UNECE
Working Party on Transport Statistics

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Mobile phone data for Transport Statistics

UN-CEBD Task Team on Mobile Phone Data (MPD)

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UN Committee of Experts on Big Data and Data Science for Official Statistics (UN-CEBD) Task Team on Mobile Phone Data (MPD)

- Established since the inception of the UN Committee of Experts on Big Data and Data Science for Official Statistics (UN-CEBD)
- Explore the use of mobile phone big data for the different areas of statistics and develop methodologies
- Composed of around 50 individual members/ 30 entities - international and regional agencies, countries, academia, private agencies/companies
- Meets (virtually) once a month to discuss issues related to the deliverables, events, and other activities

Lead: ITU

Members:

- Brazil
- Colombia
- Gambia
- Georgia
- India
- Indonesia
- Italy
- Japan
- Korea
- Malaysia
- Mexico
- Netherlands
- Oman
- Philippines
- Qatar
- Romania
- Saudi Arabia
- United Arab Emirates

- EU JRC
- Eurostat
- IMF
- IOM
- UNFPA
- UNGP Jakarta
- UNSD
- World Bank
- OECD-ITF
- UN-ECE
- Flowminder
- GSMA
- Positium
- Telenor

Areas of focus

1) Tourism statistics (lead: BPS Indonesia)

2) Migration statistics (Lead: GeoStat, Georgia)

3) Census and dynamic population (lead: Positium)

4) Displacement in disaster context (lead: University of Tokyo)

5) Information society indicators (lead: ITU)

6) Transport and commuting statistics

Activities of UN-CEBD MPD Task Team (2022)

- Nov 2022 - Organized a thematic session during the International conference on big data in Indonesia

- Nov 2022 – Organized a workshop on mobile phone data

- Launched the five **Methodological Guides on the use of mobile phone data**
  - [Displacement and Disaster Statistics](#)
  - [Dynamic Population Mapping](#)
  - [Measuring the Information Society](#)
  - [Migration Statistics](#)
  - [Tourism Statistics](#)

- Launched the MPD awareness raising course
  [UN Global Platform - Learning Management System](#)

Sub-group on MPD for transport statistics Preparation of the Guide

Members:

- World Bank
- The University of Tokyo
- Statistics Italy
- UC Berkley
- Indonesia Statistics
- UNSD
- Positium
- Eurostat
- UNECE
- OECD-ITF

- Introduction (Purpose and advantages of using MPD, Target audience, link with SDG indicators)
- Applications/Use cases of Mobile Phone Data (country examples needed)
    - Transport and mobility
    - Transport and urban planning
    - Commuting statistics
- Data Sources/reference data (country examples needed)
    - Mobile phone data (data access, etc)
    - Traditional transport data
    - Sensor Data
- Methods (country examples needed)
    - Data processing
    - Integration with other data sources
    - Trips generation
    - Origin and destination generation
    - Transport mode detection
    - Routing
    - Evaluation and validation
- Quality assurance (country examples needed)
    - Raw data
    - Indicators based on MPD
    - Limitations of MPD

Way forward/activities in 2023

- Dissemination of the Guides and awareness raising course
- Conduct of trainings and events in collaboration with the UN-CEBD regional hubs

- Synthetic MPD data – to be used for capacity building
  - Sub-group was formed
  - Mandate to review the simulator done in the context of the EU project
  - Adapt the simulator to reflect data needed to apply methodologies covering the 6 areas of statistics
  - Inviting countries who to join the sub-group
  - Inviting countries to share experiences

Please contact: magpantay[at]itu.int

https://www.itu.int/en/ITU-D/Statistics/Pages/bigdata/default.aspx

https://unstats.un.org/bigdata/task-teams/mobile-phone/index.cshtml

Thank you!