



# **SHERPA for e-reporting**

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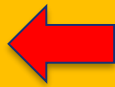
**C. Belis**

**P. Thunis**

# E- reporting Plans & Programmes

Data flow H: air quality plans

Data flow I: source apportionment

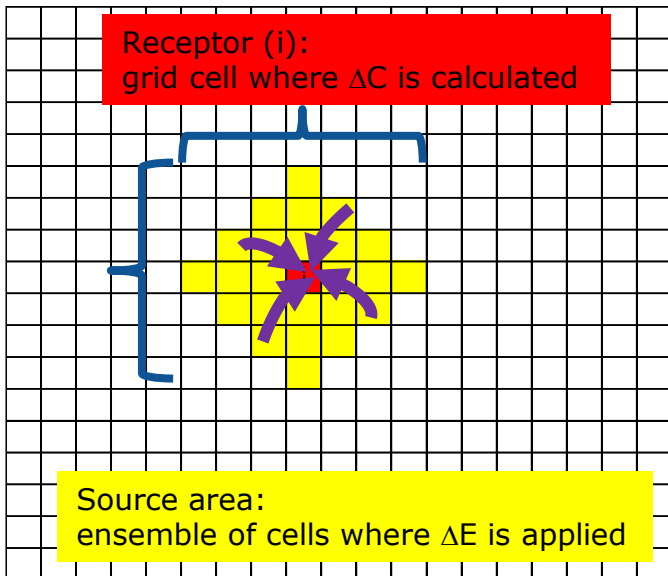


Data flow J: scenario for the attainment year

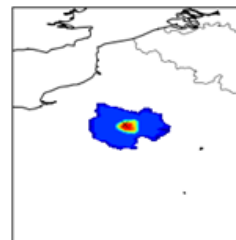
Data flow K: measures

- (I) **Information on source apportionment (Article 13)**
- (1) Code(s) of exceedance situation (link to G)
- (2) Reference year
- (3) *Regional background: total*
- (4) *Regional background: from within Member State*
- (5) *Regional background: transboundary*
- (6) *Regional background: natural*
- (7) *Urban background increment: total*
- (8) *Urban background increment: traffic*
- (9) *Urban background increment: industry including heat and power production*
- (10) *Urban background increment: agriculture*
- (11) *Urban background increment: commercial and residential*
- (12) *Urban background increment: shipping*
- (13) *Urban background increment: off-road mobile machinery*
- (14) *Urban background increment: natural*
- (15) *Urban background increment: transboundary*
- (16) *Local increment: total*
- (17) *Local increment: traffic*
- (18) *Local increment: industry including heat and power production*
- (19) *Local increment: agriculture*
- (20) *Local increment: commercial and residential*
- (21) *Local increment: shipping*
- (22) *Local increment: off-road mobile machinery*
- (23) *Local increment: natural*
- (24) *Local increment: transboundary*

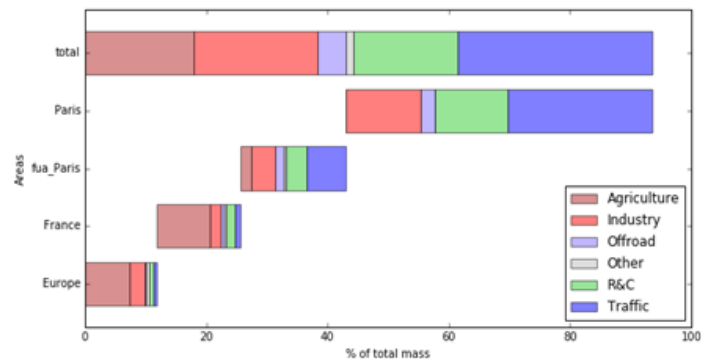
# E- reporting P&P



## SHERPA Report



Paris  
 Location: 2.36W, 48.93N  
 SHERPA: V1.1  
 AQM: Chimere  
 Emissions: EC4MACS  
 Meteo: ECMWF  
 Pollutant: PM2.5



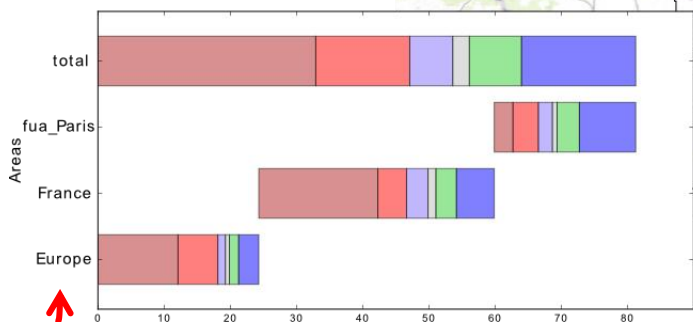
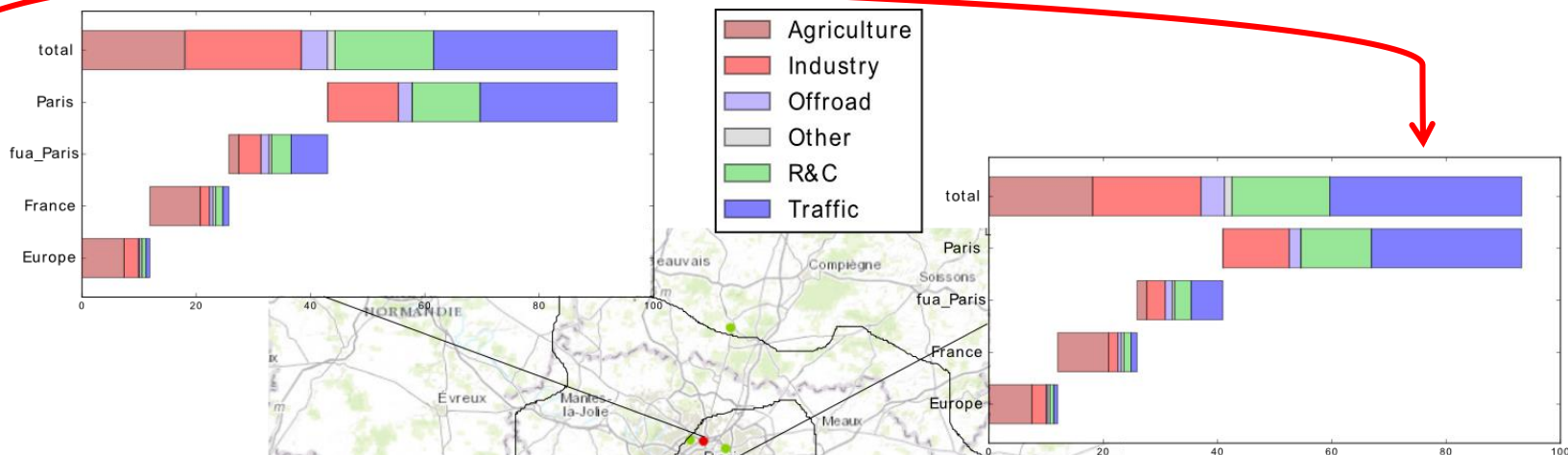
	Europe	France	<u>fua_Paris</u>	Paris	total
Agriculture	7	9	2	0	18
Industry	3	2	4	12	20
<u>Offroad</u>	0	1	1	2	5
Other	0	0	0	0	1
R&C	1	1	3	12	17
Traffic	1	1	6	24	32
<u>Natural+other</u>			6		

# Some remarks

- *In terms of receptor, the module acts on a location base*
- *In terms of sources (emissions) the module works with NUTS or Functional urban areas*
- *Available at any EU location on the basis of default model data (CHIMERE based) but can be adapted to other input data*
- *Computation time (1 min per location)*
- *Based on EU "top-down" but it is a good starting basis to interact with cities and regions (local "bottom-up")*
- *The report is a good starting point to interact with source apportionment (validation) and emissions (input data)*

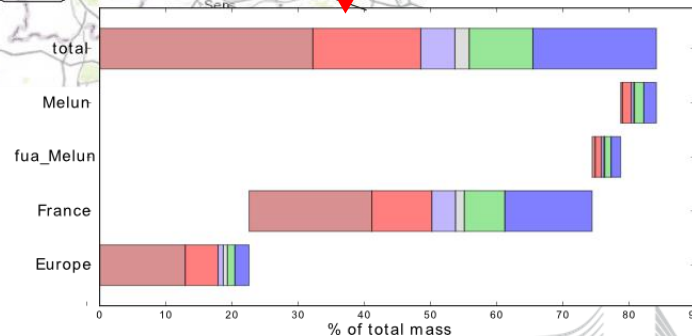
# One example in Paris

**Example 1:** Two receptors in Paris city with PM2.5 exceedances present similar results



**Example 2:** The contribution of sources and areas is quite different in a receptor with no PM2.5 exceedances located in the outskirts. In this case the contribution of the city of Paris is included in the FUA\_Paris.

**Example 3:** A receptor with PM2.5 exceedances located in the outskirts. This site is included in the cell attributed to another FUA so the contribution from the city of Paris is in the rest of France



# Points for discussion

- *Is this kind of report useful for experts/authorities involved in e-reporting?*
- *Need to consider "AQ zones" in some way?*

# Questions

- *Is it necessary to include the air quality zones as source areas?*
- *Is it enough to run the analysis for the monitoring sites where exceedances occur or is it necessary to estimate the contributions for the entire AQ zone?*
- *How to deal with monitoring stations with exceedances that are out of the "urban area"*
- *Is a report with a table of the contributions by macro-sectors and by areas enough to support MS e-reporting dataflow K?*
- *Are the reported values actual contributions or increments?*