MARITIME BORDER SAFEGUARDING:DEBRIEF SALDANHA EXP

Aim

- To give feedback on the Maritime Exp conducted at Saldanha Bay over period 28 Oct to 7 Nov 14 to the AOC

Scope

- Background
- Objectives
- Participants
- Assets
- Incidents
- General Remarks
- Current Situation
- Recommendations
- Way Forward

Experimentation/Simulation

- **"If I do this, what will happen?"** The key to an experiment can be defined as a process "*to explore the effects of manipulating a variable.*" [Shadish *et al.* 2002: p. 507]

Background

- Third Experiment
  - Ladybrandt
  - Musina
  - Macadamia
  - Some new developments
    - BMA timeline to develop a border guard and a coast guard
    - Cab Memo
    - In process with MOD to decide
    - NSS

Objectives

- **Objective 1: Joint, Interagency, Intergovernmental Participation (PA)** This aspect can only be addressed through government interdepartmental forums and structures.

- **Objective 2: Create and Operate a Maritime Operations Centre (PA)** The insights gained from the field experiment need to be applied to define and the requirements for maritime Domain Awareness Centre/s (MDAC) and the interface to other government organisations.

- **Objective 3: Situation Awareness Synthesis (PA)** As there is no other department monitoring the RSA maritime area, the MDAC should be for the benefit of other departments too, not only for the SAN.

Objectives

- **Objective 4: Joint Preparation of the Operations Space (NA)** This process can only be achieved once the quality and level of collaboration between government departments is achieved, preferably in a formalised structure.

- **Objective 5: Perform Whole of Government C2 (NA)** There was no departmental interaction except for the individuals deployed at the PECC.

- **Tech Obj: (PA)** The process of data fusion, from multiple sensors, to produce usable information from which situation awareness at various levels i.e strategic, operational and tactical can be obtained needs more formally researched and implemented as this aspect is important to critical decision making wrt to border safeguarding functions and the effective execution thereof.

Participants

SANDF Participants

- J Ops Div
- SA Army
- SAN
- CDI
- 4SFR
- CMIS (IDE)

External Participants : Personnel consisting of 85 engineers and scientists from the following organisations:

- Armscor
- DTD
- IMT
- CSIR (DPSS)
- SAAB
- Reutech Radar Systems (RRS)
- GEW
- Peralex
- Paramount Group
- Port of Entry Control Centre (PECC) Cape Town
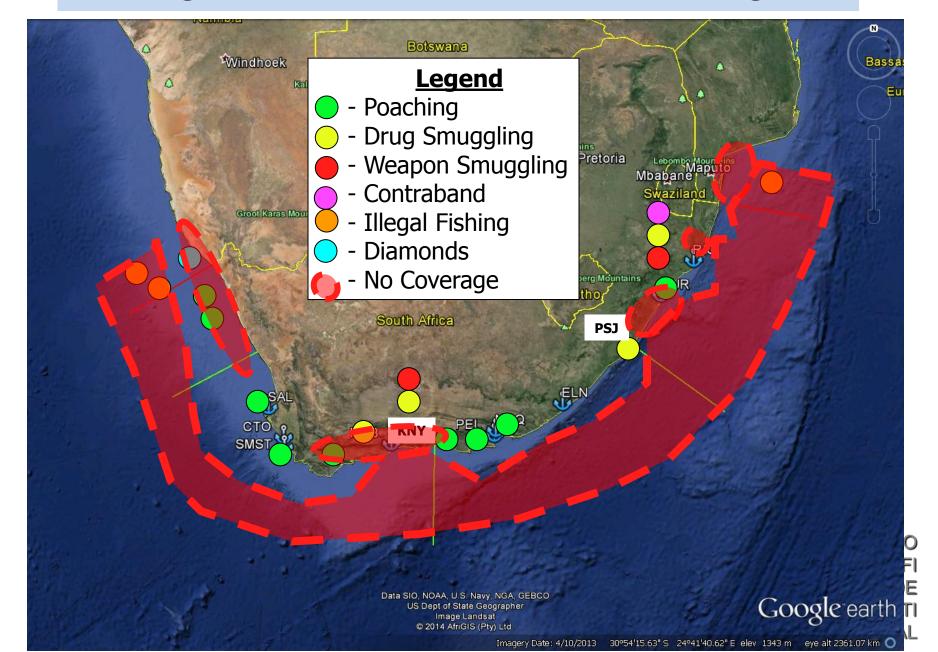
Assets
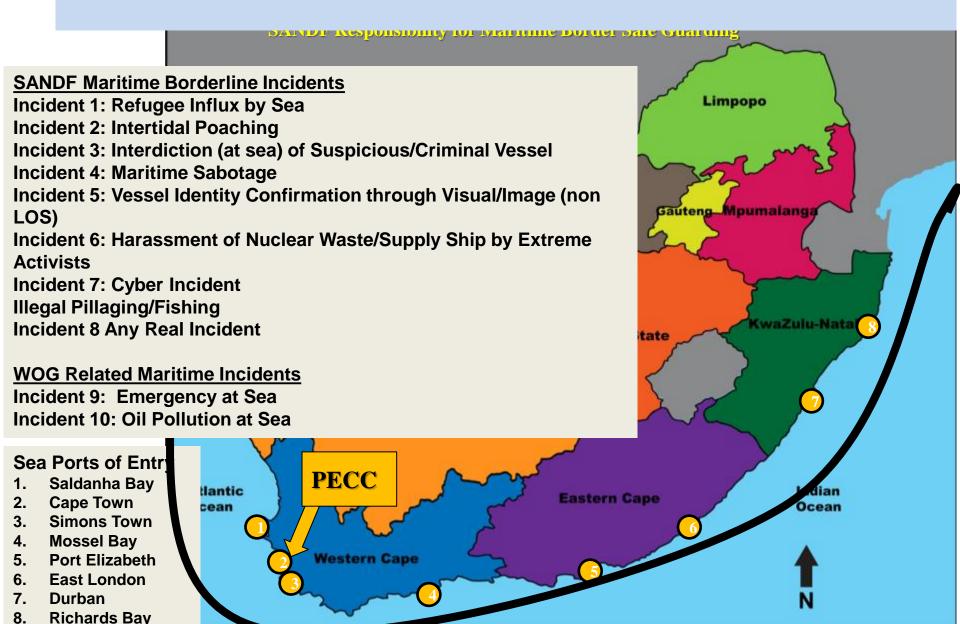
- SAAF Air Picture Display System (APDS)
- SAAF Tactical Mobile Radar (TMR)
- SAAF KOILER system
- SA Army Thutwla Radar
- SAN vessels x 3
- SAN MDAC
- JOPS Staff and 4SFR vessels
- CSIR (DPSS) CMORE technology demonstrator, Electro-Optic systems, EW equipment, Carmenta, radar information tool, Indiza UAV
- RRS Spider Radar
- IMT MREA, MDA systems, AUV and laboratory vessel,
- GEW EW equipment
- Paramount Civet UAV system
- Command and Control Data Model demonstrator

Illegal Activities and Areas of No Coverage

Legend
- 🟢 - Poaching
- 🟡 - Drug Smuggling
- 🔴 - Weapon Smuggling
- 🟣 - Contraband
- 🟠 - Illegal Fishing
- 🔵 - Diamonds
- 🔴 - No Coverage

- **MAJOR FISHING AREAS: WEST AND SOUTH WEST COAST**
- **96% OF RSA TRADE BY SEA**
- **BULK OF RSA OIL THROUGH DURBAN HARBOUR**
- **SADCC TRADE**
- **30% OF WORLD OIL ALONG RSA COAST**
- **MAJOR SEA ROUTES**
- **MARITIME TRADE BETWEEN SOUTH AMERICA AND THE FAR EAST**
- **CONSERVATION BELT (22x CONSERVATION AREAS)**
- **2x STRATEGIC CHOKE POINTS**

Experiment Incidents

SANDF Maritime Borderline Incidents
Incident 1: Refugee Influx by Sea
Incident 2: Intertidal Poaching
Incident 3: Interdiction (at sea) of Suspicious/Criminal Vessel
Incident 4: Maritime Sabotage
Incident 5: Vessel Identity Confirmation through Visual/Image (non LOS)
Incident 6: Harassment of Nuclear Waste/Supply Ship by Extreme Activists
Incident 7: Cyber Incident
Illegal Pillaging/Fishing
Incident 8 Any Real Incident

WOG Related Maritime Incidents
Incident 9: Emergency at Sea
Incident 10: Oil Pollution at Sea

Sea Ports of Entry
1. **Saldanha Bay**
2. **Cape Town**
3. **Simons Town**
4. **Mossel Bay**
5. **Port Elizabeth**
6. **East London**
7. **Durban**
8. **Richards Bay**

PECC

Maritime Experiment C2 & Coordination

Maritime Experiment C2 & Coordination

THUTLWA

LDES

SANDF
RIBs

TMR

SAN
Vessels

THUTLWA

CMORE
(x n)

KOILER

SPIDER

Optronic
Sensors
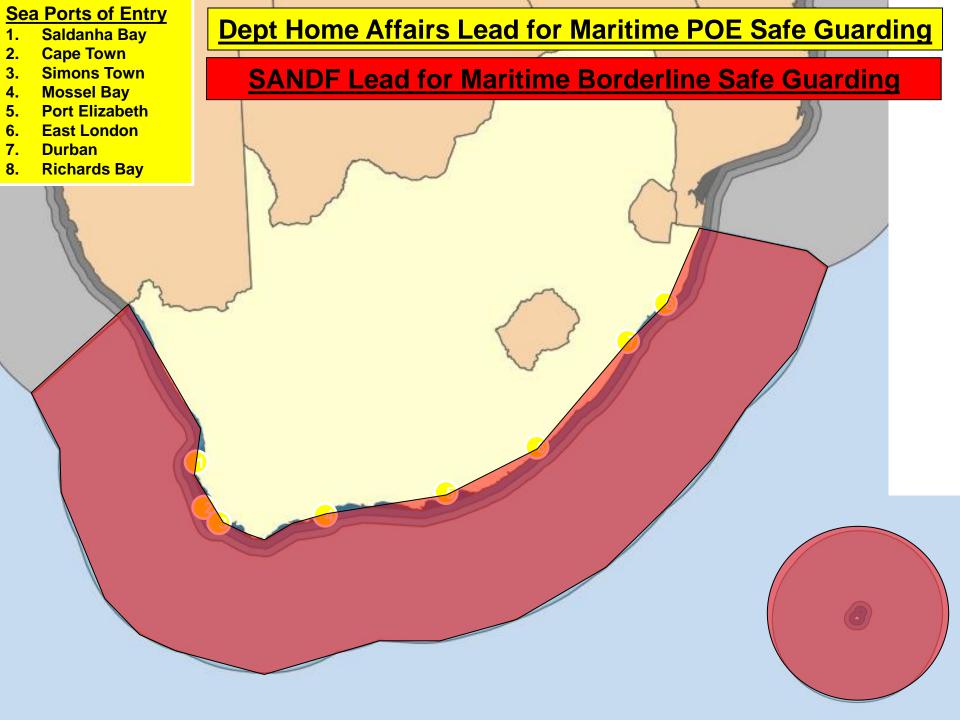
MOC

SEEKER2

APDS

CHAKA

ESM

TMR
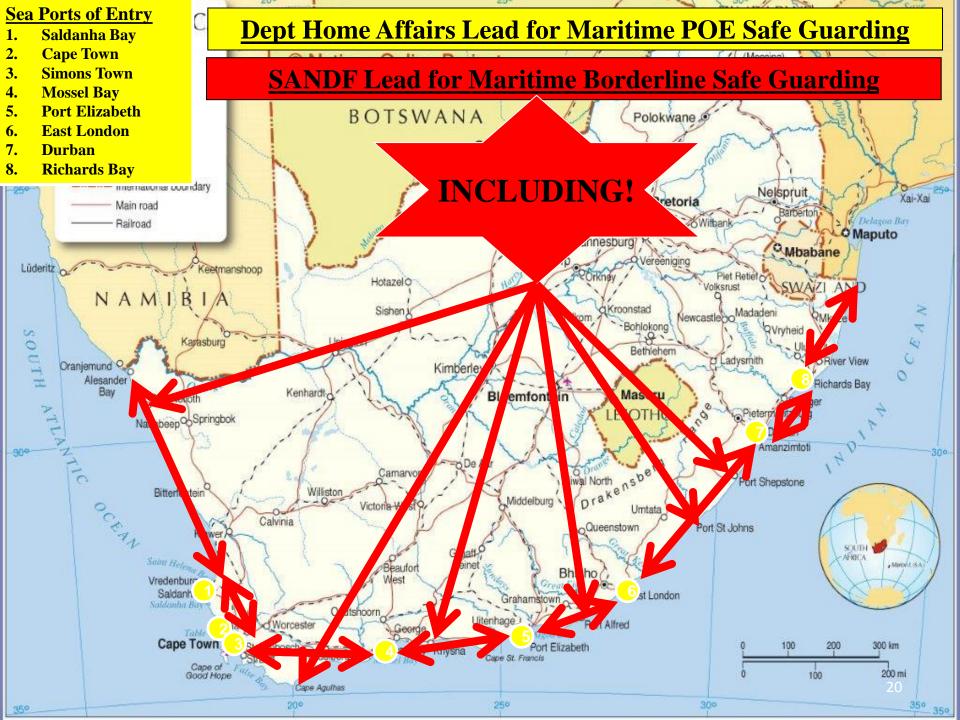
General Remarks

- DENEL – UAV
- Inter Dept Complexities
  - Dept Tpt vs Dept PE vs Def Int
  - SAPS Border Police vs PECC vs Tac HQ WC
  - Inter Dept communication
  - Port Captain
  - MCM
- Record all inputs for doctrinal/policy development
- Test CC for development of Ops rooms
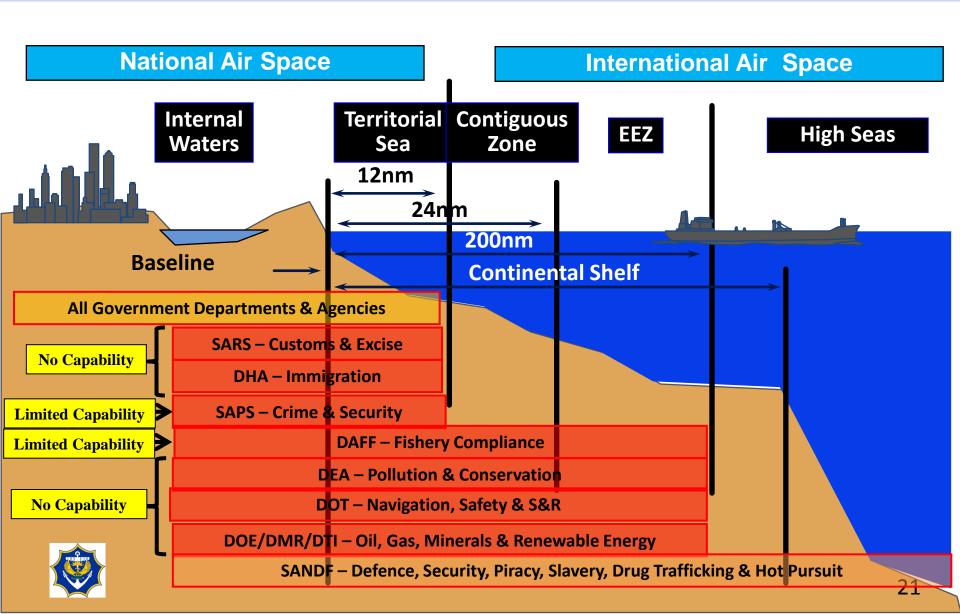
Insights Gained

Capt (SAN) J. Sinovich

Dept Home Affairs Lead for Maritime POE Safe Guarding

SANDF Lead for Maritime Borderline Safe Guarding

Dept Home Affairs Lead for Maritime POE Safe Guarding

SANDF Lead for Maritime Borderline Safe Guarding

INCLUDING!

20

Maritime Security Framework

National Air Space

International Air Space

Internal Waters

Territorial Sea

Contiguous Zone

EEZ

High Seas

12nm

24nm

200nm

Baseline

Continental Shelf

All Government Departments & Agencies

No Capability

SARS – Customs & Excise

DHA – Immigration

Limited Capability → SAPS – Crime & Security

Limited Capability → DAFF – Fishery Compliance

DEA – Pollution & Conservation

No Capability

DOT – Navigation, Safety & S&R

DOE/DMR/DTI – Oil, Gas, Minerals & Renewable Energy

SANDF – Defence, Security, Piracy, Slavery, Drug Trafficking & Hot Pursuit
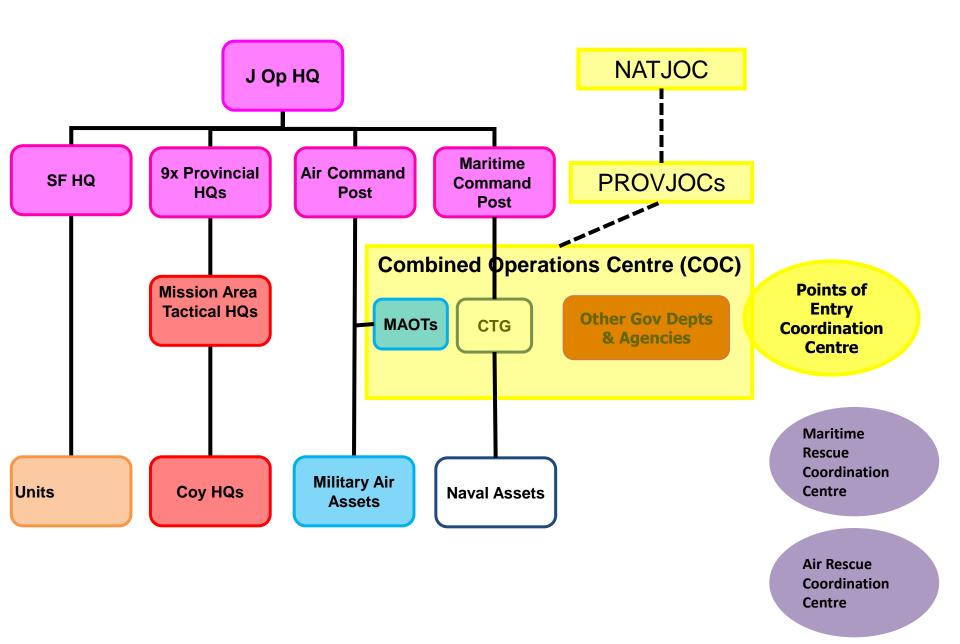
Way Forward Proposal

- Focus to implement C2 in the Maritime environment (MDACs & Maritime Command Post)

- Utilise 2015 to consolidate all inputs and technologies utilised and implement where possible

- Propose 2015 to focus on C2 through C2 Board

Maritime Experiment C2 & Coordination

J Op HQ

NATJOC

SF HQ

9x Provincial HQs

Air Command Post

Maritime Command Post

PROVJOCs

Mission Area Tactical HQs

Combined Operations Centre (COC)

MAOTs

CTG

Other Gov Depts & Agencies

Points of Entry Coordination Centre

Units

Coy HQs

Military Air Assets

Naval Assets

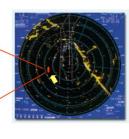**Maritime Rescue Coordination Centre**

Air Rescue Coordination Centre

Maritime C2 Process

MDA Centres

Maritime Command Post

Vessel A
Characteristics
History
Crew
Passengers
Cargo

COLLECT	FUSE	ANALYSE
• Sensors • Operators & Observers • Intelligence Agencies • Open Source • Private Sector Data • Government Departments & Agencies	• Tracks with Tracks • Tracks with Data • Data with Data • Ect.	• Anomaly Detection • Pattern Recognition & Analysis • Research & Analysis Tools • Intelligence Preparation of the OE

Actions

Displays → **Sense-Making** → **Decision-Making** → **Tasking**

Fuse → **Analyse** → **Disseminate**

Collect

PLAN – TASK - CONTROL

MDA = Surveillance & Reconnaissance + Intelligence + Situational Awareness

Levels of Maritime Command

Strategic Level

Operational Level

Tactical Level

FORCE PREPERATION

FORCE EMPLOYMENT

Maritime Command Post

Naval forces

Other assigned or attached forces

Maritime Command Post Concept

Coastal Pict		
Sit Awareness	Plan	
	Task	
	Control	

Air Picture		
Sit Awareness	Plan	
	Task	
	Control	

Surface Pict		
Sit Awareness	Plan	
	Task	
	Control	

Sub-Sur Pict		
Sit Awareness	Plan	
	Task	
	Control	

Mission 1 Pict		
Sit Awareness	Plan	
	Task	
	Control	

Mission 2 Pict		
Sit Awareness	Plan	
	Task	
	Control	

N2 Int		
Sit Awareness	Plan	
	Task	
	Control	

N3 Ops		
Sit Awareness	Plan	
	Task	
	Control	

N5 Plans		
Sit Awareness	Plan	
	Task	
	Control	

COP – Maritime Cmdr		
Sit Awareness	Plan	
	Task	
	Control	

Government Departments & Agencies

N4 Log	N1 Pers	N6 Comms	N7 Trg & Doctrine	N8 Fin	N9 Legal & PRO
Sit Awareness	Sit Awareness	Sit Awareness	Sit Awareness	Sit Awareness	Sit Awareness
Plan	Plan	Plan	Plan	Plan	Plan
Task	Task	Task	Task	Task	Task
Control	Control	Control	Control	Control	Control

Questions/Discussion