

# Biannual progress review of implementation of NOAA Fisheries Electronic Technologies Policy

## Alaska Region Progress Report

May, 2017

### Number of FMPs with defined fishery-dependent data collection monitoring goals:

The status has not changed since our last update:

- All 6 of our FMPs address fishery-dependent data collection

### Number of FMPs reviewed to identify fisheries where the adoption of additional electronic technologies would be appropriate for achieving data needs:

This has not changed since our last update:

- In 4 of our FMPs (Arctic, salmon, crab, scallops) these metrics are not applicable.
- The other 2 FMPs (Groundfish in BSAI & Groundfish in GOA) have been reviewed to evaluate where adoption of additional ET would be appropriate (see Table 1).

### For fisheries where additional ET is identified as appropriate, the number of FMPs with electronic technologies incorporated into fishery-dependent data collection programs.

In 2 FMPs, 20 fisheries<sup>1</sup> have been evaluated to identify where additional ER and EM would be appropriate (see Table 1):

#### **Electronic Reporting:**

- All 20 fisheries have mandatory ER and 6 fisheries now have mandatory ER for observer data.
- Since the last update: NMFS finalized regulations requiring tender vessel operators to use ER software “tLandings” to prepare electronic landing reports. Regulations went into effect January 2017.
- 13 fisheries have been identified where additional ER might be suitable:
  - 5 of these fisheries (yellow cells in Table 1) are being addressed through initiatives in the from the Alaska EM/ER implementation plan<sup>2</sup>

#### **Electronic Monitoring:**

- 4 fisheries (green cells in Table 1) have mandatory video for compliance monitoring along with other electronic monitoring tools (e.g. motion compensated flow scales);
- 9 fisheries have been identified where additional EM could be appropriate and work is underway in 3 of these fisheries (yellow cells in Table 1):
  - **Amendment 80 fishery:** Work is also being conducted through an Exempted Fishing Permit (EFP) to conduct a feasibility study to facilitate deck-sorting of halibut in an effort to reduce halibut mortality. The project includes the use of EM as a compliance-monitoring tool.
  - **Fixed-gear fisheries:** EM work is being conducted in the halibut, sablefish, and groundfish fixed gear (pot and longline) fisheries through the Council’s EM Workgroup<sup>3</sup> to develop & implement EM for catch estimation.
    - **2017 Pre-Implementation:** There are 91 vessels participating in the 2017 EM Cooperative Research, 72 longline vessels and 19 pot vessels. Participating vessels log all their trips and are subject to 30%

<sup>1</sup> Since the last update, we have consolidated the halibut & sablefish CV and halibut & sablefish CP fisheries to make tracking EM & ER metrics simpler.

<sup>2</sup> <http://alaskafisheries.noaa.gov/sustainablefisheries/em/akremerimplementationplan.pdf>

<sup>3</sup> <https://www.npfmc.org/observer-program/>

- selection rate. Selected trips are recorded by the EM system. Vessels in the EM selection pool are not subject to human observer coverage.
- Regulatory development: A proposed rule to integrate EM in the North Pacific Observer Program has published and the comment period is open until May 22, 2017. NMFS anticipates that the regulations will be in place for 2018. A combination of Federal and industry (NFWF) funds will be used for EM deployment under the regulated program in 2018 (Table 2) and first half of the year in 2019 until NMFS has a regulatory mechanism in place to use observer fees for EM deployment and a EM/Observer provider contract is in place.

Table 1. Summary of the existing monitoring tools currently implemented in the North Pacific. Catch share programs require a more intensive suite of monitoring tools for management and are therefore listed separately from the non-catch share programs<sup>4</sup>. **Green cells** indicate fisheries where electronic technologies have already been implemented and regulated programs are in place. Fisheries where additional Electronic Reporting (ER) and Electronic Monitoring (EM) could potentially be suitable are noted; **yellow cells** indicate fisheries that have been identified as high priority for implementation and have initiatives underway. (Note: AFA = American Fisheries Act; BSAI= Bering Sea/Aleutian Islands; CP = catcher/processor; CV = catcher vessel; GOA = Gulf of Alaska; IFQ = Individual Fishing Quota; IERS=Interagency Electronic Reporting System; LOA = length overall of vessel).

Program Type	Fishery	Current Requirements									Additional ER Potentially Suitable?	Potential EM Application?
		ER for Landings &/or Production (IERS)	ER for tender deliveries (tLandings in IERS)	Paper logbook <sup>5</sup>	ER for logbook (elogbook in IERS)	ER for Observer data (Atlas)	Flow Scale	VMS	Compliance EM	Observer Coverage		
Catch Share	BSAI pollock trawl CP & mothership (AFA)	Y	na	N	Y	Y	Y	Y	Y	200% (ie 2 observers at all times)		
	BSAI non-pollock trawl CP (Amendment 80)	Y	na	N	Y	Y	Y	Y	Y	200%		Y - video to monitor deck sorted halibut PSC
	Central GOA Rockfish Trawl CP	Y	na	N	Y	Y	Y	Y	Y	200%		
	BSAI Pacific cod Longline CP	Y	na	N	Y	Y	Y	Y	Y	200%		
	BSAI rationalized crab CP	Y	na	Y	Few-voluntary	N	Y	Y	N	100% - not NMFS	Y- elogbook	
	BSAI pollock trawl CV (AFA)	Y	na	Y	Few-voluntary	Y	n/a	Y	N	100%	Y- elogbook	
	CGOA Rockfish Trawl CV	Y	na	Y	N	Y	n/a	Y	N	100%	Y- elogbook	Y-compliance monitoring & estimation of halibut PSC
	IFQ Sablefish & Halibut CP	Y	na	Y	Few-voluntary	N	N	Y- AI only	N	100%	Y- elogbook	
	IFQ Halibut & Sablefish >40' LOA CV	Y	na	Y	N	N	n/a	Y- AI only	N	Partial	Y- elogbook	Y- video for catch estimation.
	IFQ Halibut & Sablefish <40' LOA CV	Y	na	Y <sup>6</sup>	N	N	n/a	Y- AI only	N	None		Y – video for catch estimation
Non-Catch Share	BSAI Turbot longline CP	Y	na	Y	N	N	N	Y	N	100%	Y- elogbook	
	GOA Trawl CP	Y	na	Y	N	N	N	Y	N	100%	Y- elogbook	
	GOA Longline CP	Y	na	Y	N	N	N	Y	N	100%	Y- elogbook	

<sup>4</sup> Table replicated from Alaska EM/ER implementation plan available at: <http://alaskafisheries.noaa.gov/sustainablefisheries/em/akremerimplementationplan.pdf>

<sup>5</sup> Paper logbooks are required by NMFS for vessels >60ft

<sup>6</sup> Paper logbooks are required by IPHC for vessels >26 ft fishing for halibut; vessels >60ft are also required to submit paper logbooks by NMFS and there is a shared IPHC-NMFS paper logbook.

Program Type	Fishery	Current Requirements									Additional ER Potentially Suitable?	Potential EM Application?
		ER for Landings &/or Production (IERS)	ER for tender deliveries (tLandings in IERS)	Paper logbook <sup>5</sup>	ER for logbook (elogbook in IERS)	ER for Observer data (Atlas)	Flow Scale	VMS	Compliance EM	Observer Coverage		
Non-Catch Share	BSAI Pacific cod Trawl CV	Y	Y	Y	N	N	n/a	Y	N	Partial or 100%	Y- elogbook	
	GOA pollock Trawl CV	Y	na	Y	N	N	n/a	Y	N	Partial	Y- elogbook	Y- compliance monitoring of no discard
	GOA non-pollock Trawl CV	Y	Y	Y	N	N	n/a	Y	N	Partial	Y- elogbook	Y-compliance monitoring & estimation of halibut PSC
	Pot CP	Y	na	Y	N	N	N	Y	N	100%	Y- elogbook	Y – video for catch estimation
	Longline & Pot >=40'LOA CV	Y	Y	Y	N	N	n/a	Y	N	Partial	Y- elogbook	Y – video for catch estimation & PSC monitoring
	Longline & Pot <40'LOA CV	Y	Y	N	N	N	n/a	Y- AI only	N	None		Y – video for catch estimation & PSC monitoring
	Jig	Y	Y	Y	N	N	n/a	Y- AI only	N	None		

Table 2. Estimated costs for EM pre-implementation in small-boat fisheries in 2018 (update to Table 6.1 in the Alaska Region Electronic Technologies Implementation Plan).

Project	Cost Category	Item	Government Funds	Industry Funds	Total Cost	
<b>Small boat hook and line - 30 additional vessels in 2018 for a total EM fleet of 120</b>	Hardware	Control Boxes (60 units; \$6,000/unit)	\$360,000	\$-	\$360,000	
		Camera and sensor package (30 units; \$3,200/unit)	\$96,000	\$-	\$96,000	
		Software Licenses/Hard Drives/Other supplies	\$	\$-	\$	
	Field Support	Contract or 1 FTE Program Management/field support	\$54,856	\$-	\$54,856	
		Contract or 3 FTE Port Services - installation, maintenance	\$108,675	\$-	\$108,675	
		Travel for program management/remote port service	\$35,000	\$-	\$35,000	
		Equipment shipping	\$17,000	\$-	\$17,000	
		Technician Training (labor, materials, travel)	\$	\$-	\$-	
		Data Analysis	PSMFC Data Storage	\$25,000	\$-	\$25,000
			PSMFC Labor for Video review (1.5 FTE)	\$117,108	\$-	\$117,108
	<b>PROJECT TOTAL</b>		<b>\$813,639</b>	<b>\$TBD<sup>7</sup></b>	<b>\$813,639</b>	
	<b>Small boat pot cod - Council's goal is for 15 additional vessels in 2018 for a total EM fleet of 45</b>	Hardware	Control Boxes (15 units; \$6,500/unit)	\$97,500	\$-	\$97,500
			Cameras (15 units; \$2,500/unit)	\$37,500	\$-	\$37,500
Sensors (15 units; \$2,000/unit)			\$30,000	\$-	\$30,000	
Hard drives (70 units; \$200/unit)			\$14,000	\$-	\$14,000	
Field Support		Shipping for equipment and hard drives	\$12,000	\$-	\$12,000	
		Training (labor, materials, travel)	\$55,000	\$-	\$55,000	
		Labor for 15 installations, maintenance, repair	\$52,500	\$-	\$52,500	
		2.25 FTE for field support & program management	\$238,500	\$-	\$238,500	
Data Analysis		Review Software license	\$-	\$-	\$-	
		Labor for Video review	\$-	\$-	\$-	
		<b>PROJECT TOTAL</b>	<b>\$537,000<sup>8</sup></b>	<b>\$<sup>9</sup></b>	<b>\$537,000</b>	
<b>TOTAL EM BUDGET</b>			<b>\$1,350,639</b>	<b>\$</b>	<b>\$1,350,639</b>	

<sup>7</sup> Currently NMFS has set aside \$585,639 in funds for 2018 deployment. Alaska Longline Fishermen's Association plans to submit a NFWF proposal to make up the gap.

<sup>8</sup> These funds have not been requested. AFSC is anticipating a substantial carryover of funds from 2017 due to lower than expected number of pot cod vessels participating.

<sup>9</sup> Industry funds for the small boat pot cod project was funded through a 2-year NFWF grant to Saltwater Inc. (SWI) in 2016.