

ISTAT AND VODAFONE BUSINESS: TOURISM STATISTICS WITH MOBILE NETWORK DATA

Rome, 9 May 2023 - Innovating and improving tourism statistics. This is the aim of the collaboration between **Istat** and **Vodafone Business Italia** who have carried out a study on inbound (foreigners in Italy), outbound (Italians abroad) and domestic (Italians in Italy) **tourism** by integrating official statistics with data from mobile phones. The survey covered the **Province of Rimini** and the **Municipality of Rome**, two areas with a strong tourist vocation, between **August 2019** and **August 2020**, allowing a comparison between tourist flows before and after the pandemic. Three case studies were developed: arrivals and nights spent of Italian and foreign tourists; same-day visits of Italian and foreign tourists; departures of Italians to foreign countries.

The technology used is Vodafone Analytics, which collects **real-time data** on mobile phone network activity, thus guaranteeing very precise temporal and spatial information, with algorithms developed to meet the requirements of official statistics, in full compliance with privacy regulations.

The use of data from the **mobile network** for the production of tourism statistics, already experimented at an international level, proves to be an added value to supplement and enrich Istat's current tourism surveys, in particular for its ability to provide real time information and with high territorial detail.

In the perspective of a public-private partnership that improves regulated access to data, including mobile telephony for the production of official statistics, as envisaged by the so-called European data strategy, the tested collaboration between Istat and Vodafone Business Italia represents a significant precedent, which demonstrates how mobile data can enrich and complete the **production of official statistics** and provide in-depth insights into emerging phenomena only partially covered by traditional data sources.

"The collaboration between Istat and Vodafone Business Italia demonstrates the statistical value of mobile data in a complementary way to official data for the production of tourism statistics, and opens up new possibilities in other sectors as well," said **Lorenzo Forina, director of Vodafone Business Italia**. Big data generated by Vodafone Analytics' technology, aggregated and anonymised in full compliance with privacy regulations, can open up new perspectives for analysis with a greater level of detail, such as the temporal dimension and punctual monitoring of data on the territory. The results of this partnership with Istat will inspire new projects, accelerated by Vodafone's national and European dimension and Istat's active role in the statistical community".

"We live immersed in a world that continuously produces data. Each of us produces these data in the accessing the services of an increasingly digital and connected public administration, moving around even if only with a smartphone in our pocket, using social networks or making purchase online or in a shop - explains **Monica Pratesi, head of Istat's Statistics Production Department**. These data can be used to measure so many aspects of our reality in an innovative way and to create new knowledge and value-added services on data by companies, public administrations, the academic world and research institutions". The Istat-Vodafone collaboration, which is not unique, is part of this perspective: "Istat is in fact interested in sharing with the outside world more and more information on what it is doing in the field of big data use and the production of experimental and Trusted smart statistics - adds Pratesi - precisely by activating collaborations and partnerships capable of guaranteeing continuous progress in these areas".

The project is analysed in the article 'Exploring mobile network data for tourism statistics: the collaboration between Istat and Vodafone Business Italia' published in the **Journal of Official Statistics no. 3/2022**.