IMPLEMENTING ARRANGEMENT
BETWEEN THE
MINISTRY OF EDUCATION, CULTURE, SPORTS, SCIENCE, AND TECHNOLOGY OF JAPAN
AND THE
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
OF THE UNITED STATES OF AMERICA
CONCERNING LUNAR SURFACE EXPLORATION
USING THE PRESSURIZED ROVER

The Ministry of Education, Culture, Sports, Science, and Technology of Japan (MEXT) and the National Aeronautics and Space Administration of the United States of America (NASA), (hereinafter referred to collectively as the "Implementing Agencies" and individually as an "Implementing Agency");

Affirming their shared interest in continuing to advance human exploration of the Moon in a sustained manner through mutually beneficial cooperation;

Recalling the terms of the *Framework Agreement between the Government of Japan and the Government of the United States of America for Cooperation in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies, for Peaceful Purposes*, signed at Washington on January 13, 2023 (hereinafter referred to as the "Framework Agreement");

Considering that the Implementing Agencies have expressed mutual interest in pursuing cooperation on NASA-led Artemis crewed and uncrewed missions to the lunar surface, and recognizing that such cooperation would enhance the missions and provide mutual benefits;

Recognizing that cooperation on the Civil Lunar Gateway (hereinafter referred to as the "Gateway"), together with the other Gateway partners, will help enable sustainable exploration and use of the Moon;

Recognizing that Japan and the United States of America were among the first signatories of the *Artemis Accords: Principles for Cooperation in the Civil Exploration and Use of the Moon, Mars, Comets, and Asteroids for Peaceful Purposes* (hereinafter referred to as the "Artemis Accords") signed on October 13, 2020, demonstrating a commitment to responsible, sustainable, and peaceful exploration of outer space for the benefit of all humankind;

Have reached the following understandings:

SECTION 1. PURPOSE

A. The purpose of this Implementing Arrangement is to establish the terms under which the Implementing Agencies will cooperate, on the basis of genuine partnership, for the design, development, operation, and utilization of the Pressurized Rover (hereinafter referred to as "PR") and associated elements required for crewed and uncrewed lunar surface exploration.

B. All activities under this Implementing Arrangement will be done for peaceful purposes, in accordance with all applicable laws and regulations, including international law.

C. The Implementing Agencies may formulate additional arrangements for cooperation on the lunar surface, which could include modification of this Implementing Arrangement to reflect changes to cooperation related to the PR or new arrangements to support Artemis missions. Such modifications or new cooperative arrangements would identify new responsibilities for the Implementing Agencies, which could include additional capabilities to support lunar exploration and lunar surface crew opportunities.

SECTION 2. DESCRIPTION OF THE ARTEMIS MISSIONS

The Artemis missions are a series of space exploration missions led by the United States of America with the participation of Japan and other international partners to establish the first long-term human and robotic presence on and around the Moon. The Artemis missions are intended to validate deep space systems and capabilities necessary to send the first humans to Mars. The Artemis elements include, among others, the PR, NASA's Space Launch System (SLS) rocket, the Orion spacecraft, the Extravehicular Activity (EVA) system, the Lunar Terrain Vehicle (LTV), habitation, logistics delivery, and the Human Landing System (HLS), as well as capabilities such as communications and navigation, along with the Gateway (a cooperative program among the United States of America, Japan, the European Space Agency, and Canada).

SECTION 3. RELATIONSHIP TO THE FRAMEWORK AGREEMENT

A. This Implementing Arrangement is concluded pursuant to Article 3 (Implementing Agencies and Implementing Arrangements) of the Framework Agreement and is subject to the terms and conditions of the Framework Agreement. In the event of a conflict between this Implementing Arrangement and the Framework Agreement, the provisions of the Framework Agreement will govern. Consistent with Article 3 of the Framework Agreement, this Implementing Arrangement does not create rights and obligations under international law.

B. MEXT may delegate the implementation of its responsibilities under this Implementing Arrangement to the Japan Aerospace Exploration Agency (hereinafter referred to as "JAXA").

C. In accordance with Article 1.E. (Scope of Activities) of the Framework Agreement, this Implementing Arrangement does not apply to activities governed by the International Space Station Intergovernmental Agreement (IGA), or any subsequent agreement that amends, modifies, or is concluded pursuant to the IGA. For avoidance of doubt, any activities related to this Implementing Arrangement that are governed by the IGA or any subsequent agreement that amends, modifies, or is concluded pursuant to the IGA continue to be governed by those agreements.

D. For avoidance of doubt, terms defined in the Framework Agreement retain the same meaning in this Implementing Arrangement.

SECTION 4. RESPONSIBILITIES

A. NASA will use reasonable efforts to carry out the following responsibilities:

1. Provide the Government of Japan with two (2) astronaut flight opportunities on the lunar surface. The timing of the flight opportunities will be determined by NASA in line with existing flight manifesting and crew assignment processes and will take into account program progress and constraints, MEXT's request for the earliest possible assignment of the Japanese astronauts to lunar surface missions, and major PR milestones such as when the PR is first deployed on the lunar surface;

2. Maintain responsibility for overall prioritization, planning, readiness, mission authority, and operations of the Artemis missions and integration of the PR into the Artemis architecture, including control of the configuration of the PR as far as it relates to interfaces with other Artemis elements;

3. Lead overall management and coordination of crewed and uncrewed lunar surface exploration, including use of the PR by the Implementing Agencies;

4. Lead overall management of resources including, but not limited to, crew time, power, thermal loads, consumables, data and communications, volume and accommodations, attachment points, robotic services, and transportation;

5. Lead NASA's utilization operations, including technology demonstrations and science, to be accomplished using the PR;

6. Lead overall mission planning and execution during crewed missions and periods of operations in proximity to other Artemis elements;

7. Support JAXA in the coordination of PR mission planning and execution during uncrewed missions;

8. Perform integrated readiness assessments of the PR for all missions as required;

9. Provide and operate a primary and a back-up mission control center for integrated Artemis mission activities involving the PR;

10. Provide primary communications between the mission control center and the PR, within the constraints of NASA's available communications capacity and as mutually decided by the Implementing Agencies, and manage scheduling and integration of communications assets in support of crewed and uncrewed PR operations;

11. Support JAXA boards and reviews in matters related to the PR, as mutually decided by the Implementing Agencies;

12. Establish and determine any changes to PR system-level requirements jointly with JAXA;

13. Coordinate with JAXA on PR maintenance requirements, including mass, volume, and crew time, and integrate necessary spares into the overall Artemis logistics plan;

14. Conduct with JAXA all joint testing and joint analysis in line with requirements mutually decided by the Implementing Agencies;

15. Support JAXA integration and verification activities, including providing and maintaining required hardware, software, data, and documentation, as mutually decided by the Implementing Agencies;

16. As mutually decided by the Implementing Agencies, provide NASA technical personnel in Japan and accommodate JAXA technical personnel in the United States of America;

17. Provide Artemis-related basic training and mission-specific training for astronauts, ground controllers, and support staff on NASA-provided elements, consistent with the training requirements mutually decided by the Implementing Agencies. The fidelity of this training will be sufficient to ensure the capability to perform all anticipated tasks;

18. Provide PR-related training for astronauts, ground controllers, and support staff, using associated PR training equipment located at NASA and contractor facilities, consistent with the training requirements mutually decided by the Implementing Agencies;

19. Provide required interface equipment for the driving simulator provided by JAXA;

20. Provide any required mock-ups made from data provided by JAXA, as mutually decided by the Implementing Agencies;

21. Provide to JAXA, as mutually decided by the Implementing Agencies, hardware, software, analysis, and testing that reduces risk (including technical, cost, and schedule risk) and supports the successful development, integration, operation, and utilization of the PR;

22. Provide the following equipment for the PR, unless otherwise mutually decided by the Implementing Agencies:

    a. equipment to condition, preserve, and transport lunar samples;
    b. exercise equipment;
    c. medical equipment;
    d. equipment for monitoring human health;
    e. supplies to sustain crew (e.g., food, clothing, drinking water);
    f. crew survival equipment; and
    g. other common equipment used in Artemis elements;

23. Provide equipment, adapters, umbilicals, consumables, spares, maintenance tools, and other items for any NASA-provided elements, payloads, and crew equipment that interact with the PR, unless otherwise mutually decided by the Implementing Agencies;

24. Provide NASA-related utilization equipment and payloads, including technology demonstrations and science;

25. Provide and operate the EVA system when it is used in conjunction with PR mission activities;

26. Operate the LTV when it is used in conjunction with PR mission activities;

27. Provide technical integration between the PR and any NASA-provided equipment and elements;

28. Provide integration of the PR onto the launch vehicle and lander for transportation from Earth to the lunar surface;

29. Provide launch and delivery of the PR flight unit to the lunar surface, including offloading the PR from the lander and positioning it on the lunar surface; and

30. Transport PR-related crew and cargo to and from the lunar surface, including deployment to and from the PR, unless otherwise mutually decided by the Implementing Agencies.

B. MEXT, with assistance from JAXA, will use reasonable efforts to carry out the following responsibilities:

    1. Design, develop, test, and certify an operational PR capable of crewed and uncrewed operations on the lunar surface for the duration of this Implementing Arrangement;

    2. Support NASA's integration of the PR into the Artemis architecture;

    3. Support NASA in the overall management and coordination of the crewed and uncrewed lunar surface exploration utilizing the PR;

4. Support NASA's management of resources including, but not limited to, crew time, power, thermal loads, consumables, data and communications, volume and accommodations, attachment points, robotic services, and transportation;

5. Lead JAXA's utilization operations, including technology demonstrations and science, to be accomplished using the PR;

6. Support NASA in the coordination of PR mission planning and execution during crewed missions;

7. Lead PR mission planning and execution during uncrewed missions, with the exception of operations in proximity to other Artemis elements;

8. Execute command and control operation of the PR during crewed and uncrewed missions;

9. Provide all sustaining engineering and maintenance for the PR throughout the duration of this Implementing Arrangement;

10. Perform check-out of the PR on the lunar surface and ensure readiness of the PR for all crewed missions for the duration of this Implementing Arrangement;

11. Provide a primary and a back-up PR control center for the PR during crewed and uncrewed missions;

12. Provide data network connection between the mission control center in the United States of America and the PR control center in Japan;

13. Provide ground stations to support supplementary communication between the PR control center and the PR for both crewed and uncrewed operations, as mutually decided by the Implementing Agencies;

14. Support NASA boards and reviews in matters related to the PR, as mutually decided by the Implementing Agencies;

15. Establish and determine any changes to the PR system-level requirements jointly with NASA;

16. Coordinate with NASA on PR maintenance requirements so that necessary spares are integrated into the overall Artemis logistics plan;

17. Conduct with NASA all joint testing and joint analysis in line with requirements mutually decided by the Implementing Agencies;

18. Support NASA integration and verification activities, including providing and maintaining required hardware, software, data, and documentation, as mutually decided by the Implementing Agencies;

19. As mutually decided by the Implementing Agencies, provide JAXA technical personnel in the United States of America and accommodate NASA technical personnel in Japan;

20. Provide PR-related training for astronauts, ground controllers, and support staff, using associated PR training equipment located at JAXA and contractor facilities, consistent with the training requirements mutually decided by the Implementing Agencies;

21. Support PR-related training at NASA and contractor facilities, including providing curriculum for PR training, consistent with the training requirements mutually decided by the Implementing Agencies;

22. Provide and maintain a PR driving simulator for training activities in the United States of America, including support to integrate this simulator with any NASA integrated Artemis training simulations;

23. Provide an engineering model PR, a driving simulator, and additional equipment for crew training in Japan, in line with the requirements mutually decided by the Implementing Agencies;

24. Provide necessary data and associated documentation for any required mock-ups and for the Virtual Reality (VR) training equipment for the PR, as mutually decided by the Implementing Agencies;

25. Provide to NASA, as mutually decided by the Implementing Agencies, hardware, software, analysis, and testing that reduces risk (including technical, cost, and schedule risk) and supports the successful development, integration, operation, and utilization of the PR;

26. Accommodate equipment provided by NASA in and on the PR, including hardware listed in paragraph A.22 of this Section, as coordinated between NASA and MEXT, with assistance from JAXA, and in line with the requirements mutually decided by the Implementing Agencies;

27. Provide, and support integration into the launch vehicle(s) of, equipment, adapters, umbilicals, consumables, spares, maintenance tools, and other items for any JAXA-provided elements, payloads, and crew equipment that interact with the PR, unless otherwise mutually decided by the Implementing Agencies;

28. Provide JAXA-related utilization equipment and payloads, including technology demonstrations and science;

29. Provide technical integration between the PR and any JAXA-provided equipment and elements;

30. Deliver the PR to a location in the United States of America decided by NASA, for integration of the PR onto the launch vehicle and lander;

31. Support NASA's integration of the PR onto the launch vehicle and lander for transportation from Earth to the lunar surface;

32. Provide all required spares, consumables, and maintenance tools for the PR throughout the duration of this Implementing Arrangement; and

33. Support integration into the launch vehicle(s) of all required spares, consumables, and maintenance tools for the PR.

SECTION 5. SCHEDULE AND MILESTONES

A. The launch of the PR is targeted for 2031 and will be coordinated between the Implementing Agencies and documented along with appropriate major milestones and estimated schedule, as needed, for the activities under this Implementing Arrangement in bilateral program documents.

B. The milestones and estimated schedule to be documented will be based on the projected availability of each Implementing Agency's respective goods, services, and facilities. Each Implementing Agency will provide the other Implementing Agency with reasonable notice of any change in projected availability, in order to coordinate adjustment of the schedule and milestones as necessary, in line with Section 6 (Management).

SECTION 6. MANAGEMENT

A. While NASA will be responsible for overall management of Artemis missions, including the PR and other Artemis elements such as crew and cargo transportation, each Implementing Agency will have responsibilities for management of their respective development, operations, and utilization activities as elaborated in Section 4 (Responsibilities).

B. A Joint PR Management Board (PMB), co-chaired by senior managers from the respective Implementing Agencies, will be established to address significant issues related to activities under this Implementing Arrangement. The PMB will oversee and approve any changes to the PR that would significantly impact Artemis missions, PR design and development, or PR utilization capabilities. PMB decisions will be made by consensus to the greatest possible extent, while NASA will retain mission authority for the overall operations and integration of the PR into the Artemis architecture, in line with Section 4.A.2 (Responsibilities). Where consensus cannot be achieved, either co-chair, or both, may raise the issue to the NASA Administrator and MEXT Minister. PMB decisions do not modify commitments of the Implementing Agencies specifically provided for in this Implementing Arrangement or any rights or obligations under the Framework Agreement.

C. A Joint PR Program Control Board (PPCB) will be convened as required to establish requirements for and address issues regarding the design, development, operations, and

utilization capabilities of the PR. Requirements changes that would significantly impact Artemis missions, PR design and development, or PR utilization capabilities will be elevated to the PMB for approval. The PPCB will be co-chaired by representatives from NASA and JAXA who are authorized to jointly take decisions related to implementing the cooperation described in this Implementing Arrangement. PPCB decisions will be made by consensus to the greatest possible extent. Where consensus cannot be achieved, either co-chair, or both, may raise the issue to senior technical managers and, as necessary, to the PMB for decision.

D. A Joint PR Project Control Board (PRPCB) will be established to implement the design, development, operations, and utilization capabilities of the PR. The PRPCB will be co-chaired by representatives from NASA and JAXA who are authorized to jointly take decisions related to implementing the cooperation described in this Implementing Arrangement. PRPCB decisions will be made by consensus to the greatest possible extent. Where consensus cannot be achieved, either co-chair, or both, may raise the issue to the PPCB for decision.

E. A joint utilization forum will be established to manage the science, technology, and, as appropriate, commercial utilization activities to be carried out using the PR. The forum will be co-chaired by representatives from NASA and JAXA. Forum decisions will be made by consensus to the greatest possible extent. Where consensus cannot be achieved, either co-chair, or both, may raise the issue to the PRPCB for decision.

F. Each Implementing Agency may propose access to and use of the PR by a third party for purposes consistent with the terms of this Implementing Arrangement, provided that the proposed access or use by the third party for crewed or uncrewed activities is preceded by timely consultation and approval by the PMB.

G. The Implementing Agencies will coordinate with appropriate Gateway management boards for use of the Gateway in conjunction with crewed and uncrewed PR missions.

SECTION 7. RESOURCES

A. Consistent with Section 6 (Management) and paragraphs A.4 and B.4 of Section 4 (Responsibilities), NASA will manage resources as a consolidated whole to effectuate crewed and uncrewed lunar surface exploration using the PR. MEXT, with assistance from JAXA, will support NASA's management of resources concerning the PR.

B. Resources include, but are not limited to, crew time, power, thermal loads, consumables, data and communications, volume and accommodations, attachment points, robotic services, and transportation.

SECTION 8. OPERATIONS

Consistent with Section 4 (Responsibilities):

A. NASA will manage and perform overall mission planning and prioritization of crewed and uncrewed lunar surface exploration using the PR.

B. NASA will manage PR mission planning and execution of crewed missions and periods of operations in proximity to other Artemis elements. MEXT, with assistance from JAXA, will manage PR mission planning and execution of uncrewed missions.

C. MEXT, with assistance from JAXA, will execute command and control operations of the PR.

SECTION 9. UTILIZATION

A. Science, technology, and, as appropriate, commercial utilization activities in crewed and uncrewed lunar surface exploration using the PR will be managed at the joint utilization forum consistent with paragraph E of Section 6 (Management). The forum will coordinate each Implementing Agency's high-priority utilization objectives to develop integrated utilization plans.

B. Each Implementing Agency will be responsible for the activities and costs of the payloads and experiments that it provides, including experiment Design, Development, Test, and Evaluation (DDT&E), payload ground processing, crew training, operations, ground distribution and archiving of data, and provision of payload/experiment spares, consumables, and associated equipment for payloads/experiments.

C. NASA, taking into account technical specifications of the PR and science requirements provided by JAXA, will develop the protocol by which lunar samples will be collected, handled, and transported using the PR.

SECTION 10. DOCUMENTATION

A. NASA and MEXT, with assistance from JAXA, will establish documentation, consistent with and subject to this Implementing Arrangement, to further detail the scope of responsibilities of the Implementing Agencies set out in Section 4 (Responsibilities) and related implementation activities. This documentation will include a program document detailing the joint implementation processes to ensure effective management and coordination with regard to activities under this Implementing Arrangement.

B. NASA and MEXT, with assistance from JAXA, may generate additional joint documentation as necessary to further define activities within the scope of this Implementing Arrangement. NASA will perform configuration management and maintenance of this documentation.

SECTION 11. POINTS OF CONTACT

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SECTION 12. SAFETY

A. NASA and MEXT, with assistance from JAXA, will jointly establish safety requirements and plans for lunar surface exploration using the PR, in line with Section 6 (Management).

B. NASA and MEXT, with assistance from JAXA, will each conduct safety reviews of their own elements, payloads, and utilization hardware and activities, with participation by the other Implementing Agency as mutually decided by the Implementing Agencies.

C. NASA and MEXT, with assistance from JAXA, will conduct joint PR safety reviews, aligned with the joint design reviews, as mutually decided by the Implementing Agencies.

D. NASA, with participation from JAXA, will conduct integrated safety reviews for the PR and any interfacing Artemis elements, launch packages, payloads, and utilization hardware and activities.

SECTION 13. SAFETY ZONES

Based on the commitments by the United States of America and Japan in the Artemis Accords, the Implementing Agencies will consult regarding the establishment, maintenance, and ending of any safety zones related to activities under this Implementing Arrangement.

SECTION 14. CREW

A. NASA is responsible for setting the requirements for crew qualifications, taking into account technical specifications provided by JAXA, and will provide these requirements to JAXA in sufficient time to support crew selection and training for the flight opportunities identified in Section 4 (Responsibilities).

B. NASA and MEXT, with assistance from JAXA, will coordinate and resolve crew matters related to cooperation as described in this Implementing Arrangement, including the processes, standards, and criteria for selection, certification, assignment, training, and determining flight readiness of the crew.

C. NASA and MEXT, with assistance from JAXA, will coordinate and resolve matters related to crew medical issues and healthcare, as needed.

D. The Implementing Agencies will ensure their crew operate under the following parameters:

1. For human-tended operations of Artemis elements and associated training, they will operate, together with the other Artemis mission crew, as one integrated team with one Commander.
2. Consistent with the principle of an integrated crew, they will operate, together with the other Artemis mission crew, under a single timeline for performance of all operations and utilization activities.
3. The Commander will be responsible for mission implementation and crew safety on board the PR and, as appropriate, from launch through return to Earth.

E. Each Implementing Agency will be financially responsible for all compensation, medical expenses, and subsistence costs on Earth, for the crew that it or its Related Entities provide.

F. The Implementing Agencies will abide by an applicable code of conduct for any missions jointly conducted under this Implementing Arrangement and require any crew members they provide to abide by such code of conduct.

G. NASA will inform MEXT and JAXA of NASA's assessment of mission readiness and safety for flight for the launch of their crew. Informing MEXT may involve the provision of information and data, as mutually decided by the Implementing Agencies and in accordance with Article 8 (Transfer of Goods and Technical Data) of the Framework Agreement.

SECTION 15. SCIENCE DATA POLICY

A. For all NASA- and JAXA-provided science payloads, all scientific data will be archived within and made publicly available through the appropriate repository as soon as practicable, consistent with open science principles as stated in NASA's or JAXA's respective data policies, and Section 8 of the Artemis Accords.

B. For NASA-provided science payloads involving JAXA participation and for JAXA-provided science payloads involving NASA participation, NASA and MEXT, with assistance from JAXA, will jointly develop a data management plan to specify details of data policy for each of those science payloads.

C. NASA and MEXT, with assistance from JAXA, will ensure that appropriate authorization and consents are obtained prior to human subject data release, including approval from the research subject and applicable investigation team representative(s) for release of attributable human subject data.

SECTION 16. OWNERSHIP OF GOODS AND DATA

Unless otherwise mutually decided by the Implementing Agencies in writing, each Implementing Agency will retain ownership of all goods and data it provides to the other Implementing Agency under this Implementing Arrangement, without prejudice to any individual rights of ownership of the Implementing Agencies' respective Related Entities. For avoidance of doubt, the PR will be owned by JAXA. To the extent feasible and recognizing that goods and data sent into space or integrated into the other Implementing Agency's goods and data cannot be returned, each Implementing Agency will return or dispose of the other Implementing Agency's goods and data in its possession at the conclusion of joint activities under this Implementing Arrangement, as mutually decided by the Implementing Agencies and in accordance with Article 8 (Transfer of Goods and Technical Data) of the Framework Agreement.

SECTION 17. INVESTIGATIONS OF CLOSE CALLS, MISHAPS, AND MISSION FAILURES

NASA and MEXT, with assistance from JAXA, will establish a process for investigating close calls, mishaps, or mission failures that could result in the death of or serious injury to persons or substantial loss of or damage to property. NASA and MEXT, with assistance from JAXA, will assist each other in the conduct of any close call, mishap, or mission failure investigation in accordance with Article 8 (Transfer of Goods and Technical Data) of the Framework Agreement.

SECTION 18. EXCHANGE OF PERSONNEL AND ACCESS TO FACILITIES

A. To facilitate implementation of the activities conducted under this Implementing Arrangement, NASA and MEXT, with assistance from JAXA, may support the exchange of a limited number of personnel, including contractors and subcontractors, at an appropriate time and under conditions mutually decided by the Implementing Agencies.

B. Access by each Implementing Agency and its Related Entities to the other's facilities or property of the other Implementing Agency and its Related Entities, or to the other's Information Technology (IT) systems or applications, is contingent upon compliance with the other's security and safety policies and guidelines including, but not limited to, standards on badging, credentials, and facility and IT system application/ access, including use of Interconnection Security Agreements (ISAs), where applicable.

C. NASA and MEXT, with assistance from JAXA, will jointly establish cybersecurity requirements and plans for PR IT resources, including, but not limited to, computer networks, computer systems, and data transmission systems, in line with Section 6 (Management). NASA and MEXT, with assistance from JAXA, will conduct joint PR cybersecurity reviews, aligned with the joint design reviews, as mutually decided by the Implementing Agencies.

SECTION 19. REGISTRATION OF SPACE OBJECTS

Pursuant to Article 13 (Registration and Jurisdiction) of the Framework Agreement, MEXT, with assistance from JAXA, will request that its government register the PR as a space object in accordance with the Registration Convention.

SECTION 20. COMMENCEMENT, MODIFICATIONS, AND DISCONTINUATION

A. This Implementing Arrangement will commence on the date of the last signature by the Implementing Agencies. NASA will notify MEXT in writing of the date on which the PR is deployed from the lander onto the lunar surface after it completes its pre-deployment check-out, and this Implementing Arrangement will continue to be operative for ten years after the date indicated in such notice, or through December 31, 2050, whichever comes earlier.

B. This Implementing Arrangement may be modified in writing by the Implementing Agencies.

C. Either Implementing Agency may discontinue this Implementing Arrangement at any time and will provide the other Implementing Agency at least one year's advance written notice of its intent to discontinue. In the event of any discontinuation, the discontinuing Implementing Agency will endeavor to minimize any negative impact of such discontinuation on the other Implementing Agency.

D. For avoidance of doubt, this Implementing Arrangement is subject to Article 21.C (Termination) of the Framework Agreement. Notwithstanding discontinuation or expiration of this Implementing Arrangement, commitments under Section 15 (Science Data Policy) and Section 16 (Ownership of Goods and Data) of this Implementing Arrangement will continue to be operative unless otherwise determined by the Implementing Agencies.

IN ACCORDANCE WITH Article 3 (Implementing Agencies and Implementing Arrangements) of the Framework Agreement, MEXT and NASA each indicate this Implementing Arrangement has been duly confirmed by its Government.

IN WITNESS WHEREOF the undersigned, being duly authorized, have signed this Implementing Arrangement.

Done at Washington in two originals in the English language, on this ninth day of April, 2024.

FOR THE MINISTRY OF EDUCATION, CULTURE, SPORTS, SCIENCE, AND TECHNOLOGY OF JAPAN:	FOR THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION OF THE UNITED STATES OF AMERICA:
_____	_____
Masahito Moriyama Minister	Bill Nelson Administrator