Automated Electronic Records Management:

Managing Government Records Directive

Goal A3.1

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National Archives and Records Administration

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Contents

Section I: Outcomes, Approaches, and Risks

1. Purpose and Organization

This document is both a report on the Automated Electronic Records Management project, with suitable approaches and activities to date, and the plan called for in the text of the Managing Government Records Directive Goal A3.1. NARA intends for this document to be helpful to agencies by describing suitable approaches to the management of electronic records, including email and social media, but also to make the **plan** a living document that the community will continue to revise as we learn more, automate more, and build toward a future of easier and more consistent electronic information management. The plan addresses approaches and technologies for managing electronic records that are available today, proposes steps to explore ways of making automation more accessible to agencies, and outlines elements of a future state that will allow for greatly improved management of electronic records in the future.

This document addresses Goal A3.1 of the Managing Government Records Directive, which states:

> **A3 Investigate and stimulate applied research in automated technologies to reduce the burden of records management responsibilities**
>
> **A3.1 NARA, the Federal Chief Information Officer's Council and the Federal Records Council will work with private industry and other stakeholders to produce economically viable automated records management solutions. By December 31, 2013, NARA will produce a comprehensive plan in collaboration with its stakeholders to describe suitable approaches for the automated management of email, social media, and other types of digital record content, including advanced search techniques. The plan will detail expected outcomes and outline potential associated risks.**

The document is divided into two main sections. The first section, "Automated Electronic Records Management: Outcomes, Approaches, and Risks" is a narrative describing desired outcomes, activities to date, and suitable approaches for managing electronic records.

The second section, "Automated Electronic Records Management Plan," is a preliminary description of planned activities and milestones that will bring the government to the desired state of well-managed electronic records with little reliance on end users.

The plan will be revised as early steps are completed and the records management community learns more about which approaches are most viable. NARA will continue to work with its stakeholders in FY14 and beyond to identify milestones and tasks that will move Federal records management toward digital government, including increased automation, reduced

burden on end users, and more consistent and affordable compliance with recordkeeping requirements.

2. Outcomes

The project described in the narrative and plan aims to assist agencies in the transition to digital government so that government information will be vastly more accessible, as outlined in the Managing Government Records Directive. As part of that effort, it supports agencies in meeting the 2016 and 2019 requirements of the Directive by working toward streamlined methods of getting automated electronic records management approaches into widespread agency use.

3. Problem and Proposed Solution

The Managing Government Records Directive requires a shift to electronic recordkeeping in the Federal government by the end of 2019. The Directive "requires that to the fullest extent possible, agencies eliminate paper and use electronic recordkeeping." The processes and tools that agencies currently use to manage electronic records are not adequate to support consistent compliance with the Federal Records Act, as agencies have reported in Records Management Self Assessments.

There is a wide range of sophistication in agencies' infrastructures, but most agencies are relying on individual staff members to capture and categorize their electronic records, if they are managing electronic records at all. Some agencies have DOD 5015.2-certified records management applications (RMAs) to manage records centrally once captured. However, the availability of RMAs does not necessarily ensure consistency or reduce the burden of recordkeeping on the end user because of the need for individual action to capture records. There are also types of records that are not well managed by RMAs, like database files. NARA also recognizes that the availability of RMAs on the market has not led to universal use of these tools in agencies even for types of records that RMAs can manage; the problem of achieving consistent management of all agency electronic records remains unsolved in spite of this technology.

End users find it burdensome to manage their electronic records if that means touching each file and making a separate recordkeeping decision about each one. Relying on busy end users who are focused on achieving the agency mission leads to inconsistent capture of electronic records. The time required for each human records management action also means that manual processes will not scale up to manage the sheer volume of email, social media, and other electronic records being created. Automated tools for managing electronic records could reduce the recordkeeping burden on end users and lead to more consistent, scalable results, and ultimately more accessible and usable agency information.

The goal of encouraging automation is to reduce the reliance on all individual agency staff

members to capture and manage records appropriately. (This document uses “agency staff members” or “end users” to mean all agency or contractor staff members who create Federal records but whose primary job is not records management.)

Effectively using automation to reduce the burden on end users has three positive effects: 1) records are more consistently captured and managed and therefore more accessible for support of the agency mission and for documenting the history of the United States, 2) processes can scale up to handle a higher volume of information, and 3) staff members have more time available for the agency mission.

Because of these advantages, NARA believes that many agencies will require automation to consistently comply with the Federal Records Act and meet the goals of the Managing Government Records Directive:

- Goal 1.1: By 2016 Federal agencies are managing all email records in an accessible electronic format.
- Goal 1.2: By 2019 Federal agencies are managing all permanent electronic records electronically.

Promising tools for automation already exist in the records management field and in other industries. The advanced search space, including machine learning or predictive coding as used in eDiscovery, is one of several promising areas for records management exploration. Applied research projects to develop new tools may still be needed and future steps in this plan, such as agency lessons learned, will uncover unmet requirements.

There are many acceptable ways of managing electronic records. DOD 5015.2-certified RMAs are one tool for managing electronic records, but there are other acceptable strategies. Certain methods for managing electronic records may work better in some environments or with some types of records than with others. For example, social media records may be managed best using different methods than would be used for static electronic documents like formal reports.

NARA actively supports automation of as many RM tasks as possible, as long as results of automation improve on the status quo. If automation allows an agency to capture and manage more electronic records than its current processes, and transfer more permanently valuable electronic records to NARA than its current processes, NARA will support the use of automation. Naturally, agencies will want to do a risk assessment to ensure that any new automation will not introduce unacceptable risk of destroying records prematurely. Agency management and general counsel should understand the benefits and risks before approving the new strategy.

However, NARA does not require the use of automation to manage electronic records, electronically, as required by the Directive. If agencies can transition to electronic recordkeeping and achieve consistent compliance with the Federal Records Act and 36 CFR Subchapter B without automation, electronic records management processes that require end

user action are acceptable.

NARA will not mandate any particular tool for automating records management. However, NARA will work with the community to identify and share information about tools that support good automated records management, and provide practical information about how agencies can achieve compliance. NARA will provide standards that all tools must meet, such as metadata and format requirements for records transferred to the archives. NARA's intent is to maintain compliance as we do this with ISO 15489-1:2001 Information and documentation -- Records management and ISO 23081-2:2009 Information and documentation -- Managing metadata for records. Our work on Managing Government Records Directive Goal A1 (revised format and metadata transfer guidance) will be one phase of this work. NARA also intends to develop a specification for a standard records package for ingest into the archives (the Submission Information Package, or SIP).

The plan that follows proposes that NARA and its partners explore several ways of providing easier access to automated electronic records management solutions for agencies.

4. 2013 Activities

In 2013, NARA initiated several activities that collected information for this document and laid the groundwork for future activities outlined in the Automated Electronic Records Management Plan. NARA also completed several other goals in the Managing Government Records Directive that directly support the long term goals of this project. (Particularly relevant are the new email guidance, social media guidance, updated format transfer guidance, and the feasibility study on providing electronic records management services for records still in agency legal custody, all completed in 2013.)

NARA consulted with stakeholders from the Federal Records Council and began recruiting members from this group for a new Electronic Records Management Automation Working Group. The working group was advertised to the larger records management community in the government and by the end of 2013 contained a knowledgeable group of Federal information management and information technology professionals. The working group shared experiences, best practices, and lessons learned through peer discussions and presentations on agency automation projects. The working group also solicited vendor presentations and launched an ongoing series to learn more about tools on the market today. Several presentations were held in the summer and fall of 2013. Any interested Federal staff member could elect to receive invitations to vendor presentations.

NARA, working with members of the Electronic Records Management Automation Working Group and members of the CIO Council, hosted an industry day for automation vendors on September 10, 2013: The Managing Government Records Directive: A Grand Challenge for Industry. On September 13, NARA posted a request for information (RFI) on FedBizOpps outlining what the automated electronic records management project is trying to achieve and a

list of questions vendors should answer. NARA had received approximately 40 responses to the RFI by the end of October, and responses continue to arrive. All responses are available to any Federal government staff member through the Electronic Records Management Automation Working Group's wiki on OMB MAX. (The wiki is available at https://max.omb.gov/community/x/5QlfJw)

NARA used the RFI responses to better understand the current state of the art in electronic records management automation. The approaches to automation described by the vendors informed the current document. Federal agency staff are using the RFI responses to research tools that agencies could use to meet the goals of the Managing Government Records Directive, reduce the burden on end users, and build scalable records management processes to handle 21st century electronic records volume.

The Electronic Records Management Automation Working Group also provided input to this plan by suggesting strategies that agencies would find most helpful in implementing automated solutions within the timeframe of the Managing Government Records Directive.

5. Approaches to Automation

This document defines "approach" as a technical strategy for automating electronic records management, with a particular focus on capture and categorization. Approaches to automation range from no automation at all to highly sophisticated, enterprise-wide autocategorization, using machine learning techniques (for example) that support automated capture of records into management systems. [Note that this document uses the word "capture" to indicate the act of bringing records under records management control, which may or may not involve moving a copy of a record into a separate system.]

The goal of this project is increasing the quality and consistency of electronic records management by reducing the burden of electronic records management on individual agency staff members. The first and greatest burden on end users is appropriate capture and categorization of records. Even with the use of records management applications, which can automate or centralize most records management tasks, the tasks of capture and categorization often remain the responsibility of the end user. Since appropriate management for the rest of the records lifecycle depends on initial capture, inconsistency here puts the effectiveness of the entire electronic records management program at risk.

For this reason, the approaches outlined here focus on automation of capture and initial categorization into retention schedule categories, which are the most burdensome steps and therefore the weakest links in most programs. After appropriate capture (into a records management application or another tool) a records manager or a records management application can more easily perform the remaining tasks of records management.

As noted above, automation of electronic records management is **not required** if an agency is

able to manage its electronic records in electronic form using individual action. For this reason, we are outlining a spectrum of acceptable approaches to managing electronic records that ranges from completely manual processes to high degrees of sophisticated automation. We intend for this to provide practical approaches for agencies of all sizes and budgets.

Factors that agencies should consider when choosing an approach:

- Volume of records
- Tolerance of end users for performing individual records management tasks
- Value of records to business process
- Percentage of records scheduled as permanent
- Litigation risk
- Public interest in records (FOIA, desire for proactive electronic disclosure)
- Types of electronic records that predominate (video, geospatial, social media, text, etc.)
- Agency size
- Agency budget
- Records management and IT resources available (staff time, skill sets, etc.)
- Need to incorporate collections of legacy electronic records into strategy
- Technical infrastructure, including any existing RM related applications or centralized repositories,
- Level of management support for comprehensive automation projects

Agencies may also choose different approaches for different types of records or different parts of the organization. For example, agencies may use one approach to automate management of email and another approach for permanent records created within a mission-critical workflow system.

Agencies may also use different approaches as a series of filters. For example, an agency could use business process capture to manage several important record series that have their own workflow systems, and then apply machine learning to categorize everything else. A combination of approaches like this could lead to excellent compliance, and could provide the opportunity to gain new understanding of the nature of the information accumulating in the agency. For instance, this approach could uncover large numbers of files of a type not covered by the retention schedule that should be scheduled.

All of these approaches will only succeed in situations where records management principles themselves are well-defined and understood and clear records schedules are in place. Automated tools are not a replacement for sound records management practice; they are a way of implementing a professionally developed records management strategy.

A. No automation: Manual management of electronic records

This approach includes any process that requires individual agency staff members to file each

of their emails, social media records, or other electronic record content into an electronic recordkeeping system. This approach can include individual capture into a range of technical infrastructures, from the use of shared drives as repositories for electronic records, to collaborative environments such as SharePoint, to DOD 5015.2-certified records management applications. Each of those repositories provides different degrees of automation of records management tasks after capture and categorization, but on their own, none automate capture and categorization.

DOD 5015.2-certified records management applications do provide for automation or centralization of most records management tasks after capture, however. Many agencies make effective use of them to manage their electronic records. However, there are other acceptable ways of managing electronic records. DOD 5015.2-certified repositories are not required, and on their own they do not automate the most burdensome part of records management for end users.

For small agencies, agencies with small IT budgets, and agencies with low risk and a very low record volume, managing electronic records manually may be a viable strategy. It requires active monitoring, comprehensive training, auditing, and user intervention to ensure compliance.

Risks: It is very difficult to get consistent compliance using this approach because of the reliance on end user action. The approach does not scale up to large volumes of records or staff, risking failure to effectively manage both permanent and temporary electronic records.

> See NARA Bulletin 2012-02, Guidance on Managing Content on Shared Drives
> http://www.archives.gov/records-mgmt/bulletins/2012/2012-02.html

B. Rule-Based Automation

Effective and consistent electronic records management is achievable for many agencies for at least some of their records using automated business rules that act on metadata, user roles, or another feature of records. Implementing this type of automation requires analyzing records retention schedules to write executable rules that identify records falling under each schedule item or disposition bucket. The records that belong in each category can be identified using a metadata element, role, or a combination of elements. In some cases, existing schedules will not lend themselves to execution using rules and an agency may choose to reschedule the records to create schedules that can be implemented using rules.

For example, an agency may decide to implement the “Capstone” approach to managing email. In this case, the agency could program its email archiving system to execute a rule saying all email messages sent or received by a particular email account during 2012 that are not tagged as “non-record” should be transferred to NARA when the records are 5 years old. This capability in many email platforms and archiving applications makes this a practical approach for email records. NARA’s “Capstone” email guidance is an example of a strategy based on

rules and roles.

> See NARA Bulletin 2013-02: Guidance on a New Approach to Managing Email Records (aka "Capstone")
> http://www.archives.gov/records-mgmt/bulletins/2013/2013-02.html

Similar rules can be written in other systems. For example, a rule could be written to capture all documents saved in a document management system that selected "contract" from a drop down list, or all documents uploaded by a user associated with the department "Facilities."

There may be cases where straightforward rules are written to categorize records based on keyword or regular expression searches of the content of records rather than metadata. This would also be an example of this rule-based approach.

Similarly, harvesting technology that executes rules about which web sites and social media accounts to capture can be an example of this approach.

> See NARA Bulletin 2014-02: Guidance on managing social media records and NARA White Paper on Best Practices for Social Media Capture
> http://www.archives.gov/records-mgmt/resources/socialmediacapture.pdf

This strategy requires close analysis of the retention schedules and may require some rescheduling to allow for more automation based on clear rules. However, the results are predictable and consistent and require minimal work on the part of end users.

Risks: Approaches simple enough for easy implementation may lead to over-retention of low value records, leading to higher storage costs and increased litigation risk, or failure to capture permanent records that occur in unexpected places.

C. Business Process and Workflow Automation

Many important agency business processes have information systems or workflow systems designed specifically to support the flow of information through that process. This automated approach relies on integrating workflow steps to capture necessary metadata, to associate resulting records with a retention schedule, and to destroy or transfer the records to the archives at the end of a retention period within that system. For example, an online system supporting citizen applications for permits might route each application from initial request through final approval and notification. In the last step in the process, the system automatically saves a copy of the final approved record in a repository designed to retain this series of records for the mandated retention period.

This approach can lead to consistent capture of major business process records with no additional effort from end users. It is less likely to be an option for unstructured business

processes without a defined workflow or IT infrastructure.

This strategy requires integration of basic records management requirements into the system or workflow design, as described in the Federal Enterprise Architecture Records Management Profile. However, modern workflow systems are configurable, so adding additional workflow steps to manage records does not always require redevelopment of the system.

> See the Federal Enterprise Architecture Records Management Profile
> http://www.archives.gov/records-mgmt/policy/rm-profile.html

Risks: While there are challenges in implementing this approach, because of its inherent consistency, the risk of mismanaging records when it is applied well is very low. However, there is a risk that existing systems not originally designed with records management in mind may not create adequate records or metadata for records management purposes. Relying on this approach alone may leave many electronic records unmanaged if the agency cannot integrate appropriate records management capabilities into all agency records-creation workflows, which will usually be the case.

D. Modular Re-usable Records Management Tools

A comprehensive approach that has potential to allow seamless, background integration of records management into most agency business processes is providing modular records management tools, services, or applications that are accessible to and interoperable with many agency systems. There are a number of possible ways to achieve this. For example, NARA worked with the Object Management Group to develop Records Management Services that could be deployed as part of a service oriented architecture. Several organizations have developed services on this model, but it is not yet widespread.

> See: Records Management Services: Object Management Group
> http://gov.omg.org/gov-doclib.htm#RMS-Adopted

However, any tool or application that could be deployed across many environments to perform an electronic records management task in an automated way would support this approach. For example, a tool to identify personally identifiable information (PII) in electronic records might be a component part in many agencies' electronic records management infrastructures. To make this approach most powerful, the Federal records management community will need a central catalog of modular records management tools and services available for use.

Modular automated records management tools or applications could form the basis for a flexible, forward-looking electronic records management architecture and could be developed and deployed across a variety of technical environments and enterprise architectures.

Risks: Relying on a flexible, modular approach runs the risk of leaving some electronic records

unmanaged since not all existing systems may interoperate with modular tools and services.

E. Autocategorization

The most advanced type of automation is autocategorization of records. In this approach, computer analysis of record content links the records to appropriate file categories. In one type of machine learning, an expert trains the system to recognize records that fit in each retention category based on categorization of a training set and iterative reviews of additional machine-coded documents. The expert never strictly defines the characteristics of the category as he or she would need to do to write an executable rule. The algorithm learns to recognize patterns that are common to records that have already been categorized in a particular series with increasing accuracy as the expert trains it.

Software that uses this approach may also incorporate other forms of automation, such as metadata and rule-based automation, so the tools themselves may not be mutually exclusive even though the approaches are distinct. This approach may be described using alternative or more specific terms, including predictive coding and machine learning. What these methods share is analysis of the content of records by the computer program that learns what to do with records through training on a sample set until the algorithm approaches the point of making the same decisions a human would.

The autocategorization approach has the potential to categorize records from unstructured business processes, including email, with a high degree of sophistication, something that is difficult to do with other approaches Whereas “Capstone’s” rule-based approach categorizes email records based on account, machine learning can categorize email messages based on message content. This content analysis could potentially allow effective email retention according to more traditional subject or function-based records schedules instead of Capstone’s account-based schedules.

Because autocategorization works with so many unstructured record types, this approach has great potential to address the records in an agency that cannot be managed automatically any other way. However, the technology is relatively new and is still improving, and records managers are still learning best practices for working with it effectively.

Analysis of records retention schedules will be required to ensure that schedule items are clearly defined and mutually exclusive so that system training will work. The approach also requires a significant investment of expert user time in selecting example documents from each retention schedule and training the system to reliably identify new records that belong in that schedule. The smaller the number of retention schedule items, the less time the training will take. The potential payoff of machine learning is significant after the systems are trained, but the work by experts required to train the systems is significant.

As more agencies gain experience working with autocategorization tools, the records

management community should share best practices and lessons learned about effective and efficient deployment. At this time, NARA does not have enough data to compare the relative costs of these systems against simpler forms of categorization; the required investment may not be within reach for the smallest agencies, although hosted or subscription services may bring them within reach for many.

Risks: Because autocategorization is not 100% accurate, there is some risk of incorrect disposal or over-retention of temporary records. Agency stakeholders may not trust automated algorithms, regardless of actual accuracy rates.

6. Acquiring Affordable Automated Solutions

According to the Managing Government Records Directive, all agencies must manage their permanent electronic records and all email electronically by 2019. Agencies may choose any of the technical approaches to automation outlined here as appropriate for their records and environment, and indeed may identify additional approaches over time. As demonstrated by the responses to NARA's request for information from vendors in the automated electronic records management field, agencies can now procure electronic records automation products that are installed on-site, services available in the cloud, and hybrid installations. Agencies that are ready to do so can begin their automation projects now and share their lessons learned with the community.

However, NARA understands that many agencies may want to pursue greater automation but will need help getting there. To offer more practical assistance to these agencies, NARA is developing a plan to encourage further adoption of some of these approaches. The plan that follows proposes steps to start exploring several different approaches at once. Some initiatives may prove viable; others may be dead ends or not mature enough to pursue at this time, but NARA is interested in investigating all to find the ones that are worth further work.

A. Approved electronic records automation vendors on a central procurement vehicle

After developing a simple set of requirements in collaboration with the community, NARA or GSA would issue a request for proposal to select vendors that could meet those requirements. There might be basic requirements common to all, and then different requirements to satisfy different scenarios so agencies could select a vendor that specialized in their particular situation (perhaps minimally compliant simple electronic records management in one case, and machine learning for autocategorization of electronic records in another case).

B. Electronic Records Management Line of Business, with one or several agencies offering their ERM services to other agencies

Agencies that have already developed sophisticated automated electronic records management

solutions, including machine learning, could offer those services on a reimbursable basis to other agencies in need of the same services. These become electronic records management Lines of Business.

C. Integrated workflow or rule-based electronic records management in other Lines of Business

Government lines of business that have been or will be centralized are candidates for centralized electronic records management built directly into the systems and workflows that manage those processes. For example, EPA runs Regulations.gov on behalf of many agencies and has already integrated the capability to manage records automatically into the system. USASpending.gov would be another high-value example of an opportunity to solve the electronic recordkeeping problems for high-accountability records of many agencies at once.

D. Modular records management components that can be used in many agency infrastructures

Development of component-based tools, services, and apps that can be invoked from many systems and environments would allow invisible electronic records management functions to run in the background. With a set of interoperable modules to choose from, agencies could deploy (and pay for) only the services they needed, potentially making electronic records management more affordable. If these tools were open source and shared throughout the community, information managers and business owners could affordably develop flexible custom solutions for their own situations. These could run locally or in the cloud, and could eventually support the archiving of data in place so that large data sets would not need to be physically moved in order to enter NARA's archival collection. Examples of tools such as records management services have already been developed, and NARA is investigating ways to archive large data sets in place. Full development of an ecosystem of interoperable components and services for agencies and NARA is a longer term project than some of the other initiatives mentioned here. Agencies may need to rely on other initiatives to help them meet the 2016 and 2019 goals of the Managing Government Records Directive, but activities in this initiative can help establish better options for the long term future.

7. Next Steps

The Automated Electronic Records Management Plan, section II of this document, outlines next steps to meet the goals of this project. The plan includes steps to investigate the most viable ways for NARA to support agencies that need help in their pursuit of automation, as described above. It also includes continuing market research and encouragement of the electronic records management community of interest, so that all agencies can learn about the most effective approaches together. These latter activities are described as "Community Learning."

The Plan also includes steps to clarify the community vision for the future of electronic records management and move toward a future state where electronic government information is managed from creation and supports efficient and effective access to everyone with a right to see it. This long term goal brings the Managing Government Records Directive, the Open Data Policy and Plan, and the Strategic Plan of the National Archives and Records Administration together.

The plan relies on increasing collaboration among agencies and between the government and the private sector and open source communities. NARA cannot do all these tasks, or in fact fully flesh out this plan, alone. However, working together, the information management community can make the transition to digital government, reduce the burden of records management on the end user, and provide easier access to information for all.

Section II: Automated Electronic Records Management Plan

By the end of 2019 we will manage electronic records in automated ways to support transparent government.

We will assess what is possible, decide where we need to go next, and gather current information for the next steps in an iterative way throughout this timeframe. The plan will be revised and further elaborated repeatedly as we complete tasks and learn more about the viability of different initiatives.

2014

Community Learning:

NARA will analyze Senior Agency Official for Records Management (SAO) reports to identify potential automation case studies

NARA will assess the tasks in this plan in light of Federal budgeting deadlines so we'll know when tasks will need to be completed in order to incorporate funding for automated solutions in agency budget requests.

The ERM Automation Working Group will continue to share best practices on automation.

NARA will host feedback sessions with RM experts inside and outside the government to further articulate the long term vision of this plan and solicit ideas for practical steps NARA and the community should take to get there.

NARA will work with external stakeholders, such as the CIO Council and ARMA, on practical ways of reducing costs and other hurdles to implementation of automated technologies for agencies.

The ERM Automation Working Group will identify policy, procedural, budget, organizational and other hurdles to implementation of existing technology and generate plans for addressing those hurdles.

Activities to support A. Approved ERM Vendors, B. ERM Line of Business, C. ERM Integrated into other Lines of Business, and D. Modular ERM:

Identify minimum requirements for commercial or agency-supplied electronic records management services in collaboration with partners.

Identify market segments for specialized electronic records management services suitable for different agency environments and identify specific requirements for those scenarios.

Activities to support A. Approved ERM Vendors:

Meet with procurement experts, including GSA, about ways to structure a central procurement vehicle that would give agencies easier access to approved electronic records management vendors.

Activities to support B. ERM Line of Business:

Talk to agencies that already have sophisticated electronic records management in place to find out what would be involved in offering those services to other agencies on a reimbursable basis in alignment with The Federal Information Technology Shared Services Strategy (http://www.whitehouse.gov/sites/default/files/omb/assets/egov_docs/shared_services_strategy.pdf)

Talk to OMB about development of an electronic records management Line of Business.

Activities to support C. ERM Integrated into other Lines of Business:

Work with EPA to pilot ERM as part of Regulations.gov.

Identify and meet with LOB owners for other existing or planned LOBs to advocate for inclusion of electronic records management requirements.

Meet with OMB to get support for modifying existing LOB Centers of Excellence to include centralized records management services for high value records across the government.

Activities to Support D. Modular ERM:

NARA will complete a prototype of a new Digital Processing Environment (DPE) to provide more scalable and flexible environment for transfer and processing of electronic records. The DPE will be designed to support a modular tool set for processing records in various stages of their lifecycle (e.g., processing for accessioning, preservation processing, processing to create an access or reference copy of a record).

Identify agencies to participate in an evaluation of DPE, and the tools that will be required to process their records to prepare for accessioning.

Evaluate the performance of the DPE prototype and complete requirements to support the development of a production version of DPE.

NARA and partners will investigate the role of Records Management Services, component-based approaches, and tools or apps to be used in the DPE.

NARA will manage work on PRMD Goal A3.2: identifying or working to create open source tools for electronic records management.

NARA will work with industry and standards groups (e.g., the National Information Exchange Model (NIEM) group) on the role of current standards and the need for new ones to meet our long term goals, including increased interoperability among records systems. (This may take the form of standards workshops or another kind of activity.)

NARA will develop a specification for a standard records package for ingest into the archives (the Submission Information Package, or SIP).

2015

Community Learning:

NARA will refresh its market research, issuing a new RFI and hosting another vendor event to ensure the Government understands the changing state of ERM Automation technology and to capture and provide information for as many solutions as possible. This will also provide an opportunity for sharing newly-emerged technologies.

NARA will also engage the open source and research communities in its assessment of the state of the art.

Activities to support A. Approved ERM Vendors:

Depending on results of procurement methods research in 2014, issue RFP for vendors to fulfill minimum requirements plus support for one of scenarios

Activities to support D. Modular ERM:

NARA will develop and implement the production version of Digital Processing Environment to facilitate transfer of large volumes of electronic records from agencies to NARA

NARA will publicize the Submission Information Package (SIP) specification, encouraging vendors to incorporate export using the schema.

NARA will establish and publish a list of record processing tools/apps that are qualified to work with DPE.

2016

The activities undertaken in the first two years of this plan will define the tasks for the later years of the plan. In 2016 and beyond, we will continue work as appropriate to make automated ERM more accessible to agencies and more widespread as part of a digital government.

Community Learning:

NARA will collect information and host events to assist agencies in implementing electronic email management to help agencies meet the 2016 deadline.

Activities to support A. Approved ERM Vendors:

Depending on results of 2014 and 2015 work, provide IDIQ or other procurement vehicle for agencies to quickly obtain electronic records management services, for email, social media, and other electronic records.

2017

The activities undertaken in the first two years of this plan will define the tasks for the later years of the plan. In 2016 and beyond, we will continue work as appropriate to make automated ERM more accessible to agencies and more widespread as part of a digital government.

Community Learning:

NARA will refresh its market research, issuing a new RFI and hosting another vendor event to ensure the Government understands the changing state of ERM automation technology and to capture and provide information for as many solutions as possible. This will also provide an opportunity for sharing newly emerged technologies.

2018

The activities undertaken in the first two years of this plan will define the tasks for the later years of the plan. In 2016 and beyond, we will continue work as appropriate to make automated ERM more accessible to agencies and more widespread as part of a digital government.

Community Learning:

NARA will assess where agencies are in meeting 2019 goals and come up with a 24 month plan to assist agencies in getting to 2019.

NARA will collect information and host events to assist agencies in implementing all formats of records management electronically to help agencies meet the 2019 deadline.

2019

Agencies managing all permanent electronic records and all email electronically, with as little burden on the end user as possible.