



/ Pisa World Heritage

> Management Plan for the site of Piazza del Duomo

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United Nations • Educational, Scientific and Cultural Organization •







## The Management Plan was promoted by the Municipality of Pisa.

The Plan was approved on 12 March 2021 at the Plenary Meeting of the Steering Committee, composed by the Ministry of Culture, vested by the General Secretariat – Service II – UNESCO Office; the Regional Secretariat for Tuscany; the Superintendence of Archeology, Fine Arts and Landscape for the Provinces of Pisa and Livorno; the Tuscany Region, the Province of Pisa, the Municipality of Pisa, and the Opera della Primaziale Pisana.

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Note that, following the approval by the Council of Ministers of the DECREE-LAW 1 March 2021, n. 22 "Urgent provisions regarding the reorganization of the powers of the Ministries", the Ministry of Culture (MIC) was established, replacing the previous Ministry of Cultural Heritage and Activities and Tourism (MiBACT)

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### **Premise**

he strategic planning and drafting of the Management Plan of the World Heritage Site of Piazza del Duomo in Pisa is the result of collaboration and cooperation amongst the institutions involved, in various capacities, in the protection, management and enhancement of the Site: the Ministry of Culture (through the UNESCO Office of the General Secretariat, the Regional Secretariat of Tuscany, the Superintendence of Archeology, Fine Arts and Landscape for the Provinces of Pisa and Livorno), the Tuscany Region, the Province of Pisa, the Municipality of Pisa, and the Opera della Primaziale Pisana which established, in 2014, a Steering Committee for the comparison and sharing of the objectives of conservation, use, and enhancement of the Site – registered in the World Heritage List since 1987.

In two years, an intense process of analysis, design and planning of actions and tools was carried out for the conservation and enhancement of the UNESCO-recognized *Outstanding Universal Value* of the Site. The result is a complete, clear, flexible document intended as a crucial strategic and operational reference. The document, hence, is based on the values, vision, mission, and objectives shared by all Members of the Steering Committee.

The Management Plan is apportioned into a "Five-year Intervention Strategy" established to mitigate risks associated with natural disasters and anthropogenic activity related to intensive tourism (overtourism), as well as to enhance the Site as a unitary monumental complex. The document also identifies the need to strengthen management skills, to disseminate the knowledge and values of World Heritage, and to increase the *sense of belonging* in local communities, by implementing *ad hoc* actions in cooperation with the subjects of the Steering Committee and other institutions active in the area.

The 5 Strategic Objectives of the Budapest Convention, known as the "5Cs" (Credibility, Conservation, Communication, Capacity Building and Community Engagement), constitute the key reference for the definition of the intervention program to be implemented. Furthermore, the 5Cs characterized the survey *framework* for identifying criticalities and needs of the Site, surfaced through numerous discussions with institutional subjects and analyzes conducted by the Working Group. The 17 Action Cards reflect and meet these objectives with projects developed to operationalize the strategy.



# / Introduction to the work and methodology



## 1. Introduction to the work and methodology

#### 1.1 The Convention on World Heritage Protection

The cultural and natural heritage represents the identity of all peoples of the world and constitutes an irreplaceable point of reference. Therefore, its legacy must be safeguarded and passed on from generation to generation. With the **Convention on the Protection of Cultural and Natural Heritage** 1 (World Heritage Convention or World Heritage Convention), adopted in 1972, UNESCO defined the concept of World Heritage Site (or World Heritage) and sanctioned the birth a **World Heritage Sites List** (WHL).

The Sites and cultural, natural, or mixed assets<sup>3</sup> included in the World Heritage List belong to all peoples of the world, regardless of the territory on which they are located. The concept of "Outstanding Universal Value" (OUV) recognizes the possession of certain distinctive characteristics of World Heritage Sites and assets and qualifies them as among the most important in the world<sup>4</sup>. The main body in charge of the implementation of the Convention, the

 $<sup>^{1}\,</sup>https://www.unesco.beniculturali.it/en/la-convenzione-sul-patrimonio-mondiale/.$ 

<sup>&</sup>lt;sup>2</sup> During the seventeenth General Conference of the United Nations Educational, Scientific and Cultural Organization, held in Paris from 17 October to 21 November 1972.

<sup>&</sup>lt;sup>3</sup> Mixed heritage (cultural and natural) corresponds, in part or in whole, to both definitions of cultural and natural heritage

<sup>&</sup>lt;sup>4</sup> "Outstanding Universal Value means cultural and/or natural significance which is so exceptional as to transcend national boundaries and to be of common importance for present and future generations of all humanity. As such, the permanent protection of this heritage is of the highest importance to the international community as a whole. The Committee defines the criteria for the inscription of properties on the World Heritage List." Source: *Operational Guidelines for the Implementation of the World Heritage Convention*, Paragraph 49.

World Heritage Committee, has developed **precise criteria** for inclusion in the World Heritage List, which are outlined in the "Operational guidelines for the implementation of the World Heritage Convention" (hereinafter also referred to as Guidelines or OG <sup>6</sup>).

The 1972 Convention is a legally binding instrument for Signatory States. While fully respecting the sovereignty of the States where the properties and Sites included in the World Heritage List are located, the Convention establishes the duties of the Signatory States which, through ratification, recognize the existence of a collective interest on the part of the international community and, hence, become part of an international cooperation mechanism for the protection and conservation of such heritage<sup>7</sup>. The Convention, therefore, confers on the States the role of protecting and enhancing their cultural and natural heritage, through the implementation of special measures and program tools for territorial planning, the enabling of the development of qualified personnel, specialized services for the Sites, technical-scientific research programs, and through the conservation and provision of other actions that result in the heritage playing an important function in their communities.

#### 1.2 The Management Plan

With the implementation of the 1972 Convention, the UNESCO World Heritage Center<sup>8</sup> has, to date, included in the World Heritage List a total of 1.121 Sites (869 cultural, 213 natural and 39 mixed Sites) in 167 countries around the world <sup>9</sup>. Over time, the List has included increasingly

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<sup>&</sup>lt;sup>5</sup> The Guidelines contain all the precise criteria for the inclusion of Sites and assets in the World Heritage List and for international assistance within the scope of the provisions of the World Heritage Fund. The Guidelines were first drafted in 1977 (five years after the implementation of the Convention) by the World Heritage Committee, the main body in charge of the implementation of the Convention, which periodically updates these Guidelines in order to update concepts, knowledge and experience. All editions are available at the following link: http://whc.unesco.org/en/guidelines/. The Guidelines contain all the precise criteria for the inclusion of sites and assets in the World Heritage List and for international assistance within the scope of the provisions of the World Heritage Fund.

<sup>&</sup>lt;sup>6</sup> Acronym of the English definition of the Operational Guidelines for the Implementation of the World Heritage Convention.

<sup>&</sup>lt;sup>7</sup> As in Art. 4 of the Convention, the participating States undertake the obligation to ensure the identification, protection, conservation, enhancement and transmission, to future generations, of the cultural and natural heritage located in their territory..

<sup>&</sup>lt;sup>8</sup> Established in 1992, the World Heritage Center is UNESCO's internal operational reference for all matters relating to World Heritage. The Center organizes the annual sessions of the World Heritage Committee and its Office, advises member States in preparing Site nominations, organizes and manages requests for international assistance from the World Heritage Fund, coordinates both reporting on the state of the Sites and the emergency for actions, updates the World Heritage List and the database, organizes training activities both technical and aimed at disseminating World Heritage issues (firstly, on the need for collective responsibility for the protection of *Outstanding Universal Value* of the Sites registered in the World Heritage List).

<sup>&</sup>lt;sup>9</sup> Source: http://www.unesco.it/it/ItaliaNellUnesco/Detail/188.

#### 1. Introduction to the work

more complex types of assets, with the consequent need to define management structures characterized, in turn, by a greater level of complexity. The **concept of "heritage asset management"** emerged later with respect to the adoption of the Convention. With reference to the safeguarding of the distinctive characteristics of the World Heritage, the guidelines provide that each Site or property registered in the WHL is equipped with "an adequate protection and management system that guarantees its safeguard" <sup>10</sup>. The guidelines also state that the purpose of a management system is "to ensure the effective protection of the designated asset for present and future generations" and that "an effective management system depends on the type, characteristics and specific needs of the designated assets and their cultural and environmental context" <sup>11</sup>. In addition, the **Budapest Declaration** <sup>12</sup>, adopted by the World Heritage Committee in 2002 (26<sup>th</sup> Session) to emphasize the importance of adequate management of the World Heritage, invites Member States to:

- Promote **effective conservation** by pursuing the fundamental **Strategic Objectives**.
- Ensure the right balance between **conservation**, **sustainability**, **and development**, so that the World Heritage can contribute to the social and economic development, and to the quality of life of communities.
- Promote communication, education, research, training, and public awareness strategies.
- Seek the **active involvement of local communities** at all levels in the identification, protection, and management of the assets and World Heritage Sites.

Therefore, an explicit request emerged from the World Heritage Center that any Site or property registered in the World Heritage List (or is applying for registration) is equipped with a **Management Plan**, to guide the strategy and actions of all those involved in the conservation, protection, and Site's enhancement actions<sup>13</sup>.

The Management Plan is intended as a flexible tool, capable of ensuring that the elements qualifying the *Outstanding Universal Value* of the Sites and assets are preserved and enhanced over time and that it maintains their integrity and authenticity. To this end, a good Plan must be fit to identify, and anticipate, problems and critical factors that may hinder the pursuit of the objectives and must include adequate solutions to counter them. The Management Plan is,

<sup>10</sup> Source: Operational Guidelines for the Implementation of the World Heritage Convention, Paragraph 78.

<sup>&</sup>lt;sup>11</sup> Ibidem, Paragraphs 109 and 110.

<sup>&</sup>lt;sup>12</sup> 26<sup>th</sup> session of the World Heritage Committee. Budapest, Hungary, 24-29 June 2002 (CONF 202). *Decision*: CONF 202 9 *Budapest Declaration on World Heritage*. https://whc.unesco.org/en/decisions/1217/.

<sup>&</sup>lt;sup>13</sup> Cfr. Decaro S., Preface to the manual *Gestire il Patrimonio Mondiale culturale*, ICCROM, Associazione Beni Italiani Patrimonio Mondiale, 2019 (Italian version).

therefore, configured as a **strategic and operational tool** capable of developing and guiding processes, actions and interventions aimed, first, at **preserving the** *Outstanding Universal Value* and the characteristics of its goals over time. Furthermore, the Plan should aspire to encourage the implementation of enhancement projects, coordinated and shared with an eye to long-term **sustainability** and must be capable of responding to the expectations and needs of the various stakeholders of the Site. Specifically, the participation of the **local community** plays an important role in the Plan, with the aim of creating an information system and a climate of collaboration capable of actively involving it in the protection.

The following Section illustrates, in the light of the above, the methodology adopted for the preparation of the Management Plan for Piazza del Duomo in Pisa.

#### 1.3 Methodology

The work carried out was set up with the aim of reaching a complete, clear, flexible Management Plan, with the aim of being the fundamental strategic and operational reference for the conservation, management, and enhancement of Piazza del Duomo in Pisa. The Plan represents the set of values, vision, mission, and objectives, shared by all those involved in the protection and management of the Site.

The **scope of the Plan** is represented by the area registered in the WHL, or *core area* (as explained in Section 2.2.2 of this document). However, some components of the Plan, whether they relate to the analysis or the actual design, cannot ignore considerations about a larger area, typically coinciding with its "buffer zone" of the Site (Section 2.2.2).

The structure of the document articulates the three macro-phases that led to the development of the Plan: **analysis**, **design and planning** of actions and tools for its implementation.

- 1. The **analysis** aims at a shared overall understanding of the Site, of its distinctive characteristics relative to its *Outstanding Universal Value*, of dynamics and pressure factors that support or threaten the conservation of the Site, and other favorable or critical aspects related to its management. In particular, the Plan focuses on the analysis of the criticalities that emerged from the official documents produced by the World Heritage Center, as well as on what emerged from *ad environmental* surveys conducted in preparation for the subsequent design phase.
- 2. The **planning phase** concerns the definition of the strategy and to structuring feasible and targeted actions for the pursuit of the Plan's mission. Specifically, the Action Plan outlines operational strategies and projects to be implemented in the medium term.

#### 1. Introduction to the work

3. **Implementation** relates to the creation of tools and operating methods that support the success of the provisions of the Plan, such as governance and management coordination mechanisms as well as tools for monitoring projects and actions.



Figure 1 - Phases of the work of elaboration of the Management Plan.

The **5 Strategic Objectives of the Convention**, known as the "5Cs", which guided the World Heritage Center in drafting the Operational Guidelines since the 2002 Budapest Declaration, constitute the **areas of intervention** of the Plan. The three phases of **analysis**, **design and planning** are listed, according to these Strategic Objectives, below:

- → *Credibility:* Strengthen the **credibility** of the World Heritage List, as a representative and geographically balanced testimony of cultural and environmental assets of *Outstanding Universal Value*.
- → *Conservation:* Ensuring effective **protection and conservation** of the World Heritage over time
- → *Capacity building:* Promote the development of effective measures for the understanding and implementation of the World Heritage Convention and related enabling tools by carrying out training activities for different categories of stakeholders.
- → *Communication:* Raise public awareness, activate methods for their involvement and support for the protection of the World Heritage through the effective communication of the value it holds.
- → *Community*: Strengthen the role of **communities** in the implementation of the World Heritage Convention <sup>14</sup>.

<sup>&</sup>lt;sup>14</sup> The fifth Strategic Objective -- Community engagement - was added in 2007.

The Management Plan was drawn up with **distinctive objectives**, aimed at achieving an effective strategic document and determining its structure and contents, as illustrated in the following figure.

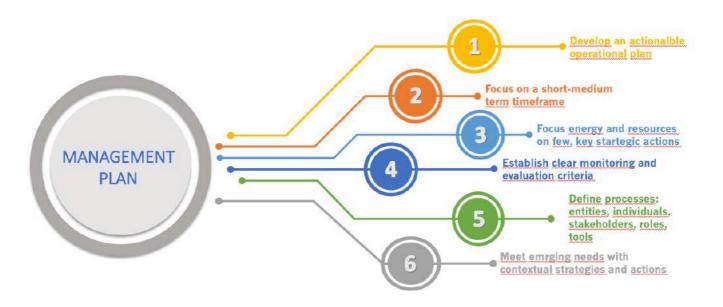
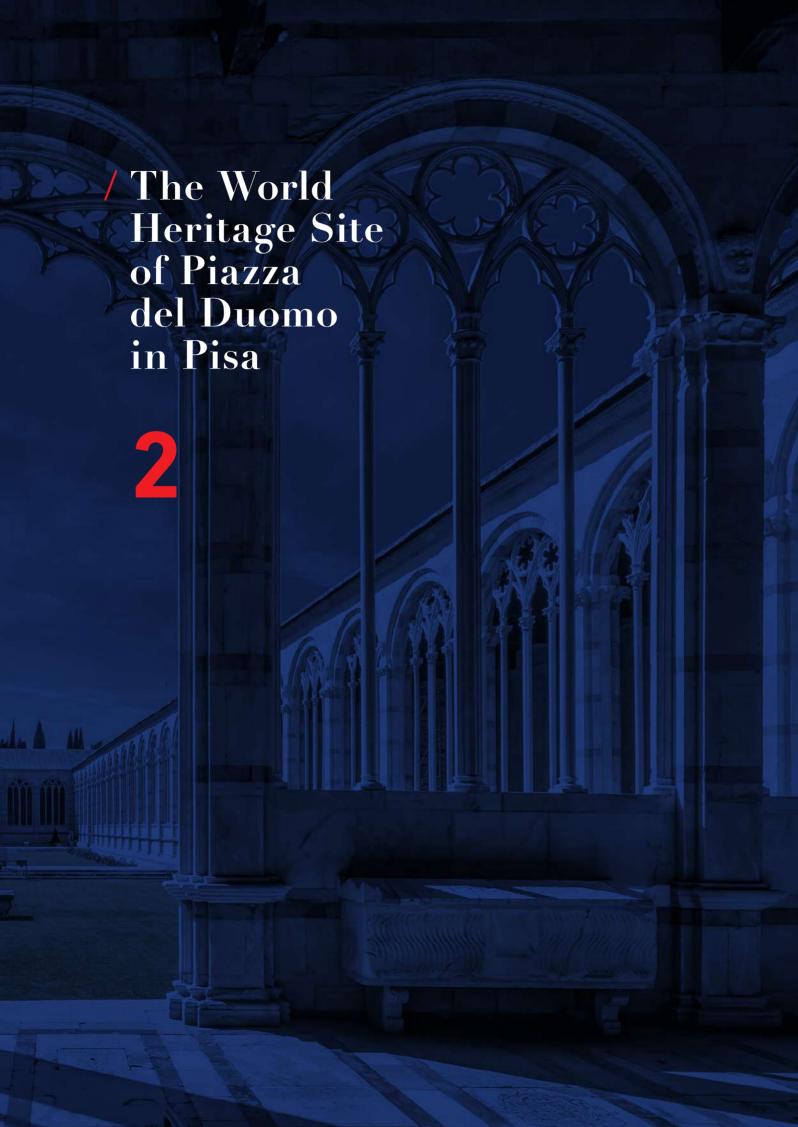


Figure 2 – Distinctive objectives of the Management Plan.





## 2. The World Heritage Site of Piazza del Duomo in Pisa



"In a restricted area bounded by the ancient City walls, the historic Ospedale della Misericordia and the Palazzo dell'Arcivescovado, the Piazza del Duomo, or Campo dei Miracoli 15, in Pisa, contains one of the most famous and surprising urban landscapes in the world.

The unique, fundamental Christian religious architectural works (Church, Cathedral, Baptistery, Bell Tower, Cemetery) were built between the 11th and 14th centuries in close proximity to each other, forming a unique set of monuments.

A magical quality pervades the Site, emanating from the glittering interplay of marble and mosaics, from the unusual union of bare walls and arched galleries, triangular pediments and large domes, which whole effect, definitely accentuated by the breathtaking inclination of the Bell Tower, the famous Pendant Tower of Pisa".

**Evaluation of the Advisory Body (ICOMOS)** for the registration of the Piazza Duomo in Pisa Site, 1987<sup>16</sup>.

<sup>&</sup>lt;sup>15</sup>The popular term Campo (or Piazza) dei Miracoli derives from the term miracles, which the poet Gabriele d'Annunzio used to define the four most important monuments contained therein (Cathedral, Baptistery, Camposanto and Campanile), by virtue of their characteristics of beauty, originality, and social and religious function within the City community, in the famous novel "Forse che sì, forse che no" (1910).

<sup>&</sup>lt;sup>16</sup> Advisory Board Evaluation (ICOMOS), 1987. Source: https://whc.unesco.org/en/list/395/documents/.

#### 2.1 Statement of Outstanding Universal Value

#### 2.1.1 Short description of the Site

The **Declaration** of *Outstanding Universal Value* contains the reasons that led to the inclusion of Piazza del Duomo in Pisa in the World Heritage List. The document consists of a brief description of the Site (*Brief synthesis*); the methods by which it meets the selection criteria adopted; a declaration of integrity (*Integrity*) and authenticity (*Authenticity*); the management methodology for the protection of the assets (*Protection and management requirements*); and it constitutes the reference point for the development of the Management Plan. Through the content of the Declaration, in fact, the Plan defines the significant value of the World Heritage Site, setting the context for understanding its important qualities in order to determine the actions necessary to protect and manage it.

The UNESCO World Heritage Center conferred the title of World Heritage Site of Piazza del Duomo in 1987, on the occasion of the eleventh Conference of the World Heritage Committee<sup>17</sup>.

The complex **contains a series of medieval architectural works, including four world-famous masterpieces**: the Cathedral, the Baptistery, the Bell Tower, and the Campo Santo.

- → The Cathedral, dedicated to Santa Maria Assunta, or **Duomo**, represents an innovative Church model for the times, which influenced the architectural works in other Tuscan cities, such as Lucca and Pistoia and also in the territories that were historically under the dominion of Maritime Republic of Pisa, such as Sardinia and Corsica. During the construction of the main building, were inserted, on the side's walls, reused materials from Roman monuments to underline the greatness of Pisa as "another Rome" <sup>18</sup>.
- → The Baptistery is an imposing structure, surrounded, like the Cathedral, by arches on columns. It has a roof system consisting of a double dome, an internal truncated cone, and an external hemispherical cap, which gives the environment exceptional acoustics which make it a real "musical instrument".
- → The Campanile, or Bell Tower, with its seven huge bells and splendid architecture, is the Bell Tower of the Cathedral of Santa Maria Assunta, the symbol of Pisa and one of the most iconic symbols of Italy. It tilted shortly after its construction and became what, even today, is known throughout the world as the Leaning Tower of Pisa, tilted 3.9° with

<sup>&</sup>lt;sup>17</sup> CONF 005 VII.A.

<sup>&</sup>lt;sup>18</sup> Source: Italian National Commission for UNESCO. http://www.unesco.it/it/PatrimonioMondiale/Detail/105.

respect to its vertical axis. The structure consists of two concentric cylinders connected by an internal spiral staircase that ends at the access to the upper cell. Indeed, the prevailing features of the monument are the curved lines that develop in the blind arches and in the six floors of loggias present on the external cylinder and divided by columns on which round arches rest.

→ The Camposanto (or Camposanto Monumentale) is one of the oldest Christian buildings destined for the cult of the dead during the Middle Ages. During the fourteenth century, the interior walls came alive with wonderful frescoes, centered on the themes of Life and Death, which started a new phase of pictorial art: among which "The Triumph of Death" 19.

**The Square** is also remembered for having been the scene of the first experiments of the intuitions of the Pisan scientist Galileo Galilei in the first decades of the seventeenth century.

#### 2.1.2 Criteria for declaring the Piazza del Duomo of Pisa a World Heritage Site

In December 1987, the Piazza del Duomo in Pisa became part of the World Heritage List (WHL). It is the sixth Italian cultural Site included in the list in chronological order and meets, according to the UNESCO World Heritage Center, to the following criteria<sup>20</sup>, which contribute to determining its *Outstanding Universal Value*:

- → (i) Artistically unique because of its spatial design, the Piazza del Duomo contains four absolute architectural masterpieces: the cathedral, the baptistery, the bell tower and the Campo Santo. Within these monuments are such world-renowned art treasures as the bronze doors and mosaics of the cathedral, the pulpits in the baptistery and cathedral, the frescoes of the Campo Santo, and many others.
- → (ii) The monuments of the Piazza del Duomo considerably influenced the development of architecture and monumental arts at two different times in history. First, from the 11th century up to 1284, during the epitome of Pisa's prosperity, a new type of church characterized by the refinement of polychrome architecture and the use of loggias was established. The Pisan style that first appeared with the Cathedral can be found elsewhere in Tuscany (notably at Lucca and Pistoia), but also within the Pisan maritime territory, as shown in more humble form by the "pieve" in Sardegna and Corsica. Later, during the 14th century, architecture in Tuscany was dominated

<sup>&</sup>lt;sup>19</sup> Attributed to Buonamico Buffalmacco, 1336-41.

<sup>&</sup>lt;sup>20</sup> Inscriptions on the World Heritage List, CONF 005 VII A – Piazza del Duomo, Pisa. Source: <a href="http://whc.unesco.org/en/list/395">http://whc.unesco.org/en/list/395</a>.

by the monumental style of Giovanni Pisano (who sculpted the pulpit of the Cathedral between 1302 and 1311), a new era of pictorial art - the Trecento - was ushered in after the epidemic of the Black Death (Triumph of Death, a fresco by Bonamico Buffalmacco at the Campo Santo, c. 1350).

- → *(iv)* The group of monuments of the Piazza del Duomo, composed of typical religious buildings constructed for distinct and specific functions, constitutes an outstanding example of medieval Christian architecture.
- → (vi) It was at the Cathedral of Pisa that Galileo Galilei (1564-1642), observing the oscillations of the bronze chandelier created by Battista Lorenzi, discovered at the age of 19 the theory of isochronism of small oscillations, a prelude to his pioneering work on dynamics. From the top of the campanile, he conducted experiments, which led him to formulate the laws governing falling bodies. Two of the principal buildings of the Piazza dei Miracoli are thus directly and tangibly associated with a decisive stage in the history of physical sciences.

"Standing in a large green expanse, Piazza del Duomo houses a group of monuments known the world over. These four masterpieces of medieval architecture – the cathedral, the baptistry, the campanile (the 'Bell Tower', also known as the 'Leaning Tower') and the cemetery – had a great influence on monumental art in Italy from the 11th to the 14th century."

UNESCO WORLD HERITAGE CENTRE, 2007 21.

The UNESCO World Heritage Center, therefore, recognizes the Pisan Site as an architectural *unicum* that has inspired, over the centuries, the works carried out in the City and in Tuscany. The monuments in Piazza del Duomo influenced the **development of much of the sacred architecture** later on, especially in the use, for decorative purposes, of **polychrome marbles** and **loggias**. In the City, there is the Church of Santa Maria della Spina, the Church di San Michele in Borgo, the Church di San Pietro in Vinculis, and the Church di San Paolo all'Orto; while the parish Churches in Sardinia and Corsica, for example, bear witness to the great territorial resonance of Pisa, starting from year 1000, as a maritime republic.

 $<sup>^{21}</sup> Source: \underline{http://whc.unesco.org/en/list/criteria\ restrication} = \underline{\&media} = \underline{1\&description} = \underline{1\&order} = \underline{synergy\ protection}$ 

The **architectural and decorative components** of the monuments that embellish Piazza del Duomo are the result of numerous **local workers**. Here are found fragments taken from the theories of the Arezzo's art historian Mario Salmi<sup>22</sup>, a professor at the University of Pisa, who devoted great effort to the study of Tuscan Romanesque:

"The architecture known as Pisan Romanesque, which for about three centuries had undisputed dominion over a large area of Tuscany, Sardinia and Corsica, proposed – as it is known – decorative purposes outside the Churches"<sup>23</sup>.

Furthermore, the importance of the Site lies in its **extraordinary architectural innovation**, widely debated over the times. The Cathedral, in fact, built starting in 1063 and inaugurated in 1118, richly decorated and with an ornamental style with blind arches, was designed by the architect **Buscheto**, who was succeeded by **Rainaldo**, who strictly respected the style of his predecessor. For the construction of the religious building, the two masters employed **all the most modern technical-scientific knowledge** of the time, rendering the complex a universally recognizable and appreciated masterpiece, for its repetitive logic of the architectural elements (first the loggia) and decorative elements (such as the distinctive use of polychrome marbles).

The main body of the building was designed and built with a Latin cross structure with five



naves, according to the layout wanted by Buscheto and then further elaborated by Rainaldo. The latter also created the external facade by importing stylistic elements of **oriental influence**, whose use in Pisan architecture was favored by the **trade exchanges** that the Maritime Republic conducted with the rest of the world. Even the **choice of the location** of the Cathedral, located in the north-west corner of the river Arno, was clearly strategic. In fact, its location on the edge of the outskirts of the medieval City, represented the very expansion of the urban fabric – the "new center of the City"<sup>24</sup>.

The entire monumental complex of Piazza del Duomo, while inspired by heterogeneous styles of a both local and international matrix, shows a heterogeneity of execution that establishes as a virtuous example of architecture, innovative and unique in its kind. Salmi, among many, confirms this writing:

<sup>&</sup>lt;sup>22</sup> 1889-1980.

<sup>&</sup>lt;sup>23</sup> Salmi, 1927.

<sup>&</sup>lt;sup>24</sup> Benevolo L., *Le città nella storia d'Europa*, Ed. Laterza, 2007.

"The complex, due to its different values of time and style, finds its clearly unified form, with a beauty that seems to date back to ancient times but is also something new [...]. The diffuse luminism in the upper part of the middle ship expresses an open joy far from the medieval nightmares of the north; it reflects the character of that lively mercantile society which resulted in the power of Pisa" 25.

Finally, it is not surprising that Piazza del Duomo in Pisa is an identity symbol of considerable importance for Italy: the Leaning Tower. Perhaps the most famous tower in the world, the leaning tower is undoubtedly an emblem of Italian art abroad. Built between 1173 and 1350, based on a project by a still unknown architect, the Bell Tower represents an extraordinary architectural feat, famous for its slope due to the clayey soil on which it was built.

The following Sections present an in-depth examination of the history of the cited monuments, and show that, even today, the overall image of the historic City is strongly influenced by the architectural and artistic language introduced with the construction of the monumental complex.

#### 2.1.3 The characteristics of integrity, authenticity, protection, and management of the Site

In addition to compliance with one or more selection criteria, there are other necessary conditions for the heritage (or Site) to be recognized as having *Outstanding Universal Value*: the fulfillment of the conditions of integrity and authenticity and the implementation of an adequate protection and management system to ensure its protection.

#### Integrity.

The Piazza del Duomo, as seen today, is a **monumental complex** inscribed within a **public space** and represents the result of a **long and articulated artistic and architectural project** started in 1063, with the establishment of the new Cathedral, and which ended in the fourteenth century with the completion of the entire square. The Site, registered in the WHL, includes 8.87 hectares, surrounded by a buffer area of 254 hectares, serving to protect and preserve the assets, as well as their *Outstanding Universal Value* that guaranteed its world heritage status in 1987. The **interventions** carried out over the centuries, after the completion of the square, have **retained the integrity of the structures** and **the spatial relationship between the monuments**.



<sup>&</sup>lt;sup>25</sup> Ibidem.

The link between the monuments and their historical context has also been protected and is still visible today. Likewise, the expansion of the Site ensured that the three main visual axes were adequately respected. The creation of the buffer zone also provided an additional level of protection for the Site's attributes – although the need for additional of protection was identified in the area located to the north and west of the Site.

#### Authenticity.

The monumental complex of Piazza del Duomo in Pisa has preserved over time the historical-artistic characteristics and attributes that convey its *Outstanding Universal Value*. After the construction of the monumental buildings and the square, the numerous architectural and urban interventions that have taken place have strengthened the relationship between the Square itself and the City, respecting the values and significance of the buildings of the monumental complex. In more recent times, all the restoration works have been carried out by qualified personnel, according to international and national standards. The authenticity of the Site, in particular in terms of conformity, location, architectural techniques and historical-artistic value has, therefore, been preserved over time<sup>26</sup>.

#### Protection and management.

#### Reference regulatory framework

Laws 1084/39 and 1497/39, concerning the protection of the historical, architectural and landscape heritage, constitute the first organic and complete drafts of legislation enacted for the purpose of preserving the assets and the landscape in their physical and cultural integrity and address the neglect, damage, and transformation to which they are subject.

The **Italian Constitution** then introduced the reference fundamental principles found in contemporary legislation. Art. 9 of the Constitution states: "The Republic promotes development and scientific and technical research. It protects the landscape and the historical and artistic heritage of the nation"<sup>27</sup>. According to the powers of the Constitution <sup>28</sup>, the State has issued exclusive legislation on the protection of the environment, ecosystem, and cultural heritage.

<sup>&</sup>lt;sup>26</sup> Ibidem.

<sup>&</sup>lt;sup>27</sup> Costituzione della Repubblica Italiana, Art. 9.

<sup>&</sup>lt;sup>28</sup> Cfr. Costituzione della Repubblica Italiana, Art. 117, lettera s).

In implementing Art. 9 of the Constitution, the protection and enhancement of cultural heritage converge in Legislative Decree 42/2004 "Code of Cultural Heritage and Landscape". Part Two of the Code defines the requirements for Cultural Heritage: "[...] immovable and movable things belonging to the State, Regions, other territorial public bodies, as well as to any other public body and institution and to private legal persons without end for profit, including civilly recognized ecclesiastical bodies, which have artistic, historical, archaeological or ethno-anthropological interest" 29.



The Third Part protects landscape assets and specifies that: "[...] By landscape we mean the expressive territory of identity, the character of which derives from the action of natural and human factors and their interdependencies"<sup>30</sup>.

With regard to the protection of the World Heritage Site, the rules of engagement, pursuant to Art. 143 of the Code, is included in the **Territorial Address Plan** (PIT), **giving value to the Landscape Plan of the Tuscany Region** (PPR, **approved with DCR n.37 of 27/03/2015**), in which the survey and the perimeter of the areas subject to protection measures are transcribed. The Plan was drawn up in collaboration with the Ministry of Cultural Heritage and Activities and Tourism, both in relation to the statutory part and that concerning landscape assets.

**The inclusion** of the assets in the Piazza del Duomo in the UNESCO World Heritage List (Paris, 7-11 December 1987), is also a key regulatory reference for the protection of the *core area*. The ITP identifies, in fact, additional contexts subject to protection, pursuant to Art. 134, Paragraph 1, letter e) of the Code ("identification of any further contexts, other than those indicated in Article 134, to be subjected to specific safeguard and use measures"), in reference to the **Sites included in the World Heritage List Universal UNESCO** present in the Region. Furthermore, Art. 145 c. 3 of the Code states that "The provisions for the landscape plans referred to in Art. 143 and 156 cannot be waived by national or regional economic development plans, programs and projects, are mandatory for urban planning instruments of Municipalities, metropolitan cities and provinces, and prevail over any non-conforming provisions contained in urban planning instruments; establish applicable safeguard rules pending the adaptation of urban planning instruments and are also binding for sectoral interventions. Regarding the protection of the landscape, the provisions of the landscape plans prevail over the provisions contained in the planning acts with territorial impact envisaged by sector

 $<sup>^{29}</sup>$  D.lgs. 42/2004 "Codice dei Beni culturali e del Paesaggio", Art. 10 comma 1.

 $<sup>^{30}\,\</sup>text{D.lgs.}\,42/2004\,\text{``Codice}$  dei Beni Culturali e del Paesaggio'', Art. 131 comma 1.

regulations, including those of managing bodies of protected natural areas". Paragraph 4, on the other hand, reports: "Municipalities, metropolitan cities, provinces and managing bodies of protected natural areas must conform or adapt urban and territorial planning tools and the forecasts of landscape plans, to the procedures provided for by Regional Law, within the terms established by the plans and in any case no later than two years from their approval. The ownership limits deriving from these provisions are not subject to indemnity".

These provisions of the Code are incorporated in the ITP in Chapter VII, which regulates, in Art. 15, contexts such as UNESCO World Heritage Sites, and provides specific directives and prescriptions that must be implemented with planning tools, territorial the governance mandate, and by sector plans by all the territorial bodies and public bodies responsible for planning<sup>31</sup>.

- "2. The tools of territorial planning, the acts of territorial governance, sector plans, management plans and interventions must pursue the following objectives in the UNESCO Sites:
- a) Enhance and maintain the landscapes and cultural heritage of the Sites included in the UNESCO World Heritage List (WHL), through management policies that constitute an example of excellence with respect to the values recognized in a sustainable development perspective, safeguarding them aesthetic-perceptive, historical, cultural and landscape identity.
- b) Safeguard the settlement heritage of historical-cultural, testimonial and identity value and characters.
- c) Ensure the recognition, knowledge and permanence of local identities that reinforce the authenticity and identity value of the Sites
- 3. The territorial bodies and public entities, in the planning tools, in the acts of the territorial government and in sector plans, each for their own competence, shall define safeguarding and use measures for the UNESCO Sites aimed at:
- a) Identify, recognize, protect and enhance the assets of Outstanding Universal Value represented by the set of material and intangible elements that make up the cultural and natural heritage included within the Sites and the identity image, as well as the collective memory of the territory.
- b) Identify "the territorial environment" understood as a space connected morphologically, functionally, historically and perceptively to the settlement heritage of historical-cultural, identity and testimonial value of the Sites, consisting of centers, villages, nuclei and historical fabrics and architectural emergencies, also through the definition of a cartographic perimeter.
- c) Identify the cones and visual targets (seabed, panoramas, skylines) that open towards the assets, with particular reference to those that open from the panoramic routes (road and rail sections), and from the lookout points accessible to the public.
- d) Protect and enhance the constitutive characteristics of the settlement heritage of historical-cultural, identity and testimonial value and promote actions aimed at its maintenance, recovery and enhancement:
  - 1. Safeguarding the peculiar morphological, architectural, and chromatic characteristics belonging to the building customary of the places and the consolidated relationships between buildings and open spaces / parks / gardens of historical relevance.
  - 2. Ensuring the maintenance of the free and green areas that qualify the settlement and close fabric relationship with the same, located at the margins of the historic building or included in the historic building fabric, preserving their traditional characteristics and consistency.
  - 3. Guaranteeing the conservation and qualification of historical urban margins.
  - 4. Excluding interventions that may compromise the morphological and aesthetic-perceptive quality of the historical aggregate.

<sup>&</sup>lt;sup>31</sup> As from Art 15:

- e) Ensure continuity of use of the nuclei, centers, urban fabrics and historical gardens of architectural emergencies, in order to keep them "vital" in the contexts to which they belong, ensuring compatibility between intended use and conservation of cultural and landscape values.
- f) Safeguard the functional and perceptive relationships between the settlement heritage of historical-cultural value and the "surrounding area":
  - 1. Maintaining the legibility of the settlement structure (with particular reference to that of the ridge).
  - 2. Enhancing the historically consolidated connections with particular reference to the maintenance of the network of paths and trails.
  - 3. Avoiding new expansions and the installation of systems that alter the morphological and perceptive integrity of historic centers and nuclei, as well as the panoramic views that look at the settlements and mutual relationships intervisibility.
- g) Protect and enhance the elements characterizing the rural landscape of testimonial, cultural and identity value in its environmental and anthropic components, also by promoting better sustainability of the economic activities connected to it:
  - 1. Preserving the testimonial elements of the rural landscape of historical interest.
  - 2. Maintaining efficient ecological infrastructure consisting of linear plant elements (hedges, riparian vegetation) and punctual (small forest nuclei, large camporili trees, ponds, and wells).
  - 3. Safeguarding the existence of the minor road network and the hydraulic-agricultural arrangements.
  - 4. Favoring in the transformations arising from the economic and social needs of agriculture the maintenance of traditional agricultural structures, crop diversification, the legibility of the relationships between historically consolidated uses and agricultural plots and recovering the symbolic meanings of the representative elements of the historical agricultural landscape.
  - 5. Preserving the morphological, perceptive and, where possible, functional relationships between rural buildings and the agricultural landscape.
  - 6. Containing the processes of de-naturalization of historic buildings also through incentive policies.
  - 7. Stemming the processes of abandonment and renaturalization of the cultural mosaic.
  - 8. Limiting the negative effects of the fragmentation of agroecosystems.
- h) Identify areas of landscape impairment and visual disturbance elements and promote redevelopment interventions, also by encouraging the relocation of artefacts, structures and plants that are not compatible with the conservation of the Sites.
- i) Promote projects and enhancement actions aimed at the revitalization of the Sites and the reproduction / development of the historical-cultural heritage also in consideration of the dynamics in place at a landscape scale.
- j) Promote forms of sustainable tourist use by safeguarding historical, landscape, cultural values and local traditions, favoring the development of a tourism system that reconnects the Site to the surrounding area, also through the creation, recovery and / or requalification of resources multimodal connections, characterized by sustainable modes of travel (such as disused railways).
- k) Promote the creation of works for the accessibility of urban spaces and structures pursuant to the Presidential Decree 503/96, of DM 236/89, of LR 47/91, of L 104/92, of LR 47/91, of LR 65/2014, and of the relative regulation all places of culture, cultural and landscape heritage, the roads relating to them with interventions strictly in line with the "guidelines for overcoming architectural barriers in restricted buildings" issued by MIBAC in 2008.
- I) Exclude the opening of new mining sites and the expansion of existing ones in areas where cultivation activities and those connected to them can compromise the conservation and perception of the Sites.
- m) Promote landscape recovery of disused quarries, also through integrated projects for the reuse of the same for other functions, with landscape and cultural value.
- n) Plan the location of alternative energy production plants avoiding visual interference with the Sites.
- o) Ensure the continuity of cultural identity connected to the permanence of civil functions and cultural processes and encourage the maintenance of a balance between the different uses consolidated in the settlement system.

The **Territorial Coordination Plan** of the Province of Pisa, drawn up in accordance with the PIT/PPR of the Region, constitutes another protection tool, as it lists actions aimed at guaranteeing the sustainable development of activities and functions with respect to territorial transformations. In particular, for the entire provincial territory, it provides that:

- With reference to interventions bordering on special buildings of cultural value, it prescribes
  for municipal planning the definition of suitable area bands and any other appropriate
  provisions aimed at preserving the quality of the buildings' unit, complexes, other structures, or
  neighborhoods, and their specific morphological characteristics in relation with the
  surrounding territory.
- 2. Due to the presence of complex space and units constituting the adjacent historic urban nucleus, a set of actions must be assigned to avoid an urban load such as to upset and/or modify the layout of the historic urban nucleus itself.
- 3. Due to the presence of focal building elements, it prohibits alterations that compromise their formal and visual characteristics, safeguarding their appreciation and visibility. Municipalities are further instructed to define appropriate rules in order to preserve, improve and maintain the integrity of the views to be safeguarded.
- 4. The classification of special buildings of historical interest, includes military architecture, and between these the walls, it prescribes: where the territorial elements referred to in Paragraph a) are configured as building units, complexes, other buildings, or neighborhoods, municipal planning must defines, around these, suitable area bands, and take any other appropriate provision aimed at preserving their aforementioned quality as well as the specific morphological characteristics in their relations with the surrounding territory.

#### Provisions for the protection of the World Heritage Site

The particularity and value of the Site require a complex protection system operating on the *core area*, this system is divided into four different types of measures:

p) Give privilege to, and encourage, the maintenance of public and / or functions of public interest in urban space,s also to avoid the removal of local communities from places of collective use.

a) To promote knowledge of the cultural and landscape heritage of the Sites through:

<sup>1.</sup> Training of the population at different levels of education and of the different workers aimed at teaching and updating intervention techniques on the heritage, also through "school visits" and educational workshops to be set up on Site.

<sup>2.</sup> Dissemination activities aimed at local communities and with participatory initiatives aimed at enhancing the intangible cultural heritage.

<sup>3.</sup> Cataloging and computer accessibility of the assets included in the Sites".

- Direct protection measures on architectural, historical, and artistic assets.
- Direct protection measures on archaeological assets.
- Indirect protection measures.
- Landscape protection measures.

#### <u>Direct protection measures on architectural, historical, and artistic assets</u>

Regarding direct protection measures (regulated by Part II of the Code of Cultural Heritage pursuant to Art.13: *Declaration of cultural interest*), the following is a list of the constraints of the Piazza del Duomo *core area* (Protocol of Understanding 2014).

- Piazza del Duomo, Piazza Arcivescovado and Via Cardinale Maffi (Pl 164, Ministerial Decree 15/03/1994, public areas. Also known as Vincolo Ronchey pursuant to Art. 21 L. 1089/39).
- Monumental Complex consisting of the Duomo, Baptistery, Camposanto and Bell Tower (PI 164 A, motivation letter dated 16/07/1984 pursuant to Art.4 of Law 1089/39).
- **Prato del Duomo** (PI 164 B, Ministerial Decree 15/03/1994, motivation letter dated 29/03/1991 pursuant to Art. 4 of Law 1089/39).
- Building located in Via Roma n. 84 corner of Piazza del Duomo (PI 164 C, motivation letter dated 16/07/1984 pursuant to Art. 4 of Law 1089/39).
- Piazza del Duomo, Via dell'Arcivescovado, Piazza dell'Arcivescovado, Via Corta, Via Cardinale Maffi (Pl 164 D, motivation letter dated 09/04/1991 pursuant to Art. 4 of Law 1089/39).
- Tourist Services Center headquarters building (PI 164 E, motivation letter dated 16/07/84).
- Palazzo dell'Opera (PI 164 F, motivation letter dated 11/04/84).
- Land adjacent to the Walls (PI 281, decree dated 13/02/92 pursuant to Art. 2-3 L. 1089/39).
- **Medical Services (Santa Chiara Hospital)** (PI 753, decree no. 73/2006 dated 16/02/2006 following the cultural verification procedure).
- **Department of Dentistry** (Santa Chiara Hospital) (PI 755, decree no. 75/2006 dated 16/02/2006 following the cultural verification procedure).
- New Hospital, Corte degli Spedalinghi, Sinopie Museum, Santa Chiara Church, including pertinent areas (PI 772, decree no. 238/2006 following the cultural verification procedure, supplemented by decree no. 50/2014 of 31 / 01/2014 for pertinent real estate).

- Building of the Venerable Company of Chaplains and adjacent Building in Piazza del Duomo (PI 816, decree no. 107/2009 on 11/03/09 following the verification procedure, completed with decree no. 51/2010 of 28/01 / 2010).
- **Hospital's administration** buildings (PI 314, Ministerial Decree dated 06/07/55, pursuant to Art. 21 of Law 1089/39).
- Trovatelli Hospital, Fabbrica delle Balie, Casa Rifugio dei Poveri and Church of San Giorgio dei Tedeschi with pertinent areas (Pl 399, decree no. 457/2006 dated 07/12/2006 following the verification procedure).
- **Former Hotel Gronchi** (PI 320, decree n. 17 dated 16/02/2007 following the verification procedure).
- Palazzo Arcivescovile (PI 155, motivation letter dated 30/11/80 pursuant to Art. 4 L. 1089/39.
- Monastery of the Capuchins (letter of motivation dated 16/11/79 pursuant to Art. 4 of Law 1089/39).
- **Property located in Via Cardinal Piero Maffi n.41**, used as a public toilet (PI 728, decree n. 302/2005 dated 28/10/05 following the verification procedure).
- **Department of General** Surgery (Santa Chiara Hospital) (PI 754, Decree no. 76 dated 16/02/2006 pursuant to Legislative Decree 42/04, following cultural verification procedure).

#### Direct protection measures on archaeological assets

The direct archaeological protection measures are regulated by Part II of the Code of Cultural Heritage and Landscape. Also recall the presence of the **declaration of important archaeological interest of the urban areas of Pisa within the medieval walls**, pursuant to Law 1089/1939. Art. 822 of the Italian Civil Code.

#### Indirect protective measures

Indirect protection measures (regulated by Part II of the Code of Cultural Heritage and Landscape, pursuant to Art. 45: *Indirect protection requirements*), include additional areas with respect to the main object of protection, these are:

- The buffer zone of Piazza del Duomo.
- Urban areas near Viale delle Cascine, Decree 20/10/1955 (pursuant to Art. 21 of Law 1089; indirect protection measure to protect the visual cones of Piazza del Duomo).

#### Landscape protection measures

The measures for the protection of the landscape are also regulated by the Code of Cultural Heritage and Landscape, pursuant to Art. 136, Buildings and areas of considerable public interest.

As previously reported, their use is governed by the Territorial Address Plan, with relevance of the Landscape Plan of the Tuscany Region. The assets subject to landscape protection measures that insist on the *core area* are the **Areas adjacent to the City walls of Pisa** (Ministerial Decree 19/05/1964) pursuant to Art. 136 ("Buildings and areas of considerable public interest; complexes of immovable things that make up a characteristic appearance with an aesthetic and traditional value, including historic centers and nuclei").

#### - Buffer zone protection provisions

Protection area of the *core area*, the buffer zone coincides with the boundaries of the historic center of Pisa, contained within the City walls. In addition to its function, it is a place of intense public use due to the presence of services and activities.

In this case also, the four types of the measures referred to above with respect to protection provisions that affect the Site, and its assets apply.

#### Direct protection measures for architectural, historical, and artistic assets

Direct protection measures are regulated by Part II of the Code of Cultural Heritage, pursuant to Art. 13: *Declaration of cultural interest*. What distinguishes the *buffer zone* is the presence of a historical fabric scattered with emergencies of particular importance. The set of buildings are distributed in large numbers over the entire area within the walls, especially near the riverside.

#### <u>Direct protection measures for archaeological assets</u>

Direct archaeological protection measures are also regulated by Part II of the Code of Cultural Heritage and Landscape, pursuant to Art. 13: *Declaration of cultural interest*. The entire perimeter inscribed in the historic center has been **declared of important archaeological interest the urban areas of Pisa within the medieval walls**, pursuant to Law 1089/1939, Art. 822 of the Italian Civil Code.

#### **Indirect protective measures**

Indirect protective measures are regulated by Part II of the Code of Cultural Heritage and Landscape, pursuant to Art. 45: Requirements for indirect protection.

#### Landscape measures<sup>32</sup>

The assets subject to landscape protection measures that require a buffer zone are:

• "All green areas located within the City walls of the Municipality of Pisa" (Ministerial Decree 10/09/1957, Official Gazette no. 236 of 23/09/1957).

<sup>&</sup>lt;sup>32</sup> Regulated by Part III of the Code of Cultural Heritage and Landscape pursuant to Art. 136.

 The Areas adjacent to the City walls of Pisa (Ministerial Decree 19/05/1964) pursuant to Art. 136 ("Buildings and areas of considerable public interest; complexes of immovable assets with a characteristic appearance of an aesthetic and traditional value, including historic centers and nuclei"). The reason for the constraint is specified in the descriptive analytical sheet:

[..] the aforementioned areas have considerable public interest because they constitute, with the walls and the important monumental complexes that arise in these areas, a set of great aesthetic and traditional as well as environmental value, where the expression of nature blends admirably with that of human work.

The descriptive analytical sheet also requires the identification of the restricted area (area within the City), describing its boundaries with precision. The perimeter of the constraint starts from the short stretch of road that connects the Lungarno Mediceo and the Piazza San Silvestro, developing in an articulated way, and their rejoining, at the starting point – embracing the historic center:

- Piazza di Santa Caterina (former Law 1497/39; according to Art. 143 of Legislative Decree 22 January 2004, n. 42 "Code of Cultural Heritage and Landscape" and Art.33 of the regional Law 3 January 2005, n. 1, "Rules for the government of the territory"; D.M. 14/11/1962 in G.U. 311 of 1962).
- The Lungarni (Legislative Decree ex Law 1497/39; according to Art. 143 of the legislative decree 22 January 2004, 42 code of cultural heritage and landscape and Art. 33 of the regional Law 3 January 2005, n. 1, rules for the government of the territory; DM 12/11/1962 GU 309 of 1962).

Added to these provisions are the protective measures pursuant to Art. 136 of the Code of Cultural Heritage and Landscape, affixed to landscape assets outside the historic center that crown the urban space and converge towards the City up to the limit of the walls, namely:

- The area of Viale delle Cascine located in the territory of the Municipality of Pisa.
- The area of Viale Gabriele d'Annunzio located within the Municipality of Pisa.
- The area including the coastal inter-municipal area, the western pine forest, and its fringes, the former Giomi Estate, and the area of the former "Hotel Oceano", within the Municipalities of Pisa, Vecchiano, San Giuliano Terme, Massarosa, Viareggio, Camaiore.
- The area on the left side of Viale Pisa San Giuliano Terme, located within the Municipalities of Pisa and San Giuliano Terme.
- The areas adjacent to the Medici aqueduct located in the Municipalities of Pisa and San Giuliano Terme.
- The Zona delle Piagge, located within the Municipality of Pisa.

#### Management structure

To the protection guaranteed by the instruments of legislative protection is added that guaranteed by a **stable management structure**, which oversees the monuments in the Square under the responsibility of the Opera della Primaziale Pisana (hereinafter also OPA).

The Opera della Primaziale Pisana is the body responsible for managing the Site and the monuments it houses. The OPA has an ancient history: it was created to supervise the construction work of the monumental complex as early as the first half of the year 1000. However, it was over a century later, in 1202, that "the Worker", or the administrator of the 'Opera del Duomo, was appointed by the *podestà* and no longer by the archbishop as was the case in the past. This event guaranteed the entity **its own institutional identity** which remained **unchanged over the centuries**.

Since 1999, OPA is configured as a non-profit organization (ONLUS), governed by its own statute <sup>33</sup>. Based in Piazza del Duomo in Pisa, it defines, among its institutional purposes, those of "protection, promotion and enhancement of its artistic heritage". It is therefore engaged, not only in the conservation and maintenance of the Site, but also in **enhancement and promotion** actions, without any interference on worship services<sup>34</sup>.

A basic premise of the management system is that **the buildings included in the Piazza del Duomo Site cannot be "interpreted" individually** and must therefore be considered in relation to the environment as a whole. The management provisions take this general policy into account in the legislation adopted and in the guide to the technical and scientific criteria for interventions<sup>35</sup>.

#### 2.1.4 Update of the Statement of Outstanding Universal Value

In 2007, on the occasion of the thirty-first Conference of the World Heritage Committee, the requests for **redefining the boundaries of the Site area** (*core area*) and the **identification of the** *buffer zone*<sup>36</sup>, were proposed, were both approved by the Committee <sup>37</sup>.

<sup>&</sup>lt;sup>33</sup> The OPA Statute is available at the following link: https://www.opapisa.it/opera-della-primaziale-pisana/statuto/.

<sup>&</sup>lt;sup>34</sup> Annually, on the official OPA website, the **Mandated Budget** is published, or the document with which the Entity announces the actions carried out in the past year. In addition, on the Site you can also consult the **preliminary budget and final balances** relating, respectively, to the current year and the one just ended.

<sup>35</sup> Ibidem.

<sup>&</sup>lt;sup>36</sup> Advisory Board Evaluation (ICOMOS), 2007. Fonte: https://whc.unesco.org/en/list/395/documents/

<sup>&</sup>lt;sup>37</sup> 31 COM 8B.61

Regarding the first aspect, considering research and studies on the visual axes after the registration of the Site in the WHL, Italy proposed to expand the inscribed area, including in it all three main visual axes that lead to the Square:

- The approach from the south along Via Santa Maria al Duomo.
- The western approach through the second door, opened in the 15th century by the Florentines, which changed the perception of the Square by moving the first view from the Cathedral to the new Palazzo dell'Arcivescovado, a symbol of new political power.
- The approach from the east, dating back to the nineteenth century, along a new road, Via Torelli, focused on the Bell Tower.

To encompass these three axes, the proposed extension includes a portion of Via Santa Maria, traced in the 11th century to frame the view of the apse and transept of the new Cathedral of the Square in front of the Archbishop's Palace, as well as a portion of the City walls in front of the Square and a part of the buildings that delimit the Square and part of Via Torelli (now Via Maffi). All main buildings, even within those within the proposed extension, are protected, for their artistic and historical interest, by Law 4/1994 or the Ronchey Law<sup>38</sup>. The decision of the WHC to accept the proposed proposal has resulted in an **extension of the area from 7.57 to 8.87 hectares**.

As regards the second proposal, we note that, at the time of registration of the Site in the WHL, no buffer zone was defined for the area. Therefore, Italy asked to identify the historic center of Pisa as a buffer zone, which extends mainly to the south and east of the area registered on an area of about 245 hectares already subject to a specific regulatory protection regime in compliance with national legislation. What was accomplished and achieved in 2007 was undoubtedly critical to the updating, in 2018, of the Declaration of Outstanding Universal Value of the Site in Piazza del Duomo. In fact, the premise for the reasons that led to the 2007 Decision lay in the fact that Italy believed that the original appointment, and subsequent registration of the Site in the WHL, were not sufficient to fully recognize the value of Piazza del Duomo and its particular composition, which results from precise artistic and ideological concepts. The original reasons for the application, in fact, focused exclusively on the four medieval monuments: Cathedral, Baptistery, Bell Tower and Camposanto. The update incorporates and embraces the concept of the organic interdependencies of the Site and the spatial composition that characterizes it as a unicum. Therefore, it is not only the individual monuments that contribute to the determination of the Site's Outstanding Universal Value, but also their mutual spatial relationship and their connection with the urban context of reference.

<sup>&</sup>lt;sup>38</sup> Repealed by D. Lgs.42/2004 "Codice dei Beni culturali e del paesaggio".

#### 2.2 Definition and delimitation of the World Heritage Site

#### 2.2.1 The core area recognized by UNESCO and the assets present

As mentioned, Piazza del Duomo in Pisa entered the World Heritage List in 1987. The Site has preserved, over time, all the elements of uniqueness that contribute to making it a monument appreciated and recognized all over the world, a symbol of Italian national identity abroad and a sought-after tourist destination.

The monumental complex, as illustrated in Figure 3, belongs to the so-called *core area*, the area of greatest relevance of recognition by UNESCO, framed within the urban perimeter, extended for **8.87 hectares**, and including the Square and its buildings. The current configuration of the *core area* dates back to 2007.

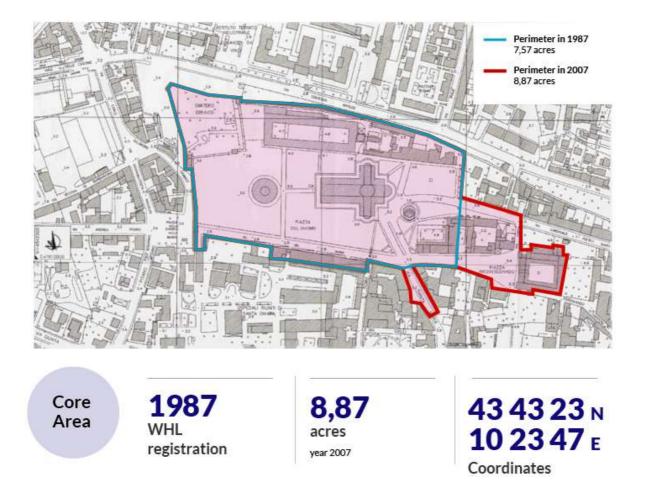


Figure 3 - Identification of the core area (Source: UNESCO World Heritage Center) and its characteristics.

Within the *core area* there is a heterogeneity of architectures that contribute to making this part of the City unique in its kind. The Square is distinguished, in fact, for the combination of classical, early Christian, Lombard and oriental characteristics. It is the buildings themselves that modulate and generate the space of the *core area*. They constitute a *unicum* of their kind and, therefore, are highly sensitive to the need for an adequate binding regime. The management of these assets guarantees a good state of conservation of the artifacts, which must also be made constantly accessible to the huge tourist flow that characterizes the Square.

In the *core area* of the Site there are **nineteen properties subject to direct protection**, including the same area of the Piazza: the Cathedral of Santa Maria Assunta, within which there is the Chapel of San Ranieri; the Bell Tower of the Cathedral; the Baptistery of San Giovanni, inside which there is the Pulpit by Nicola Pisano; the excerpt of walls, part of the ancient medieval fortification system still clearly recognizable in the historic fabric; the Camposanto Monumentale, a Cemetery that delimits the north side of Piazza del Duomo; the Palazzo dell'Opera della Primaziale Pisana; the Opera Museum of the Cathedral of Pisa; the Jewish Cemetery; the Archbishopric; and some properties located near Via Cardinal Pietro Maffi.

The characteristics of the **four main monuments** are recalled in the following graphics.



The Cathedral, with a Latin cross shape, was built starting in 1063 by the architect Buscheto. It consists of five main naves and a transept with three naves, the arms of which are apsed. It is surmounted by an elliptical dome of oriental tradition which stands on an octagonal drum supported by four large pillars. The roof is wooden, and the naves are divided by granite columns surmounted by round arches. In 1092 the Church, from a simple Cathedral, was converted into a primatial, and in 1118 it was consecrated by Pope Gelasius II.



The circular **Baptistery** is covered with white marble, in Pisan Romanesque style, and with decorations and mullioned windows that highlight a Gothic influence. The construction was started in1153 and finished around the XIV century. The current one replaces a previous, smaller Baptistery which was located north-east of the Cathedral, where the Camposanto is now located. The architect, still unknown, signed himself "*Diotisalvi magister*". Among the foremen, were the brothers Nicola and Giovanni Pisano, and Cellino di Nese.



The style of the **Bell Tower**, universally known as the **Leaning Tower**, incorporates some components of the Baptistery and the Cathedral. It has a **cylindrical structure**, the main peculiarity of which is the slope of 3.9° towards the southeast. The works, which began in 1173, stopped in the middle of the third floor, precisely due to the subsidence of the land. They resumed in 1275 under the guidance of the Pisano brothers, who added three more floors to the building, hanging in the opposite direction, with the aim of straightening the structure.



The Campo Santo Monumentale is the historic cemetery of Pisa, the last monument, in chronological order, to have been built inside the Square. Begun in 1277 by Giovanni di Simone, it was built with the intention of housing the numerous burials that were accumulating near the Cathedral. From 1360, while the factory was still about to be completed, the interior walls began to be decorated with frescoes with themes depicting the meaning of life and death, on which some of the greatest painters living at the time worked.

Figure 4 – The four main monumental buildings of Piazza del Duomo in Pisa.

# 2.2.2 Description of the buffer zone and its role in the care for, and protection of, the Site

Within the Operational Guidelines for the application of the World Heritage Convention, the concept of *buffer zone* is defined, in Italian "zona tampone" or "cuscinetto", as an "area to guarantee an additional level of protection to assets recognized as World Heritage".

As previously noted, in 2007 Italy proposed that the *buffer zone* of the Piazza del Duomo Site in Pisa should coincide with the **historic center of the City**. This proposal was subsequently approved.

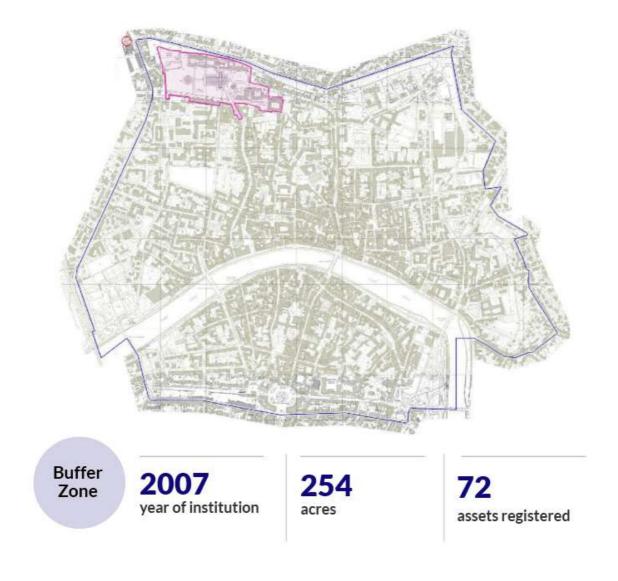


Figure 5 – Identification of the buffer zone (Source: UNESCO World Heritage Center) and its characteristics.

#### 2. The World Heritage Site

In this prestigious context, Piazza del Duomo, with its innumerable peculiarities, is located near the upper edge of the walls and, therefore, decentralized with respect to the historical fabric, which is it is in the north-west border of the *buffer zone*. In fact, it is divided on one side, mainly along the north-south axis, and on the other perpendicular to it, following the natural development of the Arno river. **The Site's** *buffer zone* **covers approximately 254 hectares, mainly south and east of the** *core area***. To the north, the area extends just beyond Piazza del Duomo, up to Via Contessa Matilde; to the south, up to Viale Francesco Bonaini – near the Central Station; east to Via Bonanno Pisano, and west to Via Vittorio Veneto. It includes secular and ecclesiastical buildings of historical-artistic importance, entrusted to entities of different nature.** 

The buffer zone is crossed by the Arno river, which inevitably defines one of the main features of the context in question. Along the banks of the river there are numerous palaces and stately homes, built starting from the sixteenth century. Inside the urban nucleus of Pisa there are historical artifacts linked to particular infrastructures and services: from the remains of an ancient thermal complex known as the "Bagni di Nerone", the terminal section of the Medici aqueduct, the supporting structure – di Porta a Mare – to the ancient navigable canal of the Navicelli, the last part of which lapped the City walls near the Stampace bastion.

Some of the historical and cultural values of the City are represented by the system of museums, by the monumental excellences, by the "places of knowledge", by the historical heritage of medieval origin (Lungarni, Via Santa Maria area). The monumental complex of Piazza del Duomo and the medieval walls of Pisa represent the visual references *par excellence*, visible from a distance from numerous panoramic points. The presence of an urban green system, consisting of parks and public and private areas and other connection systems (marginal agricultural areas, urban areas of fluvial relevance also equipped with paths), ensures continuity between the anthropized space and the surrounding naturalistic order, taking the form of a landscape nature.

The character of the historic center derives from the multiple transformations that have taken place over the centuries within the City, which, as the first among the Tuscan ones, has seen unprecedented political and cultural development. The culture and art of Pisa and, in particular, its architecture, characterized by Pisan Romanesque and influenced by the Arab world, spread throughout Tuscany over time. During the Early Middle Ages, the geomorphological structure of the historic center of Pisa was born, which can still be appreciated today. The *forma urbis*, therefore, arises from the merger of the three nuclei gathered in the walls of 1155. The medieval fabric is still recognizable today, in particular in the urban layout and in the

recurrence of the building typology of the "casatorre"<sup>39</sup>; moreover, the presence of monumental elements such as the City walls, the numerous Romanesque Churches and the fortified structures of the ramparts and arsenals, determines its *Outstanding Universal Value*.

If, therefore, to the south and east the *core area* is protected by the *buffer zone* constituted by the historic center of the City, with the characteristics already mentioned, on the other hand, to the north and west the absence of an essential *buffer zone* is evident for the adequate protection of such an important historical and cultural heritage. Already in 2007, circular no. 395<sup>40</sup> reports the specific recommendation of ICOMOS regarding the need to extend the perimeter of the area, adopting additional forms of protection on the north and west sides of the Square.

The type of urban fabric found on the north-west border with Piazza del Duomo, which does not currently fall within the *buffer zone* perimeter, stands out because it belongs to the **recent expansion of the City**, which took place in modern times, and which does not follow the logic of housing types and the morphology of the historic City.

Within the Structural Plan of the Municipality of Pisa (2005), this area is defined UTOE 9<sup>41</sup> "Buffer area of the historic center/door to Lucca" and is described as follows:

"Formerly a marshy area between the City walls and the peripheral expansion of the 1920s. Utoe characterized by the urban role conferred on it by the settlement of urban and extra-urban polarities (Stadium, I.T.I.S. complex) ordinary and extraordinary mobility phenomena determinants.

Morphological heterogeneity determined by the coexistence of school complexes of urban and neighborhood interest (S. Elementare, I.P.C.), nucleus built with a rural character of historical structure, interventions contemporaneous with the first peripheral expansion, homogeneous nuclei of social housing with pre-war plant, post-war residential interventions (intensive and semi-intensive), Telecom and GEA facilities and equipment [...] availability of green public spaces (partly spontaneously intended for vegetable gardens) limited to the popular residential settlement of the 1930s-1940s"<sup>42</sup>.

<sup>. . . . . . . . . . . . . . . . . . .</sup> 

 $<sup>^{39}</sup>$  The Casatorre (or Tower House) is a fortified construction, used in the Middle Ages starting from the  $10^{th}$  century, with military and residential functions.

<sup>&</sup>lt;sup>40</sup> The circular is available at the following link: https://www.unesco.beniculturali.it/allegati/06/Documenti/ABE2007-06\_DuomodiPisa.pdf.

<sup>&</sup>lt;sup>41</sup> As part of the territorial development strategies of the Tuscany Region, specifically of municipal level planning, the elementary organic territorial units (Utoe; LR 5/95 and LR 1/05) are delimited areas of territory, identified according to criteria that "balanced distribution of the equipment necessary for the quality of territorial development. Specifically, they determine the settlement and infrastructural quantities "bearable" by the City, together with the indications of the protection, recovery, redevelopment and transformation actions that need to be activated. Source: Territorial governance tools: municipal level planning. Contribution to the monitoring of the PIT. IRPET, 2011.

<sup>&</sup>lt;sup>42</sup> Source: Structural plan, Municipality of Pisa, 2005. Source: https://www.comune.pisa.it/doc/sit-pisa/nuovo\_prg/utoeap.htm.

#### 2. The World Heritage Site

The building types present in the area, defined by the Structural Plan of the City as a "twentieth century buildings", are inserted within **complex and multifunctional areas**, with urban or neighborhood services and production areas, equipped with large parking areas, servicing the stadium and/or the tourist flow. The settlement, thus determined, takes on the characteristics of the **urban village**.

The presence of **cultural and educational structures** is a constant in this area: the "Porta Nuova" educational center, a multifunctional complex that houses the faculties of Engineering and Medicine, the "Da Vinci – Fascetti" Institute of Higher Education, the "Filzi" Primary School and the "Ciari" Kindergarten School. To these are added the Professional Institute for Industry and Crafts "G. Fascetti" and the Pisan Philharmonic Society.

In the upper part of the area in question it is possible to identify a **complex of working-class housing** dating back to the pre-war period, the "Garibaldi" sports arena, and the Library of the Pisan Association. The **presence of the Stadium** further characterizes the areas as one of **high intensity of use and travel**. It is therefore necessary to be especially cautious in the management of flows in a north-south direction and, in general, to control the significant impact that a structure of this magnitude entails on a very significant portion of the City to protect the *core area*.

From documentary sources and cartography, the presence of some protective measures, of a twentieth-century matrix, is clear. In fact, the Church of San Lazzaro, the Church of Santo Stefano, and the Garibaldi Arena are subject to direct protection (Part II of the Code of Cultural Heritage and Landscape), in addition to the presence of *ope legis* protection measures. This portion of the urban fabric, developed by successive aggregations apparently without inner coherence, thus highlights a **strong discontinuity relative to the value of the Site of Piazza del Duomo**, from which it is separated by the limit constituted by the historic urban walls.

# 2.3 The current governance structure

There are numerous institutions that exercise their oversite, albeit with different intensity and functions, within the Site of Piazza del Duomo.

These institutions are defined below based on the role played within the Site and the functions established by the legislation to which they are subject. In particular, two **Memoranda of Understanding** were analyzed, drawn up respectively in **2014** and **2015** and signed by two or more institutional entities. The Memoranda of Understanding represent the regulatory framework of reference for the definition of future strategic lines and operational mechanisms for managing the Site.

The two Protocols, as recalled in their respective premises, were drawn up following the registration of Piazza del Duomo in the WHL in 1987, the proposed extension of the *buffer zone* 

formulated by ICOMOS in 2007, and the preliminary findings of the draft of the Management Plan and they acknowledge the criticalities and needs of the Site, to be monitored over the years.

Specifically, the 2014 Memorandum of Understanding provides for the establishment of a **multilevel governance model**, based on interinstitutional cooperation aimed at implementing, monitoring, and updating the management policies of Piazza del Duomo. With the signing of the first agreement, in fact, the Ministry for Heritage, Cultural Activities and Tourism, the Tuscany Region, the Province of Pisa, the Municipality and the Opera della Primaziale Pisana undertook the updating and implementation of the Management Plan and appointed the Municipality of Pisa as the contact entity at the Ministry of the Piazza del Duomo Site.

In 2015, a second Memorandum of Understanding, signed by Ministry of Cultural Heritage and Activities and Tourism, the Tuscany Region and the Municipality of Pisa, begun governing the uses and functions of the Site regarding the needs for protection and enhancement, while respecting the decorum and regulation of commercial activities. In fact, through the 2015 Agreement, the parties involved try to respond to the recommendations reported in the First Periodic Report on the Italian World Heritage Sites of 2006, which highlighted that in the area of Piazza del Duomo "the state of decay is caused from the interference of commercial activities, which are principally of itinerant nature but have, in fact, become permanent, and which impact with the full visibility and integrity of the context perspective and decorum". The Protocol also provides for intervening through the appointment of an Interinstitutional Committee for Decor. The 2015 Protocol, therefore, falls within the operating logic defined by the previous Protocol and represents the first experience in implementing the process of resolving a critical issue through the decisions of the Site's governance bodies.

The Interinstitutional Committee for Décor proceeded, in compliance with the provisions of the Memorandum of Understanding and in order to identify the critical issues related to the protection of the Site and the surrounding areas and the related measures to overcome them to:

- Draw up the updated maps of the Site.
- Identify additional protection measures in order to improve the existing regulatory framework.
- Identify priorities for intervention.

The tables below show the specifications of the two Memoranda of Understanding and the Concluding report of the Interinstitutional Committee for Decor.

#### 2. The World Heritage Site

Memorandum of Understanding (2014) for the updating and implementation of the Management Plan and for the identification of the contact person responsible for carrying out coordination functions between all the responsible parties and secretarial and monitoring activities of the UNESCO Site

#### **SIGNATORIES**

Ministry of Cultural Heritage and Activities and Tourism (General Secretariat, Regional Directorate, Superintendence for Architectural, Landscape, Historical, Artistic and Ethno-anthropological Heritage for the provinces of Pisa and Livorno, Superintendence for Archaeological Heritage for Tuscany), Region of Tuscany, Province of Pisa, Municipality of Pisa, Opera della Primaziale Pisana.

#### **COMMITMENTS**

- Coordinate and collaborate, each within their own sphere of competence, on the protection and conservation, management, promotion, and cultural enhancement of the areas of the Site.
- Coordinate and collaborate, each within their own sphere of competence, on the protection and redevelopment of the urban and landscape, and on socio-economic enhancement of the territories.
- Collaborate in updating the Management Plan, looking primarily at interventions such as the:
  - Adaptation of the tools for the protection of the cultural heritage present on the Site and the buffer zone.
  - o Definition, through appropriate urban planning tools, of regulations for commercial activities
  - o Development of a website for the Site, aimed at improving the conditions of its use.
  - Guarantee of compliance with the needs of worship connected to the Site.
- Activate, if necessary, appropriate collaborations.
- Define a common work program related to Site management.
- Establish a Steering Committee for the implementation of the Management Plan.
- Establish a Management Office as a technical structure, composed of the technical representatives of the Steering Committee, dedicated to updating, coordinating, and monitoring Management Plan.
- Identify the Municipality of Pisa as the contact entity at the Ministry of Cultural Heritage and Activities and Tourism for the Site.

#### ESTABLISHED BODIES CHARGED WITH IMPLEMENTATION

- Steering Committee.
- Management Office.

Memorandum of Understanding (2015) for the implementation of Art. 52, Paragraph 1-ter, of the Code of Cultural Heritage and Landscape, as amended by the Decree-Law 31 May 2014, n. 83; converted, with amendments, by Law no. 106 and by the Decree-law of 19 June 2015, n. 78; converted, with amendments, by Law 6 August 2015, n. 215

#### **SIGNATORIES**

Ministry of Cultural Heritage and Activities and Tourism (represented by the Superintendent of Fine Arts and Landscape for the provinces of Pisa and Livorno), Region of Tuscany, Municipality of Pisa.

#### **COMMITMENTS**

- Prohibit uses to be considered incompatible with the specific protection and enhancement needs of Piazza del Duomo in Pisa and the entire World Heritage Site, in order to ensure the decorum of the monumental complexes and other properties of the cultural domain affected by flows, particularly relevant tourism as well as adjacent areas.
- The Ministry undertakes to:
  - o Provide the Municipality of Pisa with the oversite of the existing constraints in the *core area* and in the buffer zone (identifying public areas with particular archaeological, architectural, historical, artistic and landscape value), and the monumental complexes and other properties of the cultural domain also in neighboring areas, affected by particularly significant tourist flows.
  - o Identify the uses to be prohibited as not compatible with the aforementioned constraints and, therefore, with specific needs of protection and enhancement of the Site; including types of public use not subject to the concession of individual use, such as itinerant activities without parking, even on a temporary basis; with regard to the co-planning agreement for the approval of the Territorial Address Plan and the Landscape Plan (PIT) signed between the Ministry and the Region of Tuscany on 11 April 2015.
  - Identify individual uses of prestigious public areas following the issuance of parking concessions, or the occupation of public land, to be assessed as prohibited as not compatible with the aforementioned constraints and, therefore, the specific needs for protection and enhancement of the Site.
- The Tuscany Region commits to providing its institutional collaboration for the purposes of the provisions of this Agreement, to guarantee the protection and enhancement of the Piazza del Duomo in Pisa and the entire World Heritage Site, also by leveraging its competences in the field of trade and crafts, as well as the protection and enhancement of the landscape according to the PIT Landscape Plan values.
- The Municipality of Pisa undertakes to:
  - Provide the Ministry with an overview of the uses currently in place in the area concerned, with particular reference to the exercise of commercial and artisanal activities of an itinerant form or on a stand; the architectural characteristics of the temporary structures; the duration of occupations and the type of other cultural, sporting, and similar events.
  - o Identify areas of use potentially susceptible to equivalent relocation, to transfer of commercial activities that are incompatible with the protection and enhancement requirements referred to in Art. 52, Paragraph 1-ter, of the Code of Cultural Heritage and Landscape, as amended by the Decree-Law 31 May 2014, n. 83, converted, with amendments, by Law no. 106.
  - o Incorporate the contents of the assessments resulting from this Agreement in the acts of urban

#### 2. The World Heritage Site

planning, transport and regulation of commercial activities in the protected areas – also by implementing the provisions of the second Paragraph of Art. 2, of the aforementioned Agreement signed on 19 June 2014 – where it is established that in the Management Plan must define the appropriate planning tools and regulations relating to the exercise of trade in public spaces; suitable interventions to resolve the critical issues relating to the conservation of the facades overlooking the square; and the deterioration resulting from improper use of these spaces.

Establish the Interinstitutional Committee for décor with the task of identifying the areas in which
uses and activities that are not compatible with protection and enhancement are to be considered
prohibited, and the areas in which certain activities are permitted under particular conditions and, in
any case, ensure decorum through specific mandates to review issued authorizations and
concessions.

#### **ESTABLISHED BODIES CHARGED WITH IMPLEMENTATION**

• Interinstitutional Committee for Decor: established in November 2015, with 10 meetings documented by minutes.

Concluding report of the Interinstitutional Committee for Decor for the territory of the Municipality of Pisa, established between Ministry of Cultural Heritage and Activities and Tourism, the Tuscany Region and the Municipality of Pisa with the Memorandum of Understanding of 28 September 2015 (*Protocol no. 4124 of 2/11/2016*)

#### **EDITOR**

The Superintendent of Archeology, Fine Arts and Landscape for the provinces of Pisa and Livorno.

#### **WORK OUTCOMES**

The Interinstitutional Committee for Decor, established by the 2015 Memorandum of Understanding, in order to identify the critical issues and needs for the protection of the World Heritage Site and surrounding areas, has drawn up updated maps of the Municipality of Pisa presenting first evidence about the historic center enclosed in the walls and the neighboring areas adjacent to the Piazza del Duomo and the City walls, to the north and west. These maps contain the data necessary to determine the protection measures to be adopted, identification the followings:

- Protective measures in force in the area of the Square and in the surrounding areas.
- Existing landscape protection measures.
- Use of public land for commercial purposes, legitimized by the municipal administration.
- Measures aimed at perfecting the protection tools which were found to be fragmented and non-homogeneous inside and outside the medieval walls.

The buildings and areas overlooking Piazza del Duomo have therefore been subjected to *Monument Protection*, pursuant to Art. 10 of the Legislative Decree. n. 42/2004. In particular the:

• Complex of monumental assets composed of the Cathedral, Baptistery, Camposanto and Campanile.

- Prato del Duomo.
- Headquarters building of the Tourist Services Center located on the corner between Piazza dell'Arcivescovado and Piazza del Duomo.
- Piazza del Duomo, Via Arcivescovado, Piazza dell'Arcivescovado, Via Corta, Via Cardinal Maffei.
- Undeveloped areas and public roads including: Via Torelli, Via Corta, Piazza and Via dell'Arcivescovado, as well as the continuing viable part of Piazza del Duomo as per combined cadastral plan in the Ministerial Decree of 15 March 1994, pursuant to Art. 21 of Law 1089/1939.
- Property located in Pisa, registered in the Land Registry on sheet 120 parcel 67, bordering Via dell'Arcivescovato and with land registry maps 66 and 68 of the same sheet 120.
- Real estate complex consisting of the new hospital, Corte degli Spedalinghi, the Sinopie Museum and the Church of Santa Chiara, including the adjoining areas.
- Palazzo dell'Opera.
- Building located in Via Roma n. 84, at the corner of Piazza del Duomo.
- Department of General Surgery.
- Department of Odontostomatology.
- Two buildings consisting of the Venerable Compagnia dei Cappellani and the adjacent building in Piazza del Duomo.
- Real estate complex consisting of the Trovatelli Hospital, the Nurses' Factory, the Poor's Refuge, and the Church of San Giorgio dei Tedeschi with adjoining areas.
- Ambulance Services.
- Urban walls of the City of Pisa and relevant areas.
- Areas adjacent to the City walls of Pisa.

It should be noted that the assets listed above do not include assets and areas protected by *ope legis*, as they belong to the public domain and are never subjected to verification of cultural interest pursuant to Art. 12. The Committee's work ends with the identification of priority actions such as:

- o Identification of alternative solutions to protect commercial activities inside and outside the walls which, at the time of signing this report, occupied areas subject to direct protection.
- o Reorganization of Piazza del Duomo, of the Archbishopric, and the area of Via Cardinal Maffei, through the elimination of commercial ads in the public area.
- o Reorganization of shop windows, signs, and shops on the ground floors of the buildings.
- o General redevelopment of the areas that surround the outside of the walls and the entrance to the UNESCO Site.
- Drafting of a planning pact and a program of interventions, achievable in stages, and contained within an urban redevelopment and enhancement project, as required by the UNESCO Management Plan and by urban planning regulations.
- o Redevelopment of the districts facing the railway and the border areas of the Porta a Lucca district, characterized by disorganized and poorly maintained paths and areas.
- o Implementation of the Recovery Program following the abandonment of the hospital complex of Santa Chiara, due to the transfer of hospital activities to a new site.
- o Translation of the operational lines listed above into an operational planning tool.
- o Application of the same protection objectives to the *buffer zone*, to the monumental buildings and squares enclosed in it and in all perimeter areas.

# **ESTABLISHED BODIES CHARGED WITH IMPLEMENTATION**

• Interinstitutional Committee for Decor.

#### 2. The World Heritage Site

From the reading of the two Protocols, it is possible to identify the main subjects exercising governance over Piazza del Duomo. The areas of competence of each, with respect to the management of the Site, are briefly illustrated below.

- → The Ministry for Cultural Heritage and Activities and for Tourism acts on Piazza del Duomo with regard to the protection, enhancement and use of its heritage through two bodies, one central and one peripheral:
  - Centrally, through the UNESCO Office, one of the seven management offices that make up the General Secretariat<sup>43</sup>. As part of the management of the relationship with UNESCO, the Office is responsible for coordinating and monitoring the activity for the registration of new Sites and new elements in the lists of material and intangible World Heritage. The Advisory Commission for the Management Plans of UNESCO Sites and its elements, and for local tourism systems operates at the Office, pursuant to Art. 5 of the Law 20 February 2006, n. 77.<sup>44</sup> Among the overall functions covered, with reference to the governance of World Heritage Sites, the Office provides technical support to the managers of the registered Sites for the preparation and implementation of Management Plans; coordinates the periodic monitoring of the registered Sites by taking care of the drafting of Periodic Reports; coordinates verification activities; and prepares the necessary documentation in relation to possible risks, actual or potential, reported by the World Heritage Center on the Sites.
  - At the territorial level, through the Superintendence of Archeology, Fine Arts and Landscape for the provinces of Pisa and Livorno, is the peripheral body of the Ministry of Cultural Heritage and Activities and Tourism 45 which has the task of protecting the archaeological, architectural, landscape, historical, and artistic heritage in the territory of competence as well as cooperating with the Region and local authorities for its enhancement. This activity is carried out pursuant to Legislative Decree 42/2004, and subsequent amendments, on the heritage of cultural, architectural, monumental and landscape interest. The main objective of the Superintendency is to value the cultural heritage, take care of its integrity, and spread knowledge and understanding about it. In this sense, the Superintendency exercises two types of protection: direct and indirect, defined respectively in Art. 3 of the Code of Cultural Heritage and Landscape,

<sup>&</sup>lt;sup>43</sup> Pursuant to DPCM 171/2014, as last amended by DPCM 238/2017.

<sup>&</sup>lt;sup>44</sup> Source: https://www.beniculturali.it/struttura-segretario.

<sup>&</sup>lt;sup>45</sup> The functions of the Superintendencies are defined in Art. 41 of Prime Ministerial Decree 169/2019 "Organization Regulations of the Ministry for Cultural Heritage and Activities and Tourism, the offices of direct collaboration with the Minister and the independent Performance Assessment Body".

mentioned above, and in Art. 45 "Other forms of protection". Direct protection consists in the exercise of functions and in the regulation of activities aimed at identifying, based on an adequate cognitive knowledge, the assets constituting the cultural heritage and guaranteeing their protection and conservation for purposes of public use. By indirect protection, on the other hand, we mean that a series of limiting provisions are imposed on assets, other than the cultural object of direct protection, which are in spatial relationship with the latter. The choice to set the indirect constraint serves the purpose of protecting the characteristics and context of the property subject to the direct constraint, ensuring, through provisions intended for the surrounding and not necessarily neighboring areas or buildings, the maintenance of integrity, perspective, light, and the conditions of the environment and its decor. Increasingly, the Superintendency is called upon to collaborate with local authorities and private entities for development projects centered on cultural heritage.

- → Pursuant to the reform of Title V, the Tuscany Region, like the other Italian Regions, is engaged in activities for the enhancement of cultural and environmental heritage and the promotion and organization of cultural activities<sup>46</sup>. Specifically, within the organizational structure of the Tuscany Region there is the "Cultural Heritage, UNESCO Sites, Contemporary Art, Remembrance Office", belonging to the Culture and Research Department<sup>47</sup>, which covers, among others, the functions of:
  - o Enhancement and promotion of Museums and Eco Museums.
  - o Interventions for the conservation, enhancement and promotion of cultural heritage, spaces and places intended for cultural activities.
  - o Enhancement and promotion of Libraries, Archives and Cultural Institutions.
- → The Municipality of Pisa, identified by the Memorandum of Understanding of 2014 as the reference subject at the Ministry of Cultural Heritage and Activities and Tourism for Piazza del Duomo, acts leveraging urban planning tools and the rules governing the activities in the area. Administratively, it legislates on matters that have an impact on the Site (land use plan, granting of contributions towards culture, granting of patronage for cultural, sporting and tourist events, etc.). In the thematic area of tourism, on the other hand, it plans and manages planning the implementation of intervention strategies, to support tourist activity of the

<sup>&</sup>lt;sup>46</sup> Functions established through Title V of the Constitution, Art. 117 and the Code of cultural heritage and landscape, in Chapter III "Principles of the enhancement of cultural heritage", Articles 111, 112 and others following.

<sup>&</sup>lt;sup>47</sup> For further information: http://www301.regione.toscana.it/bancadati/uffici/Struttori.xml?cmu=04950.

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area<sup>48</sup>. The Municipal Administration acts through the **Tourism Office**, within the Tourism Directorate - Historical Traditions and Environment. The Municipality also considered it appropriate, in 2017, to set up an inter-functional coordination unit for the Management Plan of Piazza del Duomo, which included expertise in the construction of infrastructures and public works, construction, both public and private, mobility, production activities and communication: this unit involves the managers and staff of the Infrastructure Directorate -Public Construction, Productive Activities, Private Construction, Mobility and Participation Departments.

- → The **Province of Pisa** is one of the Signatories of the 2014 Memorandum of Understanding and is a member of the Steering Committee. In line with the provisions of reform of local entities (Law 56/2014), with reference to the substantial redefinition of the functions of the Provinces – also in the cultural and tourist fields – the Province remains among the relevant entity with cultural intervention responsibilities for the vast area.
- → Finally, among the subjects falling under governance is the Opera della Primaziale Pisana. The latter has legal person status from the State, certified by the Minister of the Interior on 24 November 1987, the year in which Piazza del Duomo entered the World Heritage List. The OPA is the sole managing body of the Site and carries out the functions of custody, protection, conservation, and maintenance, as well as the promotion of the image and enhancement - without interfering with worship services - of the Cathedral, the Baptistery, the Bell Tower, the Monumental Cemetery, the Episcopio, the Church of San Ranierino, of the Museums, and of the other assets of its pertinence.

OPA is administered by the Deputation, i.e., the Board of Directors, made up of seven members chosen among Catholic citizens and appointed for a three-year period: two by the Diocesan Ordinary (usually including a priest) and five by the Minister of the Interior with input from the Diocesan Ordinary (the President, appointed by the Deputation, has legal representation). OPA is, in fact, an administrative entity, whose regulation is dictated by treaty legislation, which establishes that the administrators represent both secular and religious components. The President reports to the Administrative Secretary, who

<sup>&</sup>lt;sup>48</sup> The L.R. 86/2016 (Consolidated text of the regional tourism system) has innovated the discipline of tourism, replacing the

previous "Consolidated text of regional Laws on tourism", i.e., the L.R. 42/2000, which was now an inadequate instrument, despite having been subject to changes over the years. The L.R. 86/2016 and subsequent amendments redesigned the governance of the sector, necessarily centered on the Municipalities, after the dissolution of the tourism promotion companies (APT) in 2010 and the cessation of competences in this area by the Provinces following Law 56/2014 (Provisions on metropolitan cities, on the Provinces, on the unions and mergers of Municipalities, the so called Delrio Law), which became effective in 2016. The functions relating to tourism that were carried out by the Provinces were therefore transferred to the Municipality of Pisa, as the capital Municipality.

coordinates the Head of the Secretariat; the Head of Supervision and Custody<sup>49</sup>; the Head of Artistic Heritage; the Head of the Bursary; the Head of Accounting; and the Technical Director, in charge of all the staff responsible for Site maintenance. In fact, that all conservation interventions on the monuments in the Square are carried out by the workers employed by OPA. The organization, in fact, with a staff of about one hundred employees, of which twenty-five restorers, almost all coming from the Opificio delle Pietre Dure in Florence and from the Central Institute of Restoration of the Ministry of Cultural Heritage and Activities and Tourism, takes care of all the maintenance and conservation interventions through the use of highly specialized professionals, both in the cultural heritage and in the construction, plumbing and electrical sectors. In this regard, we recall what is illustrated in the Mandate Report of the 2020 OPA, namely the establishment of a Research Group for the Monumental Cemetery, directed by Prof. Salvatore Settis, with the collaboration of the architect Gisella Capponi and Superintendent Andrea Muzzi (now replaced by the architect Esmeralda Valente).

From the analysis of the current management model of Piazza del Duomo, from which the brief summary described above is taken, some critical issues emerge that will need to be remedied in the configuration of the future governance model:

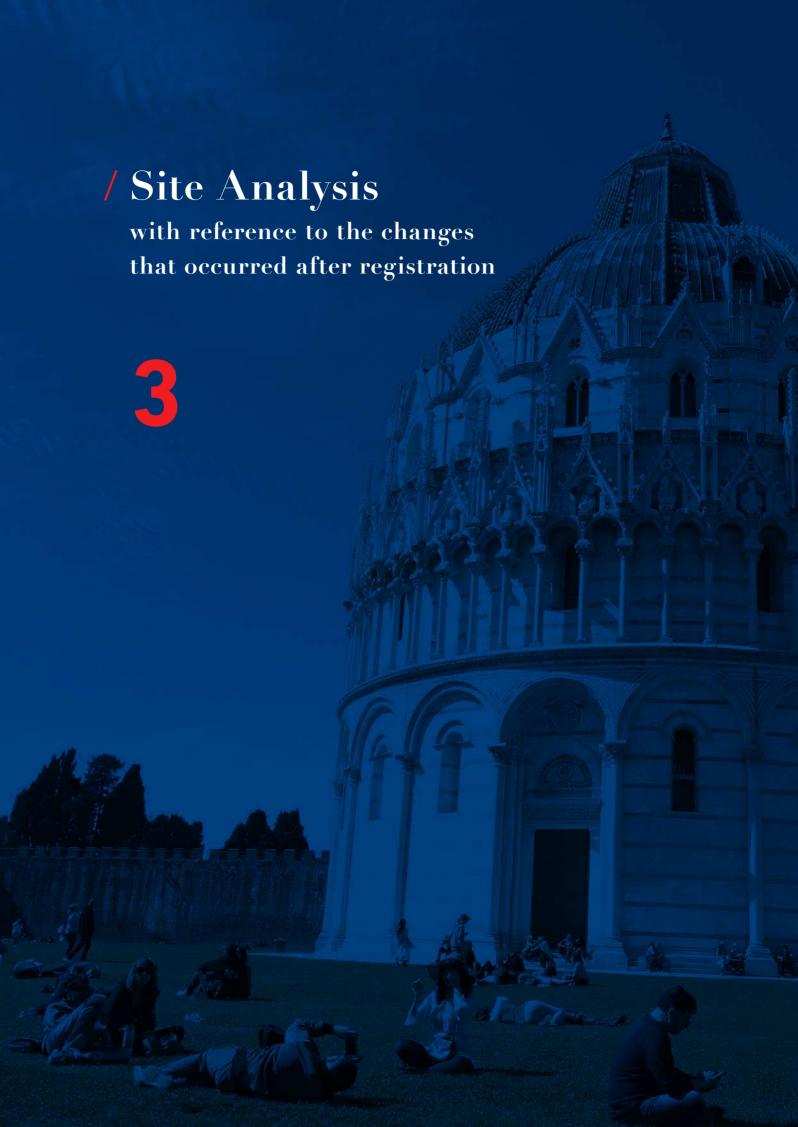
- The 2014 Protocol constitutes a framework of agreement between the institutions, but, on its own, is insufficient for the concrete implementation of management policies. In particular:
  - in its current configuration of the governance model there is an overlap of roles, subjects, and responsibilities between the two governance bodies of the Site, the Steering Committee, and the Management Office, which need to be better articulated through appointments and assignments.
  - o in the Protocol **no operating procedures are defined** to regulate the link between the institutions and their collaboration for the purposes of carrying out the envisaged functions.
  - the Protocol, drawn up in 2014, has obvious inconsistencies with the current organizational structure of some of the entities involved which have seen, as a result of reforms over time, a substantial change in the skills and nomenclature in executive and non-executive level offices.

<sup>&</sup>lt;sup>49</sup> In fact, it is specified that with regard to the surveillance garrisons, present on the Square 24 hours a day, in addition to the forces of the Army, the State Police and the Command of the Traffic Police of Pisa there are also security guards as direct employees of the Opera Primaziale.

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- In designing the governance model for the Management Plan, therefore, it is a priority to split between the competences and functions of the two bodies, by identifying the roles for each. These chosen representatives must have such powers and skills as to guarantee the Steering Committee the ability to cover strategic and decision-making functions. For the Management Office it will be necessary to cover the relevant operational functions. Apart from these functional attributes, it will be necessary to define implementation methods to regulate the activities of the two bodies, with an independent perspective on the relationship between them, in order to optimize the work of each (think, for example, of the importance of technical correct information provided by the Management Office to the Steering Committee when the latter has to make decisions on a specific topic).
- This way, the strengthening of the functions of the Steering Committee could ensure the body's ability to follow up on the approval of the Management Plan and its subsequent correct implementation. This result could be supported by the adoption of an annual planning document, which allocates resources and identifies the implementing individual(s) for the interventions performed to that year.





# 3. Site analysis with reference to the changes that occurred after registration

# 3.1 Outcomes of the 2006 Periodic Report and the 2014 Periodic Report

# 3.1.1 Criticalities emerged

Since the end of the nineties, all the Sites registered in the World Heritage List have been subjected to periodic monitoring by the World Heritage Center, with the aim of verifying the conservation over time of the *Outstanding Universal Values*. The Signatory States to the Convention are required to periodically submit, through the World Heritage Committee, a report on the administrative and legislative measures adopted, and the actions undertaken for the implementation of the Convention for the protection of the World Cultural and Natural Heritage (1972)<sup>50</sup>.

At present, the Periodic Reports concerning Piazza del Duomo in Pisa are two, dating back to 2006 and 2014<sup>51</sup> respectively. The two documents were analyzed with the aim of identifying the critical issues detected during the monitoring activities, identifying the requests for action made by UNESCO, and verifying the progress towards implementation.

The following, therefore, are the main considerations that emerged from the analysis of the two Periodic Reports, intended to provide a consistent rationalization of the areas of intervention outlined in this Management Plan. In particular, a first clustering of the results of the analysis, carried out by grouping by the thematic areas listed below, is followed by their classification with respect to the impact of each criticality on the 5 Cs, which represent the pillars of the future Action Plan.

<sup>&</sup>lt;sup>50</sup> To find out more: https://www.unesco.beniculturali.it/la-convenzione-sul-patrimonio-mondiale/.

<sup>&</sup>lt;sup>51</sup>The Periodic Reports are available at the following link: https://whc.unesco.org/en/list/395/documents/ - sezione "Periodic reporting", file *Periodic Reporting Cycle 1*, *Section II (Summary)* (2006) e Periodic Reporting Cycle 2, Section II (2014).

The thematic areas used to systematize the criticalities found, and not yet remedied, are:

- State of conservation.
- Decongestion and management of flows.
- Training and capacity building.
- Urban decor.
- Analysis for the verification of the perimeter and regulation of the buffer zone.
- Governance.
- Monitoring.
- Communication.
- Use.
- Participation.

As highlighted by the following graph, the **most critical areas**, on which most of the surveys presented by the World Heritage Center are focused and, on which, therefore, it seems appropriate to plan priority interventions, are linked to the state of **conservation**, to the management of **flows**, **training**, **capacity building** and **urban decor**.

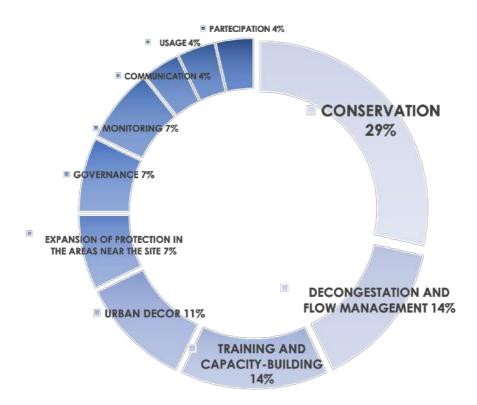


Figure 6 – Classification and percentage distribution of the criticalities that emerged from the 2006 and 2014 Periodic Reports.

#### 3.1.1.1 State of conservation

Regarding the **state of conservation** of the monuments, numerous critical issues have been identified. Some of these, highlighted in the 2006 Periodic Report, do not emerge in the subsequent 2014 Report and, therefore, are to be considered adequately remedied; these include, for example, the criticality defined in 2006 as "Boundaries and Buffer Zone", which refers to the need to expand the perimeter that delimits the *core area*.

Other intervention needs are present in both reports presented by the World Heritage Committee. First, the Committee believes that the Site is subject to **environmental risks**, defined as "risk factors, both ordinary and extraordinary, which can threaten the conservation status of the monuments"<sup>51</sup>, stating as a fact, that the monuments inside the Square are threatened by natural phenomena of different origin and extent. These risks, already noted in the 2006 Report, are detailed and specified in 2014<sup>52</sup>.

In the second Periodic Report, in fact, emerges that the presence of **groundwater** in the urban and surrounding area, and the probability of **earthquakes occurring**<sup>53</sup>, are identifiable as potential sources of risk for the monuments of the Piazza, especially for the **Bell Tower** by virtue of its inclination. The presence of these environmental factors implies the need to provide for the **configuration of a conservation plan** aimed at mitigating the risks associated with the **stability of the buildings** in Piazza del Duomo.

Also, according to the 2014 Report, **atmospheric pollution** is another element of danger for the conservation of the Site, noting the lack of current air pollution monitoring systems and **extraordinary intervention plans** to **mitigate the damage** generated on buildings.

In general, moreover, it is the atmospheric agents (wind, humidity, and temperature) that are counted among the additional risk factors, which, also in this case, require intervention through an adequate monitoring system of the effects of adverse environmental conditions and a plan of extraordinary interventions to mitigate the damage to the buildings in the Piazza generated by environmental deterioration factors.

Risks of an environmental nature are still among the problems related to conservation in the 2014 Periodic Report. In the latter, is also reported a potential risk of damage deriving from the

<sup>&</sup>lt;sup>51</sup> Ibidem.

<sup>&</sup>lt;sup>52</sup> Source: Periodic Report 2014.

<sup>&</sup>lt;sup>53</sup> According to the national seismic classification, which divides the territory according to four risk classes (from 1 to 4 in order of decreasing risk), Pisa falls into Zone 3, with the possibility of modest shaking but also of strong, albeit rare, earthquakes.

"intentional destruction of the heritage",<sup>54</sup> which denotes a management need linked to the **strengthening** of the **surveillance systems** present in the Square.

#### **FOCUS**

### Monitoring of the underground aquifer of the Leaning Tower of Pisa<sup>55</sup>

The intrinsic characteristics of the land on which the Bell Tower of the Cathedral of Santa Maria Assunta rests, better known as the "Tower", are the cause of its slope. In fact, the historic City of Pisa, a former Maritime Republic, is characterized by an altitude of just 4 meters above sea level, and the level of the water table present in the surroundings of the Tower is just one meter below ground.

The subsoil of the Bell Tower is, in fact, saturated with water, like most of the soils of the alluvial plains, and is formed by an alternation of coarse and fine-grained soils. The coarser-grained, very permeable soils are home to two aquifers, of which, the one closer to the surface is located between the depths of 40 and 100 meters from ground level, while the second is between the depths of 120 and 200 meters. The first aquifer, which can be reached more easily, was widely exploited throughout the twentieth century for irrigation and industrial purposes.

The "Polvani" Geotechnical Commission, which worked on the Tower at the end of the 1960s, defined the influence of the piezometric height of the first aquifer on the stability of the Tower, prompting the competent authorities to prohibit the installation of wells in the first aquifer less than a kilometer from the Tower.

Since the end of the 1960s, the piezometric height in the subsoil of the Tower has been constantly monitored. The Opera della Primaziale Pisana, autonomously and independently, has been dealing with it for about twenty years.

The current automatic monitoring system of the Tower uses sensors to control the piezometric height and the temperature of the groundwater to detect any changes in the hydraulic regime that may be risky for the stability of the monument.

To the control of the temperature is periodically added the control of the salinity of the water: already in the 1960s the average piezometric altitude in the first aquifer was below the average sea level. This characteristic could, over time, determine an intrusion of the

<sup>&</sup>lt;sup>54</sup> In the 2014 Report, the "*Deliberate destruction of heritage*" factor, which falls under the "Other human actions", is classified as a potential risk originating in the territory outside the Site.

<sup>&</sup>lt;sup>55</sup> This study was drawn up by the Opera della Primaziale Pisana.

saline wedge into the mainland, with the consequence, considering the characteristics of the clayey soil, of accentuating the phenomena of subsidence.

The Opera della Primaziale Pisana, for about twenty years, autonomously and independently, has been dealing with the monitoring of the water table and other environmental parameters necessary for the protection of the monument.

# 3.1.1.2 Flow decongestion

The elements of investigation highlighted in the 2006 Periodic Report, addressed, and developed in the 2014 Report, include those relating to the need to **decongest flows** in the Piazza ("Pressure from visitors/tourists flows")<sup>56</sup>.

Among the major correlated risks are those relating to the **safety** of visitors and the monuments. Some strategies have already been implemented, as shown in the 2014 Report, including the system for limiting daily access to the Bell Tower; however, the problem of overcrowding in the area would also require a strategy aimed at favoring the outflow and a lower concentration of visitors in the Piazza, the development of an **integrated fruition system** between Piazza del Duomo and the rest of the City through the **creation and promotion of tourist itineraries** that include other monuments and cultural attractions located in the urban center of Pisa, which can also be easily explored on foot.

Ultimately, the issue of visitor flows and that of access routes are recognized, in the Report, as two sides of the same coin, namely that of an increasingly stringent need for initiatives capable of promoting forms of sustainable tourism for the Square and for the City as a whole.

#### 3.1.1.3 Training and capacity-building

The critical issues regarding training and capacity-building emerged only in the 2014 Periodic Report and specifically concern the **lack of human resources** possessing the necessary skills to manage the Site.

In particular, the Report highlights the lack of training and training opportunities for specialized personnel in the fields of: **awareness-raising strategies for community** with respect to the value of World Heritage (the so-called "community outreach"), **cultural mediation** ("interpretation"), **training** ("education") and **management of visitor services** ("visitor

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management"). For these categories of resources, currently unavailable but necessary, **training** and capacity building actions aimed at stemming the criticalities highlighted are recommended.

It is useful to specify, that the Report does not only refer to the internal human resources of the person in charge of the management of Piazza del Duomo, but includes all the categories of individuals who, in different ways, can contribute to the maintenance and enhancement of the Site and its *Outstanding Universal Value* over time, i.e., public administrations, local communities, citizens, and tourism and trade operators. therefore, the necessary actions to be taken cannot be separated from an "education and awareness program", which provides the appropriate tools to all stakeholders to interpret and share the *Outstanding Universal Value* of the assets.

#### 3.1.1.4 Urban décor

A critical issue that emerges from both Periodic Reports is linked to the so-called "urban decor". Among the activities that can negatively affect it are, for example, the itinerant trade present in the Square and the non-itinerant trade close to it, which compromise the overall and organic visibility of the Site, damaging the integrity of perception and decor. In both cases, UNESCO highlights the urgent need to define regulations regarding the presence of itinerant trade in the areas pertaining to the Square.

In addition, the **development of housing** in the surrounding areas, which requires constant monitoring of construction initiatives being planned and/or implemented, and the drafting of coherent guidelines aimed at creating a sense of harmony and architectural and urban uniformity. These issues relate to the need to regulate the redevelopment and expansion of the *buffer zone* according to pre-established criteria following appropriate context assessments.

#### 3.1.1.5 Analysis for the verification of the perimeter and regulation of the buffer zone

In the Periodic Reports, the need to **extend the so-called** "buffer zone" around the Square is raised. This aspect is highlighted in the 2014 Periodic Report which recommends, more precisely, the extension of the buffer zone to the area north-west of Piazza del Duomo in order to conform the level of protection to the real needs of the Site. In fact, the absence of an "area of respect", overlooking the north-west limit of the Site, undermines the maintenance of the Outstanding Universal Values of Piazza del Duomo, including its conditions of authenticity, integrity, and ownership.

The risks associated with the absence of an adequate protection area may result in a lack of protection and enhancement, or a failure to respect the integrity of the UNESCO Heritage Site. Furthermore, the scenographic framework of the context and the views to and from the Square can be compromised.

#### 3.1.1.6 Governance

The 2014 Periodic Report focuses on two opportunities on the need to intervene through coordinated actions aimed at improving the management of the Site. The factors considered decisive are two. On the one hand, there is mention of "management activities", recalling the importance of actions aimed at strengthening the coordination mechanisms between entities responsible for defining management strategies. On the other hand, in the 2014 Report, mention is made of the need to fill – through the drafting of the document – the absence of a Management Plan.

#### 3.1.1.7 Monitoring

Among the needs mentioned in the 2014 Periodic Report, emerges the requirement to strengthen the research and monitoring activities already in place in order to improve protection and conservation. Specifically, it is indicated that, despite the presence of sufficient information materials of various kinds concerning the application of the concept of *Outstanding Universal Value* of the assets, a system of key indicators for monitoring has not yet been developed to ensure that this value is preserved over time. In general, the lack of a **system of unique and integrated indicators** is referred to as a criticality to be resolved by drawing up a Management Plan, also taking into consideration the need to implement timely detection of the actions carried out during implementation.

# 3.1.1.8 Communication

**Communication** is another critical element highlighted by the Periodic Report of 2014. As already mentioned in the paragraph dedicated to "decongesting flows", the communication tools to support visitors are lacking. In particular, the Report shows the need to improve the so-called "Interpretative and visitation facilities", through innovative methods that support the dissemination of historical-artistic content and, at the same time, act as a "guide" for the visiting tourist in Pisa.

More generally, however, it is considered necessary to **systematize the various existing communication programs** aimed at creating greater awareness of the *Outstanding Universal Value* of Piazza del Duomo among visitors and residents. The aim is the achieve an effective and unambiguous promotion and enhancement strategy.

#### 3.1.1.9 Fruition

Regarding the theme of **use**, the 2014 Periodic Report emphasizes the coexistence, within the Square, of a user interested in the **historical-cultural** aspect of the Site and of its uses it for **worship purposes**.

The Baptistery and the Camposanto, but above all the Cathedral, are places of worship and must be respected and protected as such. In recent times, a condition of substantial "balance" has been reached between the "tourist" use and that due to "cult" reasons. This balance is given by the possibility, during Sunday masses, to keep the Cathedral open, albeit with limited spaces for tourist use.

Tourists, on the other hand, are guaranteed access to the monuments 365 days a year, with times that span, in the moments of greatest influx (for example in the summer period), very long openings hours (from 8:00 to 20:00 for all the monuments, from 10:00 to 20:00 for the Cathedral) in addition to evening openings for the Bell Tower and the Camposanto in the months of June, July and August, until 22:30.

#### 3.1.1.10 Participation

Finally, about participation, attention is drawn to the sporadic relationship, where it exists, between the managers of the World Heritage and the **local population**. To cope with this criticality, it is essential to develop a plan that favors the involvement of communities in the **definition of the management needs** of the Site and the strengthening of awareness of its *Outstanding Universal Value* by local communities. In addition, there is also a lack of, if a complete absence, a relationship with **local entrepreneurs** active in the **tourism** sector, again with reference to any needs and expectations with respect to the management of the *core area* and the surrounding area.

Once the critical issues identified in the Periodic Reports have been examined, they have been traced back to the pillars that will guide the structuring of the Action Plan, namely the 5Cs, Strategic Objectives of the Convention.

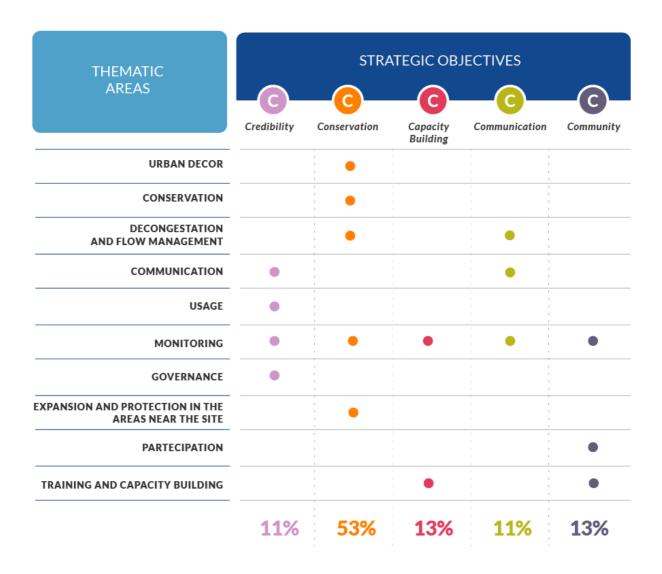


Figure 7 – Synoptic table of the topics analyzed in relation to the 5 Strategic Objectives of the Convention (5Cs). \* The percentage values are rounded to the nearest unit.

As can be seen from the table, the Periodic Reports focus more on the component connected to **conservation** and protection, while the aspects specifically related to management are dealt with only for key critical issues that are aptly identified.

For this reason, it is useful to proceed, in the following paragraph, to update "the state of affairs" identified by the Reports, through a recognition of the additional needs that emerged during the analysis.

# 3.2 Further analyzes of the registered Site and identification of criticalities / needs

In public opinion – and in that of many stakeholders – the status of World Heritage represents, first, a recognition of enormous value for a territory for the purpose of its promotion, maintenance of its reputation, and the development of tourism-related economies. However, entry into the World Heritage List – in addition to being a long, stimulating, and tiring process for the community – constitutes a responsibility, since the cultural, tangible and intangible assets, as well as the natural assets that obtain such recognition, must not only be protected so that their use is guaranteed to future generations, but must also contribute to the dissemination of best practices in the field of UNESCO culture, dissemination, accessibility and development. The five Strategic Objectives, referred to several times in this document, represent an important guideline as they are the pillars around which to design enhancement strategies to allow Piazza del Duomo to maintain unaltered the requirements for entry into the WHL. Therefore, the analysis conducted in the previous paragraph is enriched below with further suggestions for action concerning the 5Cs to integrate and complete the recommendations for action from the Periodic Reports.

#### 3.2.1 Credibility

For the World Heritage List to be representative, balanced, and credible, the World Heritage Committee has established that only assets and Sites in possession of the *Outstanding Universal Value* are included. This statement carries particular emphasis on the **collective responsibility of all those involved** in the mission – the World Heritage Center, the advisory bodies, the Signatory States to the 1972 Convention – to uphold the credibility of the World Heritage Convention. The goal is to preserve the **truthfulness of the criteria** applied for the registration of an asset or Site in the WHL and its characteristics of **integrity and authenticity**<sup>57</sup>. Therefore, the Periodic Report tool, discussed in the previous paragraph, is one of the tools used to increase the credibility of the List.

For Piazza del Duomo, the specificities of *Outstanding Universal Value* are evident and still relevant: the **careful and continuous protection** exercised by the individuals responsible for the

<sup>. . . . . . . . . . . . . . . . . . .</sup> 

<sup>&</sup>lt;sup>57</sup> The World Heritage Committee, in fact, through the instrument of the Operational Guidelines, which establishes the conditions for inclusion in the World Heritage List, reiterates that simply satisfying the criteria is not sufficient to guarantee the inclusion of the property or Site. in the WHL, as to be considered of *Outstanding Universal Value* it must also satisfy the conditions of integrity and authenticity and must have an adequate protection and management system to ensure its protection (Paragraph 78 of the Operational Guidelines).

management and enhancement of the *core area* has allowed the monumental aspects that, at the time, contributed to the registration in the WHL, to remain unaltered.

In addition to the architectural constraints, the Square and, more generally, the historic center of Pisa, have had guaranteed high levels of archaeological attention, thanks to the development of an **Archaeological Risk Map** and the deployment of consistent **timely interventions**. Over the years, moreover, the area has been the subject of careful **archaeological research**<sup>58</sup> carried out, not only in emergency conditions, as usually happens in urban contexts, and designed to preserve the central role that the area has covered since the beginning human settlements in the City.

## **FOCUS**

# The role of Piazza del Duomo throughout history

The formation of a first urban area, with structures different in construction technique and material culture, in the current Piazza del Duomo (area north-east of the Tower) is dated around the eighth century BC, certainly with functions connected to the activity of cult. It was with the Roman colonial interpretation of the 1st century BC, however, that the monumentalizing of the religious buildings in the Square took place. The remains of mosaic floors and traces of a paved road with an east/southeast – west/north-west path are attributable to the 1st century AD, while the Domus found in the garden of the Archbishopric can be dated to the late Republican age to the late antiquity.

In the new urban layout, the marginal position of the Cathedral takes on particular importance, outside the early Medieval Era, recalling of both the development methods of Christianization (which recent studies confirm to come from the sea), and the presence of river communication networks. While in the high Middle Ages there was a contraction of the inhabited area in the space between the two rivers, the Arno and the Auser (bordered to the east by the Borgo and to the west by Via Santa Maria): the municipal age favored the urban development of the City. The construction of the walls, still today among the greatest monumental evidence, was started in the mid-twelfth century, inaugurating a profound urban renewal. It seems clear that, even in the Middle Ages, the urban morphology was characterized by the location between two rivers. Therefore, the particular position of the Cathedral is explained by the importance that the river system had for the City, whose main access was that coming from the river port. The Cathedral, whose construction was started in 1063, played a particular role as a statement that Pisa, as a rising power, wanted to express both to its community and to those who, merchants and travelers, found themselves disembarking there.

<sup>&</sup>lt;sup>58</sup> It should be noted that knowledge is now available of an integrated information system (the MAP), which puts on the network the completeness of the archaeological evidence as well as a large edition of the urban archaeological excavations carried out in the last decade; although lacking an overall reading of urban developments, accessible also to non-experts, and the necessary to strengthen the element of fruition and identity recognition. The system, promoted by the University of Pisa, does not have a direct connection with the protection deeds and related functions that are attributed to SABAP.

At present, the role assumed by Piazza del Duomo, within its urban context, can be traced back to **three specific functions**:

- Cult of the Christian religion. In particular, as regards the religious element, which also connotes its cultural value, it is clear that Piazza del Duomo has values and characteristics that give it a very typical expression and is subject to special protection<sup>59</sup>. Access to the Cathedral is guaranteed to the faithful for prayers and masses, the latter regularly celebrated (two a day on weekdays, five on holidays, plus other celebrations on the occasion of solemnities, feasts, and anniversaries) <sup>60</sup>.
- Monumental, cultural function and top City tourist attraction. The monuments of Piazza del Duomo are accessible through a ticketing system that provides access to: the Baptistery, Camposanto<sup>61</sup>, the Museo delle Sinopie, the Museo dell'Opera del Duomo, temporary exhibitions (different types of integrated tickets are available, depending on the number of monuments visited), access to the Bell Tower (by reservation), access to the Cathedral (free, with a title that is obtained by purchasing one of the tickets included in the offer system). In addition, free openings<sup>62</sup> are also reserved for residents of the City and province of Pisa.
- **Civil function.** The Site is configured as **freely accessible** and **usable** by the resident community. The Square is also home to various kinds of City events.

The intersection of these three functions entails, for the purposes of managing the Site with respect to the Strategic Objective of *credibility*, the need to **ensure coexistence and balance between the three types of uses**, by respecting requests and needs from different categories of users (religious community, local community, and tourists).

Still relating to the credibility of the World Heritage List, the *Outstanding Universal Value* of the Square can also be threatened by a **simplified**, **stereotyped**, **or non-unitary perception** of it, connected to the tourist attraction of the Bell Tower, which is unbalanced with respect to the image of an organic monumental complex. Because of this, it also emerges the issue of the

<sup>59</sup> Art. 9 of the Code of Cultural Heritage and Landscape (Legislative Decree No. 42/2004) refers to cultural heritage of religious interest and provides that the Ministry and the Regions, to the extent of their competence, in the exercise of their functions of protection, must consider the needs of worship.

<sup>&</sup>lt;sup>60</sup> https://www.opapisa.it/visita/cattedrale/.

<sup>&</sup>lt;sup>61</sup> The Camposanto has been, since the early nineteenth century, one of the first public museums in Europe, with its corridors - renamed galleries – which house celebratory and funeral monuments dedicated to the most important historical figures of Pisa. Source: https://www.opapisa.it/visita/camposanto/.

<sup>&</sup>lt;sup>62</sup> Fonte: https://www.opapisa.it/biglietti/prezzi-2/.

complete cultural experience and, consequently, to the understanding of its value as a unitary element. It is also known that the phenomenon of overtourism constitutes a significant threat to the quality of life of residents and to the long-term sustainability of the cities of art, in terms of preserving cultural and historical-artistic value and maintaining a solid image and identity. In particular, as part of the *credibility* objective, for Piazza del Duomo it is considered important to encourage the implementation of a new program to favor sustainable tourism and, above all, to consolidate the personal and autonomous responsibility of all the parties involved: State, Management Body, tourism industry, local actors, residents.

Given the actions that will be illustrated later, today it is evident that the monumental complex, despite having kept its elements of integrity and authenticity unaltered, its deliberately management must respond to the strategic elements defined by UNESCO in the *Compendium*<sup>63</sup> on policies regarding the World Heritage.

#### 3.2.2 Conservation

The **cartographic survey**<sup>64</sup> of the regime for the protection of the historical-architectural and monumental heritage states the presence of the constraints<sup>65</sup> that impose on the Municipality of Pisa. As already noted, within the *core area* there are **19 real estate assets subject to direct protection measures** pursuant to Legislative Decree 42/2004 "Code of Cultural Heritage and Landscape", including the area of Piazza del Duomo.

The conservation, protection and enhancement of the *core area* are actions governed by the Opera della Primaziale Pisana, which each year draws up the Mandate Report of the Opera with

<sup>&</sup>lt;sup>63</sup> The Compendium on World Heritage Policy is an online collection of policies that have guided the implementation of the World Heritage Convention since its adoption in 1972. Presenting an articulated classification according to the Convention's 5 Strategic Objectives (5Cs), it assembles the policies adopted by the World Heritage Committee and the General Assembly of States parties in their decisions, resolutions and other strategic texts (https://whc.unesco.org/en/compendium/).

<sup>&</sup>lt;sup>64</sup> Conducted on the Geoportal of the Tuscany Region in collaboration with the Superintendence of Archeology, Fine Arts and Landscape for the Provinces of Pisa and Livorno. Geoscope is the name of the digital geographic portal of the Tuscany Region and is the union of a set of portals, created using the *framework*, which present a series of thematic layers functional for geographic information in a coordinated manner. All the data displayed comes from the Inspire services of the regional Geographic Infrastructure, Geoscope WMS, dynamically requested by the portal "created as part of the eGov Plan 2012 of the Ministry for Public Administration and Innovation, which provided for a program of interventions for digital innovation in the cultural heritage sector.

the aim of disseminating and illustrating the actions carried out during the year on the artistic heritage. In fact, the Opera della Primaziale has, within its staff, multiple figures responsible for safeguarding the assets of Piazza del Duomo. The Institution makes use, in particular, of a large group of restorers, with a high level of professionalism, flanked by construction, hydraulic and electrical workers who cooperate in carrying out the maintenance of the monumental complex and the works to preserve it. Therefore, periodic ordinary maintenance operations and punctual extraordinary maintenance operations are carried out and are all reported in the Mandate Reports of the Opera, which, with its ongoing work, manages to guarantee an excellent state of conservation of the real estate and the Site as a whole.

In the box below there are some descriptive details of the architecture and the state of conservation of the four main monumental works of Piazza del Duomo.

**FOCUS** 

# State of conservation and main interventions that have affected Piazza del Duomo

#### **The Cathedral**

The current appearance of the monument is the result of several successive restorations in different eras. The first radical interventions followed the great fire of 1596, with the reconstruction of the roof, the construction of the three bronze doors of the façade, and the dismantling of the pulpit by Giovanni Pisano, dating back to 1310 and being restored between 1599 and 1601 (the work was reassembled only in 1926; however, in the absence of provisions contemporary with the execution or dismantling, the current configuration shows divergences from the original).

Starting from the eighteenth century, the Cathedral began to be lined internally with large painted canvases that tell the stories of the Pisan Saints, created by the leading artists of the time. During the nineteenth century, further interventions involved the internal and external decoration: many sculptural elements of the façade were replaced by copies, with the originals transferred to the Museo dell'Opera del Duomo.

Again, in the fifties of the twentieth century, an important restoration involved the Dome. Further interventions date back to the 90s: in 1993 the cleaning of the San Ranieri door, with the precious bronze doors by Bonanno Pisano.

Finally, the restoration work carried out between 2016 and 2018 involved the complete verification of the state of maintenance and conservation of the plasters of the Dome and of the side faces of the Presbytery and of the intrados.

In 2018 the restoration of the wall paintings that decorate the choir and Dome was completed. The decoration of the Dome was commissioned in 1627 by the Opera del Duomo di Pisa to Orazio Riminaldi – a painter defined as a Tuscan by birth and a Roman by

education; just over thirty years after the great fire of 1595. Here Orazio worked until his death, in 1630, leaving in the hands of his brother Girolamo the conclusion of the great work, not in *fresco*, but in oil on plaster. The Dome completed the decorative layout of the choir, the triumphal Arch and the Pendentives, painted by Michelangelo Cinganelli at the end of the 16th century – this also completely recovered.

In 2019/2020, the impressive material restorations of the north transept continued.

Work is currently underway on the restoration of the external surfaces of the north transept of the Cathedral, which involves the workers of the Opera della Primaziale. The construction site activities continue with the historical-artistic investigation, the analysis of construction techniques, and the characterization of the constituent materials. The completed conservation interventions are the disinfection and cleaning of the surfaces, the removal of unsuitable materials, such as cement and metal elements, the consolidation operations of the disintegrated materials. It remains to be completed the grouting of the surfaces. The access portal to the north transept was the subject of a "bio-cleaning" experiment, in collaboration with the University of Molise, the Insubria University of Varese and the Consiglio Nazionale delle Ricerche (CNR) of Pisa.

As for the pictorial apparatus, the restoration of the Madonna delle Grazie by Andrea del Sarto and Andrea Sogliani is underway. From the first investigation, the seriousness of the situation was clear and the location of the painting inside the Cathedral caused further deterioration of the pictorial surface, as it was subjected to considerable thermohygrometric excursions. In fact, in December 2019, the workers removed the artwork, taking safety precautions, from the Altar of the President where it was located, to transfer it to the air-conditioned laboratory already used for the restoration of the Borgognone Christ.

#### **The Baptistery**

In the nineteenth century, at the same time as of a renewal that affected the entire Piazza del Duomo and its monuments, the Baptistery was subject to a radical restoration by the architect Alessandro Gherardesca, with interventions that led to the reconstruction of some portals and a large part of the decorative apparatus.

The large construction site began in 1835 and was resumed from 1841 to 1856, but interventions on the decorations have already been recorded since 1817. These interventions often involved replacements, with the rearrangement of the pieces removed to the warehouses, waiting for possible reuse. This approach denotes the restoration criteria later adopted, namely the desire to restore the homogeneous image of the building rather than preserving the ancient material.

These restorations, lasted fifteen years: initially work was done on the external walls, then on the basement, and finally on the inside of the building. Between 1835 and 1837 the reparations to the ashlars and ornaments started, which were often replaced. In just over two years, from March 1841 to May 1843, the entire south-western half of the Baptistery

(quite damaged by the Libeccio winds), had been renovated, and by the end of 1846, the last portion the works were completed. The works on the two portals (northern and southern) started at the same time in 1847 and concluded in August 1848. In autumn of the same year, the restoration of the façades of the Baptistery was completed. The ancient "gradule" were uncovered between the spring of 1849 and the winter of 1850, but their elements were mostly replaced with new marbles. In 1850, the intervention on the outside of the Baptistery could be defined as "completed", even though the internal restoration work had already begun two years prior, including the insertion of the new windows by Botti. The completion of the entire project was officially celebrated on August 16, 1856, with the reopening of the building to worshiping.

Among the most recent interventions, it should be noted that, in 2018, the recomposition of the entire stained glass windows, that characterizes the "first windowed order" of the Baptistery, was completed: to the 10 nineteenth-century windows restored by the Conservation and Restoration Center of the Venaria Reale, the four new artistic stained glass windows created by the winner of the competition announced by the Opera della Primaziale Pisana, Francesco Mori, and by the artistic glassworks factory Mellini were placed side by side. The stained-glass windows are dedicated to the patron saint of Pisa, San Ranieri, to Pope Paul IV, who celebrated a mass in Pisa in 1965 at the end of the National Eucharistic Congress, to the Blessed Giuseppe Toniolo, and to Pope John Paul II who visited Pisa in 1989.

#### **The Bell Tower**

The distinctive feature, the inclination, of the steeple of the Bell Tower was evident from its first years of construction, up to the current 3.9° of inclination. However, over the centuries there have also been long periods of stability or slope reduction.

During the nineteenth century, the Bell Tower underwent major restorations, including one that allowed the base of the Tower to be isolated. Soil analyzes brought to light the presence of a considerable amount of groundwater which render it yielding to the weight of the Tower. To cope with this problem, large quantities of water were extracted from the subsoil, but this favored the phenomenon of subsidence and the consequent increase in the slope of the Tower. In the last decades of the twentieth century, the inclination of the Tower has undergone a decisive increase, to the point of giving rise to concrete concerns about a possible collapse.

During the consolidation works carried out between 1990 and 2001, the slope of the Bell Tower was reduced by circling some floors, the temporary application of steel tie rods and lead counterweights, and under excavation. In addition, the interventions made it possible to make the Tower safe and to allow visitors' access. In March 2008 the Tower reached the final level of consolidation in terms of inclination. In April 2011, the restoration work on the external and internal stone surfaces was completed.

In 2018, the reconstruction of the entire set of stained-glass windows that characterizes

the "first windowed order" of the Baptistery was completed: the 10 nineteenth-century windows restored by Venaria Reale were flanked by the four new artistic windows created by the winner of the competition announced by the Work of the Primaziale Pisana, Francesco Mori, and by the artistic glass factory Mellini. The stained-glass windows are dedicated to the patron saint of Pisa San Ranieri, to Pope Paul VI who celebrated a mass in 1965, to the Blessed G. Toniolo, and to Pope John Paul II who visited Pisa in 1989.

#### **II Camposanto**

The Monumental Cemetery suffered extensive damage caused by a bomb in 1944, which triggered a fire on the roof and the consequent melting of the lead present, compromising frescoes, sculptures, and sarcophagi.

For this reason, from 1945 to today the Camposanto has undergone various restoration works, including the one that allowed the recovery of the sinopias, now preserved at the Sinopie Museum.

The first cycle of restoration was completed in 1960. However, research and analyses conducted by the Superintendency, in ongoing collaboration with the Opificio delle Pietre Dure and the Departments of Earth Sciences and Chemistry of the University of Pisa, evidenced the inadequacy of these interventions and the need to start a new intervention program.

At the end of the twentieth century, it was decided to proceed with a philological restoration, following the removal of the nineteenth-century sculptural apparatus, which was meant to restore the medieval structure of the monument, neutralizing at least in part the effect of the enormous architectural stratification that occurred over time. During this period the important frescoes preserved inside and in state of deterioration were also removed and subjected to restoration. Finally, in recent years, the wall frescoes and lapidary floors of the portico have been restored, which were also severely damaged by the molten lead cast in 1944.

To date, two lines of intervention have been established to return a complete and exhaustive elucidation of the Camposanto: the opening of new restoration Sites and the establishment of a research group to define the structure of the substantial corpus of stone works, which, together with the cycle of frescoes, make up the complex. The research group will be in charge of studying an exhibition itinerary capable of integrating, in the best possible way, the stone works and the set of frescoes, in order to make the visitor's itinerary fully leverageable. On the extensive external surface, work began on the east wall, whose continuity is interrupted by the grafting of the Dal Pozzo Chapel, while on the south wall work has begun to study and design an intervention on the Tabernacle of Wolf by Francesco.

The intervention project on the external surfaces is a construction site still in progress and represents an important opportunity to investigate, in depth, the construction history of the monument. It could also become a fundamental cognitive input. The restoration of the

wall started with the aim of reconstructing the conservation history of the monument, in order to chronologically mend the interventions carried out on the building, such as the replacements, renovations, and architectural changes made – in addition to understanding previous structural problems. Particular attention should be paid to the south side of the east wall, consisting of a masonry facing with pseudo-isodomic staging. Cognitive investigations were launched about this to define the connections of the various constituent elements, especially between the stone facing, the plastered masonry and the insertion of the Dal Pozzo Chapel. Before the actual restoration operations, analysis and sampling of the restoration mortars was carried out in order to identify critical areas related to the replacement of ashlars, and the presence of a large structural lesion that particularly affects the second arch from the south. Once the information obtained from the intervention mortars was recorded, they proceeded with the removal of the same, which allowed to bring to light the bedding mortars of the segments.

Inside the complex, a restoration site has been started involving the four-light windows of the east gallery. In addition, work has begun on the study and analysis of the conservation situation of the tombstones floor, in addition to the recording the current state of conservation of the sarcophagi and funeral monuments displayed inside the galleries.

As for the frescoes, the restoration of a scene depicting Moses and the Tables of the Law, created by Benozzo Gozzoli around the middle of the 15th century, has been completed.

The covers have been overhauled and inspected. These operations, and the subsequent major campaigns, highlighted emergencies such as gaps, breaks or defects in the lead cover. The Technical Office, with the specialized workers of the Opera, has developed a system for sealing the gaps, both by means of punctual tin plating, to be carried out in total safety for the underlying wooden structures, and by integration, overlapping, replacement of portions more or less affected by lead.

## Opera del Duomo Museum

In 1979 the Capuchin Sisters, owners of an ancient convent in the Piazza del Duomo in Pisa, decided to retire to a more suitable environment. The Deputation of the Opera della Primaziale Pisana, therefore, acquired the building, with the aim of providing suitable accommodation for works of art of exceptional value and collections, at the time in temporary storage. In this way, the lack of space that the development of the Fabbriceria had required for some time was accommodated. Thus, in 1986 the Museo dell'Opera del Duomo was inaugurated, under the scientific guidance of a Commission chaired by Prof. Guglielmo De Angelis d'Ossat, and the Presidency of the Opera della Primaziale by Prof. Giuseppe Toniolo.

After more than thirty years, the Deputation of the Opera della Primaziale Pisana decided to refurbish the museum with a new museum itinerary, entrusted to scholars and restorers led by Prof. Marco Collareta and coordinated by the Works Management of the Engineer Giuseppe Bentivoglio. The evocative setting is the work of the architectural firms of Adolfo

Natalini and Magni & Guicciardini. The works ended in 2019.

The restaging was deemed necessary since the components relating wiring, lighting and control systems were obsolete. Furthermore, the choice was dictated by the desire to create a new staging of the works, originally proposed in a "traditional" way, by adopting a new "contemporary" approach, which places the works of art within a Site and context specific spectacular setting. In particular, the evaluations that led to the new exhibition format derived from the assumption that the previous, despite its correct display, was more suited to use by scholars and art enthusiasts. At present, through the adoption of specific "settings", the exhibition of the works allows a more immediate reading and understanding. The works, now, are not only arranged in chronological order, but also by the monument they belong to - at least on the ground floor which is dedicated to the great Pisan sculpture: starting from the Cathedral and ending with the Bell Tower, with a special didactic system of plaques and with multimedia stations created by the Perceptual Robotics Laboratory (PERCRO) of the Scuola Superiore Sant'Anna of Pisa, directed by Prof. Massimo Bergamasco. On the first floor, on the other hand, mainly interior furnishings are exhibited, because quoting S.E. the Archbishop of Pisa Mons. Giovanni Paolo Benotto, religious buildings are not just stone walls and sculptures but, above all, places where faith" is professed". Therefore, the works exhibited there are crucifixes, wooden inlays, vestments, liturgical books, chalices, and candlesticks.

The museum itinerary navigates through 25 rooms, for a total of 380 works on display; also including new restored works, such as the Triptych of the Madonna Enthroned and Saints, tempera, and gold on wood by Spinello Aretino, the crown, the scepter, the globe, and a refined drape of Emperor Henry VII, recovered on the occasion of the surfacing of his tomb in 2014.

The route ends with the splendid cloister overlooking the Bell Tower and which preserves, on the ground floor, the statues depicting the Madonna with Child, the Evangelists, and the Prophets sculpted by Giovanni Pisano for the Baptistery. These representations are included in a new display with the aim of re-proposing the suggestion offered by the three-light windows of the monument, where the copies are now kept.

#### Sinopie Museum

The last intervention carried out on the Sinopie Museum was a functional revision. In fact, after fifteen years since the last restoration, the need emerged to renovate the area intended for welcoming visitors; taking into account the changed communication strategies of the museum complex in the Piazza del Duomo in Pisa, partly already realized with the reopening of the Museo dell'Opera del Duomo and its museological and museographic redevelopment. The result is the strengthening, both from a quantitative and qualitative point of view, of the space, whose functions of tourist information and communication have been increased. Accessibility has also been improved, with the creation of a ramp at the section dedicated to in-depth videos on the restoration of the

monumental complex. In addition, an area reserved for the museum bookshop was created, in order to provide the structure with a new function, in line with the distribution characteristics of the current museum itinerary and without modifying in any way the structure's staging.

#### **Archbishop's Palace**

Last year, the intervention at the Archbishop's Palace, now at completion, involved the restoration of the main facade and, specifically, the restoration of the Pietra Serena and the deteriorated plaster. The restoration of the Pietra Serena focused on the cornices and gables of the windows, on the stringcourses, on the large access portal and on the corner stones. With the plasters, we proceeded by removing the deteriorated plaster, followed by the implementation of the curling, and the plastering and the final coloring for the restoration of the proper decoration of the perspective of the building. In the overall intervention, the shutters were also overhauled and checked, as well as the copper windows and descendants. The intervention in question was, therefore, a conservation restoration, which respected the typological and formal elements of the organism.

As already emerged from the study of the Periodic Reports, the careful protection and conservation policies on the monuments of Piazza del Duomo, and the timely restoration projects and interventions carried out by the Opera della Primaziale Pisana, have led to a more than sufficient evaluation about the state of conservation of the complex. The most important issue that the new Management Plan must address with respect to the conservation objective is, therefore, the maintenance of a very high-quality level of protection, which would sense as a reference for the enhancement of the Site.

However, there are some **criticalities** with respect to the issue of **conservation management** of the *core area*, already highlighted by the Periodic Reports of 2006 and 2014. To complete and integrate the criticality framework, already highlighted in the Reports, particular attention is focused on the following problematic aspects that can be addressed by the Management Plan:

• The theme of the *buffer zone* and the historic City Center<sup>66</sup> is part of a Site conservation policy not only with respect to the physical and technical point of view, that the potential risk of deterioration to which the monuments are subject, but also from a

<sup>&</sup>lt;sup>66</sup> See Section **Errore.** L'origine riferimento non è stata trovata.

conceptual and imaginary point of view with respect to the cultural landscape that qualifies the entire historical cultural context. The latter is, in fact, partially compromised, as **the continuity of the historical image**, consolidated characteristic of the urban fabric, **is interrupted** due to the emergence of elements and concretions of little or no value.<sup>67</sup> Also, related to this problem, there is the presence of interventions of little architectural value around the *core area*, especially on the Lungarni.

- The tourist influx into the core area is intense and concentrated in certain spatial
  points. The excessive load of people in a limited space-time environment, which the
  area must bear and manage, requires a constant and careful effort of planning and
  managing visitors by the managing body, to adequately distribute the flows amongst
  the assets.
- In certain conditions of overcrowding, moreover, access and outflow to and from the core area - and, consequently, the management of visitor flows within the Site referred to in the previous point - can be problematic due to the small size of the Square and its limited escape routes. It is, therefore, utterly fundamental to favor alternative access routes through secondary or unused entry routes that also include a different use of the external urban layout. In this way, the routes that are currently little exploited (such as the secondary routes that cross the layout of the historic center from the south towards the Piazza) can acquire greater relevance and improve visiting the City. At the same time, this would allow for the easing of access flows to the Site that focus on the main routes (such as Via Santa Maria, access from Porta Nuova and Piazza dell'Arcivescovado). The almost continuous presence of visitors is, in fact, also as an opportunity to think and create a wider and more structured tourist route, which goes beyond the fleeting use of the Site, and allows the distribution of the flow towards the remaining part of the historic City. Finally, aspects related to safety should not be underestimated: given the highly sensitive nature of the place, exposed to risks of various kinds, it is essential to be able to take advantage of an area, characterized by an extensive urban space, in which to convey and gradually drain the large number of **people** present daily under controlled conditions.
- The arrival of tourists near the core area takes place mainly through road transport, typically tourist buses, which stop inside the parking lots located in the northern area of the City, near the Site, and result in more traffic along the driveways of the area. In

<sup>&</sup>lt;sup>67</sup> Ibidem.

particular, the long driveway that runs along the walls along Via Contessa Matilde exposes the architectural heritage of the Site to a high degree of risk due to the concentration of air particulate matter (atmospheric dust), which attacks the architectural surfaces of the assets, especially the polychrome marbles present in large quantities. Hence, the logistic and infrastructural system of the City is an aspect to be taken into consideration in order to determine the impact of the critical aspect of overcrowding. To this end, it may be necessary to design adaptive actions for the system, especially for the urban transport network, by encouraging intermodal transport. It should be noted that, to also ensure less pressure on the Pietrasantina car park (located about 700 meters as the crow flies from the Site), the Municipality intends to favor alternative mobility systems. Finally, the network of pedestrian and bicycle paths could be conceived as a single homogeneous and functional structure, able to serve the residents and, at the same time, be available to the tourist flow coming from Piazza del Duomo, using innovative forms of means of transport.

### 3.2.3 Capacity building

In addition to the objectives outlined in previous paragraphs, this Management Plan intends to monitor and analyze the **training** activities initiated or planned within the Site of Piazza del Duomo in Pisa.

The subject of the investigation in this **Section** is capacity building, or the "building of capacities", [...] a continuous process of improving individuals in an economic, institutional, managerial context [...] within an organization, which can be enhanced or accelerated by external contributions capable of encouraging the strengthening the potential through the use of already existing capabilities".<sup>68</sup>

From the analysis of the Periodic Reports, illustrated in paragraph 3.2, emerges the need to intervene to fill a **lack of language**, **management**, **and cross-functional skills**, able to favor a better use of the Site and a greater understanding of its distinctive characteristics. In addition, there is insufficient structured training activity aimed at specific targets, such as institutions responsible for enhancement, researchers and bodies specialized in high-profile scientific dissemination, and cultural and tourism operators employed by the Site.

The role of **training** in heritage management is of primary importance, at multiple levels and with different tools and methods. It is considered necessary, in fact, not only for **technicians** and **operators**, but also for **users** and the **reference community**.

<sup>&</sup>lt;sup>68</sup> Source: Treccani, Lessico del XXI Secolo, 2012.

#### 3. Site Analysis

First, it seems appropriate that the capacity building actions aimed at citizens can act to reduce a problem that has been encountered in the City, namely that the protection of heritage, if understood only as conservation, feeds the perception of Pisa as "showcase City", experienced by citizens as a foreign body without identity. The resources deployed for the conservation of the heritage could appear ineffective if conservation is not accompanied by a strategy of valorization of the heritage oriented, first, to assigning it an important function for the community. The community is not responsible for the protection of heritage, since the very high historical and artistic value of the City is only superficially recognized by people, without real awareness and effective involvement. The widespread lack of responsibility towards the heritage manifests itself in various forms: from the lack of involvement with respect to the protection and enhancement initiatives, up to acts of vandalism carried out on the heritage. Precisely to reduce the impact of these problems, capacity building actions could act by stimulating or creating greater awareness, among the residents, of the potential carried by the local cultural heritage. These exposures could, therefore, be reduced by accentuating not just the educational aspect, as that linked to awareness raising. This could be achieved through awareness campaigns or training activities that provide for a direct experience of heritage care. The goal of training specifically aimed at the community should be to sharpen its sense of acknowledgement towards the cultural element of which it is the guardian, as its own identity element, both from a cultural and a social point of view: to strengthened a sense of ownership in the community towards the territory and heritage, and ensure that the community is increasingly configured as a heritage community capable of preserving, and passing on to future generations, the inestimable cultural value of the asset.

From the analysis, capacity building emerges as a priority also for all those responsible for Piazza del Duomo, the many operators engaged, in various capacities, in its management and enhancement. These are specific needs, such as **strengthening the involvement of communities**, the consolidation of **partnership actions**, the implementation of **educational** and audience development **policies**.

The recipients of the training also include the **different types of groups** that benefit from the heritage. In this case, *capacity building* activity will aim to **raise awareness of the correct use of the assets**, with the dissemination of information useful for understanding the intrinsic value of the heritage and the historical-artistic context in which it is located. In fact, we believe that working to stimulate adequate engagement is the best way to help the visitor feel as a **protagonist in the visit experience**, and not simply an occasional consumer.

#### 3.2.4 Communication

The objective of this phase of the analysis is to understand and evaluate the effectiveness of the communication activities concerning the Piazza Duomo Site, measuring its ability to develop and maintain awareness of its *Outstanding Universal Value*, taking into consideration how communication is an irreplaceable connection tool for the different audiences and the heritage/legacy of which the Site represents a universal expression.

The assessment starts from **editorial communication**, to reveal the availability of an adequate system of information tools with the function of supporting the visit (guides, brochures, maps), and also a fair number of products intended for cognitive appreciation of the heritage (catalogs, art volumes, scientific publications). Here is also included the set of Mandate Reports of the Opera della Primaziale Pisana, performed since 2016, which describe the daily activities of conservation, restoration and enhancement of the heritage carried out by the manager. Additionally, clear margins for improvement are also achievable regarding the availability of educational-didactic publications and quality multilingual products.

**Urban communication**, limited to the *core area*, can be improved above all with respect to the quantity and typological and graphic homogeneity of the signage systems, their positioning according to flows and the thematic study of the contents.

In the **multimedia** and digital sphere, new video-photographic contents have been recorded in recent years, among which high-quality productions destined for traditional channels (produced by Rai Cultura in collaboration with Ministry of Cultural Heritage and Activities and Tourism) coexist with others, especially online (through the site and the YouTube channel of the OPA and the tourist portals of the Tuscany Region and the Municipality of Pisa). Institutional communication on the **web** is entrusted primarily to the www.opapisa.it portal, which has an optimal graphic interface and usability, and contains all the information and essential functions for the user as well as an adequate set of multimedia resources. However, only two languages are available (Italian and English), the in-depth analysis on the recognition of World Heritage by UNESCO given to the Site is scarce (the official mark is also absent) – the proposal of educational content is still limited and there are no links to social channels.

Recently published is the new platform promoted by the Tuscany Region and Fondazione Sistema Toscana with Ministry of Cultural Heritage and Activities and Tourism funds (Law 77/2006), dedicated exclusively to the **seven World Heritage Sites of Tuscany** (www.toscanapatrimoniomparmi.it), full of insights, image galleries, itineraries, blogs, and other functions. An integral part of the project is an App dedicated to younger users ("Dante's Journey"), based on a gaming strategy that integrates a virtual environment with real spaces to visit, executed with the support of specific and augmented virtual reality content about Pisa.

In any case, it should be noted that the P. del Duomo Site does not have its own official App.

#### 3. Site Analysis

Regarding the topic of *social media*, the Opera della Primaziale Pisana has, for a long time, been present on YouTube through an institutional channel (two stand out excellent productions of the "MiracoLIS" project and the video guides in Italian and signs language). On the other hand, the absence – until a few months ago – on other platforms is significant and a sign that the online communication strategy has long been based mainly on website content. However, the inauguration of two new official profiles (the Facebook page in May 2020 and the Instagram profile in August of the same year), after the reopening of Piazza del Duomo following the limitations imposed due to Covid19, highlights the desire to increase the production of digital content and the development of more interactive and differentiated activities. Finally, there is ample room for improvement for the effectiveness of web communication, also in terms of indexing and adaptation of content produced to relative to research activities (the so-called SEO / SEM) and, therefore, in the actual capacity for *engagement* of the huge – and diverse – digital audience base.

As a final remark, the graphic-communicative "visibility" of the UNESCO recognition, and the dissemination and correct use of the wording of the official "World Heritage" trademark in the areas and tools analyzed, is detected only in the 11% of cases. In conclusion, the research highlights how strategies, actions and tools put in place for the proper dissemination of the value of the Pisan World Heritage show room for improvement and highlight how best practices and successful actions can coexist with critical issues on which the next planning phase will have to focus on.

The Outstanding Universal Value of Piazza del Duomo can be better presented and interpreted paying particular attention to digital channels and the social media ecosystem, thereby increasing the ability to manage the most frequented platforms visited by the younger generations. Updating and enhancing communication activity on the web also means being able to evaluate the impact of one's actions from a **quantitative** (visits, views, followers) and **qualitative** (interactions, feedback, profiling) point of view to ensure that strategies and tools introduced are measured according to objectives and targets, an even more important need in the post-Covid19 Era.

The identified need to enhance the communication approach towards an **audience-oriented** perspective also enhances the status of World Heritage: by working on a greater diversification of language and content to capture and involve different audiences to improve OUV understanding and dissemination and, therefore, meet the primary objectives of **education**, **information**, **and awareness**.

### 3.2.5 Community

Participation is the key word for global governance. International organizations invite citizens to participate as "responsible experts" in the definition of projects in a great variety of fields and to share responsibility for their choices (Müller, 2012).

Through Article 5, the Convention on the Protection of the World Cultural and Natural Heritage requires that the Signatory States adopt policy aimed at giving to the cultural and natural heritage a function in the life of the community. **Community participation** in the World Heritage management process is another of the Strategic Objectives in the implementation process of the World Heritage Convention, within which strategies and actions of involvement, awareness and co-planning play a key function.

The local community is ideally assigned the role of **guardian** of the Site of Piazza Duomo and is also entrusted with the burden of helping spread its *Outstanding Universal Value* and pass it on from generation to generation. Citizen participation in asset management practices and decision-making processes should aim at creating a system that fosters **accountability** and **empowerment**<sup>69</sup>, thus ensuring that "experts" are no longer considered the only ones responsible for policies and interventions that have implications for the local community, as well as for the heritage itself. With these premises it is clear that sharing with citizens, institutions, and stakeholders some of the key issues concerning the protection, conservation and management of the Pisan World Heritage is a **fundamental Strategic Objective**.

During the surveys carried out, and in line with what has already been reported regarding capacity-building needs, the lack of initiatives was noted, hence the needs to strengthen the relationship with the local community, increase awareness and responsibility on conservation and use issues, and foster dialogue between institutions and citizens in decision-making and operational processes.

Therefore, there is an urgent need to define new active participation policies with the aim of periodically gathering stimuli "from the grassroots", surfacing ideas and solutions to face possible threats to the Outstanding Universal Value of Piazza del Duomo, knowing and understanding the needs and the obstacles perceived by the community; collaborate on and implement shared solutions compatible with the protection of the Site. To meet this need, it is important to work

<sup>&</sup>lt;sup>69</sup> Capability is the substantial freedom that a subject enjoys within a system, called *capability* (Fonte: Treccani, Dizionario di Economia e Finanza, 2012).

#### 3. Site Analysis

on an effective and lasting strategy, with systematic participation based on the needs identified from time to time: a "Pisan model" of awareness, responsibility and societal integration that can assert being a best practice.

Among the proposed ideal actions to involve the community are, for example: the **organization of periodic meetings with stakeholders** to identify and address common themes with a view to coordination; *calls to action* aimed at making citizens protagonists of new ways of enhancing and promoting the Site; **workshops and sessions** focused on different audiences (children, young people, families, seniors, categories of workers, etc.); and **didactic activities** with local schools on World Heritage issues.

## 3.3 Synoptic overview of the critical issues that emerged

The following figure summarizes, in tables, the critical issues that emerged and dealt with in this chapter by thematic area. Each area is then traced back to one or more Strategic Objectives of reference – the Strategic Objectives of the Budapest Convention or the "5Cs".

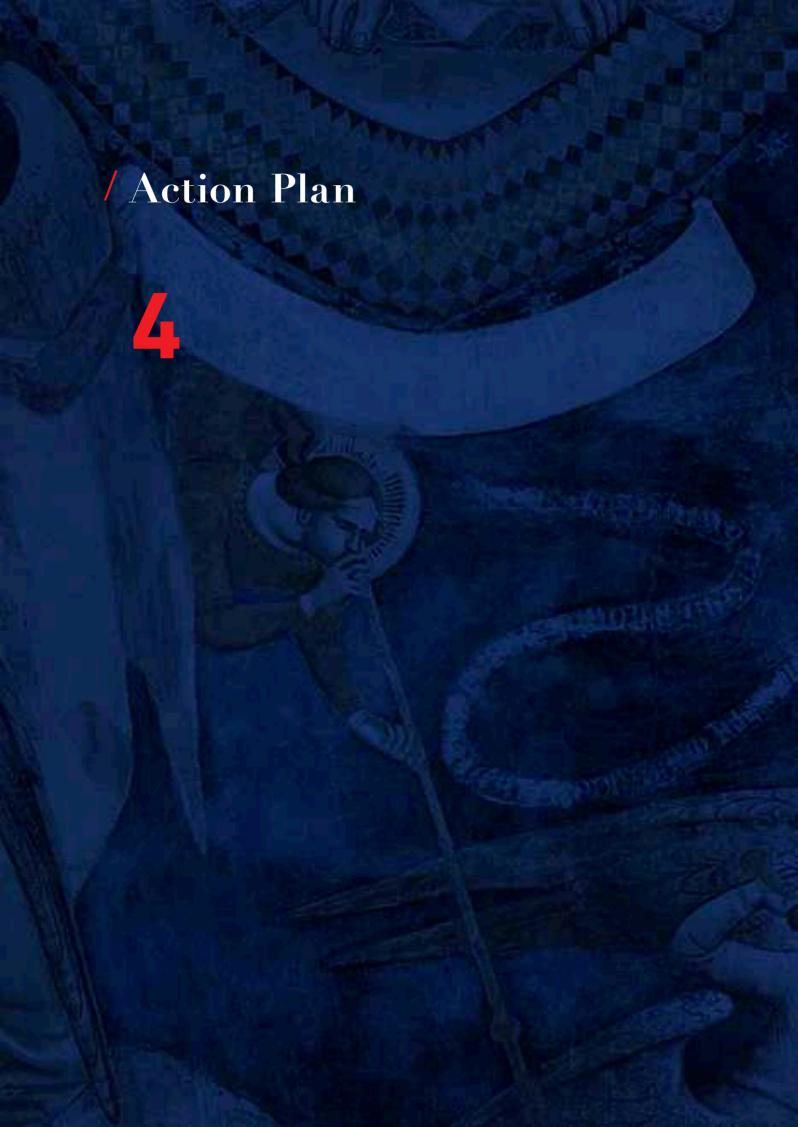
In the next chapter, in fact, the strategy and the Action Plan of the Management Plan is derived, on the one hand, from a "high" level strategic approach provided directly by UNESCO through the Convention and the Strategic Objectives, and on the other hand, from the specific contingencies detected on the Piazza del Duomo Site, which are the result of specific analyzes and surveys emerged in this document and set out so far.

The table shown here is therefore intended as a summary tool, connecting elements that are actionable and that enable understanding the management strategy and the related Action Plan, which will be the subject of the following chapter.

CRITICAL ISSUES		STRA	ATEGIC OB.	JECTIVES	
DETECTED / THEMATIC AREA					
THE PARTY	C		- 6	-	-6
	Credibility	Conservation	Capacity Building	Communication	Community
IDENTITY OF THE CATHEDRAL SQUARE AND FUNCTIONAL TRIPLE ACCEPTANCE (CULTURAL, RELIGIOUS, NATIONAL MONUMENT) TO SAFEGUARD	•				
INTERVENTIONS AND RESEARCH FOR THE KNOWLEDGE AND PROTECTION OF THE SITE NOT EASY TO ACCESS	•				
DISTORTED PERCEPTION OF THE SITE AND ITS EXCEPTIONAL UNIVERSAL VALUE (OUV)	•				
ENVIRONMENTAL RISKS THAT AFFECT THE PHYSICAL STATE OF THE MONUMENTS		•			
OVERCROWDING THE CORE AREA		•			
INSUFFICIENT PROTECTION BY THE BUFFER ZONE IN SOME POINTS		•			
LACKING AND NOT CONSISTENT SUPPORT TOOLS FOR THE VISIT (SIGNS AND COMMUNICATION)			1 1 1 1 1 1	•	
LOW LEVELS OF EFFICIENCY AND INTEGRATION OF COMMUNICATION STRATEGIES AND ACTIONS				•	
LACK OF MANAGEMENT SKILLS			•		
INEFFICIENC OF GOVERNANCE MECHANISMS			•		
LOW KNOWLEDGE OF THE REFERENCE PUBLIC			•		
LOW OR NO LEVELS OF PARTICIPATION AND INVOLVEMENT OF LOCAL STAKEHOLDERS					•

Figure 8 – Synoptic framework of the critical issues that emerged and connection with the 5 Strategic Objectives of the Convention (5Cs).





# 4.1 The relationship of the Action Plan to the 5 Strategic Objectives of the Convention

To complete the Management Plan for the Piazza del Duomo Site in Pisa, it is essential to define the objectives and action methodologies to be implemented to comply with the intent of the Plan. These elements converge in an Action Plan, which is an integral part of the Management Plan.

The 5 Strategic Objectives of the Budapest Convention, known as "5Cs", are the first reference for defining the intervention program to be implemented as part of the Management Plan. The Convention, in fact, through the identification of five strategic axes, provides a high-level strategic framework that cannot be inconsistent with the underlying objectives of a Management Plan of a Site registered in the World Heritage, and which aspires to address, in the medium-term, all the relevant strategic and functions areas.

As repeatedly referred to in this document, these objectives are: *Credibility, Conservation, Communication, Capacity Building and Community Engagement* (or, simply, Community). Already through these five axes, the previous chapters have been framed and centered on the critical issues and management needs for the Site of Piazza del Duomo in Pisa; issues emerging from numerous discussions with the institutional subjects involved (Steering Committee) and from analyzes conducted in parallel by the working group on several fields and by consultation of various resources.

The following pages briefly describe the interpretative key for the development of the management strategy of the Piazza del Duomo Site, through the Action Plan, aligned to each of these five objectives.

### Credibility

The protection of the Site, its management and enhancement, the protection and dissemination of its Universal Values all contribute to strengthening the credibility of the World Heritage List.

The strategic axis of *Credibility*, for the purposes of the Management Plan of the Piazza del Duomo Site, takes shape – in the planning context – into a continuous effort to build on the legitimacy and credibility of the entire World Heritage. Therefore, this effort is articulated on three distinct levels communicating and integrable in the planning logic of interventions and activities; these are:

- The protection of the system of common values underlying the Site, as any detriment constitutes a damage and a loss for whole of humanity and the dissemination of these values, in order to acquire legitimacy for the undertaking of protection and enhancement actions at the Site.
- The **involvement of institutions and key individuals**, which represent **excellence in the fields of research and technology**, with mastery of varied technical skills and united by a high level of *expertise*. In this respect, the strategy consists of enabling, through the logic of the legitimation of knowledge, the ability to intervene with direct involvement in management and enhancement actions.
- The **reliability** of the institutional representatives directly involved in the management of the Site (Steering Committee), in the development, first, and then in the dissemination of an ethical vision that guides precise interventions and actions, carried out on behalf of the reference communities.

Implementing the actions that are grafted onto the strategic axis of *credibility* in the Management Plan is, therefore, a fundamental step to **reconfirm**, with a long-term perspective, the *Site Universal Values*. Furthermore, it is important to affirm them also regarding an equally universal but more "popular" recognition, which refers to the stereotyped perception of Site which almost exclusively connected to the Leaning Tower. Finally, the proposed actions are designed to reaffirm the role of the entities involved in the management of the Site relative to this objective.

#### **Conservation**

From the strategic lines contained in the Convention emerges the need to preserve, over time, the integrity and authenticity of the *Outstanding Universal Value*, which have allowed the Site of Piazza del Duomo to be recognized as a World Heritage Site. This implies, therefore, the need for qualitative conservation and *constant maintenance* of architectural artefacts subject to **protection**, which are affected by intense public use, along with other selected structures,

which could be included in the territorial cultural system – also with a view to increasing the cultural offerings of the City.

The organization of a system of coordinated conservation interventions and shared management of the World Heritage are, therefore, central objectives to be pursued through the Management Plan. In the Plan, these objectives are implemented by carrying out a careful assessment of the places and properties, starting from those in the *core area*, and extending to those located outside the boundaries of the area, with an insufficient state of conservation. Also, for these assets, it is essential to start functional reconversion processes for their inclusion in the "Constellation of Cultural Heritage" of the City.

The conservation strategy is also expressed through actions of **containment**, **mitigation**, **and elimination of interference risks**. All this is achieved by:

- Preserving the absolute integrity of the *core area* and adapting the protection areas that surround it (*buffer zone*).
- Removing specific elements of compromise through adequate regulation.

These objectives – enriched by the characteristics of coordination and sharing – to be achieved, require that **private entities also participate in the safeguarding of the Site**, through maintenance actions of the properties, in question, and in the definition of its Universal Value (think, for example, of the concept of *continuity of the amalgamated historical image*, referred to in Section 3.2.2, which is compromised by some elements built in the historical urban context adjacent to the square). To this end, it is important that the entities know the constraints and possible incentives / concessions for carrying out maintenance interventions.

From the time of the construction of the Square to today, the Opera della Primaziale Pisana is the institution capable of supervising the work on the monuments included in the Site (fourteen monuments and buildings in total, as already mentioned in other Sections of this document), as well as the performing subsequent maintenance and management, providing, in particular:

- Administration, maintenance, conservation, and restoration of the patrimonial and other assets above mentioned.
- Purchase and maintenance of the furnishings and systems necessary for the Church, the adjoining Sacristy and other monuments, and any other expenses connected or instrumental to carrying out the activities that pertain – according to the provisions of the Statute – to the budget of the Opera.

All the assets mentioned are in a good state of conservation thanks to the efficient maintenance and the enhancement of the Site by the body responsible for its protection. On this aspect, therefore, the strategic purpose of the Plan is set with an approach to **sharing the contents** of these interventions and **promoting the results**.

Finally, the safeguarding of the Site and its historical urban context, which is within the scope of the objectives of the Management Plan as an instrument for addressing main criticalities, also involves the **containment of the anthropogenic burden** that affects the *core area* on an ongoing basis and, in particular, its four main monuments.

The Cathedral, the Baptistery, the Bell Tower (universally known as the "Leaning Tower") and the Camposanto are the four well-known monumental buildings of absolute historical and cultural value, recognized as masterpieces of medieval architecture to influence Italian monumental art through the  $11^{th}$  and  $14^{th}$  centuries.

The actions related to the protection and conservation objectives mentioned, therefore, concern the management of the flows visiting the Site of Piazza del Duomo. The Plan aims to contribute to a more sustainable form of urban mobility, with an incremental logic deployed over time, and by acting on the access points of tourist flows in the City of Pisa and its historic center: today the use of road vehicles is prevalent, but by virtue of the actions proposed in the plan it will be necessary to introduce alternative and integrated methods and means of transport and flow inspired by the concept of "soft mobility".

At the same time, it is important to enhance the green open spaces with the urban fabric which, if neglected, can become a source of decay and lack of decor.

The impact of these actions on the City, the expansion of the offerings of cultural heritage of the City, feasible with the recovery and enhancement resulting from maintenance and protection actions and the activation of tools that can incentivize soft mobility in the urban historical context, could contribute to countering one of the main problems facing the City of Pisa: a low visitors' length of stay of in the City despite very high flows of "hit and run" visitors concentrated in Piazza del Duomo.

#### Capacity building

The concept of *capacity building* does have a precise terminological correspondence in the Italian language. It can be argued that the word calls for the promotion and development of effective measures for the understanding and implementation of the World Heritage Convention, and of its enabling tools, by carrying out training actions for different categories of stakeholders.

Therefore, the activation of adequate policies represents a **double strategic key** for the future vision of the World Heritage. It is identified both as an objective to be achieved, to **fill some gaps** found after more than forty years of managing the World Heritage List, *and* as an **action** 

and support methodology for all future objectives focused on the local community and stakeholders<sup>70</sup>.

In fact, in most cases, capacity building activities are mainly aimed at three categories of users:

- **Professionals**, including individuals and groups directly involved in the conservation and management of the Site.
- **Institutions**, including State organizations, NGOs, the World Heritage Committee, advisory bodies, and other institutions that have a responsibility toward environmental issues for the purposes of management and conservation.
- Communities and networks, including local communities living near Sites, as well as the larger networks that support them<sup>71</sup>.

All the above is also reflected in the Site of Piazza del Duomo in Pisa, for which *capacity building* actions to be implemented as part of this Management Plan have been conceived and designed. The intent is to implement actions that have a significant impact, not only on the perception that stakeholders have towards the heritage, by increasing their awareness and sense of belonging, but also on their **activities**, favoring on the job *learning* activities and experimenting with new ways of working individually and collectively. In a nutshell, *capacity building* is identified as an enabling factor for the operating model to function effectively.

Furthermore, in this scenario, the design hypotheses are also supporting the coordination and proper functioning of the current *governance*, through the enhancement of participation by all those involved, and the development of new local policies.

To address the issues arising from the recognition of World Heritage, the need for **greater participation** is critical, therefore management practices must, first, update, adapt to new needs, favoring inclusiveness. In this sense, the traditional "top-down" approach must be abandoned in favor of new, broader, and more inclusive management approaches, useful for the proper management and use of the assets. These processes look to provide specific management capacity by executing planned professional development and training courses.

Aiming to develop a dynamic relationship between the heritage and its context, and to enhance the role and capacities of the community in the protection and sharing of its values, the Plan will broaden the number of stakeholders by leverage on the set of operators in the cultural and tourism sector.

 $<sup>^{70}</sup>$  Fondazione Santagata, Rapporto internazionale sulle strategie di Capacity Building per la valorizzazione del patrimonio culturale, 2013.

<sup>&</sup>lt;sup>71</sup> Ibidem.

A further line of activity focuses on maintaining and strengthening collaborative actions, in particular those implemented by the Opera della Primaziale Pisana, regarding conservation practices.

## **Communication**

In recent times, the term "communication" has taken on multiple meanings.

Even in the area of World Heritage, as evidenced by the numerous and recent publications produced by the World Heritage Center, the approach to the theme has changed considerably, adapting to the evolution of the times and society. What has not changed is the **vision**, in which the word "communicate" is an essential element of every action promoted by the World Heritage Center and by the Countries that have signed and ratified the 1972 Convention – whose task remains that of making **all of humanity share in the inestimable value** of the cultural heritage included in the World Heritage List.

It is therefore essential to pay great attention to the way in which this value is interpreted and transmitted, especially in Pisa where, despite the recognized commitment and progress of the manager and local institutions in recent years, **the tourist-promotional approach** of the external communication outside the Site itself seems to dominate, and at times engulf, the adequate presentation of the themes of the World Heritage.

In this context, the first objective of this design phase is the need to **enhance the use of** communication tools as a mean of preserving and raising awareness about the Site's *Outstanding Universal Value*.

It seems obvious to promote the meaning and correct dissemination of information about the patrimony of Piazza del Duomo and, consequently, the criteria and objectives underlying the 1987 recognition. This last aspect cannot be confined to an ordinary "territorial promotion" and is essential to strengthening the communication strategy to obtain appreciation and respect for the assets both by visitors and the local community.

This intent is to be achieved through a multimodal communication strategy, understood as a set of activities that aim to:

- Improve accessibility to the heritage.
- Implement innovative systems of use.
- Strengthen the presence on digital channels.
- Adapt Site knowledge-related tools to reflect the role of World Heritage Site.

It is clear that the understanding and dissemination of cultural values, at the basis of the recognition of World Heritage, must go through an organic, and above all differentiated, action

plan reflecting the abilities and needs of the recipients: this is an additional asset of the planned communication strategy.

The second objective of this design phase is to develop and **preserve the virtuous connections** between the different audiences of the Site and the heritage / legacy of which it is a universal **expression**, keeping in mind that communication is an irreplaceable tool for doing so.

The desire to enhance the communicative approach with an *audience-oriented* perspective, then, becomes central, and is the first steps for:

- Knowledge of the public (existing and potential).
- Development of actions aimed at reaching different groups of subjects (clusters)
- Ability to stimulate their involvement, awareness, and active participation.

Developing and strengthening the relationship with different types of users of the Site becomes a particularly important goal, not only because it offers an important tool in the daily management of protection activities and the planning of enhancement initiatives, but also because it provides the possibility to promote, in an ideal way, the *status* of World Heritage and the values related to it.

Intercepting and involving different audiences strengthens and consolidates the understanding and widespread dissemination of the *Outstanding Universal Value*. It thus allows to meet the primary objectives of **education**, **information**, **and awareness**, which are the basis of the communication *mission* of the World Heritage Center.

### **Community**

"(The World Heritage Convention calls upon States Parties) to adopt a general policy which aims to give the cultural and natural heritage a function in the life of the community (...)." (Art. 5, World Heritage Convention).

The fifth C of "Community", later defined in relation to other Strategic Goals, specifically through the Millennium Development Goal of 2007, is what the World Heritage Center identifies as an **essential** prerogative for the correct management of World Heritage Sites.

The community, to which the role of "guardian" is ideally assigned, has a key function relative to the cultural heritage: it legitimizes its value by exercising the right to recognize it as its own and by committing to preserving its integrity and to pass on its *Outstanding Universal Value*. It is, in fact, with the Framework Convention of the Council of Europe on the value of cultural heritage

for society of 2005, known as the "**Faro Convention**", that the importance of the community is sanctioned, defining in Art. 2 that:

"A patrimonial community is composed of people who attribute value to specific aspects of the cultural heritage, which, in the context of "public action", they wish to support and pass on to future generations".

Therefore, the link between cultural heritage and community has a **strong social value** and can be recognized as the **foundation of a democratic and cohesive society**, in which individuals continually create and reaffirm, through a common cultural heritage, a civic sense of belonging and responsibility. **Recognizing the value of the cultural heritage** of which one is custodian is the first step for each individual to establish a relationship of protection towards the asset.

The project proposal presented in this Management Plan, entrusted with the task of building a positive and constructive interaction between the Pisan community and its heritage, meets this Strategic Objective. For this vision, the Action Plan intervenes, first, to strengthen and preserve the relationship between the different components of the citizens and the World Heritage of Piazza del Duomo, therefore resolving and reducing two possible gaps:

- **Physical**, since the Square is an architectural nucleus delimited within its borders and not specifically central in the urban plan.
- **Emotional**, given that the Site is the main destination for mass tourism.

The phase of strengthening awareness and identification with the asset is followed by an **operational phase**, in which everyone will have the opportunity to share their contribution through **periodic engagement actions** (discussion roundtables, listening sessions, calls to action ...) which aim to initiate a virtuous process of participation "from the grassroots".

Even for the Site of Piazza del Duomo in Pisa, although universally recognized and appreciated, it is in fact the community that legitimizes the historical, artistic, and cultural values it bears daily. In this sense, investing in community practices and bottom-up involvement means increasing the mutual relationship between an asset and its community or the right / duty of individuals to use the heritage and to contribute to its protection.

The emphasis with which the community's commitment to the assets is focused is further strengthened, by taking into consideration some of the SDGs of the U.N. 2030 Agenda for Sustainable Development which, in the project sheets illustrated in the following paragraphs, are intertwined with the actions planned with the "Community" Strategic Objective.

## 4.2 Action Plan and the planned interventions

The Action Plan consists of a series of projects and interventions to be implemented to achieve the objectives of the Management Plan, by clearly defining for each of these the goals, the individuals and entities involved, timing, and the related necessary resources.

Each intervention is designed in response to criticalities identified in the previous chapter and reported, according to the classification in thematic areas, in the synoptic framework of Section 3.3 of the report. Each of them responds to at least one of the five Strategic Objectives. Additionally, it is not excluded that the planned activities and the expected results may also intervene in reference to other axes, as shown in the table on the following page, and may anticipates the project sheets developed for the Action Plan.

Furthermore, each action was designed for the pursuit of sustainability objectives, taking as a reference the Sustainable Development Goals (SDG) developed by the U.N. as part of the 2030 Agenda for sustainable development. Overall, 17 SDGs have been identified, divided into 169 targets and over 240 indicators. The SDGs system is transversal: it can be applied to any area or sector, as it is believed that the assessment of the contribution to the achievement of the objectives of the 2030 Agenda is measurable through a selection of the most appropriate targets and indicators for context of reference.

Through the thematic indicators for culture in the 2030 Agenda (*Culture I Indicators 2030*), UNESCO provides the conceptual framework and methodological tools to measure the contribution of culture to the achievement of sustainable development goals. The system is divided into four transversal thematic dimensions: (i) *Environment and resilience*, (ii) *Prosperity and livelihoods*, (iii) *Knowledge and skills* and (iv) *Inclusion and participation*. Each dimension combines different SDG goals and targets to capture the multifaceted and transversal contribution of culture to sustainable development.

In this case, the framework was used to guide strategic planning for the management of the Piazza del Duomo Site, with a view to making an overall contribution to sustainability. This is made possible through the levers of projects and interventions, each aimed at covering one or more areas indicated by UNESCO.



Figure 9 - Thematic Indicators for Culture in the 2030 Agenda for Sustainable Development. Source: UNESCO.

REF. n.	Project / Action plan sheet Strategic objectives of the Convention (5Cs)	Credibility	Conservation	Capacity Building	Communication	Community
1	INTERINSTITUTIONAL COLLABORATION FOR ACCESS TO CULTURE AND RESEARCH	•		•		
2	CONSERVATION PLAN (OPA PLAN IMPLEMENTATION)		•			
3	Analysis to verify the perimeter and regulation of the buffer zone	•	•			
4	REGULATION OF COMMERCIAL ACTIVITIES AND FIGHT AGAINST ILLEGAL ACTIVITIES OUTSIDE THE CORE AREA	•	•			
5	I CARDI DI PISA: NEW PATHS FOR ENHANCEMENT OF THE HISTORIC CITY	•	•			
6	RENEWAL OF URBAN PUBLIC SPACES OF THE HISTORIC CITY	•				
7	SIGNAGE PLAN				•	
8	DIGITAL ENHANCEMENT OF THE WORLD HERITAGE SITE				•	•
9	AUDIENCE-ORIENTED COMMUNICATION				•	•

REF. n.	Project / Action plan sheet Strategic objectives of the Convention (SCs)	Credibility	Conservation	Capacity Buildir	Communication	Community
10	KNOWLEDGE OF THE PUBLIC			•		•
11	ENHANCEMENT OF THE WORLD HERITAGE RECOGNITION	•			•	•
12	TRAINING PROGRAMS FOR INSTITUTIONS RESPONSIBLE FOR THE ENHANCEMENT OF THE SITE			•		
13	TRAINING PROGRAMS FOR RESEARCHERS AND BODIES SPECIALIZED IN HIGH-PROFILE SCIENTIFIC INFORMATION DISSEMINATION			•		
14	TRAINING PROGRAMS FOR CULTURAL AND TOURIST OPERATORS EMPLOYED AT THE SITE			•		
15	DEVELOPMENT OF PARTNERSHIP AGREEMENTS AND CONVENTIONS FOR THE INTEGRATED ENHANCEMENT OF THE TERRITORY				•	•
16	COMMUNITY ENGAGEMENT SUPPORT STRATEGY THROUGH WORLD HERITAGE EDUCATION AND TRAINING			•		•
17	IMPLEMENTATION OF THE NEW GOVERNANCE MODEL			•		

Each sheet illustrates the project in a concise manner, addressing all its component elements which determine effective implementation.

Specifically, the plan sheets (card), present the project by defining the following elements:

- Numeric reference of the card indicates the correspondence with the table above.
- Project title.
- Strategic lines addressed, with reference to the areas of the strategic *objectives* (5Cs) affected by the actions of the project.
- Specific project objectives.
- Brief description and purpose of the project.
- Contact person for the project, specifically responsible for implementing, managing, and coordinating with other parties involved, planned phases, monitoring and budgeting.
- Other individuals involved in some phases, or for the entire duration of the project.
- Activity plan.
- Recipients or targets of the project.
- Expected results.
- Human and physical resources for the implementation of the project.
- Project timing: duration and timing of the various phases and activities included in the project.
- Budget: economic resources necessary for the launch and development of the various phases and activities included in the project.
- Project monitoring and KPIs: methods and tools (indicators) used to assess the performance of the project in progress and at its completion.
- Sustainability factor: ability of the project to contribute to the achievement of the sustainable development goals of the U.N. Agenda 2030 (SDGs) assessed based on the accomplishment of one or more thematic areas identified by UNESCO, in the report "2030 | Culture Indicators" Environment and resilience, Prosperity and livelihoods, Knowledge and skills, Inclusion and participation.

The expense items and the relative amounts that refer to the budgets of the planned interventions are purely indicative and do not assume any constraints as these must be evaluated by the Institutions, in a collaborative manner at the Steering Committee meeting. These institutions will also decide on related financial channels for the procurement of resources.

<sup>72</sup> https://whc.unesco.org/en/culture2030indicators/.

1	Interinstitutional collaboration for access to culture and research			
Strategic objectives (5Cs)	CredibilityConservationCapacity buildingCommunicationCommunity			
Specific project objectives	Specific project objectives increase access to technical and scientific knowledge of the Piazza del Duomo Site by developing appropriate methods and tools.			
	Promote dialogue between researchers, institutions, and the community.			
Brief description and purpose of the project	The City of Pisa – in addition to the extraordinary cultural heritage with a strong identity connotation – is characterized by the presence of university training institutes of international importance (University of Pisa, Scuola Normale Superiore, Scuola Superiore Sant'Anna) that carry out ongoing research in a range of fields, some of which are of considerable interest for the management of cultural heritage. The protection and enhancement of cultural heritage are no longer just architectural, archaeological, historical, and historical-artistic research activities, but also involve a wider spectrum: from engineering to restoration technologies, to the economics of culture.			
	The project aim is to establish a network of reciprocal and continuous exchange of information between the researchers and the institutions responsible for the protection and management of the Site. The results of this process of a constantly updated systematization of technical and scientific knowledge on the Site, will be offered in <i>open access</i> mode to the national and international scientific community with intent to share and disseminate, not only the results, but also and above all, methodologies, techniques, applications for the purpose of replicability and scalability in cultural heritage management.			
	In addition, the sharing and dissemination of this cultural heritage will also facilitate cultural operators through the identification, for example, of new visit routes or the development of "cultural products". Therefore, the knowledge resulting from the systematization of research activities will benefit an extended community, including citizens, tourists, and <i>City users</i> .			
Reference entities / individuals	Opera della Primaziale Pisana.			
Other entities /	University of Pisa.			
individuals	Sant'Anna School of Advanced Studies.			
	Scuola Normale Superiore.			
	Consiglio Nazionale delle Ricerche (National Centre for Scientific Research or CNR) in Pisa.			
	Superintendence of Archeology, Fine Arts and Landscape for the Provinces of Pisa and Livorno.			
	Municipality of Pisa.			

## Project plan activities

 Organization of discussion roundtables between the various institutions involved in the project.

Periodic coordination sessions, aimed at defining research objectives and focus of systematization and scheduling of study and research sessions, sharing of data, information, results, and sharing with the public.

• Interinstitutional study and research activities.

Organization, implementation, and coordination of research projects.

- Organization of discussion roundtables for various institutions involved in the project.
- Internal sharing of data and results.

Dissemination of information on the research progress and results, systematization of existing knowledge (literature) and data.

• Wider sharing of data and results.

Organization and management of *information sharing* sessions with specialized audiences (such as, conferences and seminars) and with the general public.

Design and implementation of an open access database

implemented by developers, and operators-friendly, and containing both published studies and data and sources that may be the subject of future research and projects (for example, digitization and accessibility of archives such as, by way of example, the OPA's, the Archdiocese's, etc.).

## Recipients of the project (target)

Operators in the fields of scientific research and cultural heritage.

Cultural operators who deal with the enhancement and promotion of the Site.

Local community: citizens, students, City users.

#### **Expected results**

- 1. Create a database (portal) for documents and other research material sharing and consulting, developed over time about the Site of Piazza del Duomo in Pisa, suitably cataloged by research areas, and freely accessible (open access).
- 2. Activate collaboration and cooperation mechanisms between Site management of universities, research centers and others conducting similar activities.
- 3. Guarantee better and wider dissemination of technical knowledge about the Site of Piazza del Duomo.
- 4. Reach greater wider community involvement in the processes of adoption and dissemination of knowledge about the Site.
- 5. Design adequate, replicable, and flexible tools for the enhancement and management of the World Heritage.

Human and physical resources for implementation	The resources (personnel and equipment) will be internal, individuals already involved in the project who are taking part in research and dissemination activities are already planned and being carried out.					
Project timing	•	The full implementation of the portal will take about 2 years. The research and systematization of the results is an ongoing process.				
Budget	manager		periodic study and res mately 15.000 Euros / earch.			
			ss portal, launch and ex ry maintenance approx			
	<ul> <li>Digitizat</li> </ul>	ion of archives (to be	quantified).			
Project monitoring and	The monitoring and evaluation activities of the project will be carried out according to the following indicators:					
KPIs	<ul> <li>Number research</li> </ul>		s held with the institut	ions involved in each		
	<ul> <li>Number</li> </ul>	of sources in the oper	n access database (port	al).		
	Number of information sharing meetings held.					
	<ul> <li>Number of cultural operators involved in training activities.</li> </ul>					
		ce (%) between the a	llocated budget and th	e actual amount		
		n (number of days) be oject and actual days	etween the time plann to execute.	ed for the realization		
Sustainability factor	Environment	Prosperity	Knowledge &	Inclusion		
UNESCO Culture 2030 indicators	& resilience	& livelihoods	skills	& participation		

2	Conservation plan (OPA Plan implementation)
Strategic objectives (5Cs)	Credibility <b>Conservation</b> Capacity Communication Community
Specific project objectives	Examine the conservation planning carried out by the managing body of the Site in order to ensure the integrity of the monuments and the historical and artistic heritage preserved.
	Implement a process of systematization and dissemination of intervention programs for the conservation and protection of the Site.
Brief description and purpose of the project	The main institutional purpose of the Opera della Primaziale Pisana, by Statute, is the "custody, protection, conservation and maintenance" of the monumental and artistic heritage entrusted to it. All the interventions carried out by the Opera are published in full in the Mandate Reports <sup>73</sup> .
	Of fundamental importance, in terms of conservation, are the restoration programs, on which the Opera works almost continuously with targeted interventions. It is precisely these internal teams of professionals – specialized restorers, carpenters, bricklayers, together with the design laboratory, which allows the work to have total autonomy in the choice of material and in pictorial restoration.
	When necessary, the Universities of Pisa and of Siena, and other specialized professionals (i.e., art historians, engineers, architects, and archaeologists) also contribute to the restoration work. In fact, according to Article 17 of the Statute of the Opera della Primaziale Pisana, "[]
	The Deputization, whenever it is deemed necessary, of a professional assignment, of a subordinate employment relationship, may make use of one or more qualified professionals who are particularly experienced, both for the study of particular projects and for the management of the maintenance and restoration of monuments – as well as for historical and artistic consultancy.
	An ambitious and important project, to increase knowledge base in support of the restoration Sites, involved the use, in 2018, of new IT tools to allow new and advanced research and structural and architectural investigations on the monuments of the Square. The project followed a training period and included multiple collaborations with universities and with professionals working in the various construction Sites, following a multidisciplinary approach for collecting scientific data and archival information to develop fuller knowledge of the artefacts, prior and preliminary to any intervention.

 $<sup>^{73}\,</sup> The\, reports\, are\, available\, at\, the\, following\, link: \underline{https://www.opapisa.it/wp-content/uploads/2019/12/Relazione-dimensional content/uploads/2019/12/Relazione-dimensional content/uploads/2019/$ mandato 2019 web 02.pdf; https://www.opapisa.it/wp-content/uploads/2018/12/RELAZIONE-DI-MANDATO-2018 web.pdf; https://www.opapisa.it/wp-content/uploads/2018/12/RELAZIONE-DI-MANDATO-2018 web.pdf.

	Again, the subject of safety also falls within the scope of protection, not only for the Site and the preserved works, but also of visitors. For this reason, the entire area is constantly monitored, even at night, by surveillance teams equipped with adequate support systems.
Reference entities / individuals	Opera della Primaziale Pisana.
Other entities / individuals	Other institutional members of the Steering Committee (Superintendence of Archeology, Fine Arts and Landscape for the Provinces of Pisa and Livorno).
	University of Pisa.
	University of Siena.
	Other specialized professionals (i.e., Art Historians, Engineers, Architects, and Archaeologists).
Project plan	Implementation of the annual restoration plan.
activities	<ul> <li>Implementation of the annual ordinary and extraordinary maintenance plan.</li> </ul>
	<ul> <li>Implementation of interventions aimed at the protection and conservation of assets.</li> </ul>
	<ul> <li>Dissemination of the contents and results of the conservation plan.</li> </ul>
	Interinstitutional studies and research activities.
Recipients of the project (target)	Visitors and users of the Site.
Expected results	<ol> <li>Share the contents of the planning of the protection and conservation actions of Piazza del Duomo carried out by the managing body (OPA).</li> </ol>
	<ol><li>Create the preconditions for setting up a collaboration network aimed at protecting the Site.</li></ol>
	<ol> <li>Disseminate the results of monumental protection and conservation actions carried out on the Site and share underlying best practices.</li> </ol>
Human and	Professionals, technicians, and specialized restorers within the OPA.
physical resources for implementation	Professors and professionals who are experts in issues relating to the restoration and recovery of monuments.
Project timing	The duration of the project coincides with that of the implementation of the Management Plan.
	The estimate of the duration connected to each recovery and requalification intervention is subject to numerous variables, which will be the subject of specific technical analyzes as per the Conservation Plan.

#### **Budget** The costs estimate of carrying out each intervention are subject to numerous variables, which will be the subject of specific technical analyzes as per the Conservation Plan. **Project** Project monitoring and evaluation activities will be carried out according to the following indicators: monitoring and **KPIs** Number of approved and initiated recovery and restoration projects. Total value (Euros) of approved and initiated recovery and restoration projects. Number of professional operators involved in recovery and restoration interventions. Number of professional operators and technicians' new hires for the recovery and restoration of the Site's monuments. Number of scholarships and professional activities funded as part of the study activities for the protection and conservation of the Site's monuments. Difference (%) between the allocated budget and the final amount spent on project activities. Deviation (number of days) between the time planned for the realization of the project and actual days to execute. Sustainability factor **Environment** Inclusion Prosperity Knowledge & skills & resilience & livelihoods & participation **UNESCO Culture** 2030 indicators

3	Analysis to verify the perimeter and regulation of the buffer zone			
Strategic objectives (5Cs)	CredibilityConservationCapacity buildingCommunicationCommunity			
Specific project objectives	Carry out a review of the buffer zone perimeter of the Piazza del Duomo Site.  Design a buffer zone perimeter variant, with provisions for integration and expansion, and resulting updating of the area's regulations.  Identify guidelines to govern general area transformations compatible with the protection of the Site.			
Brief description and purpose of the project	ICOMOS, with Circular No. 395/2007, suggests that the <i>buffer zone</i> of the Site of Piazza del Duomo in Pisa be revised according to its expansion; specifically, the north-west portion of the area of the Site would not be appropriate with the respect to the Site protection needs. It is also suggested reviewing the entire regulatory framework for the area. This assessment is also a result of the Periodic Report of 13 October 2014 and the feedback given during the drafting of the Management Plan.			
	On the north-west side, in fact, the <i>buffer zone</i> extends just beyond the historic City walls that delimit the Piazza del Duomo, defining a very limited area, which is, in fact insufficient to ensure adequate and effective protection of the <i>core area</i> .			
	The analysis of this portion of the City, and the study of the relationships that exist with its surrounding fabric, shows the project will make it possible to define the critical factors. Subsequently, again within the project, the necessary guidelines will be drawn up so that it is possible to govern the transformations of the area and define protection, enhancement, and redevelopment actions. Any changes to the buffer zone will be included in municipal planning regulations. The definition and implementation of urban redevelopment and regeneration interventions in the area north-west of Piazza del Duomo will have repercussions, not only with for the protection of the World Heritage Site and the surrounding environment, but also for the livability of the urban context and the civic and social development of the area.			
Reference entities / individuals	Municipality of Pisa.			
Other entities / individuals	Superintendence of Archeology, Fine Arts and Landscape for the Provinces of Pisa and Livorno.			
	Tuscany Region.			
	Province of Pisa.			
	Other stakeholders engaged in protection interventions.			

## Project plan activities

- General review of the buffer zone perimeter.
- Verification of the suitability of regulations, identification of criticalities.
- Variance and integration project of the perimeter and the regulations.
- Identification of guidelines to govern the general transformations of the area, compatible with protecting the Site.
- Redevelopment of the area subject to expansion.

## Recipients of the project (target)

Core area users.

Residents of the areas that will be included in the buffer zone.

## **Expected results**

Although the buffer zone is not contained within the boundaries of the property registered in the List, its modifications or creation, after its registration in the List, must be approved by the World Heritage Committee (note: according to the procedure indicated in Annex 11 of the Operational Guidelines, and is considered a "minor boundary change").

The area that constitutes the "area of respect" of the UNESCO Heritage Site must be determined through appropriate processes which include:

- a) Shared and in-depth understanding of the Site and its area of respect by all stakeholders.
- b) Planning, implementation, monitoring, evaluation, and feedback cycle.
- c) Monitoring and evaluation of the impacts of trends, changes, and proposed interventions.
- d) Involvement of partners and interested parties.
- e) Allocation of necessary resources.
- f) Capacity building.
- g) Responsible and transparent description of how the management system works.

In addition, the following must be defined and provided:

- Details on the size of the buffer zone extension.
- Intrinsic characteristics of the buffer zone subject to enlargement.
- Compatibility of use of the expansion portion.
- Map indicating the precise boundaries of the expansion.
- Clear explanation of how the buffer zone protects the property.

Failure to comply with the OUV (Outstanding Universal Value) due to the absence of adequate protection involves:

Lack of protection and maintenance of the integrity of the World Heritage Site.

	- Compromise of its scenographic framework.
	- Alteration of the views to and from the Site of Piazza del Duomo.
	<ul> <li>Lack of actions to enhance the structural and functional characteristics intrinsically linked to the identity peculiarities of the place.</li> </ul>
	<ul> <li>Neglect of sustainable development with respect to the needs of the population.</li> </ul>
Human and physical	External technicians with interdisciplinary skills in urban planning, administration, and management.
resources for	Internal technical officials of the public bodies involved in the project.
implementation	Internal officials of the Superintendency of Archeology, Fine Arts and Landscape for the Provinces of Pisa and Livorno.
Project timing	To perform the analysis project for the verification of the perimeter and the regulations of the buffer zone, a duration of 18-24 months is projected.  The estimate of the duration related to each subsequent intervention envisaged by the project is subject to numerous variables, which will be subject to specific technical analyzes within the project.
Budget	To be defined.
Project monitoring and	Project monitoring and evaluation activities will be carried out according to the following indicators:
KPIs	<ul> <li>Implementation of the analysis to verify the buffer zone perimeter is aimed at preparing the documentation to be forwarded to the World Heritage Committee.</li> </ul>
	<ul> <li>Deviation (number of days) between the time planned for the realization of the project and actual days to execute.</li> </ul>
	<ul> <li>Degree of project completion with respect to the planned interventions (% of activities carried out).</li> </ul>
Sustainability factor UNESCO Culture	Environment & Prosperity & Knowledge & skills participation
2030 indicators	

4	Regulation of commercial activities and fight against illegal activities outside the core area
Strategic objectives (5Cs)	CredibilityConservationCapacity buildingCommunicationCommunity
Specific project objectives	Determine, in the context of the redevelopment plan of the areas around the Piazza, the areas for temporary and provisional location of mobile counters for itinerant trade and frame all commercial activities currently still present and incongruous placed positions, in the reorganization projects.  Define regulations for all commercial activities – both permanent and mobile – in the areas outside the core zone.
Brief description and purpose of the project	The actual location of the mobile counters for itinerant trade has already been planned by the Committee for Decor (2014 session) in the two following locations: UMI 1 Chipperfield floor (formerly Santa Chiara Hospital) and Pietrasantina car park. Pending the implementation of the forecasts, a temporary and provisional locations will be determined in places where there is minimal interference with the protection and use of the World Heritage Site.  As part of a more general review of permanent and itinerant trade in areas outside the core area (an intervention which is also part of an organic planning system through which the Municipality intends to act to combat existing forms of illegal activity), the project aims to define the temporary and provisional location of commercial activities. The goals of the project reflect the provisions of the Agreement signed on 09/29/2015, between the Ministry of Cultural Heritage and Activities, the Tuscany Region, the Municipality of Pisa, and the final document produced, found in the following:  • The findings of urban planning, transport, and regulation of commercial activities in protected areas.  • The revocation of authorizations and concessions of public land that are no longer compatible with needs of protection and enhancement of cultural heritage.  • The transfer of business activities to an alternative location.  As reported in the final minutes of the Interinstitutional Committee for Decoration established on 19/02/2018, in which the Ministry of Cultural Heritage and Activities, the Region of Tuscany, and the Municipality of Pisa took part, these activities and uses are not compatible with the protection and enhancement of the areas adjacent to Piazza del Duomo:  • Commercial activities in public areas of itinerant form  • Commercial activities in public areas of itinerant form  • Commercial activities in public areas of itinerant form with parking concession, except for those indicated temporarily and provisionally in the proposal referred to in Annex 2b "Area C

in the minutes no. 9 of 10 July 2017. The characterizing and functional element of these activities will be for use by painters and portraitists with an easel.

- 2. The activities of so called "intellectual workers", exclusively in the "Area Cocco Griffi-Cammeo-Contessa Matilde" and with a maximum number of two occupations of 1m by 1m in rectification of what is indicated in report no. 9 of 10 July 2017.
- 3. Occupations related to the administration of food and beverages that have a fixed location on commercial properties included in the area, where complying with the provisions of the adopted Unitary redevelopment project for the entire ATR-DAL area.

As part of the interinstitutional roundtables that will meet after the approval of the Management Plan, the following issues, among others, must be addressed:

- The definition of an action strategy, to be formulated through an
  interinstitutional platform, such as the Committee for Decor, aptly
  capable of guaranteeing the absolute need to manage the cultural Sites of
  considerable importance included in the World Heritage Site, considering
  the needs of operators who manage trading activities subject to new
  placement and regulations.
- The regulation of spaces temporarily used for trade in the areas concerned is also meant as an action to combat illegal commercialism, qualifying not only as a measure to protect the image of the area and for the improvement of the overall use of the Site, but also for safeguarding the interests of commercial operators in possession of a regular license.
- Provide different locations in the implementation of the area's regeneration interventions, taking, from time to time, temporary expiry decisions using the tool of "temporary uses", increasingly adopted by urban policies.
- Deliver solutions that are easily achievable in a short time, and adopt the
  related measures, even temporary ones upon expiry, to eliminate the
  interference of incongruous presence at the Site, thereby freeing the
  areas for the full and total direct and perception of visual use assets, and,
  at the same time, redevelop neighboring areas and set the conditions for a
  definitive arrangement of proper locations.
- Prepare, in the short term, a plan to combat illegal commercialism, in collaboration with the subjects who utilize the Site.

In the long term, the restoration project of the Santa Chiara Complex, whose *master plan* was drawn up by the architect Chipperfield, provides for the presence of a large and suitable space to be used for the permanent location of the benches, adjacent to the Site, while capable of mitigating interference with the needs of protection and use of the Site.

## Reference entities / individuals

Municipality of Pisa.

## Other entities / individuals

Superint. of Archeology, Fine Arts and Landscape of Pisa and Livorno.

Opera della Primaziale Pisana.

Tuscany Region.

Ministry of Cultural Heritage and Activities and Tourism.

Project plan activities	_	tion of the <b>interinsti</b> the Decor Committe	<b>tutional discussion plat</b> e.	form on the issues	
	<ul> <li>Redevelo itinerant</li> </ul>	•	reas used to house mob	ile counters for	
	<ul> <li>Design ar illegalism</li> </ul>		f <b>other actions</b> to comba	at commercial	
	<ul> <li>Regulation</li> <li>area.</li> </ul>	on of permanent and	<b>l itinerant trade</b> in areas	s outside the <i>core</i>	
Recipients of the	Core area users.				
project (target)	Residents of the	historic City center	:		
	Authorized com	mercial operators ir	the area and in the hist	oric City center.	
Expected results			ubject to intervention an ts of the Piazza del Duor		
	<ol> <li>Increase the quality of the experience of using the Site and improvement of the visual perception of access routes.</li> </ol>				
	through t and that a	emporary relocation are better suited to t	es related to the itineran n of the mobile counters the hosting of such activi counters within the Hos	in different areas, ties, then with the	
Human and	Internal technic	al officials of the pub	olic bodies involved in th	e project.	
physical	Internal officials of the Superintendency of Archeology, Fine Arts and				
resources for	Landscape for the provinces of Pisa and Livorno.				
implementation	External technic	cians in charge of the	e work.		
Project timing	For the realization of the project a duration of 9-12 months is expected.				
Budget	variables, which	will be the analyzed each temporary reall	ach intervention is subje I by technical staff prior location intervention wil	to design. It is	
Project monitoring and	Project monitor following indica	_	ctivities will be carried c	out according to the	
KPIs		n (number of days) bo	etween the time planned to execute.	for the realization	
	_	f completion of the piions (% of activities	oroject with respect to pocarried out).	lanned	
Sustainability factor	Environment	Prosperity		Inclusion	
UNESCO Culture	& resilience	& livelihoods	Knowledge & skills	& participation	
2030 indicators					

5	I Cardi di Pisa: new paths for enhancement of the historic City
Strategic objectives (5Cs)	CredibilityConservationCapacity buildingCommunicationCommunity
Specific project objectives	Strengthen the transversal routes that connect Piazza del Duomo to the east and west portions of the City.
Brief description and purpose of the project	The project further extends its span of action – with the same intentions as above – also on the west side of the Site; that is to say the axis that connects Piazza del Duomo to other main poles of the City: the Galileian Citadel, the Arsenale Repubblicano, and the Museum of Ships.
	To this is added the possibility of creating a pedestrian path along the banks of the Arno that enhances the context, with reference to the historical, artistic, architectural and museum heritage of the City center.
	The intervention, aimed at strengthening east-west transversal routes, would allow for the improvement of accessibility to the entire historic City, i.e., parts currently marginalized by visitors' flows, but which represent entire areas with potential receptive value. Therefore, an ambitious path of inclusion, within the cultural system, of these places of City's cultural heritage, not currently valued, would be accomplished – allowing the creation of an adequately usable "constellation" of places with a high historical and social value.
Reference entities / individuals	Municipality of Pisa.
Other entities / individuals	Superintendence of Archeology, Fine Arts and Landscape for the provinces of Pisa and Livorno.  Tuscany Region.  Province of Pisa.
Project plan activities	<ul> <li>Pedestrianization sections of roads.</li> <li>Arrangement and enhancement of east-west routes.</li> <li>Redevelopment of commercial, hospitality and public businesses functions along the east-west sections.</li> <li>Town planning variations / building projects.</li> </ul>
Recipients of the project (target)	Core area users.  Tourists.  Residents of the historic City center.

Expected results	<ol> <li>Improve the quality of use of places and public spaces, including the connection network represented by the streets of the historic center.</li> <li>Strengthen the equipment infrastructure of the City of Pisa, also through better accessibility of locations.</li> <li>Systematize places representing City culture within a system characterized by classification by themes.</li> </ol>
Human and physical resources for implementation	Internal technical officials of the public bodies involved in the project.
	Internal officials of the Superintendence of Archeology, Fine Arts and Landscape for the Provinces of Pisa and Livorno.
	External technicians in charge of the project.
Project timing	The project has an estimated overall duration of approximately 18 months, of which:
	about 6 months for design activities.
	<ul> <li>about 12 months for the implementation of interventions.</li> </ul>
Budget	The project has a total estimated value of around 200.000-250.000 Euros.
<b>3</b>	The costs estimate of carrying out each intervention is subject to numerous variables, which will be the study of specific technical analyzes prior to design.
Project monitoring and KPIs	Project monitoring and evaluation activities will be carried out according to the following indicators:
	<ul> <li>Total surface area of redeveloped areas following the interventions included in the project.</li> </ul>
	<ul> <li>Difference (%) between the allocated budget and the final amount spent for project activities.</li> </ul>
	<ul> <li>Deviation (number of days) between the time planned for the realization of the project and actual days to execute.</li> </ul>
	Other indicators will be defined following a validation of the actions included in the project.
Sustainability factor	Environment Prosperity Knowledge & skills Inclusion
UNESCO Culture 2030 indicators	& resilience & livelihoods & participation

6	Renewal of urban public spaces of the historic City	
Strategic objectives (5Cs)	CredibilityConservationCapacity buildingCommunicationCommunity	
Specific project objectives	Redevelop and enhance the functionality of urban spaces for collective use: green urban areas and Squares.	
Brief description and purpose of the project	The project entails addressing the urban, environmental, functional, and perceptive regeneration of urban public spaces and, first, those located near the <i>core area</i> , which are in a state of decay or use that does not conform to their value and / or purpose.	
	The intent is to generate an improvement in the quality of life of citizens by creating a planned system of public spaces of different nature and typology, also thanks to the increase of green areas within the City. The regeneration process will follow to guidelines for collective, social, and inclusive uses of spaces; the use of digital technologies for widespread connection; improvement of the environmental quality of the urban fabric; and of enhancement areas with an insufficient degree of conservation.	
Reference entities / individuals	Municipality of Pisa.	
Other entities / individuals	Superintendence of Archeology, Fine Arts and Landscape for the Provinces of Pisa and Livorno.	
Project plan	Regeneration plan for green public spaces.	
Activities	Analysis of places, definition of intervention areas, elaboration of the Plan strategy to create an organic system of spaces for collective use, plan for redevelopment and regeneration interventions, implement interventions, design, and implement supporting digital infrastructures.	
	<ul> <li>Enhancement of public spaces of the monumental and historical architectural heritage.</li> </ul>	
	Analysis of the places, definition of areas intervention and general characteristics of the interventions, design, and implementation of enhancement interventions.	
Recipients of the	Residents of the historic City center.	
project (target)	Tourists and users of the core area and buffer zone.	
Expected results	1. Implement a system of regenerative policies that includes open spaces.	
	2. Improve the livability and quality of use of urban public places and spaces.	
	3. Install tools for digital connectivity and communication.	

Human and physical resources for implementation	Internal technical officials of the public bodies involved in the project.  Internal officials of the Superintendence of Archeology, Fine Arts and Landscape for the Provinces of Pisa and Livorno.  External technicians in charge of the project.
Project timing	<ul> <li>The project has an estimated overall duration of approximately 27 months, of which:</li> <li>About 9 months for design activities.</li> <li>About 18 months for the implementation of interventions.</li> </ul>
Budget	The project has an estimated value of around 200.000-250.000 Euros.  The estimate of the costs of carrying out each intervention is subject to numerous variables, which will be the subject of specific technical analyzes prior to the design.
Project monitoring and KPIs	<ul> <li>Project monitoring and evaluation activities will be carried out according to the following indicators:</li> <li>Number of interventions on urban spaces started.</li> <li>Number of completed interventions on urban spaces.</li> <li>Degree of completion of the regeneration plan with respect to planned interventions (% of activities carried out).</li> <li>Percentage of users who declare to be satisfied with the interventions (survey).</li> <li>Difference (%) between the allocated budget and the final amount spent for the project activities.</li> <li>Deviation (number of days) between the time planned for the realization of the project and actual days to execute.</li> </ul>
Sustainability factor UNESCO Culture 2030 indicators	EnvironmentProsperityKnowledge & skillsInclusion& resilience& livelihoods& participation

7	Signage plan
Strategic objectives (5Cs)	Credibility Conservation Capacity building Communication Community
Specific project objectives	Adapt the Site knowledge tools to its role and characteristics as a World Heritage Site.  Improve accessibility to cultural heritage through easier orientation tools on the territory.
Brief description and purpose of the project	The project intends to enhance outdoor communication by improving and implementing signage systems both inside and outside the Piazza del Duomo area.  The provision of new, or updated, urban communication tools will allow the visitor to be adequately supported by informing and guiding their stay.  The actions will affect the quantity and the typological and graphic homogeneity of the support signs, and their appropriate positioning according to flows, based on the thematic study of information and on the preparation of contents in multiple languages.
Reference entities / individual(s)	Municipality of Pisa.  Opera della Primaziale Pisana.
Other entities / individuals	Other institutional subjects who are members of the Steering Committee (Superintendence of Archeology, Fine Arts and Landscape for the Provinces of Pisa and Livorno).
Project plan activities	<ul> <li>Updating of the signage inside the Site. The updating of the signage system within the Piazza Duomo Site will lead to an improvement, in typological and graphic terms, of the current state, orienting the visitors and, in an ideal manner, facilitating the exploration of places.         The reporting of places of interest, routes and information regarding the World Heritage will be improved, creating solutions in line with local regulations and in compliance with UNESCO guidelines.     </li> <li>Updating of the signage outside the Site. The enhancement of the current tourist information signage system in urban areas may affect the areas adjacent to the Site, improving accessibility, distribution, and orientation of flows. Similarly, the intervention may offer new routes and sight suggestions (integrated itineraries) by improving the accessibility and use of points of interest within the City's buffer zone.</li> <li>There will be adequate support in qualitative-quantitative terms rendered organic from a graphic and typological point of view.</li> </ul>

Recipients of the project (target)	National and international Site visitors.  Local community.		
Expected results	Raise awareness about the value of assets included in the core area and buffer zone.		
	2. Activate improved knowledge of the points of interest visited.		
	<ol> <li>Improve the management of visitor flows using a larger number of outlets.</li> </ol>		
Human and Graphic / communication agency.			
physical resources for implementation	Urban signage companies.		
Project timing	The project is expected to last approximately 18 months.		
Budget	These maximum cost items are estimated for the two lines of activity:		
	<ul> <li>Signage inside the Site (implementation and maintenance): 60.000 Euros (1.000 Euros / year for maintenance actions).</li> </ul>		
	• Signage outside the Site (implementation and maintenance): 90.000 Euros (2.000 Euros / year for maintenance actions).		
Project monitoring and	Project monitoring and evaluation activities will be carried out according to the following indicators:		
KPIs	Number of updated signage elements.		
	Number of newly created signage elements.		
	• Difference (%) between the allocated budget and the actual amount spent for project activities.		
	<ul> <li>Deviation (number of days) between the time planned for the realization of the project and actual days to execute.</li> </ul>		
Sustainability factor	Environment Prosperity Knowledge Califfe Inclusion		
UNESCO Culture 2030 indicators	& resilience & livelihoods Knowledge & skills & participation		

8	Digital enhancement of the World Heritage Site	
Strategic objectives (5Cs)	Credibility Conservation Capacity Communication Community	
Specific project objectives	Implement innovative and inclusive systems for Site usage by deploying digital technologies.	
	Strengthen knowledge of the Site through digital channels.	
Brief description and purpose of the project	The idea of project is focused on the theme of digital enhancement of the World Heritage, already defined by UNESCO as an "irreplaceable resource of knowledge and human expression". Through the common thread of technologies applied to the knowledge and use of cultural heritage, the actions include two different application areas: online and on-site.	
	The activities planned frame the use of digital technology not as an "end in itself", but as added value, by offering new methods of interpretation and interaction with the heritage of Piazza del Duomo, and in the ability to strengthen the visibility and knowledge of its <i>Outstanding Universal Value</i> through digital channels and tools.	
	In this sense, virtual and multimedia languages may offer additional information, new relationships, and emotional participation. This is because it will be possible to tell stories, offer alternative or suggestive contents, and present the heritage in an engaging and exciting way.	
	It is noted that these technologies and applications are crucial as a response to the consequences of the Covid-19 pandemic, which will have a long-term impact on the nature of the visiting experience and the delivery of cultural offerings.	
Reference	Opera della Primaziale Pisana.	
entities / individual(s)	Tuscany Region.	
Other entities / individuals	Other institutional members of the Steering Committee (Municipality of Pisa, Superintendence of Archeology, Fine Arts and Landscape for the provinces of Pisa and Livorno, Tuscany Region).	
	Universities and research centers.	
Project plan	Action 1: App for integrated use.	
activities	The creation of an App dedicated to the Piazza del Duomo Site responds to the need to offer new ways of interacting with the World Heritage Site, strengthening the knowledge and awareness of its <i>Outstanding Universal Value</i> . The App will, not only serve the traditional purpose of providing generic information on goods or services, a need now met by browsing the website on smartphones but, rather, it will offer an original and "alternative" user experience based on the innovative use of applied ICT to cultural heritage.	

The architecture of the application will allow additional knowledge sharing and exploration features of the heritage, leveraging solutions such as Virtual Reality, Augmented Reality, proximity technology, promoting new interpretations and new relationships with the urban space of the Square and with individual architectural components.

The technological components will make a difference, but an even more important role will be played by the cognitive and emotional experience with the heritage where the visitor is no longer a passive spectator, but a protagonist of the cultural experience.

#### Action 2: Tuscany World Heritage Sites web portal.

The portal project, which includes the seven Sites of Tuscany included in the WHL, was promoted, and edited by the Tuscany Region, and financed with funds from Law 77/2006, as part of an integrated enhancement conducted on a local, not regional scale. In this regard, it should be noted that the seven Sites of the Tuscany Region constitute a set of cultural testimonies historically connected, even if geographically widespread.

Among the initiatives carried out to improve communication and awareness of the values of World Heritage by visitors and local communities, we should mention the implementation of a multilingual, multimedia, and multidevice portal.

For the development of the project, the creation and annual updating of innovative content (news, blogs, events, itineraries) and revisions, both from an editorial and SEO optimization point of view (for search engines), are planned.

# Recipients of the project (target)

Site visitors.

Online users.

# **Expected results**

- 1. Adaptation of the Site's interpretation tools.
- 2. Integration of information on assets.
- 3. Dissemination of knowledge and use of ICT applied to cultural heritage.
- 4. Better accessibility of information.
- 5. Incentives to "know the places".

# **Human and** physical resources for implementation

Software houses / companies specialized in new technologies applied to cultural heritage.

Companies specialized in digital / web communication.

Content manager and technical-scientific consultants.

# **Project timing**

Action 1 (App) is expected to last approximately 18 months.

Action 2 (website) it is scheduled to be recurring annually.

Budget	For each line of act	tivity, the following	g cost items are estimat	ed, estimated:
	<ul> <li>App creation</li> </ul>	n: 15.000 Euros.		
	<ul> <li>App mainter</li> </ul>	nance: 3.000 Euro	s/year.	
	<ul> <li>Updating an</li> </ul>	nd editorial manago	ement of the website: 1	5.000 Euros / year.
Project monitoring and	Project monitoring following indicator		ctivities will be carried o	ut according to the
KPIs	<ul> <li>Downloads</li> </ul>	(number) of the Ap	op (Action 1).	
	<ul> <li>Average rat</li> </ul>	ing (score) of App	reviews (Action 1).	
	<ul> <li>Articles (nur</li> </ul>	mber) updated (Ac	ction 2).	
	Improvement	nt of the SEO rank	ing (Action 2).	
	• Increase of S	Site statistics (unic	que users, bounce rate) (	Action 2).
		%) between the all ctivities (Actions 1	located budget and the 1 1 and 2).	final amount spent
		•	etween the time planned to execute (Actions 1 ar	
Sustainability factor	Environment	Prosperity	Manufadas C. L'II	Inclusion
UNESCO Culture 2030 indicators	& resilience	& livelihoods	Knowledge & skills	& participation

9	Audience-oriented communication	
Strategic objectives (5Cs)	Credibility Conservation Capacity building Communication Community	
Specific project	Stimulate the engagement of potential audiences.	
objectives	Strengthen visit support tools for different audiences.	
	Support the acquisition of knowledge on the Site and its use by people with disabilities.	
Brief description and purpose of the project	The project is based on the awareness that general and undifferentiated communication cannot adequately reach the different types of potential audiences. The main objective is, therefore, to develop connections between heritage and its legacy, of which the Site is a universal expression, for its different categories of users, existing or potential.	
	Understanding and disseminating the values of World Heritage will be enacted by actions aimed at reaching specific groups of subjects (clusters), with diversified activities based on the abilities and needs of the intended recipients.	
	The design idea, therefore, envisages increasing the ability to control the social channels most frequented by the younger generations, enhancing visit support tools for minors and supporting knowledge acquisition and use of people with disabilities.	
	The communicative approach, developed with an audience-oriented perspective, will work on the diversification of language and content to stimulate engagement, awareness, and active participation.	
	For these reasons, all improvements will be more interactive, in addition to proposing differentiated activities, following the "development" phase with an "engagement" phase to stimulate use, interaction and participation. This will allow, depending on circumstances, to obtain results in terms of knowledge acquisition, user satisfaction, adherence, and concrete support to the values of World Heritage.	
Reference	Municipality of Pisa.	
entities / individual(s)	Opera della Primaziale Pisana.	
Other entities /	Support associations for disabled people.	
individuals	Educational operators.	
	Local publishing houses.	
Project plan	Social media campaign: "Pisa is UNESCO".	
activities	This involves the implementation of an awareness campaign developed exclusively on social media and dedicated, in particular, to young users in the City (residents, students, researchers). The goal is to increase the sense of belonging to the World Heritage Site, by stimulating active participation	

and fostering a feeling of protection of, and pride in, the enormous heritage represented by the Piazza del Duomo.

The communication strategy involves associating in a simple and immediate, and unequivocal way, the name of the City with that of World Heritage, and integrating, concurrently with the institutional communication activity of the Municipality of Pisa which are already identifiable and recognized on the web. At the operational level, the active participation of the public will be stimulated through surveys, quizzes, and invitations to share and develop content for the enhancement of the monumental complex.

The project will, therefore act, both on an informative and emotional level, increasing knowledge and, at the same time, stimulate awareness and affection for the heritage by inducing strong empathy-raising efforts in involving the local community.

#### • Visit support tools for minors.

The action entails the design and production of educational printed material aimed at school-age visitors. The initiative aims to involve younger groups by stimulating their curiosity and using a more immediate and congenial form of language. The contents, graphics and editorial form of these products will create a real "didactic kit" to accompany the visit: a simple and modern cognitive tool in its language and communicative approach.

# • Strengthening of the "MiracoLIS" project: tools to support the visit for people with disabilities.

The MiracoLIS project is an activity promoted, in recent years, by the Opera della Primaziale Pisana to offer alternative systems of use to people with disabilities.

This is a series of video guides dedicated to the heritage of Piazza del Duomo, told through the integration of sounds, images, and words in the Italian Sign Language.

Each sensory journey is the result of the work of a team composed of consultants, interpreters, experts in linguistic comparison, and video makers, following a methodology strongly oriented towards the "sharing" of professional skills. The action involves the creation of new episodes of the series, to supplement and complete those already in place.

# Recipients of the project (target)

National and international Site visitors.

Young visitors to the Site.

Site visitors with disabilities.

Local community (inhabitants of Pisa and of the Province).

#### **Expected results**

- 1. Increase contacts and interactions on social channels.
- 2. Stimulate the production and dissemination of user-generated content.
- 3. Increase the levels of knowledge, readability and understanding of the heritage.
- 4. Increase the levels of knowledge and usability by people with disabilities.

Human and physical resources for implementation	Agencies specializing in social media marketing.  Graphic designers and illustrators.  Typographies.  Consultants, interpreters, experts in linguistic comparison and mediation.  Video-production agencies.
Project timing	The duration of the project is expected to last 24 months.
Budget	<ul> <li>The following are (estimated) cost items for each line of activity:</li> <li>Social media campaign planning (Action 1): 4.000 Euros.</li> <li>Social media campaign management (Action 1): 4.000 Euros / year.</li> <li>Visit support for minors (Action 2): 18.000 Euros.</li> <li>Visit Support for the disabled (Action 3): 25.000 Euros.</li> </ul>
Project monitoring and KPIs	<ul> <li>Project monitoring and evaluation activities will be carried out according to the following indicators:</li> <li>Increase in the number of followers on social media networks (Action 1).</li> <li>Number of shares and interactions (Action 1).</li> <li>Number of printed products (Action 2).</li> <li>Number of videos produced (Action 3).</li> <li>Difference (%) between the allocated budget and the final amount spent on project activities (Actions 1, 2 and 3).</li> <li>Deviation (number of days) between the time planned for the realization of the project and actual days to execute (Actions 1, 2 and 3).</li> </ul>
Sustainability factor UNESCO Culture 2030 indicators	Environment Prosperity Knowledge & skills <b>Inclusion</b> & participation

10	Knowledge of the public
Strategic objectives (5Cs)	Credibility Conservation Capacity building Communication Community
Specific project objectives	Increase awareness and audience profiling of the Site.  Monitor Site perception by visitors and satisfaction with the visit and user experience.  Verify the degree of knowledge and awareness of the acknowledgement of World Heritage by the local community.
Brief description and purpose of the project	The project aims to develop continuous and structured listening and knowledge acquisition policies about the Site's audiences, with the aim of researching, collecting, and processing information of various kinds on existing and potential visitors, whether tourists or Pisan citizens.  The project's program of actions will allow for the monitoring and analysis of essential data on the profiles, motivations, and behaviors of tourists, as well as their level of knowledge and awareness of the <i>Outstanding Universal Value</i> of the Site. It will also make it possible to measure the relationship and familiarity of the local community with World Heritage assets.
	Among the various possible areas of investigation there are aspects related to the protection of the heritage, the knowledge and reputation of the Site, the trends in demand, and / or the satisfaction of the offerings.  This information is particularly important, not only for the planning and daily management of heritage conservation and enhancement activities, but also for verifying how the primary objectives of education, information and awareness are met, at the basis of the registration of the Site on the World Heritage List.
Reference entities / individual(s)	Municipality of Pisa.  Opera della Primaziale Pisana.
Other entities / individuals	Other institutional members of the Steering Committee (Province of Pisa, Superintendence of Archeology, Fine Arts and Landscape for the Provinces of Pisa and Livorno).  Tour operators.  Accommodation facilities.
Project plan activities	<ul> <li>Ongoing survey activity of Site visitors.</li> <li>The implementation of structured cognitive actions surrounding Site visitors will allow for the promotion and management of coordinated research, collection, and processing of data on different types of existing or potential audiences.</li> </ul>

The actions include for the establishment of a "light" structure, which can independently assist in desk and field analysis, for research and aggregation of existing databases or coordination of actions by different subjects.

One purpose is, therefore, to also encourage dialogue between administrators, cultural institutions, and sector operators, and to launch opportunities for consultation and management on common problems, such as the phenomenon of overtourism and the seasonal adjustment of flows.

#### Analysis of the local community.

This action is aimed at investigating how much the local community is actually aware of the Site's Outstanding Universal Value and the criteria that led to its inclusion in the World Heritage List.

Having an up-to-date snapshot of how the Site is perceived and valued by citizens, will orient management and communication policies to strengthen the relationship with the local community, increasing their awareness and sense of responsibility on the issues of conservation and use of its heritage.

# Recipients of the project (target)

National and international Site visitors.

Local community (inhabitants of Pisa and the Province of Pisa).

#### **Expected results**

- 1. Collection of information to guide the processes of protection, management, and enhancement of the Site.
- 2. Aggregation and optimization of datasets managed by disparate subjects.
- 3. Improvement of the quality of the offering.
- 4. Knowledge about, and profiling of, the different types of audiences on the Site.
- 5. Strengthening the involvement of the local community on World Heritage

# **Human and** physical resources for implementation

#### Physical resources:

- Online survey platform.
- Tools for on-site surveying (printed questionnaires, kiosk totems, tablets, etc.).
- Actions / communication materials.
- Human resources:
  - Administrative staff.
  - Companies specialized in data processing.

#### **Project timing**

For the realization of the project a duration of between 10 and 12 months is foreseen.

The project is carried out with a view to replicability and scalability.

#### The following maximum cost items are estimated for each line of activity: **Budget** System implementation: 25.000 Euros one-off. System maintenance: 2.000 Euros / year. Scientific-operational governance: 15.000 Euros / year. Assessments and surveys: 20.000 Euros / year. Promotion and dissemination of results: 4.000 Euros / year. Project monitoring and evaluation activities will be carried out according to the **Project** following indicators: monitoring and **KPIs** Number of subjects involved. Number of surveys carried out. Number of coordinated or aggregated surveys conducted. Number of Periodic Reports produced and shared. Difference (%) between the allocated budget and the final amount spent on project activities. Deviation (number of days) between the time planned for the realization of the project and actual days to execute. **Sustainability** factor Environment Prosperity Knowledge & Inclusion & resilience & livelihoods & participation skills **UNESCO Culture**

2030 indicators

11	Enhancement of the World Heritage recognition
Strategic objectives (5Cs)	CredibilityConservationCapacity buildingCommunicationCommunity
Specific project objectives	Adapt knowledge and information tools for the Site to share its role and its characteristics as a World Heritage Site.
Brief description and purpose of the project	The project plans to adequately enhance, through targeted actions and communication tools, the recognition of "World Heritage" awarded to Piazza del Duomo in 1987.
	Its purposes to enhance the quality and effectiveness of promotion of World Heritage Values through various communication channels, expanding their recognition and dissemination to different targets (visitors, local community, stakeholders).
	In this direction, specific measures are designed to enhance the presence and the communicative perception of the recognition of World Heritage as part of a targeted and <i>cross-media</i> strategy, organic and complementary to everyday communication activities.
	All the planned actions will be implemented following from the main guidelines of the World Heritage Convention regarding communication activities about World Heritage Sites and, generally, taking into consideration the indications and regulations governing the use of the World Heritage "brand" in promotional and communication activities.
Reference entities / individual(s)	Opera della Primaziale Pisana.
Other entities / individuals	Other institutional members of the Steering Committee (Municipality of Pisa, Province of Pisa, Region of Tuscany, Superintendence of Archeology, Fine Arts and Landscape for the Provinces of Pisa and Livorno).
	Universities in the territory.
Project plan	Guidelines for actions to enhance the recognition of World Heritage.
activities	The first of the valorization actions entails the elaboration of a strategy and a methodology aimed at raising awareness about the communication system at the local-regional-national level about the recognition of World Heritage.
	Through greater involvement, dissemination, and awareness (also among subjects operating in different fields), a frame of reference can be created (a real Action Plan) capable of developing correct information in concordance with greater and extensive promotion of the Outstanding Universal Value of the Site and of the criteria that have decreed its recognition.

Through agreements and awareness-raising activities with stakeholders (institutions, media, tourist guides, educational operators, communication operators), the action aims at strengthening the perception and presence of "awareness" in the various communication channels. For example, the transcription of the official wording may be stimulated in editorial activities by various public and private entities which produce promotional materials for the Site.

Furthermore, the presence of recognition on the web portals of organizations, institutions, and associations that deal with cultural promotion, can be verified, and encouraged. Finally, the visibility and recognition of the World Heritage "brand" will be strengthened on institutional communication materials.

# • Thematic publications.

The action involves the study and creation of publications on the theme of World Heritage, both general and about specific areas.

These efforts, to be held annually, can start from the Declaration of *Outstanding Universal Value* of Piazza del Duomo to inform, and explain the connections between the actions of UNESCO and the values recognized at the Pisan Site, aiming at raising awareness about the contemporary value of the Site and the need to protect and transmit its cultural heritage to the next generations.

The publications must have an informative and openly educational-didactic slant, with "inclusive" graphic-editorial solutions that can bring together different and not common audiences of the Site.

# Recipients of the project (target)

# Action 1:

- Media and communication operators.
- Cultural institutions.
- Tourism and cultural operators (guides, cultural associations, etc.).

#### Action 2:

- Site visitors.
- Local community.

#### **Expected results**

- 1. Increase in the enhancement for the recognition of World Heritage in the various communication channels.
- 2. Strengthening the perception of the Universal Value of the Piazza del Duomo Site for both visitors and the local community.
- 3. Higher quality of information disseminated about the World Heritage.

# Human and physical resources for implementation

Institutional communication expert (media relations officer, press officer, marketing manager).

Graphic / publishing company.

Project timing	Action 1 (guidelines):		
	- 12 months.		
	Action 2 (thematic publication):		
	- 6-8 months. The project is carried out with a view to annual replicability.		
Budget	<ul> <li>Coordination and guidelines for enhancement actions: 8.000 Euros one- off.</li> </ul>		
	<ul> <li>Creation of thematic publications: 20.000 / publication Euros (average cost).</li> </ul>		
Project monitoring and	Project monitoring and evaluation activities will be carried out according to the following indicators:		
KPIs	Number of subjects involved in the enhancement action.		
	<ul> <li>Number of thematic publications produced during the project.</li> </ul>		
	Difference (%) between the allocated budget and the final amount spent on project activities.		
	<ul> <li>Deviation (number of days) between the time planned for the realization of the project and actual days to execute.</li> </ul>		
Sustainability factor	Environment Prosperity // Inclusion		
UNESCO Culture 2030 indicators	& resilience & livelihoods Knowledge & skills & participation		

12	Training programs for institutions responsible for the enhancement of the Site
Strategic objectives (5Cs)	Credibility Conservation Capacity building Communication Community
Specific project objectives	Promote the link, and develop the integration, between institutions and cultural heritage through ad hoc training actions.
Brief description and purpose of the project	The project will promote, and coordinate training activities aimed at institutions directly involved in the enhancement of Piazza del Duomo. The proposed activities consist of, first, <b>increasing the awareness</b> , the <b>sense of belonging</b> and <b>responsibility</b> towards the cultural heritage on the part of the institutional subjects, and providing the necessary tools to solve the critical issues gradually identified, taking inspiration from the solutions adopted by the other WHL Sites at regional and / or national level.
	Furthermore, training activities also aim to <b>strengthen the current</b> <i>governance system</i> , through the establishment of new ways of working, which contribute to increased participation by all institutional subjects involved and the development of new local policies. Finally, the training interventions plan will set up a <b>monitoring</b> and <b>evaluation</b> plan for the activities to evaluate the effectiveness of the proposed interventions and the achievement of desired results.
Reference entities / individual(s)	Opera della Primaziale Pisana.
Other entities / individuals	Other institutional members of the Steering Committee (Municipality of Pisa, Tuscany Region; Province of Pisa, Superintendence of Archeology, Fine Arts and Landscape for the Provinces of Pisa and Livorno).
	Tuscany Region; Province of Pisa, Superintendence of Archeology, Fine Arts
	Tuscany Region; Province of Pisa, Superintendence of Archeology, Fine Arts and Landscape for the Provinces of Pisa and Livorno).
	Tuscany Region; Province of Pisa, Superintendence of Archeology, Fine Arts and Landscape for the Provinces of Pisa and Livorno).  Entities in charge of ongoing and / or continuous training.
	Tuscany Region; Province of Pisa, Superintendence of Archeology, Fine Arts and Landscape for the Provinces of Pisa and Livorno).  Entities in charge of ongoing and / or continuous training.  Italian World Heritage Association.  Bodies responsible for specialized training in the areas of cultural heritage
individuals Project plan	Tuscany Region; Province of Pisa, Superintendence of Archeology, Fine Arts and Landscape for the Provinces of Pisa and Livorno).  Entities in charge of ongoing and / or continuous training.  Italian World Heritage Association.  Bodies responsible for specialized training in the areas of cultural heritage management and World Heritage.  Below are some project proposals, specifying that a portfolio of tailor-made
individuals Project plan	Tuscany Region; Province of Pisa, Superintendence of Archeology, Fine Arts and Landscape for the Provinces of Pisa and Livorno).  Entities in charge of ongoing and / or continuous training.  Italian World Heritage Association.  Bodies responsible for specialized training in the areas of cultural heritage management and World Heritage.  Below are some project proposals, specifying that a portfolio of <i>tailor-made</i> actions will be dedicated to each during the implementation phase.  Generic training on World Heritage, useful for raising awareness of institutions (e.g., the themes: The concept of cultural heritage; The Paris World Heritage Convention (1972); The World Heritage List (WHL); The Italian Sites in the List; The registration of the Site of Pisa, Piazza del Duomo in the WHL; The

- Disclosure of the 17 sustainable development goals contained in the U.N. 2030 Agenda.
- Definition of new inclusiveness and bottom-up participation strategies.

# 2. Training courses for the acquisition of skills useful for defining monitoring and evaluation plans.

- Acquisition of skills useful for the collection, analysis and reporting of data collected during the monitoring phase.
- Soft and hard skills refresher courses.

# 3. Training interventions for the strengthening of managerial skills.

- Training courses for the acquisition of skills useful for interinstitutional communication.
- Basics of cultural marketing, and tourism and cultural promotion.
- Acquisition of technical skills for the implementation of the Management Plan and for the identification of critical issues and related solutions.

#### 4. Other informal ways for *capacity* building.

- Discussion roundtables with peers employed by regional and national World Heritage Sites to share best practices.
- Exchanges with other local institutions (Province, Region, national territory) engaged in the development of best practices for asset management.
- On-the-job training at other regional and / or national World Heritage Sites.

# Recipients of the project (target)

Opera della Primaziale Pisana.

Municipality of Pisa (employees).

Tuscany Region (employees).

Superintendence of Archeology, Fine Arts and Landscape for the Provinces of Pisa and Livorno.

#### **Expected results**

- 1. Design effective training tools to be adopted systematically.
- 2. Fill training gaps detected in the analysis phase.
- 3. Launch a dialogue with the human resources employed at the Site in order to collect requests and inquiries relating to the management and enhancement of the Site.
- 4. Promote a culture of sharing and collective responsibility for cultural and environmental heritage.
- Develop new managerial skills, useful for the correct oversight and promotion of the Site.

Human and physical resources for implementation	Expert trainers and training consultants.  Specialists in the UNESCO and World Heritage fields.			
Project timing	The duration of the project is expected to be between 9 and 12 months.  The project is carried out with a view to replicability and scalability.			
Budget	<ul> <li>For the implementation of training (Activities 1, 2 3): 40.000 Euros / year.</li> <li>For the design and implementation of informal capacity building activities: 12.000 Euros / year.</li> </ul>			
Project monitoring and KPIs	Project monitoring and evaluation activities will be carried out according to the following indicators:  Number of training hours carried out.  Number of operators involved in training activities.  Satisfaction level of the subjects involved, assessed by means of specific survey tools (questionnaires).  Difference (%) between the allocated budget and the final amount spent on project activities.  Deviation (number of days) between the time planned for the realization of the project and actual days to execute.			
Sustainability factor UNESCO Culture 2030 indicators	Environment <b>Prosperity Knowledge &amp;</b> Inclusion & resilience <b>&amp; livelihoods skills</b> & participation			

13	Training programs for researchers and bodies specialized in high-profile scientific information dissemination			
Strategic objectives (5Cs)	Credibility Conservation <b>Capacity</b> Communicati Community on			
Specific project objectives	Support for high-profile scientific professionals for the dissemination of results related to research and study programs.			
Brief description and purpose of the project	One of the objectives envisaged in the World Heritage Convention is that WHL Sites also become the identity heritage of the community with the characteristics of integrity and authenticity so that citizens become their main custodians and promoters.  This project will provide <b>specific training to highly qualified personnel</b> , who are able to adequately convey to the community, not only the importance of the Site and news on research, but who know how to actively involve them in the processes of knowledge, protection, and enhancement.  Professionals trained in the academic field refers to the discipline known in Italy as <i>Public History</i> (a field of historical sciences to which historians, archaeologists, and other cultural heritage professionals adhere, and who carry out activities related to research and communication of history outside academic environments, in the public as well as in the private sector, with and for different audiences).  The skills developed with the project can also help the <b>managers</b> of the Site's cultural heritage, <b>public administrations</b> , and <b>economics operators</b> such as <i>public history</i> professionals be able to support the setting up of scientific dissemination campaigns, research activities, promotions, and the creation of new visit routes both within the <i>core area</i> and outside it.			
Reference entities / individuals	Opera della Primaziale Pisana.			
Other entities / individuals	Municipality of Pisa. University of Pisa.			
Project plan activities	<ul> <li>Organization and activation of a Technical Roundtable with the University for the definition and coordination of collaboration actions.</li> <li>Design and activation of specific courses in post-graduate training.</li> <li>Planning and activation of field training courses.</li> <li>Establishment of research grants in the field of new management and enhancement strategies.</li> </ul>			
Recipients of the project (target)	Researchers. PhD students.			

Expected results	<ul> <li>Train high-level professionals in the field of dissemination of the Universal Values of World Heritage and communication.</li> </ul>			
	<ul> <li>Generate innovation in tools for the enhancement of cultural heritage.</li> </ul>			
	<ul> <li>Create new professional roles useful for the training of profiles responsible for the management of World Heritage Sites.</li> </ul>			
Human and physical resources for implementation	The staff to be employed is for university training activities in addition to that of promoters.			
Project timing	3 years.			
Budget	For the implementation of post-graduate training: 20.000 Euros / year.			
	<ul> <li>For the development of "in the field" training activities 10.000 Euros / year.</li> </ul>			
Project monitoring and	Project monitoring and evaluation activities will be carried out according to the following indicators:			
KPIs	Number of participants.			
	Number of training hours carried out.			
	<ul> <li>Number of collaborations activated following participation in the training project.</li> </ul>			
	<ul> <li>Satisfaction level of the subjects involved, assessed by means of specific survey tools (questionnaires).</li> </ul>			
	<ul> <li>Difference (%) between the allocated budget and the final amount spent on project activities.</li> </ul>			
	<ul> <li>Deviation (number of days) between the time planned for the realization of the project and actual days to execute.</li> </ul>			
Sustainability factor	Environment <b>Prosperity Knowledge &amp;</b> Inclusion			
UNESCO Culture 2030 indicators	& resilience & livelihoods skills & participation			

14	Training programs for cultural and tourist operators employed at the Site			
Strategic objectives (5Cs)	Credibility Conservation Capacity building Communication Community			
Specific project objectives	Carry out training actions aimed at tourism and cultural operators employed by the Site for the strengthening and acquisition of useful skills for the proper management of the heritage.			
Brief description and purpose of the project	The training interventions aimed at cultural and tourism operators employed by the Site will strengthen the link between human resources and the World Heritage, increasing participation in management dynamics and enhancement of the Site, as well as the creation of new skills to define new ways of working and communicating with institutions and the public.			
Reference entities / individuals	Municipality of Pisa. Opera della Primaziale Pisana.			
Other entities / individuals	Opera della Primaziale Pisana.  University of Pisa.  Other training bodies.  Trade associations and tourism organizations representative in the Pisan territory.			
Project plan activities	In order to strengthen and provide useful skills for the correct management, protection and enhancement of the Site, the activity plan proposes to proceed with training interventions that focus, at various levels, on the training of local tourism operators. In particular, the main issues that can be addressed concern:  1. Cross training in the World Heritage area.  • History of P. del Duomo and historical, artistic, and architectural elements.			
	<ul> <li>Registration of the Site in the WHL: year, elements of Outstanding Universal Value, registration criteria, etc.</li> <li>Management Plan: function and methods of implementation.</li> </ul>			
	The role of the local community in the protection and transmission of value.			
	2. Other informal ways of <i>capacity building</i> .			
	<ul> <li>Co-planning roundtables for the creation of City itineraries and / or updates to already structured itineraries.</li> </ul>			
	<ul> <li>In-depth study of special projects (e.g., ITACA Project – Accessible and Open Tourist Itineraries)</li> </ul>			
	<ul> <li>Co-creation of projects for the promotion and enhancement of the Site (e.g., creative contest to be shared between staff and collaborators).</li> </ul>			

Recipients of the	Accredited tourist guides.		
project (target)	Cultural sector operators (associations, volunteers).		
	Volunteers at the Site.		
	Employees engaged in front office activities responsible for managing the Site.		
Expected results	<ol> <li>Design and develop effective lifelong learning models (LLL) to be systematically adopted for vocational training.</li> </ol>		
	<ol> <li>Initiate collaboration practices between those in charge of the protection and enhancement of the Site and the tourism and commercial operators of the City.</li> </ol>		
	3. Enable the acquisition of new skills by tour operators active in the area.		
	4. Increase the involvement of human resources in the management, protection, and enhancement of the Site.		
Human and	Trainers.		
physical resources for implementation	Moderators and facilitators.		
Project timing	The duration of the project is expected to be between 12 and 16 months.		
Budget	<ul> <li>A one-off 20.000 Euros for the management of training and collaborative processes.</li> </ul>		
	• 10.000 Euros / year for teaching.		
Project monitoring and	Project monitoring and evaluation activities will be carried out according to the following indicators:		
KPIs	Number of training hours carried out.		
	<ul> <li>Number of operators involved in training activities.</li> </ul>		
	<ul> <li>Satisfaction level of the subjects involved, assessed by means of specific survey tools (questionnaires).</li> </ul>		
	<ul> <li>Difference (%) between the allocated budget and the final amount spent on project activities.</li> </ul>		
	<ul> <li>Deviation (number of days) between the time planned for the realization of the project and actual days to execute.</li> </ul>		
Sustainability factor	Environment <b>Prosperity Knowledge</b> Inclusion		
UNESCO Culture 2030 indicators	& resilience & livelihoods & skills & participation		

15	Development of partnership agreements and conventions for the integrated enhancement of the territory			
Strategic objectives (5Cs)	Credibility Conservation Capacity building Communication Community			
Specific project objectives	Implement actions and tools for the integrated promotion of the tangible and intangible cultural heritage of the City.			
	Encourage the decongestion of flows in the core area to other areas and attractions of the historic center and limit the anthropogenic load on the Site.			
Brief description and purpose of the project	Through the definition of a system of agreements and conventions, the project aims to develop an urban system of integrated offerings and to create alternative urban itineraries to the traditional one of Piazza del Duomo, a system capable, therefore, of revealing the City of Pisa to <i>City users</i> with an "unedited key".			
	The new practices generated for the integrated management and promotion of the artistic, religious, and cultural heritage of Pisa will activate dynamics of coopetition among the operators (an attitude of effective and participatory collaboration in which each operator enhances their skills by contributing to the qualitative advantage to the network) and stimulate the design of tools for an operational and more cognizant management of the system.			
	The formalization of the new systemic offerings of the City will make it possible to:			
	<ul> <li>Stratify the offerings and adapt it them the evolutionary dynamics of cultural and tourist demand.</li> </ul>			
	Relocate tourist flows.			
	Facilitate interpretation and contact with the City.			
	<ul> <li>Integrate the different parts of the City from a cultural and economic point of view.</li> </ul>			
	It is also worth noting the opportunity to activate itineraries at the Provincial level in partnership with local bodies and institutions in order to strengthen tourist and cultural enjoyment and encourage a longer stay for tourists.			
Reference entities / individuals	Municipality of Pisa.			
Other entities / individuals	Other institutional members of the Steering Committee (Tuscany Region, Province of Pisa, Superintendence of Archeology, Fine Arts and Landscape for the Provinces of Pisa and Livorno, Opera della Primaziale Pisana).			
	Network of the subjects involved (to be created).			
	Cultural institutions, both civic and religious, of the City.			

Tour operators.

Accommodation facilities in the area (restaurants, hotels ...).

Local transport networks.

# Project plan activities

#### • Development of a network of subjects belonging to different fields.

The development of one or more formal networks between the subjects operating in the area, characterized by an intersectoral integration between the different areas of the cultural and tourist supply chain, would help lay the foundations of a systemic offering, and formalize a more refined identity awareness of the City, in line with previous experiences already executed in the area.

Stipulation of agreements and conventions with local accommodation facilities.

This activity would favor the creation of integrated packages to combine hotels, B& Bs, and holiday homes stays with area restaurants in during cultural visit of the City, with the aim of encouraging the visitor to enjoy the City in alternative ways.

• Definition of thematic itineraries capable of highlighting local excellence.

By defining thematic itineraries, the goal is to give value to local excellence and identify themes capable of attracting stakeholders and interested parties and contribute to the promotion of the widely understood local heritage (historical-artistic itineraries, nature itineraries, food and wine itineraries, etc.).

• Strengthening the communication strategies of the new City offerings.

The definition of new cultural and tourist packages must be supported by an adequate communication strategy capable of promoting the new local opportunities, through systematic actions of both traditional and digital information dissemination.

# Recipients of the project (target)

Cultural sector operators.

Tourist guides.

Catering staff.

Hotel workers.

Travel industry operators widely known.

#### **Expected results**

- 1. Support the creation of one or more formal and intersectoral networks between public and private entities.
- 2. Encourage the formation of a more sophisticated identity awareness of the City, transmitted to the various categories of *City users* through stratified communication and marketing strategies for targeting audiences and spending capacity.
- 3. Achieve significant decongestion of the flows of visitors affecting the Site of Piazza del Duomo, reducing the anthropic load and its risks.
- 4. Consolidate and expand the local cultural and tourist supply chains.

Human and physical resources for implementation	Cultural tourism experts, urban itinerary planners.  Expert mediators in participatory planning processes.		
Project timing	The duration of the project is expected to be between 12 and 18 months.		
	The project is carried out with a view to replicability and scalability.		
Budget	For each line of activity (target) the following maximum cost items are estimated:		
	Coordination of activities and network management: 7.500 Euros / year.		
	<ul> <li>Project promotion and dissemination: 12.000 Euros / year.</li> </ul>		
	<ul> <li>Implementation of integrated marketing and promotion strategies: 30.000 Euros / year.</li> </ul>		
	<ul> <li>Implementation of special projects: 20.000 Euros / project (assumes average value).</li> </ul>		
Project monitoring and	Project monitoring and evaluation activities will be carried out according to the following indicators:		
KPIs	Number of agreements entered into.		
	Number of subjects involved overall.		
	<ul> <li>Percentage of sales of tourist packages whose circuit does not provide for the exclusive visit to the Site over the total number of packages sold.</li> </ul>		
	<ul> <li>Percentage of users who claim to be extremely satisfied or satisfied with the new cultural / tourist offerings (survey by questionnaire).</li> </ul>		
	<ul> <li>Number of problems related to congestion of flows near the Site, classified by type of risk.</li> </ul>		
	<ul> <li>Number of communication campaigns launched to promote the new integrated offerings system.</li> </ul>		
	<ul> <li>Difference (%) between the allocated budget and the final amount spent on project activities.</li> </ul>		
	<ul> <li>Deviation (number of days) between the time planned for the realization of the project and actual days to execute.</li> </ul>		
Sustainability factor	Environment Prosperity Knowledge Schille Inclusion		
UNESCO Culture 2030 indicators	& resilience & livelihoods Knowledge & skills & participation		

16	Community engagement support strategy through World Heritage education and training			
Strategic objectives (5Cs)	Credibility Conservation Capacity building Communication Community			
Specific project objectives	Promote the link, and develop integration, between the local population and cultural heritage.			
Brief description and purpose of the project	The intervention is divided into a set of actions for planning and coordination training activities, aimed at the different categories of <i>City users</i> , i.e., people who live in the City (residents, students, workers, tourists) and who, therefore, have a role, direct or indirect, in the protection and promotion of the Universal Value of the Site.			
	Within the project, different teaching and / or learning tools and processes are provided based of targets. Some of them are intended for <i>capacity building</i> interventions aimed at bridging the training gaps on the aspects of management and use of the WHS, others are inspired by the principles of individual and collective <i>life-long learning</i> and are, therefore, aimed at increasing awareness and belonging to the WHS community, as well as at the level of interaction of <i>City users</i> with the urban heritage.			
	In order to achieve the desired high levels of involvement, the project acts with a differentiated learning intensity programming divided into:			
	Generic training appointments in the UNESCO and World Heritage area.			
	<ul> <li>Specific training courses in the UNESCO and World Heritage area.</li> </ul>			
	Training and refresher meetings for students and teachers.			
	A specific module will be dedicated to the follow-up on training interventions already carried out in the years 2107 and 2018 thanks to the funding provided by Ministry of Cultural Heritage and Activities and Tourism under Law 77/2006.			
	The golden thread that unites interventions and aspirations of the objectives of education, training, and fair and inclusive education promoted by the <b>U.N. 2030 Agenda for Sustainable Development</b> through <b>Goals 4</b> (Quality Education), 5 (Gender Equality), 9 (Industry, innovation, and infrastructure), 11 (Sustainable cities and communities) and 16 (Peace, justice, and strong institutions).			
	Furthermore, independently of the recipients, the training interventions will be modulated with a view to replicability and the objectives of maximizing the impact of the project in terms of <i>reach</i> ; creating the conditions for the economic sustainability of the initiatives and stimulating similar interventions in the territory of the WHS, and elsewhere.			
Reference entities / individuals	Opera della Primaziale Pisana.			

# Other entities / individuals

Other institutional members of the Steering Committee (Municipality of Pisa, Tuscany Region, Province of Pisa, Superintendence of Archeology, Fine Arts and Landscape for the Provinces of Pisa and Livorno).

Training and Scientific Research Network (to be created, if necessary).

Entities in charge of ongoing and / or continuous training.

Bodies responsible for specialized training in the areas of cultural heritage management and World Heritage.

#### **Project plan** activities

- 1. Design and implementation of general training interventions on World Heritage issues, also deepening the definition path, function, and potential of the WHS Management Plan.
- 2. Design and implementation of specific training in the UNESCO and World Heritage area with particular attention to the training already tested by other Italian Sites on the List of World Heritage Sites. By way of example, the following is reported:
  - Annual training offered by the Training and Scientific Research Network coordinated by the Autonomous Province of Trento for the World Heritage Site of the Dolomites.
  - "Florence world Heritage" thematic seminars as part of Here Lab -Heritage Research, in collaboration with ICCROM and Bocconi University of Milan.
  - Educational itineraries for schools by the SITI World Heritage System of the Veneto Region.
  - UNESCO Creative Cities Network for the promotion of cooperation between cities.
- 3. Design and implementation of training and refresher courses aimed at teachers and students at all schools and grades, such as:
  - Guided tour of the Site with a specialized cultural operator (pupils can try to play the role of tour guide by experimenting in the field the concepts learned in class).
  - Experiential learning activities, to be carried out at the Site, through group activities (e.g., treasure hunt).
  - Labs and workshops on the theme of World Heritage included in the WHL.
  - Lectio magistralis by UNESCO and World Heritage experts for secondary school students.
  - University courses with group activities dedicated to UNESCO policies.
  - Scholarships for young researchers.
  - Training internships for university students with intercultural exchanges between universities located in Europe.

4. **Training aimed at the local community** (residents, workers, tourists, commuters, etc.), through activities characterized by a high potential for involvement, such as:

#### • World Heritage Week.

Week of events dedicated to the Site of Piazza del Duomo with a schedule of activities aimed at the local community (screenings, conferences, workshops, special openings, flag points located around the city ...).

#### Creative contest.

Involve, through creativity, the local community of all ages. By way of example, the following is reported:

Creative activities aimed at the whole community and at all age groups.
 For example: "Design the new logo for Piazza del Duomo"; "The Square I would like ..."; "Create a new look for the Tower of Pisa!".

#### Editathon.

Digital writing marathon on the cultural heritage of Piazza del Duomo.

# • Traveling urban festival.

Three days of events dedicated to the tangible and intangible cultural heritage of the City to be developed around a theme, with international guests, roundtables, guided tours, readings, workshops ... (see, for example, the Internet Festival https://www.internetfestival.it/).

- 5. **Follow up** of the training interventions financed under Law 77/2006.
- 6. **Monitoring and evaluation** of the project.

# Recipients of the project (target)

Local community (neighboring Municipalities, Province or Region).

Kindergarten, primary and secondary school Students.

University students (including PhD students).

City users (tourists, workers, commuters...).

#### **Expected results**

- 1. Design effective training tools to be systematically adopted.
- 2. Bridge the training and didactic planning gaps.
- 3. Intensify the involvement and participation of local communities and educational operators on the relevance of the Site as a World Heritage Site and its *Universal Value*.
- 4. Promote a culture of sharing and collective responsibility for cultural and environmental heritage.
- 5. Activate a sense of cultural identity shared around the values of the World Heritage Site of Piazza del Duomo by reference communities.

# Human and physical resources for implementation

Trainers.

Expert consultants in the training field.

Specialists in areas and issues relevant to the World Heritage.

Project timing	The duration of the project is expected to be between 9 and 12 months.		
Budget	For each line of activity (target) the following maximum cost items are estimated:		
	Preparation of didactic material: 8.000 Euros / year.		
	<ul> <li>Carrying out in presence activities: 18.000 Euros / year.</li> </ul>		
	<ul> <li>Coordination and implementation of special projects: 12.000 Euros / year.</li> </ul>		
	Costs may vary in the event of substantial changes in the volume of activities carried out and of persons involved.		
Project monitoring and	Project monitoring and evaluation activities will be carried out according to the following indicators:		
KPIs	Number of training activities started.		
	<ul> <li>Number of operators involved in training activities.</li> </ul>		
	Number of scholarships funded.		
	<ul> <li>Number of residents who declare to have taken part in capacity building activities (% of total population).</li> </ul>		
	<ul> <li>Satisfaction level of the subjects involved each year of the project, assessed by means of specific survey tools (questionnaires).</li> </ul>		
	<ul> <li>Number of new hires destined to carry out training activities.</li> </ul>		
	<ul> <li>Difference (%) between the allocated budget and the final amount spent on project activities.</li> </ul>		
	<ul> <li>Deviation (number of days) between the time planned for the realization of the project and actual days to execute.</li> </ul>		
Sustainability factor	Environment Prosperity <b>Knowledge &amp; Inclusion</b>		
UNESCO Culture 2030 indicators	& resilience & livelihoods <b>skills</b> & <b>participation</b>		

17	Implementation of the new governance model			
Strategic objectives (5Cs)	Credibility Conservation Capacity building Communication Community			
Specific project objectives	The goal is to make the new governance model operational based on a multilevel logic which provides for coordination and cooperation between the various institutional entities in charge of the protection, conservation, and enhancement of the World Heritage Site.			
Brief description and purpose of the project	Redesign the <i>governance structure</i> of Piazza del Duomo through the identification and appointment of institutional subjects, definition of each of the roles and functions, as well as implementation methods. The aim is to make the new model effective and functional for the correct application of the guidelines defined in the Management Plan, through the establishment of two Bodies: the Steering Committee and the Management Office.  The two bodies will have decision-making and a strategic orientation (Steering Committee), and technical and operational functions (Management Office). Finally, the new model provides for the assignment to the UNESCO Office of secretarial and coordination functions.			
Reference entities / individuals	<ul> <li>Ministry of Cultural Heritage and Activities and Tourism (MiBACT):</li> <li>UNESCO Office (General Secretariat).</li> <li>Superintendence of Archeology, Fine Arts and Landscape for the Provinces of Pisa and Livorno.</li> </ul> Tuscany Region.			
	Province of Pisa.			
	Municipality of Pisa.  Opera della Primaziale Pisana.			
Other entities / individuals	N/A			
Project plan activities	<ul> <li>Identification and appointment of the institutional members of the Steering Committee.</li> <li>Identification and appointment of the technical-operational staff of the Management Office.</li> </ul>			
	<ul> <li>Selection of employees of the UNESCO Office in charge of secretarial and staff coordination functions.</li> </ul>			
	Launch of interinstitutional collaboration practices.			
	<ul> <li>Adoption of regulations by the two bodies.</li> </ul>			

	Implementation of the provisions contained in the Management Plan.		
	<ul> <li>Periodic updating by the Steering Committee at the request of the Management Office.</li> </ul>		
Recipients of the project (target)	Signatories of the Memoranda of Understanding of 2014 and 2015.		
Expected results	1. Update of the previous governance model.		
	<ol> <li>Implementation of all necessary measures for the operation of the bodies identified by the new model as referents for strategic-decision- making and technical-operational functions.</li> </ol>		
Human and physical resources for implementation	Employees of the Offices involved in the secretarial, support and coordination functions of the Steering Committee and the Management Office.		
Project timing	For the implementation of the model, a duration of 6 months is envisaged.		
Budget	N/A		
Project monitoring and	For the evaluation of the effectiveness of the multilevel <i>governance</i> model, the following indicators are proposed:		
KPIs	<ul> <li>Deviation (number of days) between the planned timeline for the adoption of the model and the actual timing.</li> </ul>		
Sustainability factor UNESCO Culture 2030 indicators	Environment <b>Prosperity</b> Knowledge & skills Inclusion & participation		

# 4.3 In-depth analysis: intervention costs

The following table shows, for each of the projects envisaged in the Action Plan, the calculation method adopted to estimate the cost associated with the related activities.

Ref.	PROJECT / ACTION CARD	Activities included in the project	Estimated cost drivers (hourly / unit cost and quantity) <sup>74</sup>	
1	Interinstitutional collaboration for access to culture and research	Organization of periodic study and research meeting programs.	<ul> <li>Researchers' remuneration: 100 Euros / hour * 50 hours * 2 team members (average value) = 10.000 Euros</li> <li>Scientific coordinators fee: 200 Euros / hour * 25 hours = 5.000 Euros</li> <li>All activities are to be considered as estimates for a research program (theme).</li> </ul>	
		Creation of an <i>open</i> access portal, networking, and external training.	<ul> <li>Portal design and construction by a specialized IT company: a one-off 10.000 Euros (comparison with market prices).</li> <li>Ordinary and extraordinary maintenance of the portal by a specialized IT company: 150 Euros / hours labor * 20 hours / year = 3.000 Euros / year.</li> <li>Training activities: 80 Euros / hour * 12 hours / year = 960 Euros / year.</li> </ul>	
		Digitization of archives.	<ul> <li>Personal compensation for digitization: 40 €     / hour * 200 hours / year = 8.000 € / year.</li> </ul>	
2	Conservation plan (implementation of the OPA Plan)	-	The estimate of the costs of carrying out each intervention is a function of numerous variables, which will be the subject of specific technical analyzes, reflected in the Conservation Plan.	
3	Analysis for the verification of the perimeter and regulation of the buffer zone	verification of the	General review of the buffer zone perimeter.	To be defined.
		Verification of the suitability of the regulation, identification of criticalities.	To be defined.	

 $<sup>^{74}</sup>$  The estimated costs are to be understood as inclusive of all related accessory charges, depending on the type of cost considered.

		Variance and integration project of the perimeter and regulations.	To be defined.
		Identification of guidelines to govern the general transformations of the area compatible with the protection of the Site.	To be defined.
		Redevelopment of the area subject to expansion.	To be defined.
4	Regulation of commercial activities and fight against illegal activities outside the core area	Organization of the interinstitutional discussion roundtable on the issue by the Decor Committee.  Recognition of the spaces for the placement of mobile counters and configuration of the characteristics for adaptation to their function.  Design and implementation of other actions to combat commercial illegalism.  Regulation of fixed and itinerant trade in the areas pertaining to the core area.	The estimate of the costs of carrying out each intervention is subject to numerous variables, which will be subject to specific technical analyzes prior to the design.  It is estimated that each temporary reallocation intervention costs between 70.000 and 120.000 Euros.
5	I Cardi di Pisa: new paths for the enhancement of the historic City	Pedestrianization of sections of roads.  Arrangement and enhancement of eastwest routes.  Redevelopment of commercial, hospitality and public businesses along the east-west sections.  Urban planning variations / building projects.	The project has a total estimated value of around 200.000-250.000 Euros.  The estimate of the costs of carrying out each intervention is subject to numerous variables, which will be the subject of specific technical analyzes prior to the design.

6	Renewal of public urban spaces of the historic City	Renewal plan for public green spaces.	The project has a total estimated value of around 200.000-250.000 Euros.  The estimate of the costs of carrying out each intervention is subject to numerous variables, which will be the subject of specific technical analyzes prior to the design.
		Enhancement of external public spaces at the service of the monumental and historical architectural heritage.	
7	Signage plan	Updating of the internal signage on the Site.	Design by a specialized company: 13.000     Euros (comparison with market prices).
			<ul> <li>Realization of materials: 1.200 Euros / unit * 35 units = 42.000 Euros.</li> </ul>
			<ul> <li>Installation: cost of specialized labor 50 Euros / hour * 40 hours foreseen * 2 employees = 4.000 Euros.</li> </ul>
			<ul> <li>Maintenance: cost of skilled labor 50 Euros / hour * 10 hours foreseen / year * 2 employees = 1.000 Euros / year.</li> </ul>
		Updating of the external signage on the Site.	<ul> <li>Design by a specialized company: 15.000 Euros (comparison with market prices).</li> </ul>
			<ul> <li>Realization of materials: 650 Euros / unit * 100 units = 65.000 Euros.</li> </ul>
			<ul> <li>Installation: cost of specialized labor 40     Euros / hour * 100 hours foreseen * 2     employees = 8.000 Euros.</li> </ul>
		<u> </u>	<ul> <li>Maintenance: cost of skilled labor 40 Euros / hour * 25 hours foreseen / year * 2 employees = 2.000 Euros / year.</li> </ul>
8	Digital enhancement of the World Heritage Site	App implementation.	<ul> <li>App design and implementation by a specialized IT company: a one-off 15.000 Euros (comparison with market prices).</li> </ul>
			<ul> <li>Ordinary and extraordinary maintenance of the portal by an IT company: cost of skilled labor 150 Euros / hour * 20 hours / year = 3.000 Euros / year.</li> </ul>
		Website editorial management and updating.	<ul> <li>Website contributors' fee: editor cost 80</li> <li>Euros / hour * 25 hours foreseen / year * 5</li> <li>employees = 10.000 Euros / year.</li> </ul>
			<ul> <li>Updating, ordinary and extraordinary maintenance of the Site: cost of skilled labor 100 € / h * 50 h / year = 5.000 € / year.</li> </ul>
9	Audience-oriented communication	Social campaign (Action 1).	<ul> <li>Campaign design by a specialized communication company: a one-off 4.000 Euros (comparison with market prices).</li> </ul>
			<ul> <li>Campaign management: social media manager remuneration 50 Euros / hour * 80 hours / year = 4.000 Euros / year.</li> </ul>
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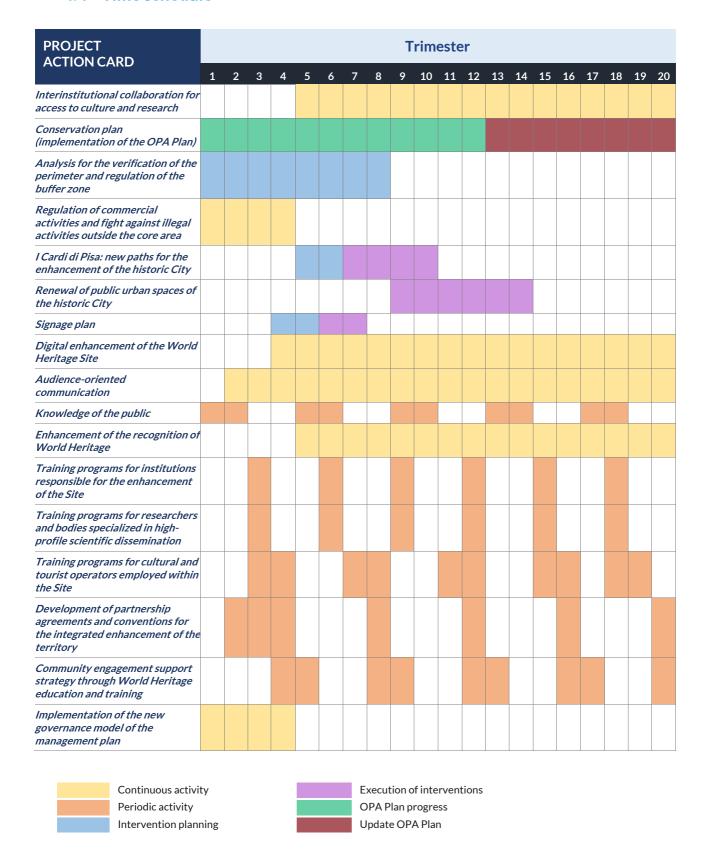
		Visit support for minors (Action 2).	<ul> <li>Expert editor-educator fee: 80 Euros / hour * 50 hours foreseen = 4.000 Euros.</li> <li>Graphic and layout remuneration: 40 Euros / hour * 75 hours foreseen = 3.000 Euros.</li> <li>Illustrator's fee: 60 Euros / hour * 50 hours foreseen = 3.000 Euros.</li> <li>Printing costs: 0.10 Euros / unit * 80.000 units = 8.000 Euros.</li> </ul>
		Support for disabled visits (Action 3).	<ul> <li>Video design and production by production companies: a one-off 16.000 Euros (comparison with market prices),</li> <li>Compensation expert in linguistic comparison: 100 Euros / hour * 50 hours foreseen = 5.000 Euros.</li> <li>Specialized LIS operator fee: 80 Euros / hour</li> </ul>
10	Knowledge of the public	Observatory implementation.	<ul> <li>* 50 hours foreseen = 4.000 Euros.</li> <li>Design of a survey system by a specialized company a one-off: 8.000 Euros (comparison with market prices).</li> <li>Consultants and analysts' remuneration: 80</li> </ul>
			<ul> <li>Euros / hour * 150 expected hours = 12.000 Euros.</li> <li>A one-off purchase of equipment = 5.000 Euros (comparison with market prices).</li> <li>Detection system maintenance: cost of skilled labor 100 Euros / hour * 20 hours / year = 2.000 Euros / year.</li> </ul>
		Scientific-operational governance of the Observatory.	<ul> <li>Scientific and operational coordinator fee: 100 Euros / hour * 150 hours foreseen = 15.000 Euros.</li> </ul>
		Assessments and surveys.	<ul> <li>Consultants and analysts' remuneration: 80         Euros / hour * 200 expected hours / year =         16.000 Euros / year.</li> <li>Coordinator's fee: 100 Euros / hour * 40         hours foreseen / year = 4.000 Euros / year.</li> </ul>
		Promotion and dissemination of results.	<ul> <li>Creation and distribution of survey reports: 3.000 Euros / year.</li> <li>Organization of meetings with local stakeholders: 1.000 / year Euros.</li> </ul>
11	Enhancement of the recognition of World Heritage	Coordination and guidelines for enhancement actions.	Institutional communication expert remuneration for the development of the guidelines: 80 Euros / hour * 100 hours foreseen = 8.000 Euros.
		Creation of thematic publications.	<ul> <li>Researcher remuneration: 80 Euros / hour * 40 hours foreseen = 3,200 Euros.</li> </ul>

12 Training program	ns Training: Cross-training aimed at the institutions	<ul> <li>Editor's fee: 50 Euros / hour * 40 hours foreseen = 2.000 Euros.</li> <li>Graphic and layout remuneration = 40 Euros / hour * 50 hours foreseen = 2.000 Euros.</li> <li>Photographer / illustrator fee for iconographic-illustrative apparatus: 60 Euros / hour * 30 hours provided = 1.800 Euros.</li> <li>Printing costs: 0.50 Euros / unit * 20.000 units = 10.000 Euros.</li> <li>Editorial costs: Euros 1.000.</li> <li>Compensation for trainers for in person lessons: 150 Euros / hour * 30 hours = 4.500</li> </ul>
responsible for the enhancement of Site	responsible for Site	<ul> <li>Compensation for technical trainers for in person lessons: 150 Euros / hour * 90 hours * 2 shifts = 27.000 Euros.</li> </ul>
	Training: Training for the Site Manager (Action 3).	<ul> <li>Compensation for trainers for in person lessons: 150 Euros / hour * 60 hours * 2 shifts = 9.000 Euros.</li> </ul>
	Other informal means of capacity building (Action 4).	<ul> <li>Consultants and specialists' remuneration: 150 Euros / hour * 40 hours = 6.000 Euros.</li> <li>Accessory costs for related services (material rental) = 4.000 Euros.</li> <li>Accessory costs for related services (travel): 2.000 Euros.</li> </ul>
13 Training program for researchers a bodies specialize in high-profile scientific dissemination	nd graduate training and	<ul> <li>Consultants and specialists' remuneration: 150 Euros / hour * 60 hours = 9.000 Euros.</li> <li>Access to study and research material (by subscription): 5.000 Euros / year.</li> <li>Activation of scholarships (part fee): 12.000 Euros / year.</li> <li>Accessory costs for related services (travel and transfers): 4.000 Euros / year.</li> </ul>
Training program for cultural and tourist operators employed within the Site	and collaborative processes – Transversal	<ul> <li>Consultants and specialists' remuneration: 150 Euros / hour * 60 hours / year = 9.000 Euros / year (of which 30% for Share 1 and 70% for Share 2).</li> <li>Trainers' remuneration for frontal lessons: 100 Euros / hour * 100 hours / year = 10.000 Euros / year (of which 60% for Action 1 and 40% for Action 2).</li> </ul>

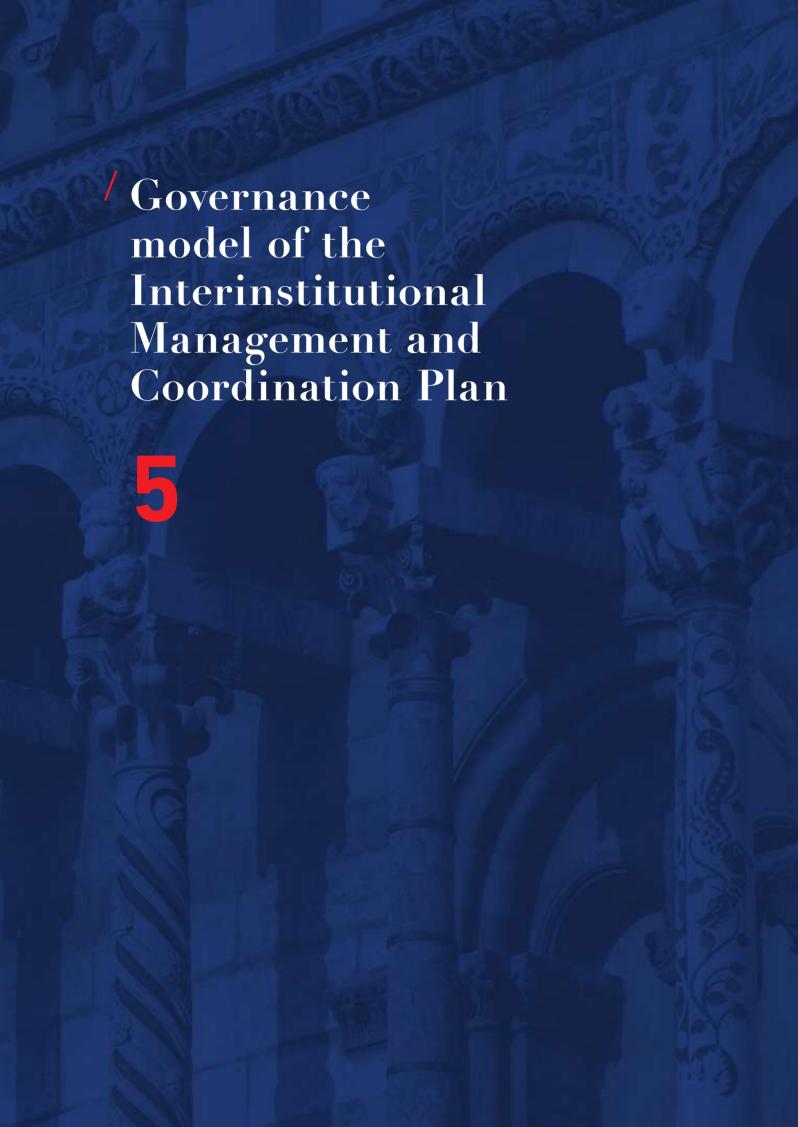
### **Action Plan**

			<ul> <li>Moderators' fee: 200 Euros / hour * 30 hours / year = 6.000 Euros / year (Action 2 only).</li> </ul>
			<ul> <li>Production of didactic material and purchase of material: 5.000 Euros / year (Action 1 only).</li> </ul>
15	Development of partnership agreements and conventions for the integrated enhancement of the territory	Creation of a network of individuals belonging to different fields.  Stipulation of agreements and conventions with the accommodation facilities of the territory.  Strengthening the communication strategies of new City offerings.  Special projects.	<ul> <li>Coordination of activities and network management: Compensation for consultants and specialists: 150 Euros / hour * 50 hours / year = 7.500 Euros / year</li> <li>Project promotion and dissemination: Moderators' fee: 200 Euros / hour * 50 hours / year = 6.000 Euros / year.</li> <li>Project promotion and dissemination: Accessory costs for related services (travel and transfers): 4.000 Euros / year.</li> <li>Implementation of integrated marketing and promotion strategies: Traditional communication material production: 18.000 Euros / year.</li> <li>Implementation of integrated marketing and promotion strategies: Design and production of social communication material: 12.000 Euros / year.</li> <li>Implementation of special projects: 20.000 Euros / project (average value).</li> </ul>
16	Community engagement support strategy through World Heritage education and training	Didactic material production. Training. Special projects.	<ul> <li>Production of didactic material:         Compensation for trainers for the         preparation of ad hoc material: 60 Euros /         hour * 50 hours / year = 3.000 Euros / year.</li> <li>Production of didactic material: Purchase of         material: 5.000 Euros / year.</li> <li>On-site training activities: Compensation for         trainers for lectures: 100 Euros / hour * 30         hours / year * 6 sessions / year = 18.000         Euros / year.</li> <li>Coordination and implementation of special         projects: Compensation for consultants and         specialists: 150 Euros / hour * 40 hours /         year = 6.000 Euros / year.</li> <li>Implementation of special projects:         Accessory costs: 6.000 Euros / year.</li> </ul>
17	Implementation of the new governance model of the management plan	Not expected.	Not expected.

### 4.4 Time schedule







## 5. Governance model of the Interinstitutional Management and Coordination Plan

Typically, the description of the governance structure of the Plan is included among the contents of a Management Plan for a Site in the WHL. This chapter, therefore, illustrates the characteristics, processes, and management mechanisms of the governance model.

This framework is designed with the aim of guaranteeing the correct implementation of the Plan, as well as defining the procedures for monitoring, reviewing and updating it. The competences, roles and related responsibilities of the subjects involved are also specified. In fact, the structure adopted can be defined as multilevel, as it is oriented to synergistically link many subjects, both at national and territorial level, as discussed in Section 2.3. By acting in an integrated manner in favor of common objectives, these players implement the principle of subsidiarity through responsible and effective forms of interinstitutional collaboration.

The objectives that arise from the need to set up, in a clear and shared manner, an integrated governance model of a World Heritage Site, such as the of Piazza del Duomo in Pisa, are found in the following points:

- → Activate effective governance of the Piazza del Duomo Site that guarantees constant and lasting coordination between the entities in charge of the protection, conservation, and enhancement of the Site.
- → Define and activate an integrated management system for Piazza del Duomo that is sustainable over time and aimed at creating and strengthening synergistic actions for the protection and enhancement of the Site, primarily within the scope of the contents of the Plan Management.
- → Ensure the correct and constant performance of the monitoring and evaluation activities in the Management Plan and the Action Plan, also by reviewing and updating the Plan.

The aims sought in the design and implementation of an efficient governance model for the Site of Piazza del Duomo in Pisa and its Management Plan include:

- → The activation of an integrated management structure for the Site of Piazza del Duomo in Pisa and coordination mechanisms, with allocation of responsibilities and functions to the subjects involved, and well-defined coordination and cooperation procedures.
- → The definition of operating mechanisms of a subject with operational management functions structured with clear, defined roles, responsibilities, and cross-functional and hierarchical reporting.
- → The dissemination of a culture of cooperation between institutional subjects (Steering Committee) and other stakeholders, aimed at achieving the Strategic Objectives of the World Heritage Convention.
- → Strengthening the *accountability* around Site management, by employing new ways of sharing results.

In summary, the *governance* of the Plan intends to strengthen, through structured mechanisms and methods, interinstitutional cooperation and coordination in the processes concerning the strategies underlying the management of the Site – formalized with the 2014 Memorandum of Understanding – and the operational management methods currently in place. This starts with the enunciation of clear prerogatives of the two bodies, established by the Memorandum of Understanding of 2014: the Steering Committee and the Management Office.

The **Steering Committee** is the entity in charge of **strategic and decision-making functions**. The Steering Committee, constituted by the Memorandum of Understanding of 2014<sup>75</sup>, is composed of representatives of from following bodies: Ministry of Cultural Heritage and Activities and Tourism (General Secretariat – UNESCO Office, Regional Secretariat for Tuscany, Superintendence of Archeology, Fine Arts and Landscape of Pisa and Livorno), Tuscany Region, Province of Pisa, Municipality of Pisa, Opera della Primaziale Pisana.

For the decision-making processes to be efficient, the representatives who are members of the Steering Committee must have full decision-making autonomy (both from a technical and a political point of view), each for their respective area of competence.

<sup>&</sup>lt;sup>75</sup> Already with the Protocol, in fact, the Signatories undertake, in the exercise of the relative competences, to carry out concerted actions for the protection, conservation, management, cultural enhancement and promotion of the Site, as well as for the protection and urban and landscape requalification and for the socio-economic enhancement of the reference territories. https://www.comune.pisa.it/uploads/2017\_06\_30\_10\_01\_16.pdf.

The Steering Committee defines the priorities and actions for the pursuit of the objectives and purposes of the Management Plan, indicating, from time to time, actors responsible for implementation and their responsibilities.

The Committee meets at least twice a year: one session to approve the annual planning document, to divide responsibilities and financial allocations for the projects and actions planned for the reference year, and another session to discuss and approve report monitoring, verify any **deviations**, and propose the allocation and distributions for the following year.

Specifically, the activities of the Committee are to:

- a) Guarantee the correct implementation of the Management Plan and Action Plans, through the governance and coordination of the organic management processes, and the implementation of the procedures connected to each intervention, always safeguarding compliance with homogeneous and adequate quality standards for Site management needs and requirements.
- b) Provide guidelines and, subsequently, approve the work of reviewing and updating the strategy underlying the Management Plan, the Action Plan, and the program of interventions, representing the interests of the various institutions that make up the Committee, in compliance with their relative functions (e.g., conservation and protection, enhancement).
- c) Supervise the monitoring and evaluation activities (M&V) and approve the documentation relating to periodic reporting.

In addition, the Committee appoints the reference entity / individual(s) assigned to the Plan, the Site Manager, or the Head of Implementation of the Plan within the Management Office.

In exercising its strategic functions, the Steering Committee may be supported, from time to time, by experts (university professors, professionals and individuals who have distinguished themselves, over the course of their careers, by merit and professional skills) in the sectors relevant to the decisions to be taken, such as, for example, in the fields of conservation and restoration, enhancement, management of cultural heritage, and World Heritage representatives, who offer institutional scientific and cultural in reference to the territory (for example, the Pisan Universities, a well-known of nationally renowned excellence), in order to obtain technical consultations on specific topics and clear and actionable proposals.

The technical and operational functions related to the coordination of the implementation activities of the Management Plan, on the other hand, are the responsibility of the Management Office. The latter is established by the Memorandum of Understanding of 2014 and is a structure composed of high-profile technical experts representing the subjects of the Steering Committee (one person for each institution involved). Each technical expert is the contact person for their relative institution and can coordinate internal work groups. The technical experts are coordinated by a **Site Manager or Head of Implementation** of the Management Plan, by the Management Office, who is appointed, as mentioned, by the Steering Committee.

The Management Office provides technical support to the Steering Committee and ensures, for the entire duration in of the Management Plan, the concrete implementation of the actions and projects envisaged. Specifically, the main functions and responsibilities of the Management Office are:

- 1. Provide the Steering Committee with all the technical and scientific information useful for carrying out decision-making and strategic direction functions in reference to the management of the Site and the implementation of the Plan.
- 2. Plan operations and processes for the implementation of the Plan and its complete realization within the established timelines, through the coordination and information between the various parties involved; sharing of the phases and times of implementation of the various actions and the various interventions envisaged; and supervision of progress, in compliance with planning and management operating standards.
- 3. Monitor and promptly inform the Steering Committee of any problems relating to any aspect of the implementation of the Plan or the implementation of an intervention envisaged in the Action Plan, promptly reporting cases of inaction, delays, or non-compliance, and personally intervening to solve problems and / or provide the Committee with proposals for resolution.
- 4. Receive and verify the data necessary for the operation of the monitoring and evaluation system (M&V) in relation to the Management Plan and the projects of the Action Plan; update the indicators relating to the evaluation of the phenomena included in the monitoring and evaluation dashboards; process the information; and draft the reporting material to be forwarded to the Strategic Evaluation Committee.
- 5. Submit to the Steering Committee proposals relating to the revision and updating of the Management Plan and the planned interventions, resulting monitoring and evaluation activities.
- 6. Convene the meetings, ordinary and extraordinary, of the Steering Committee.
- 7. vii. Coordinate and support the activities of the Steering Committee.
- 8. Manage the projects of Law 77/2006, relating to general coordination, the obligations related to requests for funds, and subsequent reporting activities.

The Site Manager convenes and manages internal discussion sessions within the Management Office, with the primary purpose of updating, coordination, and resolution of any critical issues (at least three or four times a year); all technical experts participate in these sessions. The Site Manager also participates in the meetings of the Steering Committee as a representative and the responsible person for the work of the Management Office.

With a view to optimizing its operational functions, as well as achieving higher management efficiency, the Management Office finds its "operational arm" in the UNESCO Office, set up at the Site Manager' secretarial and coordination functions. The UNESCO Office personnel represent the staff for the implementation of the Management Plan.

The following figure schematizes the governance model.

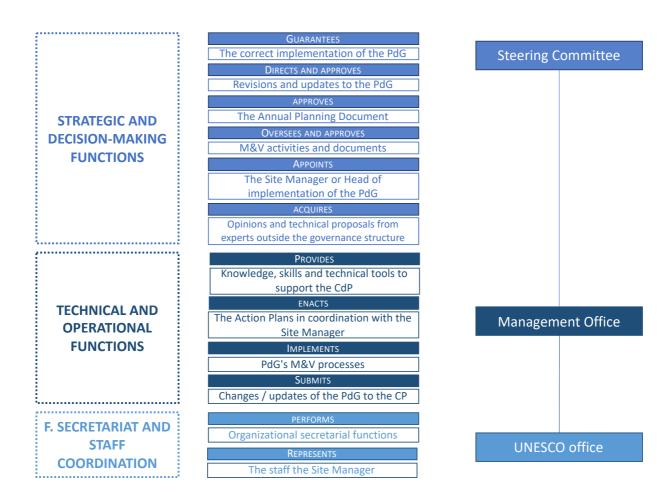
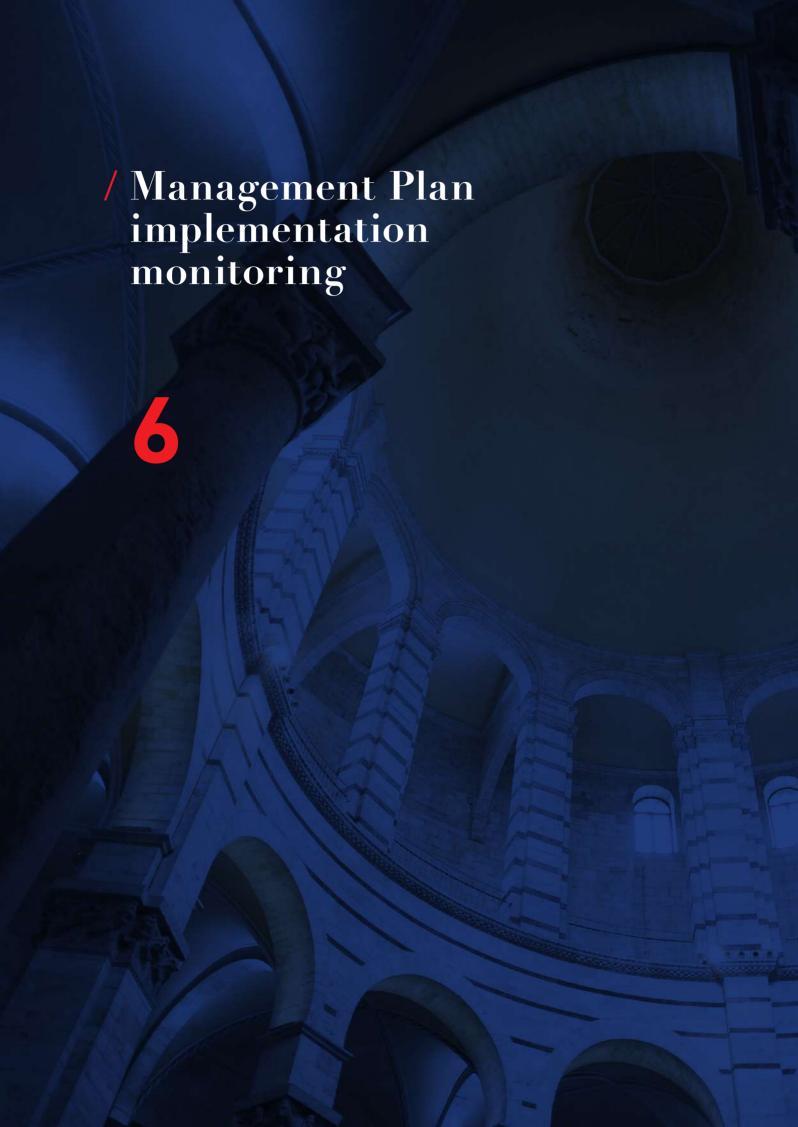


Figure 10- Subjects involved in the governance of the Management Plan and coordination mechanisms.



# 6. Management Plan implementation monitoring

This Section describes the **monitoring and evaluation system**, developed to implement systematic checks on the progress of each intervention contained in the Management Plan, as well as their contribution to achieving the objectives that the document sets out.

The monitoring and evaluation system is structured on **two different levels**:

- The first level, aimed at analyzing the effectiveness of the strategic policies of the
  Management Plan in its entirety, is focused on detecting the contribution of the
  document to the achievement of concrete changes. This first level, then, aims to
  evaluate the outcomes produced by the Management Plan, and is structured in
  accordance with the UNESCO framework "Culture 2030 | Indicators" 76.
- The second level, aimed at monitoring, through performance indicators, the outputs of
  the individual actions implemented. This level, follows the financial, physical, and
  procedural progress of individual actions over time, is based on the periodic detection
  of indicators linked to individual activities, and, at the same time, can provide relevant
  information for the purpose of evaluating the ability of each intervention to contribute
  to the achievement of the Strategic Objectives (5Cs) and desired outcomes (UNESCO
  "Culture 2030 | Indicators").

Below is a graphic summary of the monitoring and evaluation system (M&V) developed for the Management Plan of Piazza del Duomo in Pisa.

<sup>&</sup>lt;sup>76</sup> https://whc.unesco.org/en/culture2030indicators/.

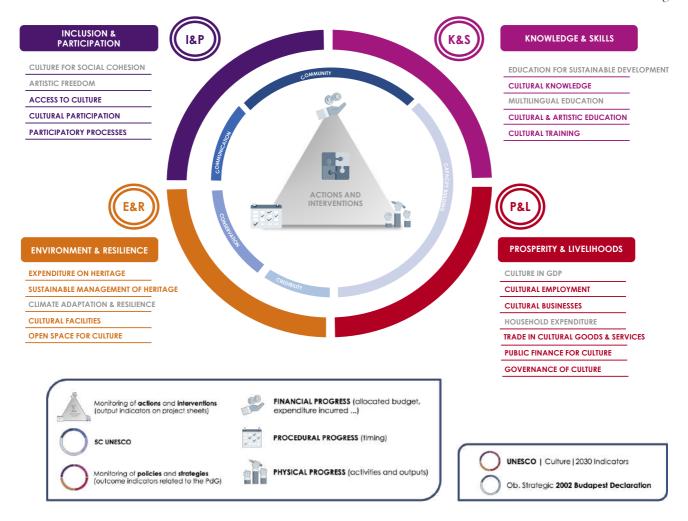


Figure 11- M&V system for the Management Plan of Piazza del Duomo in Pisa.

As illustrated above, the Management Plan of Piazza del Duomo in Pisa intends to affect, through the projects included, as many as 15 out of the 22 areas identified by UNESCO:

- 1. With respect to the indicators relating to "*inclusion and participation*", the Management Plan contributes to the following sub-areas of impact:
  - a. Access to culture.
  - b. Cultural participation.
  - c. Participatory processes.
- 2. With respect to the indicators relating to "environment and resilience":
  - a. Expenditures on heritage.
  - b. Sustainable management of heritage.
  - c. Open space for culture.
- 3. With respect to the indicators relating to "knowledge and skills":
  - a. Cultural knowledge.
  - b. Cultural and artistic education.
  - c. Cultural training.

- 4. With respect to the indicators relating to "prosperity and livelihood", the Management Plan contributes to the following sub-areas of impact:
  - a. Cultural employment.
  - b. Cultural businesses.
  - c. Trade in cultural goods and services.
  - d. Public finance for culture.
  - e. Governance of culture.

Looking at the consistency of these areas with the Strategic Objectives of the Convention adopted for the development of the Management Plan (5Cs), it is possible to identify the following relationships which also allow the development of indicators capable of identifying how much and how the interventions, considered individually and in relation to each other, contribute to the development of medium-long term results:

- The interventions related to the "Credibility" axis contribute to effects related to "environment and resilience".
- The interventions related to the "Conservation" axis contribute to "environment and resilience".
- The interventions related to the "Communication" axis contribute to effects related to "inclusion and participation".
- The interventions related to the "Community" axis contribute to effects related to "inclusion and participation" and "knowledge and skills".
- The interventions related to the "Capacity building" axis contribute to effects related to "knowledge and skills" and "prosperity and livelihood".

It should be noted that the connection between the areas of the UNESCO framework "Culture 2030 | Indicators" and the strategic axes (5Cs) is reported within each project sheet, found in Section 4.2.

The following tables show the **framework of the areas of impact** to be monitored.

The evaluation questions to of the evaluation system will provide answers mapped for each area. For each question, the metric of the indicator to be used in the surveys is also highlighted. As these indicators<sup>77</sup> linked to the assessment of the overall *outcomes* generated by the policies of the Management Plan, is expected to be viable for surveys, on an annual basis, in order to provide specific indications to the Steering Committee about any needs for rectification of actions.

<sup>&</sup>lt;sup>77</sup> Evaluation to be revealed through a numerical scale between 1 and 10 where 1 is "completely disagree" and 10 "completely agree".

SCOPE	SUB-SCOPE	REF. PROJECT CARD	ASSESSMENT QUESTION
	Cultural knowledge	1. Interinstitutional collaboration for access to culture and research	Has the setting up of research activities by entities belonging to the academic world favored the circulation of information material for public consultation?
		10. Awareness of the public	Have the analyzes on the composition of the local and international public fostered learning processes useful for delivering services in line with the identified public needs?
		16. Support strategy for community engagement through World Heritage education and training	Do the categories of subjects involved in the training interventions ("City users") believe that the projects have contributed to the construction of a cultural identity? (increase in awareness, sense of responsibility, sense of belonging towards the heritage)
		16. Support strategy for community engagement through World Heritage education and training	Do the recipients of short and long-term <b>training programs</b> (e.g., seminars, cycle of meetings, workshops, UNESCO Week, Editathon) believe that the activities have really <b>contributed to redefining awareness of heritage</b> ?
		12. Training programs for institutions responsible for the enhancement of the Site	Did the training interventions aimed at the identified targets (institutions, academia, and cultural / tourism operators) generate positive effects, favoring active participation and cooperation between subjects?
		13. Training programs for researchers and bodies specialized in high-profile scientific dissemination	
		14. Training programs for cultural and tourism operators employed within the Site	
	Cultural training	12. Training programs for institutions responsible for the enhancement of the Site	Did the skills acquired through the training activities (e.g., marketing and communication tools, management skills, exchange with other local institutions, research programs) affect the
		13. Training programs for researchers and bodies specialized in high-profile scientific dissemination	performance of the subjects involved?

		14. Training programs for cultural and tourist operators employed within the Site	
RESILIENCE	Expenditure on heritage	2. Conservation plan (implementation of the OPA Plan)	Has there been an increase in expenditure for maintenance, restoration and conservation of the monuments located in the Site?
ENVIRONMENT & RESILIENCE	Sustainable management of heritage	3. Analysis for the verification of the perimeter and regulation of the buffer zone	How much is the <b>redeveloped area north-west of the Site</b> (urbanistically, culturally, landscaped, etc.) following the action program put in place by the Plan?
ENVE		2. Conservation plan (implementation of the OPA Plan)	Have the interventions carried out on the monuments in the Square been implemented in a preventive manner (e.g., scheduled maintenance) to avoid any problems that require urgent resolutions?
		4. Regulation of commercial activities and fight against illegal activities outside the <i>core area</i>	Has the <b>relocation of the mobile vendors</b> in areas of the City other than Piazza del Duomo contributed to <b>improving the reputation of the Site on the part of users</b> ?
		5. The Cardi di Pisa: new paths for the enhancement of the historic City	Has the enhancement of transverse paths made the area surrounding the Site less crowded and more livable?
	Cultural facilities	5. The Cardi di Pisa: new paths for the enhancement of the historic City	Has the recovery and enhancement of alternative routes vs, the usual ones favored the <b>development of cultural and tourist facilities</b> capable of enhancing the offer of the territory?
	Open space to culture	5. The Cardi di Pisa: new paths for the enhancement of the historic City	Has the expansion of tourist and cultural routes to the east and west favored the recovery of previously unexploited urban spaces by the local community, contributing to their re-appropriation by the citizens?
		6. Regeneration of the public urban spaces of the historic City	Following the regeneration of public urban spaces, has the local community made use of the new spaces?

INCLUSION & PARTICIPATION	Access to culture	Interinstitutional collaboration for access to culture and research	Did the discussion roundtables organized as part of the Action Plan generate <b>concrete proposals that</b> <b>have been implemented over time?</b>
		6. Regeneration of the public urban spaces of the historic City	Has the renewal of public urban spaces encouraged the local community to take part in events and initiatives organized in the portions of the City excluded from traditional circuits?
		7. Signage plan	Has the adaptation and updating of physical and digital signage supports improved the management of flows in the Piazza?
		8. Digital enhancement of the World Heritage Site	Has the use of digital channels for dissemination and awareness <b>fostered access to information</b> by a wider audience (students, younger generations)?
		9. Audience-oriented communication	Has the adoption of alternative information systems vs. traditional (i.e., social campaigns, educational kits) stimulated interaction between the Site and the younger group of users (residents, students, tourists)?
		10. Knowledge of the public	Have services been created to <b>better facilitate accessibility of the Site according to the needs</b> identified by the analysis on visitors?
		11. Enhancement of the recognition of World Heritage	Have the enhancement actions contributed to raising the quality of the information disseminated with respect to the World Heritage Site?
		15. Development of partnership agreements and conventions for the integrated enhancement of the territory	Has the system of integrated tourism and cultural itineraries favored the <b>development of innovative</b> ways of using the heritage the by visitors of the Site?
	Cultural participation	8. Digital enhancement of the World Heritage Site	Has the adoption of digital communication tools favored the <b>creation of virtual communities for the exchange and sharing</b> of information relating to the Site?
		16. Support strategy for community engagement through World Heritage education and training	Did the engagement activities aimed at the local community help to strengthen their active participation in the <i>governance</i> processes of the Site?

PROSPERITY AND LIVELIHOOD	Cultural employment	13. Training programs for researchers and bodies specialized in high-profile scientific dissemination  14. Training programs for cultural and tourism operators	Has the development of new skills and the acquisition of experience in the field of World Heritage resulted in an <b>increase in job opportunities</b> for experts and professionals in the sectors and activities involved?
	Cultural businesses	13. Training programs for researchers and bodies specialized in high-profile scientific dissemination	Has the possibility of developing and / or acquiring systematic and unpublished material on the World Heritage of Piazza del Duomo, thanks to the presence of the new trained professionals, encouraged the development of new economic activities aimed at technical and scientific dissemination in the field of cultural heritage and World Heritage?
		14. Training programs for cultural and tourism operators	Has the development of new skills and the acquisition of training experience in the field of World Heritage made it possible to increase, improve and innovate local economic activities in the fields of culture and tourism?
	Trade in cultural goods & services	12. Training programs for institutions responsible for the enhancement of the Site	Did the implementation of training projects help generate economic value in the area through the sale of cultural goods and services?
		13. Training programs for researchers and bodies specialized in high-profile scientific dissemination	Has the implementation of training projects contributed to <b>generating economic value</b> in the area by <b>selling education and training services</b> ?
		14. Training programs for cultural and tourism operators	
	Public finance for culture	17. Implementation of the new governance model	Has the new <i>governance model</i> of the World Heritage Site <b>optimized the spending possibilities</b> of the public sector, divided into the different territorial levels involved in the management.
	Governance of culture	12. Training programs for institutions responsible for the enhancement of the Site	Have the internal training actions of the institutions included in <i>governance</i> led to a greater <b>dissemination of the management and organizational culture</b> across the different levels of the personnel structures of these institutions?

14. Training programs for cultural and tourism operators	Can the skills and experience acquired by cultural and tourism operators following the training activities provided by the project be considered such as to have allowed the activation, in Pisa, of participatory governance mechanisms for the World Heritage of Piazza del Duomo?
17. Implementation of the new <i>governance model</i>	Does the <i>governance model</i> of the Site make it possible to ensure the <b>maintenance of the most appropriate standards</b> in every area of <b>strategic planning</b> and <b>operational management</b> ?

Regarding the interventions referred to in the project sheets, each will be monitored by looking at the progress achieved in terms of **financial** (compliance with expenditure forecasts), **procedural** (compliance with scheduled times) and **physical** (compliance with efficiency and efficacy profiles of the outputs).



The survey, unlike what is provided for the *outcome* indicators, will take place **every six months** and it will be the task of the body in charge of monitoring to highlight any deviations identified within the year.

The **tools** to be used envisage the execution of **primary and secondary data surveys**, depending on the type of indicator used from time to time.

In the following table, the **output indicators** to be detected **are defined for each project sheet**.

It is understood that each intervention contributes **not only individually**, but also **through the joint contribution of other, similar actions**, to the **achievement of the objectives of the Plan** and the achievement of the effects described in the previous Section.

Ref. card	PROJECT / ACTION CARD	Output metrics
1	Interinstitutional collaboration for access to culture and research	<ul> <li>Number of thematic meetings held between the institutions involved in each research action</li> <li>Number of sources in the open access database (portal)</li> <li>Number of dissemination meetings held</li> <li>Number of cultural operators involved in the training activities</li> <li>Difference (%) between the allocated budget and the final amount spent on project activities</li> <li>Deviation (number of days) between the time planned for the realization of the project and actual days to execute</li> </ul>
2	Conservation plan (implementation of the OPA Plan)	<ul> <li>Number of approved and initiated recovery and restoration projects</li> <li>Total value (Euros) of the approved and initiated recovery and restoration projects</li> <li>Number of professional operators involved in the recovery and restoration interventions</li> <li>Number of new hires of professional operators and technicians in the context of the recovery and restoration of the Site's monuments</li> <li>Number of scholarships and professional activities funded as part of the study activities aimed at the protection and conservation of the Site's monuments</li> <li>Difference (%) between the allocated budget and the final amount spent on project activities</li> <li>Deviation (number of days) between the time planned for the realization of the project and actual days to execute</li> </ul>
3	Analysis for the verification of the perimeter and regulations of the buffer zone	<ul> <li>Implementation of the analysis for the verification of the buffer zone perimeter aimed at preparing the documentation to be forwarded to the World Heritage Committee</li> <li>Deviation (number of days) between the time planned for the realization of the project and actual days to execute</li> <li>Degree of completion of the project with respect to the planned interventions (% of activities carried out)</li> </ul>
4	Regulation of commercial activities and fight against illegal activities outside the core area	<ul> <li>Deviation (number of days) between the time planned for the realization of the project and actual days to execute</li> <li>Degree of completion of the project with respect to the planned interventions (% of activities carried out)</li> </ul>
5	I Cardi di Pisa: new paths for the enhancement of the historic City	<ul> <li>Total surface area of the redeveloped areas following the interventions included in the project</li> <li>Difference (%) between the allocated budget and the final amount spent on project activities</li> <li>Deviation (number of days) between the time planned for the realization of the project and actual days to execute</li> <li>Other indicators will be defined following a validation of the actions included in the project.</li> </ul>
6	Regeneration of the public urban spaces of the historic City	<ul> <li>Number of interventions on urban spaces started</li> <li>Number of completed interventions on urban spaces</li> <li>Degree of completion of the regeneration plan with respect to the planned interventions (% of activities carried out)</li> <li>Percentage of users who declare to be satisfied with the interventions (survey by questionnaire)</li> </ul>

		<ul> <li>Difference (%) between the allocated budget and the final amount spent on project activities</li> <li>Deviation (number of days) between the time planned for the realization of the project and actual days to execute</li> </ul>
7	Signage plan	<ul> <li>Number of updated signage elements</li> <li>Number of newly created signage elements</li> <li>Difference (%) between the allocated budget and the final amount spent on project activities</li> <li>Deviation (number of days) between the time planned for the realization of the project and actual days to execute</li> </ul>
8	Digital enhancement of the World Heritage Site	<ul> <li>Number of App downloads in the stores (Action 1)</li> <li>Average rating (score) of the App reviews in the stores (Action 1)</li> <li>Number of articles updated (Action 2)</li> <li>Improvement of SEO ranking (Search engine indexing) (Action 2)</li> <li>Increase of sit Site statistics (unique users, bounce rate) (Action 2)</li> <li>Difference (%) between the allocated budget and the final amount spent on project activities (Actions 1 and 2)</li> <li>Deviation (number of days) between the time planned for the realization of the project and actual days to execute (Actions 1 and 2)</li> </ul>
9	Audience-oriented communication	<ul> <li>Increase in the number of followers on social networks (Action 1)</li> <li>Number of shares and interactions (Action 1)</li> <li>Number of printed products (Actions 2 and 3)</li> <li>Number of videos produced (Actions 2 and 3)</li> <li>Difference (%) between the allocated budget and the final amount spent on project activities (Actions 1, 2 and 3)</li> <li>Deviation (number of days) between the time planned for the realization of the project and actual days to execute (Actions 1, 2 and 3)</li> </ul>
10	Knowledge of the public	<ul> <li>Number of subjects involved</li> <li>Number of surveys carried out</li> <li>Number of coordinated or aggregated surveys conducted within the project</li> <li>Number of periodic reports produced and shared</li> <li>Difference (%) between the allocated budget and the final amount spent on project activities</li> <li>Deviation (number of days) between the time planned for the realization of the project and actual days to execute</li> </ul>
11	Enhancement of the recognition of World Heritage	<ul> <li>Number of subjects involved in the enhancement action</li> <li>Number of thematic publications produced</li> <li>Difference (%) between the allocated budget and the final amount spent on project activities</li> <li>Deviation (number of days) between the time planned for the realization of the project and actual days to execute</li> </ul>
12	Training programs for institutions responsible for the enhancement of the Site	<ul> <li>Number of training hours carried out</li> <li>Number of operators involved in training activities</li> <li>Level of satisfaction of the subjects involved, assessed by means of specific survey tools (questionnaires)</li> <li>Difference (%) between the allocated budget and the final amount spent on project activities</li> <li>Deviation (number of days) between the time planned for the realization of the project and actual days to execute</li> </ul>

### 6. Management Plan implementation monitoring

13	Training programs for researchers and bodies specialized in high-profile scientific dissemination	<ul> <li>Number of competitors</li> <li>Number of training hours carried out</li> <li>Number of collaborations activated following participation in the training project</li> <li>Level of satisfaction of the subjects involved, assessed by means of specific survey tools (questionnaires)</li> <li>Difference (%) between the allocated budget and the final amount spent on project activities</li> <li>Deviation (number of days) between the time planned for the realization of the project and actual days to execute</li> </ul>
14	Training programs for cultural and tourism operators	<ul> <li>Number of training hours carried out</li> <li>Number of operators involved in training activities</li> <li>Level of satisfaction of the subjects involved, assessed by means of specific survey tools (questionnaires)</li> <li>Difference (%) between the allocated budget and the final amount spent on project activities</li> <li>Deviation (number of days) between the time planned for the realization of the project and actual days to execute</li> </ul>
15	Development of partnership agreements and conventions for the integrated enhancement of the territory	<ul> <li>Number of agreements entered into</li> <li>Number of subjects involved</li> <li>Percentage of sales of tourist packages whose circuit does not provide for an exclusive visit to the Site on the total number of packages sold</li> <li>Percentage of users who claim to be extremely satisfied and satisfied with the new cultural / tourist offer (survey by questionnaire)</li> <li>Number of problems related to congestion of flows near the Site, classified by type of risk</li> <li>Number of communication campaigns launched to promote the new integrated offer system</li> <li>Difference (%) between the allocated budget and the final amount spent on project activities</li> <li>Deviation (number of days) between the time planned for the realization of the project and actual days to execute</li> </ul>
16	Community engagement support strategy through World Heritage education and training	<ul> <li>Number of training activities started</li> <li>Number of operators involved in training activities</li> <li>Number of scholarships funded</li> <li>Number of residents who declare to have taken part in capacity building activities (% of total population)</li> <li>Level of satisfaction of the subjects involved, assessed by means of specific survey tools (questionnaires)</li> <li>Number of new hires destined to carry out training activities</li> <li>Difference (%) between the allocated budget and the final amount spent on project activities</li> <li>Deviation (number of days) between the time planned for the realization of the project and actual days to execute</li> </ul>
17	Implementation of the new governance model	<ul> <li>Deviation (number of days) between the time planned for the realization of the project and actual days to execute</li> </ul>



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United Nations Educational, Scientific and Cultural Organization Piazza del Duomo di Pisa Iscritto nella Lista del Patrimonio Mondiale nel 1987

