

BECAUSE AIR POLLUTION **TRAVELS**



WHAT WE DO

Universities, research and self-government institutions from CZ, PL and SK establish international cooperation on the territory of the EGTC TRITIA and find solutions to air and noise pollution, thus improving the quality of life of the population and positively influencing their health status by the improving local and regional air quality management.



15 2.6

TAKING COOPERATION **FORWARD**

WHO WE ARE

Partners from three central European countries join their forces to improve air environmental management in border area of TRITIA region.

Czech Republic

- VSB Technical University of Ostrava
- ACCENDO Centre for Science and Research
- City of Ostrava
- City of Opava
- Moravian-Silesian Region

Poland

- Central Mining Institute
- European grouping of territorial cooperation TRITIA
- Institute of Meteorology and Water Management
- City of Rybnik
- City of Opole
- Opole Voivodship
- Silesian Voivodship



Slovakia

- University of Žilina
- City of Žilina
- Žilina self-governing region

VSB - Technical University of Ostrava is the project Lead partner. The whole project partnership has 15 partners which will contribute to outputs creation (universities and research institutions) and outputs implementation (cities, regions and EGTC TRITIA).

Who funds us

Our project is funded by the Interreg CENTRAL EUROPE Programme that encourages cooperationon shared challenges in central Europe.

With 246 million Euro of funding from the European Regional Development Fund, the programme supports institutions to work togetherbeyond borders to improve cities and regionsin Austria, Croatia, Czech Republic, Germany, Hungary, Italy, Poland, Slovakia and Slovenia.

DISCOVER MORE ABOUT **AIR TRITIA**

http://interreg-central.eu/air-tritia

In case of interest you can sign up for a fresh project news in the Newsletter section on our project website.

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AIR TRITIA

UNIFORM APPROACH TO THE AIR POLLUTION
MANAGEMENT SYSTEM FOR FUNCTIONAL URBAN
AREAS IN TRITIA REGION

http://interreg-central.eu/air-tritia

FACTS AND FIGURES





Outputs planne until June 2018

≥ 2.6 M

investment value for involved regions in Euro

Outputs

The main outputs of the project are a unified spatial database of needed information on international level, tools for efficient management of air quality (Air Quality Management System and Prediction Warning System) and a suggestion of strategies for improving air quality and reduction of emissions from various sources on the level of FUAs and regions of the TRITIA region.

Five FUAs (Ostrava, Opava, Žilina, Opole, Rybnik), and regions of 3 countries (Czech Republic, Slovakia, Poland) are involved into the project partnership and they will take active part in creation of a local (FUAs) and regional strategies (TRITIA).

The main innovation of the project is the application of joint cooperation approach to air quality management on international level with detailed mathematical modelling by use of supercomputers, verification of results by various types of measurements, and a joint proposal of optimal mix of measures with impact on human health accompanied with cost evaluation. The proposed procedures and outputs will be applicable anywhere in Central Europe, in the areas with similar problems.

TOOLS

Unified Information Database

Database will be operated in GIS, including the comprehensive set of spatial data of the TRITIA region and FUAs in detail. Input will be use for Air Quality Management System. The database includes: Socio-economic data, Epidemiologic data, Meteorological data, Sources of air pollution (traffic, domestic boilers, industry).

Air pollution will include:

- impact of individual group of sources for Coarse dust and fine particles (PM10, PM2.5), Nitrogen dioxide (NO2) and highly carcinogenic benzo(a) pyrene
- impact of pollution on population
- data from measurements (traffic pollution, isotope measuring and particlegranulometry, moss analysis)

5 AQMS Air Quality Management System

AQMS is an expert system comprising relevant spatial data, analyses results, results of air-pollution modelling, measures, air quality impact of measures for TRITIA region. The information is accessible via interactive map interfaces.

5 PWS - Prediction Warning System

PWS provides model information about the air pollution within next 48 h proceeding from air monitoring and meteorological data, in detail recalculated for whole area of each FUA in border TRITIA region. It focuses mainly on situations with extreme air pollution. The information will be accessible via web browser and in form of an app for smartphones.

STRATEGIES

Common strategy of Air quality management for the TRITIA region

Common strategy, addressing identified air quality problems in TRITIA region and proposing concrete measures. The strategy will contain technical, legislative and other suggestions with a strong focus on common approach and international cooperation among individual parts of TRITIA region. Action plan and implementation documents will be part of the strategy. The common air quality strategy will be implemented by Moravian - Silesian Region (CZ), Opole Voivodship (PL), Silesian Voivodship (PL) and Žilina Self - governing Region (SK).

5 specific air quality strategies for target functional urban ares (FUAs)

Integrated strategic planning for air quality improvement will be incorporated in both joint regional strategy and respective strategies for FUAs. These strategies will take into account not

only local influences but also regional and transboundary impacts. Individual strategies for 5 target FUAs in TRITIA region (Ostrava, Opava, Rybnik, Opole, Žilina). Each strategy addresses specific problems of Air Quality. Evaluations of suggested measures within the scenarios will include modelling of impact to the air quality and social, economic and health risks impacts. These strategies will be applicable at other regions with same type of air quality problems in whole Central Europe region.



Unified Information Database November 2019



AQMS and PWS Listopad 2019



Common strategy May 2020



5 specific strategies May 2020