

## If the principles of responsibility, integrity, independence and accountability are the answer, then what was the question?

by Dr. Marc Saner, Associate Professor at the Department of Geography, Environment and Geomatics and the Inaugural Director of the Institute for Science, Society and Policy

This blog was [originally published by the International Network for Government Science Advice](#) on October 25, 2016

I had the privilege to be the rapporteur at the *Workshop on Principles & Guidelines for Government Scientific Advice* held on September 28, 2016 and to report the results to the plenary of the 2<sup>nd</sup> *INGSA Conference* two days later. The workshop was facilitated by James Wilsdon and Dan Sarewitz and included approximately 40 experts from 20 nations, with additional input from the *Global Young Academy*. I offer here observations from the rapporteur's vantage point.

(1) The **charge** to the workshop attendees originates from Article 4 of the [Declaration on the Enabling Power of Science](#) of the 2015 Budapest *World Science Forum*. In this declaration, two points need to be noticed. First, scientific advice is cast as a means to achieve results on three global ends: reach sustainable development goals, address climate change, and reduce our vulnerability to disasters. Second, and ironically, the request for advice on universal science advice principles contains its own answer (emphasized in the quote below):

“We call for concerted action of scientists and policy-makers to define and promulgate universal principles for developing and communicating science to inform and evaluate policy based on **responsibility, integrity, independence, and accountability**. We call on all scientists to monitor and assess policy areas and provide, in a pro-active manner, independent and timely science advice even when its application is not guaranteed or not expected.”

(2) If these four highlighted principles are at least part of the answer, then what exactly was the **question**? I believe that everyone in the scientific advice business will agree that a clear question really helps in formulating a helpful answer. One of the first interventions at the workshop (by Frans Brom) raised this issue. Another early intervention (by Sir Peter Gluckman) emphasized that we must consider a multitude of contexts for scientific advice. The *Global Young Academy* also chose to focus its contribution on the topic of diversity, including the diversity of knowledge and the diversity of audiences. An incomplete list of these contexts, as were raised at the workshop and the conference could be captured and bracketed as follows:

- Emergency <> Non-emergency
- Informal or *ad hoc* <> Formal or systematic
- Individuals <> Committees
- Commissioned <> Non-commissioned
- Expert-centered <> Public deliberative
- Formal science <> Traditional knowledge
- Local <> International
- Developing countries <> Developed countries

- Regulatory assessments <> Policy development <> Political decision-making

This diversity may well be needed to make headway on the goals of the Budapest Declaration—using science to save the planet is indeed a formidable challenge. The diversity does not simplify the quest for universal principles, however. All the more reason to look for clarity about the question at hand. When reviewing the Budapest Declaration and after listening to the workshop and conference, I found that all of the following six questions are valid interpretations of the charge (the word “it”, below, refers to “scientific advice”):

- i. How to do it? – this calls for a **formula** or a system of principles, standards, or guidelines.
- ii. How to teach it? – this calls for a **curriculum** or a table of contents of a longer text.
- iii. How to evaluate it? – this calls for **compliance** thinking such as indicators of accountability, return-on-investment, or success.
- iv. What to aspire to? – **values**-based codes are commonly used to engender debate and define leadership styles.
- v. What matters most? – lessons-learned can be condensed into a **“top ten”** list (or a similar idea)
- vi. Which new direction? – there is a sense in the Budapest Declaration that there is real room for improvement. A **manifesto** could highlight key components of directional change.

Some of these questions are closely related and I, thus, do not believe it necessary to select a single question. However, we do need to select a small number of related questions. Attempts to satisfy all six interpretations at the same time are not likely to succeed. For example, compliance codes are hard to combine with aspirational codes. A traditional cookbook and an avant-garde manifesto are two different things.

(3) What is the right **length and format**? The nature of the question has, of course, a big impact on the length and format of the answer. Nevertheless, we know *a priori* that people are not all that good at remembering more than 3-5 items. As a result, a shorter number of principles can become a **slogan** while a larger number leads to a **checklist** that can be expanded into an entire textbook or guide. A case in point: a card distributed at the conference shows three key aspirations of *Scientific Committees of the European Commission* in the format of a slogan: “Excellence, Independence, Transparency.” The Budapest Declaration, however, is over 2500 words.

At the workshop, we worked on both principles and guidelines. The duality increases the elbow room to include all of the important points but also introduces some confusion over what belongs in the explanation of a principle and how to render the guidelines fully commensurate with the principles. The choice of length and format, thus, deserves some real attention. Once an idea for length and format is chosen, it sets the debate into a direction that is hard to reverse.

(4) What is the right **balance**? Sustainable development is often thought of in terms of triple bottom-line accounting: social, natural, and produced capital, or **people, planet, and profit**. Considering and balancing all three should help us reach the Sustainable Development Goals and it has been

helpful to have this slogan that reminds of the equal status of the non-profit motives. The work on principles can benefit from an analogous slogan. Principles are arguably in the domain of ethics. Just about every ethics textbook will contain (usually in complex language) the following three components of good decisions: **people**, **process** and **performance** (virtue and care, means and duties, ends and utility). It's remarkable to me that the slogan of *the Scientific Committees of the European Commission* hits these three notes. "Independence" refers to a people (although "impartiality" would be a better choice here), "transparency" is an important component of process, and "excellence" relates to performance. I would argue that the text INGSA will produce should strike such a balance too, no matter if the text turns out to be a short set of principles, a longer guide, a list of lessons learned, or a manifesto.

(5) **What's next?** James Wilsdon and Dan Sarewitz used a straightforward methodology to develop draft principles for discussion. They reviewed [important existing texts](#) and distilled the information into a set of principles and guidelines. After the workshop and the conference, I believe the time is now ripe to make a strategic selection of the exact questions INGSA wants to focus on. In an e-mail exchange with Dan Sarewitz, he expressed a particular interest in Questions 4-6 (aspirations, lessons learned and the new direction). I agree with this choice and would like to see the next step focus on these three. But this may be a matter for a larger debate. It may be even meaningful (if practical), to consult the authors of the Budapest Declaration. After all, a principle of good advice is to have a keen interest in the needs, wants, culture, and language of the audience, and to also project the use and possible misuse of the answer one will ultimately provide.

Dr. [Marc Saner](#) is Associate Professor at the Department of Geography, Environment and Geomatics and was the Inaugural Director of the Institute for Science, Society and Policy, both at the [University of Ottawa](#).

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