

Environmental Satellite Processing Center (ESPC) Operational Analysis FY08 OA Analysis

The operational analysis (OA) is an annual, in-depth review of ESPC program's performance based on the following:

- Customer Results
- Performance Measures
- Strategic and Business Results
- Financial Performance
- Innovation

The focus on this analysis will include a review FY08 performance, measures and results highlighting significant achievements/ performances. An historical review/ comparison of FY07OA will also be conducted to highlight significant information and contributions.

1.0 Customer Results

In FY2008, all products formerly processed by SATEPS were successfully transitioned into the ESPC operations. These products provide the required outputs and continue to satisfy customer-focused outcomes. The ESPC program operates 24 hours per day/7 days per week. The Critical Infrastructure Protection System (CIP) Phase 1.0 has been commissioned. This mitigates the risks associated with having a potential single point of failure for ingesting, processing and disseminating mission critical environmental satellite data to the National Weather Service (NWS), the Department of Defense (DoD), other agencies and private sector companies that protect life and property as well as providing for the economic well being of the Nation.

1.1 Performance Measures

Four performance measures track the timeliness and accuracy of ESPC program's performance, in direct alignment with customer requirements

- (1) Accuracy of Service delivered – Customer requirements reviewed and revalidated;
- (2) Number of Products transitioned per operational year;
- (3) % of NOAA satellite data processed and delivered within targeted time;
- (4) % of non-NOAA satellite data processed and distributed within targeted time.

The performance measures evaluate the accuracy and timeliness of the data transmitted from environmental satellites to our primary and end-user customers. In FY07, ESPC added milestones that link to the established Performance Measures. These milestones are for the transition of new METOP products and the Microwave Integrated Retrieval System (MIRS) into operations. Metrics have been reported on a quarterly basis.

Customer Results; Customer Requirements Reviewed; Threshold 1 per year. FY2008 Actual Results 1 Actual result is through 4th Quarter FY08

Mission and Business Results; Products Transitioned Threshold 6 per year. FY2008 Actual Result 17 (+283%) Actual result is through 4th Quarter FY08

Processes and Activities; Timeliness Threshold 98% per year. FY2008 Actual Results 98.13% (+0.13%) Actual result is through 4th Quarter FY08

Technology; Percent of non-NOAA Satellite data processed and distributed within targeted time Threshold 85% per year. FY2008 Actual Result 88% (+3%) Actual result is through 3rd Quarter FY08*

2.0 Strategic and Business Results

The ESPC program is meeting its own goals and objectives as well as those of the agency. Program management and controls are in place to ensure the program continues to meet its goals and objectives and monitor how well the ESPC program performs.

2.1 Program Management and Controls

ESPC will maximize the benefits of the common IT environment by combining processes, eliminating redundancies, and lowering refresh costs.

The ESPC performs extensive, continuous Operational Analysis on the performance of its components. This ensures system resources and ancillary supporting infrastructure (security, training, facilities, etc.) as well as labor resources remain optimally functional and configured to suit the NESDIS/NOAA's goals.

2.2 Monitoring Cost, Schedule and Performance

Cost – The ESPC conducts a variety of budget analyses throughout the fiscal year. Obligations and expenditures are tracked on a weekly basis. Labor costs and full time equivalent usage are tracked on a bi-weekly basis. Key budget issues and risks are identified through these reviews and tracked by ESPC management.

Schedule – The annual operating plan is used to track key milestones. The final matrix annual operating plan based on FY08 appropriations established the FY08 schedule.

Performance – Contract performance is monitored to support both budget and performance measurements. ESPC operations are conducted utilizing contractors.

All of these elements are provided to Ground Systems management via a monthly project report summarizing cost, schedule, and performance

2.3 Security

ESPC is a government system operated by government staff and contractors using government-owned equipment, and residing in a government facility. Contractors provide operational and development services. The required security clauses are inserted in the

ESPC IT services contracts by the Contracting Officer and independently verified by the Information Technology Security Officer (ITSO).

ESPC has an approved System Security Plan, Risk Assessment, and Contingency Plan in place. Management, operational and technical security controls are in place to ensure the confidentiality, integrity, and availability of information. ESPC received an Authority to Operate (ATO) on April 15, 2008 for a period of 3 years. Vulnerability scans of the ESPC system are routinely performed under the direction of the ESPC Information Systems Security Officer (ISSO) and the results reported to the NESDIS Office of the Chief Information Office (OCIO). A Plan of Action and Milestones (POA&Ms) are tracked and reported by the ISSO as well as a Security Corrective Action Plan (CAP) that provides mitigation for a critical subset of POA&Ms that stands to considerably enhance the security posture of the ESPC system.

2.4 Performance Measures

Contractor Performance; Requirements and Metrics are Reviewed by Evaluation Board; Threshold 2; FY2008 Actual Results 2; Completed in 2nd and 4th Quarters FY08

3.0 Financial Performance

Cost – The program planned costs vs. actual costs are shown in Figure 1. Program costs consist of labor and benefits for full time permanent staff dedicated to ESPC, travel, communications, supplies and equipment, and corporate overhead. To date, actual costs are equal to budgeted costs.

Total planned expenditures for the Fiscal Year 2008 were approximately \$7,330,121.76; actual expenditures were approximately \$ 7,323,557.70.

Schedule – All ESPC Operations and Maintenance activities to date are on schedule.

4.0 Innovation to Meet Future Customer Needs

Improve 24/7/365 Customer Services- ESPC will maximize the benefits of the common IT environment by combining processes, eliminating redundancies, and lowering refresh costs.

Improvements to Pre and Post Launch Operations- Improvements to the ESPC pre- and post launch activities.

Improvements to Ingest Operations- ESPC ingest requirements for the following elements will be improved.

Improvements to Processing Operations- ESPC improvements to operational product requirements will include the following areas. This streamlining will also include analyzing automated on-line processing capabilities that will allow the ESPC Operational

Staff to more quickly and efficiently identify problems and assist in diagnosing the problem and developing the solution.

Improvements to Critical Infrastructure Protection System (CIP) Operations- Phases 2.0 and 3.0 are envisioned which will provide a more comprehensive backup for all of ESPC mission critical products to users, including GOES and non-NOAA data sources.

Improvements to Data and Product Distribution Operations- ESPC service a large, unique set of customers for its respective data and derived products.

Improvements to the ESPC Helpdesk Operations- ESPC will be providing operational customers with a single point interface for operational data and products distribution. Other improvements include the deployment of a Customer Relationship Management (CRM) tool that will provide 24x7 call center for operational issues and customer problem resolution.

Additionally, to assist our ESPC operations staff in identifying and resolving issues, a contract to perform a study to analyze automated on-line monitoring tools is planned to determine if tools are available to assist in this function.

Improvements to ESPC IT Security

ESPC improvements to IT Security will include the following areas:

- Develop Control Policies and Procedures for the 17 NIST 800-53 High Baseline Security Control families.
- Implement Enterprise level tools within the ESPC environment for centralized user account management, policy & procedure assurance, centralized inventory management and event monitoring.