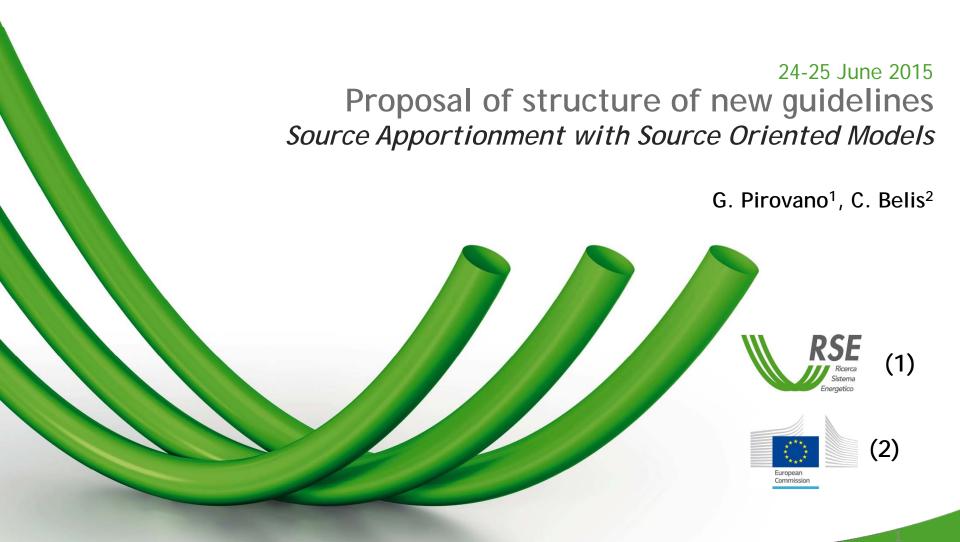
## **FAIRMODE Technical Meeting**







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## 1. Introduction to Source Apportionment with Source Oriented Models

- General notes on the use of Air Quality models for S.A.
- Preliminary introduction of some key concepts: linear effects, zero-out modelling, tagged species approach

## 2. Source Apportionment protocol for source oriented models

Only PM species?

#### 2.1 Problem framework

Area of study, kind of sources, kind of pollutants

#### 2.2 Emissions

- Emission inventories and other requested data
- Speciation profiles: a key aspect

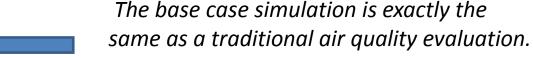
Actually, this is a key aspect in case of SM and RM comparison either when the focus is on specific pollutants. It is less relevant for PM bulk mass

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## 2.3 Base Case (or Reference) simulation

- Input definition
- Model validation





Could we could refer to PM modeling guidance already published in FAIRMODE?

### 2.4 Source apportionment

- Zero out modelling: approach, weaknesses and strengths
- Tagged species modelling: approach (PSAT LOTOS, PSAT CAMx, ISAM CMAQ, others?), weaknesses and strengths
- Category sources and Area sources

## 3. Comparing Source and Receptor oriented modelling

- Introduction: the need for source apportionment "validation"
- Methods:
  - Source definition
  - Mass closure verification
  - Source ranking and estimates
  - Temporal correlation and exceedances analysis
  - Specific sources analysis
  - Secondary pollutants
  - Use of tracers

Only a description of the different approaches? Examples of applications?