

Suggested ideas, technologies, projects for consideration in Regional ET Implementation Plans; issues raised at meetings with management organizations

This is a list of suggested electronic technology ideas to be considered by regions as part of the NMFS Electronic Technologies Initiative which requires that Regional Electronic Technology Implementation Plans be developed by Council region. These ideas and suggested projects are compiled from ET Project meetings with Regional Offices, Fishery Science Centers, Regional Fishery Management Councils, Interstate Fishery Commissions, some vendors, limited fishing industry members.

GENERAL IDEAS

- 1) ER – much work to be done to advance broadly
- 2) EM – needs a slower pace
- 3) Use passive location devices
- 4) Cost savings needs more evaluation
- 5) Focus on mobile technologies when considering data entry
- 6) NOAA should concentrate on common reporting standards, electronic monitoring data standards and then let the technologies and programs develop to meet the standards set
- 7) For location, consider shift to GPS from VMS
- 8) Set performance standards by fishery / species, then let innovation deliver technologies, applications
- 9) Use open source software to allow innovation to flourish

WESTERN PACIFIC COUNCIL AREA

- 1) ER – broader use of elogbooks
- 2) Incorporate state / territorial plans in regional ET plans
- 3) Electronic signature acceptance is a significant roadblock
- 4) EM in longline fishery

NORTH PACIFIC COUNCIL AREA

- 1) Follow the NP EM/ER strategic plan
- 2) need better analysis of costs, technologies
- 3) Use VMS / EM together to get best possible data
- 4) VMS – broader access (more than LE) is needed
- 5) EM – need better performance standards
- 6) EM – need base deployment and statistical analysis before implementing
- 7) EM – need to determine sampling protocol in fishery with many participants
- 8) sample, don't put EM unit on every vessel
- 9) EM – pilot needed for halibut / sablefish to determine
 - a. will EM work
 - b. costs relative to observers

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PACIFIC COUNCIL AREA

- 1) SW – VMS for HMS vessels
- 2) SW – EM for small gillnet fishery because of space limitations on vessels
 - a. To monitor discards
- 3) NW – cost savings need more evaluation
- 4) EM as an option but observers will still be required
- 5) NW – need broader use of e-logbooks
- 6) NW – ER – needs to be responsive enough to monitor catch and trends
- 7) EM – groundfish for compliance, regulatory backup
- 8) EM – HMS (tuna)
- 9) EM – need to be able to enforce based on computer analysis of video
- 10) ER – need e-logbooks

SOUTHEAST REGION GENERAL

- 1) ER – for private anglers – consider using panels to allow submission of self-reported data with mobile devices
- 2) ET – cost is high relative to industry profitability
- 3) Protected Species – not enough observer coverage to obtain accurate estimates
- 4) ER – need faster, more accurate data
- 5) ER – incorporate iSnapper, iAngler
- 6) EM – to monitor protected species interactions
- 7) Reef fish
- 8) Rec fisheries – release data
- 9) Shrimp e-reporting
 - a. Location
 - b. bycatch
- 10) ER – for timely ACL monitoring
- 11) EM – for markets, sustainability

GULF OF MEXICO COUNCIL AREA

- 1) VMS data which should include access by management entities, not just law enforcement
- 2) Separation of for-hire from private angler category with electronic reporting
- 3) ER for dealers with forcing mechanism to require timely reporting. This means that the reporting must be timely with respect to data needs in various fisheries for management and science
- 4) Look at new technologies
 - a. Satellite imagery
 - b. Drone aircraft
- 5) EM with clear articulation of program goals
- 6) Use EM with maximized retention to get best possible target, non-target catch estimates
- 7) VMS / GPS to obtain location information needed for management
- 8) ER – need broad development and implementation
- 9) ER for private recreational anglers
 - a. With validation
 - b. Need stakeholder buy-in that we don't have with MRIP
- 10) Web based commercial reporting system
- 11) EM for the for-hire fishery to obtain better discard estimates

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CARIBBEAN COUNCIL AREA

- 1) ER needed for monitoring fisheries, need elogbook system

SOUTH ATLANTIC COUNCIL AREA

- 1) ER – need better coordination among entities to reduce redundancies, achieve economies of scale
- 2) VMS – need ready access beyond law enforcement
- 3) Costs are a major barriers for fishing industry
- 4) EM – more pilot work is needed before implementing
- 5) Consider ET in
 - a. golden crab
 - b. snapper / grouper
 - c. coastal pelagic
 - d. dolphin / wahoo
 - e. rock shrimp
- 6) ER
 - a. Paniaed shrimp – to get better information
 - b. spiny lobster – to get better information
- 7) New technologies –
 - a. high frequency radar

Comment [m1]: I'd say SG here too.

MID-ATLANTIC COUNCIL AREA

- 1) VMS – squid / mackerel vessels – staring 1 Jan 2014
- 2) ER pilot project in surf clam fishery – David Wallace
- 3) EM – in the for hire fleet to monitor discards
- 4) ER – implement broadly and as soon as possible
- 5) ER – with automatic recording of location

NEW ENGLAND COUNCIL AREA

- 1) ER but with strong stakeholder process
- 2) EM/ER to improve traceability
- 3) ER with better coordination with Southeast Region
- 4) ER and EM – need transition period in implementation
- 5) EM – provide incentives to address cultural, non-market issues
- 6) ER – needs integrated data system
- 7) EM – groundfish
 - a. with phase-in because of number of vessels
- 8) EM – herring for shad, river herring monitoring
- 9) ET – Darden's interest from sustainability, traceability perspective
- 10) ER – need to do this first
- 11) EM – groundfish
- 12) Omnibus amendment for
 - a. ER
 - b. EM
 - c. cost recovery
- 13) allow the use of framework to implement ET
- 14) scallops – to monitor fishfish bycatch

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- 15) Develop ER with significant stakeholder involvement in development of entire system
- 16) ER – use cellphone, tablet based system
- 17) Ensure data set interoperability between ER, EM, other data
- 18) ER – separate for-hire from private rec. angling
- 19) ER – develop system to have fishermen fill out one report per trip, needed info then goes to those who need it. No multiple system multiple device ER

Comment [m2]: I think these are all equally applicable to the South Atlantic, especially #15. We have fishermen participating in HMS fisheries, as well as both northeast and southeast permitted fisheries – whatever ER software is developed needs to be able to run on any required VMS platforms as well. So not just one trip report (w/the info going to the appropriate entities who need it), but also one device. Fishermen shouldn't *have* to have multiple devices for reports and VMS (some may prefer to use a tablet on a vessel, but log into a system via computer when on land to fill out post-trip economic info).