

October 11, 2024

Mr. Alan F. Estevez
Under Secretary of Commerce for Industry and Security
U.S. Department of Commerce
1401 Constitution Ave NW
Washington, District of Columbia 20230

RE: Comments of ACT | The App Association to the Bureau of Industry and Security Proposed Rule on the Establishment of Reporting Requirements for the Development of Advanced Artificial Intelligence Models and Computing Clusters (Docket No. 240905-0231)

ACT | The App Association (App Association) appreciates the opportunity to provide input to the U.S. Department of Commerce Bureau of Industry and Security on the potential implications of the proposed rule to require reporting on the development of advanced dual-use artificial intelligence (AI) models and computing clusters.¹

The App Association is a global trade association for small technology companies. Our members are entrepreneurs, innovators, and independent developers within the global app ecosystem that engage with verticals across every industry. We work with and for our members to promote a policy environment that rewards and inspires innovation while providing resources that help them raise capital, create jobs, and continue to build incredible technology. Today, the value of the ecosystem the App Association represents—which we call the app economy—is approximately \$1.8 trillion and is responsible for 6.1 million American jobs, while serving as a key driver of the \$8 trillion internet of things (IoT) revolution.² Alongside the world's rapid embrace of mobile technology, our members create the innovative solutions that utilize AI to power IoT across various modalities and segments of the economy.

From the App Association's perspective, AI is an evolving constellation of technologies that enable computers to simulate elements of human thinking, such as learning and reasoning. An encompassing term, AI entails a range of approaches and technologies, such as machine learning (ML), where algorithms use data, learn from it, and apply their newly-learned lessons to make informed decisions, and deep learning, where an algorithm based on the way neurons and synapses in the brain change as they are exposed to new inputs allows for independent or assisted decision-making. AI-driven

¹ https://www.federalregister.gov/documents/2024/09/11/2024-20529/establishment-of-reporting-requirements-for-the-development-of-advanced-artificial-intelligence.

² ACT | The App Association, State of the U.S. App Economy: 2020 (7th Edition) (Apr. 2020), available at https://actonline.org/wp-content/uploads/2020-App-economy-Report.pdf

tools are having, and will continue to have, substantial direct and indirect effects on Americans. Some forms of AI are already being used to improve American consumers' lives today – for example, AI is used to detect financial and identity theft and to protect the communications networks upon which Americans rely against cybersecurity threats. Moving across use cases and sectors, AI has incredible potential to enable faster and better-informed decision making through cutting-edge distributed cloud computing. For example, healthcare treatments and patient outcomes stand poised to improve disease prevention and conditions, as well as efficiently and effectively treat diseases through automated analysis of X-rays and other medical imaging. From a governance perspective, AI solutions will derive greater insights from infrastructure and support efficient budgeting decisions.

As AI systems, powered by streams of data and advanced algorithms, continue to improve services and generate new business models, the fundamental transformation of economies across the globe will only accelerate. At the same time, AI's growing use raises a variety of challenges, and some new and unique considerations, for policymakers as well as those making AI operational today. The App Association appreciates the efforts of BIS, and other federal agencies, to address AI safety, reliability, and innovation per the Executive Order on Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence ("the Executive Order").³

The App Association has worked proactively to develop consensus around AI governance and policy questions from across its diverse and innovative community of small businesses. As a result of these consensus-building efforts, the App Association has created comprehensive policy principles for AI governance,⁴ which we append to this comment and urge BIS (and other policymakers) to align with. Notably, the App Association's policy principles for AI governance and policy address quality assurance and oversight, recommending that any AI policy framework utilize risk-based approaches to ensure that the use of AI aligns with the recognized standards of safety, efficacy, and equity. Our AI policy principles also prioritize ensuring the appropriate distribution and mitigation of risk and liability by providing that those in the value chain with the ability to minimize risks based on their knowledge and ability should have appropriate incentives to do so.

The App Association also strongly encourages BIS to contribute to the reasonable distribution of responsibility in AI value chains, which will be vital in supporting American AI innovation and leadership. BIS can do this by aligning its approach moving forward with the App Association's recommendations in our *Roles and Interdependences Framework*,⁵ which proposes clear definitions of stakeholders across the AI value chain, from development to distribution, deployment, and end use. The framework also

⁴ The App Association's *Policy Principles for Artificial Intelligence* are included in this comment as **Appendix A**.

³ EO 14110.

⁵ The App Association's *Al Roles & Interdependencies Framework* is included in this comment as **Appendix B**.

suggests and maps roles for supporting safety, ethical use, and fairness for each of these important stakeholder groups that are intended to illuminate the interdependencies between these actors, thus advancing the shared responsibility concept..

The App Association appreciates BIS's desire to collect information about dual-use foundation models for the purpose of understanding the status of the U.S. industrial base regarding these new technologies that will continue to have national defense implications. However, as advanced AI models that may or may not fall under the "dual-use" definition will be of great importance to the U.S. economy and society beyond defense applications. Therefore, we believe it is of great importance for BIS and other regulators to minimize unintended consequences for developers and end-users of advanced AI models (particularly small businesses). We urge BIS to recognize that compliance burdens placed on larger developers are often passed along to the developers that leverage their foundation model as well as its users, and to minimize those burdens.

Building on the above, we offer the following comments and recommendations:

- Adhere to scalable risk-based harm mitigation principles in alignment with the federal government's leading efforts. Consistent with the intent of the Executive Order, alignment with other key federal efforts occurring in parallel should be prioritized. We urge BIS to prioritize alignment with the efforts of the National Institute of Standards and Technology (NIST) and the AI Safety Institute (AISI) it leads, which leverage a risk-based approach to AI risk management. Relevant guidance for BIS to consider include:
 - NIST's AI Risk Management Framework (https://www.nist.gov/itl/ai-risk-management-framework); and
 - The AISI's Managing Misuse Risk for Dual-Use Foundation Models (https://www.nist.gov/aisi/quidance)

We also call on BIS to align its approach with the App Association's AI Policy Recommendations and our Roles & Interdependencies Framework (described above), which are appended to this comment.

As BIS explores policy and regulatory options for dual-use foundation models, we strongly urge BIS to, consistent with the National Institute of Standards and Technology's AI Risk Management Framework, ensure that its proposals are grounded in utilizing risk-based approaches to ensure that levels of review, assurance, and oversight are proportionate to potential harms. Building on this foundation, BIS should discourage blanket/one-size-fits-all approaches to risk mitigation for dual-use foundation models.

We urge BIS to maintain a broad perspective in considering risk in this matter. Many other factors than weights can alter the risks and benefits for a foundation model, such as training data, evaluation metrics, and deployment guidelines.

- Clarify the responsibilities of small businesses. The App Association urges BIS to minimize compliance burdens that are likely to be passed along to the developers that leverage their foundation model as well as its users, and to minimize those burdens. We appreciate that BIS has specifically considered small businesses in its proposed rule and note that the Bureau believes that only a small number of entities will be affected by the rule's reporting requirements. However, the rule applies to "covered U.S. persons" including "any entity including organizations, companies, and corporations – organized under the laws of the United States," potentially implicating vast numbers of companies. If the rule requires all covered U.S. persons to report quarterly to BIS that they have not undertaken any "applicable activities," the aggregate compliance burden on businesses across the economy would be enormous and the amount of paperwork generated for BIS would overwhelm any useful insights that could be gained. If instead BIS only intends for a subset of covered U.S. persons to report that they are not undertaking applicable activities, this requirement must be clarified.
- Support international harmonization. We urge BIS to maintain a priority for supporting risk-based approaches to AI governance in markets abroad and through bilateral and multilateral agreements. Already, developers of AI face topdown and one-size-fits-all mandates that substantially impede their ability to develop and utilize AI across a range of use cases. It is crucial that BIS's efforts here, and the Administration's efforts broadly, discourage, or at least have a positive influence on, such mandates in other jurisdictions.

The App Association appreciates BIS's consideration of the above (and appended) views, and we urge BIS to contact the undersigned with any questions or ways that we can assist moving forward.

Sincerely,

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Policy Recommendations for Al



Artificial Intelligence (AI) is clearly a priority for policymakers, with 37 Al-related laws enacted globally, more than 80 pending legislative proposals at the state level and several more at the federal level. To understand and shape rules for this complex and evolving technology, a vital voice—that of small businesses, members of ACT| The App Association—must be prioritized in order to create a competitive, safe, and secure Al future.

We initially released these principles in 2021. However, we are updating them continually to reflect new developments in privacy and data security laws around the world and new learnings about the benefits, risks, and challenges presented by evolving AI tools in use cases from healthcare and education to software development and cybersecurity.

A successful policy approach to Al will align with the following guidelines:



Harmonizing and Coordinating Approaches to Al

A wide range of federal, local, and state laws prohibit harmful conduct regardless of whether the use of Al is involved. For example, the Federal Trade Commission (FTC) Act prohibits a wide range of unfair or deceptive acts or practices, and states also have versions of these prohibitions in their statute books. The use of Al does not shield companies from these prohibitions. However, federal and state agencies alike must approach the applicability of these laws in Al contexts thoughtfully and with great sensitivity to the novel or evolving risks Al systems present. Congress and other policymakers must first understand how existing frameworks apply to activities involving Al to avoid creating sweeping new authorities or agencies that awkwardly or inconsistently overlap with current policy frameworks.

Quality Assurance and Oversight

Policy frameworks should utilize risk-based approaches to ensure that the use of Al aligns with any relevant recognized standards of safety, efficacy, and equity. Small software and device companies benefit from understanding the distribution of risk and liability in building, testing, and using Al tools. Policy frameworks addressing liability should ensure the appropriate distribution and mitigation of risk and liability. Specifically, those in the value chain with the ability to minimize risks based on their knowledge and ability to mitigate should have appropriate incentives to do so. Some recommended areas of focus include:

- Ensuring Al is safe, efficacious, and equitable.
- Encouraging AI developers to consistently utilize rigorous procedures and enabling them to document their methods and results.
- Encouraging those developing, offering, or testing AI systems intended for consumer use to
 provide truthful and easy-to-understand representations regarding intended use and risks
 that would be reasonably understood by those intended, as well as expected, to use the AI
 solution.

Thoughtful Design

Policy frameworks should encourage design of AI systems that are informed by real-world workflows, human-centered design and usability principles, and end-user needs. AI systems should facilitate a transition to changes in the delivery of goods and services that benefit consumers and businesses. The design, development, and success of AI should leverage collaboration and dialogue among users, AI technology developers, and other stakeholders to have all perspectives reflected in AI solutions.

Access and Affordability

Policy frameworks should enable products and services that involve AI systems to be accessible and affordable. Significant resources may be required to scale systems. Policymakers should also ensure that developers can build accessibility features into their AI-driven offerings and avoid policies that limit their accessibility options.

Research and Transparency

Policy frameworks should support and facilitate research and development of AI by prioritizing and providing sufficient funding while also maximizing innovators' and researchers' ability to collect and process data from a wide range of sources. Research on the costs and benefits of transparency in AI should also be a priority and involve collaboration among all affected stakeholders to develop a better understanding of how and under which circumstances transparency mandates would help address risks arising from the use of AI systems.

Modernized Privacy and Security Frameworks

The many new Al-driven uses for data, including sensitive personal information, raise privacy questions. They also offer the potential for more powerful and granular privacy controls for consumers. Accordingly, any policy framework should address the topics of privacy, consent, and modern technological capabilities as a part of the policy development process. Policy frameworks must be scalable and assure that an individual's data is properly protected, while also allowing the flow of information and responsible evolution of Al. A balanced framework should avoid undue barriers to data processing and collection while imposing reasonable data minimization, consent, and consumer rights frameworks.

Bias

The bias inherent in all data, as well as errors, will remain one of the more pressing issues with Al systems that utilize machine learning techniques in particular. Regulatory agencies should examine data provenance and bias issues present in the development and uses of Al solutions to ensure that bias in datasets does not result in harm to users or consumers of products or services involving Al, including through unlawful discrimination.

Ethics

The success of Al depends on ethical use. A policy framework must promote many of the existing and emerging ethical norms for broader adherence by Al technologists, innovators, computer scientists, and those who use such systems. Relevant ethical considerations include:

- Applying ethics to each phase of an Al system's life, from design to development to use.
- Maintaining consistency with international conventions on human rights.
- Prioritizing inclusivity such that Al solutions benefit consumers and are developed using data from across socioeconomic, age, gender, geographic origin, and other groupings.
- Reflect that AI tools may reveal extremely sensitive and private information about a user and ensure that laws require the protection of such information.

Education

Policy frameworks should support education for the advancement of AI, promote examples that demonstrate the success of AI, and encourage stakeholder engagements to keep frameworks responsive to emerging opportunities and challenges.

- Consumers should be educated as to the use of AI in the service(s) they are using.
- Academic education should include curriculum that will advance the understanding of and ability to use AI solutions.

Intellectual Property

The protection of intellectual property (IP) rights is critical to the evolution of Al. In developing approaches and frameworks for Al governance, policymakers should ensure that compliance measures and requirements do not undercut IP or trade secrets.

APPENDIX B

ACT | The App Association Al Roles & Interdependency Framework

Overview: Artificial Intelligence (AI), especially generative AI, is already a powerful tool for consumers and companies. App Association small business members have a vital role in advancing AI's positive impacts by identifying new and novel opportunities where the responsible use of AI can solve expensive problems and provide new efficiencies for consumers and businesses.

While AI capabilities are already positively transforming American society, the App Association also recognizes that the same capabilities raise unique challenges that the government, private sector, and others have an important role in addressing across development, distribution, deployment, and end use phases. The App Association has worked proactively with its diverse and innovative community of small businesses to develop this consensus taxonomy, which describes the roles and interdependencies of various actors in the value (or supply) chain of AI solutions. These roles include several AI/ML developer subgroups, deploying organizations, end users, standard-setting organizations, certification and test beds, specialty boards and licensing bodies, and academic institutions. Many of these stakeholders map to actors in the National Institute for Standards and Technology's (NIST's) AI Risk Management Framework (RMF), which we indicate on the far right of the matrix below.

While the App Association has created comprehensive policy principles for Al governance, there we have several recommendations from this roles and interdependencies document. The App Association recommends: (1) that requirements placed on small business Al developers and users be based on demonstrated harms; (2) the leveraging of a risk-based approach to Al harm mitigation where the level of review, assurance, and oversight is proportionate to those demonstrated harms; and (3) that those in Al value chains with the ability to minimize risks based on their knowledge and ability have appropriate responsibilities and incentives to do so.

Stakeholder Group	Definition	Roles	NIST AI RMF Actor Tasks
Al/ML Developers	Someone who designs, codes, researches, or produces an Al/ML system or platform for internal use or for use by a third party. See below for defined Subgroups of this Stakeholder Group along with recommendations specific to that Subgroup.	 Informing deployers and users of data requirements/definitions, intended use cases/populations and applications (e.g., disclosing sufficient detail allowing providers to determine when an AI-enabled tool should reasonably apply to the individual they are treating), including whether the AI/ML tools are intended to augment human work versus automate workflows, and status of/compliance with all applicable legal and regulatory requirements. Prioritizing safety, effectiveness, transparency, data privacy and security, and equity from the earliest stages of design, leveraging (and, where appropriate, updating) existing AI/ML guidelines on research and ethics, leading standards, and other resources. Employing algorithms that produce repeatable results and, when feasible, are auditable, and make decisions that comply with relevant sector-specific requirements. Using risk management approaches that scale to the potential likely harms posed in intended use scenarios to support safety, protect privacy and security, avoid harmful outcomes due to bias, . Providing information that enables those further down the value chain can assess the quality, performance, equity, and utility of AI/ML tools. Aligning with relevant ethical obligations and international conventions on human rights and supporting the development of new ethical guidelines to address emerging issues. 	Al Deployment; Operation and Monitoring; Test, Evaluation, Verification, and Validation (TEVV); Human Factors; Domain Expert; Al Impact Assessment; Governance and Oversight

Stakeholder Subgroup	Definition	Roles	NIST RMF Actor Tasks
Foundation	Someone who creates or	Building on the cross-Al/ML Developer roles	Al Deployment; Operation and
Model	modifies large and	noted above:	Monitoring; Test, Evaluation, Verification,
Developer	generalizable machine	 Assessing what bias and safety issues 	and Validation (TEVV); Human Factors;
	learning models that can be	might be present in its Foundation Model,	

Stakeholder Subgroup	Definition	Roles	NIST RMF Actor Tasks
· ·	used/adapted for various downstream tasks and applications, such as natural language processing, computer vision, or software development.	 and documenting steps taken to mitigate those issues in its Transparency Documentation (e.g., Transparency Notes, System Cards and product documentation). Providing clear guidance on (1) how to use and adapt its Foundation Model for various foreseeable downstream tasks and applications, and (2) what limitations or risks may arise from doing so based on challenges discovered during testing and deployment. 	Domain Expert; AI Impact Assessment; Governance and Oversight
Al Platform Developer	Someone who leverages existing foundation models and builds an industryagnostic platform that enables other developers to access, customize, and deploy these models for various use cases and applications, such as natural language processing, computer vision, and/or software development.	Building on the cross-Al/ML Developer roles noted above: • Testing for, identifying, and mitigating bias and safety issues that may arise from using or modifying existing foundation models for its Al Platform, and documenting these issues and steps taken to address them in its transparency documentation (e.g., transparency notes, system cards and product documentation).	Al Deployment; Operation and Monitoring; Test, Evaluation, Verification, and Validation (TEVV); Human Factors; Domain Expert; Al Impact Assessment; Governance and Oversight
Use Case AI Platform Developer	Someone who creates or uses Al-powered platforms that are tailored for a particular domain or sector. These platforms may leverage foundation models (or other types of machine learning models or solutions), such as Al platforms, that are suitable for domain-specific	Building on the cross-Al/ML Developer roles noted above: • Meeting specific requirements and standards of the domain to address unique accuracy, efficacy, explainability, and compliance needs. • Testing for, identifying, and mitigating any bias and safety issues that may affect domain-specific outcomes or performance needs, and documenting these issues and the steps it has taken to address them in its transparency	Al Deployment; Operation and Monitoring; Test, Evaluation, Verification, and Validation (TEVV); Human Factors; Domain Expert; Al Impact Assessment; Governance and Oversight

Stakeholder Subgroup	Definition	Roles	NIST RMF Actor Tasks
	problems and data sources.	documentation (e.g., transparency notes, system cards and product documentation).	
Al Solution Developer	Someone who creates complete digital tools and technologies for a domain. They may build or incorporate Al solutions with both use case Al platforms, which are specialized for the domain, and Al platforms, which are more general and adaptable for various use cases and applications.	Building on the cross-Al/ML Developer responsibilities noted above: Specifying appropriate uses for its solution to avoid amplifying bias or safety issues that may exist in the underlying foundation models, Al platforms, or domain-specific Al platforms. Designing user interfaces to enable an end user to safely and effectively act upon the output of the tool, such as providing explanations, feedback mechanisms, or human oversight options, providing clear documentation to Deploying Organizations and Users to help them avoid bias and safety issues.	Al Deployment; Operation and Monitoring; Test, Evaluation, Verification, and Validation (TEVV); Human Factors; Domain Expert; Al Impact Assessment; Governance and Oversight

Stakeholder Group	Definition	Roles	NIST AI RMF
			Actor Tasks
Deploying Organization	Someone who is deploying solutions built by AI Solution Developers. They may also have their own internal IT staff that employ use case AI platforms or general AI platforms to develop their own custom AI solutions.	 Respecting that managing Al/ML risks will be more challenging for small to medium-sized organizations depending on their capabilities and resources: Adopting Al/ML Developer instructions for use, specifying appropriate uses for Users through governance policies to avoid bias and safety issues that may exist in the underlying foundation models, Al platforms, or use case Al platforms. Developing and leveraging solutions that augment efficiencies in automation, facilitate administrative simplification/reduce workflow burdens, and are fit for purpose. Setting organization policy/designing workflows to reduce the likelihood that a User will act upon the output 	Al Deployment; Operation and Monitoring; Domain Expert; Al Impact Assessment; Procurement; Governance and Oversight

Stakeholder Group	Definition	Roles	NIST AI RMF Actor Tasks
		of the tool in a way that would cause fairness/bias or safety issues (tailored explanations, feedback mechanisms, and/or human oversight options). • Assuring that Al/ML systems allow for the individualized assessment of domain-specific circumstances and flexibility to override automated decisions, ensuring that use of Al/ML does not improperly reduce or withhold intended benefits or inappropriately override human judgement. • Developing support mechanisms for the use of Al/ML by providers based on validation, aligning with decision-making processes familiar to the domain and high-quality evidence. • Developing organizational guidance on how the Al solution should and should not be used. • Creating engagement pathways to support dialogue with Al use case developers, Al solution developers, or any other applicable Al/ML developer, to enable ongoing updates to address evolving risks and benefits of Al solution uses. • Creating risk-based, tailored communications and engagement plans to enable easily understood explanations to customers about how the Al solution was developed, its performance and maintenance, and how it aligns with the latest best practices and regulatory requirements.	
Al End Users	Someone who directly interacts with or benefits from the AI solutions that are built by AI Solution Developers or by the internal IT staff of the Deploying Organization.	Respecting that managing Al/ML risks will be more challenging for small to medium-sized organizations depending on their capabilities and resources: • Aligning with consensus Al/ML definitions, present-day and future Al/ML solutions, the future of Al/ML changes and trends. • Taking required training and incorporating employer guidance about use of Al/ML solutions. • Documenting (through automated processes or otherwise) and reporting any issues or feedback to the	Al Deployment; Operation and Monitoring; Domain Expert; Al Impact Assessment; Procurement; Governance and

Stakeholder Group	Definition	Roles	NIST AI RMF Actor Tasks
		 developer, such as errors, vulnerabilities, biases, or harms (where Al/ML's use is known by the User). Ensuring there is appropriate review of the output or recommendations from each Al solution prior to acting on it to make decisions, if relevant (where Al/ML's use is known by the User). Raising awareness of and acting according to customers' rights and choices when using Al solutions, such as consent, access, correction, or deletion of their personal data. 	Oversight; Human Factors
Standard-Setting Organizations	An organization whose primary function is developing, coordinating, promulgating, revising, amending, reissuing, interpreting, or otherwise contributing to the usefulness of technical standards to those who employ them.	Developing and promoting adoption of international voluntary/non-regulatory consensus standardized approaches and resources to steward a shared responsibility approach to technology standards that include or are otherwise related to AI.	Human Factors; Domain Expert; Al Impact Assessment; Governance and Oversight
Certification Bodies & Test Beds	A certification body is a third-party organization that assures the conformity of a product, process or service to specified requirements. A test bed is a platform for conducting rigorous, transparent, and replicable testing of scientific theories, computing tools, and new technologies to a standard.	 Creating and making available transparent and reliable processes for the assurance of conformity to voluntary AI standards. Creating and making available voluntary sandbox environments to help evaluate the usability and performance of AI/ML-based high-performance computing applications to advance the understanding of how reliable and efficacious AI, and to provide an appropriate assurance of reliability and efficacy. 	Test, Evaluation, Verification, and Validation (TEVV); Human Factors; Domain Expert; Al Impact Assessment; Governance and Oversight
Accrediting and Licensing Bodies, Specialty Societies and Boards	Accrediting and licensing bodies are governing authorities that establish the suitability of any participating certification body. Notably, state-level boards serve	 Based on needs and expertise, developing and setting the standard of practice/behavior and ethical guidelines to address emerging issues with the use of AI/ML in the relevant domain. Identifying the most appropriate uses of AI-enabled technologies and developing and disseminating 	Test, Evaluation, Verification, and Validation (TEVV); Human

Stakeholder Group	Definition	Roles	NIST AI RMF Actor Tasks
	this purpose for certain professions to standards set by each state. Specialty societies are organizations for specialized professionals.	guidance and education on the responsible deployment of AI/ML, both generally and for specialty-specific uses.	Factors; Domain Expert; AI Impact Assessment; Governance and Oversight
Academic Education Institutions	Tertiary educational institutions, professional schools, or forms a part of such institutions, that teach and award professional degrees.	 Developing and teaching curriculum that will advance understanding of and ability to use AI/ML solutions responsibly, which should be assisted by inclusion of data scientists and engineers as instructors as needed. Developing curriculum to advance the understanding of data science research to help inform ethical bodies. 	Human Factors; Domain Expert; Al Impact Assessment