

July 1, 2019

Comment Template for Draft Plan for Federal Engagement in Developing Technical Standards and Related Tools for AI Technologies

COMMENT #	NAME OF COMMENTER	TYPE i.e., Editorial Minor Major	LINE # PAGE etc.	RATIONALE for CHANGE	PROPOSED CHANGE (specific replacement text, figure, etc. is required)
	Adelina Cooke		515	Additional recommendation/ 5 th recommendation	5. Public-private collaboration and engagement plan for non-technical/qualitative measures to address societal and ethical considerations. <ul style="list-style-type: none">- The National Science Foundation (NSF) can play a critical role in working alongside NIST, drawing on their ability to facilitate public and private research and collaboration across scientific disciplines to examine qualitative/non-technical standards.



National Institute of Standards and Technology
100 Bureau Drive, Stop 2000
Gaithersburg, MD 20899

RE: A draft “Plan for Federal Engagement in Developing Technical Standards and Related Tools”

Accenture is grateful for the opportunity to provide further input to the National Institute of Standards and Technology (NIST) Federal AI Standards Engagement Plan.

In section (F) of the proposed plan, it states: “While stakeholders in the development of this plan expressed broad agreement that societal and ethical considerations must factor into AI standards, it is not clear how that should be done and whether there is yet sufficient scientific and technical basis to develop those standards.” Accenture is among those stakeholders who expressed that societal and ethical considerations must be part of the standards discussion. We agree with NIST that it is not currently clear how to address these critical issues on a “scientific and technical basis”; however, Accenture and many other public and private sector entities have been working diligently on best practices and approaches to addressing them.

Therefore, we recommend a separate work stream or plan fort non-technical/qualitative measures to address societal and ethical considerations. This could be a fifth recommendation or could be added to the third recommendation on “private-public partnerships.”

Qualitative measures enable the critical thinking necessary to interpret this evidence effectively. Both context and evidence are necessary to understand risks because there is no one definition of fairness, nor one understanding of “sufficient” transparency.

Qualitative standards may require organizations to consider how to proactively justify their design choices by explaining:

- why they chose a particular data set to draw inferences;
- why these inferences are relevant (and ethical) for the chosen decision they are trying to make; and
- whether the data and methods used to draw the inferences are accurate and statistically reliable for the population they are trying to serve. (A qualitative endeavor informed by quantitative measures.)

Additionally, qualitative standards require human participation in deploying and monitoring AI systems. In considering the application of AI in high risk areas, such as criminal justice and health care, organizations should design, build and deploy AI systems that leverage human judgment and responsibility where they are needed most. Whereas quantitative analysis provides insights into the systems driving decision-making, ultimately human judgement is needed to change how humans are impacted by some AI systems.

An added complexity that is aligned with the issue of transparency is accountability of human and algorithmic systems. Qualitative standards should help us trace human decision-making, not just of the technical aspects of algorithms.

Further, ethics, a mostly qualitative science, is critical to informing an organization’s strategy for its technology deployments. Organizations should consider and articulate the values that should be encompassed in their product, and how these values might vary across different demographics. Organizations can then proceed by developing AI that incorporates those values.

The National Science Foundation (NSF) can play a critical role in working alongside NIST, drawing on their ability to facilitate public and private research and collaboration across scientific disciplines to examine qualitative standards. We hope that this plan will further shed light on how to leverage the best of NSF and NIST to produce valuable technical and non-technical frameworks for organizations utilizing AI.