

Tab D, No. 4(b)

Estimated Costs for Position-recording Devices in the Gulf of Mexico Shrimp Fleet - Comparison of Alternatives

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NOAA
FISHERIES

Industry Costs For Cellular Units

Cost Assumptions

- Based on Early Adopter units
- Values supplied by unit vendor to NMFS
- Early Adopter vendors indicated intent to submit for type approval
- Unit cost under Alternative 2 is reimbursable under the VMS Reimbursement program

Cost	Zen	Nemo	Boat Command
One-time Cost	\$845	\$874	\$499
Unit	\$545	\$574	\$199
Installation	\$300	\$300	\$300
Cellular Service	\$99/yr	\$175/yr	\$179/yr
Total Cost	\$944	\$1,049	\$678

*all costs are approximate and could change



Satellite Unit Cost Information

- 104 shrimp vessels have a satellite VMS requirement due to other permits on the vessel
 - These vessel owners may want a satellite VMS option to utilize their existing unit provided it meets type approval for the Shrimp fishery
- Satellite transmission costs dependent on plan selected and data used
 - Reef Fish transmission costs between \$35-\$65/mo at an hourly position tracking
 - Ten-minute ping rate increases costs but not as much as 6X hourly rate
- Informal Survey Results for expected Shrimp VMS units
 - Expected increased transmission rate based on 10 minute position tracking
 - SkyMate - unit cost ~\$1000-\$1500, \$21.99 - \$124.95/month transmission
 - MetOcean: unit cost ~\$1750, ~\$120/month for transmission



VMS Malfunction

- Rate of failure
 - Satellite units have a low rate of failure
 - Cellular units may have a higher rate of failure. SEFHIER failures were largely in 2 units, both have been discontinued by the vendor.
 - Vendors generally estimate little down-time
- Other fisheries
 - Require functioning units to achieve program requirements
 - Costs for missed days of fishing often more than costs for a backup unit.
- Cost of malfunction
 - May vary by fishermen, time of year, and unit
 - Vendors can overnight a replacement unit



Agency costs

DOC, NOAA, and NMFS strategic plans emphasis enterprise-level data systems and the elimination of duplicative data systems

- Agency costs lower under Alternative 2 than under Alternative 3.
- Alternative 2 takes advantage of existing “VMS” program systems. There will be some marginal costs to the VMS program for additional data, additional help desk, additional type approval.
- Alternative 3 will require systems that duplicate existing systems for **data collection and storage, help desk, type approval process and data security**

Shrimp Permit Holder Costs by Alternative

Assumptions

- Used Nemo unit, as most expensive unit

Cost	Alt 2	Alt 3	Difference
One-time Cost	\$874	\$874	
Unit	\$574	\$574	
Installation	\$300	\$300	
Cellular Service (annual)	\$175/yr	\$175/yr	
Total Cost	\$1,049	\$1,049	
Reimbursement Program	\$574	\$0	
First Year Total Cost	\$475	\$1049	\$574*

*Individual costs can be substantially offset by early adopter funds.