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We are excited to share with you the second edition of the International Space Law and Policy Update, Akin's quarterly newsletter focused on developments in international space law and policy.

This newsletter takes a longer and more in-depth view than Akin's biweekly Space Law, Regulation and Policy Update. Together, they will provide context on the legal and policy developments shaping the next generation of space business and exploration.

We hope you find this update informative and will share it with colleagues you think may be interested in receiving it. We welcome any feedback on how our team can make our newsletters more useful to you and your teams.

What's New?

- New Artemis Accord Joiners include Angola, Bulgaria, Iceland and the Netherlands

Opportunities for Engagement

- UNCOPUOS Scientific and Technical Subcommittee Meetings Held from January 29 - February 9
- IAC Plenary Participation Application Open until February 9
- Paris Space Week will be held in Paris, France from March 12-13
- Space-Comm Expo will be held in Farnborough, UK from March 6-7
- Registration of Intent to Sign ESA's Zero Debris Charter Opened November 6, 2023

Launches and Landings Around the World

What's New?

UAE Newest Joiner to Artemis Program with Plan to Provide Gateway Airlock

On January 7, 2024, the United States and United Arab Emirates (UAE) announced that the UAE will provide and operate the Crew and Airlock module for Gateway, the first lunar orbiting space station. The module will allow transfers to and from Gateway's pressurized modules to space, which will support scientific experiments and Gateway maintenance. The UAE will also "provide engineering support for the life of the lunar space station." In exchange, a UAE astronaut will fly to Gateway on a future Artemis mission. On the announcement, National Aeronautics and Space Administration (NASA) Administrator Bill Nelson said, "We are in a new era of exploration through Artemis – strengthened by the peaceful and international exploration of space. The UAE's provision of the airlock to Gateway will allow astronauts to conduct ground breaking science in deep space and prepare to one day send humanity to Mars."

ISO Publishes New Space Standards

The International Organization for Standardization (ISO) published a number of space standards in recent months, including a new standard on January 1, 2024, concerning the design, testing and operation of "large constellations of spacecraft operating in the LEO." As the standard notes, "While large constellations can provide societal benefits to humanity, they can also put pressure on the orbital and electro-magnetic environments, introducing mission design, hardware design, launch, operations and disposal challenges to other operating space assets and the long-term sustainability of space activities." The standard aims to provide a set of "practices throughout the large constellation life cycle to promote safety on the ground from re-entry hazard and long-term sustainability of space operations."

U.S. National Space Council Meeting Emphasizes International Cooperation

On December 20, 2023, with 33 country representatives in attendance, Vice President Kamala Harris emphasized the importance of international cooperation on space activities at a meeting of the U.S. National Space Council. In particular, Vice President Harris highlighted the need for "citizens, scientists, and policymakers around the world" to use "data collected in space to help

fight against the climate crisis"; "to establish and strengthen international rules and norms for the peaceful and responsible use of space," especially with regard to the threat of military applications in space; and to come up with a "model for global action" on "establishing rules for commercial space activities." Finally, Vice President Harris applauded the "essential role that our allies and partners play in the Artemis program" and announced that the U.S. intends "to land an international astronaut on the surface of the Moon by the end of the decade."

World Radiocommunication Conference Revises ITU Radio Regulations

On December 15, 2023, the International Telecommunications Union (ITU) member states revised the ITU Radio Regulations, the global treaty governing on-Earth and in-space use of the radio frequency spectrum, during the 2023 World Radiocommunication Conference (WRC). The decision "identifies new spectrum resources to support technological innovation, deepen global connectivity, increase access to and equitable use of space-based radio resources, and enhance safety at sea, in the air, and on land." Specifically, the WRC decision, among others:

- Identified spectrum for International Mobile Telecommunications (IMT), "which will be crucial for expanding broadband connectivity and developing IMT mobile services" like 4G and 5G.
- Identified 2 GHz and 2.6 GHz bands for "using high-altitude platform stations as IMT base stations (HIBS)."
- Identified new frequencies for Earth Stations in Motion (ESIMs) to "deliver high-speed broadband onboard aircraft, vessels, trains, and vehicles" and provide services "following disasters where local communication infrastructure is damaged or destroyed."
- Allocated additional frequencies "to the aviation industry for aeronautical mobile satellite services (117.975-137 MHz)."
- Mandated ITU Sector Study Groups to undertake future studies on a number of topics, including "[p]ossible new or modified space research service (space-to-space) allocations for future development of communications on the lunar surface, and between lunar orbit and the lunar surface"; the development of "regulatory measures to limit the unauthorized operations of non-geostationary-satellite orbit (non-GSO) earth stations"; the creation of regulatory measures to "protect radio astronomy operating in specific Radio Quiet Zones from radio-frequency interference caused by systems in the non-geostationary-satellite orbit"; and more.

OECD, United States and EU Publish Report on Measuring the Space Economy

Last month, the Organization for Economic Co-operation and Development (OECD), the United States and the European Union (EU) published a report on approaches to measuring the space economy. Noting that "measurement of the [space economy's] contribution to, notably, economic growth and employment, remains a challenging exercise due to the scarcity of appropriate data and specific methodologies," the report seeks to remedy the gap by publishing the "first-ever list of statistical codes to measure the space economy." The list is meant to be a "first necessary step towards the construction of space economy thematic accounts."

Relatedly, on December 13, 2023, European Space Agency (ESA) published a set of experimental statistics to "translate the definition and scope of the space economy into codes of European statistical classifications." Further results are expected to be published by the end of 2024.

Egypt Joins China's International Lunar Research Station Initiative

On December 12, 2023, Egypt and China signed a memorandum of understanding on space cooperation, in which Egypt agreed to join China's International Lunar Research Station (ILRS) initiative. The two countries are expected to cooperate on "joint research and development cooperation in the fields of lunar and deep space exploration, spacecraft development and

launch, space infrastructure construction, satellite data reception and application, BRICS remote sensing satellite constellation, space science and astronomical observation." The two will further cooperate in "joint demonstration and research at international lunar research stations, space missions, space systems and subsystems, space equipment, ground segments and applications, education and training, and capacity building." Egypt is the second African country to sign up for the ILRS after South Africa, which joined in September 2023.

UNOOSA Publishes Report on Country Approaches to the Registration of Objects in Space

On December 4, 2023, the United Nations Office of Outer Space Affairs (UNOOSA) published a report on UN member state approaches to "implementing their international commitments related to the registration of objects launched into outer space." The report outlines the key differences in states' approaches to their application of international space law; national licensing and authorization regimes; national registries; joint launch and international cooperation practices; and others. The report also details emerging trends in the registration of objects, including the impact of the entrance of new actors, large or mega-constellations of satellites and lunar activities.

United States, U.K. and Australia Establish Network of Space-Tracking Radars

On December 2, 2023, as part of the AUKUS trilateral security partnership, the United States, U.K. and Australia agreed to jointly host and operate the Deep Space Advanced Radar Capability (DARC), a "next generation ground-based sensor." The DARC is expected to provide 24/7 tracking of objects in geosynchronous orbit 22,000 miles above the Earth, and its first site is set to become operational in 2026. On the announcement, U.S. Assistant Secretary of Defense for Space Policy John Plumb said that the DARC will "leverage the geography of the United States, Australia, and the United Kingdom to further enhance our collective space domain awareness: the ability to track, identify and characterize space objects."

Europe's First Continental Spaceport Opens

On November 8, 2023, Norway announced the opening of Europe's first continental spaceport in Nordmela, on Norway's Andøya island. The spaceport includes "several launchpads to launch small to medium satellites into space" and is the "launch site of the European launch service company Isar Aerospace." On the announcement, President of Andøya Spaceport Ingun Berget said, "The opening of the spaceport on Andøya island marks an important milestone for Norway, European New Space industry, and our partnership with Isar Aerospace. This enables us to have the first satellite launches ever from European soil." Autonomous launch capabilities has been a top priority for ESA officials in recent years. As ESA Director of Commercialization, Industry and Procurement Geraldine Naja said just days after Norway's announcement, "There is no space policy without an autonomous launcher capability. . . I believe that we are at the start of a new era for launches in Europe, with a higher focus on commercial launch services. And ESA must follow this trend."

EU Promises a "Paradigm Shift" in its Space Program in Turn to Private Partnerships

On November 6, 2023, the ESA Council declared at its 2023 Space Summit that it is committed to a "paradigm shift" in its space program that "assert[s] Europe's rightful place in the world." In particular, the Council decided to embrace a competition-based model to procure future space launchers and cargo delivery vehicles, similar to that used by the United States. As a first step, the Council announced a "competition between innovative companies based in Europe to deliver a space cargo return service that will see a European commercial provider deliver supplies to the International Space Station by 2028 and return cargo to Earth." According to ESA Director General Josef Aschbacher, it is hoped that the service will unlock transport, docking, and reentry capabilities that pave the way to a "crewed vehicle [that could] serve other destinations beyond low Earth orbit." The call for competition will be issued on ESA's ESA-Star website.

Relatedly, also at the Space Summit, ESA signed an MOU with Airbus and Voyager Space to explore opportunities "for access to space for Europe through the Starlab space station." Potential collaboration includes access to Starlab "for astronaut missions and research activities as well as commercial business development;" contributions to research "using European technology and advancing European science" in areas like advanced robotics and artificial intelligence (AI); and establishing a "complete 'end-to-end' system with the Starlab space station as a low Earth orbit destination and a potential ESA-developed European cargo and crew transportation system."

New Artemis Accord Joiners include Angola, Bulgaria, Iceland and the Netherlands

Angola, Bulgaria, Iceland and the Netherlands have all recently joined the U.S.-led Artemis Accords, a series of bilateral agreements with the United States designed to lay out a clear and mutually agreed-upon framework for upcoming missions to the Moon, and to gather support for the U.S. interpretation of less-than-clear principles of existing international space law. Although many of the recent signatories have only small space programs, U.S. officials have touted the agreements as widening the diversity of participants in "the most important conversations that affect the future of this very decisive decade in space — space norms."

Opportunities for Engagement

UNCOPUOS Scientific and Technical Subcommittee Meetings Held from January 29 - February 9

The United Nations Committee on the Peaceful Uses of Outer Space (UNCOPUOS) is holding its Scientific and Technical Subcommittee Meetings (STSM) from January 29 through February 9 in Vienna, Austria. Items on the Subcommittee's agenda include issues related to space debris; space-system-based disaster management support; near-Earth objects; long-term sustainability of outer space activities; space and global health; the use of nuclear power sources in outer space; and more. Participants can access many of the meetings online if not attending in person.

IAC Plenary Participation Application Open until February 9

The 2024 International Astronautical Congress (IAC) hosted by the International Astronautical Congress will be held from October 14-18, 2024, in Milan, Italy. For International Accreditation Forum (IAF) members wishing to participate in the plenary sessions, applications to submit a proposal are due February 9, 2024. Applications will be evaluated based on the proposed topic (e.g., industry, exploration, next generation), the proposal's originality, the topic's timeliness, proposal relevance, and more.

Paris Space Week will be held in Paris, France from March 12-13

From March 12-13, Paris Space Week will bring together 1,500 space professionals for the "optimal BtoB trade show dedicated to the Space Industry." The event will bring together startups, venture capital firms, space agencies, chambers of commerce, and others in the space industry for two days of networking opportunities, exhibitions, planning programming, and innovation challenges. Registration is now open.

Space-Comm Expo will be held in Farnborough, UK from March 6-7

From March 6-7, Space-Comm Expo will gather "space, aerospace, defence, downstream and upstream industries for two days of high-level networking, discussions, education and business, focussed on the commercial future of space." The conference and exhibition will focus on the UK space industry and cover the "whole of the space supply chain," with an emphasis on new technologies and innovations in the space industry. Registration is now open.

Registration of Intent to Sign ESA's Zero Debris Charter Opened November 6, 2023

Developed by ESA, the Zero Debris Charter is a "community-building document and initiative for the global space community" that "contains both high-level guiding principles and specific, jointly defined targets . . . [that] define ambitious and measurable space debris mitigation and remediation targets for 2030." The Charter encourages "any entity demonstrating a strong commitment to advancing space safety and sustainability" to sign and join the Zero Debris Community. Registration of intent to sign the Charter is now open, with signing ceremonies to take place in the first half of 2024.

Launches and Landings Around the World

On January 19, 2024, **Japan** landed its SLIM lander on the moon shortly after 15:20 (GMT). At the time of publication, it was not clear whether the lander had accomplished a soft landing, which would make the country only the fifth country to accomplish a soft landing on the moon, or a hard landing.

On January 1, 2024, **India** launched an astronomy satellite that will conduct "tests for its human spaceflight program and a potential joint crewed mission with NASA." The launch is the first in an ambitious plan by India to double its launches from last year, with up to 12 to 14 launches planned in 2024 total.

On December 28, 2023, **Japan** announced that it will launch its H3 rocket, promoted as a "flexible and cost-effective new flagship," on February 15, 2024. The launch will be the third attempt after two previous failures in 2023.

On December 15, 2023, **China** announced it had launched a Long March 2F carrier rocket, reportedly placing the Shenlong (Divine Dragon) space plane into orbit "to perform space science experiments and validate technologies essential for reusable spacecraft."

On December 14, 2023, Rocket Lab launched a **Japanese** radar imaging satellite on its Electron rocket, the tenth Electron launch in 2023 and the first after a September 2023 failure.

Questions?

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