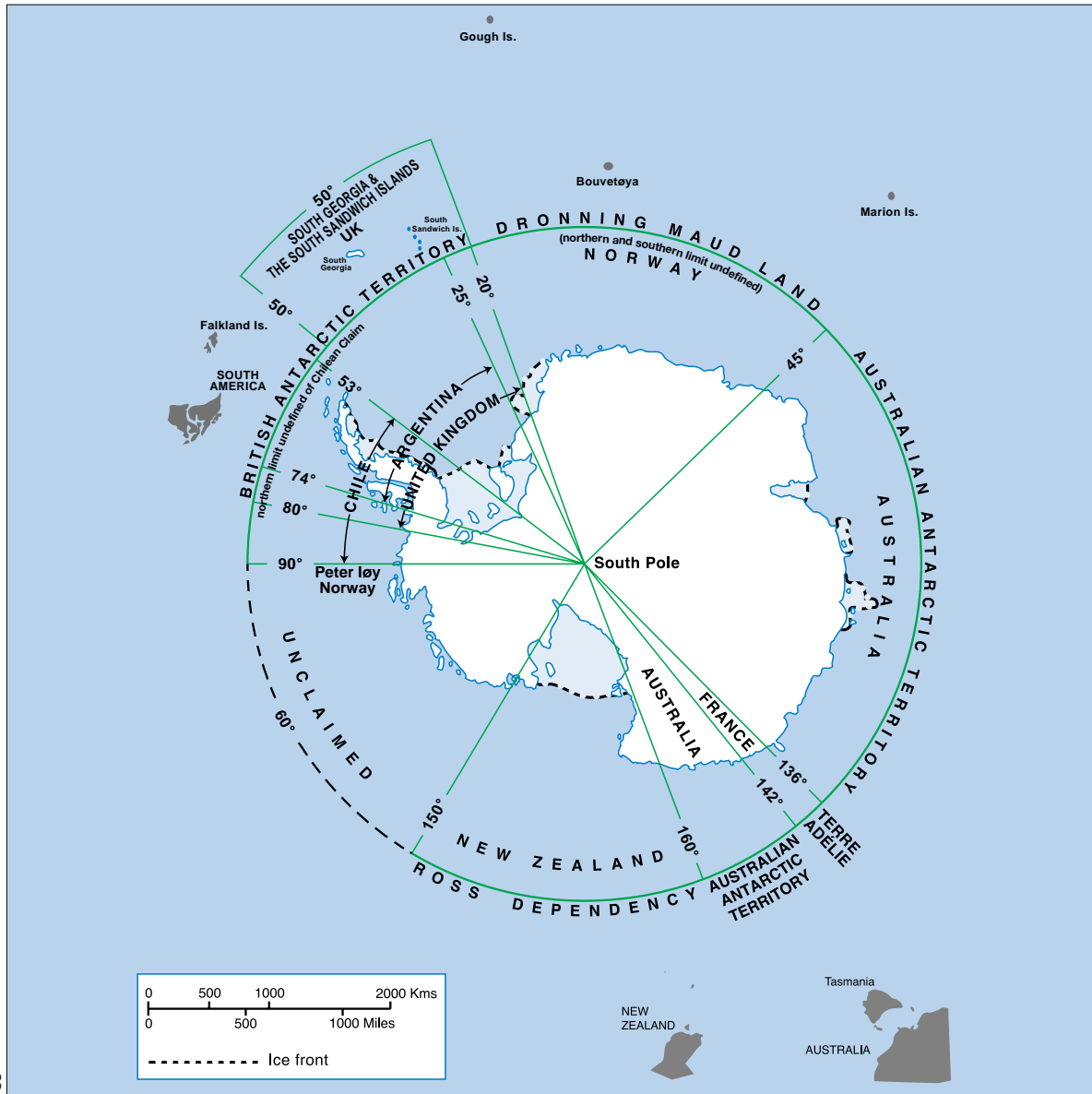




Territorial claims in Antarctica

Resource ATS1



History of territorial claims in Antarctica (south of 60°S latitude)

Britain

- 1908 Royal Letters Patent of 21 July consolidated claims as the Falkland Islands Dependencies (this included the Antarctic Peninsula, South Georgia and the South Sandwich Islands).
- 1962 British Order in Council of 26 February established British Antarctic Territory.

New Zealand

- 1923 British Order in Council of 30 July established the Ross Dependency under the administration of the Governor General of New Zealand.

France

- 1924 Presidential Decree of 27 March reserved rights in Terre Adélie.

Norway

- 1931 Royal Proclamation of 1 May placed Peter Iøy under Norwegian sovereignty.
- 1939 Royal Proclamation of 14 January annexed Dronning Maud Land as Norwegian territory.

Australia

- 1933 British Order in Council of 7 February established Australian Antarctic Territory.

Chile

- 1940 Presidential Decree of 6 November established Territorio Chileno Antártico.

Argentina

- 1943 Announcement by the Argentine Foreign Minister of 15 February established Antártida Argentina.
- 1947 Comisión Nacional del Antártico, on 12 March, extended western boundary of claim.

Source: Headland (pers.comm., 1999)



Summary of the Antarctic Treaty

Resource ATS2

1 Military activities in Antarctica are prohibited (e.g. military manoeuvres), although military personnel and equipment may be used for scientific research or other peaceful purposes.

2 Freedom of scientific investigation and cooperation in Antarctica shall continue.

3 Free exchange of information on scientific programmes and scientific data, and scientists to be exchanged between expeditions and stations when practicable.

4 Existing territorial sovereignty claims are set aside. Territorial claims are not recognised, disputed or established by the Treaty. No new territorial claims can be made whilst the Treaty is in force.

5 Nuclear explosions and radioactive waste disposal are prohibited in Antarctica.

6 The Treaty applies to all land and ice shelves south of latitude 60°S, but not to the high seas within the area.

7 All Antarctic stations, and all ships and aircraft operating in Antarctica, have to be open to inspection by designated observers from any Treaty nation.

8 Personnel working in Antarctica shall be under the jurisdiction only of their own country.

9 Treaty nations will meet regularly to consider ways of furthering the principles and objectives of the Treaty. Attendance at these meetings will be limited to countries showing substantial scientific research activity in Antarctica (e.g. by the establishment of a scientific station or the despatch of a scientific expedition). Unanimous approval will be necessary at these meetings for any new measures to become effective.

10 All Treaty nations will try to ensure that no one engages in any activity in Antarctica contrary to the principles or purposes of the Treaty.

11 Any dispute between Treaty nations, if not settled by agreement in some form, shall be determined by the International Court of Justice.

12 The Treaty may be modified at any time by unanimous agreement. After 30 years (e.g. after June 1991) any Consultative Party may call for a conference to review the operation of the Treaty. The Treaty may be modified at such a conference by a majority decision.

13 The Treaty must be ratified by any nation wishing to join. Any member of the United Nations may join, as well as any other country invited to do so by the Treaty nations. All notices of accession and ratification are deposited with the Government of the United States of America, which is designated as the Depositary Government.

14 The Treaty, translated into English, French, Russian and Spanish was signed on 1st December 1959.



Agreements of the Antarctic Treaty System

Resource ATS3

Agreed Measures for the Conservation of Antarctic Fauna and Flora

The Antarctic Treaty of 1961 put into place regulations controlling human activities in the region and for dealing with territorial disputes. The Treaty nations then turned their attention to wildlife conservation. In 1964, the Agreed Measures were adopted. The provisions agreed were mandatory and such pre-emptive action has become the hall-mark of the Antarctic Treaty System and the reason for much of its success.

The Agreed Measures ensure that no Antarctic bird or mammal can be killed or captured without a permit. They also prevent disturbance from human activities, such as the operation of research stations, on penguin and seal colonies. Specially protected areas and species can be designated. Regulations also cover the importation of non-indigenous species, parasites and diseases.

The Agreed Measures have now been superseded and brought up-to-date by the Environmental Protocol.



Under the Agreed Measures flying helicopters in a way that disturbs birds and seal colonies is prohibited



The killing of Ross seals is prohibited by CCAS

Convention on the Conservation of Antarctic Seals

The concept of this Convention was initially developed by the Scientific Committee on Antarctic Research (SCAR) and was finally agreed by the Treaty Parties in London in 1972. The Convention applies to all species of seals living south of 60°S. Its purpose was to increase the protection of seals found in or close to the Antarctic coastline such as Weddell and Leopard seals, and to regulate what was then believed to be a potential sealing industry. Crabeater seals, with a population of 15–30 million, are the most numerous seals on Earth and could have been hunted commercially. The Convention prohibits the killing of both Ross and Antarctic fur seals. In the event, the sealing industry has not returned and the Convention has focused on strengthening the protection for all Antarctic seals.

Convention on the Conservation of the Antarctic Marine Living Resources (CCAMLR)

Commercial fisheries in the Southern Ocean are controlled by the Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR). There are 29 signatory nations to the Convention whose representatives meet annually to discuss conservation

measures at the CCAMLR headquarters in Hobart, Tasmania. They are advised by a special scientific committee.

CCAMLR is based on the 'ecosystem approach' whereby commercial fishing takes account not only of the impact on the targeted species but also on the prey and predators of that species. To do this, CCAMLR is applied to the seas south of the natural boundary of the Antarctic Polar Front, not the political boundary of the Antarctic Treaty at 60°S. This ensures that the likely implications for all links in the food chain are examined. CCAMLR is thus involved in assessing the stocks of seals and seabirds as well as fish, squid and krill. The conservation and management of whales is the remit of the International Whaling Commission (IWC).

CCAMLR, with its proactive rather than reactive approach, entered into force in 1982. Unfortunately, this was about a decade after fishing began in the Southern Oceans and the Convention inherited some seriously depleted fish stocks. However, progress has been made since then. Regulatory measures, including catch limits, have been set for all commercial fisheries and strict controls introduced to minimise illegal and unregulated fishing activity.



Krill are a key species in the South Ocean food chain. Harvesting is strictly controlled by CCAMLR



The regulation of Antarctic minerals activities

The Antarctic Treaty does not address the regulation of mineral resource activities. The control of possible future mining was first raised by the UK and New Zealand in 1970 as they had been contacted by minerals companies about possible commercial geophysical exploration in the Southern Ocean. The regulation of minerals activities was to become a very controversial issue, which was to dominate Antarctic politics throughout the 1980s and early 1990s.

In the absence of any agreed regime to regulate minerals activity, the Treaty nations decided on a precautionary approach and imposed a voluntary moratorium on the exploration and exploitation of Antarctic minerals in 1976. This was because unregulated exploration and mining would have caused serious environmental and political problems.

In 1981, the Treaty nations finally agreed to start negotiations on a comprehensive minerals regime. The issue was so difficult and complex that it took until 1988 for the Treaty nations to reach consensus and adopt the Convention on the Regulation of Antarctic Mineral Resource Activities (CRAMRA). Partly as a result of the minerals discussions, Antarctica re-emerged onto the international arena and there was a growing interest in the region. For example, between 1981 to 1988 the number of signatories to the Treaty increased rapidly from 25 to 38 (see the graph showing the growth in the number of Antarctic Treaty nations on this page).

CRAMRA sought to establish a regulatory framework for minerals prospecting, exploration and development activities. Under the agreement, no mining could have taken place in Antarctica unless all Parties agreed that there would not be a risk to the environment. However, by the time CRAMRA was adopted in 1988, there was a major coordinated public campaign by environmental groups, such as Greenpeace and the World Wide Fund for Nature,

against minerals exploitation. Their view was that Antarctica should be declared a 'World Park' where mining would be prohibited from ever taking place. They argued that CRAMRA actually encouraged minerals activity as it provided a set of agreed international regulations within which mining companies would be able to operate legally.

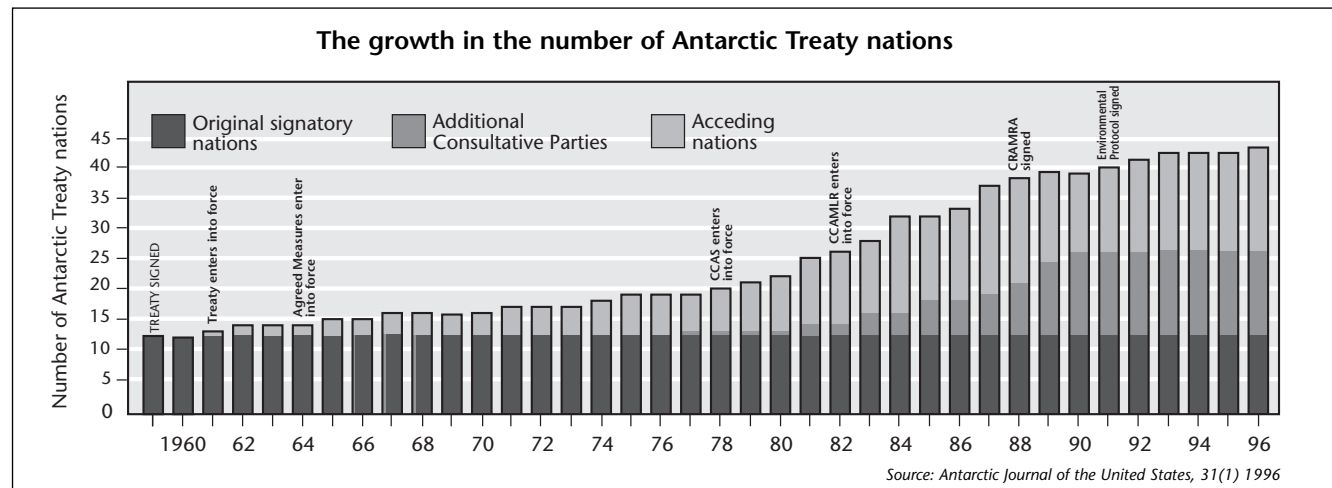
Under intense pressure from environmental groups, first Australia and then France decided not to sign CRAMRA in 1989. As well as environmental concerns, other factors which contributed to Australia's rejection of the Convention probably included the absence of royalty payments for mining on its territory, and fears about loss of sovereignty.

As CRAMRA required ratification by all the Treaty nations to enter into force it was effectively doomed. This encouraged other nations to withdraw their support. By 1990, Australia and France had been joined by New Zealand, Italy and Belgium and together they proposed a comprehensive environmental protection convention for Antarctica. Others, including the UK, Japan and the USA, argued against a permanent ban on mining. The UK

argued that comprehensive environmental measures should complement, not replace CRAMRA, which was still seen as necessary if minerals were to be exploited in the future.

The collapse of CRAMRA was the first major threat to the Antarctic Treaty System and it triggered a highly charged debate. The UK and Chile called for a special meeting to discuss comprehensive measures for the environmental protection of Antarctica and together developed a draft environmental protocol. Within two years of the collapse of CRAMRA, the Protocol on Environmental Protection to the Antarctic Treaty was signed in 1991. CRAMRA provided the basis for the Environmental Protocol with several of its definitions and measures being incorporated into the new agreement.

The demise of CRAMRA illustrates the vulnerability of the ATS consensus process. It also demonstrates the power and effectiveness of international environmental campaigns. However, it is unlikely that the Treaty nations would have agreed to the tough mandatory regulations on environmental protection contained in the Protocol without the conflict over CRAMRA.





The Environmental Protocol

Resource AT55

Following the collapse of the Convention on the Regulation of Minerals Activities in Antarctica (CRAMRA) in 1989, new ways to regulate Antarctic activities to high environmental standards needed to be found. This led to the negotiation by the Antarctic Treaty Nations of the Protocol on Environmental Protection. It was signed by most Treaty Parties in October 1991 and by the remaining Parties subsequently. The UK was the first to sign. The Environmental Protocol entered into force in 1998.

In summary, the Environmental Protocol:

- designates Antarctica as a ‘natural reserve devoted to peace and science’
- sets out principles for environmental protection
- establishes a Committee for Environmental Protection to provide environmental advice to Treaty meetings
- sets out mandatory rules governing human activities. These are contained in five annexes, which are:
 - Environmental Impact Assessment
 - Conservation of fauna and flora
 - Waste disposal and waste management
 - Prevention of marine pollution
 - Special area protection and management.

A sixth annex on financial liability for environmental damage is currently being negotiated.

As regards mineral resource exploitation, the Protocol provides for:

- an indefinite ban on mineral resource activity (other than scientific research)
- mechanisms for the review of the ban after 50 years, or before if all the Treaty Parties agree; and
- continuation of the ban unless or until there are rules in place under which a decision can be taken as to whether mining is environmentally acceptable.

Overall, the Protocol introduces one of the toughest sets of environmental regulations found anywhere in the

world. The regulations are mandatory and are legally binding on all the Treaty nations. Never before have nations agreed such detailed rules to protect the environment of a whole continent.



Oil spill response exercises are carried out regularly at Rothera Research Station as required by the Environmental Protocol

Environmental Impact Assessment (EIA)

No activity, whether governmental or private, within Antarctica may proceed unless there is sufficient information available to determine that the environmental impact is acceptable. All proposed activities require an EIA. Activities with more than a minor or transitory effect have to undergo a Comprehensive Environmental Evaluation (CEE). The findings of any CEEs are reviewed by the Committee on Environmental Protection.

Conservation of fauna and flora

The existing measures for the conservation of fauna and flora are strengthened. The killing of, or harmful interference with, native animals or plants is prohibited except in accordance with a permit, as is the introduction of non-native species. All dogs were required to be removed from Antarctica by 1994.

Waste disposal and waste management

Strict regulations for waste disposal and waste management at stations and field camps are specified. For example, most types of waste must be removed, and the open burning of waste was banned in 1999. Abandoned stations and rubbish dumps must be cleaned up. No PCBs, non-sterile soil, polystyrene packaging or pesticides can be brought into Antarctica.

Prevention of marine pollution

Discharges into the sea of oil, chemicals and garbage, both from ships and stations, are all prohibited. There are restrictions on the disposal of sewage and food waste. Ships and stations are required to have oil spill contingency plans, and be able to respond promptly and effectively to environmental emergencies.

Protected areas

The previous five categories of protected areas are consolidated into just two types:

- Antarctic Specially Protected Areas (ASPAs) – these are areas which have outstanding wilderness, scientific and environmental values. Entry to ASPAs is prohibited except in accordance with a permit. Activities within ASPAs must comply with a Management Plan.
- Antarctic Specially Managed Areas (ASMAs) – these are areas where human activities need to be coordinated. Entry to ASMAs does not require a permit. Activities within ASMAs are coordinated by a Management Plan.



Comments on the Antarctic Treaty System

Resource ATS6

The Antarctic Treaty System (ATS) is one of the few international agreements of the 20th century to have succeeded.

The ATS has maintained the spirit of peaceful international cooperation in Antarctica.

The ATS has limited environmental damage within Antarctica.

The ATS has permitted Antarctic science to flourish and many issues of global concern such as the ozone hole have unfolded there.

The ATS has brought together many different nations, some of whom have been in conflict elsewhere in the world. For example, the USA and the former USSR during the Cold War and the UK and Argentina during the Falklands War.

The ATS is a 'rich man's club' run by a select group of developed countries for their own benefit.

Much of the science conducted in Antarctica is poor and is done to disguise territorial claims or potential rights to mineral exploitation.

There has been no armed conflict within Antarctica since the Antarctic Treaty was signed.

The ATS has focused only on the issues that are easily resolved, for example scientific cooperation, whilst avoiding fundamental problems such as the competing territorial claims.

Antarctica is a 'common heritage for mankind' and should be governed as a 'World Park' by the United Nations.

Government by consensus is a recipe for achieving the lowest common denominator at the slowest possible rate of progress.

The ATS has only succeeded because the principal Treaty nations feared what might happen if it failed.

The ATS does not provide any benefits to countries unable to pay for expensive scientific programmes within Antarctica.



The system of international governance that has evolved in Antarctica is unique. Activities south of latitude 60°S are governed by the Antarctic Treaty (1961) and its associated agreements. The Treaty established Antarctica as a region of peace and science, and sets territorial claims to one side. Forty-three countries have now signed the Treaty, representing over 80% of the world's population. In 23 meetings of the Treaty Nations since 1961, more than 250 recommendations and four separate international agreements have been adopted. These rules and regulations, together with the Treaty itself, are collectively known as the Antarctic Treaty System. This worksheet examines the territorial claims that have been made in Antarctica, explains the Antarctic Treaty and its associated agreements and evaluates the achievements and problems of the Antarctic Treaty System over the past 40 years.

Territorial claims

Task 1 Refer to Worksheet 2 on the Discovery of Antarctica and list by year the countries that were involved in major Antarctic expeditions or voyages up until the mid 20th century. Suggest reasons for their involvement, in particular indicating how these may have changed over time.

Of the many countries that have taken part in the exploration of Antarctica, only seven have staked territorial claims in the region.

Task 2 Examine the map and the history of the territorial claims in Antarctica which are shown in Resource ATS1. Which countries have claims? For each country suggest reasons for its claims. Reference to a map of the southern hemisphere will assist you in this. ➤



The geographical South Pole with the flags of the Antarctic Treaty nations around it

➤ Which major powers do not have claims? Suggest reasons for this. Which claims overlap? Suggest reasons for these competing claims and suggest the likely consequences. Which claims are only defined in terms of longitude and not latitude?
A large part of Antarctica is not claimed – why do you think this is so?

During the 1940s and 1950s the competing claims were a source of international conflict. The situation was made more complex by the refusal of non-claimant countries to recognise any of the claims, while the USA and the former USSR asserted their right to make claims if they so wished.

International Geophysical Year (1957/58)

Twelve countries joined forces to participate in the Antarctic Research Programme of the 1957/58 International Geophysical Year (IGY). This resulted in significant scientific cooperation between nations in Antarctica and crucially gained the support of the claimant states as well as both the USA and the former USSR. The IGY was a

tremendous success and led, amongst other achievements, to the establishment of several permanent research stations on the Antarctic continent. More significantly, it eased political tensions and encouraged the participating countries to look for a permanent solution to the problems in Antarctica. This led to the negotiation of the Antarctic Treaty.

The Antarctic Treaty

On 1 December 1959 in Washington, USA the Antarctic Treaty was signed by representatives of the twelve nations that had participated in the IGY (Argentina, Australia, Belgium, Chile, France, Japan, New Zealand, Norway, South Africa, UK, USA and the former USSR). The UK was the first to sign. The Treaty entered into force on 23 June 1961 and remains in place indefinitely. It was a historic and important agreement and began a new era in Antarctic history with the continent designated exclusively for peaceful purposes.

Task 3 Resource ATS2 gives a summary of the Antarctic Treaty. Read this resource and answer the following questions:

- Which measures in the Treaty show that it was signed at the height of the Cold War? What do these measures require signatories to do?
- Which areas of Antarctica are not covered by the Treaty? What implications for the future do you think this exclusion might have had?
- What is the key criterion for nations to participate in Antarctic Treaty Consultative Meetings? What do you think this means for participation by less developed countries?
- How does the Treaty deal with the issue of territorial claims? Comment on the advantages and disadvantages of this approach.
- What appears to be the overriding goal of the Treaty? What issues does it fail to address?

Dr B. Storey/BAS

The Antarctic Treaty System Worksheet 5

The success of the Treaty can be shown by the steady growth in membership. In 1998, there were 27 nations with consultative (voting) status and a further 16 were signatories.

Development of the Antarctic Treaty System (ATS)

The Treaty has not remained static but has evolved to take account of major issues as they have arisen. The original Treaty did not address issues such as resource exploitation or environmental protection since they were not considered to be priorities in the late 1950s.

In addition to the Treaty, four international agreements have been adopted.

These are the:

1. Agreed Measures for the Conservation of Antarctic Fauna and Flora (1964)
2. Convention for the Conservation of Antarctic Seals (CCAS) (1972)
3. Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR) (1982)
4. Protocol on Environmental Protection to the Antarctic Treaty (1998).

A fifth agreement – the Convention on the Regulation of Antarctic Mineral Resource Activities (CRAMRA) – was agreed in 1988 but has never entered into force. The failure of CRAMRA led to the negotiation of the Environmental Protocol.

Each of these agreements was, in its time, acknowledged as a trail blazer in international environmental law. The Agreed Measures introduced tough laws to protect Antarctic fauna and flora. CCAS provided for the regulation of possible commercial sealing operations, although sealing has not returned to Antarctica. CCAMLR regulates fisheries in the Southern Ocean and pioneered the 'ecosystem approach' to fisheries management. The Environmental Protocol sets out mandatory regulations to ensure the environmental protection of Antarctica. It brings in the 'precautionary principle' whereby new activities are not allowed to go ahead unless it can be demonstrated that they will not damage the environment.

Task 4 Read Resource ATS3 which summarises the Agreed Measures, CCAS and CCAMLR. Answer the following questions:

- What effects might the introduction of non-native species have on Antarctic animals and plants?
- Why has sealing not returned to Antarctica?
- What is the 'ecosystem approach'? How can this concept be used to minimise human impacts in Antarctica?

Regulation of minerals activities

Mineral exploitation in Antarctica is very controversial. Although there are mineral occurrences in Antarctica, none are known in commercially viable quantities. Also, the technical, economic and environmental difficulties of extracting minerals are immense. Nevertheless, the geological similarities of Antarctica to other mineral bearing regions of the world has led to interest in the potential mineral wealth of the region. CRAMRA was negotiated to regulate any commercial mining activity in Antarctica and to ensure that if mining did take place there would be no risk to the environment.

Task 5 Read Resource ATS4 which describes the history of CRAMRA.

- Identify the political positions taken by Greenpeace, Australia and the UK. Suggest reasons for their views. What position do you think may have been adopted by less developed countries?
- Explain why CRAMRA failed to come into force. Which countries refused to sign or ratify it?
- How effective do you think CRAMRA would have been if implemented?

The Environmental Protocol

The collapse of CRAMRA triggered a major political debate on the future of Antarctica and caused a major shift in policy by the Treaty nations towards comprehensive environmental protection of the continent. The end result was the Protocol on Environmental Protection

to the Antarctic Treaty which was signed in 1991 and came into force in 1998.

Task 6 The Environment Protocol is described in Resource ATS5. Read this resource and Worksheet 14 on Environmental Protection. Working in pairs undertake the following tasks:

- List the principles that underlie the Protocol.
- Identify the implications of the Protocol for scientific research and tourism in Antarctica.
- Outline how the Protocol curtails commercial mining activities in Antarctica.

Evaluation of the Antarctic Treaty System

The ATS has been in operation for nearly 40 years and is regarded by many people as an outstanding example of international cooperation. There have, however, been dissenting voices (see Resource ATS 6). For example, some nations, who are not part of the ATS, believe that it is a 'rich man's club' and in the past have proposed that the continent should be managed by the United Nations as a global heritage for mankind.

One criticism of the ATS is that its consensus decision-making process (as opposed to majority-voting) is inherently weak, leading to feeble policies. However, in a consensus-based system, all parties should feel ownership of decisions taken and thus be prepared to implement them in full.

Task 7 Split the class into two groups. The task is to produce agreement by each group on the answers to the following two questions:

- Should mining in Antarctica be allowed in 50 years time?
- If so, what environmental measures should be in place to control it?

One group must operate by consensus, the other by majority voting. The two groups both have 30 minutes to complete the task. Discuss the results. What lessons can be learnt from these two decision-making techniques?