New Developments in VMS/MCS Technologies - a powerful tool against IUU fishing

GFCM - Workshop on IUU Fishing in the Mediterranean Sea
Tunis, Tunisia, 3-4 October 2013

Nenad Hercigonja, VMS technology expert

Real-time catch reporting

- Advanced ERS systems record and transmit each fishing action and catch in real time
- Inspectors check and compare reported with real situation at any time and can detect the difference
- VMS transponders with ERS transmission capability are a wise investment – no need for additional devices

Embedded geo-zones

- Protected fishing zones (MPA's) are difficult to control
- Conventional VMS systems enable short intrusions into protected areas
- New technologies <u>instantly</u> alert entrance into protected area

Net authentication

- Controls the usage of allowed nets and other tools
- Combines the net information with time and place of use – alerts of infringements
- Each tool/net is marked by fishery authority with unique robust authentication tag
- "Ghosts" get their name

Anti-tamper measures

- VMS device tampering typically includes disconnection of VMS transmitter from power, sending false position reports and other
- New anti-tampering measures detect and prevent tampering attempts and thus provide detterance to tampering as well as evidence of tampering

Fish-To-Fishermen (F2F)

- Feed of <u>local</u> VMS data to fishermen's electonic chart (e.g. 2 nm arround the vessel)
- Observing of IUU by fishermen through comparing with surrounding VMS feed
- Provision of instant and relevant IUU alerts
- Targeted inspection interventions
- Incentives to participating fishermen
- Discretion and protection

CONCLUSION

- VMS is not any more only position, speed and course because of limited results
- New technologies enable precise and reliable information, supporting many other important aspects of fishery control and <u>especially</u>
- Application of new technologies greatly improves <u>fight against IUU</u> <u>fishing</u>

Nenad Hercigonja, VMS technology expert

Thanks!

Nenad Hercigonja

info@vms-consult.com nenad.hercigonja@gmail.com