



NOAA
FISHERIES

Electronic Monitoring Policy Development

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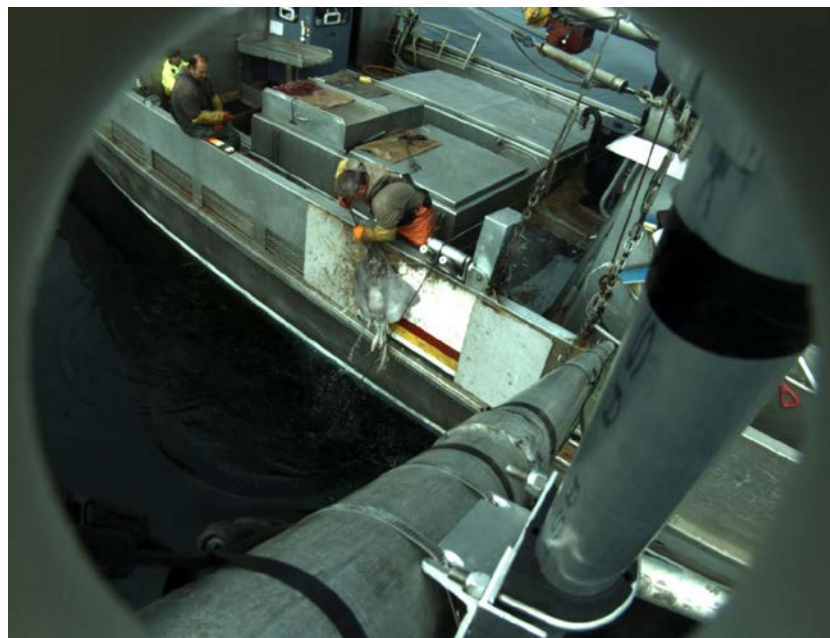
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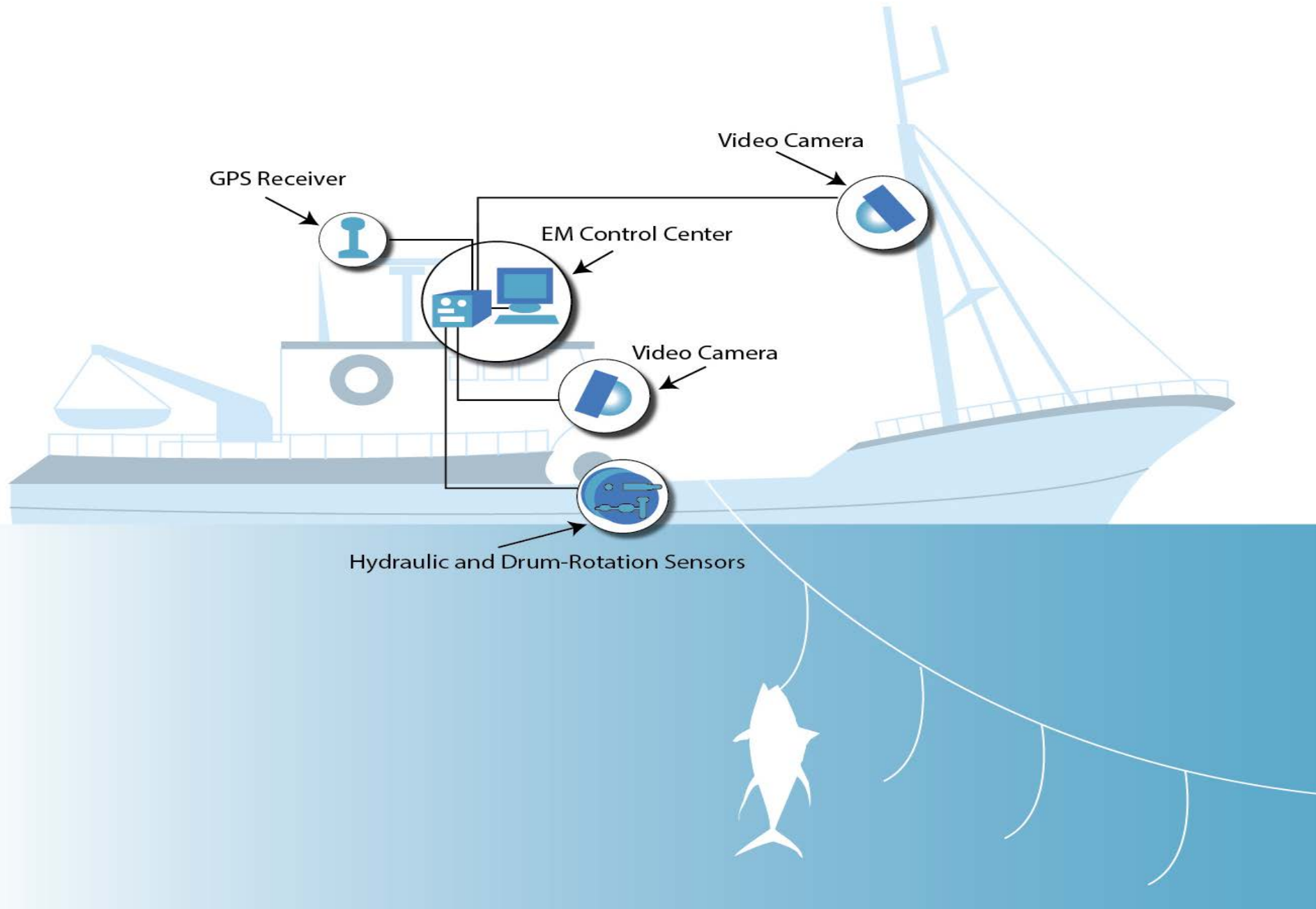
February 28, 2018



Electronic Monitoring (EM) Policy Development

- Present and future technologies
- Policy Directive - Electronic Technologies (ET) (2013)
- Cost allocation
- Video storage
- Video review
- Access and ownership
- EM standards
- New Regional Implementation Plans





Fleet Owner

Supply Chain

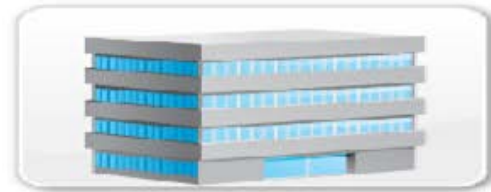
Fisheries Authorities



Secure Website



Secure APIs



Existing VMS & Catch Reporting Data Standards



Cellular Communications

Satellite Communications

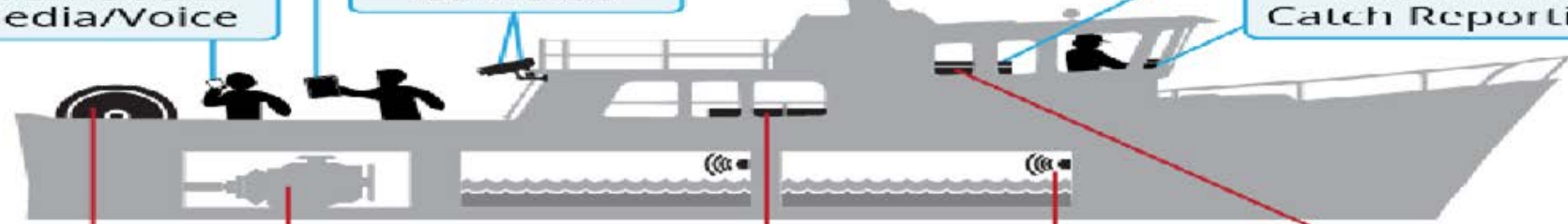
Labor/Safety Reporting

Crew Social Media/Voice

Cameras

Secure Communications Server/Vessel Monitoring System

Electronic Catch Reporting



Fishing Gear

Engine (J1939)

Factory Systems (Modbus)

Well Temperature

GPS Functions



NOAA Fisheries ET Policy Directive - 2013

- Guidance for fishery-dependent data collection
 - Vessel monitoring systems, electronic reporting, and EM
- Objectives
 - Encourage to adopt ET
 - Complement and/or improve existing programs
 - Cost-effectiveness and sustainable implementation
 - Align management goals, data needs, funding sources, and regulations
 - Coordinate costs between the Agency and industry

Draft Procedural Directive on EM Cost Allocation

- Decreasing budgets and increasing data demands
- Specify costs and monitoring functions
- Consider existing cost recovery provisions
- NOAA will not approve a program if:
 - Provisions create an unfunded or unsustainable cost
- Program funding should consider:
 - a range of funding authorities; fee collection from industry
- Develop transition plans for existing programs

Fishing Industry – Sampling Costs

- Hardware
 - Purchase/lease, install, maintain, and replace
- Training for captain and crew
- Develop vessel monitoring plans (VMPs)
- Video and data transmission to reviewers
- Initial video review and storage
- Service provider fees and overhead

NOAA Fisheries – Administrative Costs

- Program administration support
 - Address science, enforcement, and management needs
 - Review VMPs, troubleshoot issues, manage vessel selection
- Certification of EM service providers
- Program performance monitoring
 - Audit service providers (video and data)
 - Ensure data quality standards
- Data analysis and storage of Federal records

Cost Allocation Transition and Final Directive

- Establish provisions within 2 years
- Implementation within 5 years total
- Provisions must include:
 - List of allocations by category
 - Step-wise transition, if appropriate
- Timeline to complete final directive
 - February 2018 – Share draft with CCC
 - Spring 2018 – Council review
 - Fall 2018 – Finalize directive



Video Storage and Retention - Overview

- Video Storage Cost Survey (Feb 2018)
 - Transmission methods and security protocols
 - File types/sizes, video resolution, and storage type
 - Review and access
- Federal – National Archive and Records Administration
 - Current - Retain with observer records (indefinitely)
 - Future – New retention schedule for video and images
 - ~6 month process, 45-day comment period, NARA publishes an FR notice
- Non-Federal – Third-party service providers
 - Current – Retained indefinitely
 - Future – Create a policy directive and guidance to Regions

Video Review - Overview

- Current – Human review of most/all video
- Reduced human review
 - Review a portion (e.g., 20%) of trips, hauls, catch, etc.
- Computer-assisted human review
 - Review fishing events only
 - ID flat vs roundfish
 - ID species with human audit
- Computer review (mostly)
 - ID species
 - Collect length/weight
 - Monitor compliance

Type	flat
SubType	plaice
Count Label	ignore
Fish ID	2
Total Fish	78
Frame Counted	3671
Go To ID:	<input type="text"/>
Add Region	
Remove Region	
Next + Copy	



Additional EM Policies and Issues

- Data access, ownership, and confidentiality
 - Part of a broader discussion on data modernization
 - Involves States, fishing industry, Councils, and other partners
- EM standards
 - Hardware, software, data, and video review/machine learning
 - Balancing act across Regions, EM providers seek standards
 - Discussions by Agency working group, support from Knauss fellow
- Update 2013 ET Policy Directive
 - Regional ET Plans created in 2015, 4 bi-annual updates
 - Working on guidance to Regions for new plans
 - Better standardization and oversight; looking forward 3-5 years
 - Include new topics and issues

Thank you



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Additional slides



ET Policy Directive – Cost provision

- *“No electronic technology-based fishery-dependent data collection program will be approved by NOAA if its provisions create an unfunded or unsustainable cost of implementation or operation contrary to applicable law or regulation. Funding of fishery dependent data collection programs is expected to consider the entire range of funding authorities available under federal law, including those that allow collection of funds from industry. Where cost-sharing of monitoring costs between the agency and industry is deemed appropriate and approved under applicable law and regulation, NOAA Fisheries will work with Councils and stakeholders to develop transition plans from present to future funding arrangements”.*