



Technical Review Sub-Committee Charter

Version 3.0

March 2017



Version History

Version Number	Implemented By	Revision Date	Approved By	Approval Date	Description of Change
1.0	Chris Niedermayer	December 20, 2010			Final Version 1.0
1.1	Chris Niedermayer	May 10, 2011			Updates to style and quality control review
2.0	Weems	August 28, 2013			Updated based on OCRPM Working Session on Governance
3.0	Russell Varnado	June 18, 2016			Updated to comply with revised governance structure
3.1	Russell Varnado Mark Hayes	March 2017			Final review for release



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1. Purpose

The Technical Review Sub-Committee (TRC) shall monitor the Department of Housing and Urban Development's (HUD's) information technology (IT) projects and infrastructure services, and provide analysis to the Chief Information Officer (CIO) and Customer Care Committee (CCC). It shall act as a control gate and its members as technical, project, and architecture subject matter experts (SMEs) for the other IT governance bodies on an as-needed basis.

For larger projects, the TRC shall evaluate each proposed project's alignment with HUD's enterprise and segment architecture and provide recommendations for action to the CCC. For smaller projects, the TRC may be authorized by the CCC to finalize conclusions on segment architecture alignment. The TRC shall also play a role in project termination. It shall either implement the Executive Operations Council (EOC) and CCC's recommendations for large projects, come to its own determination on the best course of action regarding smaller projects.

2. Authority

The TRC is established to comply with the Clinger-Cohen Act (PL 104-106 at 40 USC, Chapter 25) and other federal authorities, and functions under the provisions of the Office of Management and Budget (OMB) Circular A-130, revised. Functional oversight of the TRC is provided by the CIO and the other governance boards described in Section 4. The TRC has the authority and responsibility to oversee Information Technology at HUD and to make recommendations to senior leadership on matters that may impact the entire organization or individual business missions. It may also establish working groups to support its roles and responsibilities, and provides direct oversight of any designated working groups.

3. Membership

The TRC shall be composed of members representing key technical stakeholders within the OCIO. Membership of the TRC shall include the following:

- Chief Technology Officer (TRC chair; votes in the event of tie)
- Chief Architect
- Chief Information Security Officer (CISO)
- Deputy CIO, Operations
- Deputy CIO, Office of Customer Relationship and Performance Management (Customer Relationship Coordinators attend as non-voting members)
- Investment Review Sub-Committee (IRC) Chair (Non-Voting)

Designated alternates may represent the members listed above. The names of alternates must be submitted to the TRC chair prior to participating in meetings. Alternates must have substantive decision-making authority within their business or support area, allowing them to vote on all matters presented to the TRC and to be fully informed on the TRC's previous, ongoing, and planned activities.

4. HUD’s Governance Overview

HUD’s IT governance structure empowers business areas to influence strategic priorities for IT enterprise and business support services, and ensures that IT investments align with mission area needs. The governance process instills the principles of transparency, engagement, and collaboration in the management of the Department’s IT assets and services. Significant business area participation in the activities of the governance bodies ensures both enterprise service and business stakeholder frames-of-reference.

The EOC comprises the Department’s senior leadership. The EOC recommends and determines HUD’s strategic priorities, policies, and budgets, including for investments in Information Technology services. It provides programmatic and planning oversight to all enterprise management councils, including the CCC. With respect to Information Technology governance, the EOC replaces the previously-chartered Executive Investment Board (EIB). The EOC was formed to align the governance processes over Information Technology and other enterprise activities under one senior level Board. The EOC has substantially the same membership and IT oversight functions as the EIB.

The CCC has formed two sub-committees, which perform analyses and other responsibilities delegated to them, and make recommendations to the CCC. These are the IRC and the TRC. The TRC primarily focuses on overseeing the operations of specific IT projects, while the IRC primarily focuses on oversight of HUD’s entire IT investments portfolio.

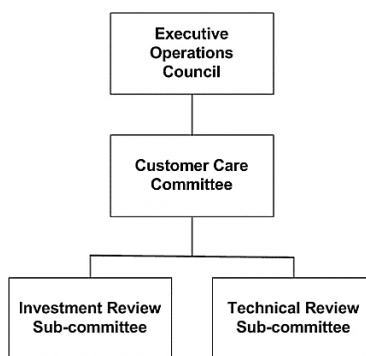


Figure 1. HUD’s Governance Structure

5. Definitions of Key Terms

The following are the key terms related to the management of information technology assets and services that are used in this charter.

Portfolio – HUD’s IT portfolio comprises all investments, both operational and in development. Key oversight activities at this level include the following:

- Environmental scanning for new industry and federal government developments
- Development of enterprise architecture transition strategies
- Portfolio performance measurement



- Approval of the HUD's IT budget

Investment – IT Investments are groups of projects, systems, and activities that focus on achieving an interrelated set of organizational goals and objectives in support of HUD's mission and in accordance with the direction set by HUD's target enterprise architecture or strategic priorities. Key oversight activities at this level include the identification, sponsorship, and selection of investments, and the monitoring of investment performance.

Business Segment – Within a portfolio, investments are classified within business segments, which are organized according to HUD's Enterprise Architecture or relevant strategic priorities. The Segment Sponsor, who is a senior HUD executive and has business responsibility for functions within the segment. Additionally, the sponsor is also responsible for overseeing investments within that segment.

Project - Projects are temporary endeavors within an investment that will in some way improve the outcomes of the investment. IT Projects are managed according to the HUD Project Planning and Management life cycle, and cover a range of types, including the following:

- Custom development or commercial/government off-the-shelf (COTS, GOTS) software
- Software, platform or infrastructure as a service (SaaS, PaaS, IaaS)
- Modifications, enhancements, or de-commissioning of an existing system
- Improved Service delivery
- Organizational strengthening

Program - is a group of related projects managed in a coordinated way to obtain benefits and control not available from managing them individually. Programs may include elements of related work (e.g., ongoing operations) outside the scope of the discrete projects in a program.

System - a discrete set of information resources organized for the collection, processing, maintenance, transmission, and dissemination of information, in accordance with defined procedures.

Task - a **task** is an activity that needs to be accomplished within a defined period of time or by a deadline to work towards work-related goals. A **task** can be broken down into assignments which should also have a defined start and end date or a deadline for completion.



6. Roles and Responsibilities

The following table outlines the roles and responsibilities of all members of the TRC:

Sub-Committee Roles	Responsibilities
Chair (Chief Technology Officer)	<ul style="list-style-type: none"> • Presides over TRC meeting • Schedules meeting agendas and disseminate agendas prior to meeting • Presides over TRC working groups • Makes recommendations to the CIO, CCC and IRC for consideration and presentation • Ensures a quorum is present in order to have a meeting • Distributes meeting material to TRC members • Serves as senior advisor to the CIO and CCC • Votes in event of a tie • Presents recommendations to CIO and CCC
Voting Members	<ul style="list-style-type: none"> • Participate in rating and prioritization of investments based on EOC criteria • Define and prioritize HUD’s segment architectures • Conduct PPM control gate reviews • Provide input to funding decisions • Support Strategic Technology Innovation

Table 1 – TRC Roles and Responsibilities

6.1 Support the Enterprise Roadmap and IT Strategic Recommendations

6.1.1 Review and Support the Enterprise Roadmap (ER)

HUD’s IT priorities are expressed in the Enterprise Roadmap, including business driven prioritization of modernization blueprints. The Enterprise Architecture (EA) team provides the ER to the IRC, whose focus is on the business and performance components of the ER. The TRC’s focus is on the service, data and technical aspects. It is important for the IRC and TRC to have a common understanding of the ER. The IRC provides recommendations on modernization priorities and ER sequencing to the CCC based on business priorities.

6.1.2 Support IT Strategic Decisions

The TRC supports the CCC in establishing strategic direction, including changes to investment selection criteria. The TRC also uses EOC approved investment evaluation criteria to assess the performance of investments and the IT portfolio, and to make recommendations on IT strategy to the CCC based on those results.

6.2 Support the Enterprise Transition Plan (ETP)

6.2.1 Support Prioritized Investments



The TRC shall provide direct support to the CCC and IRC in the management and oversight of prioritized investments based on the EOC's recommendations and criteria. This may be limited to architecture and other technical analysis.

6.2.2 Define and Prioritize HUD's Segment Architectures

The TRC shall review and prioritize the segment architectures proposed by the EA team based on HUD's mission and strategic goals.

6.2.3 Review and Support the Enterprise Transition Plan

The TRC shall review the current and target EA and update the ETP. The proposed ETP shall be present to the TRC members for review and support. The TRC shall ensure that the ETP aligns with HUD's mission and strategic goals and present its recommendation to the CCC for approval.

6.3 **Manage HUD's Architecture and Technical Standards**

6.3.1 Manage HUD's Service, Data, and Technical Reference Models

The TRC shall be responsible for the management of HUD's *Service Reference Model*, *Data Reference Model*, and *Technical Reference Model (TRM)*. This shall include reviewing new technologies and adapting the TRM to include any such technology. The TRC shall also be responsible for HUD's solution development methodology (SDM) and associated components.

6.3.2 Identify Technical Standards Updates

The TRC shall work with its supporting groups (EA, capital planning, security, privacy, infrastructure, and operations) to ensure that HUD's technical standards remain current. When standards updates are identified, these supporting groups, in coordination with their TRC representative, send update request to the TRC chair. The communication should include proposed technical standard, any existing standard(s) that may be affected or replaced by this change, any actions necessary because of this change, and a justification of the need for this new standard. The TRC chair shall distribute these requests to the TRC members for review and add this item to the agenda of the TRC's next scheduled meeting.

The TRC members shall review the proposed standards updates and coordinate this review with any necessary personnel from their respective teams. As a result of this review, each TRC member should be prepared to represent the position of his or her business with respect to the proposed standard update.

The TRC chair shall facilitate the discussion about the requested update and upon completion, shall facilitate a vote to approve the adoption of the proposed standard.

As HUD's needs and priorities shift over time, the TRC shall be responsible for ensuring that each investment's architecture remains in alignment with the Department's technical architecture.

Oversee and Manage Projects

6.3.3 Align Projects to Technical Layers



The TRC shall have the primary responsibility of ensuring alignment between a project and the relevant technical layers, including business, data security, and performance models. In collaboration with the IRC, the TRC determines which investment a project is aligned with.

6.3.4 Conduct Project Program Management (PPM) Control Gate Reviews

The TRC shall monitor and oversee HUD's smallest projects to reduce the number of projects that are directly overseen by the CCC. For all IT projects, the TRC shall be responsible for conducting PPM control gate reviews at each phase. Additionally, the TRC shall review the project for alignment with technical architecture prior to committing OCIO resources.

6.3.5 Apply Governance Oversight Criteria

The TRC shall review the necessary level of oversight for a project based on financial, exposure, and interoperability criteria. This responsibility shall include the identification of any project that is being divided into multiple smaller projects to manage the level of scrutiny or review received.

6.3.6 Review Project Funding

The TRC may have funding authority within an authorized budget as delegated from the CCC, for HUD's smallest projects including change and configuration management. The TRC shall make recommendations whether to fund a project or configuration changes based upon established priorities and EA.

6.4 **Lead Systems Engineering Support for the Applications Level**

The TRC shall have the primary responsibility to develop and manage the application level capability objectives, while supporting the task of clarifying and operationalizing the objectives and expectations of the business analyst and stakeholders.

6.4.1 Conduct Technical Assessments and Technology Review

The TRC shall conduct technology assessments, which are a form of cost-benefit analysis, which shall consider complex issues such as (a) the boundaries of the analysis (i.e., what costs are internalized and externalized), (b) the selection of appropriate indicators of potential positive and negative consequences of the new technology, (c) the monetization of non-business values, and (d) a wide range of stakeholder perspectives.

6.4.2 Conduct Baseline Assessments and Engineering Trade-off Analysis

The TRC shall establish technical baseline and supporting technical performance criteria. For all IT projects, the TRC shall be responsible for conducting technical baseline reviews, and engineering trade-off. The TRC shall monitor the system life cycle, and continuously monitor affordability drivers to identify opportunities to reduce life-cycle costs, and conducts trade-off analyses as needed to meet program cost, schedule, and performance requirements.

6.4.3 Perform Feasibility Studies

The TRC shall support feasibility studies which analysis and evaluation of proposed project to determine if it (1) is technically feasible, (2) is feasible within the estimated cost, and (3) will have



a probability of success.

6.4.4 Support Strategic Technology Innovation

The TRC shall provide technical support to HUD's strategic technology innovation programs, which consist of processes, artifacts and the technological infrastructures in which they are integrated.

6.5 Lead Change and Configuration Management

The TRC shall have the primary responsibility to establish and lead a Change and Configuration Management Program, which shall ensure that all changes are assessed, approved, implemented, and reviewed in a controlled, end-to-end manner. The TRC shall ensure that standardized methods and procedures are used for efficient and prompt handling of all changes to enterprise services and projects. This shall minimize the impact of change-related incidents upon service quality, and consequently improve the day-to-day operations of the organization. The TRC shall provide oversight to both operational (ITIL-ITSM) change requests and to project (PMBOK) change requests.

The TRC shall conduct change and configuration management assessments which may lead to changes in architectural and technical standards; however, these should be considered independent functions. Change requests not meeting established target architecture or technical standards shall be denied until the target architecture or technical standards are changed.

The IT infrastructure library (ITIL) is the set of concepts and practices that guide IT service management at HUD. These practices are also expressed in the ISO 2000 standard. The TRC shall provide direct oversight for all change and configuration management decisions by providing final approval for any changes to enterprise services.

Projects under planning and development may make change requests. These requests shall be made directly to the TRC by the IPT chairs. Any proposed change request shall require the TRC to re-evaluate the stage gate affected.

6.6 Lead System Engineering Practice

The TRC shall ensure that all functional system engineering practices are assessed, approved, implemented and reviewed in a controlled, end-to-end manner. The TRC shall ensure that standardized methods and procedures are used for efficient and prompt handling of all system integration and engineering. This minimizes the impact to enterprise services and project change-related incidents upon service quality, and consequently improves the day to day operations of the enterprise. The TRC shall provide oversight to engineered operational solutions and project technical solutions.

6.7 Coordinate with IRC, CCC, and EOC

The TRC shall coordinate all architecture, strategic assessment, and project activities with the IRC and CCC chairs. In addition, the IRC, CCC, or EOC may task the TRC with ad-hoc technical tasks.



7. Operating Procedures

7.1 Frequency and Agenda

The TRC will meet as determined by the TRC Chair. The TRC Chair or designee will: provide the agenda and relevant documents before the meeting is held; invite persons deemed necessary for deliberations; and decide if decisions can be made through electronic voting without convening a meeting. If there are no agenda items, the TRC shall not be obligated to meet and the TRC's secretary shall notify its members. This schedule may also be adjusted as necessary in order to account for requests from the CIO and the CCC.

The Chair works with the TRC members to schedule meetings. TRC members can request a meeting at any time. The Chair notifies the requestor once a meeting/review has been scheduled and confirms the time, location, and participants for the review.

The TRC will meet monthly for the review of projects, or as needed, to support the CCC.

Agenda items should address (but are not limited to) one or more of the following topics:

- Enterprise transition planning
- Architecture and technical standards updates
- Project management oversight (provided through the Project Health Assessment Process)
- Change and configuration management
- Systems Engineering
- Ad-hoc requests
- Control Gate Review

IPT chairs, OCIO division leads, or other governing bodies should contact the TRC chair to request to be scheduled onto a TRC agenda. The requestor should identify the topic to be addressed, provide a brief description of the topic, and objective of the discussion (decision, informational or update). This should be done at least two weeks in advance of the desired date, to ensure any potential scheduling conflicts are addressed. The TRC chair shall notify the requestor once the review has been scheduled and confirm the time, location, and participants for the review. Read-ahead materials (inputs) shall be required for most proposed topics.

Working group operating practices should be guided by their respective procedures.

7.2 Inputs for TRC Meetings

Inputs (read-ahead materials) shall be determined based on the topic or type of review being conducted. Inputs should be of sufficient detail to provide TRC members the information needed to make a decision if required. A soft copy of the input should be submitted to the TRC chair at least two weeks (10 working days) in advance of the scheduled review date. Failure to provide read-ahead materials timely may result in the topic being rescheduled. The TRC chair shall then distribute these materials, along with the proposed meeting agenda, to the TRC members for review.



Potential Inputs should include, but are not limited to:

- Enterprise Transition Plan and IT Strategic Assessment
- Proposals for New/Updates to Architecture and Technical Standards
- IT Project Control Gate Documentation.
- Change/Configuration Management Requests
- Ad-Hoc Requests

7.3 Preparing for TRC Meetings

Once the inputs are received, TRC members shall review all artifacts and coordinate with the appropriate resource(s) from their respective teams to ensure they are fully aware of any concerns or issues regarding the projects, standards, changes, or architecture. Through these discussions and reviews, each TRC member should be prepared to represent the position of their team with respect to the agenda item being reviewed.

The TRC meeting should not be a forum to review the artifacts. The meeting shall serve as place to discuss the materials and make decisions.

7.4 Conducting TRC Meetings

Annually the EA team shall present recommendations for the ETP. The TRC shall prepare and present the IRC an *IT strategic assessment* that shall include the ETP recommendations, emerging technology drivers, new requirements, and recommendations for the continuance of projects or new projects based on performance, *Federal Information Security Act (FISMA)* needs, and suggested changes to the investment select criteria. A key input from the TRC shall be the status and needs of underlying IT infrastructure required to support mission applications and systems.

The TRC shall receive all necessary artifacts to conduct the review a minimum of two weeks prior to the scheduled review date. Each member shall complete a thorough analysis prior to the scheduled TRC meeting.

The TRC chair shall facilitate a discussion on the proposed enterprise transition plan and allow all members to express their comments, issues, and concerns. Upon the completion of the discussion a recommendation shall be made to the CCC on whether the *ETP* should be approved as is or modified. The TRC shall communicate their recommendations in a summary document and provide the supporting documentation as reference material.

7.4.1 Architecture and Technical Standards Updates

The TRC chair shall facilitate a discussion on the proposed changes or additions to the architecture or technical standards and allow all members to express their comments, issues, and concerns. Upon the completion of the discussion a decision shall be made to approve, approve with conditions, or reject the change to the architecture or technical standards. New or changes



to technical architecture shall be coordinated with the IRC to ensure they support the performance and business reference architecture.

The TRC members shall receive and review all proposed standards updates or architecture changes prior to the scheduled TRC meeting. Each member shall coordinate this review with any necessary personnel from their respective teams and assemble a list of comments, questions, or concerns and shall be prepared to represent the position of their team.

7.4.2 Project Management Oversight

The TRC shall conduct technical reviews for each of the project. The TRC members shall receive and review all control gates and performance monitoring artifacts prior to the scheduled TRC meeting. Each member shall coordinate this review with any necessary personnel from their respective teams and assemble a list of comments, questions, or concerns and shall be prepared to represent the position of their team.

The TRC chair shall facilitate the phase gate review meetings in accordance with the established meeting agenda. The IT and business project manager shall present, to the TRC, all technical risks and issues for each project scheduled for review and the proposed mitigation plan if applicable. Decisions shall focus on whether the projects are approved to pass control gates, approved with conditions, or rejected. The TRC shall communicate their recommendations to the CCC in a summary document and provide the supporting documentation as reference material.

7.4.3 Change/Configuration Management Requests

The TRC shall implement and provide governance enforcement to both operational (ITIL-ITSM) requests and to project (PMBOK) change requests. ITIL-ITSM requests are those requests that affect day-to-day on-going operations, are known to be technically aligned to target architectures, and adhere to established procedures, standards, and guidelines. Requests not aligned to target architectures or not adhering to established procedures, standards, and guidelines including requests for new services or products shall require TRC review and action.

The TRC members shall receive and review project change requests prior to the scheduled TRC meeting. Each member shall coordinate this review with any necessary personnel from their respective teams and assemble a list of comments, questions, or concerns and shall be prepared to represent the position of his or her team.

The TRC chair shall facilitate the change request review in accordance with the established meeting agenda. The IPT chair shall present, to the TRC, all technical risks and issues for each project scheduled for review and the proposed mitigation plan if applicable.

7.4.4 Ad-Hoc Requests

HUD's other governing bodies such as the EOC and CCC, may request the TRC to review and provide technical guidance on a specific topic.

The TRC members shall review the submitted topic and coordinate this review with any



necessary personnel from their respective teams. As a result of this review, each TRC member should be prepared to represent the position of his or her team with respect to the topic at hand.

7.5 Quorum Criteria and Voting Procedures

The TRC's rulings and decisions shall only be enforceable or actionable if the majority of its participants, or alternates, are present during its meetings. When this quorum is not reached, members may continue deliberation, but substantive voting decisions may not be made. At the earliest convenience, another TRC meeting shall be scheduled where at least the majority of its members are able to attend.

The TRC chair shall facilitate a vote for any decision made by the TRC. The final TRC decision (or recommendation) shall be based on majority vote of the quorum. Any TRC member, including the chair of the TRC, may provide a dissenting opinion for CIO consideration in decision records.

7.6 Outputs from TRC Meetings

All meetings shall be documented to establish an official record of TRC activities. The TRC chair shall be responsible for distributing (or delegating the distribution of) all meeting documentation and the development of meeting minutes and/or decision memoranda.

Potential outputs should include, but are not limited to:

- Recommendations for the ETP
- New technical standards and architectural changes
- Project control gate decisions and recommendations
- Change/configuration management approvals and recommendations

7.7 Communicating TRC Decisions and Recommendations

Once the TRC meeting concludes, the minutes and resulting project decisions shall be documented by the TRC secretary. These decisions shall be distributed by the TRC chair to all meeting attendees, TRC members, project representative(s) who participated in the TRC presentation, and all other stakeholders. In addition, the TRC chair shall communicate the results of any TRC decisions to the:

- CIO
- Chair CCC
- Chair IRC
- Office of the Chief Financial Officer (if project funding is to be de-obligated)

All recommendations to the CCC shall be communicated in the form of a summary document with the supporting documentation as reference material. Depending on the recommendations made by the TRC, the TRC chair shall make him or herself available to participate in any resulting meetings requested by the CIO or the CCC.