

Review of USACE PMBP Manual

The USACE PMBP Manual clearly involved a massive effort, and I commend all who contributed to its development. **Response: As we continued reviewing these comments on Saturday morning, we very much appreciated this comment.**

The Manual seems to have no role for the Engineer Research and Development Center (ERDC) and USACE Centers of Expertise in technical quality for both the Civil Works and Military Programs. The Corps has world-class laboratories that provide world-class technology in support of many Corps' civil works and military programs projects, but the Manual omits involvement of Corps' laboratories in the PMBP. There is a section on how the ERDC will conduct PMBP taking into account that its work, for example, for the Warfighter community differs from civil works or military customer programs, but the Manual is silent on how the ERDC is a part of the Civil Works and Military Program processes. **Response: We have modified the processes to ensure that good ideas developed by the labs are reviewed by the PDTs at the outset of a project.** Part of Quality Management is to ensure one is using state-of-the-art engineering tools, and the support of ERDC and USACE Centers of Expertise should be an explicit part of the Quality Management Plan. **Response: Addressed in 'Quality Management Plan'.** Moreover, the term "Resource Providers," that is used in the Manual should be defined, and the ERDC and USACE Centers of Expertise should be explicitly identified as possible Resource Provider members of the Project Delivery Team. **Response: Has been included in glossary.** The ERDC supports thousands of Corps' projects each year, but it is not clear that ERDC people are defined as a part of the Project Delivery Team. **Response: Anyone working or providing a service on a given project is a part of the PDT for that project.**

The Manual appears uneven in its level of detail with, for example, low detail for HQUSACE and MSCs, but very high detail as one moves down to the Project Manager (PM) – leaving one with the perception that PMBP has not been thought out well for levels above the PM. For example, the Civil Works Program and Budget Process that involves billions of dollars has a flow chart that involves a single step, "Develop and integrate program and budget guidance per following schedule." **Response: There are 5 separate processes that support that one process and include HQUSACE involvement in the process in interfaces with Congress, OMB, and budget allocation and execution.** However, it takes 22 steps for an MSC to accept work. Moreover, the process for a PM to handle a project starting from PMP Development spans pages 79 through 140 and includes a dozen pages of flow charts. The minimum level of detail for PMP/PgMP applies to a \$5K project and covers as many pages as the Civil Works Program and Budget Process that involves billions of dollars and the Command Workload Analysis and Resource Leveling section that would typically involve hundreds of millions of dollars. It would seem that the process to describe the minimum PMP for

a minor project should be shorter than the process for workload analysis and resource leveling for an entire MSC – but it is not. **Response: This is a general business process manual which establishes a corporate level of consistency by all USACE activities. The level of detail required IS dependent on the size and complexity of the project. That doesn't change the overall process required to get there, but many individual steps will be streamlined for smaller/less complex projects.**

The issue of minimum level of detail for very small efforts is not resolved satisfactorily in the Manual. At the SLC, BG Strock mentioned a repetitive grass-cutting project where the PMB was on a 3 by 5 card. The ERDC has many examples of projects such as a \$3K project for a researcher to travel to a District to attend a one-day meeting and provide advice. **Response: This effort is part of a bigger, project. The trip is not a project in and of itself.** The minimum PMP content and level of detail covers three detailed pages and requires content and level of detail that for very small projects is not commensurate with requirements to be agile, cost effective, and responsive to customers. As the Chief notes in his video, the primary purpose of PMBP is “Corporate Agility.” District people have commented to me on the importance of being very flexible on the minimum level of detail for small and/or repetitive projects.

Response: The minimum level of detail is commensurate with the size and complexity of the project. Some plans may have a great deal of detail and some may be very minimal. The Manual mentions use of templates, etc., to reduce effort, but, for example, the need for Work Breakdown Structure for projects involving a fraction of an FTE is not obvious. **Response: The ability to copy project (templates) from a similar project provides for quick modification of data to include information needed on the new project.** The Acronyms on page 11 have a number of errors and inconsistencies and likely should be combined with the Acronyms and Glossary on pages 159 – 161 and remain starting on page 11. Example errors and inconsistencies include: “AOR” is Area of Responsibility and not “area of operation.” The acronym for “Business Management Office” is not “BMP” but “BMO.” It would seem the acronym for “Defense Contract Management Office” should be “DCMO” and not “CDMO.” “GAO” is not “Comptroller General’s Office.” Since acronyms are defined, they should be used. So, for example, page 14 uses the term “Project Management Business Process Manual” 10 times, when the acronym has already been defined. On the same page it uses acronyms such as P2 and CEFMS that are undefined. P3e is never defined. On page 160, “PBAC” is not properly defined. Acronyms should not be defined in the text if they are never to be used again (e.g., page 13 defines acronyms NPR and GPRA but they are not used again). **There will only be one acronyms and glossary list which will include all acronyms in the PMBP manual.**

In addition to acronyms, there are many terms not defined. For example, “Resource Providers” is never defined. **Response: Has been included in glossary.**

There are examples of misused words such as “escalation” for “allocation” on page 19. Page 80 of the PMB Development process has the baffling sentence, “At no time in this process will you be working on a “Current Approved version of the project.” Since the

previous sentence said, “Developing, reviewing, and revising PMP content is a continuous process throughout the life of the project,” the sentences imply that for the life of the project, the PM will never work on the “Current Approved version of the project.” This would mean there is never a Current Approved version of the project.

Response: This sentence has been deleted.

The most pressing needs for Manual improvement would be to incorporate the ERDC and USACE Centers of Expertise in the PMBP for Civil Works and Military Programs and to reduce the minimum PMP requirements for very small projects. **Response: Your PMBP/P2 team member will provide the team those processes for review.**

James R. Houston
Director
Engineer Research and Development Center

I have reviewed the Project Management Business Process Manual and offer the following comments.

General Comment: Manual is very prescriptive, and may restrict development of better techniques or procedures. Need to balance empowerment with prescriptive instructions. ER 5-1-11 provides a very good philosophy of what PMBP is. Instead of developing such a prescriptive document, it is recommended that a "Project Planning and Execution using the PMBP be developed to provide a template for the field to use. In addition, there should be some limits set on what projects demand a PDT. The criteria should involve money, scope or a combination of both. **Response: This is a living document and will be continuously modified as needed. You will find that many modifications have been made as a result of the time and effort of reviewers like yourself. The business processes develop a consistency necessary to readily and efficiently share and execute work among various USACE elements.**

Too Many Acronyms: We have really exceeded the standard on this. Recommend a fold out page that has all the acronyms listed so readers can have a ready reference handy so that they do not have to turn to the front or back of the manual. The overuse of acronyms makes the manual extremely difficult to understand and follow. **Response: The manual is not intended to be printed, it is designed as an “on-line” manual. From every process/reference document, there will be a hotlink to the acronyms. In addition, the PMBP home web page will have a hotlinked index to all processes and reference documents. The use of the number of acronyms will be evaluated.**

Flowcharts: Recommend that a section on how to read and follow a flow chart be added. Not all readers are educated in this technique and a short section instructing

them on the how to read and what the symbols are would be helpful. **Response: A document will be provided with that further explains the contents of the processes as it pertains to the Oracle Tutor software.**

Responsibility/Ownership: Currently BP/P2 Program Office (whoever they are) is responsible for ensuring that all processes are necessary and are current. Responsibility for reviewing and updating the processes need to be assigned to more specific agencies i.e. Receipt of Funds (pg 69) should be an RM responsibility. In addition, each process should include a step to review the process and send comments to the appropriate agency. **Response: There will be a Configuration Management Board that will manage this living document through a PMBP Manual Maintenance document.**

John W. Morris III
Colonel, Corps of Engineers
Commander
Engineer Research and Development Center

As requested I have reviewed the USACE PMBP Manual and offer the following comments:

The development of standard USACE business practice for project delivery is a time that has come. With the need for reliance on a virtual work force to provide the expertise needed to meet today's complex Civil and Military projects it is essential to establish a standard way of doing business that involves management, financial and S&E activities. This manual goes a long way in helping set standard business practices for Corps Districts/Divisions. However, even though the business practices are relevant to ERDC and the conduct of R&D, the specific procedures delineated in the manual to implement the business practices of project delivery are not appropriate. Terminology, organizational structure along with nature of R&D will require modification to the procedures to make them relevant to the R&D process. **Response: An R&D specific document has been developed to address your program specific requirements.**

Based on my review it seems appropriate to develop a companion manual for R&D that provides specific procedures appropriate to the R&D process rather than try to modify the current manual to address R&D. A draft online (ERDC PMBP Manual) manual under the direction of the ERDC Deputy Director is in preparation. To insure the business practices and procedures are consistent with the USACE business practices, the HQ PMB IPT has been requested to set up a subgroup to support and provide comments on the developed R&D business practices and procedures. It is anticipated the R&D business practices and procedures will be defined by the 2nd quarter FY02 to insure ERDC is in compliant with ER 5-1-11 and P2 can be implemented as the project

management AIS 1 Oct 02. In addition, it is essential ERDC be an active participant this summer in the test, evaluation and demonstration of P2 as AIS in support of project delivery. Without ERDC's involvement there is a strong possibility that the resulting AIS will not meet the requirements of ERDC and R&D process. **Response: Noted. ERDC's interest in being part of the test will be passed on to the PM.**

Although the PMBP Manual does an excellent job in delineating management and financial activities associated with project delivery, it does not address the technical (scientific and engineering (S&E)) business practices and procedures in project planning, development and delivery. It seems appropriate to include in each of the major PMBP Project Delivery Process sub sections a section on S&E. **Response: An R&D specific document has been developed to address your program specific requirements.** Of particular concern is the lack of attention to mechanisms by which to incorporate new and innovative technologies and business practices into the Corps project delivery process. **Response: We have modified the processes to ensure that good ideas developed by the labs are reviewed by the PDTs at the outset of a project.**

Thomas L. Hart
Assistant Director
Engineer Research and Development Center

The ERDC Support Staff have completed their review of the USACE PMBP. All support chiefs have stated that they concur with this document as written. Joe Roberto and I have also reviewed the document as ERDC management-level 15's, and we concur with the document as written. Unedited comments forwarded to me as part of this review are provided below [Mr. Haulman and Mr. Ross], for incorporation into the ERDC submission. **Response: Thank you for your time and effort. Incorporation of many comments have improved the PMBP manual.**

Pete Swart
Deputy Director for Programs and Resources
Engineer Research and Development Center

The following summarizes the Coastal and Hydraulics Laboratory's principal concern. Although we have others, we believe this is by far the most important and should receive the most attention.

The PMBP Manual in its present state is very uneven in degree of detail. It is almost prescriptive for Project Managers and close to vague for HQ. This is a fundamental flaw that leaves the impression upper management doesn't want to have its hands tied by

rules and procedures, but the people who execute projects can't be trusted to think for themselves. In turn, this reinforces the perception that PMBP is a top-down requirement imposed on the Field, instead of how the entire Corps will go about its business. The majority of effort in rewriting the manual should be focused on "leveling" the degree of detail across all strata of the Corps: less detail than present for lower echelons; more than present for upper. Everyone in the Corps should feel they play an equal part in making PMBP work, and the message this Manual sends will be central to that perception. **Response: The business processes develop a consistency necessary to readily and efficiently share and execute work among various USACE elements. The programs that are managed by HQUSACE and MSCs ARE governed by these processes, but at the programmatic rather than the project level. Many of the procedures at HQUSACE are prescribed in existing policies and SOPs.**

Thomas W. Richardson
Acting Director
Coastal and Hydraulics Laboratory
Engineer Research and Development Center

The Manual, as currently written, represents the collection and consensus of best field practices for typical Corps work. ERDC is in the process of tailoring these PMBP concepts to the R&D community and will greatly benefit from this start. **Response: Thank you for your comment concerning best practices. That is the intent of this manual. Your PMBP/P2 team member will provide the team those processes for review.**

The manual is extremely comprehensive at the field operational level, but needs definition for Headquarters level processes, including the R&D process at HQ. **Response: The business processes develop a consistency necessary to readily and efficiently share and execute work among various USACE elements. The programs that are managed by HQUSACE and MSCs ARE governed by these processes, but at the programmatic rather than the project level. Many of the procedures at HQUSACE are prescribed in existing policies and SOPs.**

Michael J. O'Connor
Director
Geotechnical and Structures Laboratory
Engineer Research and Development Center

After reviewing the Corps' draft PMBP Manual, I had several impressions: 1) that someone had put an incredible amount of work into the process and the document, and ought to be congratulated; 2) that I was probably not qualified to give it an honest technical review; and 3) that if I was somewhat qualified to review the manual, I'd have to say it needs a lot of work (conceptual and editorial) before it's finished. So if the comments contained herein seem off base to Program Management experts, please disregard them. If they seem to ring true, please consider them. However, they're all offered in good faith. I'm a true believer in the program and project management business process concept as outlined in ER 5-1-11; my concerns are how it appears to be implemented in the draft PMBP manual. My comments range from general comments on how the PMBP concept is implemented and stated in this manual as I understand it, to simple editorial comments, to a commentary at the end on how I think the system should be deployed to maximize the probability of success.

I think the introductory section (Preface) is well done, in that it lays out what needs to be done (the big picture), and why it needs to be done (again, from a big picture perspective). However, I think the explanation for "why it needs to be done" suffers from a "motherhood and apple pie" syndrome; everything that's stated sounds good, but it fails to state or offer "what's broken" that needs to be fixed? The Corps has been managing major programs very successfully for many years. **Response: Improving the process, does not necessarily imply that we're "broke", but there's always ways to improve how we do things by sharing best business practices.** What value will the PMBP process add? For tips about how this might be better stated, I think the ERDC draft PMBP Manual's Executive Summary addresses this question better than the Corps PMBP Manual. **Response: We have asked ERDC's representative to provide a copy so we can incorporate those good ideas.** To get buy-in from the Corps workforce, which will be critical to the success of the system, a solid, rational reason that very clearly states why we need to move to the new PMBP system needs to be effectively communicated to the workforce. **Response: Agreed.**

The manual seems to suffer from an identity crisis --- who's the audience? Who's it written for? It looks like a Program Manager's dream, and hopefully it's understandable and clear to a professional program manager, or program analyst, or budget analyst, or budget technician. It zooms from a satellite image, macro view of the world in the first few pages (the Preface), straight to a subterranean (below the weeds) depth on pages 15-224. No transition --- nothing for us common engineers who wouldn't know a "resource escalation process" (for example --- page 19) if it hit us in the face. How would I improve this situation? First, I'd decide for whom the document is written, then write it for the intended audience (and state who the intended audience is, in the introduction). If the audience is supposed to include engineers, scientists, managers, supervisors, principal investigators, etc., then address them somewhere in the document besides pages 12-14. This may be accomplished by writing an introductory section, after the preface and before "Work Acceptance." This introductory section should explain why the rest of the manual exists (pages 17-225), and why each section is discussed. It should answer the questions: "What is project management?" "What is the PMBP process? Why is it important?" "What are the key components and stages of

the PMBP process? How are they related?” “How is project management implemented in the Corps’ now? How will it be implemented in the future? What are the key differences? Then, after this introductory (transition) chapter, introduce each major section (chapter? i.e. like “Work Acceptance”) with an introduction, that explains 1) what the chapter will contain; 2) why it contains what it contains; 3) why the chapter is necessary; 4) what should be done with the information in the chapter, etc. Then, each subsection in the chapter, like “Policy,” should address in so many words these same four points. Putting each chapter and section in context is very important, particularly if the reader is using the manual to learn more about the process. **Response: We have revised the wording of the documents to provide greater clarity and consistency. Also, please note that these documents have been designed to be “on-line” documents and not printed documents. The hotlinks provided in the “on-line” documents make the connection between processes clearer. We have also added a number of terms to the glossary and revised the executive summary and preface.**

General commentary: To help enable a successful implementation of the PMBP process, it is critical to get buy-in as quickly as possible for all key Corps’ stakeholders, from the principal investigators to the project managers to the senior managers. To do this, the process should address up front all major concerns of all key stakeholders in the process. The true value of the PMBP should be apparent to all stakeholders; if it’s seen as primarily a “reporting up” system, the power of and value of the process will be severely compromised. The ease of using the PMBP process by all echelons of stakeholders, particularly through AISs like P2 or P3e, will be critical --- think Microsoft Outlook, or Quicken --- not CEFMS (a very poor example of user-friendly, intuitive software). A massive training program will need to be developed and effectively deployed, to educate all stakeholders and all echelons of Corps stakeholders about the process and the various AISs. The training programs should be tailored to the needs of the various echelons and perspectives of the employees being taught. A reasonable schedule for deployment of the PMBP system must be established, preferably in stages where incremental “successes” can be achieved early on in the deployment. Finally, a system for easily accepting (and adapting to) lessons learned, feedback, or simply dealing with flaws in the system (a PMBP guru or helpdesk?), should be established and deployed and widely communicated to the user community. The system should accept input or feedback from all echelons of the organization, whether the problem is identified by a principal investigator or a program manager or a senior leader. If all of this is done, I believe the PMBP system will not only be successful, we’ll wonder how we ever did business without it. **Response: Thank you for your time and effort. Incorporation of many comments have improved the PMBP manual.**

David W. Pittman
Deputy Director
Geotechnical and Structures Laboratory
Engineer Research and Development Center

I have read the draft PMBP manual as directed. It thoroughly specifies every detail. It should make the management of programs and projects more uniform throughout the Corps. **Response: Thank you for your time and effort. Incorporation of many comments have improved the PMBP manual.**

Paul F. Mlakar
Technical Director
Sustainment Engineering
and Airfields & Pavements
Geotechnical and Structures Laboratory
Engineer Research and Development Center

I have reviewed the subject report. I believe there has been a lot of thought put in to this process and see some good applications for ERDC. However, we must develop a process similar to this for ERDC but accounting for the fact that many of our projects are very small (1-10K) and should be either rolled up or exempted from this process. We should consider possibly using this at say the Military Direct level. For instant maybe all of AT40 programs were combined. If this proves too large maybe at the Work Package level for Military and the Program level for civil. **Response: This is a general business process manual which establishes a corporate level of consistency by all USACE activities. The level of detail required IS dependent on the size and complexity of the project. That doesn't change the overall process required to get there, but many individual steps will be streamlined for smaller/less complex projects.**

Albert J. Bush, III
Chief, Engineering Systems and Materials Division
Geotechnical and Structures Laboratory
Engineer Research and Development Center

I have reviewed the manual and believe this manual describes a sound foundation for our future business processes. I look forward to helping to implement these processes in the ERDC. **Response: Thank you for your time and effort. Incorporation of many comments have improved the PMBP manual.**

Reed L. Mosher

USACE Project Management Business Process Manual

Observations:

- The manual clearly is the result of a great deal of concentrated effort, however it is too long, detailed, and repetitive.
- The manual is extremely detailed at mid-management, mid-execution levels, but lacking in upper and lower echelons. There is no corporate view for strategic planning and exploitation of corporate assets.
- The PMBP process as laid out does not reflect the processes being developed in ERDC for strategic program planning, program development, and program execution for both military and civil programs.
- The manual appears to be remarkably stovepipe restricted regarding intra-agency coordination and communication.
- The labs and centers are not seen as part of the Corps of Engineers and certainly are not incorporated in any corporate manner for achieving the Chief's vision.

Recommendations:

- The missing elements need some clear, concise attention.
- The process for involving MSCs, the Labs, other Centers, and HQ in corporate strategic and tactical planning needs to be added.
- A system for life-cycle evaluation of Corps projects and R&D investments needs to be added.
- A platform for Corps-wide sharing of current problems, neat solutions, and lessons learned needs to be added, so that a corporate wide problem is not being solved piecemeal, paying many times for the same solution. This platform needs to be sufficiently concise and attractive for it to be successful.
- In R&D program planning and development, improvements are needed to improve our investment strategies.
 - Identification of the gaps in our knowledge base and lining up of these gaps with FOCs
 - Involvement of HQ and Field folks in program development, not just in FOC workshops and CW Gang meetings
 - Conveying more precise product/knowledge gap requests in ERDC-wide RPFs

Response: The programs that are managed by HQUSACE and MSCs ARE governed by these processes, but at the programmatic rather than the project level. Many of the procedures at HQUSACE are prescribed in existing policies and SOPs.

An R&D specific document has been developed to address your program specific requirements. We have modified the processes to ensure that good ideas developed by the labs are reviewed by the PDTs at the outset of a project.

Mary Ellen Hynes
Technical Director
Civil Structural, Geotechnical, Geological,
and Geophysical Aspects of R&D
Geotechnical and Structures Laboratory
Engineer Research and Development Center

Dr. Houston's comment about resources available to any Corps team is absolutely correct. The Process manual does not mention Corps Laboratories and Centers as resources for Teams. Centers and Laboratories should be named, not assumed.

Response: Language has been made more inclusive.

Consider testing this Process at one District prior to deploying USACE-wide. Then deploy in steps, beginning with very large multi-year construction projects. If the Process is seen by Corps team members to be adding value in large projects, it will be more readily and enthusiastically adopted. This step-wise deployment may also assist in identifying the optimum or minimum program/project size for the most detailed many-step processes. **Response:** This is the deployment method that is contemplated.

The value this process might add to Research & Development efforts of short duration is not obvious. A minimum limit on projects to be managed through this multi-step process might be appropriate. Propose a dollar value of \$1M, or a minimum number of FTE (maybe 8?) On smaller projects (\$50K or less), labor dollars spent on appeasing the process, rather than on accomplishing the mission, becomes a large percentage of the total. **Response:** This is inconsistent with the requirements of ER 5-1-11. The level of detail required IS dependent on the size and complexity of the project. That doesn't change the overall process required to get there, but many individual steps will be streamlined for smaller/less complex projects.

Avoid presenting the process as if it is a product. **Response:** The PMBP Manual (web based) is the product. It is a living document and will be continuously modified as needed. You will find that many modifications have been made as a result of the time and effort of reviewers like yourself.

In several iterations and years of GPRA reviews and customer satisfaction surveys, the GSL has not identified a customer-focus problem. Our customers are already involved, particularly in all small, short-duration projects. They become repeat customers when they find us able to respond very quickly, and not be delayed by paperwork. The process appears to have long delays built in. **Response: The level of detail required IS dependent on the size and complexity of the project. That doesn't change the overall process required to get there, but many individual steps will be streamlined for smaller/less complex projects.**

It is unlikely a 230-page manual will enjoy a wide readership. The manual is not user friendly to engineers and scientists. It uses insider language of management, apparently without regard for the fact that the individuals we now consider Principal Investigators in the Laboratories are professional investigators, not professional managers. They already have an insider language of their professional specialty. We need to be sure we are leaving people enough time away from manager-speak to infuse the essential technical content to their work. **Response: We have added many additional terms to the glossary to aid in understanding the application of these processes.**

The goal of increasing customer-focus of projects and making customers part of the team (where they are not at present) is admirable. But the PMBP has a language all its own. We should be conscious that we will be requiring all customers to learn to speak this language. It is likely that customers already have their own processes, and we run the risk of becoming too difficult to work with. If we make it this difficult to plan and start a project, the customer will hire a private contractor who won't make him go through this process. **Response: Per ER 5-1-11, the customer is a part of the PDT. As these relationships strengthen, communications and understanding will improve. One of the issues raised by our customers at the last USACE PDT Conference was the inconsistency of the Corps' business process. We have added many additional terms to the glossary to aid in understanding the application of these processes. The level of detail required is dependent on the size and complexity of the project.**

If agility is lacking in the way the Corps performs large projects, the goal of gaining agility is admirable. The way agility will be enhanced by PMBP is not clear in the 230-page document. To the contrary, this long, involved process has strong potential to be detrimental to agility because processes that involve more than 25 steps are too specific to be agile. **Response: The business processes develop a consistency necessary to readily and efficiently share and execute work among various USACE elements. The level of detail required is dependent on the size and complexity of the project. That doesn't change the overall process required to get there, but many individual steps will be streamlined for smaller/less complex projects.**

Robert Hall
Chief
Geosciences and Structures Division
Geotechnical and Structures Laboratory
Engineer Research and Development Center

I have reviewed the PMBP manual and generally concur with the content and intent of the manual. I find the manual addresses business process at varying levels of detail across the functional areas as well as hierarchy (District, Division, HQ, Centers). It lacks consistent prescriptive guidance. It seems the manual goes beyond the management process and restates functional area requirements. This document should address only the business process by which we apply proven functional area technical processes using a lifecycle teaming concept, not rewrite how we conduct our business within functional areas. **Reponse: According to ER 5-1-11, ALL work is covered by the business process. This is a general business process manual which establishes a corporate level of consistency by all USACE activities, but does not address specific technical or support functions.**

Edwin A. Theriot
Director
Environmental Laboratory
Engineer Research and Development Center

I have reviewed the web site and offer no comments. **Response: Thank you for your time and effort.**

Richard Price
Chief
Environmental Processes and Engineering Division
Environmental Laboratory
Engineer Research and Development Center

I have reviewed the web site and found it to be overwhelming in terms of total information content. I am sure it is a well-structured and efficient business process that meets the objectives of the Chief. I recommend that ERDC interpret and adapt the

concept for ERDC-wide implementation, to bring it down to our level in an equally well-structured and meaningful way. **Response: An R&D specific document has been developed to address your program specific requirements.**

Dave Tazik
Chief
Ecosystem Evaluation and Engineering Division
Environmental Laboratory
Engineer Research and Development Center

I have reviewed the web site and concur with the direction prescribed therein.
Response: Thank you for your time and effort.

John Cullinane
Technical Director
Environmental Engineering and Cleanup
Environmental Laboratory
Engineer Research and Development Center

I have reviewed the web site and related documents and have no significant comments.
Response: Thank you for your time and effort.

John Barko
Technical Director, Environmental Sciences
Environmental Laboratory
Engineer Research and Development Center

The manual is an expansive and detailed document that should improve the Corps business processes. One concern is that I hope its size will not hinder it also being a living document. We all know that some different future business process needs will demand that changes be made. The living document idea should be primary in redrafts. **Response: Concur.**

Tom Patin
Deputy Director

Environmental Laboratory
Engineer Research and Development Center

I have reviewed the web site as well as the other documents on the web site. I agree with the Program Management Team and endorse the plan in concept and principle. **Response: Thank you for your time and effort.**

Russ Theriot
Program Manager
Wetlands/Ecosystem Management
and Restoration Research
Environmental Laboratory
Engineer Research and Development Center

Adoption of the Project Management Business Process is the most radical undertaking I have witnessed in my tenure with USACE. It recognizes that we cannot operate as one Corps without a corporate business process, that we clearly do not have such a process at present, and that we must make a tremendous effort to put one in place and apply it. I have heard much wondering in the ranks about why we must prescribe how we do our work, but it is a question that answers itself. If we are to change (and we must), we must codify the new way of doing business so we will know what it is, so we can learn how to apply it and teach others the same, and so we don't lose our way. There are some rubs, however. How do we do this in a manner that the resulting process provides us with "corporate agility" (i.e., isn't overly prescriptive)? How do we ensure that we have and can apply a process that provides needed business practice consistency without being too loose in construction? Our approach must be one that balances the need for rigor in the process with the need for flexibility (and affordability) in responding quickly to customer requirements. The manual is a start, but in its present form it lacks this kind of balance, and it further emphasizes some roles over others disproportionately. For example, the Project Manager has a tremendous amount of guidance for even the smallest work efforts, whereas other functions (headquarters, MSCs, etc.) have little for far larger efforts. **Response: The business processes develop a consistency necessary to readily and efficiently share and execute work among various USACE elements. A curriculum effort is ongoing to address cultural change issues and provide instruction in the business process. The programs that are managed by HQUSACE and MSCs are governed by these processes, but at the programmatic rather than the project level. The level of detail required is dependent on the size and complexity of the project. That doesn't change the overall process required to get there, but many individual steps will be streamlined for smaller/less complex projects.**

The form of the manual appears modular in the sense of a computer program (each element containing the essential elements to do a given function). This leads to repetition that is necessary and even desirable when in use but is cumbersome when reviewing such a document (hopefully the reviewers understand this), so I wouldn't be terribly concerned about criticism of the repetition. Rather, focus should be placed on the inconsistencies in substance, detail for the respective roles, etc. I believe the manual actually is not as long as it must ultimately be. That said, however, we will need forms of it (or tools for extracting from it) that will present the essential aspects in the appropriate level of detail for a given purpose. These are characteristics of the best web publications, which doubtless is the intended form of the final product. **Response: You are correct.**

I am thankful USACE has recognized the paramount need for a corporate business process. The lack of such a process was the reason PROMIS was developed as it was (as an AIS with sufficient flexibility to support any or no business process) and is the true cause for the disenchantment with PROMIS in so many quarters. We must ensure this time that we get the PMBP right and completely embrace it. **Response: concur.**

We should place a dollar threshold on the size of projects requiring the level of detail prescribed in the PMBP, or we should have a greatly simplified process for small projects. **Response: The level of detail required is dependent on the size and complexity of the project. That doesn't change the overall process required to get there, but many individual steps will be streamlined for smaller/less complex projects.**

Timothy D. Ables
Acting Director
Information Technology Laboratory
Engineer Research and Development Center

This document is the result of much effort, and I applaud those involved. But much work remains in order for the Corps to have a useful Project Management Business Process Manual. The most significant flaw in the Manual is that it is far too long to be effective. Reducing the length of the Project Management Business Process Manual will require a change in the paradigm used in its writing. **Response: This is a web base tool and the user will only be viewing a small portion at any given time. It is more critical to be complete than to reduce the size when the total length will not be apparent.**

The Project Management Business Process Manual, with some sections yet to be added, takes up 231 pages and requires three to four hours to be reviewed. By

contrast, the United States Constitution, which defines how the Federal Government operates, consists of less than 12 full pages, and can be read in about 30 minutes. At 231 pages, the Project Management Business Process Manual will be difficult for the 37,000 Corps' employees to understand and to use. **Response: ER 5-1-11 is our Constitution and is 9 pages long. The PMBP manual is the codification of that document.**

The length of the Project Management Business Process Manual is a natural outcome of the approach used by the authors and not their writing ability. First, the instructions throughout are written in the same step-by-step form used in computer programming, even including the use of "goto" for "go to." This form is a very space-intensive method for describing activities that differ only slightly. **Response: Oracle Tutor, the software chosen to develop the PMBP manual, requires this format.**

Another significant drawback of the step-by-step form is that, while it is well suited for processors that need not develop an understanding of what they are doing and are executing instructions by rote, this approach encourages Corps employees to examine the leaves but hides the trees and forests of the Corps business management practices. Without seeing the forests, the Corps employees will have difficulty understanding the underlying vision for the business practices. They will be unable to make independent decisions that are in conformance with other Corps members for those situations unforeseen in Project Management Business Process Manual. The Corps employee will feel less empowered. This concept is contrary to our Chief's very good philosophy, which is stated in a few simple rules: know your job, be situationally aware; be healthy; treat every individual with dignity and respect; leaders set the example; offer solutions – not complaints. And his good, and few, simple rules for deciding on a course of action: "Is it good for my customer? Is it legal and ethical? Is it something I am willing to be held accountable for?" **Response: The purpose and focus of the documents are the PDT. The PDT are the decision makers on the project. Effective project execution is the result of empowered teams and results in effective program execution.**

The second aspect of the approach used by the authors that causes the Project Management Business Process Manual to be long is that it appears each section is meant to be used independently of all other sections. This causes much verbiage to be repeated in section after section. For example, the same ownership statement, "The BP/P2 Program Office is responsible for ensuring that this document is necessary, that it reflects actual practice, and that it supports corporate policy," appears dozens of times in the document. And for example, the first 1-1/2 pages of Civil Works Program and Budget Process – Sections 1, 2, 3, 4, and 5 each contain the same verbiage. In fact, the scope for each of these particular sections is verbatim the scope of the other four sections, and it is unclear how the sections are different. Another outcome of intending for each section to be independent of all other sections is the occurrence of lists of acronyms at 20 different locations within the document. The occurrence of 20 different acronym lists increases the likelihood that the acronyms are not consistent throughout

the document. **Response: Each process is unique, but not independent of the other documents; however, all acronyms are included in a single reference document. This is a web based tool and the user will only be viewing a small portion at any given time. It is more critical to be complete than to reduce the size when the total length will not be apparent.**

The length of the Project Management Business Process Manual significantly increases the effort to review and understand the document, and decreases its effectiveness. As long as the paradigm of section independence and computer-program style instructions are used in its writing, the document will remain long. I propose that a different paradigm be used to write the Project Management Business Process Manual. To explain, consider the following physics-based analogy.

You can convey the operating characteristics of all simple electrical systems, and the response of all simple beams, by writing down how each beam or circuit will respond to a given change in voltage or current (for the electrical system), or a change in load or displacement (for the beams). To describe the response of each system would require pages and pages of numbers for each change in input. Or you can provide a simple rule that describes the response of all such systems, it happens to be in the form of a simple second-order ordinary differential equation (about 13 characters), but the particular form is not the point. The point is that it is rule-based. The rule provides a greater understanding of the different systems than do tables of data, allows predictions of beams and circuits not considered, and does this succinctly. **Response: This is a web based tool and the user will only be viewing a small portion at any given time. It is more critical to be complete than to reduce the size when the total length will not be apparent.**

The new Corps Business Process Initiative incorporates seven business imperatives. These are delineated well in ER 5-1-11. It incorporates the use of virtual teams, Project/Program Managers, Project Delivery Teams, and a common business process throughout the Corps. ER 5-1-11 does a good job in providing the philosophy behind the new USACE Business Process, and provides some details of the Business Process. ER 5-1-11 is a more rule-oriented description. **Response: We agree.**

The Project Management Business Manual should take the approach of describing the Project Management Business Process through a series of simple definitions of the important terms, staff roles, and the governing rules. For example, what is a virtual team and who are its members (e.g., Project Manager, customer, information gatherer, problem analyst, scheduler, cost estimator, accountant, project communicator, resource manager, etc). Each type of member has a specific function and responsibility. Each member relates to each other and to the project through defined relationships (rules). For most teams, team members will have multiple roles. In the case of a grass cutter,

for example, the Project Manager may perform all roles. **Response: Roles and responsibilities that should be consistent across USACE are shown.**

Each project has a natural evolution that is depicted in some of the graphics of the draft Project Management Business Process Manual. This includes customer/problem identification, formation of Product Delivery Team, definition and agreement of project products, Business Management Plan development, etc. The business process and the performers, customers, and stakeholders should be broadly defined in the Project Management Business Process Manual such that these definitions are applicable to the restoration of the Florida Everglades, or for cutting the grass at the Waterways Experiment Station. In keeping with ER 5-1-11, the required effort to accept the project and to develop the Business Management Plan should be “appropriate to the size, complexity, acquisition strategy, project delivery, and nature of each product”. The simple definitions that define the players (service providers, customers, stakeholders) in a project, and the rules by which they inter-relate to delivery a product, should comprise the essence of the Project Management Business Process Manual. **Response: This is a general business process manual which establishes a corporate level of consistency by all USACE activities. The level of detail required IS dependent on the size and complexity of the project. That doesn't change the overall process required to get there, but many individual steps will be streamlined for smaller/less complex projects.**

Application of the Project Management Business Process to specific on-going Corps activities should be covered in short appendices to the Project Management Business Process Manual. In these appendices the make-up of the Product Delivery Team for specific projects should be defined in the same terms used in the Project Management Business Process Manual. Leave to the Project Management Business Process Manual what the terms mean and how the team member inter-relates. If a specific on-going project contains a peculiar approval path for work acceptance, this should be delineated in the associated appendix. The acceptance of new work, and the development of the associated Project Delivery Team and Business Management Plan, should be consistent with the guidelines provided in the Project Management Business Process Manual. **Response: The business processes develop a consistency necessary to readily and efficiently share and execute work among various USACE elements. The specifics of team make up and rules governing team interaction are left up to the individual PDT.**

Finally, throughout the Project Management Business Process Manual and its appendices the use of acronyms should be kept to a minimum, or perhaps not used at all. It has been my repeated experience that acronyms reduce communications effectiveness. The United States Constitution in its twelve pages uses no acronyms, not even “U.S.” for United States. **Response: Thank you for your time and effort. Incorporation of many comments have improved the PMBP manual.**

Charles R. (Bob) Welch
Technical Director, General Instrumentation
Information Technology Laboratory
Engineer Research and Development Center

Project Management Plan/Program Management Plan. Many small projects are undertaken each year that should not require the use of all these many plans. I could not find the funding threshold for this but some very abbreviated version should be used for project smaller than \$100K. Otherwise the project overhead for management will consume at least 50% of the project funds. **Response: This is a general business process manual which establishes a corporate level of consistency by all USACE activities. The level of detail required IS dependent on the size and complexity of the project. That doesn't change the overall process required to get there, but many individual steps will be streamlined for smaller/less complex projects.**

General Comments: The document appears to have been written around how a typical District operation. This may not fit for those Districts that are Centers of Expertise and use innovative funding and management technique for projects like the Everglades Project in Florida. The CADD/GIS Technology Center also works as a center of expertise and has different Federal Agencies contributing funds to accomplish a tasking. This results in many different funding sources, customers, proponents, and agency requirements. The Project Management Business Process does not provide for this flexibility. **Response: Disagree, the processes are written to be flexible based on project size, customer need, etc.**

Harold L. Smith
Chief, CADD/GIS Technology Center
Information Technology Laboratory
Engineer Research and Development Center

Thank you for the opportunity to provide input to the formulation of the Corps of Engineers' Project Management Business Process. **Response: You're welcome.**

The document and the processes described therein focus primarily on a target audience of the Corps of Engineers' core business; programs and projects intended to deliver services to the Nation via the District and Division service model. The ERDC laboratories' activities on the other hand are divided into two major functions:

reimbursable investigations/studies and direct funded research. **Response: An R&D specific document has been developed to address your program specific requirements.**

Reimbursable activities fundamentally perform like a support function or contractor to the Districts and Divisions. Given this perspective, the value for Laboratory leadership in understanding this document is primarily with respect to understanding how the Districts and Divisions function to better understand how the Laboratories' business processes need to interact and dovetail with the Districts' and Divisions' business processes. I know the COE does not like to hear from the laboratories: "we're different". However, with the exception of the execution of our direct funded research programs (discussed below), we are different. We are service providers to the Districts and Divisions, not program or project managers. All too often, processes, regulations, and/or automation systems are developed for the COE as a whole and then implemented into the Laboratory environment with only limited success. The Laboratories' reimbursable efforts/projects should be incorporated into the project management processes being managed by the District or Division. **Response: When the PMBP Initiative was begun, there was a broad based feeling that the core programs were all unique. However, we have found that the basic business processes are common across the programs as shown in the PMBP manual. Where the labs are providing a service to a district on a particular project, they are a part of the PDT for that project. Their efforts are not a separate project under these processes. An R&D specific document has been developed to address your program specific requirements.**

However, I do believe that the processes outlined in the manual are applicable to the Laboratories' direct funded research programs. I believe it should be implemented at the level of the major research programs. Implementing these processes into the projects that make up a research program does not appear to be appropriate as this will result in researchers applying these processes to 50K and 100K work units. Hitting an ant with a sledgehammer. In concert with the Chief's permission slip, we need to retain the trust in our people that they will do the right thing with our resources. We need to assure that the research in the organization continues to be creative and leading edge with little distraction due to highly structured business processes intended for larger programs. **Response: The processes are written to be flexible based on project size, customer need, etc.**

Aside from the applicability of these processes to the Laboratories, the document seems to have significant variability in scope. Some sections go into excruciating detail describing certain processes or even individual steps of processes (for example how to calculate the number of effective hours in a year) and then at other times it takes a view from 20,000 feet. Related to the issue of "level of detail", there are numerous references to specific activities that closely resemble an automation system's user manual. This level of detail should be omitted from the document and simply provide a reference to the particular automation system's user or reference manual. For example,

a statement such as “Enter Schedule into automation System XYZ” and then provide a reference to that automation system. The level of detail currently provided in the manual with respect to our existing automation systems will quickly result in the manual becoming dated and invalid. **Response: This is a general business process manual which establishes a corporate level of consistency by all USACE activities. The level of detail required IS dependent on the size and complexity of the project. That doesn’t change the overall process required to get there, but many individual steps will be streamlined for smaller/less complex projects.**

Lastly, over the past decade or so, we have lost much of our traditional senior leadership that had life-long careers in the COE. The “wisdom” of our organization typically grew up in a District or Division with select individuals elevating into the infrastructure of the COE Headquarters. This process created an environment of senior mentors to the Districts and Divisions who promoted the use of the Laboratories for projects that required specialized equipment and/or expertise. I sense that this system has deteriorated and the Districts and Divisions no longer understand the value and/or role of the research laboratories. Unfortunately, we now have to rely on more formalized business processes for the Laboratory/field interactions to occur. I believe this recent formulation of our business processes is an opportunity to re-integrate the Laboratories roles into the business processes of the Districts, Divisions and Headquarters. I am not at all in favor of an entitlement system; however, the manual could specifically call out key opportunities during the program/project’s design and implementation (or even the life cycle management of the project) that Laboratory assistance should or could be considered. **Response: We have modified the processes to ensure that good ideas developed by the labs are reviewed by the PDTs at the outset of a project.**

Bradley M. Comes
Director
DoD High Performance Computing Center
Information Technology Laboratory
Engineer Research and Development Center

The size of this document is rather intimidating. Can the concepts and material relayed by this document be reformatted and covered in fewer than 231 pages? **Response: This is a web based tool and the user will only be viewing a small portion at any given time. It is more critical to be complete than to reduce the size when the total length will not be apparent.**

Robert M. Ebeling
Research Civil Engineer
Information Technology Laboratory

Because I have always concentrated on the technical aspects of projects, I am the least equipped to comment. Rather than try to be an expert and quickly demonstrate that I am not, I will simply give my reaction and perspective.

The concept of everything being a project, each project being done by a team, and the plan being formally developed by the team has good potential for big projects. In my mind this effort is analogous to the topic of software engineering. Here, the skyrocketing cost of software development created the need for a formal technology to be developed where a software plan was developed before different people started down the “getting the work done” road. So it is understandable for higher management to want to formalize the business process to control the cost of doing our work. When I took the class in software engineering, it was a graduate class in computer science, and there was a lot to it. This is what my first reaction to the manual is: there is a lot to this! A novice (one who like me has been “spoiled” and somebody else has taken care of the “paperwork”) will have a lot of digging to do to get up to speed on this. This will initially raise the overhead costs, and for small projects, it may never pay off. For bigger ones, it could. One suggestion: how about doing a Quick-Start guide like many complex software packages have? This could help a lot in allowing one to get a better grasp of the total picture and how to get started. **Response: The final documents will include navigation tools to aid the user. This is a general business process manual which establishes a corporate level of consistency by all USACE activities. The level of detail required IS dependent on the size and complexity of the project. That doesn't change the overall process required to get there, but many individual steps will be streamlined for smaller/less complex projects.**

I have worked on teams for over ten years now. I have worked for some time on the Groundwater Modeling Team headed by Dr. Jeff Holland, CHL. This team was represented by CHL, GSL, EL, and ITL, so in order to be successful; Jeff had to have loyalty to the Team at times over that of his own laboratory. He did an excellent job at this. I can remember a time when money got tight, and there was a tendency for the individual laboratories to “hunker down” and not let any resources go out to the other team members external to the lab where the PM resided. Jeff “took up” for his team and worked things out to everybody’s satisfaction. What I am trying to convey is that this new system needs to have in place a mechanism to protect the project and the team from being “clobbered” by short-term needs. **Response: The processes (in particular “Team Establishment” and “PMP Development”) stress the requirement for team members to be committed to the team.**

This past year I have worked with the MSRC Team, which involves around 80 government, contractor, and university type folks here locally, plus many others at

various universities. When helping interview the MSRC Team and report to the MSRC Management Team on the MSRC Five-Year Strategic Plan, I marveled at how challenging the communication is to get the job done effectively. Getting a one-size-fits-all formal description to the project management business process also seems to be difficult. The manual appears to me to be a collection of various flow charts rather than the more difficult task of first finding as much common ground as possible to have a coherent approach. Perhaps the development of a quick-start guide would allow the hard-working developers to see how they can improve their product. **Response: Thank you for your time and effort. Incorporation of many comments has improved the PMBP manual.**

Fred T. Tracy
Research Computer Scientist
Information Technology Laboratory
Engineer Research and Development Center

I want to preface my comments by stating that I totally support the principles of ER-5-1-11 and believe that ERDC can meet the requirements of the regulation with little problem. My primary concern is related to the perception that we are attempting to force "generic" standard business processes on ERDC that were written in the context of a District environment. We certainly need standard processes for ERDC but most of them must be written in an R&D context. Just as the PMBP authors recognized a need for specific District processes for Military, Civil, and HTRW, we also need various flavors of R&D processes. To combine all of these into one process will just confuse everyone, and reading these processes did that for most of my staff. **Response: An R&D specific document has been developed to address your program specific requirements.**

These processes may be "generic" for a district, but they are often not normal (or best) practice in the reimbursable R&D environment. For example, a lab rarely gets funds prior to developing a proposal. In the district process, funds are received and the team (including the sponsor) develops the proposal. It would be nice for our overhead to use this process, but our customers just won't buy that concept. We currently require an approved proposal before work begins to ensure that we meet our customers expectations. Other examples include the content of the PMP and R&D closeout procedures that don't have the real estate requirements that a construction project would have. **Response: This is a general business process manual that establishes a corporate level of consistency by all USACE activities. The level of detail required IS dependent on the size and complexity of the project. That doesn't change the overall process required to get there, but many individual steps will be streamlined for smaller/less complex projects.**

I don't believe the solution is to either have these generic processes as an R&D standard or to generalize them even more to reflect the needs of the R&D environment. That would just make them so generic, that it would confuse the Districts PMs as much as the current documents confuse R&D PMs. The solution is to have several R&D business processes (as we have drafted on the ERDC website). They are consistent with the philosophy of ER-5-1-11 and in many cases, edited from the drafts on the HND website. The software challenge would be to merge the processes so that they could all reside on one web site. To do that the software needs to understand that a PM in a district needs differing information than a PM in a lab. I don't think the software is that intelligent so we may be forced to have a dedicated ERDC site for the near term.

Response: When the PMBP Initiative was begun, there was a broad based feeling that the core programs were all unique. However, we have found that the basic business processes are common across the programs as shown in the PMBP manual. Where the labs are providing a service to a district on a particular project, they are a part of the PDT for that project. Their efforts are not a separate project under these processes. An R&D specific document has been developed to address your program specific requirements.

I am concerned that there is still no mention of ERDC to the district project managers or other district personnel (for that matter, ERDC doesn't yet exist in the Engineer Regulation 10 series and 70 series either). This is a great opportunity for them to understand when ERDC should be contacted and involved as part of the team. I realize that the ERDC business processes are not yet integrated with the Corps website, but that integration will still not address the interaction needed with a district PM.

Response: We have modified the processes to ensure that good ideas developed by the labs are reviewed by the PDTs at the outset of a project.

L. Michael Golish
Chief, Facilities Division
Construction Engineering Research Laboratory
Engineer Research and Development Center

The Manual doesn't integrate the ERDC into the rest of the Corps. Two aspects of this need attention. First, ERDC's business processes are sufficiently different from those of the Divisions and Districts that it's really necessary to address ERDC explicitly. Parallels with District processes are not obvious and will be even less so to our researchers who, for the most part, are less familiar with the Districts. Second, ERDC ought to be an integral part of the Project Delivery Teams of the Districts - infusing state-of-the-art technology and facilitating quality assurance. These opportunities for synergy within the Corps should be highlighted. **Response:** We have modified the processes to ensure that good ideas developed by the labs are reviewed by the PDTs

at the outset of a project. An R&D specific document has been developed to address your program specific requirements. Where the labs are providing a service to a district on a particular project, they are a part of the PDT for that project. Their efforts are not a separate project under these processes.

The manual is uneven in the attention it pays to projects of different sizes. Some very big projects receive relatively little attention. Some, seemingly less important, projects are dealt with in great detail. The prescribed processes probably ought to be simplified for very small projects (a few thousand rather than million dollars...). They don't seem to be, although it surely wasn't intended that all projects be managed with the same intensity. **Response: This is a general business process manual that establishes a corporate level of consistency by all USACE activities. The level of detail required IS dependent on the size and complexity of the project. That doesn't change the overall process required to get there, but many individual steps will be streamlined for smaller/less complex projects.**

Some thought needs to be given to how the final product of this is presented in print and in other media. Reading this is pretty heavy going. It would help with assimilation of these new ideas by the Corps family if the new concepts were presented in a more interesting and memorable way. The Chief's video is a good example of a better way to communicate the big ideas. **Response: This is a web based tool and the user will only be viewing a small portion at any given time.**

John Bandy
Chief, Installations Division
Construction Engineering Research Laboratory
Engineer Research and Development Center

The manual is a good attempt at documenting and trying to unify the Corps project management business practices. To be a customer responsive organization, the Corps needs to understand and embrace the principles that the PMBP is attempting to define.

The manual has several weaknesses when applied to RDT&E projects and ERDC:

- All work is treated as if it was multi-million dollar, multi-year CW or MilCon efforts; most of ERDC's projects are below \$200K and last less than one year.
- The multiple roles for the Project Delivery Team described in the manual are typically undertaken by one or two people.
- The high level of documentation and planning described by the manual makes sense for large and complex projects, but to be useful to ERDC, project documentation needs to be simplified and streamlined.

- The manual assumes that there will always be a full time Project Manager assigned to each project, dedicated to keeping the documentation current and handling customer interaction. In ERDC, the Project Manager is also the senior technical researcher.
- The example WBS templates for CW or MilCon do not fit typical RDT&E activities.

Response: This is a general business process manual that establishes a corporate level of consistency by all USACE activities. The level of detail required IS dependent on the size and complexity of the project. That doesn't change the overall process required to get there, but many individual steps will be streamlined for smaller/less complex projects. An R&D specific document has been developed to address your program specific requirements. According to ER 5-1-11, there is a PM designated for every project. The PM does not necessarily reside in the PM organization, and can have a different role on other PDTs. It does not require, nor is the intent of this manual to imply that a PM is assigned to only one project at a time. That will almost never be the case.

I suggest that the PMBP manual have graduated documentation requirements that increase in complexity as the project increases in size – use project cut points like \$100K and below, \$100-500K, \$500K-\$1M, etc. A good guide for constructing this graduated documentation concept should be the cost of maintaining the project documentation as a percentage of the total project. Small projects should not have to spend 10-20% of their total cost on documentation, while large projects spend less than 1%. **Response:** This is a general business process manual that establishes a corporate level of consistency by all USACE activities. The level of detail required IS dependent on the size and complexity of the project. That doesn't change the overall process required to get there, but many individual steps will be streamlined for smaller/less complex projects.

To make the task of project documentation easier, standard templates could be developed for the communications, risk management, quality management and change management plans based on the standard business practices of the MSC, District, Center or Lab. These templates could have several levels based on the degree of difficulty anticipated in each area – the more difficult, the more complex the plan. **Response:** There will be standard templates included in P2 that will contain at least a skeleton of the various plans required.

The PMBP documentation is not very useful in its current linear and “book” form. To be more useful, the PMBP should employ web based knowledge management principles where information is interlinked to the process that a Project Manager will follow in performing the job. This information should include what is to be done, how it is to be done, when it is to be done, examples of what is needed and lessons learned results. ERDC has produced several knowledge management tools that can be used to create this process. **Response:** This is a web based tool and the user will only be viewing a

small portion at any given time. The document you reviewed was downloaded from the web site that also contains the web links. <http://www.hnd.usace.army.mil/p2>

The key to making the PMBP process work is TRAINING, TRAINING, and TRAINING. In ERDC, most Principal Investigators do not have the sophisticated project management skills required by the PMBP. **Response: Agreed.**

Gary Schanche
Technical Director
Installation Operations,
Infrastructure Asset Management
Construction Engineering Research Laboratory
Engineer Research and Development Center

Both the USACE PgMP and the ERDC derivative plan are appropriate. What is lacking is an effective user support tool. PROMIS was developed to meet the support requirements but its performance specifically in supporting the USACE R&D programs is marginal at best. My concern is ERDC's ability to effectively meet the PgMT initiative with an ineffective support tools. We need a good user-friendly support tool now, not in a couple of years, or at least we need an interim workable fix. **Response: P2 is being developed as a tool for the PDT and resource providers, with upward reporting being a by-product of the information in the system.**

Paul Howdyshell
Technical Director
Facility Acquisition and Revitalization
Construction Engineering Research Laboratory
Engineer Research and Development Center

I have read the manual.

My general feeling is that it is a good draft to start working from for the Corps of Engineers. I sense that the customer care, quality, planning, and other activities that

are being discussed are something that CERL, at an ERDC minimum, has been doing for a considerable length of time.

The terminology is quite different and it would be in our best interest to either move to this terminology, (i.e. Outreach Coordinator, PM, etc) or at a minimum make sure that everyone understands how they fit in the scheme and who has responsibility for which tasks within the PMBP and the matches don't seem to be one-to-one. ERDC wants to declare that a PI is a PM but there are significant differences in the level of tasks.

Response: Thank you for your time and effort. Incorporation of many comments has improved the PMBP manual. Definitions in the glossary will include examples applicable to the various Corps programs.

Bill Severinghaus
Technical Director
Military Land Management
Construction Engineering Research Laboratory
Engineer Research and Development Center

The ER and the manual promote sound and commendable business process imperatives for the USACE.

The overall process seems to be very complex and convoluted. Such level of complexity may be necessary for multi-million dollar, multi-year programs/projects, but does not serve well an organization that wants to be lean and have the agility to solve pressing Army problems, however small they may be. **Response: This is a general business process manual that establishes a corporate level of consistency by all USACE activities. The level of detail required IS dependent on the size and complexity of the project. That doesn't change the overall process required to get there, but many individual steps will be streamlined for smaller/less complex projects.**

More than half of the manual is devoted to activities before the start of the actual execution. What should be the most important stage of a project to satisfy the customer need, *project execution and control*, receives minimal attention. **Response: If you have a good plan, execution is much simpler. One day of planning can save three days of execution (old adage).**

Ilker Adiguzel
Deputy Director
Construction Engineering Research Laboratory
Engineer Research and Development Center

I applaud the Corps' efforts to create a flexible, consistent process for managing work and responding to customer needs. There are several areas that seem to conflict that may need to be addressed. Consistency is stressed and it is clear that the PMBP will be used for all work in the COE. The Executive Summary states that "flexibility to adjust local procedures to meet mission needs" is also provided, however flexibility did not seem to be addressed in the document itself. **Response: The business processes develop a consistency necessary to readily and efficiently share and execute work among various USACE elements. The level of detail required is dependent on the size and complexity of the project. That doesn't change the overall process required to get there, but many individual steps will be streamlined for smaller/less complex projects.**

The executive summary states that the PMBP Manual addresses both program and project level processes. The Preface states that the PMBP Manual serves as a framework for effective *program* management at all levels across the Corps of Engineers. I find astonishing detail at the project level but very little at the program (or higher) level. Indeed, Program Managers are included in the Congressional budget preparation and work acceptance phase however seem to play minor roles elsewhere, particularly those at the MSCs. For example, pg 58-59 describe COE activities when the Chief is going to testify before the House and Senate committees **Response: The business processes develop a consistency necessary to readily and efficiently share and execute work among various USACE elements. The programs that are managed by HQUSACE and MSCs ARE governed by these processes, but at the programmatic rather than the project level. Many of the procedures at HQUSACE are prescribed in existing policies and SOPs.**

I find the activities summarized in pgs 35-38 to be of interest and provide "situational awareness". The sections of customer and stakeholder interactions will serve to remind us all to include them in our activities. **Response: Agreed.**

Although the level of detail at first seems excessive, the consistency in format facilitates absorption of the material. I agree with the intent of the PMBP. I hope the implementation does not stifle flexibility nor require unanticipated level of effort at the "bench" level. **Response: Concur. This is a web based tool and the user will only be viewing a small portion at any given time. It is more critical to be complete than to reduce the size when the total length will not be apparent.**

There is little mention of the Centers of Expertise and Labs in the PMBP. COE might be more cohesive if reminders to consider inclusion on the PDT's and/or during the Change Management process to insure we have insertion of emerging technologies and/or specialized expertise where needed. **Response: We have modified the processes to**

ensure that good ideas developed by the labs are reviewed by the PDTs at the outset of a project.

Barbara J. Sotirin
Director
Cold Regions Research and Engineering Laboratory
Engineer Research and Development Center

The overall document appears comprehensive and fairly consistent, particularly in format, at the Corps project level. However, in the section discussing PMP development, it becomes unclear which "document" represents the real 'umbrella' document. I like the proposition that the Project Management Plan will see continuous revision, though the description of this on page 80 confuses the reader since it implies some of the execution details of PROMIS without actually discussing them. **Response:** This is a web based tool and the user will only be viewing a small portion at any given time. Incorporation of many comments has improved the clarity of the PMBP manual.

Dr. Robert E. Davis
Technical Director for Terrain State Modeling
Signature Physics and Cold Regions
Processes and Properties
Cold Regions Research and Engineering Laboratory
Engineer Research and Development Center

Where do you train the PM to obtain the skills to choose, run, and execute a successful PDT for a specific project? I searched several documents and could not find the appropriate document; maybe it's available. **Response:** The PMBP process includes a curriculum team charged with the development of training.

ER 5-1-11. 7b1. I think the labs should be specifically spelled out as partners to undertake work. We (the labs) do not have sufficient exposure such that the District staff will think to use the lab expertise. **Response:** We have modified the processes to ensure that good ideas developed by the labs are reviewed by the PDTs at the outset of a project. An R&D specific document has been developed to address your program specific requirements. Where the labs are providing a service to a district on a particular project, they are a part of the PDT for that project. Their efforts are not a separate project under these processes.

Are there going to be examples of how to set up Project Delivery Teams for projects that have recurring similarities so one doesn't have to wade through this document.

Response: In the processes, use of existing projects as templates for new projects is specifically addressed. Using the same team on similar projects is desirable, but resource constraints may prevent this.

If P2 isn't any better to use than PROMIS, then forget it for being a cost effective tool for use. **Response:** Agreed.

Darryl J. Calkins
Technical Director for CW Geospatial R&D
Cold Regions Research and Engineering Laboratory
Engineer Research and Development Center

The manual strikes me as being highly prescriptive as to process and procedure at the lowest levels, and progressively less detailed on process and responsibility at higher levels. I feel that we should maintain as much flexibility as possible at the lower or local level, given a recognized need for more standardized processes and definitions.

Response: The business processes develop a consistency necessary to readily and efficiently share and execute work among various USACE elements. The programs that are managed by HQUSACE and MSCs ARE governed by these processes, but at the programmatic rather than the project level. Many of the procedures at HQUSACE are prescribed in existing policies and SOPs.

The manual is highly focused on district level activities and on work coming down the management chain, which is not always applicable to the Lab situation. As such, having a separate section (yet to be completed) dealing with R&D-specific processes is in order. However, as presented, this would appear to leave integration of lab activities into the overall Corps operations as a completely separate operation or an afterthought. The manual often mentions workload analysis and division of work between in-house and contracting, but it is not clear how the use of Labs or Centers is included. For example, areas such as Project Workload Analysis under Work Acceptance on pg 19 call for analysis of in-house options and A-E requirements. If sufficient resources are not available, then the process calls for going to the RBC for resources within other Districts within the Division, and then to other RBCs. It would be good to call out Lab/Center resources as an option. **Response:** An R&D specific document has been developed to address your program specific requirements. We have modified the processes to ensure that good ideas developed by the labs are reviewed by the PDTs at the outset of a project. The wording in the documents has been revised to be inclusive of the labs.

Labs/Centers are mentioned under the establishment of PDT's on p.92, and execution on p 125, but as an internal process rather than in the context of organization

leveraging, since the next step is to look for required resources within the region. Having lab representatives on appropriate PDT's or cognizant of RMB activities could be a plus. **Response: An R&D specific document has been developed to address your program specific requirements. We have modified the processes to ensure that good ideas developed by the labs are reviewed by the PDTs at the outset of a project. The wording in the documents has been revised to be inclusive of the labs. Where the labs are providing a service to a district on a particular project, they are a part of the PDT for that project. Their efforts are not a separate project under these processes.**

James L. Wuebben
Deputy Director
Cold Regions Research and Engineering Laboratory
Engineer Research and Development Center

I've read the attached information on the PMBP. I concur with the presented format and the methodology prescribed. **Response: Thank you for your time and effort. Incorporation of many comments has improved the PMBP manual.**

LTC Vince Collier
Military Deputy to the Director
Topographic Engineering Center
Engineer Research and Development Center

The PMPB manual as outlined is a good document and captures the vision of regional delivery of goods and services. The only concern I have is that many of our customers are driven to accept our revised timelines and project scopes rather than given clear expectations up front. The upfront project delivery expectation setting I think could be strengthened by an acknowledgement in our business process of the difficulty in meeting exacting timelines. Rather they should be provided the realists view and our best guess rather than an optimists view. This may be more cultural than process. **Response: Key in PMP Development is the early verification/clarification of the scope with the customer (PDT member).**

Robert Burkhardt
Director
Topographic Engineering Center
Engineer Research and Development Center

I have made a cursory review of the PMBP Manual. Quite honestly, I haven't had the time to wade through the entire document.

As a general comment, I think the goals of ensuring consistency in program execution, the customer focus, progress measurement, and recognizing the reality of the virtual management environment are admirable. My basic concern is that the length of the manual will cause our very busy PIs and PMs to avoid it. Also, taken literally, I believe the process and the manual place too much of a documentation burden on small projects. More flexibility is needed in this regard. **Response: This is a web based tool and the user will only be viewing a small portion at any given time. It is more critical to be complete than to reduce the size when the total length will not be apparent. This is a general business process manual that establishes a corporate level of consistency by all USACE activities. The level of detail required is dependent on the size and complexity of the project. That doesn't change the overall process required to get there, but many individual steps will be streamlined for smaller/less complex projects.**

From an R&D perspective, I will be commenting on the ERDC PMBP or Common Business Process Manual (currently under development) which supplements the USACE PMBP Manual. In my still cursory review of it, it seems to better recognize differences in size and type of programs, while still adhering to the goals of the overarching USACE initiative.

Francis G. Capece
Deputy Director
Topographic Engineering Center
Engineer Research and Development Center

The initial letter request was dated 1 Oct 01 requesting review and comments of the Business Process Manual. Following that was a second letter request for "all GS 15s to review and comment on the manual, by 31 October 01". That period allowed ten working days and above to looking over the 231 pages of the Manual. Although according to instruction, "one is to familiarize yourself with some 100 pages plus of other material... before beginning your review...."! If this PMBP is important, meaningful and to be truly understood then implemented, then how can anyone expect an individual to accomplish this kind of review in such a short period of time. Additionally when you factor in: delays in retransmitted of letters/emails, access to internet sites, downloading and printing of material to review, earlier suspense's by local Supervisors, and still continuing to accomplish day to day work; the request is impractical, illogical and impossible to perform any credible review and comment! Corps PMBP at the PMBP Kick off meeting tomorrow?? I am really trying to understand the "why" and "what" part of PMBP. Additionally we are scheduled to hear the chain teaching PMBP Town Hall this afternoon, on the 30 October 01. **Response: Timeline required to meet the Chief's targeted implementation date.**

On the surface it appears to add a significant amount of questionable paper work AKA "government bureaucracy" to programs (projects) with items like: Program management plans, Work breakdown structures, Quality management plan, Change Management Plan, Communication plan, risk management plan, etc. This especially applies to the Corps R&D programs, since many of the references and sample tables relate to Civil Works Construction projects and are not applicable to R&D programs. PMBP would appear to be more applicable to large-scale construction projects like Dams. **Response:** This is a general business process manual that establishes a corporate level of consistency by all USACE activities. The level of detail required IS dependent on the size and complexity of the project. That doesn't change the overall process required to get there, but many individual steps will be streamlined for smaller/less complex projects.

There does not appear to be any process to evaluate, a priori, the need or value of the myriad of documents that are associated with PMBP. **Response:** This is a general business process manual that establishes a corporate level of consistency by all USACE activities. The level of detail required is dependent on the size and complexity of the project. That doesn't change the overall process required to get there, but many individual steps will be streamlined for smaller/less complex projects.

PMBP adopts a one size fits all approach, and does not allow creative or innovative operations - for example like Industries concept of separate profit centers (divisions), where efficiency and effectiveness determine the continuation of each separate (uniquely focused) division. Understand that by definition you are meeting customer expectations in order to achieve "efficiency and effectiveness" of your business.

Specific Comments:

Data Checklist required for Civil Works data elements not identified - "under development", page 210 of manual. **Response:** Will be included in final document.

Harold Britton
Technical Director
Topography, Imagery, and Geospatial
Civil Works and Support for Others
Topographic Engineering Center
Engineer Research and Development Center

I must admit that I didn't review the entire PMBP (USACE and ERDC versions), but I will agree that some form of standardized business practices would make sense. However, having said that, these types of practices must be scaleable in order to be both effective and efficient. Clearly the PMBP is written for large Corps projects (dams, shoreline

erosion protection, navigation, dredging, etc.) My concern is that by requiring a common PMBP approach to all projects, large and small, planned and ad-hoc (emergency), we could be faced with unrealistic administrative and bureaucratic overhead in the project data entry and management of everything we do. Hopefully, we would not be expected to do the same level of project planning and entry for a \$5k reimbursable CW project as we would for a multi-year, multi-million dollar contractual effort to produce say SNE/Common Environmental Data Bases. **Response: This is a general business process manual that establishes a corporate level of consistency by all USACE activities. The level of detail required is dependent on the size and complexity of the project. That doesn't change the overall process required to get there, but many individual steps will be streamlined for smaller/less complex projects.**

I am concerned that we will spend an inordinate amount of time on project planning and data entry and management, detracting from the real work at hand and subsequently forcing the true costs of anything we do to dramatically rise to cover the added "overhead". I am also concerned about the various roles and responsibilities of all of the PMBP "players": All of the roles for everyone must be clearly articulated and cross-referenced to existing roles within the Divisions, Districts, Labs, Centers, etc. Otherwise, there will be mass confusion. **Response: If you have a good plan, execution is much simpler. One day of planning can save three days of execution (old adage). This is a general business process manual that establishes a corporate level of consistency by all USACE activities.**

Reference is made to P2 being the new PM AIS for the PMBP process. Frankly, I haven't heard many positive comments about the ability of P2 to succeed. In fact, the success of P2 was in question over one year ago! **Response: You have a team member on the BP/P2 team, Mike Richardson, who can address your concerns.**

Just by the nature of how the standard PMBP was laid out causes concern: over 200 pages of implementing instructions for USACE, on top of a 50 page ER, and another 200+ pages of ERDC "guidance" over and above the USACE plan! I will bet very, very few will have looked at the entire PMBP Manual and all of its associated parts. **Response: The current ER 5-1-11, 17 Aug 2001, is 9 pages plus 5 pages of appendices. This is a web based tool and the user will only be viewing a small portion at any given time. It is more critical to be complete than to reduce the size when the total length will not be apparent.**

Realizing that some form of PMBP will go through and be initiated for all of the Corps, ample training and checklists will be necessary to help ensure both success and the acceptance of such a broad scale business process implementation after years of more independent processes. **Response: Agreed.**

Richard A. Herrmann
Technical Director
Topography, Imagery, and Geospatial Requirements
and Operational Support
Topographic Engineering Center
Engineer Research and Development Center

No substantive comments. A good portion of the PMBP is not complete or still marked "draft". The TENCAP, JPSPD and CTIS sections look OK. **Response: Thank you for your time and effort. Incorporation of many comments has improved the PMBP manual.**

David E. Thacker
Topographic Engineering Center
Engineer Research and Development Center
Topographic Engineering Center
Engineer Research and Development Center

Procedures are obviously geared to large projects. The PMBP should allow for consistent, but simplified procedures for smaller jobs. **Response: This is a general business process manual that establishes a corporate level of consistency by all USACE activities. The level of detail required is dependent on the size and complexity of the project. That doesn't change the overall process required to get there, but many individual steps will be streamlined for smaller/less complex projects.**

Automated systems tend to grow to include bells and whistles that appear to be desirable until the costs are realized. Let's guard against becoming too detail-oriented and measure only the important. **Response: Agreed.**

David Haulman
Chief
Department of Public Works
Engineer Research and Development Center

The PMBP is well written, concise and logical. Bringing the Contracting Office in early by establishing an Advanced Acquisition Planning Board (AAPB) may result in

better overall customer service and timely products by giving the Chief of Contracting a realistic approach to scheduling resources. This approach differs from the PRB meetings which actually seem to serve only as monthly updates. **Response: Thank you.**

The AAPB significantly increases the responsibility of the Contracting offices throughout MVD but in Vicksburg this responsibility will be doubled (MVK and ERDC). Although the board will convene semiannually, the reports generated from these meetings are living documents that must be closely monitored. In my opinion the current staffing of the VCCO is not adequate to support this function. **Response: Noted.**

In addition, implementation could have the potential for lots of extra work for contract specialists. If the outcome of this process results in another database (P2) that should “interface” with SPS (PD2), but in actuality does not, CT personnel will continue to be bogged down with manual data entry requirements in support of PM that will prevent them from accomplishing the mission. **Response: Interface to SPS will be thru CEFMS for needed data and will not require duplicate entry of the data by CT.**

Please call me if you have any questions.

Mack Ross
Chief
ERDC Contracting Team
Engineer Research and Development Center