

## **The use of mobile phone data and geo-spatial information**

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The advent of Big Data is having an important impact on the production and analysis of data, and is changing the environment within which the official statistical community operates. Spurred by the increased demands for timely and disaggregated data for the monitoring of the new sustainable development goals of the Post-2015 development agenda, innovative technologies and new data sources are required. The rapid spread of mobile phone usage offers a great opportunity to improve timeliness and fill data gaps. There are today almost 7 billion mobile-cellular subscriptions worldwide. Each of these mobile phones generates data and leaves a digital footprint by communicating, accessing the internet and using various applications. Mobile phone data provides – among others – the location and movement of mobile phones, and is considered one of the most promising data sources for measuring and monitoring spatial-temporal activities of the population. In parallel, geospatial information services, including satellite imagery, have added new dimensions to traditional statistical outputs. Together this creates a range of new opportunities to modernize statistical production and improve the quality in different domains of official statistics, including tourism, transportation and population statistics. Privacy concerns and access to mobile phone data are important challenges, as are some technological and methodological difficulties. Despite these challenges, mobile phone data, in particular if combined with satellite imagery and other geospatial information, can offer unprecedented opportunities for improving the timeliness, frequency, coverage and relevance of official statistics, especially in developing countries.

**Key words:** Big Data, sustainable development goals, Post-2015 development agenda, mobile phone data, geo-spatial information, satellite imagery