

**CEP IV/ XXIV ATCM
Working Paper WP-7
Agenda Item 8a/18
Australia
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With Attachments A&B**

**REPORT FROM THE INTERSESSIONAL CONTACT GROUP REVIEWING
INFORMATION EXCHANGE REQUIREMENTS**

Report from the Intersessional Contact Group Reviewing Information Exchange Requirements

Background

The issue of improving the Antarctic Treaty system for the annual exchange of information was raised at ATCM XXII. The United States introduced an Information Paper that noted the following three issues regarding the current method for information exchange:

1. overlap and in some cases duplication of information requirements;
2. outdated and inefficient mechanisms for the preparation and distribution of information; and
3. loss in timely delivery of information.

The meeting noted that there is a need to rationalise the information exchange system and that consideration should be given to what information is exchanged and why, as well as to how the process could be improved. It was agreed that exchange of information would be a priority item on the agenda of ATCM XXIII.

ATCM XXIII examined this issue further and considered three Working Papers that presented ideas on how information exchange obligations may be made more timely and efficient. The meeting recognised the benefit of using new technologies to improve the process for exchanging information, but also noted that there are a number of policy, legal and technical issues that need to be addressed before a conclusion can be drawn on the best way to improve the Antarctic Treaty information exchange system. These issues include: the kind of information that should be exchanged; the best way to transmit and present it; the date by which information should be provided; who should receive the information that is made available; whether some kinds of information should be stored in a central location; and how consistency in the information exchanged can be achieved.

The meeting accepted an offer by Australia to co-ordinate an intersessional exchange of views between interested Parties and organisations so that an analysis of options could be presented to the next meeting. Subsequent to CEP II the following people participated on the inter-sessional contact group (ICG) examining this issue: Dr Peter Clarkson (SCAR), Mr Harlan Cohen (USA), Mr Guy Guthridge (USA), Mr Anders Modig (Sweden), Ms Birgit Njaastad (Norway), Mr Warren Papworth (Australia), Mr Rodolfo Sanchez (Argentina), Mr Jack Sayers (COMNAP).

Analysis of Issues/Options

A summary of the ICG's analysis of each of the issues identified at ATCM XXIII follows:

1. What kind of information should be exchanged

To address this issue it is necessary to have a clear focus on why information is exchanged. Parties exchange information annually about their activities in Antarctica to:

- demonstrate their compliance with the Antarctic Treaty, with measures adopted under the Treaty and with the Protocol on Environmental Protection;
- enhance the safety of operations in Antarctica;
- promote scientific and logistical cooperation; and

- add to the historical record.

In this context the ICG reviewed current information exchange obligations/requirements in order to identify areas of overlap and duplication, whether some of the information currently sought is no longer required, or if additional information should be sought. This included obligations arising from the Antarctic Treaty, the Protocol on Environment Protection to the Antarctic Treaty, the Convention for the Conservation of Antarctic Seals, ATCM recommendations, and requirements of SCAR and COMNAP.

As a result of this review it became apparent that the information could be sorted into three distinct categories: Pre-season, Annual (end of season) and Permanent. The use of a 'permanent' category was considered particularly efficient for information that did not change from year to year but would previously have been reported annually, either in pre or post-season reports.

A summary of the ICG's recommendations on the kinds of information that should be exchanged in these three categories, is provided in Attachment A. It should be noted that the ICG could not reach agreement on the information to be provided pre-season. Some members were of the opinion that this information is generally received too late to be useful and that consequently little, if any, information should be sought at this time.

2. The Best Way to Transmit and Present the Information

The ICG identified the following options for the transmission and presentation of information:

- option 1 - display information on national program web sites;
- option 2 - display information on a central web site with information posted electronically to the site by Treaty Parties;
- option 3 - use a central web site with links to information on national / COMNAP / SCAR web sites;
- option 4 - use a central web site with information recruited electronically from national / COMNAP / SCAR web sites;
- option 5 - use multiple web sites such as CEP, ATCM (when established), COMNAP and SCAR with each collecting the information relevant to their organisation;
- option 6 - send email with information attached to other Parties' national contact points; and
- option 7 - retain existing system of exchange through diplomatic channels.

A summary of the benefits and disadvantages identified for each option is provided in Attachment B.

It was clear from an examination of the above options that use of the world wide web (www) would significantly increase the efficiency and effectiveness of the information exchange process. It allows the timely exchange of information, avoids duplication in the submission of information (while allowing information to appear at numerous sites), provides an efficient mechanism for the submission of information to one or more databases (if required), would provide a central site from which all information could be accessed, and potentially allows the presentation of information in a variety of formats or languages allowing ready access and the ability to compare and analyse data.

The majority, though not all, of ICG members favoured option 2. Other members preferred option 1, or a combination of options 1 and 2.

The ICG **recommends** that a central web site be established for the transmission and presentation of this information.

3. The Date by Which Information Should be Provided

The ICG considered the optimum time for the submission of information in each of the three categories: Pre-season, Annual (end of season) and Permanent.

Pre-season Information

Due to the difficulty and complexity of Antarctic operations many Parties plan their operations well in advance. The ICG recommends that Parties be encouraged to submit relevant information from these plans as far in advance as is practical so that other Parties can make use of this information when planning their own activities. Information for the coming season would preferably be submitted by 1 October, but in all cases before the start of that Party's annual operations.

Annual (end of season) Information

Collection of much of this information is considered essential if the CEP is to carry out its functions as described in Article 12 of the Protocol. It should be submitted as early as possible after the end of the austral summer season and where possible in advance of ATCM and CEP meetings, but in all cases before 1 October. The ICG considered that a reporting period of 30 March to 1 April is appropriate.

Permanent Information

This information, which is often generated through the annual information exchange process, does not change much from year to year and includes information that is prepared on an ad hoc basis. It could be submitted at any time (or in accordance with the requirements of the Antarctic Treaty and Protocol).

The ICG **recommends** that information be submitted as follows:

- Pre-season information - Submitted as early as possible, preferably by 1 October, but no later than the start of that Party's annual operations.
- Annual information - Should be submitted as early as possible after the end of the austral summer season, but in all cases before 1 October (with a reporting period of 30 March to 1 April).
- Permanent Information - Submitted at any time (or in accordance with the requirements of the Antarctic Treaty and Environmental Protocol).

4. Who Should Receive the Information that is Made Available

The ICG identified the following options for who should receive the information that is made available:

- make information available to Treaty Parties only;
- make all information publicly available;
- make some parts of the information publicly available, with other parts only available to Treaty Parties; and
- restrict access to the users of the information.

It was noted that the primary users of the information exchanged are the Treaty Parties and that the information is provided, in large part, for their use in order to promote international cooperation and to permit maximum efficiency of operations. It was also noted that making this information publicly available assists in making the Antarctic Treaty system transparent. As well, some Parties' national legislation requires that this information be made publicly available. There is however some information, such as the satellite telephone numbers of ships and stations, which it was felt should be restricted as frequent use of these services by the general public could disrupt operational efficiency (particularly in emergency situations).

Consequently, the ICG **recommends** that, as a general principle, all information be made publicly available, but that Parties be given the option of restricting information where public access would impede operational efficiency.

5. Whether Some Kinds of Information Should be Stored in a Central Location

When addressing this item the ICG identified two issues that it believes ATCM should take into consideration. These are whether information should be **stored** in a central location, that is a single web-site or database where all information is held, or alternatively, a central location from which information is **accessed**, ie providing links to other sites where the information is held. The www can allow these functions to be undertaken separately, or for a combination of them to be used.

The ICG considers that any information that needs to be analysed, compared, or used in the production of reports, should be stored centrally in a database that will allow manipulation of the data. Metadata records are one example, although potentially most of the information exchanged could fall into this category.

Where there is a diverse array of information being submitted from a variety of sources there are clear advantages in having the information accessible from a central location. The major benefit is that information can be readily located, both by frequent users of the information and by infrequent users, such as members of the general public.

At this point the ICG does not consider it practical to store all the information that is exchanged on a single web-site or database. It favours a hybrid system, with some information being stored on the central site and other information held on remote sites, accessible via links from the central site.

The availability of a central web site would also allow those Treaty Parties that do not currently have their own web site to post their information electronically to the central site. Those Parties that do have information displayed on their own web site would only need to provide a link to the central site. Alternatively, www technology would allow information to be copied off Parties' sites to the central site, if appropriate. The information thus gathered could be submitted to a database for analysis or use in reports.

The ICG **recommends** that all three categories of information identified in item 1. above be accessible from a central location. To achieve this a central web site should be established that would allow Parties to either submit information directly to the site, or alternatively, provide relevant links to their own site.

6. How Consistency in the Information Exchanged can be Achieved

It is unlikely that complete consistency can be achieved in the information exchanged between Treaty Parties as there are significant differences in the way that national programs are operated, as well as different languages being used. However, the ICG believes a high level of consistency can be achieved if a common, basic format for reporting is established, with clear instructions and/or examples on the level and type of information being sought. This was achieved with ATCM recommendation VIII-6. However, since then many additional information exchange obligations have arisen and it would be appropriate to again consolidate these requirements. The information provided by the ICG in Attachment A could form a useful basis for this consolidation.

The agreed format should establish minimum data requirements that all Treaty Parties provide, but it should also allow Parties to provide additional information. This would allow a degree of flexibility to take account of the differences between national operations.

The ICG **recommends** that a common, basic format be developed identifying the minimum level of information required for each reporting obligation, with clear instructions and/or examples on the type of information being sought.

Recommendations

The following recommendations are put forward for consideration by ATCM. That:

1. information be collected according to the following categories, Pre-season, Annual (end of season) and Permanent and that agreement be reached on the specific information that is to be provided under each of these categories. The information provided in Attachment A is provided as a basis for further discussion;
2. a central web site be established for the transmission and presentation of this information;
3. information be submitted as follows:
 - Pre-season information - submitted as early as possible, preferably by 1 October, but no later than the start of that Party's annual operations.
 - Annual information - should be submitted as early as possible after the end of the austral summer season, but in all cases before 1 October (with a reporting period of 30 March to 1 April).
 - Permanent Information - submitted at any time (or in accordance with the requirements of the Antarctic Treaty and Environmental Protocol);
4. as a general principle, all information is made publicly available, but that Parties be given the option of restricting information where public access would impede operational efficiency;
5. all three categories of information identified in item 1 be accessible from a central location. To achieve this a central web site should be established that would allow Parties to either submit information directly to the site, or alternatively, provide relevant links to their own site; and
6. a common, basic format be developed identifying the minimum level of information required for each reporting obligation, with clear instructions and/or examples on the type of information being sought.

1. Pre-season Information

1.1 Operational information

1.1.1 National Expeditions

A. Stations

- ❑ Names of wintering stations (giving region, latitude and longitude), maximum population and medical support available.
- ❑ Names of summer stations/bases and field camps (giving region, latitude, longitude), operating period, maximum population and medical support available.
- ❑ Names of refuges (region, latitude and longitude) medical facilities and accommodation capacity.
- ❑ Other major field activities, e.g. scientific traverse (giving locations)

[Note: Fixed data drawn from «Permanent Information» source.]

B. Vessels

- ❑ Name of vessels, country of registry of vessels, number of voyages, planned departure dates, areas of operation, ports of departure and arrival to and from Antarctica, and purpose of voyage (e.g. science deployment, resupply, change-over, oceanography, etc)

[Note: Fixed data drawn from «Permanent Information» source.]

C. Aircraft

- ❑ Type of aircraft, planned number of flights, period of flights or planned departure dates, routes and purpose.

[Note: Fixed data drawn from «Permanent Information» source.]

E. Science Rockets

- ❑ Coordinates of the place of launching, time and date/period, direction of launching, planned maximum altitude, impact area, type and specifications of rockets, purpose and title of research project.

E. Military

- ❑ Number and ranks of military personnel participating in expedition, number and type of personal armaments carried.
- ❑ Number and type of armaments on ships and aircraft.
- ❑ List of armaments on stations/bases.

1.1.2 Non-governmental Expeditions

A. Ship-based Operations

- ❑ Name of operator, name of vessel, country of registry of vessel, number of voyages, planned departure dates, ports of departure and arrival to and from Antarctica, areas of operation including the names of proposed landing sites and the planned dates at which these landings will take place.

B. Land-based Operations

- Name of expedition, method of transportation to, from and within Antarctica, type of adventure/activity, location, dates of expedition, number of personnel involved, contact address, web-site address.

1.2 Visits to Protected Areas

- Name and number of protected area, number of people permitted to visit, date/period and purpose.

2. Annual Report

2.1 Scientific Information

2.1.1 *Forward Plans*

- Copy (PDF), or contact point for printed version, of strategic or multi-year science plan.
- List of planned participations in major, international, collaborative science programs/projects.

2.1.2 *Science Activities in Previous Year*

- List of research projects undertaken in previous year under science discipline (giving location and principal investigator).

[Note: Links can be provided to national web site for details of each project]

2.2 Operational information

2.2.1 *National expeditions*

- Update of information given under 1.1.1.

2.2.2 *Non-governmental expeditions*

- Update of information given under 1.1.2.

2.3 Permit Information

2.3.1 *Visits to Protected Areas*

- Update of information provided under 1.2.

2.3.2 *Taking and harmful interference with flora and fauna*

- Species, location, amount, sex, age and purpose.

2.3.3 *Introduction of non-native species*

- Species, location, amount and purpose.

2.4 Environmental Information

2.4.1 *Compliance with the Protocol*

- New measures adopted during past year in accordance with Article 13 of the Environmental Protocol giving description of measure, date of effect.

2.4.2 *List of IEEs and CEEs*

- List of IEEs/CEEs undertaken during year giving proposed activity, location, level of assessment and decision taken.

2.4.3 *Monitoring activities report*

- Name of activity, location, (lat. long), procedures put in place, significant information obtained, action taken in consequence thereof.

2.4.4 *Waste Management Plans*

- Waste management plans issued during the year giving title including name of station/vessel/location.
- Report on implementation of waste management plans during the year.

2.5 Relevant National Legislation

- Measures adopted during the year to give effect to the Antarctic Treaty and to obligations arising from ATCM recommendations, giving description of measure and date of effect.

2.6 Other information

2.6.1 *Inspection Reports*

- Report of any inspections conducted under AT Article VII and Article 14 and Article 10 (Annex V) of the Environmental Protocol during the year giving date of inspection, person/s conducting inspection, nationality of inspector/s, locations inspected, where inspection report located (URL?).

2.6.2 *Notice of Activities Undertaken in Case of Emergencies*

- Description of emergency, location (latitude and longitude) and action undertaken.

3. Permanent Information

3.1. Science Facilities

3.1.1 *Automatic Recording Stations/Observatories*

- Site name, co-ordinates (latitude and longitude), elevation (m), parameters recorded, observation frequency, reference number (e.g. WMO no.)

3.2 Operational Information

A. Stations

- Name of wintering stations (giving region, latitude and longitude, and maximum population), date established and accommodation and medical facilities.
- Name of summer stations/bases and field camps (giving region, latitude, longitude, operating period and maximum population)
- Names of refuges (region, latitude and longitude) medical facilities and accommodation capacity.

B. Vessels

- Name of vessels, flag state, ice strength, length, beam and gross tonnage.

[Note: This information is publicly available on the COMNAP web site.]

C. Aircraft

- Number and type of aircraft operated.

[Note: This information is publicly available on the COMNAP web site.]

D. Aircraft landing facilities (information as per COMNAP requirements)

[Note: This information is published in the *Antarctic Flight Information Manual* by COMNAP]

E. Communications facilities and frequencies (information as per COMNAP requirements)

[Note: This information is published in the *Antarctic Telecommunications Operators Handbook (ATOM)* by COMNAP].

3.3 Waste Management Plans

- Title of Waste Management Plan, copy (PDF) or contact point for printed version and brief report on implementation.

3.4 Contingency Plans

- Title of Oil Spill Plan, copy (PDF) or contact point for printed version. Brief report on implementation.
- Title of Emergency Contingency Plan(s) for Oil Spills and other emergencies, copies (PDFs) or contact point for printed versions. Brief report on implementation.

3.5 Inventory of Past Activities

- Name of station/base/field camp/traverse/crashed aircraft/etc, co-ordinates (latitude and longitude) period during which activity undertaken; description/purpose of activities undertaken; description of equipment or facilities remaining.

3.6 Relevant National Legislation

- Description of law, regulation, administrative action or enforcement measure, date of effect/enacted, giving copy (PDF) or contact point for printed version.

| Option | Benefits | Disadvantages |
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| 1. Display information on national program web sites. | <ul style="list-style-type: none"> - Information can be automatically updated throughout year providing more timely and reliable data e.g. shipping schedules. - No delays in transmission of information. - Fewer resources required for collation of information. - All exchange information for that nation's program can be found in one location. | <ul style="list-style-type: none"> - As the information is not in a central database it cannot be readily compared or analysed. - Some national programs may not have a web site established although it is likely that this will only be a short-term constraint. - May be difficult to locate individual nation's web sites. - There is a cost involved in setting up and maintaining a web site. However, most programs already have sites established and would only incur a small incremental cost to include ATIE. - May result in lack of consistency between sites. |
| <ul style="list-style-type: none"> • Display on central site with information posted electronically to the site by national programs. | <ul style="list-style-type: none"> - Information would have to be submitted in a consistent format. This would allow data to be stored in a database that could then be used to analyse/report on the information submitted. Potentially very useful for both research and operational reasons. - Would be very easy to find information about other nations' programs as all information is presented on the one site. - Fewer resources required for collation of information though not as efficient as option 1. - System could allow national programs to edit their own information making the updating of information more efficient. | <ul style="list-style-type: none"> - There would be a cost involved in setting up and maintaining the web site however this would be less costly than having multiple web sites set up for each national program. - Currently there is no ATCM Secretariat to establish and maintain the site. |
| 3. Use a central site with links to information on | - Easy to find information about other nations' | - Relies on national programs maintaining URL |

| Option | Benefits | Disadvantages |
|--|---|---|
| national sites i.e. central web site provides URLs to specific information on national web sites. | <p>programs as all information is accessible from one site.</p> <ul style="list-style-type: none"> - Fewer resources required for collation of information. Similar efficiencies to option 2. - Central site would not need to be updated continuously as this would be done on national sites. | <p>links to central site.</p> <ul style="list-style-type: none"> - May result in a lack of consistency between national sites. |
| 4. Use of a central site with information recruited from national sites i.e. central computer automatically retrieves information from national sites and presents it on a central web site. | <ul style="list-style-type: none"> - Easy to find information about other nations' programs as all information is accessible from one site. - Information would have to be available on national web sites in a consistent format. This would allow data to be stored in a database that could then be used to analyse/report on the information submitted. Potentially very useful for both research and operational purposes. - Central web site could be programmed to update information on a regular basis ensuring that information is current. - No resources required from national programs to transmit information. | <ul style="list-style-type: none"> - A cost involved in setting up and maintaining a central web site. Would require resources to manage the database and ensure quality control on the information received. - Technically more difficult than other web based options. |
| 5. Use multiple core web sites such as CEP, ATCM (when established), COMNAP and SCAR sites to collect information relevant to these organisations. | <ul style="list-style-type: none"> - Information would be stored on web sites according to its use e.g. environmental information on the CEP site, operational info on the COMNAP site, scientific information on the SCAR site. This may make it easier for people to find the information they are seeking. - If the information is stored in a database on these sites then it could be used to | <ul style="list-style-type: none"> - Potential for lack of consistency/approach between sites. - Some information may be relevant to more than one site leading to duplication of information. - A greater cost involved in setting up and maintaining a number of web sites. - Web sites may have different requirements for |

| Option | Benefits | Disadvantages |
|---|---|--|
| | <p>analyse/report on the information submitted. Potentially very useful for both research and operational purposes.</p> | <p>the submission of data which may be confusing.</p> <ul style="list-style-type: none"> - May be more difficult to find information as data held on a number of web sites. |
| <p>6. Send email with ATIE attached to other parties' national contact points. (This could be a default option for those national programs that don't want/haven't got access to a web site.)</p> | <ul style="list-style-type: none"> - Would allow more timely exchange of information compared to the current system. - Would not cost much to establish and maintain. | <ul style="list-style-type: none"> - Due to the large amount of information exchanged and the different formats used (text, tables, diagrams and images) operators who use this option are likely to encounter difficulties when transmitting data. |
| <p>7. Retain existing system of exchange through diplomatic channels.</p> | <ul style="list-style-type: none"> - All national programs can access this system. | <ul style="list-style-type: none"> - Existing inefficiencies and delays in the production and transmission of paper reports would continue. |