

United States Department of the Interior
BUREAU OF LAND MANAGEMENT

Bureau Business Architecture Charter

July 10, 2000

Bureau Architecture Team

~ Background ~

This document is an amendment to the Bureau Architecture Team Charter, dated 12/17/99 and that document is incorporated by reference.

On December 17, 1999 the initial Bureau Architecture Team was chartered to provide the following deliverables:

1. Document the current information architecture in BLM based on the BLM's business (program) work processes, including analysis of business process, data, applications, and technology (PDAT);
2. Develop a framework or high level view of the desired future business process architecture of the BLM, aligned with the information needs and IT support of those work processes;
3. Develop a set of architectural criteria for evaluating new IT project development proposals, project modification proposals, and overall IT investment opportunities;
4. In order to begin moving toward the desired future "Bureau Architecture" (BA), provide recommended initial investments in:
 - a. Re-engineered business processes,
 - b. Data bases,
 - c. Applications, and
 - d. Infrastructure requirements.

The initial effort was completed on March 31, 2000 with a report and recommendations to the ITIB. This effort provided deliverables 1, 2 and 3 above, to a certain depth. A high level of detail was provided because of the complexity and breath of the current processes that BLM employs in meeting its mission. The initial report is attached as Appendix One.

Many detailed recommendations were made in the report and the Team grouped these into six implementation strategies (which are a mechanism to allow a relatively easy grasp of the numerous actions required to achieve the future vision). The six strategies are:

- (1) Facilitating the Accomplishment of BLM Work in the Field;
- (2) Improving the Utility of BLM Business Processes and Information;
- (3) Managing BLM's Information Resource is Part of BLM's Real Work;
- (4) Assuring and Storing High-Quality Program Information;
- (5) Providing the Solid Foundation on Which All Technology Works; and,
- (6) Getting the Return on Investment and Budget Dollars.

Much work remains on the business side to fully realize the goals of the initial effort. For instance, business cases need to be developed to determine which business subject areas are of highest priority.

~ Purpose of the Architecture ~

BLM must assure that our business tools and information technology are:

- supporting the needs of on-the-ground activities,
- aligned with our strategic goals and business processes,
- meeting new and changing public demands, and
- providing the best value for both our employees and the taxpayers.
- institutionalized in the Bureau Architecture

The BLM, like many other organizations in the Federal Government and in the private sector, now recognizes that we must manage our work processes looking across the whole agency in a horizontal view in addition to the traditional programmatic or vertical view.

The BA is designed to identify and document the BLM's business work processes and the information needs of these processes. This helps BLM management establish investment strategies for IT based on a comprehensive view of the BLM business needs for IT support and allows the BLM to direct its efforts into the areas of the greatest benefit. One of the over-riding objectives for the Architecture is to reduce the number of Bureau-wide automated systems. This should reduce the costs of overhead as well as increasing the value of our automation investments to on-the-ground management.

The BA:

- is driven by business goals and processes,
- is a joint responsibility of the program owners and IRM,
- will look across the entire spectrum of BLM's work (and build on what has been accomplished in our ABC effort and other work process analyses), and
- processes will be re-engineered before automation rather than after.

In order to gain the most comprehensive view of the BLM's "business" needs, we will integrate BA implementation with the BLM's:

- Strategic Plan,
- Budget Process,
- Cost Management (ABC) efforts,
- Capital investment planning,
- Work force planning, and
- Other standing committees (such as the Budget Strategy team) in BLM.

~ Business Needs Statement ~

Business architecture development and management is not a one-time job. The initial BA represents the first step in relation to the overall effort needed to align IT strategy with the BLM mission.

To date, BLM has done little horizontal work process analysis, as past analysis was mostly programmatic. We will need to enhance and further build out the BA process descriptions as lessons are learned in using the BA to support the BLM's business and IT investment decisions.

As reflected by approval of this document, the sponsors of this Charter believe that BLM cannot afford to—either in terms of available staff, budget resources, or credibility—operate redundant work processes, collect the same data time and time again, or haphazardly implement new technology.

How many times have we collected data for a planning effort and not reused it when needed for an Environmental Assessment (EA)? Or conversely, if data had been captured at the EA level and kept current in the normal course of an employee's work, could it have been reused in either a planning effort or other work process?

In a recent analysis prepared for the grazing program, it was estimated that duplicative data entry of financial information costs the program at least 3.4 work years, or approximately \$100,000 (assuming a GS-5 employee level) annually. While this is not an overwhelming number, industry has found that significant savings come from cumulative small savings such as these from a previously vertical work process. This figure does not reflect the costs of collecting and not reusing other natural resource data valuable to other programs and/or uses.

In a different light, given the potential turnover in BLM's resource expertise over the near term due to retirements, etc., how much investment in on-the-ground resource knowledge will depart without any means of capturing that knowledge so it can be reused by new/other employees? How many times have different BLM offices implemented different solutions to enterprise-wide business needs?

Conservative estimates covering the seven primary BLM mission-oriented work processes—is that a minimum of \$27 million is annually wasted due to the above data inefficiencies. The total labor cost only (not including any operations costs) in 1999 for these work processes was approximately \$271.7 million. The \$27 million wasted is derived from an estimate of at least ten percent inefficiency resulting from duplication, re-work, and redundant operations as described in the Current Environment of the BA. The BA provides the blueprint for building a better future.

~ Goals/Objectives of this BA Phase ~

In the December 17, 1999 charter the following statement is made: "A decision will be made on or about April 1, 2000, on the need to initiate additional efforts to continue the definition of the BA and/or undertake additional BA development steps."

As endorsed by BLM's executive leadership, the goal of this phase of the BA effort will be to provide continuing development of and support to the business side of the BA in parallel with the initial application of BA principles and criteria to IT investment management. This charter, therefore, describes the on-going requirements to implement this approach, as well as providing the ability to react to new/changing business requirements/expectations and the rapid change in technology.

Work to implement the IT Architecture (implementation strategy 5) as well as improving the management of IT investments (implementation strategy 6) has already begun under the direction of the AD-IRM. These efforts are considered outside the scope of this Charter.

The objectives for this BA phase are the following:

- To develop a comprehensive plan to transition to the future desired architecture;
- To refine work completed under Phase I of the BA effort;
- To identify the priority business areas for additional study and decomposition;
- To develop a 'business-side' methodology for evaluating existing Bureau automated systems. This evaluation will determine which systems should be kept as is, modified (including the possible addition of new functionality), or discarded;
- To determine the costs associated with employing the implementation strategies delineated in Phase I, as well as the best approach towards their implementation;
- To determine the tangible and intangible benefits (including ROI) of employing the implementation strategies;
- To determine how to build the future architecture bottom up, funding the development of integrated proposals that directly support business requirements while moving toward the future; and,
- To determine how to effectively merge the BA analytical products with the FY01 Budget Initiatives, such as Management of National Landscapes, Restoration of Threatened Watersheds, and Planning for Sustainable Resource Decisions.

To accomplish these objectives, Team efforts will be organized into three basic activity areas:

- Transition Planning, including further development of the BA;
- Developing Future Core Horizontal Processes; and
- Addressing Immediate Business Needs

In all of these areas, the over-riding philosophy will be to rapidly deliver tools that the on-the-ground specialist needs. Given adequate resources, we anticipate this intensive effort to support

the strategic goal of meeting CMM Level 2 in 18 months. However, under a best case analysis, the team would exist for at least 24 months.

~ BA Methodology ~

This iteration of the BA effort will continue to apply the PDAT method in:

- describing the BLM's future work processes and information needs,
- completing a "gap" analysis indicating the differences between our current situation and where we strategically wish to go and,
- developing a detailed implementation priority matrix which will provide senior level managers with alternatives on how to achieve the desired future (including costs and pros and cons for each alternative).

This phase will be done in the same manner as the original work, with a high degree of field office involvement and step-by-step validation of the work. The further elaboration and build-out of the BA will be conducted in parallel with the application of the initial BA principles and criteria in IT investment decision-making, so that the immediate business needs of BLM are met while attempting to progress towards achievement of the desired future BA state.

~ Deliverables of this BA Phase ~

Specifics concerning timeframes, costs, and resources required will be detailed in a Project Plan to be completed after approval of this Charter.

(1) Transition Plan

- Prepare Overall Transition Plan including:
 - Prepare Business Cases for the Implementation Strategies
 - Business Subject Areas Prioritization
 - Make Recommendations for Existing Systems, including Keep-Toss-Acquire or transition
 - Develop Cost Analyses
 - Refine Initial BA Phase One Work
 - Complete Initial BA Work Deferred by Previous Deadline
- Communications/Road Show

(2) Future Core Horizontal Processes Projects

- Name and Address
- Serial Number
- Land Status/Resource Condition
- Inclusion of E-Commerce requirements in work process analysis
- Facilities Management System
- Identification of Corporate Data Needed For Decision-Making

(3) Help Address Immediate Business Needs, such as:

- Rangeland Administration System (RAS), FIMMS, AFMSS/Bond and Surety
- Automated Data to support Assessments, Planning, and Implementation
- Consensus building with States, Program Leaders, IRMAC, and Field Committee
- Coordination with both the SCO and ELT
- Coordination with Budget Office and Budget Strategy Team

~ BA Team Organization ~

This iteration of the BA will require a “core” Team of five, almost full time, positions over the next two years along with a need for field office staff to work full-time for shorter durations. We anticipate that these five will be the “virtual” staff to the Architecture effort by providing ‘business-side’ staff resources to:

- Ø help coordinate and guide the various parallel efforts that will be occurring over this time period,
- Û represent their respective mission/business organizations during BA efforts, and
- Û perform staff work as noted previously.

Members of the core team from the previous initial BA effort should continue as core team members for this effort since the BLM has already a significant investment in the team which, if replaced by new staff, would further delay implementation of the proposed actions contained in this document.

Each core team member would organizationally remain with their respective AD, however, the overall responsible, accountable official for the BA effort would be the AD-IRM (Hord Tipton). Each AD will need to examine their existing organization to determine how impacts to existing workloads would be addressed in view of the proposed makeup of the Team. Elaine Zielinski, Oregon State Director has agreed to be the ELT Sponsor. Appendix 2 illustrates the draft AD-500 organizational proposal.

It is important to note that this Team will utilize contractor expertise to the maximum extent possible. The estimated contractor cost is approximately \$525,000 through the balance of this calendar year. Use of contractors is required to obtain the scarce skills necessary. It is anticipated that at a point in the future, contractor expense will diminish as BA methodology becomes embedded in the BLM culture, and institutional knowledge is built-up through experience.

In addition to the core team, the Architectural Oversight Board (AOB) should also be continued but with a modified membership. A higher level of field manager representation is needed on the new AOB that will review and validate the products coming from the BA definition. Also, there should be at least one AOB member from each State. The role of the AOB in this phase of the BA would require a more in-depth commitment of time and resources as the implementation questions are addressed. One of the crucial assignments to the AOB is the identification of corporate data needed for decision-making.

Finally, Subject Matter Experts (SMEs) would be recruited for specific work assignments as needed. We anticipate a larger number of SMEs to be involved in this phase from field offices since work processes would be further analyzed, leading to detailed data analysis and new application proposals.

The following table summarizes the roles and responsibilities of the various parts of the organization.

Title	Name	Role/Comments
Architecture Implementation Director	Roger Hildebeidel, Special Assistant, WO-101	Overall BA development management including coordination with BLM leadership and program managers. BLM spokesperson for Architecture-related issues.
Architecture Oversight Board	<i>Board Members:</i> TBD, however there should a rep from each BLM State, and the overwhelming majority would be field managers with a minority of State or HQ-level personnel.	The Board provides business program oversight of all implementing strategic decisions and provides review, validation, and feedback at critical decision points of the process. Board will meet as necessary but this is not a full time assignment. Will validate the corporate data identification process.
Core Team	Peter Ertman, WO-800 (T) Renee Duval, WO-200 (D) John Bebout, WO-300 (P) Duane Dippon, ORSO (D) Clark Collins, WO-700 (part-time) (P) John Broderick, WO-300 (Advisor) (A)	Members of the core team assist the Architecture Implementation Manager by providing full time implementation staff. Each person represents one part of the PDAT equation (in parentheses) as well as the enterprise-wide business process owner.
Work Process Teams	Some combination or variation of these teams will be used as necessary.	These interdisciplinary (subject matter expert) teams will address BA needs from an on-the-ground perspective and continue the analytical approach from the initial phase.
IRMAC	Existing Committee	To maintain communications with the technical side of the Architecture.
Contractors	Various	Provides the process and analytical expertise and operational support for successful implementation.

~ Factors for Success/Barriers to Address ~

The over-riding factor is management commitment to providing the necessary resources to continue implementation and building-out the future BA components. This includes having knowledgeable field office staff available, when needed, for participation in the analytical phases as well as making the core team members available on a full time basis.

The second factor is to restrain employees' natural tendencies for proposing solutions before the analytical process is complete. Employees need to be mindful that any potential IT solutions are only one of the desired outcomes of this process. There are many "business" related benefits—outside of IRM—to be derived from this effort.

The third factor is the recognition of BLM's existing culture which can be described as highly decentralized and autonomous. In order to successfully implement our findings, each State and program area must be willing to make compromises and agree to data standards and standard operating procedures for the good of the entire organization. Management commitment in this area is vital for the Bureau to realize the optimal benefits from the investment in this effort.

Fourth, allied with the above cultural issue, is the need for active management participation in identification of what data and information is necessary to make proper 'business' decisions for the BLM as a whole. This may—sometimes—be in conflict with the perceptions of particular field specialists or individual office managers.

The final factor to address in managing the implementation of the BA, is the realization that this process will not yield the future BA in the short-term. While this effort looks to the future to guide current actions, the approach must produce incremental successes that continually move the Bureau towards the future. Additionally, the future will evolve as the business process requirements of the Bureau adapts to changing legislation, mandates, technologies, and public expectations. However, over the long-term, this effort must address all of these areas effectively and comprehensively. To do so will require that the BA process and horizontal perspective become institutionalized, changing how the Bureau values information and uses it to implement it's Strategic Plans.

~ Communications Points ~

In addition, we must effectively communicate the need for this effort and how and why it is different from previous efforts. Some ideas to consider are:

- Business (Program) need driven
 - P A joint Business/IRM quality improvement process
 - P Align IT with business, *not* business with IT
 - P Information/data are corporate resources shared by many applications and not just part of a single application

- Cross cutting look at business processes in horizontal dimension in addition to vertical
 - P Multiple points of review by Business Process owners
 - P Provides accountability of technical IT decisions to Business Process owners
 - P Rather than attempting to “grow” a vertical or “stove-pipe” application
- Build on previous business analysis and buy-in
 - P Much process analysis has been done in ABC and other efforts
 - P GPRA
 - P Cost Management
 - P Continuous Improvement
 - P Analytical tools are better today
 - P Will assist in workforce planning issues
- Cross cutting look at business processes in horizontal dimension, in addition to vertical:
- Method of setting priorities and sequence of implementation of investments
 - P Leads to value added for our investment
 - P Same as in other BLM decision processes, *e.g.* resource decisions
 - P Will provide information and tools to enable BLM to make better decisions
- Legislation requires it
- Budget resources won't be available without it

~ Charter Approvals ~

Recommended by:

BA Implementation Director

Concurred By:

Hord Tipton, CIO/AD-IRM

Pete Culp, AD-Minerals, Realty and Resource Protection

Henri Bisson, AD-Renewable Resources and Planning

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Approved by:

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Date

Appendix

Information Resources Management

