



NATIONAL FACILITIES & (BEYOND) SEACHANGE

Cape Town 2012



ROLE OF (Beyond) SEACChange IN THE NSI

One of the key funding instruments in marine science

- Open competitive call
- Caters for large and small programmes
- Can be discipline specific
- Strong HCD component

Objectives should align with the DST Global grand challenge and other partner organisations research needs e.g. DEA & DAFF.

DST ministers Science vote speech – integration between activities and transformation



ROLE OF NATIONAL FACILITIES

- National Facilities are formed around critical pieces of equipment, networks or infrastructure not normally available in HEI's, NGOs and smaller research councils.
- Dual aim of undertaking research and the provision of research platforms to the NSI.
- Research platforms in the National Facilities are not there for exclusive use of NF staff members and should be integrated as far as possible into the National research framework.



COLLECTION PLATFORMS

- Collection Platform

- Wet collection
- Biobank
- Genetics lab
- Micro-otolith lab
- Xray lab



- Good research requires proper voucher specimens. SA has done well in the wet collection aspect but genetic and isotope material is in disarray.
- Proper curation and associated management system is required that protects both the collectors efforts and the long term public good.

RESEARCH EQUIPMENT

- Marine Infrastructure
 - Ukwabelana - 13m coastal craft
 - ROV & Jump cameras
 - OTN/ATAP
 - Dive Unit
 - Skippers
 - ROV pilots

UKWABELANA & SMALLER CRAFT

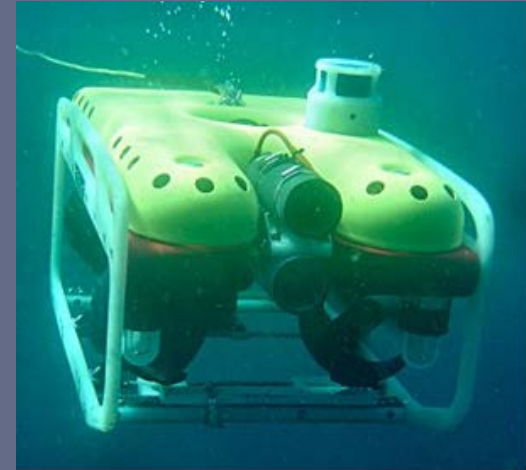
- Ukwabelana
 - Proven concept
 - < R5000 to run per day
 - Multiple institution availability
 - Suitable for HCD
- Large RIBs
- Dive units

Used extensively by HEI's

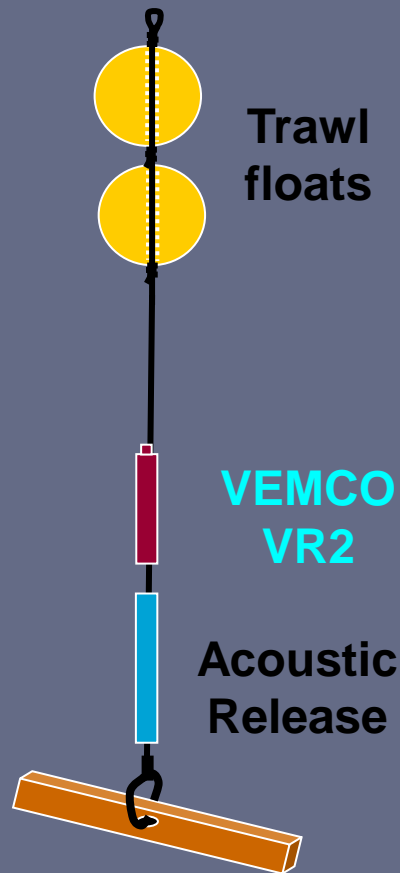


ROV & Deep-water platforms

- ROV Depth rated 300m
 - Highly technical
 - Very powerful
 - Steep learning curve
- SAEON Egagasini – Deep water benthic camera



Expanded acoustic telemetry network



Co-ordination and integration

Port Elizabeth

ALGOA BAY

- SAIAB
- BAYWORLD
- OTN

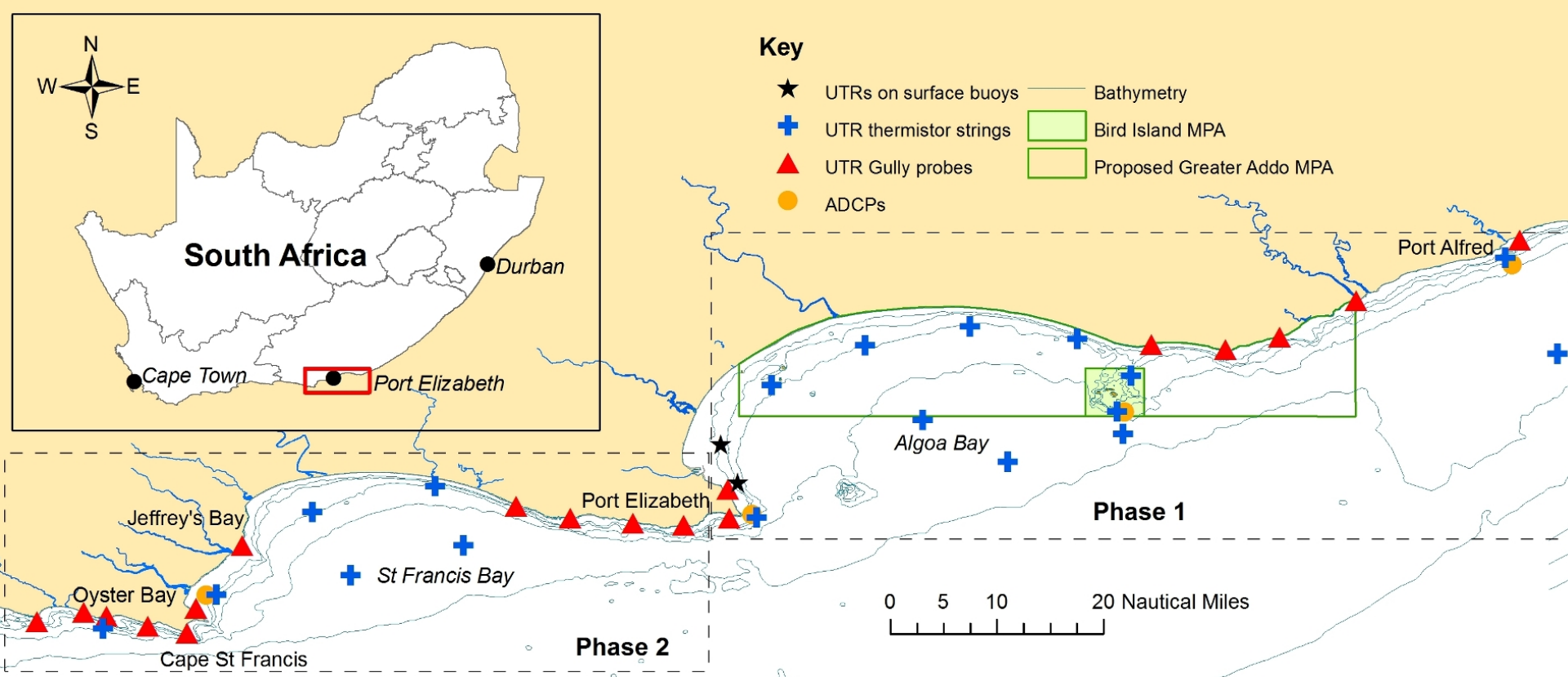


SAIAB
South African Institute
for Aquatic Biodiversity

Bayworld
Port Elizabeth Museum



SAEON Sentinel site – Elwandle and Egagasini



Significant potential for SEACChange project integration

St Lucia – next sentinel site

DATA PLATFORMS

- Processing and analysis of physical data, eg ADCPs, CTDs, weather etc
- Development of databases and websites for stakeholders
- Other data related skills (eg programming, archiving, access etc)
- Archiving of data at SAEON & SADCO with specific user agreements

SUPERVISION OR CO-SUPERVISION

- National mandate therefore multiple university affiliations
- Broad spectrum of disciplines/fields from estuaries through to the southern ocean and from genetics to oceanographic modelling.
- Training and capacity building, lecturing, workshop coordination and support in marine sciences and related skills eg modelling, data analysis, Permanova etc.



INTEGRATION OF NATIONAL FACILITIES AND DEPARTMENTS WITH SEACHANGE

- Management integration through programme managers interacting and collaborating
- National equipment register
- Competitive access to all equipment
- Overarching marine strategy for SA that recognises the numerous players and institutional mandates
- Transformation
 - Dedicated ring-fenced programme
 - Targets within open programme





SAIAB

South African Institute
for Aquatic Biodiversity



SAEON

South African Environmental
Observation Network