

ESSnet Big Data II - Pilots track kickoff meeting

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Introduction

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Overview

- What went before: ESSnet Big Data I
- ESSnet Big Data II
- Pilots Track
- Objectives of the kickoff meeting

What went before: ESSnet Big Data I

- ❑ Running from February 2016 until May 2018, for 28 months
- ❑ 22 partners from 20 countries: NSIs of AT, BE, BG, DE, DK, EE, EL, ES, FI, FR, IE, IT, NL, NO, PL, PT, RO, SE, SI, UK + FR DARES and SEDS
- ❑ 10 workpackages
 - Coordination, Webscraping job vacancies, Webscraping enterprise characteristics, Smart meters, AIS Data, Mobile phone data, Early estimates, Multiple domains, Methodology, Communication
- ❑ Read all about it on (*provisional url!*)

https://webgate.ec.europa.eu/fpfis/mwikis/essnetbigdata/index.php/Main_Page1

About to start: ESSnet Big Data II

- ❑ Even bigger, the biggest ever!
- ❑ From November 2018 until December 2020, for 26 months
- ❑ 23 countries, 28 partners
- ❑ 12 workpackages (A=>L)
- ❑ Website & collaboration platform (*under construction*):
https://webgate.ec.europa.eu/fpfis/mwikis/essnetbigdata/index.php/Main_Page
(see agenda item 'Communication and wiki')

28 partners (6 new)

□ 20 NSIs with reimbursement

AT, BE, BG, DE, DK, EE, EL, ES, FI, FR, IT, **LT**, NL, NO, PL, PT, RO, SE, SI, **SK**

□ 3 NSIs without reimbursement

CH, IE, UK

□ 5 other partners

- ❖ DE: **Office for Statistics Berlin-Brandenburg (BBB)** and **Hesse Statistical Office (HSL)**
- ❖ FI: **Natural Resources Institute Finland (LUKE)**
- ❖ FR: Ministry of Labour, Employment, Vocational Training and Social Dialogue (DARES), **Ministry of Agriculture, Agrifood Industry and Forestry (SSP)**

Workpackages

Overview, participants, lead

<i>WP</i>	<i>WP name</i>	<i>Participating partners</i>	<i>Lead</i>
WPA	Coordination and Communication	BE, FI, NL , NO, PL, SE	NL – Peter Struijs (M. van Sebillie, M. Debusschere, D. Nowak)
Implementation			
WPB	Online Job Vacancies	BG, CH, DARES, DE, IE, IT, LT, PL, RO, SE, SI , UK	SI – Tomaz Speh
WPC	Enterprise Characteristics	AT, BG , DE, FI, IT, NL, PL, UK	BG – Galya Stateva
WPD	Smart Energy	DK, EE , NO, SE	EE – Arko Kesküla
WPE	Tracking Ships	EL, NL , PL	NL – Anke Consten
WPF	Process and Architecture	BG, DE, DK, EE, FR, IT , NL, PT	IT – Monica Scannapieco
Pilots			
WPG	Financial Transaction Data	BG, DE, IT, NO , PT, SI	NO – Johan Fosen
WPH	Earth Observation	BE, DE, FR, IT, LUKE, NL, PL , PT, SSP	PL – Marek Morze
WPI	Mobile Network Data	DE, EE, ES , FR, IE, IT, NL, RO, UK	ES – David Salgado
WPJ	Innovative Tourism Statistics	BG, EL, HSL, IT, NL, PL , PT, SK	PL – Marek Cierpial-Wolan
WPK	Methodology and Quality	AT , ES, IT, NL, PL, PT	AT - Alex Kowarik
Smart statistics			
WPL	Preparing Smart Statistics	AT, BBB, BG, DE , FI, FR, IT, NL, NO, PL, PT, UK	DE - Natalie Rosenski

Pilots track

- Aim: new research into the possibilities of various big data sources for producing official statistics, through pilot studies ...
- ... resulting in experimental statistics
- Four new pilots, partly building on ESSnet Big Data I:
 - ❖ Financial transactions data
 - ❖ Earth observation
 - ❖ Mobile networks data
 - ❖ Innovative tourism statistics
- Cross-cutting workpackage:
 - ❖ Methodology and quality

Pilots track - Financial transactions data (FTD)

□ Objectives

- ❖ Inventory FTD sources and data infrastructure (metadata) in participating countries
- ❖ Describe availability and access possibilities/restrictions for use by official statistics
- ❖ Assess potential for 1) improving or validating the quality of existing statistics, or 2) the creation of new statistical products

□ Actions

- ❖ Obtain access to financial transactions data
- ❖ Explore and analyse them with a view to statistical use cases
- ❖ Develop and empirically test statistical use cases
- ❖ If possible, develop experimental statistics

Pilots track - Earth observation (EO)

□ Features and objectives

- ❖ To be based largely on Sentinel data ensuring free, open and continuous access to satellite images
- ❖ Goal is to build a geospatial framework filling the “geospatial breakdown” between statistical and geographical information

□ Actions

Describe availability and access possibilities/restrictions for statistical use in various domains and application areas:

- ❖ Agriculture
- ❖ Built-up areas
- ❖ Land cover and settlements enumeration
- ❖ Forestry

Pilots track – Mobile networks data

□ Objective

Complete the production framework started in ESSnet Big Data I, aimed at a standardised statistical production process for the ESS.

□ Actions

A modular rather than a linear approach will be used, to avoid obstruction from the lack of access to real data and to allow optimal development of the building blocks of the framework, addressing many different aspects: data access and the relationship with Mobile Network Operators; methodology and IT (enabling the identification of skills and capabilities needed); quality issues; proposals for standards and related metadata; dissemination aspects of statistical products (mainly visualisation).

As a novelty, instrumental (semi-simulated) data closely resembling real data will be used when the latter are not accessible).

Pilots track – Innovative tourism statistics

□ Objectives

Develop a conceptual framework and set up a smart pilot Tourism Information System to support statistical production in the field of tourism by integrating various big data sources with administrative registers and statistical databases using innovative statistical methods.

□ Actions

- ❖ Identify and evaluate availability and quality of various big data sources
- ❖ Develop methods to combine data and their spatio-temporal disaggregation
- ❖ Develop prototype production system for tourism statistics
- ❖ Recommend data sources to produce good quality tourism estimates
- ❖ Recommend ways to set up a smart and robust Tourism Information System

Pilots track – Methodology and quality

□ Objective

Consolidate the knowledge and knowhow on methodology and quality gained in the course of ESSnet Big Data II (and, up to a point, outside of it in academia and non-ESS official statistics), building and expanding on key deliverables from ESSnet Big Data I:

- ❖ the literature overview;
- ❖ an overview of quality issues and their possible solutions;
- ❖ an overview of methodologies applied and challenges identified.

To maximally ensure acceptance, feedback from relevant ESS bodies (e.g. the Big Data Taskforce & Steering group, WG Qual, WG Meth, DIME) will be collected for key envisaged deliverables (especially the guidelines and the template).

Objectives of the kickoff meeting

- Getting to know one another!
- Getting to know one another's approach and concrete projects
- Establishing common ground between pilots
- Providing input for and benefiting from cross-cutting WPK Methodology and quality