

Question: What are the mechanics of a quality peer review process?

Group A Breakout 2

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[View Schematic](#)

**Purpose.** The purpose of the review is to assist the authors and/or modelers in making their product (report, model, project, etc.) as accurate and effective as possible and to ensure the creditability of product, product results, and the U.S. Army Corps of Engineers. The review not only fulfills the institutional obligation to exercise oversight, but also improves quality control and quality assurance, and provides the authors and/or modeler with preliminary reactions from a diverse group of experts and, as a result, enhances the clarity, effectiveness, and credibility of the final product.

**Process.** The review process is administered by the Report and Model Review Board (Board), Chaired at the Institute for Water Resources and made up of a mix of Corps, other Federal agencies, and Academics. The Board is responsible for all administrative activities, management, and institutional oversight. The Board will select external to the Corps, Project Functional Area Leaders (navigation, flood control, environmental, surveys, etc.) to serve as project managers to manage the product review and have final call on review issues. A roster of internal and external reviewers, experts by functional areas, will be selected by an independent organization or group (i.e.) NAS; Blue Ribbon Panel) from which individuals would be selected to review products. The Project Functional Area Leader in consultation with the Board and product owner develops the statement of review tasks. The Project Functional Area Leader in consultation with the Board selects independent reviewers, from the roster of reviewers, with diverse perspectives on key issues considered in the product. Reviewers receive the complete product including all documentation along with the statement of tasks. Reviewers are asked to provide written comments on any and all aspects of the draft product, but to pay particular attention to the review criteria, i.e., tasks provided. Review comments are provided to the Project Functional Area Leader and when satisfied provides comments to the product owner who in turn provides a response to comments and if necessary a work

plan to adhere to review comments. The Board in consultation with the Project Functional Area Leader approves the work plan. Reviewers get a second chance to assess the responses to comments and if developed the work plan to determine if comments were correctly alleviated or if the work plan will lead to settling review comments.. Product owner gets to respond to review comments until Project Functional Area Leader approves the review of the product.

**Confidentiality and Anonymity.** To encourage reviewers to express their views freely, the review comments are treated as confidential documents and are given to product owners with identifiers removed. Identity of reviewers remains anonymous to the product owner until the report is released (usually by acknowledgment in the printed report), but their comments remain confidential.

**Consensus and Dissent.** The Board and Project Functional Area Leader strive for consensus, but one or more reviewers may not concur with the views of the majority. Matters of disagreement should be addressed forthrightly in the report. As a final recourse, a reviewer may choose to prepare a brief dissent describing the issues of

contention and the arguments in support of the minority view. The Project Functional Area Leader in consultation with the Board will have the final call on product approval Product Checklist Requirements. All products must adhere to a checklist of requirements of product review material specific to each type product before the product is entered into the review process. The Project Functional Area Leader in consultation with the Board and functional area experts develops the product checklist requirements.

Levels of Review. Criteria for level of review will be utilized to determine the level of review required for a specific product. The criteria will be established based on the risk of product and/or risk of product results on project failure and impacts, complexity of product, controversy involved, magnitude of investment decision product supports, etc. Examples of levels are: Level 1, highly complex and risk of failure and resulting impacts high will dictate top priority review an conducted by several reviewers external to the

Corps; Level 2, normal complexity with minimum failure risk and minimum impacts will dictate less reviewers made up of both external and internal reviewers form the review roster; Level 3, routine product and project application with minor failure risk and minor impacts will dictate an internal Corps review by Corps experts from the review roster list; Level 4, established/accepted product and project application with minor failure risk and resulting impacts will dictate an Independent Technical Review (ITR) by practicing senior level reviewer in the functional area and the ITR evaluated by a Project Functional Area Leader.

Review Cost. The Reports and Model Review Board would serve without salary but all necessary travel and minor administrative expenses funded by the USACE. Reviewers would be paid labor expenses based on the level of detail and complexity of the required review, i.e., a complex transportation model may require a unique individual for model review. Some reviews may generate interest of reviewers without compensation for labor when they are motivated to volunteer to enhance his/her own prestige. The reviewers would receive all travel expenses for services rendered.

Reviewers. Peer reviewers should have the expertise to understand the argument of the product and/or model. Bias is ok as long as bias is balanced among reviewers. Reviewers with both knowledge in the theoretical and practice is encouraged.

Feedback. The product owner will be allowed to review comments and responds to the Reports and Model Review Board with a plan to respond to reviewer's comments. Board approves the plan. The reviewers are allowed to review the product and if necessary the product work plan until all review comments are settled or the Project Functional Area Leader (PM) in consultation with the Board finalizes the review.

Approval and Publication. Upon completion of the review process the board will publish the product and/or model review results and recommendations. The review time will be utilized and encouraged to work with the Board and product author to submit the product for publication in appropriate Journals and publications.