Before the
OFFICE OF SCIENCE AND TECHNOLOGY POLICY
Alexandria, VA 22314

In the Matter of	)	
	)	
The Development of an Artificial Intelligence (AI) Action Plan	)	Docket No. 2025-02305
	)	

COMMENTS OF ERICSSON

Ericsson welcomes the opportunity to respond to the Office of Science and Technology Policy ("OSTP") Request for Information ("RFI") on the Development of an Artificial Intelligence (AI) Action Plan ("AI Action Plan").[1]

I. INTRODUCTION

Ericsson shares the Administration's commitment to establishing U.S. policy that will enhance America's AI leadership to promote human flourishing, economic competitiveness, and national security. Innovators across nearly every sector of the economy are leveraging AI technology to deliver unprecedented benefits to the American people. When properly executed, AI enhances outcomes, improves efficiency and saves time, money, and even lives by deftly handling massive quantities of data, facilitating quick decision-making, performing perilous tasks efficiently, improving processes, automating repetitive tasks, reducing human error, and more.[2] Ericsson appreciates the Administration's commitment here to ensuring that unnecessarily burdensome requirements do not hamper private sector AI innovation.[3]

[1] Request for Information on the Development of an Artificial Intelligence (AI) Action Plan, 90 Fed. Reg. 9088 (Feb. 6, 2025), https://www.federalregister.gov/documents/2025/02/06/2025-02305/request-for-information-on-the-development-of-an-artificial-intelligence-ai-action-plan ("RFI"). This document is approved for public dissemination. The document contains no business-proprietary or confidential information. Document contents may be reused by the government in developing the AI Action Plan and associated documents without attribution.

[2] *See* Rashi Maheshwari, *Advantages of Artificial Intelligence (AI) in 2025*, Forbes (Aug. 24, 2023), https://www.forbes.com/advisor/in/business/software/advantages-of-ai/.

[3] RFI at 9088-9089.

At Ericsson, we are using AI to transform communications networks – enhancing network management, boosting performance, optimizing energy use and sustainability, increasing trustworthiness and security, and delivering new business opportunities to enterprise customers.[4] Stakeholders across all verticals are embracing AI use cases and placing new and expanding demands on their communications networks – for additional capacity, speed, service quality, and next-generation capabilities.

As we point out below, to meet these demands, network providers need access to more commercial spectrum. Concurrently, the United States should pursue global cooperation and coordination that will benefit U.S. AI innovation – avoiding overbroad and ineffective restraints. Accelerating AI development will also require a balanced, risk-based approach to ensure the flexibility necessary to innovate while also guarding against significant risks as they evolve.

Ericsson expands on these recommendations below and welcomes further engagement with the Administration on development of the AI Action Plan.

II. ERICSSON IS ALREADY DELIVERING TRANSFORMATIVE AI BENEFITS TO COMMUNICATIONS NETWORKS AND OPERATIONS.

Ericsson is a leader among network infrastructure makers infusing AI capabilities into communications networks and operations. For example, we are using AI to:

- Improve network planning and design with advanced analytics that provide high-accuracy traffic forecasts, KPI predictions, bottleneck identification and load balancing opportunities across the network lifecycle;
- Advance network optimization via AI-based network diagnostics that make it possible to proactively identify 50 percent more issues with up to 98 percent field-validated accuracy, increasing operational efficiency by up to 30 percent;

[4] *See* Zeljka Lemaster, Thomas Kinnman, & Andres Laya, *How is intelligence transforming telecom? Five benefits that reveal the full value of AI*, Ericsson (Mar. 27, 2023), https://www.ericsson.com/en/blog/2023/3/value-of-ai-for-telecom-networks.

- Expand cybersecurity by using AI automation to detect zero-day attacks, predict upcoming attacks, detect ongoing attacks, and test and deploy new defense mechanisms at run time;
- Enhance network operations by taking service providers closer towards zero-touch end-to-end automation of the network; and
- Improve customer and service experience via cognitive tuning and optimization technologies.[5]

Additionally, Ericsson's 5G smart factory in Lewisville, Texas, employs intelligent automation, which integrates AI and robotics to streamline operations, reduce human error, and increase productivity.[6]

Looking ahead, AI will be foundational for the next generation of network technologies – and these networks will make new AI use cases possible. Networks will be able to sense, compute, learn, reason, and act on business intent almost autonomously, and manage the ongoing expansion of data from an ever-increasing number of connected intelligent devices. 6G's AI native architecture will enable further real-time self-optimization, enhancing network performance, reliability, and energy efficiency by intelligently managing resource allocation, predicting congestion, and adapting to changing conditions. 6G networks will use AI to enable mixed reality, autonomous mobility, sophisticated spatial sensing, and more to provide end users with an immersive, personalized, seamless communication experience. With significantly lower latency (in the microseconds) and higher bandwidth (up to 100 times faster than 5G), 6G will enable AI-driven applications to usher in a new era of functionality for end users.

[5] *See AI in networks*, Ericsson, https://www.ericsson.com/en/ai/ai-in-networks (last visited Mar. 12, 2025).

[6] *Inside Ericsson's Cutting-Edge 5G Manufacturing Hub in the US*, Manufacturing Today (May 30, 2024), https://manufacturing-today.com/news/inside-ericssons-cutting-edge-5g-manufacturing-hub-in-the-us/.

III. AI INNOVATION DEMANDS EVER-EXPANDING NETWORK CAPABILITIES AND WIDE-AREA, UBIQUITOUS CONNECTIVITY, AND U.S. AI LEADERSHIP WILL REQUIRE MORE FULL POWER, LICENSED COMMERCIAL SPECTRUM.

The emerging panoply of AI use cases is placing new demands on communications networks which, in turn, requires access to more full-power licensed commercial spectrum. AI algorithms require large amounts of data to learn and improve, and as more companies adopt AI technologies, they will need to process and analyze larger and more complex datasets. This will require more internet bandwidth and faster connectivity. In addition, AI will advance in parallel (and often in partnership) with other technologies – like autonomous vehicles and IoT – that compound demands on the network.

Much of this demand, moreover, will rely on ubiquitous hyperconnectivity that only wide-area wireless networks can provide. For example, autonomous vehicles process data in real-time and need to transmit data between vehicles and cloud platforms in bulk, at speed.[7] Similarly, the proliferation of IoT devices will continue to generate vast amounts of data that need to be processed and analyzed by AI algorithms.[8] Many IoT products – such as wearable healthcare devices, industrial IoT sensors, autonomous tractors, and more – perform their functions outside and/or on-the-go, requiring robust wireless connectivity. Furthermore, generative AI ("GenAI") applications may significantly impact future mobile network traffic, particularly through increased video consumption.[9]

[7] Ericsson expects 10% of global new car sales to be autonomous by 2030.

[8] Ericsson estimates close to 7 billion cellular IoT connections by 2029.

[9] Increased use of GenAI-driven video assistants and immersive interactions may increase both uplink and downlink traffic with the expansion of hyper-personalized content as well as the new AI-driven applications. *Understanding the Impact of GenAI*, Ericsson (Nov. 2024), https://www.ericsson.com/en/reports-and-papers/mobility-report/articles/genai-impact-on-mobile-network-traffic.

To meet these demands, wireless providers will need to make increased investments in capacity, quality, and capabilities – all of which require more licensed, full-power commercial spectrum. U.S. leadership in AI thus requires identifying sufficient and suitable spectrum for wireless broadband, especially in mid-band frequencies that support wide-area coverage and capacity. To meet the forecasted demand, Ericsson estimates that up to 2.2 GHz of additional spectrum is necessary to realize the full potential of 6G.[10] Even more will be needed if one accounts for massive digital twin, radio-based sensing, and holographic communications.

Without access to sufficient spectrum, the United States will not be positioned to realize the benefits of AI or seize global leadership in AI. Licensing spectrum for wireless services on an exclusive-use basis, combined with flexible rights, is instrumental in spurring the investment necessary to support more network buildout – it provides greater reliability, enhanced security, as well as flexibility and scalability. A licensed spectrum pipeline offers the assured access and interference protection that generates massive investment in next-generation commercial technologies and wide-area network deployments that trigger innovation across verticals – including with AI use cases.

With this in mind, Ericsson urges the U.S. government to swiftly help repurpose spectrum in the Lower 3 GHz (3.1-3.45 GHz) band, the 4.4-4.94 band, and the 7/8 GHz (7.125-8.4 GHz) band. The AI Action Plan should prioritize delivering a spectrum pipeline that meets the needs of these proliferating technologies.

[10] Kumar Balachandran, Mark Racek, & Noman M. Alam, *Why a National Spectrum Strategy Is Crucial for US Leadership*, Ericsson (Oct. 18, 2023), https://www.ericsson.com/en/blog/north-america/2023/national-spectrum-strategy-crucial-for-us-leadership.

IV. U.S. AI DEVELOPERS WILL BENEFIT SUBSTANTIALLY BY DRIVING GLOBAL INTEROPERABILITY AND COORDINATION THAT PROMOTES U.S. AI INNOVATION AND ADOPTION.

AI models have an inherently global reach with value chains that are globally integrated. As with the many transformative technologies, voluntary industry-led standards will facilitate the development and deployment of beneficial AI systems. U.S. AI developers and deployers will benefit from a unified, global, industry-led, and rules-based system for standards development. Under this framework, a varied ecosystem of innovators can use like technology to develop new products and use cases at scale.

Innovation itself requires coordination across disparate actors. Technologists need a common technical vocabulary and system of measurement to share research and findings. Common practices reduce development and production costs. Moreover, widely used international standards increase potential market size and enhance potential applications for businesses and consumers. For the United States and its partners, international standards provide an invaluable opportunity to ensure that security, privacy, and other shared values form the architecture of AI technology for generations to come. Conversely, a fragmented standards ecosystem introduces barriers to interoperability and global deployment. In the worst cases, it can invite foreign adversaries to seek competitive advantage by creating a negative-sum game.[11]

With this in mind, OSTP's AI Action Plan should promote strong intellectual property rights, advance and enforce sound governance principles, maintain multilateral cooperation, ensure effective coordination, build capacity for standards leadership, and incentivize U.S. industry engagement in international standards bodies.

[11] *See* Sujai Shivakumar, *Securing Global Standards for Innovation and Growth*, CSIS (Jan. 27, 2022), https://www.csis.org/analysis/securing-global-standards-innovation-and-growth.

V. THE UNITED STATES SHOULD TAKE A RISK-BASED APPROACH TO ACCELERATE AI INNOVATION AND ADOPTION.

As the new Administration develops its AI Action Plan, OSTP should revive the balanced, risk-based approach articulated in the first Trump Administration's draft memorandum on "Guidance for Regulation of Artificial Intelligence Applications" ("OMB Draft Memo"), including "reducing unnecessary barriers to the development and deployment of AI."[12] Key to this strategy is avoiding "regulatory or non-regulatory actions that needlessly hamper AI innovation and growth."[13] This is particularly true when considering low-risk AI use cases – such as those discussed in these comments in which companies like Ericsson are leveraging AI to optimize operations that are already automated.

Where policymakers identify a potentially high-risk AI use case, they should first consider how existing laws and regulations can already address identified concerns. For example, the Federal Trade Commission Act protects against unfair and deceptive trade practices whether conducted in a brick-and-mortar store front, over the telephone, or using AI-assisted messaging. As the OMB Draft Memo recognized, "AI applications do not necessarily raise novel issues" and thus policymakers should consider new regulations only after thorough evaluation of existing rules, opportunity costs, and potential consequences related to new regulation.[14]

If necessary, any new AI-specific rules should be risk-based, narrowly tailored, proportionate, and technologically neutral to effectively address this wide-ranging and

[12] Memorandum from Russell T. Vought, Acting Director, to Heads of Executive Departments and Agencies, at 2, https://www.dwt.com/-/media/files/blogs/financial-services-law-advisor/2024/11/2019cats5830revdocdraftombmemoonregulationofai1010.pdf?rev=d570fead06cf470e816c87779a3b6cd8&hash=CBCBE010E95CB9358544E49FBD614B2E (last visited Mar. 12, 2025) ("OMB Draft Memo").

[13] *Id.*

[14] *Id.* at 3.

dynamically evolving technology. As the OMB Draft Memo observed, "[i]t is not necessary to mitigate every foreseeable risk; in fact, a foundational principle of regulatory policy is that all activities involve tradeoffs."[15] We agree and, as OMB stated,"[a]gencies should be transparent about their evaluations of risk and re-evaluate their assumptions and conclusions at appropriate intervals so as to foster accountability."[16] They should also scope the level and type of regulatory effort appropriate to identify and mitigate risks in proportion to the magnitude and nature of the consequences should an AI tool fail or succeed.[17]

Ericsson therefore encourages OSTP to embed this risk-based approach into its AI Action Plan. Stakeholder-driven, consensus-based tools can play a crucial role in AI risk management in a way that supports the Administration's commitment to minimizing regulatory burdens while promoting human flourishing, economic competitiveness, and national security.

Importantly, the Action Plan should distinguish between the many applications of AI that will not materially alter the risk profile of a particular function and should not be subject to any new regulations with those that may require greater scrutiny. For instance, AI can improve the operation of systems that have already been automated for years using non-AI means and that were previously directly controlled by humans.[18] These systems are typically already subject to laws and regulations intended to protect people and society. Applying AI does not substantially change the risk profile of these systems in terms of the likelihood or consequences of adverse

[15] *Id.* at 4.

[16] *Id.*

[17] *Id.*

[18] For example, a radio base station in a cellular network must perform functions like shaping radio waves and controlling the tilt of antennas. Performing these functions under computer control, within microseconds or milliseconds, has vastly improved the reliability, capacity, and performance of mobile networks. The consequences of automation failing here are minor and localized: a temporary degradation in performance in a single site. But new regulations on these uses could impose undue burdens.

impacts in the event of a failure. In such cases, new restrictions can significantly impede their use and impose substantial opportunity costs throughout a diverse ecosystem of innovators and beneficiaries of AI. The AI Action Plan should solidify the United States' risk-based approach to AI policy, carefully considering targeted steps to address high-risk use cases and safeguarding the ability for innovators to bring the benefits of myriad other AI applications to bear for the American people.

VI. CONCLUSION

Ericsson appreciates the Administration's commitment to removing barriers to American leadership in AI and our shared goal to accelerate AI innovation and adoption. The recommendations above will help ensure OSTP's AI Action Plan delivers on these objectives. Ericsson welcomes further engagement with the Administration to that end.

Respectfully submitted,

/s/ Jeff Marks

Jeff Marks
Matthew Hussey
Ericsson
1776 I Street, NW
Suite 240
Washington, DC 20006
[redacted]

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