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# Request for Information (RFI) on an Implementation Plan for a National Artificial Intelligence Research Resource: Responses

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# Request for Information (RFI) on an Implementation Plan for a National Artificial Intelligence Research Resource

notice document number 86 FR 39081

Name of the person(s) or organization(s) filing the comment:

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**About AIR**

AI Redefined (AIR) is a Montreal-based company that has built a new AI training approach where humans and machines learn continuously from each other to address sophisticated challenges in real time. AIR recently released Cogment, the world's first open-source framework to provide the means to design, train, and deploy complex intelligent ecosystems that mix humans and AI agents of various kinds. In Cogment's real-world and simulated environments, actors, which can be humans, AI agents, traditional algorithms, or even aggregates of actors, can build trust and explore context together. Cogment can support human-AI collaboration on tasks like pilot training, the operation of hybrid vehicle fleets, and crisis management decision making. AIR currently works with leading players in the European aerospace and defense industries.

1. *What options should the Task Force consider for any of roadmap elements A through I above, and why? [Please take care to annotate your responses to this question by indicating the letter(s) of the item (A through I in the list above) for which you are identifying options.]*

A. *Goals for establishment and sustainment of a National Artificial Intelligence Research Resource and metrics for success;*

**N/A**

B. *A plan for ownership and administration of the National Artificial Intelligence Research Resource, including:*

i. *An appropriate agency or organization responsible for the implementation, deployment and administration of the Research Resource; and*

ii. *A governance structure for the Research Resource, including oversight and decision-making authorities;*

**N/A**

C. *A model for governance and oversight to establish strategic direction, make programmatic decisions, and manage the allocation of resources;*

**N/A**

D. *Capabilities required to create and maintain a shared computing infrastructure to facilitate access to advanced computing resources for researchers across the country, including provision of curated data sets, compute resources, educational tools and services, a user-interface portal, secure access control, resident expertise, and scalability of such infrastructure;*

**Among the many capabilities required to address this particular point, we believe that an open-source orchestration platform enabling the access and combined use, in shared environments, of different AI agents, as well as human users, is of paramount importance for several reasons:**

- **The ability to easily compare and audit implementations of AI agents with:**

- other AI implementations,
- human users
- other non-learning algorithms or heuristics;
- The ability to keep human oversight;
- The ability to provide context to AI agents through human expertise.

Our multi-agent & human-in-the-loop open source AI framework, Cogment, allows just that, and thanks to its microservice architecture, is both scalable and distributable out-of-the-box. As a result, researchers worldwide can build Cogment projects to design, test, train, deploy and use AI agents and allow access to their work to their teams, other researchers, or users, in any configuration they choose. Training environments designed for specific research or projects can be shared as well, and we are currently working on additional tools to facilitate the sharing of agents and environments even further.

We stand ready to help the AI community build intelligence ecosystems mixing humans, heterogeneous AI agents and other systems.

*E. An assessment of, and recommended solutions to, barriers to the dissemination and use of high-quality government data sets as part of the National Artificial Intelligence Research Resource;*

Open-source software (OSS) quietly affects nearly every issue in AI policy, but it is largely absent from discussions around AI policy—policymakers need to more actively consider OSS's role in AI.

OSS is software that is free to access, use, and change without restrictions, and plays a central role in the development and use of artificial intelligence (AI). Across open-source programming languages such as Python, R, C++, Java, Scala, Javascript, Julia, and others, there are thousands of implementations of machine learning algorithms. OSS frameworks for machine learning, including tidymodels in R and Scikit-learn in Python, have helped consolidate many diverse algorithms into a consistent

machine learning process and enabled far easier use for the everyday data scientist.

Cogment core framework is OSS, and so can be projects built on Cogment. We believe that remaining open source, future proof, tech agnostic and accessible will not only make Cogment a better framework, it will also foster better research, and mitigate phenomena such as the digital fracture, biased AI / datasets, or other contributing factors impeding the general public's understanding, acceptance, and use of AI.

*F. An assessment of security requirements associated with the National Artificial Intelligence Research Resource and its management of access controls;*

**N/A**

*G. An assessment of privacy and civil rights and civil liberties requirements associated with the National Artificial Intelligence Research Resource and its research;*

**N/A**

*H. A plan for sustaining the National Artificial Intelligence Research Resource, including through Federal funding and partnerships with the private sector; and*

**N/A**

*I. Parameters for the establishment and sustainment of the National Artificial Intelligence Research Resource, including agency roles and responsibilities.*

**N/A**

*2. Which capabilities and services (see, for example, item D above) provided through the NAIRR should be prioritized?*

**N/A**

*3. How can the NAIRR and its components reinforce principles of ethical and responsible research and development of AI, such as those*

*concerning issues of racial and gender equity, fairness, bias, civil rights, transparency, and accountability?*

**N/A**

- 4. What building blocks already exist for the NAIRR, in terms of government, academic, or private-sector activities, resources, and services?*

**N/A**

- 5. What role should public-private partnerships play in the NAIRR? What examples could be used as a model?*

**N/A**

- 6. Where do you see limitations in the ability of the NAIRR to democratize access to AI R&D? And how could these limitations be overcome?*

**N/A**