Before the DEPARTMENT OF COMMERCE Washington, D.C. 20230

In the Matter of)
)
Request for Information on) RTID: 0648-XV190
Scope of Civil Space)
Situational Awareness Services)
)

COMMENTS OF CONFERS

I. Introduction and Summary

CONFERS (formerly the Consortium for Execution of Rendezvous and Servicing Operations) is an industry-led initiative that aims to leverage best practices from government and industry to research, develop, and publish non-binding, consensus-derived principles, practices, and technical and operations standards for On-Orbit Servicing (OOS) and Rendezvous and Proximity Operations (RPO). These standards would provide the foundation for a new commercial repertoire of robust space-based capabilities and a future in-space economy.

To fulfill its mission, CONFERS is recruiting a broad array of members from satellite equipment manufacturers, satellite operators, service providers, developers of RPO simulation, planning and safety tools, and insurers; interacting with standards development organizations; and engaging other stakeholders from industry, academia, and governments. At the end of 2022, CONFERS had more than 60 members from eleven countries. The process is fully collaborative and includes dedicated outreach activities to the global commercial satellite and space community.

We appreciate the efforts of the Office of Space Commerce (OSC) to conduct a comprehensive review of its Space Situational Awareness (SSA) Services and the opportunity to provide comment in the Request for Information¹ (RFI).

II. Member Perspectives on SSA Services

 $^{^{1}\} https://www.federalregister.gov/documents/2023/01/26/2023-01556/request-for-information-on-scope-of-civil-space-situational-awareness-services$

Space situational awareness is crucial because it enables us to monitor and understand the location, trajectory, and behavior of objects in space, including debris, satellites, and other space-based assets. This information is essential for maintaining the safety and sustainability of space operations, as well as ensuring the continuity of critical space-based services such as communication, navigation, and earth observation. SSA provides an understanding of the space environment that is vital for reducing risk, avoiding collision, and enabling safe and responsible use of space for future generations.

Our members are working on developing a variety of commercial technologies, capabilities, and services that could directly benefit civil SSA. One major area of impact are technologies for the identification, tracking, and inspection of other space objects. These commercial capabilities would complement existing public and private sector ground-based capabilities by providing more detailed and comprehensive data to help identify and resolve on-orbit anomalies and increase the accuracy and precision of SSA decision-making data.

Regarding <u>C. Tenants of Participation and Receipt of Basic SSA Safety Services</u> of the RFI, the CONFERS *Guiding Principles for Commercial Rendezvous and Proximity Operations (RPO) and On-Orbit Services (OOS)* (Principles) provides a framework for information we believe necessary for safe and sustainable OOS. CONFERS Principles expects that commercial servicing operations provide a level of transparency "in keeping with [...] the Outer Space Treaty". Operators would "notify the relevant State(s) of the general nature, conduct, locations, and results of servicing operations" and "ensure sufficient communication and coordination with entities that could reasonably be affected by the servicing operation to support safety and avoid harmful interference." A level of transparency should be the minimum for owner/operator participation in the Traffic Management System for Space (TraCSS).

CONFERS believes that by relying on the expertise and innovation of commercial industries, the US Government can benefit from faster development times, improved quality, and reduced costs. In the case of space technologies, many commercial companies, including some CONFERS members, are already developing cutting-edge capabilities that can directly benefit the OSC's mission. Buying these commercial technologies instead of trying to replicate them in-house, can free up resources for other mission-critical activities. Additionally, purchasing from the commercial sector can stimulate economic growth and incentivize continued innovation, creating a self-sustaining cycle of progress. As such, CONFERS supports that, where possible, the OSC should leverage commercial capabilities that support the fourteen services to be included in TraCSS.

III. General Comments

As discussed in CONFERS's 2019 comments on the *Request for Information on Commercial Capabilities in Space Situational Awareness Data and Space Traffic Management Services*², inspace sensors and data collection can provide critical augmentation of current SSA capabilities. We reiterate the importance of maintaining a commercially supportive non-Earth imaging (NEI) licensing framework. Licensing updates implemented in 2020³ have allowed OOS capabilities to flourish. These capabilities allow for space-based SSA to support scientific studies of the orbital debris population, assist with tracking and identifying newly launched objects, tracking fragments from new breakups and collisions, helping diagnose and resolve on-orbit anomalies, conduct safe rendezvous and proximity operations, and contribute to monitoring or reinforcing norms of behavior on orbit to support current U.S. national policy goals.⁴ Incorporation of space-based SSA data into TraCSS will create a more robust system, allowing for a safer orbital environment.

Respectfully submitted,

/signed/

Brian Weeden, Ph.D. Executive Director CONFERS 8 The Green STE 4000 Dover, DE 19901 February 27, 2023

² https://www.regulations.gov/comment/DOC-2019-0001-0031

³ https://www.federalregister.gov/documents/2020/05/20/2020-10703/licensing-of-private-remote-sensing-space-systems

⁴ White House, "National Space Policy of the United States of America," June 28, 2010, retrieved from http://obamawhitehouse.archives.gov/sites/default/files/national_space_policy_6-28-10.pdf