SPA Policies

1/19/00

1. Strategic Planning & Architecture

Introduction: The Information Management Team (SC-621) follows a well-defined process called a "lifecycle" to provide IM products and services that meet the business needs of the Office of Science Headquarters. The following organizational view of this lifecycle reflects the critical role played by strategic planning.

The process starts with the identification of IM needs to support SC Headquarters business activities. A strategic plan is developed for the delivery of services over the next five years. An operating plan is then developed that outlines the projects and resources needed to deliver the services included in the first year of the strategic plan.

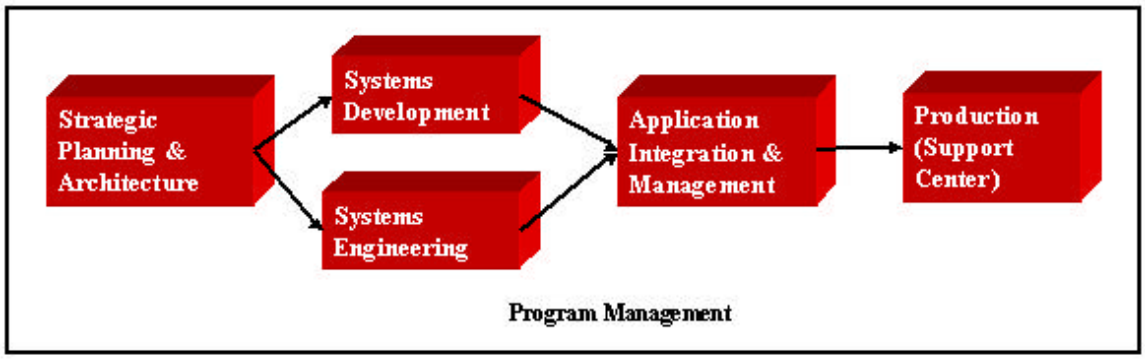

Figure 1 – IM Lifecycle

In accordance with the operations plan, system applications and technology to support those applications are developed in the Systems Development and Systems Engineering boxes. Projects that are completed and ready to go into daily use (i.e., production) must go through a rigid integration process (e.g., testing, documentation review, training, roll-out to the user) to ensure the structured delivery of a quality product to the user. This occurs in the Application and Integration Management portion of the Lifecycle. Finally, the product goes into production where ongoing maintenance is performed and assistance is provided to the customer through the Support Center.

Summary Strategic Planning and Architecture Policy Description: All IM products and services provided to SC Headquarters staff require planning, communications, and lifecycle methodologies. The following policies support the implementation of these methodologies to ensure that the right IM products and services are pro0vided in the most cost-effective and efficient manner possible.

Policy1.1 Information Architecture

1.1 The Information Architecture methodology as required by the Clinger-Cohen Act will be employed to determine what IM products and services will be provided to SC Headquarters. Capabilities put into place independently outside of this process will not be supported. The information architecture methodology ensures that only IM products and services supporting business needs will be implemented; systems and capabilities will be interoperable (e.g., word processing and graphics software work together in an integrated way, new capabilities easily integrate with existing ones); data will be shared; and corporate needs will be placed before individual needs. The goal will be to provide everyone with the business information they need, whenever and wherever needed, and in a useful format.

1.1.2. The Information Architecture will have the following eight components:

Principles: The rules by which IM decisions will be made.

Business Model: A hierarchical definition of all business activities.

Information Resource Catalog (IRC): A repository of information describing all information systems and technology platforms currently in use.

Data Architecture: A model of all data needed to support the business activities (i.e., types of data, definitions, and relationships).

Applications Architecture: A set of automated capabilities (e.g., software applications) needed to support the business activities.

Technology Architecture: The technology infrastructure needed to support the business activities, data needs, and applications needs. The technology architecture will be based on industry, governmental, and de-facto standards.

Strategic Plan: A five-year plan to deploy IM products and services in support of the business activities based on the previous six components.

Operating Plan: A detailed one-year IM plan to implement the first year of the Strategic Plan based on the approved budget.

1.1.3. The Information Architecture will cover only SC Headquarters IM needs. However, the Information Management Team will work with the SC Operations Offices to develop common plans and collaborate on selected projects to leverage resources.

1.1.4. All components of the Information Architecture will be updated annually. Customers who identify significant needs in the middle of the fiscal year (i.e., between updates) should contact the Support Center. (See Support Center Policy 5.6.7)

1.1.5. Update of the Information Architecture will involve all levels of business users to ensure it is business focused and driven by business needs. The Customer Information Advisory Group will be heavily involved during this process. This Group is responsible for providing input and feedback on IM services, communications, policies, and rollout plans. It is made up of one working level representative from each SC Headquarters program organization

1.1.6. Approval of the updated Information Architecture will first be required by the IM Board and then by the ESC Executive Steering Committee. The IM Board is responsible for approving the Information Architecture update and monitoring IM operations. It is made up of one senior level representative from each SC Headquarters direct report organization.

1.1.7. The Strategic Plan will be the foundation for the formulation of the IM budget.

Policy 1.2. <u>Communications</u>

1.2.1. SPA will keep customers informed through periodic and one-time communications about:

- ✓ what IM services are currently available and how to take advantage of them,
- ✓ what new IM services are expected to be delivered and when, and
- ✓ the process used to determine what new IM services will be delivered and how to become involved.

Periodic communications will include such things as quarterly publications of the "IM Today" newsletter, updates of the Information Management Team homepage, the IM on-line "Roadshow," and presentations to the Executive Steering Committee, the SC IM Board and the Customer Information Advisory Group. One-time communications will include IM surveys, e-mail messages from the Support Center, and other special interest e-mails.

1.2.2. SPA will maintain formal customer representative groups as necessary to ensure involvement in the planning process and input on IM services. SPA will serve as the Executive Secretary for such groups. The SC Headquarters IM Board and the Customer Information Advisory Group are the current customer representative groups. Customers with questions about how to be involved in the planning process should contact their representatives on either of these groups or a member of the IM Team (SC-621).

Policy 1.3. <u>Information Management Lifecycle</u>

1.3.1. The "lifecycle" employed by the Information Management Team (depicted in the Introduction above) will be reviewed and updated annually to ensure that it is well-defined, rigorously followed, incorporating best practices, continuously improving, and enabling the effective provision of IM products and services.

1.3.2. Policies will be written and updated annually for each component of the "lifecycle" to ensure the effective provision of IM products and services.

1.3.3. Performance measures will be developed annually for each component of the "lifecycle" to assess the productivity, timeliness, quality, cost, and customer satisfaction of IM activities. Each component's performance against those measures will be evaluated quarterly and appropriate adjustments made to ensure the effective provision of IM products and services.

1.3.4. Budget execution meetings will be held monthly with all "lifecycle" components to ensure adherence to the approved budget and maximum utilization of funds.