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CONFERENCE
IDEAS THAT WORK

8-9 October 2015 | CSIR ICC



Finding the right technology solutions to
secure our borders

Cobus Venter

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Background



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

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

Finding Focus

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- CSIR-developed process
- Specific objectives
- Targeted technical solutions
- Consultation amongst multiple parties



From the Lab to Real Life

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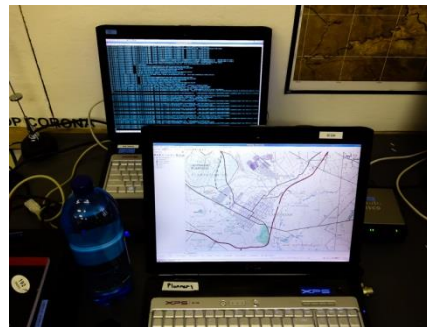
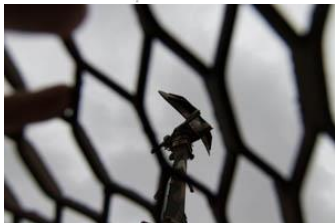
- Verify technical achievements
- Small-scale lab experiments
- What fails in the lab doesn't go
- Validate technical & doctrinal concepts
- Real-life field conditions
- Simulated events



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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

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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

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Thank you

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