Good morning, ladies and gentlemen. My name is Kevin O’Connell and I’m the Director of the Office of Space Commerce ("OSC") at the Department of Commerce ("DoC"). I thought that I would use the great legal minds in this audience and the early morning energy to have a discussion about space regulatory matters, specifically, what we at Commerce describe as a “light tough, permissive regulatory environment.” This is a topic that we are discussing routinely, both inside Commerce, and increasingly with external stakeholders, including Congress. The key question is how we adjust our space regulatory frameworks to enable a lightning-speed U.S. space industry to play the key role in a trillion dollar space economy, possibly more, projected over the next two decades.

Before we dive into that, let’s level set for everyone in the room. Ensuring that America continues to be the leader in space and space commerce are key priorities for the Trump Administration and the first objective in the Department of Commerce’s Strategic Plan for 2018-2022. By the last Galloway conference, with Space Policy Directive 1 ("SPD-1"), the Administration had re-established the National Space Council and set ambitious goals to return to the Moon. Since then two additional Space Policy Directives have set a new course on regulatory reform and on the growing challenges associated with space traffic management.

Specifically, Space Policy Directive 2 ("SPD-2") called for a broad review of federal policy and regulations related to the commercial space sector in areas like spectrum management, export controls, remote sensing, and in particular, reorganization of the Commerce Department in order to unleash the U.S. commercial space industry for economic and national security benefit.

Space Policy Directive 3 ("SPD-3") directed the Department of Commerce, working with its partners in the Department of Defense ("DoD") and the Department of Transportation ("DoT"), to create a civil Space Situational Awareness ("SSA") agency to support civil and commercial entities. While there are many reasons for this, key is that a burgeoning U.S. industry stands ready to help innovate in this area, bringing a wide range of capabilities like sensors, analytic tools, visual and decision aids to an increasingly complex problem. But there’s not only a supply side opportunity here; we also have to be able to understand the kinds of SSA and Space Traffic Management ("STM") needs that commercial entities will have as the space economy expands. The Department of Commerce is a natural “storefront” for those kinds of activities.

It is not Commerce alone. Consistent with National Space Council direction, we employ a “whole of government” strategy to thinking about these issues. What does that mean? In the context of this topic, it could conjure up images of ponderous and burdensome regulation. In fact, what it means is that we gather as agencies to discuss issues, elevate where we can’t agree, and know that every few months, the Vice President is going to ask us about our progress. This has imparted a speed to bureaucratic processes rarely seen, including on complex issues at the intersection of policy and technology.
One more bit of background on the Office of Space Commerce. Our mandate, in legislation, is “to foster the conditions for the economic growth and technological advancement of the U.S. commercial space industry.” To this end, Secretary Ross [U.S. Secretary of Commerce] has asked me to advance our mission through four key elements of strategy:

- **Industry advocacy:** We advocate both at home and abroad for U.S. commercial space capabilities. At home, where U.S. government agencies seek to replace or create innovative new capabilities, for commercial industry to be given fair and rigorous consideration. Abroad, working with DoC’s International Trade Administration, to promote and to ensure fair market access for U.S. companies. We’re currently in the process of building a “toolkit” for entrepreneurs to tap the full capabilities of the Commerce Department.

- **Removing regulatory barriers:** We are seeking to modernize licensing processes and remove burdensome regulatory requirements to more efficiently comply with national and international obligations.

- **Industry engagement:** Through industry engagement, OSC seeks to better understand developments in the commercial space industry, partly to understand current advocacy and regulatory needs, but also to understand what new capabilities might be coming forward for commercialization.

- **Understanding the value of space:** We have a rich but incomplete understanding of the value of space and its impact on our daily lives. We need to do a better job of analyzing the impact of space on the economy but also explaining it in simple terms.

With that as background, let’s turn to the issue of regulation. From what I have already told you, there’s active work being done, under SPD-2, on export control reform, on launch, on spectrum issues, and on remote sensing. I have already spoken publicly about the remote sensing rule to suggest two key changes: we started with a “clean sheet” approach, and included a “presumption of approval” consistent with Administration policy.

Pending legislation will transition the Office of Space Commerce out of the National Oceanic and Atmospheric Administration (“NOAA”) and into the Office of the Secretary of Commerce in order to better serve the commercial space industry. The title of my talk today is one that, legitimately, comes up in discussions with both our House [U.S. House of Representatives] and Senate [U.S. Senate] oversight. “What do you mean by light touch, permissive regulation, Kevin?” I’d like to use my remaining time to both offer ideas on this, but also to stimulate your own thinking on the topic. In almost all of our travels thus far, and here in Washington, we in OSC have been holding small, informal discussions with industry groups and others about individual experiences with regulation of a fast-paced industry and its enablers, like finance and insurance. Those discussions will continue.

My first observation about these discussions is the importance of collaborative dialogue on regulations and regulatory impacts. Early in my time at Commerce, we had a handful of
discussions where companies said “we’ll just wait for the government to tell us about regulations.” That’s silly. Regulations benefit from input informed by technical and business considerations that industry input uniquely provides. Conversely, industry often understands what government safety and security concerns are, and we have already seen companies adjusting their business plans in the market in order to help with those concerns.

We have also had a variety of discussions about “permission-less” versus “permissive” environments. The former risks anarchy and chaos in space where individuals companies might thrive, but commerce more broadly will shy away. We don’t get to that trillion dollar space economy in anarchy, but rather through stability, predictability and order.

Some look to existing regulatory guidelines for clues on what a “light-touch, permissive regulatory environment” might look like. Certainly, there are principles that one can derive from existing regulations: reasonable timelines, transparency between government and industry, and collaborative pre-consultation processes, but those don’t completely define the environment.

Secretary Ross often likes to ask folks ‘what’s the next big thing in space?’” While we want to anticipate these developments better – that’s part of our industry engagement strategy that I spoke of earlier – the speed of leadership, finance, and technology right now means that we need a regulatory environment that reasonably considers new ideas and gives companies a shot at innovative new concepts. What we’re thinking about now is what kind of processes that could be used efficiently for such a dynamic industry, and for ways to keep the regulatory processes agile in the face of blisteringly quick space developments.

Why is this critical? Not only is speed critical to leveraging innovative new capabilities, it is also critical to maintaining U.S. economic competitiveness in a changing global environment. Our “flag of choice” mandate depends on giving U.S. companies a reasonable chance to bring new services to market. The trillion dollar space economy will depend on continuing disruption and innovation, first, for the “traditional” commercial space arenas like communication, remote sensing, navigation, even weather, even as newer commercial offerings in satellite servicing, space debris removal, space tourism and others come to market. We should be thinking right now about how regulations might hinder or enable industry.

Space regulations must be easily navigable and consolidated whenever possible. For extension or expansion of licenses, such as for constellation cycle approvals, the regulatory system should distinguish between de minimus changes to existing authorizations and treat them differently than more significant satellite operational changes reasonably subject to longer license review. Additionally, a policy of presumption in favor of expansion should be a model we strongly consider. In order to ensure commercial companies are given a fair economic chance, technical standards should be outcome-based rather than technically prescriptive.

Next, regulation should be technology-neutral. Technical standards should reflect performance-based outcomes, rather than relying on our current understanding of ever-changing technology. While there will be winners and losers in the commercial space industry, regulation should not play a role in determining those market-driven outcomes. Regulations should, in effect, justify further investment in the commercial space industry and serve to advance
innovation by allowing for previously unseen business models and technologies to be licensed rapidly and bring their services to market. Here, we need to consider creating a system for granting rapid waivers or experimental allowances for innovative concepts that don’t fit within existing regulatory confines.

Regulation has an international dimension as well as countries want to both leverage and benefit from the trillion dollar space economy. The Outer Space Treaty, of course, calls for “continuing supervision” of commercial space activities, but doesn't go much further than that. Along these lines, we welcome the cooperation within the UN on the long-term sustainability guidelines. Dual regulation is also a risk to be avoided if possible.

We must find a regulatory balance between ensuring continued safety and best practices in space while simultaneously accommodating innovative space activities and ensuring that the U.S. remains the flag of choice for commercial space companies. This approach will justify reasonable investment and operation in space and encourage innovation.

There’s a question in my mind about whether the past twenty years of commercial space regulation have been a success, with only a handful of speed bumps, or whether companies have succeeded in spite of an overly complex regulatory structure. We can debate that, and my view sometimes changes on different days. One thing I know for sure, is that I sometimes engage battles that it seems like we’ve been arguing for over a decade. The key question is whether we can adapt a regulatory system to the dynamic space commerce world that we’re already in, to the advantage of U.S. firms.

Within the Department of Commerce, our own strategy envisions, as Secretary Ross likes to describe it, “as a one-stop shop” to meet industry’s advocacy and regulatory needs. Ultimately, an extraordinary Administration focus on commercial enterprise and long-term commercial viability is why the space regulatory regime has been placed within the Department of Commerce. Yes, it’s a regulatory function, but it’s a regulatory function designed to stimulate, not stifle, the industry it serves. It will not be permission-less, nor reckless, but the primary goal will be to enable the commercial space industry in a safe and responsible manner in order to ensure economic expansion, and facilitate rapid innovation.

Finally, the ideas I have shared here this morning are the starting point of the conversation, not a slate of definitive answers. Secretary Ross has asked my office to look at whether the existing regulatory structure will ensure that the U.S. remains the global leader in the space industry. Just as we welcome industry input, I would welcome hearing from you in the space law community on the best and brightest ideas about how to adapt our regulatory frameworks on behalf of a 21st century space industry and the path toward the trillion dollar space economy.