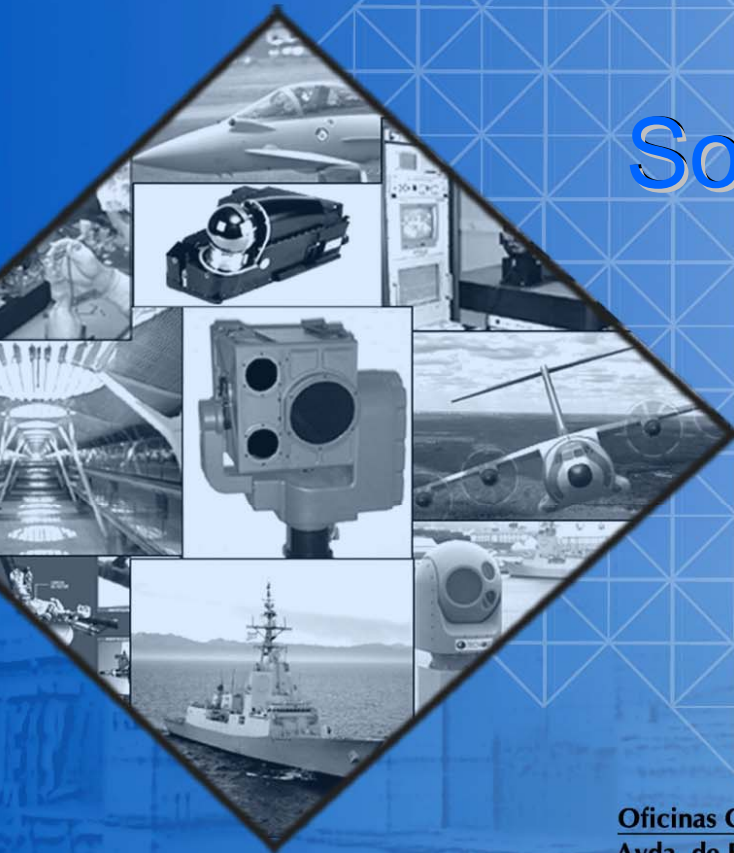


TECNOBIT

Solutions for Counter-Piracy



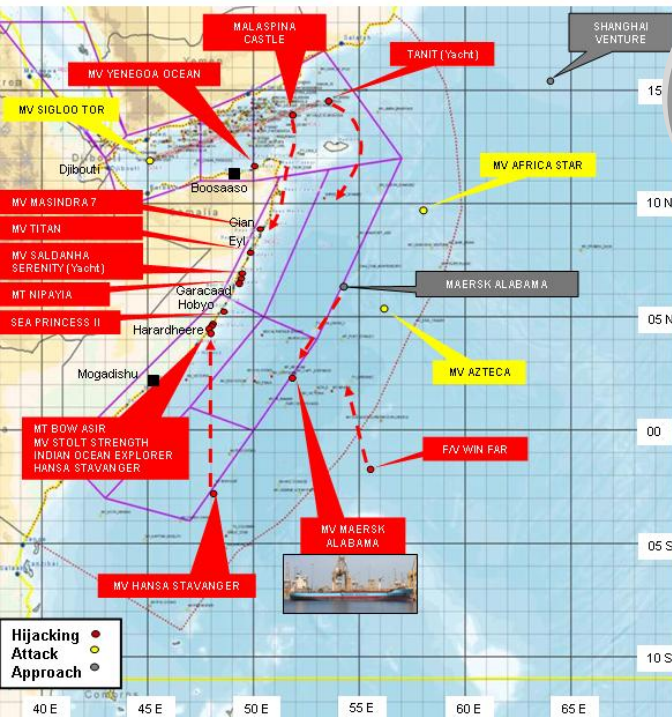
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Parque Empresarial La Moraleja
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Fábrica:

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13300 Valdepeñas
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Somali Piracy Update: 08 April 2012



safe havens
used as
home bases

financial
profit

market for
their loot

ability to project
armed parties into
shipping lanes

capability to seize vessels

ONGOING HIJACK INCIDENTS COMMERCIAL Vessels

FV WIN FAR, 06 APR/unlocated
MV MALASPINA CASTLE, 06 APR/unlocated
HANSA STAVANGER, 04 APR/Harardheere
BOW ASIR, 31 Mar/Harardheere
NIPAYIA, 02 Apr/Near Garacaad
TITAN, 19 Mar/Eyl
SALDANHA, 22 Feb/Garacaad
SEA PRINCESS II, 02 Jan/Harardheere
MASINDRA 7, 16 Dec/Gian
STOLT STRENGTH, 10 Nov/Harardheere
YENEGOA OCEAN, 05 Aug/Harardheere
INDIAN OCEAN EXPLORER

YACHT TANIT, 04 Apr
SERENITY, Approx. 15 Mar/C
SHASHEEN (IRN DHOW) 21
MOHAMMEDI (IRN DHOW)

NOTE: BOW ASIR possibly

- Sea-keeping boats/ships
- Armed and trained people
- Availability of Comms & Information

"We are considering options for a possible long-term NATO role to combat piracy, including by taking into account, as appropriate, regional requests for maritime capacity-building".

-The NATO Heads of State and Government-
Strasbourg/Kehl Summit Communiqué, 4 April 2009

NATO Op
*Allied
Protector*
(SNMG 1)

EU Op
ATALANTA

US led
Coalition
(TF-151)

Neighbouring
countries

... plus Russia,
India, etc.

Navies

Coast
Guards

Air Forces

Modern technology allows

- *Tracking vessels at sea*
- *Communicating efficiently and secured*
- *Compiling and sharing the RMP*
- *Managing alarms*
- *Using of non lethal weapons*
- ...

...but also offers
pirates open market:

- *Satellite telephone comms*
- *Access to maritime navigation data*

Hardware-independent software system implemented as:

A tool based on PDA or handheld that:

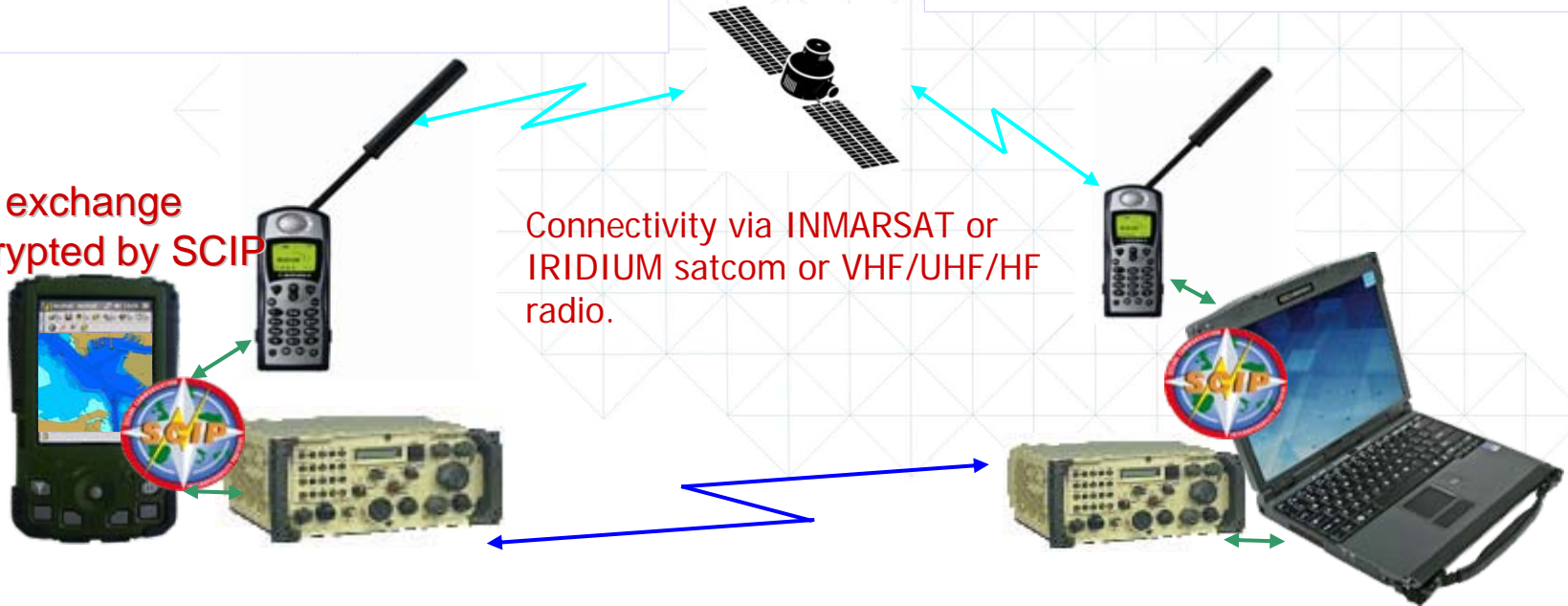
- Sends GPS position to the Command Post
- Permits transmission of tracks, areas and alerts
- Displays tactical NTDS or APP-6A information on a cartographic background.

A PC based centralized tool that:

- Receives information (GPS position, tracks, chat, voice, etc.) from PDAs
- Integrates other relevant information from higher level systems
- Distributes the resulting information to PDAs.

Info exchange encrypted by SCIP

Connectivity via INMARSAT or IRIDIUM satcom or VHF/UHF/HF radio.



Secure Communication Interoperability Protocol (SCIP): Application layer crypto protocol using public key technology (Suite B) for use up to NATO SECRET

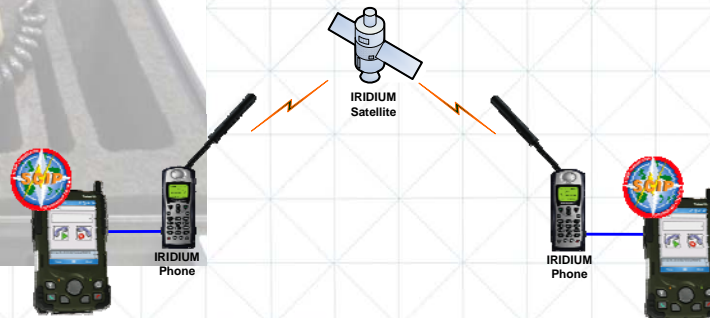
Main features:

- Interoperability
- Independent of the comms link
- NATO/National key sharing



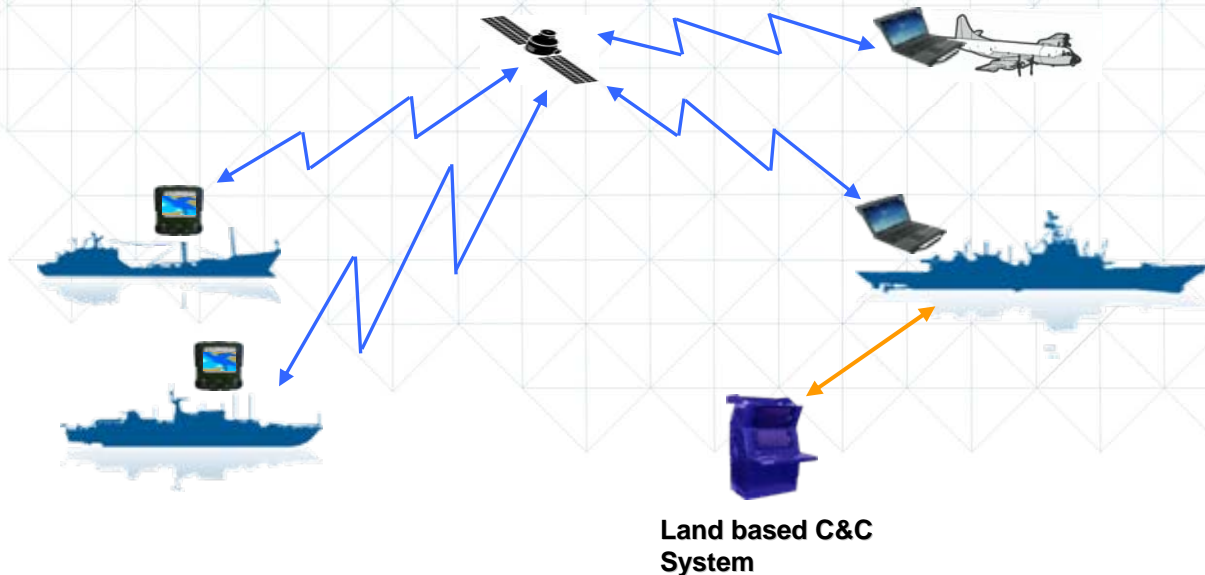
Currently in use by:

- *The NATO Operational Mentor and Liaison Teams (OMLT) of the ISAF (Afghanistan)*
-OMLTs provide training and mentoring to support ANA units' operational deployments and also liaison capability between ANA and ISAF forces –
- *The SP Marines SOF teams operating off the SP Navy ships in counter-piracy operations Allied Protector and Atalanta*
- *The SP HUMINT teams in ISAF*



Control Post (Afloat, airborne or Land Based Military Unit) :

- Secure Communications (SCIP)
- Fusion of Information from portable devices
 - Unique scenario generation
 - Alerts and Detection Coordination
 - Safety/Dangerous Areas generation
- Possible Integration with higher level systems



Portable devices (Boarding Teams, Small Patrol Boats, Merchant Ships & Trawlers):

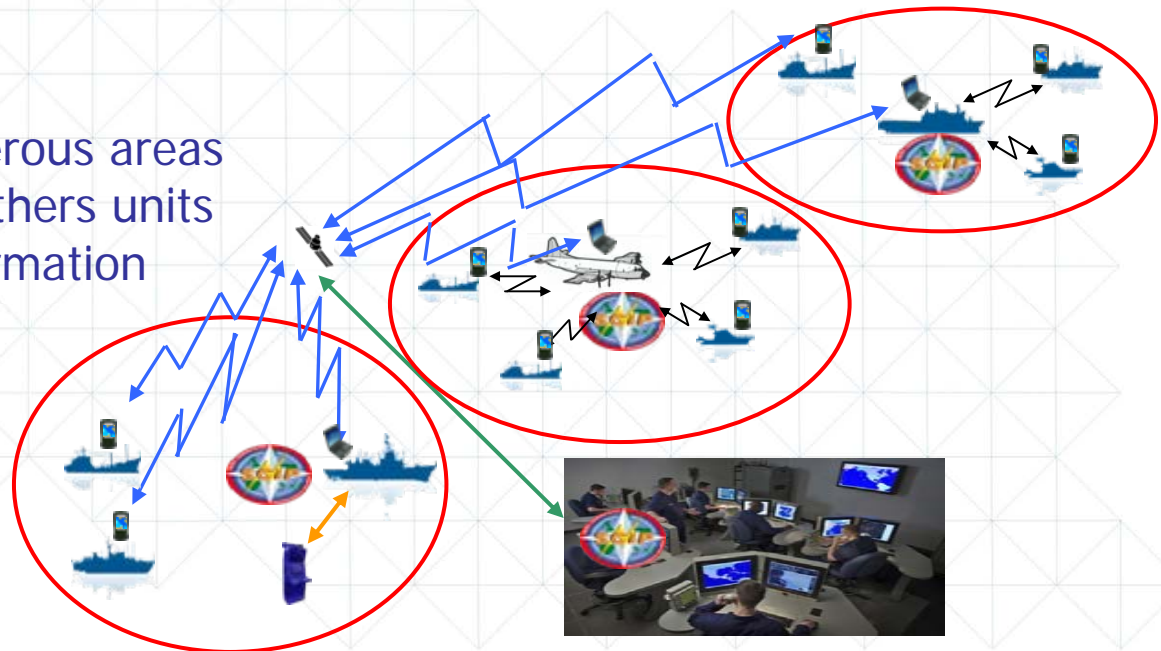
➤ Secure Communications (SCIP)

➤ Transmission of

- Own position
- Alerts
- Suspicious detections

➤ Reception of

- Safety/Dangerous areas
- Alerts from others units
- scenario information



Mobile Unit Software
can be deployed on:



PDA

Tablet PC



Portable
PC

Command Post Software
can be deployed on:



➤ Portable
PC / PC



PC



Existing on board
Console

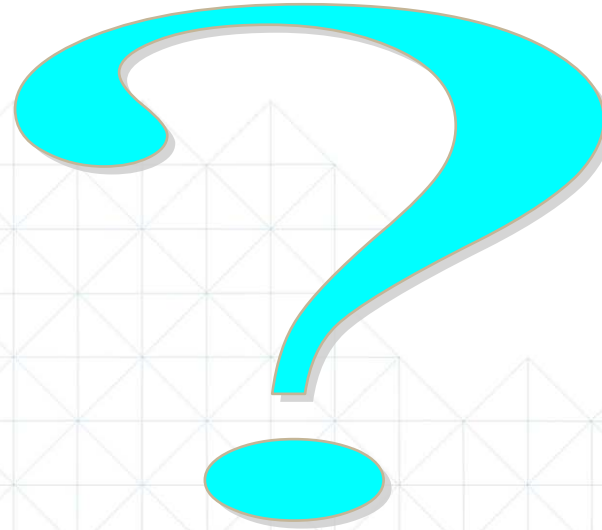
Get advantage of technology:

Use commercially available satcom

Use SCIP for comms security

Provide control stations to own forces

Provide/facilitate Mobile Situation Awareness portable devices to other forces (Non-NATO Navies, CG of neighbouring countries, merchant ships, etc)



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