

FAIRMODE
management practices

CROATIA

WG1: did you work with **MQO**? With the **Δ Tool**? Did you contribute to the **Composite Mapping tool** for concentrations?

- We used AQ model on a coarse (50 km) and finer (25 km) resolution scales. We did not have emissions on a 7 km resolution to test (we have it now for 2015)
- We used **Δ Tool** to test results and found good agreements for O₃ and PM at rural sites (ozone better and 50 km scale, PM at 25 km scale).
- Some urban sites fulfilled the **Δ Tool** test some did not. Fulfillment of criteria depends on local circumstances of the site
- Composite mapping was made for national level (25 km scale)

WG2: what about *emissions*? Did you benchmark your inventory with top-down ones? Did you contribute to **Composite Mapping** tool for emissions?

- Emission inventory is under development in 2017 (project-based, financed)
- Currently, bottom-up inventories do not exist, all industrial and medium-scale installations are obliged to submit their emission data and supporting information through questionnaires on annual basis, but these data are not quality controlled regularly
- Therefore, we were not able to use and combine top-down and bottom-up inventories yet (and participate to Composite Mapping for emissions)
- GNFR EMEP emission inventory on a 0.1 x 0.1 lat.-lon. scales finalised in May 2017 (emission data for year 2015), currently under checking, but generally, ready to use
- Small scale inventory (500 m x 500 m resolution) for 4 cities (Zagreb, Rijeka, Split, Osijek i Slavonski Brod) will be finalised by November 2017, GNFR methodology

WG3: what about *source apportionment*? Do you already apply SA in your domain?

- Until now, source apportionment analysis was not the task allocated to NFC, therefore, not done by NFC
- Source apportionment study for PM_{2.5} for Zagreb was done as a part of JRC Pilot study
- Air Quality Plans for agglomerations/cities generally have to include some aspects of SA analysis; this work is usually done by commercial companies and of questionable quality (neither models nor PFM is used) – lack of knowledge at companies involved in preparation of AQ Plans
- NFC will start using AQ models for SA in 2018-2019 (first phase)
- As a second step (2019) PFM-based analysis will be introduced too

WG4: what about *planning*? Did you use planning indicators? And *SHERPA*? (1 slide)

- None of the above was used for planning
- SHERPA was tested (as an exercise within FAIRMODE) but not used by anybody involved in planning activities

Expectations

- Assess the feasibility and complexity of methodological approaches developed/recommended within FAIRMODE Working Groups (WG1—WG4)
- Implement and test methodologies at national, regional (county) and local levels
- Assess capacities and human resources available at these three levels
- Assess sharing of responsibilities and technical /expert capacities available at these three levels
- Enable Inter-connectivity of these three administrative levels, understand weaknesses, lack of expertise, strong and weak points in the system and suggest ways forward
- Enhance/develop capacities for cooperation and mutual support of different administrative levels

Expectations - continued

- Bridge the gaps and establish common platform for all related activities
- Share experiences within FAIRMODE and contribute to further development of methodologies and guidances
- Further develop technical/scientific/expert basis to conduct the work of this complexity level
- Learning by the way of doing it!

Expectations - continued

- JRC, All: to provide recommendations how to adjust air quality management system to enable use of methodological approaches and guidance developed in FAIRMODE at national/regional/local level for air quality management practices and fulfilment of EU obligations – for air quality assessment, air quality plans, and e-reporting on AQ
- JRC, All: to continue to serve as a forum for promotion of the use of modelling for air quality management practices and fulfilment of EU obligations – for air quality assessment and e-reporting on AQ and AQ P&P
- All: To continue to work on improvement of methodologies and guidelines

Pollutants of interest by the order of priority

- PM₁₀
- PM_{2.5}
- Ozone
- NO₂