Workshop on use of Mobile Phone Data

Organized by Positium, Flowminder, and BPS Indonesia

Purpose

This workshop aims to demystify mobile phone data by way of practical work with datasets themselves. The course is structured around the chain of processing mobile phone data (MPD), from big data to results. During this course you will be able to learn and experience (a) what is mobile phone data; (b) how to extract insights; (c) how to use it for official statistics.

Presenters

Date: 29 April -1 May 2019

Venue :   Data Science Campus, National Institute of Statistics of Rwanda, Kigali, Rwanda

Presenters: Mr Siim Esko, Positium
                   Ms Tracey Li, Flowminder
                   Ms Alfatihah Reno, BPS Indonesia
                   Mr Karoly Kovacs, UNSD
                   Mr Shengjie Lai, University of Southampton

Programme

Day 1 Mobile Phone Data and Official Statistics

11.15		**Introduction**

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                   Presenter: Karoly Kovacs
                   Introductions to the workshop – Why use Big Data for Official Statistics

       Session 1.1 **Mobile Phone Data use in Official Statistics**
                   Presenter: Karoly Kovacs
                   UN Global Working Group for Big Data in Official Statistics has a dedicated Task Team on Mobile Phone Data – overview of the objectives, deliverables and current work of the task team and its ongoing projects
                   Current projects in the use of MPD for official statistics

       Session 1.2 **Mobile Phone Data overview**
                   Presenter: Siim Esko
                   What is mobile phone location data? Where does it come from? What information does it hold and what it doesn't?

       Exercise   **Mobile Phone Data hands-on**
                   Facilitators: Siim Esko, Tracey Li and Alfatihah Reno

Participants will have access to and inspect two common types of mobile phone data – Call Detail Records and signaling data – in the raw data form

Session 1.3	**Access MPD**
	Presenter: Siim Esko and Tracey Li
	How to get access to mobile data for NSIs?
	- Privacy and regulatory concerns
	- Data access models
	- Understanding stakeholders and partnership models
Exercise	**Mobile Phone Data survey**
	Participants will fill a brief survey on the necessary conditions currently available in their organization for accessing and using mobile phone data.
17.00	Close

Day 2 Mobile Phone Data and Official Statistics

9.00	Session 2.1	**Working with MPD for Official Statistics**
		Presenter: Alfatihah Reno
		How to clean and pre-process the data?
		How to calculate tourism statistics?
		How to use mobile phone data for detecting homes?
	Exercise	**Exploring MPD**
		Exploring MPD using tools of your choice to detect tourism and home location
	Session 2.2	**Working with MPD in resource-scarce settings**
		Presenter: Tracey Li
		MPD in resource-scarce settings – limitations and data quality issues
		Examples of basic analysis and aggregates
	Session 2.3	**Planning a Mobile Phone Data Project**
		Presenter: Siim Esko
		Develop roadmaps for MPD projects - discuss the current situation based on survey responses and analysing the missing pieces in each country
17.00		Close

9.00   Session 3.1   **Current research and future direction**
Presenters: Tracey Li, Shengjie Lai
Review of the research base around MPD
Recent research in the field in migration and population statistics
Discussion on the standardization of methods

Session 3.2   **Workshop wrap-up and close**
Facilitator: Karoly Kovacs
General discussion and Q&A with workshop participants
Feedback

12.00   **Close of Workshop**