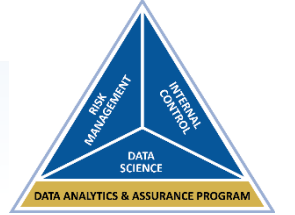




NSB Enterprise Risk Management (ERM) Update



Mike Wetklow, Division Director for Financial Management and
Deputy Chief Financial Officer
National Science Foundation
July 29, 2020

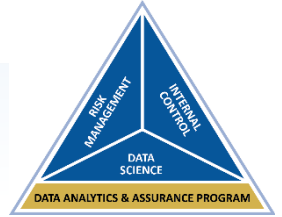


Purpose:

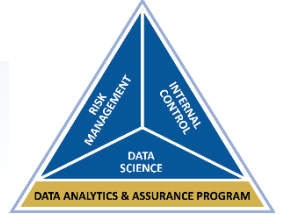
- To inform the NSB on NSF's approach to ERM.
- Obtain NSB input on ERM.

Outcomes:

- Shared understanding of ERM progress and next steps at NSF.
- Alignment of NSB oversight role and NSF's approach to ERM.



ERM is not intended to be a check the box compliance exercise

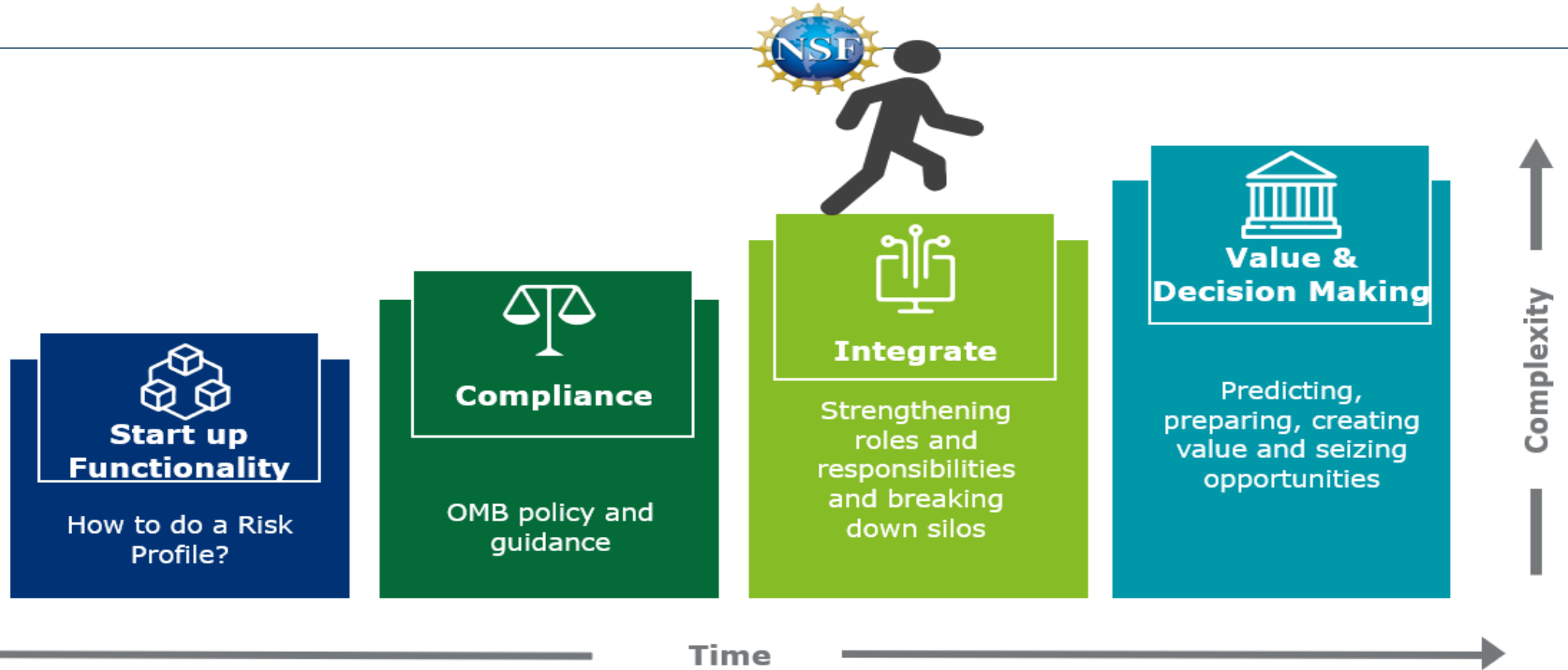
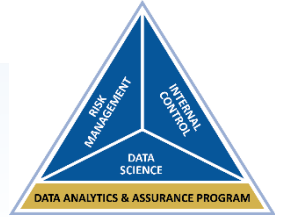


*Boards play an important role in enterprise risk management.
“Boards are experienced, skilled, highly talented, and can offer
an appropriate degree of industry, business, and technical
input while performing oversight responsibilities.”*

According to ERM Best Practice Standard Setter, the Committee of Sponsoring Organizations
of the Treadway Commission

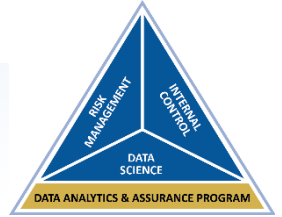
NSB ERM Update

Progress to Date and Next Steps

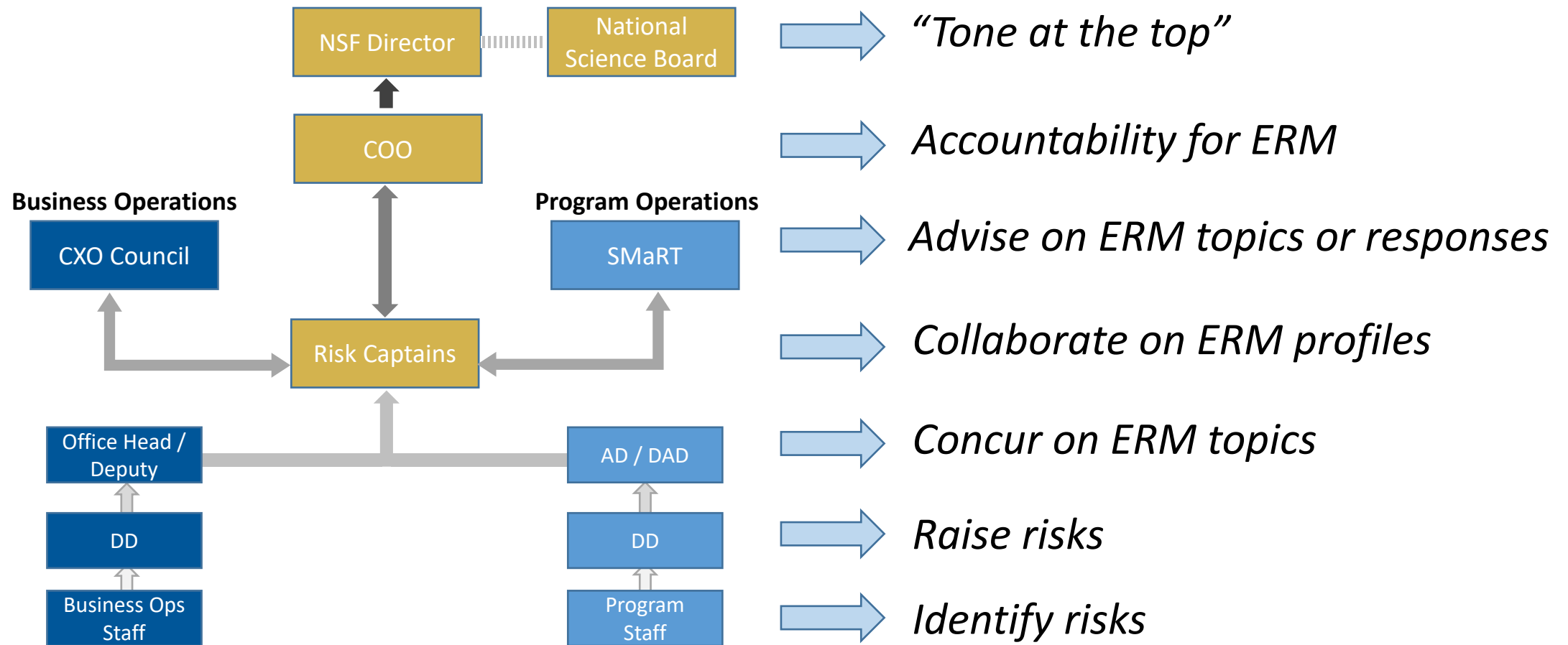


NSB ERM Update

Developing ERM Communication Structure

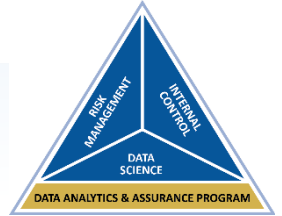


NSF ERM Communication Structure



NSB ERM Update

Illustrative Example of Risk Posture



National Science Foundation
Office of the Director

May 18, 2020

Dear NSF family:

As we continue to operate under extraordinary circumstances, I wanted to thank you all again for the hard work that you're doing and highlight how important NSF is to the nation's COVID-19 response efforts.

In particular, I want to recognize three groups of you who have been tireless in your efforts to make sure this agency maintains its ability to operate and keeps providing support to the researchers who require it.

This crisis has resulted in an unprecedented volume of RAPID proposals and awards. As of today, NSF has funded more than 400 RAPID awards, and we expect the high volume of proposals to continue – and that is a testament to so many of you who are receiving RAPID proposals, making decisions, and processing awards. Awarded projects have ranged from modeling the spread of COVID-19 to developing innovative new materials that can be integrated into medical masks. Members of the research community have spoken: They require support for projects that can ease this pandemic, help us recover and apply what we're learning to deal with the next emergency. Through RAPIDs, NSF has answered that call with the most diverse group of awards ever issued.

I want to especially commend the NSF COVID-19 Program Director Working Group. This group has been on the front lines of handling the extraordinary number of inquiries and correspondence from the research community leading to the 400 awards, the likes of which this agency has never seen. Through tight coordination, they have kept NSF's responses consistent and appropriate. Their work demonstrates this agency's character as a trustworthy source of leadership. They have made sure that NSF can do more than simply continue operations during this crisis – we're an active participant in the race for solutions.

Finally, this agency is already looking ahead to find ways to allow the U.S. scientific enterprise to increase its capacity for work in the current difficult climate and fully transition to normal operations later. NSF's Restart Planning Task Force will face tremendous challenges ahead, looking at how we can be most effective in applying resources and support. I am confident that they are equal to the task.

2415 Eisenhower Avenue, Suite 19100, Alexandria, VA 22314

are working without the normal comforts of NSF
virtual meetings and digital communications. And even in the
d to ensure that new NSF-supported research reflects agency
laboration and broadening participation in science and

wledge the importance of the work NSF does supporting basic
re every day. The RAPIDs and other NSF-supported research
be nearly as effective if this agency hadn't spent decades
rch workforce, its scientific facilities and its knowledge base

est efforts through the duration of this crisis, and I know you
and we all are continuing to adjust to our virtual work. But
late the remarkable accomplishments of this agency. They
dedication. Thank you for all your work, and please continue

Sincerely,

Kelvin K. Droegemeier
Acting Director

2415 Eisenhower Avenue, Suite 19100, Alexandria, VA 22314

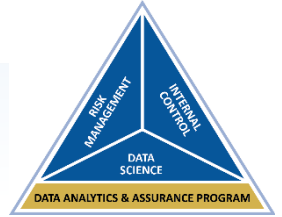
NSF Acting Director's May 18, 2020 Letter to NSF includes several examples of natural/inherent risk management:

- Employee Safety
- RAPID Proposals and Awards
- NSF COVID-19 Program Director Working Group
- NSF's Recovery Planning Task Force

Risk posture can change over time. ⁷

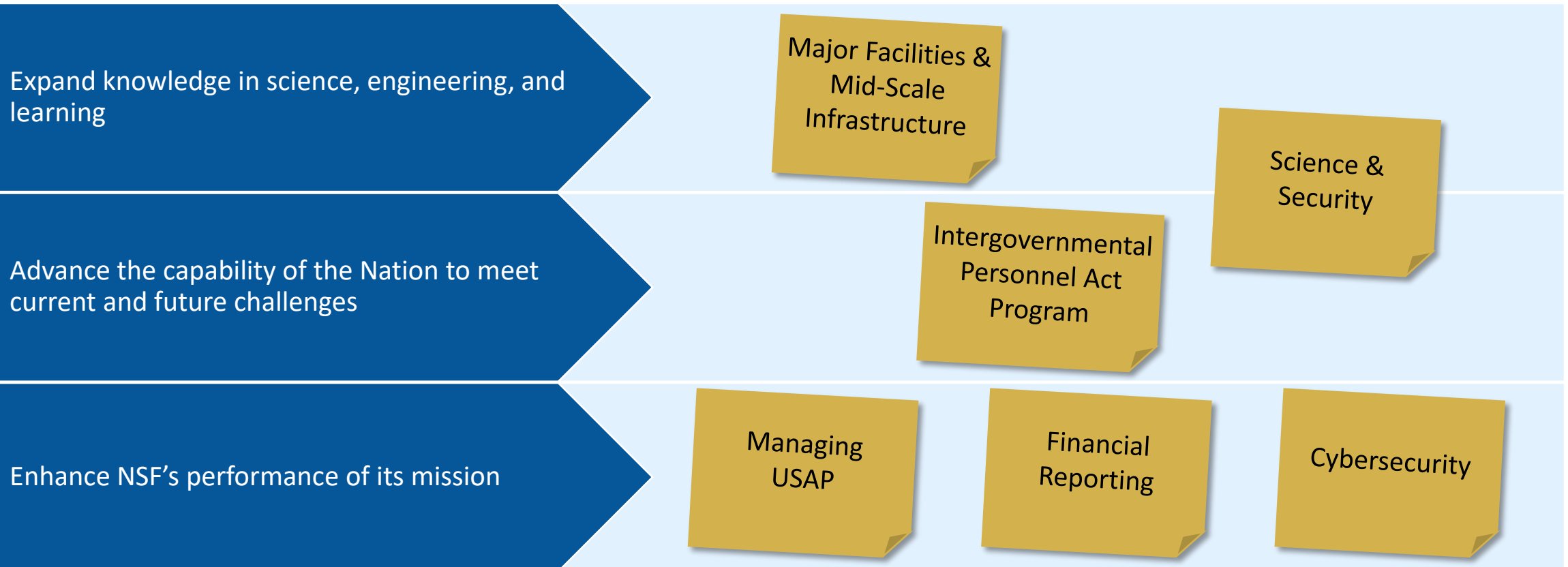
NSB ERM Update

Enterprise Risk Management at NSF



NSF Strategic Goals *Drive Value & Deliver Mission*

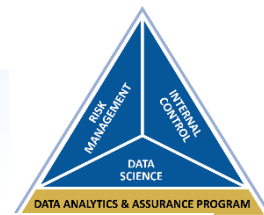
NSF FY2020 ERM Objectives ⁽¹⁾ *Manage Strategic & Reputational Risks & Opportunities*



⁽¹⁾ Each ERM area of focus is shown aligned with its primary related strategic goal; some cross-cut / align with multiple goals.

NSB ERM Update

Example Risk Profile – Financial Reporting



Financial Reporting 2020

STRATEGIC GOAL 3: Enhance NSF's performance of its mission.

STRATEGIC OBJECTIVE 3.2– Processes and Operations. Continually improve agency operations.

RISK Category: Main: Financial Sub: Reputational	Inherent Assessment		Current Risk Response	Residual Assessment		Proposed Risk Response	Owner	Proposed Risk Response Category
	Impact	Likelihood		Impact	Likelihood			
FINANCIAL OBJECTIVE – Maintain 22-year record of unmodified clean opinions without material weaknesses and in accordance with the CFO Act and related financial management laws.								
Risk: Maintaining internal control over financial reporting Causes: Human Error, Process Breakdowns, Poor Implementation of Policy and Procedures, System deficiencies. New Requirements Outcome: Material financial statement misstatement, reputational damage, missed opportunities.	Rating: Moderate Score: 3	Rating: High Score: 3	<ul style="list-style-type: none">Continue strong control environment through tone at the top by NSF Director, Chief Financial Officer, and Senior Management support throughout NSF.Manage risks and decide how to allocate resources and efforts to mitigate risks and what types of control activities and management involvement is needed.Execute control activities in accordance with policy, procedures and business processes.Provide information and communication to maintain proper controls and accountability.Maintain internal control over financial reporting through active monitoring of day to day operations, separate evaluations to ensure operations are as intended.NSF has developed corrective actions to provide the Office of Polar Programs technical assistance.NSF is updating internal controls and Financial Systems for new CARES Act (COVID-19) reporting requirements.	Rating: Moderate Score: 3	Rating: Moderate Score: 3	Risk Reduction: <ul style="list-style-type: none">NSF will monitor corrective actions and conduct Independent Verification and Validation assessment work to support assurance that corrective actions are effective. Opportunities: <ul style="list-style-type: none">Continue evaluation of internal control in accordance with OMB A-123 and GAO GreenbookContinue efforts to explore emerging technologies and data science use cases.	Head, Office of Budget Finance & Award Management Office Director, Polar Programs	Internal Control Assessment

1. Do you have feedback on NSF's developing approach to ERM?
2. What does ERM mean to other NSB Committees?
3. How can NSF and the NSB best work together on ERM?

