



XXXI SCAR Delegates Meeting
Buenos Aires, Argentina, 9-11 August 2010

Agenda Item: 5.4
Person Responsible: Kim Finney

Report of the Joint and Individual Meetings of SCADM (Standing Committee on Antarctic Data Management) and SCAGI (Standing Committee on Antarctic Geographic Information), Amsterdam, 7 – 9 September 2009

Executive Summary

Title: Report of the Joint and Individual Meetings of SCADM (Standing Committee on Antarctic Data Management) and SCAGI (Standing Committee on Antarctic Geographic Information), Amsterdam, 7 – 9 September 2009

Authors: Finney, Brotsma et al.

Relevant URLs or references to other reports:

Introduction/ Background: For information only – gives background to reports on SCAGI and SCADM given at the Delegates meeting

Minutes of joint SCADM/SCAGI meeting 7-9th September 2009 Trippenhuis, Amsterdam

The meeting took the format of a joint meeting on the morning of 7th September, all day on the 8th September until mid afternoon on 9th September. SCADM and SCAGI had individual business meetings on the afternoons of 7th September and 9th September.

Invited Guests:

Colin Summerhayes - SCAR
Mike Sparrow - SCAR
Volker Rachold - IASC
Mark Parsons – IPY Data Committee
Martin Loss – NWO
Ad Huiskes - SCAR

Invited Speakers:

Antonio Quesada (Biologist – SCAR)
Tony Phillips (Physical Scientist – SCAR)
Ian Jackson (OneGeology)
Paul Morin (University of Minnesota)

Day 1 – 7th September

Agenda items 1 – 3 (welcome and opening remarks, overview of meeting activities and goals, and housekeeping)

The meeting commenced with a welcome to Amsterdam and the Trippenhuis by Martin Loss from the Royal Netherlands Academy of Arts and Sciences.

Kim Finney :

- thanked Taco de Bruin for organising the meeting, and hosting the SCADM and SCAGI meetings in Amsterdam.
- welcomed Colin Summerhayes and Mike Sparrow from SCAR, Volker Rachold from IASC, Ad Huiskes from SCAR Excom, and Mark Parsons from the IPY Data Committee.
- Noted that this was a historic meeting as it was the first official joint meeting of SCADM and SCAGI.
- Introduced the structure of meeting, and the three guest speakers, Antonio Quesada, Tony Phillips and Ian Jackson and gave a brief overview of aims of meeting

Henk Brolsma thanked the hosts, and welcomed new members of SCAGI.

Taco de Bruin welcomed all attendees to Amsterdam and the Trippenhuis, and introduced logistical arrangements for the meeting.

Agenda item 4 (Presentation by SCAR Executive Director (Colin Summerhayes))

Colin Summerhayes gave a brief introduction to the work of SCAR, and the outcomes of the data discussions at the recent SCAR Executive Committee meeting. Coordination of data and information are an important role for SCAR, and EXCOM see data as fundamental to the way we do science. He emphasised the importance of presenting the DIMS at the next ATCM to explain how it will provide benefits for all Parties [ACTION 1].

He went on to explain that SCAR and COMNAP will be meeting soon to develop more mutually beneficial working arrangements, and will also conduct discussions on links with SCADM and SCAGI. SCADM and

SCAGI will also play an important role in the new developing Strategic Plan for SCAR. A meeting to progress the development of the new SCAR strategic plan will be held in early 2010 in Cambridge.

Colin talked about the progress which had been made in promoting the status of SCADM and SCAGI which are both now standing committees within SCAR. He pointed out that this shows a recognition of the permanent and ongoing requirement for data and information work in SCAR. He said that SCAGI's work was well recognised and appreciated by SCAR EXCOM.

Colin highlighted that many global bodies now have programmes which include Antarctic Science, and SCAR must recognise this and work with these organisations to form better partnerships. This is also being reflected in the SCAR DIMS, which highlights the growing relationships with, for example, CODATA and GBIF. He also highlighted the importance of close relationships with the Arctic community.

He encouraged SCADM and SCAGI to interact more with the science community through attending the various science symposiums which the SCAR science community runs. They should be used as an opportunity to bring the data message to the science communities.

He also highlighted the SCAR fellowship programme, and recommended that the data community could use this for development opportunities, and progressing implementation of the DIMS [ACTION 2]

Colin then pointed out that data is becoming increasingly important at EXCOM level. He reported that EXCOM were extremely pleased to receive and endorse the new DIMS, and congratulated Kim on having led its production. It places SCAR very effectively in global efforts in data management for science. He highlighted the importance of getting the draft SCAR data policy endorsed [ACTION 3]. Colin highlighted that as we are all volunteers, manpower is needed to take forward implementation of the policy, and he promoted the need for secondments to work on strategy implementation, as is recommended in the DIMS. Kim and Colin will be sending out a letter to national contacts to advance this [ACTION 4]. He highlighted the suggestion that had been agreed at EXCOM, that a demonstration project should be used to show how strategy implementation can help SCAR science. He encouraged all SCADM and SCAGI members to gain further national approval for the strategy [ACTION 5]. The strategy will also be promoted through the Notes from the President.

Colin recommended that SCAR products need to be managed in a more coherent way, and should be brought in line with implementation of the strategy. To reflect this, SCADM have been asked by EXCOM to carry out a review of SCAR products [ACTION 6]. Finally, he highlighted the IPY legacy points, of which data is one, and the need to SCADM to remain close to the work on the IPY legacy.

Helen Campbell highlighted that the DIMS had raised expectations on SCADM, and we therefore need to manage these expectations, and successful implementation will require involvement of all NADCs.

Henk Brolsma then agreed with this point and highlighted the importance of collaboration on implementing the strategy, and not just attending meetings.

On behalf of the SCAR President, Henk Brolsma then presented two SCAR certificates of appreciation acknowledging the long-term and excellent services provided by Chiara Ramorino and Roberto Cervellati, both from Italy.

Henk also presented how names in the SCAR CGA can now be viewed using Google Earth. It visually highlights the problem of the same features being given different coordinates by different countries. SCAGI is in the process of writing to the national committees to ask for them to accept changes to locations to rectify some of these problems [ACTION 7].

The meeting then divided into the separate SCADM and SCAGI meetings.

Agenda item 5 - AMD, Portals, Statistics, Future Plans (Stephanie Grebas – GCMD)

Stephanie presented statistics on use of the AMD, ways to search for metadata on the AMD, and ways to contribute metadata. The presentation showed the content growth in the AMD – there has been a 20% increase since 2008 (possibly largely through NZ contributions). 46% of records provide access to data through the Get Data link. Astrophysics keywords can be accessed from the top-level navigation – it was explained that these two sets of keywords need to be separate to differentiate between earth science and space science domains. She also introduced how to use the data services section of the site. The content provision per country was demonstrated, along with the growth in content per country this year. Finally she

showed that many of the polar portals are in the top 20 portals of GCMD. She then demonstrated the IPY portal. Colin Summerhayes asked SCADM to produce a SCAR news item on AMD statistics for the next news bulletin – the intent being to give our work a higher profile. The graph for the news bulletin should also include an extra column for the number of DIFs per country which point to web-accessible data [ACTION 8].

Stephanie then presented new developments in the GCMD. For satellites there are DESDyni and Icesat. For GCMD in general there is a tool for checking broken links. There is also the ability to define private portals. The Climate diagnostics portal provides access to climate diagnostics visualisations. NADCs can provide visualisations to this - rules for inclusion of visualisations are on the GCMD website.

GCMD are continuing to update the Keywords. SCADM asked for more consultation on updating of keywords, and for more information about the keyword web service that is being developed [ACTION 9]

The web interface is also being updated with an improved look. The potential for using feedback from the AMD user survey to inform this development work was discussed, and Stephanie agreed to send out an email of the timetable and content of changes to show how the AMD user survey could fit in with the GCMD plans [ACTION 10].

There was a discussion about what the Get Data link means. Links to further information should use the related URL field, rather than the GET DATA link. The Get Data link should point directly to data, and not to another search page.

Agenda item 6 - Devising an AMD User Survey (Kim Finney & Stephanie Grebas)

Kim explained that the AMD has been in operation now for a number of years and there has been variable feedback from both data managers and scientists alike on aspects of its functionality and use. She said that it was probably time to assess how users and data providers feel about using the AMD. This task has been on the SCADM “to do” list since last year, but has not yet been tackled. She explained that one way of capturing information from both data providers and users was via a survey. Kim gave an outline of how a survey should be designed to make sure it is as effective as possible. In a subsequent break-out session meeting participants questioned the need for a survey and instead said that they felt a range of data gathering methods might be more suitable to get the type of information required, a survey being just one method. As many of the users of the AMD are based within SRPs, it was decided that SRP liaison officers were perhaps best placed to get the type of feedback we required on the AMD. This session was concluded by placing an action on SRP Liaison Officers to discuss how best to get feedback from providers and users and to work with the SCADM Exec and the GCMD to develop a report of the AMD issues that users feel need addressing [ACTION 11]. Note that this action is dependent on outcomes of action [13] outlined later in these minutes.

Kim highlighted that not all issues associated with the AMD were related to the technical functioning of the AMD application and many of the issues that need addressing were in fact more to do with the way in which the SCAR community manages and uses the AMD. By way of example she explained that there is confusion about how certain fields in the AMD are being used. For example the “Project” field is being used by some to define the project that the data was collected for, and used by others to record the projects that the data might be useful for. She also highlighted that the AMD uses a look-up list of project keywords from an un-moderated list of project names. She suggested that SCADM should play some role in moderating SCAR related project lists – at least to ensure that the SCAR project structure is reflected in the keyword list. This led to a discussion about how we should tackle issues of consistent use of fields within DIFs [ACTION 12]

Agenda item 7 - Feedback from AMD users by nation:

Taco presented feedback from the Netherlands. He began by explaining how metadata is managed for ocean sciences. He suggested that guidelines are needed on how to fill out fields in the AMD. He also highlighted that granularity of metadata entries in the AMD is an issue. He requested that there is a need for a PR campaign by NADCs, SCADM and SCAR about use of the AMD. He also pointed out the importance of DIFs being linked to online data. Finally he said that there was a need for overall integration of DIFs to provide an overall overview of Antarctic data.

Helen presented the feedback for NZ on behalf of Shulamit Gordon. The presentation began with an overview of the 18-month post at Antarctica NZ which resulted in a large number of metadata entries being submitted to the AMD, covering all of the science carried out by NZ since the 1950s. It then went on to

explain that future plans will involve developing a data policy which all Antarctica NZ funded scientists will have to adhere to. The feedback on the AMD was then divided between DIF Creators and AMD users. The (single) DIF Creator was generally positive about the AMD, though they noted that improvements could be made to search functions, and this was followed by a list of suggested improvements to the AMD for DIF creators. The feedback from NZ scientific users was also generally good, with users having found out about science and data which they were not previously aware of. But there was also some concern expressed about the time it takes to create metadata, and that the search facilities are not as intuitive as they could be.

Talha Alhady presented feedback from Malaysia. There is a need to encourage more use of the AMD, and there is a need for more guidelines on completing metadata – this could include:

- how often should metadata be submitted
- how should metadata be aggregated
- who should manage the metadata (or lay claim to it) – the country that created the metadata, or the country holding the data (particularly and issue where countries collaborate and scientists work within the framework of one country but belong to another).

There is also a need for enforcement of the data policy.

Masaki Kanao presented feedback from Japan. He began by presenting an update on their NADC progress which included a demonstration of their science database and metadata base, and how they link to the AMD. They have a data policy which ensures compliance with SCADM requirements. They now also have a national Arctic metadata portal in the GCMD. They still have more metadata to contribute to the AMD and from IPY. They have also entered some outreach metadata in the AMD.

Agenda item 8 - Breakout groups: developing typical survey questions that capture feedback from AMD users and providers.

The break-out session outcomes were already summarised above but the detailed responses from the individual groups is listed below.

Group 1:

- The first question to tackle is – who are the users?
- If people are looking for data beyond their discipline, they may need different types of information.
- The metadata records don't really show which data might be useful (i.e. no incorporation of user feedback).
- The utility of the system comes down to robust complete metadata.
- To better understand perceptions we should focus on a particular need of SCAR and then tailor our approach to using and managing the AMD to meet that need – e.g. just work on getting SALE related records in the system and usefully able to be searched. Then we can say – this is what a good portal could be. This will hopefully mean that the word of how good it is would get passed on. Fits in well with guidance from EXCOM on making sure that our work is presented in way which shows that we are answering specific science questions
- Follow standards, guided keywords and direct links to data.

Group 2:

- How do you enter metadata now? DocBuilder? Other?
- If you use other system(s), how would you compare to DocBuilder?
- Do you find the DocBuilder data entry process intuitive?
- Do you need more guidance when adding data through docbuilder ?
- Would you like additional guidance to be specific to the polar domain (i.e. Contextual examples)? [GCMD – feasible by portal?]
- Does the current standard (set of fields) adequately describe your data? If no, what might you add or change?
- Would you like the system to be more flexible to better serve national requirements? If yes, how?

- Which community(ies) do you work with?
- What are they using as their metadata standard? [Context: GCMD and ISO 19115 etc.]
- Do you tend to complete all fields in a DIF record? If no, which fields do you tend to omit?
- Do you find entering metadata using DocBuilder to be prohibitively time consuming?
- Have you used /know of automated systems? If yes, please list.
- Community – Granularity
- Community – Point of contact
- Community – Guidance on populating each field
- Capacity – resources to provide focused support?

Group 3: could the user provider experience be improved by changing the way the community manages its content?

- It might be good to monitor how users use the system – could maybe use formal web usability testing
- We generally just need to improve our promotion of the AMD
- We could have the ability to feedback straight after a search has been performed about how well the search has worked
- We could learn from other groups e.g. TDWG
- How would we get feedback from people who are not already interested
- Have a questionnaire about the AMD at the open science conference and have a prize
- Is the AMD a useful tool to identify data from multiple sources, and to help with science. What tools do scientists already use (examine them and then bottle the good points)?
- Granularity – how detailed should it be – what role is it playing, and what role do we expect it to play?
- Its good to get constant feedback.....

Agenda item 10 - Perspectives on data issues from a practicing biologist (Antonio Quesada)

Antonio has been involved in pushing the importance of SCAR data management for many years. He presented his experiences from the LIMNOPOLAR projects, to provide an example of what is needed by scientists from data management. LIMNOPOLAR requires as much reference information as possible, in a zone which is changing rapidly from climate change. It is a diverse project team from many countries and they are multidisciplinary. Minimising environmental impact was very important, and therefore they tried to minimise the number of scientists that needed to be there. Individual projects were funded by different institutions.

Spanish legislation makes deposit of metadata and data into a data repository mandatory.

The LIMNOPOLAR project built a portal to be specifically useful for the science. It has a bibliography, picture repository, GIS interface to enable download of all data layers. At first it is only open to the project community, but will be made publicly available soon.

The data management problems which were encountered included:

- Non polar researchers who are not as used to data sharing – they were very sceptical about it. We need ways to convince non-polar scientists to share data in the same way
- Diverse data types – very difficult to feed them all into one system – this problem has not been solved. There is a desire to be able to access it all from one place.
- It is hard to define dates when data will be made available, as it can take many years to identify new species etc from samples, and therefore the information cannot be made available quickly
- Patenting and data ownership are different in different countries

The solution proposed is one of FLEXIBILITY.

Need guidance on where to store all these diverse data types – e.g. huge amounts of genomics data. It has been difficult integrating data, as different disciplines use different terminologies. Ensuring that data

management is considered at the stage of initial funding helps with ensuring that data management work is carried out. Genbank is a problem when you have very large datasets.

Agenda items 11 & 12 - Reports from SCADM SRP liaisons

Peter Pulsifer introduced the history of the liaison posts – they were established following a review of JCADM where it was decided that we needed to work more closely with the SCAR science community. There are currently only two active liaisons – for Life Sciences and the Physical Sciences. It was agreed that before new people could volunteer to be liaisons, there needed to be a job description, which needs to include a description of how individual members are expected to communicate the work of SCADM.

This job description was produced out of session and then provided by Peter back to the meeting during a later session. Despite making the job description explicit there was still reticence from people to volunteer for the available roles. Ideally the volunteers should be those with (a) time to do the function and (b) those who are already closely aligned in some way with the particular group that they would be the liaison for (e.g. Shulamit Gordon is the Life Sciences rep and is also the SCAR EBA Secretary). It was also felt, after some discussion, that we were targeting the Liaison roles at a level higher than is ideal and that we should in fact target the research project level. Whilst this is intuitively better, given that the idea is to create an effective liaison between SCADM and science practitioners, it also has the effect of increasing the number of Liaison Officers required. Currently the Liaison Officers are targeted at the Standing Group level. The SCADM Exec agreed to discuss the matter off-line and make some recommendations on how effective liaison can be achieved, given the lack of people able to take on this role from within SCADM. [Action 13].

Day 2 - 8th September

SCADM and SCAGI were again in joint session.

Agenda item 1 – Training workshop – what issues need consideration in setting up an NADC? (Helen Campbell), and what are the key elements of a science data management plan? (Kim Finney)

The presentation on establishing an NADC included the history of NADCs; Identification of players/stakeholders; and a model for how to establish an NADC.

The presentation on data management plans included emphasising that they are needed to ensure that the current practice of data management often being an afterthought is replaced by it becoming an integral part of project planning – this is to ensure that data management is well specified and properly resourced. The lack of planning results in data not being interoperable, or even being lost. Data Management Planning is now part of the SCAR Rules of Procedure, the SCAR Strategy, and the draft SCAR data policy. A Data Management Plan describes data flows from capture through to publication and archival. The presentation also included a list of components which should be included in a plan and a sample plan was provided.

Breakout Groups

Several break-out groups were then convened focussing on two questions. The main points raised by meeting participants in these sessions included:

Group 1: Hardest things to overcome in setting up a data centre

- No formal program / focal point in country
- No enforcement of policy
- Sustained funding
- language issues + semantics
- relevant adherence to international agreements
- nations focus on national priorities
- note: push some recommendations to higher level bodies such as ICSU

- competition with science for \$
- different culture by discipline re. data management
- scientists may not be interested in benefit to others re. sharing
- heterogeneity
- data centre vs. data network
- management vs. repositories
- scientist need support, ed. , materials
- need to demonstrate value to scientists
- standards – dif? ISO? Keeping up with updates, versioning etc.
- Translation issues – non-specialist attempting to translate
- Incentives – pressuring to conform may undermine our efforts – ‘leave the program’
- Position as a benefit to science as a whole – service element
- Data formats – attempt to adopt existing
- Harmonization of formats

Group 2: What difficulties do you expect in requiring scientist to prepare data management plans?

- What are the value propositions for scientists ? Some responses were:
- The plan could improve the quality of the data e.g. reducing ambiguous data values
- Safety of data and storage/preservation + security threats (malware, attacks) - professional level security
- Some studies you cannot do without data management - e.g. longitudinal, climate change, change detection
- Centres can make the data discoverable
- Highlight projects such as MARBIN where many publications are resulting from work done on managed data
- Increasing value of data by establishing relationships between data sets.
- Funding agency requirements? Round table - what do national agencies do?
 1. Canada: IPY program - management plan, metadata / NSERC - no
 2. UK - some requirements i.e. South Georgia GIS
 3. US - NSF - Office of Polar Programs - rigorously enforced / Mark P. - consistent policy but variable implementations.
 4. Italy - National Program requires - no enforcement tools - if data is not obvious, not a tracking mechanism
 5. Malaysia - Data policy - concern about scaring the researchers away so not enforced

Agenda item 2 – Training workshops – ‘A Roadmap of Open Source components for GI Web Services and Clients’ (Paul Cooper), and ‘SCAGI Community Products’ (Henk Brolsma).

The presentation on open source components for GI Web Services and Clients covered Standards, Databases, Web Servers, GIS Server Software, Client Software, and encouraged the audience to see that OGC standards don’t have to be difficult to implement in data centres.

The presentation on SCAGI community products began with Henk presenting the SCAR Map Catalogue and the SCAR Composite Gazetteer, followed by Paul Cooper presenting the SCAR Antarctic Digital Database. The key point that was made was that the ADD is enabled with Web Services and can be combined with other Web Services – an example was given of overlaying the ADD on USGS LIMA imagery.

These presentations were followed by questions including:

- Would this work in Google Earth? The answer was ‘Yes’, and ideally ADD data would be included in the base Google data set. It is very difficult to get a response from Google - Henk Brolsma has had some response, but action is pending. However Paul Cooper cautioned that broadly promoting the ADD Web Services would exceed the capacity of the servers.

- Should we be integrating SCADM/SCAGI efforts with respect to CGA, ADD? Paul Cooper explained that contributions to CGA need to go through national naming authorities. There was discussion about establishing a SCADM standard that requires the use of CGA data in metadata records. Henk Broelsma cautioned about issues of spatial inaccuracy in location of some place names. Adrian Fox suggested using LIMA base as spatial reference framework - this activity needs to be done but is not currently resourced. Despite this discussion it was still concluded that we should use the CGA wherever possible in SCADM work. SC-AGI is to provide information to SCADM and GCMD on use of the CGA [ACTION 15].
- Should SCADM be providing data or reference to data for use by SC-AGI, i.e. additions to ADD? Paul Cooper is interested in receiving new data from SCADM, but data would need to be reviewed for appropriate scale, quality, and intellectual property permissions [ACTION 16 – noting that SCADM will be conducting a review of all SCAR –badged products at the request of EXCOM].
- Can we create useful services/applications that would combine SCADM / SCAGI resources? Paul Morin suggested that SCADM can contribute by creating footprints of data collected in the form of a Web Service. Mark Parsons explained that all NSIDC data sets are being published using OGC. There was discussion about GCMD providing the data ‘footprints’ using the information from the bounding boxes. However Peter Pulsifer suggested that even though it would not be difficult for GCMD to create a web service to do this, the wide variation in granularity and the nature of the 'bounding box' where only a few disparate points may be enclosed by a large bounding box, would not support the detailed footprints described by Paul M. Helen Campbell suggested that the SCAGI/SCADM community need to work together to establish a framework or application that will integrate the various services and data feeds into something that is identifiably useful for a scientific research initiative.

Agenda item 3 – National Presentations on approaches to Antarctic Data management

Presentations were given by China, Korea, Finland, USA and Netherlands. All the presentations are now available on the FTP site. Questions and comments were as follows:

- Kim Finney stated that the Korean example of considering the need to push data out from databases designed by the data centre to SCAR products such as SCAR MarBIN and the EBA Biodiversity database is very good.
- Paul Cooper asked if in Finland the INSPIRE initiative is making a difference to attitudes in terms of making data accessible online? Arto Vitikka stated that yes the attitudes are changing due to INSPIRE - particularly with respect to geodata.
- Taco asked whether the fact that the US metadata system is based on slightly less fields than the GCMD docbuilder, makes a differences in terms of whether scientists are happier to use it. Bob Arko answered that it does, as anything that saves time makes a difference. It was agreed that Bob Arko would send out the schema for the US implementation of the AMD to SCADM [ACTION 17]. Peter Pulsifer commented that any changes to DIF profile or GCMD interface for SCADM should be done in conjunction with the Arctic Community to ensure we're going in similar directions.
- Mark Parsons asked whether the work of the U.S. Antarctic Program Data Coordination Center is focussed on NSF funded programs, rather than all US funded Antarctic work. The answer was yes.
- Mark Parsons asked whether the U.S. Antarctic Program Data Coordination Center always assesses whether there are other more appropriate data centres for curating data for the long term, thereby acting as a data centre of last resort for curating data which does not have a suitable data centre for long-term curation. The answer was yes, but they have found that there is a lot of data for which there is not a suitable centre. Bob Arko said that there is a growing recognition of the need for a data repository for this ‘orphan’ data, and that there are US plans for development of databases for samples, lab results and derived data, which could help a lot with this. Bob Arko agreed to update SCADM on progress with this [ACTION 18].

There was a lot of discussion about how NSF enforces its data policy. The summary was that the funding agency asks for a URL to the dataset metadata, which must have a link to access the actual data. The USAP will not give the URL to the PI for submission to NSF until they are satisfied that the data policy requirements have been met.

Agenda Item 5 – Antarctic Data: A Physical Sciences Perspective (Tony Phillips)

The presentation is available on the FTP site.

Helen Campbell thanked Tony for a great presentation.

Stephanie Grebas was interested in the comments from Tony about the need for ordering relevance of results in GCMD searches, and this is something that they are working on.

Mark Parsons pointed out that it can be a struggle to reproduce work of the Earth System Research Laboratory because NSIDC data are not standardized. Makes it much harder to develop an easy interface without the underlying standardized data formats. He recognized that the ESRL has put a lot of effort into designing the 'gold standard' interface.

The importance of getting 'buy in' from the community on providing data in a particular format with particular quality was emphasised.

Agenda item 6 – SCAR Data Strategy overview and next steps

Kim Finney provided an introduction to the DIMS. Up until the production of the strategy, there has been lots of urging from SCAR and ATCM, but very little guidance as to how we should actually be delivering the ADMS. There was no policy, and the approach to data management remained ad-hoc. The strategy now explains how the ADMS should work. The challenge now is to expand the DIMS with an implementation plan, as the DIMS covers the bare-bones of what needs to be done. We should keep the testimonials which are presented at the beginning of the strategy in mind throughout the implementation, to ensure that we remain focussed on the final outcome that we want. As much of the current data management work in SCAR is done outside of SCADM and SCAGI, we must focus on alliances and cooperation.

The strategy calls for development of a data policy, and we now have a draft which needs endorsing at the next meeting of the SCAR delegates. It is vital that we find secondees for leading on implementation of the strategy. We must leverage resources from existing global networks. We must ensure closer cooperation between SCADM and SCAGI.

Agenda item 7 – Strategy implementation

There was a discussion on the pros and cons of merging SCADM and SCAGI. The group could see the benefits of closer working, but that merging would not be sensible. This is because the networks that we work with are different – SCADM works with scientists, SCAGI works with national mapping agencies. The two groups have specialist skills and need to all remain active, but it was agreed that we need to work out how the groups will work better together – should every meeting now be joint SCADM/SCAGI meetings, and how will we harmonise the workings of the groups? [Action 19]

Three priorities for strategy implementation were emphasised, and these were mapping SCAR science to the DIMS [ACTION 24], making the AMD work better [ACTION 25], and looking at national science and data management plans, and looking for synergies [ACTION 26].

Colin Summerhayes urged SCADM and SCAGI to be adventurous in the implementation plan, and not restrict ourselves based on current resources. This is because an adventurous plan is more likely to win funding.

We must ensure that we use the feedback that we already have from the SRP's when planning the basis for implementing the strategy.

Day 3 - 9th September

Agenda Item 1 – OneGeology (Ian Jackson)

Ian Jackson presented the OneGeology project. This presentation was chosen by the SCADM executive for two reasons: firstly, to promote the project, and encourage SCADM members to contribute more polar data,

and secondly, as an inspirational example of what can be achieved in terms of high-profile international data sharing projects.

The presentation ended with a list of recommendations for SCADM as follows:

Ingredients for success	Things to avoid
Simple unifying objectives	Allowing scientists to extend & complicate
Simple model, methodology, technology	Intrusive, large burden task
Inclusive, regardless of development status	Exclusive, technically sophisticated
Distributed model, local data ownership	Centralised database
Committed, passionate international core team	Un-sustained enthusiasm (esp after meetings)
Approval of leaders of national organisations	Offending any national organisation
Understand the importance of cultural and language diversity	Fail to recognise that these are people projects not technical projects
Persistence and tenacity	Inertia, procrastination, apathy
Support from existing international bodies/initiatives	Underestimating sensitivities in existing players
Timing and pressing multiple buttons (IYPE, SDI/INSPIRE, GEO/GEOSS, GeoSciML)	Not looking outside
Lean funding requirement	Over-ambitious and expensive
Quick wins and prototype	All strategy, no action
Make outreach and media profile a priority	Restricted (elite) communications
A memorable name and logo	A boring and externally meaningless acronym

Kim Finney thanked Ian Jackson for a very useful presentation. All SCADM and SCAGI members were encouraged to submit the best possible Antarctic Geology data to the OneGeology Project. [ACTION 21]

Agenda item 2 – SCAGI vision for an Antarctic Spatial Data Infrastructure

Henk presented plans for the AntSDI, and made suggestions as to how we should progress to implement the vision for the Ant SDI, as a component of the DIMS.

Agenda item 2a – Presentation on new data sources by Paul Morin

Paul Morin presented information on the new high-resolution imagery available in Antarctica. The challenge is no longer paucity of data, but is now accessing appropriate data from the huge quantities available. The data community needs to step up to the challenge of providing the tools to enable scientists to access the most appropriate data.

Colin Summerhayes suggested that working together to make this data more accessible for specific scientific purposes could form the basis for new scientific endeavour in SCAR.

Agenda item 2b – Data access to distributed databases - A case study from oceanography (Taco de Bruin)

Taco presented some of the new techniques which are being developed in the field of oceanography to enable better preservation and reuse of data.

Agenda item 3 – IPY legacy, IPYDIS Overview and the Polar Information Commons (Mark Parsons)

SCADM, IPY and Antarctic Treaty are inspirations behind the work of the PIC. PIC will encourage sharing and preservation of polar data. PIC is based on changing the view from data ownership, to data being a network resource. To move towards citation becoming the norm of behaviour, and to simply provide terms of use, rather than licensing. Attributing data to the PIC, would define that there are certain expected norms of behaviour when using PIC attributed data.

Agenda items 5 onwards – Implementing the strategy

There was clear recognition of the need for cooperation amongst all SCADM and SCAGI members to implement the strategy. There also needs to be a lot of clarity in what we want people to do to implement the strategy, and how much we are asking them to commit.

It was suggested that we should follow the advice from the One Geology project, which included making sure that we have a product which looks impressive, demonstrates national contributions, and provides quick-wins to ensure that we keep the community bought-in to the need to stay involved in the project. A suggestion was made that if we also want the product to be of interest to the general public (as OneGeology was with its vast media coverage), involving data on charismatic megafauna would be a good idea. It was also suggested that we follow the advice of EXCOM in making sure that we can demonstrate how the work that we are doing is enabling us to answer important SCAR science questions.

It was also pointed out that wherever possible, our implementation should build on existing tools and products which we already have (e.g. ADD, gazetteer as OGC services), and potentially bring in some of the data and tools demonstrated by Paul Morin, if this was relevant to the science question.

It was suggested that as SCAR MarBIN has already been a success in this area, and the EBA terrestrial database is teaming up with the Belgian SCADM representatives to build a terrestrial partner database – AntaBIF (Antarctic Biodiversity Information Facility), that focussing on a biologically based project may be the best initial choice.

We need to ensure that we remain focussed on the goal of working closely with an interested science group to make sure that what we do meets a set of needs that they have. It will also need to be done in a time-frame which is consistent with us being able to demonstrate significant steps by the SCAR OSC in Buenos Aires. The presentation at the OSC must be a science presentation, focussing on how implementing the strategy has enabled SCAR to do things, which otherwise would not have been possible. The presentation can also then extend into showing that having followed the strategy for implementation, it will not now be difficult to integrate more data with the product, in order to answer even more interdisciplinary science questions. Huw Griffiths and Bruno Danis could provide good advice on this based on their experiences from SCAR MarBIN.

In addition to this, Paul Cooper suggested running a training session at the OSC on OGC services which would improve the capacity of Data Centres to use OGC services, and could show how quickly data can be mashed-up by using these services.

The major actions were:

- to form a group from SCADM and SCAGI of willing participants who can dedicate time to the project [ACTION 22]
- meet with EBA to identify science questions which can only be answered with enhanced access to data held by the data centres [ACTION 23]

SCAR Standing Committee on Antarctic Geographic Information (SCAGI) Inter-sessional Meeting

Amsterdam, September 7 to 9, 2009

Table of Contents

1. Background	15
2. Introduction	15
3. SC-AGI Meeting	16
4. Project Reports	19
Coastal Change and Glaciological Maps of Antarctica Project	16
Names Projects	16
Aerial Photography	17
Cybercartographic Atlas	17
SCAR Composite Gazetteer of Antarctica and SCAR Map Catalogue	17
GEBCO/IBCSO	17
AGIC and Antarctic Mapping	17
Antarctic Digital Database	18
Other Issues	19
Election of SCAGI deputy chief officers	19
SCAGI Website	19
King George Island GIS	19
Appendix 1 – SCAGI Attendees	23
Appendix 2 – Report on Antarctic Digital Database	24

1. Background

All work in Antarctica relies on a consistent geographic framework, and the main function of the Standing Committee on Antarctic Geographic Information (SCAGI) is to manage and improve the geographic framework not only for Antarctic scientific research but also for other activities including operations, environmental management and tourism.

SCAGI continues to deliver a range of Geographic Information products through its various projects. These products include the SCAR Composite Gazetteer of Antarctica, the SCAR Antarctic Digital Database, the SCAR King George Island GIS Database, the SCAR Map Catalogue and SCAR Feature Catalogue.

SCAGI integrates topographic and names information received from national Antarctic programs into the SCAR ADD and SCAR Composite Gazetteer of Antarctica. SCAR / SCAGI in keeping with Article III.1.c of the Treaty that *Scientific observations and results from Antarctica shall be exchanged and made freely available* promotes an open standards approach to support free and unrestricted data access and develops the respective specifications.

The Chair Officer of SCAGI is Henk Brolsma (henk.brolsma@aad.gov.au) and the Deputy Chief Officers are now Adrian Fox (ajfo@bas.ac.uk) and Roberto Cervellati (roberto.cervellati@consorzio.pnra.it).

2. Introduction

The third intersessional meeting of SCAGI was held at the Trippenhuis in Amsterdam from the 7 to 9 of September 2009. The meeting was held in parallel with the Standing Committee on Antarctic Data Management (SCADM), with many of the sessions being held jointly. SCAGI would like to thank the Royal

Netherlands Institute for Sea Research (NIOZ) and the Netherlands Organization for Scientific Research (NWO) for hosting the meeting and the official dinners.

During the joint session with SCADM Certificates of Appreciation were awarded to Roberto Cervellati and Chiara Ramorino for their long-standing work on the SCAR Composite Gazetteer of Antarctica (SCAR CGA).

There were thirteen attendees at the SCAGI-only sessions of the meeting, including invited experts (see Appendix 1 for full list). Apologies were received from New Zealand and Poland. Unfortunately there was a clash with the Latin American Congress of Antarctic Research in Ecuador and so no Latin American representatives were present. Henk Brolsma, the SCAGI chair, noted that we would work with our Latin American colleagues to try to ensure such meetings do not clash in the future.

3. SC-AGI Meeting

Henk Brolsma, the SCAGI chair, opened the first SC-AGI only session by introducing the topics to be covered. In particular there were several outstanding issues for which solutions were required:

- hosting of the SCAGI web site. The web site is rather large and complex, and now needs to be hosted somewhere other than the University of Freiburg;
- although progress has been good greater effort is needed from some Members to share SCAGI-related data;
- SCAGI needs to work more closely with COMNAP on GISs and topographic surveys;
- the GIS for King George Island (KGI) also needs to be moved from the server at Freiburg University so as to make it more useful for the KGI community. A volunteer institution is being sought.

Henk also noted that the draft Rules of Procedure for SCAR Working Groups would need to be modified to include, e.g. the need for two new deputy chief officers.

***ACTION:** SCAGI Chief Officers to review draft Rules of Procedure for SCAR Working Groups with regards to SCAGI.*

SCAGI's membership has risen to 26 with the most recent new member being Ecuador which is an important development.

Mike Sparrow, the SCAR Executive Officer, summarised issues of relevance to SCAGI that arose from the SCAR Executive Committee Meeting (EXCOM) held in Punta Arenas in August. EXCOM recognised that SCAGI has demonstrated significant progress since its migration from an Expert Group to a Standing Committee. EXCOM welcomed these developments, endorsed plans to reorganise the web site and solve the KGI GIS problem, and applauded the developing close cooperation with SCADM. Mike mentioned the need to highlight SCAGI products such as the Antarctic Digital Database (ADD). One example where this could be done is on the new SCAR website that will be developed over the next year.

4. Project Reports

Coastal Change and Glaciological Maps of Antarctica Project

Jerry Mullins gave an overview of the USGC Coastal-Change and Glaciological Maps of Antarctica Project (see <http://pubs.usgs.gov/imap/2600/>).

***ACTION:** Jerry Mullins to contact Jane Ferrigno to ensure details of the USGS digital maps are entered into the SCAR Map Catalogue.*

Names Projects

Henk Brolsma gave an update on the Larsemann Hills names project .

***ACTION:** Henk Brolsma to send information on Larsemann hills names project to Chiara Ramorino for inclusion in SCAR CGA.*

Ai Songtao summarised progress with the Grove Mountains names project. This project has now been expanded to include other areas, such as the Amery Ice Shelf and Dome A (the PANDA IPY project). For the moment the website is only available in Chinese, but the plan is to produce an English version.

ACTION: Ai Songtao to send link of PANDA website to Chief Officer for inclusion in SCAGI web site.

With regards to the Allan Hills Project Henk Brolsma will liaise with Jerry Mullins with regards to new sets of coordinates to be sent to the US Names Committee.

ACTION: Henk Brolsma to liaise with Jerry Mullins with regards to new sets of coordinates to be sent to the US Names Committee.

ACTION: Henk Brolsma to send around a paper on how data should be formatted with names for SCAR CGA.

Aerial Photography

Henk Brolsma commented that the Australian project on the History of Aerial Photography in Antarctica would need to be withdrawn from the list of national projects as the project leader, now retired, was not able to commit to the project.

Adrian Fox noted that the British Antarctic Survey is in the process developing a web browser to discover aerial photography. The USGS is in the process of scanning all aerial photography with Paul Morin compiling that information and associated flight lines for all aerial photography in Antarctica. A discussion was held on the metadata that should be included on flight line information, something that interested parties would discuss further offline.

ACTION: Paul Cooper to send updated TMA and RARE flight lines updated by BAS using more recent map data.

ACTION: Jerry Mullins to send estimate on cost of scanning aerial photography after receipt of information from Henk Brolsma, Adrian Fox and Jean-Yves Pirlot on the number and type of rolls of aerial photography.

Cybercartographic Atlas

Henk Brolsma noted that this project was being withdrawn, due to lack of funding for the project. Comment was also made that technological innovations such as Google Earth that were not available when the project was originally proposed have made many aspects of the project redundant.

SCAR Composite Gazetteer of Antarctica and SCAR Map Catalogue

Roberto Cervellati gave a presentation on the SCAR Composite Gazetteer of Antarctica (CGA) – see <http://data.aad.gov.au/aadc/gaz/scar/>. A major task this year has been the transfer of the SCAR CGA from Italy to AAD.

ACTION: Henk Brolsma to send an email to SCAGI contacts about the fields in the SCAR CGA.

ACTION: Henk Brolsma to remind SCAGI representatives to make their major maps (those they would normally distribute) available to the SCAR Map Catalogue and if possible to make any new data available to the SCAR ADD via Paul Cooper.

General Bathymetric Chart of the Oceans (GEBCO)/ International Bathymetric Chart of the Southern Ocean (IBCSO)

Norbert Ott gave the group an update on GEBCO/IBCSO (<http://www.ibcso.org/>).

ACTION: Henk Brolsma to liaise with Hans Werner and Norbett Ott (GEBCO and AWI) when they determine the limits of under sea features

Antarctic Geospatial Information Centre (AGIC) and Antarctic Mapping

Paul Morin presented work on Antarctic mapping, MODIS mosaics and USGC air photography.

(i) Daily Antarctic MODIS Mosaics

Daily MODIS mosaics of Antarctica are now available from the NASA Rapid Response website in near- real time at:

<http://rapidfire.sci.gsfc.nasa.gov/subsets/?mosaic=Antarctica>

A complete mosaic of previous day(s) can be viewed by clicking on the 'Prev' button on the top of the page.

Each day a set of true color images are generated from data from the Terra and Aqua satellites at 4km, 2km, 1km and 250m resolutions along with a 367 false-color image generated from Terra. By clicking on each individual tile within the mosaic, a page featuring that tile will come up, and the 250m image for that tile can be downloaded.

The images are mapped using the Polar Stereographic projection with origin at 0 longitude and -90 latitude with a -71 standard parallel (also known as EPSG code 3031). Each one of the files can be downloaded with the metadata file and directly used in GIS and remote sensing software for integration into other products and services.

Information on using the mosaic image in GIS and image processing software packages is available on the FAQ page <http://rapidfire.sci.gsfc.nasa.gov/faq/>.

(ii) USGS Antarctic Air Photography

The USGS Antarctic Resource Center has completed the medium resolution scans of their entire air photography collection from 1947 to the present of 330,000 photos. All photos have been placed online with known digitized flight lines and calibration information by the Antarctic Geospatial Information Center and can be downloaded from <http://www.agic.umn.edu/imagery/aerial>. If requested, all of the images can be written to a 2tb hard disk and shipped to researchers and other programs. Contact Michelle LaRue at larue010@umn.edu for more information.

ACTION: Henk Brolsma to liaise with Paul Morin with regard to what is required re finding maps via Google search, specifically (i) Paul Morin to draft and register a page on searching for Antarctic Maps. (ii) SCAGI members to provide information as to what are the key maps, Digital Elevation Models, key scanned paper maps etc.

Note that the draft page can be found at <http://www.agic.umn.edu/?q=resources/mapping>

ACTION: Henk Brolsma and Paul Morin to produce a one page summary on how to deliver maps in a format useful for Google Earth

ACTION: Mike Sparrow to Liaise with Paul Morin re producing a SCAR News Item about satellite/photo data available.

ACTION: Adrian Fox and Paul Morin will carry out an initial audit examining what DEM (Digital Elevation Model) products are available in SCAGI areas of interest.

Antarctic Digital Database

Paul Cooper gave a presentation on progress and issue with the SCAR Antarctic Digital Database (ADD) - see www.add.scar.org and Appendix 2. Paul identified a number of issues, including the potential revision of the SCAR ADD using LIMA (<http://lima.usgs.gov/>) and the creation of ISO 19115 metadata for SCAR ADD features.

Paul Cooper reported that if modern metadata standards were to be written for the original SCAR AAD data it would require approximately two person years to complete. Chief Officer Henk Brolsma replied that this wasn't necessary as there was a hard copy "metadata" record also available in PDF format for the SCAR ADD and all that was required was for a metadata record for the SCAR ADD to be entered with the hard copy description of the data attached. New topographic data came with metadata record attached and in time would replace the earlier topographic information.

ACTION: Paul Cooper to write metadata record for the SCAR ADD (AADC can assist if required) and Paul to insist all new data for the SCAR ADD come with metadata attached otherwise data cannot be added to the SCAR ADD.

Other Issues

None.

Election of SCAGI deputy chief officers

Adrian Fox and Roberto Cervellati were elected by acclaim as co-chief officers of SCAGI. Roberto noted that he would be willing to stand aside at a future meeting if another (preferably non-European) SCAGI member wished to be considered for the post.

SCAGI Website

The SCAR web site is rather large and complex, and now needs to be hosted somewhere other than the University of Freiburg since it has been impossible to contact the German SCAGI representative.

ACTION: SCAR SCAGI Website: (i) Henk Brolsma to draft letter to University of Freiberg asking them to send information on AntSDI and to close website down (ii) move website to new SCAR website with CMS when available

King George Island GIS

SCAGI needs to develop a GIS / Web Map Server for King George Island GIS similar to that developed by Steffan at Freiburg University (<http://www.kgis.scar.org/mapviewer/kgis.phtm>). This service has the potential to be useful not only to SCAR but to other groups such as COMNAP and the ATS.

ACTION: Mike Sparrow to provide contact to KGI Action Group to Adrian Fox. Adrian to liaise with Sergio Marenni with regards to liaison between KGI AG and KGI GIS.

ACTION: SCAGI COs and SCAT Secretariat to work on finding a host country for the KGI GIS from the ten nations represented on the island.

Appendix 1 – SCAGI Attendees**SCAGI Members**

Australia	Henk Brolsma (Chair)
Belgium	Jean-Yves Pirlot Yvan Vander Vennet (part-time)
China	DongChen Ai Songtao
France	Elisabeth Calvarin
Italy	Roberto Cervellati Chiara Ramorino
United Kingdom	Adrian Fox Paul Cooper
USA	Jerry Mullins

SCAR Executive Mike Sparrow

Invited Experts

AGIC	Paul Morin
GEBCO	Norbert Ott

Appendix 2 – Report on Antarctic Digital Database

Standing Committee on Antarctic Geographic Information, Amsterdam, Holland, 7-9 September 2009.

Introduction

The Antarctic Digital Database (ADD) is a compilation of topographic and other information for Antarctica. It was originally compiled in 1990-1993, and released on CD in 1993. Since then it has passed through five successive versions, being first released on the Internet in 1997. In Summer 2007, the most recent version (5) was released through a completely revised web-site, with many new features. This report summarizes developments since the last meeting of SC-AGI in St Petersburg in July 2008.

Usage

Since July 2008, 345 persons have registered to download data from the ADD. The table at the end of the report breaks the number persons registering down by country.

Approximately 16,000 people have entered the ADD web-site during the same period.

New developments

Since the last meeting of SC-AGI, only one change to the ADD has been noted on the ADD's web-site. The web-site has been updated to use the "OpenLayers" software to view maps of Antarctica, and as part of this change, links have been added to the USGS web servers for the Landsat Image Mosaic of Antarctica (LIMA). Despite this being the only change made since the last meeting of SC-AGI, it provides a considerable improvement to user's experience of the ADD, and provides access to LIMA seamlessly with the ADD through the map browser on the ADD web-site.

All changes are detailed in the "News" link on the ADD web-site. Change on the ADD web-site is driven by several forces, including advice tendered by SC-AGI at its meeting, user suggestions and new data sources becoming available.

Future developments

The ADD will continue to develop in the ways already outlined through:

- incremental improvements to the technology and user interface of the web-site,
- adoption of new data and
- maintenance of existing data and functionality.

The following headings will provide an overview of expected developments:

New data

Incorporation of new data for the Antarctic Peninsula is an ongoing project. All members of SCAR should notify the manager of the ADD of digital map data suitable for inclusion in the ADD. Guidelines for assessing suitability are:

- Does the organization offering the data own the intellectual property rights for the data?
- Is the map source original (that is, not based on data already incorporated in the ADD)
- Is the map data an improvement on the data included in the ADD already (that is, are the data at a larger scale or based on more reliable source information than that already used by the ADD)
- Does the data cover a significant area? For example, base plans do not cover a sufficiently large area for inclusion in the ADD.

In the longer term, a new coastline and rock outcrop layer for many areas should be derived from the Landsat Image Mosaic of Antarctica (LIMA). This will be a major project, but areas where the existing coastline is of poor quality (e.g. the coast adjacent to the Amundsen and Bellingshausen seas) will be targeted first. Areas

where existing mapping is of good quality will not be revised in the short term; in such areas differences between the ADD and LIMA are probably because of real change in the coast (see Issues paper).

New data layers will be incorporated as they become available; data already available includes a database of lakes for the Antarctic Peninsula and a database of sub-glacial lakes for the whole of Antarctica.

Data for further sub-Antarctic Islands will be incorporated as they become available. BAS has new mapping for the South Sandwich Islands in preparation, and data for Marion Island is available, but in a form that will require substantial effort to incorporate in the ADD. No data has been supplied by other nations as yet, and in one case the response from the mapping agency has been that the data can only be made available on commercial terms.

New functionality

A means of watermarking image data provided by the ADD will be considered, to ensure that images are correctly attributed. This is increasingly urgent, as the ADD now provides map data in a form readily used on the Internet. I have already had to insist on acknowledgment in one case where I found images from the ADD being used without suitable credit being given.

Maintenance

The site will continue to be maintained and bugs fixed as they arise.

A Paul R Cooper
01 September 2009

Table of registrations since SC-AGI meeting in St Petersburg, July 2008

country¹	Number of registrations
UNITED STATES	94
UNITED KINGDOM	44
AUSTRALIA	22
NEW ZEALAND	17
ARGENTINA	15
BRAZIL	14
GERMANY	12
CANADA	11
CHILE	11
CHINA	10
FRANCE	9
SPAIN	9
NORWAY	8
ITALY	7
SOUTH AFRICA	6
INDIA	5
NETHERLANDS	5
RUSSIAN FEDERATION	4
KOREA, DEMOCRATIC PEOPLE'S REPUBLIC OF	2
CZECH REPUBLIC	2
SWEDEN	2
POLAND	2
BELGIUM	2
JAPAN	2
ERITREA	1
UKRAINE	1
MALAYSIA	1
LIBYAN ARAB JAMAHIRIYA	1
SOMALIA	1
LITHUANIA	1
BOUVET ISLAND	1
JAMAICA	1
PORTUGAL	1
COTE D'IVOIRE	1
SLOVENIA	1
HONDURAS	1
FRANCE, METROPOLITAN	1
IRAQ	1

¹ Note that the countries below are those entered by those registering, and may not be an accurate reflection of the countries from which users register.

Table of registrations since SC-AGI meeting in St Petersburg, July 2008

country¹	Number of registrations
UNITED STATES MINOR OUTLYING ISLANDS	1
VENEZUELA	1
YUGOSLAVIA	1
GIBRALTAR	1
PERU	1
ARMENIA	1
TRINIDAD AND TOBAGO	1
CYPRUS	1
SWITZERLAND	1
NETHERLANDS ANTILLES	1
SAINT KITTS AND NEVIS	1
ZAMBIA	1
LAO PEOPLE'S DEMOCRATIC REPUBLIC	1
COSTA RICA	1
IRELAND	1
RWANDA	1
TOTAL NUMBER OF REGISTRATIONS	345

Actions from joint SCADM/SCAGI meeting

7-9th September 2009

Trippenhuys, Amsterdam

1	Promote adoption of the DIMS at the ATCM & CEP through submitting a paper on the DIMS. This will need to be done with SCATS	Kim, Peter, Helen
2	Use the SCAR fellowship programme for development opportunities, and progressing implementation of the DIMS	SCADM Exec
3	Gain endorsement for the SCAR Data Policy	Kim
4	Send out letter to ask for nominations for secondments. Consider possibilities for secondments to work on implementation of the DIMS	Kim, Colin, All
5	Promote the DIMS nationally	All
6	Work with managers of SCAR products to carry out a review, and ensure that they form an effective part of strategy implementation	SCADM Exec
7	SCAGI to write to national committees to ask for them to accept changes to locations to rectify the problem of the same features having different locations	SCAGI
8	SCADM to produce a SCAR news item on AMD statistics for the next news bulletin. An extra column needs adding for numbers of DIFs with a GET DATA link	SCADM Exec, Stephanie
9	GCMD to communicate plans for updating keywords in the future, and plans and timetables for delivering keywords as a web service. This is to enable SCADM to feedback concerns over the keywords	Stephanie
10	GCMD to produce a timetable of works for upgrading their website, to enable SCADM to provide input via the AMD User Survey	Stephanie
11	The SCADM liaison Officers (once identified) will meet to develop ideas about how to solicit information from AMD data providers and users regarding the functioning and utility of the AMD.	SCADM liaisons (SCAR Exec and GCMD)
12	There is a need for development of guidance on consistent use of fields within the DIF by SCADM members.	SCADM Exec (Ira)?
13	Review job description for SCADM liaisons, develop a position paper on how to increase the number of effective liaison officers and bring into effect.	Kim & Peter
14	Find contacts in Google Earth, to discuss serving of ADD data through GE	Paul Cooper
15	Send out paper on background and status of placenames in the CGA, and guidelines on how to incorporate the CGA into national databases and the AMD	Henk
16	SCADM members to contact Paul Cooper regarding submitting data to the ADD. Paul to talk to GCMD regarding embedding the AMD in the GCMD spatial search	Paul Cooper
17	Bob Arko to send out schema for US implementation of the AMD	Bob Arko
18	Send out US plans for development of database for samples, lab results, derived data etc	Bob Arko

19	Should SCADM and SCAGI meetings now be joint to encourage harmonising of groups	SCADM and SCAGI
20	Decide on how to address issue of vacancies for SCADM SRP reps	Kim and Peter
21	SCADM and SCAGI to submit the best possible Antarctica Geological data to the OneGeology Project	All
22	Form a group from SCADM and SCAGI of willing participants who can dedicate time to the project	Kim
23	The implementation project team to meet with EBA to identify a science question which can only be answered with enhanced access to data held by the data centres	Implementation project team
24	Ensure that the DIMS Implementation Plan maps onto SCAR science (make use of the existing feedback provided through the SCADM liaisons (when appointed)).	Kim
25	Address scientific opportunities and concerns with the AMD	SCADM Exec
26	Look for opportunities to leverage existing national activities for DIMS Implementation.	SCADM Exec

Investigate a project to improve accessibility of image data, to form the basis of new SCAR science	
---	--