DRAFT – SUBJECT TO TASK FORCE APPROVAL ON DECEMBER 7, 2022

MEETING SUMMARY National Artificial Intelligence Research Resource Task Force Meeting #10

October 21, 2022

MEETING SUMMARY

Meeting Summary

The tenth meeting of the National Artificial Intelligence Research Resource (NAIRR) Task Force (TF) was held via Zoom on October 21, 2022, between 1:03 PM and 2:57 PM EDT.

Welcome and Administrative Remarks

The meeting started at 1:03 PM EDT.

Dr. Manish Parashar, NAIRR TF Co-Chair, opened the meeting. He called for a motion to approve the minutes from the ninth NAIRR TF meeting held on September 12, 2022; the motion passed.

Dr. Parashar then provided an overview of the meeting agenda, which included time for the TF to deliberate on four items requiring further discussion before their inclusion in the final report. These items included a NAIRR pilot option, security requirements for the NAIRR, NAIRR data resources, and the administrative home for the NAIRR.

This session ended at 1:12 PM EDT.

Discussion of NAIRR Timeline

The session started at 1:12 PM EDT.

The discussion began with Dr. Parashar outlining the timeline to stand up the NAIRR developed by the TF. This timeline included four phases: Program Launch and Operating Entity Selection, Operating Entity Setup, Initial Operational Capability, and Full NAIRR Operation. Should this timeline be implemented, the NAIRR would be available for users in 2025.

NAIRR TF members Dr. Dan Stanzione and Dr. Mike Norman and led a conversation among the TF around the possibility of recommending a pilot option for the NAIRR, in order to accelerate the ability to provide resources to the AI research community. The pilot would run in parallel to the establishment of the fully operational NAIRR, leveraging existing resources and service providers.

The TF discussed the benefits of being able to serve the community more quickly, and how it would be contingent on rapid assembly of a steering committee and a small program management office, which would oversee the first limited selection of service providers.

The timeline of the pilot could be as follows:

- 1. Identify service providers by the second quarter of FY 2023;
- 2. Receive proposals by the third quarter of FY 2023;

- 3. Initiate pilot operations with the minimum viable product by the fourth quarter of FY 2023;
- 4. Continue to ramp up capacity until the pilot reaches regular operating status in the third quarter of FY 2024; and
- 5. Fully transition from the pilot to a fully operational NAIRR by the third quarter of FY 2025.

TF deliberated on the merits. Topics included impacts on entities applying to be resource providers who do not participate in the pilot; the need for resource providers to hire additional staff for the pilot; and what would become of these staff after the pilot phases out. The TF agreed that it would be important to resolve these items ahead of startup, and that if established, the pilot should include as many capabilities as possible.

This session ended at 1:32 PM EDT.

Discussion of NAIRR Security Requirements

The session started at 1:32 PM EDT.

NAIRR TF members Ms. Elham Tabassi, Dr. Stanzione, and Dr. Norman began with a summary of the security considerations warranting further discussion, namely whether the NAIRR should embrace a tiered access model or a configuration that would pair an open NAIRR with a single and distinct security layer, and the envisioned role for resource providers operating within that secure layer to provide access to sensitive data. Dr. Stanzione noted the vision for a NAIRR-Secure that would provide a logical (vs. physical) separation achieved through a software layer to enable and ensure proper controls and compliance for secure data and computation on approved resources. The TF agreed that tiered security levels would provide ease of use and identified three tiers in particular (public, protected, and restricted). Finally, the TF spoke about the usability-security tradeoff, possibility that if data are controlled too tightly, they would not be used. The TF discussed using a risk-based approach to determine how securely to protect individual data sets.

The session ended at 1:55PM EDT.

Discussion of NAIRR Data Resources

The session started at 1:55PM EDT.

NAIRR TF members Dr. Julia Lane and Dr. Daniela Braga led a discussion on NAIRR data resources. The TF discussed how to measure the value of specific data sets, and the envisioned cooperation between the NAIRR and data.gov and the National Secure Data Service (NSDS). In determining how valuable a specific data set is, the TF agreed that several factors should be considered, including whether the data have been cleaned, how often the data have been accessed, and whether other models have already shown the data to be usable. It was suggested that a review system be put in place that would allow users to provide feedback on how valuable the data sets are. It was agreed that standardized data citations should be considered.

The TF considered how the NAIRR might cooperate with other data-housing entities. The TF agreed that the NAIRR should not imitate the data.gov role of pointing to data sets, but rather would work with data.gov to enhance data discoverability. With respect to collaboration between the NAIRR and NSDS, the TF agreed that both entities should evolve together, but the NAIRR could provide access to some government data due to the still to-be-determined timeline of NSDS.

This session ended at 2:17 PM EDT.

Discussion of the Administrative Home for the NAIRR

The session started at 2:17 PM EDT.

NAIRR TF Co-Chair, Ms. Tess deBlanc-Knowles, provided background on how the TF came to develop the model for a single Federal administrative home for the NAIRR to manage its operations paired with an interagency steering committee that would steer its governance and resource investments. TF members discussed the characteristics that the administrative home would need to reflect, including:

- Mission alignment;
- Capacity and capabilities to effectively support administrative activities;
- Existing relationship with AI research community and other NAIRR stakeholders;
- Experience supporting foundational, use inspired, and translational AI research;
- Focus on equity and diversity and ability to support democratization of resource access; and
- Experience in managing interagency agreements.

TF members highlighted the model developed as one of "cooperative stewardship" of the NAIRR.

Ms. deBlanc-Knowles closed the discussion by reviewing next steps and benchmarks in the timeline for development of the final report.

This session ended at 2:39 PM EDT.

Questions from Public and Meeting Close

The session started at 2:39 PM EDT.

Dr. Parashar read aloud four comments from members of the public, to which responses were provided by TF members.

The next meeting is scheduled for December 7, 2022, during which the TF will vote on the Final Report, constituting an implementation plan and roadmap. Details will be posted in the Federal Register.

The meeting adjourned at 2:57 PM EDT.

Appendix I: Attendance for NAIRR TF Meeting 10

TF Members Present:

Manish Parashar, National Science Foundation (Co-Chair)

Tess deBlanc-Knowles, White House Office of Science and Technology Policy (Co-Chair)

Daniela Braga, Defined.ai

Mark Dean, retired (formerly IBM and University of Tennessee, Knoxville)

Julia Lane, New York University

Fei-Fei Li, Stanford University

Michael Norman, University of California, San Diego

Dan Stanzione, University of Texas, Austin

Frederick Streitz, Lawrence Livermore National Laboratory

Elham Tabassi, National Institute of Standards and Technology

TF Members Absent:

Andrew Moore, Google

Oren Etzioni, Allen Institute for Al

Other Contributors

Erwin Gianchandani, National Science Foundation

Lynne Parker, White House Office of Science and Technology Policy (Consultant)

Science and Technology Policy Institute Staff Present:

Emily Grumbling

Lisa Van Pay

Brian Zuckerman

Matt Ishimaru

Matt Christman

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