



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

Programme 3: Oceans and Coasts

*Presentation to the Portfolio Committee on
Water and Environmental Affairs*

6-7 March 2012

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- ☐ Southern Ocean & Antarctic Support

4. Ocean Conservation: Ocean Conservation Strategy

5. Structure of Oceans & Coasts

1. WHAT IS THE ROLE OF OCEANS & COASTS?



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The Role of Oceans & Coasts

- ❑ **DEA Goal:** Environmental assets conserved, valued, sustainably used, protected and continually enhanced.

- ❑ **Purpose:** Manage and protect South Africa's oceans and coastal environment and their resources

- ❑ **O & C Objectives:**
 1. Established management frameworks and mechanisms for the ocean and coastal environment
 2. Strengthened national science programmes for integrated oceans and coastal management
 3. Established information platforms and products that facilitate stakeholder's stewardship of the ocean and coastal environment
 4. Prioritized and advanced South African interests regionally, internationally, on the high-seas and in Antarctica

Achievements - 2011 & 2012 Targets - 2012/13: SO1 - Established management frameworks and mechanisms for the ocean and coastal environment

Performance Indicators	Targets -2011	Progress	2012/13
Ocean management regime developed	Draft Green Paper Produced	98% complete and on track for 31.03.2012	Approval of Green Paper and consultations
Number of relief voyages to remote stations	3 voyages per annum	Target Achieved	3 voyages per year
National Coastal Management programme (NCMP) and guidelines developed and implemented	Guideline documents developed for the formulation of phase one of NCMP	2nd draft Guideline for the development of the NCMP compiled.	Development of the CMP initiated
Number of local oil pollution emergency response plans reviewed and implemented.	6 of 25 updated local plans (Additional 2)	06 Will have been updated by 31 March 2012	Additional 2 plans updated.
Estuary management protocol finalised and implemented	Draft Protocol compiled	Protocol compiled (referred to Economic Cluster)	Protocol applied to the planning and operational management of estuaries
% increase of coastline under MPA's with partial or full protection	Partial protection increase from 12 to 13%, 9% full	Target Achieved (Amathole MPA declared), 9 full	-13,5% Partial protection - 9% full protection
Number of protected marine species with management plans	3 species management plans implemented, including the NPOA for sharks	<ul style="list-style-type: none"> - Permits for BBWW and WSCD allocated, - Penguin Management Plan - First draft Framework for Conservation of Sharks . 	1 additional management plan

Achievements - 2011 & 2012 Targets: 2. SO2 - Strengthened national science programmes for integrated oceans and coastal management

Performance Indicators	Targets -2011	Progress	2012/13
% of baseline assessment of ocean and coastal biodiversity within priority eco and bioregions (including MPAs).	Nil (New Target)	Nil .	2% of targeted representative habitats.
Estimates of population numbers and trends for marine top predators	Annual seabird population estimate for 12 species	10 (out of the 12) seabird species population estimates now completed.	Annual seabird population estimate of 12 species around SA and in addition 1 Southern Ocean species.
	Complete Aerial survey of West coast seal colonies	Annual aerial Surveys completed	Estimates of seal pup numbers at colonies
	Research on international methodology for Shark and Whale population estimation.	<ul style="list-style-type: none"> - Shark estimation methodology identified and submitted for review - Whale estimation methodology tested. 	Methods of whale population estimation appropriate for South Africa evaluated and refined
Number of peer reviewed scientific publications (including theses).	22 peer-reviewed scientific publications	15 publications made (as of January 2012)	20 peer-reviewed scientific publications.

Achievements - 2011 & 2012 Targets: SO3 - Established information platforms and products that facilitate stakeholder's stewardship of the ocean and coastal environment

Performance Indicators	Targets -2011	Progress	2012/13
Frequency of the State of the Oceans Report.	Bi- annual state of the oceans report	Target achieved	Annual State of the Ocean Report
On-line information system accessible to stakeholders.	Needs analysis and system design for South African Ocean and Coastal Information system conducted	Needs analysis initiated by describing key aspects of the information system	-Specification and design made and project plan determined - Technical development of system initiated
Functioning database with real-time, delayed-time and ship data, with online access and products	5 Prototype database management system	- 5 prototype Several prototype databases (Expansion of databases
Functioning coastal and deep ocean observation and monitoring networks	4 buoys deployed	2 buoys deployed	Additional 2 buoys deployed

Achievements - 2011 & 2012 Targets: SO4. - Prioritized and advanced South African interests regionally, internationally, on the high-seas and in Antarctica

Performance Indicators	Targets -2011	Progress	2012/13
Benguela Current Commission (BCC) Treaty ratification and implementation.	1 st draft of the BCC Treaty text compiled.	Convention certified by DIRCO and referred to the Presidency.	BCC Treaty signed
Ratification of the Annex VI to the Protocol on Environmental Protection to the Antarctic Treaty: Liability Arising from Environmental Emergencies	Annex V1 ratification process facilitated	Annex V1 Has been referred to the International Cooperation, Trade and Security Cluster of DG's in preparation for Cabinet approval	Annex VI ratified.
Specialised assets and infrastructure for research and its support in Antarctica replaced or improved	Polar vessel construction	Construction of the vessel almost complete, and is expected for delivery around May 2012	Take delivery of the vessel in May 2012 Undertake a shake - down cruise

Challenges: Coastal Management

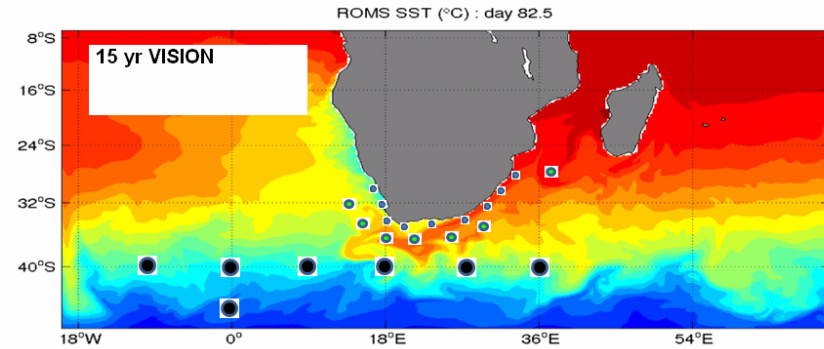
- ❑ Readiness and equipment to deal with oil spills
- ❑ Prince Edward Island MPA: Agreement with the fishing industry.
- ❑ Institutional structures at provincial level and Coastal Management Programme for the ICM Act.



Ocean Monitoring

CHALLENGE

- ❑ Capacity, infrastructure and finances for monitoring and observational network.

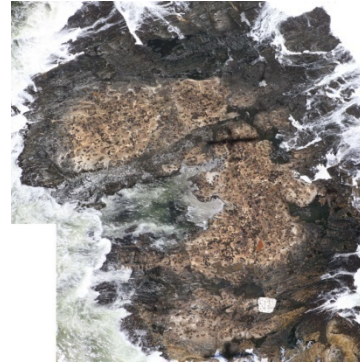


Marine Biodiversity

CHALLENGES

- ❑ Methodology for population estimates of migratory species
- ❑ Capacity and expertise to do marine biodiversity surveys

Surveys are undertaken by air, sea and on land



**Aerial Survey of all seal Colonies –
Dec 2011**



Whale cruise – Nov 2011



**Marion Island; Robben
Island**



Antarctica & Islands

Challenges

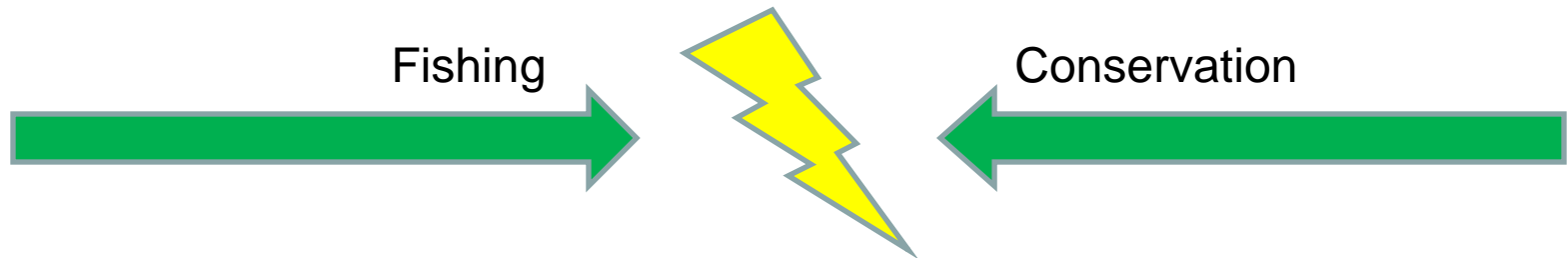
- ❑ Delivery of the vessel pending.
- ❑ Old base, at Marion not yet decommissioned.



Progress on Oceans Conservation Strategy

The Branch Oceans & Coasts

- 1998 Marine Living Resources Act (MLRA)



- The Presidential Declaration of 2010 aims to correct this by **separating** fishing & consumptive use from oceans and coasts conservation

OCEANS – Defining Jurisdiction

THE LAST COMMONS

- Oceans governance history

1700s freedom of the seas

1800s 3 nautical miles

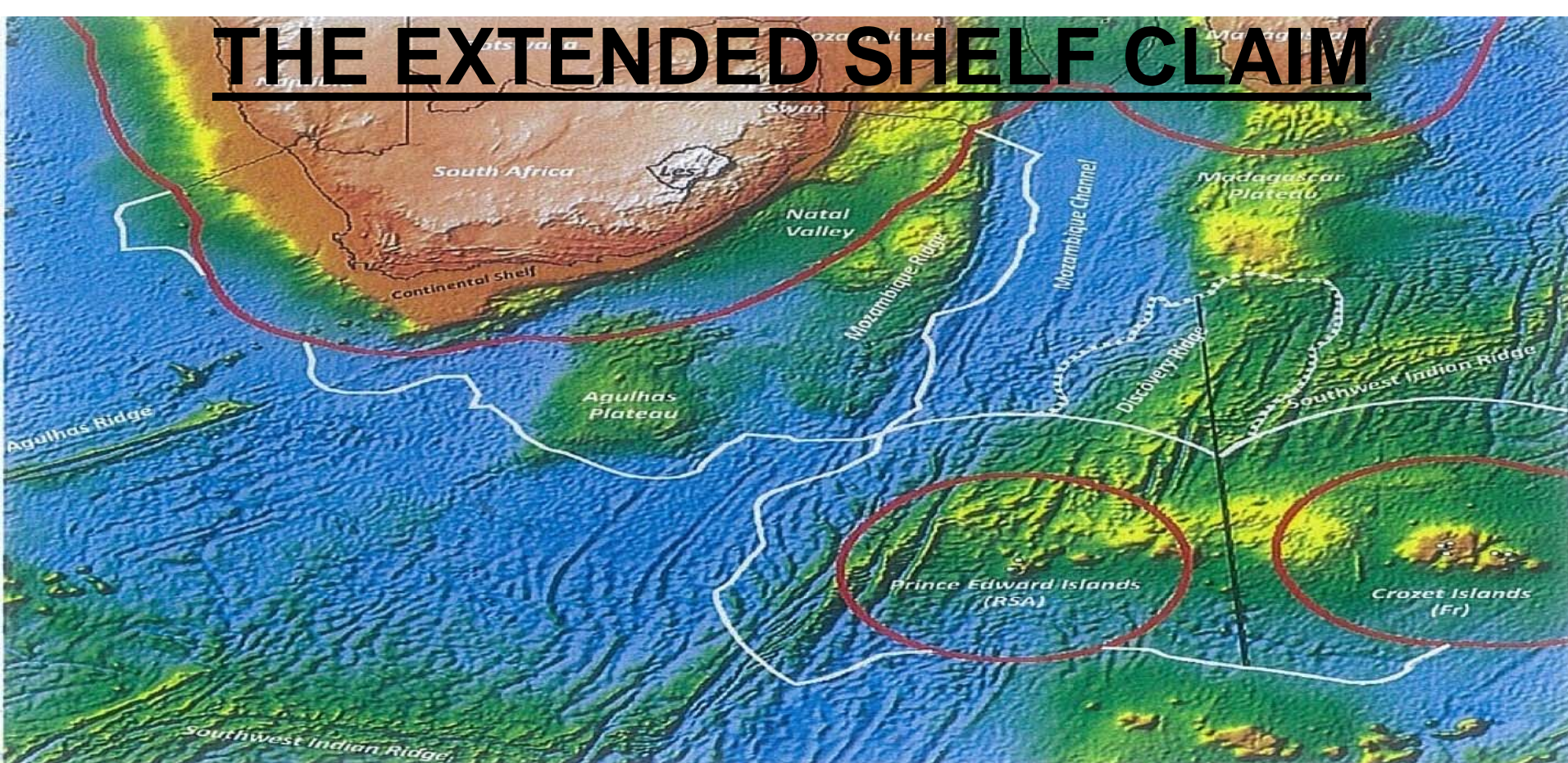
1980s United Nations Law of the Sea

200 nm >>>+- 400 kms X 3000 km

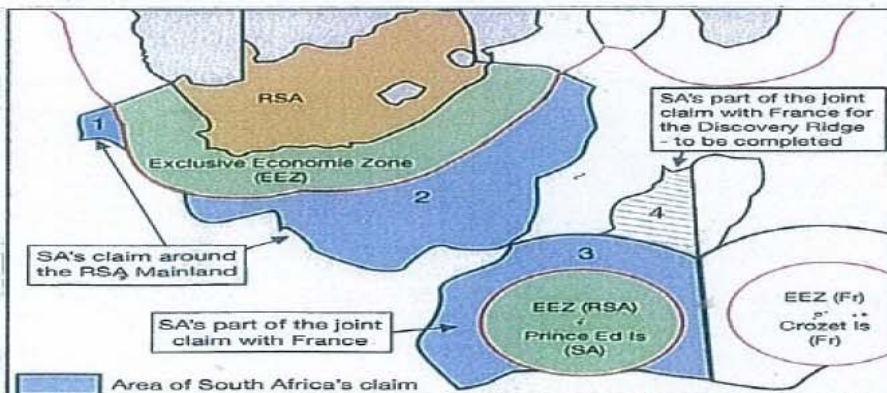
2010 Extended shelf claim

350 nm >>>+- 700 kms X 3000 km

THE EXTENDED SHELF CLAIM



The landscape of the ocean floor as revealed by satellite imagery. The blue areas depict the deep ocean floor (6000m deep) which is a vast plain cut by trenches and ridges which follow fault lines. The green and yellow areas depict enormous underwater plateaus and mountain ranges. South Africa's remote and tiny Prince Edward Islands are seen to be the peaks of underwater volcanoes on the flank of the SW Indian Ridge.



KEY	
—	National boundary or maritime median line
—	200 nautical mile Exclusive Economic Zone
—	Boundary of the Extended Continental Shelf (Still to be confirmed by UN Committee)
SOUTH AFRICA'S EXISTING TERRITORY	
Land — RSA Mainland	Area (sq kms)
Sea — EEZ of RSA Mainland and Prince Edward Islands	1,220,000
	1,540,000
NEW EXTENDED CONTINENTAL SHELF	
1. West Coast	45,000
2. East and South Coast	1,075,000
3. Prince Edward Islands	560,000
4. Discovery Ridge (yet to be submitted) - SA's part (50%)	~190,000
Total Area of Claim	1,870,000

For further details contact The Chief Executive Officer, Petroleum Agency SA, tel: 021 938 3500, xlphum@petroleumagencyrsa.com

Oceans Management

Where are we?

- 2011-12 Review of SA ocean management



- Conclusion

- management of commercial sectors operating in the ocean exist
- Function to advance the interests of the sectors: shipping, mining

- No policy framework for conservation and protection of the oceans

Policy Gap Consequences

➤ Oil Spill

- Gulf of Mexico – SA operating in the same policy vacuum as USA

➤ Coastal Storms & storm surge sensitivity

- no risk atlas available

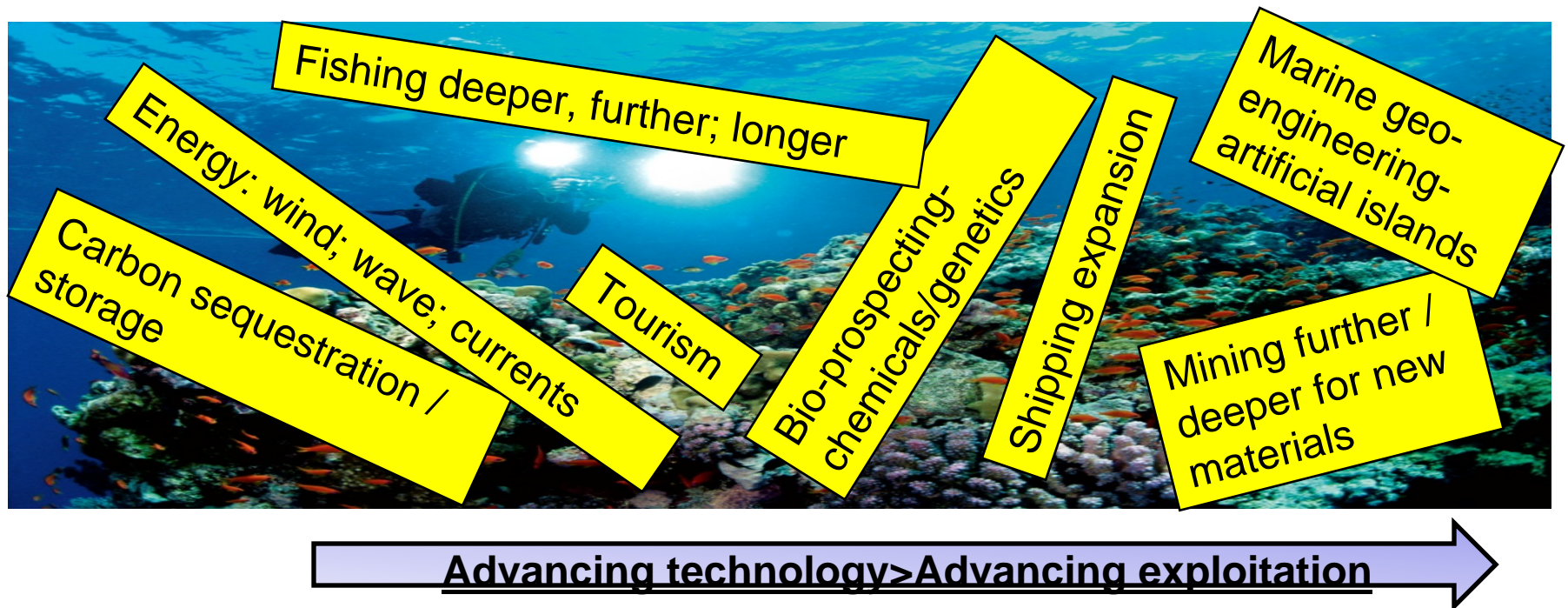
➤ No national index of biodiversity vulnerability

- E.g. coral reefs, biodiversity & climate change: sea temperature rise; ocean acidification



SA Ocean Policy - Objectives

- Ecosystem Conservation & Protection
- Contribute to Spatial Planning
 - Provide framework for existing and new industries to access oceans responsibly
- Maintain & enhance **oceans goods & services**



Ocean Goods & Services

- Provision –
 - sea trade; fish; oil; minerals; pharmaceuticals etc
- Earth System Regulation
 - environmental – climate – weather – e.g. re-cycling of carbon & nitrogen; heat distribution
- Supporting
 - creating special habitat for biodiversity
- Cultural
 - Recreation-Religious-Tradition



Environmental Affairs exists to ensure the sustainability & conservation of these goods & services

SA Ocean Policy

Ocean Management Objectives

Objectives

Vision

Mission

Principles & Objectives

Description of Ocean Jurisdiction; Ecosystems; Industries & Livelihood Support

Description of Value of Oceans

Pollution
Description &
Management
Objectives

Ecosystem &
Biodiversity
description &
Management
Objectives

Ocean Risks
description and
management
objectives

Climate Change; Ocean-
earth system functioning,
ocean acidification
description of
management objectives

Ecosystem
diversity &
processes
not
irreversibly
impacted

Biodiversity &
heritage valued
and protected

Risks assessed &
information
distributed to
preparedness at
local government

Regional & global ocean
management Objectives
defined for national
interest, including
southern ocean &
Antarctica

South Africa's Ocean management Knowledge & information Requirements assessed
South Africa's Ocean Monitoring and Science Plan
21 Science

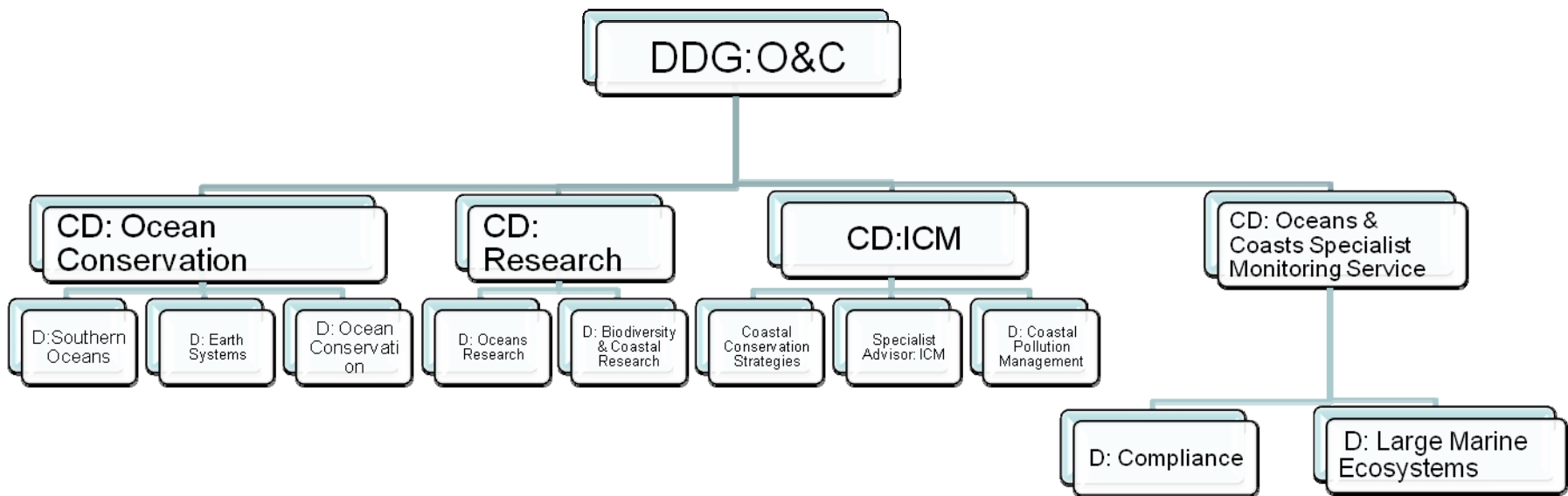
South Africa's Ocean Information Atlas; Spatial Planning & Trade offs

KPAs

**Management
Goals**

**Knowledge
Tools
Decision
Support;
Dissemination**

6. The O & C Branch: sms structure



THANK YOU