

Statistical Commission

Forty-ninth session

6 - 9 March 2018

Item 3(e) of the provisional agenda

Items for discussion and decision: Big data for official statistics

Statistics Poland experts actively participate in the Eurostat project as part of the ESSnet Big Data consortium, participating in the work of numerous working packages and leading one of them. The aim of the pilot action is to explore the possibility of using Big Data sources to combine with existing data from official statistics in order to improve current statistics and develop new ones in various statistical domains. This work package focuses on the following areas: Population, Tourism / border crossing, Agriculture. As a result of the work, a methodology was prepared for pilots related to the use of, among others, satellite images for agriculture (study of crop types); data from social media to study moods and life satisfaction; traffic sensors for work related to border traffic. Practical work was also carried out to increase the use of data from websites in the field of tourism (air traffic, rail transport and other means of travel, travel destinations, hotel chain). As a result of the work recommendations will be developed and the pilot for implementation in the next wave is to be prepared.

As part of the **Global Working Group on Big Data for Official Statistics** – GWG, there are similar areas of research to produce trusted data, for example as part of:

- a task team on satellite imagery data, whose practical goal was to develop methods for identifying the type of crops and classification based on Landsat 7, a methodological guide containing information about the sources of Earth observation data, methodology to create statistics on crops and other statistics through the use of data from satellite systems - the developed document is particularly valuable for statistical offices that plan research work in the field of the use of earth observation data for the first time;
- a task team on social media data to study indicators of opinion and sentiment. The group plans to set up a multi-source data team. Poland is already researching and developing a methodology to combine data not only from many sources (including Big Data), but also from many domains.

The study of similar thematic areas by various groups of experts may provide valuable knowledge and increase quality. Polish representatives would gladly be included in the work of newly created teams in order to use the knowledge and experience already gained and exchange experiences with other countries.

Expert's professionalism is extremely important in building trustworthy statistics and trust in statistics. Processes of modernization of statistical production should take advantage of the potential of new data sources and technologies, to this end the key is to develop good, transparent practices on cooperation and partnership with public institutions, research communities, as well as the private sector and improving the competences of statistical staff.