



Fundamental Principles of Official Statistics and Professional Ethics in the Era of Big Data: Challenges & Strategies for Implementation – A Panel Discussion

**ISI Side Event
UN Statistical Commission
March 3, 2014
UN Headquarters, New York**

The International Statistical Institute (ISI) organized this side event during the UN Statistical Commission in New York. The panel members were:

- Ms. Katherine Wallman, Chief Statistician of the United States, Office of Management and Budget; Co-chair, Friends of the Chair Group on the implementation of FPOS;
- Mr. Wayne Smith, Chief Statistician of Canada, Statistics Canada; Chairman of the Bureau of the Conference of European Statisticians;
- Mr. Werner Bier, Deputy Director General Statistics, European Central Bank and Chair of the Committee for the Coordination of Statistical Activities;
- Mr. Eduardo Sojo Garza-Aldape, President of the National Institute of Statistics, Geography and Informatics, Mexico;
- Mr. Vijay Nair, President of the ISI and Donald A. Darling Professor of Statistics at the University of Michigan, USA.



Ms. Irena Križman (left), ISI Vice-President and Former Director General of Slovenia National Statistics Office, moderated the discussion.

The event was well attended with more than 80 representatives from National Statistical Offices (NSOs) and International Statistical Organizations (ISOs).

In her opening remarks, Irena Križman noted that, in addition to the well-known challenges faced by official statistics, the 'data revolution' has brought new ones. At the same time, it is also creating opportunities for improving statistical practice worldwide. She asked the panellists to comment on these challenges and opportunities as well as suggest ideas/strategies on how to move forward.



The panellists Wayne Smith (left), Vijay Nair, Wayne Smith, Katherine Wallman and Eduardo Sojo Garza-Aldape (middle) and Werner Bier (right).

This was followed by a robust discussion from the panel and questions and answers from the participants. Some of the issues that were raised included:

- The need to be absolutely transparent about the reasons and the methodological issues associated with any changes including possible errors;
- Any data used by the government should be publicly available, including the methods and concepts;
- Statistical organisations are facing many challenges due to the lack of resources, lack of trust, lack of transparency and data security;
- To safeguard the public trust in the institution and in the data published the integrity of Chief Statistician was mentioned as one of the very important factors;
- Confidentiality of the data and threats associated with cyber security are becoming increasingly important;
- Find ways to bring innovative ideas to the attention of those who decide on allocating resources;
- Communication and collaboration should be strengthened among all players in official statistics at national, regional and international levels;
- NSOs can benefit from cooperation with groups in academia and business. At the same time, academia and corporations should be made aware of how they can learn from the Fundamental Principles;
- Some statistical offices are already using alternative sources of data (Big Data), for instance from mobile phones and Twitter, to produce new indicators, such as on the movements of individuals, tourism data, and wellbeing indicators;
- Statisticians have to be the champions in dealing with huge databases and confidentiality matters. They are in a position to understand how to effectively use different data sources and at the same time respect principles of ethics, privacy, and security; and
- Statisticians are aware of the limitations and bias in the use of Big Data. They should emphasise these limitations whenever there is improper use of Big Data by others.

This was followed by a second set of discussion on the interplay between the Fundamental Principles of Official Statistics (FPOS) and the ISI's Declaration on Professional Ethics (DPE). There is a grey zone between the two, and many



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of the issues that are brought to the attention of the ISI are really in the area of FPOS. The question was raised as to who should act in the case of serious violations of FPOS? There was extended discussion, and the general sense was that this was a very complex issue, one that would require careful discussion among the various stakeholders.



Active participation from the floor.

It was also noted that there was a need to modernize the ISI Declaration on Professional Ethics, given the various developments since its last revision in 2010.

Irena Križman concluded the sessions by thanking the panellists for their comments and all the participants for their interesting and constructive contributions to the discussion.

Irena Križman
ISI Vice-President

Ada van Krimpen
Director