

Department of Commerce · National Oceanic & Atmospheric Administration · National Marine Fisheries Service

<b><i>NATIONAL MARINE FISHERIES SERVICE PROCEDURE XX-XXX</i></b>	
Effective on: DATE	
To be reviewed on: DATE	
Science and Technology	
Policy on Electronics Technologies and Fishery-Dependent Data Collection	
MINIMUM DATA RETENTION PERIOD FOR ELECTRONIC MONITORING PROGRAMS FOR FEDERALLY MANAGED U.S. FISHERIES	
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<b>Author name:</b> Brett Alger <b>Office:</b> Science and Technology	<b>Certified by:</b> TBD <b>Office:</b> Science and Technology
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## I. Introduction

NOAA Fisheries, in conjunction with Regional Fishery Management Councils (Councils) and State Marine Fisheries Commissions (Commissions), continue to explore electronic technologies (ET) when developing new and/or improving existing fisheries-dependent data collection programs. These efforts align with the NOAA Fisheries Policy Directive on Electronic Technologies and Fishery Dependent Data Collection (ET Policy Directive; 04-115; updated May 7, 2019) to improve the timeliness, quality, integration, cost effectiveness, and accessibility of fishery-dependent data.

The use of electronic monitoring (EM) is an effective tool for collecting critical fisheries-dependent data for science and management purposes. Unlike traditional means of data collection in fisheries, (e.g. at-sea observer programs and logbooks), EM data—or the “raw” data that is collected as video, imagery, or other metadata during fishing operations, as well as reviewed or processed summary data—can require substantially more storage space, which often drives the costs of EM programs. As such, the fishing industry has raised concerns over the costs associated with storing EM data, including:

- The amount, size, and format of the video being stored;
- The length of time the video is stored, and the storage options utilized (e.g. external hard drives, cloud storage, etc.); and
- The accessibility requirements for accessing EM data from storage.

NMFS Procedure XX-XXX-XX, Effective Date (Month Day, Year)

## II. Objective

This procedural directive would establish a minimum retention period of 12 months<sup>1</sup> for data collected by EM systems that are the cost responsibility of the fishing industry.<sup>2</sup> This would ensure that vessel owners' EM data are retained and available to NOAA Fisheries to evaluate the EM service providers and participating vessels for effective program administration, while balancing the fishing industry concerns over the costs associated with storing EM data long-term. NOAA Fisheries, Councils, and Commissions, can use the guidance in this procedural directive when developing new and/or improving existing EM programs.

The guidance in this procedural directive does not address Federal "records," including EM data that are submitted to NOAA Fisheries and are subject to the Federal Records Act<sup>3</sup> These may include, among others, EM data submitted to NOAA Fisheries for enforcement purposes, reviewing video to determine optimal sampling rates, and analyzing data to ensure quality and effective program performance.

## III. Guidance

### **1. Establishing a Minimum Retention Period in the Overall EM Data Life Cycle Model**

The EM data lifecycle model provides a high-level framework of the stages involved in successful collection, use, preservation, and potential reuse of EM data. Although the minimum retention period would be 12 months, the begin date may be variable from fishery-to-fishery and program-to-program given the differences in fishery characteristics and monitoring objectives (e.g. 100% video review versus 10% video review). Therefore, NOAA Fisheries, Councils, and Commissions can use this high level framework to inform decision making and implementation of the retention (or "storage") of EM data while also accounting for specific program needs and timing of data collection and review.

EM data goes through three basic stages (Figure 1):

1. Fishing Period, or *creation* of EM data;
2. Monitoring Period, or *use* of EM data (typically referred to generally as review, that overlaps and often extends past the fishing period; and
3. Minimum Retention Period, or *storage* period of 12 months.

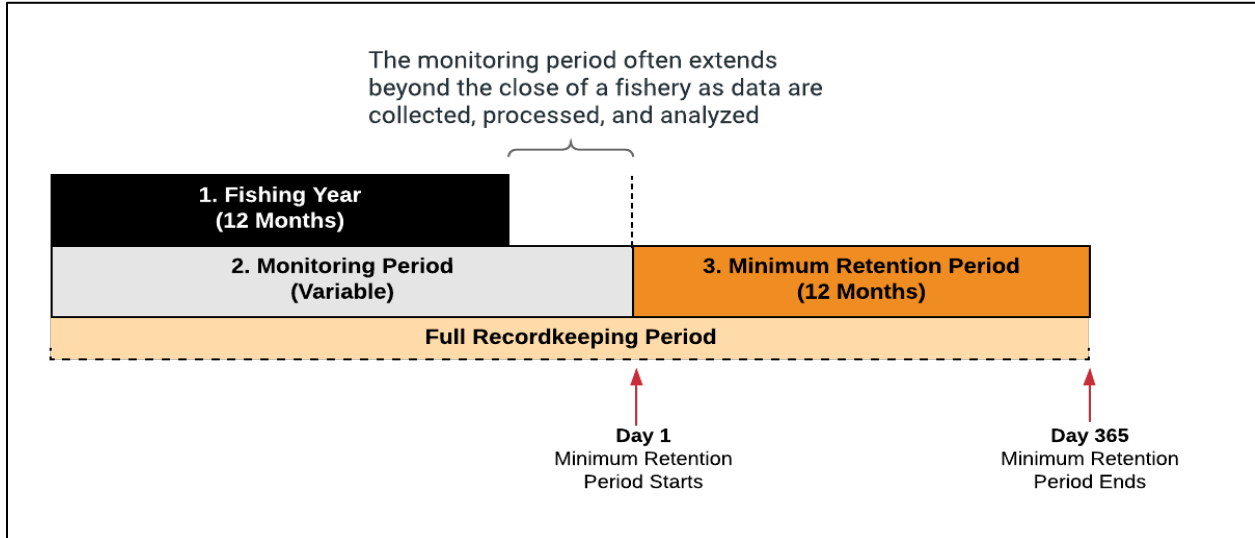
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<sup>1</sup> Because this is a minimum retention period, EM service providers and participating vessels have the discretion to retain EM data for longer than 12 months as needed for business or other purposes (i.e.  $\geq 12$  months).

<sup>2</sup> The NOAA Fisheries Procedural Directive on Cost Allocation in Electronic Monitoring Programs for Federally Managed U.S. Fisheries (Cost Allocation Directive; *04-115-02*; effective May 7, 2019) describes data from EM video, imagery, and associated metadata, as well initial review, processing, and storage of EM data, as sampling costs and the responsibility of the fishing industry.

<sup>3</sup> The Federal Records Act (FRA) establishes requirements for storage and disposition of "agency records." Agency records are defined as all books, papers, maps, photographs, etc., made or received by an agency of the United States Government under Federal law or in connection with the transaction of public business and preserved or appropriate for preservation by that agency or its legitimate successor as evidence of the organization, functions, policies, decisions, procedures, operations, or other activities of the Government or because of the informational value of the data in them.

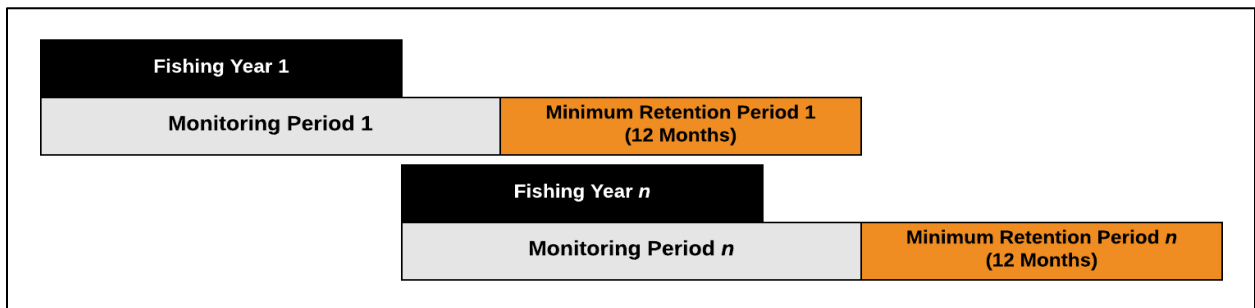
NMFS Procedure XX-XXX-XX, Effective Date (Month Day, Year)



**Figure 1. EM Data Life Cycle Model**

*1. Fishing Year (12 months):* The fishing year represents the *creation* of EM data within the EM data life cycle model. Creation is the physical capture or collection EM video, imagery, and associated metadata during fishing operations. Although fishing years across U.S. fisheries vary on the start date (e.g., January 1 vs. May 1), NOAA Fisheries monitors fisheries under Annual Catch Limits (ACLs), and generally, refer to a fishing year as a 12-month period for monitoring and management purposes. However, there are some “fishing years” that span multiple calendar years (e.g., May 1 to April 30 the following year), as well as many instances when the majority of the fishing effort occurs within a few weeks or months, typically defined informally as a “fishing season.”

When an EM program is implemented for a fishery that operates under variable fishing timeframes (e.g., a fishery is open for three months and subject to a closure), the monitoring period may be completed on shorter timeframes as well. Lastly, as shown in Figure 2 below, it is important to note that as one fishing year ends, another begins.



**Figure 2. EM Data Life Cycle Model Multi-Year.**

*2. Monitoring Period (variable timeframe and program specific):* The monitoring period represents the *use* of a variety of fisheries-dependent data, such as logbooks, observers, landings, vessel monitoring systems (VMS), etc., and in the case of EM programs, the use of EM data. Meaning, the information, inclusive of EM data, are used to monitor catch against some type of quota, allocation, or ACL. Under the EM data life cycle model, the monitoring

NMFS Procedure XX-XXX-XX, Effective Date (Month Day, Year)

period runs concurrently with and extends beyond the actual fishing effort. The monitoring period is often referred to as the review and analysis of EM data, and is dependent on the objectives of the EM program, which are variable from fishery-to-fishery. For this reason, the monitoring period is variable and will depend greatly on the characteristics of the fishery, the ability to collect and analyze all forms of data to meet the monitoring objectives, and therefore will not be uniform across all EM programs. As an example, the fishing year may end on December 31, but the monitoring continues for an additional two months as data are collected, processed, and analyzed from a number of sources, before NOAA Fisheries officially “closes the books” on the fishery.

*3. The minimum retention period (no less than 12 months):* The minimum retention period (i.e., storage period) is an integral part of responsible data management and is the third and final stage of the EM data life cycle model, which begins when the monitoring period is complete. At the conclusion of the monitoring period, EM service providers and participating vessels are required to store—and make available to NOAA Fisheries—EM data for a minimum of at least 12 months. This would ensure that vessel owners’ EM data are available to evaluate the EM service providers’ and participating vessels’ performance, and to effectively administer the EM program and enforce regulations. In an EM service provider “third-party” model,<sup>4</sup> this data storage would be part of the data services that a vessel owner receives from its EM service provider(s). Vessel owners would be responsible for these storage costs, along with the other services rendered by the EM service provider, as a condition of the vessel owner’s participation in the program. Because this is a minimum retention period, EM service providers and participating vessels would have the discretion to retain EM data for longer than 12 months as needed for business or other purposes.

## **2. EM Data Subject to this Procedural Directive**

For the purposes of this procedural directive, “EM data” refers to the data that are created in the collection of fisheries-dependent data by EM systems (“raw” data that is collected as video, imagery, or other metadata during fishing operations), as well as summary data that result from reviewed or processed video during the monitoring period. This procedural directive only applies to the data collected by EM service providers and participating vessels that are the cost responsibility of the fishing industry (as described in the EM Cost Allocation Procedural Directive), and does not apply to Federal records.

Corporate records or internal business records (e.g. emails, sales reports, finance documents, marketing materials, human resource records, etc.) are not considered EM data, and are not subject to the minimum retention period established in this procedural directive. NOAA Fisheries may require EM service providers and participating vessels to retain other records, such as EM provider certification documentation or EM service plans, for other programmatic purposes on a program-to-program basis.

## **3. EM Service Plans and Certification Considerations**

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<sup>4</sup> The EM service “Third Party” model is where a service provider retained by fishermen reviews EM video data, provides fishery information to NOAA Fisheries, and stores, manages and disposes of EM video data in accordance with NOAA Fisheries performance standards and its contractual agreements with participating vessels.

NMFS Procedure XX-XXX-XX, Effective Date (Month Day, Year)

Managing video and other electronic multimedia can be far more challenging than paper records and requires data infrastructure changes to properly store and manage the data. It is necessary for any EM program to establish distinct physical storage requirements (e.g., local servers vs. cloud services), access frequency and purpose, archival standards, continuity of EM records throughout the EM data life cycle, and procedures for disposal. Additionally, each EM program may have varying goals and use of the EM data, and therefore, each EM program is better suited to determine how to develop the requirements for the EM data management. In summary, this procedural directive does not specify how every EM program must store, access, archive, and manage EM data.

#### **4. Implementation and Timelines**

NOAA Fisheries expects that EM programs subject to this procedural directive would implement a minimum retention period within two years of the effective date of this directive, and where possible, align with the efforts of each program to implement the timelines and provisions described in the EM Cost Allocation Procedural Directive. Additionally, transition plans should be developed for EM data that is currently in various stages of the EM data lifecycle, such as programs currently storing EM data indefinitely.

#### **Attachment 1 – Glossary**

**Electronic Monitoring (EM)** – The use of technologies—such as video cameras, gear sensors, and reporting systems—to monitor fishing operations, effort, and/or catch.

**Electronic Monitoring (EM) Service Plan** – A service contract between a service provider, such as an EM service provider, and customer that provides specific and measurable aspects related to service offerings and the execution of those offerings. For example, a service contract would be included in signed agreements between EM service providers and participating vessels.

**Electronic Monitoring (EM) Service Provider** – For the purpose of this procedural directive, an EM provider refers to any organization certified and/or permitted by NOAA fisheries and arranged for by the fishing industry, a Regional Fishery Management Council, or other entity that is engaged in the collection, handling, and dissemination of fisheries-dependent EM data. EM providers may include private businesses, non-governmental organizations, or fishing and natural resource advocacy groups.

**Electronic Technology(ies)** – Any electronic tool used to support fisheries monitoring both onshore and at sea, including electronic reporting (e.g., e-logbooks, tablets, and other input devices), electronic monitoring (e.g., electronic cameras and gear sensors on-board fishing vessels), and vessel monitoring systems.

**Fishery-dependent Data Collection Program** – Data collected in association with commercial, recreational or subsistence/customary fish harvesting or subsequent processing activities or operations, as opposed to data collected via means independent of fishing operations, such as from research vessel survey cruises or remote sensing devices.