Response by Spatial Web Foundation
to NIST's Request for Information
Related to its Assignments under Sections 4.1, 4.5 and 11
of the Executive Order Concerning Artificial Intelligence

Docket number NIST–2023–0309
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The Spatial Web Foundation (SWF) is a non-profit dedicated to development of interoperability and governance standards for AI. SWF's response to this RFI is based on our leadership of IEEE P2874 in the IEEE AI Standards Committee; the experience from VERSES Inc's commercial implementation of IEEE P2874; and, the expertise of VERSES's Chief Scientist, Dr. Karl Friston.

This SWF response is focused on RFI item 1. Developing Guidelines, Standards, and Best Practices for AI Safety and Security; Sub-item (2) Creating guidance and benchmarks for evaluating and auditing AI capabilities, with a focus on capabilities and limitations through which AI could be used to cause harm.

In response to RFI item 1.(2), **SWF recommends that NIST adopt the IEEE 2874 Spatial Web Standard as guidance for evaluating AI Capabilities which AI could cause harm.**

The IEEE P2874 standard defines requirements for safe and trustworthy operation of AI Agents, where AI Agents are defined as in ISO/IEC 22989:2022. The IEEE P2874 specification defines criteria for AI Agent intelligence levels as a basis for certification credentials and ecosystem governance. The P2874 criteria were developed from the socio-technical approach elaborated in The Future of AI Governance developed by Dentons, VERSES and the Spatial Web Foundation.

As guidance for evaluating AI capabilities, with a focus on capabilities that could potentially cause harm, the IEEE P2874 specification establishes measurable criteria for the governance of Autonomous Intelligent Systems (AIS). In particular, the **AIS International Rating System (AIRS)** provides guidelines for governance based on the varying level of intelligence of AI agents operating interactively in open ecosystems.