

DIVISION C / HERITAGE OF SPACE EXPLORATION

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TRIENNIAL REPORT 2016-2018

1. Representation from UNESCO (Anna Sidorenko) and ICOMOS (Michel Cotte)

It is aware that "owing to the complexities of serial nominations it is likely that at least 2 or 3 triennia will be need to achieve tangible results in terms of nominations, but it is possible that an ICOMOS-IAU Thematic Study could be completed on a shorter timescale" (quoted from the Commission C4 guidelines).

2. Summary of the work to be done (According to Dr. Clive Ruggles, President, Commission C.4):

Advance the "Odyssey of human creative genius" project, which focuses on technological heritage connected with space exploration. Specifically:

- i. To set up an international team of specialists composed of representatives of the leading space agencies, interested countries and other international bodies to collect proposals and to undertake related activities aimed at endorsing Space Technology as a segment of Astronomical Heritage in the context of the UNESCO World Heritage Convention.
- ii. To develop a tentative proposal of fixed sites and space facilities pertaining specifically to technological heritage related to space astronomy and/or generally to space science, as well as a draft approach for the implementation of the proposal.
- iii. To work closely together with the International Expert Working Group created by UNESCO in 2012 in order to specify the main issues relevant to the WG's goal to progress with Space Technology recognition as a branch intrinsically related to the UNESCO Astronomy and World Heritage Initiative.
- iv. To promote cooperation between the UNESCO World Heritage Centre, specialized agencies and relevant interdisciplinary scientific initiatives towards the elaboration of a Global Thematic Study on Heritage of Science and Technology, including studies and research on technological heritage connected with space exploration, and including promotions to generate financial and technical support from State Parties and the IAU for the Thematic Initiative "Astronomy and World Heritage".

3. Progress

Significant progress has been made in the last triennia and the past outcomes achieved can be briefly summarized as follows

1. Quite elaborative efforts were continuously undertaken towards recognition of space astronomy and related technologies as an important segment of UNESCO Astronomy Heritage Initiative since this initiative while being obvious is not yet widely accepted and recognized by astronomical community as commonly acceptable innovative ideas.

2. The goal aiming to identify the relevant segments of space technologies heritage intrinsically related to astronomy and involving both tangible and intangible objects was thoroughly emphasized in the paper after O. Dluzhnevskaya and M. Marov "Odyssey of Human Creative Genius: From Astronomy Heritage to Space Technology Heritage" published in *Astronomy in Focus*, v.1 , 2015 and based on their report to the XXIX GA.

3. Because of its broad scope of interest and responsibility WG3 needs to be linked not only to the IAU but also to other relevant international organizations such as COSPAR and IAF, both these bodies were requested to join this Initiative and expressed their agreement.

4. National Focal Points (Egypt, Russian Federation), UNESCO's representatives (World Heritage Centre), Space Agencies (Roscosmos) and International bodies (COSPAR, IAF) met during 40th Scientific Assembly of COSPAR in Moscow on August 6, 2014 within the framework of Associated Event on the UNESCO Thematic Initiative "Astronomy and World Heritage" to discuss thematic and organizing issues relevant to the elaboration of studies and researches on technological heritage connected with space exploration. Respective Minute of the meeting summarizing the main goals and activities has been issued.

5. A part of the Baykonur Space Centre infrastructure such as the human-engineered Gagarin Launch Pad together with related auxiliary facilities were addressed and recommended to be in the list of priority objects of space technology heritage. Elaborative comments in support of this idea were brought in the paper of M. Marov "World Space Heritage of Bayconur Cosmodrome: The Case Study" published in Thematic Study 2 (TS2) in 2017.

6. Regarding Baikonur cosmodrome as a provisional object of the tangible Space World Heritage, there has been significant progress since the meeting in March 2015 aiming to clarify many problems involved with participation of the IAU, ICOMOS and Russian and Kazakh authorities. Recently, the Initiative was preliminary accepted by ROSCOSMOS, according to UNESCO press release: Russian space corporation promotes Baikonur as UNESCO object tass.com/science/973056 of 02/11/2017.

7. A meeting of stakeholders involving the nominated focal points and all other interested parties to advance the UNESCO Initiative regarding to Space Technology Heritage is planned in the UNESCO HQ in 2018 with ROSCOSMOS provisional sponsorship aiming to clarify the main thematic/organizing/cooperative issues concerning the respective WG of the UNESCO WH Center with the involvement of the IAU WG3 C.C4 and other international bodies.