the Ministry of Culture and Media, the Conservation Department in Dubrovnik, the Institute for the Restoration of Dubrovnik, and the City of Dubrovnik. As a way to support owners who are not in a the position to provide financing on their own, a system of help will be developed through programmes aimed at housing improvement. Programmes can contain topics such as the development of situation assessments, project documentation, applications, etc.



KUPE KANALICE (TRADITIONAL ROOFING TILES)
Source: Institute for the Restoration of Dubrovnik

AREA OF THE WORLD HERITAGE SITE:
ISSUE OF TOURIST ACCOMMODATION UNITS
Tourist accommodation units are distributed throughout the entire area, residential areas are transformed into tourist areas
Source: Authors



ACTION 3.5.: Development of a co-financing programme related to the preservation and restoration of traditional building

This action encompasses the development of different co-financing programmes related to the preservation and restoration of traditional building (e.g.: wall and ceiling paintings, woodwork, exterior carpentry, decorative sculptural elements, traditional roofing tiles (*'kupe kanalice'*, removal of outdoor air conditioning units, etc.). Three levels have been proposed – a subsidy system for contracting entities, incentives for the development of specialised crafts, and education for craftsmen. Subsidies can be varied (e.g.: for bills, for opening and maintenance of specialised crafts, etc.). In order to encourage the preservation and restoration of traditional exterior carpentry that represents both tangible and non-tangible heritage and the tradition of the city of Dubrovnik, a programme will be developed that will co-finance the preservation and restoration of exterior carpentry. This will include not only the restoration of existing carpentry, but also the replacement of PVC with wooden carpentry, in line with the traditional environment and architecture.

ACTION 3.6.: Ensure additional funds for construction rehabilitation and the seismic retrofitting of buildings within the World Heritage Site

With the aim of ensuring the continuity and enhancement of activities implemented by the Institute for the Restoration of Dubrovnik, additional funds will be ensured for the overall restoration of and seismic retrofitting of the WHS buildings. This action should encompass full-scale and systematic restoration and aim at increasing the number of building blocks restored yearly.

OBJECTIVE 4: ENSURE EFFICIENT AND TIMELY WORLD-HERITAGE SITE CONTROL

ACTION 4.1.: Improving the capacity of all public services that take care of the World Heritage Site area

The current situation indicates a lack of efficiency in the implementation of existing regulations and limitations in the area of competence of certain public services, sometimes leading to unresolved issues related to space. Currently, local residents turn to the Conservation Department of the Ministry of Culture and Media for most interventions on cultural property. Aside from the conservation issues primarily related to the preservation of cultural property and WHS attributes (the competent authority in this regard is the Conservation Department), the majority of challenging issues are caused by problems related to property and property ownership, as well as interventions not necessarily under the authority of conservers. Solving these issues can be assigned to other administrative divisions that closely collaborate with conservers (municipal wardens, State Inspectorate, the City's administrative departments, etc.).

Their competencies and activities need to be supported by elements that strengthen and improve their capacity and expertise. The exact needs regarding capacity will be defined by the capacity-building strategy, while greater focus needs to be placed on the capabilities and capacities of municipal wardens.



TRADITIONAL GREEN WOODEN WINDOW COVERINGS (*PERSLIJANE*) OF DUBROVNIK
Source: Filip Filipović



CONTRIBUTION TO GREEN OBJECTIVES AND CLIMATE-CHANGE ADAPTATION

As part of the regular work and monitoring irregularities, it is possible to get insight into activities/interventions that have a negative impact on climate change and to emphasise them in order to mitigate future climate change.



CONTRIBUTION TO DIGITALISATION

Implementation of education and capacity building related to digital skills in cultural heritage management, preservation, and valorisation.

ACTION 4.2.: Coordinate overlapping of institutional competencies in the World Heritage Site area

Although there are many issues that could be resolved by municipal wardens, there are many other aspects which need further coordination between different inspections. This requires changes in the national framework and better coordination at the local level and includes the accountability of the public sector in these interventions. The action proposed is to monitor the interventions of the sectoral controlling bodies and to report on the outcomes, asking for further fines for inactive services. The proposal is to strengthen the existing institutions by delegating persons from the inspectorate who would be in charge of the protection of cultural goods.

Inspections by the Ministry of Culture and Media and other competent public bodies need to be increased.

ACTION 4.3.: Enhance mechanisms for dialogue with citizens

The need to establish an efficient complaint mechanism, the **Dubrovnik Eye**, currently does not have the necessary credibility, and in the existing framework it is not perceived as an effective tool for the management of citizens' complaints. It should be enhanced and upgraded with new elements that will integrate a much-needed mechanism for solving municipal problems. The enhanced mechanism needs to be aimed at the development of an active dialogue between citizens and public bodies in order to enhance communication and the interaction of all parties involved. It is also necessary to carry out promotional activities related to the use of this tool as a means of dialogue between citizens and public services.

OBJECTIVE 5: AWARENESS RAISING THROUGH EFFECTIVE EDUCATION ON THE PROTECTION AND MAINTENANCE OF THE WORLD HERITAGE SITE

ACTION 5.1.: Prepare guidelines and handbooks for the preservation and maintenance of the World Heritage Site, the buffer zone, and its setting

The preparation of technical guidelines for the maintenance and care for different types of goods is a priority in order to guarantee proper heritage preservation. It is proposed that a series of small thematic publications that can be distributed to house owners and builders, as well as heads of different organisations be published.

In addition to local regulations, the focus of the plan needs to be active engagement in the education of various stakeholders. The aim of the booklets is to interpret relevant regulations and other protection instruments. Brochures should be widely distributed and explain elements of heritage preservation in a simple and illustrative way. Information should also refer to simple interventions on private facilities that are not encompassed by the Act on Construction. Such handbooks will provide more detailed information and communication in order to avoid inappropriate interventions inside the WHS area.



CONTRIBUTION TO GREEN OBJECTIVES AND CLIMATE-CHANGE ADAPTATION

The possibility of early detection of problematic activities/emissions into the environment and their potential negative impact on climate change as well as the possibility of the efficient and timely reaction of competent authorities.



CONTRIBUTION TO DIGITALISATION

Integration of digital tools for the active participation of citizens and other stakeholders as well as a dialogue between public administration and the private and civil sectors.

With the aim of raising awareness in citizens and the improvement of the state of the WHS area and of its individual buildings, it is proposed that professional and technical instructions and handbooks intended for owners, building managers, and competent municipal services be developed and published. The content would refer to maintenance and minor interventions on buildings that do not require, under the Act on Construction, procedures with the competent authorities. Some of the topics that the handbooks should cover are certainly energy efficiency in historic buildings inside the WHS area, traditional ways of building, and the use of traditional material during restoration. These simple and illustrative instructions, developed based on conservation conditions and guidelines, would foster communication and ensure that all stakeholders remain informed, and would also reduce inappropriate interventions inside the WHS area.

ACTION 5.2.: Encourage public administration to develop scientific and research-based cooperation with national and international institutions

There is a need for scientific history-related research in Dubrovnik due to the lack of scientific studies, syntheses, and published archaeological and research work. There is also a need to research tourism development in post-pandemic conditions in historic cities, construction heritage management in inhabited historic cities, or spatial and physical planning adaptation of historic cities to climate change. The Action includes the introduction of a support system for studies and projects with the aim of preserving the historic urban identity. This includes the documentation, research, analysis, and interpretation of tangible and intangible constituents of the World Heritage Site. This approach should contribute to a better understanding of the integrity and authenticity of HUL and the adoption of sustainable development decisions by the City.

Through this action it is also necessary to encourage and support the work of the IPU.

The Action also includes the promotion of activities related to research, development, and innovation, especially those aimed at sustainability assurance and Management Plan feasibility.

ACTION 5.3.: Encourage preparing and conducting various educational programmes

During the development of the capacity-building strategy it is necessary to determine in detail the needs for different types of education (educational programmes in the preschool and primary school system, university programmes, lifelong learning, specialist courses, awareness-raising programmes for residents and other users, programmes aimed at entrepreneurs, culture and art associations, preservation and promotion of WHS and cultural heritage, the use of EU funds for projects related to topics from the Management Plan, etc.). In accordance with the needs identified within this action, it is necessary to ensure awareness building related to the importance of the HUL, but also specific professional activities aimed at different sectors involved in the process of restoration and protection.



CONTRIBUTION TO GREEN OBJECTIVES AND CLIMATE-CHANGE ADAPTATION

Education should include specific professional activities aimed at the environmental protection sector and climate change impacts.

OBJECTIVE 6: VALORISATION AND APPROPRIATE ENVIRONMENTAL PROTECTION

ACTION 6.1.: Preserve and improve the urban green and natural setting

Ensuring the preservation and improvement of green areas and other natural landscape elements is essential for the environmental and visual characteristics of urban space. The basis for their preservation is the development of a **Green Cadastre**, a tool for the management of public green areas, and the development of a landscape database as a basis for spatial and physical planning documentation. The landscape study of Dubrovnik, currently in the process of development, will provide detailed insight into landscape types and areas, their current state, and expected development pressures. It will also include an assessment of landscape qualities and provide guidelines for further protection, sustainable planning, and landscape management of the City of Dubrovnik. Furthermore, it will provide an overview of green infrastructure and the potential of its development concepts. The results of the landscape study will be implemented in spatial and physical planning documentation, sectoral documents, and development strategies, and will serve as one of the starting points for sustainable development of the city. Development planning needs to include the protection of various elements – from large landscape zones such as Srd to individual greenery in the built urban structure of the city.

The Green Cadastre for the urban area should contain an inventory of public green areas and the adjoining greenery (parks, forest parks, tree lines, and private gardens inside the City Walls and in the surrounding area), but especially monastery gardens and parks, summer residences, out-of-the-city houses and gardens, and green terraces inside the walls (formed after the 1667 earthquake).

It is necessary to ban new construction on the slopes of Srd and preserve the nature and green areas by preventing the transformation and endangerment of the natural landscape. The preservation of greenery in the parts of the Pile and Kono buffer zone, characteristic for their historic gardens, should be particularly emphasised. During action implementation, it is necessary to encourage the development of tools and mechanisms for the protection of trees and greenery in the WHS area and its buffer zone to stop tree harvesting and the destruction of green areas. In the buffer zone, it is necessary to encourage the development of green infrastructure that has multiplicative effects on climate change adjustments as well as on the visual identity of the buffer zone. It is also necessary to encourage the regeneration of the natural green mantle that once stood there (native Mediterranean trees that were originally in the buffer zone area and the setting). The anticipated conservation database within Action 3 must define the protection of the city’s green areas and natural environment as well as prohibit tree harvesting (except in the case of diseases and safety threats for citizens).

As part of both actions within this objective, it is important to point out the fact that the European Union, through its multiannual financial framework (2021–2027), and the European Green Deal, opens up numerous possibilities to finance projects related to green infrastructure development, urban greenery, urban and peri-urban gardens, small supply chains, healthy lifestyles, and other activities related to the mitigation of negative impacts on the environment and the improvement of living conditions in general. All this is linked to the concept of a living city. Also, the development of a Green Cadastre can be stipulated by merging the objectives set by the green and digital transition, thus enabling favourable EU funding.



CONTRIBUTION TO GREEN OBJECTIVES AND CLIMATE-CHANGE ADAPTATION

The maintenance of green areas in urban settlements reduces the harmful effects of urban emissions and prevents the increase of the average temperature and daily warming of urban areas. Preservation of the natural environment ensures resilience for ecosystems that serve as a catalyst for negative impacts on climate change, especially maritime ecosystems.

LOKRUM
Source: Public Institution Lokrum Reserve



ACTION 6.2.: Ensure sustainable and responsible use and preservation of Lokrum

Lokrum Island is protected as a special reserve of forest vegetation by the Act on Nature Protection and is managed by the Public Institution Lokrum Reserve. Lokrum is also part of the network of Natura 2020 nature protection areas. The Public Institution Lokrum Reserve has already developed a management plan draft for the reserve (obligatory for every protected area managed by public institutions). Lokrum is also part of the WHS of the Old City of Dubrovnik and needs to be included in all documentation developed for the site – spatial and physical planning documentation, conservation database, Carrying Capacity Plan, etc. The specificities of Lokrum require an adjustment of actions and related indicators in the context of the appropriate environmental protection and it is proposed they be defined precisely during the implementation of the Management Plan by the Executive Board, in cooperation with the Public Institution Lokrum Reserve.

It is also necessary to develop a Detailed Development-Plan-level Implementation Urban Plan for the WHS as a whole. As a basis for the Urban Development Plan, a conservation and landscape study for the entire WHS area should be developed.

Given that the biggest threat to the natural and cultural heritage of Lokrum is the uncontrolled and excessive number of visitors, it is necessary, as part of the development of the city’s carrying capacity, to urgently develop a carrying capacity study for the entire WHS. It is also necessary to define adequate content for the monastery complex.

During the implementation of this action, actions defined by the management plan for the reserve will be supported and aligned with the implementation of the Management Plan for the UNESCO World Heritage Site of the Old City of Dubrovnik. During the implementation it is necessary to establish close cooperation with the Public Institution Lokrum Reserve. The latter has a representative in the Executive Board.

ACTION 6.3.: Development of a co-financing project related to research, preservation and restoration of historic gardens

The historic gardens of the City of Dubrovnik are of significant cultural, landscape, architectural and environmental importance for the city. The development of a co-financing project related to the research, preservation, and restoration of the historic gardens and summer residences would ensure their adequate protection and appropriate valorisation.

RENAISSANCE GARDEN IN THE BUNIĆ-KABOGA SUMMER RESIDENCE
Source: The Dubrovnik Summer Festival



CONTRIBUTION TO GREEN OBJECTIVES AND CLIMATE-CHANGE ADAPTATION

Preservation of protected areas implies the preservation of species and habitats important for the balance of the world’s ecosystems and better resilience of an area to climate change.



CONTRIBUTION TO GREEN OBJECTIVES AND CLIMATE-CHANGE ADAPTATION

The development of co-financing projects related to research, preservation, and restoration of historic gardens ensures their adequate protection and valorisation.

IV.1.3. Sustainable Development

Sustainable development is considered a horizontal topic of the Management Plan's strategic framework. With regard to sustainable development, the priorities are nature and environmental protection and the improvement of the social aspect of life in the city, whereas the economic aspect is considered in the context of **Tourism Management**. The development of economy refers to the examination of potential economic opportunities based on the rich cultural and natural heritage. Tourism as one of many such potentials is the most represented economic activity, resulting from Dubrovnik's status as a global tourist destination. In its present form, however, tourism started having a negative impact on the state/condition of both the WHS and the setting as well as quality of life of the local community. It is necessary to direct this activity in line with sustainability principles and simultaneously develop other forms of a sustainable economy. After all, focusing on tourism alone is a risk in the context of global threats (one such example are the consequences of the COVID-19 pandemic) and is contrary to the principles of sustainable development that take global threats as a starting point in planning.

The revitalisation of the city and strengthening of the local community are primary conditions that must be met in order to preserve the cultural and social identity of the area. Even though the WHS area and its setting form an extremely important economic resource, it is necessary to prevent the negative impacts of tourism on the lives of residents, because this would threaten both the WHS and the lifestyle of Dubrovnik's citizens. This means that the WHS's protection must involve awareness raising about the city as a place where everyday life takes place. The preservation of a living city implies the protection of both the space and the quality of life of the local community as the bearer of the local identity.

Sustainable development implies establishing a balance between everyday life and tourism, involving the local community in decision making, and strengthening the cooperation of all relevant stakeholders with the common objective of preserving Dubrovnik's cultural heritage. In this sense, it is necessary to continuously and jointly work on limiting and eliminating all negative impacts on the WHS (both as a tourist destination and as a living city) and on the natural environment (Lokrum, Srd, the sea, etc.).

The continuous improvement and development of the **infrastructure network** is a precondition for increasing the quality of life of **residents** and visitors. New solutions need to be found to improve the microclimate **inside the WHS area**. The implementation of modern technical and ecological **solutions** will contribute to an improvement in the quality of life while preserving WHS values at the same time.

OBJECTIVE 7: DUBROVNIK AS A LIVING CITY

The process of depopulation of the WHS area is the most serious threat to its sustainability. A disproportion has been noticed between the number of people living in the city and the number of registered residents, indicating the need to find a way to determine the number of permanent residents. In order to solve this issue, it is necessary to implement revitalisation measures at all levels of management. A long-term management system should enable the walled city to preserve its active multifunctional purpose as an urban centre. In addition to housing, it is necessary to preserve and supplement existing administrative, cultural, educational, recreational, and commercial resources with the aim of ensuring the vitalisation of the historic core.

Even though the City of Dubrovnik has introduced measures for demographic revitalisation, trends continue to be negative and are marked by the significant depopulation of its historic core. It is therefore necessary to introduce measures for demographic revitalisation and urban regeneration through the continuous adaptation of financial and other measures that would improve the quality of life, keeping the existing inhabitants and attracting new ones. Using the right of pre-emption, intended to demographically revitalise the historic core, it is necessary to increase the number of accommodation units owned by the City, introduce financial incentives for property owners inside the WHS area who rent their apartments to young families in line with ethical renting regulations, introduce financial incentives for permanent residents in the WHS area, introduce the option of subsidised loans for the renovation of properties inside the protected area (for permanent residence purposes), etc. The area has continuously been recording increasing depopulation. The demographic structure reveals that one third of permanent residents are the elderly, while a large number of inhabitants in the protected area have the status of protected tenants.

The internal census needs to be re-implemented in 2021 and 2026 to collect data continuously and to compare it, with the aim of the long-term monitoring of tendencies related to the number of residents in the WHS area.

All actions determined by this objective also need to be aimed at stopping and preventing the gentrification process.



SLAVICA SUMMER MOVIE THEATER
Source: Dubrovnik Cinemas, Nino Knežević



CHILDREN PLAYING ON STRADUN
Source: Dubrovnik Tourist Board

ACTION 7.1.: Develop a social housing fund and a cooperative housing model in the protected area

Under the Act on Protection and Preservation of Cultural property, when selling a property that is part of cultural heritage, you must first offer it to the city, county, and state. It is a legally binding right of pre-emption. Due to the demographic aging and the population being in decline, many stakeholders point to the problem of deteriorating and neglected housing. Initiatives to develop a fund for the purchase of housing units in the historic core have been put forward for years. The objective of such a fund is to provide allocations for the purchase of real estate, the renovation and improvement of housing conditions, or the conversion of real estate for general, socially useful purposes. Abandoned housing units pose a threat to the safety of citizens and space, but they have exceptional potential for reuse. Different cooperative housing models have been considered through partner action plans of the Urban Agenda for the EU (UAEU) on housing right. A comprehensive and financially sustainable model has to be developed to attract a diverse population with permanent residence.

Action can be structured into two separate parts. The first part is related to the use of pre-emption right with the aim of achieving more favourable rental prices for permanent residence, whereas the second part refers to the creation of a cooperative housing model.

ACTION 7.2.: Monitoring socioeconomic and vital statistics in the World Heritage Site area

The census has shown that many citizens are registered as permanent residents in the protected area in order to earn apartment renter rights of a certain category. The national taxation model enables them to get lower income taxation related to short-term rent. This is widely abused both in Dubrovnik and in other cities. From the management point of view this does not allow the real number of residents to be identified and appropriate measures to be planned. In addition, management purposes require up-to-date socioeconomic and vital demographic data about the local population inside the WHS area, and this is missing. This data could be used for the purposes of defining measures of demographic revitalisation, the adjustment of activities defined by the Management Plan, and the implementation of coordinated measures to improve the socioeconomic situation of the population. This action will collect continuous vital statistics to address the lack of up-to-date and accurate data. To ensure the monitoring of the broader picture with regard to socioeconomic and vital statistics, it is necessary to monitor not only the WHS area as a focal point, but also the situation in the buffer zone. Precise indicators will be determined by the Executive Board during action implementation.

In addition, after Croatia's 2021 census it will be necessary to develop a review methodology, paying attention to the anonymity and individuals' data protection. Data needs to be used solely for the purpose of WHS management and the implementation of both this one and all upcoming WHS management plans. The methodology can include data triangulation with the aim of determining the actual number of residents inside the WHS area.



CONTRIBUTION TO GREEN OBJECTIVES AND CLIMATE-CHANGE ADAPTATION

The sustainable management of housing and optimisation of the urban area use reduces pressure on environmental elements and enhances the environment's resilience.



CONTRIBUTION TO DIGITALISATION

Integration of digital tools intended for monitoring socioeconomic and vital statistics indicators and the increase of data availability.

ACTION 7.3.: Determine income assessment ceilings in order to improve housing conditions – social housing – protected tenants

The housing in the historic core varies from luxury apartments to apartments in extremely poor condition. Although restoration and maintenance of cultural heritage is expensive and all residents should receive financial aid, an income assessment should be implemented to determine priorities in the process. Such an imbalance in the housing supply has a negative impact on the demographic situation and social sustainability. Attention also needs to be paid to the problem of protected tenants whose status is about to expire due to national legislation. In order to solve this social problem in the historic core, it is necessary to find and implement an adequate model that will harmonise the needs of all stakeholders involved.

ACTION 7.4.: Reconstruction of housing and enhancement of housing conditions with the aim of reaching earthquake-risk resilience

Urgent measures need to be adopted to improve conditions for residents in old and unsafe housing facilities. The map of seismic microzoning was made in the 1980s according to diverse inputs, including levels of damage and geo-mechanical research. The WHS area was put in the 8–10 zones on the MCS scale. Dubrovnik is in category 8, while the document identifies zones ranging from 8 to 10. Among the most endangered areas are Stradun and Prijeko, since buildings in these areas were built on embankments. The systematic seismic rehabilitation programme, implemented ever since the 1979 earthquake, needs to be continued and implemented for the entire WHS area. During the 1990s, the Institute for the Restoration of Dubrovnik (ZOD) developed its own programme and conditions for the development of a detailed architectural record of the existing situation at the project execution level. It was complemented in the 2000s with the conditions for digital format record development.

The established methodology and technical solutions adapt to types and features of buildings and are based on conservation conditions and guidelines. The key element of the programme is documentating the existing condition of each building, including detailed architectural records of the building, architectural details and decorative sculptural element records, and photographic documentation. Besides the need for the systematic restoration and seismic rehabilitation of buildings, the development of this documentation is at the same time a necessary preventive measure in case of damage caused by an earthquake and other threats as it enables the new reconstruction of buildings or parts of buildings destroyed in a potential earthquake.

Building restoration begins with the rehabilitation of the load-carrying capacity of historic structures and the introduction of anti-seismic reinforcement that is compatible with historic material and construction techniques.

Urgent measures need to be adopted to improve the living conditions of old and unsafe housing.



CONTRIBUTION TO GREEN OBJECTIVES AND CLIMATE-CHANGE ADAPTATION

Reconstruction should be carried out in compliance with the principles of green infrastructure and sustainability of building in order to reduce energy consumption, which reduces the overall environmental footprint of the building. In addition to that, materials used are obtained in processes that reduce the effects of negative climate change.

ACTION 7.5.: Improve the quality of life of permanent residents

The intensive development of tourism has increased the negative impact on the quality of life of the local population, especially evident in increasing noise pollution, air pollution, and pedestrian and traffic congestion. It is necessary to follow the UNESCO recommendations and to introduce controls and limitations on the number of visitors and tourists in the WHS area in accordance with carrying capacity. It is also necessary to introduce measures for noise and light control as well as control of other forms of pollution that might jeopardise residents' daily rhythm. Building on the above, it is necessary to tighten control over the application of regulations on municipal decisions and to sanction violators in the WHS area.

A reduced quality of life is especially visible in older population groups who need a safer environment and living space and often organised help in taking care of household chores (daily help at home, meal delivery, etc.). It is necessary to focus on strengthening solidarity and encouraging the development of a local network of assistance, care, and trust (preservation of the neighbourhood and intergenerational and other forms of solidarity; concrete measures need to be developed in agreement with local residents and adapted to their needs). In addition to adequate assistance, the local population needs adequate space for walking, socialising, sports, and recreation. This is especially important for pre-school and elementary school children. Given that the elderly population make up one third of the overall population in the historic core, it is necessary to increase the accessibility of public facilities and services to the elderly and people with disabilities, with a special focus on improving health services.

New demographic revitalisation measures for the WHS area will be developed. Stakeholders will discuss them during the World Heritage Site Dialogue envisaged as part of Objective 1. They will also be considered by administrative bodies.

Additionally, the aforementioned bodies will consider the proposal for the development of a set of benefits for permanent residents of the WHS through the Dubrovnik ID programme. Dubrovnik ID is a digital platform that would help improve the quality of life of Dubrovnik's citizens, giving residents inside the WHS area special benefits through arrangements involving residents, the City of Dubrovnik, and providers of different services. This action also needs to be considered during the World Heritage Dialogue.

ACTION 7.6.: Increase available public standard services

Given that one third of the historic core population is elderly, it is limited in its mobility and ability to perform daily activities (such as shopping, using craft services, etc.). It is necessary to ensure the high quality and availability of scarce services and access to food for the elderly. It is possible to involve local associations in the implementation of projects and programmes aiming to help the elderly.

The urban plan should provide a network of store locations for the population's daily shopping needs as well as necessary services due to the difficult delivery of goods. City incentives and favourable rents should help in this regard.



CONTRIBUTION TO GREEN OBJECTIVES AND CLIMATE-CHANGE ADAPTATION

The proposed measures assume a reduction of emissions into the environment as a precondition for reducing the negative impacts of climate change.

It is necessary to establish public, private, and civil partnerships and programmes to support desired businesses such as groceries and traditional crafts. It is necessary to give incentives for crafts related to the renovation of buildings according to conservation criteria (woodwork – window shutter, sheet metal, wrought iron, stone, etc.).

ACTION 7.7.: Install noise-measuring devices and develop an efficient control system

The problem of noise in the historic core is a significant one. Currently, residents are in an institutional vacuum. The installation and application of permanent devices for continuous and automatic noise measurement, together with a smartphone application (whose data needs to be linked with **Dubrovnik Eye** in real-time) and a timely reaction in addition to the education of municipal wardens would significantly improve life inside the WHS area. This action would be a part of new-generation decisions.

This action, in addition to interventions in new-generation decisions, includes infrastructure and noise-measuring device acquisition, as well as quality system enhancement and additional training required for noise measurement control. Action is implemented in cooperation with the City's competent administrative departments and municipal warden services.

ACTION 7.8.: Adjust the number of rented units to carrying capacity

Given that the trend of increased apartment rental units is directly linked to the trend of population decline, legal measures/decisions will be made to limit short-term rentals modelled on some other European cities (e.g.: Barcelona, Bruges, etc.) in order to preserve OUV attributes. In order to avoid difficulties in the implementation of restrictions, measures need to be developed together with the Carrying Capacity Plan.



CONTRIBUTION TO GREEN OBJECTIVES AND CLIMATE-CHANGE ADAPTATION

The proposed measures assume a reduction of emissions into the environment as a precondition for reducing the negative impacts of climate change.



CONTRIBUTION TO DIGITALISATION

Development of digital control and monitoring systems for elements that negatively impact the quality of life of citizens in the WHS area, including continuous noise monitoring.

DUBROVNIK TIRAMOLA (CLOTHES LINE SUSPENDED OVER THE FAÇADE OF A HOUSE OR OVER A STREET)
Source: Dubrovnik Tourist Board



OBJECTIVE 8: PRESERVE PUBLIC GOOD AND PROTECT PUBLIC INTEREST AND PUBLIC SPACE

ACTION 8.1.: Preserve public good and protect public interest and public space by limiting commercialisation and privatisation

The preservation and accessibility of public space as a public good of all citizens and WHS visitors is extremely important. It is necessary to ensure the permeability, safety, and accessibility of public space inside the WHS for living, walking, socialising, swimming, and other activities. Care for the specific and authentic atmosphere, streets, and squares needs to be raised to a higher level and the space should be protected from overcommercialisation. In order to create priorities for the preservation of public space, it is necessary to conduct continuous research on the perceptions and needs of the local community with regard to quality of life, heritage, and public good protection in the city of Dubrovnik and to integrate the results into spatial and physical planning documents and a new generation of decisions.

Public spaces need to be preserved and protected from overcommercialisation. Stakeholders have highlighted the possibility of limiting leases/concessions on public goods for a shorter period of time, with a transparent procedure and public participation as well as visible benefit to the local community resulting from lease/concession fees. The transparency of the process needs to be integrated into the calculation of public areas that can be leased, while public space privatisation needs to be strictly limited. This will be provided for by a database that will be integrated into a Detailed Development-Plan-level Implementation Urban Plan. As a consequence, it is necessary to ban new construction on the slopes of Srđ in the buffer zone and preserve the nature and green areas through the prevention of redevelopment and endangerment of the natural landscape.

How much space can be rented, under what conditions, and with what benefit must be defined/limited by the needs of the ideal number of inhabitants living in the city because the over-occupation of public spaces and non-living facilities and services are among the causes of depopulation. A living city needs public spaces and free squares. Measures will be prescribed for the regulation of who has the right to obtain public space and in what way, without degrading the attributes of a living city. It is also necessary to integrate a model encouraging desired content that is required by the local community.

The criteria and limitations regarding the process of awarding concessions will be considered and defined through the implementation of this action by the Executive Board in cooperation with other relevant stakeholders. Potential criteria could include the method of supplying goods and scale of orders, kitchen size, kitchen to used space ratio, interior to exterior ratio (terrace), working hours outside the season, etc. Precise criteria will be determined through the action's implementation, which in turn needs to contribute to the enhancement of the Plan on Use of Public Spaces.



BANJE CITY BEACH
Source: Dubrovnik Tourist Board

ACTION 8.2.: Modernise and increase waste management efficiency and reduce waste production

With an increase in tourism and catering activities, the amount of waste produced also increases. The existing system lacks a more efficient waste separation model, so it is necessary to improve the entire separate waste collection network in the WHS area and in the buffer zone with active stakeholder participation and in line with the needs of the local population. Spatial constraints within the historic core reduce the possibilities and flexibility of waste collection, so it is necessary to improve the availability of areas for all types of waste management, utility, and emergency vehicles.

The Action's implementation needs to be in line with legal and strategic acts in the area of environmental protection and waste management, especially the City of Dubrovnik Environmental Protection Programme (2018–2021) and the draft Plan for Environmental Protection of the Republic of Croatia (2016–2023). In the context of waste management, it is necessary to enhance the separate waste collection network in order to achieve the objectives of sustainable space management and green transition (in line with the European Green Plan). During implementation, data will be collected and processed for the WHS area as well as its buffer zone and setting in order to obtain information about quantities of waste with regard to accommodation type and waste type (if a separate waste collection system exists), amounts of catering industry waste with regard to waste type (glass, plastic, paper, food preparation, thermally-processed foods, deep fryer oil, etc.), and the total amount of separate waste collected with regard to type. Data has to be used to enhance the waste management system, with particular emphasis on a reduction in the amount of waste and an increased level of separate collection and waste recycling. During the action's implementation, public infrastructure for separate waste collection will also be enhanced and a reduction in the amount of packaging waste will also be promoted.



CONTRIBUTION TO GREEN OBJECTIVES AND CLIMATE-CHANGE ADAPTATION

Waste and waste management are one of the leading causes of the negative impacts of climate change. Sustainable waste management reduces the pressure that waste creates on the environment and ensures better environmental status.

ACTION 8.3.: Renew and improve infrastructure networks in the World Heritage Site area

The existing drainage system is based on the historic Dubrovnik sewerage system, which requires significant improvements and continuous work on infrastructure renewal and modernisation. Stakeholders pointed to the need to improve and modernise the wastewater drainage infrastructure and rainwater drainage infrastructure. It is necessary to plan works on the rehabilitation of the city’s sewerage network in line with conservator instructions, that is, a complete, interdisciplinary conservation database. It is necessary to implement stakeholder education and establish control over the use of the system. In addition to drainage, great attention should be paid to the modernisation and improvement of the water supply infrastructure in order to solve the problem of water supply in the summer months.

It is necessary to improve electric power supply. The existing telecommunications network needs to be underground. The radio and TV network system needs to be modernised.

In recent years, the problem of an excessive number of air conditioning units has been a focus of debate among stakeholders. This issue has also been noticed by the UNESCO Reactive Monitoring Mission and an intervention was requested. The tendency is to remove exterior air conditioning units from street fronts. A long-term solution is to explore the possibilities of applying other alternative solutions for air conditioning in individual buildings and/or spaces as well as of the financing of these systems. This needs to be regulated by a new generation of decisions.

OBJECTIVE 9: IMPLEMENTING AND MONITORING ENVIRONMENTAL PROTECTION ASPECTS

ACTION 9.1.: Continue proactive implementation of actions proposed in the City of Dubrovnik Environmental Protection Programme

The City of Dubrovnik has prepared the Environmental Protection Programme of the City of Dubrovnik for the period 2018–2021. The program contains eight priorities and related objectives, all of which are relevant to the Management Plan. Special attention should be paid to the implementation of actions that are part of measures: 1-1, 1-2, 1-4, 2-7, 2-8, 6-3, 7-4, 1-5, 1-9, 3- 1, 3-2, 3-3, 3-4, 3-5, 3-5 to 3-9, 3-12, 4-2, 4-3, 5-1, 5-2, 5-3, 5-6, 5-12. These measures need to be proactively applied to ensure a high quality environment in the area of the City of Dubrovnik, including the WHS, the buffer zone, and the setting. All measures are aimed at the effective protection of nature and improvement of the environment (of special importance for the Management Plan is the preservation of the Mount Srd slopes and the regeneration of the authentic environment, the preservation of Lokrum, the seabed, and maritime area of the City Port as well as the maritime area between Lokrum Island and the mainland, park areas in Gruž, etc.). The Environmental Protection Programme’s implementation period lasts until 2021, after which time it is necessary to continue with the implementation of marked actions and harmonise implementation with the new Environmental Protection Programme that will be developed.



CONTRIBUTION TO GREEN OBJECTIVES AND CLIMATE-CHANGE ADAPTATION

Reducing water pollution and consequently sea pollution; this strengthens the resilience of the sea, as the biggest catalyst for climate change.



CONTRIBUTION TO DIGITALISATION

Possible integration and modernisation of digital tools for monitoring the state and load of the infrastructure network.



CONTRIBUTION TO GREEN OBJECTIVES AND CLIMATE-CHANGE ADAPTATION

The increased quality of the environment ensures the positive direction of climate change to which humanity is gradually adapting.

The Management Plan cannot directly influence the environmental protection framework but its implementation needs to be aligned and tied to the existing and the new environmental protection programme. The new programme needs to be aligned with the Management Plan, whereas actions carried out during the Management Plan’s implementation need to be adjusted to the new programme. An evaluation will be carried out with regard to the implementation of already existing measures as well as the integration of measures that will be structured by the new programme. If necessary, the Executive Board can intensify and further enhance certain measures from the new programme during the implementation process in the context of interlinking with Chapter IV.1.7. Horizontal actions.

ACTION 9.2.: Health and heritage impact monitoring

Road and maritime transport, even excessive pedestrian traffic and supply-related traffic, can contribute to the deterioration of human health and heritage. Additional monitoring of emissions (air, noise, and light) and impacts (public health and state of heritage) should be carried out under the supervision of the competent authorities and experts. The control and monitoring of the impact on health should be carried out by independent, licensed institutions and companies. It is necessary to enhance infrastructure and measuring devices and monitor the type and source of pollution. During the action’s implementation, a new system of monitoring the quality of environmental constituents will be established and its impact on health and heritage will be actively monitored.

In the context of both these actions, it is necessary to point out that the European Commission, through its multiannual financial framework (2021–2027) and the European Green Deal, opens plenty of opportunities to finance projects related to green infrastructure, urban greenery, and urban and peri-urban garden development as well as other actions related to reducing the negative impact on the environment and the state of the environment.



CONTRIBUTION TO GREEN OBJECTIVES AND CLIMATE-CHANGE ADAPTATION

The proposed measures assume a reduction of emissions into the environment as a precondition for reducing the negative impacts of climate change.



CONTRIBUTION TO DIGITALISATION

Development of digital control and monitoring systems of elements that negatively affect the quality of life and health of citizens in the field of world good and the environment



PARK IN GRUŽ
Source: Kristina Mirošević

IV.1.4. Tourism management

ISSUES: The city of Dubrovnik is one of the most visited cultural sites on the Adriatic Sea, with well-deserved market recognition, tourism management infrastructure and accommodation availability. In 2019 it was visited by 1.3 million visitors, most of whom also stayed overnight. Tourism in Dubrovnik in 2019 reached a point that manifests high dependence on mass and unsustainable tourism. The biggest burden in terms of a concerning level of depopulation and increasing number of accommodation units for tourists has been noticed in the WHS area.

CHALLENGES: Tourism of the City of Dubrovnik faces many complex challenges. Mass tourism characterised by high spatial and temporal concentration overburdens the most recognisable landmarks in peak periods, putting the entire WHS and its population at risk. In terms of the economy, Dubrovnik is highly dependent on tourism. At the same time, there is a lack of systematic tourism management and the continuous monitoring of positive and negative impacts of tourism on heritage and the community's life.

Consequently, it is necessary to build on informed tourism management based on diversification and quality improvement, relieving the most visited places of pressure and offering alternative and complementary forms of activities to generate added economic, ecological, and heritage benefits for the entire community. There is need for long-term planning based on the balanced and optimal use of social, cultural, and natural resources and the involvement and participation of the community as well as respect for local customs and the local way of living.

Issues related to tourism management are key to the sustainable management of the site and in the pre-pandemic situation, these problems were most visible in protected area management. This is why first actions of the Management Plan's implantation refer to the design and development of the Carrying Capacity Plan and a visitor management model.

OBJECTIVE 10: DEVELOPMENT OF INFORMED TOURISM THAT CREATES ADDITIONAL ECONOMIC, ECOLOGICAL, AND HERITAGE VALUE FOR THE LOCAL COMMUNITY WITH AN EMPHASIS ON DIVERSIFICATION AND QUALITY IMPROVEMENT

The development of informed tourism must in the future improve the quality of life and increase the number of inhabitants in the entire WHS area.

ACTION 10.1.: Develop a Carrying Capacity Plan for the entire World Heritage Site area

A very important action of the management plan is the development of a **Carrying Capacity Plan for Dubrovnik** according to the guidelines and criteria set by UNESCO with the aim of responsible and sustainable tourism development inside the WHS of OUV.²⁵ Previous attempts to develop a Carrying Capacity Plan were not in line with the UNESCO guidelines and needs of both space and citizens.²⁶ The Carrying Capacity Plan aims to assess the peak or optimal number of visitors for certain locations and destinations. Carrying capacity must be defined as a dependent variable that depends on different independent variables and different time periods. It is of crucial importance that, once carrying capacity is exceeded, a way of managing tourism as well as mitigation and prevention measures be proposed. The system will also enable continuous feedback regarding the definition, establishment and implementation of limitations based on a budget and tourism carrying capacity analysis (TCC is defined as a variable that depends on different time periods). It is important to assess bottlenecks, key stations, infrastructure capacity, and the number of visitors that certain locations/attractions can admit. It is also important to take into account the buffer zone with all its function and contents.

The development of the Carrying Capacity Plan must be aimed at the protection of OUV attributes, in particular the preservation of the living city. For this reason, this action is horizontal and connects all objectives defined by the Management Plan. The Carrying Capacity Plan and visitor management model development requires the involvement of an independent body to carry out an expert analysis, while the process needs to include experts, institutions and the local community. The carrying capacity plan needs to be developed in line with the UNESCO guidelines, especially taking into account the UNESCO World Heritage Sustainable Tourism Toolkit.

It is necessary to prepare a separate carrying capacity study for Lokrum, which needs to be integrated into the Carrying Capacity Plan for the entire WHS.



CONTRIBUTION TO GREEN OBJECTIVES AND CLIMATE-CHANGE ADAPTATION

Destination control in terms of reducing or limiting the number of potential visitors directly affects the reduction of the ecological footprint of visitors who would simultaneously organise trips to the same destination. Although economically unsustainable, the model of reduced travel activities by plane, car, and ship would have a positive effect on the state of climate.



CONTRIBUTION TO DIGITALISATION

Integration of GIS and other tools for capacity monitoring and visitor system management.



THEMED TOUR: "MEET RENAISSANCE DUBROVNIK"
Source: House of Marin Držić

²⁵ UNESCO World Heritage Sustainable Tourism Online Toolkit
²⁶ The tourism development and reception capacity sustainability study as part of the City of Dubrovnik Action Plan is not considered an adequate carrying capacity plan. The Management Plan's implementation foresees the development of a Carrying Capacity Plan in line with the UNESCO guidelines and needs of the space and the city

ACTION 10.2.: Design, establish and develop a visitor management system in different World Heritage Site areas

Based on tourism sustainability monitoring, the objective is to improve the system of the management and coordination of visits and the flow of tourists in order to avoid the spatial and temporal concentration of visitors and impairment of the quality of life of the local population. An appropriate visitor management system will relieve pressure on the most visited places by introducing restrictions and offering alternative and additional forms of activities. A Carrying Capacity Plan is the first step, taken parallel with the development of the system for the establishment of monitoring. This is the primary direction of the visitor management system as a long-term and continuous operation. Just as in the previous action, the development of the visitor management model needs to be aimed at the protection of OUV attributes of the WHS, with particular emphasis on the preservation of the living city.

The establishment and development of the system, as well as system improvement activities, will be implemented by the City of Dubrovnik in cooperation with the Dubrovnik Tourist Board and other relevant stakeholders involved in the Management Plan's implementation (defined by the Executive Board).

One of the proposals made by the citizens referred to the need for the development of a model for the online reservation of tickets for museums, galleries, and other services to keep the overburdening of spaces with visitors under control. During the action's implementation the possibility of upgrading the existing Dubrovnik Card system will also be examined as a tool for visitor management.

ACTION 10.3.: Establish a tourism sustainability monitoring system

The aim of this activity is to establish a system for the continuous collection, processing, and analysis of clearly defined and concrete information on the positive and negative impacts of tourism on the environment, culture, society, and economy by zones (WHS, buffer zone, setting).²⁷

This system will be able to calculate and analyse various aspects and constraints of tourism capacities so that they can be used in visitor management.

This action can be divided into three key segments: evaluating the effects of tourism on the economy of Dubrovnik and the local community, evaluating the pressure of tourism on the environment and human health, and evaluating the use of space.

The first segment of evaluation includes monitoring and measuring the satisfaction, consumption and motivation of tourism, calculating the multiplying effects of tourism, making cost-benefit analyses of tourist supply and demand, monitoring the investment of funds obtained from tourism, researching local satisfaction, etc. Research must contribute to WHS risk mitigation and selected indicators need to be adjusted accordingly.

The second mentioned segment of evaluation includes the preparation of four-year reports on the implementation of the Environmental Protection Program of the City of Dubrovnik²⁸ as well as annual reports on Waste Management Plan implementation and data obtained from the air quality monitoring system traffic counting systems, data on noise emission, etc.



CONTRIBUTION TO DIGITALISATION

Integration of GIS and other tools for capacity monitoring and visitor system management.



SOCIAL EVENT IN THE LAZARETTO
Source: Institute for the Restoration of Dubrovnik



CONTRIBUTION TO GREEN OBJECTIVES AND CLIMATE-CHANGE ADAPTATION

It will be possible to review the assessment of the pressure of tourism on the environment and climate change negative impacts.

²⁷ Guide 1 Understanding tourism in your destination in UNESCO World Heritage Sustainable Tourism Online Toolkit

²⁸ Particular emphasis should be put on measures: 1-1, 1-2, 1-4, 2-7, 2-8, 6-3, 7-4, 1-5, 1-9, 3-1, 3-2, 3-3, 3-4, 3-5, 3-5 to 3-9, 3-12, 4-2, 4-3, 5-1, 5-2, 5-3, 5-6, 5-12

The third aspect includes improving the collection of data in the WHS area, updating data, mapping the use of WHS by facilities, monitoring indicators of changes in the ownership structure of facilities in the WHS area, establishing a system of spatial and temporal distribution of visitors and real-time data analysis, monitoring local community satisfaction with tourism, etc. The basis for this action are selection, definition of sustainability limits, and monitoring of adequate indicators for sustainable tourism development in the WHS areas, including the buffer zone and its setting. It is mandatory to involve the local community and representatives of city districts, depending on the zone for which indicators are chosen and sustainability limitations defined.

These activities are carried out in cooperation with the Institute for the Restoration of Dubrovnik and the University of Dubrovnik. It is especially important to emphasise the existence of a large amount of data in the Institute for the Restoration of Dubrovnik (ZOD), the University of Dubrovnik, local and regional agencies, tourist boards, national institutes, etc. This activity is therefore carried out in accordance with the upgrading of ZOD's capacity and the existing capacities and resources of the University of Dubrovnik.

ACTION 10.4.: Enhance and strengthen investment of tourism-related revenues in natural and cultural heritage in the entire World Heritage Site area

During the participatory process, the local population expressed the need for a more transparent process of reinvesting private and public tourism revenues in natural and cultural heritage, with special emphasis on the fund for the purchase of apartments in the area of the WHS and the preservation of OUV, in line with one of the UNESCO recommendations.²⁹ Elements of natural and cultural heritage are used as basic resources for tourism development, but there is a lack of return on investment in the protection, preservation and restoration of used resources. It is necessary to develop a plan for reinvestment in cultural heritage (determining funding priorities, detecting all available local and county funding sources, transparency of tenders, harmonisation of funding sources with national and EU sources, analysis of revenues from public cultural resources and their allocation to culture). At the same time, there is the potential to relieve the society of local taxes and contributions and to provide incentives for reinvestment in areas that encourage heritage preservation, quality of life, and health, etc. Investments need to contribute to the development and preservation of the living city concept.

Before action implementation, the governing bodies need to determine the treatment of the monument annuity institute and give recommendations for the reconfiguration of local taxes with the aim of encouraging cultural and natural heritage protection. Given the impact of tourism on the living city as the most important attribute of OUV, investment needs to be integrated in that direction. The Management Committee will determine precise investment needs during action implementation.

²⁹ Guide 9 Securing funding and investment in UNESCO World Heritage Sustainable Tourism Online Toolkit



CONTRIBUTION TO DIGITALISATION

It will be possible to review the assessment of the pressure of tourism on the environment and climate change negative impacts.



PUSTIJERNA, VIEW OF ARCHITECTURAL EXCAVATION FROM THE PERIOD BEFORE THE EARTHQUAKE OF 1667
Source: Institute for the Restoration of Dubrovnik



CONTRIBUTION TO GREEN OBJECTIVES AND CLIMATE-CHANGE ADAPTATION

Part of the income should be directed to mitigating the negative climate change.

ACTION 10.5.: Develop county and City strategy of integrated tourism management

The City of Dubrovnik needs to establish an integrated tourism development action plan that would involve relevant authorities, tourism operators, and representatives of the community in order to discuss the development of the Tourism Management Strategy expanding and diversifying tourism objectives while programming access to the most crowded places and defining the action plan.³⁰ The plan needs to be integrated with other economic sectors (such as agriculture, fisheries, IT services, and other non-tourism activities) in order to create the necessary synergies and achieve long-term sustainable development. Actions need to involve topics related to the post-pandemic recovery of the tourism sector and future risk adjustments.

There is a need to direct visitors to the wider area of Dubrovnik through strengthening the valorisation of cultural and natural contents in the setting and the wider area of the county. In the context of Dubrovnik, a “must-see” locality is the WHS, and Old Town as its central part. During the development of a carrying plan it is also necessary to enforce certain activities and later coordinate them. Possible alternatives include: agriculture, historic gardens near Dubrovnik, refurbishment of the Pile port, Pile as an industrial centre of the Republic, recreational facilities, etc. The pressure of cruise ships in the area of Gruž requires the introduction of new facilities and tours such as a World Heritage Centre in Gruž with urban centre characteristics, tours of summer residences, WHS tours from the sea which do not involve entering the city, etc.

In order to relieve the WHS, it is necessary to activate the available tangible and intangible resource and attraction base, but also the physically available development space of the entire Dubrovnik-Neretva County that can be historically linked to the context of the Republic of Ragusa. It is only through turning the content and/or thematic integration of the valuable, but still relatively poorly commercialised, cultural landscape of this whole area into a complex and multidimensional experiential framework that it will be possible to relieve the historic core and the narrower area of the City of Dubrovnik from an increasing investment demand and an increasing number of concurrent (stationary and one-day) visitors. It is also necessary to integrate the opportunities and potential of the digital and green transition.

ACTION 10.6.: Diversify tourist offer to unburden the World Heritage Site

Numerous stakeholders in the participation process highlighted the problem of the monoculture of the tourism system in the WHS area, resulting in Dubrovnik’s high dependence on tourism. This is particularly evident today during the COVID-19 pandemic. The need to unburden the WHS by strengthening the offer in the setting and other parts of the region was also emphasised, with the aim of ensuring a more sustainable management system. Implementation needs to be in line with other actions within Objective 10. Possible activities that contribute to the diversification of the currently monocultural tourist offer are³¹:



CONTRIBUTION TO GREEN OBJECTIVES AND CLIMATE-CHANGE ADAPTATION

Respecting the principles of sustainable development when planning the processes of overlapping with other industries, the diversification of tourism objectives and relieving the most visited places would strengthen the resilience of the environment of the protected property.

³⁰ Guide 2 Developing a strategy for progressive change in UNESCO World Heritage Sustainable Tourism Online Contribution to green objectives and climate change adaptation

³¹ According to UNESCO guidelines, Guide 8 Managing visitor behaviour, UNESCO World Heritage Sustainable Tourism Online Toolkit.

- **INCREASING THE DWELL-TIME WHERE LOCAL BUSINESSES AND SERVICES ARE LOCATED**
- **AN INCUBATOR IN THE HISTORIC CENTRE (SUPPORTING THE REALLOCATION NOT ONLY OF THE OLD CRAFTS BUT CONTEMPORARY CRAFTS AS WELL – DESIGN, ARCHITECTURE, ETC.)**
- **VISITOR REDISTRIBUTION AND DISPERSION**
- **ENCOURAGING THE REVIVAL OF OLD TRADITIONAL CRAFTS**
- **ENCOURAGING THE DEVELOPMENT OF SMALLER SPECIALIZED SHOPS WITH LOCAL PRODUCTS**
- **STRENGTHENING LOCAL ORGANISATIONS**
- **GIVING PREFERENTIAL RENTAL PRICES FOR URBAN SPACES FOR TRADITIONAL CRAFTS AND DEFICIT OCCUPATIONS**
- **PROVIDING SUPPORT TO ACTIVITIES LED BY THE LOCAL POPULATION**
- **ENCOURAGING SOCIAL, CULTURAL, AND ARTISTIC ACTIVITIES PRIMARILY AIMED AT CITIZENS, BUT ALSO VISITORS (E.G. STREET GAMES IN THE CITY)**
- **ENCOURAGING THE DEVELOPMENT OF CULTURAL AND CREATIVE INDUSTRIES, CRAFTS, AND ACTIVITIES**
- **RATIONALISING TOURIST FLOWS BY DEVELOPING AND PROMOTING SPECIAL FORMS OF TOURISM OUTSIDE THE PEAK TOURIST SEASON**
- **CONTINUOUS IMPROVEMENT OF THE QUALITY OF THE TOURIST OFFER, WHILE RESPECTING THE CULTURE AND WAY OF LIFE OF THE LOCAL POPULATION**

ACTION 10.7.: Develop cost and benefit analysis of cruise ship tourism

Intensive cruise ship tourism has negative impacts on the environment, health, infrastructure, and quality of life, whereas the economic impacts are limited and significantly smaller compared to stationary destination tourism. The fact that the impact of different types of tourism in Croatian destinations is not being measured precisely prevents clear consideration, but the existing literature and attitudes of stakeholders clearly point to the conclusion that cruise tourism can endanger competitiveness and the destination’s image. It can be concluded that environmental protection standards, food safety, workers’ rights, and passenger safety are far lower and/or far less effective compared to those on the mainland. Port and maritime authorities, stakeholders in the field of tourism, the academic community, and civil society show a high level of concern, but also of understanding with regard to the causes and effects of the unlimited development of cruise ship tourism. Further consideration related to the implementation of this action needs to be based on this knowledge.



STUDENTS OF THE LUKA SORKOČEVIĆ ARTS HIGH SCHOOL PAINT A MURAL IN THE NEW SOCIAL CENTER – YARD OF THE TUP CARBON GRAPHITE PRODUCTS FACTORY
Source: Red History Museum



CRUISE SHIPS IN THE GRUŽ PORT
Source: City of Dubrovnik

The cost parameters of cruise ship tourism include negative externalities in the following domains: environmental protection (air emissions, biocide, waste, blackwater, bilge water, etc.), nature and landscape protection, business risks (arrival changes/delays, large investments in port infrastructure), impact on human health, infrastructure deterioration, quality of life, and the satisfaction of the local population and tourists visiting the destination. Benefit parameters encompass aspects that directly impact the economy and state and city revenue as well as positive externalities related to the benefits that tourism brings to local aspects of life.

ACTION 10.8.: Establish a framework for the measurement of the tourism economy system and its role in the City of Dubrovnik’s economy

Existing indicators of tourism activity do not take into account all aspects of physical tourism activity in the area of the city, such as one-day stays and stays in non-commercial accommodation units. In addition to that, they also do not take into account extremely important monetary and structural aspects of tourism’s influence on the city’s economy, including the total tourist expenditure, production of tourist activities, gross value added , and gross product added of tourism. The satellite tourism account is a tool for understanding and measuring the tourism economy system and its role in the economy at both the national and regional level. Its development at the city level has the potential to ensure significant benefits for the implementation and evolution of a successful and, in the long term, sustainable economic and tourism policy that arises from:

- **UNDERSTANDING KEY FEATURES OF BUSINESS CONDUCTED BY ECONOMIC OPERATORS IN CHARACTERISTIC ELEMENTS OF THE TOURISM SYSTEM AS WELL AS THEIR RELATIONSHIP WITH ECONOMIC ACTIVITIES**
- **LINKING DEMAND AND SUPPLY DATA ACCORDING TO MAIN GROUPS OF VISITORS WITH THE SUPPLY AND PRODUCTION OF THE CHARACTERISTIC TOURISM OFFER**
- **DETERMINING SPECIFIC INDICATORS NECESSARY FOR STRATEGIC MANAGEMENT AND MARKETING IN TOURISM**
- **ENSURING OPPORTUNITIES FOR MONITORING THE EFFICIENCY OF STRATEGIES, MEASURES, AND THE IMPLEMENTATION ACTIONS OF PLANNING DOCUMENTS**
- **DIRECTING NATIONAL AND EU FUNDS TO PROJECTS THAT PROVIDE THE REQUIREMENTS NEEDED TO IMPROVE TOURISM ACTIVITY OVERALL**
- **IN ADDITION TO THE PUBLIC SECTOR, THE REGIONAL SATELLITE ACCOUNT CAN BE USED BY PRIVATE ENTREPRENEURS IN THE BUSINESS DECISION MAKING PROCESS AND DEFINITION OF STRATEGIC GUIDELINES FOR THEIR BUSINESS AS IT PROVIDES, FOR EXAMPLE, THE ABILITY TO DETERMINE WHERE A BUSINESS STANDS IN TERMS OF ITS COMPETITION, TRENDS ANALYSIS, AND CONSUMER BEHAVIOUR MONITORING AS WELL AS AN OVERVIEW OF THE LABOUR MARKET, AND CHANGES IN THE SUPPLIER MARKET**

Starting with the methodological framework of the expected benefits, the regional satellite account for the City of Dubrovnik should result in the assessment of the following factors:

- **INCOMING TOURIST EXPENDITURE OF GUESTS FROM ABROAD, CATEGORIZED INTO ONE-DAY AND SEVERAL-DAY VISITOR EXPENDITURES AND ACCORDING TO PRODUCTS AND SERVICES CHARACTERISTIC FOR TOURISM**
- **INCOMING TOURIST EXPENDITURE OF GUESTS FROM CROATIA, CATEGORIZED INTO ONE-DAY AND SEVERAL-DAY VISITOR EXPENDITURES AND ACCORDING TO PRODUCTS AND SERVICES CHARACTERISTIC FOR TOURISM**
- **LOCAL TOURIST EXPENDITURE OF INTRA-REGIONAL GUESTS, I.E. VISITORS FROM DUBROVNIK-NERETVA COUNTY, ACHIEVED IN THE DUBROVNIK-NERETVA COUNTY AREA, CATEGORIZED INTO ONE- DAY AND SEVERAL-DAY VISITOR EXPENDITURES AND ACCORDING TO PRODUCTS AND SERVICES CHARACTERISTIC FOR TOURISM**
- **INTERNAL TOURIST SPENDING, INVOLVING BOTH INCOMING AND LOCAL TOURIST EXPENDITURE AND OTHER TOURIST-SPENDING COMPONENTS, ACCORDING TO PRODUCTS AND SERVICES CHARACTERISTIC FOR TOURISM**
- **NUMBER AND LENGTH OF STAYS BY SEVERAL-DAY VISITORS FROM ABROAD, FROM CROATIA, AND FROM THE DUBROVNIK-NERETVA COUNTY STAYING IN ALL OF THE COMMERCIAL ACCOMMODATION UNITS, NON-COMMERCIAL ACCOMMODATION UNITS (HOUSE OWNERS, HOLIDAY APARTMENT OWNERS, VISITING FRIENDS AND RELATIVES) AND WHO ARE VISITING FOR NAUTICAL TOURISM, INCLUDING ESTIMATES OF NUMBERS OF UNREGISTERED TOURISTS**
- **NUMBER OF ONE-DAY VISITORS FROM ABROAD, FROM CROATIA, AND FROM THE DUBROVNIK-NERETVA COUNTY, INCLUDING DAY- TRIPPERS, TRANSIT GUESTS, AND GUESTS IN NAUTICAL OR CRUISE SHIP TOURISM**
- **PRODUCTION VALUE, I.E., VALUE OF THE PROVIDED SERVICES AT THEIR BASE PRICE, INTERMEDIATE EXPENDITURE, THE GROSS ADDED VALUE OF ECONOMIC ACTIVITIES CHARACTERISTIC FOR TOURISM, THE PRODUCTION VALUE OF CERTAIN ECONOMIC ACTIVITIES CHARACTERISTIC FOR TOURISM (DISAGGREGATED ACCORDING TO PRODUCTS AND SERVICES CHARACTERISTIC FOR TOURISM)**
- **PRODUCTION VALUE, I.E., THE VALUE OF PROVIDED SERVICES AT THEIR BASE PRICE GENERATED BY TOURIST DEMAND ACCORDING TO ECONOMIC ACTIVITIES CHARACTERISTIC FOR TOURISM AND OTHER ACTIVITIES**
- **PRODUCTION VALUE, I.E., THE VALUE OF PROVIDED SERVICES AT THEIR PURCHASE PRICE THROUGH THE TRANSFORMATION OF DOMESTIC PRODUCTION AT THEIR BASE PRICE ACCORDING TO ECONOMIC ACTIVITIES CHARACTERISTIC FOR TOURISM AND OTHER ACTIVITIES**
- **VALUE OF DOMESTIC SUPPLY AND COMPARISON WITH INTERNAL TOURISM EXPENDITURE AND TOURISM’S GROSS ADDED VALUE ACCORDING TO ECONOMIC ACTIVITIES CHARACTERISTIC FOR TOURISM AND OTHER ACTIVITIES**
- **EMPLOYMENT RATES IN ECONOMIC ACTIVITIES CHARACTERISTIC FOR TOURISM**

IV.1.5. Traffic management

The current state of the traffic system of the city of Dubrovnik can be characterised as excessively overburdened. Traffic and movement conditions in the WHS have been poor for decades. The configuration of the terrain, the excessive use of cars and buses, excessive number of visitors, and poor management result in traffic congestion in all parts of the city. During the tourist season, the traffic in the city is blocked in many places and the situation around the WHS is chaotic. It is therefore necessary to find a sustainable solution in the near future.

Road traffic is limited by a lack of space (close to the border, narrow state territory), terrain conditions (hilly and steep), and insufficient infrastructure, which affects traffic congestion throughout the network. The average traffic load exceeds the existing capacities. The problem is particularly pronounced during the summer when the system becomes completely unsustainable. What was also noticed was a significant trend of increased road traffic, which comes as a consequence of an increase in air traffic at the airport in Čilipi. It is known that Dubrovnik is mainly an air destination, meaning that the airport is the main point of tourist arrivals. However, the airport is 20 km away from Dubrovnik and the main road connecting it with the airport is the Adriatic Highway, which passes right above the city and Lokrum, a WHS.

It is therefore necessary to look at the city and Lokrum in light of HUL, buffer zone, and setting, as well as to look for a most appropriate solution within that perimeter. The most favourable solution should be sought within the carrying capacity calculation. Traffic solutions should also be modelled accordingly. For all interventions in the buffer zone, special attention should be paid to the visual component of the intervention in relation to the WHS OUV.

Building on the problem of traffic load, there is also the problem of scarce parking space. Visitors who try to park near the WHS contribute to traffic jams and congestion. Also lacking are parking spaces for permanent residents of the WHS and the buffer zone. The **Park & Ride** concept emerged as a possible solution in recent years, but spatial resources are limited and the quality of public transportation limits its use. Buses are used for the public transport of passengers (urban and suburban transport lines), but their quality and frequency need to be improved.

The WHS area is a pedestrian zone. The main issues are at the perimeters of the WHS (Ploče and Pile), where cars and buses share spaces with small freight vehicles used for urban logistics (delivery and removal of all goods and materials related to the needs of people inside the area). Such loads at the Pile location create crowds in front of the historic core entrance and the entire system is characterised by a lack of space for the improvement of pedestrian traffic (narrow streets). Cycling traffic inside the core is not allowed and the possibilities of its development in the **buffer zone** are limited due to the lack of space, unfavourable terrain configuration, and inability to guarantee safety (traffic overload). A Sustainable Urban Mobility Plan (SUMP) should provide a response to future traffic development guidelines, following some of the best examples worldwide.

The port in Gruž is about 3.5 km away from the WHS. It records approximately 735,000 passengers a year. The problem is the lack of traffic infrastructure to and from the Port, which causes traffic congestion. Due to an excessive number of visitors from cruise ships in the Gruž Port, there are significant traffic congestion. It is necessary to reduce the number of visitors to a sustainable level.

Air traffic records a continuous increase in the number of passengers. Dubrovnik Airport is the third largest airport in the Republic of Croatia according to the criteria of dispatched passengers per year, while in terms of the number of passengers in July or August, Dubrovnik leads the way. The problem is not only the lack of traffic infrastructure to and from the airport, but also traffic jams around the airport building.

During the physical planning documentation analysis, the needs and opportunities of the traffic system development in the area of the City of Dubrovnik were defined in accordance with the needs of the WHS:

- TO ORGANISE THE TRANSPORT NETWORK WITH REGARD TO THE FUTURE IMPACT OF THE INCREASING NUMBER OF VEHICLES AFTER THE CONSTRUCTION OF THE PELJEŠAC BRIDGE, THE NEED FOR BETTER CONNECTIONS WITH THE AIRPORT IN ČILIP, AND THE RECEPTION CAPACITY ASSESSMENT OF THE "ADRIATIC TOURIST HIGHWAY" THAT RUNS ALONG THE SOUTHERN SLOPE OF SRĐ, RIGHT ABOVE THE WHS AND THE BORDER CROSSINGS
- TO INFLUENCE THE REDUCTION OF THE INTENSITY OF INTRACITY TRAFFIC AND THE DEVELOPMENT OF ALTERNATIVE TRANSPORT MODELS (PARK & RIDE, PUBLIC FERRY LINES, ETC.)
- TO DEVELOP ELEMENTS OF THE INTERMODULAR TRANSPORT SYSTEM AS A MODEL FOR AN INTEGRATED SOLUTION OF TRAFFIC PROBLEMS



TRAFFIC TERMINAL AT PILE DURING THE ARRIVAL OF CRUISE SHIP GUESTS
Source: Integrated Development Plan Dubrovnik 2030, 2020

- TO SUPPORT PEDESTRIAN TRAFFIC, TO FACILITATE AND ENABLE MOVEMENT OF PEOPLE WITH DISABILITIES, TO CONNECT PROMENADES AND PEDESTRIAN ROUTES INTO A NETWORK THAT CONNECTS ALL PARTS OF THE CITY
- TO ENCOURAGE THE CONSTRUCTION OF PARKING LOTS FOR TENANTS BY BUILDING SMALLER GROUP GARAGES
- TURNING TO SMALLER ELECTRIC PUBLIC TRANSPORT VEHICLES IN CERTAIN PARTS OF THE BUFFER ZONE AS WELL AS SPEED REDUCTION AND CONTROL

Traffic system management requires the organisation of a sustainable traffic system and traffic flow increase. The development strategy must be aimed at improving and promoting public transport, reducing road transport, and encouraging innovative solutions. The idea is to reduce the amount of road transport and continuously develop an efficient public transport system that will be environmentally friendly and time efficient. The realisation of this objective will result in an increase of WHS availability and a reduction in congestion in the transport network, which has a negative impact on the development of the city.

OBJECTIVE 11: DEVELOP A TRANSPORT SYSTEM WHILE STRENGTHENING SUSTAINABLE MOBILITY

ACTION 11.1.: Ensure that the protected area is not blocked by traffic

Develop an alternative road that will redirect part of the traffic to less congested areas. The international Dubrovnik Airport is about 20 km away from the City of Dubrovnik and generates transit traffic overload in Dubrovnik. Due to its geological and spatial limitations, all road traffic generated by air traffic passes through the City of Dubrovnik.

The main plan of the Functional Region of Southern Dalmatia envisages a motorway from Dubrovnik (Osojnik) to Dubrovnik Airport with connecting roads to the Dubrovnik traffic network. This would redirect part of the transit traffic to less congested areas and connect Dubrovnik with the airport, the regional traffic network, and other parts of Croatia in an adequate manner.

Develop integrated supply management. The historic core of the city is limited in terms of its traffic capacities, resulting in the delivery and supply system encountering frequent problems. Stakeholders highlighted the need and potential for the development of a logistics centre near the WHS with the aim of developing integrated freight traffic management. Such a solution would result in a better organised delivery system in the historic centre of the city.



CONTRIBUTION TO GREEN OBJECTIVES AND CLIMATE-CHANGE ADAPTATION

The development and construction of alternative roads would reduce the impact of harmful traffic emissions on the protected area. Therefore the negative impact on climate change would also be reduced.

ACTION 11.2.: Develop a Sustainable Urban Mobility Plan

A major issue is to bring forward a comprehensive Sustainable Urban Mobility Plan (SUMP) of the protected area. Even though the current Dubrovnik Masterplan deals with this issue, it's missing SUMP aspects in its drafting procedure, level of detail, and prioritisation of sustainable transport options. Its framework that relates to the protection of the WHS OUV is hence limited. It is therefore necessary to develop a SUMP, but also to ensure, during implementation, consistency with the development of a Carrying Capacity Plan, as envisaged by objective 10.

The objectives of such mobility planning are accessibility, primarily through sustainable transportation modes, an increase in traffic safety, the reduction of greenhouse gas emissions and consumption of fossil fuels, the attractiveness of urban spaces, an improved quality of life, a healthier environment, and a reduced harmful impact on citizens' health. According to measurements, the transport system of the City of Dubrovnik is one of the busiest systems in Europe and there is an exceptional need to define a SUMP that would follow the objectives of the Management Plan. In addition to that, the SUMP needs to contribute to the alleviation of traffic congestion in the inner part of the buffer zone as well as tourist traffic in Pile, the introduction of smaller electric public transport vehicles, speed limits, etc. It is also necessary to contribute to the development of alternative forms of traffic (Park & Ride, maritime public transport, etc.) and find adequate solutions for underground parking in appropriate areas. The development of the SUMP must stimulate measures that contribute to a reduction in the number of vehicles in the buffer zone, the reduction of negative impact of traffic on the environment and cultural heritage, the integration of digital tools for traffic management and monitoring the capacity and overload in certain parts of the traffic system, promotion of environmentally friendly solutions, and an increase in accessibility for persons with disabilities or reduced mobility as well as other measures that contribute to sustainable traffic development and the development of the area as a whole. The plan's development and implementation can to a great extent be financed through EU funding.

The SUMP will serve as a basis for future versions of spatial and physical planning documents.

During the development and implementation phase, it is necessary to ensure the coordination of the competent authorities for both the Management Plan and the SUMP.

ACTION 11.3.: Support the development of integrated passenger transport

The traffic system of the city of Dubrovnik is under a heavy load of road traffic. Public transport in the existing framework of congested traffic has reduced flexibility, and its modernisation and popularisation are needed. With the aim of developing an integrated passenger transport system, there is a need to harmonise the timetables of different branches of public transport (bus, maritime transport, etc.). There are subway development initiatives whose development needs to be considered.



CONTRIBUTION TO GREEN OBJECTIVES AND CLIMATE-CHANGE ADAPTATION

Sustainable traffic management and reduction in the emission of harmful gases positively impacts the ozone layer preservation and, consequently, climate change.



CONTRIBUTION TO DIGITALISATION

Integration of GIS tools in traffic system management.



ELECTRIC CYCLIST IN DUBROVNIK
Source: Kristina Mirošević



CONTRIBUTION TO GREEN OBJECTIVES AND CLIMATE-CHANGE ADAPTATION

Sustainable traffic management and reduction in the emission of harmful gases positively impacts the ozone layer preservation and climate change as a consequence.

The introduction of coastal line tourism and public transport is emerging as a potentially useful alternative to the existing public transport system. It is of strategic importance to improve the accessibility of the airport in Čilipi with other parts of the city, due to the trend of an increase in the number of tourist arrivals by air. A significant potential for overall modernisation of integrated passenger transport is visible in the introduction of modern toll collection and the integration of smart traffic solutions. With the aim of relieving the traffic system, great emphasis is placed on the development of parking solutions for the local population (construction of garages) with the possibility of integrating the *Park & Ride* system (as well as electric bicycles and other alternative forms of individual traffic).

Include maritime coastal transport in the passenger transport system. Coastal maritime traffic is not adequately valorised within the public transport system and represents an adequate alternative to relieving the existing system. It is necessary to develop new city transport lines in cooperation with the Dubrovnik Port Authority that will connect parts of the city as well as suburban ones (those that connect the city with its surroundings). This activity should be encompassed by the SUMP development.

ACTION 11.4.: Ensure sustainable mobility development in the buffer zone

The biggest problem is the lack of space and unfavourable terrain configuration in the densely urbanised area of the buffer zone. Sustainable mobility will be reassessed and planned through the development of the SUMP. The concept of sustainable urban mobility, especially pedestrian traffic improvement, needs to be linked to the previously determined need for visitor management system development (possibility of GIS platform integration). Cycling and pedestrian traffic present an opportunity for sustainable mobility development in city traffic, but the existing infrastructure is insufficient for its wider use. It is necessary to reconsider the possibilities for the development of cycling infrastructure and pedestrian paths/zones through comprehensive planning of public and green city infrastructure in the entire city with a special focus on the buffer zone. A database for green infrastructure and landscape basis is planned and it needs to be aligned with this action. The overall infrastructure should be adjusted for persons with disabilities.

ACTION 11.5.: Organise underground parking facility in an adequate area (Iza Grada)

The lack of parking space diminishes mobility opportunities of the local population in the historic core, but also in the buffer zone. The development of an underground garage would reduce the problem of traffic load and would create the necessary preconditions for the development of alternative forms of traffic (*Park & Ride*, maritime public transport, etc.). In addition to that, through the development of underground garages, logistics and transshipment point systems for the WHS area could be integrated. This action needs to be consistent with Action 11.2. Develop a Sustainable Urban Mobility Plan. During implementation it is necessary to find an adequate area in line with the SUMP and encourage the preparation of project documentation.



CONTRIBUTION TO DIGITALISATION

Integration of GIS tools in traffic system management.



CONTRIBUTION TO GREEN OBJECTIVES AND CLIMATE-CHANGE ADAPTATION

Sustainable traffic management and reduction in the emission of harmful gases positively impacts the ozone layer preservation and, consequently, climate change.

The development and construction of alternative roads would reduce the impact of harmful traffic emissions on the protected area. Therefore the negative impact on climate change would also be reduced.

IV.1.6. Risk management

Risk management, usually understood as risk assessment and efficient response design, is one of the key tools in protected area management and is to a great extent linked to other management aspects elaborated as part of the plan. It has its specificities in Dubrovnik just as it does in other areas considered to be living cities. This means that there are existing and predefined systems regulated by national and local legislation. The major risks identified for the WHS area during risk assessment process are: floods, earthquakes, and other natural hazards (drought, heat wave, stormy weather, landslide, hail, snow, ice, etc.), technical and technological disasters, and pandemics. The main hazard is earthquakes, and they have already hit Dubrovnik several times, causing huge damage to the protected WHS area. Due to the high possibility of the occurrence of earthquakes, earthquake mitigation measures were integrated into the Management Plan.

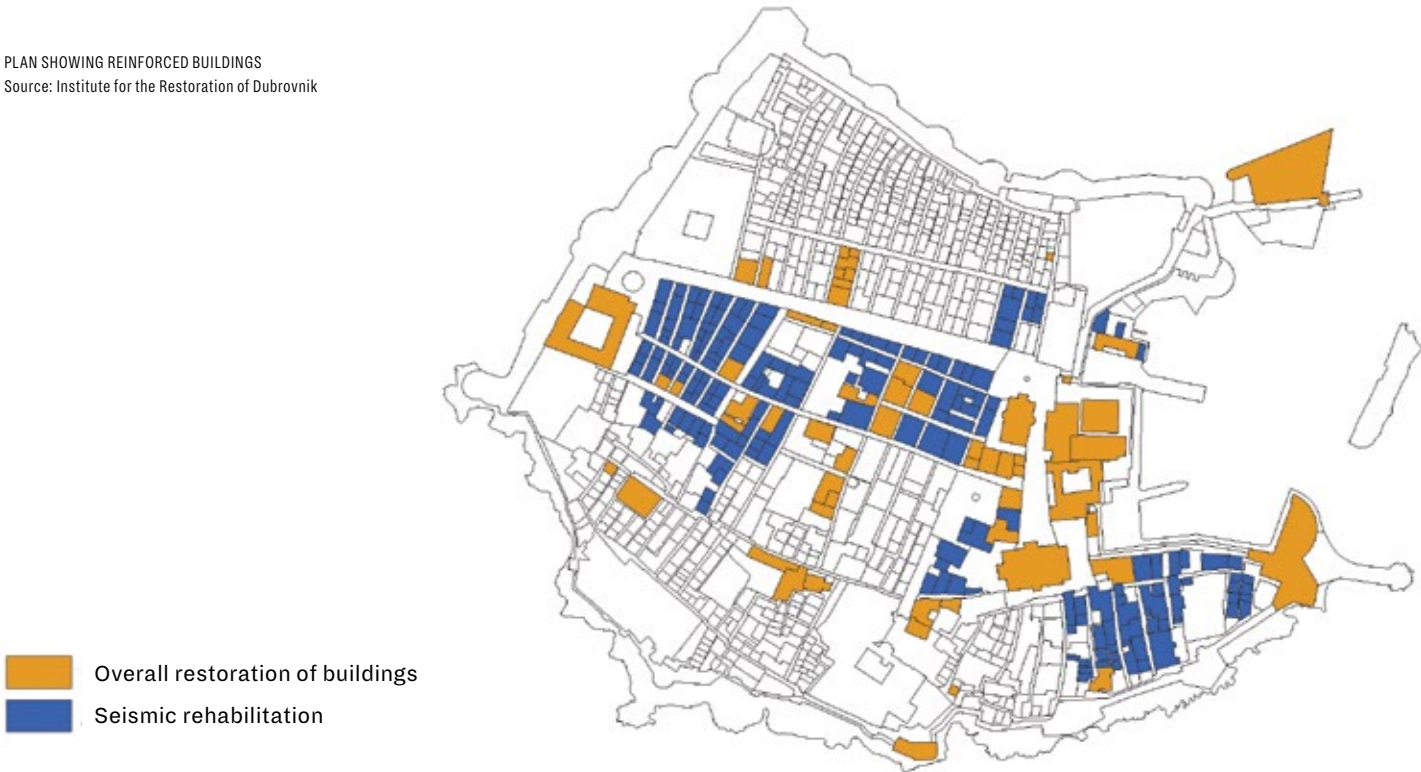


Increasing the **risk-preparedness level** of the WHS and the entire city includes risk management through the interlinkage of processes and the establishment of the city's carrying capacity as well as the development of a large number of relevant scenarios in case of a risk outbreak. Due to the susceptibility of the WHS in the city ensemble, the Management Plan must foresee countermeasures for different types of risks: fire, earthquake, flood, climate risks (sea level rise), etc. This includes the establishing departments, equipping intervention teams (firefighters, civil protection, etc.), educating the local population on behaviour in case of a disaster, and institutional organisation of potential interventions depending on risk type. It is, of course, impossible to manage all risks or foresee all potential scenarios (each scenario represents one of many possible developments), but good preparedness for potential emergency situations can mitigate or even minimise the consequences of a risk to where damage is insignificant and consequences are minor. Finally, it is once again necessary to point out that the WHS is a very sensitive **habitat** that can suffer significant damage even in the case of minor risks. It is therefore necessary to strengthen Dubrovnik's level of risk-preparedness as much as possible. A prerequisite for these activities is the development of a Risk Preparedness and Management Plan for the WHS.

There are bodies identified in emergency situation management and these are regulated through the national legislative framework.

Based on the concern expressed by the 2015 UNESCO/ICOMOS Reactive Monitoring Mission with regard to the WHS state of preservation, an urgent need was identified to improve the situation. In addition to the general operational guidelines for the implementation of the World Heritage Convention, the report contains recommendations for improving the situation in the WHS area and these need to be considered when drafting the Management Plan.

PLAN SHOWING REINFORCED BUILDINGS
Source: Institute for the Restoration of Dubrovnik



Given the latent risk of earthquakes and fires, preparedness and evacuation plans need to be coordinated with existing building structures: non-fire-resistant wooden roofs, buildings with damaged construction and load-bearing stone walls, occupancy of individual assemblies, street flows, existence of a hydrant network, etc. All plans for the mitigation of potential risks should be developed in cooperation with the Institute for the Restoration of Dubrovnik, which possesses all available data. Reconstruction plans should also be aligned with planned evacuation corridors.

Additional topics are covered in **Appendix V.4. Risk preparedness**.

OBJECTIVE 12: MITIGATE POTENTIAL RISKS AND DEVELOP A SUCCESSFUL RESPONSE SYSTEM IN CASE OF HAZARD

ACTION 12.1.: Develop a Risk Preparedness and Management Plan for the World Heritage Site

In addition to the existing document adopted in 2018 (**Major Accident Risk Assessment for the City of Dubrovnik**) representing a wider framework and an assessment of earthquake, flood, and open fire risk, it is considered a priority to develop a targeted Risk Preparedness and Management Plan for the WHS of Old City of Dubrovnik, in line with the methodology found in documents and publications by UNESCO, ICOMOS and ICCROM. The plan encompasses all segments of risk management, such as risk mitigation, risk preparedness, risk response, and risk recovery. The development involves the consideration of all types of threats, identification of possible and most likely threats for the WHS, vulnerability analysis for the WHS and its constituent parts, assessment of the potential impact of identified threats, and measures to mitigate risk and strengthen resilience as well as response and recovery measures in case of risk activation. In addition to the constituents of OUV, it is necessary to consider intangible values related to the WHS. Apart from the WHS area, the Management Plan and the Risk Preparedness and Management Plan need to encompass the buffer zone area as well.

The Risk Preparedness and Management Plan needs to identify and evaluate emergency exits and determine the evacuation plan.

It must also integrate measures related to green infrastructure development in the buffer zone with the aim of risk mitigation, especially risks caused by climate change.

During its development, actions need to be aligned with the relevant UNESCO and ICCROM guidelines, such as *Guide to the Methodological Study of Monuments and Causes of Their Deterioration*; *Risk Preparedness: A Management Manual for World Cultural Heritage*; *Management Guidelines for World Cultural Heritage sites*; *Between Two Earthquakes – Cultural Property in Seismic Zones*, etc.



REPAIR OF CHAPTERS IN THE RECTOR'S PALACE
Source: Institute for the Restoration of Dubrovnik



CONTRIBUTION TO GREEN OBJECTIVES AND CLIMATE-CHANGE ADAPTATION

Unification of activities to mitigate risk and risk consequences.

ACTION 12.2.: Monitor implementation of the measures identified in the Major Accident Risk Assessment for the City of Dubrovnik

Major Accident Risk Assessment for the City of Dubrovnik was adopted in 2018. The study was prepared and serves as an excellent basis for the further continuous improvement and definition of measures to reduce risk and increase safety. The current state of all relevant indicators is documented in detail and organisational measures are proposed for further improvement of the Civil Protection structure. International guidelines relevant to the scope of the Management Plan, such as the Sendai framework, should be integrated.

Many measures are intended to be implemented through the development of spatial plans. This means that the new Urban Development Plan for the WHS area should be planned in line with this and other documents regulating spatial planning and cultural heritage protection.

ACTION 12.3.: Strengthen the knowledge base on seismic risk

The national network of seismographs and accelerographs is inadequate. It is necessary to develop a network, particularly in the area of Dubrovnik. In line with the national project, the installation of devices is planned in outer parts of the WHS. It is necessary to continue the activities of the Seismological Institute and Institute for the Restoration of Dubrovnik to find adequate facilities and locations for permanent seismographs so that seismic activity can be monitored and regularly reported to the local government and the Institute for the Restoration of Dubrovnik. Action includes the purchase of special equipment and the necessary education to apply earthquake knowledge in a qualitative way. Action also includes continuous data monitoring.

ACTION 12.4.: Ensure additional capacities for the Institute for the Restoration of Dubrovnik on diverse aspects of risk monitoring and management related to the World Heritage Site

One of the segments related to the future functionality of the Institute for the Restoration of Dubrovnik is to increase knowledge with regard to risks/hazards, risk monitoring, and risk management. It is necessary to conduct trainings and provide adequate funds and equipment for these activities.



CONTRIBUTION TO GREEN OBJECTIVES AND CLIMATE-CHANGE ADAPTATION

Certain risks can correlate with negative climate.

ACTION 12.5.: Organise continuous education of children, citizens, and local experts on natural and anthropogenic risks

As outlined in the Capacity-Building Strategy, one of the actions to reduce risk and increase safety is the organisation of the continuous education of citizens and local experts with regard to natural and anthropogenic risks. This education is mandatory for stakeholders involved in the Management Plan implementation process.

ACTION 12.6.: Integrate measures for climate change adaptation

The consequences of climate change are becoming increasingly visible and pose a significant risk to the future protection, preservation and valorisation of the WHS. Climate change adaptation measures must be integrated in a timely manner to create an adequate level of resilience. This activity is horizontal within the strategic framework and needs to be applied in the implementation of all other actions, in line with chapter IV.1.7. Horizontal actions and Appendix V.5. Interlinkage of horizontal actions related to green and digital transition.

As part of this action, it is important to point out that the European Union, through its multiannual financial framework (2021–2027) and the European Green Deal, opens up great opportunities for the EU funding of projects dealing with the development of green infrastructure and urban greenery, other activities related to the mitigation of negative environmental impact, the improvement of environmental conditions, and the mitigation of negative impacts of climate change through strengthening risk resilience. The development of a green infrastructure network is also of great significance, with particular emphasis on the buffer zone.



CONTRIBUTION TO GREEN OBJECTIVES AND CLIMATE-CHANGE ADAPTATION

Increased awareness and citizens' knowledge about environmental pressures and what they mean for their quality of life. This can lead to positive changes in citizen behaviour (reduced waste generation, reduced use of non-renewable energy sources, etc.) that ensure positive impacts on climate change.



CONTRIBUTION TO DIGITALISATION

Strengthen capacities and increase knowledge about the potential digital tools have for various aspects of monitoring and managing WHS-related risks.

IV.2. ACTION PLAN

IV.2.1. Action Plan setup

The Action Plan connects planned objectives and actions with management capacities of the competent institutions and stakeholders. For each activity, the bodies responsible for implementation have been identified.

During participatory workshops with local and regional stakeholders, the objectives were prioritized. The results of the workshop are presented below and the objectives were ranked according to following priorities:

- **PRIORITY (I) – Highest priority of action implementation defined by stated objectives. This category represents short-term actions of the highest priority.**
- **PRIORITY (II) – Moderate priority of action implementation defined by stated objectives. This category represents medium-term actions of a moderate priority.**
- **PRIORITY (III) – Action implementation in line with objectives of higher-level priority is required. This category represents long-term actions of a lower priority.**

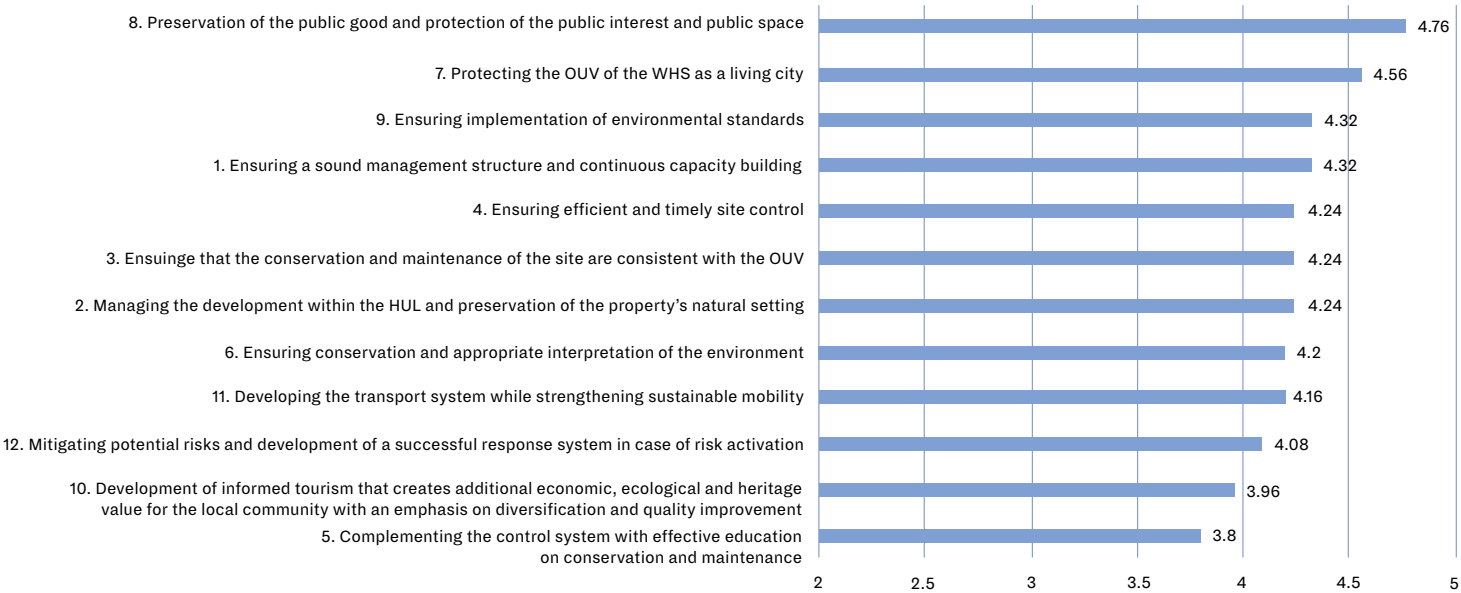


FIGURE 7. ASSESSMENT OF THE IMPLEMENTATION PRIORITY FOR OBJECTIVES ACCORDING TO THE RESULTS OF A PARTICIPATORY WORKSHOP WITH STAKEHOLDERS
Source: Authors

Objective prioritisation derived from workshops with stakeholders is shown below.

PRIORITY LEVEL		
I	II	III
8. Preservation of the public good and protection of the public interest and public space	4. Ensuring efficient and timely site control	11. Developing the transport system while strengthening sustainable mobility
7. Protecting the OUV of the WHS as a <i>living city</i>	3. Ensuinge that the conservation and maintenance of the site are consistent with the OUV	12. Mitigating potential risks and development of a successful response system in case of risk activation
9. Ensuring implementation of environmental standards	2. Managing the development within the HUL and preservation of the property's natural setting	10. Development of informed tourism that creates additional economic, ecological and heritage value for the local community with an emphasis on diversification and quality improvement
1. Ensuring a sound management structure and continuous capacity building	6. Ensuring conservation and appropriate interpretation of the environment	5. Complementing the control system with effective education on conservation and maintenance

The criteria for defining the priority of individual activities:

- **COMPLIANCE WITH THE ANTICIPATED MFF³² AND RRF³³ CALL DYNAMICS**
- **LONG-TERM IMPLEMENTATION**
- **CONTRIBUTION TO IMPLEMENTATION INDICATORS**
- **DEGREE OF CONTRIBUTION TO THE OVERALL VISION FOR 2026**

The Action Plan was developed in line with the input provided by involved stakeholders and citizens and based on previously defined strategic objectives and actions. The Management Action Plan is shown in the table below. For the sake of simplicity and in line with stakeholder instructions, a consolidated table was developed containing monitoring indicators.

The Action Plan does not contain financial values, as is the practice with UNESCO management plans. The Executive Board will, however, develop a financial plan proposal every year. The proposal will be in line with the budgets of public authorities involved in the implementation in order to precisely align the Management Plan development process with future circumstances.

³² MFF – Multiannual financial framework 2021–2027.
³³ The Recovery and Resilience Facility.

As proposed by citizens, a separate column (Scope proposal) was added into the action plan, suggesting the spatial extent of the action’s impact according to the following categories: **O – general action** (not spatially specific but rather involving the entire area of the City of Dubrovnik or primarily of administrative and/or organisational character), **WHS – World Heritage Site**, **B – buffer zone area**, **S – setting area**. During the implementation of the Management Plan, the Executive Board can extend the Scope proposal category in line with the identified needs.

IV.2.2. Reporting and monitoring

Monitoring can be viewed from two perspectives. The first refers to monitoring the state of the WHS and is implemented at the national level by the Croatian Ministry of Culture and the Conservation Department in Dubrovnik as well as UNESCO, through periodic and extraordinary reports submitted by the Ministry. The second is focused on monitoring the implementation of the Management Plan. The functionality of monitoring is visible through the provision of objective data on the state of the WHS and implementation of the priorities, objectives, and actions of the Management Plan. All the monitoring data will be used for the purpose of performance assessment of the implementation of the Management Plan and updates made to it.

IV.2.2.1. Monitoring the state of the World Heritage Site

Monitoring refers to a system of regular inspections, surveys, and reporting, which allows property owners and experts to compare the current situation with previous reports. As a result, it is possible to identify weaknesses and risks in a timely manner and prepare interventions for maintenance or conservation. All WHS features are subject to regular monitoring of their preservation, conducted every five years.

Restoration and protection should be based on a clear definition of cultural heritage resources and their relation to the environment. This definition is a part of an important process aimed at nurturing heritage values as an integral part of today’s society by developing a framework for assessing the value of resources, establishing management objectives, and preparing the presentation and interpretation policies. This process has four different steps:

- **RESEARCH:** methodical inspection, research, and documentation of resources, their historical and physical environment
- **DEFINITION:** critical and historical definition and assessment of the object and its environment
- **ANALYSIS:** scientific analysis and diagnosis of material elements and the associated structural system with the aim of the preservation of cultural heritage
- **STRATEGY:** long-term and short-term programmes for preservation and environment change, including regular inspections, cyclical maintenance, and environmental control

In order to improve WHS monitoring activities, the existing actions will be complemented by implementation monitoring actions from the Management Plan. This way – in addition to monitoring the state and development of the OUV, awareness raising in citizens and administrative bodies, sustainable development, trends and other data – parameters defined within the Action Plan will be used as well. The Executive Board can modify indicators using some of UNESCO’s programmes and studies as a basis: *World Heritage Capacity Building Strategy* (UNESCO, 2011), *Recommendation on The Historic Urban Landscape* (UNESCO, 2011), *UNESCO World Heritage Sustainable Tourism Toolkit* and many other documents available on UNESCO’s website.³⁴

IV.2.2.2. Management plan implementation monitoring

Management Plan Implementation monitoring for the Old City of Dubrovnik is the process of collecting, analysing, and comparing indicators that systematically monitor the success of the document’s implementation. Objectives in strategic planning documents need to be clearly defined and measurable using relevant indicators. Outcome indicators are quantitative and/or qualitative measurable data that enable monitoring, reporting, and performance assessment with regard to objectives and action implementation. With the aim of more efficient implementation and in line with instructions provided by the stakeholders, indicators were developed at the action level. A list of indicators and action target values that need to be reached by 2026 is shown in the table below. Objective achievement is measured by the implementation percentage of corresponding actions.

34 Other relevant documents with additional information: Framework Convention on the Value of Cultural Heritage to Society (Faro Convention) (Council of Europe, 2005), Charter for the Conservation of Historic Towns and Urban Areas (UNESCO, 1987), Document on Authenticity (UNESCO-ICOMOS- ICCROM, 1994), Charter for Places of Cultural Significance, Burra Charter (ICOMOS, 1979), Declaration on the Conservation of the Setting, of Heritage Structures, Sites and Areas, Xi’an Declaration (ICOMOS, 2005), World Heritage Convention (UNESCO, 1972), UNESCO (2005), Vienna Memorandum on World Heritage and Contemporary Architecture - Managing the Historic Urban Landscape (UNESCO, 2005) etc.

In order to accurately monitor the implementation of and adjustments made to the Action Plan due to new situations during the implementation period, it is necessary to prepare a report once a year that quantifies the current state of its implementation. The purpose of preparing such reports is to precisely monitor the implementation of the defined Action Plan and adjust it to potential risks that arise in the implementation phase. If necessary, the Action Plan and indicators will be updated and revised to adjust implementation to current financial capacities due to the consequences of the global COVID-19 pandemic. For every year of Management Plan implementation, the Executive Board will develop a financial plan draft for the realisation of planned actions in line with available funds and developments in the post-pandemic period. The financial plan needs to be in line with the budgets of the public authorities involved in Management Plan implementation.

At the end of the implementation period, a report on the implementation of the Management Plan is prepared which evaluates the indicators and determines the success of the implementation of the Management Plan for the protected monumental ensemble of the city of Dubrovnik. The report will be used when preparing and drafting a new Management Plan for the period after 2026. New management plans will be revised every five years. The key actors in Management Plan implementation monitoring are the Management Board and the Executive Board of the Management Committee and the Institute for the Restoration of Dubrovnik (ZOD), as the development and Management Plan implementation coordinator. The division of tasks in implementation monitoring is defined by the rules of procedure of the aforementioned bodies. The Executive Board is responsible for implementation monitoring and develops yearly reports on the state of the plan's implementation. The Executive Board will in this way file implementation reports to the Management Board.

IV.2.3. Action Plan overview

The Management Committee (especially the Executive Board) can, during the implementation process, name additional stakeholders for the implementation of certain actions. Additional specific indicators (qualitative and quantitative) for objectives and actions will be defined by the executive body during plan implementation. If needed, cooperation will be established with experts in certain fields. Since the Institute for the Restoration of Dubrovnik is present in all actions as the coordinator of all processes and is the body responsible for Management Plan implementation, it is not listed in each action. The same is true of the participation of the Executive and Management Board.

The concept of WHS in the following table implies the scope defined in chapter I.2. Management Plan scope – historic core with city walls, Pile district with Lovrijenac Fortress, Lazareti complex and Revelin Fortress, Lokrum Island and the adjoining maritime zone.



NO.	OBJECTIVE/ACTION	OPERATIVE BODIES AND STAKEHOLDERS	ACTION IMPLEMENTATION START ³⁵	SCOPE PROPOSAL ³⁶	PRIORITY LEVEL	TITLE	MEASURE (UNIT) ³⁷	INITIAL VALUE (2021.)	TARGET VALUE (2026.)
A WORLD HERITAGE SITE MANAGEMENT AND CAPACITY BUILDING									
1.	Establishing a stable management structure and continuous capacity building	City of Dubrovnik, Dubrovnik-Neretva County, Ministry of Culture and Media			I.				
1.1.	Establishing a management system	City of Dubrovnik, stakeholders identified through Action 1.1.	2021.	O	I.	Establishment of management structure (each management body started its work)	1	0	1
1.2.	Establishment of World Heritage Dialogue	City of Dubrovnik, Institute for the Restoration of Dubrovnik, Executive Board	2021.	O	I.	Establishment of World Heritage Dialogue	1	0	1
1.3.	Develop and implement a stakeholder capacity-building strategy	Executive Board, Institute for the Restoration of Dubrovnik	2021.	O	I.	Development of stakeholder capacity-building strategy	1	0	1
1.4.	Establish the Dubrovnik World Heritage Centre for interpretation, education, and research, together with local community capacity building	City of Dubrovnik, Dubrovnik-Neretva County, Ministry of Culture and Media	2022.	WHS, B	II	Establishment of the Dubrovnik World Heritage Centre (centre network)	1	0	1
1.5.	Upgrade the functions of the Institute for the Restoration of Dubrovnik as a body for dynamic data management and monitoring	City of Dubrovnik, Dubrovnik-Neretva County, Ministry of Culture and Media	2022.	O	I.	Expansion of activities and scope of work of the Institute for the Restoration of Dubrovnik (ZOD) (data management and monitoring)	1	0	1
1.6.	Start the amendment process with regard to the Law on the Renewal of Dubrovnik's Architectural Heritage and Other Immovable Cultural Property in the Dubrovnik Area and create an amendment proposal for the Act on Preservation and Protection of Cultural Property	Ministry of Culture and Media, national bodies competent for legal framework amendments	2022.	O	I.	Adoption of amendments to the Law on the Renewal of Dubrovnik's Architectural Heritage and Other Immovable Cultural Property in the Dubrovnik Area	1	0	1
						Amendments to the Act on Protection and Preservation of Cultural Property, as well as Acts on Physical Planning and Environmental Protection	1	0	1
B PROTECTION, CONSERVATION AND MAINTENANCE									
2.	Historic urban landscape management	Ministry of Culture and Media, Ministry of Culture and Media – Conservation Department in Dubrovnik, City of Dubrovnik, Institute for the Restoration of Dubrovnik, Dubrovnik-Neretva County Institute for Spatial Development			I.				
2.1.	Integration of the conservation database for the World Heritage Site buffer zone in the General Urban Plan	City of Dubrovnik	2021.	B	I.	Development of amendments for the General Urban Plan (GUP) with an integrated conservation database for the buffer zone	1	0	1
2.2.	Development of protocols for the Heritage Impact Assessment implementation	Ministry of Culture and Media	2021.	O	I.	Development of protocol for HIA implementation for the WHS	1	0	1



³⁵ Subject to changes and adaptations during Management Plan implementation due to unpredictability of possible sources and scale of funding during and after the COVID-19 pandemic.

³⁶ **O** – general action (not spatially specific, but rather involving the entire area of the City of Dubrovnik or primarily of administrative and/or organisational character) / **WHS** – World Heritage Site / **B** – buffer zone area / **S** – setting area. Parentheses indicate that the action indirectly refers to other areas as well, taking into account the broader context and interdependent impacts.



³⁷ For the sake of simplicity, additional labels were added to certain indicators (**O** – not implemented, **1** – implemented).


NO.	OBJECTIVE/ACTION	OPERATIVE BODIES AND STAKEHOLDERS	ACTION IMPLEMENTATION START ³⁵	SCOPE PROPOSAL ³⁶	PRIORITY LEVEL	TITLE	MEASURE (UNIT) ³⁷	INITIAL VALUE (2021.)	TARGET VALUE (2026.)
2.3.	Strengthening professional competences for historic urban landscape planning and strengthening spatial and physical planning documentation in protection and preservation cultural property	Ministry of Culture and Media, Dubrovnik-Neretva County Institute for Spatial Development, Ministry of Physical Planning, Construction and State Assets, Ministry of Economy and Sustainable Development, Croatian Chamber of Architects	2022.	O	II.	Number of participants who successfully participated in educational and capacity building programmes for HUL planning in the framework of spatial planning	number	0	10
2.4.	Initiate the establishment of a Directorate for Historic Cities	Ministry of Culture and Media, Ministry of Physical Planning, Construction and State Assets	2022.	O	II.	Establishment of a Directorate for Historic Cities	1	0	1
3.	Ensure that conservation and maintenance of the World Heritage Site are consistent with its Outstanding Universal Value	Ministry of Culture and Media, Ministry of Culture and Media – Conservation Department in Dubrovnik, City of Dubrovnik, Institute for the Restoration of Dubrovnik (ZOD)			II.				
3.1.	Develop a conservation and landscape database for the World Heritage Site	Ministry of Culture and Media	2021.	WHS	I.	Establishment of a conservation and landscape database for the World Heritage Site	1	0	1
3.2.	Preparation of an Urban Development Plan for the World Heritage area with a detailed breakdown	City of Dubrovnik	2021.	WHS	I.	Development of an Urban Development Plan for the WHS area with a detailed breakdown started	1	0	1
3.3.	Develop new-generation local decrees for standardisation of design and installation of small structures, urban equipment and other interventions in the World Heritage Site public space	City of Dubrovnik, Dubrovnik-Neretva County, Ministry of Culture and Media in cooperation with local DAD and other professional organisations	2022.	O	II.	Development of new-generation local decisions for standardisation of design and installation of small structures, urban equipment, and other interventions in the World Heritage Site public space	1	0	1
3.4.	Create a list of priorities for interventions related to theprotection and preservation of individual cultural property inside the World Heritage Site and its buffer zone	ZOD, Ministry of Culture and Media, Ministry of Culture and Media – Conservation Department in Dubrovnik, City of Dubrovnik	2021.	WHS, B	I.	Creation of a list of priorities for interventions related to protection and preservation of individual cultural property inside the World Heritage Site and its buffer zone	1	0	1
3.5.	Development of a co-financing programme related to the preservation and restoration of traditional building	Grad Dubrovnik, ZOD, MKM, MKM KO-DU	2021.	WHS, B	I.	Number of implemented projects applied as part of the co-financing programme related to preservation and restoration of traditional building	number	0	20
3.6.	Osigurati dodatna sredstva za konstrukcijsku sanaciju i aseizmičko ojačanje graditeljskog fonda svjetskog dobra	City of Dubrovnik, ZOD, Ministry of Culture and Media, Ministry of Culture and Media – Conservation Department in Dubrovnik	2022.	WHS	I.	Number of rehabilitated and seismically strengthened buildings during Management Plan implementation	number	0	10
4.	Ensure efficient and timely World Heritage Site control	Ministry of Culture and Media, Ministry of Culture and Media – Conservation Department in Dubrovnik City of Dubrovnik, ZOD			II.				
4.1.	Improving the capacity of all public services that take care of the World Heritage Site area	City of Dubrovnik, ZOD, Ministry of Culture and Media, Dubrovnik-Neretva County	2022.	O	II.	Number of trainings	number	-	10
4.2.	Coordinate overlapping of institutional competencies in the World Heritage Site area	Ministry of Culture and Media, City of Dubrovnik, ZOD, Dubrovnik-Neretva County, other competent bodies determined by the Executive Board	2021.	O	I.	Share of city district residents who consider that the level of efficiency of public services monitoring the site has increased compared to the beginning of implementation (survey)	%	-	60%
4.3.	Enhance mechanisms for dialogue with citizens	City of Dubrovnik, ZOD	2021.	O	I.	Establishment of an efficient mechanism for dialogue with citizens	1	0	1



NO.	OBJECTIVE/ACTION	OPERATIVE BODIES AND STAKEHOLDERS	ACTION IMPLEMENTATION START ³⁵	SCOPE PROPOSAL ³⁶	PRIORITY LEVEL	TITLE	MEASURE (UNIT) ³⁷	INITIAL VALUE (2021.)	TARGET VALUE (2026.)
5.	Awareness raising through effective education on the protection and maintenance of the world heritage site	Ministry of Culture and Media, Ministry of Culture and Media – Conservation Department in Dubrovnik, City of Dubrovnik, ZOD			III.				
5.1.	Prepare guidelines and handbooks for the preservation and maintenance of the World Heritage Site, the buffer zone and its setting	Ministry of Culture and Media, ZOD	2022.	WHS, B, S	II.	Development of guidelines and handbooks for WHS preservation, maintenance and use	1	0	1
5.2.	Encourage public administration to develop scientific and research-based cooperation with national and international institutions	ZOD, University of Dubrovnik, University of Zagreb	2022.	O	III.	Number of subsidised scientific and research projects	number	0	3
						Number of institutions involved in scientific and research projects	number	0	6
5.3.	Encourage preparing and conducting of various educational programmes	ZOD, University of Dubrovnik, educational institutions	2022.	O	II.	Number of participants who successfully participated in preservation and maintenance educational programmesja	number	0	500
6.	Valorisation and appropriate environmental protection	City of Dubrovnik			II.				
6.1.	Preserve and improve the urban green and natural setting	City of Dubrovnik, Dubrovnik-Neretva County	2021.	WHS, B, S	I.	Development of an inventory of green areas and greenery elements in public and private areas in spatial and physical planning documentation (immediate realisation)	1	0	1
						Green Cadastre Development	1	0	1
						Development of a sanctioning model (Ordinance) and recognition of private greenery in yearly programmes of municipal infrastructure maintenance	1	0	1
6.2.	Ensure sustainable and responsible use and preservation of Lokrum	City of Dubrovnik, Public Institution Lokrum Reserve	2021.	WHS	II.	Establishment of a model of sustainable use of natural and cultural property of Lokrum Island in line with the Management Plan for the UNESCO WHS of the Old City of Dubrovnik	1	0	1
6.3.	Development of a co-financing project related to research, preservation, and restoration of historic gardens	City of Dubrovnik, ZOD, Ministry of Culture and Media	2021.	WHS, B, S	I.	Implementation of a co-financing project aimed at research, preservation, and renovation of historic gardens	1	0	1
						Number of revitalised historic gardens	number	-	5
C	SUSTAINABLE DEVELOPMENT								
7.	Dubrovnik as a living city	City of Dubrovnik			I.				
7.1.	Develop a social housing fund and a cooperative housing model in the protected area	City of Dubrovnik	2022.	WHS	I.	Development of a social housing fund and a cooperative housing model	1	0	1
7.2.	Monitoring socioeconomic and vital statistics in the World Heritage Site area	ZOD, volunteers (World Heritage Dialogue)	2021.	WHS, (B) ³⁸	I.	Establishment of vital statistics monitoring system for the WHS area	1	0	1

³⁸ Detailed focus is on the WHS, but it is also necessary to follow external processes, especially in the buffer zone.

NO.	OBJECTIVE/ACTION	OPERATIVE BODIES AND STAKEHOLDERS	ACTION IMPLEMENTATION START ³⁵	SCOPE PROPOSAL ³⁶	PRIORITY LEVEL	TITLE	MEASURE (UNIT) ³⁷	INITIAL VALUE (2021.)	TARGET VALUE (2026.)
7.3.	Determine income assessment ceilings in order to improve housing conditions – social housing – protected tenants	City of Dubrovnik	2021.	WHS	I.	Definition of income assessment ceilings and integration into the social housing fund system	1	0	1
7.4.	Reconstruction of housing and enhancement of housing conditions with the aim of reaching earthquake-risk resilience	City of Dubrovnik, ZOD, Ministry of Culture and Media, Ministry of Culture and Media – Conservation Department in Dubrovnik	2021.	WHS, B	II.	Establishment of incentive measures for revitalisation and renovation of facilities for permanent housing as well as seismic retrofitting	1	0	1
7.5.	Improve the quality of life of permanent residents	City of Dubrovnik	2021.	WHS, (B) ³⁹	II.	Share of historic core residents who are mainly or completely satisfied with the number and availability of elements of community life the historic core (survey)	%	-	60%
						An increase in number of children residing in the city who attend the Marin Getaldić Elementary School	%	-	10%
						An increase in number of permanent residents	%		10%
7.6.	Increase available public standard services	City of Dubrovnik, Dubrovnik-Neretva County	2021.	WHS, (B) ⁴⁰	II.	Share of historic core residents who are mainly or completely satisfied with the number and availability of public services and supply (survey)	%	-	60%
7.7.	Install noise-measuring devices and develop an efficient control system	City of Dubrovnik	2022.	WHS (B) ⁴¹	II.	Development of a functional noise measurement control system	1	0	1
7.8.	Adjust the number of rented units to carrying capacity	City of Dubrovnik, Dubrovnik-Neretva County, Dubrovnik Tourist Board	2022.	WHS, (B) ⁴²	II.	Establishment of a rental control system (adoption of order that limits the option of short-term rental)	1	0	1
8.	Preserve public good and protect public interest and public space	Grad Dubrovnik							
8.1.	Preserve public good and protect public interest and public space by limiting commercialisation and privatisation	City of Dubrovnik, City District Grad, Ministry of Culture and Media – Conservation Department in Dubrovnik, Dubrovnik-Neretva County	2021.	WHS, B	I.	Definition of indicators for quality of life and heritage and public good monitoring	1	0	1
						Definition of optimal public space area under lease/concession (mapping, calculation and definition of optimal area)	1	0	1
						Introduction of precise and clear criteria for public space use limitations	1	0	1
						Decrease in share of commercialised and inaccessible public space (25% decrease compared to existing area) ⁴³	%	-	- 25%
8.2.	Modernise and increase waste management efficiency and reduce waste production	City of Dubrovnik	2022.	WHP, B	II.	Enhancement of waste management system	1	0	1



³⁹

Detailed focus is on the WHS, but it is also necessary to adapt actions for the buffer zone.

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Detailed focus is on the WHS, but it is also necessary to adapt actions for the buffer zone.

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Detailed focus is on the WHS, but it is also necessary to adapt actions for the buffer zone.

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Detailed focus is on the WHS, but it is also necessary to adapt actions for the buffer zone.

⁴³

Precise area will be determined by a detailed plan during Management Plan implementation.



NO.	OBJECTIVE/ACTION	OPERATIVE BODIES AND STAKEHOLDERS	ACTION IMPLEMENTATION START ³⁵	SCOPE PROPOSAL ³⁶	PRIORITY LEVEL	TITLE	MEASURE (UNIT) ³⁷	INITIAL VALUE (2021.)	TARGET VALUE (2026.)
8.3.	Renew and improve infrastructure networks in the World Heritage Site area	City of Dubrovnik, Dubrovnik-Neretva County, Republic of Croatia	2022.	WHS	III.	Share of city district residents who consider that infrastructure in the WHS area is adequate (survey)	%	-	60%
9.	Implementing and monitoring environmental protection aspects	City of Dubrovnik			I.				
9.1.	Continue proactive implementation of actions proposed in the City of Dubrovnik Environmental Protection Programme	City of Dubrovnik, Dubrovnik-Neretva County	2021.	WHS, B, S	III.	Share of successfully implemented measures from the Environmental Protection Programme	%	-	60%
						Evaluation of the existing Environmental Protection Programme and integration of measures from the new Environmental Protection Programme with Management Plan actions	1	0	1
9.2.	Health and heritage impact monitoring	City of Dubrovnik, Dubrovnik-Neretva County	2021.	WHS, B, S	II.	Establishment of quality monitoring system for environmental elements and their impact on health and heritage	1	0	1
D	TOURISM MANAGEMENT								
10.	Development of informed tourism that creates additional economic, ecological, and heritage value for the local community with an emphasis on diversification and quality improvement	City of Dubrovnik			II.				
10.1.	Develop a Carrying Capacity Plan for the entire World Heritage Site area	City of Dubrovnik	2021.	WHS, (B)	I.	Development of a Carrying Capacity Plan	1	0	1
10.2.	Design, establish and develop a visitor management system in different World Heritage Site areas	City of Dubrovnik	2021.	WHS, (B)	I.	Design, establishment and continuous enhancement of visitor monitoring system	1	0	1
						Establishment of connection between the system and carrying capacity findings	1	0	1
10.3.	Establish a tourism sustainability monitoring system	City of Dubrovnik	2022.	WHS, B, S	II.	Establishment of a statistics office for tourism development sustainability monitoring	1	0	1
						Development level and monitoring of sustainable tourism development indicators	%	10	50
10.4.	Enhance and strengthen investment of tourism-related revenues in natural and cultural heritage in the entire World Heritage Site area	City of Dubrovnik, Dubrovnik-Neretva County	2022.	WHS, (B)	II.	Establishment of a transparent system for tourism-related income investment monitoring	1	0	1
						Increase of tourism-related income investment in natural and cultural heritage	%	-	50
10.5.	Develop county and city strategy of integrated tourism management	City of Dubrovnik, Dubrovnik-Neretva County	2021.	WHS, B, S	II.	Development of a Tourism Management Strategy of the City of Dubrovnik with an associated Action Plan	1	0	1
						Development of a Tourism Management Strategy of the Dubrovnik-Neretva County with an associated Action Plan	1	0	1
						Level of realisation of strategic objectives and actions from the strategy	%	10	60



NO.	OBJECTIVE/ACTION	OPERATIVE BODIES AND STAKEHOLDERS	ACTION IMPLEMENTATION START ³⁵	SCOPE PROPOSAL ³⁶	PRIORITY LEVEL	TITLE	MEASURE (UNIT) ³⁷	INITIAL VALUE (2021.)	TARGET VALUE (2026.)
10.6.	Diversify tourist offer to unburden the World Heritage Site	City of Dubrovnik, Dubrovnik-Neretva County	2021.	B, S	III.	Share of tourist arrivals and stays outside peak season	%	20	30
						Share of tourist traffic outside the narrow urban centre	%	16	30
10.7.	Develop cost and benefit analysis of cruise ship tourism	City of Dubrovnik, Dubrovnik-Neretva County	2021.	O	II.	Definition of key parameters and methods for data collection related to monitoring negative and positive externalities	%	0	100
						Quantification level of indicators	%	0	100
10.8.	Establish a framework for measurement of the tourism economy system and its role in the City of Dubrovnik's economy	City of Dubrovnik	2022.	O	III.	Establishment of a framework and development of an analysis for measurement of tourism economy system and its role in the City of Dubrovnik's economy	%	-	60%
E TRAFFIC MANAGEMENT									
11.	Develop a transport system while strengthening sustainable mobility ⁴⁴	Grad Dubrovnik, ZOD			III.				
11.1.	Ensure that the protected area is not blocked by traffic	City of Dubrovnik, Dubrovnik-Neretva County	2021.	B, S	II.	Share of population that considers that the problem of traffic congestion was adequately solved (survey)	%	-	60%
11.2.	Develop a Sustainable Urban Mobility Plan	City of Dubrovnik	2021.	WHS, B, S	I.	Development of Sustainable Urban Mobility Plan	1	-	1
11.3.	Support the development of integrated passenger transport	City of Dubrovnik, Dubrovnik-Neretva County	2021.	B, S	II.	Share of population mostly or completely satisfied with the traffic system (survey)	%	-	60%
						Adjustment of timetables from different types of traffic that enable intermodality	1	0	1
11.4.	Ensure sustainable mobility development in the buffer zone	City of Dubrovnik	2021.	B	III.	Length of newly established or built pedestrian or cycling paths	m	0	10.000
11.5.	Organise underground parking facility in an adequate area (Iza Grada)	City of Dubrovnik	2022.	B, S	III.	Public call launch and realisation of all preconditions for project implementation	1	0	1

⁴⁴ Scope proposal needs to be specified at the beginning of the implementation process and it is necessary to consider which actions are defined for the buffer zone in a stricter and broader sense.



NO.	OBJECTIVE/ACTION	OPERATIVE BODIES AND STAKEHOLDERS	ACTION IMPLEMENTATION START ³⁵	PRIJEDLOG OBUHVATA ³⁶	RAZINA PRIORITETA	NAZIV	MEASURE (UNIT) ³⁷	POČETNA VR. (2021.)	CILJANA VR. (2026.)
F	RISK MANAGEMENT								
12.	Mitigate potential risks and develop a successful response system in case of risk activation	City of Dubrovnik, Institute for the Restoration of Dubrovnik (ZOD)			III.				
12.1.	Develop a Risk Preparedness and Management Plan for the World Heritage Site	City of Dubrovnik	2021.	WHS, (B, S) ⁴⁵	I.	Development of a Risk Preparedness and Management Plan for the World Heritage Site	1	0	1
12.2.	Monitor implementation of the measures identified in the Major Accident Risk Assessment for the City of Dubrovnik	City of Dubrovnik	2021.	O	III.	Development of a report on implementation of measures identified during risk assessment as part of Management Plan implementation	1	0	1
12.3.	Strengthen the knowledge base on seismic risk	ZOD	2021.	O	II	Enhancement and development of earthquake monitoring infrastructure	1	0	1
12.4.	Ensure additional capacities for the Institute for the Restoration of Dubrovnik (ZOD) on diverse aspects of risk monitoring and management related to the World Heritage Site	City of Dubrovnik, Ministry of Culture and Media, Dubrovnik-Neretva County	2021.	O	II	Acquisition of necessary infrastructure for risk monitoring and management related to WHS	1	0	1
12.5.	Organise continuous education of children, citizens, and local experts on natural and anthropogenic risks	ZOD, Civil Protection, educational institutions	2021.	O	II	Number of implemented education programmes for children, citizens, and local experts on natural and anthropogenic risks	number	0	10
12.6.	Integrate measures for climate change adaptation	City of Dubrovnik, ZOD	2021.	WHP, B, S	II	Share of Management Plan actions that used measures for climate change adaptation	%	-	30%

⁴⁵ Detailed focus is on the WHS, but it is also necessary to consider impact and actions in the broader area.

V.1. STAKEHOLDER NETWORK DESCRIPTION

INTERNATIONAL STAKEHOLDERS

UNESCO (*United Nations Educational, Scientific and Cultural Organization*)

was established in London in 1945 as an agency of the United Nations. In 1972, the General Conference of UNESCO adopted the Convention Concerning the Protection of the World Cultural and Natural Heritage. The mission of this convention is the identification, protection, preservation, and presentation of cultural and natural heritage which possesses outstanding value. The WHS of the Old City of Dubrovnik was inscribed on the World Heritage List in 1979. In 2015, a UNESCO/ICOMOS Reactive Monitoring Mission was organised for the WHS in Dubrovnik. After the mission, UNESCO strongly recommended drafting a Management Plan for the WHS in Dubrovnik. ICOMOS, ICCROM, and IUCN are UNESCO's professional advisory bodies that deal with WHS protection and preservation.

ICOMOS (*International Council on Monuments and Sites*)

is an international non-governmental organisation oriented towards the preservation and protection of built heritage including World Heritage. It consists of a network of interdisciplinary experts from various fields, such as art history, anthropology, sociology, history, engineering, urban planning, etc. There are 27 International Scientific Committees and 95 National Committees (ICOMOS Croatia is one of them).

ICCROM (*International Centre for the Study of the Preservation and Restoration of Cultural Property*)

is an intergovernmental organization working in service to its Member States to promote the conservation of all forms of cultural heritage in every region of the world. It operates in the spirit of the 2001 UNESCO Universal Declaration on Cultural Diversity, which states that "Respect for the diversity of cultures, tolerance, dialogue, and cooperation, in a climate of mutual trust and understanding, are among the best guarantees of international peace and security."

IUCN (*International Union for Conservation of Nature*)

brings together NGOs to protect the environment and promote sustainable development. Its activities are aimed at the protection of biodiversity, sustainable management of natural resources, and finding practical solutions to global challenges such as those related to the climate, sustainable development, organic farming, etc.

Through many forms of bilateral and other types of cooperation with other cities in the Republic of Croatia and abroad, the City of Dubrovnik exchanges experiences and knowledge in sustainable management. The City has signed **cooperation agreements** with twelve cities, most of which are realised through cultural programmes.

The City of Dubrovnik has launched an initiative for the establishment of the **CROATIAN ASSOCIATION OF HISTORIC TOWNS**. It is a platform for the unique presentation and promotion of the specific interests and needs of Croatian historic cities and their citizens. The association organises conferences, workshops, and cultural events on topics such as the preservation of cultural and natural heritage, traditional culture, the needs of citizens of historic cities and the attitudes of citizens towards cultural heritage, recognition of the importance and value of Croatian cultural heritage, and the management and use of Croatian cultural heritage.

THE ORGANISATION OF WORLD HERITAGE CITIES (OWHC)

is an international non-profit non-governmental organisation that brings together over 200 cities from around the world that are inscribed on the World Heritage List and, which the City of Dubrovnik is a member of. The organisation is in particular aimed at encouraging international cooperation and the exchange of experience and information. Through its implementation of its various programmes it builds WHS cities' management capacities.

STAKEHOLDERS AT THE NATIONAL LEVEL

THE MINISTRY OF CULTURE AND MEDIA OF THE REPUBLIC OF CROATIA

performs administrative and other tasks related to the research, study, monitoring, recording, documenting, and promoting cultural heritage. It manages a central information and documentation service, determines protected cultural property features as well as the conditions for their use and purpose, manages cultural property, develops measures for the protection of cultural property, and determines special construction conditions for the protection of parts of cultural heritage. It also performs inspection activities related to the protection of cultural heritage. The Ministry performs professional and administrative tasks for the Croatian Commission for UNESCO and takes care of general compliance with the UNESCO World Heritage Convention in terms of ensuring proper management of WHS in Croatia. It also identifies and proposes new goods for inclusion on the World Heritage List. The exchange of all relevant information materials with UNESCO is carried out by the Ministry, i.e. the Croatian Commission for UNESCO. It is also responsible for the transfer and application of international experiences and knowledge generated by UNESCO's activities.

CONSERVATION DEPARTMENT IN DUBROVNIK

as part of the Directorate for the Protection of Cultural Heritage of the Ministry of Culture and Media performs professional and administrative tasks related to the research, study, documentation, and promotion of cultural property and the application of appropriate methods and measures for the protection of cultural property. It also determines special construction conditions for the protection of parts of cultural heritage, conditions for their use, the purpose and management of cultural property. Further, it determines the regime of cultural property protection, organises protective works on cultural property, and performs expert work in line with regulation related to the protection and preservation of cultural heritage.

THE MINISTRY OF PHYSICAL PLANNING, CONSTRUCTION AND STATE ASSETS

is competent for tasks related to the spatial planning system and thereby impacts the implementation of spatial and physical planning acts.

THE CROATIAN ACADEMY OF SCIENCE AND ARTS

is the leading Croatian science and arts institution. It encourages and organises scientific work, advocates the application of achieved results, promotes artistic and cultural activities, and looks after Croatian cultural heritage and its global affirmation. The Institute for Historical Sciences in Dubrovnik has achieved significant scientific results in research related to the history of Dubrovnik and its population.

THE INTER-UNIVERSITY CENTRE OF THE UNIVERSITY OF ZAGREB (IUC)

was founded in 1972 as an international and independent association of universities. As part of the programme it offers postgraduate courses and conferences in all academic fields. Participants come from universities and scientific institutes from all over the world. The programme is supported by the University of Zagreb, the Ministry of Science and Education, numerous international foundations, partner universities, and institutions from all continents whose professors, scientists, and students participate in the programme in Dubrovnik. In this respect, the city of Dubrovnik itself is of particular significance due to its spirit and tradition of tolerance and open-mindedness. It attracts members of the academic community to the programme, but also strengthens its reputation in scientific and academic circles through the activities of the IUC.

THE UNIVERSITY OF DUBROVNIK

was founded in 2003. Even though it is one of the youngest Croatian universities, its courses, structure, and technical equipment make it a very modern higher education institution. Its History Department is involved in research related to Dubrovnik. It is necessary to point out that the Arts and Restoration Department offers a master's programme in Restoration and Conservation (textile), the only such programme in Croatia.

THE INSTITUTE OF ART HISTORY (IPU)

is a public scientific institution founded in 1961 with the purpose of the enhancement and systematisation of scientific work related to the study of national historical and artistic heritage. In addition

to scientific research, its staff – art historians and architects – is involved in the restoration of the city, settlement, and architecture, with Dubrovnik being one the most comprehensive tasks in this regard. Starting in late 1960s, research related to Dubrovnik resulted in a number of scientific papers and the development of architectural and photographic documentation. After the 1979 earthquake, experts from the Institute were actively involved in the reconstruction of the city and its architecture. In addition to numerous conservation studies that were published even after the Independence War, the Institute has as of late been devoted to the systematic treatment of churches in Dubrovnik, which has resulted in a monograph in both Croatian and English (the Cathedral of the Assumption of the Virgin and the Collegiate Church of St Blaise). It is also important to emphasise that the documentation prepared by the Institute was the basis for Dubrovnik's inscription on the World Heritage List in 1979.

THE DUBROVNIK PORT AUTHORITY

manages the port zone open to public transport of national importance in the buffer zone in Gruž. Dubrovnik Port is a passenger port of international importance which welcomes a significant number of cruise ships.

STAKEHOLDERS AT THE REGIONAL LEVEL

DUBROVNIK-NERETVA COUNTY

as a regional self-government unit, was established to perform tasks of regional significance. Within the scope of its governance, the county performs activities related to: urban and spatial planning, economic development, traffic and transport infrastructure, maintenance of public roads, and the planning and development of a network of educational, health, social, and cultural institutions. The County is responsible for issuing acts related to construction and the implementation of spatial planning documents for parts of the county outside the city area. Dubrovnik-Neretva County is one of the founders of the Institute for the Restoration of Dubrovnik (ZOD).

THE INSTITUTE FOR PHYSICAL PLANNING OF THE DUBROVNIK-NERETVA REGION (ZZPUDNŽ)

founded in 1994, prepares or coordinates the development of and monitors the implementation of spatial plans at the regional level, prepares reports on the area status, and manages the spatial planning information system within its jurisdiction. It also prepares the basis for the development or repeal of spatial plans of narrower areas and performs other tasks in accordance with the existing acts and statutes. The Institute spearheaded the preparation of numerous studies on the protection of cultural and natural heritage as well landscapes and actively participated in the identification of the landscape of the inner city area of Dubrovnik from the aspect of OUV. In that way, it encouraged and explained, using its expertise, the need to expand the buffer zone and outlined the areas of the buffer zone and setting in the spatial and physical planning documentation both for the City of Dubrovnik and for the sites on the Tentative UNESCO List (Ston and Korčula). As the lead organisation in the EU cross-border

cooperation project **Heritage – Driver of Development**, the Institute encouraged and commissioned a series of relevant studies for the WHS, introduced the HIA methodology in the protection system, and developed the assessment framework for Dubrovnik's HUL. With the expansion of the buffer zone and the perception of property as a HUL, the role of spatial planning in protection becomes the most important factor in the preservation and management of the site, which is achieved through the participation of this body.

THE DUBROVNIK COUNTY PORT AUTHORITY

was established in 2005 for the management, construction, and use of the Dubrovnik Port and 15 other ports open to public traffic in the port area of Dubrovnik-Neretva County. The administration takes care of construction, maintenance, management, protection and improvement of the maritime good in the port area and ensures the permanent and uninterrupted flow of port traffic and the technical and technological unity and safety of navigation. It also ensures the provision of services of general interest and coordinates and supervises the work of concession holders performing economic activity. The WHS includes the Dubrovnik Port and the Lokrum Port, while the Gruž Port is in the buffer zone.

THE REGIONAL DEVELOPMENT AGENCY OF THE DUBROVNIK-NERETVA COUNTY

was founded in 2006 in Dubrovnik, at the initiative of Dubrovnik-Neretva County. Its main role is to ensure the balanced and sustainable development of the county, to enhance and coordinate existing development activities in line with needs at the regional and national level as well as EU requirements, and to plan future economic development together with neighbouring regions. It specialises in project management, regional development coordination, joint projects development, advisory and technical support to public law bodies, and the organisation of different workshops, seminars and events, and it also takes part in activities of the regions and in the promotion of investment opportunities.

THE PUBLIC INSTITUTION FOR MANAGEMENT OF PROTECTED NATURAL AREAS OF THE DUBROVNIK-NERETVA COUNTY

was founded in 2004. Its scope of activities includes the protection, maintenance, and promotion of protected natural areas with the aim of the protection and preservation of natural authenticity, the assurance of the unimpeded occurrence of natural processes, the sustainable use of natural resources, and the monitoring of the implementation of conditions and measures aimed at the protection of nature in the area under its governance. In the buffer zone area, it is responsible for the significant landscape of Rijeka Dubrovačka, Forest Park Velika i Mala Petka, and the Platana park architecture monument on Brsalje in Dubrovnik.

THE DUBROVNIK-NERETVA COUNTY TOURIST BOARD (Tourist Board of Dubrovnik-Neretva County)

was founded by Dubrovnik-Neretva County to lead and coordinate the work of the tourist boards of local (self-)government units. The tasks of the board, as a regional destination management organisation, include strategic planning and development, tourism system management information and research, and marketing.

Educational institutions founded by the Dubrovnik-Neretva County are also stakeholders at the regional level, and this includes all high schools in Dubrovnik (Luka Sorkočević Music School, Dubrovnik Gymnasium, Luka Sorkočević Art School, the Dubrovnik Tourism and Hospitality School, etc.).

STAKEHOLDERS AT THE LOCAL LEVEL

THE PUBLIC SECTOR

THE CITY OF DUBROVNIK

as a local government unit with eleven administrative departments, performs a number of administrative, professional, and auxiliary and technical tasks and activities in order to meet the needs of citizens for high quality outlook for long-term development. Its responsibility is to provide a range of public services that affect everyday life within inside the WHS area.

THE CITY COUNCIL

is a representative body of citizens and a body of local government which, within its rights and duties, adopts acts and performs activities in accordance with the Constitution, acts, and the Statute of the City of Dubrovnik. After drafting the final proposal of the Management Plan, the City Council is authorised to decide on its acceptance and adopts the Management Plan.

THE ADMINISTRATIVE DEPARTMENT FOR URBANISM, SPATIAL PLANNING AND ENVIRONMENTAL PROTECTION

performs administrative and professional tasks in the field of urbanism, spatial planning, and environmental protection. It participates in drafting acts regulating the issue of spatial planning and environmental protection, monitors the situation, and prepares reports related to space. Further, it performs tasks related to the introduction and maintenance of the City's information database (GIS), provides conditions for the development and implementation of environmental protection programmes, participates in the implementation of programmes for the maintenance of specially protected parts of nature in the city, and cooperates with state and other bodies and legal entities in performing activities within its scope of authority.

THE ADMINISTRATIVE DEPARTMENT FOR ISSUANCE AND IMPLEMENTATION OF PHYSICAL PLANNING AND CONSTRUCTION DOCUMENTS

conducts administrative and non-administrative procedures in the field of spatial planning and construction, performs technical inspections of buildings, and issues use permits, location permits, and building permits. It also maintains data on buildings for the purpose of statistical reports, etc.

THE ADMINISTRATIVE DEPARTMENT FOR CULTURE AND HERITAGE

performs administrative and professional tasks related to ensuring the local needs of inhabitants in the area of culture, monitors and coordinates activities related to the protection and preservation of cultural property of the city, and cooperates with the Ministry of Culture and Media of the Republic of Croatia and other institutions in the field of cultural heritage protection. It designs and implements programmes and projects for the best possible promotion of the city’s cultural heritage, participates in the design and implementation of cultural events of importance to the city, monitors work and management of cultural institutions founded by the City, prepares and proposes programmes related to public needs in culture, participates in the development of strategies, action plans, and other professional documents related to cultural policy of the city, and cooperates with state and other bodies and legal entities in performing tasks within its scope of authority.

THE ADMINISTRATIVE DEPARTMENT FOR COMMUNAL SERVICES AND LOCAL SELF-GOVERNMENT

performs the contracting of work and supervises the implementation of works related to the maintenance of municipal infrastructure (hygiene and maintenance; maintenance of public areas, public toilets, public lighting, etc.), disinfection, and pest control in the city. It also coordinates tasks related to the drinking water supply and drainage and wastewater treatment, cooperates with others in hygiene and maintenance, regulates the operation of the farmers market, takes care of the supply of both shops and citizens inside the historic core using special vehicles, and takes care of marking settlements, streets, shores, squares, and buildings, as well as cooperates in the maintenance of the public hydrant network and fire routes. The department also performs municipal warden services and other supervision tasks, drafts general and other acts on municipal order, determines and collects municipal contributions, communal fees, and monument rents, cooperates with others in the preparation and implementation of programmes of city districts and local committees, and cooperates with state and other bodies and legal entities in performing tasks within its scope of authority.

THE ADMINISTRATIVE DEPARTMENT FOR TOURISM, ECONOMY AND SEA

performs analyses of economic trends in the city and proposes measures for the improvement of business conditions and further economic development, organises and monitors the drafting of the economic development strategy of the city, and participates in the development of spatial plans and in deciding on the use of real estate for commercial purposes. It also proposes and implements documents related to the development of the economy, especially tourism, coordinates the activities of all stakeholders in the field of tourism, and coordinates programmes to encourage the development of traditional crafts, small and medium enterprises, and agricultural production. The department also takes care of the maintenance and management of public beaches and bathing areas, conducts procedures for granting concession approvals on maritime property, and cooperates with state and other bodies and legal entities in performing tasks within its scope of authority.

THE INSTITUTE FOR THE RESTORATION OF DUBROVNIK (ZOD)

was established in 1979 with the aim of restoring architectural heritage after the earthquake. Since 1986 its activity has been defined by the Law on the Renewal of Dubrovnik’s Architectural Heritage and Other Immovable Cultural Property in the Dubrovnik Area. It performs professional and other tasks related to organising and implementing the reconstruction programme – the programme for the protection of cultural property. Among other tasks, post-earthquake and post-war reconstruction (Independence War 1991–1995) stand out. During the war, the institute, in cooperation with UNESCO, drafted the Restoration Action Plan that served as the basis for the restoration of buildings of significant monumental value (palaces and sacral-buildingcomplexes). This helped remove Dubrovnik from the List of World Heritage in Danger. ZOD implements a programme related to the seismic rehabilitation of building blocks inside the historic core, thereby increasing their resistance to seismic actions. ZOD also organises and coordinates the development of various professional, technical, and other documentation (studies, projects, etc.) and continuously organises the production of digital architectural recordings of the existing condition of the buildings in the historic core. It also preserves and manages the use of registry material. By processing data related to prepared documentation and the reconstruction of architectural heritage conducted by the Institute, an information and documentation database for the WHS was developed and it is regularly updated in the geoinformation system. The City Council of the City of Dubrovnik has appointed the ZOD as the coordinator of the Management Plan development.

PUBLIC INSTITUTION LOKRUM RESERVE

manages the protected area of Lokrum Island, which is a part of the WHS. The Institution was established in order to protect, maintain, and promote the Lokrum Reserve and its natural authenticity as well as to ensure the unimpeded occurrence of natural processes there and sustainable use of natural goods. It also monitors the implementation of conditions and measures for the protection of nature and takes part in data collection with regard to monitoring the state of nature preservation. Among other things, the institution organises the transportation of visitors and sightseeing in the Reserve as an important activity for securing income. Lokrum is protected as a special reserve of forest vegetation in line with the Act on Nature Protection. A Management Plan for the Reserve has been developed, but it has not yet been adopted, and a carrying capacity study is also missing. Lokrum is also part of the network of the Natura 2020 nature protection areas. The institution is responsible for the regeneration of indigenous vegetation, preservation of planted areas, the botanical garden, the appearance of the natural landscape, and animal life on the island. It implements all its activities in line with the Public Institution Lokrum Reserve Statute.

THE DUBROVNIK DEVELOPMENT AGENCY (DURA)

provides support for the preparation and implementation of domestic and international projects of economic, social, and cultural importance for the development of the City of Dubrovnik. Through its activities, the agency represents a link between the cCty and other institutions and organisations important in providing support to local development, especially to innovators and young

entrepreneurs. Through training programmes, they strengthen capacities important for local development (the unemployed, young people, entrepreneurs, craftsmen, people with disabilities, civil society organisations, etc).

THE DUBROVNIK TOURIST BOARD

as a destination management organisation, is the key stakeholder when it comes to tourism development. This includes visitor profiling, tourism product diversification, and visitor management. The majority of the promotional strategies and activities of this body are oriented towards the tangible and intangible cultural heritage of the city.

DUBROVAČKA BAŠTINA LTD.

is a company founded by the City of Dubrovnik in 2009. It is, among other things, registered for the management, care, and maintenance of all cultural heritage goods owned by the City of Dubrovnik and facilities owned by cultural institutions as well as Lazareti, Revelin, and all villas that once served as summer residences and are today owned by the City of Dubrovnik. In cooperation with the Platform for Lazareti, a group of non-governmental organisations that reside and manage the part of the Lazareti complex (Lazareti Platform, Student Theater Lero, Deša), Dubrovačka Baština is working on the establishment of a Lazareti sociocultural centre.

Institutions, other companies, and joint-stock companies, as well as educational institutions founded by the City of Dubrovnik are stakeholders at the local level, as part of the civil sector.

The strong cultural sector, in addition to the inherited tangible and intangible cultural good, form part of the cultural resources of the City of Dubrovnik. This includes cultural institutions whose existence is part of the tradition and represents a significant potential for cultural development and the interpretation of WHS values. Given the fact that all of the eleven cultural institutions of the City of Dubrovnik are located inside the WHS area, the cultural programmes they create directly contribute to improving the quality of life in the historic core and its immediate surrounding as well as the entire city. These are: **Dubrovnik Libraries, Dubrovnik Museums** (cultural and historic, ethnographic, maritime and archaeological), **Dubrovnik Symphony Orchestra, Marin Držić Theatre, Dubrovnik Art Gallery, the House of Marin Držić, Dubrovnik Summer Festival, Dubrovnik Cinemas, Lindo Folklore Ensemble, Dubrovnik Natural History Museum, Homeland War Museum of Dubrovnik**, etc.

Having in mind the WHS potential for education and research, educational institutions are also stakeholders in management, and represent a potential for capacity building as well as the strengthening of Dubrovnik’s reputation in scientific and educational circles worldwide. In addition, many are located in the WHS area – **Marin Držić Elementary School, Marin Getaldić Elementary School, Dubrovnik Gymnasium, Luka Sorkočević Art School, Ruđer Bošković Classical Gymnasium**, and **Libertas International University**. Located in the immediate vicinity of the WHS is the **Dubrovnik Kindergarten, Tourism**

and Hospitality School Dubrovnik, University of Dubrovnik, Rochester Institute of Technology, and the international independent university association of the **Inter-University Centre in Dubrovnik**.

The municipal and commercial companies that manage the municipal infrastructure of the WHS, the buffer zone, and the setting are **Vodovod Dubrovnik** (water supply systems), **HEP ODS Elektrojug Dubrovnik** (electric supply), **Domouprava Dubrovnik** (building management), **Vatrogasci Dubrovnik** (Dubrovnik firefighters), **Čistoća Dubrovnik** (waste management), Vrtlar Dubrovnik (maintenance of public green areas), **Sanitat Dubrovnik** (management of public parking lots, public farmers markets, disinfection, pest control), **Libertas** (public transport), **Port Authority Dubrovnik**, etc.

City District Councils are institutional forms of citizen participation in the decision-making processes when it comes to the direct and daily impact on their lives. They can affect urban planning and management processes, housing, health issues, the working hours of public services and catering facilities, traffic regulation, etc. One of their main roles is to communicate with and inform city and county departments about the needs and problems of their districts. City Districts are established for areas that represent an economic and social whole and which are connected by the common interests of citizens. Inside the WHS area, there are three districts with their respective councils: Ploče Iza Grada, Grad, and Pile-Kono, but management requires the involvement of those councils belonging to the buffer zone as well (Gruž, Montovjerna, and Lapad).

THE CIVIL SECTOR

Dubrovnik has a longstanding tradition of active citizenship and a large number of active non-governmental organisations whose work is focused on the democratisation of decision-making processes concerning public resources and interests through the involvement of non-political and non-institutional actors in decision-making processes. They directly contribute to sustainable urban development, active citizenship, and social responsibility. They cover different expert fields, exhibit enormous potential, and play an indispensable role in WHS preservation. Numerous associations, as well as citizens individually, have been working for years to improve all aspects of life in the WHS area (active cooperation with UNESCO, conducting an internal census, numerous initiatives towards public bodies, and many other activities). Their contribution in maintaining the historic core of Dubrovnik as a *living city* is immeasurable. During the preparation phase of the Management Plan, several of them contributed significantly to the definition of strategic actions and the needs for property preservation. Those are the **Platforma za Lazarete** (“Platform for Lazareti”) (Art Workshop Lazareti, DEŠA Regional Center for Community Building and Civil Society Development, Lero student theater, Audio-visual Centre Dubrovnik, Luža Association of Media Culture Promotion), **Kinookus, Association of Dubrovnik’s Architects, Placa, DART Dubrovnik Art Association Without Borders, DUB Nature**

Lovers Association, Tourist Guides Association, the Association of Dubrovnik’s Architects’ Grada Gladan (“Hungry for the City”) platform, etc. Other NGO organisations have expressed their interest in helping with their expertise and being included in the implementation of the Management Plan (the Srd’ je naš citizens’ initiative, etc.). Their participation is envisaged through Objective 1 and inclusion in the administrative structure, but also through the continuation of the existing Management Plan Development Monitoring Board. The involvement of local associations in the process of the Management Plan’s implementation should be encouraged with the aim of better site management and an increased stakeholder knowledge of WHS potential, because civil society organisations are in the focus of modern EU models of cultural property management. This is because they nurture WHS’s greatest values and bring a continuity of knowledge about the WHS OUV while at the same time contributing to the democratic process of public heritage goods management.

Zaklada Blaga djela (“*The Good Deeds Foundation*”) dates back to the period of the Republic of Ragusa (14th to 18th century). Its fund consists of property donated by citizens. Over the centuries, the foundation has come to own very attractive commercial and residential buildings in the historic core. As a charitable foundation, its main objective is to take care of the socially endangered citizens of Dubrovnik. The foundation rents residential buildings (at significantly lower prices compared to market prices) to users who are selected, among other things, based on their social status. The foundation also rents out several of its properties to traditional crafts and other businesses deemed necessary in the historic core who cannot afford to rent property at market price.

Društvo prijatelja dubrovačke starine (“*The Society of Friends of Dubrovnik Antiquities*”) was founded in 1952 as a society of citizens with the aim of sensitizing the general public to Dubrovnik’s cultural and historical heritage. Based on a contract from 1969, the former Municipality of Dubrovnik entrusted the Society with the maintenance and management of the city wall complex as well as maintenance of some communal facilities such as fountains, city clock, etc. In accordance with the contract with the City of Dubrovnik from 1998, the society manages Dubrovnik’s fortification system (all indoor and outdoor spaces, including Lovrijenac, with the exception of Revelin Fortress) and makes it available to the public, subject to an entrance fee. With the consent of the Conservation Department in Dubrovnik, the society manages the City Walls and in doing so meets the obligation of maintaining order and cleanliness and the obligation of construction and conservation maintenance, all in accordance with the applicable regulations. It also promotes the uniqueness and significance of the walls in the country and abroad. The 1998 contract was amended by a 2009 annex that changed the way revenues were distributed in such a way that the revenue was divided equally. As of 2019, the city and the society share income, where the city gets 60%. Revenues generated by the management of city walls, in addition to the maintenance of walls, enable the restoration of other cultural heritage in the area of the former Republic of Ragusa, as well as other activities – from scientific and field research to condition documentation

and the purchase of immovable and movable cultural heritage. The Society provides financial assistance to other stakeholders involved in the preservation of cultural heritage as well as in publishing activities related to Dubrovnik’s heritage.

Religious communities form a significant group of owners of attractive properties and cultural property. They are also part of the civil sector stakeholders network and include the Diocese of Dubrovnik, the Serbian Orthodox Church, and the Jewish community. In addition to religious buildings, they own real estate that is leased for commercial purposes (housing or accommodation of public institutions).

THE PRIVATE SECTOR

Through interest groups that involve representatives of **entrepreneurs** and **craftsmen**, the latter also participated in the preparation phase of the Management Plan. This includes the Guild of Caterers and Tourism Employees, Association of Craftsmen Dubrovnik, Association of Taxi Drivers, Croatian Chamber of Economy Dubrovnik, Tourist Guides Association Dubrovnik, Association of Private Accommodation Owners, Association of Bus Drivers Ragusa, hotel representatives, etc.

V.2. PARTICIPATORY PROCESS



WORKSHOP DURING THE FIRST PARTICIPATORY ROUND, 2019
Source: Institute for the Restoration of Dubrovnik (ZOD)



EXHIBITION: “DUBROVNIK DESIGNERS ABOUT THE CITY”, 2020
Source: The Association of Dubrovnik’s Architects’ Grada Gladan (“HUNGRY FOR THE CITY”) PLATFORM

The Management Plan for the UNESCO WHS of the Old City of Dubrovnik was developed, through a participatory approach, with the participation of all relevant stakeholders at the regional and local level as well as the participation of the public (citizens) in the process of decision making. The aforementioned approach is different from the traditional „top-down“ approach and includes a wide range of stakeholders in the process of Management Plan development. The main advantages of this approach are a better insight into real problems, the establishment of a strong base for community interventions, the timely inclusion of the public, and chances being offered to all stakeholders to express their opinions and ideas.

Before starting the document draft, a rich preparatory phase occurred, during which local stakeholders and citizens determined their needs. A previous evaluation of the state of the space and the management system was also implemented. The Institute for the Restoration of Dubrovnik (ZOD) published the results of the research in the book “Life in the Historic Core of Dubrovnik” (Klempić Bogadi, S., Vukić, J., Čaldarović, O., 2018).

RESEARCH CONSISTED OF:

- SOCIODEMOGRAPHIC RESEARCH CONDUCTED IN 2016 AND 2017 IN THE HISTORIC CORE OF DUBROVNIK (CITY DISTRICT GRAD):
 - Sociological and demographic analysis of the state in the historic core and comparison with previously conducted sociological research (Rogić et al., 1986 and 1987)
 - Field research
 - Internal census conducted in 2016 with the participation of residents from the historic core
 - Qualitative research conducted using methods such as focus groups and interviews
 - Survey research related to quality of life and the satisfaction of residents in the historic core
- EXPERT ANALYSIS OF THE SITUATION IN 2019 BASED ON DATA FROM THE CENTRAL BUREAU OF STATISTICS AT THE LEVEL OF THE 2001 AND 2011 CENSUS, SURVEY OF RESIDENTS' ATTITUDES (QUALITATIVE APPROACH: FOCUS GROUPS, INTERVIEWS), AND DIRECT PARTICIPATION OF CITIZENS (WORKSHOP, OFFICIAL STATEMENTS OF TWO CITY DISTRICTS RECEIVED IN RESPONSE TO A PUBLIC CALL, AND CONCLUSIONS FROM CITIZENS' ASSEMBLIES OF THE CITY DISTRICT GRAD AND CITY DISTRICT PLOČE – IZA GRADA, WHILE OTHER CITY DISTRICTS DID NOT SUBMIT THEIR STATEMENTS).

The process of participation in the development of the Management Plan was conducted in two large rounds. The first round was conducted in fall of 2019 at various locations in Dubrovnik. The main objective of the first round of was to identify problems and opportunities in the management of the WHS in Dubrovnik through the involvement of stakeholders and to establish a vision as the initial phase of strategic framework development. Through the accompanying program as part of the manifestation *Days of Creative / Cultural Industries*, stakeholders were informed about the tasks that the Management Plan should consider, which is one of the tools for building and strengthening the capacity of stakeholders.

FIVE WORKSHOPS WERE HELD:

- **WORKSHOP 1, NOVEMBER 15TH 2019, DUBROVNIK** – THE WORKSHOP AIMED AT THE CREATION OF A VISION THAT INCLUDED PROPOSALS FROM CITY AND COUNTY ADMINISTRATIVE DEPARTMENTS AND OTHER PUBLIC BODIES AS WELL AS PUBLIC AND COMMERCIAL COMPANIES AND ASSOCIATIONS. TOPICS RELATED TO CITY MANAGEMENT ASPECTS, SOCIODEMOGRAPHIC ASPECTS, URBAN AND ARCHITECTURAL ASPECTS, TRAFFIC ASPECTS, ECONOMIC AND TOURISM ASPECTS, AND ENVIRONMENTAL AND SAFETY ASPECTS WERE COVERED.
- **WORKSHOP 2, 15 NOVEMBER 2019, DUBROVNIK** – THE WORKSHOP AIMED AT THE CREATION OF A VISION THAT INCLUDED PROPOSALS FROM CITIZENS AND ASSOCIATIONS AND CONSIDERED OPINIONS ON THE CURRENT AND DESIRED STATE OF THE MANAGEMENT OF THE WHS IN DUBROVNIK. A SURVEY WAS CONDUCTED AMONG PARTICIPANTS THAT ENABLED THE MORE PRECISE DEVELOPMENT OF BOTH THE VISION AND STRATEGIC ACTIONS.
- **WORKSHOPS 3 AND 4, 22 NOVEMBER 2019, DUBROVNIK** – TWO FOCUS GROUP MEETINGS WERE HELD WITH RESIDENTS OF THE AREA UNDER THE PROTECTION OF UNESCO AS WERE WORK SHOPS WITH CITIZENS. THE AIM OF THE FOCUS GROUPS AND WORKSHOPS WAS TO SEE THE SITUATION AND PROBLEMS THAT CITIZENS FACE IN EVERYDAY LIFE AND TO DISCUSS AND FORMULATE PROPOSALS FOR THE VISION OF THE CITY AS WELL AS OBJECTIVES AND MEASURES THAT CITIZENS PROPOSED FOR THE MANAGEMENT PLAN.
- **WORKSHOP 5, 13 DECEMBER 2019, DUBROVNIK** – THE STRATEGIC FRAMEWORK AND THE FIRST DRAFT OF OBJECTIVES AND MEASURES FOR WHS MANAGEMENT IN DUBROVNIK WERE PRESENTED TO STAKEHOLDERS.

The participatory process of stakeholder involvement in the development of a strategic framework in the form of workshops could not take place in the first half of 2020 due to constraints caused by the COVID-19 pandemic. For this reason, between two participation rounds, an online survey was conducted among local stakeholders regarding the first draft of strategic actions that was developed based on the results of the first round. The results were used to update the draft document.

As COVID-19-related restrictions eased up during July and August of 2020, body-to-body (B2B) meetings held on strategic actions were organised with public bodies of the City of Dubrovnik and tDubrovnik-Neretva County. The aim of the B2B meetings was to precisely direct strategic actions, with a special emphasis on defining Objective 1, aimed at the establishment of a new organisational structure for the management of the WHS in the City of Dubrovnik. This resulted in updated strategic actions that were adjusted to realistic possibilities in the context of the management framework.

The second participation round was held in fall of 2020 and was accompanied by activities of informing citizens and the public. An interview was conducted with prof. Jukka Jokilehto, PhD, expert associate in the development of the Management Plan, on the topic of the management plan as a tool in WHS protection. The essence of the interview was to acquaint stakeholders, citizens, and the public with the Management Plan, which is a novelty in the Croatian legal system, but at the same time an obligation under the UNESCO World Heritage Convention. In cooperation with the *Grada gladan* Platform, interviews with stakeholders were organized and posted on social networks. The exhibition "**Dubrovnik Designers about the City**" was organised. The concept of the exhibition was to present the works of young Dubrovnik designers on the topic of the city. These designers are continuously present in everyday life, either through information on bulletin boards, product appearance, or by shaping the recognisable visual identities of cultural institutions. The exhibition aimed to achieve a better understanding and presentation of the processes and thoughts that are the result of their understanding of the experience of the values of the city. A screening of the film **Social Life of Small Urban Areas** was held in cooperation with Dubrovnik Cinemas. Many people attended the events and the interest of citizens in the process of Management Plan development grew respectively.

As part of the second participation round, the following workshops were held with the aim of discussing the final draft of the strategic framework and prioritising objectives:

- **18 SEPTEMBER (ONLINE)**
– CIVIL SOCIETY ORGANISATIONS
- **19 SEPTEMBER (TWO WORKSHOPS: LAZARETI AND JADRAN CINEMA)**
– CITIZENS
- **24 SEPTEMBER (ONLINE)**
– PUBLIC ADMINISTRATION BODIES AND OWNERS
- **25 SEPTEMBER (ONLINE)**
– PUBLIC ADMINISTRATION BODIES AND PUBLIC INSTITUTIONS

Stakeholders discussed the offered solutions developed in the latest draft of the Management Plan and the information obtained was integrated into an updated document. During the second round, all stakeholders were able to complete an online survey in which they could give their comments and/or suggestions for refining strategic actions. They were also given the opportunity to define the priority level for identified objectives. All data was integrated into the document prepared for the public hearing process.

Management Plan development included participation in meetings and the presentation of working materials to the Management Plan Development Monitoring Board, which includes representatives of the most important management stakeholders, from public administration and the professional public to citizens and civil society organisations.

The entire participation process enabled the more detailed, precise, and tailored development of the Management Plan strategic framework as a fundamental segment in WHS management in Dubrovnik in the period until 2026.

V.2.1. Overview of results from workshops with stakeholders

During the process of Management Plan development, a range of participatory activities were conducted: workshops, focus group meetings, and interviews with residents for a better understanding of the situation, problems, and potentials for improvement of the state as seen from the perspective of residents. In the first participatory round, a survey was also conducted among the local population, during which it was possible to give additional comments and proposals. Participants were encouraged to give their proposals of measures through which the quality of life in Dubrovnik could be enhanced in the future. Topics included general satisfaction with the quality of life (positive and negative aspects related to residence and Dubrovnik as a whole); cultural identity and the protection of tangible and intangible heritage, the authenticity of ambience, and lifestyle; aspects of quality of life (housing, accessibility of services, everyday activities, problems, needs, public space in the city); tourism and its impact on quality of life, positive and negative aspects of the tourist season and cultural and other events in public space; sustainability; vision; priorities and measures, etc.

During January 2020 two citizens’ assemblies were held, during which additional data was collected. The conclusions were taken into account during the development of objectives and actions. Relevant remarks from the city districts and citizens’ assemblies are presented below:

THE CITIZENS’ ASSEMBLY OF THE CITY DISTRICT GRAD was held on **22 January 2020** (*Defining main problems and priorities that need to be included in the Management Plan*). The following **15** topics were raised:

- REPOPULATION AND PROTECTED TENANTS
- IMPROVEMENT OF PUBLIC SERVICES (AMBULANCE, FISH MARKET, BULKY WASTE DISPOSAL, ETC.)
- SAFETY (EVACUATION, FIRE, AND EARTHQUAKE)
- INNOVATIVE URBAN SOLUTIONS (GARAGE, PUSTJERNA, ETC.)

- CALCULATION AND CONTROL OF TOURISM CARRYING CAPACITY
- CONTROL OF NUMBER OF ACCOMMODATION AND FOOD AND BEVERAGE FACILITIES
- MAINTENANCE OF PUBLIC SPACES (HYGIENE, CLEANLINESS, TRAFFIC)
- ADEQUATE PROTECTION, PRESERVATION, AND RESTORATION OF MONUMENTAL HERITAGE (ILLEGAL CONSTRUCTION, ETC.)
- DEVELOPMENT OF MUNICIPAL INFRASTRUCTURE (STORMWATER, PAVEMENTS, ETC.)
- TRAFFIC AROUND THE CITY AND PARKING SPACE
- NOISE PROTECTION (FIREWORKS, TRASH CANS, DELIVERIES, ETC.)
- INCENTIVES FOR CRAFTS AND SMALL BUSINESSES
- DEVELOPMENT OF SOCIAL INFRASTRUCTURE (CHEAPER MARKETS, VARIETY OF OFFER, FISH MARKET, ETC.)
- ENVIRONMENTAL PROTECTION AND THE ISSUE OF WASTE
- IMPROVEMENT OF COMMUNICATION BETWEEN CITIZENS, DISTRICTS, AND CITY INSTITUTIONS.

Voting enabled each citizen to choose five topics that he or she considered to be most important. Votes were counted, and the five topics that should be included in the Management Plan as priorities were chosen:

- 50,77 % NOISE PROTECTION (FIREWORKS, TRASH CANS, DELIVERY...)
- 49,23 % IMPROVEMENT OF PUBLIC SERVICES (AMBULANCE, FISH MARKET, BULKY WASTE DISPOSAL, ETC.)
- 46,15 % REPOPULATION AND PROTECTED TENANTS
- 46,15 % CONTROL OF THE NUMBER OF ACCOMMODATION AND FOOD AND BEVERAGE FACILITIES
- 44,61 % DEVELOPMENT OF SOCIAL INFRASTRUCTURE (CHEAPER MARKETS, VARIETY OF OFFER, FISH MARKET...)

THE CITIZENS’ ASSEMBLY OF THE CITY DISTRICT PLOČE – IZA GRADA was held on **11 FEBRUARY 2020** as part of the project *Place of Community, Development of Socio-cultural Centre in Lazareti (the Lazaretto)*. After the discussion and citizens’ presentations, **12** categories were identified for voting:

- IMPROVEMENT OF MUNICIPAL INFRASTRUCTURE (LIGHTNING, STORMWATER, PAVEMENTS, SIDEWALKS, WALLS, SEWERAGE, ELECTRIC POWER)
- MAINTENANCE AND PROTECTION OF PUBLIC SPACES (BATHING AREAS AND CONCESSIONS, PARKS)
- SOLVING THE QUESTION OF TRAFFIC AROUND THE CITY (COMMERCIAL BUSES, TRANSFERS, AND TAXIS)
- IMPROVEMENT OF PUBLIC SERVICES (PUBLIC TRANSPORTATION – NEW ROUTES, ČISTOČA – WASTE BINS AND GARBAGE, DELIVERY, STORES)
- NOISE PROTECTION
- ACCESSIBILITY OF PRIVATE AND PUBLIC FACILITIES (PARKS, BATHING AREAS, NEW ROADS, ACCESS AND PARKING SPORTS FOR THE DISABLED)
- SOLVING THE QUESTION OF ISOLATED DISTRICTS (SVETI JAKOV, BENEATH THE ADRIATIC HIGHWAY)
- CREATION OF NEW PUBLIC CONTENT (PROMENADES, ORSULA, BISKUPIJA PARK)
- NEW PARKING SPOTS AND GARAGES
- SOLVING PROBLEMS RELATED TO INADEQUATE URBAN PLANNING (PLANS, THE GENERAL URBAN PLAN, DOCUMENTATION, ILLEGAL CONSTRUCTION)
- ENVIRONMENTAL PROTECTION (LOKRUM MARITIME AREA AND CRUISE SHIPS, GREEN AREAS)
- SOLVING THE QUESTION OF SAFETY (SLIDES, FIRE, FLOODS)

Voting enabled each citizen to choose five topics that he or she considered to be most important. Votes were counted and five topics that should be included in Management Plan as priorities for the City District Ploče – Iza Grada are:

- IMPROVEMENT OF COMMUNAL INFRASTRUCTURE (LIGHTNING, STORMWATER, PAVEMENTS, SIDEWALKS, WALLS, SEWERAGE, ELECTRIC POWER)
- SOLVING THE QUESTION OF TRAFFIC AROUND THE CITY (COMMERCIAL BUSES, TRANSFERS, AND TAXIS)
- IMPROVEMENT OF PUBLIC SERVICES (PUBLIC TRANSPORTATION – NEW ROUTES, ČISTOČA – WASTE BINS AND GARBAGE, DELIVERY, STORES)
- CREATION OF NEW PUBLIC CONTENT (PROMENADES, ORSULA, BISKUPIJA PARK)
- NEW PARKING SPOTS AND BUILDING GARAGES

(All the quotes are from the official conclusions of the Citizens' Assembly)

BASED ON THE PRESENTED PHASE OF THE 2019/2020 STUDY IT CAN BE CONCLUDED THAT:

- THE QUALITY AND WAY OF LIFE OF RESIDENTS ARE MOST ENDANGERED IN THE WHS AREA AND IT IS NECESSARY TO PAY SPECIAL ATTENTION TO THEIR PROTECTION, ALTHOUGH PROBLEMS ARE PRESENT IN THE ENTIRE PROTECTION ZONE
- IT IS NECESSARY TO CONDUCT COMPREHENSIVE RESEARCH ON QUALITY OF LIFE AROUND THE CITY OF DUBROVNIK ON A REPRESENTATIVE AND SPATIAL SAMPLE, TO MONITOR CHANGES, AND TO SYSTEMATICALLY DEVELOP AND ADOPT MEASURES FOR INDIVIDUAL AREAS
- IT IS NECESSARY TO STRENGTHEN COOPERATION BETWEEN CITIZENS AND LOCAL SELF-GOVERNMENT AND INVOLVE THE POPULATION IN THE DECISION-MAKING PROCESS
- IT IS NECESSARY TO DEVELOP TRANSPARENT MECHANISMS FOR RETURNING A CERTAIN PART OF TOURISM REVENUES DIRECTLY TO THE LOCAL COMMUNITY IN THE FORM OF IMPROVING QUALITY OF LIFE.

The main problems that are visible today in the WHS area are the continuation and further elaboration of problems detected by the previous research (Rogić et al. 1986; 1987). Substantial changes have to be introduced lest Dubrovnik become a city without residents, as warned by the residents of the WHS area who participated in the workshop and focus groups in the fall of 2019.

THE MAIN PROBLEMS IN THE WHS AREA FOUND BY THE RESEARCH AND THROUGH CITIZEN PARTICIPATION ARE:

- **NEGATIVE DEMOGRAPHIC PROCESSES** (DEPOPULATION AND AGING)
- **DECREASED QUALITY OF LIFE DUE TO EXCESSIVE AND UNCONTROLLED TOURISM AND DUE TO THE LACK OF SERVICES NEEDED FOR EVERYDAY LIFE AS EVERYTHING IS SUBORDINATED TO THE NEEDS OF TOURISM, INSTEAD OF THE NEEDS OF RESIDENTS (HEALTH CARE, STORES, ETC.) AND EVERYTHING IS ALMOST EXCLUSIVELY ORIENTED TOWARDS TOURISM**
- **LACK OF AN OBJECTIVELY CALCULATED CARRYING CAPACITY OF THE HISTORIC CORE AND WHS** (BY INDEPENDENT EXPERTS AND WITH THE VERIFICATION OF THE LOCAL COMMUNITY)
- **TRAFFIC PROBLEMS** (CROWDS, MOTORIZED TRAFFIC AT REST, TOURIST BUSES, TAXIS, DELIVERY AND TRANS-SHIPMENT OF GOODS IN RESIDENTIAL AREAS (EX.: PILE AND PLOČE), AIR POLLUTION, NOISE, ETC., AND THE INABILITY TO ADEQUATELY ACCESS AND DELIVER GOODS AND SERVICES TO RESIDENTS OF THE HISTORIC CORE)
- **POLLUTION** (NOISE, AIR POLLUTION, SEA POLLUTION)
- **INFRASTRUCTURE PROBLEMS** (SEWERAGE, STORMWATER DRAINAGE, ELECTRICITY NETWORK, ETC.)
- **WASTE DISPOSAL** (EXCESSIVE AMOUNTS OF WASTE, INADEQUATE DISPOSAL AND SEPARATION OF WASTE, THE PROBLEM OF WASTE COLLECTION, ETC.)
- **GREEN AREAS** (THERE ARE ONLY A FEW OF THEM AND THEY ARE INADEQUATELY MAINTAINED), **URBAN GREENERY, AND NATURE** (SLOPES OF SRD)

- **MUNICIPAL ORDER, NON-COMPLIANCE WITH RULES AND LAWS, AND INSUFFICIENT INSPECTIONS** (CONSTRUCTION WORKS, CATERING FACILITIES, APARTMENT RENTERS, AND HOLIDAY HOMES, ETC.)
- **SAFETY PROBLEMS** (IN CASE OF NATURAL DISASTERS, NEGATIVE IMPACTS OF CLIMATE CHANGE, ETC.) **AND A REDUCED SENSE OF SECURITY DUE TO A LARGE NUMBER OF FOREIGNERS AND TOURISTS WHO USE THE AREA WHERE WHS RESIDENTS LIVE EVERY DAY** (THE LACK OF SECURITY IS ESPECIALLY IN RELATION TO VULNERABLE GROUPS, CHILDREN, THE ELDERLY, PEOPLE LIVING ALONE, AND OTHERS).

During the workshops and focus group meetings with citizens in the fall of 2019, a very clear opinion was defined about the problem of non-transparency, about spending funds from tourism on solving all the problems mentioned above, and on the insufficient participation of the local community in decision making and development planning. It is necessary to ensure the transparent management of revenues and participation of the local community in decision-making and thus create the foundations for trust and cooperation in the Management Plan’s implementation.

Another problem that was pointed out is the fragility of the local community, the disappearance of the concept of the neighbourhood, and the lack of social capital, which additionally makes it harder, for example, for old people and those who live alone to stay in the historic core due to the lack of safety and help in everyday activities. When we think of a neighbourhood, the picture that appears usually shows daily and long-term relationships among a group of people that live in a specific, relatively small place within the historic core, their daily rhythm and interactions, as well as the spatial organisation of apartments, buildings, and streets themselves. Each neighbourhood has its own micro-dynamics and specificities, but in the case of the historic core of Dubrovnik, there is a range of specificities. Those are related to the connection of residents with the historic part and a particular lifestyle and heritage as well as to challenges and common elements of endangerment that mainly stem from unregulated tourism. The fragility of everyday life is visible when we consider the data related to the drastic decrease in the number of residents, causing neighbourhood networks that are already stretched

too thin to collapse (it was pointed out that older single residents depend greatly on the help of the community and neighbourhoods). This fragility can also be seen in the prices of goods and services, a change in the content available in the historic core, and the number of visitors the core has during the tourist season.

The aforementioned continuous problem appeared during the final phase of research, though somewhat varying in form. This problem, in addition to the tourism-burdened historic core, and the rapidly increasing *apartmentisation* and *gentrification*, leads to the further escalation of the already present trend of depopulation. In this context, the urban renewal process related to the restoration of neglected parts of the city can also have negative



WORKSHOP WITH CITIZENS, 2020
Source: Institute for the Restoration of Dubrovnik (ZOD)



WORKSHOP WITH ORGANIZATIONS, 2020
Source: Institute for the Restoration of Dubrovnik (ZOD)

consequences, because investments in real estate and their upgrade leads to price increases of both real estate and services. This in turn causes changes in the population structure, that is, the influx of a wealthier population and the exodus of the existing population that cannot keep up with the increasing cost of life in this part of the city. The same problems were brought forward during focus groups and workshops with citizens that were held on 22 and 23 November 2019.

A new threat to the depopulation of WHS area is posed by the unsolved situation with what are called “protected tenants”, whose right to use the housing area is expiring in a few years, meaning there is a great chance that the historic core loses another significant number of its residents.

POZIV GRAĐANIMA NA RADIONICU

Rasprava o strateškom okviru Plana upravljanja zaštićenom spomeničkom cjelinom Grada Dubrovnika

PETAK, 18.9.2020.
15:00 - 17:00 / ONLINE
radionica za udruge civilnog društva
(upute za sudjelovanje će biti proslijedene nakon registracije)

18:00 - 20:00 / 3. LAĐA LAZARETI
radionica za građane

SUBOTA, 19.9.2020.
9:00 - 11:00 h / ONLINE
radionica za građane
(upute za sudjelovanje će biti podijeljeni nakon registracije)

16:00 - 19:00 / KINO JADRAN
radionica za građane

COVID-19 napomena:
S obzirom na nužne epidemiološke mjere, molimo Vas da svoj dolazak potvrdite na mail zod@zod.hr ili pozivom na broj 020/324 060 od 7 do 15 h. Nakon registracije dobiti ćete upute za online radionice.

Obavezno je nošenje maski, te održavanje razmaka sukladno poznatim uputama. Napominjemo kako je zbog epidemioloških mjera ograničen broj sudionika na radionicama, te je organizirana online radionica i online upitnik za sve građane (bilo da su sudionici radionica ili ne).

Proces izrade Plana upravljanja zaštićenom spomeničkom cjelinom Grada Dubrovnika u završnoj je fazi. Uz Vašu pomoć te u suradnji s ostalim lokalnim, regionalnim, nacionalnim i međunarodnim dionicima i stručnjacima, definirane su ključne strateške teme, ciljevi i aktivnosti na koje je usmjeren Plan upravljanja zaštićenom spomeničkom cjelinom Grada Dubrovnika i kojima će se ovaj prvi Plan upravljanja baviti do 2025. godine.

Cijenimo Vaše sudjelovanje i molimo vas da se odazovete ovome pozivu kako bi Plan upravljanja bio što kvalitetniji zajednički dokument.

Svaki sudionik radionice dobit će primjerak radnog nacrtu strateškog okvira s temama, ciljevima i aktivnostima te upitnik s ciljem određivanja prioriteta ciljeva i komentara aktivnosti. Materijali će biti dostupni u fizičkom i online formatu. Molimo sve ugrožene skupine da poštuju epidemiološke mjere, te u što većoj mjeri koriste online oblike komuniciranja.

ZAVOD ZA OBNOVU DUBROVNIKA
INSTITUTE FOR RESTORATION OF DUBROVNIK

Art radionice Lazareti

le.ro

POSTER INVITING CITIZENS TO WORKSHOPS AS PART OF THE SECOND ROUND OF PARTICIPATION, 2020
Source: Institute for the Restoration of Dubrovnik (ZOD)

V.3. RISK PREPAREDNESS

V.3.1. Mitigation and preparedness

The main aim of the preparedness phase is risk mitigation. It is important to strengthen the ability of a property to resist catastrophes or contain the consequences. There is a need to establish an adequate warning system of impending disaster and to develop emergency response plans for individual properties as well as for neighbourhoods.

With the aim of full-scale and organised crisis situation management related to WHS, it is necessary to develop a risk handling management plan in case of disaster for the WHS of the Old City of Dubrovnik. It needs to be based on the relevant documents and professional publications by UNESCO, ICOMOS, and ICCROM, but also be linked to the existing document adopted in 2018 (**Risk Assessment in Case of Major Accidents for the City of Dubrovnik**).

ENVIRONMENT: The HUL of Dubrovnik needs to be analysed due to its vulnerability in the context of the state of the environment. Aside from crucial procedural errors listed in the part related to environmental and nature protection, there is the lack of an efficient control and supervision system of the implementation of measures prescribed in the SEA and EIA procedures. Without mitigation measures, these errors could have a potentially negative cumulative impact on the environment, causing disastrous consequences. With regard to SEA and EIA methodology and procedures, the identified problem, as previously stated, refers to the insufficient treatment of cultural heritage in the existing format of this document, even though cultural heritage represents a sensitive and irreplaceable element of the environment. However, the SEA and PUO can be efficient tools for disaster risk control and mitigation in the WHS area if the impact of spatial interventions in the WHS setting is considered with regard to the potential negative cumulative influence that can increase the harmful consequences of particular threats.

If it is assumed that a project in the WHS setting could impact its outstanding universal value, it is necessary to develop a **HIA**. This study is obligatory for all such projects in the buffer zone and advisable for bigger and influential projects in the wider setting.

Natural (green) areas are subject to periodic checks of vegetation state and management in order to mitigate fire or flood susceptibility.

INFRASTRUCTURE: The HUL of Dubrovnik is the result of many years of historic development. Some elements of today's infrastructures are several centuries old. It is necessary, first of all, to verify that there is adequate and complete documentation on the current state and potential vulnerability of different infrastructures, such as water management, drainage, electricity and gas. It is necessary to verify that there is proper infrastructure for providing water in case of fire emergency, that there are fire extinguishers available for all public and private properties, and that there is a foam extinguishing infrastructure that greatly reduces the damage caused by extinguishing.

WORLD HERITAGE SITE: The historic core of Dubrovnik is the best documented area of the HUL. Based on this documentation, it is recommended that the condition of the buildings in view of earthquake resistance, fire, and flood be verified. Particular attention should be given to carrying out regular inspections of the vulnerabilities of each object, such as the condition of the wooden joinery and electric wirings and installations as well as water pipes. It is necessary to regularly verify the functioning of the fire prevention and alarm systems in each building. There is a need to verify that responsible managers and technical personnel are well informed and capable of performing their tasks in case of emergency. It is also necessary to undertake periodical fire drills and evacuation drills. Also, evacuation measures must be a significant factor in determining the carrying capacity of the city.

As part of the Risk Preparedness and Management Plan for the WHS Old City of Dubrovnik, it is necessary to prepare plans and handbooks for the implementation of urgent measures for the physical and technical protection of movable and immovable cultural property for all recognised types of threats, plans, and handbooks for the evacuation of movable cultural property and heritage in appropriate temporary storage and plans and handbooks for the clearance of ruins and disposal of valuable architectural elements. Taking into account the characteristics of each threat, it is necessary to determine the need for, as well as type and scope of, preventive measures, measures applicable during disaster, urgent response measures after a disaster ends, and recovery measures. These plans and handbooks are intended for local and regional government, the responsible professional and operative services and owners, and users of buildings inside the WHS area.

WHS BUFFER ZONE AREA: This area is particularly important in risk management planning since it encompasses its immediate and wider setting and in a physical sense the WHS access zone and WHS evacuation zone as well as areas where certain types of threats potentially could occur. In appropriate locations in the buffer zone or the wider setting area, it is necessary to ensure space with adequate conditions for the storage of movable cultural property and heritage as well as collapsed or dismantled architectural parts in case evacuation is needed.

PRIVATE OWNERSHIP: In the context of private ownership, the main challenge is the great number and variety of private stakeholders as well as the verification of their preparedness to mitigate risks within a systematic emergency response plan. The solution is capacity building, which can be achieved by getting in contact with each property owner via e-mail or regular mail. This information should be complemented by a programme of periodic public gatherings and on-site explorations which would consist of explanations and demonstrations. Each property needs to have fire extinguishers and an evacuation plan. Particular attention needs to be given to regular inspections, which need to be undertaken by the competent bodies, with particular regard for the building's vulnerability to seismic risk or fire. There is the need for an adequate warning system of impending disaster and an emergency response plan. Property owners need to be aware of the neighbourhood environment to make sure they would be able to contain the consequences of potential disaster.

V.3.2. Response and recovery

The ICCROM Risk Preparedness Manual (1998) states that risk response is the adequate functionality of preparedness measures. It includes appropriate response plans and training for residents, travellers, and emergency-response personnel. For a successful response it is necessary to ensure in advance the availability of a risk preparedness plan. It is necessary to ensure that everyone has ready and immediate access to plans in the event of an emergency. It is also important for everyone involved to be familiar and comfortable with the response plan. Regular drills and simulations are important to ensure readiness to use the plan in the event of an emergency.

Depending on the type of disaster that might occur, it is important, if possible, to already start registering the damages in the preparation phase, prior to recovery.

EFFORTS MADE FOLLOWING A DISASTER INCLUDE THE FOLLOWING:

- EFFORTS TO MITIGATE NEGATIVE CONSEQUENCES OF THE DISASTER. THESE SHOULD FOCUS ON PROBLEMS THAT CAN BE MITIGATED AND REPAIRED IN THE SHORT TERM. THESE INCLUDE STRUCTURE STABILISATION AND THE REMOVAL OF FLOODWATERS AND DEBRIS AS WELL AS PROVIDING TEMPORARY HOUSING FOR OCCUPANTS.
- EFFORTS TO REBUILD THE PHYSICAL COMPONENTS OF THE PROPERTY AND THE SOCIAL STRUCTURE OF THOSE USING THE PROPERTY AND ITS ENVIRONMENT. RECONSTRUCTION CAN TAKE RELATIVELY LONG, DEPENDING ON THE DAMAGE AND THE TYPE OF STRUCTURE CONCERNED. THE PARTIAL RECONSTRUCTION OF HISTORICALLY IMPORTANT BUILDINGS NEEDS TO BE UNDERTAKEN WITH A FULL UNDERSTANDING OF THE SIGNIFICANCE OF THE BUILDING WITHIN ITS CONTEXT AND ACCORDING TO THE PRINCIPLES EXPRESSED IN CONSERVATION THEORY AND INTERNATIONAL DOCTRINES. ONE OF THE ISSUES TO CONSIDER DURING EVERY INDIVIDUAL RESTORATION IS THE APPROPRIATENESS OF EACH OF THE WAYS OF RECONSTRUCTION COMPARED TO OTHER ALTERNATIVES.
- EFFORTS TO REINSTATE AND ENHANCE PREPAREDNESS MEASURES.

V.3.3. Risk preparedness check list⁴⁶

Space needs to be thoroughly checked to establish and maintain reasonable standards of risk preparedness. The check list from the publication *"Between Two Earthquakes: Cultural Property in Seismic Zones"*⁴⁷ can be used as a useful example for a wide spectrum of different types of buildings. It is advised to create a check list for certain structures inside the WHS area with clear guidelines presented in prominent positions. Check lists need to be upgraded and adjusted to correspond to certain risks and spaces.

⁴⁶ Sir Bernard M. Feilden, 1987. Between Two Earthquakes: Cultural Property in Seismic Zones, Getty Conservation Institute & ICCROM

⁴⁷ Sir Bernard M. Feilden, 1987. Between Two Earthquakes: Cultural Property in Seismic Zones, Getty Conservation Institute & ICCROM

V.4. INTERLINKAGE OF GREEN AND DIGITAL TRANSITION HORIZONTAL ACTIONS

CONTRIBUTION TO GREEN OBJECTIVES AND CLIMATE CHANGE ADAPTATION



MANAGEMENT PLAN ACTION	CONTRIBUTION TO GREEN OBJECTIVES AND CLIMATE CHANGE ADAPTATION
ACTION 1.3.: Develop and implement a stakeholder capacity-building strategy	The strategy will strengthen the capacity of stakeholders in the field of environmental protection and the prevention of negative anthropogenic impacts, achieving the effect of future climate change mitigation.
ACTION 1.5: Upgrade the functions of the Institute for the Restoration of Dubrovnik (ZOD) as a body for dynamic data management and monitoring	One of the functions of ZOD is to integrate the database, including the database on the state of the environment in the city. This will provide insight into risk activities and their potential impacts on climate change.
ACTION 2.2.: Development of protocols for the Heritage Impact Assessment implementation	The protocol will determine the relationship between the environmental impact eassessment procedure (EIA, EIA Screening, and SEA) and the HIA procedure. The overlapping of these two levels of protection provides a realistic level of World Heritage environment status and directs managing authorities in a coordinated action that prevents negative impacts on climate change.
ACTION 3.2.: Development of an Urban Development Plan for the World Heritage Site area with a detailed breakdown	The adoption of the proposed document is subject to SEA procedure and the identification of positive and negative impacts on climate change that are part of studies in SEA procedures.
ACTION 3.3.: Develop new-generation local decrees for the standardisation of design and the installation of small structures, urban equipment, and other interventions in the World Heritage Site public space	It is necessary that all regulations consider the aspect of environmental protection and integrate it during the spatial planning and use of urban space.
ACTION 4.1: Improving the capacity of all public services that take care of the World Heritage Site area	As part of the regular work and monitoring irregularities, it is possible to get insight into activities/interventions that have a negative impact on climate change and to emphasise them in order to mitigate future climate change.

ACTION 4.3: Enhance mechanisms for dialogue with citizens	The possibility of early detection of problematic activities/ emissions into the environment and their potential negative impacts on climate change as well as the possibility of the efficient and timely reaction of competent authorities.
ACTION 5.3: Encourage preparing and conducting various educational programmes	Education should include specific professional activities aimed at the environmental protection sector and climate change impacts.
ACTION 6.1.: Preserve and improve the urban green and natural setting	The maintenance of green areas in urban settlements reduces the harmful effects of urban emissions and prevents the increase of the average temperature and daily heating up of urban areas. Preservation of the natural environment ensures resilience to ecosystems that serve as a catalyst for negative impacts on climate change, especially maritime ecosystems.
ACTION 6.2: Ensure sustainable and responsible use and preservation of Lokrum	Preservation of protected areas implies the preservation of species and habitats important for the balance of the world's ecosystems and better resilience of an area to climate change.
ACTION 6.3: Development of a co-financing project related to research, preservation, and restoration of historic gardens	The development of co-financing projects related to research, preservation, and restoration of historic gardens ensures their adequate protection and valorisation.
ACTION 7.1.: Develop a social housing fund and a cooperative housing model in the protected area	The sustainable management of housing and optimisation of the urban area use reduces pressure on environmental elements and enhances the environment's resilience.
ACTION 7.4.: Reconstruction of housing and enhancement of housing conditions with the aim of reaching earthquake-risk resilience	Reconstruction should be carried out in compliance with the principles of green infrastructure and sustainability of building in order to reduce energy consumption, which reduces the overall environmental footprint of the building. In addition to that, materials used are obtained in processes that reduce the effects of negative climate change.
ACTION 7.5.: Improve the quality of life of permanent residents	The proposed measures assume a reduction of emissions into the environment as a precondition for reducing the negative impacts of climate change
ACTION 7.7.: Install noise-measuring devices and develop an efficient control system	Same as 7.5.
ACTION 8.2.: Modernise and increase waste management efficiency and reduce waste production	Waste and waste management are one of the leading causes of negative impacts of climate change. Sustainable waste management reduces the pressure that waste creates on the environment and ensures better environmental status.

ACTION 8.3.: Renew and improve infrastructure networks in the World Heritage Site area	The reduction of water pollution and, consequently, of sea pollution. This strengthens the resilience of the sea, as the biggest catalyst for climate change.
ACTION 9.1.: Continue proactive implementation of actions proposed in the City of Dubrovnik Environmental Protection Programme	The increased quality of the environment ensures the positive direction of climate change to which humanity is gradually adapting.
ACTION 9.2.: Health and heritage impact monitoring	Same as 7.7.
ACTION 10.1.: Develop a Carrying Capacity Plan for the entire World Heritage Site area	Destination control in terms of reducing or limiting the number of potential visitors directly affects the reduction of the ecological footprint of visitors who would simultaneously organise trips to the same destination. Although economically unsustainable, the model of reduced travel activities by plane, car, and ship would have a positive effect on the state of climate.
ACTION 10.3.: Establish a tourism sustainability monitoring system	It will be possible to review the assessment of the pressure of tourism on the environment and negative impacts of climate change.
ACTION 10.4.: Enhance and strengthen the investment of tourism-related revenues in the natural and cultural heritage in the entire World Heritage Site area	Part of the income should be directed to mitigating the negative climate change.
ACTION 10.5.: Develop county and city strategy of integrated tourism management	Respecting the principles of sustainable development when planning the processes of overlapping with other industries, the diversification of tourism objectives and relieving the most visited places would strengthen the resilience of the environment of the protected property.
ACTION 11.1.: Ensure that the protected area is not blocked by traffic	The development and construction of alternative roads would reduce the impact of harmful traffic emissions on the protected area. Therefore the negative impact on climate change would also be reduced.
ACTION 11.2.: Develop a Sustainable Urban Mobility Plan	Sustainable traffic management and reduction in the emission of harmful gases positively impacts the ozone layer preservation and climate change as a consequence.
ACTION 11.3.: Support the development of integrated passenger transport	Same as 11.1.
ACTION 11.4.: Ensure sustainable mobility development in the buffer zone	Same as 11.2. and 11.3.

ACTION 12.1.: Develop a Risk Preparedness and Management Plan for the World Heritage Site	Unification of activities to mitigate risk and risk consequences.
ACTION 12.2.: Monitor implementation of the measures identified in the Major Accident Risk Assessment for the City of Dubrovnik	Certain risks can correlate with negative climate change risks and would be considered early warnings.
ACTION 12.5.: Organise the continuous education of children, citizens, and local experts on natural and anthropogenic risks	Increased awareness and knowledge of citizens about environmental pressures and what they mean for their quality of life. This can lead to positive changes in citizen behaviour (reduced waste generation, reduced use of non-renewable energy sources, etc.) that ensure positive impacts on climate change.

DIGITALISATION



MANAGEMENT PLAN ACTION	CONTRIBUTION TO DIGITALISATION
ACTION 1.3.: Develop and implement a stakeholder capacity-building strategy	Implementation of education and capacity building related to digital skills in cultural heritage management, preservation, and valorisation.
ACTION 1.5.: Upgrade the functions of the Institute for the Restoration of Dubrovnik (ZOD) as a body for dynamic data management and monitoring	Strengthen capacities and increase knowledge about the potential digital tools have for dynamic data management and monitoring, as well as increase the availability of data on all elements related to the management of the WHS.
ACTION 3.3.: Develop new-generation local decrees for the standardisation of design and installation of small structures, urban equipment, and other interventions in the World Heritage Site public space	Possible integration of digital tools.
ACTION 4.1.: Improving the capacity of all public services that take care of the World Heritage Site area	Same as 1.3.
ACTION 4.3.: Enhance mechanisms for dialogue with citizens	Integration of digital tools for active participation of citizens and other stakeholders and dialogue between public administration with the private and civil sector.
ACTION 7.2.: Monitoring socioeconomic and vital statistics in the World Heritage Site area	Integration of digital tools intended for the monitoring socioeconomic and vital statistics indicators and the increase of data availability.
ACTION 7.7.: Install noise-measuring devices and develop an efficient control system	Development of digital control and monitoring systems for elements that negatively impact the quality of life of citizens in the WHS area, including continuous noise monitoring.
ACTION 8.3.: Renew and improve infrastructure networks in the World Heritage Site area	Possible integration and modernisation of digital tools for monitoring the state and load of the infrastructure network.
ACTION 9.2.: Health and heritage impact monitoring	Development of digital control and monitoring systems for elements that negatively impact the quality of life and health of citizens in the WHS area as well as the environment.

ACTION 10.1.: Develop a Carrying Capacity Plan for the entire World Heritage Site area	Integration of GIS and other tools for capacity monitoring and visitor system management.
ACTION 10.2.: Design, establish and develop a visitor management system in different World Heritage Site areas	Integration of digital tools intended for monitoring tourism sustainability indicators and an increase in data availability.
ACTION 10.3.: Establish a tourism sustainability monitoring system	Integration of GIS and other tools for capacity monitoring and visitor system management and increase in data availability.
ACTION 11.2.: Develop a Sustainable Urban Mobility Plan	Integration of GIS tools in traffic system management.
ACTION 11.3.: Support the development of integrated passenger transport	Integration of GIS tools in traffic system management.
ACTION 12.4.: Ensure additional capacities for the Institute for the Restoration of Dubrovnik (ZOD) for diverse aspects of risk monitoring and management related to the World Heritage Site	Strengthen capacity and increase knowledge about the potential digital tools have for various aspects of monitoring and managing WHS-related risks.

V.5. GLOSSARY

HIA – Heritage Impact Assessment is a structured process that ensures that the importance of cultural heritage is considered when developing interventions in a particular area. It is a fundamental part of the project development process that checks whether projects and interventions in space are appropriate to the significance of the historic landscape and cultural heritage. It helps to preserve the importance of cultural heritage. Due to the specificity of the name, the abbreviation HIA is used in the text of the Plan.

Buffer zone – The buffer zone is a protective area around the WHS and is defined by UNESCO as “an area surrounding a nominated property and which has complementary legal and/or customary restrictions on its use and development in order to receive an additional layer of protection of the property. It should include the immediate surroundings of the nominated property, significant views and other areas or attributes that are functionally important in support of the property and its protection.” The buffer zone in Dubrovnik includes the eastern and western suburbs, the slopes of Mount Srd, and the water in front of the Old Port and around the Island of Lokrum.

Carrying capacity – A measure that refers to the optimal level of space usage without negative impacts on society, the environment, and the surrounding. During Management Plan implementation, the UNESCO definition will be used, in line with the UNESCO World Heritage Sustainable Tourism Online Toolkit.

Sustainable development – According to the 2030 Agenda for Sustainable Development, a type of development that satisfies current needs without endangering the ability and opportunity of future generations to satisfy their needs. The same definition is valid for the concept of sustainable tourism.

Setting – Setting represents the immediate and wider area around the WHS that contributes to the preservation of its significance and uniqueness. The environment is not part of the registration of Dubrovnik as a WHS but it is rather a spatial planning category that is defined to protect the WHS. The category partly corresponds to the definition of a HUL, which in its broader definitions may include the entire territory of the Dubrovnik Republic.

Historic Urban Landscape (HUL) – The historic urban landscape is the urban area understood as the result of a historic layering of cultural and natural values and attributes, extending beyond the notion of “historic centre” or “ensemble” to include the broader urban context and its geographical setting. An approach based on HUL seeks to preserve the quality of the human environment and strengthen the productive and sustainable use of urban spaces while recognising their dynamic character and promoting social and functional diversity. It integrates the objectives of urban heritage preservation and the objectives of social and economic development. It is rooted in a balanced and sustainable relationship between the urban and natural environment, between the needs of present and future generations and the historic heritage.

TERMINOLOGY OF CONSERVATION APPROACHES

When discussing conservation approaches in an international and multi-lingual environment, it is necessary to observe that the same or similar words may have different meanings in different contexts. This can easily cause misunderstandings. It is therefore always important to clarify what the different terms mean. As noted above, international organisations have adopted definitions for frequently used words, normally in English and French, sometimes translated into other languages. The most common general terms for safeguarding heritage include conservation, restoration, maintenance, and reconstruction. Here already, there are differences because the Anglo-Saxons prefer to use the word conservation, when Latin languages speak of restoration, and the United States introduces preservation. In Croatian, for example, there is common use of the concept reconstruction. In this particular Management Plan, it proposed to use the English terms with the meaning defined in international documents.

Integrated Conservation refers to the processes of culturally and environmentally sustainable development in historic areas, integrating conservation with the planning and management instruments. Integrated conserva-

tion depends on legal, administrative, financial, and technical support, and the informed involvement of the heritage community as a whole. (Ref. Council of Europe, 1975 Charter)

Safeguarding shall be taken to mean the identification, protection, conservation, restoration, revitalization of historic or traditional areas and their environment. Every historic area and its surroundings should be considered in their totality as a coherent whole whose balance and specific nature depend on the fusion of the parts of which it is composed and which include human activities as much as the buildings, the spatial organization and the surroundings. Ail valid elements, including human activities, however modest, thus have a significance in relation to the whole which must not be disregarded (UNESCO Recommendation in regards to the protection of and contemporary role of historic areas, 26 November 1976).

Conservation of cultural heritage is now recognized as resting within the general field of environmental and cultural development. Sustainable management strategies for change which respect cultural heritage require the integration of conservation attitudes with contemporary economic and social objectives including tourism. The object of conservation is to prolong the life of cultural heritage and, if possible, to clarify the artistic and historic messages therein without the loss of authenticity and meaning. Conservation is a cultural, artistic, technical and craft activity based on humanistic and scientific studies and systematic research. Conservation must respect the cultural context. (ICOMOS Training Guidelines, 1993)

Culture takes diverse forms across time and space. This diversity is embodied in the uniqueness and plurality of the identities of the groups and societies making up humankind. As a source of exchange, innovation and creativity, cultural diversity is as necessary for humankind as biodiversity is for nature. In this sense, it is the common heritage of humanity and should be recognized and affirmed for the benefit of present and future generations. (UNESCO Universal Declaration on Cultural Diversity 2 November 2001)

Safeguarding: means measures aimed at ensuring the long-term viability of the tangible and intangible cultural heritage, including the identification, documentation, research, preservation, protection, promotion, enhancement, transmission, particularly through formal and non-formal education and training, as well as the revitalisation of the various aspects of such heritage. (Ref. UNESCO 2003 Convention)

Reconstruction: We believe that replication of cultural heritage is in general a misrepresentation of evidence of the past, and that each architectural work should reflect the time of its own creation, in the belief that sympathetic new buildings can maintain the environmental context, but that in exceptional circumstances, reconstruction of cultural heritage, lost through disaster, whether of natural or human origin, may be acceptable, when the monument concerned has outstanding artistic, symbolic or environmental (whether urban or rural) significance for regional history and cultures; provided that:

- ▶ appropriate survey and historical documentation are available (including iconographic, archival or material evidence)
- ▶ the reconstruction does not falsify the overall urban or landscape context; and
- ▶ existing significant historic fabric will not be damaged; and providing always that the need for reconstruction has been established through full and open consultations among national and local authorities and the community concerned and urge
- ▶ all concerned governments and administrations to integrate this document and those which give it context into national and local policies and practices, and all concerned academic institutions to include it in their training programmes. (Riga Charter on Reconstruction, 2000)

Restoration: The process of restoration is a highly specialized operation. Its aim is to preserve and reveal the aesthetic and historic value of the monument and is based on respect for original material and authentic documents. It must stop at the point where conjecture begins, and in this case moreover any extra work which is indispensable must be distinct from the architectural composition and must bear a contemporary stamp. The restoration in any case must be preceded and followed by an archaeological and historical study of the monument. (Venice Charter, 1964)

OTHER TERMINOLOGY

Emergency: An unforeseen combination of circumstances or the resulting state that calls for immediate action (Merriam Webster Online Dictionary, www.m-w.com).

Disaster: A serious disruption of the functioning of a community or a society causing widespread human, material, economic or environmental losses which exceeds the ability of the affected community or society to cope using its own resources (www.unisdr.org).

Climate change: a change in climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods (United Nations Framework Convention on Climate Change; <http://unfccc.int/>).

Code of Practice: It is essential to establish a balance between the development of tourism and conservation of World Cultural Heritage and to coordinate efforts for their mutual benefit. The Director General of the National Trust of England, Mr A. Stirling, in his address to the ICOMOS conference in Canterbury, U.K. in 1990, proposed the following Code of Practice for the resources in his care: ⁴⁸

1. Comprehensive tourist development plans are essential as the pre-condition for developing any tourist potential.
2. It should be a fundamental principle of any tourist development plan that both conservation, in its widest sense, and tourism benefit from it. This principle should be part of the constitutional purpose of all national tourist agencies, and of local authority tourism and recreation departments.
3. A significant proportion of revenue earned from tourism should be applied for the benefit of conservation, both nationally and regionally.
4. The best long-term interests of the people living and working in any host community should be the primary determining factor in selecting options for tourist development.
5. Educational programmes should assist and invite tourists to respect and understand the local way of life, culture, history, and religion. Tourism policy should take these factors into account.
6. The design of new buildings, sites, and transport systems should minimize the potentially harmful visual effects of tourism. Pollution controls should be built into all forms of infrastructure. Where sites of great natural beauty are concerned, the intrusion of man-made structures should be avoided if possible.
7. Good management should define the level of acceptable tourism development and provide controls to maintain that level.

Response: The reaction to an incident or emergency to assess the damage or impact to the site and its components, and actions taken to prevent people and the property from suffering further damage.

Hazard: Any phenomenon, substance or situation, which has the potential to cause disruption or damage to infrastructure and services, people, their property and their environment (Abarquez and Murshed, 2004).

Recovery: The process of returning the institution to normal operations, which may also involve the rehabilitation and restoration of the building or site.

Prevention: Measures taken to reduce the likelihood of losses. Ideally, these measures would seek to reduce losses to zero, but this often is not possible. Key question: How much prevention do you need to undertake?

Service providers: Tourism is often attracted by the most visible parts of a heritage landscape, ignoring other, perhaps equally interesting and noteworthy, customs and places. Another issue is that tourism tends to be in the hands of tourism operators, who may not be keen on involving local people as stakeholders in the process. The key factor in the continuous and balanced development of tourism resides in the quality and efficiency of services provided not only in the most visited places but also in their surroundings. What are called “tourism service providers” can include the following:⁴⁹

- ▶ Transportation Services providers: public and private companies that provide the services of transporting people (ex.: buses, taxis, airplanes, trains, etc).
- ▶ Event Management Services: public and private companies dealing with event organization (ex.: conferences, conventions, concerts, sport events).
- ▶ Complementary goods and services providers: companies that produce and offer complementary goods and services for travellers, like local shops, museums, excursion services, sport & leisure facilities, handicrafts.

Vulnerability: The susceptibility and resilience of the community and environment to hazards. ‘Resilience’ relates to ‘existing controls’ and the capacity to reduce or sustain harm. ‘Susceptibility’ relates to ‘exposure’ (Emergency Management Australia, 2000).

Risk: The chance of something happening that will have an impact upon objectives. (Emergency Management Australia, 2000).

Mitigation: Taking action in the timeframe before a disaster to lessen post-event damage to lives and property. In risk management, many hazards such as earthquakes cannot be reduced, but the risk from that hazard can be reduced, or mitigated, for example by constructing earthquake-resistant buildings, or shelves that prevent objects from sliding off. The former is structural mitigation, the latter is non-structural.

Destination management: The United Nations World Tourism Organisation emphasises the need to introduce a system of Destination Management to link sometimes separate elements of interest for the better management of a destination. Destination Management consists of the coordinated management of all the elements that make up a tourism destination. Destination management takes a strategic approach to link together these sometimes very separate elements for the better management of the destination. Such management can help to avoid the overlapping of functions and duplication of efforts with regards to promotion, visitor services, training, business, and support and can help identify any management gaps that are not being addressed. Destination management calls for a coalition of many organizations and interests working towards a common objective, which is ultimately the assurance of the competitiveness and sustainability of the tourism destination.⁵⁰

⁴⁸ Ref. UNWTO, Policy and Destination Management: <https://www.unwto.org/policy-destination-management>

⁴⁹ Salvatore Ammirato, Alberto Michele Felicetti and Marco Della Gala: *Tourism Destination Management: A Collaborative Approach* (https://link.springer.com/chapter/10.1007/978-3-662-44745-1_21)

⁵⁰ Feilden, B.M. & Jokilehto, J. 1998. *Management Guidelines for World Cultural Heritage Sites*, ICCROM, Rome (p. 104)

V.7. ABBREVIATIONS

- B2B** – Body to body
- DAD** – Society of Architects Dubrovnik (Društvo arhitekata Dubrovnik)
- DPU** – Detailed Development Plan (Detaljni plan uređenja)
- EIA** – Environmental Impact Assessment
- GIS** – Geographic Information System
- GK** – City District (gradski kotar)
- GUP** – General Urban Plan (Generalni urbanistički plan)
- HIA** – Heritage Impact Assessment
- HKA** – Croatian Chamber of Architects (Hrvatska komora arhitekata)
- HUL** – Historic Urban Landscape
- ICCROM** – International Centre for the Study of the Preservation and Restoration of Cultural Property
- ICOMOS** – International Council on Monuments and Sites
- IPU** – Institute of Art History (Institut za povijest umjetnosti)
- IUCN** – International Union for Conservation of Nature
- MINGOR** – Ministry of Economy and Sustainable Development (Ministarstvo gospodarstva i održivog razvoja)
- MKM** – Ministry of Culture and Media (Ministarstvo kulture i medija)
- MKM KO-DU** – Ministry of Culture and Media – Conservation Department in Dubrovnik (Ministarstvo kulture i medija, Konzervatorski odjel u Dubrovniku)
- MPUGDI** – Ministry of Physical Planning, Construction and State Assets (Ministarstvo prostornoga uređenja, graditeljstva i državne imovine)
- OUV** – Outstanding Universal Value
- PUO** – Assessment of Intervention Environmental Impact (Procjena utjecaja na okoliš)
- PUP** – Implementation Urban Plan (Provedbeni urbanistički plan)
- RH** – Republic of Croatia (Republika Hrvatska)
- RRF** – Recovery and Resilience Facility
- SEA** – Strategic Environmental Assessment
- SUMP** – Sustainable Urban Mobility Plan
- TZGD** – Dubrovnik Tourist Board (Turistička zajednica Grada Dubrovnika)
- UNESCO** – United Nations Educational, Scientific and Cultural Organization
- UPU** – Urban Development Plan (Urbanistički plan uređenja)
- WHS** – World Heritage Site
- ZOD** – Institute for the Restoration of Dubrovnik (Zavod za obnovu Dubrovnika)
- ZZPUDNŽ** – Institute for Physical Planning of the Dubrovnik-Neretva Region (Zavod za prostorno uređenje Dubrovačko-neretvanske županije)

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V.9. BIBLIOGRAPHY

Bačić, J., 1990: Nekad u Dubrovniku (Once Upon a Time in Dubrovnik), Dubrovnik

Baće, A.; Viden I., 2013: Lazareti na Pločama od pada Dubrovačke Republike do danas (1808.-2013.) (Lazareti na Pločama from the Fall of the Republic of Ragusa Until Today, 1808–2013), "Prostor", 21, Zagreb, 323–328.

Belamarić, J.; Belamarić, I.; Bilić, D.; Šverko, A.; Tudor, A., 2014: Identifikacija i valorizacija prirodne i graditeljske baštine područja Dubrovnika u prostornom kontekstu (Identification and Valorisation of Natural and Architectural Heritage of the Dubrovnik Area in Spatial Context), Naručitelj: Zavod za prostorno uređenje Dubrovačko-neretvanske županije; Izrađivač: Institut za povijest umjetnosti, Centar Cvito Fisković, Split

Beritić, L., 1956: Ubikacija nestalih gradjevinskih spomenika u Dubrovniku (Location of Missing Monument Buildings in Dubrovnik), "Prilozi povijesti umjetnosti u Dalmaciji", Split

Beritić, L., 1958: "Urbanistički razvitak Dubrovnika" ("Urban Development of Dubrovnik"), Zagreb

Between Two Earthquakes – Cultural Property in Seismic Zones, ICCROM, Getty Conservation Institute, 1987

Council of Europe, 2005: Framework Convention on the Value of Cultural Heritage to Society (Faro Convention)

CROSTO Dubrovnik 2017: Institut za turizam, Zagreb, 2018.

Demografska razvojna strategija Grada Dubrovnika (Demographic Development Strategy of the City of Dubrovnik), Grad Dubrovnik, 2020

Digitalna komora Hrvatske gospodarske komore (Digital Chamber of the Croatian Chamber of Commerce)

Direktiva 2009/147/EZ Europskog parlamenta i Vijeća od 30. studenog 2009. o očuvanju divljih ptica (kodificirana verzija) (Directive 2009/147/EC of the European Parliament and Council from 30 November, 2009 on the Conservation of Wild Birds (codified version)) (SL L 20, 26.1.2010.)

Direktiva 92/43/EEZ o zaštiti staništa i divljih biljnih i životinjskih vrsta (Directive 92/43 / EEC on the Protection of Habitats and of Wild Fauna and Flora) (SL L 206, 22 July1992)

Dubrovnik Visitors, 2019.

Duletić, V.D., 2011: Budvanski turizam i održivi razvoj (Budva’s Tourism and Sustainable Development), NU Budvanski kulturni identitet, Budva

Dumbović-Bilušić, B., 2016: "Registar kulturnih dobara Dubrovačko-neretvanske županije" ("Register of Cultural Heritage of the Dubrovnik-Neretva Region"), Zavod za prostorno uređenje Dubrovačko-neretvanske županije, Dubrovnik

Dumbović-Bilušić, B., 2018: Kulturni krajolici - Prepoznavanje i vrednovanje kulturnih krajolika Dubrovačko-neretvanske županije – podloga za zaštitu, podloga za izmjene i dopune Prostornog plana Dubrovačko-neretvanske županije (Recognition and Evaluation of Cultural Landscapes of the Dubrovnik-Neretva Region - Basis for Protection, Basis for Amendments to the Spatial Planning of the Dubrovnik-Neretva Region), Zavod za prostorno uređenje Dubrovačko-neretvanske županije

EC, 2013 – Integrating maritime transport emissions in the EU’s greenhouse gas reduction policies

Feilden, B.M. and Jokilehto, J. Management Guidelines for World Cultural Heritage Sites, ICCROM, UNESCO, ICOMOS, 1998

Ferrighi; Plosnić Škarić, A., 2016: "Mapping City Councils' Deliberations for the Urban Development Research: Dubrovnik 1400-1450"

Fisković, C., 1947: "Naši graditelji i kipari 15. i 16. stoljeća u Dubrovniku" ("Our Builders and Sculptors in the 15th and 16th century Dubrovnik"), Zagreb

Fisković, C., 1955: "Prvi poznati dubrovački graditelji" ("First Known Builders of Dubrovnik"), Zagreb

Guidance on Heritage Impact Assessments for Cultural World Heritage Properties, ICOMOS, 2011

Grujić N., 1972: Metode istraživanja starih urbanih aglomeracija – Dubrovnik (Research Methods of Old Urban Agglomerations – Dubrovnik), „Radovi Instituta za povijest umjetnosti“, 1/2, Zagreb, 7–12.

Grujić, N., 1986: Dubrovnik – Pustijerna, istraživanje jednog dijela povijesnog tkiva grada (Pustijerna, Exploring One Part of the Historical Fabric of the City), „Radovi Instituta za povijest umjetnosti“, 10, Zagreb, 7–39. istraživanje jednog dijela povijesnog tkiva grada

Grujić, N., 2013: "Kuća u gradu, studije o Dubrovačkoj stambenoj arhitekturi 15. i 16. stoljeća" ("House in the City, Studies on Dubrovnik Residential architecture of the 15th and 16th century"), Zagreb

Guide to the methodical study of Monuments and causes of their deterioration, ICCROM, 1982

Horvat-Levaj, K., 2001: "Barokne palače u Dubrovniku" ("Baroque Palaces in Dubrovnik"), Institut za povijest umjetnosti, HAZU, Zagreb – Dubrovnik

Hrvatska gospodarska komora, Interni podaci dostavljeni za potrebe izrade Plana upravljanja (Internal data submitted for the purposes of drafting the Management Plan)

HZZO Područni ured Dubrovnik, Statistički godišnjak (Statistical Yearbook), Dubrovnik, travanj 2018.

ICOMOS (2005.), Declaration on the Conservation of the Setting, of Heritage Structures, Sites and Areas, Xi’an Declaration

ICOMOS Australia 1979 (and revisions), Charter for Places of Cultural Significance, Burra Charter

ICOMOS, 1987, Charter for the Conservation of Historic Towns and Urban Areas, Washington

ICOMOS, Deklaracija o očuvanju spomeničkih objekata, lokaliteta i zona (Declaration on the Preservation of Monuments, Sites and Zones), 2005.

Institut za razvoj i međunarodne odnose – IRMO (2014): "Strategija razvoja kulture Grada Dubrovnika 2015. – 2025." ("Cultural Development Strategy of the City of Dubrovnik 2015–2025"), Zagreb

Istraživanje tržišta potražnje za turističkom destinacijom Dubrovnik u svrhu izrade studija održivog razvoja, Obilježja turista, izletnika i posjetitelja s brodova na kružnim putovanjima – potrošnja i zadovoljstvo kvalitetom ponude grada Dubrovnika (Market research on the demand for Dubrovnik as a tourist destination for the purpose of making sustainable development studies, Characteristics of tourists, excursionists and visitors from cruise ships – consumption and satisfaction with the quality of the offer of the city of Dubrovnik), Sveučilište u Dubrovniku, Odjel za ekonomiju i poslovnu ekonomiju, 2015

Izvješće o reaktivnoj promatračkoj misiji UNESCO-a i ICOMOS-a Starom gradu Dubrovniku (Report on the UNESCO and ICOMOS Reactive Monitoring Mission to the Old Town of Dubrovnik), Hrvatska, od 27. listopada do 1. studenog 2015., Dubrovnik, 2015

Izvješće o stanju okoliša Grada Dubrovnika za razdoblje 2012.–2015. (Report on the State of the Environment of the City of Dubrovnik for the 2012–2015 Period)

Jemo, I., 2017: "Urbana matrica grada Dubrovnika" ("Urban Matrix of the city of Dubrovnik"), ArTresor naklada, Ogranak Matice hrvatske u Dubrovniku, Zagreb-Dubrovnik

Jemo, I., 2019: Izvadak iz Programa za izradu Plana upravljanja zaštićenom spomeničkom cjelinom grada Dubrovnika (Excerpt from the Programme for the Development of the Management Plan for the Protected Monumental Ensemble of the City of Dubrovnik)

Karta buke za povijesnu jezgru Grada Dubrovnika (Noise Map for the Historical Centre of the City of Dubrovnik), 1998.

Katedrala Gospe Velike u Dubrovniku (Cathedral of Our Lady in Dubrovnik), 2014: (ed.) Katarina Horvat-Levaj, Institut za povijest umjetnosti (Institute of Art History), ArTresor naklada (ArTresor Publishing), Katedralna župa Gospe Velike (Our Lady Cathedral Parish), Dubrovnik – Zagreb

Klempić Bogadi, S., 2010: Populacijski razvoj gradskih regija Hrvatske 1948.-2001. (Population Development of Croatian City Regions 1948-2001), in: I. Lajić (ed.), Migracije i regionalni razvoj Hrvatske (Migration and Regional Development of Croatia), IMIN, Zagreb, 23–62

Klempić Bogadi, S., Podgorelec, S., 2009: Socio-demografske značajke i procesi u hrvatskim obalnim gradovima (Socio-demographic Characteristics and Processes in Croatian Coastal Cities), „Geoadria“ 14 (2): 221–247

Klempić Bogadi, S., Vukić, J., Čaldarović, O., 2018: Život u povijesnoj jezgri Dubrovnika: sociološko-demografska studija (Life in the Historical Centre of Dubrovnik: A Sociological and Demographic Study), Dubrovnik: Zavod za obnovu Dubrovnika (Institute for the Reconstruction of Dubrovnik).

Knežev dvor u Dubrovniku, utvrda, palača, muzej (Rector’s Palace in Dubrovnik, Fort, Palace, Museum), 2016: (ed.) Pavica Vilać, Dubrovnik

Konzervatorska podloga za kontaktnu zone svjetskog dobra Starog grada u Dubrovniku (Conservation Base for the Contact Zone of the Old Town Dubrovnik World Heritage Site), Ministarstvo kulture i medija Republike Hrvatske (Ministry of Culture and Media of the Republic of Croatia), Zagreb, 2020

Lazarević, I., 2012: "Granice dubrovačkih seksterija" (Boundaries of Dubrovnik Sextories), Anali Dubrovnik 50, Dubrovnik, 63–74

Lisitzin, K., Mlakar, A., Berlengi, G., 2015: Identifikacija i valorizacija prirodnih i kulturnih krajolika na pilot području grada Dubrovnika, EU projekt IPA prekogranične suradnje HR-CG: Baština – pokretač razvoja (Identification and Valorisation of Natural and Cultural Landscapes in the Pilot Area of the city of Dubrovnik, EU IPA Project Cross-Border Cooperation CRO-MNE: Heritage – Driver of Development), Dubrovnik

Luka Dubrovnik (Dubrovnik Port), 2019

Marasović, J., 1971: Sadržaj i obrada arhitektonskog snimka postojećeg stanja graditeljskog naslijeđa (Content and Processing of the Architectural Record of the Existing State of architectural Heritage), Split

Marković, V., 1990: Kuća i prostor grada u Dubrovniku nakon potresa 1667. Godine (House and the City Space in Dubrovnik After the 1667 Earthquake), „Radovi Instituta za povijest umjetnosti“, 14, Zagreb, 137–149

Ministarstvo kulture i medija Republike Hrvatske (Ministry of Culture and Media of the Republic of Croatia), <https://min-kulture.gov.hr/>

Nacionalna razvojna strategija Republike Hrvatske do 2030. g. (National Development Strategy of the Republic of Croatia until 2030), Vlada Republike Hrvatske, 2021

Nacr Plana upravljanja za Rezervat Lokrum (Draft Management Plan for Lokrum Reserve), JU Rezervat Lokrum

New life for historic cities – The historic urban landscape approach explained, UNESCO, 2013.

Ničetić, A., 1996: "Povijest dubrovačke luke" (History of the Dubrovnik Port), Hrvatska akademija znanosti i umjetnosti u Zagrebu, Dubrovnik

Nodari, M., 2017: "Sažeti pregled povijesti područja dubrovačko-neretvanske županije" (Brief Review of the History of the Dubrovnik-Neretva Region Area), Dubrovnik

Obnova Dubrovnika 1979–1989 (Restoration of Dubrovnik from 1979 to 1989), 1989: (ed.) Snješka Knežević, Dubrovnik

Obilježja područja sa stanovišta zaštite prirode s prijedlogom mjera zaštite, podloga za izmjene i dopune Prostornog plana Dubrovačko-neretvanske županije (Characteristics of the Area From the Point of View of Nature Protection with a Proposal of Protection Measures, Basis for Amendments to the Spatial Plan of the Dubrovnik-Neretva County), Zavod za prostorno uređenje Dubrovačko-neretvanske županije, 2018

Odluka o donošenju Plana upravljanja vodnim područjima 2016.-2021. (Order on the Adoption of the Water Areas Management Plan 2016-2021) (OG 66/16)

Odluka o donošenju Programa mjera zaštite i upravljanja morskim okolišem i obalnim područjem Republike Hrvatske (Order on the Adoption of the Programme of Measures for the Protection and Management of the Marine Environment and the Coastal Area of the Republic of Croatia (OG 97/17)

Odluka o izmjenama i dopunama odluke o određivanju osjetljivih područja (Order on Amendments to the Order on Designation of Sensitive Areas) (OG 141/15)

Odluka o komunalnom redu Grada Dubrovnika (Order on the Communal Order of the City of Dubrovnik) (Sl. glasnik GD 10/09, 2/10, 6/11, 2/12 5/14, 8/14 i 19/15)

Odluka o određivanju osjetljivih područja (Order on Designation of Sensitive Areas) (OG 81/10 i 141/15)

Odluka o odvodnji otpadnih voda Aglomeracije Dubrovnik (Order on Wastewater Drainage of the Dubrovnik Agglomeration), Zaton, Trsteno, Koločep i Lopud (Sl. glasnik GD 01/16)

Odluka o odvodnji otpadnih voda na području Grada Dubrovnika (Order on Wastewater Drainage in the City of Dubrovnik Area) (Sl. glasnik GD 2/12)

Odluka o razvrstavanju javnih cesta (Order on Classification of Public Roads), OG 103/18

Oreb, M., 2019: "Integracija konzervatorskih smjernica u prostorno-planske dokumente – mogućnosti i ograničenja" ("Integration of Conservation Guidelines Into Spatial Planning Documents - Possibilities and Limitations"), 3. Savjetovanja konzervatora Ministarstva kulture u suradnji s Ministarstvom graditeljstva i prostornog uređenja, Zagreb

Pavlič I., Portolan, A., Puh, B., 2018: Does living distance from the center of tourism activities influence local residents' quality of life?, Proceedings of 5th International Multidisciplinary Scientific Conference on Social Sciences and Arts SGEM

Pavlič, I., Portolan, A., Puh, B., 2018: Tourism seasonality and level of irritation in a World heritage

site: Old City of Dubrovnik, Croatia, Proceedings of 7th International Scientific Symposium Economy of Eastern Croatia – Vision and Growth, Osijek

Peković, Ž., 2016: „Valobran Kaše: tijek i način izgradnje, primijenjene antičke tehnike gradnje u renesansi" (Kaše SEawall: Course and Construction Method, Applied Antique Construction Techniques in the Renaissance), Odsjek za povijest umjetnosti Filozofskog fakulteta Sveučilišta u Splitu, Split

Peković, Ž.; Babić, K., 2017: "Predgrađe dubrovačke Civitas" (Dubrovnik Civitas Suburb), Dubrovnik

Peković, Ž.; Babić, K., 2018: "Razvoj zapadnog ulaza u grad Dubrovnik od 13. do polovine 16. stoljeća" (Development of the West Dubrovnik City Gate from the 13th to mid-16th century), Dubrovnik

Plan civilne zaštite Grada Dubrovnika (City of Dubrovnik Civil Protection Plan), 2016

Plan gospodarenja otpadom Grada Dubrovnika za razdoblje do 2015. godine (Waste Management Plan of the City of Dubrovnik for the period until 2015) (Sl. glasnik GD 10/11)

Plan gospodarenja otpadom Grada Dubrovnika za razdoblje od 2018. do 2023. Godine (Waste Management Plan of the City of Dubrovnik from 2018 to 2023) (Sl. glasnik GD 9/18)

Plan intervencija kod iznenadnih onečišćenja mora (Contingency Plan for Sudden Marine Pollution) (OG 92/08)

Plan intervencija kod iznenadnih onečišćenja mora u DNŽ (Contingency plan for sudden marine pollution in Dubrovnik-Neretva County) (Official Gazette of Dubrovnik-Neretva County, No. 2/11)

Plan korištenja javnih površina u povijesnoj jezgri (Plan for the Use of Public Areas in the Historic Centre), Grad Dubrovnik

Plan upravljanja spomeničkim kompleksom Lazareti 2016.–2020. (Management Plan for the Lazareti Historical Complex 2016–2020), Grad Dubrovnik, 2015

Plan zaštite i spašavanja Grada Dubrovnika (Protection and Rescue Plan of the City of Dubrovnik), 2016

Plan zaštite i spašavanja s mjerama civilne zaštite na području Grada Dubrovnika (usvojen na 28. sjednici Gradskog vijeća od 27. lipnja 2012. godine) (Protection and rescue plan with civil protection measures in the City of Dubrovnik area (adopted at the 28th session of the City Council on 27 June, 2012)).

Planić-Lončarić, M. 1980: "Planirana izgradnja na području Dubrovačke Republike" (Planned Construction in the Republic of Ragusa Area), Institut za povijest umjetnosti, Zagreb

Plosnić Škarić, A., 2015–2017: „Dubrovnik: Civitas et Acta Consiliourum", Institut za povijest umjetnosti, Zagreb

Pomorski zakonik (Maritime Code) (OG 181/04, 76/07, 146/08, 61/11, 56/13, 26/15)

Popis stanovništva, domaćinstava, stanova i poljoprivrednih gospodarstava, 1991. (Census of Population, Households, Apartments and Agricultural Holdings, 1991), posebna obrada, DZS, Zagreb

Popis stanovništva, kućanstava i stanova 2001. (Census of Population, Households and Apartments 2001), posebna obrada, Državni zavod za statistiku, Zagreb

Popis stanovništva, kućanstava i stanova 2011. (Census of Population, Households and Apartments 2011), posebna obrada, Državni zavod za statistiku, Zagreb

Pravilnik o gospodarenju otpadom (Ordinance on Waste Management) (OG 81/20)

Pravilnik o katalogu otpada (Ordinance on Waste Catalogue) (OG 90/15)

Pravilnik o granicama područja podslivova, malih slivova i sektora (Ordinance on the Boundaries of Sub-Basins, Small Basins and Sectors) (OG 97/10 i 31/13)

Pravilnik o obliku, sadržaju i načinu vođenja Registra kulturnih dobara Republike Hrvatske (Ordinance on the Form, Content and Manner of Keeping the Register of Cultural Heritage of the Republic of Croatia) (OG 89/11 i OG 30/13)

Pravilnik o ocjeni prihvatljivosti za ekološku mrežu (Ordinance on the Assessment of Acceptability for the Ecological Network) (OG 146/14)

Pravilnik o popisu stanišnih tipova, karti staništa, te ugroženim i rijetkim stanišnim tipovima (Ordinance on the List of Habitat Types, Habitat Maps, and Endangered and Rare Habitat Types) (OG 88/14)

Pravilnik o praćenju kvalitete zraka (Ordinance on Air Quality Monitoring) (OG 79/17)

Pravilnik o strogo zaštićenim vrstama (Ordinance on Strictly Protected Species) (OG 144/13, 73/16)

Pravilnik o uvjetima za utvrđivanje zona sanitarne zaštite izvorišta (Ordinance on the Conditions for Determining the Sanitary Protection Zones of Springs) (OG 66/11, 47/13)

Pravilnik o uzajamnoj razmjeni informacija i izvješćivanju o kvaliteti zraka i obavezama za provedbu odluke komisije 2011/850/EU (Ordinance on Mutual Exchange of Information and Reporting on Air Quality and Obligations for the Implementation of Commission Decision 2011/850/EU) (OG 3/16)

Prelog, M., 1971.–1972: Dubrovački statut i izgradnja grada (Dubrovnik Statute and City Construction), „Peristil“, 14–15, Zagreb, 81–94

Prelog, M., 1975: Grad kao umjetničko djelo (City as a Work of Art), „Život umjetnosti“, 22–23: 4–21.

Prijedlog lokalnog programa za mlade Grada Dubrovnika (Proposal of the Local Youth Programme of the City of Dubrovnik), Grad Dubrovnik, 2019

Procjena ugroženosti stanovništva, materijalnih i kulturnih dobara i okoliša Grada Dubrovnika (usvojena na 25. sjednici Gradskog vijeća od 28.1.2012.; studeni 2015. usklađivanje dokumenta) Assessment of the Endangerment of the Population, Material and Cultural property and the Environment of the City of Dubrovnik (adopted at the 25th session of the City Council on 28 January 2012; November 2015 harmonisation of the document)

Program zaštite okoliša Grada Dubrovnika (od 2012. do 2015.) (Environmental Protection Programme for the City of Dubrovnik from 2012 to 2015) (Sl. glasnik GD 16/12)

Program zaštite okoliša Grada Dubrovnika za razdoblje od 2018.-2021. Godine (Environmental Protection Programme for the City of Dubrovnik from 2018 to 2021)

Program zaštite zraka, ozonskog sloja, ublažavanje klimatskih promjena i prilagodbe klimatskim promjenama za područje Grada Dubrovnika 2016.-2020. Godine (Programme for Air Protection, Ozone Layer, Climate Change Mitigation and Adaptation to Climate Change for the Area of the City of Dubrovnik 2016-2020), (Sl. glasnik GD br. 15/16)

Prometna studija Grada Dubrovnika (svibanj 2012. godine) (Traffic Study for the City of Dubrovnik, May 2012)

Prostorni plan Dubrovačko-neretvanske županije (Spatial Plan of the Dubrovnik-Neretva County), Službeni glasnik Dubrovačko-neretvanske županije, br. 6/03., 3/05.-uskl., 3/06., 7/10., 4/12.-isp., 9/13., 2/15.-uskl., 7/16., 2/19. i 6/19.-pročišćeni tekst; Presuda Visokog upravnog suda RH Br: Usoz-96/2012-8 od 28.11.2014., "Narodne novine", br. 10/15. od 28.1.2015.

Provedbeni urbanistički plan Pile Ploče Sveti Jakov (Implementation Urban Plan for Pile Ploče St. Jacob), Dubrovnik, 1989

Provedbeni urbanistički plan Stari Grad (Implementation Urban Plan for Old Town), Dubrovnik, 1986

Registar kulturnih dobara Republike Hrvatske (Register of Cultural Heritage of the Republic of Croatia), <https://www.min-kulture.hr/default.aspx?id=31>, (30 December 2019)

Regulacijski plan Lokruma (Lokrum Regulation Plan), Dubrovnik, 1989

Rezultati Internog popisa stanovništva, kućanstava i stanova u povijesnoj jezgri Dubrovnika 2016. (Results of the Internal Census of Population, Households and Apartments in the Dubrovnik Historic Centre in 2016), Zavod za obnovu Dubrovnik, Dubrovnik, internal-use material

Risk Preparedness: A Management Manual for World Cultural Heritage, ICCROM, UNESCO, ICOMOS, WHC, 1998

Rogić, I., Kovačević, R., 1986: Dubrovnik – stara gradska jezgra (Dubrovnik – Old Town Centre). Sociologijska studija, Urbanistički institut SRH, Zavod za prostorno planiranje, Zagreb

Rogić, I., Kovačević, R., Sarić, B., Šikić, V., 1987: Dubrovnik – Kontaktno područje stare jezgre: Studija sociologijskih i funkcionalnih aspekata (Dubrovnik – Contact Area of the Old Centre: A Study of Sociological and Functional Aspects). Zagreb: Urbanistički institut SRH, Zavod za prostorno planiranje

Special Eurobarometer 466: Cultural Heritage, <https://epale.ec.europa.eu/en/resource-centre/content/special-eurobarometer-report-466-cultural-heritage>

Standardi i smjernice za izradu inventara kulturnih dobara (Standards and Guidelines for Making an Inventory of Cultural property), <https://www.min-kulture.hr/default.aspx?id=393>, 30 December 2019

Statement of Outstanding Universal Value – Old City of Dubrovnik, Draft statement sent to World Heritage Centre, Uprava za zaštitu kulturne baštine Ministarstva kulture Republike Hrvatske, Zagreb, 2015

Statut Javne ustanove Rezervat Lokrum (Statute of the Public Institution Lokrum Reserve), www.lokrum.hr

Strategija izjednačavanja mogućnosti za osobe s invaliditetom Grada Dubrovnika za razdoblje od 2015. do 2020. Godine (Equalisation Strategy for Persons with Disabilities of the City of Dubrovnik for the 2015 to 2020 period), Grad Dubrovnik, 2015

Strategija razvoja kulture Grada Dubrovnika od 2015.-2025. (Culture Development Strategy of the City of Dubrovnik from 2015-2025), Grad Dubrovnik, 2014

Strategija razvoja sporta i sportske infrastrukture u Gradu Dubrovniku 2018.–2028. (Strategy for the Development of Sports and Sports Infrastructure in the City of Dubrovnik 2018–2028), Grad Dubrovnik, 2017

Strategija razvoja turizma i odredbe u krizing-turizmu na području grada Dubrovnika (I. Faza) Tourism development strategy and provisions in cruising tourism in the city of Dubrovnik (Phase I), Sveučilište u Dubrovniku, Odjel za ekonomiju i poslovnu ekonomiju, 2017

Strateški plan grada Dubrovnika 2018.-2020. (Strategic Plan of the city of Dubrovnik 2018-2020), Grad Dubrovnik, 2018

Strateški plan vijeća civilnog društva Grada Dubrovnika 2015.-2020.(Strategic Plan of the Civil Society Council of the City of Dubrovnik 2015–2020), Grad Dubrovnik, 2015

Stručna podloga za određivanje dopuštenih razina buke prilikom održavanja javnih skupova, razonode, zabavnih i drugih aktivnosti na području Grada Dubrovnika (lipanj 2012. godine) (Expert basis for determining the permitted noise levels during public gatherings, leisure, entertainment and other activities in the City of Dubrovnik (June 2012))

Šimunović, K., 2008: "Od dječjeg nahodišta do doma za djecu i mlade punoljetne osobe Maslina: Prilog povijesti socijalne skrbi za djecu u Dubrovniku" (From a children's home to a home for children and young adults Maslina: A contribution to the history of social care for children in Dubrovnik)

Šubić, N., 2008: Dubrovački turizam od 1857. do 2005. (Dubrovnik Tourism from 1857 to 2005), Alfa 2., Dubrovnik

Tehnoekspert d.o.o., 2014: "Plan evakuacije i spašavanja iz stare gradske jezgre grada Dubrovnika" (Evacuation and rescue plan from the Old Town of Dubrovnik); Naručitelj: Grad Dubrovnik, Dubrovnik

The UNESCO Recommendation on the Historic Urban Landscape, UNESCO World Heritage Centre, 2011, <https://whc.unesco.org/en/hul/>

TOMAS Dubrovnik 2018., Stavovi i potrošnja turista i jednodnevnih posjetitelja u Dubrovniku u 2018. Godini (Attitudes and consumption of tourists and one-day visitors in Dubrovnik in 2018), Institut za turizam, Zagreb 2018

Turistička zajednica grada Dubrovnika, Interni podaci dostavljeni za potrebe izrade Plana upravljanja (Internal data submitted for the purposes of drafting the Management Plan)

UNESCO (1972), World Heritage Convention

UNESCO (2005), Vienna Memorandum on World Heritage and Contemporary Architecture - Managing the Historic Urban Landscape

UNESCO, 2011, Recommendation on The Historic Urban Landscape

UNESCO, 2011, World Heritage Capacity Building Strategy, World Heritage Committee (WHC-11/35. COM/9B)

UNESCO World Heritage Sustainable Tourism Toolkit, <http://whc.unesco.org/sustainabletourismtoolkit/>

UNESCO, <http://whc.unesco.org/en/decisions/6715>

UNESCO, <http://whc.unesco.org/en/list/95/>

UNESCO, <http://whc.unesco.org/en/list/95/documents/>

UNESCO, http://whc.unesco.org/en/list/95/multiple=1&unique_number=103

UNESCO-ICOMOS- ICCROM 1994, Document on Authenticity, Nara

Urbanistički zavod Grada Zagreba d.o.o. (2012): "Dopuna konzervatorske dokumentacije usklađene s postojećim konzervatorskim podlogama za izmjene i dopune GUP-a Grada Dubrovnika" (Amendments to the conservation documentation harmonised with the existing conservation bases for amendments to the GUP of the City of Dubrovnik), Zagreb

Urbos d.o.o. (2020): "Izvješće o stanju u prostoru Grada Dubrovnika za razdoblje od 2014.-2018." (Report on the situation in the City of Dubrovnik for the 2014–2018 period), Split

Uredbu o ekološkoj mreži i nadležnostima javnih ustanova za upravljanje područjima ekološke mreže (Regulation on the ecological network and the competencies of public institutions for the management of ecological network areas) (OG 80/19)

Uredba o informiranju i sudjelovanju javnosti i zainteresirane javnosti u pitanjima zaštite okoliša (Regulation on public information and participation and the public interested in environmental issues) (OG 64/08)

Uredba o kakvoći mora za kupanje (Regulation on sea quality for bathing) (OG 73/08)

Uredba o komunalnom otpadu (Regulation on municipal waste) (OG 50/17)

Uredba o određivanju zona i aglomeracija prema razinama onečišćenosti zraka na teritoriju Republike Hrvatske (Regulation on the determination of zones and agglomerations according to the levels of air pollution on the territory of the Republic of Croatia)

Uredba o praćenju emisija ugljikova dioksida iz pomorskog prometa, izvješćivanju o njima i njihovoj verifikaciji, te o izmjeni Direktive 2009/16/EZ (Regulation on the monitoring, reporting and verification of carbon dioxide emissions from maritime transport and amending Directive 2009/16/EC) (EU, 2017/757)

Uredba o razinama onečišćujućih tvari u zraku (Regulation on air pollutant levels) (OG 117/12 i 84/17)

Uredba o standardu kakvoće voda (Regulation on water quality standard) (OG 73/13, 151/14, 78/15)

Vitalna statistika 2001.-2017., tablogrami, podaci po naseljima (Vital statistics 2001–2017, tablograms, data by settlements), Državni zavod za statistiku, Zagreb

Vresk. M., 1976: Ekonomska baza i funkcionalna usmjerenost gradova SR Hrvatske (Economic base and functional orientation of the cities of the FR Croatia) in: A. Cvitanović (ed.), Centralna naselja i gradovi SR Hrvatske (Central Settlements and Cities of SR Croatia), Školska knjiga, Zagreb, 77–98.

Act on Construction (OG 153/13, 20/17, 39/19, 125/19)

Zakon o obnovi spomeničke cjeline Dubrovnika i drugih nepokretnih dobara u okolici Dubrovnika (Law on the Renewal of Dubrovnik's Architectural Heritage and Other Immovable Cultural Property in the Dubrovnik Area) (OG 21/86, 33/89, 26/93, 128/99, 19/14, 32/14, 99/14)

Zakon o održivom gospodarenju otpadom (Act on Sustainable Waste Management) (OG 94/13, 73/17, 14/19, 98/19)

Zakon o pomorskom dobru i morskim lukama (Act on Maritime Property and Seaports) (OG 158/03, 100/04, 141/06, 38/09, 123/11, 56/16, 98/19)

Zakon o prostornom uređenju (Act on Physical Planning) (OG 153/13, 65/17, 114/18, 39/19, 98/19)

Zakon o sustavu strateškog planiranja i upravljanja razvojem Republike Hrvatske (Act on the System of Strategic Planning and Development Management of the Republic of Croatia) (OG 123/17)

Zakon o šumama (Act on Forests) (OG 68/18, 115/18, 98/19, 32/20, 145/20)

Zakon o vodama (Act on Water) (OG 66/19)

Zakon o zaštiti i očuvanju kulturnih dobara (Act on Protection and Preservation of Cultural Heritage) (OG 69/99, 151/03, 157/03, 100/04, 87/09, 88/10, 61/11, 25/12, 136/12, 157/13, 152/14 , 98/15, 44/17, 90/18, 32/20)

Zakon o zaštiti okoliša (Environmental Protection Act) (OG 80/13, 153/13, 78/15 i 12/18)

Zakon o zaštiti prirode (Nature Protection Act) (OG 80/13, 15/18, 14/19, 127/19)

Zakon o zaštiti zraka (Air Protection Act) (OG 127/19)

Zavod za obnovu Dubrovnika (Institute for the Restoration of Dubrovnik), <http://www.zod.hr>

Zborna crkva sv. Vlaha u Dubrovniku (St. Blaise's Church in Dubrovnik), 2017: (ed.) Katarina Horvat-Levaj, Institut za povijest umjetnosti, ArTresor naklada, Dubrovačka biskupija, Dubrovnik Zagreb

Zračna luka Dubrovnik (Dubrovnik Airport), 2019

Žile, I., 2007: Srednjovjekovna kanalizacija Grada Dubrovnika (Medieval sewerage of the City of Dubrovnik), "Starohrvatska prosvjeta", III/43, Split, 437–449.

Život u povijesnoj jezgri Dubrovnika (Life in the historic centre of Dubrovnik), Sociološko-demografska studija, Zavod za obnovu Dubrovnika, Dubrovnik, 2018

Županijska razvojna strategija Dubrovačko-neretvanske županije 2016.-2020. (County Development Strategy for the Dubrovnik-Neretva County 2016–2020), DUNEa, 2016



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