FINAL REPORT OF IASC ACTION GROUP "COMMUNICATING ARCTIC SCIENCE TO POLICY-MAKERS (CASP)"

Rationale

Providing objective and independent scientific advice on issues of Arctic science and communicating scientific information beyond the research community are central to IASC's mission. Thanks to its position as the leading international, non-governmental scientific organisation dedicated to the Arctic, IASC is very well situated to provide such advice and, in addition to facilitating cooperation across all aspects of Arctic research, to communicate scientific findings to decision-makers and relevant stakeholders.

To enhance this function, IASC needs to build on its distinctive assets and broad and diverse membership in order to make the most of its unique position among the steadily growing number of Arctic science events and initiatives. Supporting IASC in this endeavour has been the central goal of the CASP Action Group and the recommendations included in this document build on the IASC Review 2016 and support the proposals within IASC's Strategic Plan 2018-2023. Whereas both IASC's Mission and the Strategic Plan provide IASC with long-term, shared goals, the CASP Action Group sought to identify specific steps and concrete actions for enhancing IASC's role in communicating Arctic science to policy-makers and a wider audience. In doing so, the Action Group strongly welcomes the steps taken by the IASC Secretariat to increase its communication work and presence in social media, while recognising that there are further opportunities to strengthen this role.

The recommendations in this report are built around three main issues:

- o WHAT to communicate?
- o TO WHOM to communicate? and
- O HOW to communicate?

The Action Group believes that putting the recommendations in this report into action will support the effective realisation of IASC's Strategic Plan 2018-2023 and help further elevate IASC's role and profile internationally. Most importantly, it will present a positive contribution to communicating issues of Arctic science and scientific cooperation to decision-makers, in line with IASC's strong position and future potential.

WHAT to communicate?

When it comes to communicating Arctic science, IASC has a double role to play. On the one hand, to inform and support the formulation of national priorities in Arctic science, and on the other to reinforce the delivery of the most important scientific information to decision-makers, in concert with other relevant organisations.

There are many relevant sources of scientific information on the Arctic. The challenge and task for IASC is to find its position in this panoply, to contribute to scientific communication and provide advice in a way that does not duplicate the efforts of others, but instead

reinforces and complements them in line with IASC's strengths and in recognition of its limitations. One gap that was clearly identified by the Action Group among all existing projects and activities concerns communicating issues related to the state of Arctic science itself. To fill this important gap,

CASP recommends that:

As the leading Arctic scientific organisation, IASC should regularly produce a
 "State of Arctic Science Report". Such a report, covering both national and
 thematic perspectives, would provide an annual overview covering: major
 identified and emerging issues in Arctic science; matters concerning
 international Arctic scientific cooperation; and the most important
 remaining gaps in data.

The production of such a report would not only strengthen the identification of research priorities by IASC and address the existing gap, but it would also enhance IASC's major role as an independent authority and synthesis voice in Arctic science.

Regarding communicating scientific findings to policy-makers and relevant stakeholders, IASC has a particular responsibility to enhance communication about projects that it has helped initiate and develop. Not only could IASC's support in this respect significantly boost their prospects for obtaining required funding, but it would also broaden the outreach of their results. Moreover, IASC provides an excellent forum to identify issues and emerging topics that need deepened scientific inquiry. Therefore, the Action Group recommends that:

- o IASC should play a more active role in supporting the communication activities of IASC-linked, major, cross-disciplinary projects (such as MOSAiC, RATIC or PACES) to more effectively reach decision-makers, especially those with the capacity to fund such projects, and the end users of results of those projects. The example of MOSAiC, a vitally important contribution to the Year of Polar Prediction (YOPP), shows the scale of projects that IASC via its members is able to instigate, and from which countries benefit immensely, often far beyond their individual contributions to the programmes.
- Following each Arctic Science Summit Week (ASSW) IASC should produce a "State of Arctic Science Report" (for more details see below). Additionally, in years where the ASSW includes a scientific conference, the report could be complemented by a brief statement summarising major findings and emerging research issues presented at the conference.
- IASC should support Sustaining Arctic Observing Networks (SAON) in its communication efforts.

> TO WHOM to communicate?

The array of recipients of IASC-delivered scientific communication and information about Arctic science is wide. The Action Group believes that IASC should pay particular attention to enhancing its communication in relation to the following:

- National research councils and science foundations that in many IASC member countries serve as the primary funding sources and the chief advisory bodies on research issues. Strengthening this channel of communication is vital to the success of IASC communication efforts and its mission as a whole.
- Arctic Science Ministerial meetings that bring together science ministers, or their representatives, from all countries engaged in Arctic research present a new and important venue that IASC should address accordingly.¹
- The Arctic Council (AC) is considered the primary inter-governmental forum for circumpolar cooperation. As an Observer IASC maintains close and collaborative bonds with the Council. While a lot has been done regarding cooperation with the AC, the communication from IASC to the AC could be further enhanced, including with the AC Secretariat, the secretariats of the WGs, and the AC chairing country and its team.
- Future meetings taking forward the implementation of the Agreement on Enhancing International Arctic Scientific Cooperation.²
- o The Intergovernmental Panel on Climate Change (IPCC). The CASP Action Group commends to IASC exploring the possibility of becoming an Observer to the IPCC and of potential benefits of such status with regard to communicating scientific information on the Arctic to this forum.
- The World Meteorological Organization (WMO). IASC already works closely with the WMO in supporting the Year of Polar Prediction (YOPP) which is orchestrated by the WMO. The recent admission of WMO as Observer to the Arctic Council presents a new platform, where the two could further extend their collaboration to enhance delivery of scientific information to the AC and others.

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¹ Following the first Arctic Science Ministerial meeting organized in Washington D.C. in September 2016 – the White House Arctic Science Ministerial - the second one will take place in Berlin on the 25-25th October 2018 and will be organized jointly by Finland, Germany and the European Union.

² The Agreement, signed in May 2017, entered into force on the 23rd of May 2018.

> HOW to communicate?

This part of the report focuses on concrete actions needed to enhance IASC provision of scientific advice and information. It includes both specific steps to produce the proposed a "State of Arctic Science Report" as well as other recommendations.

To ensure the inclusion of both national and thematic perspectives, a "State of Arctic Science Report" should be based on contributions from national representatives to IASC and from all IASC Working Groups. To produce such reports the CASP Action Group recommends the following steps:

- 1. To generate an overview of national perspectives from the thematic working groups, each national representative within each IASC WG shall submit a 1-2 page document up to 4 months before each ASSW listing this country's science priorities in each year, major ongoing and upcoming projects within the field of interest of the given WG, identify emerging research issues as well as matters concerning international Arctic scientific cooperation (successes, remaining obstacles, observed progress), and, if possible, major identified gaps in data.
- 2. To ensure inclusion of thematic perspectives, the secretariat of each WG shall be tasked with preparing, based on submissions from all countries within a given WG, a draft 2-5 page document for the upcoming ASSW (which is also the only annual meeting of the IASC WGs) summarising received papers from countries' representatives, covering: major themes, emerging scientific priorities, issues regarding research collaboration and remaining gaps in data.
- 3. To provide an overview of the overall country's position regarding its scientific priorities and major issues concerning Arctic science and scientific cooperation in a given year, each IASC Council member shall submit to the IASC Secretariat before the upcoming ASSW a 1-2 page document summarising the five reports presented and submitted to each WG.
- 4. <u>"State of Arctic Science Report"</u>: Based on submissions received from the WGs (prepared by their Secretariats, see above) and from IASC Council representatives, the IASC Secretariat within 2-3 months after each ASSW shall produce a short document (5-10 pages) summarising the state of Arctic science in a given year, including information on the state of Arctic scientific cooperation, as reported by IASC member countries.
 - To facilitate this process, the IASC Secretariat should prepare a template for such reports, to make the reporting easier for the countries' representatives.

The information synthesised in this manner by IASC in a "State of Arctic Science Report" would serve as an important contribution to discussions of relevant decision- and policy-

makers in various fora – as described in the 'To Whom to communicate?' section. At the same time, CASP recognises that each country has its scientific community and system organised in a different manner. The Action Group acknowledges the importance of consultation within member countries' communities, and cognisant of their capacities, to decide how best to prepare the reports from national representatives.

Furthermore, the Action Group recommends:

- Ensuring translation of key IASC documents to Russian. Recognising that English is the official language of IASC, ensuring translation of the most important IASC documents (e.g. the final report of ICARP III) would be of significant added value and would serve well the scientific community as a whole – both within IASC and beyond it.
- Creating a new IASC Science Communication Fellow. Add to the IASC Fellowship programme a Fellow for Science Communication with adequate training and experience in this field. The SciComm Fellow would be responsible for supporting outreach efforts of the IASC WGs and work closely with the IASC Secretariat.
- While the format of each Arctic Science Ministerial meeting and of future meetings regarding the implementation of the Agreement on Enhancing International Arctic Scientific Cooperation is left to their organisers, IASC should seek to ensure its contribution to the meetings via involvement of IASC representatives in preparations for them. Where possible, this could include also delivering a presentation on the state of Arctic science to science ministers and relevant officials.

Summary

The creation of the IASC Strategic Plan 2018-23 offers the organisation an excellent opportunity to make a real change in how the state of Arctic science, scientific cooperation, needs and gaps is communicated to policy- and decision-makers. The Action Group believes that taking the steps recommended in this report can play an important part in delivering that change and with that both realising IASC's full potential and further elevating its international role and profile.

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