Quality aspects using Mobile Network Operators data for Official Statistics

Gabriele Ascari¹, Erika Cerasti, Cristina Faricelli, Paolo Mattera, Sara Piombo, Roberta Radini, Giorgia Simeoni and Tiziana Tuoto

Abstract

The potentialities of data from Mobile Network Operator (MNO data) for the production of official statistics are wellrecognised. MNO data can support traditional statistical production as well as cover new topics. Several experiences have been carried out on specific use-cases, but the need of a further step towards standardization is emerging as well as the need to explore and systematize quality issues in the use of this data. In this paper we approach the definition of a quality framework for official statistics based on MNO data. We identify the main components of the quality framework, relying also on previous existing work, and we develop the quality aspects related to the institutional environment, input data and first reflections on throughput quality.

Key words: quality framework, MNO data, input quality, Trusted Smart Statistics

¹ Istat, email: <u>gabascari@istat.it</u>, <u>erika.cerasti@istat.it</u>, <u>cristina.faricelli@istat.it</u>, <u>paolo.mattera@istat.it</u>, piombo@istat.it, radini@istat.it, simeoni@istat.it, tuoto@istat.it</u>