



# TechStat Policy And Process Overview

Office of Chief Information Officer  
Capital Planning and Investment Control Team

Version 1.1

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## Revision History

<u>Date</u>	<u>Version</u>	<u>Summary of Changes</u>	<u>Author</u>
08/17/2015	1.0	Removed detailed process and procedures; updated TechStat policy and provided process overview to reflect FITARA and OMB requirements; now publicly available  ADAMS Accession No. ML15231A578.  Note: Detailed process and operating procedures are being maintained in a separate document.	Vickie Smith, OIS/PMPD/IPMB  [Approved by Darren Ash, OEDO/DEDCM]
11/27/2015	1.1	Updated to reflect organizational changes effective on 11/01/2015.  ADAMS Accession No. ML15289A34.	Vickie Smith, OCIO/PMPD/IPMB  [Approved by Darren Ash, CIO]



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## Background

A TechStat Accountability Session (or TechStat) is a face-to-face, evidence-based accountability review of a troubled or failing information technology (IT) investment or program. A realistic, data driven assessment is performed to identify weaknesses and to determine corrective actions or modifications to make the investment successful in reaching its performance goals and expected value, or to halt or terminate the investment. TechStats were first implemented as part of the “25 Point Implementation Plan to Reform Federal Information Technology Management” to strengthen IT governance and improve accountability. The TechStat Toolkit issued by the Office of Management and Budget (OMB) on January 28, 2011, as guidance to agencies on implementing TechStats serves as the basis for the NRC’s TechStat policy and process.

In addition, the requirements set forth by the Federal Information Technology Acquisition Reform Act (FITARA) enacted on December 19, 2014, and the OMB guidance on implementing FITARA issued in Memorandum M-15-14, “Management and Oversight of Federal Information,” on June 10, 2015, serve as the basis for the NRC’s use of Capital Planning and Investment Control (CPIC) processes and the Federal IT Dashboard (ITDB) to help identify and determine when an automatic TechStat is required and identify potential candidates before the investments automatically require a TechStat. Memorandum M-15-14 also established new reporting requirements through the quarterly Integrated Data Collection (IDC) and the use of the “Investment and Portfolio Management Maturity Framework” template provided in Attachment E of the memorandum.

## Purpose

This document sets forth the policy for, and explains the process for implementing, TechStats at the U.S. Nuclear Regulatory Commission (NRC). It establishes the business rules and guidelines for consistency and compliance in executing the TechStat process and procedures. This document has been updated to reflect FITARA requirements and therefore supersedes all previous TechStat policy and process documents.

## TechStat Policy

All TechStats must be conducted in accordance with Federal mandates, OMB requirements, and agency procedures. This policy establishes the following rules and guidelines:

1. As required by CPIC guidance, the Chief Information Officer (CIO) evaluations reported to the ITDB for all major investments must reflect the CIO’s assessment of the current risk associated with a major investment’s ability to accomplish its established goals based on the following evaluation factors: (a) risk management; (b) requirements management; (c) contractor oversight; (d) performance; (e) human capital; and other factors that the CIO deems important to forecasting future success. Data will be provided to the CIO as part of the CPIC monthly review and update process. If during this review the CIO receives new information affecting the assessment of any given investment, the CIO will update the investment’s rating and provide a



narrative explaining the reason(s) behind the change. Even if no change in an investment's rating occurs over a three month period, the CIO will update an investment's CIO evaluation on the ITDB to report current status and progress.

2. A major investment will automatically be the subject of a TechStat if it has a high risk or moderately high risk rating (i.e., has a rating of 1 or 2) on the ITDB for three consecutive months.

3. A major investment will be evaluated to determine the need for a TechStat if it has a high risk or moderately high risk rating on the ITDB for one month and there are indications that the high risk rating will continue unless action is taken.

4. A major investment will be evaluated to determine the need for a TechStat if more than one Baseline Change Request is submitted within a 12 month period due to financial or schedule issues.

5. An investment (major or non-major) will be evaluated to determine the need for a TechStat if the investment has performed recommended corrective actions that have proven unsuccessful in turning the investment around.

6. An investment (major or non-major) will be evaluated to determine the need for a TechStat if the CIO or the IT/IM Portfolio Executive Council (IPEC) request the evaluation due to concerns over cost, schedule variance or dependencies, performance, usage, or organizational impact.

7. Once it is determined a TechStat is needed, the TechStat will be performed according to NRC's TechStat process and supporting procedures which must be based on the "TechStat Toolkit" available at <https://cio.gov/drivingvalue/techstat/browse-toolkit/>.

8. The TechStat Lead Analyst (commonly referred to as the TechStat Lead) will contact [egov@omb.eop.gov](mailto:egov@omb.eop.gov) with the subject line "NRC TechStat Notification" at least two weeks before the TechStat session.

9. The TechStat Lead will report the outcomes and outputs of all TechStat sessions through the quarterly Integrated Data Collection (IDC) and will include (a) an assessment using OMB's "Investment and Portfolio Management Maturity Framework" template<sup>1</sup>; (b) a root cause analysis of performance issues; (c) corrective action plans which address the causes; and (d) a timeline for implementing the corrective actions.

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<sup>1</sup> See Attachment E of Memorandum M-15-14, "Management and Oversight of Federal Information Technology" issued by OMB on June 10, 2015.



## Responsibilities

The IPEC will serve as the governing body to make and enforce the decisions resulting from a TechStat session. TechStat participants are listed below; the table depicts their responsibilities.

- NRC's TechStat Lead
- IPEC Co-Chairs (i.e., CIO and Chief Financial Officer)
- IPEC Members (includes Agency CXOs and Major Investment Business Sponsors)
- Investment's Program / Project Manager (PM) and Business Process Owner

Responsibility	TechStat Lead	CIO	PM	Business Owner	IPEC Co-Chairs	IPEC Members
Identify investments for TechStat	P <sup>2</sup>	X			X	X
Lead the documentation review, perform critical analysis, and provide briefing materials to the IPEC prior to meeting	P					
Support documentation review	P	X				X
Track and monitor action items resulting from TechStats	P					
Brief leadership (CIO, etc.) prior to the meeting	P		X	X		
Provide full and complete documentation to support a given review			P	X		
Coordinate staffing necessary to support a review		P				
Execute Action Plan resulting from TechStat Reviews			P	X		
Present findings to IPEC	P		X			
Coordinate and facilitate TechStat meeting	P					
Lead TechStat meeting and ask probing questions		P			X	
Provide expert advice and objective recommendations that assist the IPEC in decision-making	X	X				
Ensure decisions are consistent with the Agency and IT strategic plans, policies and guidelines		X			X	
Notify Investment of TechStat	P					
Document decisions and action plan resulting from TechStat	P					
Attend TechStat and contribute to group decisions	X	X	X	X	X	X
Report results of TechStats to the IDC	P					
Report progress/results of corrective actions to executives and to OMB	P	X				

<sup>2</sup> "P" indicates the primary person responsible.



In addition the following must be in attendance:

- Additional members of the investment's Integrated Program Team (IPT)
- Subject Matter Experts (SMEs) who supported the TechStat analysis must be available for questions
- CPIC Team is to provide meeting support

## TechStat Process

NRC's TechStat process enables the CIO, jointly with other Senior Agency Officials and senior executive leadership, to provide actionable assistance and guidance to investments, facilitating their success. A TechStat review is designed to be an in-depth review of an investment and supporting program management documentation that supports executive level discussion and decision-making during a 60 minutes or less TechStat session. Though the review is comprehensive, the meeting is focused on the issues impeding product delivery and determining specific concrete action items to turnaround the investment.

Each TechStat follows a similar evolution beginning with discovery of the investments that require intervention and ending with continuous oversight of the action plan to ensure the investment is turned-around, halted or terminated. The review has five distinct phases:

- Discovery
- Analysis
- Preparation
- TechStat Facilitation
- Follow-up

## Discovery

In the discovery phase, NRC's CPIC Team actively monitors major investments and provides current data to the CIO on a monthly basis. As part of the CPIC's monthly review and update process, the performance and risk associated with NRC's major investments are continuously being assessed. It is through this process that major investments are identify as automatic, or potential, TechStat candidates based on the criteria set forth under the policy section of this document. NRC strives to address concerns early, effectively manage investment risk, and prevent high-risks ratings and the occurrence of automatic TechStats.

Non-major investments are monitored on a quarterly basis as part of the reporting of planned expenditures for IT transactions and resources to the CIO. Additionally, during the year of execution IT expenditure data is compared to budget allocation and is presented to the IPEC. The data is used to evaluate the health of the portfolio and to facilitate rebalancing or reallocation decisions at the IPEC level. During these briefings, the TechStat Lead should also provide a status report on corrective actions from TechStat sessions and their effectiveness. Any concerns raised by information the reports provide will be evaluate and could potentially result in an in-depth review of certain investments or portions of the IT portfolio.



The TechStat Lead will analyze the data gathered in the discovery phase, develop a list of potential TechStat candidates, and review the results of the analysis and list with the CIO to determine if a TechStat is necessary. Investments are best fit for a TechStat if they have significant underlying issues and the need for management intervention is clear and immediate.

## Analysis

Once an investment has been identified for a TechStat review, the TechStat Lead should work to examine the investment to the fullest extent, engaging the investment's IPT and the appropriate SMEs as needed. Every TechStat analysis will require the following basic outputs, as well as additional outputs as requested by the CIO or IPEC:

- TechStat Problem Statement (i.e., a concise statement that describes why this investment is in need of intervention) developed by analyzing investment documentation
- Questions and information requests to project managers regarding the investment being reviewed
- Briefing deck for the IPEC that highlights key issues needing resolution

The TechStat Lead will identify the documents needed for review as part of the TechStat analysis. The three main areas that should be analyzed during the TechStat are:

- **Business Impact.** This includes business importance, mission, priority and strategic alignment, primary users and stakeholder engagement, executive sponsorship, governance, and oversight.
- **Operation and Execution:** This includes issue and risk management, project team capability, vendor management, cost and schedule variance, usage, availability and leveling of resources.
- **Technical Implementation:** This includes architectural alignment (how well is the investment's architecture aligned with the enterprise and enterprise targets), architecture maturity<sup>3</sup>, technology supportability, security and privacy compliance, technical performance, cross-cutting capabilities and reuse possibilities.

To assist the reviewer in their analysis, OMB has a list of broad questions related to the areas that be addressed in each type of TechStat Review.

The analytical work is essential to the success of a TechStat. Analysis should be rigorous and not simply based on superficial review of readily available materials. As part of their analysis, the TechStat Lead should always seek the advice and counsel of SMEs on relevant policy areas, business requirements, or highly specialized technical areas to ensure the highest quality review; the TechStat session should be focused on making decisions and corrective action plans, not on questioning the merits of the analysis.

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<sup>3</sup> Organizational Transformation. A Framework for Assessing and Improving Enterprise Architecture Management (Version 2.0). August 2010. GAO-10-846G.



## Meeting Preparation

As the analysis nears completion, the TechStat Lead should begin to develop an executive level briefing deck that speaks to the results of the analysis. At a minimum, the briefing deck slides should present the following topics:

- *TechStat Problem Statement*: concise statement that describes why this investment is in need of intervention.
- *Program Overview*: clear articulation of the objectives of the investment from a business perspective.
- *Project Plan*: expected deliverables over the next one year.
- *Issue Analysis*: accurately identify most significant issues and root causes.
- *Governance*: who is accountable for delivering the product (should include the Integrated Program/Project Team members), and what oversight bodies exist to mitigate risks and oversee successful product/service delivery.

When compiling the briefing deck, the TechStat Lead must consider the time constraints and purpose of the meeting. The briefing must focused on communicating only the most pressing issues that require executive level intervention and allow time for active discussion. Other issues identified during the analysis not in need of executive decisions are to be addressed by the investment's IPT outside of the TechStat and monitored by the TechStat Lead and CPIC Team. The TechStat Lead will work with the IPT to formulate the briefing deck and to ensure the investment's key issues are well communicated, and all data is presented accurately.

Prior to the TechStat, the TechStat team will pre-brief the IPEC Co-Chairs and Deputy CIO. Before the pre-brief, the investment's IPT will review the briefing deck and provide feedback and additional information to better inform the assessment presented in the final briefing deck. Copies of the final presentation will be provided electronically to the IPEC members five business days before the meeting.

## TechStat Facilitation

To ensure the TechStat achieves its objectives, the TechStat Lead will prepare appropriately for the session. Administrative preparations will be in accordance with IPEC meeting processes. For all agency-led TechStat reviews of investments, the agency shall contact [egov@omb.eop.gov](mailto:egov@omb.eop.gov) with the subject line, "NRC TechStat Notification," at least two weeks ahead of the TechStat session.

The TechStat Lead will ensure that invited SMEs were actively engaged in the analysis and thus can be actively engaged during the session if questioned about root causes and potential solutions.



While the CIO will lead the session, the TechStat Lead should be an active facilitator, presenting and clarifying important facts, asking probing questions of participants, and engaging SMEs for support. Additionally, accurate notes must be taken to capture decisions and outcomes so that they can be recounted following the meeting in a formal follow-up memo which must include all action items. Action items must have clear owners and deadlines and focus on outcomes. Action items will be managed and tracked in accordance with the procedures governing IPEC action items.

### Follow-Up and Managing Outcomes

As an output from the TechStat review, the IPEC will determine if the investment should:

- Continue as planned with minor recovery and corrective action plans
- Continue with modifications such as:
  - Rescope and rebaseline
  - Reassess make/buy approach
  - Reassign project team and/or vendor
  - Implement extensive corrective action plans
  - Thorough root cause analysis of performance issues
- Halt Investment and:
  - Determine if the investment is still necessary
  - Recharter - Agency performs a deeper analysis of the program
  - Stabilize the application to a point of non-impact to users and business operations
- Terminate investment

The outcomes and outputs of TechStats will be reported to OMB quarterly as part of the IDC reporting. Current Quarterly IDC Instructions issued by OMB dictate the reporting requirements for each quarter; the current minimum requirements are to include a completed assessment using OMB's "Investment and Portfolio Management Maturity Framework," a root cause analysis of performance issues, corrective action plans which address these causes, and a timeline for implementing the corrective actions.

The IPT is responsible for implementing the corrective actions according to the established timeline and the CPIC Team and TechStat Lead are responsible for monitoring and reporting the progress of the implementation and effect of the corrective actions on the investment. For major investments, the CPIC Team should leverage the existing monthly review process for major investments to keep the CIO well informed of progress. For major and non-major investments, the TechStat Lead should leverage the quarterly reporting to the IPEC described previously on page 4.

Lastly, the TechStat Lead will capture lessons learned within two weeks of the TechStat session. The compilation of lessons learned will be evaluated during the Evaluation Phase review of the NRC's CPIC processes to help mature the investment and portfolio management of the agency.