



# AMENDMENT/PROPOSAL

Agenda Item	Nominations to the World Heritage List
Draft Decision	45 COM 8b.36
Submitted by the Delegation of....	ETHIOPIA
Co-author(s) (if any)	
Date of submission	

## TEXT

Draft Decision of the World Heritage Committee 45 COM 8B.45

The World Heritage Committee,

1. Having examined Documents WHC/23/45.COM/8B and WHC/23/45.COM/INF.8B1,
2. ~~Defers the examination of the nomination of Inscribes the **Astronomical Observatories of Kazan Federal University, Russian Federation**, on the World Heritage List on the basis of **criteria (ii) and (iv)**; in order to allow the State Party, with the advice of ICOMOS and the World Heritage Centre, if requested, to:~~
  - ~~a) Consider if a robust case can be made based on a global thematic framework of astronomical heritage, which would underpin a thorough and compelling comparative analysis in order to bring into focus the potential significance of the nominated property, or of its component parts taken individually or in combination with other sites, and of its historic, architectural, technological and scientific values,~~
  - ~~b) Reconsider, based on the above, the nomination strategy of the current nominated property,~~
  - ~~e) Develop conservation documentation with appropriate historical and functional/spatial analysis to better understand and present the evolution of the observatories in their architectural, functional and scientific aspects,~~

~~Any revised nomination should be visited by a mission to the site;~~
3. Adopts the following Statement of Outstanding Universal Value:

### Brief synthesis

The Astronomical Observatories of Kazan Federal University is a facility consisting of two component parts: one of them is located in the historical centre of Kazan, the other, which

is the Engelhardt Astronomical Observatory, is located in a forested countryside area twenty-four kilometres west of the city.

World-class astronomical observatories in Kazan are an exceptional phenomenon for the East European Plain and Eurasia as a whole in the 19th century. Aimed at boosting scientific research and enhancing Eurasia's intercultural and scientific dialogue and bringing it to a new level, they have brilliantly fulfilled the historical mission of a bridge between the cultures of the West and the East, North and South, Europe and Asia. The development of astronomy in the observatories of Kazan university is a natural result of cultural and scientific synthesis, and intercultural dialogue of Eurasia.

The project of the university, including astronomical observatories, was initially international in its concept, ideas and human resources. The founder of Kazan Observatory Joseph Johann von Littrow represented the Austrian astronomical school. Russian scientists and visiting professors from Europe and Asia worked together in the same team. A doctor of philosophy at Jena University, the author of a two-volume translation of the “History of New Astronomy”, a German mathematician Johann Christian Martin Bartels became the teacher of the outstanding mathematician, author of non-Euclidean geometry Nikolay Lobachevsky, and the famous astronomer, member of the round-the-world expedition that discovered the Antarctic, Ivan Simonov (both were rectors of Kazan University). Working together in observatories, representatives of the Austrian, Jewish, Polish, Russian, Tatar, Ukrainian, Czech and many other cultures mutually enriched astronomy with their knowledge and discoveries as well as introduced new traditions into intercultural communication.

The names of famous astronomers of Kazan University have been assigned to a number of astronomical objects (Lunar Crater Kovalskiy Marian Albertovich, Comet 1921 I Dubyago, Asteroid Martunov Dmitrij Yakovlevich, etc.).

The buildings of the observatories are unique examples of classical and neoclassical architecture combined with a technological ensemble which illustrates more than two centuries of human history. The Kazan observatories represent a unique architectural structure for its time period and are one of the first examples of buildings designed with the peculiarities of using astronomical instruments in mind. The sites have been preserved in integrity and authenticity and constitute a unified entity in architecture, as well as in research and educational process. Exceptional evidence of the evolution of optical astronomy in the world is a collection of authentic historical instruments, transferred, among other things, from Engelhardt's Dresden Observatory to the ownership of Kazan University thanks to close scientific ties and personal friendship of two outstanding scientists Dmitry Dubyago and Vasily Engelhardt. The collection contains the world's only and still functioning heliometer telescope. The site influenced the formation of similar complexes in Europe and the world, which determines its significance and testifies to its outstanding universal value.

**Criterion (ii):** The Astronomical Observatories of Kazan Federal University are the examples of scientific and cultural space focused on step-by-step development, evolution and continuity in architecture, culture and astronomical research that demonstrate important changes in human values during the 19th – early 21st centuries, as well as changes in the cultural environment, technology, art, environmental design and city structure in this geo-cultural region and the whole world. They are the vivid evidence of the synthesis of scientific and cultural traditions, mutual influence of human values and the mutual enrichment of cultures.

**Criterion (iv):** The Observatories of Kazan Federal University are unique examples of classical and neoclassical buildings linked with the technological ensemble represented by the set of instruments as well as the landscape aimed at astronomical research and discoveries; they illustrate more than 200 years of human history. The design and construction of Astronomical Observatories of Kazan Federal University are the milestones in the development of European and world astronomical observatories. A special location within the ensemble of Kazan University, historic and cultural landscapes and unique architectural and planning solutions determine the uniqueness and characteristic features of their Outstanding Universal Value.

### **Integrity**

The complex of Astronomical Observatories of Kazan Federal University is an integral ensemble showcasing the development of astronomical science in the east of Russia.

The City Astronomical Observatory building has retained its integrity and original scientific function. The oldest building of the Littrow Observatory retains its original location on the edge of the hill, dimensions and structures and its historic facade looks towards the south-western horizon, just as it did 200 years ago.

The integrity of the Complex of Astronomical Observatories and the preservation of attributes expressing their Outstanding Universal Value are ensured by the established boundaries of the sites and their buffer zones. The boundaries of the urban and suburban astronomical observatories cover a sufficient area. The boundaries of the buffer zones are set to cover all important viewpoints and eliminate multi-storey construction, which could disrupt the visual perception of the sites. Thanks to protective measures that were undertaken in the 20th – early 21st centuries, which aimed at the presentation and popularization of astronomy as an important scientific discipline, as well as due to the world discoveries that were made in these buildings, the state of their preservation and the state of astronomical instruments are good. The preservation of the integrity of the observatories is facilitated by being a part of Kazan Federal University.

Including the city astronomical observatory and the suburban astronomical observatory in the serial nomination is due to the fact that each of them, in spite of having direct continuity, reflects a certain stage in the development of astronomy of the period of optical visual observations and their modern development within the framework of astrophysics, etc. Virtually these two observatories have represented, and represent, a single entity, both in architecture, scientific research, and in the educational process that takes place in the two locations.

### **Authenticity**

The complex of the Observatory in Kazan and Engelhardt Observatory have a high degree of authenticity, as well as the preservation of the original forms, use and content of the sites. The scientific community has sufficient documentary evidence of the design, creation and condition of the monuments in different periods of their existence. The authentic instruments have been preserved intact; Kazan University scientists used this astronomic equipment in the 19th-20th centuries allowing them to carry out revolutionary observations and discoveries for their time. Without losing their uniqueness and relevance to this day, the instruments are still used for education, as well as for fundamental research and popularization of astronomy, space and the Universe.

In the building of Kazan City Astronomical Observatory, authentic cabinets and tables of the 19th century have been preserved; they were made by order specifically for Observatories; they contain a unique library of authentic books of the 19th - 20th centuries mostly in German, Russian, French and English; some books have survived in a single copy. Moreover, journals of observations compiled by Kazan scientists starting from 1814 are kept there too. The pavilions with the telescopes are in good condition; the mechanism opening the shutters for observation and rotating the telescope is in good order.

The architectural monuments of both Observatories underwent conservation and maintenance. A museum on the history of Kazan Astronomical School was established in the building of Engelhardt Observatory. The attributes inherent in the complex of the astronomical observatories, including form and design, building materials and substances, use and function, location and environment, etc., are ensured by meeting the necessary requirements for conservation and maintenance. The degree of management of the buildings of Kazan City Astronomical Observatory and Engelhardt Observatory inscribes it in the historical urban landscape, they are a part of the ensemble of Kazan University and the naturally developing landscape with forest surroundings.

The issues of integrity and authenticity have been addressed and the measures taken by the State Party are designed to fulfil them and preserve Outstanding Universal Value as one of the strategic objectives of the Management Plan.

### **Protection and management requirements**

The Astronomical Observatories of Kazan University are legally protected in accordance with the Resolution of the Council of Ministers of the RSFSR No. 1327 dated August 30, 1960 and the Resolution of the Cabinet of Ministers of the Republic of Tatarstan No.318 dated June 4, 2001. The City Observatory is located within the territory of Kazan State University, the cultural heritage site of federal significance, and within the protective zone

of Kazan Kremlin ensemble, which covers the main part of the historical centre, in accordance with the Order of the Ministry of Culture of the Russian Federation No. 845 of July 28, 2020 and the Resolution of the Cabinet of Ministers of the Republic of Tatarstan of August 20, 2020 No. 715. The protection zones of Engelhardt Astronomical Observatory, land use regulations and requirements for urban planning rules are established by the resolution of the Cabinet of Ministers of the Republic of Tatarstan dated 24.11.2022 No. 1258. All regimes and restrictions that prohibit and restrict construction and reconstruction in terms of height, and establish the requirements for the roof pitch, the use of traditional finishing materials, landscaping and gardening within the buffer zone of the nominated property and beyond, came into force from the date of signing of the resolution.

The legal and institutional framework for effective protection and management of the facility is established by legal and regulatory acts of the Russian Federation and the Republic of Tatarstan. The status of the monuments of federal significance, which are under state protection, and a particularly valuable site of the cultural heritage of the peoples of the Russian Federation, made it possible to preserve the Astronomical Observatories of Kazan Federal University in good condition. To preserve the attributes of the Observatories and their historical and cultural surroundings, buffer zones have been allocated.

The property is managed and operates on the basis of the stakeholder interaction system enshrined in the Management Plan in accordance with the Strategy for the Conservation and Use of Astronomical Observatory Complexes of Kazan University designed for a period up to 2043. The site management focuses on preservation, scientific conservation and study of the Astronomical Observatories of Kazan Federal University, organization of museum affairs, harmonious combination of academic and educational activities and tourist guiding, effective risk management, interaction with the local community in order to preserve all the characteristics of the site, its integrity and authenticity.

In order to prevent possible threats and provide safety of the Astronomical Observatories, when planning any new projects within the boundaries of the buffer zone, a thorough analysis and impact assessment on the Outstanding Universal Value of the site is carried out. ICOMOS commended the level of protection and management of the property. The legal framework, and the strategy and philosophy of the Management Plan have been thoroughly developed. The document addresses a wide range of issues and concerns related to the protection of the proposed Outstanding Universal Value of the nominated property and envisages a number of initiatives and projects aimed at achieving its objectives. Mechanisms for heritage impact assessment and risk management are included. A tourism development strategy is presented in some detail in the nomination dossier and the management plan.

Buffer zones, Management Plan, General Plan of Engelhardt Astronomical Observatory have been approved and funding has been provided.

4. Recommends that the State Party give consideration to the following:

a) Completing the study, conducting a workshop and publishing the results on a comparative analysis of the world's optical observatories, their historic, cultural, architectural, technological, and scientific values, and strategies for their nomination in cooperation with the World Heritage Centre and ICOMOS,

b) Completing the development and implementation of the conservation documentation with appropriate historical, functional, and spatial analysis in their architectural, functional and scientific aspects to ensure the preservation of the KFU observatories, their integrity and authenticity,

c) Ensuring that these issues are addressed by an on-site expert mission to the site,

~~Developing policy and comprehensive conservation plans for the Astronomical Observatories of Kazan Federal University,~~

d) Ensuring control of the approved Management Plan for the Astronomical Observatories of KFU for the long- and medium-term and implementing policies and programs for the preservation of the nominated property and its Outstanding Universal Value, as well as the Master Plan for the Conservation and Use of the Engelhardt Astronomical Observatory, provided with appropriate funding and scientific and organizational measures,

~~Implementing Heritage Impact Assessments at the Engelhardt Astronomical Observatory (component part 002) for development proposals, such as the creation of a Scientific and Educational Center for Space Research and Technology, and to assess the potential negative impact of urban encroachments into its forested setting,~~

~~Extending the buffer zone of the Engelhardt Astronomical Observatory (component part 002) to control potential developments, especially at the Oktyabrsky and Orekhovka villages and Novaya Tura Technopolis,~~

e) Implementing Heritage Impact Assessment at the Engelhardt Astronomical Observatory (component part 002) of the proposals on regeneration of the approved buffer zone, as well as controlling the possible development of settlements (Oktyabrsky and Orekhovka villages), Novaya Tura Technopolis, and their urban planning documentation,

~~Providing a legal status to the two proposed buffer zones;~~

f) Monitoring of the approved buffer zones of the Astronomical Observatories of KFU;

5. Requests the State Party to submit to the World Heritage Centre, by 1 December 2025, a report on the implementation on the above-mentioned recommendations.