

Chairman Don Beyer (D-VA) of the Subcommittee on Space and Aeronautics

Space and Aeronautics Subcommittee Hearing: Space Situational Awareness: Guiding the Transition to a Civil Capability May 12, 2022

Good morning, and welcome to today's hearing, "*Space Situational Awareness: Guiding the Transition to a Civil Capability*." I want to thank our distinguished panel of witnesses for being here today.

I'm pleased that we are finally able to hold this important hearing. Previously scheduled hearing dates had to be postponed due changes to the House voting schedule and a memorial service for a former House Member.

Today, we are here and ready to discuss this urgent issue—Space Situational Awareness or SSA. SSA is the ability to identify, understand, and predict the locations of objects in space so that potential collision risks can be calculated and shared with operators.

The growth in space activity has made SSA crucial. Space-enabled services like communications, national security activities, banking, weather forecasting, and Earth imaging depend on the ability of systems to operate safely in space.

However, safety is far from guaranteed.

Mega constellations of thousands of satellites are creating orbital congestion, and orbital debris from past missions—and reckless anti-satellite tests—are compounding the risks of operating in space. The sustainability of the space environment is in peril if we don't act.

Understanding and mitigating the risks starts with SSA.

While the DOD has been providing SSA services and information to space operators for decades, the increasing complexity of the SSA function, the resources required to manage it, and the need for ongoing improvements are becoming an increasing burden.

In 2018, Space Policy Directive-3 recognized the need for a civil agency to carry out basic SSA capabilities so that the DOD can focus on its national security mission.

I couldn't agree more. How will a transition from a DOD-based system to a fully operational, civil SSA capability occur?

Some entities suggest that commercial companies can perform the civil SSA function and already do so, albeit on a smaller scale.

Others argue the problem has been studied to death and we need to get on with it.

First, we need to know exactly what we're getting on with, because the transition to civil SSA remains unclear.

- What functions and responsibilities should be transitioned?
- What SSA data are needed and who will provide it?
- What services and information, and at what level, will the civil capability provide?
- And what roles will the government have and where should the commercial sector contribute?

The current approach to civil SSA is the Department of Commerce's Office of Space Commerce open architecture data repository—OADR. In 2021, the Office demonstrated its OADR protype to enable SSA data sharing among government and commercial space operators. For Fiscal Year 2023, the Office is requesting a whopping 550 percent increase toward bringing the pilot to an operational capability.

How the OADR would evolve, however, is an open question. The path forward for civil SSA has not been defined, and it needs to be to avoid the mistakes of past programs gone awry.

DOD's own attempts to upgrade its legacy SSA systems ended up in nearly a billion dollars spent and a decade lost before the agency cancelled the JMS program.

Today's hearing will examine the questions, actions, and issues that must be addressed to enable an effective transition.

For starters, it's clear we need a plan to move quickly. And while SSA is an essential first step, it is just one element of space safety.

We also need aggressive actions to mitigate the further creation of orbital debris.

And we need a framework to define who moves where and when in space—so-called space traffic management or space traffic coordination.

While the U.S. has led the world in actionable SSA services and information, other nations are quickly getting into the game and developing advanced approaches to SSA and space traffic coordination.

We can't afford to lose our edge. Because while space safety is a global issue that requires spacefaring nations work together, we must continue to lead the way. I'm pleased that the Biden-Harris Administration is doing just that by taking initial steps on norms of responsible behavior, which includes their recent announcement of a new commitment by the U.S. government not to conduct direct-ascent anti-satellite missile testing, a stark contrast with the behavior of some of our global adversaries.

I want to thank our witnesses again for being here and I look forward to your testimony. Establishing a robust, evolvable civil SSA capability is an essential part of space safety and one the Subcommittee and Committee are taking very seriously.

The Subcommittee is currently working on the "Space Safety and Situational Awareness Transition Act of 2022" and today's hearing will inform that process. I look forward to working with Ranking Member Babin and Members of the Subcommittee and Committee and the broader stakeholder community as we advance legislation to address this pressing issue.