



## Use of mobile devices and other advances in data collection

Tuulikki Sillajõe\*

Statistics Estonia, Tallinn, Estonia – [tuulikki.sillajoe@stat.ee](mailto:tuulikki.sillajoe@stat.ee)

Jaanus Kroon

Eesti Pank, Tallinn, Estonia – [jaanus.kroon@eestipank.ee](mailto:jaanus.kroon@eestipank.ee)

### Abstract

The paper describes the aspirations of Estonian official statisticians towards using new data sources.

The paper also provides a short overview on the results of an international consortium's (which Statistics Estonia was participating in) study, which focused on the usage of mobile positioning data for tourism statistics. The strengths and weaknesses as well as the new possible uses of mobile positioning data are presented.

A concrete business case is described. Namely, in 2008, Eesti Pank (central bank of Estonia) started to develop a new data collection methodology jointly with the researchers of the University of Tartu, who were experienced in using mobile positioning data in urban and regional planning. After a two-year experience of using the data for external sector statistics, the methodology was considered to offer a reliable overview on persons crossing the Estonian border to travel abroad (outbound travel) and to Estonia (inbound travel). So, the official cross-border travel statistics have been published by Eesti Pank since 2012.

**Keywords:** big data; cooperation of official statistics, central banks and universities; mobile positioning; new data sources.