



**DEPARTMENT OF THE ARMY  
U.S. ARMY CORPS OF ENGINEERS  
441 G STREET, NW  
WASHINGTON, DC 20314-1000**

**CECW-P**

**JUL 29 2022**

**MEMORANDUM FOR SEE DISTRIBUTION**

**SUBJECT: Vertical Team Alignment Memorandum (VTAM) Guidance**

**1. Reference:**

- a. Memorandum for Major Subordinate Commands, Subject: U.S. Army Corps of Engineers Civil Works Feasibility Study Program Execution and Delivery, 8 February 2012
- b. Implementation Guidance, Subject: Updated Implementation Guidance for Section 1002 of the Water Resources Reform and Development Act (WRRDA) of 2014, Consolidation of Studies, 17 May 2017
- c. Implementation Guidance, Subject: Revised Implementation Guidance for Section 1001 of the Water Resources Reform and Development Act of 2014 (WRRDA 2014), Vertical Integration and Acceleration of Studies, 26 July 2018
- d. Implementation Guidance for Section 1005 of the Water Resources Reform and Development Act of 2014 (WRRDA 2014), Project Acceleration
- e. Planning Bulletin 2018-01, CECW-P, Subject: Feasibility Study Milestones, 26 September 2018
- f. Planning Bulletin 2018-01(S), CECW-P, Subject: Feasibility Study Milestones Supplemental Guidance, 26 June 2019
- g. Correspondence from Deputy Commanding General – Civil and Emergency Operations, Subject: MSC Commander Certification of FY21 New Start Studies, 4 October 2021
- h. Correspondence from Deputy Commanding General – Civil and Emergency Operations, Subject: New way of doing business – Feasibility Studies, 5 May 2022

**2. Purpose:** The purpose of this memorandum is to reaffirm the steps for preparing the Vertical Team Alignment Memorandum (VTAM).

3. **Applicability:** This guidance applies to VTAMs prepared for all new planning phase studies, or ongoing planning studies with changed scope, schedule, or budget, resulting in a decision document. This includes feasibility studies, post authorization change reports, validation reports, and watershed studies. This guidance does not apply to Continuing Authorities Program projects. Applicability inquiries should be raised to the Vertical Team as early as possible for coordination and alignment.

4. **Discussion.**

a. The overall intent of the VTAM is to ensure development of an adequate study scope, establish a realistic schedule and budget early in the study process, and actively manage towards achieving the schedule and budget. Success is defined as executing studies within the identified schedule and budget. Major Subordinate Command (MSC) commanders will 'deep dive' the VTAM with the districts to ensure command attention and a culture to deliver studies on schedule and budget and to ensure timely command visibility that will enable efficient execution of planning studies. MSC commanders will certify their approval of the study scope, schedules, and budgets for all studies by signing the VTAM.

b. As stated in paragraph 6b of PB2018-01(S), the VTAM ensures alignment at all echelons on the work to be performed, funding requirements, and the study schedule, including whether an exception to the 3x3x3x3 rule (\$3M total budget; no more than three years to complete) is needed. Furthermore, Director's Policy Memorandum (DPM) 2019-02 ("Operationalizing Risk-Informed Decision Making in Project Management – Planning Phase") issued 02 July 2019 requires that the vertically aligned Project Management Plan (PMP) including study scope, schedule, and budget be developed prior to the Alternatives Milestone Meeting (AMM).

c. MSC Planning Chiefs, Civil Works Integration Division Chiefs, and Programs Directors should confirm vertical and non-federal sponsor alignment on study scope, schedules, budgets, and annual funding requirements and prepare the VTAM for the MSC Commander's signature.

VTAMs are expected to be coordinated, signed, and forwarded to Headquarters, U.S. Army Corps of Engineer (HQ) Civil Works within 120 days after receipt of initial funding or execution of the Feasibility Cost Sharing Agreement (FCSA), or other agreement, and/or in concert with achieving the first feasibility study milestone (Alternatives Milestone). If greater than 120 days is expected to be needed to complete the AMM and prepare the VTAM, the MSC Programs Director or Planning Chief should immediately notify the appropriate HQ Regional Integration Team (RIT) and the Chief of the Office of Water Project Review, including the new estimated date of completion.

d. For studies requiring an exception to the 3x3x3 rule, the VTAM will be the primary document used in requesting the exception. The 3x3x3 exception request process is being accelerated to the beginning of the study process rather than at or near the end. This will help improve the quality and overall delivery of planning studies. This new VTAM process will eliminate the current 3x3x3 exception Senior Leader Panel and the



exception briefing to the DCG for first exceptions to the 3x3x3 rule, when the exception is identified by the AMM. Subsequent exceptions, if needed, will follow the process outlined in Reference PB 2018-02 ("Exemption Procedures for Planning Studies Exceeding Cost and Schedule Limits").

5. Requirements:

a. MSCs must use the VTAM template provided via e-mail on 5 May 2022. The template is provided as an enclosure (Enclosure 1) to this guidance.

b. Following the VTAM template, the VTAM will provide the following information:

(1) References

(2) Purpose

(3) Background

(4) Study Scope

(5) Plan Formulation

(a) Initial Array and Tentatively Selected Plan (TSP) Strategy. The PDT has presented a specific, initial array of alternatives at the AMM along with a detailed evaluation strategy to select a TSP. The initial array of alternatives must consist of a screened, manageable set of plans. The level of detail necessary to achieve a TSP must be appropriate for the decisions being made, must not be under-scoped, and must be clearly reflected in the activities, timeframes, and costs indicated in the Project Management Plan (PMP).

(b) Consideration of Measures. Ensure compliance with Section 1184 of WRDA 2016, Consideration of Measures, and 29 September 2017 Implementation Guidance which requires, with consent of the non-Federal sponsor, consideration of natural features, nature-based features, nonstructural measures, and structural measures, as appropriate.

(c) Comprehensive Documentation of Benefits in Decision Document. Ensure compliance with 5 January 2021 Policy Directive on the comprehensive assessment and documentation of benefits in the formulation of water resources project alternatives.

(d) Ensure the appropriate Planning Center of Expertise (PCX) is included in scoping and plan formulation through review of the PMP and participation in the AMM.

(6) Risk and Uncertainty:

(a) Study Risks. All applicable and known study risks have been evaluated, risk mitigation plans, and contingencies (time and cost) have been developed, and a risk management option has been selected and will be implemented for each risk.

(7) Numerical Modeling Tools and Software

(a) Modeling Tools and Issues. The PDT has identified the suite of numerical modeling tools and software (including both engineering and planning) selected for use or to be developed specifically for the study, along with their approval/certification or validation requirements, and an update of these modeling efforts within the project delivery schedule. The PDT has provided a description of potential significant engineering and planning issues associated with numerical modeling and a path to resolution for each. The appropriate PCX must endorse these tasks, including the level of effort needed for approval/certification or validation requirements, software version, as well as any model tool or software development, by email to the MSC Planning Chief.

(8) Project Management Plan (PMP) – Director's Policy Memorandum (DPM) 2019-02 ("Operationalizing Risk-Informed Decision Making in Project Management – Planning Phase") issued 02 July 2019

(a) Project Information

(b) Schedule (within P2)

(i) including the coordinated environmental review schedule with the cooperating and participating agencies

(c) Scope of Work

(d) Budget

(e) Anticipated Funding Stream

(f) Work-in-Kind

(g) Acquisition Strategy, if applicable

(h) Management Plans

(i) Communication Management (including a detailed public and stakeholder involvement strategy and communication plan with the cooperating and participating agencies)

(ii) Change Management (including contingency thresholds)



(iii) Quality Management

(iv) Risk Management

(v) Data Management

(9) Environmental Justice (EJ): Ensure consistency with the ASA(CW)'s 15 March 2022 Implementation of Environmental Justice and the Justice40 Initiative interim guidance.

(10) Study Schedule and Funding Stream:

(a) Ensure schedule and funding contingency

(b) Schedule and funding for the convening of the required interagency meeting within 90 days after FCSA execution of all federal, tribal, and state agencies that have jurisdiction over the project, or that may be required by law to conduct or issue a review, analysis or opinion on or to make a determination concerning a permit or license for the study. Information needs from the USACE, cooperating and participating agencies discussed at this meeting will inform the scope and schedule.

(c) Ensure schedule and funding adequately covers required National Environmental Policy Act (NEPA), Endangered Species Act (ESA) coordination and other required coordination for a timely and coordinated environmental review process.

(d) Ensure that consideration of costs to enable robust involvement of the National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife Service (USFWS, collectively, The Services) as an active member of the team throughout the entire study process as a cooperating agency, and in accordance with the Fish and Wildlife Coordination Act (FWCA), if the FWCA applies. Detailed scopes of work for the Services' involvement should be developed in cooperation with each agency such that there is mutual understanding regarding commitments (products, meeting participation, timelines, etc.). Budgets for these scopes shall be coordinated with the MSCs and aggregated such that each agency can properly staff up to meet FWCA requirements within their regional and field offices. Funds shall be transferred to these agencies via FWCA memoranda with each agency (reference 2003 USFWS FWCA MOU; 2020 NMFS FWCA MOA), unless superseded. HQUSACE realizes that costs to robustly fund FWCA may exceed those budgeted for this purpose in the past and expects that reasonable costs for these activities should be a part of the study budget to ensure active engagement by the resource agencies from the beginning of the study.

(e) Ensure schedule and funding adequately address Real Estate requirements

(f) Ensure schedule and funding adequately covers Tribal Consultation activities.

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(g) Ensure schedule and funding adequately covers Cultural Resources and that consultation is initiated during scoping activities.

(h) Confirm that consideration was given to availability and competency of technical resources; and acquisition strategy if leveraging resources from other districts/enterprise. Specifically, confirm the experience and capability of those staff running the certified and approved models are appropriate for the level of complexity of the study.

(11) 3x3x3x3 Rule Compliance

(12) Vertical Team Alignment:

(a) Vertical Team alignment with Milestone/IPR Approval. Any non-alignment by the Regional Integration Team, Policy and Legal Compliance Review Team members, or appropriate PCX representative will be clearly documented in the VTAM with the reason for disagreement and why alignment could not be reached.

(b) Document district and MSC functional chief concurrence with scope, schedule, and budget. This concurrence should be informed by input from the policy and legal compliance review team and the PCX.

c. The VTAM is signed by the MSC Commander and transmitted to the appropriate HQUSACE RIT. The RIT Deputy will review the VTAM to ensure compliance with guidance and completeness. Upon completion of review and confirmation that the VTAM is complete, the VTAM will be routed for signature by the DCG-CEO and endorsement to the OASA(CW), if required.

6. This memorandum does not alter any requirements to obtain a policy exception from the Office of the Assistant Secretary of the Army (Civil Works) under section 1001 of WRRDA 2014 for feasibility studies that exceed \$3M in Federal cost or exceed a duration of three years.

7. Questions regarding this memorandum should be directed to Howard (Howie) Gonzales, Senior Policy Advisor, Planning and Policy Division, at (904) 327-9457 or howard.h.gonzales@usace.army.mil.

*THAT MUCH  
NEEDED REFINEMENT  
WILL HELP USA  
DELIVER QUALITY STUDIES  
ON SCHEDULE & WITHIN BUDGET  
ASSURE US TO SOLVE PROBLEMS  
TO HELP PEO PL...*



WILLIAM H. GRAHAM, JR.

Major General, USA

Deputy Commanding General

for Civil and Emergency Operations

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**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS**  
**[MSC LETTERHEAD]**

[MSC OFFICE SYMBOL]

[Date]

MEMORANDUM FOR COMMANDER, U.S. Army Corps of Engineers, 441 G Street,  
NW, Washington, DC 20314-1000

SUBJECT: Vertical Team Alignment Memorandum (VTAM) – \_\_\_\_\_ [Study  
name, type of study/report]

1. References: [include all pertinent references]

a. Memorandum for Major Subordinate Commands, Subject: U.S. Army Corps of  
Engineers Civil Works Feasibility Study Program Execution and Delivery,  
8 February 2012

b. Implementation Guidance, Subject: Section 1001 of the Water Resources Reform  
and Development Act (WRRDA) of 2014, Vertical Integration and Acceleration of  
Studies as Amended by Section 1330(b) of the Water Resources Development Act of  
2018, 25 March 2019

c. Planning Bulletin 2018-01, CECW-P, Subject: Feasibility Study Milestones,  
26 September 2018

d. Planning Bulletin 2018-01(S), CECW-P, Subject: Feasibility Study Milestones  
Supplemental Guidance, 26 June 2019

e. Correspondence from Deputy Commanding General – Civil and Emergency  
Operations, Subject: MSC Commander Certification of FY21 New Start Studies,  
4 October 2021

2. Purpose: This Vertical Team Alignment Memorandum (VTAM) documents the  
aligned scope, schedule, and funding stream for the \_\_\_\_\_ as presented at the  
Alternatives Milestone Meeting (AMM) held on \_\_\_\_\_.

3. Background:

4. Study Scope:

5. Plan Formulation. Approval of the VTAM by the MSC Commander will certify the  
following:



- a. The PDT has presented a specific, focused array of alternatives at the AMM that consists of a screened, manageable set of plans; and,
  - b. The PDT has provided a detailed evaluation strategy to identify a Tentatively Selected Plan. The level of detail necessary to achieve a TSP is:
    - 1) Appropriate for the decisions being made;
    - 2) Not under-scoped; and,
    - 3) Clearly reflected in the activities, timeframes, and costs indicated in the Project Management Plan (PMP).
6. Risk and Uncertainty. Approval of the VTAM will certify that all applicable and known study risks have been evaluated, risk mitigation plans have been developed, and a risk management option has been selected and will be implemented for each risk.
7. Numerical Modeling Tools and Software. VTAM approval will certify that:
- a. The PDT has identified the suite of numerical modeling tools and software (including both engineering and planning) selected for use or to be developed specifically for the study, along with their approval/certification or validation requirements, and an update of these modeling efforts within the project delivery schedule;
  - b. The PDT has provided a description of potential significant engineering and planning issues associated with numerical modeling and a path to resolution for each;
  - c. Endorsement by email from the appropriate Center of Expertise for these tasks has been received, including the level of effort needed for approval/certification or validation requirements, as well as any model tool or software development; and,
  - d. That the selected modeling tools and software are applicable to the study objectives and will produce the necessary results to differentiate between alternatives.
8. Project Management Plan. VTAM approval will certify that a complete and detailed Project Management Plan (PMP) with an accurate scope, schedule, and budget has been provided for the study. The PMP includes the following details:
- a. Activities are adequately resourced to district section level;
  - b. Appropriate schedule and cost contingencies are included that are supported by a well-informed risk analysis; and,
  - c. The resource-loaded schedule includes a work breakdown structure that identifies all critical reviews, tasks, and activities between milestones.

9. Environmental Justice. Approval of the VTAM will certify that the district has conducted outreach to identify disadvantaged communities within the study area and each disadvantaged community has been provided the opportunity to meaningfully participate in study development. Additionally, the study schedule and budget include adequate time and cost for full integration of environmental justice in the remainder of the study activities.

10. Study Schedule and Funding Stream:

a. Include Table with Study schedule.

b. Include Table with Funding stream.

11. 3x3x3 Rule Compliance. State whether the scope, schedule, and budget will exceed the requirements in Reference a. or Section 1001 of WRRDA 2014. If there is non-compliance, then add the following information:

a. Complexity (as established in Reference b.) factors.

b. Total study duration with policy exception (in months).

c. Total study cost of policy exception broken down with federal/non-federal cost share and Independent External Peer Review cost.

11. Vertical Team Alignment: Any non-alignment by the Regional Integration Team Planner, Policy and Legal Compliance Review Team (PLCT) members, or appropriate Center of Expertise representative will be clearly documented in this section with the reason for disagreement and why alignment could not be reached.

12. Please direct any questions or requests for information to the undersigned at \_\_\_\_\_ [phone], \_\_\_\_\_ [e-mail], or \_\_\_\_\_ [name], Chief, \_\_\_\_\_ [MSC] Planning & Policy Division, at \_\_\_\_\_ [phone], \_\_\_\_\_ [e-mail].

Encl [if applicable]

\_\_\_\_\_ [NAME – MSC Commander]  
\_\_\_\_\_ [Rank], EN  
Commanding