NATIONAL ARCHIVES

NARA Federal Electronic Records Modernization Initiative (FERMI)

Use Cases for Capture

March 2021

Capture refers to placing digital objects created in the course of agency business under records management control for management, disposition, and access purposes. Records are not necessarily moved from the system they reside in when they are captured.

Below is the list of use cases and associated business scenarios for the capture of electronic records.

ERM.010 - Electronic Records Capture
- ERM.010.L1.01. Determine whether the electronic content meets the criteria for a record
- ERM.010.L1.02. Determine if the electronic record can be placed under records management control
- ERM.010.L1.03. Verify the electronic record possesses the characteristics of a record: reliability, authenticity, integrity, and usability
- ERM.010.L1.04. Analyze electronic records to determine retention period based on business value
- ERM.010.L1.05. Obtain NARA approval of retention period for electronic records
- ERM.010.L1.06. Determine which records schedule applies to the electronic records
- ERM.010.L3.01. Capture electronic messages sent or received from personal accounts within 20 days

CONSIDERATIONS FOR SPECIFIC ELECTRONIC RECORD TYPES

The use cases and workflows are written from a high-level perspective and are intended to cover all types of electronic records. The base level requirements for all electronic records are the same: records must be brought under records management control and managed. It is an assumption that different types of electronic records will require different approaches to capture and management. This is important to remember when using the use cases to demonstrate how vendors and service providers meet the requirements. The steps through the lifecycle can be done automatically, semi-automatically or manually. While NARA would like to see agencies move toward full automation, agencies may not be in the position to do this due to limited resources or other constraints.

For all types of records capture, agencies will need to consider how the electronic records are created, used, and scheduled. The Business Lifecycle and Business Capabilities identify the Records Capture functions to include Records Creation, Records Validation, and Records Retention. All of these steps contribute to bringing electronic records under records management control. As explained in the Electronic Records Management Use Cases Overview, agencies may take various approaches to managing their electronic records. They may choose to manage records in the platforms or systems in which they were created or import records into a records management application. No matter the approach taken, agencies should be able to manage the records from creation through disposition.

For all types of records, agencies will have to consider the file formats the records should be in and all necessary metadata. For metadata guidance for permanent electronic records, see NARA Bulletin 2015-04: Metadata Guidance for the Transfer of Permanent Electronic Records.

Ideally, agencies will have a records management working group in place with representatives from records management, social media, public affairs, general counsel, information technology, privacy and

information security, and other relevant stakeholder areas. This working group can address a number of the below considerations when managing electronic records. They can ensure records management has a complete inventory of the platforms used to create records and how they are being used.

Note: Unscheduled records should be treated as permanent.

Below are the capture considerations for specific types of records based on how and where they were created. See the Electronic Records Management Use Cases Overview Appendix for definitions of specific record types.

Record Type	Capture Considerations for Record Type
Cloud Services	Increasingly, agencies are using cloud services for all aspects of their IT infrastructure, including to create, store, and maintain records. Agencies are moving data centers into cloud storage so they do not have to maintain the centers themselves. Agencies may choose to manage records in the cloud environment in-place or export for management in a recordkeeping system. Agencies must consider how the records are scheduled to determine the best approach for managing in-place or on premise. Agencies should be aware that utilizing cloud-based applications may require exporting records for transfer to NARA. Agencies should ensure there are appropriate export formats capable of capturing all necessary content and metadata and that, once exported, these records can be used for the same purposes as the originals.
Structured data	Structured data can reside on premise or in the cloud. Agencies will have determine which records are created and how they are scheduled to determine how records should be captured.
Office Management Applications	Records created with office management applications, such as Microsoft Office files, should be brought under records management control so they can be managed for the entire lifecycle.
Digital Media (Photo)	Digital media (photo) records should be brought under records management control so they can be managed for the entire lifecycle.
Digital Media (Audio)	Digital media (audio) records should be brought under records management control so they can be managed for the entire lifecycle.
Digital Media (Video)	Digital media (video) records should be brought under records management control so they can be managed for the entire lifecycle.
Electronic Messages	The steps for capture and management of electronic messages will vary based on the type of electronic message. That is, the steps to capture text messages will differ from those for email. If agencies are using a Capstone approach for electronic messages, they may choose to capture all messages and keep them for the length of time dictated by the Capstone schedule and the role of the user. Agencies will need to capture any attachments and all necessary metadata. For example, ensuring the sender of a text message can be identified by name instead of only phone number.

	Agencies must also evaluate how to capture and manage electronic messages sent through social media platforms (see NARA Bulletin 2015-02: Guidance on managing social media records). Agency policies and practices need to address how they will handle employee use of social media platforms to send or receive messages in personal accounts in the course of their work.
Engineering Drawings	Engineering records should be brought under records management control so they can be managed for the entire lifecycle. If engineering records are created and maintained in systems that store the component parts in a database, agencies will need to export permanent records in an appropriate format that is capable of maintaining the record and ensuring that it can still be used for the same purposes as the original.
Shared Drives	Shared drives can be configured to provide recordkeeping functionality. The setup requires organization at the outset and user compliance with folder structures that align to the agency records schedule. Users can be trained to save records in the appropriate folders. Records may need to be captured from shared/network drives and managed in a recordkeeping system that can provide additional functionality.
Social Media	Social media content is dynamic and may be continually updated, which may cause challenges for capture. It is best practice for content created in social media platforms to remain there for the life of the platform or service. Agencies should capture social media records as needed based on their approved records schedules and risks assessment. Permanent and long-term temporary social media records should be captured and managed outside of the social media platform. Short-term temporary social media records may be managed in the platform. Agencies will need to determine the frequency of capture and how they will address replies, comments, and any other content that changes over time. Ideally, agencies would have a system that performs "real-time" capture of social media content. That is, as close to the time it was created or received as possible. This should be done in an automated way so agencies do not have to rely on manual methods to look for updated content. A system should be able to do this in a way to comply with agency records schedules and all regulations. Agencies will need to determine how to handle legacy content based on their approved records schedule.
Websites	Agencies must manage website-related records created from agency web operations, including web content records and website administrative records (see NARA Guidance on Managing Web Records). It is a best practice for website content to remain accessible to the public and for agencies to explain why content is removed. There is an expectation from users that content will be available for the foreseeable future. Agencies should assume content posted on agency website platforms are records. From there, they can move forward with determining the function

of web pages and the scheduling and retention process. It is likely the case that not all website records must be kept forever, but it is also likely website platforms do contain permanent records agencies should capture and manage separate from the platform. As it may be difficult to do a web page by web page analysis, agencies should consider a holistic approach to manage websites at the domain level.

Permanent and long-term temporary website records should be captured and managed outside of the live website. Short-term temporary website records may be managed in the platform. Agencies will need to frequently revisit their approaches to managing website records to ensure they are appropriately assessing risk and taking a proactive approach to meeting their requirements for compliance. Policy and schedules should clearly state how each of the considerations will be addressed. Agencies should consider the following when determining if solutions and services meet their requirements:

- **Frequency of updates.** What intervals will website records be captured. As the complete website record can change over time, agencies must consider the frequency of capture. A third-party application could automate this capture over time.
- **Level at which a website will be managed**. For example, how many levels deep or how many webpages within the agency website will need to be captured.
- **How to manage dynamic content.** For example, integrated third-party content on a page.
- **How to manage day-forward capture of data.**
- **How to handle deleted content**.
- **How to capture and manage legacy websites**. Agencies will have to determine how to capture legacy data as far back as the platforms make it available.
- **How to handle content that resides in third-party platforms**, such as embedded social media content.

USE CASES FOR CAPTURE AND WORKFLOWS

ERM.010 – Use Case for Electronic Records Capture

Enabling Function: Electronic Records Capture
Note: The ERM functions affect every other Federal Functional Area in that all agency mission support activities create electronic records. The Enabling Functions provide support to other Functional Areas and should be combined into their use cases to reflect where records are created and how they are captured and managed.

Business Scenario(s) Covered

- ERM.010.L1.01. Determine whether the electronic content meets the criteria for a record
- ERM.010.L1.02. Determine if the electronic records can be placed under records management control
- ERM.010.L1.03. Verify the electronic record possesses the characteristics of a record: reliability, authenticity, integrity, usability
- ERM.010.L1.04. Analyze electronic records to determine retention period based on business value
- ERM.010.L1.05. Obtain NARA approval of retention period for electronic records
- ERM.010.L1.06. Determine which records schedule applies to the electronic record
- ERM.010.L3.01. Capture electronic messages sent or received from personal accounts within 20 days

Business Actor(s)

Agency Personnel, Agency Records Management Staff**,** Business Process Owner, Information Systems Owner

Synopsis

When agency personnel create or receive electronic content, the records management lifecycle begins and agencies must determine how the content will be managed. The process for managing electronic content includes determining the subject, matching the content to existing business functions, ensuring the format is acceptable, and ensuring the metadata is adequate and accurate. The agency is responsible for verifying electronic records can be managed in a way to ensure they are reliable, authentic, usable, and have integrity.

The next process analyzes a group of records to determine the retention period. This consists of identifying the business function of the group of records, determining the business value of the group of records, and identifying retention periods of similar records. Agencies should determine if an existing agency-specific or NARA General Records Schedule (GRS) applies to the records. If not, agencies should then submit a description for the group of records and a proposed retention period to NARA for approval. Once agencies receive approval from NARA to use the retention period for the group of records, they can assign that retention period to records.

Finally, the agency will assign the electronic records to the appropriate records schedule. This process consists of determining the correct group of records to assign to electronic records and ensuring the assigned group of records is tied to a records schedule. If there is not a records schedule, electronic records must be treated as permanent.

According to the Federal Records Act, agencies are required to manage records created or received in non-official and personal electronic messaging accounts (44 USC § 2911). If agency personnel send or receive messages from personal accounts in the course of their work, the messages must be forwarded or copied to official accounts within 20 days. Agencies should have policies to address the requirement to copy or forward to official accounts electronic messages that were sent or received from personal accounts.
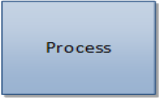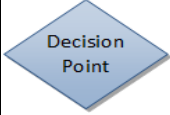
Assumptions and Dependencies

1. There are no predecessor events required to trigger the Initiating Event.
2. These events can be automated, semi-automated, or be executed manually.
3. All the inputs and outputs listed in each event have been created or are available for use to execute the events.
4. There are systems or repositories designated to manage an agency's electronic records. This may be an agency information system or the originating platform.
5. This business process includes a scheduling approval process to account for both scheduled and unscheduled electronic content. Unscheduled electronic content will need to be scheduled.
6. Agencies personnel are aware of the metadata necessary for electronic records to be complete.

Initiating Event

Electronic content created, posted or received.

Visual Workflow Key

Rectangle	Process or activity	**Arrows**	Flow of activity	**Diamond**	Decision point, usually indicated by yes/no text	**Oval**	Start or end of a process
Process				Decision Point		Start/End	

ERM.010 – ELECTRONIC RECORDS CAPTURE

Typical Flow of Events

	ERM Event	Input(s)	Output(s) / Outcome(s)
ERM.010.L1.01. Determine whether the electronic content meets the criteria for a record			
1	Determine the subject of the electronic content, including any links or attachments. (ERM.010.020 – Records Validation)	● Electronic content ● Electronic attachments ● Criteria for a record	● Subject of electronic content
2	Determine if the subject of the electronic content supports any of the business functions of the department or agency. (ERM.010.020 – Records Validation)	● Subject of electronic content ● List of business functions	● Subject of electronic content is determined
3	Ensure the electronic content metadata is complete. (ERM.010.020 – Records Validation)	● Electronic content ● Electronic content metadata	● Electronic content is complete
4	Verify the electronic content as a record. (ERM.010.020 – Records Validation)	● Subject of electronic content	● Electronic content verified as a record

		● List of business functions ● Complete electronic record	

ERM.010.L1.01. Determine whether the electronic record meets the criteria for a record

	ERM.010 – ELECTRONIC RECORDS CAPTURE		
	Typical Flow of Events		
	ERM Event	**Input(s)**	**Output(s) / Outcome(s)**
	ERM.010.L1.02. Determine if the electronic records can be placed under records management control		
5	Determine if the format of the electronic record matches the approved formats in use at the agency. (ERM.010.020 – Records Validation)	● Electronic record ● Agency approved formats ● Agency systems	● Electronic record format matches the approved formats
6	Ensure the electronic record metadata is complete. (ERM.010.020 – Records Validation)	● User computer/device ● Computer software ● Electronic record metadata ● Agency systems	● Electronic record metadata is complete
7	Verify electronic record can be placed under records management control (ERM.010.020 – Records Validation)	● Electronic record format is approved ● Electronic record metadata is complete ● Agency systems	● Electronic record can be placed under records management control

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ERM.010.L1.02. Determine if the electronic record can be placed under records management control

Agency Personnel

Start

Electronic record determined to be a record.

Does the electronic record match the approved formats in use at the agency?

—Yes→ Ensure the electronic record metadata is complete.

Electronic record can be brought under records management control.

End

No

Agency Records Management Staff

Can the electronic record be converted to an approved format?

—Yes→

—No→ Maintain the electronic record in place or in an approved repository.

Ensure the metadata is complete.

Electronic record can be brought under records management control.

End

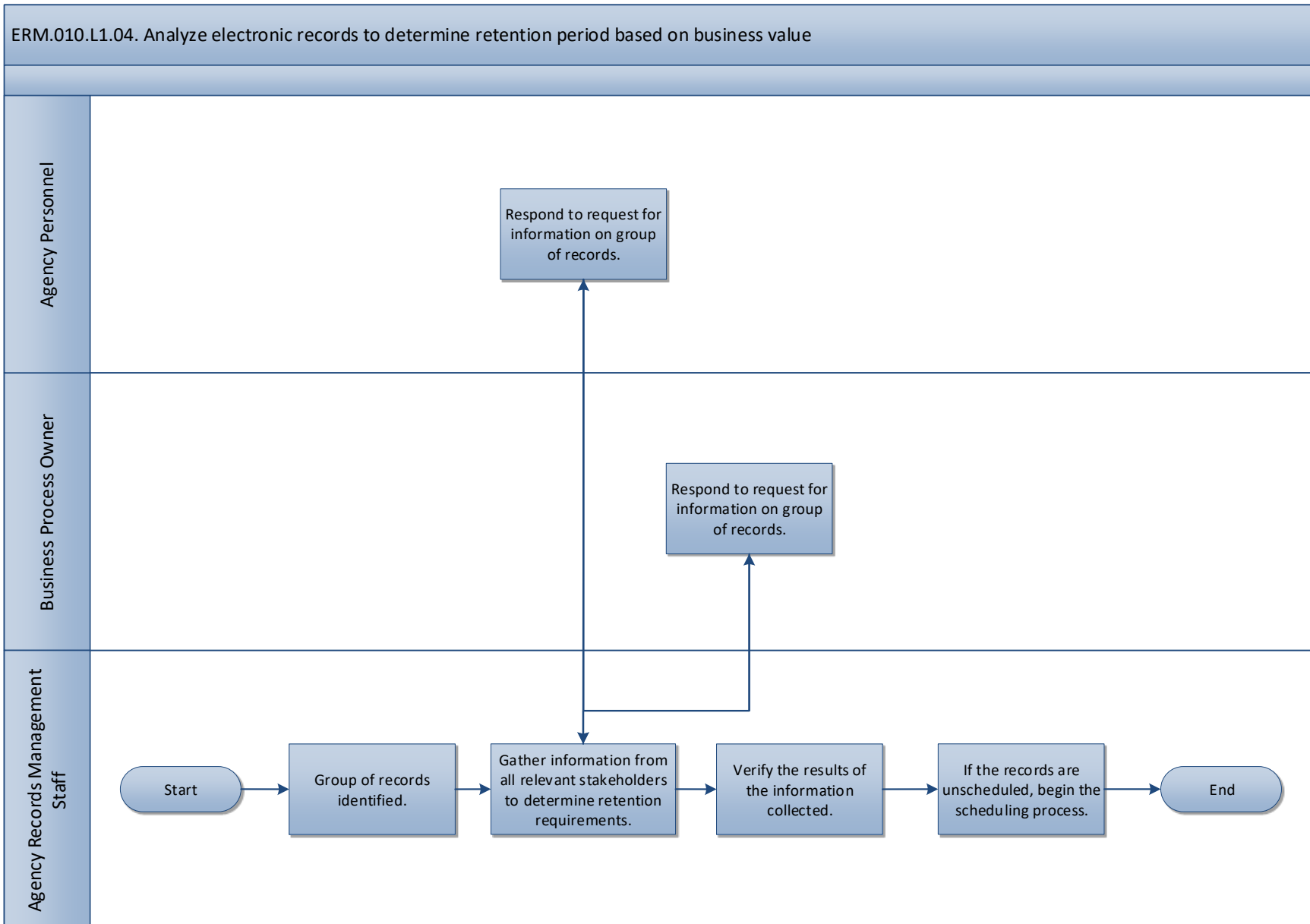| ERM.010 - ELECTRONIC RECORDS CAPTURE		
Typical Flow of Events		
ERM Event	**Input(s)**	**Output(s) / Outcome(s)**
ERM.010.L1.03. Verify the electronic record possesses the characteristics of a record: reliability, authenticity, integrity, and usability		
8 Ensure the electronic record has been placed under records management control. (ERM.010.020 – Records Validation)	● Electronic record ● Agency systems	● Records management controls applied to electronic record
9 Ensure the electronic record represents a full and accurate account of the transaction or activity. (ERM.010.020 – Records Validation)	● Electronic record content	● Electronic record is considered reliable
10 Ensure the electronic record metadata elements are accurate. (ERM.010.020 – Records Validation)	● Electronic record metadata	● Electronic record is considered authentic
11 Ensure the electronic record is complete and unaltered. (ERM.010.020 – Records Validation)	● Electronic record content ● Electronic record audit trail	● Electronic record is considered to have integrity
12 Ensure the electronic record can be located, retrieved, presented, and interpreted. (ERM.010.020 – Records Validation)	● Agency systems ● Software	● Electronic record is considered usable
13 Validate the characteristics of the electronic record and confirm as a record. (ERM.010.020 – Records Validation)	● Electronic record is reliable ● Electronic record is authentic ● Electronic record has integrity ● Electronic record is usable	● Electronic record meets the characteristics of a record

ERM.010.L1.03. Verify the electronic record possesses the characteristics of reliability, authenticity, integrity, usability

Business Process Owner

Ensure the record represents a full and accurate account of activity → Ensure electronic record metadata elements are accurate → Ensure electronic record is complete and unaltered → Ensure electronic record can be located, retrieved, presented, and interpreted.

Information System Owner

Start → Electronic record is under records management control.

End ← Electronic record meets characteristics.

Agency Records Management Staff

Ensure the record represents a full and accurate account of activity → Ensure record metadata elements are accurate → Ensure electronic record is complete and unaltered → Ensure electronic record can be located, retrieved, presented, and interpreted.

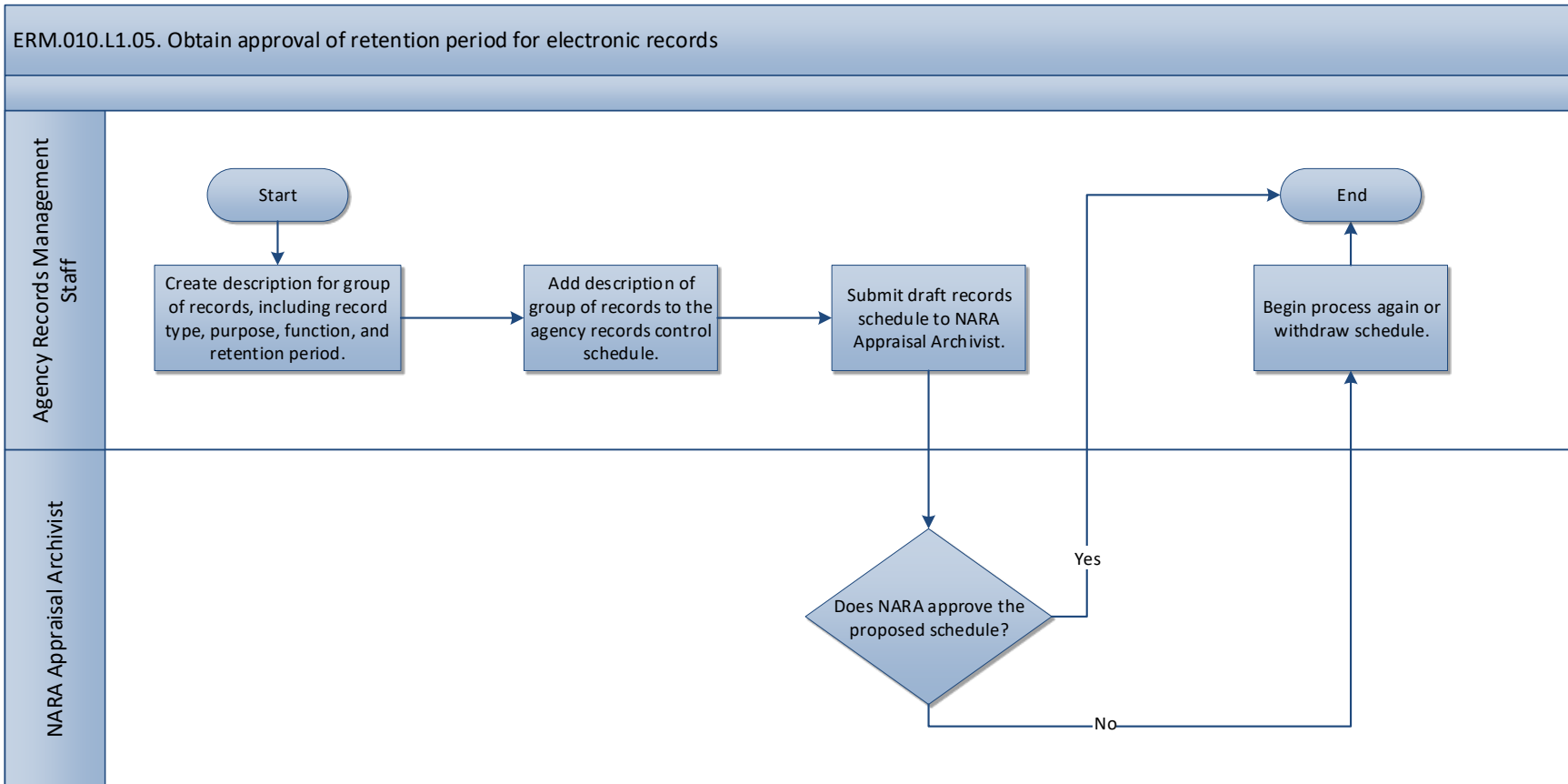|	ERM.010 – ELECTRONIC RECORDS CAPTURE		
Typical Flow of Events			
	ERM Event	**Input(s)**	**Output(s) / Outcome(s)**
ERM.010.L1.04. Analyze electronic records to determine retention period based on business value			
14	Examine group of records to identify primary business function(s). (ERM.020.020 – Records Retention)	● Agency systems ● Group of records	● Business function of group of records is identified
15	Analyze existing laws and regulations related to group of records to determine business value. (ERM.020.020 – Records Retention)	● Group of records ● Business function ● Related laws and regulations	● Business value of group of records is determined
16	Research existing approved agency records schedules to identify retention periods of similar records. (ERM.020.020 – Records Retention)	● Business function ● Business value ● Records schedules	● Relevant records retention periods
17	Assign proposed retention period for group of records. (ERM.020.020 – Records Retention)	● Business function ● Relevant records retention periods ● Business value	● Proposed retention period for group of records

ERM.010.L1.04. Analyze electronic records to determine retention period based on business value

Agency Personnel

Respond to request for information on group of records.

Business Process Owner

Respond to request for information on group of records.

Agency Records Management Staff

Start → Group of records identified. → Gather information from all relevant stakeholders to determine retention requirements. → Verify the results of the information collected. → If the records are unscheduled, begin the scheduling process. → End

	ERM.010 - ELECTRONIC RECORDS CAPTURE		
	Typical Flow of Events		
	ERM Event	**Input(s)**	**Output(s) / Outcome(s)**
	ERM.010.L1.05. Obtain NARA approval of retention period for electronic records		
18	Create description for group of records which includes record type, purpose, function, and retention period. (ERM.020.020 – Records Retention)	● Record type ● Purpose ● Business function ● Retention period	● Records description
19	Add description of group of records to the agency records control schedule. (ERM.020.020 – Records Retention)	● Records description	● Agency records control schedule
20	Submit agency records control schedule to NARA for approval. (ERM.020.020 – Records Retention)	● Agency records control schedule	● Agency records control schedule submitted to NARA for approval
21	Receive approval from NARA to assign retention period for group of records. (ERM.020.020 – Records Retention)	● Communication from NARA	● Records retention period is approved

ERM.010.L1.05. Obtain approval of retention period for electronic records

Agency Records Management Staff

Start

Create description for group of records, including record type, purpose, function, and retention period.

Add description of group of records to the agency records control schedule.

Submit draft records schedule to NARA Appraisal Archivist.

Begin process again or withdraw schedule.

End

NARA Appraisal Archivist

Does NARA approve the proposed schedule?

Yes

No

	ERM.010 – ELECTRONIC RECORDS CAPTURE		
Typical Flow of Events			
	ERM Event	**Input(s)**	**Output(s) / Outcome(s)**
ERM.010.L1.06. Determine which records schedule applies to the electronic records			
22	Create description for group of records which includes record type, purpose, function, and retention period. (ERM.020.020 – Records Retention)	● Record type ● Purpose ● Business function ● Retention period	● Records description
23	Add description of group of records to the agency records control schedule. (ERM.020.020 – Records Retention)	● Records description	● Agency records control schedule
24	Submit agency records control schedule to NARA for approval. (ERM.020.020 – Records Retention)	● Agency records control schedule	● Agency records control schedule submitted to NARA for approval
25	Receive approval from NARA to assign retention period for group of records. (ERM.020.020 – Records Retention)	● Communication from NARA	● Records retention period is approved

ERM.010.L1.06. Determine which records schedule applies to the electronic record

Agency Personnel

Start

Electronic record created, sent, or received.

Do any agency specific schedules or the GRS apply to the record?

No

The electronic record is unscheduled, treat as permanent.

Yes

Agency Records Management Staff

Ensure records can be associated with all applicable schedules.

Schedule the record series.

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ERM.010 - ELECTRONIC RECORDS CAPTURE		
Typical Flow of Events		
ERM Event	**Input(s)**	**Output(s) / Outcome(s)**
ERM.010.L3.01. Capture electronic messages sent or received from personal electronic message accounts within 20 days		
27 Examine the current list of groups of records for assignment. (ERM.010.030 - Records Retention)	● List of groups of records	● Appropriate group of records is identified
28 Ensure the appropriate group of records is tied to a records schedule. (ERM.010.030 - Records Retention)	● Identified group of records ● Records schedule	● Group of records is in records schedule
29 Assign the social media record to the appropriate group of records. (ERM.010.030 - Records Retention)	● Social media record ● Group of records in the records schedule	● Social media record is assigned to appropriate group of records

ERM.010.L3.01. Capture electronic messages sent or received from personal accounts within 20 days

Agency Personnel

Start → Electronic message is sent or received in personal account. → CC or forward electronic message to official agency account within 20 calendar days. → Ensure record and all associated metadata are included in official account. → End

Agency Records Management Staff

Start → Create agency policy on use of electronic messages including the requirement to forward or cc messages received in personal accounts. → End