Finding the right technology solutions to secure our borders

Cobus Venter
Background

- Coastal border 2 700 km
- Terrestrial border 5 200 km

- Variety of border related crimes
- Illegal crossings
- Poaching
- Smuggling
Finding Focus

- CSIR-developed process
- Specific objectives
- Targeted technical solutions
- Consultation amongst multiple parties
From the Lab to Real Life

- Verify technical achievements
- Small-scale lab experiments
- What fails in the lab doesn’t go
- Validate technical & doctrinal concepts
- Real-life field conditions
- Simulated events
Maritime Scenario

- Maritime and Harbour Protection in Saldanha area
- Refugee Influx, Intertidal Poaching, Vessel Interception
- Specific “Injects” – plausible events simulated
- Various technologies used
- Radar and Electronic warfare systems, optronic systems, unmanned aerial vehicles, databases, software, networks.
- Preparation time 8 months
- Executed over two weeks
Working with real results

After the experiment

• Overall and technical objectives are evaluated
• Evaluation aid in planning and managing future experiments better

Most important outputs

• Recommendations generated against objectives
• Government departments use results to plan process improvements and technology acquisitions
• Five major experiments in four years
• Initiated doctrinal changes and influenced acquisitions
Thank you