Principles to Guide the Activities of the IAI Science Policy Advisory Committee

a report to IAI CoP 23

Overview: At the twenty-first Conference of the Parties (CoP - Montevideo, Uruguay, 12-13 June 2013) IAI members decided under the Action List for June 13 the establishment of an Advisory Committee on Science-Policy Liaison, hereafter called the *IAI Science Policy Advisory Committee (SPAC)*. The guidance provided by the IAI CoP charged the SPAC to develop an IAI strategy to improve and broaden the links between its scientific work and policy-making communities, and thereby provide support and guidance to the Directorate and the CoP. The SPAC is designed to advise the IAI on how to:

(1) effectively link its science and research to decision making;

(2) build institutional capacity for a dialogue between scientific research and decisionmaking; and

(3) effectively engage policy stakeholders in the Institute's programs and other activities.

It is recommended that an SPAC be an ongoing Committee of IAI, guided by the SPAC Mandate outlined in its Terms of Reference and to focus its work and programmatic efforts on adaption strategies, methodologies and tools:

"To enable more informed, timely and responsive adaptation policy and decisionmaking for the global changes that confront the Americas."

These activities of the SPAC shall be conducted in the context of the IAI founding principles of scientific excellence, international cooperation and full and open exchange of scientific information relevant to global environmental change.

Given the goals of the IAI and its science-policy liaison initiatives, the SPAC suggests that it is a natural evolution of the IAI program to *initiate a focus on adaptation*1 (as suggested in the diagram below) that builds on its base of high quality scientific knowledge on global change by an additional effort that promotes dialogues on adaptation strategies, and that develops methods and tools to support decision-making and policy development. In implementing such a focus on adaptation, it is suggested that these six overarching principles guide the work of the SPAC.

Begin with Users' Needs: Decision support activities should be driven by users' needs that can be identified collaboratively and iteratively in ongoing two-way communication between knowledge producers and decision makers. While the IAI does not have the size and capacity to address users' needs directly, it can, however,

¹ The IPCC defines adaptation as adjustment in natural or *human systems* in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities. Further, IPCC defines adaptive capacity (in relation to climate change impacts) as the ability of a system to adjust to *climate change* (including *climate variability* and extremes) to moderate potential damages, to take advantage of opportunities, or to cope with the consequences.

work with the IAI CoP and other entities in IAI member nations to develop an enhanced understanding of what decision makers need to know.

Give Priority to Processes Over Products: Decision support is not merely about producing the right kind of information products. Interpersonal and inter-institutional interactions are critical to effective decision support. The IAI is a service provider and an agent to develop a culture of learning among decision support participants. Essential to these processes is two-way communication and effective leadership guided by these principles.

Link Information Producers and Users: Decision support systems require networks and institutions linking information producers and users. The cultures and incentives of science and practice are different and those differences need to be respected if a productive and durable relationship is to be built. Decision makers are accountable to agencies, publics, stakeholders, or shareholders. Scientists, by contrast, are primarily accountable to their funders and their academic institutions and peers. The IAI's structure and objectives place it at the intersection of these responsibilities. It shares with both groups the social contract with society. The IAI in its next epoch has the opportunity to develop additional skills as a broker of scientific knowledge and can serve as a boundary organization,2 which is designed to facilitate collaboration and information flow between the research and public policy communities.

Build Connections Across Disciplines and Organizations: This is the IAI's successful core business. Not only does the IAI implement interdisciplinarity and networking, but, recently it has begun to investigate the processes of integration. Results are being brokered by the IAI between different sectors and institutions. Decision support services and products (knowledge) must be shaped this integration and multidisciplinarity.

Seek Institutional Stability: Decision support systems need stable support. Stable decision support systems are able to obtain greater visibility, stature, longevity, and effectiveness. IAI member country support has been variable but constant enough to have provided stability for 20 some years. Maintaining this is a constant effort, and is fundamental to the development of effective adaptation strategies.

Design for Learning: Decision support systems should be structured for flexibility, adaptability, and learning from experience. The IAI has shown its capacity to constantly evolve and is probably at the forefront of global change education and knowledge mobilization. Development and maintenance of learning networks for science integration and decision support is a key output of the IAI. One of the most important real-time learning modalities is *deliberation with analysis*. This is an iterative process: it begins with the participants in a decision working together to define objectives and other parameters; then working in real time with experts to generate and interpret decision-relevant information; and constantly reviewing the objectives in the light of decisions based on that information.

² There is a rich literature on boundary organizations, organizations designed to facilitate collaboration and information flow between the research and public policy communities, have been advanced as a powerful means of achieving support to policy development and decision-making. See: http://www.hks.harvard.edu/gea/pubs/huru1.pdf or http://links.jstor.org/sici?sici=0162-2439(200123)26:4<399:BOIEPA>2.0.CO;2-D#sthash.4szYZU9T.dpuf

Summary: To build upon its scientific foundations and expand its successes in supporting informed decision making, the IAI is evolving with a greater emphasis on science-policy linkages through its new Buenos Aires office and the Science-Policy Advisory Committee. To provide strategic integration, there is also an effort to establish an analysis and foresight mechanism (e.g., *Deliberation with analysis)* that is to be linked to the office to be established in Brazil. Medium term priorities in these processes are:

- 1. **Multidimensionality of Global Change and Policy:** There are demands for multidimensionality but also for clear priorities in the foundational science. The balance will be set by the response to the IAI's open calls, but should also be guided by policy input.
- 2. Scientific uncertainty: Scientists in a dialogue with decision makers can present uncertainties in a more useful way in part this will be driven by realizing the urgencies of decisions and actions. Uncertainty is also an asset in the process. Since results, decisions, and actions are subject to uncertainty, incomplete knowledge and changing conditions, the science-policy discourse must be provisional and a mutual learning exercise. Up to now, this has largely been an unplanned process. The IAI must explore how much and what planning is needed and possible.
- 3. Value Differences: Value differences exist between different stakeholders (including countries) in the IAI that should find a forum in the science-policy dialogue, and which the SPAC and others integrate into their efforts.
- 4. Adaptation Methods and Tools: Adaptive management, iterative processes, project and program reviews are key tools which will guide the work of the SPAC.

