Workshop Summary

Business Activity Modeling
Of the
CEQ’s NEPA Regulations
(40 CFR 1500-1508)

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Workshop Background

In August, 2001, the USDA Forest Service IMI initiated a project to develop business process models that depict the activities a typical Ranger District would perform in order to comply with the National Environmental Policy Act (NEPA) and all other applicable laws and regulations during the project planning phase. The models were based on the Forest Service’s Environmental Policy and Procedures Handbook (FSH 1909.15), major environmental statutes and knowledge from District level staff. The product from this initial effort identified a need for the Forest Service to focus on examining more specifically the requirements of the NEPA statute and the CEQ’s regulations for implementing the procedural provisions of the NEPA (40 CFR Parts 1500 – 1508).

The initial effort to conduct business process analysis on the Ranger District project planning process was used in partial support of the Chief’s testimony on “process gridlock” in November 2001. During the review of the draft of the Chief’s testimony, CEQ became interested in the business process work and sought greater elaboration of the role of the NEPA statute and regulations in the Forest Service’s project planning and decision-making process. The CEQ and the Forest Service jointly undertook this modeling project through a contract with BusinessGenetics, a business consulting company. The modeling effort was designed to focus on the activities that Agencies were to perform in order to comply with the NEPA statute as defined by the NEPA regulations. The models were not intended to be a legal interpretation of those regulations.

A business activity model of the requirements set forth in the NEPA statute and regulations was developed during a series of workshops held between December 2001 and June 2002, in Washington, DC. BusinessGenetics (BG) facilitated the workshop and developed the models using their eXtended Business Modeling Language (xBMLSM). Subject matter expert’s (SME’s) involved in the workshops included representatives from the CEQ and the Forest Service’s EMC and IMI staff. The initial project effort focused on creating a foundation for an objective evaluation of the NEPA regulations and a benchmark for comparison against the initial project planning modeling effort that was initiated in August, 2001.

Workshop Approach

The steps followed to build the final business activity model of the existing CEQ NEPA regulations (40 CFR Parts 1500 – 1508) are described below.

Step 1

BusinessGenetics and IMI developed the initial business activity model based on the NEPA statute and the CEQ’s NEPA regulations. Each source reference, including the nine sections of the regulations, was represented in the model by a unique color-coding schema. The primary objectives of this step were:
(a.) Develop a complete WHAT activity model of the statute and regulations to serve as a reference model for the rest of the modeling effort. A reference model is structured as an exact duplicate of the order in which the activities are found in those documents.

(b.) Create a foundation for evaluation and organization of the activities from a compliance and implementation perspective for evaluating how the activities are currently being performed in order to comply with NEPA.

**Step 2**

A validation workshop was conducted with the CEQ and FS participants to ensure the models accurately reflected the NEPA statute and regulations and gain consensus on categorizing each activity as required (R), situational (S) or optional (O). **Required** activities are specifically mandated by the NEPA statute or regulation, e.g. an agency shall do a certain activity. **Situational** activities are actions that must be done but only if certain conditions exist. **Optional** activities are those an agency should consider while performing NEPA analysis but not required to do. The version of the model created during Step 2 retained the same structure as the statute and regulations.

**Step 3**

The workshop team collaboratively analyzed the model to identify possibilities for re-organizing the activities into a more logical sequence from an implementation perspective. The Team then began development of a new activity model based on this new structure. The new model reflected four primary groupings of activities found in the regulations:

1. Responsibilities to support an agency’s capability for compliance such as establishing Agency-wide procedures.
2. Management considerations to facilitate NEPA compliance during implementation at the program and project levels.
3. Process requirements and criteria to ensure NEPA compliance during implementation at the program and project levels.
4. Responsibilities unique to the CEQ and the Environmental Protection Agency.

The overall modeling effort was iterative and provided for consideration and consolidation of redundant business activities as each version of the activity models was developed. The original color-coding of activities (based on the original section of the regulations from which they were drawn) was retained. The color-coding helped to visually keep track of the exact source of each activity and provided for some common discussion points for key concepts in the statute and regulations.
The Final WHAT Activity Model

Several interim work-products were produced to support each workshop. Within the context of xBML, a final representation of a Business Activity (“What”) Model was completed for both the NEPA statute and the CEQ NEPA regulations. The final WHAT models for the NEPA statute and regulations will be accessible through the IMI World Wide Web site under the Business Requirements section at:

http://www.fs.fed.us/institute/biz.html

General Observations

Overall, the modeling workshops included some good discussions and effectively provided for a facilitated consensus between CEQ and FS representatives on individual business activities represented in the NEPA statute and regulation. Each participant was asked to offer some general observations about the workshop that other members of the group could consider and reach consensus. The observations commonly shared by all members of the group are presented in this section.

1. The regulations contain common points of discussion represented in multiple sections and often repeatedly referenced throughout the regulation (e.g., authority to reduce paperwork). Each section of the regulation must be carefully examined to ensure a complete understanding of key guiding direction. This is graphically reflected in the business activity model where multiple colors, representing direction from different sections of the regulation, are grouped under a common implementation theme.

2. The current content of the regulation is not organized as a procedural guide for implementation. Instead, the current regulation is focused primarily along the lines of selected guiding principles; reducing paperwork, reducing delay, providing for timely and appropriate consideration of NEPA policies, and emphasizing public involvement and significant issues.

3. The regulations speak primarily to the development of EIS documents and allow implementing agencies to develop their own direction on the appropriate process for developing an Environmental Assessment (EA) document.

4. The NEPA regulation offers flexibility in compliance by allowing for optional and situational activities along with specific required activities.

In addition, the workshop discussions identified some possible implications given the current organization of the regulations and the Forest Service’s compliance with NEPA requirements:

1. Relative to points 1 and 2 above, the organization of the NEPA regulations is not unusual compared to other guiding regulatory direction but does defer
interpretation and implementation issues to the Agencies. Consequently, this creates an environment for project-specific interpretation and potentially inconsistent implementation between Federal agencies.

2. Implementation direction for Categorical Exclusions and Environmental Assessments are left to individual agencies to develop (with CEQ approval), allowing for potentially different interpretations by agencies. This situation gives agencies the freedom to coordinate and apply NEPA in ways that best reflect their unique decision-making processes and management systems.

3. The optional and situational activities add complexity and length to the regulations while providing flexibility during implementation. This flexibility allows for different interpretations, and potential inconsistencies, between agencies.

4. Specific direction on what constitutes a “major federal action significantly affecting the quality of the human environment” is left to the agencies to develop for their particular decision-making processes, management systems, and environmental issues.

**Potential use of the NEPA WHAT Activity Model**

The business activity model constructed using the CEQ’s NEPA regulations is only the first step in an analysis of how NEPA is implemented within the Forest Service. The development of a corresponding Business Information Model (“Which Info”), Temporal Model (“When”), Organizational Model (“Who”), Locality Model (“Where”) and a Business Operational Model (“How”) was not within the scope of this work. The model does not reflect how NEPA fits into the Forest Service’s overall project-level decision-making framework.

The CEQ NEPA WHAT Activity model can provide a solid basis for building a more comprehensive WHAT Activity model of a typical Forest Service decision-making process used during the project planning phase of resource program management. The model could be merged together with the District level project planning model developed by IMI and BusinessGenetics in 2001 (See Workshop Background section). An analysis and comparison of the two models may identify where efficiencies can be gained in collecting and managing data needed for project planning and decision-making. The analysis could also identify which activities are being performed that are required by statute and regulation compared to activities that are being done for other reasons (e.g. Manual and Handbooks, case law or informal direction).
The NEPA WHAT model could have immediate utility in NEPA training for agency personnel and in answering routine compliance questions. With the addition of some basic information for project management, the model could be converted to a practical application for managing the NEPA process at the Ranger District and Supervisor’s office level. The project management model could include, for each relevant activity, specific action items and responsible persons. For example, each activity box could include:

- Status:
- Objective:
- Action Plan:
- Performance Deadlines/Measures:
- Points Of Contact:

The models could be used by other agencies to model their own regulations and decision processes. The models could also be useful to examine potential changes or clarifications in the CEQ NEPA regulation content and/or structure.
Appendix I

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