

State of Conservation Report
World Heritage Property "Kyiv: Saint-Sophia Cathedral and Related Monastic
Buildings, Kyiv-Pechersk Lavra (Ukraine)" (527 bis)

I. Executive Summary of the report

The State of Ukraine created appropriate conditions for the preservation of UNESCO World Heritage Sites, provides appropriate regulatory, organizational, and methodological support for the management of the World Heritage Sites, and takes all necessary measures to preserve the uniqueness, integrity and authenticity of the properties.

At the same time, the Ministry of Culture and Information Policy of Ukraine (MCIP) constantly monitors the state of preservation of the World Heritage property "Kyiv: Saint-Sophia Cathedral and Related Monastic Buildings, Kyiv-Pechersk Lavra".

The general state of preservation of the World Heritage site "Kyiv: Saint-Sophia Cathedral and Related Monastic Buildings, Kyiv-Pechersk Lavra" (hereinafter - the Site/Property) is satisfactory.

Currently, the Site is not threatened by factors that may negatively affect its Outstanding Universal Value (OUV) and its inclusion on the List of World Heritage in Danger.

All the construction and restoration works within the territory and buffer zone of the Site are carried out after the appropriate approval of the MCIP to prevent the negative impact on the OUV of the property.

At the same time, in connection with the Russian invasion and the introduction of martial law in Ukraine, there remains a danger of destruction or damage not only to the components of the Site but also to the entire cultural heritage located on the territory of Ukraine.

The Russian Federation mercilessly destroys the cultural heritage properties of Ukraine.

Since the first days of the full-scale Russian aggression, air attacks have threatened numerous historical monuments of Kyiv, including the World Heritage property "Kyiv: Saint-Sophia Cathedral and Related Monastic Buildings, Kyiv-Pechersk Lavra".

Currently, the Site faces not only the risk of a direct hit by Russian missiles and drones but also the impact of shock and sound waves from the bombing of the city. Vibration loads may cause deterioration of the load-bearing capacity of the Property's structures and provokes a significant threat to the detachment of mosaics and ancient plaster decorated with frescoes.

At the same time, Ukrainian cultural heritage is threatened by the danger associated with emergency and rolling blackouts, as well as the shutdown of special equipment that maintains constant conditions at the Site: microclimate, etc.

It should also be noted that the missile attacks that took place on October 10, 2022, damaged the Pedestrian and Bicycle Bridge between Khreshchaty and Volodymyrska Hill parks in the Pecherskyi and Shevchenkivskyi districts, which is located within the buffer zone of the Site.

At the same time were damaged the buildings of Taras Shevchenko Kyiv National University, located in the immediate vicinity of the buffer zone of the Site.

Despite the indicated facts of Russia's violations of international humanitarian law, in the framework of the provisions of Article 8 of the 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict, Article 10 of the Second Protocol to the 1954 Hague Convention, as well as international obligations undertaken by Ukraine under the

1954 Hague Convention, the Ministry of Culture and Information Policy of Ukraine prepared and submitted for consideration of UNESCO the request for enhanced and special protection of cultural heritage properties included in the UNESCO World Heritage List and UNESCO World Heritage Tentative List.

At the same time, as of today, the development of the Site Management Plan is being completed, which is scheduled to be submitted to the UNESCO World Heritage Committee by February 1, 2023.

II. Response to the Decision of the World Heritage Committee

Decision 44 COM 7B.59

The World Heritage Committee,

1. Having examined Document WHC/21/44.COM/7B,
2. Recalling Decision 43 COM 7B.92, adopted at its 43rd session (Baku, 2019),
3. **Acknowledges the efforts made by the State Party to implement previous Committee decisions, and requests the State Party to finalize and submit the new Management Plan for the property to the World Heritage Centre, for revision by the Advisory Bodies, prior to formal adoption, by 1 February 2022;**

Work continues on the finalization of the Management Plan of the world heritage site "Kyiv: Saint Sophia Cathedral and adjacent monastic buildings, Kyiv-Pechersk Lavra" under the recommendations of the ICOMOS Technical Assessment of April 2018, an expert-consultative meeting (Sofia, Bulgaria, 2018) and the ICOMOS Technical Advisory Mission (Kyiv, Ukraine, 2019). However, in connection with the situation in the country during 2020-2022 (the epidemic of COVID 19, the introduction of martial law due to the aggression of the Russian Federation against Ukraine, emergency and fan power outages, etc.), work on the final version of the Management Plan has slowed down.

It is planned to complete work on the Management Plan and submit it to the UNESCO World Heritage Committee by February 1, 2023.

In addition to the recommendations of ICOMOS experts, the Management Plan will take into account:

- the latest changes made to the national legislation regarding the preservation of world heritage sites;
- changes in the management system (Resolution of the CMU dated September 2, 2019 No. 829 regarding the liquidation of the Ministry of Culture of Ukraine and the creation of the Ministry of Culture, Youth and Sports of Ukraine, Resolution of the CMU dated 16.10.2019 No. 885 "Some Issues of the Ministry of Culture and Information Policy" and Resolution CMU dated March 23, 2020 No. 231 "On Amendments to Certain Acts of the Cabinet of Ministers of Ukraine Regarding the Activities of the Ministry of Culture and Information Policy").

4. **Also requests the State Party to maintain the moratorium on Urban Development until the urban planning documentation has been adopted, and control and monitoring are fully in place;**

In connection with the amendments to the Law of Ukraine "On the Protection of Cultural Heritage" by the Law of Ukraine "On Amendments to Certain Legislative Acts of Ukraine on Improving the System of Management and Deregulation in the Field of Land Relations" dated April 28, 2021 No. 1423-IX, which entered into force in May 2022, the urban development of the territories of protection zones, buffer zones, historical areas of settlements is regulated by the use regimes defined or established by this Law.

At the same time, the scientific and design documentation in the field of cultural heritage protection, approved before the entry into force of the Law No. 1423-IX, remains valid.

Thus, the use regime of the territory of the World Heritage property "Kyiv: Saint-Sophia Cathedral and Related Monastic Buildings, Kyiv-Pechersk Lavra" and its buffer zone are currently regulated by the order of the Ministry of Culture, Youth and Sports of Ukraine dated January 31, 2020 No. 412 "About approval of the boundaries and use regimes of the buffer zone of the UNESCO World Heritage property "Kyiv: Saint-Sophia Cathedral and Related Monastic Buildings, Kyiv-Pechersk Lavra" and use regimes of the historical areas of the city of Kyiv, which were determined by the scientific and design documentation on the Preservation and protection of historical cultural heritage.

According to this Order, the use regimes of historical areas are determined by the existing (current) use regimes of territories and zones of protection of cultural heritage monuments located within these areas (the document provides their complete list and the corresponding regimes already approved in the prescribed manner by local and/or central authorities for cultural heritage protection within their competencies and mandate).

At the same time, a temporary ban was introduced on new construction and reconstruction activities with the increase of the existing volume and spatial parameters of buildings (except engineering, transport and social infrastructure objects) in the historical areas not covered by such zones, as well as a temporary ban on dismantling (demolition) or reconstruction with changes in the existing volume and spatial parameters of historical building within historical areas.

5. Endorses the 2020 Reactive Monitoring mission recommendations, and further requests the State Party to implement them, and in particular to:

a) Align the name spelling in all relevant documents following the change of the name of the property and establish, as a matter of urgency, the proposed Supervisory Board for the property,

The spelling of the Property's name is brought in line with all regulatory and statutory documents.

The procedure for the establishment and formation of the composition of the Supervisory Board of the World Heritage Site was approved by the Resolution of the Cabinet of Ministers of Ukraine of July 24, 2019 No. 805 "On some issues of protection and preservation of World Heritage properties".

However, in connection with the armed aggression of the Russian Federation against Ukraine, MCIP is currently deprived of the opportunity to establish a Supervisory Board of the Property. Its formation will take place after the end of a full-scale war.

b) Introduce strict monitoring of the application of the new zone-by-zone protection regime and submit a progress report on its implementation,

According to the Law of Ukraine "On the Protection of Cultural Heritage", the buffer zone is the territory around the World Heritage site, which ensures the protection of the integrity and authenticity of its Outstanding Universal Value and within which the appropriate use regime is established.

Under the third part of Article 32 of the Law of Ukraine "On the Protection of Cultural Heritage", in order to ensure the preservation of the outstanding universal value of world heritage sites, buffer zones are established around them.

The boundaries and use regimes of the buffer zone of the World Heritage site are determined by the scientific, design documentation on the definition of the boundaries, and use regimes of the buffer zone, based on the results of the conducted preliminary research.

The decision on the approval of the scientific and design documentation on the definition of the boundaries, and use regimes of the buffer zone is taken by the central executive body implementing the state policy in the field of cultural heritage protection.

Before determining the boundaries of the buffer zone of the World Heritage site in the prescribed manner, the boundaries of the buffer zone are established in accordance with the boundaries specified in the nomination dossier.

The updated boundaries and use regimes of the buffer zone of the World Heritage site "Kyiv: Saint-Sophia–Cathedral and Related Monastic Buildings, Kyiv-Pechersk Lavra" were approved by the order of the Ministry of Culture, Youth and Sports of Ukraine dated January 31, 2020 No. 412 "On approval of the boundaries and use regimes of the buffer zone of the UNESCO World Heritage site "Kyiv: Saint-Sophia Cathedral and Related Monastic Buildings, Kyiv-Pechersk Lavra".

By the decision of the 44th session of the UNESCO World Heritage Committee, which took place in July, 2021, the specified boundaries and use regimes of the buffer zone were approved by the UNESCO World Heritage Committee.

The determined use regimes of the buffer zone include differentiated regimes, regulate construction rules within the buffer zone, and by their provisions eliminate possible risks of the threat of loss of the Outstanding Universal Value of the World Heritage site.

Differentiated use regimes of the buffer zone are based on requirements for the preservation of the OUV, namely:

- a) Preservation of the role of the Property's components as architectural dominants in the historical urban environment by creating optimal conditions for their observation: preservation of visual connections, valuable visual points and panoramas.
- b) Preservation of green areas and panoramas along the Dnipro River as integral parts of the Property's cultural value.
- c) Physical preservation of the Property from negative technogenic and anthropogenic impacts (vibrations, floods, pollution, etc.)
- d) Preservation of the historical urban fabric, the components of which are its integral part.

Within the buffer zone, any urban planning transformations that may negatively affect the Outstanding Universal Value of the Property's components, reduce their role as architectural dominants in the surrounding historical environment, violate the traditional nature of the environment and reduce its historical, cultural, compositional, and artistic potential are prohibited; namely:

- demolition of historical buildings;
- alteration of the historical urban planning structure (planning of quarters, parcelling, violation of red and blue lines);
- exceeding the maximum permissible height by new buildings and additional structures (map "Regimes of the maximum permissible height of new construction and reconstruction objects");
- violation of the historical silhouette of panoramas and valuable views that determine the originality of the historical center of the city;
- destruction of historical green zones or reduction of their territories;
- urban planning, architectural or landscape transformations, construction, melioration, road, and earthworks without the permission of the relevant cultural heritage protection authorities.
- laying new networks of engineering and transport infrastructure without complying with the requirements of the current legislation of Ukraine, etc.

For all design objects in the territory of the Property's buffer zone, general regimes are applied with mandatory consideration of local regimes (clause 2.2.2) established for the corresponding subzone depending on the location of the design area.

In the case of setting the boundaries of the territory of the monument and its protection zones, which are located within the buffer zone, the use regimes of the territory of the monument and its protection zones cannot mitigate the regimes of the buffer zone. If the use regimes of the territory of the monument and its protection zone turn out to be stricter than the use regimes of the buffer zone of the Property, the priority remains the stricter use regimes of this area.

In connection with the amendment of Article 32 of the Law of Ukraine "On the Protection of Cultural Heritage" by the Law of Ukraine "On Amendments to Certain Legislative Acts of Ukraine Regarding the Improvement of the Management System and Deregulation in the Field of Land Relations" dated April 28, 2021 No. 1423-IX, which entered into force in May 2022, part six of Article 32 establishes that the development of the territories of protection zones, buffer zones, and historical areas of settlements is carried out in accordance with the use regimes defined or established by this Law.

Thus, monitoring of compliance with the new differentiated use regimes of the buffer zone is carried out by:

- conducting an assessment of the impact on the Property's OUV of urban development projects within the buffer zone or the territory of the World Heritage site and informing the World Heritage Committee in accordance with the established procedure about the urban development projects planned within the Property, its buffer zone and surroundings that may affect its OUV.

-deciding on the approval of the MCIP of projects of new construction or reconstruction of existing construction objects located within the buffer zone or on the territory of the World Heritage site for the compliance of such construction projects with the established use regimes of the buffer zone of the World Heritage site;

-exercising control of the MCIP as a management body of the relevant Property over the implementation of the Law of Ukraine "On the Protection of Cultural Heritage", and other regulatory legal acts on the protection of cultural heritage during the monitoring of the state of preservation of the World Heritage site in accordance with Article 37- 4 of this Law;

-monitoring of the state of preservation of the World Heritage site and its buffer zone by specialists of the National Conservation Area "St. Sophia of Kyiv" and the National Preserve "Kyiv-Pechersk Lavra".

Thus, during 2020-2022, the MCIP did not grant approvals for projects of new construction or reconstruction within the buffer zone or the territory of the World Heritage site, which violates the established use regimes of the Property's buffer zone.

At the same time, the MCIP issued six orders to stop earthworks and any other construction works that were carried out in the absence of programs and projects approved or agreed upon with the relevant cultural heritage protection authorities, provided for by the Law of Ukraine "On the Protection of Cultural Heritage" or with a deviation from them, and also issued one order regarding the violation of the use regime of the monument of national importance located on the territory of the World Heritage site:

- order dated 04.17.2020 No. 106/6.11.6 on the termination of earthworks and any other construction works at the object "Reconstruction of non-residential buildings into administrative and office buildings on 34-B, 34-V Velyka Zhytomyrska Str., in the Shevchenkivsky district of Kyiv" (the customer is BUDSTANDART LLC).

Financial sanctions were imposed on BUDSTANDART LLC for violation of the legislation on the protection of cultural heritage, which was sent to the specified company at its official legal address, by the resolution of the MCIP dated 31.07.2020 No. 323/6.11.6. At the same time, MCIP didn't receive a written notification about the payment of financial sanctions by BUDSTANDART LLC; there is no information about the appeal following the established procedure of the decision of the MCIP on the application of financial sanctions and the above-mentioned order.

-order dated 28.09.2020 No. 576/6.11.6 on the termination of earthworks and any other construction works under the project on "Reconstruction with the unification of groups of non-residential (administrative) premises No. 21, 21A, 22, 23 and premises No. VII-a, IV, VII, 13 of the first and second floors and technical underground for the placement of trade and public catering establishments in building No. 10 on Yaroslaviv Val Str. in the city of Kyiv" (customer - VALYAR LLC).

VALYAR LLC did not provide an explanation of the facts of the violation of the legislation on the protection of cultural heritage set out in the report to the MCIP.

- order dated 12.10.2020 No. 12482/6.11.6 on the termination of further earthworks and any other works under the project on "Works on the construction of engineering networks at the address: 24 Lavrska Str. - 1st stage" (KYIVVODFOND Utility Enterprise).

An explanation of the facts of violation of the legislation on the protection of the cultural heritage of the KYIVVODFOND in respect to the facts stated in the prescription was provided to the MCIP by letter dated 10.27.2020 No. 246-1166 (receipt ref. dated 10.29.2020 No. 31821/20.1-20).

- order dated 11.01.2021 No. 136/6.11.6 on the termination of earthworks and construction works under the project on "Construction of an administrative and office building on 16-A Redutna Str. in the Pechersk district of Kyiv" (customers - T. S. Ponomarenko, O. V. Martynovska).

- order dated 11.01.2021 No. 118/6.11.6 on the termination of earthworks and construction works under the project on "Construction of an administrative and office building on 16-A Redutna Str. in the Pechersk district of Kyiv" (the contractor is First Investment Construction Company LLC).

- order dated 03.17.2021 No. 321/6.11.6 on the termination of any works at the construction site on 15 (A) Reitarska Str. in the Shevchenkivskyi district of Kyiv (building owner/customer - CHAIKA STUDIO LLC).

Financial sanctions were imposed on CHAIKA STUDIO LLC for the violation of the legislation on the cultural heritage protection by the resolution of the MCIP of 23.04.2021 No. 511/6.11.6, which was sent to the mentioned company at the official legal address, and CHAYKA STUDIO LLC has paid in full to the State Budget of Ukraine.

- order dated 22.11.2021 No. 1175/6.11.6 on the termination of any construction works under the project on "Attraction "Rope crossing over the Dnipro River from the Druzby Narodiv Arch to Trukhanov Island" (customer - ACTIVE COUNTRY LLC).

- order dated 22.11.2021 No. 1176/6.11.6 on the termination of any construction work under the project on "Attraction "Rope crossing over the Dnipro River from the Druzby Narodiv Arch to Trukhanov Island" (contractor - COOL ROUTE CONSTRUCTION LLC).

- order dated 27.04.2021 No. 4912/6.11.6 regarding the protection and preservation of Bursa, the architectural monument of national importance, located at the address: Kyiv, 24 Volodymyrska Str. (protection number 260072/5-H).

Specialists of the National Reserve "Sofia Kyivska" and the National Reserve "Kyiv-Pechersk Lavra" National Reserve, which manage the sights of the property, periodically monitor possible urban and landscape changes in the buffer zone of the property, as well as compliance modes of using the buffer zone.

c) Assess the effectiveness of the amendment of the legal framework in prioritizing the protection of attributes, which contribute to the Outstanding Universal Value (OUV) and the setting of the property,

The Law of Ukraine "On Amendments to the Law of Ukraine "On the Protection of Cultural Heritage" on the Preservation of Cultural Heritage properties inscribed to the UNESCO World Heritage List" dated 19.06.2018, No. 2457-VIII regulates the issue of protection of UNESCO World Heritage sites by defining the concept of World Heritage properties, their buffer zones, determining the procedure for establishing the regimes of their use, determining the competences of the management bodies of such properties and their supervisory boards, establishing other specificities regarding the management and preservation of such sites.

Undoubtedly, these changes contributed to the effective protection of the world heritage site.

At the same time, there is a problematic issue concerning the protection of the World Heritage sites, which was not determined in the prescribed manner by the scientific and design documentation on the definition of the boundaries and use regimes of the World Heritage site buffer zone, as well as the procedure for entering information to the urban planning cadaster and State Land Cadastre about the boundaries and restrictions in the use of lands (territories), defined by scientific and design documentation in the field of cultural heritage protection, approved in accordance with the established procedure.

The specified issues are currently regulated by amendments to the Law of Ukraine "On the Protection of Cultural Heritage" introduced by the Law of Ukraine "On Amendments to Certain Legislative Acts of Ukraine on Improving the Management System and Deregulation in the Field of Land Relations" dated 28.04.2021 No. 1423-IX, which entered in force in May 2022.

According to the specified changes, the scientific and design documentation for determining the boundaries and use regimes of the World Heritage site territory and the boundaries and use regimes of the buffer zone is one of the types of scientific and design documentation in the field of cultural heritage protection.

Scientific and design documentation in the field of cultural heritage protection defines a special use regimes of the territory or properties, including planning restrictions on the use of land in the field of development, and the maximum permissible height of buildings and structures.

Information about the territory boundaries and restrictions on the use of land (territories), determined by scientific and design documentation in the field of cultural heritage protection, approved in accordance with the established procedure, is published on the official website of the cultural heritage protection authority that approved them and is subject to inclusion in the urban planning cadastre, as well as to the State Land Cadastre.

The composition and content of scientific and design documentation in the field of cultural heritage protection are established by the Cabinet of Ministers of Ukraine.

The customer of scientific and design documentation in the field of cultural heritage protection is, in particular:

- cultural heritage protection bodies, natural and/or legal entities that initiated the nomination of the World Heritage site, - regarding the scientific and design documentation for defining the boundaries of the World Heritage site;
- the central executive body that implements the state policy in the field of cultural heritage protection, the management body of the World Heritage site, the cultural heritage protection body on the territory of which the World Heritage site is located, natural and/or legal entities that initiated the nomination of the World Heritage property - regarding the scientific and design documentation on defining the boundaries and use regimes of the buffer zone of the World Heritage site.

Developers of scientific and project documentation in the field of cultural heritage protection are scientific and design or scientific and research organizations that meet the qualification requirements determined by the Cabinet of Ministers of Ukraine.

Use regimes of the World Heritage site are defined by the scientific project (research) documentation for determining the use regimes of the World Heritage site, which is based on the results of research and approved by the central executive body ensuring the formation of the state policy in the field of cultural heritage protection.

Before determining the boundaries of the buffer zone of the World Heritage property in the prescribed manner, the boundaries of the Property's buffer zone are established in accordance with the boundaries specified in the nomination dossier.

The central executive body, which implements the state policy in the field of cultural heritage protection, within one month from the date of inscription of the cultural heritage property to the UNESCO World Heritage List, provides for the submission of information about the established boundaries of the World Heritage site for entry into the State Land Cadastre and to the body, responsible for maintaining the urban cadastre, as well as the information on land use restrictions.

At the same time, the scientific and design documentation in the field of cultural heritage protection, approved before the entry into force of Law No. 1423-IX, remains valid.

Law No. 1423-IX also amended the Land Code of Ukraine, according to which the Code was supplemented by Article 54-1, which states: —

1. In order to protect the cultural heritage restrictions are established on the use of land within the territory of a cultural heritage monument, historical and cultural preserve, historical and cultural protected territory, protected archaeological area, open-air museum, memorial museum-manor, protection zones, buffer zone, historical areas of settlements, and territory of the World Heritage Cultural Property under the Law of Ukraine "On the Protection of Cultural Heritage".

2. Restrictions on the use of land within the territory of a cultural heritage monument, historical and cultural preserve, historical and cultural protected area, protected archaeological area, open-air museum, memorial museum-manor, protection zones, historical areas of settlements, buffer zone, and territory of the World Heritage Cultural Property apply to all the areas located within these territories and sites, regardless of their intended purpose. The boundaries of the territory to which such restrictions apply are determined by the Law of Ukraine "On the Protection of Cultural Heritage" and are indicated in the land planning documentation, urban planning documentation, and scientific design documentation in the field of cultural heritage protection. Information on the specific land use restrictions is entered in the State Land Cadastre.

3. Regime of land use within the territory of a cultural heritage monument, historical and cultural preserve, historical and cultural protected area, protected archaeological area, open-air museum, memorial museum-manor, protection zones, historical areas of settlements, buffer zone, and territory of the World Heritage Cultural Property is determined by scientific design documentation in the field of cultural heritage protection, and before approval of such documentation - by the Law of Ukraine "On Protection of Cultural Heritage".

Undoubtedly, the corresponding changes to the legislation should contribute to the harmonization of the legislation in the field of cultural heritage protection with land and urban planning legislation, provided that several government regulations are developed and the MCIP takes measures to convert the materials into electronic (digital) form, which, according

to the legislation in force at the time of their development, determined the restrictions on the use of land in accordance with the Law of Ukraine "On the Protection of Cultural Heritage" concerning World Heritage sites and their buffer zones and the entry of information about such restrictions into the State Land Cadastre. In case the valid limits of such restrictions cannot be established based on such materials, the development of technical documentation on land management regarding the establishment of boundaries of regime-forming cultural heritage monuments should be ensured.

d) Establish an efficient system to protect from any visual impact on the skyline, the visual fields and vistas from the most characteristic viewpoints and introduce this system in the urban regulation documents, such as Kyiv City Master Plan, updated "Historical and Architectural Key Plan of Kyiv" and the Zoning Plan of Kyiv Central Area,

e) Finalize the "Historical and Architectural Key Plan of Kyiv" and submit it to the World Heritage Centre for review, prior to its adoption,

The current Master Plan of the city of Kyiv for the period until 2020, approved by the decision of the Kyiv City Council dated March 28, 2002 No. 370/1804, includes the Historical and Architectural Key Plan of the city of Kyiv, which defined the boundaries of seven historical areas of the capital (Central, Northern, Darnytskyi, Kytaivskyi, Southern, Solomyanskyi and Pushcha-Vodytsia). At the same time, clear use regimes of the territory of historical areas were not determined.

Another problem was that these historical areas were not approved by the central executive body that implements the state policy in the field of cultural heritage protection. That is, at one time, the relevant documentation was not submitted to the Ministry for consideration.

The concept of the Historical and Architectural Key Plan of the city of Kyiv - 2021, approved by the letter of the Ministry of Culture and Information Policy dated 28.07.2021 No. 875/6.11.1, is very simple: it is a pure fixation document, in which the boundaries of the seven existing historical areas of Kyiv are displayed without any changes and the eighth Bykivnia historical area is defined around the National Historical and Memorial Preserve "Bykivniansky Mohylas" (since the inclusion of the territory of the preserves within the boundaries of the historical area is a direct requirement of the monument protection legislation, and this Preserve was created already after the approval of the Master Plan of Kyiv 2020).

The performed adjustment of the Historical and Architectural Key Plan of the City of Kyiv consists primarily in its updating as of 2021 - in addition to the eight named historical areas, it reflects all cultural heritage monuments currently registered and all protection zones of cultural heritage monuments in the territory of the city of Kyiv approved in the established procedure over the last 20 years, including the updated unified buffer zone of the World Heritage site "Kyiv: Saint-Sophia Cathedral and Related Monastic Buildings, Kyiv-Pechersk Lavra", approved by order of the Ministry of Culture, Youth and of Sports of Ukraine dated 31.01.2020 No. 412 "On approval of the boundaries and use regimes of the buffer zone of the UNESCO World Heritage site "Kyiv: Saint-Sophia Cathedral and Related Monastic Buildings, Kyiv-Pechersk Lavra".

The usage modes of the territory of historical areas are determined by the existing (current) usage modes of territories and zones of protection of cultural heritage properties on its

territory (the document provides an exhaustive list of them and reflects the corresponding regimes already approved in the prescribed manner by local and/or central bodies for the protection of cultural heritage according to competence and authority).

At the same time, a temporary prohibition on new construction and reconstruction with an increase in the existing volume-spatial parameters of buildings (except for engineering, transport and social infrastructure objects), as well as a temporary prohibition on dismantling (demolition) or reconstructions with a change in the existing volume-spatial parameters of the existing historical buildings in historical areas.

Scientific and design documentation on the "Preservation and protection of historical and cultural heritage. Historical and Architectural Key Plan of the city of Kyiv" (Vol. 8 of the Master Plan of the City of Kyiv), developed by order of the Department of Urban Planning and Architecture of the Kyiv City State Administration by the communal organization "Institute of the Master Plan of the City of Kyiv", was reviewed in the established procedure, approved by the Scientific and Methodological Council for the Protection of Cultural Heritage of the MCIP and approved by the letter of the MCIP dated 07.28.2021 No. 875/6.11.1. The boundaries and use regimes of the historical areas defined by this documentation were approved by the order of the MCIP dated 02.08.2021 No. 599 "On approval of the boundaries and use regimes of the territory of the historical areas of the city of Kyiv" under Articles 5, 32 of the Law of Ukraine "On the Protection of Cultural Heritage" and clause 12. The procedure for determining the boundaries and use regimes of historical areas of settlements, restrictions on economic activity on the territory of historical areas of settlements, approved by the Resolution of the Cabinet of Ministers of Ukraine dated 13.03.2002 No. 318, taking into account the protocol of the extraordinary meeting of the Scientific and Methodological Council for the Protection of Cultural Heritage of the MCIP dated 14.07.2021 No. 10, and the letter of the Department of Cultural Heritage Protection of the Kyiv City State Administration dated 20.01.2021 No. 066-197.

As of today, The Historical and Architectural Key Plan of the city of Kyiv has not been approved by the city authorities.

However, according to the Article 32 of the Law of Ukraine "On the Protection of Cultural Heritage", the boundaries and use regimes of the historical areas of settlements, restrictions on economic activity on the territories of historical areas of settlements are determined in accordance with the procedure established by the Cabinet of Ministers of Ukraine, as well as the relevant scientific and design documentation, approved by the central executive body that implements the state policy in the field of cultural heritage protection. Thus, the MCIP approved the boundaries and regimes of the use of the territory of the historical areas of the city of Kyiv, defined by the scientific and design documentation on the "Preservation and protection of the historical and cultural heritage. Historical and Architectural Key Plan of the city of Kyiv". Therefore, at present, the urban development within the territories of the historical areas of the city of Kyiv is carried out under the use regimes determined by the order of the MCIP dated 02.08.2021 No. 599.

At the same time, the Historical and Architectural Key Plan should become an integral part of the Master Plan of the city of Kyiv, the development of which is currently suspended due to the Russian invasion of the territory of Ukraine.

According to the information of the Department of Urban Planning and Architecture of the executive body of the Kyiv City Council (Kyiv City State Administration) (letter dated 16.11.2022 No. 055-7922), in accordance with the decision of the Kyiv City Council dated 18.09.2008 No. 262/262 "On the development of a new Master Plan of the city of Kyiv and its suburban zone until 2025", adopted according to the Decree of the President of Ukraine dated 25.02.2008 No. 157/2008 "On urgent measures concerning the development of the city of Kyiv" and the decision of the Kyiv City Council dated 13.11.2013 No. 518/10006 "On approval of the city program for creating (updating) urban planning documentation in the city of Kyiv", commissioned by the Department of Urban Planning and Architecture of the Executive Planning of the Kyiv City Council (Kyiv City State Administration), the communal organization of the executive body of the Kyiv City Council (Kyiv City State Administration) "Institute of the Master Plan of Kyiv" is developing a draft Master Plan of the city of Kyiv.

The Draft Master Plan of the city of Kyiv should be submitted to the Kyiv City Council for consideration after:

- conducting public discussions (hearings) of the Draft Master Plan of the city of Kyiv and its strategic environmental assessment;
- consideration of the Draft Master Plan of the city of Kyiv at the meeting of the architectural and urban planning council at the Department of Urban Planning and Architecture;
- obtaining an expert report on compliance of the documentation with state construction regulations, standards and rules.

f) Include in the Zoning Plans of the Kyiv City General Plan specific requirement on the protection of the property's setting for all other "district" and "landscape protection" areas,

Zoning plans of the territories of settlements are provided for development by urban planning documentation simultaneously with the Master plans of settlements included in the List of historical settlements of Ukraine. The new Master Plan of Kyiv is under development.

Zoning Plan of the central planning area of Kyiv developed as part of the new Master Plan, includes information on World Heritage sites, their territories and buffer zones, as well as all relevant restrictions. The development of the Zoning Plan of the Kyiv City Master Plan is currently suspended due to the Russian invasion of the territory of Ukraine.

g) Establish a comprehensive inventory of tall buildings, including all existing high-rise buildings, as well as the already-issued building permissions related to tall building projects;

The Ministry of Culture and Information Policy of Ukraine for the period from 2020-2022 granted the following approvals at the following addresses:

1. Reconstruction of Peizazhna (Landscape) Alley in the Kyiv Shevchenkivsky district;
2. Reconstruction and beautification of the Volodymyrska Hill Park in the Shevchenkivsky district of Kyiv;
3. Installation of the flagpole of the National Flag of Ukraine on the territory of the Memorial Complex "National Museum of the History of Ukraine in the Second World War" on 27, Lavrska Str. in the Pechersk district of Kyiv (the project involved exceeding the height

established by the use regimes, but it was approved by the World Heritage Committee, agreed by the MCIP, and as of today, the flagpole has been installed);

4. New construction of a catering facility on 33-A, Druzhby Narodov Boulevard in the Pechersk district of Kyiv;

5. Reconstruction of non-residential buildings with built-in parking under the administrative and office building on 3-A, B, Borychiv Tik Str. in the Podilsky District of Kyiv;

6. Reconstruction of the upper floors of the building at the address 32-A, Velyka Zhytomyrska Str. in the Shevchenkivsky district of Kyiv.

At the same time, we consider it expedient to highlight the issue of reconstruction of the unfinished construction of the residential complex with public premises and built-in parking on the 17-23, Olesya Honchara Str. in the Shevchenkivsky district of Kyiv.

This high-rise building exceeds the established parameters of subzone 1 of the Property's buffer zone use regimes.

According to the local regime of protection and use of the territory of subzone 1 of the buffer zone of the World Heritage site "Kyiv: Saint-Sophia Cathedral and Related Monastic Buildings, Kyiv-Pechersk Lavra", the maximum permissible height of objects of new construction and reconstruction is 18 m.

At the same time, the height of the existing building is 37.9 m, which already exceeds the permissible height by 19.9 m. After the reconstruction, it is planned to reduce the total height of the building by 10 m, which in any case exceeds the mark of 18 m and is absolutely unacceptable.

As of today, MCIP, together with the customer of the urban transformation, are conducting coordination procedures regarding the issue of reducing the height of the building in order to comply with the established restrictions on the use regimes.

The legal process is currently ongoing due to the lawsuit of the Private Joint Stock Company "L-Capital" to the Ministry of Culture and Information Policy to recognize as illegal the refusal to approve the project of restoration and adaptation of the non-residential building on 36-A Volodymyrska Str., and reconstruction with a superstructure of a non-residential building on 11-A, A, B Zolotovoritska Str. with unification into a single hotel and office complex in the Shevchenkivskyi district of Kyiv within the buffer zone of the Property.

By decision of the District Administrative Court of Kyiv dated 18.08.2020, on the case No. 640/4985/20 states:

1. The administrative claim of the L-Capital Private Joint Stock Company (EDRPOU code 32735854, Kyiv, 01034, 36-A Volodymyrska Str.) shall be fully satisfied.

2. To recognize as illegal the refusal of the Ministry of Culture of Ukraine, set out in the letter dated 04.04.2019 under No. 163/10-2/72-19 to approve the project documentation of the L-Capital Private Joint Stock Company, including the master plan of the object under the project of the Restoration and adaptation of a non-residential building at 36-A, Volodymyrska Street and reconstruction with a superstructure of a non-residential building at 11-A, A, B,

Zolotovoritska Street with unification into a single hotel and office complex in Shevchenkivskyi district of the city of Kyiv.

3. To oblige the Ministry of Culture and Information Policy of Ukraine to approve the Project of the L-KAPITAL Private Joint-Stock Company (01034, Kyiv, 36-A, Volodymyrska Str., identification code 32735854) on the Restoration and adaptation of a non-residential building at 36-A, Volodymyrska Str. and reconstruction with a superstructure of a non-residential building at 11-A, A, B, Zolotovoritska Str. with unification into a single hotel and office complex in the Shevchenkivsky district of Kyiv, developed in 2016 by Architectural bureau "VIVAS" LLC, including the master plan of the site. The Chief architect of the project - INDIVIDUAL_1, qualification certificate AA No. 000124, issued on 11.07.2012),

4. To oblige the Ministry of Culture and Information Policy to issue permission to the L-KAPITAL Private Joint Stock Company (01034, Kyiv, 36-A, Volodymyrska Str., identification code 32735854) to carry out earthworks within the Central Historical Area of the city of Kyiv as the part of the construction project on the Restoration with an adaptation of a non-residential building at 36-A, Volodymyrska Str. and reconstruction with a superstructure of a non-residential building at 11-A, A, B, Zolotovoritska Str. with the unification into a single hotel and office complex in the Shevchenkivsky district of the city of Kyiv. —

By the resolution of the Sixth Administrative Court of Appeal dated 11.17.2020 (receipt ref. 34512/15.1-20 dated 11/25/2020) concerning the case Nr. 640/4985/20 on the claim of L-KAPITAL PJSC to the Ministry of Culture of Ukraine, the Ministry of Culture and Information Policy of Ukraine on recognition as illegal the refusal to approve the project documentation set out in the letter dated 04.04.2019 Nr. 163/10-2/72-19, the appeal of the Ministry of Culture and Information Policy of Ukraine was dismissed, the decision of the District Administrative Court of Kyiv dated 18.08.2020 remained unchanged.

The decision of the District Administrative Court of Kyiv dated 18.08.2020 entered into force.

At the same time, the Court of First Instance and the Court of Appeal did not take into account and examine the following evidence of the MCIP, and did not give a legal assessment of the evidence of the MCIP, in particular, the UNESCO/ICOMOS Technical Review, which according to the norms of international and national legislation is mandatory binding to execution.

By the decision of the Supreme Court dated 18.01.2021 (receipt ref. 2183/15.1-21 dated 23.01.2021), MCIP was denied to open cassation proceedings against the decision of the District Administrative Court of Kyiv dated 18.08.2020 and the decision of the Sixth Administrative Court of Appeal dated 17.11.2020. The Ministry again filed a cassation appeal against the decisions of the courts of first instance and appeals. The Supreme Court, by its decision dated 03.16.2021, once again refused the MCIP to open cassation proceedings.

Currently, appeals against the decision on the lawsuit of the General Prosecutor's Office are ongoing.

6. Reiterates its request to the State Party to undertake an Heritage Impact Assessment (HIA) for developments within the property and its buffer zone as a timely and appropriate method of assessing the multiple and cumulative impacts of planned

developments, taking into account potential impacts on the OUV of the property, in conformity with the ICOMOS Guidelines on HIAs for Cultural World Heritage properties, including reference to 3D visual simulations, prior to allowing any developments to take place; and encourages the State Party to continue to submit, in accordance with Paragraph 172 of the *Operational Guidelines*, detailed information on any proposed development projects within the property, its buffer zone and setting, which may impact the OUV of the property, for review by the World Heritage Centre and the Advisory Bodies prior to any decisions being taken that could be difficult to reverse;

During 2020-2022, MCIP undertook 14 HIAs on the OUV of the Property, in particular at the following addresses:

1. 34-B, 34-V, Velyka Zhytomyrska Str. in the city of Kyiv;
2. Peizazhna Avenue in the Shevchenkivsky district of Kyiv;
3. 14, Redutny Lane in the city of Kyiv;
4. 14, Khreschatyk Str. in the Shevchenkivsky district of Kyiv; —
5. Volodymyrska Hill Park in the Shevchenkivsky district of Kyiv;
6. 27, Lavrska Str. in the Pechersky district of Kyiv; —
7. 18, 20, Lavrska Str. in the city of Kyiv;
8. 25, Naberezhne Highway in the Pechersky district of Kyiv;
9. 6, Mala Zhytomyrska Str. in the Shevchenkivsky district of Kyiv;
10. 33-A, Druzhby Narodiv Boulevard in the Pechersky district of Kyiv; —
11. 60, Redutna Str. in the Pechersky district of Kyiv; —
12. 17-23, Honchara Str. in the Shevchenkivsky district of Kyiv;
13. 11, Andriivskyi Descent in the Shevchenkivsky district of Kyiv;
14. 3-A, 3-B Boryehiv Tik Str. in the Pechersky district of Kyiv. —

The Ministry of Culture and Information Policy of Ukraine keeps informing the UNESCO World Heritage Committee in compliance with Article 37-2 of the Law of Ukraine "On the Protection of Cultural Heritage" and Paragraph 172 of the Operational Guidelines the about the planned urban transformations within the territory of the Property and its buffer zone.

During 2020-2022, 12 notifications were submitted to the UNESCO World Heritage Committee about the planned urban transformations at the addresses:

1. Informing the UNESCO World Heritage Committee about the intentions to reconstruct non-residential buildings into administrative and office buildings on 34-B, 34-V, Velyka Zhytomyrska Str. in the city of Kyiv;
2. Informing the UNESCO World Heritage Committee about the intentions to carry out the reconstruction of Peizazhna Alley in the Shevchenkivsky District of Kyiv;

3. Informing the UNESCO World Heritage Committee about the intention to carry out a new construction of an individual blocked residential building (mansion type) for several generations at the address: 14, Redutny Lane in the city of Kyiv;
 4. Informing the UNESCO World Heritage Committee about the intentions to carry out the reconstruction of the Khreshchatyk Hotel at the address: 14, Khreschatyk Str. in the Shevchenkivsky district of Kyiv;
 5. Informing the UNESCO World Heritage Committee about the intentions to carry out the reconstruction and beautification of the Volodymyrska Hill Park in the Shevchenkivsky District of Kyiv;
 6. Informing the UNESCO World Heritage Committee about the intention to install the flagpole of the National Flag of Ukraine on the territory of the Memorial Complex "National Museum of the History of Ukraine in the Second World War" on 27, Lavrska Str. in the Pechersky District of Kyiv;
 7. Informing the UNESCO World Heritage Committee about the intentions to build a multifunctional complex with underground parking on 18, 20 Lavrska Str. in the city of Kyiv;
 8. Informing the UNESCO World Heritage Committee about the intentions of the construction of a multifunctional complex for public purposes and the construction of a nonresidential building – a cafe on 25, Naberezhna Highway in the Pechersk district of Kyiv;
 9. Informing the UNESCO World Heritage Committee about the intention to carry out the reconstruction of a non-residential building on the 6, Mala Zhytomyrska Str. in the Shevchenkivsky District of Kyiv;
 10. Informing the UNESCO World Heritage Committee about the intentions of the construction of a public catering facility at 33-A, Druzhby Narodiv Boulevard in the Pechersky District of Kyiv;
 11. Informing the UNESCO World Heritage Committee about the urban transformation at the address: 60, Redutna Str. in the Pechersky District of Kyiv;
 12. Informing the UNESCO World Heritage Committee about the project of reconstruction of non-residential buildings with built-in parking into the administrative and office building on 3-A, B, Borychiv Tik Str. in the Podilsky District of Kyiv.
- 7. Finally requests the State Party to submit to the World Heritage Centre, by 1 December 2022, an updated report on the state of conservation of the property and the implementation of the above, for examination by the World Heritage Committee at its 46th session.**

III. Other current conservation issues identified by the State Party which may have an impact on the property's Outstanding Universal Value

From the first days of full-scale Russian aggression, air attacks have threatened numerous historical monuments of Kyiv, including the World Heritage Property "Kyiv: Saint-Sophia Cathedral and Related Monastic Buildings, Kyiv-Pechersk Lavra".

In order to protect St. Sophia Cathedral, specialists decided to cover with sandbags the most vulnerable parts of the building and premises with important architectural and artistic values.



Protection measures of St. Sophia Cathedral

On October 10, 2022, the Russian federation carried out an air attack, which resulted in three hits at a distance of about 1 km from the “Saint-Sophia Cathedral and Related Monastic Buildings” Component.

Currently, the Property faces not only the threat of direct Russian missile or drone hits but also the impact of shock and sound waves from the bombing of the city. Vibration loads may cause deterioration of the bearing capacity of the Property's structures, and pose a significant risk of detachment of mosaics and ancient plaster decorated with frescoes.

On the territory of the Property's Component “Kyiv-Pechersk Lavra” temporary conservation measures were taken to protect cultural monuments under martial law.



Тимчасова консервація пам'ятника
Костянтину Олександровичу Іпсиланті
на період воєнного стану



Temporary conservation of the monument to Kostiantyn Ipsilanti under martial law

At the same time, Ukrainian cultural heritage is in danger provoked by emergency and rolling blackouts and the succeeding shutdown of special equipment that maintains constant conditions at the monuments: microclimate, etc.

According to the recommendations of the Ministry of Culture and Information Policy of Ukraine, based on the provisions of the UNESCO Declaration on the protection of cultural heritage in Ukraine, approved at the Second Extraordinary Meeting of the Committee for the Protection of Cultural Property in the Event of Armed Conflict on March 18, 2022, the key cultural monuments of the Property were marked with the Blue Shield distinctive emblem of the 1954 Hague Convention in order to facilitate the recognition of their status of enhanced protection.



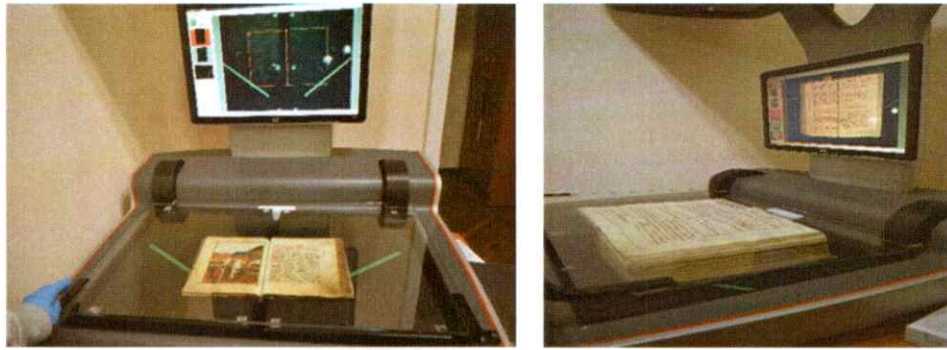
In March 2022, the site managers of the National Conservation Area “St. Sophia of Kyiv” and the National Preserve “Kyiv-Pechersk Lavra” took part in the online consultation of the UNESCO World Heritage Centre with representatives of UNESCO World Heritage properties in Ukraine. The purpose of the meeting was to discuss urgent needs and challenges, as well as to clarify the next steps concerning the protection of cultural heritage in Ukraine in the face of the invasion by Russian occupation forces.

Since the first months of the war, the management and specialists of these institutions have been actively participating in international online workshops and webinars, in particular, organized by UNESCO in cooperation with the Ministry of Culture and Information Policy of Ukraine, as well as the national and international organizations. The events were dedicated to the issues of securing cultural heritage properties during war conflict, namely: post-event damage and risk assessment for cultural heritage in Ukraine, discussion of priority needs of the Ukrainian museums and ways of assistance from international intergovernmental and public organizations, preservation of museum collections during emergency situations, protection of documentary heritage, etc.

In July 2022, a visit to the Property of the members of the UNESCO programmatic mission to Ukraine was provided.

During the visit to the Property’s Component “Kyiv-Pechersk Lavra”, the members of the mission were introduced to the measures taken to secure the movable and immovable monuments of the Preserve, the process of packing and storing the Preserve collection’s items in war settings, urgent needs, in particular in the field of restoration work on the Ensemble’s monuments.

As a result of the UNESCO programmatic mission to Ukraine as well as owing to the support of the Permanent Delegation of Austria to UNESCO, the National Preserve “Kyiv-Pechersk Lavra” received a high-resolution scanner to optimize and improve the quality of digitization of the collection of early printed books, manuscripts and archives.



In addition, humanitarian aid was received from other international organizations such as packaging materials for the preservation and protection of museum collection artworks. The work is under way on the issue of the preservation of cultural heritage immovable monuments in conditions of limited power supply.

On July 11, 2022, the members of the mission of the International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM), International Council on Monuments and Sites (ICOMOS) and International Alliance for the Protection of Heritage in Conflict Areas (ALIPH) visited the Property in the framework of monitoring the current state of preservation of World heritage cultural monuments, assessment of losses and risks, and defining urgent needs with a long-term aim of attracting funds for resolving emergency issues.

Following the working meeting with the members of the Mission, the request was submitted to the UNESCO World Heritage Centre and ICOMOS for help in attracting donors' funding to complete suspended restoration work on a number of monuments of the National Preserve "Kyiv-Pechersk Lavra" (see point IV of this Report), which had been started before the war.

IV. In conformity with Paragraph 172 of the Operational Guidelines, describe any potential major restorations, alterations and/or new construction(s) intended within the property, the buffer zone(s) and/or corridors or other areas, where such developments may affect the Outstanding Universal Value of the property, including authenticity and integrity.

As of today, the General state of conservation of the World Heritage Property "Kyiv: Saint-Sophia Cathedral and Related Monastic Buildings, Kyiv-Pechersk Lavra" remains satisfactory.

Since the first days of full-scale Russian aggression, the Property has faced the threat of air attacks that could cause physical damage. Another threat is hitting the critical infrastructure of Ukraine, which causes emergency and rolling blackouts. Power outages cause disruptions of special equipment at the Property.

No measures were taken that may have a negative impact on the Outstanding Universal Value of the Property.

Within the territories of the Property, permanent integrated monitoring is carried out to control the state of resistance of the monuments structures. This includes hydrogeological monitoring of the territory, engineering and technical survey over the state of conservation of the monuments, geodesic monitoring over the deformations on the monuments and territory

(subsidence, inclinations, changes коливання in the width of typical cracks), and control over microclimate conditions.

In 2021 in the framework of the International Assistance (Request for the International Assistance Ref. 2918) provided by UNESCO at the application submitted by the World Heritage Property “Kyiv: Saint-Sophia Cathedral and Related Monastic Buildings, Kyiv-Pechersk Lavra” (527bis) the Project on the Modernization of the Hydrogeological Monitoring System of the Territory of the Ensemble of Buildings of St. Sophia Cathedral and Kyiv-Pechersk Lavra was accomplished.

A number of scientific, research, restoration and repair work has been performed on the Property’s components to enhance their preservation and physical condition.

Concerning the Component “Saint-Sophia Cathedral and Related Monastic Buildings”

Monitoring studies of the condition of walls, wall paintings and air in St. Sophia Cathedral are continuing, especially in the basement premises, in order to prevent the development of the biodestructive process and to determine the effectiveness of the neutralization of biodestructors. These studies include control and periodic microbiological surveys with the use of a complex of modern culture-independent methodological approaches (such as — molecular-biological metagenomic methods for the detection and characterization of microbial DNA in samples), as well as culture-dependent microbiological methods.

— Molecular and biological metagenomic studies of fungal DNA (NGS) in 2022 again, as in previous years, showed that xerophilic aspergilli (according to preliminary data, dominant *Eurotium halophilicum* = *Aspergillus halophilicus* in combination with minor *Aspergillus vitricola*) play a significant role in the development of dark stains on the walls. These data still need a thorough bioinformatic analysis.

— In the course of microbiological studies of dark-spotted damage to the walls with paintings in the cathedral, with the help of culture-dependent methodical approaches, a developed model — medium selective for xerophilic aspergilli, which causes damage to the walls of the cathedral, — was applied. As a result, it was possible to isolate 19 isolates of microscopic fungi in pure culture, which were able to produce dark pigments and dissolve calcium carbonate. Further molecular genetic identification of the isolates using several genetic markers together with scanning electron microscopy (SEM) showed that all isolates belong to the species *Aspergillus vitricola*, the DNA of which was regularly recorded together with *A. halophilicus* in the zone of dark-spotted damage to the walls of the St. Michael aisle of the cathedral. Under laboratory conditions, it was possible to cultivate xerophilic aspergilli, which are real agents of biodamage to walls with paintings and are closest in physiological and biochemical characteristics to the dominant *A. halophilicus*, which is difficult to cultivate. In the event of possible failure with the isolation and cultivation of *A. halophilicus*, *Aspergillus vitricola* isolates may serve as relevant model microorganisms for the development of methods of combating dark-spotted lesions of walls with paintings in the Cathedral.

According to the results of the conducted research, the “Use regimes for St. Sophia Cathedral” were developed – a set of norms, conditions, and measures necessary to ensure the existence and functioning of the monument. The document was submitted for review and approval to the Ministry of Culture and Information Policy of Ukraine.

In addition, archaeological research is being carried out in the interior of St. Sophia Cathedral with the museification of the remains of ancient structural elements and on the territory of the ensemble with the conservation and museification of the foundations of ancient buildings.

In 2021, the remains of a previously unknown Cathedral altar were found near the northeastern corner of St. Sophia Cathedral in 2021. It is a well-preserved foundation of the so-called apse – the semicircular projection of the eastern wall of the northern outer gallery of the cathedral. The strength of this foundation, made of stones on a lime-cement mortar, reaches more than 1.2 m. On top of it, a wall about 1 m thick was built from a plinth (ancient brick) and individual stone blocks on a mortar. The apse was built at the same time with the main volume of the cathedral in the first half of the 11th century, but the time and circumstances of its destruction remain unknown.

It is planned to continue studies of the remains of the ancient apse of the Cathedral, found in 2021, with the aim of a more detailed study and museification of the excavated ruins.



The remains of the newly opened apse on the north-eastern side of St. Sophia Cathedral

Repair and restoration works on the components of the Property On the Component “Saint-Sophia Cathedral and Related Monastic Buildings”

1. By the aid of patrons, the equipment of the Biodry system for drying the walls from moisture was purchased and installed at the monuments of St. Sophia Cathedral and Related Monastic Buildings. This system, by interacting with the electromagnetic waves of the earth, eliminates the cause of excessive moisture in the walls, after which the walls are dried naturally.

13 drainage devices have been installed at the sights of the St. Sophia of Kyiv ensemble: in St. Sophia Cathedral, the Refectory, the Bell Tower, the Metropolitan’s Residence, the South Entrance Tower, and on the Stone Fence Walls.

2. According to the survey, it is impossible to carry out emergency works and complex restoration (repair and restoration works) of the architectural monument of national

importance in Seminary without the relocation of the Central State Archive Museum of Literature and Art of Ukraine.

Project works

Developed:

- Project “Modernization of the heating system and microclimate in St. Sophia Cathedral” (at the completion stage);
- Project “Restoration of the architectural monument of national importance of Seminary (protection No. 260072/5-H) with adaptation to the museum center of the National Conservation Area “St. Sophia of Kyiv” (developed, received a positive expert opinion, approved);
- Project “Repair and restoration works of the Bell Tower of St. Sophia Cathedral” (at the completion stage);

Implemented:

- Project “Automated system of monitoring monuments and the territory of the St. Sophia Cathedral buildings ensemble of the National Conservation Area “St. Sophia of Kyiv” in the part of hydrogeological monitoring with the modernization of three hydrophysical bushes which have automatic sensors with data recording on loggers.

Restoration and repair works

Completed:

- restoration work according to the project “Restoration of part of the premises of the former Bakery (Consistory) (an architectural monument of the 18th century) with adaptation to the exhibition halls, and the Consistory – to the administrative premises of the National Conservation Area “St. Sophia of Kyiv”;
- “Restoration repair of the balcony in the Metropolitan’s House (architectural monument of the 18th century) on St. Volodymyrska, 24”;
- “Current repair (restoration repair) of the part of St. Sophia Cathedral”.

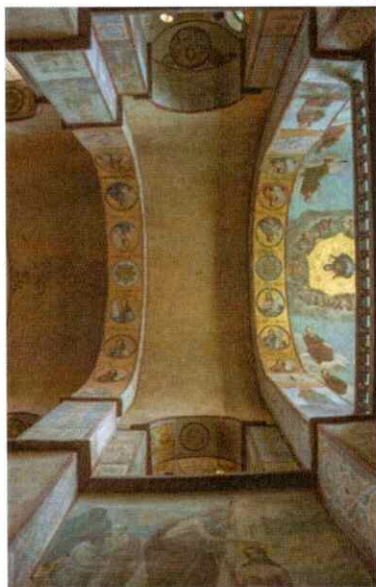
In progress:

- restoration work according to the project “Repair and restoration works on an architectural monument of national importance – Refectory, the 18th century”;
- works on repair (restoration) of switchboard objects of the ensemble of St. Sophia Cathedral;
- works on “Reconstruction of the public toilet building on 24 Volodymyrska street” with adaptation for people with disabilities, as well as arrangement of a mother-child room and a storage room for visitors’ belongings;
- works on the modernization of the interior lighting of St. Sophia Cathedral (phase 3) (at the completion stage).

Conservation and restoration of monumental painting

Inspected and restored:

- the 19th century monumental painting of the first from the choirs compartment of the western part of the central nave of St. Sophia Cathedral, the restoration of which was performed in accordance with the approved “Program of restoration works of the 19th century monumental painting of the western part of the central nave of St. Sophia Cathedral” (record No. 2) on January 31, 2020, that was developed by the Scientific and Restoration Council of the Conservation Area based on the results of the survey of the specified volume;
- the 18th century monumental painting of the western part of the central nave of St. Sophia Cathedral, renewed in the 19th century. It was established that the painting in this part of the cathedral was partially damaged by the wet. Back in the 1950s during the restoration, it was recovered, collecting all the surviving parts. Since, according to the concept of the time, this painting was considered not valuable from an artistic point of view, it was decided to cover it with a neutral tone. Over time, the neutral tone darkened, covered with a layer of dust and dirt. The entire surface of the painting, cornices, parapets of choirs were cleaned of surface contamination. During the restoration, the neutral tone was successfully and without complications removed;
- the 18th century monumental painting, renewed in the 19th century. The areas of peeling and exfoliation of the painting (including the one on a gold background) were also fixed. Thus, in the zenith, the image of Christ in bishop's garments on a golden background was disclosed. On the vault on both sides, respectively, there are images of two groups of saints with ribbons above, on which the inscriptions are easily read. On the northern slope below, a fragment of the image of a group of saints is partially preserved. In those places where the painting was not preserved, plastering and re-toning with a neutral tone was performed. According to the decision of the Scientific and Restoration Council of the Conservation Area, after checking the fastening and the state of conservation, it was left the mounted in the wall copper sheet, installed in the place of the former old wet part. The copper sheet has special holes made for drying the structure.



Before restoration



After restoration

Painting of the 11th - 19th centuries. Central nave.

Second compartment to the west of the central under-domed space



Before restoration



After restoration

Painting of the 11th - 19th centuries. Central nave.

First compartment to the west of the central under-domed space

Fixed:

- the composition "Meeting of the Lord" by Ivan Selezniiov, opened in 2008, has been cleaned of minor peeling of the paint layer and surface contamination;
- layer of paint in the arches, putty is added and tinting is done.

Brought to proper condition:

- in the western part of the central nave of St. Sophia Cathedral in Kyiv (the second compartment from the choirs).

The last restoration of the mentioned volume was carried out more than 60 years ago – in 1956. According to the concept followed by the restorers at that time, the painting of the 18th-19th centuries was not considered valuable from an artistic point of view, so it was decided to cover it with a neutral tone.

In the 2nd compartment, there were peelings both on the most neutral tone and on the oil painting. In addition, there was dust both on the fresco and on the cornices. In general, the volume of work in the 2nd compartment was more and it was greater challenge.

The restorers thoroughly tapped the entire surface of the specified compartment, identified problem areas and fixed emergency locations, cleaned of dirt, and eliminated cracks. The neutral color, according to the restorers' report of 1957, was redone several times. The painting of the 18th century, especially the lower groups of the apostles, during the restoration directed by Fedir Solntsev, was significantly repainted, which was probably connected with its destruction due to the wetting of the sinuses of the vaults. In the 50s of the 20th century, it was also in a very bad condition: both groups of apostles, both from the north and from the south, were very damaged. In these places, clearing was carried out from under the later

layering with the aim of revealing the surviving fragments of authentic painting. Quite a lot of authentic fragments have been preserved, so it was possible to perform rather delicate toning of the places of loss and to assemble the image in general.

Previously, it was believed that the Ecumenical Councils or the Council of the Apostles were depicted on the vault of the 2nd compartment. In fact, the composition that was opened from under the neutral coloring and studied is “The Descent of the Holy Spirit on the Apostles”, because there are clearly visible halos and rays from the Holy Spirit (the image of a dove in the zenith). This attribution is confirmed by the inscriptions on the ribbons. Apparently, during the restoration performed by Fedir Solntsev, when the fresco image of “The Descent of the Holy Spirit on the Apostles” was opened on the western wall of the southern part of the transept, it was decided to change this image somewhat. Today, it is all covered with a golden background.

The flaking of the oil painting during the restoration process was fixed with wax-varnish mastic over the entire plane. The neutral tone was prepared on carpentry glue, washed off relatively easily. But there was old putty – both wax and resin – that looked like stains, it was removed.

The image of the lower groups of the apostles had many losses that were toned.

The compositions fit quite nicely into the interior of the cathedral both in terms of scale and color.

In the arches adjacent to this compartment from the north and south, the paint layer of the painting was fixed, putty was applied in the places of loss and tinting was performed.

A fresco painting was preserved below the cornice, which was also cleaned of surface contamination.

Completed:

- restoration of frescoes and oil paintings in the altar of the St. Andrew the First-Called aisle of in the southern choirs of St. Sophia Cathedral;
- restoration of frescoes and oil paintings in the northern part of the western gallery of St. Sophia Cathedral.

Concerning the Component “Kyiv-Pechersk Lavra” and “Church of the Saviour at Berestove”

In 2020, the Great Restoration Program was launched in Ukraine at the state level aimed at the conservation of the immovable cultural heritage monuments.

In 2021, the National Preserve “Kyiv-Pechersk Lavra” submitted 14 applications to the Great Restoration Program concerning the monuments that require restoration and development of research and design documentation for its realization. In 2021, the following six monuments were selected in the framework of the Program:

- Restoration and adaptation of the Trinity Gate Church, the architectural monument of national and world importance (building Nr. 27, protection Nr. 4/3);

- Emergency work on section 3 of the Defensive Walls around the Near and Far Caves, the architectural monument of national and world importance (building Nr. 93, protection number 867/3);
 - Restoration of section 1 of the Monastic Walls, the architectural monument of national and world importance (from Ivan Kushnyk Tower to the South Tower) (building Nr. 92, protection Nr. 4/14);
 - Restoration and adaptation of Ivan Kushnyk Tower, the architectural monument of national and world importance (building Nr. 88, protection Nr. 4/16);
 - Restoration and repair work with the adaptation of St. Onufriy Tower, the architectural monument of national and world importance (building Nr. 83, protection Nr. 4/15);
 - Restoration and adaptation of the Library of Metropolitan Flavian, the architectural monument of local importance (building Nr. 5, protection Nr. 893/14-Kv).
1. Restoration and adaptation of the Trinity Gate Church, the architectural monument of national and world importance.

The restoration of the monument started in 2018.

The full completion of the project provides the adaptation of part of the premises of the first and second floors of the building for exhibition purposes; landscaping of the territory; completion of the renovation of facades and restoration of monumental painting of the western and eastern facades; conservation of monumental painting in the interior of the church, etc.

In 2021, the following work have been accomplished: decoration of the western, northern and southern facades; restoration of monumental painting and icons on metal base on the western facade; cleaning of dirt and soot from the surface of the monumental painting in the interiors of the church; installation of a gilded cross and ripidias on the western, northern and southern facades; replacement of copper covering of gables, window sills and covers of architectural details; production of forgings for the entrance group to the church; landscaping of the surrounding area; installation of a ceramic tile floor on the first floor; dismantling of the granite steps of the entrance porch to the church for the purpose of further restoration and installation of a new foundation for the porch; dismantling of scaffolding from the western, northern and southern facades; arrangement of external heating and electricity networks. The restoration works are conducted under the on-site designer supervision in compliance with design decisions.

The completion status of the project is 75.5%.

In 2022, it was planned to complete the repair and restoration work and commission the project.



Territory of the monument

Before restoration

After restoration



Western façade of the monument

Before restoration

After restoration



Fragment of Holy Princess Olga monumental painting
Before restoration



After restoration

2. Emergency work on section 3 of the Defensive Walls around the Near and Far Caves, architectural monument of national and world importance (building Nr. 93, protection number 867/3)

The project provided for the elimination of the emergency state of a part of the monument by installing injection piles, restoration of the brick masonry section with mesh reinforcement, and strengthening the retaining wall by installing an additional concrete base under the foundation.

In 2021, the restoration of the destroyed brickwork of the walls was performed with subsequent injection of the emergency section of the walls with a strengthening solution; reinforcement of emergency sections of walls by installing piles; the arrangement of the reinforced concrete grid; concreting of reinforcing, horizontal strands; repair of rainwater drainage; installation of a concrete slab made of fiber concrete; fixing the soil base of foundations with heliocomposite.

The completion status of the project is 100%.



Before restoration



After restoration



Before restoration



During restoration

3. Restoration of section 1 of the Monastic Walls, the architectural monument of national and world importance (from Ivan Kushnyk Tower to the South Tower) (building Nr. 92, protection Nr. 4/14)

The project provides for the implementation of emergency repair, restoration, renovation and rehabilitation, namely: repair of damaged and lost fragments of brick masonry, renovation of the original defensive functions – the rehabilitation of the wooden gallery along the northern wall with wooden stairs (on the side of the Metropolitan garden) as well as opening of the loopholes; the replacement of the covering of the crowning cornice and installation of a wood shingle roofing over the gallery all-round the structure. In addition, strengthening of foundations and waterproofing works are provided.

In 2021, the following works have been accomplished: dismantling of the wooden and metal structures of the protective covering of the monastic wall; dismantling of perimeter concrete paving; dismantling of the destructured brick masonry; strengthening foundations with an injection solution; installation of cut-off waterproofing of the wall by the method of injection with a special solution; preparatory works for the restoration and rehabilitation of the gallery arches.

The completion status of the project is 15.6%.

In 2022, it was planned to complete the repair and restoration works and commission the project.



Monastic walls before restoration



During restoration

4. Restoration and adaptation of Ivan Kushnyk Tower, the architectural monument of national and world importance (building Nr. 88, protection Nr. 4/16)

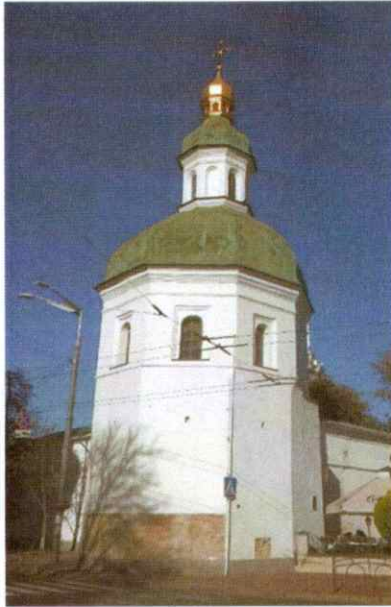
The project provides for a restoration with a maximum preservation of authentic architectural elements and structures of the monument with the reconstruction of the inter-level floor on the basis of historical documentation. The project also involves strengthening of the foundations, installation of waterproofing, strengthening of the tower structures by installing hidden inter-level metal braces in the outer walls, injecting existing cracks.

In addition, it is planned to restore the decoration of the facades and interiors of the monument, to repair and partially replace the carpentry, to restore the wooden structures of the dome, drum and cupola, to replace the entrance doors of the first floor with metal ones, and make the entrance doors giving onto the monastic brick wall.

In 2021, the following works have been accomplished: dismantling of small drum, cupola and cross of the tower, their restoration and gilding; strengthening of the foundations with an injection solution; restoration of the walls masonry.

The completion status of the project is 22.11%.

In 2022, it was planned to complete the repair and restoration works and commission the project.



General aspect of the monument
from the south-west side



Restoration in progress

5. Restoration and repair work with the adaptation of St. Onufriy Tower, the architectural monument of national and world importance (building Nr. 83, protection Nr. 4/15);

The restoration of the monument was resumed in 2018.

The completion of the project provides for the restoration of facades, completion of interior finishing works, equipment of exhibition premises and improvement of the surrounding area. The project also defines technological solutions for the adaptation of the tower's premises for the organization of the permanent exhibition dedicated to Hetman Ivan Mazepa.

In 2021, the following works have been accomplished: interior plastering; arrangement of floor structures; installation of door blocks; installation and testing of the heating and ventilation system; installation of sanitary appliances; installation of internal low power networks; installation of electrical systems.

The completion status of the project is 54.4%

In 2022, it was planned to complete the repair and restoration works and commission the project.



Interiors of the 3rd tier before restoration



Interiors of the 3rd tier during restoration



Interiors of the 1st tier during restoration



Interiors of the 2nd tier during restoration

6. Restoration and adaptation of the Library of Metropolitan Flavian, the architectural monument of local importance (building Nr. 5, protection Nr. 893/14-Kv)

The project envisages carrying out complex restoration work with full preservation of the historical aspect of the monument and its adaptation to multifunctional purposes (office, exhibition halls, conference and presentation halls), including the installation of modern utilities system.

In 2021, the following works have been accomplished: dismantling of interior equipment of walls and floors; strengthening of foundations by the method of pressing in reinforced concrete piles.

The completion status of the project is 6.75%.

In 2022, it was planned to complete the repair and restoration works and commission the project in 2023.



Restoration in progress

In 2022, no funding has been allocated to the conservation and restoration work because of the aggression of the Russian Federation against Ukraine and introduction of martial law.

Although, as of today, the Property's monuments are not destroyed by shelling during Russia's hostile attack on the territory of Ukraine, they are indirectly at risk of the destruction due to the lack of state funding to complete the restoration.

In addition to the mentioned projects, in 2022 it was planned to start restoration work on other cultural heritage monuments of the Kyiv-Pechersk Lavra Component that requires immediate preservation measures. These are, in particular:

Restoration of the monumental painting in the interior of the Church of the Savior at Berestove, the architectural monument of national and world importance (building Nr. 84, protection Nr. 2)

Restoration and adaptation of the architectural monument of national importance – the Church above the Economic Gate (Church of All Saints) (building Nr. 82, protection Nr. 4/12).

All the works carried out at the World Heritage Site during the reporting period were aimed at protecting the historical and cultural heritage in compliance with the requirements of international and national legislation in the field of monument protection and have a positive effect on the preservation of the Property's Outstanding Universal Value.

V. Public access to the state of conservation report

(Note: This report will be approved for public access in the information system of the World Heritage Center (<http://whc.unesco.org/en/soc>). If a State Party objects to the report being posted in full for public access only one page of the resume will be opened).

VI. Signature of the Authority

**Minister of Culture and Information
Policy of Ukraine**

Oleksandr TKACHENKO