



## *International Conference on Big Data for Official Statistics*

Organized by UNSD and NBS China  
*28-30 October 2014, Beijing China*

### **Concept Note**

(as of 13 August 2014)

#### **Background**

Innovations in technology, broad use of electronic devices and the all-around generation of digital information brings fundamental changes to the availability of real-time information, such as data from GPS devices, from mobile phones or from social media. These high-volume and sometimes loosely structured data sources, commonly referred to as Big Data, are different from conventional data sources for official statistics, and have many challenges in their application. The business case still needs to be made for many statistical offices if, why and how Big Data are useful for official statistics.

The potential of Big Data sources resides in their timely (sometimes real-time) availability of large amounts of data. The traditional data sources, such as household and business surveys are often costly and slow in the production of statistics. Big Data could supplement, reduce or replace such data collections. However, the statistical community is conscious of the fact that in order to be able to take advantage of these innovative data sources, it needs to adequately address issues pertaining to methodology, quality, technology, legislation, privacy, management and finance. It is also of utmost importance to create an environment where public trust in the use of Big Data for official statistics is established and where privacy and confidentiality of personal information can be assured.

The statistical community has recognized the potential use of big data for official statistics. The UN Statistical Commission therefore established in March 2014 a global working group mandated to provide strategic vision, direction and coordination of a global programme on Big Data for official statistics, to promote practical use of sources of Big Data for official statistics, while finding solutions for their challenges, and to promote capacity building and sharing of experiences in this respect.

Currently, mostly developed countries have started using various Big Data sources encountering a number of challenges. Mobile phone data, Traffic loop data, Twitter data and Satellite imagery have all been successfully used. Whereas national circumstances can be fairly unique, it is still intended to generalize the use of such Big Data sources to other countries, especially also in developing parts of the world.

### **Purpose of the Conference**

The International Conference on Big Data for Official Statistics tries to contribute to a better understanding of the issues surrounding Big Data and to a sharing of experiences. The purpose of the Conference is therefore:

- i. Giving an overview of the ongoing initiatives of Big Data for official statistics at the international level
- ii. Working on concrete and practical examples of Big Data sources, while addressing the concerns of methodology, standards and norms, privacy, utility, risks and research on Big Data for official statistics
- iii. Sharing national experiences of building partnerships for Big Data projects

### **Target audience**

The Conference is intended first of all for statisticians, but also for researchers, academia, and representatives from the private sector.