



COST

European Network on New Sensing Technologies for Air
Pollution Control and Environmental Sustainability - *EuNetAir*

COST Action TD1105

WGs and MC Meeting at Rome, 4-6 December 2012

Action Start date: 01/07/2012 - Action End date: 30/06/2016

Year: 2012-2013 (*Starting Action*)



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Scientific context and objectives in the Action

Scientific context / challenges

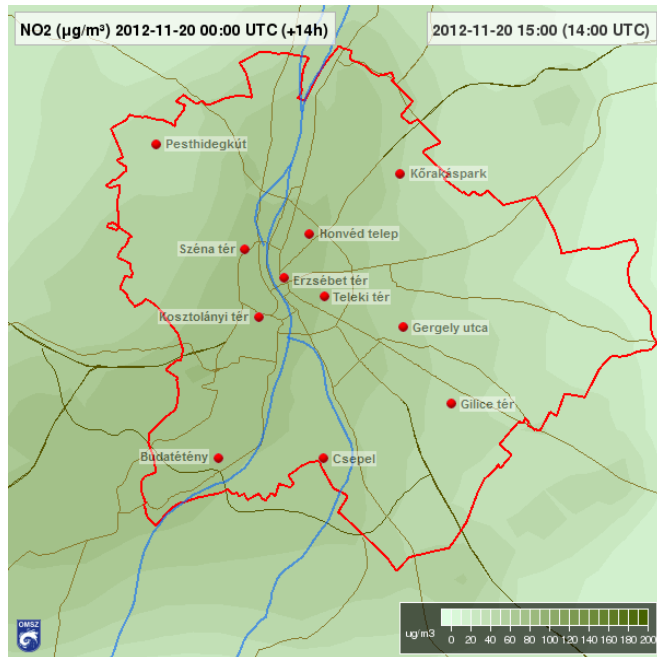
- official background monitoring in Hungary
- chemical weather forecast (Budapest) and regulatory dispersion modeling for Hungary
- air quality legislation

Brief reminder of MoU objectives

- Contribution to the **SIG4** objectives
 - Expert comments for the revision of the Air Quality Directive
- Contribution to the **Gender Balance Committee** objectives
- Contribution to the **WG3.1 and 3.2** objectives
 - Environmental measurements at laboratory and in field air quality stations
 - Air quality modeling and chemical weather forecasting

Current research activities of the Hungarian Meteorological Service on these fields

- operative chemical weather forecast for Budapest – validation, development of the emission data and the meteorological model
- in-field sampling and monitoring development





Research Facilities available at the Hungarian Meteorological Service

sampling

- 3-stage filter pack aerosol sampling, NO₂ sampling, precipitation sampling
- high volume sampling for PM_{2.5}
- ozone and PM₁₀ monitoring

laboratory

- ion chromatography, spectrophotometry, flame atomic absorption spectrophotometry, graphite furnace spectrophotometry

modeling

- CHIMERE chemical transport model
- Flexpart, Aermoc dispersion models
- WRF, AROME numerical weather prediction models



Suggested priorities for future research

monitoring

(though we do not operate any measurements with nanotechnology)

overview of the current state-of-the-art on regular environmental monitoring and the EU legislation on this field

air quality modeling

participation in offline chemical weather prediction cooperations or common case studies