SRB Process Review

Planetary Advisory Committee (PAC) Meeting
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Psyche IRB Report – SRB Findings and Recommendations

IRB Observations

The SRB process can be an important project-management asset to identify critical problems requiring corrective action

The SRB process includes: an independent board, interaction with the project being reviewed, and NASA oversight of the board and project activities to ensure board actions are properly implemented.

The Psyche SRB reviews were not timed properly to allow identification of the problems that caused the launch delay or the recommendation of corrective actions
- The board identified schedule issues that were not communicated with sufficient level of severity, were not acted upon appropriately by the project, and/or were not properly dispositioned by NASA

Work Still Needed

❑ The IRB believes NASA and Management Centers should take the necessary action to clarify the responsibilities of the board, the appropriate schedule for board meetings, and board membership composition.

❑ NASA's actions should specifically define the project responsibilities when answering board recommendations and NASA accountability for governance of the total process to ensure that board recommendations are properly understood and dispositioned

Recommendations

❑ The SRB process must be strengthened to discriminate between "normal" activities and serious issues that will highlight critical factors impacting a project's success

❑ Guidelines given to projects for status reporting should be clear and unambiguous (e.g., for "green," "yellow," and "red" color-coding)

❑ The response to the SRB-reported issues and concerns must be thoroughly reviewed on a regular basis until satisfactory resolution is achieved by the SRB, Management Center, and NASA authorities

PAC Findings/Recommendations
June 2023

Psyche IRB Follow-up with Institutional Assessment

Context/Finding: The PAC expresses our appreciation for the transparency and insights provided by JPL and PSD leadership in addressing the issues identified in the Psyche Independent Review Board (IRB) findings. JPL's proactive attitude of taking interim steps to mitigate remaining concerns with the Standing Review Board (SRB) review process, while NASA leadership assesses the SRB review process, is laudable. Similar proactive interim steps are desirable at other NASA Centers

Recommendation: With important upcoming reviews for major missions, the PAC requests an update on the status of the Agency's internal reviews of the SRB review process and the Agency's response to the IRB recommendations

NASA Response to Psyche IRB Report

[SMD/JPL Response](#) to Psyche IRB Report - SRB Findings and Recommendations:

A. We **partially concur** with the IRB's assessment that the **responses to the SRB Review Process** improvement recommendations **were inadequate**.

   i.   NASA agrees that significant work is needed to meet the spirit of the recommendations in this area.

   ii. We acknowledge, however, that this is **an area of Agency responsibility**, requiring active engagement across multiple Headquarters organizations, and **efforts that go well beyond the Psyche Project, JPL, or even SMD jurisdiction.**

   iii. We note the IRB's positive acknowledgement of the active efforts specific to the Psyche SRB, and we **remain committed to delivering impactful improvements** to benefit all relevant NASA projects and programs in the future.

   iv. The work being led by **the NASA Chief Project Management Officer (CPMO) in collaboration with the Mission Directorates** is underway and is intended to address deficiencies in the current SRB and independent assessment processes and practices.

NASA CPMO - Strengthening IAs Initiative

- CPMO gathered feedback on NASA's IA process earlier this year through an Independent Assessment (IA) Community Survey **(283 responses, 37 respondents)** and IA Stakeholder Survey **(466 responses, 87 respondents)**
  - Initiative aims to improve **cross-organizational collaboration**, share **best practices and lessons learned**, and identify forward **work for IA improvement** in collaboration with the mission directorates (MDs)
- CPMO presented the findings and recommendations to stakeholders at the August 2023 MD IA Forum
  - Identified **13 key-takeaways** across **9 categories**, **16 challenges** to the IA process, **13 ideas** for action, and **8 focus areas** for future work
  - Recommended:
    Increasing SRB training opportunities
    Improving SRB feedback mechanisms and accountability
    Documenting and standardizing SRB procedures, expectations, and roles and responsibilities

**Thank you!
Questions?**

Backup

Summary of Feedback:

Challenges

- Striking a balance for making the SRB work for all convening authorities (ESDMD)

- SRBs issuing recommendations that overlook the constraints within which the MD operates (e.g., limited funding) (ESDMD)

- The scope of SRB reviews sometimes extends beyond the P/p under review (ESDMD)

- The performance of SRBs is influenced by the personalities of their members (ESDMD)

- Finding and selecting qualified personnel in a dynamic environment (ARMD, SMD)

- Navigating constraints of the relationship with the project based on acquisition approach (ARMD)

- Dispersed SRB success criteria across multiple documents (STMD)

- Absence of meaningful high-level training (STMD)

- Addressing projects that ignore review feedback (STMD)

- Forcing FFP contracts to fix problems (STMD)

- Hybrid meetings inhibiting meaningful dialogue (SMD)

Summary of Feedback: Challenges

- **Staffing and Qualifications**: Finding and selecting qualified and available personnel for SRBs in a dynamic environment appears to be a challenge for all MDs. This includes not only identifying individuals with the right skills but also ensuring they are available and capable of effectively participating in the review process

- **Training**: There is a lack of meaningful high-level training for SRBs. This challenge pertains to the need for training programs that can equip SRB members with the skills and knowledge necessary to conduct effective reviews

- **Scope and Execution of Reviews**: There seems to be an issue with how SRBs execute reviews. In some instances, they issue recommendations that do not fully recognize the constraints within which the MD is operating (i.e., limited budget). In other instances, the scope of their reviews extends beyond the program/project under review

- **Management and Leadership Challenges**: Leadership needs to set the tone for success and focus on upholding core values, which is a challenge when there is a dynamic environment and limited resources

- **Feedback and Accountability**: There is a need for a mechanism to ensure that feedback from SRBs is considered and not ignored, implying a need for a more structured accountability process

Summary of Feedback: Ideas for Action

- Significant value in a community of practice and promoting open and honest dialogue (SMD)

- Make individuals available with specific subject matter expertise who can work closely with the P/p team (ESDMD, ARMD)

- Non-voting consultants could be brought on to observe, learn, and provide mentorship (STMD, SMD)

- Require RMs with lived program experience, not just meeting facilitation skills (ESDMD)

- Centers could establish a requirement for IA service (STMD)

- Develop meaningful training either via SATERN or given by experienced personnel (SMD)

- Develop a system for staffing where the supervisor is a key stakeholder (ARMD)

- Leadership needs to focus on upholding NASA core values (ARMD)

- IAT leadership should set the note for success (STMD)

- Later reviews could deprioritize review teams and leverage independent personnel instead, prioritizing IATs for earlier reviews (STMD)

- Metrics to measure SRB effectiveness and improvement should be established (SMD)

- Projects and SRBs should check-in between life cycle reviews (SMD)

- SRB should receive project data in a timely manner and have a dedicated pre-review given by the project prior to a life cycle review (SMD)

Independent Assessment Survey Background

- **Responses to Open-Ended Questions:**
  - IA Community Survey: 283 Responses from 37 Respondents
  - IA Stakeholder Survey: 466 Responses from 87 Respondents
  - Responses were grouped in nine Categories. (Categories are listed according to number of combined responses, from highest to lowest)
    - Category 1: Staffing
    - Category 2: Engagement
    - Category 3: Training
    - Category 4: Review Planning and Execution
    - Category 5: Purpose/Value of Independent Assessment
    - Category 6: Review Products
    - Category 7: Organizational Management of IAs
    - Category 8: Post Review/Follow-Up
    - Category 9: Policy
  - Within many Categories, responses were also grouped in sub-categories

Key Take-Aways by Category

Category 1: Staffing
- Database of Qualified IAT Members is Needed *(16 Responses)*
- IAT Members have Demanding "Day" Jobs that Compete with Review Roles *(37 Responses)*
- Relevant Experience is Essential but not Always Available *(37 Responses)*
- Review Managers are Essential to IAT Success – Need More Training, Consider Dedicated Full-Time Role *(35 Responses)*

Category 2: Engagement
- No Additional IAT Reviews are Needed *(25 Responses)*
- Engage IAT when LCRs Separated by Long Periods of Time *(20 Responses)*
- Earlier IAT Engagement would be Beneficial *(19 Responses)*

Category 3: Training
- Training is Essential and Lacking *(50 Responses)*
- Relevant Experience is Essential but not Always Available *(37 Responses)*
- Review Managers are Essential to IAT Success – Need More Training, Consider Dedicated Full-Time Role *(35 Responses)*

Category 4: Review Planning and Execution
- Leadership Needs to Set the Tone for IAT Success *(16 Responses)*

Category 5: Purpose/Value of Independent Assessment
- Leadership Needs to Set the Tone for IAT Success *(16 Responses)*

Category 7: Organizational Management of IAs
- Review Managers are Essential to IAT Success – Need More Training, Consider Dedicated Full-Time Role *(35 Responses)*

Categories 6 (review products), 8 (post-review follow-up), 9 (policy): No key take-aways