Shrimp cELB alternatives approved in other fisheries

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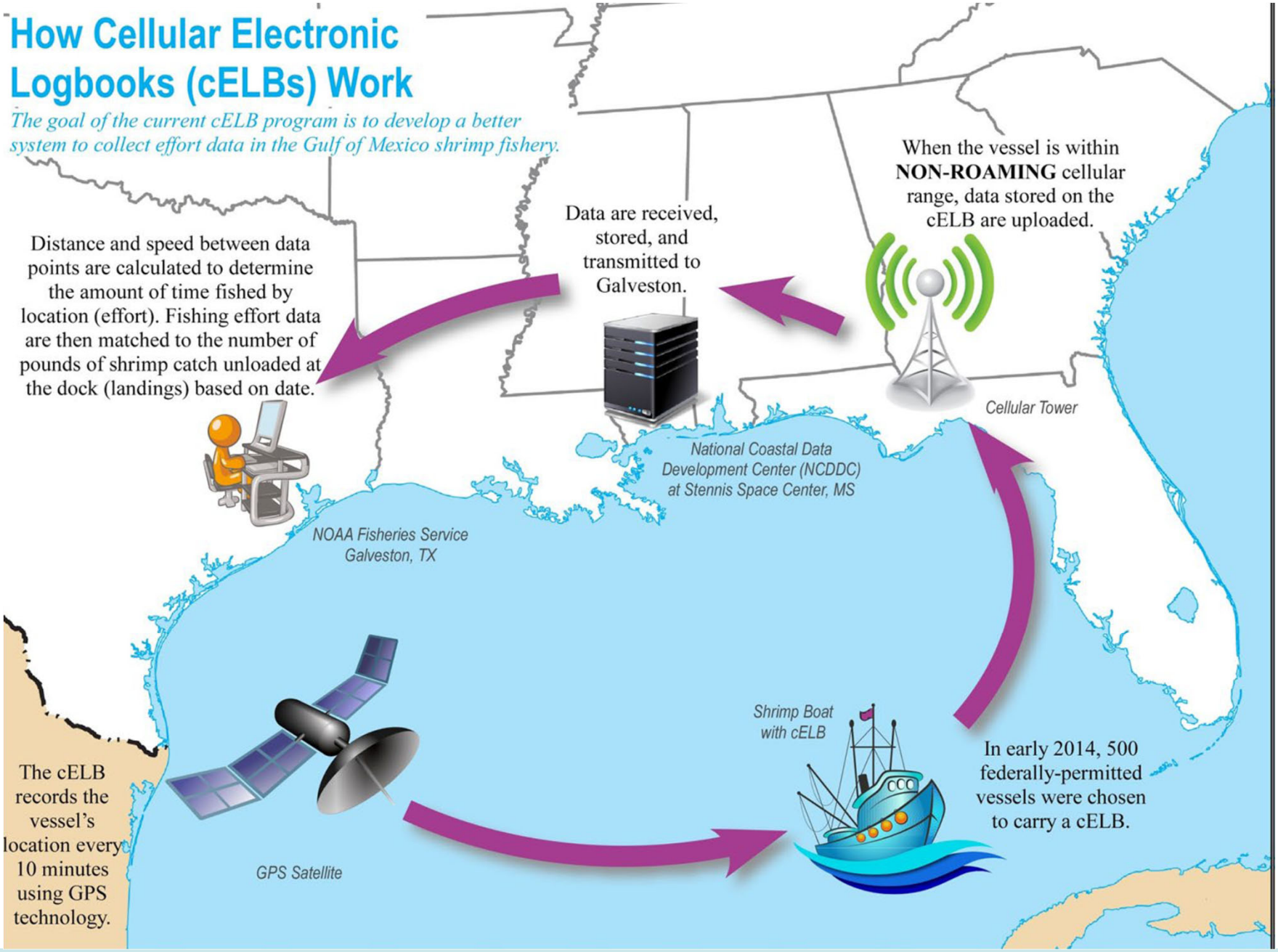
How Cellular Electronic Logbooks (cELBs) Work

The goal of the current cELB program is to develop a better system to collect effort data in the Gulf of Mexico shrimp fishery.



Key characteristics of cELB

- Cellular based system
- Designed to monitor the location and movement of vessels
- Sends Global Positioning System position reports to NMFS (or authorized entity)

A couple of relevant definitions

50 CFR part 600 subpart Q

- *Vessel Monitoring System (VMS)* means, for purposes of this subpart, a satellite and/or cellular based system designed to monitor the location and movement of vessels using onboard VMS units that send Global Positioning System position reports to an authorized entity.
- *Enhanced Mobile Transceiver Unit*, *Cellular Based (EMTU-C)* means an EMTU that transmits and receives data via cellular communications, except that it may not need a dedicated message terminal and display component at the time of approval as explained at §600.1502(a)(6). An EMTU-C only needs to be capable of transmission and reception when in the range of a cellular network (MTUs (one way transmission) are no longer approved for new installations on VMS vessels).

Units approved in commercial fisheries

Unit	Rock Shrimp	Gulf Finfish	GARFO	West Coast	Alaska	Pacific Islands	Atlantic HMS
Addvalue iFleetONE	Y	Y	Y	Y	Y	Y	Y
FariaWatchDog 750VMS (with Messaging Terminal)	Y	Y		Y	Y	Y	Y
McMurdo Omnitracks FMCT/G	Y	Y					Y
Nautic Alert, Insight X2	Y	Y		Y	Y	Y	Y
Network Innovations - Sailor VMS Gold [1]	Y	Y			Y	Y	Y
Network Innovations – Sailor VMS Gold Plus [1]	Y	Y		Y	Y	Y	Y
Network Innovations Sailor Platinum			Y	Y			
Omnicom Global (3G) EMTU [1]			Y	Y			
Omnicom McMurdo FMCT/G	Y	Y					Y
Omnicom VMS			Y	Y			
Skymate I1500 VMS [1]	Y	Y	Y	Y	Y	Y	Y
Skymate m1600 VMS	Y	Y	Y	Y	Y	Y	Y
Woods Hole Group - Thorium TST A2.0 [1]	Y	Y		Y	Y	Y	Y
Woods Hole Group - Thorium LEO A2.0 [1]	Y	Y	Y	Y	Y	Y	Y
Woods Hole Group - Triton Advanced	Y	Y	Y	Y	Y	Y	Y

[1] Manufacturers are phasing out these older versions

Units approved in For-hire fisheries

Unit	Gulf For-Hire VMS	Gulf For-Hire VMS + Forms
AddValue iFleetONE		Y
Faria WatchDog 750VMS (with Messaging Terminal)		Y
Nautic Alert, Insight X2	Y	
Omnicom McMurdo FMCT/G	Y	
Skymate I1500 VMS [1]		Y
Skymate m1600 VMS		Y
Woods Hole Group - Thorium TST A2.0 [1]		Y
Woods Hole Group - Thorium LEO A2.0 [1]		Y
Woods Hole Group - Triton Advanced		Y

[1] Manufacturers are phasing out these older versions

Possible options for "quick" type approval

Unit	Satellite	Cellular/ Hybrid	hardware cost estimate	Transmission cost estimate	Installation type
AddValue iFleetONE	Y		$3,000	?(no response)	marine electrician
Faria FB eTerm-C*		Y	$1,995	$20/month after 1st year[1]	"Plug and Play"
Faria WatchDog 750VMS (with Messaging Terminal)	Y		$3,150	$100-200	marine electrician
GlobalStar Smartone Solar	Y		$300-500	$30/month	"Plug and Play"
Nautic Alert, Insight X2	Y		$2,599	$150/month	"Plug and Play"
Omnicom Mcmurdo FMCT/G with Tablet	Y		$2,095 (introductory)[2]	$150-300/month	"Plug and Play"
Omnicom McMurdo FMCT/G without Tablet	Y		$1,595 (Introductory)[2]	$150-300/month	"Plug and Play"
Skymate m1600 VMS	Y		$3,000	No Quote without regulations	marine electrician
Woods Hole Group – NEMO*		Y	$500	$350/year	"Plug and Play"
Woods Hole Group - Triton Advanced	Y		$3,000	$150/month	marine electrician

[1]Free the first year
[2]First unit purchased

*pending approval for SEFIER

Type Approval

- Communications security-secure from tampering or interception
  - transmitted by a secure means that prevents interception, spoofing, or viewing by unauthorized individuals
- Field and Technical Services-24/7 field or technical support
- Unit durability and reliability-unit, cabling and antenna must be resistant to salt, moisture, and shock associated with sea-going vessels
- Protection of PII-type-approval holder is responsible for ensuring PII and other protected information is handled in accordance with applicable state and Federal law

https://www.ecfr.gov/cgi-bin/text-idx?SID=e4e761243c0f45783e0bf0f36e411157&mc=true&node=sp50.12.600.q&rgn=div6#se50.12.600_11507

Reimbursement process

1. Purchase, install, and activate a NOAA OLE Type-Approved VMS unit.
2. Contact the NOAA OLE VMS Helpdesk at 1.888.219.9228 to initiate the confirmation process and obtain a four-digit confirmation number for reimbursement.
3. Complete and sign the VMS Reimbursement Request Form.
4. Mail, fax or email the reimbursement request form, a copy of the paid itemized sales invoice, a copy of the Federal Fisheries Permit, a copy of the vessel's Certificate of Documentation and/or State Registration to Pacific States Marine Fisheries Commission

https://www.psmfc.org/program/vessel-monitoring-system-reimbursement-program-vms?pid=17

Conclusions

- There are a lot of options out there to achieve the goal providing effort data
- Agency prefers to write specifications for type approval rather than require specific vendors
- Any option needs to meet type approval
- Purchase (but not installation) is often reimbursable
- There are some interesting developments on the horizon.