SCAR LIFE SCIENCES STANDING SCIENTIFIC GROUP (LSSSG) Draft Report of the meeting at SCAR XXIX, 8 – 11 July, 2006, Hobart, Tasmania

Attendees

- a. Country members
- b. Additional members
- c. Observers

A list of recommendations from the LSSSG meeting is in **Annex 1**. A list of names and addresses is in **Annex 2**. The agenda of the meeting is in **Annex 3**. A list of working papers is in **Annex 4**.

Welcome and Apologies

The Chief Officer, A. Huiskes opened the meeting of the LSSSG, and welcomed all delegates, observers and alternative delegates. Apologies had been received from A. Blix and K. Conlan. The CO invited E. Woehler (Chair of the Group of Experts on Birds) to act as Secretary for the meeting in the absence of K. Conlan.

Adoption of Agenda

The agenda (Doc 1) as tabled was adopted with an additional item (27a) included to receive a report on the 9^{th} Biology Symposium at Curitiba in 2005. The CO invited E. Fanta to present this report.

Report of the SCAR XXVIII LSSSG meeting, Bremen 2004

The draft minutes of the LSSSG meeting from Bremen (Doc 2) were adopted without change.

D. Walton outlined the present situation with respect to Codes of Conduct for field activities. He reported that questions on this had been raised at XXIX ATCM, and noted that there was potential for confusion as there were already several independent versions produced both by countries and by research groups. A unified approach to a Code of Conduct for field work anywhere in the Antarctic was a reasonable objective, and if it was achieved it would be essential to consult COMNAP over the outcomes. Whilst the initial draft could come from LSSSG, it should be iterated with both other SSGs to ensure comprehensive coverage. After discussion, it was agreed to address the revision and synthesis from existing documents at a small workshop in the Netherlands organised by A. Huiskes.

D. Walton spoke to the SCAR Code of Conduct for the use of animals for scientific purposes in Antarctica (Doc 27). He noted that the Code was now almost 20 years old and that for many countries, both the public expectations in this field and the national legislation had changed markedly. SCAR should ensure that in such an area its advice was both sound and up-to-date. In introducing a revision of the existing text, he noted that key new elements were the need for ethical oversight by a committee with independent members, the potential for reducing the need for animal experiments and the importance of developing a culture of humane care. The Code should be seen as a supplement to national laws and a minimum "fall-back" position for countries lacking suitable contemporary legislation. Several amendments to the text were incorporated and the Code of Conduct (Doc 27) was adopted by the Group.

Relationships with ICSU subsidiaries

The CO spoke regarding the relationship with SCOPE (Doc 4a) and reported on the increased linkages requested by ICSU of its subsidiary bodies, such as SCAR. It was noted that a range of ongoing activities of SCOPE may provide synergy with LSSSG, and that there was a need to increase the interaction between SCOPE and SCAR – this could be achieved by joint scientific projects. Further opportunities were noted arising from CAML, EBA and the SAER programmes, and with research topics of the EGHBM potentially linking with SCOPE.

G. Knox briefly reported on the breadth of ICSU, and noted that many Antarctic scientists were already involved in ICSU subsidiaries. The potential links between IUBS projects such as DIVERSITAS and EBA were identified, and members were encouraged to establish greater linkages between other IUBS projects and SCAR in the future. D. Lugg drew the attention to the collaboration between the EGHBM with IUPS. The Group saw the need for a more proactive role for SCAR in its involvement with IUBS, such as a regular publication in *Biology International* to raise SCAR's profile. The CO will collaborate with the Executive Director to produce a more general article. A paper describing the EBA programme in the periodical was also seen as a high priority.

Matters Arising from the Expert Group on Human Biology and Medicine

I. Grant provided a progress report on the EGHB&M under a series of headings:

NATIONAL REPORTS

In keeping with the objectives of SCAR to share information between nations, each participating full member of EGHB&M reported on medical statistics, trends, and significant cases over the last two years. Reports from members who were unable to attend were tabled. This stimulated discussion on medical care in Antarctica, and opened suggestions for applied healthcare research. This is a useful exercise, conducted at every meeting of the EGHB&M, which would be much enhanced by the establishment of an epidemiological database of medical events to permit sharing of anonymised data between nations to complement understanding of trends, identify any problems at an early stage, and reduce the limitations on healthcare research imposed by small numbers of subjects.

PAPER ON PATHOGENIC MICROBIOTA IN ANTARCTICA

At the request of LSSSG, the EGHB&M considered and appraised paper IP72 presented by Russia to ATCM in Edinburgh in June 2005. The EGHB&M were concerned by the lack of peer reviewed references for the quoted work, and considered that this made interpretation of the paper difficult in that methodology and reasoning could not be validated. This notwithstanding, the paper raised interesting questions that deserve further research and consideration. It was decided that I. Grant, G. Steel and P. Convey would draft an information paper for the next ATCM in response to the information paper 72 submitted to XXIX ATCM by Russia.

MEMBERSHIP OF EGHB&M

It was noted that attendance at this meeting was less than in recent times. Several members have retired fro the group and have not been replaced by national nominating groups despite contact and requests from EGHB&M executive. It was considered by the group that every effort should be made to sustain the expertise available to the group for the benefit of all, and that reduced participation could only be detrimental to future research and healthcare.

THE EXPERT GROUP WEBSITE

Development of this has continued with uploading of considerable amounts of information, setting up of information sources and an IPY site, and improvement of functionality. The site however remains public access and has had a few security problems. The EGHB&M wishes to

develop a secure workspace for members and has requested funding from SCAR to permit this.

ONGOING RESEARCH

It is clear that human biology and medicine research in Antarctica remains vibrant with many ongoing projects at various stages. These were described and discussed, and ideas for future work elaborated.

<u>IPY</u>

This is a major focus of activity for the group. The project "Taking the Antarctic and Arctic Polar Pulse (TTAAPP)" has gained endorsement from ICSU/WMO (Project 341). This coordinates several projects with some focus around the development of linked databases of medical events and healthcare measures. This will provide a snapshot of healthcare problems in the Antarctic and with continued use will gradually build a legacy of epidemiological data and resource. The group intends to hold an open workshop later this week.

The CO thanked the EGHBM for their presentation, noted with pleasure the role of EGHBM in IPY activities.

Recommendation XXIX -LSSSG - 1 (Internal)

Concerning the Membership of LSSSG Expert Groups.

Noting that there are currently vacancies in national representation on LSSSG Expert Groups:

- In that several nations have not nominated members to the Expert Groups despite an active participation in science in the Antarctic.
- In that several people who have recently retired from LSSSG Expert Groups have not been
 replaced despite contact between the executive of LSSSG Expert Groups and the national
 nominating body.

Considering that this:

- Depletes the number of collaborators in research
- Reduces the scope of expertise available to EGHB&M
- Limits the overall functionality of the group
- Tends to hamper effort to stimulate participation in Health research in the Antarctic.

The LSSSG recommends and requests that:

- SCAR maximizes influence on national appointing organizations to nominate members for LSSSG Expert Groups, and encourages support for attendance at meetings.
- SCAR supports efforts by LSSSG Expert Groups to encourage replacement of retiring members.

Scientific matters arising from ATCM

D. Walton spoke to the Report to the Delegates from ATCM 29 (Doc 7a) and Monitoring of pathogenic microbiota in the Antarctic (Doc 9) and identified issues of particular relevance to LSSSG. He noted that a wide range of Antarctic Treaty papers had been posted in advance on the web site to allow members to familiarise themselves with the key subjects discussed.

It had been a very successful ATCM for SCAR, with several important working papers and an extremely good SCAR lecture by Valerie Masson-Delmotte. D. Walton noted significant progress with conservation, including the implementation of a scientific approach to listing/delisting species as Specially Protected Species under the Madrid Protocol. Fur seals had been delisted (although they retained full protection under the Protocol), there was a recommendation on the protection of Southern Giant Petrels, marine protected areas had been discussed in some detail, new and revised management plans had been tabled for Antarctic Specially Protected and Specially Managed Areas and there had been a report on the first inspections of protected areas in the Ross Sea.

The SCAR paper on marine acoustics had broken further new ground with its discussion of the relationship between natural baseline noise and additional anthropogenic noise, especially from increased shipping. There was almost universal enthusiasm for the SCAR proposal to undertake an Antarctic Climate Assessment and there had been continued concern about alien species, culminating in a new set of guidelines agreed for ballast water exchange.

CO thanked D. Walton for his report.

Specially Protected Area plans and Specially Protected Species

A proposal for ASMA status for the Fildes Peninsula put forward by Germany was not agreed upon, and a workshop would be organised on this by Chile. Brazilian scientists agreed to report on the outcomes of this workshop to LSSSG.

The further assistance of the Expert Group on Birds would be needed to deal with the possibility of listing regional populations of Southern Giant Petrels and Macaroni Penguins. A statement would have to be made about the population status of Ross seals at the next Treaty meeting.

New Zealand had tabled a paper on the Systematic Geographic-Environmental Framework and had requested the assistance of SCAR in reviewing it. P. Convey agreed to assist in this matter.

A report was tabled by Russia on its intention to drill a further 50m core from the Lake Vostok hole next season and penetrate the lake in 2007/08 stimulated discussion. G Di Prisco asked that the LSSSG raise with the Delegates that penetration of the lake was a matter of great concern to many in the scientific community as the proposed precautions might not be adequate to eliminate contamination. In the discussion that followed, it was pointed out that all legal aspects are being followed by Russia. However, representatives of several countries shared the concern of possible environmental damage due to the difficulties in certainty in reducing the risks of contamination when reaching the water, especially considering recent reports of possible interconnection networks among subglacial lakes. The CO promised to convey these concerns to the Delegates.

The LSSSG agreed that for other items requiring the appointment of LSSSG representatives (representation at the CCAMLR MPA, and EMM workshops), decisions would be taken after the detailed request to participate had been received.

CO thanked D. Walton for his report.

Antarctic Conservation in the 21st Century

In response to questions about Antarctic Conservation in the 21st Century, D. Walton replied that the workshop in Stellenbosch, South Africa had provided initial scoping discussions but it had become clear that in order to address this issue adequately given the number of interested parties, a larger effort jointly with IUCN was required. He would be meeting with IUCN shortly to plan this.

Report of the Scientific Programme Planning Group on Biological Monitoring

D. Walton introduced the summary report from the Practical Biological indicators of Human Impacts in the Antarctic (Doc 10). The CO noted the excellent organization of the workshop in Texas and congratulated them on producing an excellent report. The Report finalised the work of the SPPG, and was thus closed by the CO. The SPPG was thanked by the CO and by the

LSSSG (applause). **Presentation: Special Scientific Program Antarctica and the Global Climate System**

J. Turner gave a presentation on the Antarctica and the Global Climate System (AGCS), which is one of the five SCAR Scientific Research Programmes (Doc 11). The presentation outlined the progress with data compilation on terrestrial and oceanographic data sets (web addresses). The CO thanked him for his presentation, and noted the potential valuable interactions with EBA.

JCADM

T. de Bruin presented the report from JCADM (Doc 12). Discussions on the work of JCADM raised the issue of the inclusion of, and access to operational data from COMNAP. At present, limited data from COMNAP were included within JCADM, and it was suggested that the inclusion of more operational data would further increase the valuable contribution of JCADM.

It was noted that a substantial number of data sets arising from bio-prospecting activities were also not made available to JCADM. While acknowledging the confidential nature of some data, such as those describing commercial fishing activities under CCAMLR, a number of terrestrial investigations and collections, in some cases funded from commercial sources, were generating scientifically valuable data sets that were unavailable to other researchers. Members were reminded that the Treaty requires free exchange of scientific information, but advised that there was no time frame specified for this exchange. Even if the raw data were not made available, it was felt that a meta-data record describing the data and alerting researchers to their existence would be an appropriate advance. In particular, some indication of when the data might be made freely available was also seen as desirable.

The CO thanked T. de Bruin for his presentation.

Recommendation XXIX -LSSSG - 2 (External)

On the recording of confidential data from commercial activities

Concerned that valuable scientific data, collected from Antarctica and the Southern Ocean through commercial activities such as bio-prospecting, is not being released for scientific use, and that such commercial activities may not even be recorded anywhere at present,

SCAR calls on National Committees to ensure that a metadata entry is made in the Antarctic Master Data Directory whenever possible to provide a record of all such activities. Such an entry should record if possible a statement about when full data disclosure could be expected.

Recommendation XXIX -LSSSG - 3 (External)

On the provision of data to third parties

Recognising that whilst under Article III of the Antarctic Treaty data and information must be freely exchanged between Parties, this exchange does not over-ride the intellectual property rights of ownership of the data, and knowing that SCAR groups hold a variety of data provided for specific purposes from individuals and institutions,

the LSSSG recommends that a SCAR data policy should be developed which requires that SCAR only provide details of the data owner/manager to whom all such requests need to be directed, and that all requests for data held by SCAR is to made through JCADM.

Evolution of SO-GLOBEC into ICED and SCAR/SCOR Expert Group on Oceanography

E. Hoffman was unable to attend the meeting and thus unable to report on these activities. Her

report is added as Doc. xx.

SCAR matters

The Executive Director of SCAR, C. Summerhayes reported on recent progress and future plans for SCAR. Extensive progress had been achieved across much of SCAR's operations. SCAR will present three Medals during the Hobart meeting in recognition of services to SCAR. Two new members had joined SCAR, and others members had indicated their intention to increase their membership level to full members. The 50th anniversary for SCAR would occur in 2008 when the next Open Science Conference and associated meetings would be held in St Petersburg in conjunction with the IASC, providing the opportunity for a bi-polar theme. The

CO thanked C. Summerhayes for his presentation.

Matters Arising from the Expert Group on Seals

The Secretary of the EGS, M. Bester, presented a draft report on the activities of the group. The group was established at SCAR XXVII in 2002 with A. Blix as CO and M. Bester as Secretary. Upon taking advice from the SCAR Executive Director, a core group of 7 persons, in addition to the two SCAR appointed officers, was named by the Chair in 2005 and submitted to the LSSSG for final approval, while everyone else who has an expressed interest in the study of Antarctic seals was co-opted as a member. A Blix recently indicated his intention to retire at the end of 2006.

The activities of the Group were carried out and will be continued, primarily electronically. These activities comprised the status of stocks following requirements of the Convention for the Conservation of Antarctic Seals (CCAS) and the Antarctic Treaty.

In the discussion following the presentation, it was noted that the group should formulate new research goals under CAML or EBA rather than formulating a new research programme. MMEOPP [Marine Mammal Exploration of the Oceans, Pole to Pole] is a new programme being developed, which will include censuses, ecological research and the development of new technologies. MMEOPP will run to 2013, it may be a separate programme but will have links with CAML and EBA.

The APIS final report is still pending, despite numerous attempts to gain momentum on the delivery. Members noted the continuing embarrassment to SCAR for not delivering data, particularly for Ross Seals, to the ATS, despite annual reassurance to the contrary. Especially the data on the Ross Seal are urgently needed, preferably before the next ATCM meeting. The matter was referred back to the EGS, with the suggestion that if the compiler of the report did not respond, the original data from the individual scientists who contributed to the data for the report should be asked to resubmit, eg to the SCAR MarBIN database. The EGS should find scientists to run the statistical analyses already developed in order to facilitate finalisation of the report. Funding to assist in analyses and report production might be considered. The meeting accepted that the EGS will take affirmative action inter-sessionally to compile data from the original sources, with a primary focus on Ross seals, the group will advise the LSSSG on any progress. The CO will subsequently report this to the SCAR Delegates meeting.

The CO thanked M. Bester for his presentation.

Matters Arising from the Expert Group of Birds

The CO invited the Chair of the Expert Group of Birds, E. Woehler, to report on the activities of the Group.

There had been no meeting of the Group of Experts on Birds since the July 2004 meeting in Texel, as there was no real need for the Group to meet. Extensive inter-sessional contacts

among members were maintained electronically and this allowed the business of the Group to continue (see below). Three members of the group retired inter-sessionally (J. Croxall, J. Valencia and F. Pezzo). A fourth member, J. Cooper, indicated his intention to retire at the end of 2006. Preliminary discussions have been held amongst the remaining members to identify suitable candidates for consideration as new members of the Group. It is expected that the selected candidates will be approached in the second half of 2006, with a view to establishing a new membership early in 2007.

Extensive inter-sessional efforts continued on a broad spectrum of issues, requests and workshops (Doc xx). A joint SCAR-BirdLife International-IUCN workshop was held at BAS in March 2005 to assess regional populations of Antarctic seabirds against IUCN regional criteria. This workshop identified Southern Giant Petrels as Critically Endangered in the Antarctic. Compilation and collation of seabird census data continued, with interim [semi-quantitative] assessment conducted in Texel in 2004, and next statistical assessments to be undertaken in 2008 (10 years after original workshop).

The GEB was represented at the joint SCAR/COMNAP/NSF workshop on Practical Biological Indicators of Human Impacts in the Antarctic, held in Texas, March 2005. The GEB continued its assessment of the potential impact of flipper banding of penguins, global conservation assessments of penguins. SCAR was accorded Observer status at ACAP (Agreement for the Conservation of Albatrosses and Petrels) and attended several meetings in 2005. The GEB played an active role within SCAR-MARBIN (<u>http://www.scarmarbin.be/</u>), and continued to provide advice regarding the nomination of Specially Protected Species (SPS) status to Southern Giant Petrels. Efforts continued, albeit more slowly than desired, on the Important Bird Areas (IBA) project in conjunction with BirdLife International; this joint effort with BLI is now the highest priority for EGB.

The CO noted the potential contributions from both Expert Groups to EBA, then thanked E. Woehler for his presentation.

The LSSSG then discussed the options for a potential merger of the two Expert Groups to form an Expert Group on Higher Predators. The two Convenors agreed to discuss all options with their members inter-sessionally and report back to the LSSSG.

Recommendation XXIX -LSSSG - 4 (External)

Concerning the use of flipper bands on penguins

Recollecting Recommendations SCAR XXVII-Biol 2, SCAR XXVII-10 and SCAR XXVIII-10, discouraging the use of flipper bands for external marking of penguins,

Noting the substantial and increasing scientific evidence for adverse, cumulative long-term (ie greater than one year duration) impacts of flipper bands,

Recognizing that banding studies of varying durations are still underway within some national programmes;

SCAR *recommends* that National Committees urge researchers to give careful consideration as to whether flipper bands should be used, and under what circumstances.

Recommendation XXIX -LSSSG - 5 (External)

Concerning the Agreement for the Conservation of Albatrosses and Petrels (ACAP)

Recollecting Recommendations SCAR XXVI-Biol 8, SCAR XXVII-Biol 1, SCAR XXVII-LSSSG 13 and SCAR XXVIII-LSSSG 3, covering threats to Southern Ocean seabirds due to mortality in longline fisheries, and

Noting the entry into force of the Agreement on the Conservation of Albatrosses and Petrels in

2004,

SCAR *requests* relevant National Committees to contact the relevant adhering body within their country to ensure that they have produced their FAO National Plans of Action – Seabirds and/or ratified the Agreement on the Conservation of Albatrosses and Petrels.

Progress report of the Evolution and Biodiversity in Antarctica Programme

The CO thanked the Scientific Planning Group for their efforts to develop the EBA programme, and then invited G. di Prisco to introduce the Evolution and Biodiversity in Antarctica (EBA) programme, one of five SCAR programmes adopted in 2004. P. Convey expanded on the work plans that had been developed and the research directions for the programme. The CO thanked both presenters, and the EBA progress report was adopted.

M. Stoddart provided a brief overview of the progress of activities in support of CAML. The CAML SC had met twice, standard sampling and data management protocols had been established, including a close link with SCAR-MARBIN. The Sloan Foundation had been approached for additional funding.

The CO thanked M. Stoddart for his presentation.

The CO invited C. de Broyer to deliver the report on SCAR-MARBIN. C de Broyer reported on activities since SCAR XXVIII (2004) then B. Danis demonstrated the SCAR-MARBIN facility, with examples of data search tools and the visualisation abilities of the facility.

The CO thanked both presenters.

Progress report on the RiSCC programme

The CO reminded attendees that RiSCC ceased when EBA commenced. This occurred after the 2004 meeting of the LSSSG, so a brief report on the closing activities of RiSCC was presented by A. Huiskes (Doc 17). The report was adopted, and the CO formally closed RiSCC. The CO thanked all involved with RISCC for their efforts for the duration of the programme.

Progress report on the EVOLANTA programme

The CO reminded attendees that EVOLANTA ceased after the 2004 meeting of the LSSSG. A report on the activities of EVOLANTA was presented by G. di Prisco (Doc 18). The report was adopted, and the CO formally closed EVOLANTA. The CO thanked all involved with EVOLANTA for their efforts for the duration of the programme.

Informal report of the CCAMLR observer

G. Hosie spoke to Doc 19, and highlighted issues of particular importance to LSSSG. SCAR had been invited to attend the WG-EMM meeting in 2007 to provide advice on data on higher predators. The Group decided that two representatives of LSSSG should attend this meeting. The Group noted a meeting had been held on Marine Protected Areas and that there would be greater role for SCAR regarding MPAs in the future. G. Hosie confirmed that at a next meeting on Marine Protected Areas SCAR will be invited.

G. Hosie described the extant Continuous Plankton Recorder (CPR) data set, and sought its endorsement as a SCAR data set. It was noted that there were plans for extensive CPR data to be collected during IPY. The CO proposed the formation of an Action Group of the LSSSG (CPR-AG) and invited G. Hosie to formulate a draft membership list, draft Terms of Reference (Doc x), and to prepare preliminary financial requests to initiate CPRAG. G. Hosie accepted the

invitation.

The CO noted the potential contribution of CRPAG to EBA and SCAR-MARBIN, then thanked G. Hosie.

Presentation: Special Scientific Program Subglacial Antarctic Lake Exploration

C. Kennicutt gave a report on SALE (Doc 20) and gave a detailed presentation describing the progress and accomplishments for 2005 and 2006. The presentation also included goals identified for IPY and beyond. A Strategic Plan for programme was then outlined.

The CO noted that extensive efforts have been undertaken to address goals of the programme. The report was adopted and the CO thanked C. Kennicutt for the presentation.

Presentation: Special Scientific Program Antarctic Climate Evolution

G. Wilson provided a presentation on progress and highlights of ACE programme (Doc 21). The aims and achievements were described, and the outcomes and outputs listed.

The CO thanked G. Wilson for his presentation and report to the Group.

Other meetings in the inter-sessional period 2006 - 2008

The Group noted the following meetings to be held in the forthcoming inter-sessional period that would be of interest to the LSSSG members.

6th International Penguin Meeting

Highlights of National Research Programmes

The CO summarised highlights of biological research undertaken by National Programmes. Terrestrial studies were increasing especially in the field of microbiology, with a wide diversity of research underway, many of these studies will have links to EBA. Biodiversity-related investigations are high on research agendas. Both short-term and long-term research efforts are undertaken at a number of sites. He also highlighted the efforts by France for long-term studies in the sub-Antarctic and Continental Antarctic, now approaching already 50 years of investigations.

IPY activities

The CO presented a report (Doc 23) prepared by C. Summerhayes, and highlighted the activities investigating life sciences involving, or of interest ,to SCAR. A wide spectrum of research activities were described. A request by the ad hoc SCAR Advisory Committee on the IPY to strengthen the committee by a marine biologist was agreed; the CO was asked to find a suitable candidate. (The CO asked C. Verde from Italy to join the Committee, which she accepted).

Financial Requests – Integration (Chief Officers)

The CO presented a spreadsheet that included all financial requests made to the Group. Funds requested were totalling USD\$18,000 and USD\$23,200 for 2007 and 2008, respectively. While slightly higher than funds allocated, the CO indicated his intention to request more funds from the Delegates, given the highly productive efforts of the subsidiary groups.

Budget re	equests LSSSG in US dollars	2007		2008	
Group	Description	<u>Requested</u>	<u>Allocated</u> by Delegates <u>Meeting</u>	<u>Requested</u>	<u>Allocated</u> by Delegates <u>Meeting</u>
EGBirds	database (distribution and abundance) meetings (long-term population data) meetings (long-term population data) travel meetings (long-term population data) publication	2500	2500	2500 4000 2000 800	2000 2800 1500 600
LSSSG	cross-linkages workshop code of conduct workshop (Netherlands)	1000 5000	1000 5000	1000	750
EGSeals	meeting costs travel accommodation			800 1200 1400	600 800 1000
EG HB&M	IT meeting database website	1000 2500 1000	1000 2000 1000	500 2500	400 2000
	data management travel			500 1000	400 500
AG-CPR	meeting costs travel	3000 2000	2500 2000	3000 2000	2150 1500
Total		18000	17000	23200	17000

Recommendations

The Chair reviewed the list of Internal Recommendations submitted in 2004 in Bremen (Doc 2). All internal Recommendations, with the exception of LSSSG XXVIII-1 (regarding the amalgamation of MEDINET and EG HB&M), were allowed to lapse. The lapsed Internal Recommendations were (XXVIII-2, XXVIII-5, XXVIII-6, XXVIII-7, XXVIII-8, XXVIII-9, XXVIII-10 and XXVIII-11)

External Recommendation XXVIII-3 (regarding ACAP) was to stand, while Recommendation XXVIII-4 was to be revised.

A list of recommendations adopted by the LSSSG is given in Annex 1.

Report on 9th Biology Symposium

E. Fanta presented a brief report on the 9th Biology Symposium, held in Curitiba, Brazil 25-29 July 2005. This was the first SBS in South America. The theme was EBA, and there had been 12 keynote speakers from nine countries, more than 570 participants including 145 students. The symposium had heard 65 oral presentations, 179 posters; of these, the 10 keynote and 14 invited papers were to be published in a special edition of *Antarctic Science* in 2007.

The CO warmly thanked E. Fanta for the excellent efforts that were made to ensure the highly successful Symposium, and the Group thanked E. Fanta with acclaim.

10th SCAR Biology Symposium

The CO introduced M. Fukuchi who presented an invitation from Japan to host the 10th SCAR Biology Symposium. It was noted that there had been no previous SCAR Biology Symposia in Asia. The Group warmly accepted the invitation to hold the Symposium in Sapporo, noting the dates were to be confirmed. The CO reminded the Group of the valuable role the International

Steering Committee would have in the development of the theme for the Symposium, and that they would meet inter-sessionally or communicate by email to undertake their business. The CO expressed the belief that the IPY activities would figure prominently in the Symposium.

Future SCAR meetings

The XXXth SCAR meeting will be in St Petersburg, Russia.

Election of Office Bearers

The CO indicated that the EGHB&M had nominated G. Steel, New Zealand, as an unopposed candidate to replace L. Palinkas as Deputy Chief Officer of LSSSG. The CO warmly thanked L. Palinkas for his efforts over the last 4 years, and welcomed plans for a meeting of the EGHB&M concurrent with the 10th SCAR Biology Symposium in Sapporo in Japan in 2009.

Next LSSSG Meeting

The next meeting of the LSSSG will be concurrent with the XXXth SCAR in St Petersburg, Russia, July 2008.

Provisional Adoption of Draft Report and Closure of meeting

The Group adopted the provisional text of the Group's minutes. The CO thanked E. Woehler for his efforts. L. Palinkas warmly thanked A. Huiskes for his inclusive approach to interactions between the EGHB&M and the LSSSG that had resulted in greater interaction and involvement among all members.

D. Walton proposed that all Group documents in the future include an Executive Summary to assist members in coping with the increasing volume of tabled documents. This proposal was accepted in addition to the adoption of an annotated agenda for future meetings.

The meeting was closed.

Annex 1.

List of recommendations.

The Group adopted the following recommendations:

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Concerning the Membership of LSSSG Expert Groups.

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- Limits the overall functionality of the group
- Tends to hamper effort to stimulate participation in Health research in the Antarctic.

The LSSSG recommends and requests that:

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- SCAR supports efforts by LSSSG Expert Groups to encourage replacement of retiring members.

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Concerned that valuable scientific data, collected from Antarctica and the Southern Ocean through commercial activities such as bio-prospecting, is not being released for scientific use, and that such commercial activities may not even be recorded anywhere at present,

SCAR calls on National Committees to ensure that a metadata entry is made in the Antarctic Master Data Directory whenever possible to provide a record of all such activities. Such an entry should record if possible a statement about when full data disclosure could be expected.

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Recollecting Recommendations SCAR XXVI-Biol 8, SCAR XXVII-Biol 1, SCAR XXVII-LSSSG 13 and SCAR XXVIII-LSSSG 3, covering threats to Southern Ocean seabirds due to mortality in longline fisheries, and

Noting the entry into force of the Agreement on the Conservation of Albatrosses and Petrels in 2004,

SCAR *requests* relevant National Committees to contact the relevant adhering body within their country to ensure that they have produced their FAO National Plans of Action – Seabirds and/or ratified the Agreement on the Conservation of Albatrosses and Petrels.

Annex 2. List of names and addresses of members, additional members and observers.

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Annex 3.

SCAR LIFE SCIENCES STANDING SCIENTIFIC GROUP (LSSSG)

Agenda for the meeting at SCAR XXIX, 8 – 11 July, 2006, Hobart, Tasmania

Saturday July 8, am

- 1. Welcome and Apologies
- 2. Adoption of Agenda (Doc 1)
- 3. Report of the SCAR XXVIII LSSSG meeting, Bremen 2004 (Docs 2, 26 and 27)
- 4. a. Relationships with SCOPE (Chief Officer) (Doc 4a)
 - b. Contacts with ICSU unions (Chief Officer) (Doc 4b)
- 5. Matters Arising from the Expert Group on Human Biology and Medicine (Bachelard)
 - a. Progress report 2004 2006 (Doc 5)
 - b. Plans for the next session 2006 2008, incl. IPY project (Doc 6)
 - c. Items that should be brought to the attention of the Delegates Meeting (Doc 9)

Saturday July 8, pm

- 6. Scientific matters arising from ATCM (Walton) (Docs 7 and 9)
- 7. Specially Protected Areas and Specially Protected Species (Walton) (Doc 8)
- 8. Antarctic Conservation in the 21st Century (Walton)
- 9. Progress report of the Scientific Programme Planning Group on Biological Monitoring (Kennicutt/Walton)
 - a. Progress report 2004 2006 and report on the Workshop(2005) (Doc 10)
 - b. Items that should be brought to the attention of the Delegates Meeting
- 10. Presentation: Special Scientific Program Antarctica and the Global Climate System (Turner) (Doc 7b and 11)

Sunday July 9, am

- 11. JCADM (De Bruin) (Doc 12)
- 12. Evolution of SO-GLOBEC into ICED and SCAR/SCOR Expert Group on Oceanography (Hofmann)
- 13. SCAR matters (Summerhayes) (Doc 3)
- 14. Matters Arising from the Expert Group on Seals (Blix)
 - a. Progress report 2004 2006 (Doc 13)
 - b. Final report APIS programme (Doc 14)
 - c. Plans for the next session 2006 2008
 - d. Items that should be brought to the attention of the Delegates Meeting
- 15. Matters Arising from the Expert Group of Birds (Woehler)

- a. Progress report 2004 2006 (Doc 15)
- b. Plans for the next session 2006 2008
- c. Items that should be brought to the attention of the Delegates Meeting

Sunday July 9, pm

- 16. Progress report of the Scientific Programme Planning Group on Evolution and Biodiversity in Antarctica (di Prisco)
 - a. Progress report 2004 2006 (Doc 16)
 - b. Census of Marine Life and the IPY (Chief Officer)
 - c. SCAR-MarBIN project (De Broyer)
 - d. Plans for the next session 2006 2008
 - e. Items that should be brought to the attention of the Delegates Meeting
- 17. Progress report on the RiSCC programme (Bergstrom)
 - a. Progress report 2004 2006 (Doc 17)
 - b. Items that should be brought to the attention of the Delegates Meeting
- 18. Progress report on the EVOLANTA programme (Rodhouse)
 - a. Progress report 2004 2006 (Doc 18)
 - b. Items that should be brought to the attention of the Delegates Meeting
- 19. Informal report of the CCAMLR observer (Doc 19) (Hosie)
- 20. Presentation: Special Scientific Program Subglacial Antarctic Lake Exploration (Kennicutt) (Doc 20)
- 21. Presentation: Special Scientific Program Antarctic Climate Evolution (Wilson) (Doc 21)
- 22. Other meetings in the intersessional period 2004 2006 (Chief Officer)

Monday July 10, am

- 23. Highlights of National Research Programmes (Summary by Chief Officer on written accounts from National Representatives)
- 24. IPY activities (Chief Officer) (Doc 23)
- 25. Financial Requests Integration (Chief Officers) (Doc 25)
- 26. Recommendations (Chief Officer)
 - a. Review of Previous Recommendations
 - b. New Recommendations

Tuesday July 11, am

- 27. New Recommendations (revised)
- 28. 10th SCAR Biology Symposium (Doc 24) (Fukuchi)
- 29. Future meetings (Chief Officers)
- 30. Election of Office Bearers (Chief Officer)
- 31. Next LSSSG Meeting
- 32. Approval of Report and Closure

Annex 4.

List of papers.

Agenda Item	Paper no.	Title
1		Welcome and apologies
2		Adoption of agenda
	Doc 1	SCAR LSSSG agenda for Hobart 2006 (final version)
3	Doc 2	Report of the SCAR XXVIII LSSSG meeting, Bremen 2004
	Doc 26	Code of Conduct for field work
	Doc 27	SCAR Code of Conduct Revised06 (28Jun06)
4	Doc 4a	Relationships with SCOPE (Chief Officer)
	Doc 4b	Contacts with ICSU unions (Chief Officer)
5		Matters Arising from the Expert Group on Human Biology and Medicine (Bachelard)
5a		Progress report 2004 - 2006
	Doc 5a	2005 Sofia Minutes
	Doc 5b	Bremen July 2004 Meeting Minutes
	Doc 5c	Report 2006
5b	Doc 6	Plans for the next session 2006 - 2008, incl. IPY project
	Doc 6a	TTAAPP IPY Approval Letter 24April 2006
	Doc 6b	IPY Full proposal nr341
5c		Items that should be brought to the attention of the Delegates Meeting
	Doc 9	Antarctic Conservation in the 21st Century (Walton)
6	Doc 7	Scientific matters arising from ATCM (Walton)
	Doc 7a	Report to delegates on ATCM 29
	Doc 7b	Climate assessment
	Doc 7c	Wildlife & aircraft
	Doc 7d	Alien speciess workshop
	Doc 7e	<u>SEGF</u>
	Doc 7f	Marine acoustics
	Doc 9	Antarctic Conservation in the 21st Century / Pathogenic microbiota (Walton)
7		Specially Protected Areas and Specially Protected Species (Walton)
	Doc 8a	Protected area checklist
	Doc 8b	Inspections of protected areas
	Doc 8c	CCAMLR MPAs
	Doc 8d	SPS Giant petrel

8	Doc 9	Antarctic Conservation in the 21st Century / Pathogenic microbiota (Walton)
9		Progress report of the Scientific Programme Planning Group on Biological Monitoring (Kennicutt/Walton)
9a		Progress report 2004 - 2006 and report on the Workshop (2005)
	Doc 10	Practical Biological Indicators of Human Impacts in Antarctica
	Doc 10a	Biological indicators
9b		Items that should be brought to the attention of the Delegates Meeting
10		Presentation: Special Scientific Program Antarctica and the Global Climate System (Turner)
	Doc 7b	
	Doc 11	Presentation: Special Scientific Program Antarctica and the Global Climate System (Turner)
11	Doc 12	JCADM (De Bruin)
12		Evolution of SO-GLOBEC into ICED and SCAR/SCOR Expert Group on Oceanography (Hofmann)
13	Doc 3	SCAR matters (Summerhayes)
14		Matters Arising from the Expert Group on Seals (Blix)
14a	Doc 13	Progress report 2004 - 2006
14b	Doc 14	Final report APIS programme
14c		Plans for the next session 2006 - 2008
14d		Items that should be brought to the attention of the Delegates Meeting
15		Matters Arising from the Expert Group of Birds (Woehler)
15a	Doc 15	Progress report 2004 - 2006
15b		Plans for the next session 2006 - 2008
15c		Items that should be brought to the attention of the Delegates Meeting
16		Progress report of the Scientific Programme Planning Group on Evolution and Biodiversity in Antarctica (di Prisco)
16a	Doc 16	Progress report 2004 - 2006 (2005)
16b		Census of Marine Life and the IPY (Chief Officer)
16c	Doc 28	SCAR-MarBIN project (De Broyer)
16d		Plans for the next session 2006 - 2008
16e		Items that should be brought to the attention of the Delegates Meeting
17		Progress report on the RiSCC programme (Bergstrom)
17a	Doc 17	Progress report 2004 - 2006
17b		Items that should be brought to the attention of the Delegates Meeting

18		Progress report on the EVOLANTA programme (Rodhouse)
18a	Doc 18	Progress report 2004 - 2006
18b		Items that should be brought to the attention of the Delegates Meeting
19	Doc 19	Informal report of the CCAMLR observer (Hosie)
	Doc 19a	SO-CPR Database (Hosie)
20	Doc 20	Presentation: Special Scientific Program Subglacial Antarctic Lake Exploration (Kennicutt)
21	Doc 21	Presentation: Special Scientific Program Antarctic Climate Evolution (Wilson)
22	Doc 22	Other meetings in the intersessional period 2004 - 2006 (Chief Officer)
23		Highlights of National Research Programmes (Summary by Chief Officer on written accounts from National Representatives)
		Argentina
		Belgium
		Brazil
		Canada
		<u>France</u>
		Italy
		Korea
		Netherlands
		New Zealand
		South Africa
		United States
24	Doc 23	IPY activities (Chief Officer)
25		Financial Requests - Integration (Chief Officer)
	Doc 25a	FINANCIAL REQUESTS 2007-08
26		Recommendations (Chief Officer)
26a		Review of Previous Recommendations
26b		New Recommendations
27		New Recommendations (revised)
28		10th SCAR Biology Symposium (Fukuchi)
29		Future meetings (Chief Officers)
30		Election of Office Bearers (Chief Officer)
31		Next LSSSG Meeting
32		Approval of Report and Closure