



Fishing Vessel & Small Craft tracking Solution

Maritime Assets are soft Targets

Terrorists & pirates are targeting more and more locations & facilities considered too "soft". As was evident in such attacks as the USS Cole, M/V. Limburg & the tragic attacks of 26/11 in Mumbai. It is clear that "soft" targets have included attacks on Merchant & Naval ships, Coastal Tourist hotspots & hotels, Bridges,



commercial shipping, oil & Transport critical infrastructure. Perils of pirate attacks are increasing by the day. All these attacks have been carried out using small crafts & fishing vessels. Since these attacks, the importance of small craft / fishing vessel track

ing has taken great importance & have highlighted the need for security on coastal borders. **Terrorism today, is a worldwide Issue.**

Situational Awareness for your coast?

Security is a key word today and being "on-line" with all borders and water front is essential for the new world order. The tracking of small crafts have for several years already, been an aim of authorities worldwide. No cost effective fool proof solution has been found yet. A vessel or craft close to the coast is the immediate threat. Various technologies have been tried and apart from satellite tracking no other technology has succeeded. As we know Satellite tracking is very expensive & position updates are inadequate for security. So is GSM which apart from being pricey is susceptible to network congestion and breakdowns. **Inadequate reporting rates make tracking useless for security.**

Why Class B is Not the Solution?

The most obvious step in tightening security is to have knowledge of the movements of all vessels along the coastline. Thus incorporating any tracking projects into the security agenda is important. For the IMO class vessels this is achieved with a Class A AIS. What about small boats, yachts, harbor crafts, towed barges, jet ski..... in general small crafts? Class B with CSTDMA is not suitable for various reasons.

will overload existing coastal AIS networks. It should be kept in mind that all ships in vicinity would also see 1000's of targets. With this magnitude of clutter it could become a **"hazard to navigation"**. **USCG cautions class B users are not seen by all.**

vmsTRACK for MDA

vmsTRACK from ELAB is the world's 1st purpose built tracking solution for fishing vessels & other small crafts with or without power. This is a result of over 15 man-years spent on listening to fishermen's needs as well as homeland security requirements. The end result is a product that is robust, designed by experienced engineers and made in Germany. vmsTRACK helps bring small boats, leisure crafts & fishing vessels into a national Maritime Domain Awareness network.

vmsTRACK is an award winning TDMA based VHF radio unit that can work on programmable marine band frequency. Due to the nature of TDMA technology it allows several users to share the same frequency channel by dividing the signal into different timeslots. vmsTrack has a unique capability of transmitting a SOLAS "Panic" alert as AIS MSG 14 which can also be received by any one carrying a Class A or B receiver or transponder.

vmsTrack is :

Suitable for leisure boats, ski jets, harbor crafts etc

A Coastal security & MDA application device

Ideal for coastal fishing fleet tracking & Management

A "Friend or Foe" (Pirate) identifying device

Useful to monitor movement of vehicles in a port

An aid to Pilots and boarding parties

A Radar less traffic monitoring system for small ports

MDA software available for vmsTRACK

www.elektroniklab.com

Stay on TRACK with vmsTRACK

Key features of vmsTRACK

TDMA technology tested & Proved

Smallest self contained device in the world

Future proofed and tested for AIS satellite pickup

Unique ID programmable for each unit

Will work with existing AIS shore infrastructure

Embedded geo reference coast line table

Incremental tracking as it nears coast

Built-in Emergency Distress button uses AIS MSG14

Distress complies with SOLAS & received by all AIS

Intelligent high tech tamper proof solution

Records Position when out of Radio Range

Water proof to 10m depth - IP 68

LED flash for night navigation alert

Integrated fast high sensitive GPS

Palm size and easy portability in emergency

Size 125mm x 68mm x 30mm, Weight 210 gms

Power Output approx 2 w - No Installation required

Built in rechargeable battery for upto 200 Hrs*

Programmable to any Marine Frequency

MDA tracking software solution available



Conforms to following Standards

ITU - RM 1371 - 4

IEC / EN 60950 - 1 : 2006 + A11 : 2009

IEC / EN 60945

IEC / EN 61097 - 14

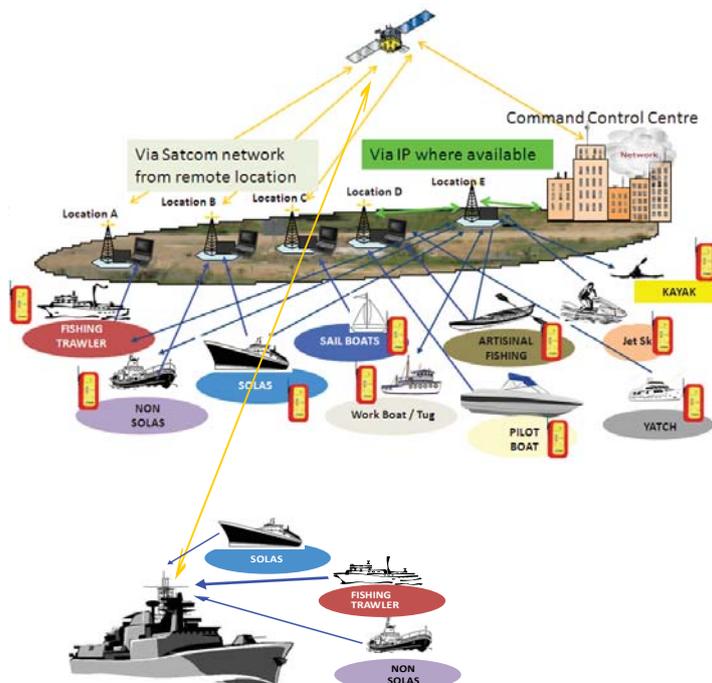
IEC / EN 61108 - 1

R&TTE - CE 0700

SOLAS - Ch 5



Integrate and share data across Your Coast



Patrolling Navy or Coast guard Ships with vmsRECEIVER relays "out of coverage" area vessels to control station via SATCOM

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