International Arctic Science Committee (IASC) Activities' Report - Year 2021

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1. Introduction

The International Arctic Science Committee (IASC) is governed by a Council, composed of one representative of each of its member countries, which meets annually at the Arctic Science Summit Week. The Council sets priorities and guides the work of the organisation. An Executive Committee, consisting of an elected President, four elected Vice-Presidents and a permanent Executive Secretary operates as a Board of Directors and manages IASC activities between Council meetings. The Secretariat is currently hosted by Rannis (Iceland), and is responsible for the day-to-day operations of the organisation. The Secretariat was previously hosted by Germany, Norway and Sweden.

Despite the difficulties under which we have operated since this awful pandemic entered our lives in December 2019, Arctic scientists have remained compelled and committed to exploring the mysteries of our environment and advancing our societies understanding of the complexities and subtleties of the role of the Arctic in the Earth System. Social and human dimensions have been the foci of one of our five working groups since 2010 and in the last decade we have strived to understand the consequences of the rapidly changing environment and the implications of global change upon the peoples of the Arctic. The impacts of the pandemic on the peoples of the North, the concerns for racial justice and gender equity, and our need to better engage Indigenous people in our research efforts have given emphasis to our actions to understand social issues and promote individual and community well-being. We have initiated efforts to diversify our membership and have implemented many of the recommendations proposed by the Action Team on Indigenous Involvement, including the appointment of two Indigenous Fellows to the working groups, but we acknowledge these efforts must be continued and much work remains to be completed.

2. Main activities carried on by IASC during 2021 relevant for Italy and for CNR

Most important activities carried out in 2021 relies on:

1. IASC Strategic Plan Update

The current IASC Strategic Plan was developed as directed by the IASC Council based upon the key priorities and overarching messages of the 3rd International Conference on Arctic Research Planning (ICARP III). This, our first Strategic Plan, was approved by the IASC Council in June 2018 in Davos Switzerland and is valid from 2018 until 2023. It is based on three scientific 'pillars' that provide direction for a necessary progression from knowledge production, to exchange, to action.

IASC must develop a new Strategic plan for 2024 onwards. However, in 2025, the 4th International Conference on Arctic Research Planning (ICARP IV) will be held and its outcomes will influence IASC strategic planning in the future. Based on discussions at the October 2020 ExCom meeting, a proposal will be made to Council to extend the existing Strategic Plan through 2025 with only an internal update of the existing text during 2022/2023.

2. Establishment of an Action Group on Carbon Footprint.

IASC wants to ensure a full organizational response to the climate crisis. Therefore, these Terms of Reference ask the AGCF to think broadly and holistically across IASC's actions, activities, and the scientific context within which the organization sits.

Significant contributions to the carbon footprint of IASC and Arctic research included: supporting international travel for networking and research activities; supporting and hosting meetings, workshops, and large conferences; field logistical operations; and lab operations and computing infrastructure.

AGCF suggested many ways to reducing carbon footprints: through sharing resources to minimize emissions; changing fuel sources to renewable alternatives; preferencing support of projects which reduce IASC's carbon footprint (e.g., funding honoraria rather than plane tickets); replacing high-carbon actions with low-carbon alternatives; building knowledge about carbon sources and sinks in natural and built environments; and offsetting emissions, as a last resort.

The Action Group considered both the direct and indirect impacts of IASC funding and activities (e.g., IASC funds travel – but convening ASSW might reduce some travel). The Action Group considered the possible impacts of its recommendations, and the equity implications therein (i.e., ensuring that early career researchers or Indigenous scientists are not further marginalized).

The AGCF consulted with IASC partners including, but not limited to the AGU Meetings Committee, APECS, Arctic Youth Network, the Belmont Forum, FARO, IACS, INTERACT, SCAR, and WWF Arctic, who are working on complementary efforts to reduce their carbon footprints.

3. Activities carried on by Carlo Barbante within IASC during 2021 and impact on the Italian scientific community

We had continuous exchange of ideas with the Italian representatives in the IASC Working Groups. The Italian national participation to these WGs was low in the past years, because of the difficulties of supporting the participation of Italian researchers. Since when the Ministry of University and Research established the *Programma di Ricerche in Artico*, it was possible through the Arctic Scientific Commission to support to the participation to the WGs of some Italian Researchers.

I actively participated to the IASC Strategic Plan Update and I took part to the Action Group on Carbon Footprint, producing a Report (https://iasc.info/our-work/action-groups/26-action-group-on-carbon-footprint).

4. Evaluation of the participation in terms of benefits and membership cost

The establishment of an active participation to the Working and Action Groups made a considerable impact in the Italian Arctic research system and CNR in particular. We could indeed establish an important networking with the international research community, which lead to the participation to common research initiative and sharing of facilities.

5. Evaluation of Italians' attendance and how to improve interest and involvement

The Italian National Community has to be more present within the Social and Human WG. These themes are more and more important in the Arctic research especially considering the role of our Country as an Observer member in the Arctic Council. One of the greatest benefits in participating to the IASC activities is that of encouraging and facilitating cooperation between Italian and international researchers in all aspects of Arctic research and in all areas of the Arctic region

6. Italian experts with important roles within the Union or within related Commissions and Programs (if known)

Italian researchers are now sitting in almost all the WGs. This has been a great achievement, since the WG is the place where most of networking s carried out.

- Atmosphere WG Stefano Decesari (ISAC-CNR)
- Cryosphere WG Andrea Spolaor (ISP-CNR)
- Marine WG Tommaso Tesi (ISP-CNR)
- Terrestrial WG Antonello Provenzale (IGG-CNR)

Composition and activities of the WG are reported in the https://iasc.info/working-groups/

7. Notes (if any)

All the documents stored in the IASC web site are available upon request.

8. Conclusions

It is extremely important to encourage the participation of Italian Scientists to the governing bodies of IASC and of the Working Groups and in particular in key positions such as those of vice-Chair and Chair. I think that in a few years we will be in a position to propose someone

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Carlo Barbante