

Putting **PAID** to Pirates! (but without paying them.....)

Fred Streefland, LTC ret. RNLAF

Defence/NCO specialist

Leendert van Bochoven

European Defence Leader

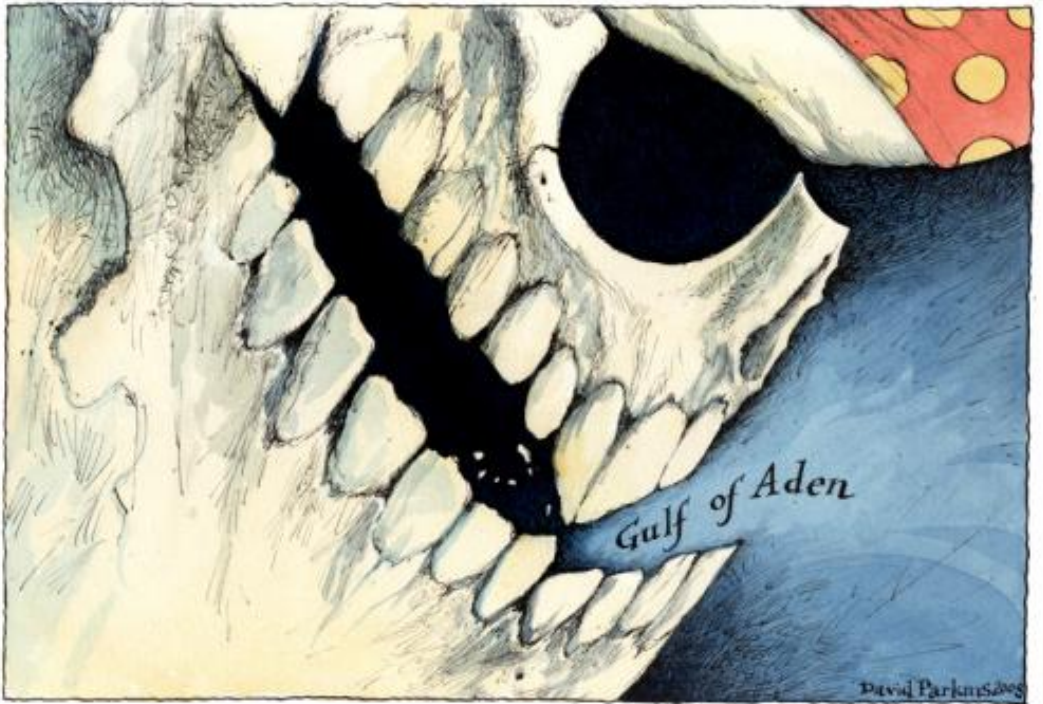


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Outline

- Background and solution requirements
- Collaboration@Sea
- New AIS Binary Messages
- Questions





Bottom line first

- Piracy is not a pure military naval problem, it is crucial to draw the shippers into the solution
- Pirates are exploiting the seams between naval forces from the different coalitions (Atalanta, TF 151, Allied Provider, etc) and individual nations (India, China, etc): it is crucial to adopt a collaborative, comprehensive approach to the problem
- Shippers need fast/cheap solutions to enhance their situational awareness, allowing them to avoid confrontations with pirates
- IBM can provide short term solutions to enhance collaboration and situational awareness at sea (Collaboration@Sea, new AIS Binary Messages)
- However: if the business model challenges for the private sector don't get addressed, then the problem for the military forces will increase

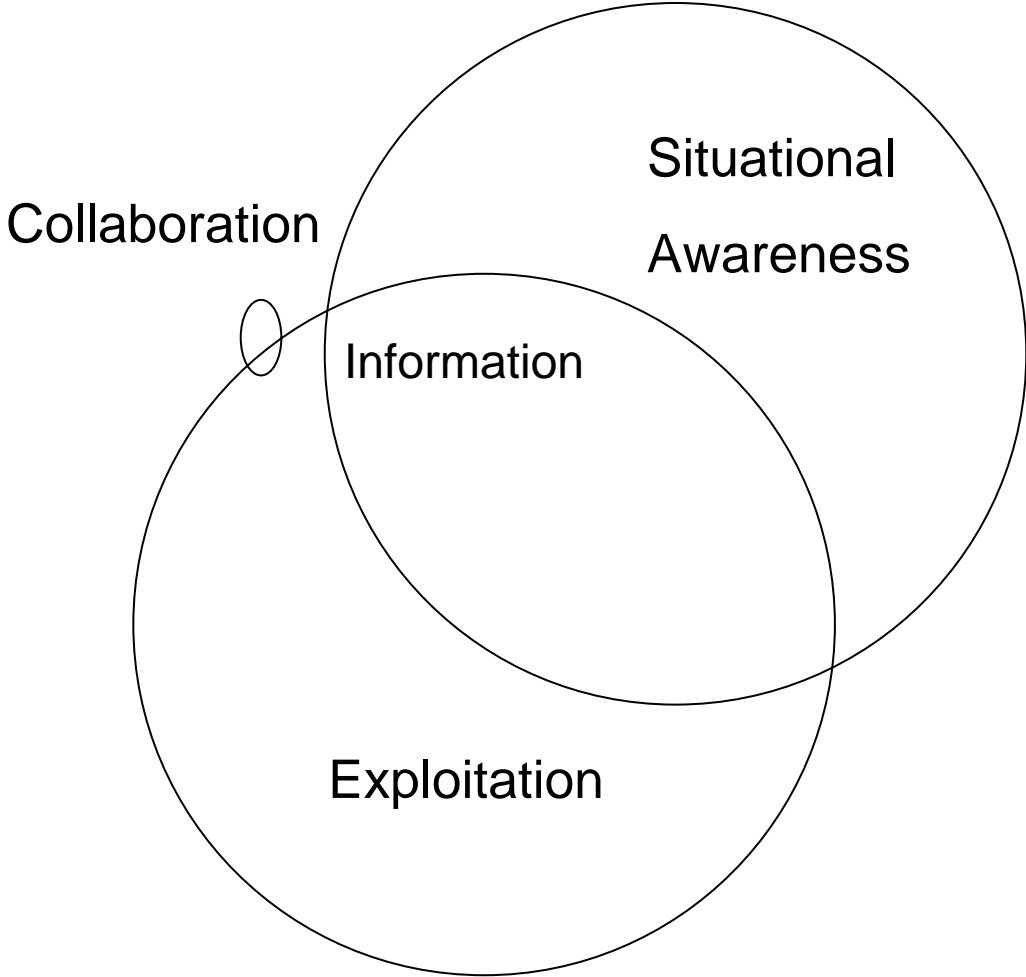


Solution requirements to address this problem space

- Build on existing capability (both military and civilian)
- Rapid deployment due to urgency of problem (low tech, high impact)
- Solutions that fit the big picture *and* the current economic climate (low cost)
- Work in wide area, bandwidth constrained environments (VHF, HF, satcom, ..)
- Interoperability is key (data exchange, open standards, operating procedures etc)
- Need to share, able to protect information
- Joint/Combined/Comprehensive approach
 - Blue water – brown water operations
 - Maritime – Air
 - Civ - Mil
 - Across agencies
- Out of IBM's portfolio of solutions, we selected two short term options to address piracy



Information is at the heart of a strategy of Avoidance:
based on enhanced collaboration and situational awareness at sea





Collaboration @ Sea started at JWID 2000 and is still in use: this can be rolled out in a matter of weeks

- AUSCANNZUKUS MNTG “Collaboration at Sea” successfully demonstrated over intermittent, low bandwidth, SATCOM and non-SATCOM channels during JWID 2000 and JWID 2001
- Global, Distributed Collaborative Planning, including Chat, Screen Sharing and White boarding, between sea, air and land forces.
- Real-Time Language Translation services (like: French, German, Italian and Spanish)
- Rapid setup and operation of a global web and collaboration services by just a few technicians
- Tools and information are available to all ships even when disconnected





C@S has developed further into Collaboration Core Enterprise Services (CCES)

Instant Messaging

- Securely Send & Receive Messages (1:1/Group Chat)
- Presence & Awareness (In or Out of portal)
- File Transfer between Chat Partners
- Audio/Video through Ad Hoc Meetings
- Automatically archived & searchable by Date/Time Stamp

Web Conferencing

- Whiteboard Application
- Sharing/Roll Out Presentations
- Voting/Polling
- Invite Unregistered Users
- Recording

Chat Rooms

- Restrict access
- Optional password
- Leave messages or Notes
- Store and share files
- Enable Alerts



Instant Messaging:
Instantly and securely send and receive text messages

Web Conferencing: Join (one or more) secure conferences with just 1 participant or hundreds of others in a single conference

Other Features such as "Translation"

Other Features such as "Find People"

Active Meetings Listed on Home Page
....click on the meeting you want to attend from the home page

Microsoft Internet Explorer

Tools Help

Search

Go

Welcome Barry Eldridge [My Profile](#) [Logout](#) **FOUO**

Core Collaboration Enterprise Service (CCES)
Information sharing can be a powerful weapon

Home Chat Rooms Web Conferencing Translation Document Manager

Sametime Contact List
People Options
Work
Barry Eldridge
John Neff

Who Is Here
Barry Eldridge

What's New
Sametime Connect Client Hotfix

Lotus Sametime Meeting Center
Wed, 3/26/2008 9:56 AM

Logged in as Barry Eldridge
[Log Out](#)

Meetings In Progress
Click Attend to join an active meeting, or click a meeting name to see information about the meeting. Times are shown in your current time zone.

	Date	Time	Meeting	Chair	Status
• In Progress	3/26/2008	10:00 AM	Barry Demo	Barry Eldridge	In P
Today					
Scheduled					
Completed					

Meeting and Chat Room names must be prefaced with (F) for FOUO, or (U) for publicly releasable unclassified content, as appropriate. FOUO meetings MUST be secured with a password.

Applet STLinksApp started



Exploitation of new AIS Binary messages to enhance Situational Awareness on any ship

- AIS is a very flexible tool that can be enhanced with new binary messages. Unfortunately the current capability to display new messages is limited.
- We believe there is a solution to rapidly adopt and exploit binary messages on any ship
- The solution is to connect a standard laptop to the AIS MKD via the parallel port. Any information that is received by the AIS is replicated, even if the unit itself can not display the information. This information can be translated and displayed on the laptop via a Graphical User Interface
- This will provide a two-way data transmission capability to ships using the AIS system's VHF transceiver system and a standard PC. This would enable ships to communicate with officials using existing data systems and messaging standards instead of voice radio
- This approach will be piloted in a Baltic Sea initiative and presented to the International Maritime Organisation in July 2009.

See for example: Digital Ship, May 2009, Dr Andy Norris



Addressing the Business Model for shippers is crucial

- Introducing new technologies to combat piracy is just one element; the technologies are currently available
- An effective business model is needed for the private sector to manage piracy risks
- Rather than paying more for insurance, shippers should invest in self-insurance: increased SA leads to self-corrective actions that should reduce the risk exposure
- Bottom line: How are shippers (and naval forces) going to invest in enhanced situational awareness?

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Questions?

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fred.streefland@nl.ibm.com

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l_van_bochoven@nl.ibm.com



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