Exhibit 300: Capital Asset Summary

Part I: Summary Information And Justification (All Capital Assets)

Section A: Overview & Summary Information

Date Investment First Submitted: 2009-06-30
Date of Last Change to Activities: 2012-08-16
Investment Auto Submission Date: 2012-02-29
Date of Last Investment Detail Update: 2012-06-29
Date of Last Exhibit 300A Update: 2012-06-29
Date of Last Revision: 2012-08-16

Agency: 006 - Department of Commerce **Bureau:** 48 - National Oceanic and Atmospheric Administration

Investment Part Code: 01

Investment Category: 00 - Agency Investments

1. Name of this Investment: NOAA/NESDIS/ Environmental Satellite Processing Center (ESPC)

2. Unique Investment Identifier (UII): 006-000003213

Section B: Investment Detail

1. **Provide a brief summary of the investment, including a brief description of the related benefit to the mission delivery and management support areas, and the primary beneficiary(ies) of the investment. Include an explanation of any dependencies between this investment and other investments.**

Purpose and Scope. The Environmental Satellite Processing Center (ESPC) is NOAA's primary data processing and distribution system for the Nation's satellite-derived environmental products and services. Benefits and Beneficiaries. ESPC operates 24 hours a day, 7 days a week to provide critical weather and environmental satellite products and services to NOAA customers, such as NOAA's National Weather Service (NWS) and National Ocean Service (NOS), DoD, other federal agencies, state and local groups, and the private sector, as required to protect life and property, and provide for the well being of the United States. ESPC benefits NOAA's mission to to predict weather extremes and to monitor sea levels, water resources, and marine ecosystems. ESPC operates, maintains, and secures the systems that ingest satellite and other data, generates satellite-based products, and distributes them to NOAA's customers. Management. ESPC is managed by the DOC/NOAA/NESDIS/Office of Satellite and Products Operations (OSPO), which was formed in an FY11 reorganization. In FY10, ESPC removed all development activities from their work. Phases 1 and 2 of the Critical Infrastructure Protection (CIP) system became operational and the CIP development activities for later phases were moved to the NESDIS Office of Systems Development (OSD). The new ESPC contract, ESPDS-O&M covers operation, maintenance, and security of ESPC. Delivery of Products and Services. ESPC processes data from Geostationary Operational Environmental Satellites (GOES), Polar

Orbiting Environmental Satellites (POES), and non-NOAA satellites. The environmental products generated and distributed include vertical atmospheric measurements (soundings), low-level winds, sea surface heights and temperatures, and marine ecosystem parameters like chlorophyll concentrations indicating algal blooms. ESPC also provides operational satellite distribution services which provide customers with environmental information via satellite. Dependencies. For product, service, and infrastructure improvements, ESPC depends on the Satellite Operations Control Center and Command and Data Acquisition Stations (SOCC-CDAS) satellite data downloads and transmission to ESPC. CIP provides improvements in disaster recovery capability. For new ground system data ingest and new satellites ESPC depends on OSD (which includes GOES-GS, POES-GS,CIP, Jason-3, and NDE), GOES-R, and Joint Polar Satellite Systems (JPSS).

2. **How does this investment close in part or in whole any identified performance gap in support of the mission delivery and management support areas? Include an assessment of the program impact if this investment isn't fully funded.**

ESPC is NOAA's primary data processing system for environmental data. ESPC maximizes the benefits of a common IT environment by combining processes, eliminating redundancies, lowering IT refresh costs, reducing O&M costs, and enforcing standard operating procedures (SOPs). If ESPC is not fully funded, the data downloaded from the NOAA operational environmental satellites and international satellites are not reformatted for use and products are not produced and distributed to users as part of meeting Department of Commerce Goal 3.1 "Advance understanding and predict changes in the Earth's environment to meet America's economic, social, and environmental needs".

3. **Provide a list of this investment's accomplishments in the prior year (PY), including projects or useful components/project segments completed, new functionality added, or operational efficiency achieved.**

ESPC accomplishments in FY2011 (PY) include: - Achievement of the ESPC 3 year Authorization to Operate (ATO) awarded in April 2011, - Ongoing support to the conversion of the telecommunications system from FTS2000 to NETWORXX, - Operational support to the Jason-3 ground system, - Prepare operationally for the October 2011 NPP satellite launch, - Implementation of the Antarctic Data Acquisition (ADA) operational deployment, - Adding automated monitoring functionality to ESPC servers, - Finalized OSPO security policies as part of ESPC's Standard Operating Procedures (SOPs) - Operational support to the Polar Metop-B deployment to operations, - Meeting or exceeding ESPC operational performance metrics targets every month.

4. **Provide a list of planned accomplishments for current year (CY) and budget year (BY).**

Planned accomplishments for Current Year (CY) 2012 include: - Continue to meet or exceed ESPC system performance targets, - Deploy operationally into the ESPC system boundary: (1) the National Ice Center (NIC) Satellite Image Processing and Analysis System (SIPAS) system, (2) the POES Metop-B product generation and distribution modifications, and - Complete scheduled IT Refresh activities: (1) Deploy VMware to improve baseline configuration recovery and management, (2) Deploy software changes for GOES-15 becoming operational as GOES-West, (3) Deploy Scheduler software replacement, (4)

Refresh ESPC desktop systems, (5) Provide labor to refresh the ESPC LAN. Planned accomplishments for Budget Year (BY) 2013 include: - Continue to meet or exceed ESPC system performance targets, - Deploy operationally into the ESPC system boundary; (1) Ingest system upgrades, (2) Distribution of validated Key Performance Parameter (KPP) EDRs from the NPP satellite data, and (3) Distribution of validated products from polar Metop-B satellite data. (4) the NPP Data Exploitation (NDE) product ingest, generation, and distribution systems. - Complete scheduled IT Refresh activities; (1) Refresh ESPC dektop systems, and (2) Deploy distribution system hardware.

5. **Provide the date of the Charter establishing the required Integrated Program Team (IPT) for this investment. An IPT must always include, but is not limited to: a qualified fully-dedicated IT program manager, a contract specialist, an information technology specialist, a security specialist and a business process owner before OMB will approve this program investment budget. IT Program Manager, Business Process Owner and Contract Specialist must be Government Employees.**

2005-06-15

Section C: Summary of Funding (Budget Authority for Capital Assets)

1.

Table I.C.1 Summary of Funding

	PY-1 & Prior	PY 2011	CY 2012	BY 2013
Planning Costs:	$0.0	$0.0	$0.0	$0.0
DME (Excluding Planning) Costs:	$17.4	$0.0	$0.0	$0.0
DME (Including Planning) Govt. FTEs:	$0.0	$0.0	$0.0	$0.0
Sub-Total DME (Including Govt. FTE):	$17.4	0	0	0
O & M Costs:	$96.2	$17.0	$17.8	$22.3
O & M Govt. FTEs:	$85.0	$14.1	$14.1	$18.3
Sub-Total O & M Costs (Including Govt. FTE):	$181.2	$31.1	$31.9	$40.6
Total Cost (Including Govt. FTE):	$198.6	$31.1	$31.9	$40.6
Total Govt. FTE costs:	$85.0	$14.1	$14.1	$18.3
# of FTE rep by costs:	507	123	123	123
Total change from prior year final President's Budget ($)		$31.2	$32.0	
Total change from prior year final President's Budget (%)		0.00%	0.00%	

2. If the funding levels have changed from the FY 2012 President's Budget request for PY or CY, briefly explain those changes:

For CY (2012) $3.8M in FY12 funding was requested for ESPC, but not received, to support NPP operations (e.g. migration to operational status, communications, government and contractor labor, and operational maintenance). The full amount to support NPP operations at ESPC is in the President's FY13 Budget request.

Section D: Acquisition/Contract Strategy (All Capital Assets)

Table I.D.1 Contracts and Acquisition Strategy

Contract Type	EVM Required	Contracting Agency ID	Procurement Instrument Identifier (PIID)	Indefinite Delivery Vehicle (IDV) Reference ID	IDV Agency ID	Solicitation ID	Ultimate Contract Value ($M)	Type	PBSA ?	Effective Date	Actual or Expected End Date
Awarded	1330	DOCR1BK13090024									
Awarded	1330	DOCDG133E10BU0085									

2. If earned value is not required or will not be a contract requirement for any of the contracts or task orders above, explain why:
The ESPC ESPDS-O&M contract is entirely O&M. EVM is not required by the FAR for O&M and therefore EVM is not required in the ESPC ESPDS-O&M contract. New contract work started June 16, 2010, following resolution of contract award protest. ESPC management has completed deployment activities. The new contract name is ESPDS-O&M and it does not overlap with the completely separate ESPDS-Development contract. ESPC management and the new contractor updated the risk management plan and risk register. ESPC management established new milestones and is creating an Exhibit 300 Baseline Change Request (BCR) to make appropriate cost and schedule changes to the ESPC OMB Exhibit 300 Tables B.1 and B.2.

Exhibit 300B: Performance Measurement Report

Section A: General Information

Date of Last Change to Activities: 2012-08-16

Section B: Project Execution Data

Table II.B.1 Projects

Project ID	Project Name	Project Description	Project Start Date	Project Completion Date	Project Lifecycle Cost ($M)
321311M001	IT Refresh	IT Refresh is an on-going effort to extend the life cycle of ESPC O&M Investment. Commercial computer equipment supportability issues typically surface after five to seven years of service. This project may include infrastructure refresh/replacement.			
321311M002	FY12 Product and Processing Deployment to Operations	To deploy infrastructure into an operational configuration for satellites, products and distribution systems.			
321311M003	Scheduler Replacement Phase I	Re-fresh Product processing scheduling software Phase I. (Standalone two server platform).			

Activity Summary

Roll-up of Information Provided in Lowest Level Child Activities

Project ID	Name	Total Cost of Project Activities ($M)	End Point Schedule Variance (in days)	End Point Schedule Variance (%)	Cost Variance ($M)	Cost Variance (%)	Total Planned Cost ($M)	Count of Activities
321311M001	IT Refresh							

Activity Summary

Roll-up of Information Provided in Lowest Level Child Activities

Project ID	Name	Total Cost of Project Activities ($M)	End Point Schedule Variance (in days)	End Point Schedule Variance (%)	Cost Variance ($M)	Cost Variance (%)	Total Planned Cost ($M)	Count of Activities
321311M002	FY12 Product and Processing Deployment to Operations							
321311M003	Scheduler Replacement Phase I							

Key Deliverables

Project Name	Activity Name	Description	Planned Completion Date	Projected Completion Date	Actual Completion Date	Duration (in days)	Schedule Variance (in days)	Schedule Variance (%)
321311M001	Deploy software changes for GOES-15	Install GOES Ingest software on to refreshed hardware platforms.	2011-11-15	2011-11-30	2011-12-31	92	-46	-50.00%
321311M001	Replace Scheduler Software	Install Tidal Scheduler Software to replace OPUS software.	2011-11-15	2011-11-15	2011-11-14	61	1	1.64%
321311M003	Scheduler Software	Re-fresh Product processing scheduling software.	2011-11-15	2011-11-15	2011-11-14	61	1	1.64%
321311M002	SIPAS Hardware deployment	Add SIPAS HW systems to ESPC inventory, place under configuration control, manage accounts, devices, operating system upgrades and patches.	2012-01-31	2012-03-28	2012-03-28	120	-57	-47.50%
321311M002	SIPAS Network Integration into ESPC Operational Network	Integrate NIC operations network into ESPC operational network.	2012-01-31	2012-03-02	2012-03-05	62	-34	-54.84%
321311M001	Deploy VMware	Implement virtualized operating system environment for baseline configuration	2012-02-15	2012-04-18	2012-04-18	184	-63	-34.24%

Key Deliverables								
Project Name	Activity Name	Description	Planned Completion Date	Projected Completion Date	Actual Completion Date	Duration (in days)	Schedule Variance (in days)	Schedule Variance (%)
		maintenance and recovery.						
321311M001	Refresh ESPC Desktop Systems - Phase 1	Purchase 77 replacement laptops for ESPC Desktop Systems.	2012-03-30	2012-03-30	2012-03-30	179	0	0.00%
321311M002	SIPAS Software deployment	Add SIPAS software licenses to ESPC inventory, place software under configuration management, and update security documentation.	2012-03-30	2012-06-30	2012-06-30	179	-92	-51.40%
321311M002	Metop-B Hardware deployment	Implement virtualized operating system environment for product processing.	2012-04-25	2012-04-25		174	-128	-73.56%
321311M002	Metop-B Software deployment	Rebuild all software and libraries on virtualized systems; check software into configuration management tool.	2012-06-15	2012-12-30		164	-198	-120.73%

Section C: Operational Data

Table II.C.1 Performance Metrics

Metric Description	Unit of Measure	FEA Performance Measurement Category Mapping	Measurement Condition	Baseline	Target for PY	Actual for PY	Target for CY	Reporting Frequency
Customer connectivity for product delivery	Percentage of network uptime for product delivery	Customer Results - Service Quality	Over target	98.000000	98.500000	98.900000	99.000000	Monthly
Percent of planned products deployed to operations - cumulative per FY	% of planned products going operational to date	Mission and Business Results - Services for Citizens	Over target	100.000000	100.000000	100.000000	100.000000	Quarterly
% of data processed and delivered within timeliness threshold (based on a daily volume received of 43 GB).	% of data delivered within timeliness threshold.	Process and Activities - Quality	Over target	98.000000	98.500000	99.900000	98.800000	Monthly
Percent of non-NOAA satellite data processed and distributed within 180 minutes.	% of non-NOAA sat. data processed and delivered.	Technology - Effectiveness	Over target	85.000000	85.000000	0.000000	85.000000	Monthly
Test and use of failover capability to prove capability to maintain ESPC production even under extreme conditions.	Successful failovers NSOF to CIP at WCDA each FY	Process and Activities - Productivity	Over target	2.000000	3.000000	3.000000	2.000000	Semi-Annual