Dear NIST AI RMF team,

First, let me congratulate the team on the really great progress to date with the AI RMF. I have been following your work and the AI RMF conceptual framework released last year has significantly influenced my research work.

By way of background, I am a Doctoral Candidate, and am in my third year researching AI, Ethics and Risk Management. I recently retired after 24 years with a large professional services firm where I was part of the internal Global Technology Executive team reporting to the Global CIO.

I would like to provide input on an aspect that was discussed in passing during the workshop (I have recently reviewed the recordings), but that I believe needs more explicit focus in the RMF. The two panel discussions, Panel 4 (Management Function) and Panel 5 (Govern Function) touched on the need for operational monitoring and continuous improvement respectively.

My comments relate to **the need for a greater focus on dynamic operational monitoring and active risk reviews**.

From the Management Function (Table 3), category ID #3 "Responses to enumerated and measured risks are documented and monitored over time," there is clearly a sharp focus on the AI system and its operation post deployment. Similarly, in the Govern Function (Table 4), category ID #1, second subcategory "Ongoing monitoring and periodic review of the risk management process and its outcomes are planned, with responsibilities clearly defined," there is a focus on evolving the risk management process and its outcomes. I suggest that while these are critical, they do not go far enough, and are perhaps not holistic enough in concept.

The context for my observations is:

1.   As was articulated on Panel 4, AI risk management is nascent and is a dynamic, maturing space, implying continuous change.
2.   Further, AI Risks are temporal (pg. 6 line 11), contextual, and contingent, implying the need for a dynamic approach.
3.   Because of the unique capabilities of AI solutions, and its socio-technical context, dynamic (quick and extensive) changes can occur in several areas simultaneously, including:
    a.   **The AI system's learning and adapting**, e.g., as the AIS learns or adapts to the environment. This can happen quickly with significant risk implications.
    b.   **Stakeholder-related changes** – For instance, the need to respond to new cultural perspectives as the system is deployed into new geographies and within new ethical contexts. In addition, there are evolving ethical expectations by users and stakeholders. Again, these changes can happen quickly, requiring an agile risk management response.
    c.   **Changes to the AI Principles and Standards**: The AI Principles defined by governments, standards bodies, industry groups continue to evolve. While each of these principles and standards individually take time to develop, their combined effect on risk managers, and AI designers and developers is a continuous stream of changes that need to be responded to.
    d.   **Responding to AI incidents** – there will continue to be AI incidents that require risk review and analysis, not only by the organizations directly involved, but also by others that may have similar or adjacent solutions.

While the general risk management approach of "ongoing monitoring and periodic review of the risk management process and its outcomes" is necessary, it needs to be augmented. **This highly dynamic and complex landscape requires a risk response that is driven by continuous monitoring and sensing of the environment and triggering the appropriate risk assessment and risk responses** (some of which may be automated). The recommendation is therefore to explicitly include a "continuous monitoring and sensing" element to the Deployment stage of the AI System Lifecycle, perhaps as is shown in the adapted Fig. 6 attached.

If this recommendation rings true, I would be happy to elaborate the recommendation further and provide additional background and perspectives.

Again, congratulations, and good luck with the work ahead of you all.

Regards
Quintin McGrath