

1310.06 Information Processing and System Development: Requirements

Issued January 1, 1994

SUBJECT: Information Processing and System Development: Requirements.

APPLICATION: Executive Branch Departments and Sub-units.

PURPOSE: To provide the procedures and guidelines governing the development of effective automated information systems.

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SUMMARY: This procedure establishes guidelines and requirements for information processing system development activities and methods. It establishes project management, quality assurance and project reporting functions which become requirements when a system development project qualifies as a large scale project. A project becomes "large scale" when a total score of 100 or greater results from various project characteristics being input into a Project Assessment Worksheet (PAW) algorithm. The PAW is described in Procedure 1310.10.

APPLICABLE FORMS: Feasibility Study Report (FSR).
Project Assessment Worksheet (PAW).

PROCEDURES:

General Information:

This procedure is issued to provide guidance to agency management in the implementation and application of techniques and processes designed to improve their ability to deliver automated information systems which:

- Produce reliable systems which meet the needs of the agency.
- Are implemented on time.
- Avoid cost overruns.

Specifically, procedures are set forth for the use of:

- A system development life cycle method.
- Project management techniques.
- Quality assurance practices and procedures.

Additional policies are set forth for those automated information systems qualifying as large-scale projects.

Agency:

- Will adopt the use of a system development life cycle (SDLC) for automated information systems.
- Is free to select the SDLC method and, if appropriate, supporting computer-aided software engineering (CASE) tools that best suit their needs. The SDLC selected, however, must meet the following minimum standards:
 - Be comprised of a phased discipline addressing the entire scope of the project beginning with project initiation through post-implementation review.
 - Require that system objectives and information requirements be defined; that system alternatives be developed and evaluated; that complete project plans for development and implementation be established; and that the system's end-users be involved in all phases.
 - Require that a detailed design be produced which describes how the system will be structured to meet objectives.
 - Require that program specifications be documented and that a thorough systems test be developed and executed successfully prior to system implementation.
 - Require that, at the time of installation, all needed physical resources are available, end-users have been trained, data has been converted and system monitoring is in place.
 - Require completion of a system post-implementation review and evaluation.
- Upon selection of an SDLC method and CASE tools, will certify to DIT that they meet or exceed the minimum standards. Until such time as the agency selects its own SDLC method, SDM-70 will continue to be the State standard (See Procedure 1310.07 for detailed guidelines).
- Will adopt the use of project management techniques to assist the project manager in the ongoing assessment of resource consumption, allocation and administration (See MDIT Procedure 1310.08 for detailed guidelines).
- Will establish and institute quality assurance standards and guidelines for each phase of the SDLC (See Procedure 1310.09 for detailed guidelines).
- Automated information systems believed to be large-scale, as defined above, will be reviewed by the Bureau of Strategic Policy (BSP) for final determination. For purposes of this review, submits a Service Request and a Project Assessment Worksheet (PAW) to BSP (See Procedure 1310.10 for details). Barring unforeseen circumstances, BSP review of the PAW will be completed within 15 working days of receipt.
- An automated information system determined to be large-scale will be subject to the procedures that follow. All other automated information systems are not required to follow these procedures.
 - Agency will prepare and submit a Feasibility Study Report (FSR) to BSP for review and approval (see Procedure 1310.10 for details). The purposes of the BSP review are to:

- Ensure that appropriate processes are in place for systems development, project management and quality assurance.
- Ensure that there is agreement among agency executive management, program management, and project management as to:
 - The nature, benefits, schedule, and costs of a proposed project.
 - Their respective management responsibilities over the course of the project.
- Provide DIT with sufficient information to determine the nature and extent of project oversight requirements.
- Agency will identify a project manager who will be responsible for all activities associated with the development and implementation of the system and be accountable for the project. Identification by name, Civil Service classification, and organizational position is required.

Brief justification must also be provided for the named project manager. Such justification should demonstrate that the project manager has the knowledge and experience necessary to manage and control the project successfully.
- Agency will submit quarterly reports to BSP describing overall progress against published work plans. Particular emphasis should be placed on those factors which may affect the timely implementation of the system within the authorized funding allocation (see Procedure 1310.10 for details).

BSP:

Upon review of the selected agency system development method, will forward a written response with comments and/or approval within 10 days of receipt of descriptive documentation.

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