



Migration data sources and innovation

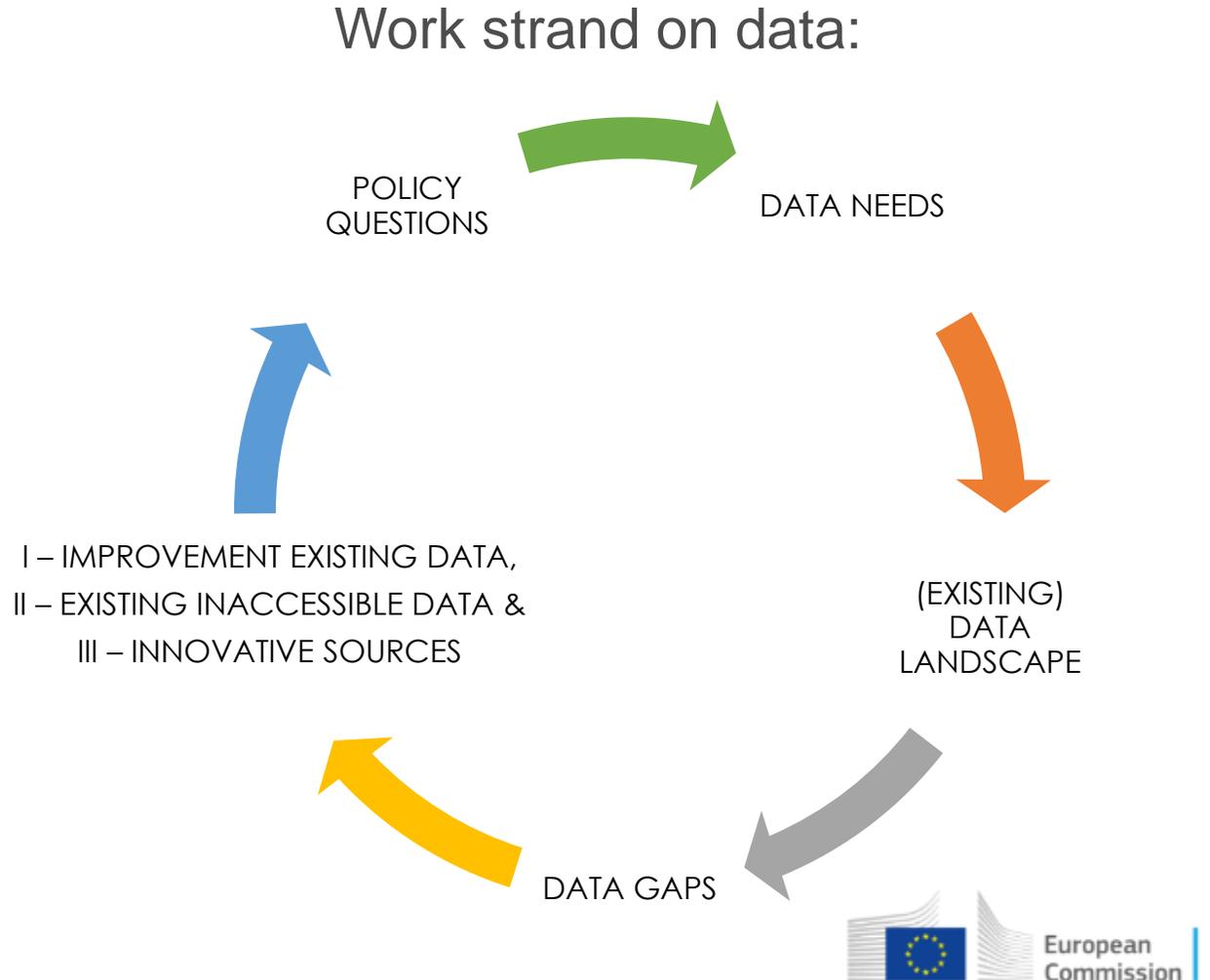
Knowledge Centre on Migration and Demography

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Joint Research Centre

The Knowledge Centre on Migration and Demography - KCMD

Strategic partnership with a number of Directorate Generals and services of the Commission, the KCMD:

- starts from policy questions
- maps existing knowledge
- addresses knowledge gaps through own research or in partnership with external organizations, and
- facilitates uptake of findings for EU policy makers and other stakeholders





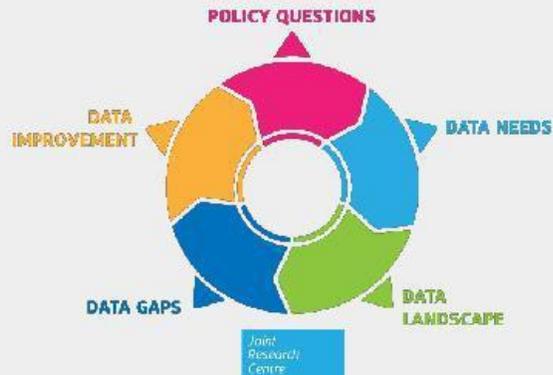
JRC SCIENCE FOR POLICY REPORT

Towards an EU Policy on Migration Data

Improvements to the EU migration data landscape

Edited by C. Santamaria and M. Vespe

2018



EUR 29351 EN

Towards an EU policy on migration data

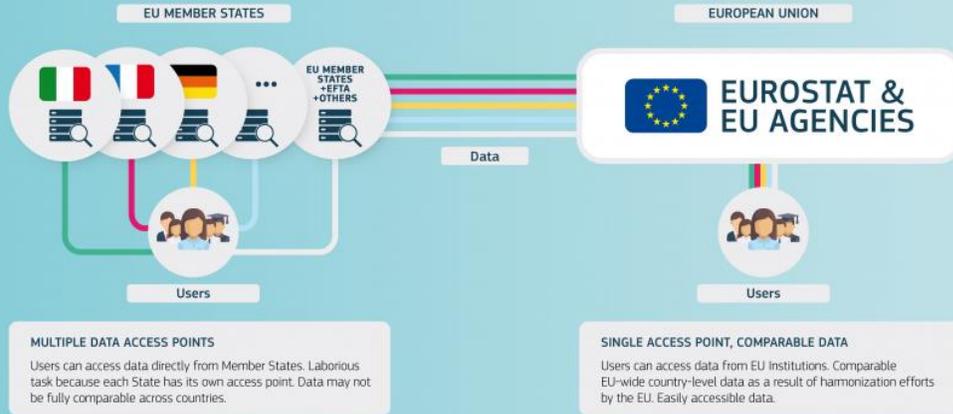
Adequate data is key for evidence-informed policymaking

This report describes the initiative coordinated by the KCMD that has brought together relevant EU policy officers to discuss the current state of migration data for EU policymaking and to coordinate actions intended to address some of the existing data gaps

The report presents the European migration data landscape and describes some approaches that are being explored to improve data adequacy

MIGRATION DATA IN THE EU

DATA FLOW



INSTITUTIONAL AND LEGAL FRAMEWORK

FOR CONTINUOUS IMPROVEMENT OF MIGRATION DATA QUALITY

POLICY INFORMATION NEEDS



Through consultation between European Commission Directorate Generals, including Eurostat and DG HOME, and EU Agencies, the adequacy of existing data (as specified in legislation) to meet EU policy information requirements is examined. Unmet needs are identified.

DATA AVAILABILITY



The EU Institutions in consultation with Member States analyse the likely future availability of data to address the policy information needs identified in the previous step. Support is offered so that Member States can gradually adapt their systems and processes.



EU LEGISLATION



EU legislation is amended/new legislation is drafted, addressing the information requirements that can be feasibly met. The legislation specifies which data (and with which breakdowns, frequency, timeline) are delivered to EU institutions.

Main existing legislation:

- **Statistical regulation (Eurostat)**
- No 862/2007: statistics on migration and international protection
- No 1260/2013: European demographic statistics
- No 763/2008: Population and Housing Censuses
- No 1177/2003: statistics on income and living conditions (SILC)
- No 577/98: labour force sample survey (LFS)
- **Agencies legal basis**

- E.g. regulation No 1077/2011 (eu-LISA), 439/2010 (EASO), 2016/1624 (European Border and Coast Guard), etc.

New legislative proposals:

- COM(2018) 307 final, Proposal for a Regulation amending Regulation (EC) No 862/2007

EU Regional Page

A dedicated section on migration in Europe prepared by the European Commission's KCMD released on IOM's Global Migration Data Portal

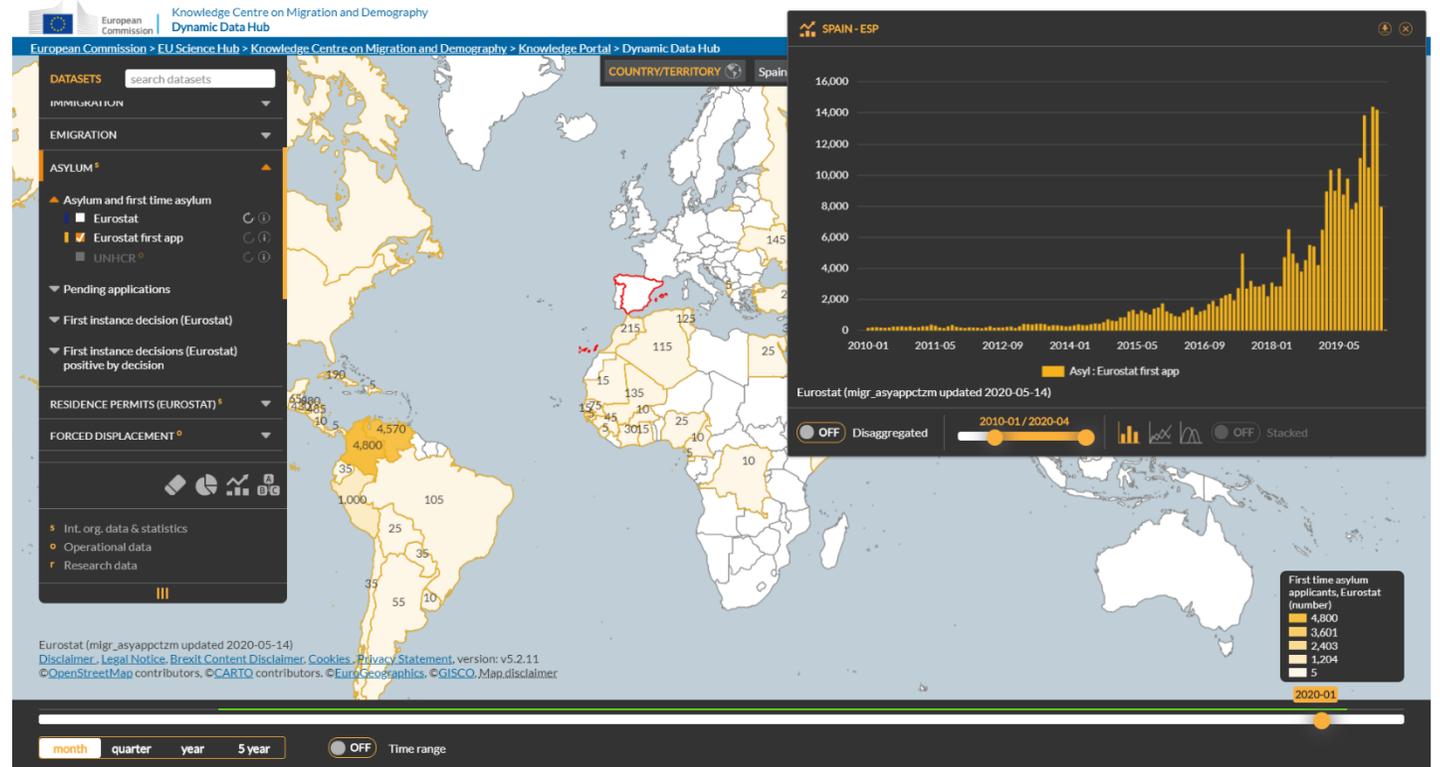
It brings together an array of data sources to provide evidence on European migration in one place

<https://migrationdataportal.org/regional-data-overview/europe>

The KCMD Dynamic Data Hub

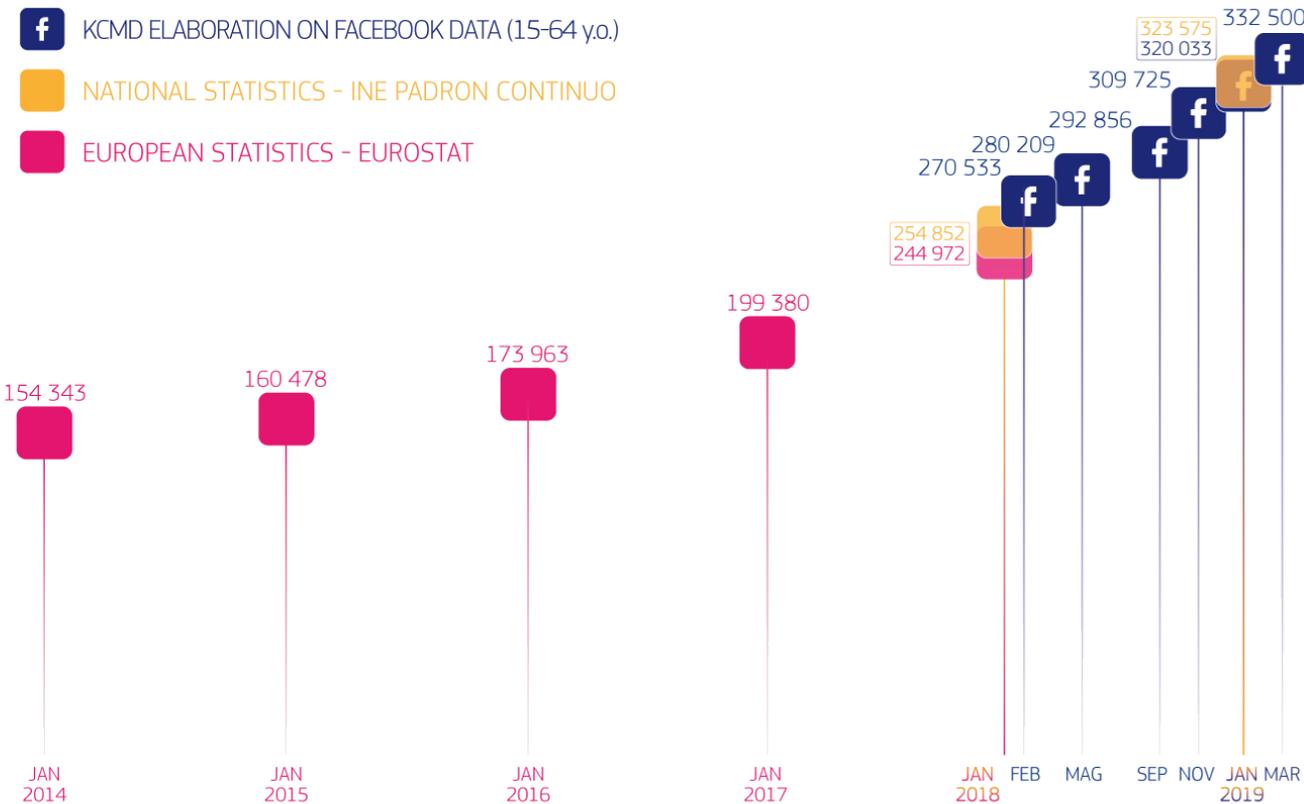
Through interactive mapping, the Dynamic Data Hub gives direct access to single datasets to visualise and analyse migration, mobility and demographic data

<https://bluehub.jrc.ec.europa.eu/migration/app/>



Examples of data innovation for mobility and migration

Early signs of population movements

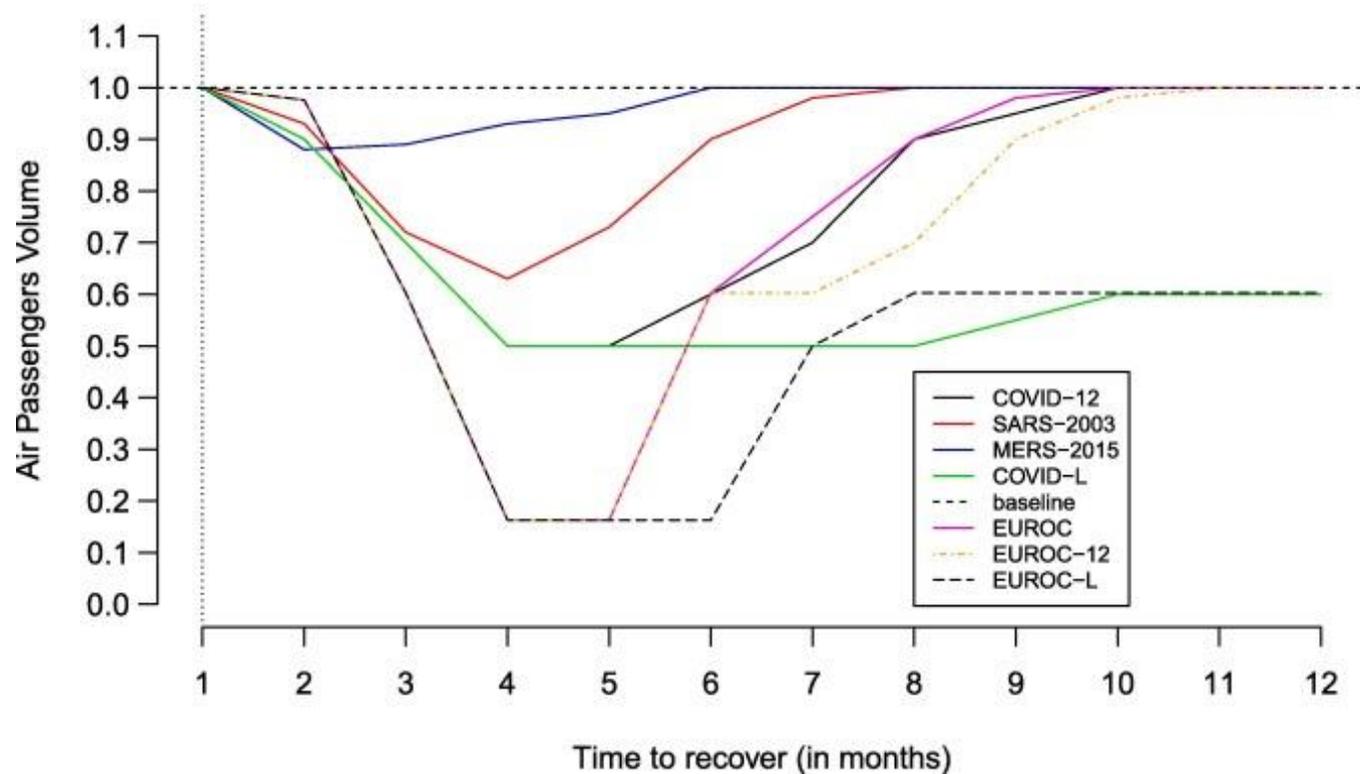


- **Social Media data**
- Air traffic passenger data
- Mobile Positioning Data
- AI project DG HOME
- Computational Social Science for Policy

S. Spyrtos, M. Vespe, F. Natale, I. Weber, E. Zagheni and M. Rango, (2019), Quantifying international human mobility patterns using Facebook Network data.

Examples of data innovation for mobility and migration

COVID-19 Crisis Scenarios



- Social Media data
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Iacus, S. M., Natale, F., Santamaria, C., Spyrtos, S., & Vespe, M. (2020). Estimating and projecting air passenger traffic during the covid-19 coronavirus outbreak and its socio-economic impact. *Safety Science*.

Gabrielli, L., Deutschmann, E., Natale, F., Recchi, E., & Vespe, M. (2019). Dissecting global air traffic data to discern different types and trends of transnational human mobility. *EPJ Data Science*, 8(1), 1-24.

Examples of data innovation for mobility and migration

“[...] **mobile network operators** can offer a wealth of data on mobility, social interactions [...] Such data, if pooled and used in anonymised, aggregated format in compliance with EU data protection and privacy rules, could contribute **to improve the quality of modelling and forecasting for the pandemic at EU level**. The Joint Research Centre (JRC) and ECDC can centralise this data collection and modelling work.”

Joint European Roadmap towards lifting COVID-19 containment measures

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Examples of data innovation for mobility and migration

Feasibility study on a forecasting and early warning tool for migration based on Artificial Intelligence technology

To forecast emerging circumstances, both in the EU and in third countries, which may generate migratory movements potentially affecting the EU

Gathering data from different sources

Complementary to the systems developed by EU JHA Agencies and allowing its integration with them

- Social Media data
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Examples of data innovation for mobility and migration

“Micro-” vs “nano-data” to model collective behaviours difficult to capture by official statistics

Mostly held by private companies, such data can **transform the whole policy cycle**

Innovative approaches to demography, employment, mobility, politics, democracy, etc.

Potential in **tackling societal challenges** (e.g. emergency response, security, gender gaps...)

Goal: to build capacity in accessing non-traditional data through key partnerships and in coordination with Commission services

- Social Media data
- Air traffic passenger data
- Mobile Positioning Data
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Thank you

Subscribe to our **newsletter**: kcnd@ec.europa.eu

Visit our **website**: <https://ec.europa.eu/knowledge4policy/migration-demography>

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