BigData as a solution for Migration Statistics

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Aim of WG: Currently working on the finalization of the Handbook on the Use of Mobile Phone Data.

Handbook on the Use of Mobile Phone Data: MIGRATION STATISTICS

- **Structure of the handbook:**
  - ❑ Introduction;
  - ❑ Data Sources;
  - ❑ Quality issues;
  - ❑ Methods (concepts, definitions, data processing algorithms, and quality assurance)
  - ❑ Conclusion.

- **The aim** of the handbook is to inform the statistical data users about the possibilities of production migration statistics using MPD.

Data Sources for migration statistics – **Traditional Data**

- Population Census, Population Register and Administrative data - A solid source for migration statistics;

- **Limitations:** coverage, measurement, timeliness, and data quality issues

Alternative Data Sources for migration statistics - MPD

Advantage:

- ❑ Timeliness (raise frequency of data collection - more data points)
- ❑ access to statistical information previously not available (new indicators)
- ❑ calibration opportunities for existing data,
- ❑ space and timely resolution/granularity (i.e. the scale or level of detail in a set of data)
- ❑ Accuracy.

Limitations and caveats

When using MPD to produce official statistics, it is important to consider the following:

❑ The availability and quality of socio-demographic information;

❑ Completeness and accuracy;

❑ To obtain the data from all the Mobile Network Operators;

❑ MPD can be difficult to access from MNOs due to privacy and other legal aspects;

❑ Geographic accuracy or the so-called "tossing";

❑ Coping with under- or over-coverage.

Traditional vs. new data sources:

Modern technologies will not be able to replace traditional data sources, but rather they will be a complimentary source for increasing the data quality and producing new indicators.

Thank you for your attention!