

Report for 2015/16 of the Council of Managers of National Antarctic Programs (COMNAP)

COMNAP is the organisation of National Antarctic Programs which brings together, in particular, the national officials responsible for planning, conducting and managing support to science in Antarctica on behalf of their respective governments.

COMNAP is an international association, established in September 1988, whose Members are the 30 National Antarctic Programs from the countries of Argentina, Australia, Belarus (welcomed to membership in August 2015), Belgium, Brazil, Bulgaria, Chile, China, Czech Republic, Ecuador, Finland, France, Germany, India, Italy, Japan, Republic of Korea, Netherlands, New Zealand, Norway, Peru, Poland, Russian Federation, South Africa, Spain, Sweden, Ukraine, United Kingdom, United States and Uruguay. The National Antarctic Programs of Portugal and Venezuela were welcomed (August 2015) to a three-year term as COMNAP Observer organisations.

COMNAP's purpose is to develop and promote best practice in managing the support of scientific research in the Antarctic. As an organisation, COMNAP acts to add value to National Antarctic Program's efforts by serving as a forum to develop practices that improve effectiveness of activities in an environmentally responsible manner, by facilitating and promoting international partnerships, and by providing opportunities and systems for information exchange.

COMNAP strives to provide the Antarctic Treaty System with objective, practical, technical and non-political advice drawn from the National Antarctic Programs' extensive pool of expertise and their first-hand Antarctic knowledge.

COMNAP continues to have a close working relationship with other Antarctic organisations, in particular with SCAR. A joint COMNAP/SCAR Executive Committee Meeting was held in Tromsø in August 2015. COMNAP was an invited observer to the IAATO meeting and presented reports to the Forum of Arctic Research Operators (FARO) and the International Ice Charting Working Group (IICWG) meetings, and is grateful to be an invited observer to the HCA Meetings.

The COMNAP Annual General Meeting (AGM) was held in August 2015 in Tromsø, Norway, hosted by the Norwegian Polar Institute. Break-out sessions on energy & technology, education & outreach, and safety were convened. Professor Kazuyuki Shiraishi of Japan's NIPR continues in his three-year term as the COMNAP Chair to AGM 2017. Michelle Rogan-Finnemore continues as Executive Secretary. The University of Canterbury, Christchurch, New Zealand, continues to host the COMNAP Secretariat.

COMNAP Highlights and Achievements for 2015/16

COMNAP Antarctic Roadmap Challenges (ARC) Project - *complete*

The COMNAP ARC project, a follow-on project from the SCAR Antarctic Science Horizon Scan, explored the technology, logistics, operations, funding and international collaboration challenges that will likely be encountered by the national Antarctic programs in the delivery of Antarctic science in the mid- to long-term. Over 1000 experts participated in the ARC project either by: responding to on-line surveys, participating in a workshop, contributing topical white papers and/or by providing expert review of the writing group reports or the ARC outcomes publication. It was a community effort and all involved are thanked, but, in particular, Mahlon C. Kennicutt II (Emeritus Professor, Texas A & M University) and Yeadong Kim (President, KOPRI) for co-convening the ARC project. ARC outcomes have now been published (see COMNAP Information Paper) and see: www.comnap.aq/Projects/SitePages/ARC.aspx.

Sea Ice Challenges Workshop Report - *published*

COMNAP convened the Sea Ice Challenges Workshop on 12–13 May 2015, co-hosted by AAD and the ACE CRC in Hobart, Tasmania, Australia. It provided an opportunity for the science and operations communities to discuss regional Antarctic sea ice trends and to propose technical and practical ways to address the challenging conditions. The report (published December 2015) can be downloaded from: www.comnap.aq/Publications/SitePages/Home.aspx.

Telemedicine Workshop - convened

The Joint Expert Group on Human Biology and Medicine (JEGHBM) convened the Telehealth Workshop on 27 August 2016, Tromsø, Norway. The workshop aim was for national Antarctic programs to view a range of telehealth remote services and to allow them to consider what may be appropriate to their own Antarctic operations. See: www.comnap.aq/Groups/medical/SitePages/Home.aspx.

Unmanned Aerial Systems Working Group (UAS-WG) - established

Formed as a sub-group of the COMNAP Air Expert Group, the UAS-WGs purpose is to "...reduce risk to people, infrastructure and environment in the Antarctic Treaty area, while enabling...UAS use in the area for scientific applications and science support purposes." Experts from fourteen COMNAP Member national Antarctic programs are part of the group. The UAS-WG terms of reference include development of COMNAP guidelines; (See also COMNAP Working Paper) and support to Member national Antarctic programs to prepare their program's UAS Operating Procedures which are specific to their own Antarctic operations, exchange of information, and to communicate, in a collaborative manner with other members of the Antarctic community, information on UAS use in the area.

Station Infrastructure Catalogue - started

The EU-PolarNet project, conducted in collaboration with INTERACT and COMNAP, includes development of a catalogue, focusing on European Arctic and Antarctic infrastructures. This project already included all the European COMNAP Members. COMNAP decided to use this opportunity to extend the exercise to all its Members. The COMNAP Infrastructure Catalogue will provide for the first time comprehensive and exhaustive information on the national Antarctic program facilities which will be useful to promote future collaboration, exchange of scientists and sharing of infrastructures, in the spirit of the Antarctic Treaty.

COMNAP Antarctic Research Fellowship - application round open

COMNAP established the Antarctic Research Fellowship in 2011 and since that time has awarded six fellowships, plus three jointly with SCAR. The Fellowship aims to assist early career researchers, technicians and engineers. The 2015 Fellowship was awarded to Alejandro Velasco Castrillon (University of Adelaide, Australia) to undertake travel to Antarctica in support of research on "A re-evaluation of the first discovery of limno-terrestrial microfauna of the McMurdo Sound region". Also, a joint COMNAP/SCAR fellowship was awarded to Inka Koch (University of Otago, New Zealand) to undertake research on "Detecting marine ice internal layers and thickness in an Antarctic ice shelf with airborne ice penetrating radar". The 2016 Fellowship round closes on 1 June 2016. Both SCAR and COMNAP are also working with CCAMLR to promote their scholarships. See <https://www.comnap.aq/SitePages/fellowships.aspx>.

Middle Managers Scheme - trial underway

The scheme aims to assist national Antarctic program managers with development in the areas of international collaboration, training programmes or sharing of best practice at another national Antarctic program office or Antarctic research station. Applications from personnel of COMNAP Member national Antarctic programs for the scheme can be submitted at any time of the year and will be evaluated by the COMNAP EXCOM.

Search and Rescue (SAR) Workshop III - upcoming

In support of safe operations in the Antarctic Treaty region, and as agreed by COMNAP in response to ATCM Resolution 4 (2013), to regularly convene workshops to discuss SAR and emergency response in the region, COMNAP will convene the SAR Workshop III. The workshop will take place on 1-2 June 2016, co-hosted by INACH and DIRECTEMAR. Experts from IAATO, CCAMLR (COLTO and ARK), and from COSPAS-SARSAT have also been invited to attend. The workshop report will be submitted to the ATCM when available. Further information see: <https://www.comnap.aq/SitePages/SARWorkshopIII.aspx>.

COMNAP Products and Tools

Search and Rescue (SAR) Webpage www.comnap.aq/membersonly/SitePages/SAR.aspx

As requested in ATCM Resolution 4 (2013), COMNAP has established a SAR webpage in consultation with RCCs which is regularly updated. It will be reviewed during SAR Workshop III.

Accident, Incident & Near-Miss Reporting (AINMR) www.comnap.aq/membersonly/AINMR/SitePages/Home.aspx

The AINMR System was developed to assist in information exchange and is available on the members-only area of the COMNAP website. The AINMR's primary objective is: to capture information about events that had, or could have had, serious consequences; and/or reveal lessons; and/or for novel or very unusual events. Full reports on accidents can also be posted and shared on the site and can be discussed and reviewed. National Antarctic Programs can learn from each other to reduce the risk of serious consequences occurring in the course of their Antarctic activities.

Ship Position Reporting System (SPRS) www.comnap.aq/sprs/SitePages/Home.aspx

The SPRS is an optional, voluntary system for exchange of information about National Antarctic Program ship operations. Its primary purpose is to facilitate collaboration. It can also, however, make a very useful contribution to safety with all SPRS information made available to the RCCs as an additional source of information complementing all other national and international systems in place. Position information is delivered via email and can be graphically displayed in Google Earth. A review of the SPRS is underway.

Antarctic Flight Information Manual (AFIM)

AFIM is a handbook of aeronautical information published as a tool towards safe air operations in Antarctica as per Resolution 1 (2013). COMNAP continues to transform the paper-based AFIM into an electronic product. The AFIM continues to be updated via information from National Antarctic Programs.

Antarctic Telecommunications Operators Manual (ATOM) www.comnap.aq/membersonly/SitePages/ATOM.aspx

ATOM is an evolution of the handbook of telecommunications practices to which ATCM Recommendation X-3 *Improvement of Telecommunications in Antarctica and the Collection and Distribution of Antarctic Meteorological Data* refers. COMNAP Members and SAR authorities have access to the latest version (January 2016) via the COMNAP website.

For more information see www.comnap.aq.

Attachment 1: COMNAP officers, projects, expert groups and meetings

Executive Committee (EXCOM)

The COMNAP Chair and Vice-Chairs are elected officers of COMNAP. The elected officers plus the Executive Secretary, compose the COMNAP Executive Committee as follows:

Position	Officer	Term expires
Chair	Kazuyuki Shiraishi (NIPR) kshiraishi@nipr.ac.jp	AGM 2017
Vice-Chairs	Hyoung Chul Shin (KOPRI) hcschin@kopri.re.kr	AGM 2016
	John Hall (BAS) jhal@bas.ac.uk	AGM 2016
	José Retamales (INACH) jretamales@inach.cl	AGM 2017
	Rob Wooding (AAD) rob.wooding@aad.gov.au	AGM 2017
	Yves Frenot (IPEV) yves.frenot@ipev.fr	AGM 2017
Executive Secretary	Michelle Rogan-Finnemore michelle.finnemore@comnap.aq	

Table 1 – COMNAP Executive Committee.

Projects

Project	Project Manager	EXCOM officer (oversight)
Antarctic Flight Information Manual (AFIM) – Electronic Format Implementation	Paul Morin & Brian Stone	John Hall
Antarctic Roadmap Challenges (ARC)	Michelle Rogan-Finnemore	Kazuyuki Shiraishi
Ship Position Reporting System (SPRS) Review	Robb Clifton	Hyoung Chul Shin
Station Infrastructure Catalogue	Michelle Rogan-Finnemore	Yves Frenot
Suppliers Database	Simon Trotter	John Hall
Telemedicine Workshop	Jeff Ayton	John Hall

Table 2 – COMNAP projects currently in progress.

Expert Groups

Expert Group (topic)	Expert Group leader	EXCOM officer (oversight)
Air (includes the UAS-WG)	Giuseppe Di Rossi & Brian Stone	John Hall
Energy & Technology	Felix Bartsch & Pavel Kapler	Rob Wooding
Environment	Anoop Tiwari	Hyoung Chul Shin
Medical	Jeff Ayton	John Hall
Outreach/Education	Dragomir Mateev	Yves Frenot
Safety	Henrik Törnberg (until 31 Jan 2016) Simon Trotter (from 1 Feb 2016)	Kazuyuki Shiraishi
Science (includes the SOOS “Think Tank”)	Robb Clifton	José Retamales
Shipping	Miguel Ojeda	José Retamales
Training	Veronica Vlasich	Yves Frenot

Table 3 – COMNAP Expert Groups.

Meetings

Previous 12 months

22–24 August 2015, Antarctic Roadmap Challenges Workshop, Norwegian Polar Institute (NPI), Tromsø, Norway.

25 August 2015, COMNAP/SCAR Joint Executive Committee Meeting, Norwegian Polar Institute (NPI), Tromsø, Norway.

26–28 August 2015, COMNAP Annual General Meeting (COMNAP AGM XXVII), hosted by the Norwegian Polar Institute (NPI), Tromsø, Norway (includes Safety session, Energy & Technology session and Education & Outreach session and the Joint Expert Group on Human Biology and Medicine Telemedicine Workshop).

29 August 2015, COMNAP EXCOM Meeting, hosted by the Norwegian Polar Institute (NPI), Tromsø, Norway.

29 August 2015, Joint COMNAP/SCAR EXCOM Meeting, hosted by the Norwegian Polar Institute (NPI), Tromsø, Norway.

Upcoming 12 months

1–2 June 2016, Search and Rescue (SAR) Workshop III, co-hosted by Instituto Antartico Chileno (INACH) and DIRECTEMAR, Valparaiso, Chile.

16–18 August 2016, COMNAP Annual General Meeting (AGM) XXVIII (2016), hosted by the National Centre for Antarctic and Oceans Research (NCAOR), Goa, India.

19–20 August 2016, COMNAP Symposium 2016 “Wintering-over Challenges”, hosted by the National Centre for Antarctic and Oceans Research (NCAOR), Goa, India.

21 August 2016, Joint SCAR/COMNAP EXCOM Meeting, Kuala Lumpur, Malaysia.

21–22 August 2016, Joint Expert Group on Human Biology and Medicine (JEGHBM) Meeting, Kuala Lumpur, Malaysia.