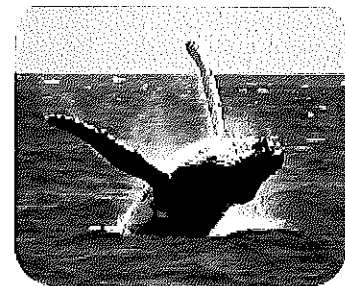
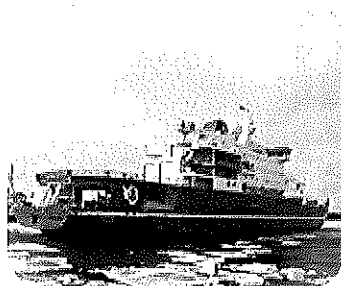


# ANTARTIC TREATY AND SOUTH AFRICA:

## PAST, CURRENT AND FUTURE PLANS

J Mphepya



Oceans and Coasts



environmental affairs

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA

October 2016

161108 pc environ

# CONTENT

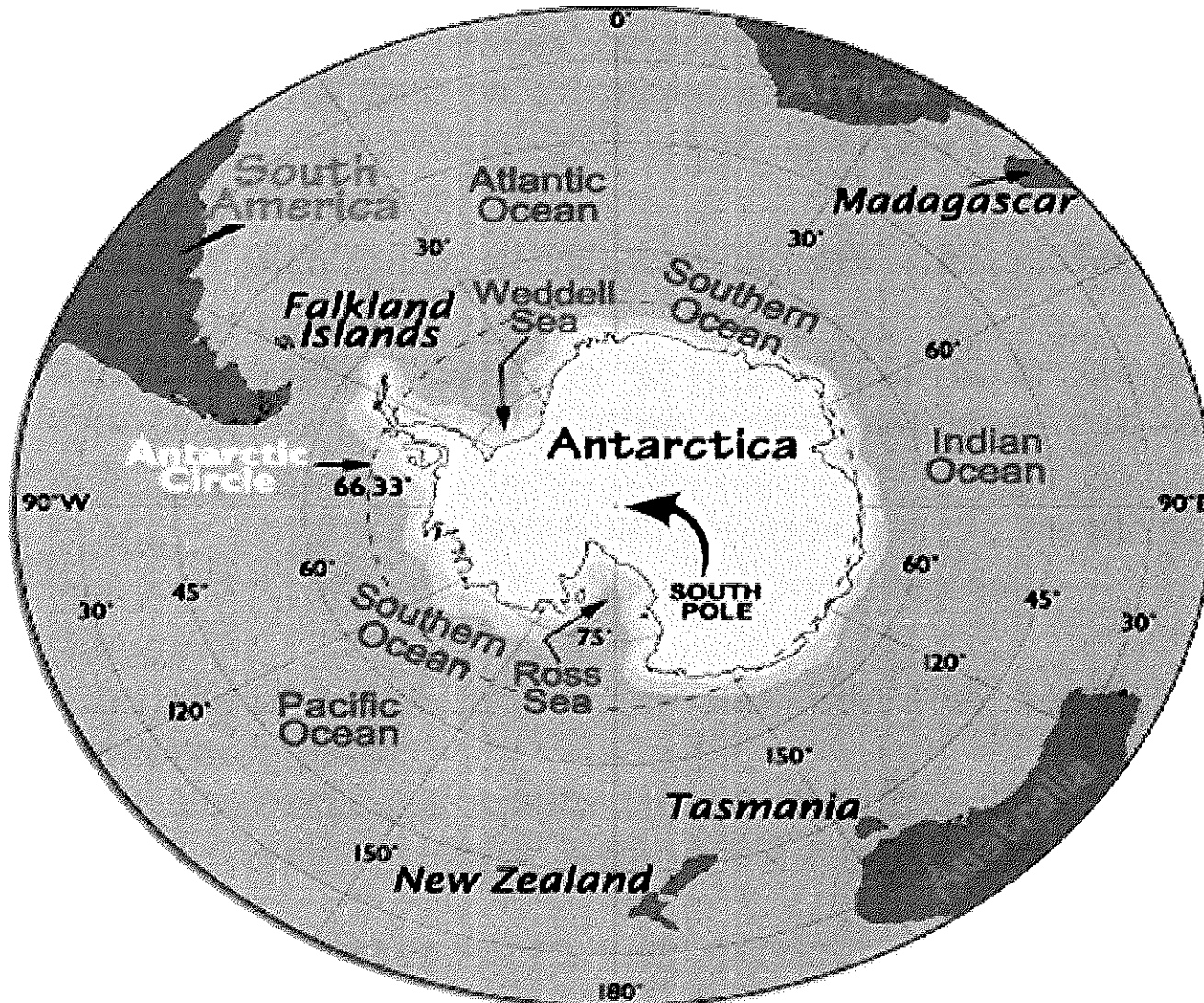
- Background to Antarctic Treaty;
- Current International And South African Context;
- Possible Opportunities And What to do with them.



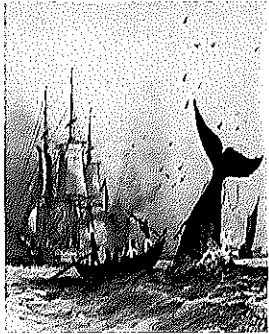
environmental affairs

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA

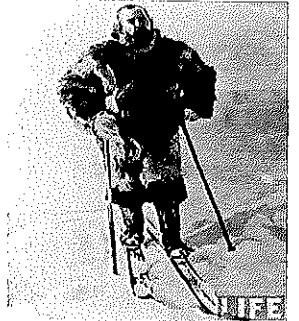
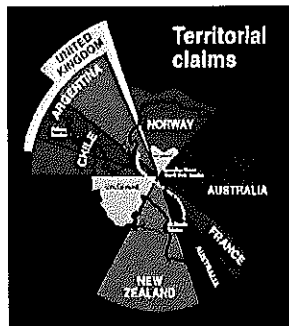
# ANTARCTIC OVERVIEW MAP



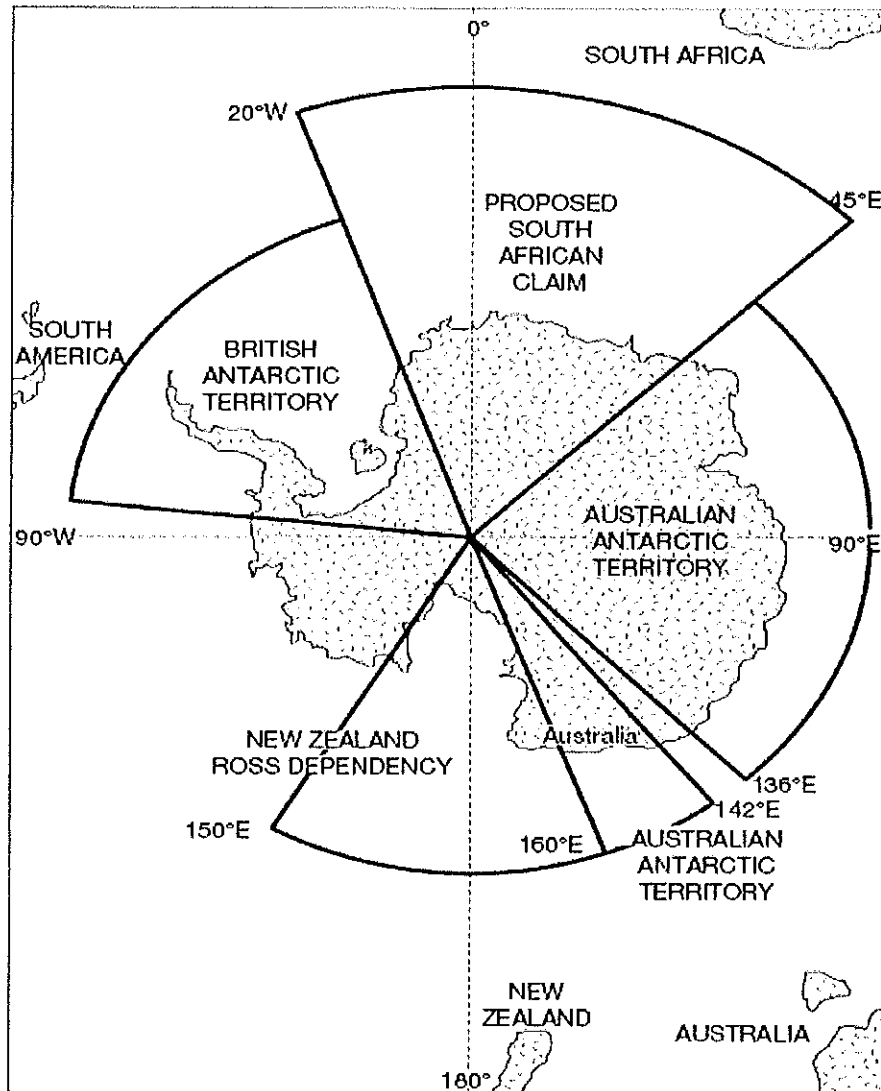
# Territorial claims: a slice of history



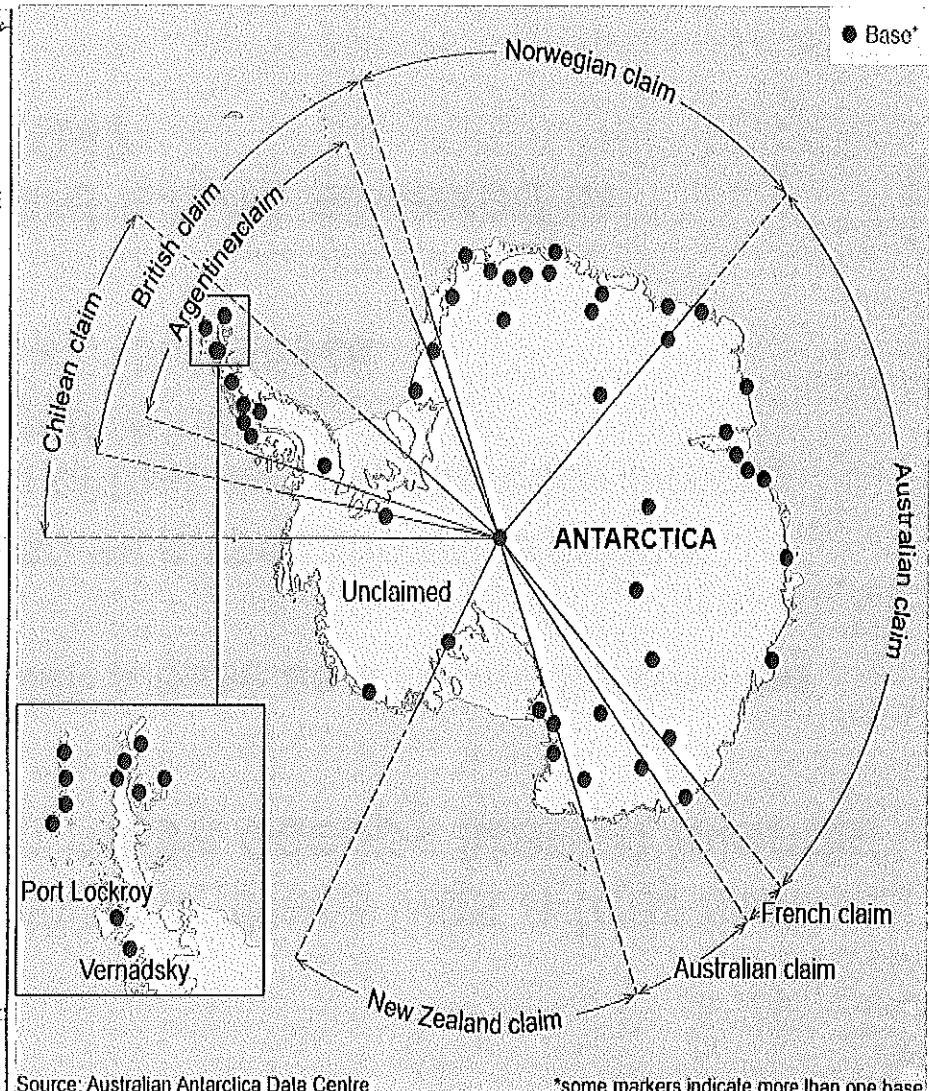
- 1700s -1800s explorers, sealers and whalers claimed for their countries the islands closest to Antarctica as they discovered them;
- 20<sup>th</sup> century the focus was on exploring Antarctic continent;
- Early Explorers: Scott, Shackleton and Amundsen.
- 1908 – 1942 seven countries laid claim to the sector of the Antarctic;
- South Africa declined to make a claim originally due to financial reasons and later by Prime Minister JC Smuts, who saw no merits;
- France, New Zealand, Norway and the UK recognised each other's mutual claims;
- Countries with overlapping claims disagreed, countries with none refused to recognise any of the claims, and the USA and the former USSR said they had a right to make claims in future if they wanted to.



### Proposed South African Claim in 1931

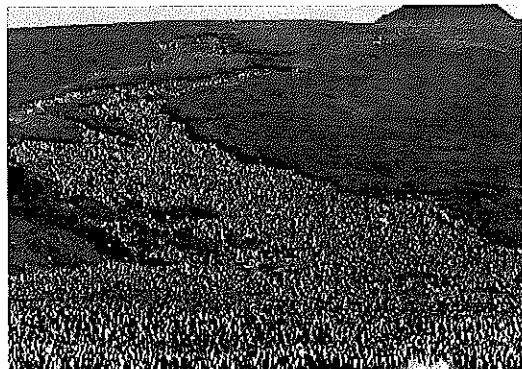
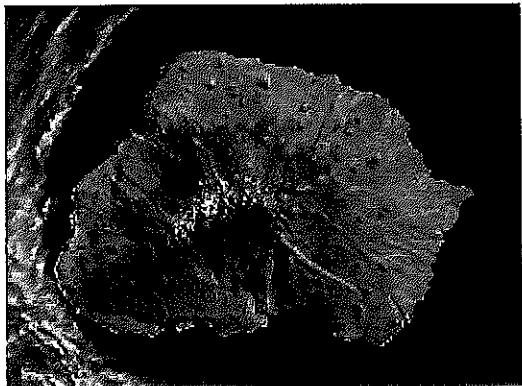
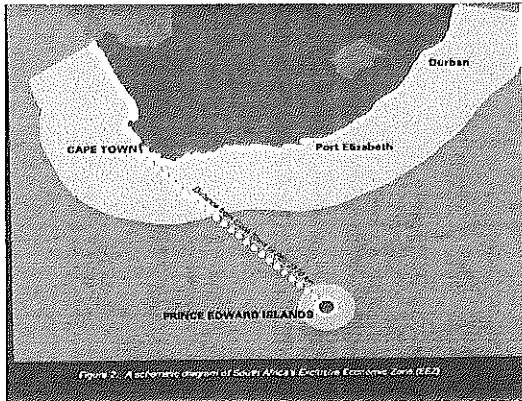


### Claims as of 1959



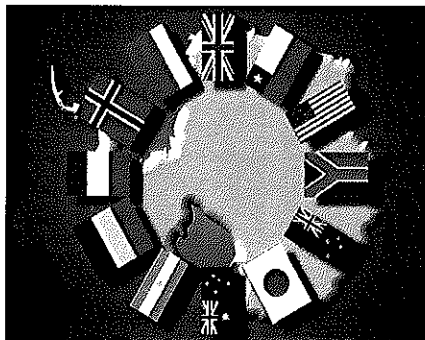
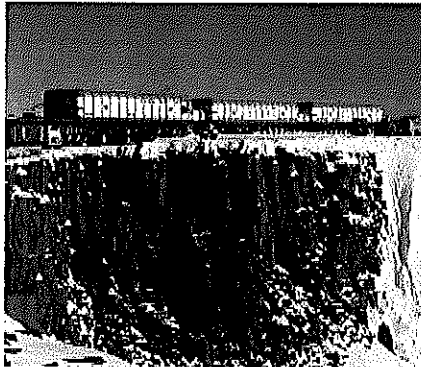
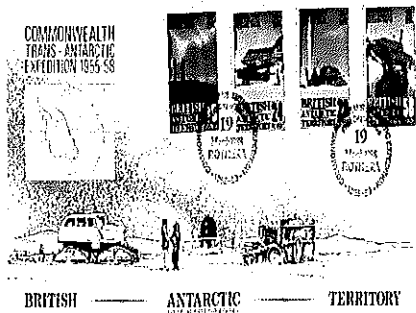
Jan Glazewski Yearbook of International Environmental Law 2010;20:88-121

# Territorial claims: a slice of history

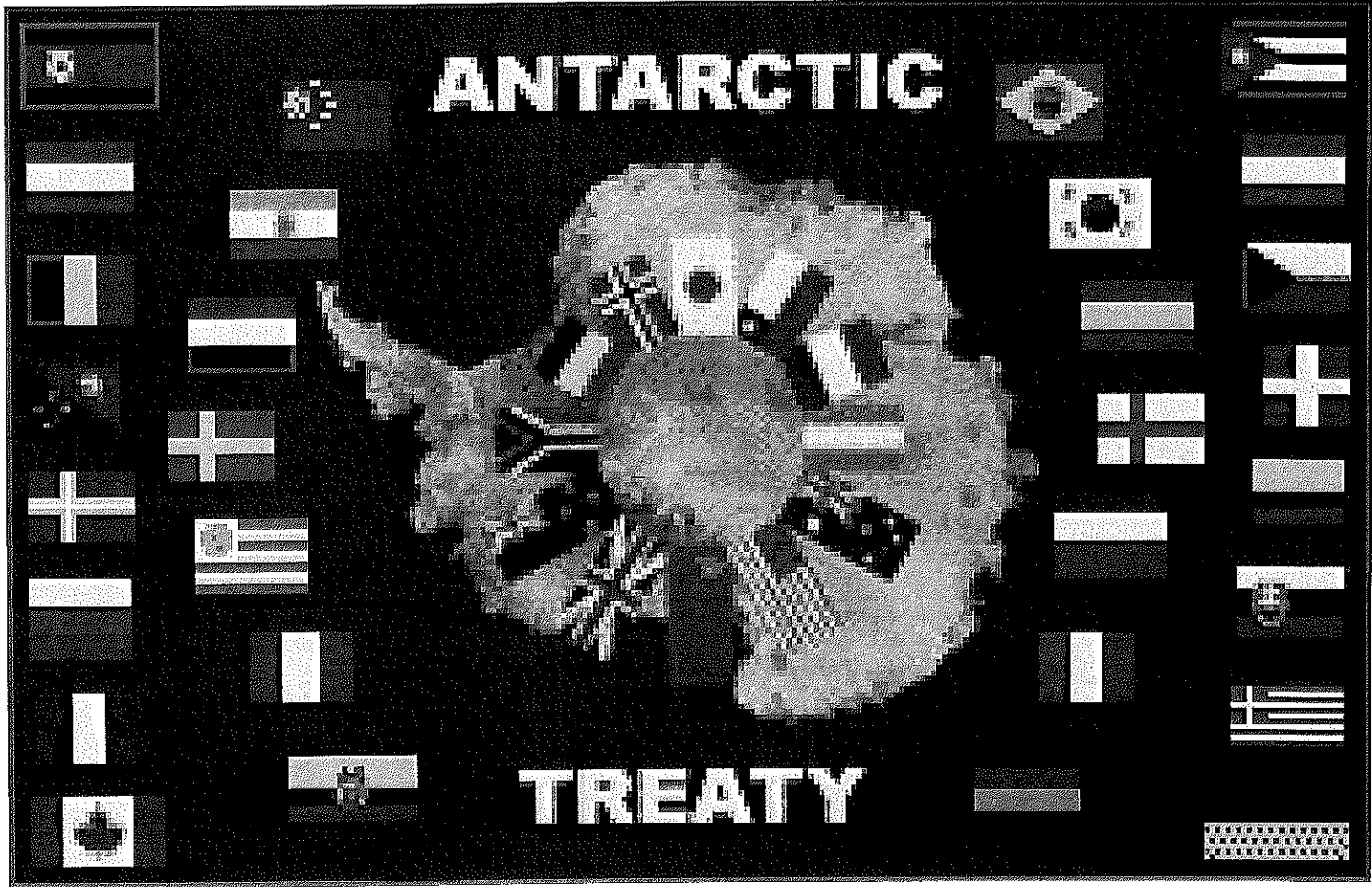


- After World War II, there was a fear that Soviet Union might occupy Marion Islands:
  - thus establish a base as a centre for whaling activities;
  - use the base as a springboard to taking;
  - possession of that part of Antarctica directly south of South Africa;
  - Launching a rocket attack.
- Prince Edward Island annexed in December 1947.

# Territorial claims: a slice of history

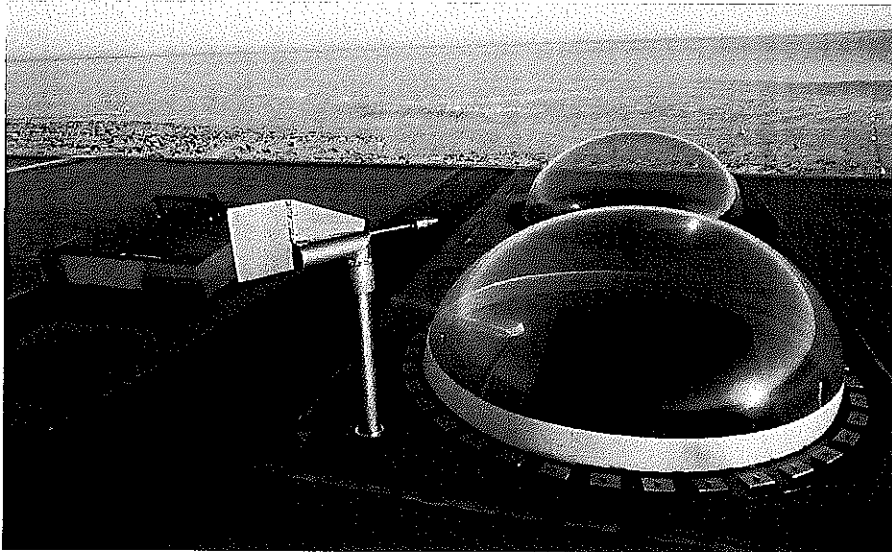


- In 1957-58, SA invited to participate in the Commonwealth Trans-Antarctic Expedition as part of the celebration of the International Geophysical Year;
- This led directly to South Africa's active involvement in Antarctic research and the establishment of a research station that is staffed year-round;
- As result of:
  - Success of the International Geophysical Year activities;
  - Cold War competition between US and Soviet Union and fear of military conflict and nuclear weapons testing in the south pole;
  - Possible conflict as a result of countries making claim to sections of Antarctica as part of their national territory.
- In 1959, the US initiated negotiations that led to the adoption of the Antarctica Treaty.



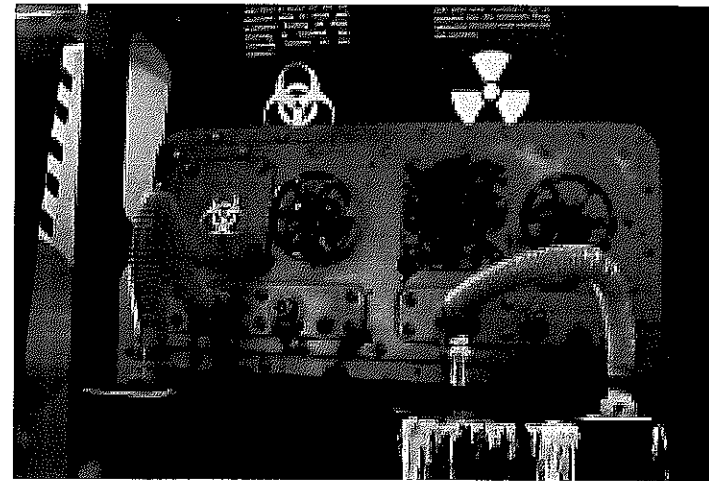


# The 1961 Antarctic Treaty covers five key areas:

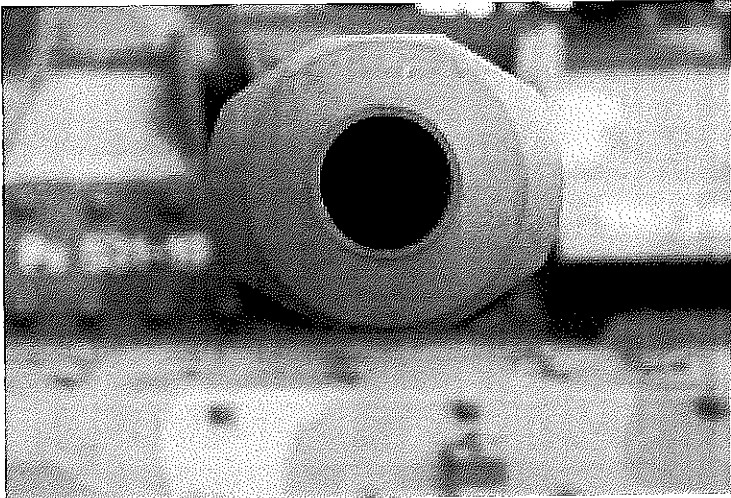


- Countries that sign up to the Treaty are free to carry out scientific research in Antarctica and must share their results

- All testing of nuclear weapons and the dumping of radioactive waste is forbidden in Antarctica

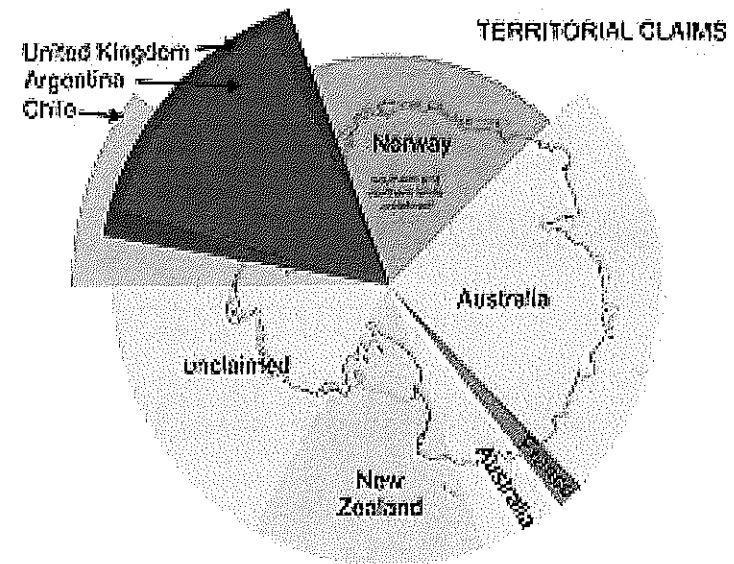


## The 1961 Antarctic Treaty covers five key areas:



- No military activities are allowed in Antarctica – the continent must be used for peaceful purposes only

- Claims to slices of Antarctica by individual countries are set aside so long as the Treaty exists



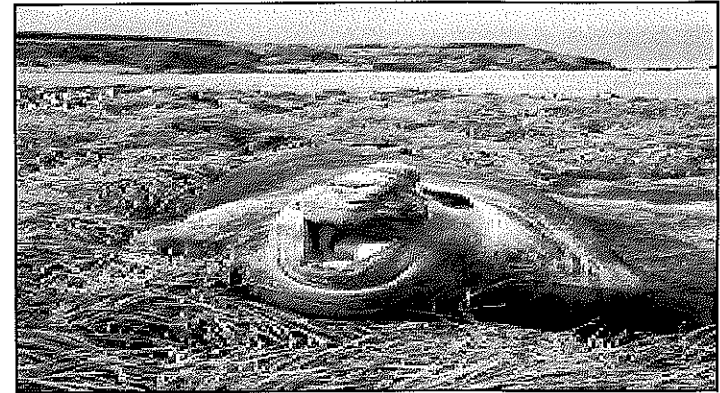
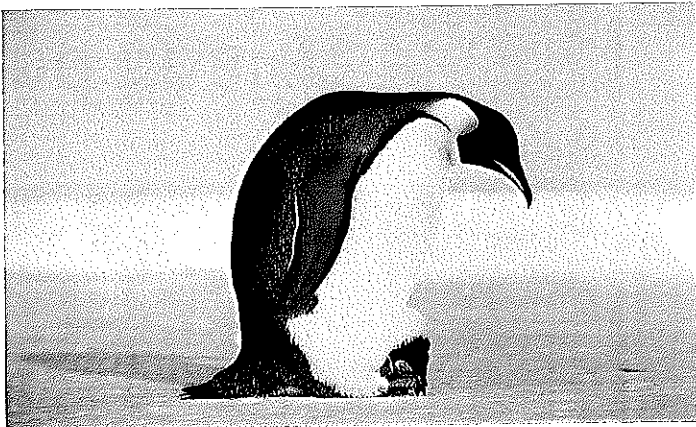
## The 1961 Antarctic Treaty covers five key areas:

- And finally:
- The Treaty promotes Antarctica as a place to undertake important scientific research



In addition, there are 4 **other agreements that now make up the full 'Antarctica Treaty System' which are:**

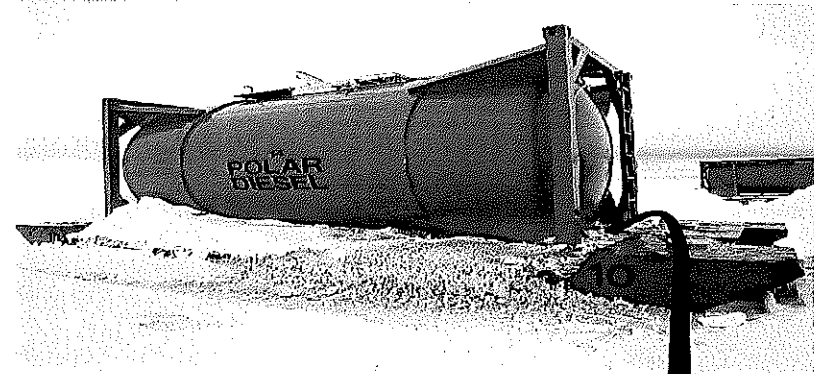
- **Agreed Measures for the Conservation of Antarctica Flora and Fauna (1964):**
- Pioneering laws protecting Antarctica's plants and animals. This has now been superseded by the Protocol on Environmental Protection.



- **Convention on the Conservation of Antarctic Seals (1972):**
- The Convention bans the killing of both Ross and Antarctic fur seals. No hunting of seals is carried out in Antarctica.

In addition, there are 4 other agreements that now make up the full 'Antarctica Treaty System' which are:

- **Convention on the Conservation of Antarctic Marine Living Resources (1982):**
- This agreement controls the amount of fishing that is allowed in Antarctic waters by giving licences to fish up to a certain agreed limit. These fishing limits (or 'quotas') also take into account the possible knock-on effects of fishing on the rest of the marine food web.



- **The Protocol on Environmental Protection to the Antarctic Treaty (1998):**
- The Environmental Protocol is one of the toughest sets of rules for any environment in the world. Under the agreement, no new activities are allowed in Antarctica until their potential impacts on the environment have been properly assessed and minimised.

# Convention on the Regulation of Antarctic Mineral Resource Activities

- In 1988 CRAMRA was developed to regulate mineral resource prospecting and exploration activities in the Antarctic Treaty area.
- External pressure
  - NGOs, Non-Treaty countries (Malaysia)
- Internal pressure
  - Australia and France
- United Nations General Assembly (UNGA)



# Convention on the Regulation of Antarctic Mineral Resource Activities

- CRAMRA was superseded by Madrid protocol;
- Mineral Exploitation prohibited until 2048;
- Overturning the prohibition requires a majority of 75%.



environmental affairs

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA

# What Are The Current International And National Environment?



environmental affairs

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA



# CURRENT INTERNATIONAL ENVIRONMENT

- The international interest in Antarctica is currently rising (Table on next slide – Snapshot Comparison)
  - Non original Antarctic Treaty countries have increased their bases e.g. China, S. Korea and India;
  - Iran and Turkey have said they intend to build bases in Antarctica;
  - Pakistan has approved Antarctic expansion;
  - Building of new polar research vessels by countries undergoing austerity measures e.g. UK and Australia;
  - Renewal of Antarctic strategies e.g. Australia, Russia and Norway;
  
  - Disputes over proposals for a new marine protected areas;
  - Conflict between anti-whaling groups and the Japanese government over whaling.
  
  - **IS THIS JUST SCIENCE OR MIGHT THERE BE OTHER INTERESTS?**

## A SNAPSHOT COMPARISON OF NATIONAL ANTARCTIC PROGRAMS

	NAME OF COUNTRY OPERATING IN ANTARCTICA						
Metrics Used in Comparison	UK - BAS	S. Korea - KOPRI	India - NCAOR	USA - NSF	Australia - AAD	China - CAA	S. Africa - SANAP
When did they become Treaty Members	1960	1986	1983	1960	1961	1983	1960
No. of stations In Antarctica	3	2	2	3	3	3	1
No of people during winter	22	15	25	250	22	14	11
No of People during summer	130	60	65	980	70	40	80
Resources In Directorate	400	280	100	25	33	230	24
No of Vessels	2	1	0	2	1	1	1
No of helicopters	Charter	Charter	Charter	Charter	Charter	Charter	Charter
No of fixed wing aircraft	2	Charter	Charter	Charter	Charter	Charter	Charter
Total Expenditure	USD 75 M	USD 50 M	USD 44.1 M	USD 300 M	USD 82.63 M	USD 32.7 M	USD 15 M

# CURRENT SOUTH AFRICAN CONTEXT

- No comprehensive National Antarctic Strategy (Economic Interest, Research Interest, Security Interest etc.);
- No National Research Strategy to guide and direct Antarctic Research efforts;
- Current scientific outputs not on par with other Treaty Countries;
- Institutional arrangements – role players have different objectives – Lack synergy



# WHAT ARE THE PROPOSED FUTURE PLANS?



environmental affairs

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA

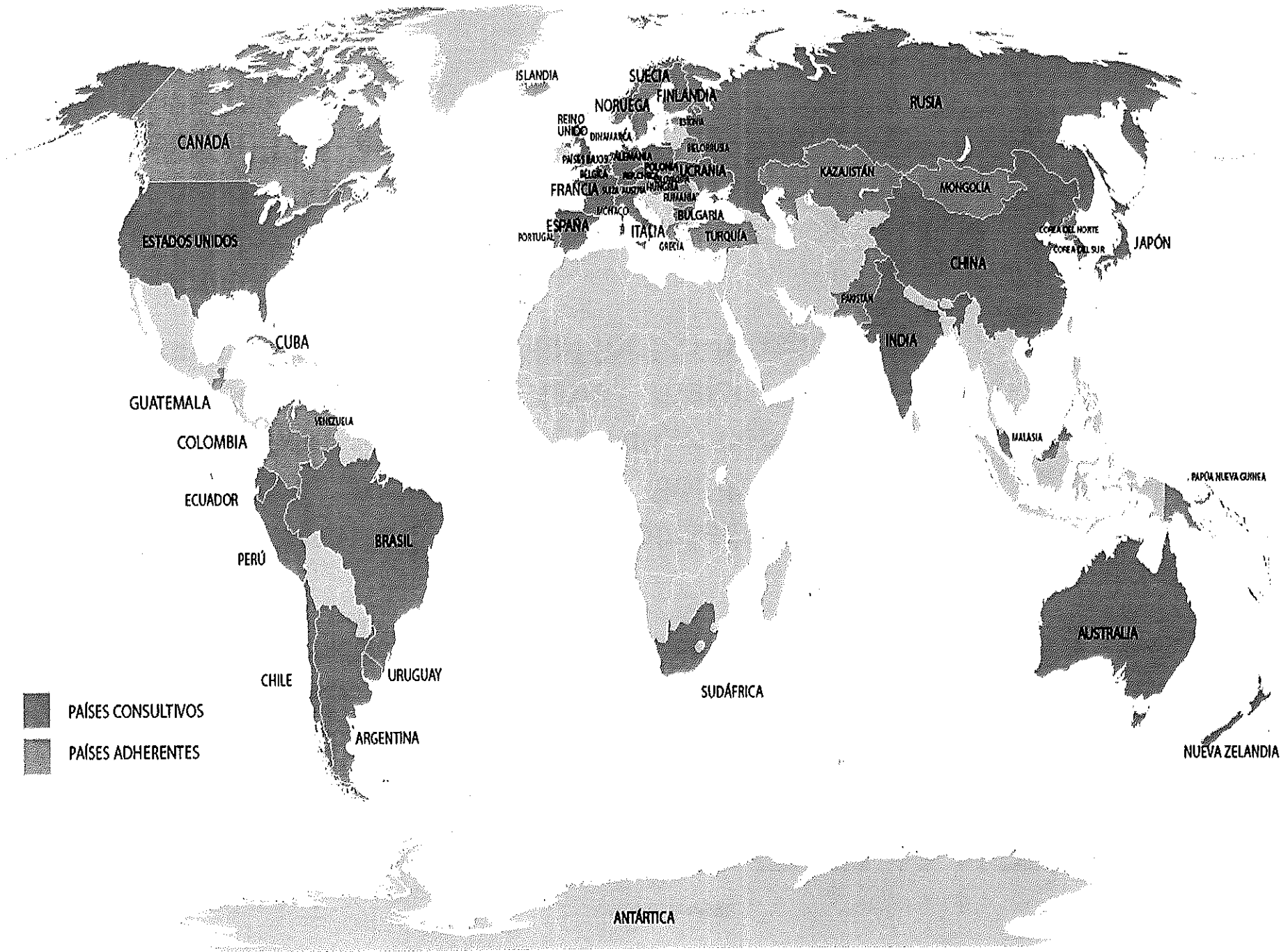
# POSSIBLE OPPORTUNITIES

- **Foreign Policy:** Greater African representivity and therefore greater influence on Antarctic Treaty System (ATS).
- **Science Interest:** South Africa already heavily invested in logistical and science infrastructure . South Africa close proximity to Antarctica and SO provide us with a competitive advantage – key to the global weather systems, major carbon sink, vast marine resources and great potential for bio-prospecting.
- **Economic Potential:** Gateway status of Cape Town to be enhanced - already contributing to economy of the region. Not benefitting as much as other gateway cities (particularly from Antarctic Tourism) though.



environmental affairs

Department  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA

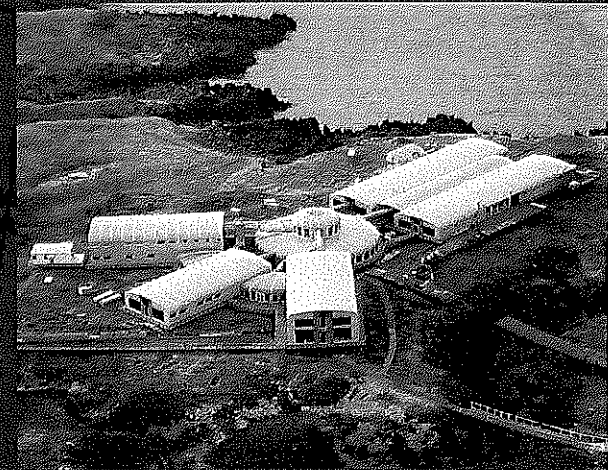
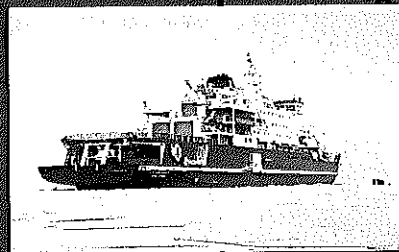


# POSSIBLE OPPORTUNITIES

- **Foreign Policy:** Greater African representivity and therefore greater influence on Antarctic Treaty System (ATS).
- **Science Interest:** South Africa already heavily invested in logistical and science infrastructure . Antarctica and SO– key to the global weather systems, major carbon sink, vast marine resources and great potential for bio-prospecting. South Africa in close proximity can capitalise on this.
- **Economic Potential:** Gateway status of Cape Town to be enhanced - already contributing to economy of the region. Not benefitting as much as other gateway cities (particularly from Antarctic Tourism) though.

# SOUTH AFRICA'S INVESTMENT

Pretoria  
South Africa  
Cape Town





**Problem Statement:** South Africa not fully utilizing their investment (bases, ship and scientific) infrastructure.

**Root Cause:** Fragmentation, lack of co-ordination, planning and budgeting for access, investment and support of platforms and observational equipment. Clarification of the mandates, responsibilities and commitments of stakeholders in government.

**What is being proposed:** Polar Institute/ RI:

- Governance model(s) – study of 2 – 3 models;
- Business case to close gap between investment and benefits

# INSTITUTIONAL ARRANGEMENTS - INTERNATIONAL

Other National Antarctic Programmes consolidate (or strive to) their operations/activities into one entity/institute/component

e.g. Australia – Australian Antarctic Division (AAD) =  
Branch

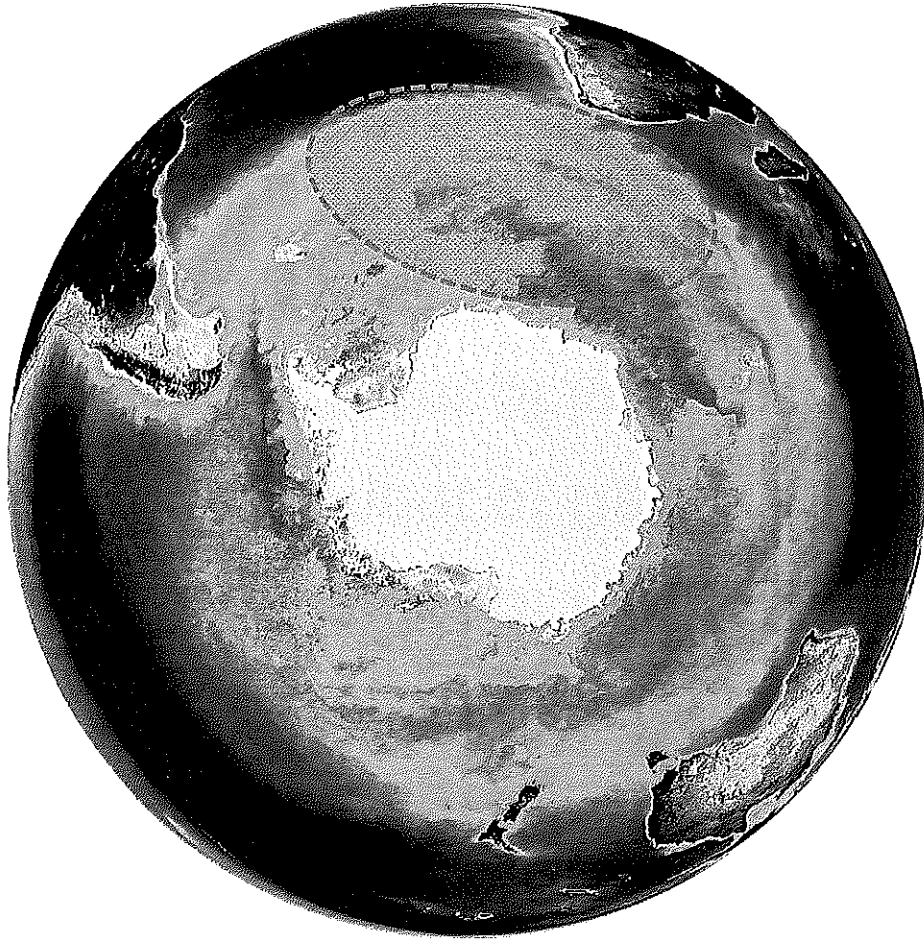
- Germany – Alfred Wegener Institute (AWI) = Institute
- United Kingdom – British Antarctic Survey (BAS) = Institute
- Chile – Chilean Antarctic Institute (INACH) = Institute

# INSTITUTIONAL ARRANGEMENTS – SOUTH AFRICA

South African Programme is – fragmented

Key Stakeholders:

- Department of Environmental Affairs
- Department of Science and Technology
- Department of Public Works
- Department of Defence
- Department of International Relations and Cooperation
- Tertiary Institutions
- National Research Foundation , etc



Antarctica and Southern Ocean are – key to the global weather systems, major carbon sink, vast marine resources and great potential for bio-prospecting

**Problem Statement:** South Africa is not utilizing/exploiting its proximity to the Antarctic and the Southern Ocean to as well as its infrastructure to the fullest extent.

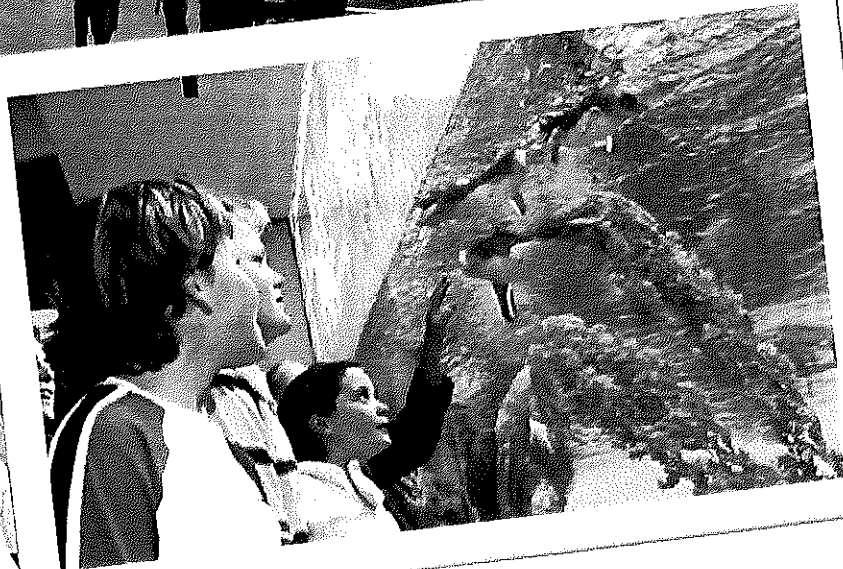
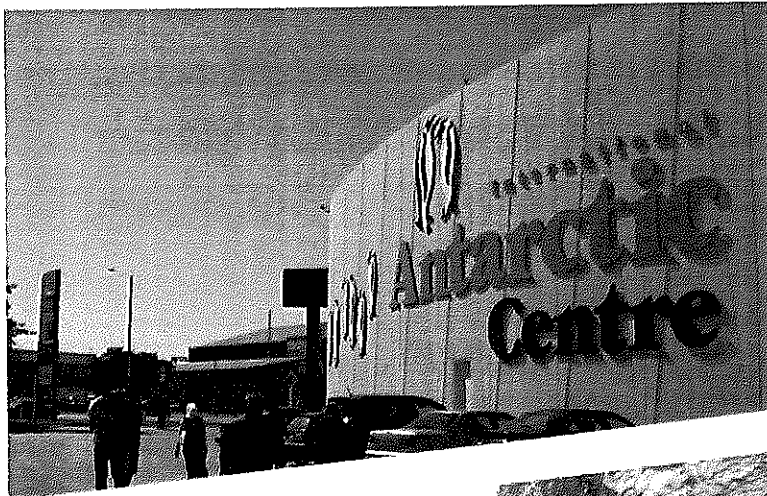
**Root cause:** Limited resources (skills, budget, etc.) Skills – limited number of renowned scientists – too few to build capacity.

**What to do:** Develop a long term partnerships with Countries leaving from SA to Antarctica

# POSSIBLE OPPORTUNITIES

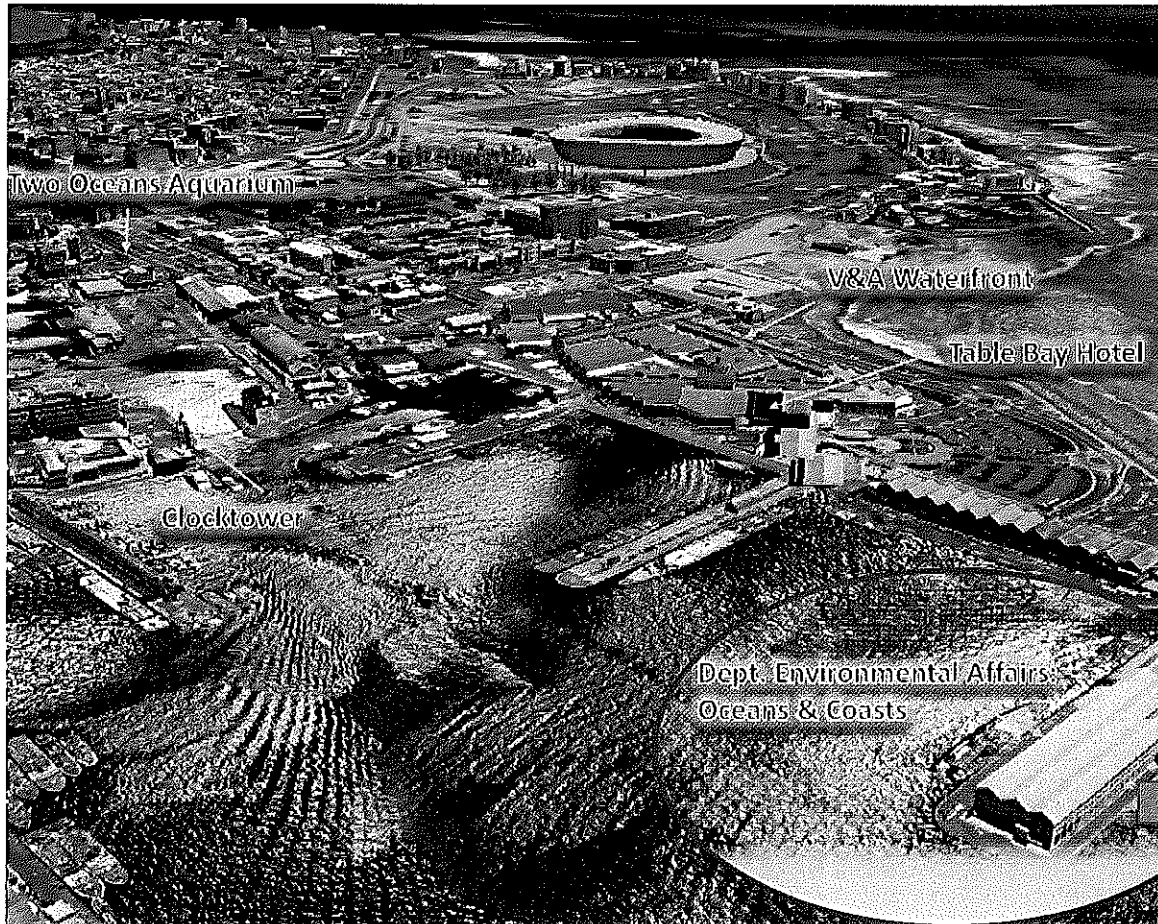
- **Foreign Policy:** Greater African representivity and therefore greater influence on Antarctic Treaty System (ATS).
- **Science Interest:** South Africa already heavily invested in logistical and science infrastructure . Antarctica and SO– key to the global weather systems, major carbon sink, vast marine resources and great potential for bio-prospecting. South Africa in close proximity can capitalise on this.
- **Economic Potential:** Gateway status of Cape Town to be enhanced - already contributing to economy of the region. Not benefitting as much as other gateway cities (particularly from Antarctic Tourism) though.

# THE CREATION OF AN ANTARCTIC CENTRE



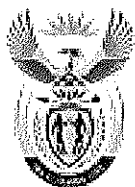
- The creation of an Antarctic centre will provides enormous scope and potential for:
  - Awareness-raising and Education;
  - Job creation and grass-roots skills generation;
  - Emphasizing South Africa's commitment to Antarctic research; and
  - Providing an African education centre for Antarctic initiatives.

# South Africa- Gateway to Antarctica



## Strategic Location for SA as an Antarctica Gateway:

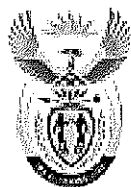
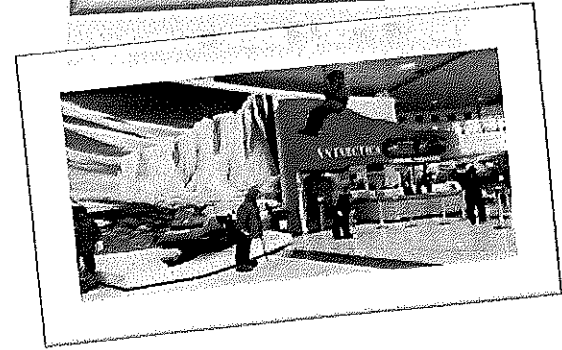
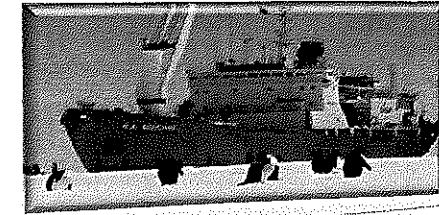
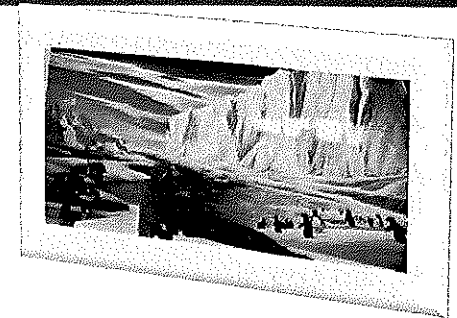
- Cape Town's V&A Waterfront as one of the five Southern Rim Gateway cities to the Antarctic;
- 24 million annual visitor; 80% SA in winter and 60% international summer
- The other four cities are Ushuaia in Argentina, Punta Arenas in Chile, Christchurch in New Zealand and Hobart in Australia.



**environmental affairs**

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA

# Look and Feel



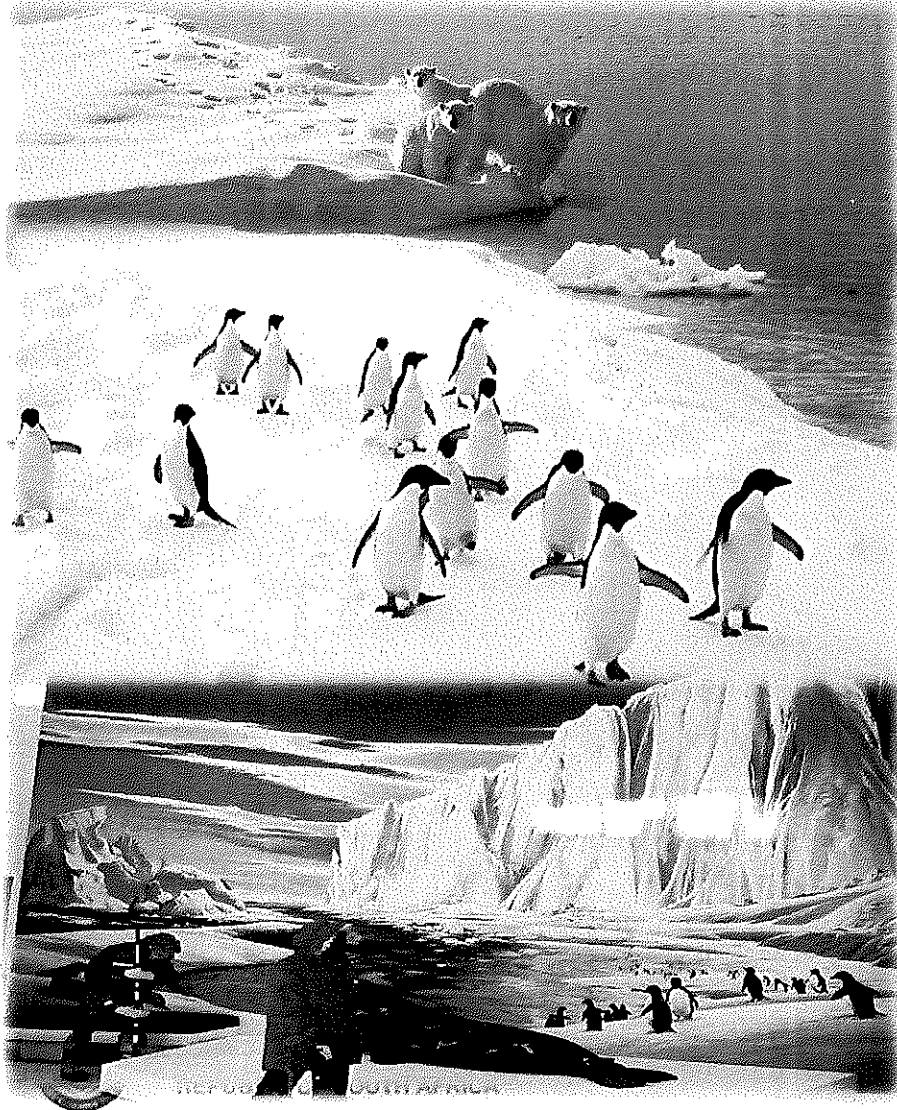
environmental affairs

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA

**information Centre: provide  
information**

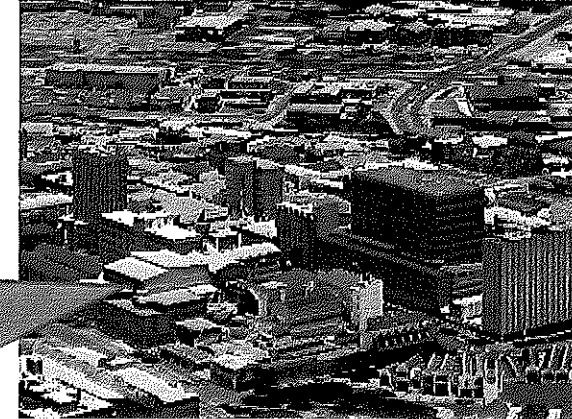
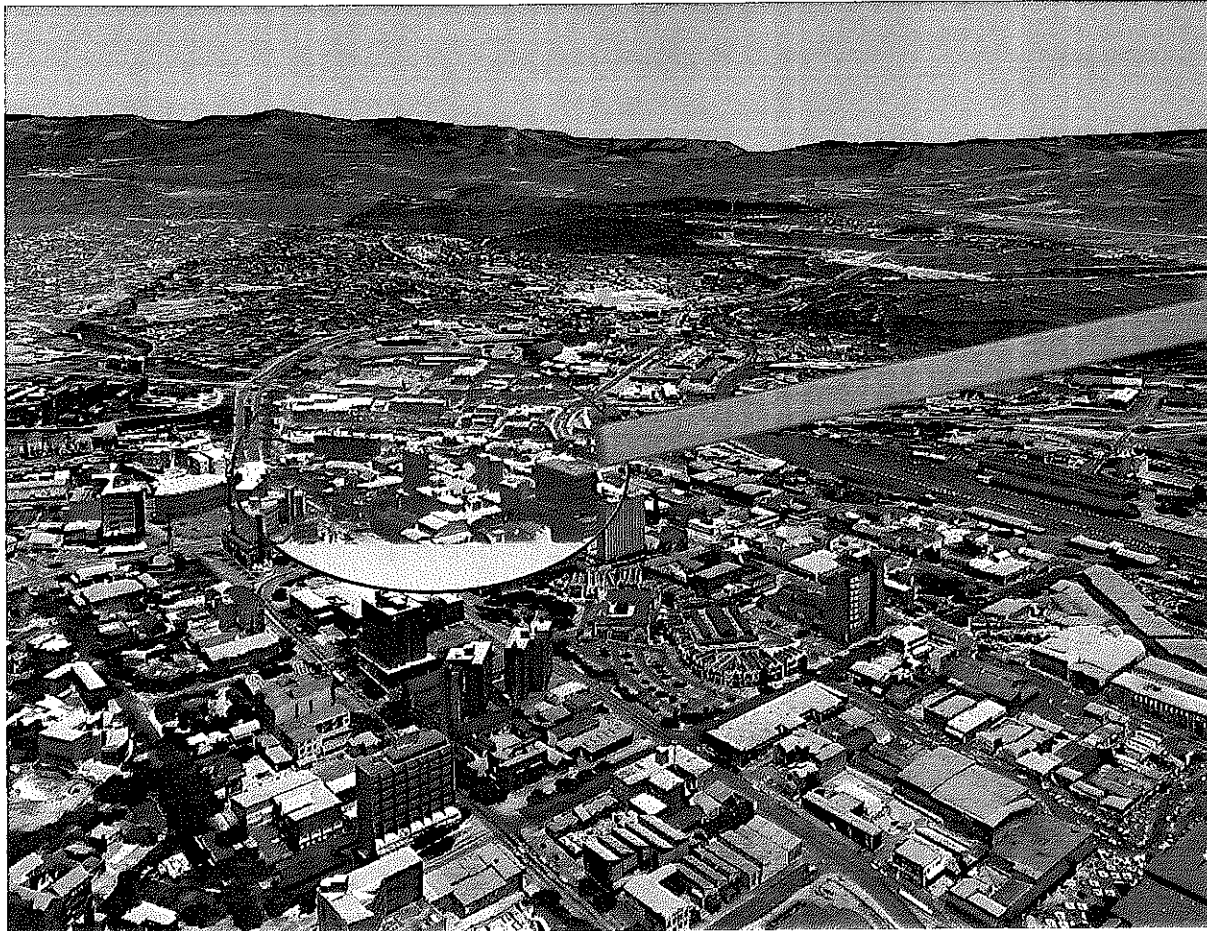


# THE ESTABLISHMENT OF A SOUTH AFRICAN POLAR NETWORK



- To coordinate Antarctic and Southern Ocean sector;
- The intent is to provide a central hub (“one-stop shop”) for the coordination of polar expeditions that can be utilised by the global polar research community;
- The intent is for the institute to be located in a centralised local in South Africa and to serve as a secretariat for African Polar initiatives.

# THE ESTABLISHMENT OF AN AFRICAN POLAR INSTITUTE



**Strategic Location for African Polar Institute could be for example (inland) close to the University of Mpumalanga:**

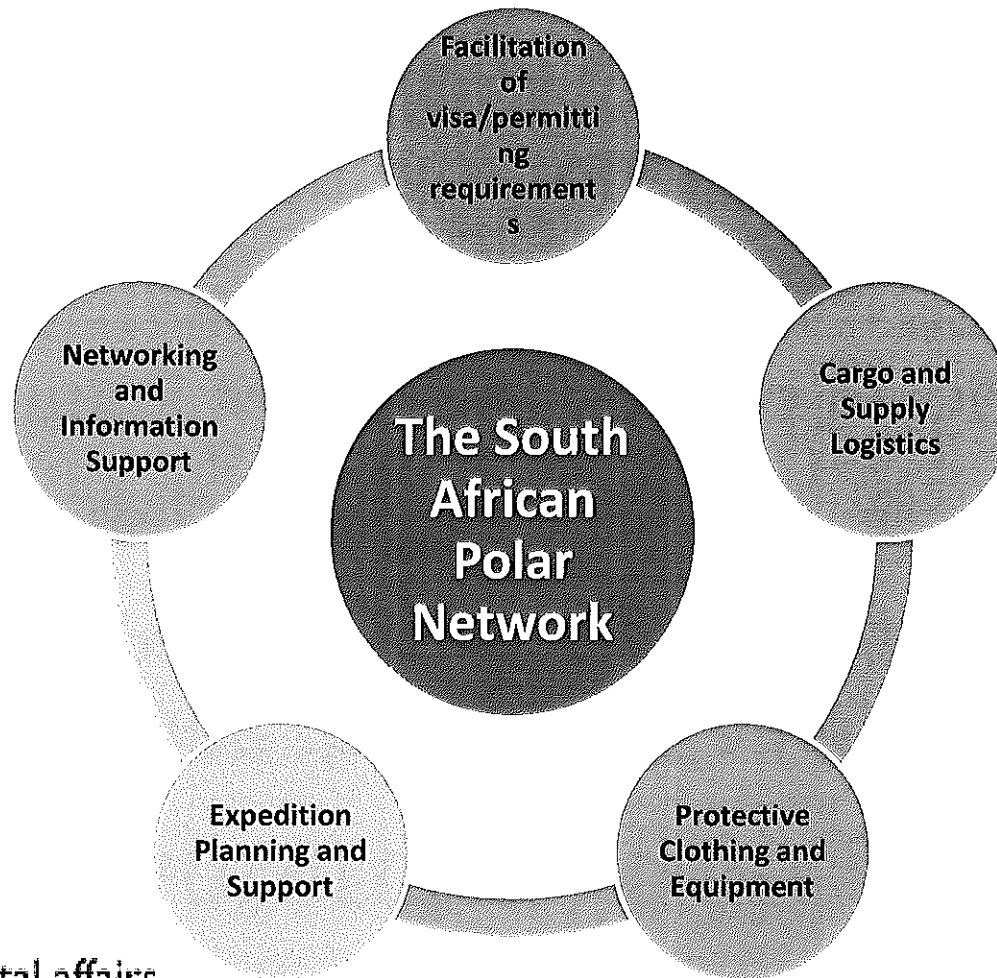
- **Antarctic Science**
- **Polar Law**
- **Polar Politics**
- **Cold climate and remote medicine**
- **Expertise in Antarctic trades and operations**



**environmental affairs**

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA

# THE ANTARTIC AND SOUTHERN OCEAN SECTOR COORDINATION



environmental affairs

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA

# Towards A comprehensive Antarctic Strategy

- Understanding the Current and potential Economic Potential of South Africa as a Gateway to Antarctic;
- Determining what is or should be South Africa's national interest in Antarctic Treaty;
- Determine the Institutional Arrangement to drive the South African national interest.

# THANK YOU FOR YOUR ATTENTION



environmental affairs  
Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA

South African National Antarctic  
Program

