

UNITED NATIONS DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS STATISTICS DIVISION United Nations Statistical Commission Global Working Group on Big Data for Official Statistics

Item 2 (i) c. Access and Partnerships – Discussion note by UNSD

# **Discussion note**

### By UNSD

Meeting of the Global Working Group on Big Data for Official Statistics, 29 August 2016, Dublin, Ireland

#### Recommendations for Access to Data

The Global Working Group (GWG) on Big Data promotes the use and thus the access to new data sources for official statistics. In 2015, it drafted so-called Principles for Access to Big Data Sources for Official Statistics. These Access Principles were meant to strike a balance between the legitimate interests of organizations holding Big Data and the public need for official statistics based on Big Data. Their basis was an appeal to the social responsibility of those organizations and they were closely linked to the Fundamental Principles of Official Statistics.

The Task Team on Access and Partnerships led by Statistics Netherlands, Eurostat and ITU was convinced of the need for the principles to support national statistical institutes in acquiring access to new data sources and consulted with stakeholders on the content of these principles.

As explained by Peter Struijs in his discussion note, the term principle may be too strong for adoption by any intergovernmental body, so that rewording to recommendation would be preferable. He concluded and proposed to:

- Change the name of the Access Principles into "Recommendations for Access to Data from Private organizations for Official Statistics".
- If deemed really necessary, organize one more cycle of consulting stakeholders, within strict time limits.
- Let the GWG formally adopt the Access Recommendations and put them on its website as a formally adopted document, so that organizations can refer to it.

#### Public-Private Partnerships for Data Innovation

This note tries putting the access to proprietary data into a broader context, in which the emphasis is put more on partnerships and on shared data, shared services and shared applications than on access to data. Whereas obtaining access to data implies a relation of bargaining between those who 'own' the data and those who 'want' the data, the partnership relation implies working together for a common objective with mutual benefits.

Also when we either opt for the notion of sharing data versus access of data, there is a need to be cognizant of the principles considered by the Fundamental Principles of Official Statistics as adopted by the GA on 29 January 2014<sup>i</sup>. Further articulation of these principles can be found in the generic National Quality Assurance Framework (NQAF) as adopted by the UNSC<sup>1</sup>. Moreover, for the collection, production and dissemination of official statistics at the global and regional level, there is a need for elaborating the Fundamental Principles in a "code of practice" which sets the quality standard for developing, producing and disseminating statistics. It builds upon a common definition of quality in statistics and could target all relevant areas from the institutional environment, the statistical production processes and the outputs of official statistics.

With reference to the existing regional codes of practice in European Statistical System<sup>2</sup>, Africa, Latina America and the Caribbean, the Fundamental Principles could be further detailed for an international code of practice on data collection with reference to legally mandating the statistical authorities to collect information for statistical purposes. Such a principle/recommendation could further elaborate that administrations, enterprises and households, and the public at large may be compelled by law to allow access to or deliver data for statistical purposes at the request of statistical authorities. Moreover, the code of practices can contain complementary principles/recommendations on statistical confidentiality related to the privacy of data providers (households, enterprises, administrations and other respondents), the confidentiality of the information they provide and its guaranteed use only for statistical. The latter principle on statistical confidentiality of the code of practices could indicate that it is secured and guaranteed in law, legal confidentiality commitments of staff on appointment, penalties are prescribed for any willful breaches of statistical confidentiality, guidelines and instructions are provided to staff on the protection of statistical confidentiality in the production and dissemination processes. Also the confidentiality policy is made known to the public, physical, technological and organisational provisions are in place to protect the security and integrity of statistical databases and strict protocols apply to external users accessing statistical microdata for research purposes.

It is expected that these and other principles on sound methodology for the use of adequate tools, procedures and expertise, on appropriate statistical procedures, implemented from data collection to data validation, on non-excessive burden on respondents to ensure that the reporting burden is proportionate to the needs of the users and is not excessive for respondents and on cost effectiveness

<sup>1</sup> 

<sup>&</sup>lt;sup>2</sup> The link is: http://ec.europa.eu/eurostat/documents/3859598/5921861/KS-32-11-955-EN.PDF/5fa1ebc6-90bb-43fa-888f-dde032471e15

will allow appropriate coverage of guidance on access and use of propriety data of data owners for statistical purposes and production of high quality statistics in addition to other data owners.

Moreover in addition to the development of the code of practices for adoption at the global level to complement the National Quality Assurance Framework as the quality standard for official statistics, we should also explore the avenue for public private partnership agreements. Here we make reference to a recent article by Alexander Kostura and Daniel Castro (of the Center for Data Innovation) titled *"Three Types of Public-Private Partnerships That Enable Data Innovation"*, in which they describe indeed three types of public-private partnerships, namely Cooperative research and development agreements, Cooperative agreements, and Joint venture partnerships. They gave examples for each type of partnership.

Firstly, the National Oceanic and Atmospheric Administration (NOAA) has established a series of **cooperative research and development agreements** to make the organization's vast stores of environmental data more accessible to the private sector and the public through cloud-based platforms. The agreements come at no direct cost to the government, cover a term of three years, and allow NOAA to develop and test prototypes of data sharing platforms with each of its collaborators. Collaborators have non-exclusive access to NOAA data and, while they are allowed to charge for access to the data, they mustprovide equal access on equal terms to anyone who wants access.

Secondly, the U.S. Census Bureau utilizes **cooperative agreements** to engage companies, universities, and nonprofits in projects that support and promote statistical research and methodology and improving their mission to make statistical data accessible to the research community. For example, the Census Bureau and the National Science Foundation, an independent federal agency that funds research in science, health, and national security, have awarded cooperative agreements to over 50 public and private partners to create a national network of Federal Statistical Research Data Centers, which provide non-government researchers with secure access to otherwise restricted government data sets.

Finally, A Joint Venture (JV) partnership is a public-private partnership in which a government agency and its business partner jointly plan, invest resources in, and carry out a project to meet an agency mission need and share any revenue generated from the project. The National Technical Information Service (NTIS), an agency within the Department Commerce charged with managing its information resources, holds the unique authority within the Department to form these partnerships. NTIS matches up client agencies in the federal government with private sector partners who have the expertise to advance the government's research and development goals. Any federal agency can engage in one of these JV partnerships provided they have the appropriated funds available. NTIS serves as the relationship manager, signing a memorandum of understanding with the selected private partner and an interagency agreement directly with the federal client agency.

Secretary of Commerce Penny Pritzker has expanded the mission of NTIS to explicitly include a role in making federal government data on the nation's economy, population, and environment

more accessible and useful. NTIS recently announced a request for proposals from for-profit, nonprofit, and research performing service organizations to enter into JV Partnerships with federal agencies to improve the way the government collects, analyzes, uses, and shares data to drive economic growth, make government operations more efficient, or improve public services. NTIS will review the proposals and generate a pool of organizations which are available to work on projects related to priority issues like big data, open data, open access, smart cities, and the Internet of Things. For example, NTIS describes a potential JV in which a data analytics partner enhances the capabilities of federal agencies to connect different data sets from across the government and derive new insights to improve public services.

The full article can be found at <u>https://www.datainnovation.org/2016/08/three-types-of-public-private-partnerships-that-enable-data-innovation/</u>

## Concluding remarks

The development and adoption of an international code of practice complementing the regional code of practice and the three types of partnerships seem to cover quite well the way in which NSOs need to operate in projects involving the use of large administrative dataset, Big Data or other non-traditional data sources for statistical purpose. This raises for us a few questions for further discussion, namely:

- How and in which moment can these recommendations for Access to Data help in setting up the right public-private partnership models?
- Is the development of the international code of practice as a quality standard for developing, producing and disseminating statistics an alternative for the recommendations for Access to Data?
- Will these recommendations make a positive contribution in establishing the partnerships, or could they actually hurt and shy away potential partners, since the recommendations are prescriptive in one way or another?

<sup>&</sup>lt;sup>i</sup> For link: http://unstats.un.org/unsd/dnss/gp/FP-NEW-e.pdf