



January 25, 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
Concept Paper**

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”) concept paper. Auto Innovators appreciates the opportunity to contribute to the ongoing consensus-driven process to craft the AI RMF.

Auto Innovators is the singular, authoritative, and respected voice of the automotive industry. Focused on creating a safe and transformative path for personal mobility, Auto Innovators represents the manufacturers that produce nearly 99 percent of cars and light trucks sold in the United States, original equipment suppliers, technology companies, and others within the automotive ecosystem. The automotive industry is the nation’s largest manufacturing sector, contributing \$1.1 trillion to the United States economy and representing 5.5 percent of the country’s GDP. As a significant engine for our nation’s economy, the automotive sector is responsible for 10.3 million jobs and \$650 billion in paychecks.

A number of the innovative and cutting-edge technologies that our member companies integrate into consumer vehicles – including automated driving, other advanced safety technologies, and features to support drivers and passengers – incorporate or leverage artificial intelligence. We agree that efforts to mitigate artificial intelligence risks through collaborative, voluntary multi-stakeholder approaches can engender public trust in artificial intelligence systems, permit flexibility for innovation, and ensure benefits flow from such systems. For this reason, Auto Innovators supports NIST’s ongoing efforts to “improve the ability to incorporate trustworthiness considerations into the design, development, and use, and evaluation of AI products, services, and systems.”

Overall, Auto Innovators maintains that the concept paper presents a favorable direction for the eventual AI RMF. We appreciate that NIST continues to prioritize partnership with public

and private sector actors to drive consensus on risk management approaches to emerging technologies, and NIST's commitment to a multi-stakeholder process here as well is welcome. In addition, we appreciate that the concept paper does not take a "zero risk" approach to artificial intelligence; instead, it reiterates that the AI RMF intends to "serve as a blueprint for mapping, measuring, and managing risks related to AI systems across a wide spectrum of types, applications, and maturity." The concept paper appears to recognize the iterative, cyclical, and overlapping nature of innovation across the pre-design, design and development, test and evaluation, and deployment stages. This is especially true for artificial intelligence systems, where risks may present in later stages of a system's lifecycle.

Auto Innovators also supports the concept paper's outlined attributes and its proposed organizational structure. With regards to the outlined attributes, we particularly appreciate the emphasis on being "risk-based, outcome-focused, cost-effective, voluntary, and non-prescriptive," "appropriate for both technology agnostic (horizontal) as well as context-specific (vertical) use cases," "consistent or aligned with other approaches to managing AI risks," and "consensus-driven and developed and updated regularly through an open, transparent process." The other listed attributes of usability, common and plain language, and iterative over time are also important. Such attributes will enable the eventual AI RMF to provide maximum understandability and flexibility by individuals and organizations, regardless of sector or specific technology use. Finally, Auto Innovators maintains that the concept paper's proposal of an organizational structure for the AI RMF similar to NIST's Framework for Improving Critical Infrastructure Cybersecurity and the Privacy Framework is valuable. Public and private sector actors know these frameworks well, and therefore, this approach will provide a baseline of understanding for the proposed approach and facilitate potential adoption in the future. We also contend that the proposed functions will help users appropriately manage AI risks.

Specific Recommendations

As NIST continues its ongoing work to develop the AI RMF, Auto Innovators offers some recommendations:

- **Encourage AI Benefit Maximization:** Auto Innovators appreciates that the concept paper acknowledges that, "AI risk management is as much about offering a path to minimize anticipated negative impacts of AI systems...as it is about identifying opportunities to maximize positive impacts." NIST should continue to emphasize the potential for positive impacts and benefits from artificial intelligence systems, when such systems are appropriate or warranted, as it continues development of the AI RMF. For example, in the Map and Measure functions, NIST can include that artificial intelligence users enumerate and quantify the potential benefits as well as the risks.
- **Accommodate Scope Challenges:** The concept paper strives to create a shared understanding of what constitutes artificial intelligence and artificial intelligence systems, given the diversity of audiences that NIST intends to target with the AI RMF. However, to facilitate usability and adoption, the AI RMF should acknowledge that implementers may not always know whether applications integrated into their products and services contain artificial intelligence systems. This is particularly true when the application is

provided by a supplier or technology partner. Furthermore, the concept paper and the AI RMF should provide sufficient flexibility to entities to appropriately target the use of the AI RMF to the most relevant applications, including human-facing applications with significant legal implication or impact.

- **Align Proposed Functions with Draft AI Risk Taxonomy:** The NIST Draft – Taxonomy of AI Risk is a useful document to “cultivate trust in the design, development, use, and governance of Artificial Intelligence (AI) technologies and systems.” Therefore, we suggest more fulsome alignment between the concept paper and eventual AI RMF with the AI Risk Taxonomy to “encourage consensus regarding terminology related to risk so that these types of risk may be identified and managed.” For example, NIST can further subdivide each of the four proposed Functions in the concept paper into categories and subcategories that relate to the AI Risk Taxonomy’s proposed technical design attributes, socio-technical attributes, and guiding principles contributing to trustworthiness.
- **Further Leverage Existing AI Risk Management Approaches:** As mentioned above, Auto Innovators is grateful that NIST has identified consistency or alignment with other approaches to managing AI risks as a key attribute. To further promote consistency and alignment, NIST should consider identifying existing laws, regulations, standards, guidelines, and practices as informative references for each eventual subcategory. This should include or accommodate, as appropriate, industry-specific standards such as ISO/AWI PAS 8800 (Road Vehicles – Safety and artificial intelligence).¹ NIST can also consider other instructive risk management approaches for other technologies or from other disciplines (*e.g.*, ISO 31000:2018 – Risk management – A practical guide)².

Auto Innovators sincerely appreciates the opportunity to provide this feedback to NIST as it continues this work to advance the deployment of trustworthy and useful artificial intelligence. We look forward to continuing to collaborate with NIST on this and other matters.

Sincerely,



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

¹ ISO/AWI PAS 8800 (Road Vehicles – Safety and artificial intelligence) remains under development. See here: [ISO - ISO/AWI PAS 8800 - Road Vehicles — Safety and artificial intelligence](#). Nevertheless, Auto Innovators maintains that the automotive industry can leverage both the AI RMF and ISO/AWI PAS 8800 to effectively manage artificial intelligence risks in automated driving vehicles and related infrastructure.

² See here: [ISO - ISO 31000:2018 - Risk management — A practical guide](#).