

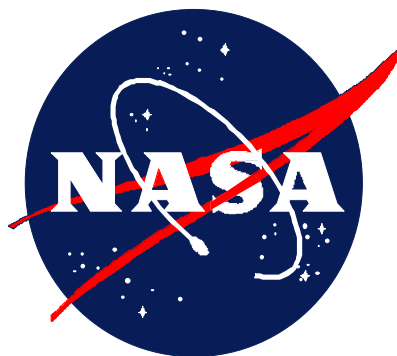
**Office Work Instruction**

HQOWI 7410-Y006A  
Effective Date: April 19, 1999

Responsible Office: YB/Business Management Division

**Subject: Formulate the ESE Budget**

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**OFFICE WORK INSTRUCTION**

**FORMULATE THE ESE BUDGET**

**(Conforming to ISO 9001 Quality System Requirements)**

<b>Earth Science Enterprise Office Work Instruction</b>		
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**DOCUMENT HISTORY LOG**

<b>Status (Baseline/ Revision/ Canceled)</b>	<b>Document Revision</b>	<b>Effective Date</b>	<b>Description</b>
Baseline		11/30/98	
Revision	A	4/19/99	Section 2.0: Added text to describe budget procedures as ESE's method for ensuring customer requirements are understood and can be met. Section 4.0: Deleted references not called out in the procedure. Section 5.0, Flowchart; Section 6.0, Procedure; and Section 7.0, Quality Records: Updated to identify certain inputs and outputs as electronic. Section 7.0: Added NPG 1441.1 reference.

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### **PREFACE**

The NASA Office Work Instruction (OWI) for Formulate the ESE Budget documents the tasks and activities in conformance with the International Organization for Standardization's (ISO) 9001 requirements for quality systems. The OWI supplements the *NASA Strategic Plan*, the *NASA Strategic Management Handbook*, and other higher level NASA directives, which form the basis for how NASA conducts business.

This OWI is not intended to duplicate or contradict any other NASA policy, procedures or guidelines, which currently exist. As such, the OWI will reference prevailing documents where a topic is addressed and existing coverage is deemed adequate. Additional information provided within is intended to supplement existing documentation regarding Headquarters (HQ) implementation of strategic and program/project management, as well as HQ conformance with the ISO 9001 Quality Management System (QMS) requirements.

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## 1.0 PURPOSE

This OWI documents the NASA Earth Science Enterprise (ESE) procedure for formulating the ESE budget.

## 2.0 SCOPE AND APPLICABILITY

2.1 Scope. The ESE budget formulation procedure includes preparing Program Operating Plan (POP) guidelines, assessing NASA Center budget submittals, and developing the ESE budget recommendation. It also includes performance planning as an integrated part of developing the ESE budget recommendation.

ESE budget formulation activities, together with the activities described in HQOWI 7410-Y007, *Advocate the ESE Budget*, and in HQOWI 7410-Y008, *Execute the ESE Budget*, provide ESE with a systematic and documented method for ensuring that ESE understands and can meet its customers' needs. These activities provide the objective evidence that requirements are adequately defined, differences are understood and resolved, and reviews are done to determine if the capability exist to meet customer requirements. ESE documents its understanding of the requirements and determines its capability to meet customer requirements through budget formulation and internal budget advocacy activities. ESE identifies and resolves discrepancies with OMB and Congress through external advocacy activities. The ESE portion of the Agency Operating Plan, established in budget execution activities, reflects the agreement between ESE and the Congress on program content. The operating plan tracks back to the Congressional appropriation, and documents how the Enterprise plans to spend the funds to ultimately meet customer requirements.

2.2 Applicability. This work instruction for Formulate the ESE Budget applies to the NASA Office of Earth Science (OES, Code Y) offices and divisions. The Associate Administrator for Earth Science is responsible for maintaining this document. The controlled version of this OWI is available on the World Wide Web (WWW) via the HQ ISO 9000 Document Library at <http://hqiso9000.hq.nasa.gov>. Any printed version of this OWI is uncontrolled (reference: HCP 1400.1, *Document and Data Control*). Proposed revisions will be accomplished by following HQOWI 1410-Y015, *Approve Quality Documents*.

## 3.0 DEFINITIONS

Appendix B of the *Earth Science Enterprise Management Handbook* provides ESE-specific terms and definitions.

## 4.0 REFERENCES

The following document contains provisions that, through reference in this OWI or in policy or procedure documents, constitute the basis for the documented procedure:

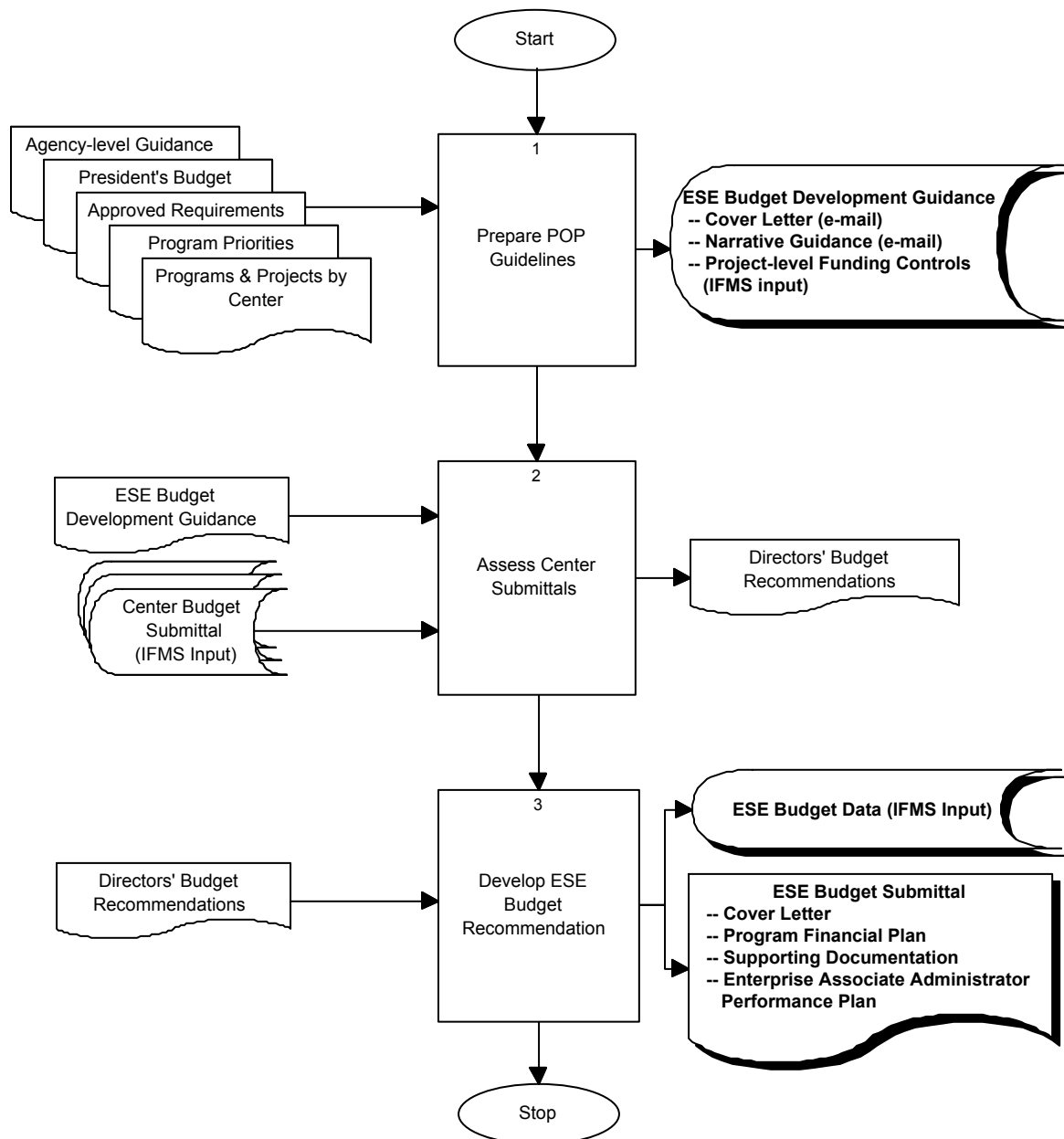
NPG 1000.2

NASA Strategic Management Handbook

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## 5.0 FLOWCHART

The following flowchart depicts the procedure described in Section 6. Outputs in boldface type represent the quality records listed in Section 7.



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## 6.0 PROCEDURE

The budget formulation process is often equated with the development of the Program Operating Plan (POP). The objective of the POP is to establish the budget requirements for the budget year (current year plus two) and the four subsequent years. The main result of this process is a Program Financial Plan (PFP). Additionally, project content, schedules, and funding plans are often adjusted to enable the total ESE program to stay within its budget envelope.

The following table describes the flowchart of Section 5.

<u>Actionee</u>	<u>Action</u>
Associate Administrator  Business Management Division  ESE Technical Division Directors	1 <u>Prepare POP Guidelines.</u> The POP guidelines establish the funding envelope for the ESE program in its entirety, as well as for individual projects. In addition, the guidelines provide data requirements and formats, a budget preparation schedule, and specific direction to projects regarding, for example, assumptions, option analysis, and unique data requests. The guideline preparation activity includes the following major tasks: <ul style="list-style-type: none"> <li>❑ <i>Receive Agency-Level Guidance.</i> Agency-level guidance is issued shortly after the President's budget is submitted to Congress in late January of each year. The President's budget documents the Agency's baseline program. This baseline, which may be adjusted by the NASA Administrator, essentially forms the Agency-level guidance for budget formulation. The Agency-level guidance may cover topics such as full-cost accounting, core competencies, and the results of other major Agency initiatives. This guidance is obtained as part of a Capital Investment Council (CIC) meeting chaired by the NASA Administrator. A Senior Management Council (SMC) meeting, also chaired by the NASA Administrator, also may be used to provide a strategic framework for budget formulation. Details of this organizational structure, the responsibilities of the participants, and the management processes used to determine the Agency's strategic direction are provided in NPG 1000.2, <i>NASA Strategic Management Handbook</i>.</li> <li>❑ <i>Establish ESE Budget Development Guidance.</i> The Business Management Division prepares the ESE budget development guidelines with the participation of the Associate Administrator and the technical divisions (Research; Applications, Commercialization, and Education; and Program Planning and Development). The technical division directors recommend priorities and policy implementation guidelines. The Business Management Division identifies available funds and any budget changes. With this information, the Associate Administrator and technical division directors collectively interpret Agency guidelines and set the overall program priorities and budget strategy for the upcoming process. The Business Management Division then drafts both numeric and narrative guidance consistent with this direction.</li> <li>❑ <i>Coordinate ESE Guidance with Technical Divisions.</i> The Business Management Division coordinates the draft guidance with the technical divisions, and incorporates comments into the guidance as appropriate.</li> </ul>

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- ❑ *Develop Funding Controls.* The Business Management Division develops project-level funding controls to be consistent in total with the most recently submitted President's budget. There is often some redistribution between projects to accommodate the latest approved requirements or to reflect changes in program priorities. These controls are broken out by Field Center and within each Field Center by project. In some instances -- such as Research and Analysis -- the precise distribution by Field Center cannot be determined until the specific tasks are selected. In such cases, an estimate is provided to the Centers to enable each Center to properly size its institutional base. The Business Management Division inputs the funding control data into NASA's Integrated Financial Management System (IFMS).
- ❑ *Prepare Cover Letter.* A cover letter from the Associate Administrator for Earth Science to the Field Centers accompanies the funding controls and narrative guidance. The Business Management Division Team Lead for Resources prepares this memo. It generally includes a brief review of recent accomplishments, the overall Enterprise strategy for budget development, and a discussion of the program and project areas that will receive special emphasis during the budget development cycle.
- ❑ *Integrate and Distribute POP Guidelines.* The Business Management Division provides all components of ESE guidelines to the Office of the Chief Financial Officer (Code B). The cover letter and narrative guidance are provided via e-mail, while the funding controls are provided via IFMS. Code B establishes the overall budget schedule and requirements, integrates the guidelines from all Headquarters Program Offices and Headquarters Staff Offices, and distributes the guideline package to the Centers.

Business Management 2  
Division

ESE Technical  
Division Directors

Technical Division  
Program Executives

Technical Division  
Science, Applications,  
and Education (SAE)  
Program Managers

Assess Center Submittals. The assessment of Center POP submittals is conducted as a joint activity between the Business Management Division and the ESE technical divisions. The purpose of this activity is to develop program and budget recommendations from the technical division directors to the Associate Administrator for Earth Science. This activity includes the following major tasks:

- ❑ *Integrate Center Inputs.* The Business Management Division reviews the Center inputs to ensure that the inputs provide all the required data in the appropriate formats. In the case of the GSFC (for which the OES serves as the Institutional Program Office), the Business Management Division distributes the submittal package to the other Headquarters Program Offices such as the Office of Space Science (Code S) as well as to the Headquarters Staff Offices. After all the required data are received, the Business Management Division summarizes the data at a high level to determine the variances from the guidelines.
- ❑ *Identify Issues.* Business Management Division program analysts work with the technical divisions to identify all significant issues based on the data from the Center submittals. Data may be gathered during POP reviews with the Centers. These issues may include variances in the budget relative to the guidelines, milestone changes, technical problems, contract or subcontract growth, and usage of reserve



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levels. These issues form a basis for further investigation and analysis. If sufficiently significant, they may be presented on a preliminary basis to the Associate Administrator for direction as to the range of options that should be pursued.

- Develop Budget Recommendations.* Business Management Division program analysts work with the appropriate program executives and science, applications, and education (SAE) program managers in the technical divisions to develop budget recommendations on a project-by-project basis. These recommendations are designed to resolve issues by rebalancing the budget within and across projects as necessary, and may involve trade-offs of funds between fiscal years. The program analysts, program executives, and SAE program managers present their recommendations to the appropriate division director, who may accept the recommendations or direct that additional work be done, usually an assessment of additional options or alternatives.
- Develop Program Options.* This is essentially a second iteration of the previous activity, except that it is usually begun after the technical division director has reviewed all of the projects in his/her division and has an understanding of the total difference between the initial recommendation and the available budget. The technical division director, staff, and appropriate program offices develop the options necessary to ensure the program fits within the guidelines. Option development involves analysis of alternative approaches, such as schedule changes, use of alternative launch vehicles, and changes in technical scope.
- Develop and Present Budget Recommendations to the Associate Administrator.* The division director reviews the options, and recommends the funding level for each project in his/her division. The Business Management Division develops formats consistent with full-cost budgeting to include all project cost elements such as development, operations, and launch vehicle. The formatted funding levels form the main component of a presentation from each division director to the Associate Administrator. This presentation provides each director's budget recommendations to the Associate Administrator.

Associate Administrator  
Business Management Division

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Develop ESE Budget Recommendation. In this activity, the Associate Administrator determines the final ESE budget recommendation. This activity includes the following major tasks:

- Develop Preliminary ESE Budget Recommendation.* Following the presentation of the division directors' budget recommendations to the Associate Administrator, the Business Management Division consolidates the recommendations and provides the Associate Administrator with a total budget summary. The Associate Administrator reviews this summary and makes adjustments on the basis of considerations such as changes in Agency or Enterprise priorities, political factors, and project performance. These adjustments form a preliminary ESE budget recommendation.
- Resolve Remaining Issues.* The preliminary ESE budget

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recommendation will usually have a small number of remaining issues that must be resolved in order for the program to stay within the funding guidelines. The Associate Administrator and the Business Management Division identify and define these issues. The Business Management Division, working with the technical divisions as appropriate, may then develop a brief set of solution options for the Associate Administrator's consideration.

- ❑ *Develop Final ESE Budget Recommendation.* The Associate Administrator reviews the final set of options, considers the overall budget situation, and makes whatever final decisions are necessary to balance the total program to the guideline level. It is also at this time that the Associate Administrator makes the final decision as to any potential program augmentations -- that is, whether or not to request funding in excess of the guidelines to, for example, support new mission starts, resolve major budget problems, or expand the scope of existing missions.
- ❑ *Submit ESE Budget Recommendation to the Office of the Chief Financial Officer.* The Business Management Division inputs the recommended ESE budget data into the IFMS and prepares the ESE submittal to the Office of the Chief Financial Officer. The submittal consists of a letter from the Associate Administrator summarizing the Enterprise's budget priorities and issues, a Program Financial Plan, and supporting documentation as required by the Office of the Chief Financial Officer. The Program Financial Plan presents the budget data as entered into the IFMS. The supporting documentation usually consists of budget traces which display changes from the previous year's baseline to the current recommendation, content charts which show a lower level of budget detail than is contained in the Program Financial Plan, and several formats which are required for the Agency's reporting to the Office of Management and Budget. Additionally, the budget submittal includes performance goals and metrics. NPG 1000.2, *NASA Strategic Management Handbook*, Section 5.4.1, establishes the requirement for an integrated Enterprise Associate Administrator Performance Plan.

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## 7.0 QUALITY RECORDS

RECORD IDENTIFICATION	OWNER	LOCATION	MEDIA Electronic or Hardcopy	SCHEDULE AND ITEM NUMBERS*	RETENTION / DISPOSITION
ESE Budget Development Guidance	Resources Team Lead	Business Management Division	Electronic	Schedule 7, Item 21, "Budget and Programming Resources / Apportionment Files," paragraph D.1.	Destroy 2 years after the close of the fiscal year.
ESE Budget Data (IFMS Input)	Resources Team Lead	Business Management Division	Electronic	Schedule 7, Item 21, paragraph D.1.	Destroy 2 years after the close of the fiscal year.
ESE Budget Submittal	Resources Team Lead	Business Management Division	Hardcopy	Schedule 7, Item 21, paragraph D.1.	Destroy 2 years after the close of the fiscal year.

\* Quality Records are retained in accordance with the referenced schedule and item numbers from NPG 1441.1, *NASA Records Retention Schedules*.