

**ISI Advisory Board on Ethics: Statistics for the Common Good**

**Governance framework for scientific integrity and professional independence**

Panel Session at the [65th ISI World Statistics Congress](#)

IPS 1118 Wednesday 8 October 9:20 a.m. - 10:30 a.m., Room - Oceania

**Concept Note**

**1 The panel**

The present panel is primarily concerned with the challenges faced by official statistics. The causes and solutions discussed have wider significance for how statistics serves society.

Trust in statistics depends on quality and integrity. The quality of statistics is the responsibility of producers (e.g. statisticians and statistical institutions). The integrity of statistics depends on the framework conditions for official statistics, which are defined by political actors. This session will focus on the latter, not the former. The focus will be on statistical governance and science policy.

The ISI Advisory Board on Ethics (ABE) is responsible for organising the session. Speakers have been invited to represent the perspectives of statisticians, users and stakeholders.

**2 Statistics under challenging conditions: the urgent need for an exchange of views**

[Concerns](#) have been raised about the fragility of scientific freedom and of conditions allowing work to be carried out professionally due to the numerous measures that have been taken by US authorities in recent months. In a supposedly mature democracy, this is all the more worrying. Preserving the integrity of statistics is one of the challenges in such situations. This is particularly alarming when coupled with policies that harm individuals and groups in terms of fair treatment, both nationally and internationally.

The nation state and statistics are products of the Enlightenment. Statistics can enable the state to function effectively. However, the conditions under which they are produced can be susceptible to poor policymaking by those in power. The state, society and statistics are closely linked through the ebb and flow of political trends in good times and bad. It is crucial to determine how the integrity and professional independence of statistics can be reinforced as part of science and good governance. In a globalised and digitally connected world, international matters must be addressed on an international stage. The aim of this session is to discuss opportunities and initiate innovative approaches to promoting science and statistics. What lessons can be learned from recent developments?

Methods used to discredit and relativise verified facts by placing them on a par with assertions, opinions or fabrications are all too often successful. False allegations are made more easily when people do not have a basic understanding of statistics, or even when they have a strong dislike of statistics and statisticians, which are seen as part of the technocratic elite. For example, it is easy to claim, without providing any evidence, that the head of a statistics agency can manipulate figures to favour, or disadvantage, the government.

Statistics underpin international scientific cooperation in fields ranging from vaccine innovation to climate research and sustainable development by providing accessible and shared sources of evidence. When their integrity is undermined, mistrust can spread across borders. An attack on statistics and science in one country can quickly become a political export, replicated elsewhere by actors with similar objectives.

The problem is exacerbated by the emergence of tools such as AI chatbots. These systems rely on unchecked web content rather than documented data sources, and they are not designed to distinguish fact from fiction. Furthermore, much of the quality data produced by government

agencies is unusable for AI purposes as it is neither standardised, machine-readable nor openly accessible. Evidence-based discourse is becoming increasingly rare, being replaced by undocumented opinions. When data portraying countries statistically is not subject to any checks or controls, the authorities become bystanders to their own development. Decisions about their economies, societies, and environments are 'informed' by AI systems that have been trained using distorted and unrepresentative data. Countries with poor-quality data infrastructures are especially vulnerable, as can be seen in examples from the Global South. However, the combination of poor literacy regarding quality data and rising ideologies that disregard scientific knowledge means that the Global North is not immune either.

### **3 Actions and reactions of the statistics community**

How are current developments within the statistical profession perceived, and are the responses adequate? Is there a sufficient understanding of where the threats to the discipline's contribution to society originate, what they encompass, and how serious they are? What strategic frameworks have been designed to address the interconnected challenges of governance, statistical education and public trust? Furthermore, are institutional structures and mechanisms robust enough to enable prompt and effective action in the event of systemic disruption?

Despite numerous initiatives in recent years, including proposals for an advisory body to the UN Statistical Commission, the answers remain unsatisfactory. There is reason to fear a worsening global situation for statistics instead. Just as collective action was necessary in the early 1990s to counter challenges of a similar magnitude, so a renewed and united effort is imperative today to address the current threats and reverse the negative trajectory.

### **4 Professional Ethics**

Professional ethics apply to everyone who works with statistics in different areas

*“The [ISI's Declaration on Professional Ethics](#) consists of a statement of Shared Professional Values and a set of Ethical Principles that derive from these values.*

*For the purposes of this document, the definition of who is a statistician goes well beyond those with formal degrees in the field, to include a wide array of creators and users of statistical data and tools. Statisticians work within a variety of economic, cultural, legal, and political settings, each of which influences the emphasis and focus of statistical inquiry. They also work within one of several different branches of their discipline, each involving its own techniques and procedures and, possibly, its own ethical approach.”*

While the ISI Ethics Declaration focuses on the responsibilities of statisticians producing results, it lacks corresponding principles for those commissioning or using statistics in politics, business or research. There is an absence of a shared sense of responsibility between producers and commissioners to enable informed decision-making.

Ethical dilemmas can have severe consequences for individual statisticians, as demonstrated by cases in Argentina and Greece. This raises the question of how professional associations can provide effective support.

For professional ethics guidelines to be effective, they must be taken seriously in statistical practice and in the training of statisticians, and implemented through application-oriented measures. In this regard, interaction between institutions with defined roles in national and international governance structures, and interest groups such as specific communities or NGOs, fulfils an important function.

### **5 Approaches for a set of measures**

A structured approach involves the following three lines of activity:

- Empowerment:
  - Upgrading statistics to align with the current data landscape is essential to position it as a public digital infrastructure capable of meeting present and future demands. This should involve establishing a global Trusted Data Observatory (TDO).

- Statistical governance has improved in recent decades thanks to quality codes such as the UN Fundamental Principles of Official Statistics. However, these initiatives must now include provisions that reflect the current data landscape. They must also be promoted and secured in a way that enables proper interaction with the political sphere.
- The dissemination and promotion of ethical values and principles through statistical education, online training and modern teaching methods can be used to build capacity in the Global South. Cooperation amongst organisations such as Paris21, the UN and the ISI Academy is essential in this respect.
- Evidence:
  - Having strong connections and networks with the media is vital, including traditional forms of journalism as well as maintaining an engaging and appealing social media presence.
  - The statistical discipline could learn from our journalistic colleagues and their [World Press Freedom Index](#). However, in terms of quality, it must fulfil our professional requirements. Only with an evidence-based approach can we hope to draw the media's attention to global issues affecting working conditions and integrity. Unfortunately, there is little interest or support for this approach within the statistical community.
- Enforcement:
  - The options for dealing with breaches of the quality code or professional ethics by institutional actors are usually limited and depend on political influence. This often reflects the fact that statistical institutions lack strong recognition and positioning within the political structure. Furthermore, the situation is no less complicated at an international level when conflicting interests include ill-doing with statistical evidence.
  - A swift diagnosis of the causes and background of acute violations of the code of ethics, as well as threats to the professional integrity and independence of statisticians, is needed. Appropriate measures must be taken to address these violations, whether they concern the individuals themselves or their successors in position.
  - Interest groups and NGOs such as ISI lack the institutionalised political power to act when wrongdoing emerges. They are limited to using 'soft' tools, such as communicating with those affected and offering expertise. In the worst case, they can publish statements. However, they may have the advantage of being able to react quickly.
  - In the Global South, criticism of international actors based on ethical reasoning can backfire, leading to resistance and scepticism towards perceived Western dominance. How can we apply, promote and execute our global approaches in a way that incorporates proper dialogue with local approaches?

## 6 The panel discussion

The panellists are requested to strengthen the position of statistics in their contributions by focusing on initiatives that target the identified weaknesses and areas requiring action. Particular importance will be attached to cooperation between statistical institutions and NGOs at national and international levels, and, above all, between the various global regions.

### Panellists

- Moderation: Walter Radermacher ([Chair ISI ABE](#))
- Ola Awad ([President of PCBS](#))
- John Aston ([President RSS](#))
- Graciela Bevaqua ([Consultant in Argentina and for IMF](#))
- Albina Chuwa ([Former Statistician General of Tanzania, Member ISI ABE](#))
- Ed Humpherson ([DG Office for Statistics Regulation UK](#))
- Steve MacFeely ([OECD Chief Statistician](#))
- Kerstin Schneider ([Member ESGAB](#))
- Ron Wasserstein ([Executive Director ASA](#))