# *Use of new data sources for measuring international migration*

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# Aim of the presentation

- To inform about the activity of the Task force on the use of new data sources for measuring international migration and cross-border mobility that was established by the United Nations Economic Commission for Europe (UNECE) in January 2020 following a decision of the Bureau of the Conference of European Statisticians (CES)

- To introduce the contents of the Report Use of new data sources for measuring international migration

# Background/1

New non-conventional data sources, such as data gathered from the use of mobile telephones, credit cards and social networks — generally known as big and social media data — could be useful for producing migration statistics

# Background/2

The UNECE Guidance on data integration for measuring migration proposes further work on using the potential of big data:

1. to share the emerging practices internationally

2. to support countries' first steps towards harnessing the potential of such data for producing migration statistics

UNECE

**Guidance on Data Integration for Measuring Migration**

# The Aim of the Task Force

In October 2019, the Conference of European Statisticians (CES) Bureau brought up the importance of collecting and analyzing examples **to support national statistical offices in embarking on the use of new data sources.**

**To this aim a specific task Force has been established**

# Activities and outputs

1. Review **existing experience** and plans in national statistical offices for using new data sources for measuring migration and cross-border mobility

2. **Identify examples from outside official statistics** where new data sources have been used for measuring migration and cross-border mobility

3. Compile the examples into a **reference tool** and develop a mechanism for updating it with new examples

4. Analyze the collected material **to guide** national statistical offices in the use of the new sources.

# A questionnaire for collecting experiences in NSOs

An **informal survey** was carried out Between November 2020 and February 2021 on "The use of new data sources for measuring migration and cross-border mobility"

**36 Countries** filled the questionnaire

***The core question:*** *Are you aware of processes/projects that currently use big and social media data for measuring migration and cross-border mobility?*

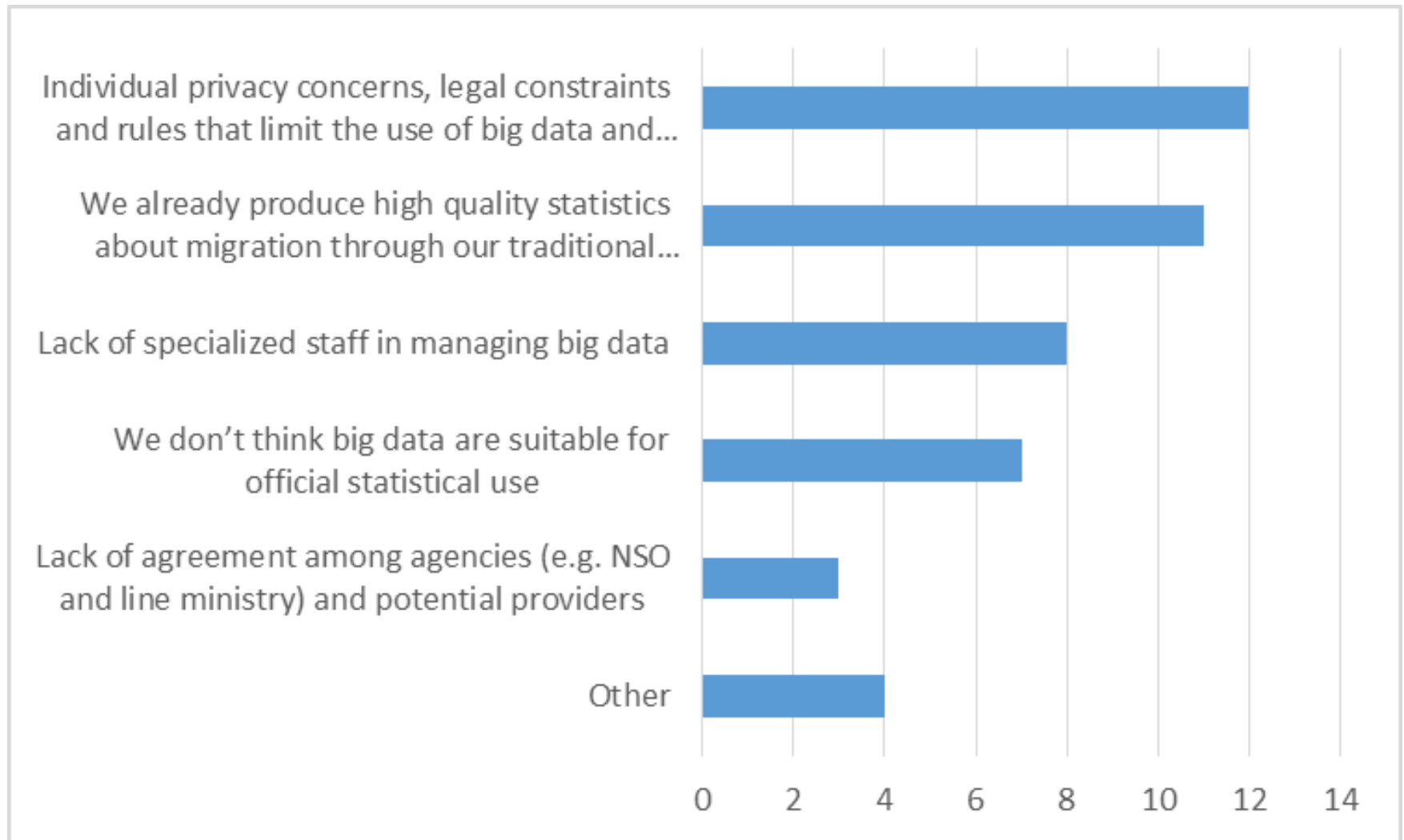**2 relevant experiences** (Georgia and United States)

# NSOs experiences

- A project was set up in Georgia on measuring human mobility The national statistical office in Georgia (Geostat), the Georgian **mobile phon**e regulator (GNCC) and members of the task team (ITU, UNSD, Eurostat, Positium and others) work together to develop and test methods to estimate migration and tourism statistics in Georgia with use of mobile phone data.

- The Impact of Hurricane Maria: The US Census Bureau's experience **combining Survey-Based Estimates and "Big Data"** to Produce 2018 Puerto Rico Net Migration Estimates.

# The follow-up survey

The follow-up survey was carried out in December 2020, and **27 countries responded**.

The 24 countries that **do not use** new data sources for measuring migration and cross-border mobility were asked in the survey what were **the main reasons for that**. The survey offered several possible reasons, in addition to allowing a write-in response, and respondents could select up to three reasons

# Why not?

# Examples from outside official statistics

- The literature about migration and big data is broad and multidisciplinary, but the experiences are not always relevant for official statistics.

- Rather than providing an exhaustive list, the Taskforce selected the most relevant articles/papers and compiled these into a **reference tool** (about 100 articles and papers)

- A set of key variables have been compiled for each article in order to give a repository with a common framework (title, abstract, data sources, country/region, output….)

# Innovations without big data

12 NSOs indicated that they were "**working on significant innovations on measuring international migration**", including "new approaches using current sources and/or exploring new data sources

- Changes in data sources from what was being previously used by the NSO.

- New or innovative methodology that NSOs are using on this data, or on their existing data.

# The contents of the Report

- Purpose and summary
- National experiences about big data and new data sources
- Reasons for not using new data sources
- Significant innovations on measuring international migration
- Compiling a literature reference tool

# Conclusions

- So far there are **limited experiences by NSOs** on the use of new data sources for migration statistics. Therefore, it is too early to provide guidance or recommendations. However, the information available on the ongoing experiences should be disseminated as it provides useful examples to countries interested to work in this area

- We have found out which are the **main obstacles** that can in some cases be removed and when more experience will come up, the tool we have produced will be ready to collect them in a systematic, harmonized and coherent way.

- We know these processes sometimes take time to be put in place (fully work) but we are confident we are paving the way for creating a reference tool that can be used by a statistician in a SO and help his or her in the near future