

# A Strategic Framework for Space Diplomacy

*“Today, as was the case 60 years ago, our nation’s leadership in space is critical to our economic prosperity, to our scientific and technological progress, and, in a time of increasing great power rivalry, to our national security.”*

*– Vice President Kamala Harris, September 9, 2022*

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## I. Executive Summary

Over the last 65 years, the United States has been a leader in exploring and utilizing outer space for peaceful purposes; maximizing the benefits of space for U.S. citizens and the citizens of the world. Our nation's commitment to progress for all humankind has made the United States the global space partner of choice. We continue working with allies and partners to expand the base of likeminded space faring nations. This first Strategic Framework for Space Diplomacy outlines how State Department diplomacy will advance continued U.S. space leadership and will expand international cooperation on mutually beneficial space activities, while promoting responsible behavior from all space actors, strengthening the understanding of, and support for, U.S. national space policies and programs, and promoting international use of U.S. space capabilities, systems, and services.

All nations benefit from the scientific and technological progress made possible with space-based assets and related data. Space systems have expanded access to broadband internet in hard-to-reach areas and are now essential to operations of almost all sectors of U.S. critical infrastructure, directly affecting the lives of the American people. Satellite-based data and information enhance U.S. and international responses to disasters and epidemiological events; promote inclusive, sustainable development to combat climate change; enable tracking of ocean plastics and air pollution and the policing of illegal, unreported, and unregulated fishing; increase our

understanding of migration and refugee flows; support U.S. military actions abroad; enable the monitoring of arms control treaty compliance; and provide evidence of war crimes and human rights violations and abuses.

As costs fall and technological capabilities advance, the commercial space sector has grown at an unprecedented rate. One recent NGO estimate puts the value of the global space economy at \$469 billion in 2021.<sup>1</sup> The U.S. private sector is revolutionizing the use of outer space with new technologies and business models. By optimizing our diplomatic and outreach efforts and strengthening the global governance of outer space activities, the Department can showcase how new and novel space activities can be conducted in a lawful, responsible, peaceful, and sustainable manner, while promoting the U.S. space industry.

Driven by these new commercial opportunities and the geo-strategic importance of space, the number of space faring nations has dramatically increased. Countries without current launch capacities are investing in space-based assets and infrastructure. The norms, best practices, and principles that guide outer space activities must evolve to promote responsible stewardship of the outer space environment and maximize the benefits of the growing space economy for current and future generations.

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<sup>1</sup> [Space Foundation Releases the Space Report 2022 Q2 Showing Growth of Global Space Economy](#) The Department of Commerce estimated the U.S. space economy to be worth \$195 billion in 2019. [Commerce Releases Updated Space Economy Statistics for 2012-2019](#)

Establishing a shared vision for outer space activities requires traditional government-to-government diplomacy, as well as multi-stakeholder engagement with the U.S. and worldwide commercial space sector. We must collaborate with allies and partners to increase cooperation, raise awareness, and increase resilience in the space domain. We must promote space safety and security cooperation; pursue bilateral and multilateral exchanges and transparency and confidence-building measures; and encourage responsible behavior by current and future space actors. And we must encourage the formation of robust multilateral coalitions such as the Artemis Accords to protect and promote peaceful cooperation in space exploration and scientific endeavors. Finally, we will compete where necessary against countries that seek to impose a different view of outer space governance.

Current U.S. space policy guides U.S. diplomacy. The 2020 National Space Policy <sup>2</sup> articulates the U.S. commitment to leading the responsible, peaceful, and sustainable exploration and use of outer space, minimizing the negative impacts of space activities on the outer space environment, and reducing the potential for conflict. The 2021 United States Space Priorities Framework <sup>3</sup> outlines the Biden-Harris Administration's overarching

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<sup>2</sup> [The National Space Policy](#)

<sup>3</sup> [United States Space Priorities Framework](#)

priorities to maintain a robust and responsible United States space enterprise and preserve space for current and future generations. Seven Space Policy Directives (SPD) issued between 2018 and 2020 provide additional information on U.S. policies and procedures as they relate to space activities.<sup>4</sup>

These policy guidelines prioritize partnership, and diplomatic and public diplomacy efforts led by the Department of State, in coordination with other Executive Branch departments and agencies. The Department's international engagements can enhance U.S. leadership in space exploration, science, and applications, and promote development in other countries' space policies, practices, and regulations in a manner that aligns with our domestic national security and foreign policy objectives. Department efforts can also advance U.S. national security; economic prosperity; diversity, equity, and inclusion; and scientific and technological progress.

In keeping with the aims of these national policies, the Bureau of Oceans and International Environmental and Scientific Affairs (OES) and the Bureau of Arms Control, Verification and Compliance (AVC) have drafted this strategic framework in consultation with other Department stakeholders, and with insight from key inter-agency and external partners. This Strategic

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<sup>4</sup> Such as Presidential Policy Directive (PPD) 42 "Preventing and Countering Weapons of Mass Destruction Proliferation, Terrorism, and Use", E.O. 13865 "Coordinating National Resilience to Electromagnetic Pulses," the 2018 "National Near-Earth Object Preparedness Strategy and Action Plan," and the National Space Transportation Policy (2013).

Framework for Space Diplomacy outlines actions for the Department across three pillars:

- **Diplomacy for Space: Advancing space policy for the benefit of future generations.** Advance U.S. space policy and programs internationally through bilateral and multilateral engagement and cooperation in order to advance U.S. leadership in safe and responsible space activities, including space exploration and commerce, while strengthening U.S. and allied capabilities and working to reduce the potential for conflict.
- **Space for Diplomacy: Leveraging U.S. space activities for wider diplomatic goals.** Pursue increased international cooperation in the use of satellite applications, remote sensing satellite imagery, and space-derived data to help solve urgent societal challenges and achieve U.S. foreign policy objectives, on issues such as: climate change and environmental sustainability; crisis management and conflict prevention; arms control and international security; economic competitiveness and prosperity; and human health, while promoting U.S. standards, best practices, and democratic values, including through outreach to foreign publics.
- **Empowering the Department Workforce on Space Diplomacy.** Provide diplomatic posts and the Department's workforce in Washington, D.C. with the modernized skill set of tools and knowledge

needed to pursue space-related policy and programmatic objectives through all relevant bilateral and multilateral fora and mechanisms.

Secretary Blinken has noted that one of space exploration's greatest powers is its ability to bring people together, across continents, across oceans, in pursuit of knowledge, and in pursuit of understanding. This, too, is the power of diplomacy. U.S. diplomacy and space activities are reflection of our values of democracy, human rights, and the rule of law. In our space diplomacy we look forward to ever-expanding opportunities to strengthen America's leadership role in coalitions and coalition-building to extend human presence deeper into outer space and enhance the benefits of space for all.

*“Space exploration and use benefits humanity, from creating opportunities to developing new technologies and enabling climate surveillance. America will maintain our position as the world’s leader in space and work alongside the international community to ensure the domain’s sustainability, safety, stability, and security. We must lead in updating outer space governance, establishing a space traffic coordination system, and charting a path for future space norms and space control. Working with allies and partners, we will develop policies and regulations that enable the burgeoning U.S. commercial space sector to compete internationally. We will enhance the resilience of U.S. space systems that we rely on for critical national and homeland security functions. The efforts aim to protect U.S. interests in space, avoid destabilizing arms races, and responsibly steward the space environment.”*

*National Security Strategy*

*October 2022*

## II. Our Mission

The Department of State will promote U.S. space leadership in the exploration and use of outer space for peaceful purposes and advance U.S. and allied security priorities. We will pursue and maintain a rules-based international framework for outer space activities, including the long-term sustainability, commercialization, exploration, and utilization of space, so as to strengthen the U.S. leadership role in coalitions, support human exploration, and expand the benefits of space for all.

## III. Policy Foundations

The December 2020 National Space Policy (NSP) directs the Department of State, in coordination with other Executive Branch departments and agencies, to carry out diplomatic and public diplomacy efforts to strengthen global understanding and support for U.S. space policies and programs and to promote the international use of U.S. space capabilities. The NSP also directs the Department to cooperate with likeminded international partners to establish standards of safe and responsible behavior, including openness, transparency, and predictability, and to facilitate the detection, identification, and attribution of actions in space that would be inconsistent with the safety, stability, security, and long-term sustainability of space activities. The December 2021 United States Space Priorities Framework affirms U.S. commitment to upholding and strengthening a rules-based

international order for outer space activities by showcasing U.S. leadership in the responsible and sustainable use of space. The October 2022 National Security Strategy underscores these U.S. leadership objectives for outer space. Our work will also be governed by Space Policy Directives<sup>5</sup>, other national space-related policies and Executive Orders, by the ideals and tenets set out in the FY 2022-2026 State-USAID Joint Strategic Plan<sup>6</sup>, and other national strategies and policies, including the National Cybersecurity Strategy, the National Security Memorandum on Counterterrorism, the National Strategy on Gender Equity and Equality, U.S. Strategy on Global Women's Economic Security, and national policies and plans on critical infrastructure security and resilience. Our space diplomacy is in line with and will further the Department's mission of protecting and promoting U.S. security, prosperity, and democratic values and shaping an international environment in which all Americans can thrive.

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<sup>5</sup> [SPD-1: Reinvigorating America's Human Space Exploration Program \(archives.gov\)](#)

[SPD-2: Streamlining Regulations on Commercial Use of Space](#)

[SPD-3: National Space Traffic Management Policy](#)

[SPD-4: Establishment of the United States Space Force \(archives.gov\)](#)

[SPD-5: Cybersecurity Principles for Space Systems](#)

[SPD-6: National Strategy for Space Nuclear Power and Propulsion](#)

[SPD-7: United States Space-Based Positioning, Navigation, and Timing Policy](#)

<sup>6</sup> Especially Objectives 1.4 ("Lead allies and partners to address shared challenges and competitors; prevent, deter, and resolve conflicts; and promote international security") and 4.1 ("Build and equip a diverse, inclusive, resilient, and dynamic workforce").

## **IV. Key Factors for the Department**

### **Our Strengths**

The Department's analysis of broad geopolitical dynamics, emerging foreign policy concerns, and country-specific political and economic circumstances is foundational to influencing international policy, governance, practices, and partnerships. Our space-specific policy expertise benefits from crucial insight from partners into space faring nations' interests and activities, as well as competing priorities and concerns. The Department's convening ability and engagement with the highest level and breadth of foreign governments provide the U.S. space community with unique access. Our diplomacy helps secure our national interests, build relationships, compete on a level playing field, solve challenges, and advocate for U.S. scientific and technical objectives.

### **Our Partners**

The Department's space diplomacy success relies on close, continuing collaboration with the National Space Council, National Security Council, Office of Science and Technology Policy, the Departments of Commerce, Defense, Energy, Homeland Security, Interior, and Transportation, the Office of the Director of National Intelligence (ODNI), NASA, Federal Communications Commission (FCC), U.S. Agency for International Development (USAID) and other U.S. agencies. U.S. space activities have

broad bipartisan Congressional support. Our commercial space sector is an essential partner in continued U.S. leadership and diplomacy on space governance, safety, security, and sustainability. Academic and research institutions, the private sector, non-governmental organizations, and civil society contribute to and benefit from space-related activities, products, and data.

Our relationships with foreign allies and partners are at the heart of our work. International allies and partners' support for U.S. positions on norms and standards is influenced by their own internal priorities and domestic constituencies, as well as their national security apparatus and their space industries.

Expanding and leveraging these domestic and international partnerships can help address global challenges and common objectives and expand economic, security, and social benefits for the American people.

## **Our Challenges**

U.S. competitors are organizing, training, and equipping their forces to undermine U.S. and allied security in space. The unclassified version of ODNI's 2023 Annual Threat Assessment notes that "The PRC is steadily progressing toward its goal of becoming a world-class space leader, with the intent to match or surpass the United States by 2045. ...China's space activities are designed to advance its global standing and strengthen its

attempts to erode U.S. influence across military, technological, economic, and diplomatic spheres.”<sup>7</sup>

Regarding Russia, the unclassified assessment also notes: “Russia will remain a key space competitor, but it may have difficulty achieving its long-term space goals because of the effects of additional international sanctions and export controls following its invasion of Ukraine, a myriad of domestic space-sector problems, and increasingly strained competition for program resources within Russia. Russia continues to train its military space elements, and field new antisatellite weapons to disrupt and degrade U.S. and allied space capabilities. Russia’s cyberattack against commercial satellite communications networks in February 2022 illustrates the increasing interdependencies across space sectors as well as between the space and cyber domains.”

Distinct civil and military space policies and programs do not exist in all nations. New, emerging space partners balance space relationships with us and our strategic competitors. Some governments may not recognize the vulnerabilities of increased intermingling with competitors’ space industries. Future cooperation with strategic competitors will depend on these

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<sup>7</sup> The 2023 unclassified ODNI Threat Assessment also notes: Even by 2030, China probably will achieve world-class status in all but a few space technology areas. Counterspace operations will be integral to potential People’s Liberation Army military campaigns, and China has counterspace weapons capabilities intended to target U.S. and allied satellites. China’s commercial space sector is growing quickly and is on pace to become a major global competitor by 2030.

countries' adherence to international standards both in space and here on Earth. Increasing commercial leadership and participation mean we cannot rely solely on government-to-government diplomacy. Technology transfer concerns and corresponding regulation mean an inherent necessary tension exists between our dual missions of protecting national security and promoting the U.S. space industry and the benefits of space for all.

Ally and partner technical and budgetary resources for cooperation vary. Space technologies continue to advance, which requires that regulations, behaviors, strategies, and norms not unnecessarily constrain innovation and future beneficial uses of space. A resource-constrained environment requires us to make deliberate choices on where and how to focus our activities.

## **Our Obligations**

Four widely subscribed international treaties, developed in the United Nations Committee on the Peaceful Uses of Outer Space (UNCOPUOS) in the 1960s and early 1970s, underpin international space law. The foundational Outer Space Treaty (1967) affirms, among other things, that international law, including the Charter of the United Nations, applies to activities in outer space and that States Parties bear international responsibility for their national activities in space, including those of nongovernmental entities. In addition to meeting these treaty obligations, our work must remain consistent with other international commitments and with U.S. laws,

regulations, and policies. Within the U.S. government, State has the lead on treaty interpretation and facilitates and reviews all binding bilateral and multilateral government and agency-to-agency international cooperation agreements. The Department also represents USG positions at multilateral negotiations on space governance and policy, including in discussions regarding international law and legally nonbinding norms, guidelines, and best practices, as well as current and emerging space issues. We will not cede U.S. leadership in these diplomatic fora to other space faring nations that do not share our values and our commitment to an international rules-based order for space, space sustainability, and space for all.

## **Our Opportunities**

The United States remains the global space partner of choice. U.S. civil, national security, and commercial space activities have bipartisan support and wide domestic constituencies, who, along with the USG, are eager to engage with international partners. U.S. leadership in space exploration and utilization is among the U.S. government's most valuable soft power tools and presents strategic opportunities to promote academic and research partnerships, scientific engagement, as well as for public diplomacy to increase awareness among and influence audiences outside the United States on U.S. space diplomacy. Space governance issues are prominent nationally and internationally, and the United States is committed to a leadership role with international partners. We are part of a strong coalition

of like-minded allies and partners that regularly collaborate across a breadth of fora and issues. Space data and products can support foreign policy aims, and Department agility helps us to pivot quickly to emerging space priorities. Space diplomacy requires capacity and expertise on technology, multilateral and economic statecraft, and strategic competition, and is in line with the Secretary's Modernization Agenda priorities and skill sets.

## **Our Methods**

We will engage foreign partners and publics through bilateral dialogues, multi-country coalitions, multilateral governmental bodies, non-governmental conferences and fora, partnerships and exchanges, industry symposiums, and our embassies, and we will use international agreements and other arrangements, political commitments, statements, and meeting outcomes to encourage meaningful progress. In particular, we will continue promoting and updating a rules-based international order for outer space activities through our leadership at the UN Committee on the Peaceful Uses of Outer Space (UNCOPUOS) and UN disarmament and international security fora. The Department will continue including U.S. scientific and technical agencies, and, as appropriate, the private sector, academia, NGOs, and other space practitioners, in U.S government engagement with other countries and at international meetings on space policy and governance. The Department will align our space diplomacy work, resources, and expertise with the space-related issues and priorities at the core of our

national security interests, our space alliances and partnerships, or efforts to help address global challenge. We will do so in consultation with the interagency and leveraging insight from our overseas posts. At the same time, we will be poised to respond to emerging space challenges and opportunities, particularly those that affect U.S. national security and U.S. economic interests.

## **Our Values**

The United States will continue to lead in expanding international space cooperation to extend the benefits of space for all humankind. We will continue to build and broaden coalitions of allies and partners who share our democratic values of openness, transparency, adaptability, and the free flow of ideas and information, and who are committed to putting these values at the heart of our shared future. We will showcase how U.S. space activities are conducted in a lawful, responsible, peaceful, and sustainable manner in line with these and other U.S. values, including diversity, equity, inclusion, and accessibility (DEIA).

Today, U.S. space-related agencies, research, and industry recognize that humanity benefits from diverse talents, innovation, and perspectives at all levels of the workplace. U.S. STEM and space efforts also benefit from a diversity of foreign students, professionals, and investment. Our diplomacy will acknowledge the importance of developing and retaining diverse expertise in space endeavors and showcase the diverse U.S. space

community. As the United States Space Priorities Framework notes, “The United States is a diverse and multicultural society, and its space activities and workforce must reflect this composition.”

We will advocate for equity and equality in our diplomatic space dialogues to help close the gender gap and advance women’s economic security.<sup>8</sup> We will work with allies and partners to understand and address shared barriers to the full participation of underrepresented, underserved, and marginalized communities in the space sector. And we will press for broad, consistent inclusion of civil society and other non-governmental organizations, including those with indigenous representation and women-led organizations, in space governance fora, as well as other fora benefiting from space-related services and data.

## **V. Goals and Objectives**

### **Pillar 1: Diplomacy for Space -- Advancing space policy for the benefit of future generations.**

**Advance U.S. space policy and programs internationally through bilateral and multilateral engagement and cooperation in order to maintain U.S. leadership in**

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<sup>8</sup> Specifically, U.S. diplomatic outreach can contribute to broader USG efforts under the U.S. Global Strategy on Global Women’s Economic Security to promote entrepreneurship and financial and digital inclusion, including through trade and investment. Outreach on space contributions to women’s economic security can be reinforced by integration of space security into the priority lines of effort in U.S. Strategy on Women, Peace and Security.

**safe and responsible space activities, including space exploration and commerce, while strengthening U.S. and allied capabilities and working to reduce the potential for conflict.**

Our *Diplomacy for Space* efforts will promote a rules-based international order for outer space activities. We will strengthen international understanding and support for U.S. space policies and programs. The Department's whole-of-government approach will showcase U.S. leadership in the responsible and sustainable use of space across the civil, commercial, and national security sectors and will seek to increase predictability and reduce the risk of misunderstanding and miscalculation.

In coordination with other U.S. departments and agencies, we will build international partnerships for civil and national security space, promote a rules-based international order for outer space and work to secure the United States and its allies from space-enabled threats. In international governance, policy, and regulatory fora, the Department will exercise U.S. leadership across space-related issues, tackling current space safety and sustainability challenges such as congestion in the space domain, near Earth objects, and severe space weather, and leading early action on the challenges of tomorrow, including those related to the recovery and use of outer space resources, lunar

operations, and other novel space activities<sup>9</sup>. Along with diplomacy on civil space activities and national security, we will pursue cross-cutting diplomacy related to commercial space; strategic competition; non-proliferation, technology transfer and export controls; cybersecurity of space systems; and space situational awareness and international preparedness. We will support candidates for election in relevant multilateral bodies who are committed to upholding and strengthening responsible, sustainable rules-based frameworks for space operations and policies.

The Artemis Accords are a centerpiece of the United States' civil space diplomacy. The Accords' principles, guidelines, and best practices are grounded in the Outer Space Treaty of 1967, setting the stage for safe and transparent civil space exploration, and promoting peaceful cooperation.<sup>10</sup> By signing the Artemis Accords, States commit to carrying out activities in the civil exploration and use of outer space in a manner that is both responsible and sustainable.

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<sup>9</sup> Such as: In-space servicing assembly and manufacturing (ISAM), future lunar operations, debris remediation, space tourism, recovery and reuse of space resources, asteroid mining, space launch vehicles, and new satellite applications.

<sup>10</sup> Artemis Accords principles include committing to transparency, interoperability, sharing of scientific data, registration of space objects, mitigation of orbital debris including spacecraft disposal, and providing emergency assistance in space.

## Diplomacy for Space Goal 1

### Civil and Commercial Space:

**Facilitate increased international cooperation and partnerships in civil and commercial space applications to harness their economic, environmental, and societal benefits for all, while promoting U.S. standards, best practices, values, and responsible behaviors and avoiding unreasonable burdens on the U.S. private sector. In support of U.S. and international civil and commercial space activities, the Department will:** Work with allies and partners to establish or update guidelines at the UN Committee on the Peaceful Uses of Outer Space (UNCOPUOS) and other relevant multilateral fora on the enhanced civil exploration and use of space for peaceful purposes, including science; Earth observation; economic development and novel space activities; preservation of the electromagnetic spectrum; civil positioning, navigation, and timing; and other space-based applications.

2. Utilize the Artemis Accords as a convening function to help shape discussion around the global governance of space exploration and other activities, such as the use of space resources, by fostering and expanding cooperation with traditional and non-traditional space partners, and:
  - a. Work with signatories to launch Artemis deconfliction and emerging partners working groups.

- b. Expand the number of Artemis Accord signatories through outreach to additional States.
3. Engage with U.S. space industry to understand views that may inform U.S. leadership at multilateral fora, including on emerging issues such as space resource utilization and the approach to post-International Space Station space exploration.
4. Promote cooperation and interoperability between national space regulatory regimes and systems and enhance opportunities for the peaceful use and exploration of outer space, including as appropriate through the negotiation of bilateral and multilateral agreements or other arrangements.
5. Pursue full, free, and open data policies for government Earth observation satellites. Enhance international cooperation to enable more robust Earth observation architectures, increase access to data from overseas sources, and support capacity building efforts so that data can be appropriately employed for disaster management, climate change mitigation and adaptation, and economic development.
6. Meet existing international obligations and showcase U.S. transparency and engagement on coordination with other States on registration of space objects, astronaut rescue and return, debris recovery, and planetary protection and defense.

7. Integrate space-related policy and programmatic objectives and concerns into international cybersecurity, electromagnetic spectrum, environmental, critical infrastructure, and other relevant diplomatic fora.
8. Collaborate with industry and encourage partner development and integration of cybersecurity plans for space systems that mitigate unauthorized access to critical space system functions, reduce vulnerabilities, protect ground systems, promote cybersecurity hygiene practices, and manage supply chain risks.
9. Press to include gender equity and equality on the agendas of our regular space dialogues and for broad, consistent inclusion of civil society and non-governmental organizations, including those with indigenous representation and women-led organizations, in multilateral space governance fora.

In our bilateral and regional dialogues and diplomacy, the Department will advocate for U.S. space policy goals and initiatives, including the use of U.S. space-derived data, products, remote sensing imagery, and services. As appropriate, we will raise space-related issues, activities, and programs at the highest levels of foreign governments. We will:

1. Promote responsible behavior and commercial cooperation, spur progress on technical cooperation, build and maintain cross-

government relationships, generate new initiatives, and raise allies' and partners' whole-of-government awareness of space issues.

2. Encourage other nations' full compliance with international obligations on space object registration and effective practices on space weather and planetary protection.
3. Track foreign space policy positions, strategy, programs, and activities; local space industry trends; and other space-related issues. In support of U.S. policy development, we will obtain insight on allies' and partners' approaches to emerging commercial issues, such as liability and insurance.

## **Diplomacy for Space Goal 2**

### **National Security:**

**Promote U.S. and allied security through bilateral and multilateral efforts that enhance capabilities and reduce risks of unintended conflict or escalation.**

1. Continue to comply with applicable international law and demonstrate leadership in both the responsible use of space and the stewardship of the space environment.
2. Use space security dialogues and diplomatic engagements to exchange views on space threats, policies, strategies, and doctrine.

3. Work with allies and other likeminded nations, including at UN disarmament and international security fora, to reduce space threats by advancing norms, rules, and principles of responsible behaviors, and as appropriate, legally binding arms control agreements, consistent with the National Space Policy.
4. Consider refining targeted export controls to better meet our foreign policy and national security equities – including balancing our equities to facilitate the growth of U.S. industry and protect critical U.S. technologies and intellectual property. Advocate for those controls in coordinated bilateral and multilateral fora and implement those controls nationally.
5. Building upon general international guidelines on space debris and mitigation and long-term sustainability, work to reduce risks of misunderstanding, help prevent or manage space-related incidents, and prevent inadvertent escalations.
6. Further the integration of U.S. national security space capabilities and activities with those of our allies and partners.

## **Diplomacy for Space Goal 3 – Cross-Cutting Priorities**

### **3.1 Commercial Space Diplomacy:**

**Support U.S. space-related economic growth and advance space science and exploration.** In line with the 2020 National Space Policy objectives, we will:

1. Continue and expand commercial diplomacy and advocacy on behalf of the U.S. space industry to support economic growth and advance space science and exploration, in coordination with the Department of Commerce.
2. Encourage other nations to adopt U.S. space regulatory approaches and commercial space and remote sensing sector practices and encourage interoperability.
3. Facilitate new market opportunities for U.S. commercial space capabilities and services, including civil applications that rely on USG-provided space systems.

### **3.2 Strategic Competition**

**Pursue space-related priorities in broader foreign policy and diplomatic engagement with strategic competitors, and:**

1. Pursue bilateral and multilateral transparency and confidence-building measures to reduce the risk of confrontation or conflict in space.

2. Track foreign government non-market practices in the space industry. Raise awareness with allies and partners of potential risks of collaboration with strategic competitors.
3. Connect emerging and aspiring space partners with U.S. expertise on national space policies and agency and governance structures, technological innovation, scientific collaboration, and equitable STEM education to help ensure the United States remains the partner of choice. This collaboration can also expand international scientific and technical capacity to support U.S. and international space program goals and societal benefits.

### **3.3 Non-Proliferation, Technology Transfer, and Export Controls:**

**Ensure Technology Transfer mechanisms and Export Controls support national and economic security, and:**

1. Maintain U.S. policy, consistent with PPD-42 “Preventing and Countering Weapons of Mass Destruction Proliferation, Terrorism, and Use” and the National Space Transportation Policy (2013), of not supporting the development or acquisition of space launch vehicle (SLV) (PPD-42) and space transportation systems in non-Missile Technology Control Regime (MTCR) countries. We will also continue our policy of not encouraging SLV and space transportation programs in MTCR partner countries, which we did not support prior to the advent of the MTCR in 1987.

2. Negotiate Technology Safeguards Agreements with MTCR Partner countries to establish the legal and technical framework for the protection of sensitive U.S. technologies that will allow U.S. commercial launch operations from an MTCR Partner country consistent with U.S. law, regulation, policy, and our commitments to the MTCR.

### **3.4 Critical Infrastructure and Cybersecurity of Space:**

**Promote and explain U.S. policy on cybersecurity and information and communications technologies (ICTS) in space, space-related critical infrastructure security and resilience, and space asset resiliency on the international stage, and:**

1. Work with U.S. cybersecurity agencies and entities to promote a secure environment, with cybersecurity interoperability, to strengthen space asset resiliency against adversarial offensive operations.
2. Collaborate with interagency, allied, partner, and commercial space system operators to promote the development and adoption of best practices and risk mitigations.
3. Enhance understanding of, and integrate cybersecurity of, space equities and objectives into U.S. positions at cybersecurity and other multilateral fora.

4. Promote comprehensive, risk-based approaches for cybersecurity of ground and space-based systems, along with appropriate physical security strategies.
5. Include commercial space stakeholders, as appropriate, into international efforts to promote secure and resilient critical infrastructure.
6. Work with commercial space stakeholders to advance the use of space systems to complement, where possible, and expand the reach of information and communications technologies and services' global connectivity.
7. Align space regulations to U.S. ICTS security policies such as E.O. 13873, 14034, 14028, and SPD-5.

### **3.5 Space Situational Awareness and International Preparedness:**

**Pursue cooperative space situational awareness in civil, security, and comprehensive space dialogues.** We will work with USG interagency partners and the U.S. commercial sector, as appropriate, to:

1. Advocate for a U.S. civil open data platform which leverages data and services provided from a variety of government, commercial, academic, and international sources.
2. Lead in the development and implementation of open, transparent, and credible international standards, policies, and best practices that establish the foundation for global space traffic coordination.

3. Continue to support international consultation mechanisms for planetary defense.
4. Support international cooperation on monitoring operational space weather.
5. Increase international dialogue on the future of astronaut search and rescue operations.
6. Improve information sharing and other procedures related to space object re-entry outside of a launching State's territory.

## **Pillar 2: Space for Diplomacy – Leveraging space activities for wider diplomatic goals.**

**Pursue increased international cooperation in the use of satellite applications, remote sensing satellite imagery, and space-derived data to help solve urgent societal challenges and achieve U.S. foreign policy and national security objectives on issues such as: climate change and environmental sustainability; crisis management and conflict prevention; arms control and international security; economic competitiveness and prosperity; and human health, while promoting U.S. standards, best practices, and values, including through outreach to foreign publics.**

Through *Space for Diplomacy*, the Department's diplomatic and public diplomacy efforts will promote the international peaceful use of space capabilities to make progress on global economic, environmental, political,

technological, and societal challenges. We will also use public and science diplomacy tools to enable embassies to leverage U.S. leadership in space exploration to build affinity for the United States among foreign publics and a better appreciation of how U.S.-led space exploration and scientific research provide tangible benefits for all. We will use space-derived imagery, data, and analysis to illuminate the realities of, and spur international efforts on, humanitarian crises and disasters; migration and refugee flows; the environment and sustainable development; natural resource and energy issues, including oceans and water; boundary disputes and territorial claims; and human rights issues and war crimes.

The development of new space applications also provides opportunities for economic growth, scientific leadership, and technological innovation that have not yet been identified. Sustaining the rules-based order requires working with an expanding number of partners on a shared positive vision for space. The Department will continue facilitating connection and education on ways space activities can support partner and ally priorities and international partnerships. We will also continue applying space-related capacity, data, and analysis to broader Department policy decisions, including our responses to geopolitical events such as armed conflict; facility planning surrounding climate adaptation and mitigation, air pollution, and natural disasters in our internal Department operations; and when targeting our disaster response and emergency assistance. Scientific and technological cooperation in the exploration and use of outer space for peaceful purposes, such as the making available of satellite imagery, is also critical to national preparedness and

domestic disaster management. We will therefore continue prioritizing our facilitation of international agreements and other arrangements that serve as umbrella frameworks for technical implementation. In this way, we will support enhanced U.S. resilience by augmenting the U.S. ability to observe and respond to a range of urgent situations.

## **Space for Diplomacy Goal 1**

### **Use Space Activities to Meet Diplomatic Priorities.**

1. Enhance internal Department and interagency synergies to further benefit from space-derived data, products, and services in our policymaking and response to breaking events, global challenges, such as extreme weather and climate change, environmental, oceans, disaster risk reduction, and indigenous issues, and arms control verification and nonproliferation.
2. Use satellite imagery to build U.S. credibility and counter false narratives and disinformation.
3. Facilitate use of international satellite-based data, including from non-U.S. systems, for U.S. national preparedness and domestic disaster analyses and management.
4. Promote available access for foreign partners, prioritizing outreach to emerging and aspiring space partners, including in appropriate non-space fora.

5. Promote equitable access to Earth observations, including by mobilizing new donors and both private sector and innovation funding, as appropriate, and by publicizing U.S. online capacity-building opportunities, including raising awareness for underrepresented, underserved, and marginalized communities, including women.
6. Continue to expand the use of space-derived data and educational materials in pursuit of STEM, gender equity and equality, and DEIA objectives.
7. Leverage interagency expertise in space science and technology through the Embassy Science Fellows and educational exchange programs to build capacity in appropriate countries and encourage countries to see the United States as a preferred collaboration partner.
8. Highlight U.S. space exploration leadership and promote U.S. space diplomacy through public outreach campaigns.

## **Space for Diplomacy Goal 2**

### **Support Department Resource Management and Operations.**

1. Leverage interagency space-related capacity for insights into U.S. diplomatic mission conditions and resource requirements related to staff health, facilities management, extreme weather and climate and

biodiversity resilience, natural hazards, emergency planning, and security, that also bring focus to key global challenges.

2. Support broader U.S. government and Department all-hazards critical infrastructure security and resilience outreach, emergency planning, and continuity of government/continuity of operations requirements, as they expand to incorporate space-related hazards.

### **Pillar 3: Empowering the Department Workforce on Space Diplomacy.**

**Provide diplomatic posts and the Department's workforce in Washington, D.C. with the modernized skill set of tools and knowledge needed to pursue space-related policy and programmatic objectives through all relevant bilateral and multilateral fora and mechanisms.**

We must ensure that Department staff have the knowledge and tools they need to be fully successful on space-specific objectives, to use space-related information in pursuit of other diplomatic objectives, and to integrate space-related policy positions into related policy discussions. Our space diplomacy already benefits from working with the interagency and from growing expertise and focus arising out of the Department Modernization Agenda, including on climate, cyberspace and emerging technologies, economics, and multilateral diplomacy. The Department's space community of interest will:

1. Continue identifying synergies and, when appropriate, joint prioritization, of key issues across Department engagement at space-related or bilateral fora.
2. Systemically support Department workforce on space diplomacy, including flagging topics of interest for post reporting and elevating awareness of space-related online resources and training options.
3. Broaden use and understanding of space-related data that can be applied to global challenges, both at the Department level and by posts.
4. Gain a better understanding of Regional Environment, Science, Technology, and Health (ESTH) Officers (REOs), ESTH, political-military, Regional Technology Officers (RTOs), and public diplomacy sections' needs and requirements, so they are further equipped to engage on space issues.
5. Develop public diplomacy toolkits to help translate U.S. leadership in outer space exploration and establish a greater appreciation of the U.S. commitment to transparency, open science, and innovation.

## VI. Conclusion

Vice President Harris has noted that U.S. space leadership has “been guided by a set of fundamental principles – cooperation, security, ambition, and public trust – and the recognition that space can and must be protected for

the benefit of all people.” In pursuit of these principles, the actions proposed in this strategic framework are intended to ensure the Department fulfills its mission to advance the United States’ position as a global space leader, working alongside our allies and partners for peaceful purposes, utilizing space to benefit society, and exploring the Moon, Mars, and beyond to continue expanding humanity’s knowledge and awareness of our surroundings and the vast expanse of the universe.