ALLIANCE FOR AUTOMOTIVE INNOVATION

April 29, 2022

SUBMITTED VIA ELECTRONIC MAIL at AIframework@nist.gov

Elham Tabassi
Chief of Staff, Information Technology Lab
National Institute of Standards and Technology
100 Bureau Drive
Gaithersburg, Maryland 20899

RE: Request for Comment on Artificial Intelligence Risk Management Framework Initial Draft

Dear Ms. Tabassi:

The Alliance for Automotive Innovation ("Auto Innovators") is pleased to submit comments to the National Institute of Standards and Technology ("NIST") in response to its request for comments on the Artificial Intelligence Risk Management Framework ("AI RMF") Initial Draft. Auto Innovators welcomes the opportunity to continue contributing to the multistakeholder, consensus-driven process informing the development of the AI RMF.

Auto Innovators is the singular, authoritative, and respected voice of the automotive industry. Auto Innovators represents the manufacturers that produce nearly 98 percent of cars and light trucks sold in the United States, original equipment suppliers, technology companies, and other value-chain partners within the automotive ecosystem. The automotive industry is the nation's largest manufacturing sector, representing approximately 5.5 percent of the country's GDP, and responsible for roughly 10 million jobs.

Artificial intelligence powers or enables the automated driving systems, advanced safety technologies, and driver support features that our member companies integrate into consumer vehicles. The capabilities of these systems and technologies can provide tremendous benefits to drivers and other road users. We fully recognize the importance of cultivating public trust and communication to understand and manage artificial intelligence system risk and appreciate that the AI RMF intends to "improve understanding of and to help organizations manage both enterprise and societal risks related to the development, deployment, and use of AI systems."

Technological advances in the automotive industry have the potential to improve roadway safety, reduce serious injuries and deaths, protect vulnerable road users, improve the environment, and support the way Americans live today and in the future. The industry views roadway safety as paramount and remains committed to deploying technology, including artificial intelligence systems, as part of a proactive, comprehensive, holistic, and collective approach to improving transportation safety in the

U.S., in concert with policymakers and other stakeholders. We understand that risk management is not limited to automotive companies or the direct users of the vehicles and systems they produce; we must consider the potential broader societal and systemic risk management issues in the overall transportation ecosystem.

Specific Comments:

As NIST continues its development of the AI RMF, Auto Innovators offers the following specific comments on the Initial Draft:

- **Audience:** The additional detail outlining the four stakeholder groups identified as intended audiences of the AI RMF is helpful. In particular, the inclusion of those responsible for the acquisition of AI systems under AI system stakeholders can highlight the importance of artificial intelligence risk management concepts for acquisition, procurement, and supply chain professionals who may unconsciously onboard such potential risk. Auto Innovators recommends further alignment with draft international standard, ISO/IEC DIS 23894 Information Technology – Artificial Intelligence – Risk Management, where possible, to ensure consistency with ongoing international standards development work. We also suggest that further iterations of the AI RMF consider how to serve each stakeholder group's needs given their diversity, perhaps through further subdivision into sub-groups to facilitate additional engagement.

- **Framing Risk:** NIST notes that the AI RMF "intends to offer [risk management] approaches to minimize negative impacts of AI systems *and* identify opportunities to maximize positive impacts" (emphasis in original). As it continues development of the AI RMF, NIST should emphasize the potential for positive impacts and benefits from artificial intelligence systems, when such systems are appropriate and warranted, as it continues developing the AI RMF. This could be achieved with a figure, in addition to the already included ***Figure 2:*** *Examples of potential harms from AI systems*, on examples of potential benefits from AI systems.

  In addition to further elucidating the potential benefits from AI systems, the AI RMF should not group safety risks that do not pose a potential risk of serious injury or death with potential safety risks that do pose such risks. Each could have its own set of artificial intelligence risk management approaches based on the severity of potential risks presented. The Initial Draft acknowledges that risk tolerances are context and use case-specific, "set through policies and norms that can be established by AI system owners, organizations, industries, communities, or regulators (who often are acting on behalf of individuals or societies)." Context is particularly important given the different connotations associated with safety.

- **AI Risks and Trustworthiness:** Auto Innovators appreciates that NIST incorporates the three-class taxonomy, originally proposed in mid-October 2021, into the Initial Draft. We suggest that the descriptions of each technical characteristic, socio-technical characteristic, and guiding principle include both a discussion of how they each address potential artificial intelligence risk and how they can promote artificial intelligence benefits (where appropriate).

- **AI RMF Core:** Auto Innovators welcomes the expansion of the AI RMF Core to align with the three-class taxonomy of technical characteristics, socio-technical characteristics, and guiding

principles. The further subdivision of each Core Function into Categories and Subcategories is also helpful. We maintain that existing laws, regulations, standards, guidelines, and practices can serve as useful informative references for each subcategory. NIST should seek to incorporate both industry-specific and industry-agnostic informative references.

- **Practice Guide Example on Embedded AI Systems:** When NIST compiles its companion Practice Guides with examples and practices that can assist in using the AI RMF, we suggest that one of the examples focus on artificial intelligence systems in embedded applications. Such an example could provide insight and guidance into how to address the technical and socio-technical characteristics of artificial intelligence models and algorithms that often function as subsystems of larger information and control systems. It could also broaden the scope of safety as a socio-technical characteristic, per the framing risk discussion above, and focus on functional safety of an entire system incorporating algorithms.

Auto Innovators appreciates its ongoing collaboration with NIST on the development of the AI RMF. We look forward to our continued engagement on this and other matters.

Sincerely,



Tara Hairston
Senior Director, Technology, Innovation, & Mobility Policy