# National Archives and Records Administration

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Reply to
Attn of : Office of Inspector General (OIG)

Subject : Advisory Report No. 09-06, OIG Monitoring of the Executive Office of the President System

To : Adrienne Thomas, Acting Archivist of the United States (N)

The purpose of this report is to advise you of the current status of the Executive Office of the President (EOP) System, part of the Electronic Records Archive (ERA)[1]. This report addresses sensitive but unclassified electronic data to be transferred to the National Archives and Records Administration (NARA) from the George W. Bush Administration and is limited in scope to the priority systems identified in NARA's Contingency Plan for Bush Presidential Electronic Records (see Supplemental Information for additional details). Additional data from other systems will also be transferred to NARA. A separate report will be issued addressing the Bush Administration's classified electronic records.

We continue in our on-going effort to review NARA's development and implementation of the ERA System. This initiative focuses on assessing the current status of the ERA program and determining whether the program (a) is meeting cost and schedule requirements, and (b) will be able to cost-effectively meet future target implementation dates.

Our review of the EOP System development effort revealed that due to the expected volume of electronic records from the Bush Administration, and the possibility of receiving these records in unknown or incompatible formats, NARA will not be able to rely solely on the EOP System to comply with the Presidential Records Act, and will incur additional costs.

The ERA is a major information system that is intended to preserve and provide access to massive volumes of all types and formats of electronic records, including presidential records, independent of their original hardware or software. Due to the system's complexity, NARA awarded a contract to the Lockheed Martin Corporation to develop the ERA in phases, or increments, at an estimated cost of $453 million. In response to schedule delays, NARA and Lockheed Martin agreed to a revised schedule and strategy consisting of a two-pronged development approach.

Development of the original system, now referred to as the ERA "Base" System was to continue, while parallel development would be conducted for a separate system dedicated initially to receiving sensitive but unclassified electronic records from the outgoing Bush Administration in January 2009. This system, known as the EOP System, uses a different architecture than the ERA Base system. It is being built on a commercial product that is to

[1] The portion of ERA that will handle electronic records from the Executive Office of the President.

provide the basic requirements for processing presidential electronic records, such as rapid ingestion of records, and the ability to search content. The estimated development cost of the EOP System is $38.9 million.

The main archival storage component for the EOP is the Hitachi Data Systems (HDS) Content Archive Platform (HCAP) which is managed by NARA and the vendor. During testing of the ingest function, the HCAP experienced stability problems that resulted in significant slowdowns in the system's ability to ingest records. Hitachi issued software patches that appear to have corrected the stability problems in the test environment. However, there are two performance requirements that may not be met relating to the amount of time to perform ingest and search functions. Results from laboratory tests of these functions in October 2008 indicate they fall short of the performance requirements. Hitachi, which has a test lab in California that simulates the NARA environment, is working on reducing the response times. At this time, it is unknown how the system will respond in a production environment to the full volume of White House electronic records.

Due to the expected volume of electronic records from the Bush Administration and the possibility of receiving these records in unknown or incompatible formats, we are concerned that (a) the EOP will not solely enable the agency to fully comply with the Presidential Records Act, and (b) NARA will incur increased costs from maintaining additional systems, getting the data ingested, and putting the data in a format that is searchable in the EOP.

On December 5, 2008, NARA took delivery of the first batch of data from three White House systems. Data from one system is currently being ingested into the EOP. The software needed to ingest data from the remaining two systems is expected to be available on January 15, 2009. The balance of the White House's electronic records is planned to be delivered in two more batches, and ingestion of the highest-priority data is expected to be completed in May 2009. The contractor has additional software drops planned for January and March 2009, to accommodate additional data types beyond those addressed at Initial Operating Capability (IOC).

While the EOP System achieved IOC on December 5, 2008, this does not mean the system currently has the capability to ingest, search, and access all electronic records from the White House. This conclusion is supported by the fact that the Contingency Plan for Bush Presidential Electronic Records has been invoked for two proprietary systems – the Records Management System (RMS) and the White House Photo System (PHOTO). The RMS uses a customized older version of Documentum while PHOTO, which is the largest system, uses proprietary photo management software called MerlinOne. Essentially, NARA will inherit these systems (both hardware and software) from the White House on January 20, 2009, and they will continue to be housed in their present location. NARA will have to establish contracts with the software providers for these systems. It is estimated it will take several months for the records in RMS and PHOTO to be ingested into the EOP and for the records to be searchable.

The Presidential Records Act gives the Archivist of the United States responsibility for the custody, control, and preservation of presidential records upon the conclusion of a

President's term of office. The Act states that the Archivist has an affirmative duty to make such records available to the public as rapidly and completely as possible consistent with the provisions of the Act. NARA will immediately need to be able to respond to time-sensitive and often high-visibility special access requests for these records. Such special access requests come from former and incumbent Presidents, the Courts, and the Congress.

At the time of the last presidential transition, NARA met these requirements by recreating the Clinton Administration's computer systems (software and hardware) that originally held the records and developing simple search interfaces, so that NARA personnel could search for requested information. It took about 400 days to process the two terabytes[2] of data received from the Clinton Administration. It is estimated the Bush Administration's electronic records will be about 100 terabytes. Any records that cannot be ingested in a way that supports search and retrieval immediately after the change in administration will affect the time and cost for NARA to comply with the Presidential Records Act.

Our review effort consisted primarily of reviewing applicable ERA/EOP documentation such as: the ERA development contract and modifications; contractor status reports; Congressional status reports; the Contingency Plan for Bush Presidential Electronic Records; ERA's Exhibit 300, Capital Asset Plan and Business Case Summary for ERA[3]; Congressional Budget Justifications; and interviews with responsible ERA Program Office and Presidential library officials. We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

If you have any questions concerning the information presented in this Advisory Report, please e-mail Mr. James Springs or me, or call us at extension 73000.

Paul Brachfeld
Inspector General

cc: NH (M. Morphy)

[2] A terabyte is about 1 trillion bytes or about 1,000 gigabytes.
[3] Agencies develop an Exhibit 300 to justify each request for a major information technology investment.

## SUPPLEMENTAL INFORMATION

### Contingency Plan for Bush Presidential Electronic Records

The Contingency Plan for Bush Presidential Electronic Records states there are several risks associated with the transfer of the Bush records into the ERA System. The first is that the ERA is a new system and there are Information technology components that are being developed specifically for Presidential records. Secondly, because records are being created by the White House staff until the end of the administration, there is always uncertainty regarding an exact volume of data that NARA will receive from the White House. While NARA has experience through the last three Presidential administrations accepting and making available these records, this transition presents unique challenges because the agency is faced with about 50 times the volume of electronic materials and formats not previously dealt with. Lastly, although NARA has been working closely with the White House to understand the types of data that will be transferred, there is always a possibility that some electronic records may be overlooked, and NARA officials will have to do some analysis after January 20, 2009, to prepare the records for transfer into the EOP.

NARA's contingency plan prioritizes non-classified systems from the White House based on the Office of Presidential Libraries (NL) experience with records of previous administrations. The highest-priority systems were identified that represent the first set of Bush Administration electronic records that need to be available for search and access. These systems include:

- Records Management System (RMS)—provides the key index to the bulk of Presidential textual records.
- White House Photo System (PHOTO)—contains all the Presidential photographs (in three different formats/resolution) taken during the George W. Bush Administration and all of the metadata regarding the photographs.
- Presidential Diary System—contains a daily record of the President's activities such as travel, meetings, and phone calls.
- WARDS—a search and access database that includes data from the Worker and Visitor Entry System (WAVES) and Access Control System (ACS). These systems control and record access to the White House complex.
- Automated Records Management System (ARMS)—electronic mail 2001-2003.
- MS Exchange—electronic mail 2003-present.