







 EXECUTIVE OFFICE OF THE PRESIDENT
 OFFICE OF SCIENCE AND TECHNOLOGY POLICY
 WASHINGTON, D.C. 20502

April 2, 2024

MEMORANDUM FOR DEPARTMENTS AND AGENCIES PARTICIPATING IN THE WHITE HOUSE CISLUNAR TECHNOLOGY STRATEGY INTERAGENCY WORKING GROUP

FROM: Arati Prabhakar, Assistant to the President for Science and Technology and Director, Office of Science and Technology Policy

SUBJECT: *Arati Prabhakar*
 Policy on Celestial Time Standardization in Support of the National Cislunar Science and Technology (S&T) Strategy

This memorandum outlines the Biden-Harris Administration's policy to establish time standards at and around celestial bodies other than Earth to advance the National Cislunar S&T Strategy.¹ OSTP directs federal departments and agencies to align their planning and policies with this memorandum.

The approach to establish time standards consists of the definition, development, and implementation of a distinct reference time at each celestial body and its surrounding space environment. Each new time standard developed will include the following features:

1. *Traceability* to Coordinated Universal Time (UTC);²
2. *Accuracy* sufficient to support precision navigation and science;
3. *Resilience* to loss of contact with Earth; and
4. *Scalability* to space environments beyond the Earth-Moon system

Federal agencies will develop celestial time standardization with an initial focus on the lunar surface and missions operating in Cislunar space, with sufficient traceability to support missions to other celestial bodies.

NASA will, in coordination with the Departments of Commerce, Defense, State, and Transportation, provide a finalized strategy to the Executive Office of the President to implement lunar timing standardization no later than December 31, 2026. NASA will also include consideration of Coordinated Lunar Time (LTC), as described in this memorandum, as part of its annual Moon-to-Mars Architecture Concept Review cycle no later than December 31, 2024. These tasks will be supported and informed by the National Cislunar S&T sub-Interagency Working Group, co-led by NASA and the National Space Council, and focused on Objective 4 of the National Cislunar S&T Strategy:

- Implement Cislunar communications and positioning, navigation, and timing capabilities with scalable and interoperable approaches.

¹ National Science and Technology Council, 2022. "National Cislunar Science and Technology Strategy" <https://www.whitehouse.gov/wp-content/uploads/2022/11/1-2022-NS-TC-National-Cislunar-ST-Strategy.pdf>

² The United States maintains local approximations of UTC at the U.S. Naval Observatory (USNO) and the National Institute of Standards and Technology (NIST), designated as UTC(USNO) and UTC(NIST), respectively. Department of Defense (DOD) systems will continue to operate in accordance with DOD JCJCS 6130.01H and may interoperate with other systems as required.





