



# **WP on mobile phone data**

## **ESSNET ON BIG DATA**

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# Goals

## Generic goal

To give a real proof of concept at European level that mobile phone data constitute a promising source of information for official statistics.

## Specific goals

- To negotiate with MNOs the access to mobile phone data proposing a business model for the collaboration.
- To develop the technological environment in an NSI to use mobile phone data in actual production conditions.
- To develop a statistical methodology for the use of mobile phone data in official statistics.
- To adapt/develop a quality framework for official statistics based on mobile phone data.
- To make proposals for using mobile phone data in different statistical domains.

## General conditions

- Bottom-up approach: concentration on a particular statistical output.
- Division of the project into modules and these into tasks.
- Parallel development of tasks to achieve reproducibility in several countries.
- Although we'll consider the project as a whole, we propose to dedicate SGA-1 to data access and SGA-2 to the rest.
- Profiles:

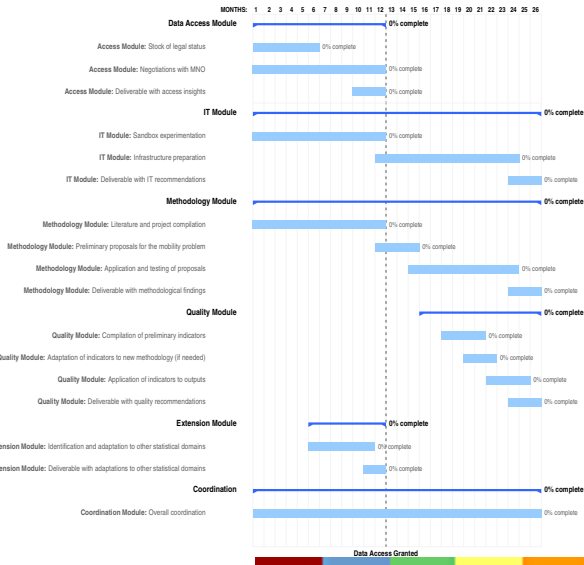
Profile	Spain	France	Romania	Finland	Italy
Top-managers	2				
Stat	5				
CS	2				
CS-Stat	2				
SubMat	3				
Legal	1				

# The statistical problem

Given a population  $U$ , two geographic partitions  $\mathcal{R}_I$  and  $\mathcal{R}_J$ , and a time period  $T$ :

- to estimate daytime populations in  $\mathcal{R}_I$  and  $T$ .
- to estimate origin-destination mobility matrices for  $\mathcal{R}_I$ ,  $\mathcal{R}_J$  and  $T$ .

# Task schedule



## Business case framework for SGA-1

To arrive progressively at a common fully-fledged business case dealing with:

1. No black boxes.
2. Spatial granularity.
3. Time granularity.
4. Data integration conductor.
5. Data identifiability.
6. Data from a sample of MNOs or all MNOs.
7. MNO issues (reputational concern, legal issues, market restrictions, collection costs, privacy/confidentiality issues, ...).