

ANNEX VIIID

PRESENTATION ENGLISH SOPHIA.PDF

Mission Report
Joint World Heritage Centre/ICOMOS Reactive Monitoring
Mission to the World Heritage property
Kyiv: Saint-Sophia Cathedral and Related Monastic Buildings,
Kyiv-Pechersk Lavra

Kyiv, Ukraine
10 – 14 February 2020



**STATE OF CONSERVATION OF THE
WORLD HERITAGE PROPERTY
COMPONENT**

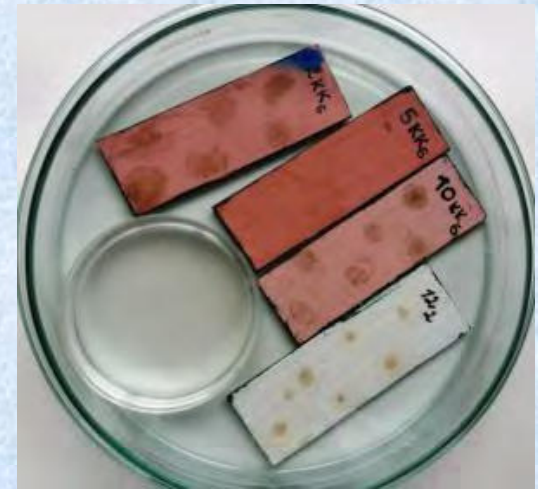
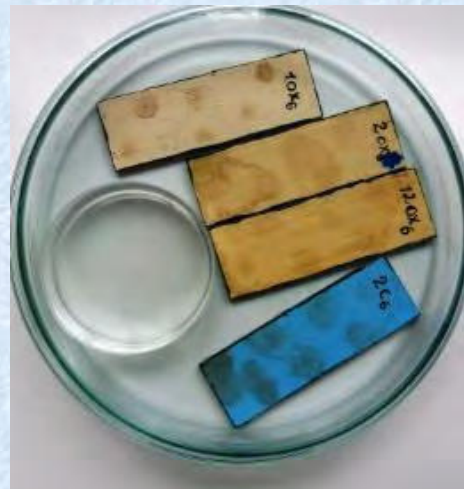
**“SAINT-SOPHIA CATHEDRAL AND
RELATED MONASTIC BUILDINGS”**

Scientific and research works:

A continuous comprehensive monitoring of the state of conservation of the monuments is carried out on the territory of St. Sophia Cathedral and monastic buildings to ensure the control over the stability of their constructions and necessary conditions of preservation, namely:

- hydrogeological monitoring of the territory;
- engineering and technical supervision of the state of the monuments;
- geodetic monitoring of deformations in the monuments and territories (sediments, rolls, fluctuation of the width of the opening of existing characteristic cracks);
- microclimate monitoring;
- termographic studies.

To prevent the development of the biodeterioration process and to assess the efficiency of the biodegrading agents' neutralization, the monitoring studies (control and periodic microbiological analysis) of the walls, wall painting and air of St. Sophia Cathedral, especially basements, are being continued.



Samples of probes

The following measures have been taken during 2019 in order to improve the monitoring:

- Extension of the hydrogeological supervisory network - arrangement of three additional wells;
- Arrangement of the system of monitoring of the temperature and humidity in the buildings;
- Conduction of comprehensive scientific and technical researches with determination of the following optimum and maximum permissible indicators in St. Sophia Cathedral:
 - temperature and humidity regime;
 - light regime;
 - air velocities of the internal air environment;
 - microbiological and chemical state of the air environment;
 - vibration and acoustic loads on the structures from the following factors: traffic, the sound of bells, church singing;
 - dynamic characteristics and stress-strain state of the building.

The following projects have been developed on basis of the researches conducted in 2019 :

- “Use regimes of St. Sophia Cathedral” – a set of rules, conditions, measures necessary to ensure the maintenance and functioning of the monument. The document must be approved by the central executive body in the field of cultural heritage protection;
- “Automated monitoring system of the monuments and territory of the ensemble of buildings of the National Conservation Area “St. Sophia of Kyiv”;
- “Modernization of the heating and microclimate system in St. Sophia Cathedral”.

Restoration and repair works:

Restoration works in St. Sophia Cathedral (the 11th c.)



Transept of the cathedral

Restoration works in St. Sophia Cathedral (the 11th c.)



Restoration works in the southern part of the space under the central cupola.
The eastern intrados of the southern wall arch. Fragment.

Restoration works in St. Sophia Cathedral (the 11th c.)



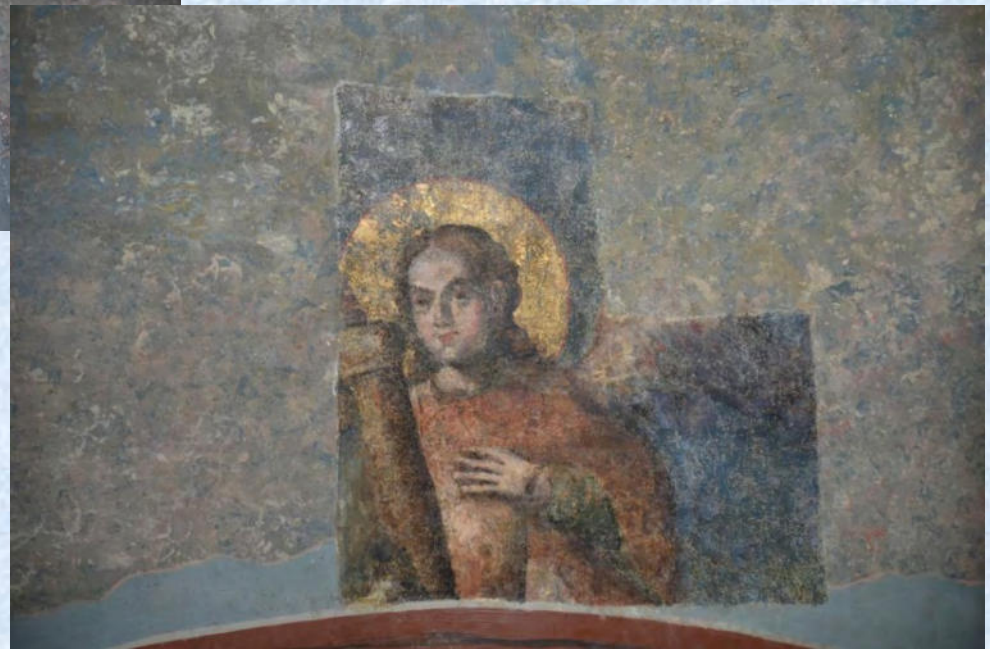
Restoration works in the southern part of the transept. The western part of the vault.

Restoration works in St. Sophia Cathedral (the 11th c.)



Restoration works in the southern part of the transept. The western part of the vault.

Restoration works in St. Sophia Cathedral (the 11th c.)



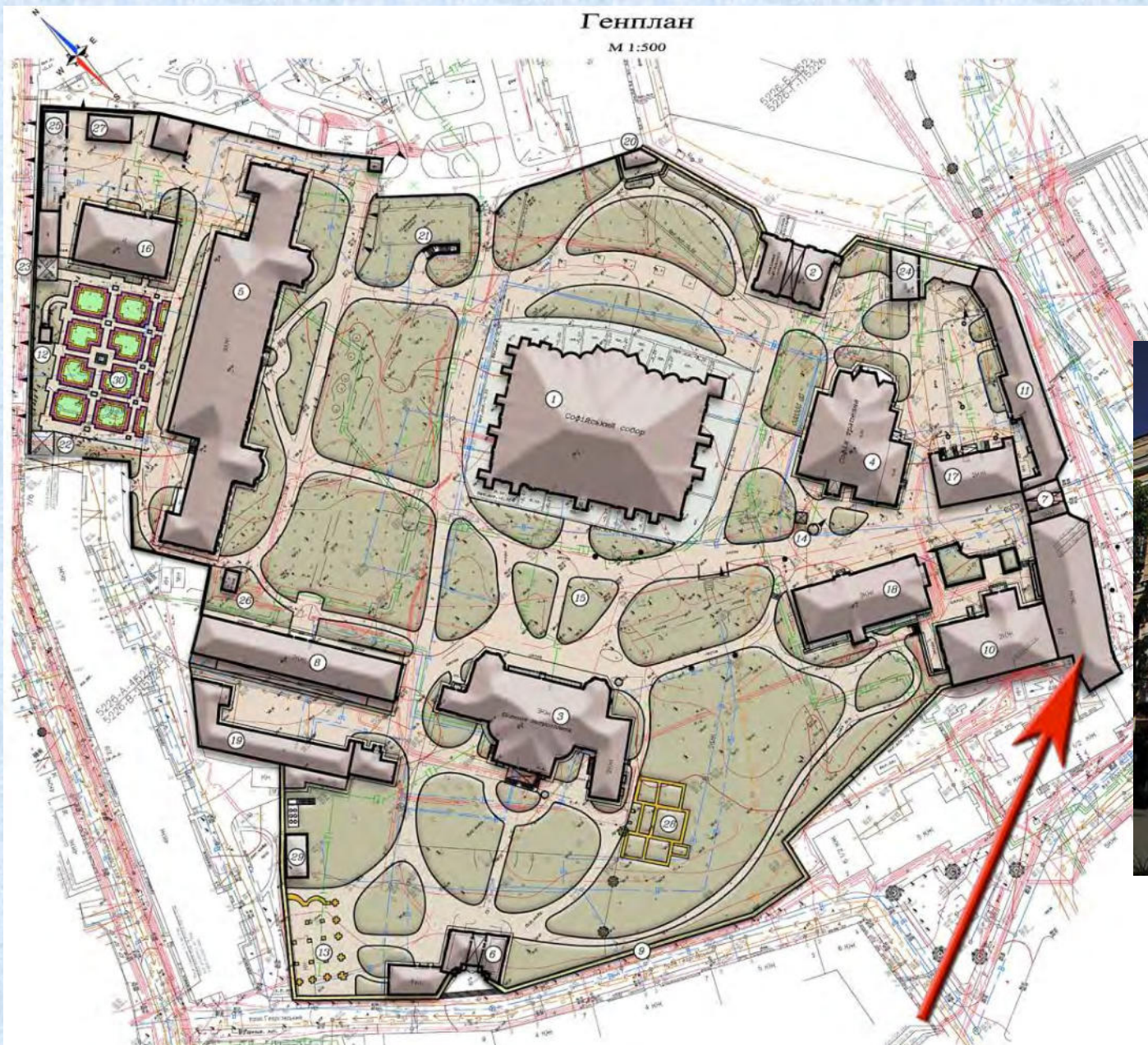
**Restoration works in St. Nicholas chapel. Altar part.
The western side of the drum. Fragment.**

Restoration works in St. Sophia Cathedral (the 11th c.)



Restoration works in the southern part of the transept and the southern part of the dome space.

The Consistory Building (the 18th c.)



The process of restoration and repair works in the Consistory



The process of restoration and repair works in the Consistory



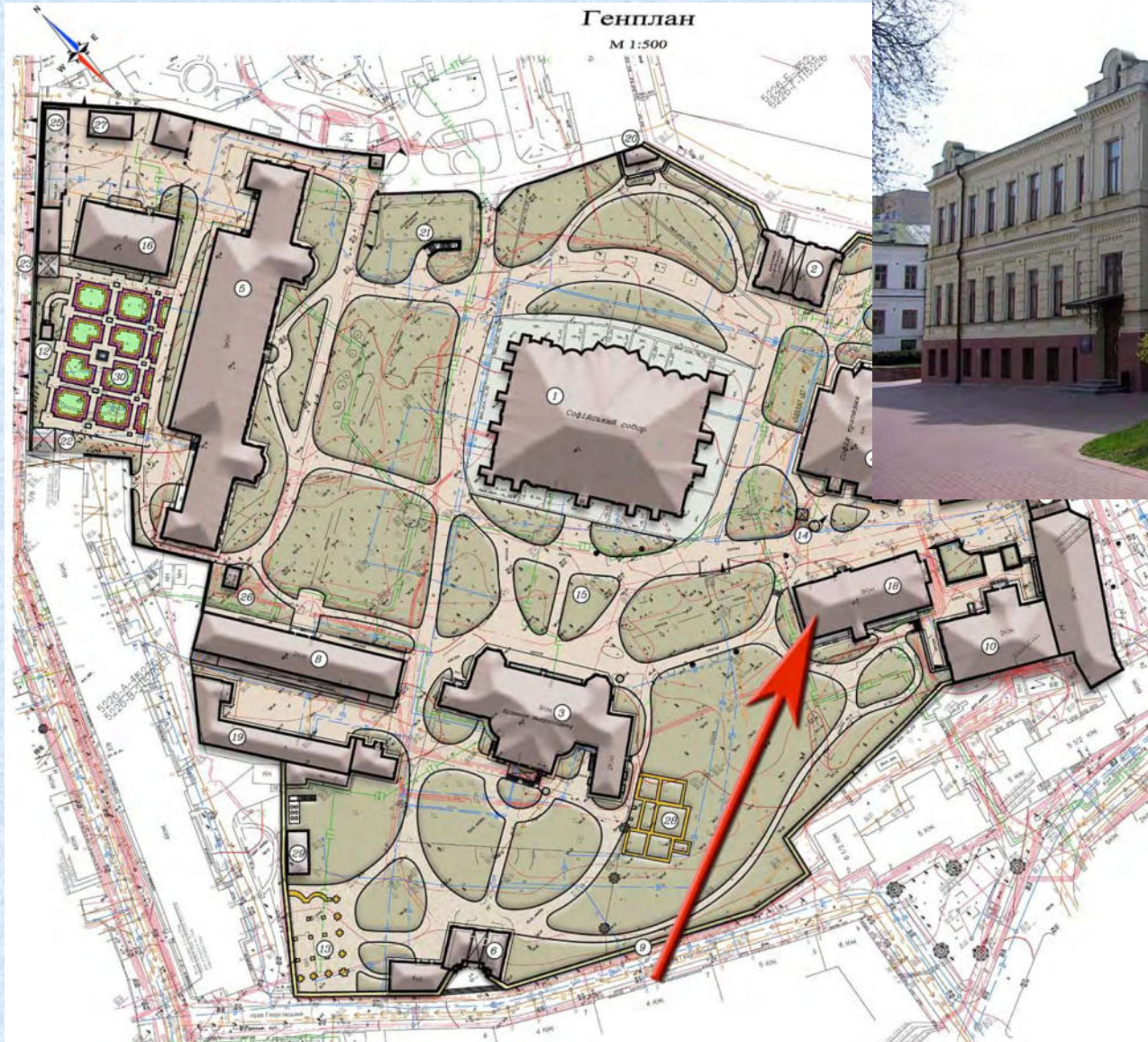
Repair and Restoration works of the walls

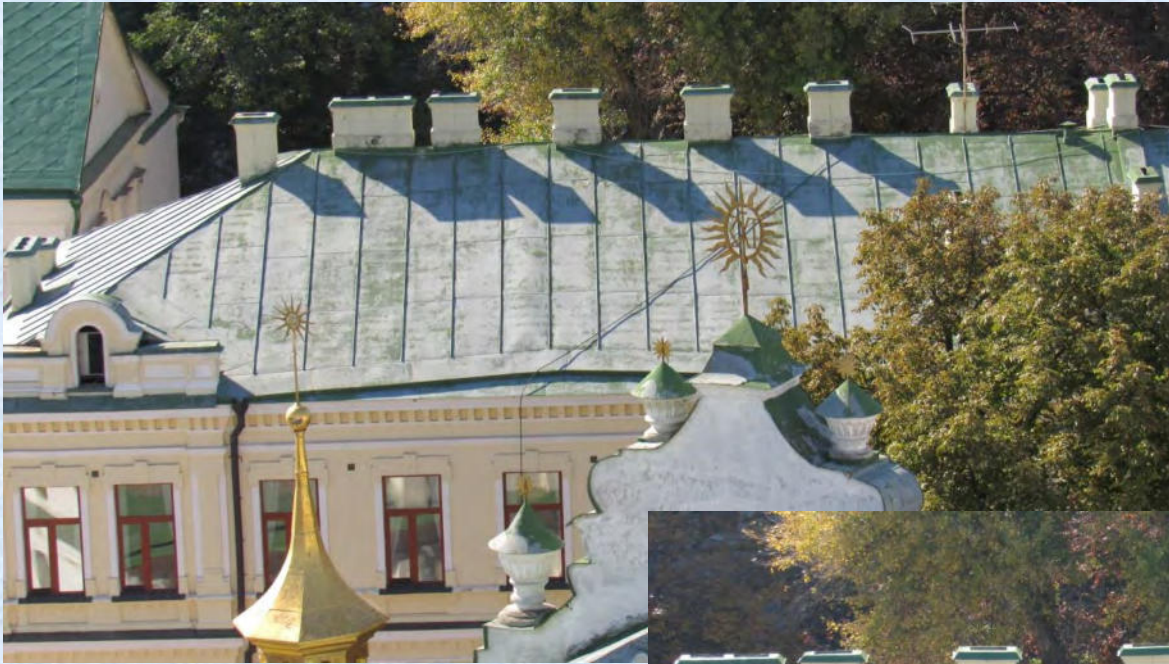


Ongoing repair (painting)
of the roofs of the following buildings:

- the architectural monument of the 18th century – the Building of the cells of the Cathedral Elders (protection No. 260072/8-H);
- the architectural monument of the 19th century – the Wall Cells (protection No. 260072/8-H);
- the former carriage premises;
- the Bell Tower;
- the Bakery.

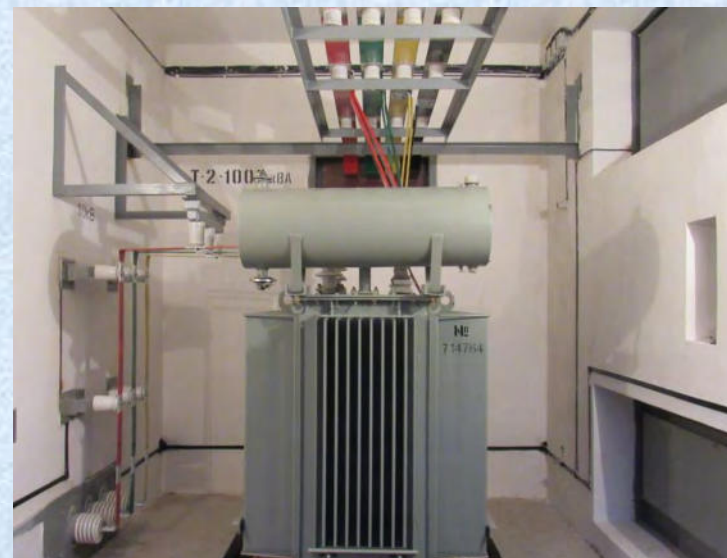
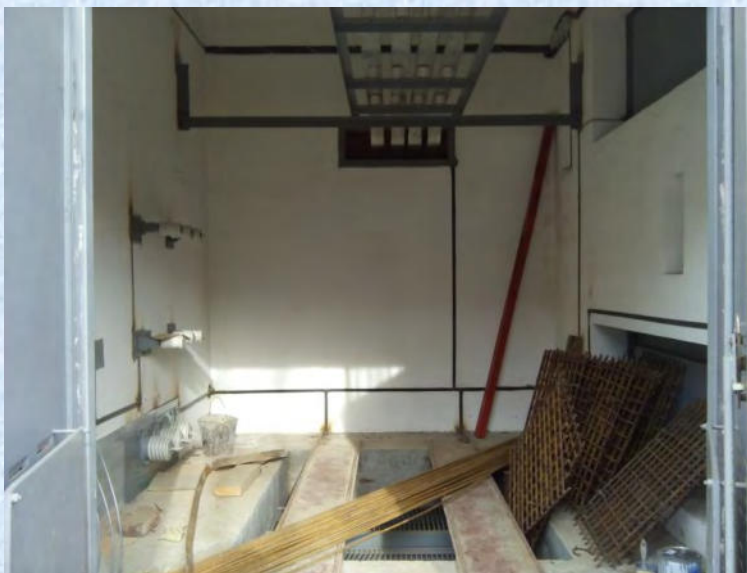
Building № 3





Ongoing repair of the roof

Modernization of equipment in technical premises and reconstruction of lighting in the territory of St. Sophia Cathedral courtyard



Improvement of the northern part of the territory (territory behind Seminary)



Ongoing repair works on the facades of the monuments



Design works

The developed projects:

- “Restoration with replacement of the window filling of the 2nd floor of the monument of architecture, history, monumental art of national importance – St. Sophia Cathedral (protection No. 260072/1-H) of the National Conservation Area “St. Sophia of Kyiv”;
- Comprehensive project “Repair and restoration works on the monument of national importance – the **Refectory**, the 18th century”;
- “Creating barrier-free accessibility to **St. Sophia Cathedral, Refectory, Metropolitan's House, Zaborovsky Gate** for people with disabilities and other low-mobility groups”.
- Comprehensive project “Restoration of the **Seminary (Bursa)** with adaptation to a museum center of the National Conservation Area “St. Sophia of Kyiv” is under development.

“Reconstruction of the building of the public toilet” with its adaptation to:



**a toilet for people with disabilities,
a room of a mother and child, a room for visitors' belongings;**

Monuments that are unfit for
appropriate use and require
immediate restoration

The Seminary (Bursa) (the 18th c.)

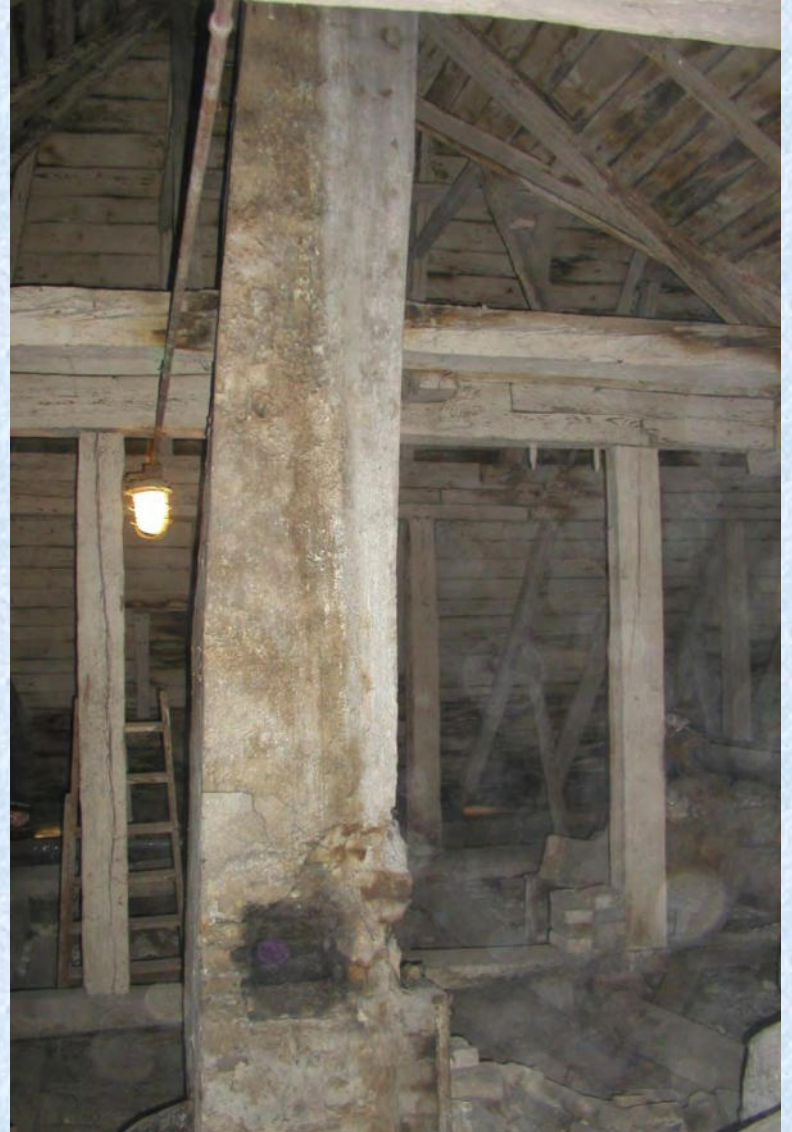


Requires urgent resettlement of tenants for complex restoration work

Condition of load-bearing structures



Condition of roof structures



**Condition of the facades of
the building**



Condition of the interiors



Visualization of Bursa interiors according to the project of restoration with adaptation to the museum center of National Conservation Area “St. Sophia of Kyiv”

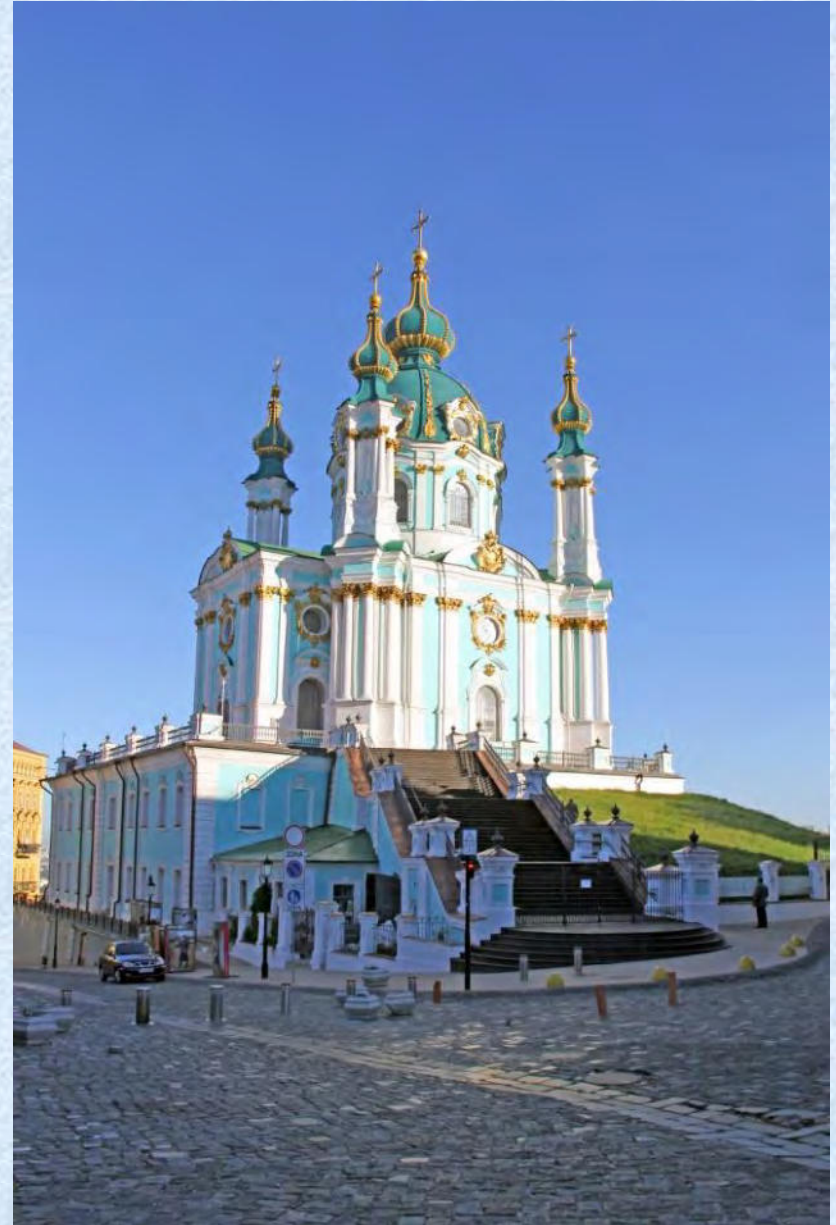
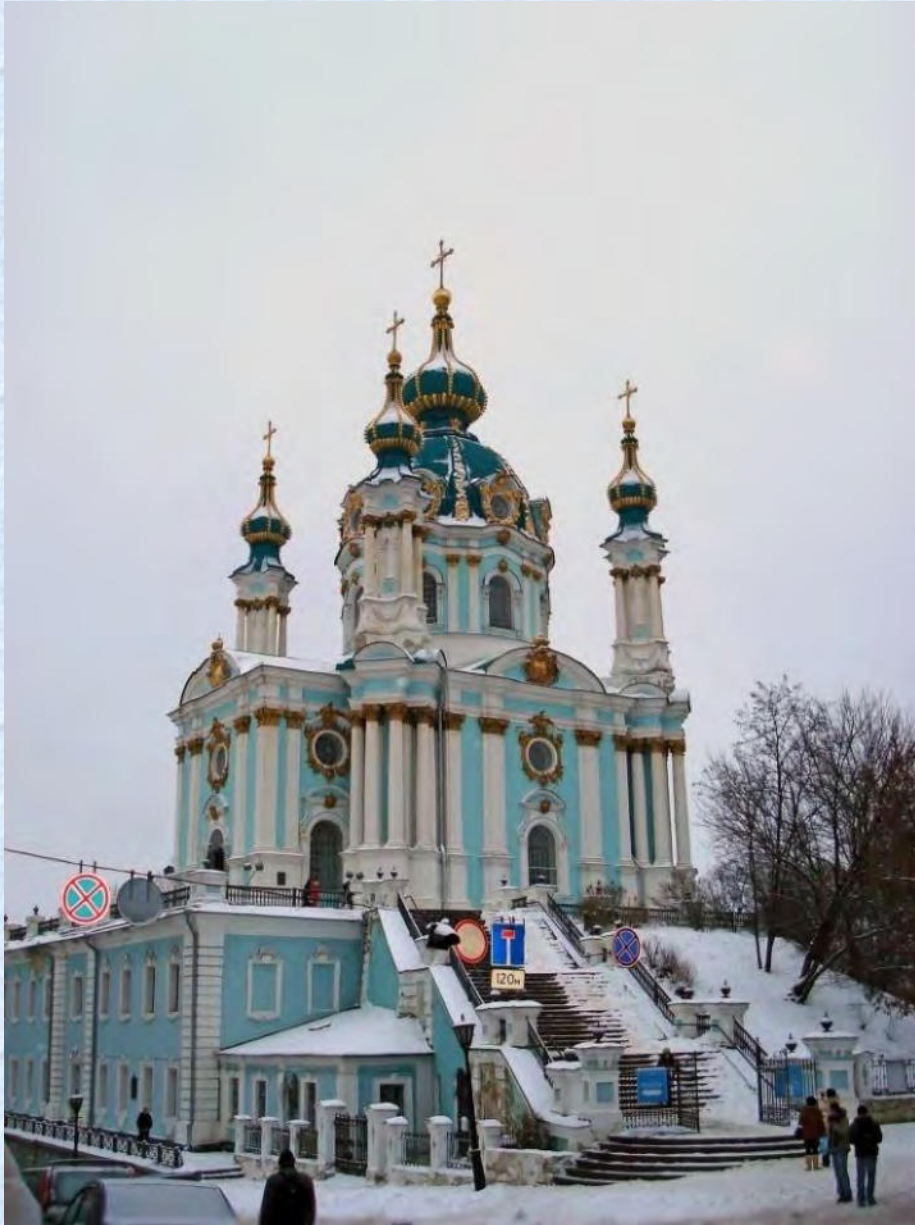


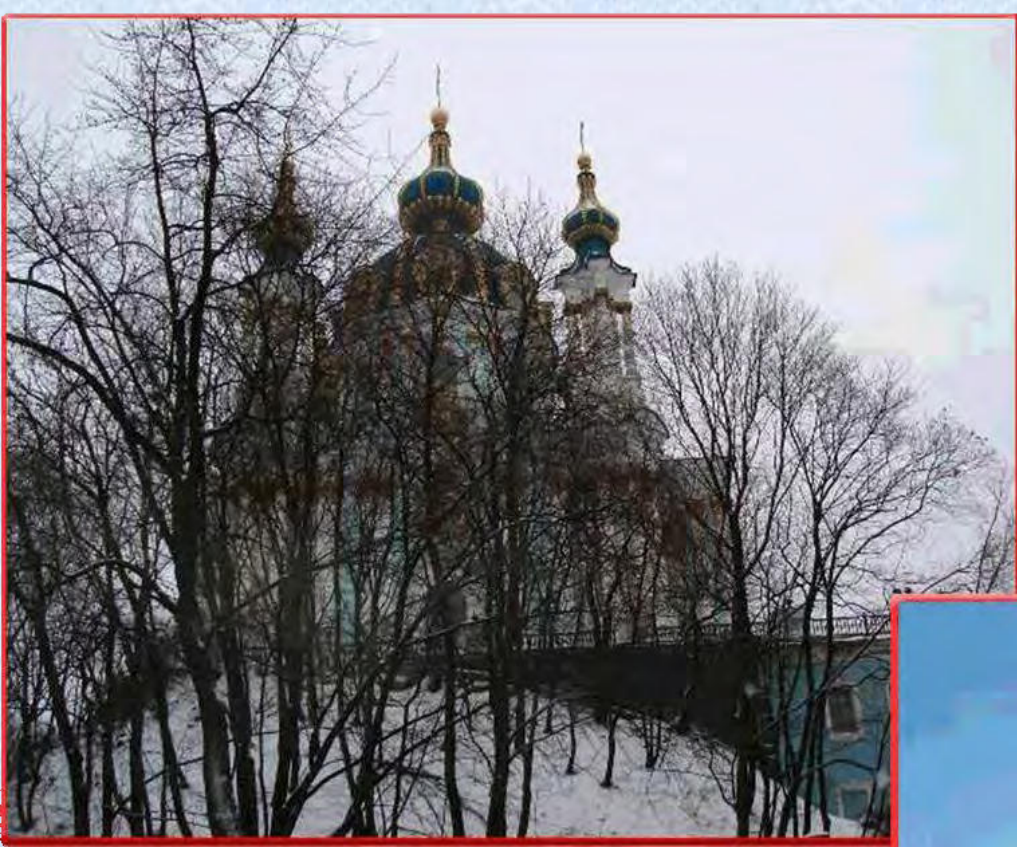
**ST. ANDREW'S CHURCH, THE MONUMENT OF
THE CONSERVATION AREA LOCATED WITHIN
THE BUFFER ZONE AND INSCRIBED TO THE
TENTATIVE LIST AS THE EXTENSION OF THE
WORLD HERITAGE PROPERTY
“KYIV: SAINT-SOPHIA CATHEDRAL AND
RELATED MONASTIC BUILDINGS, KYIV-
PECHERSK LAVRA”**

St. Andrew's church (the 18th c.)

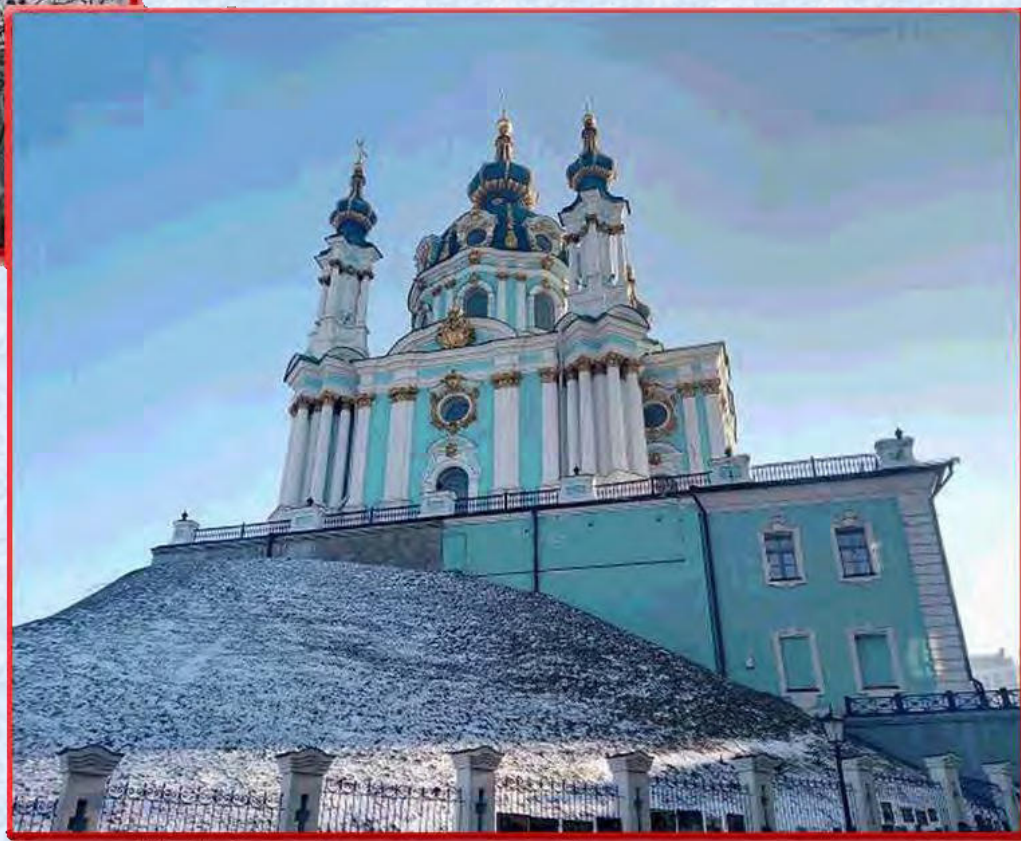


Repair and restoration works in St. Andrew's church (the 18th c.)

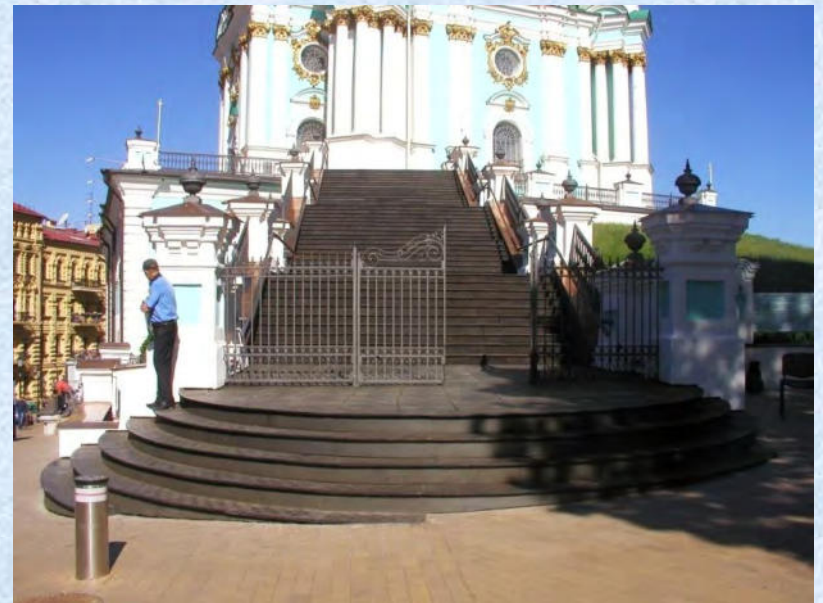




Complex of repair and restoration works in St. Andrew's church. The view before the beginning of the works and on January, 2017.



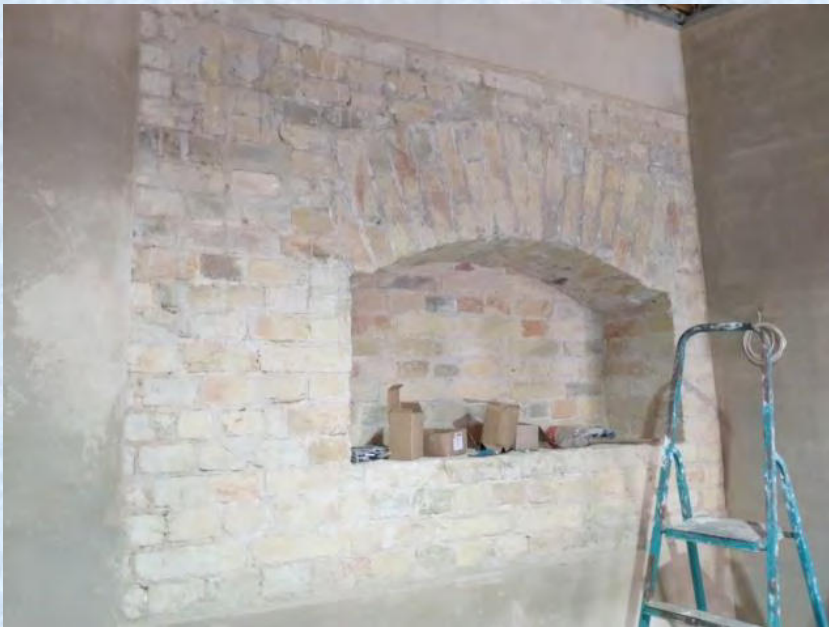
Restoration works of facades and stairs



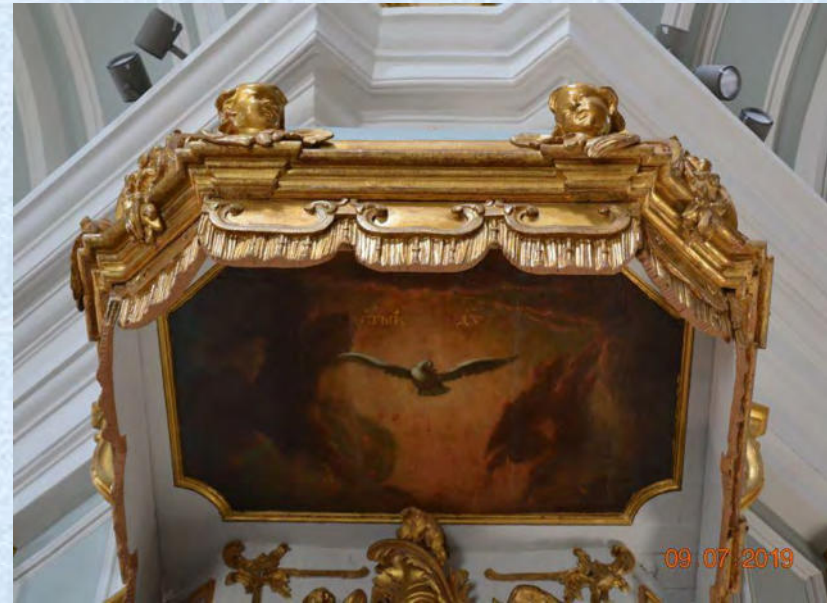
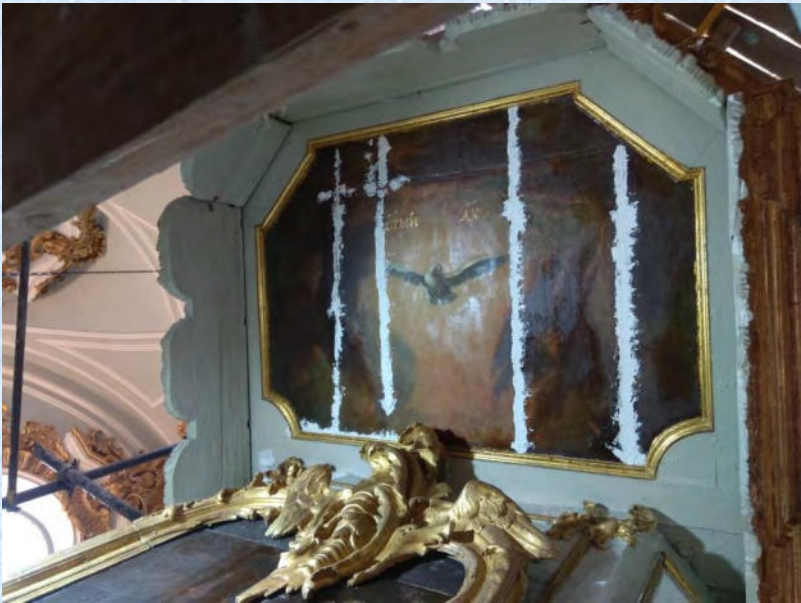
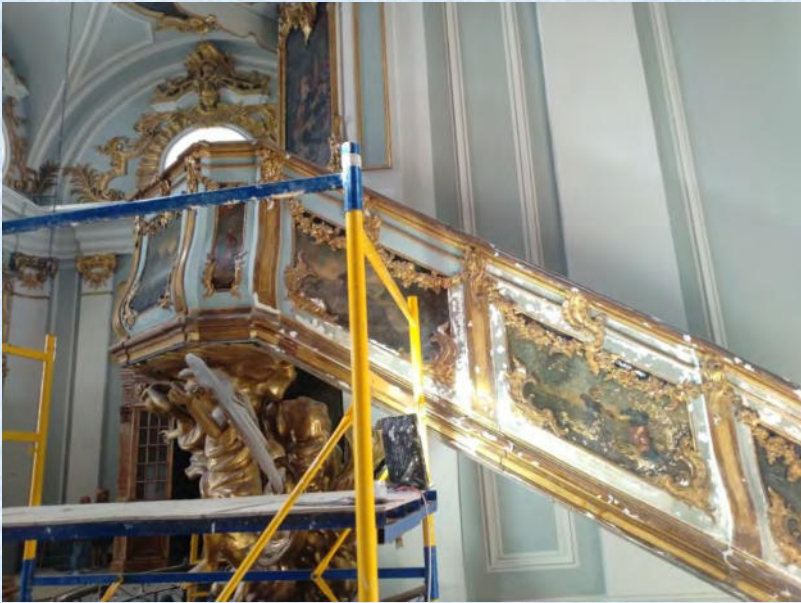
Restoration works of facades



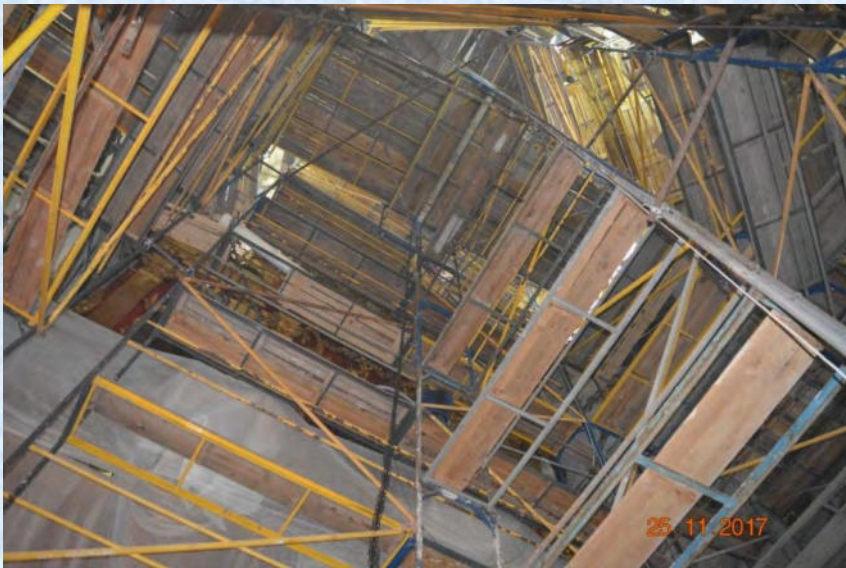
Restoration works in the building



Restoration works in the church



Restoration works in the interior of the church



Restoration works



Before



After

Restoration of the decorated ceiling on the western vault of the church with depiction of Apostle Andrew erecting a cross on Kyivan hills



Before Restoration 2015

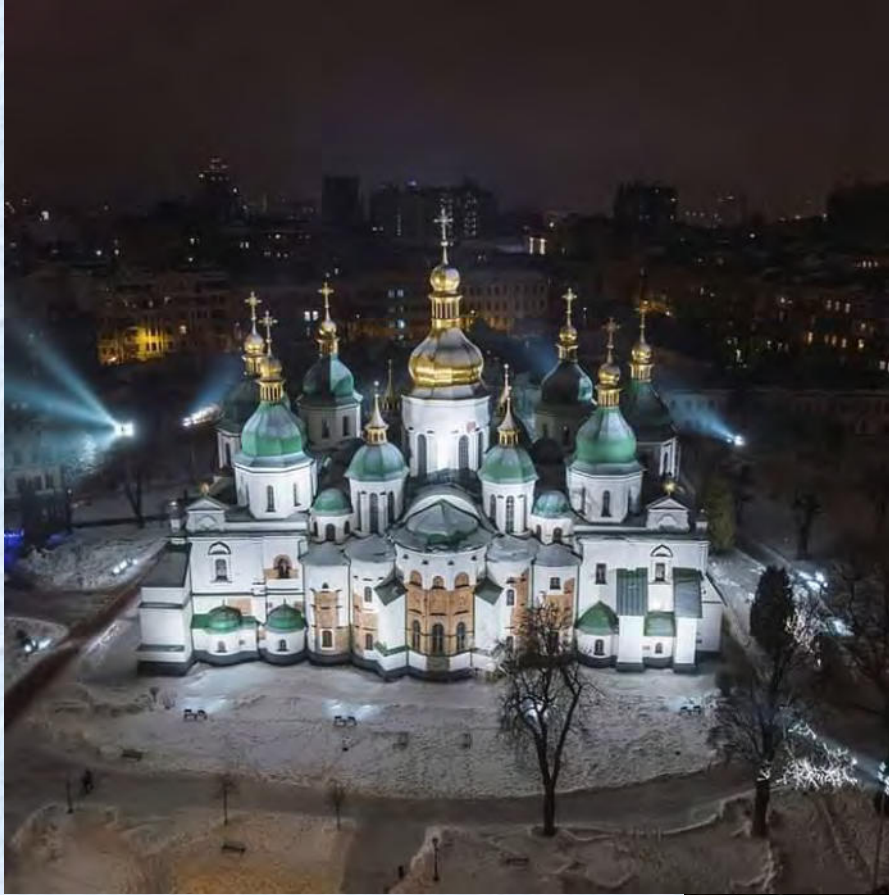


After Restoration 2018

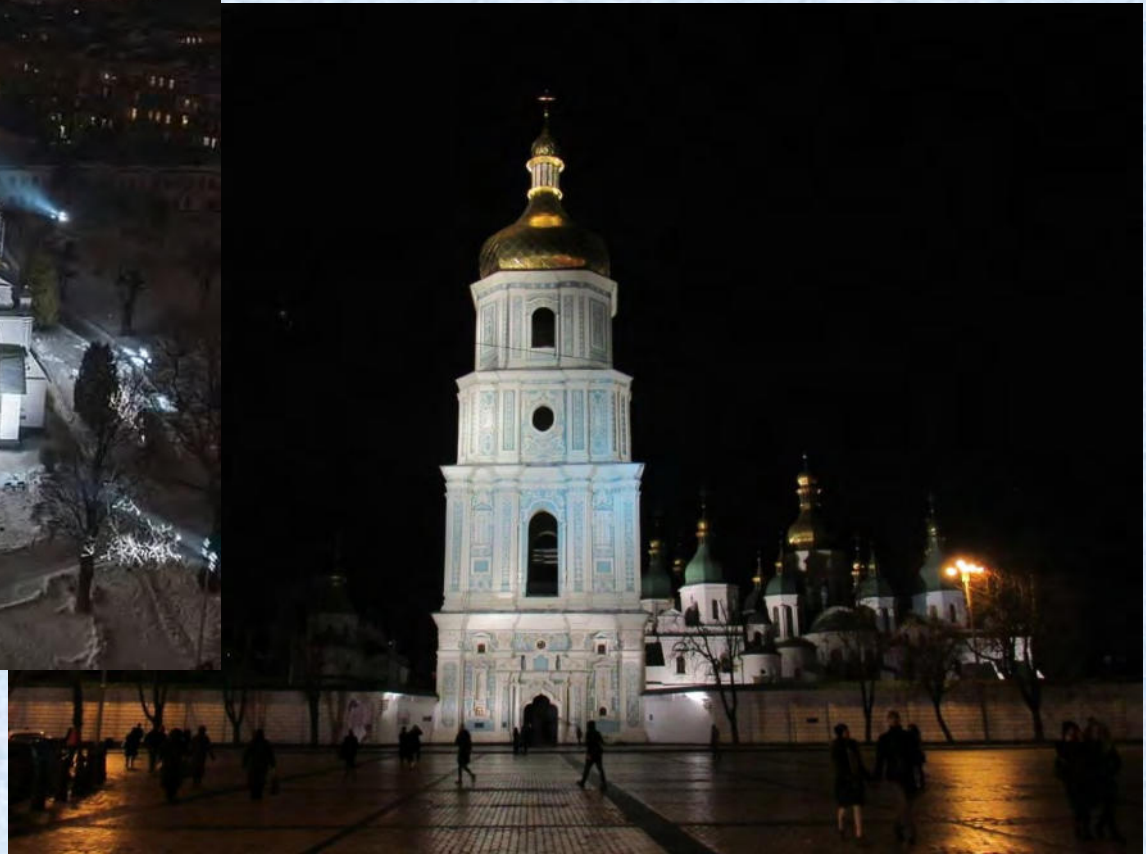
Carrying out restoration works in St. Andrew's church



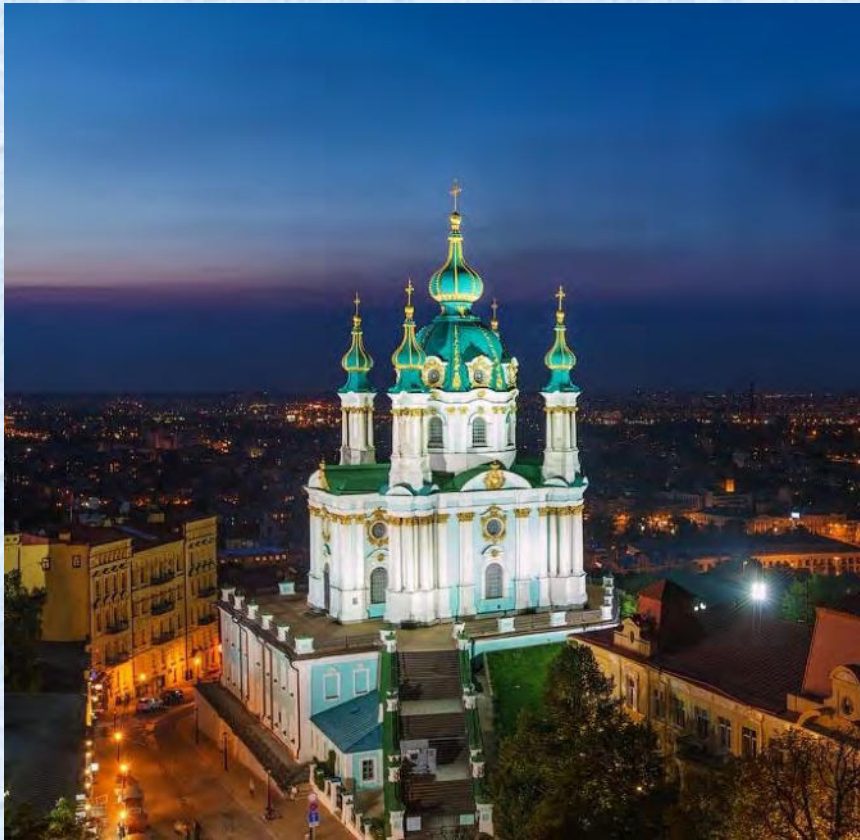
Modernization of the lighting of the monuments of national importance on the Property and within the buffer zone



**St. Sophia Cathedral, the
11th century**



**Bell Tower, the 18th
century**



St. Andrew's church, the 18th century.



Golden Gate, the 11th century.