

USE OF MOBILE PHONE DATA TO GENERATE OFFICIAL STATISTICS ON PEOPLE'S DISPLACEMENT IN THE FACE OF EVENTS AND DISASTERS IN THE DOMINICAN REPUBLIC



Organization: Government

Data Type: Citizen data, Private sector data, Administrative data

Region: National

Timeline: 2025

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Sponsoring Organization:

National Statistics Office (NSO) Dominican Republic

Supporting Organization(s):

• Dominican Institute of Telecommunications (INDOTEL) • Mobile Network Operator (telephone companies) • International Organization for Migration

Objective:

Contribute to decision-making in disaster management by producing official statistics on population mobility in the event of disasters based on mobile phone data.

Description:

In the absence of traditional data sources, the National Statistics Office (ONE), in collaboration with the Dominican Institute of Telecommunications (INDOTEL), has shown interest in using mobile positioning data provided by telephone companies to generate statistics on displacement in emergency and disaster situations. The information obtained from mobile phones can be crucial to improve decision-making in humanitarian operations and support development programs. In addition, there is a regulatory framework that regulates the statistical data that public telecommunications service providers must submit to INDOTEL, established in the “Manual of Statistical Indicators of the Telecommunications Sector of the Dominican Republic.”

The initiative proposes the development of new statistical indicators using mobile positioning data and holds great promise for improving the country's statistical capabilities and informing public policy decisions aimed at risk and disaster management. However, it is crucial to examine it in the context of the Quality Assurance

Framework to ensure that it maintains high standards of quality and data protection, and that it provides meaningful information. In this regard, to maintain confidence, the NSO will use strictly professional considerations, including scientific principles and professional ethics, to ensure that the methods and procedures for collecting or gathering, storing, processing, and presenting statistical data.

- Collect statistics on displacement and population movements in the context of events and disasters.
- Use Big Data information to monitor displacement in the face of events.
- Build technical capacity in the use and integration of non-traditional sources for the production of statistics.
- Analyze mobile phone data as an alternative (non-traditional) source to generate and/or fill the gap in statistics on displacement in the face of events and disasters based on administrative records.
- Calculate the displacement of people in the face of events and disasters, as a subcomponent of the SDG indicator 13.1.1 on the number of people killed, missing and displaced in the face of disasters.