

# Interreg

## CENTRAL EUROPE

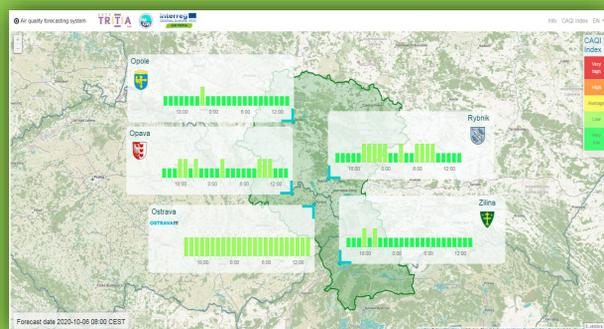
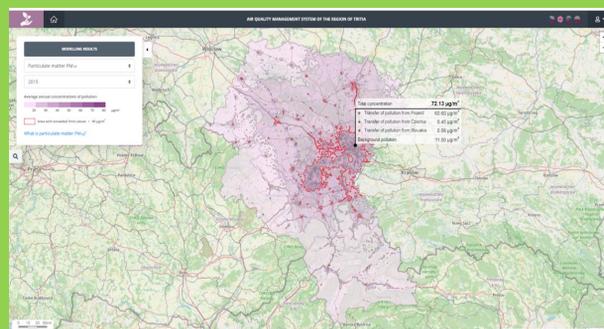
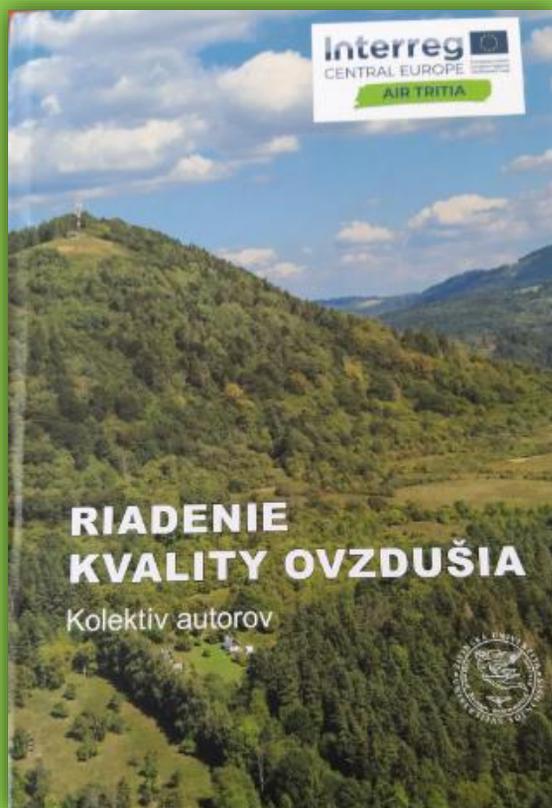


European Union  
European Regional  
Development Fund

### AIR TRITIA

## Newsletter

### October 2020



# PROFESSIONAL ACTIVITIES

## AIR QUALITY MANAGEMENT

One of the objectives of the AIR TRITIA project is to create tools for efficient and transparent air quality management in accordance with evidence-based decision support. These are the *Air quality management system* and *Prediction Warning System* for decision makers and citizens of TRITIA region. The tools will help public authorities in the field of air quality management.

### Air quality management system



Air quality management system (AQMS) is a tool to support long-term strategic decision making. It is an information system, that through a user-friendly environment in the form of an interactive map, provides state administration bodies with the information necessary for strategic planning and decision-making in the field of air quality, based on scientific knowledge. The system provides information on air quality and planned measures for the general public.

Within the AIR TRITIA project, the AQMS was implemented in five cities and respective FUA (Opava, Ostrava, Opole, Rybnik and Žilina) and the TRITIA region (Moravian-Silesian Region, Opole and Silesian Voivodeship and Žilina Region).

The system works at: <https://aqms.vsb.cz/> the login interface is accessible from each city/TRITIA sub-website.

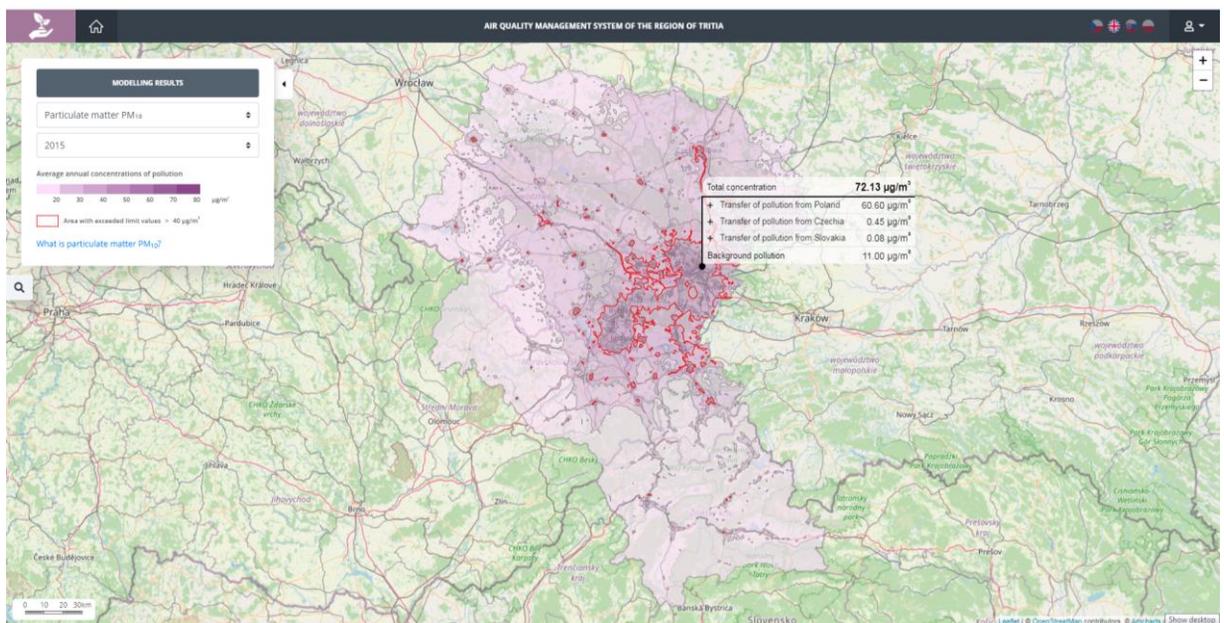


FIG. 1 Air Quality Management System (AQMS) - interactive map

## Prediction Warning System



IMWM-NRI (the team implementing the forecast - Ewa Krajny, Leszek Osrodka, Marek Wojtylak) introduced after the testing period the Prediction Warning System (PWS) = short-term air quality forecast AQ (Air Quality) as one of the outputs of the AIR TRITIA project .

This PWS, in accordance with the provisions of the project objective, is to be a source of information on the predicted temporary (one-hour) concentrations of air pollutants. This is due to the fact that it is implemented in the legislation of the European Union member states <https://eur-lex.europa.eu> (Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe OJ L 152, 11.6.2008).

In the area (zone or agglomeration) there is a risk that the levels of pollutants in the air will be above the norm in relation to the specified thresholds included in the annexes to the above-mentioned Directive. Member States develop plans specifying short-term actions plans taken to reduce the risk or shorten the exceedance time.

Although the Directive does not explicitly mention the short-term air quality forecast as a tool for the implementation of short-term plans, in the era of dynamic development of methods of Numerical Weather Prediction, forecasting meteorological conditions and the fact that effective informing the public about the threat resulting from the occurrence of air pollutants hazardous to health should be made in advance, it is becoming practice to use such air quality forecasts.

More information about the system and the visualization of the forecast itself can be found at <http://air-tritia-test.herokuapp.com> .

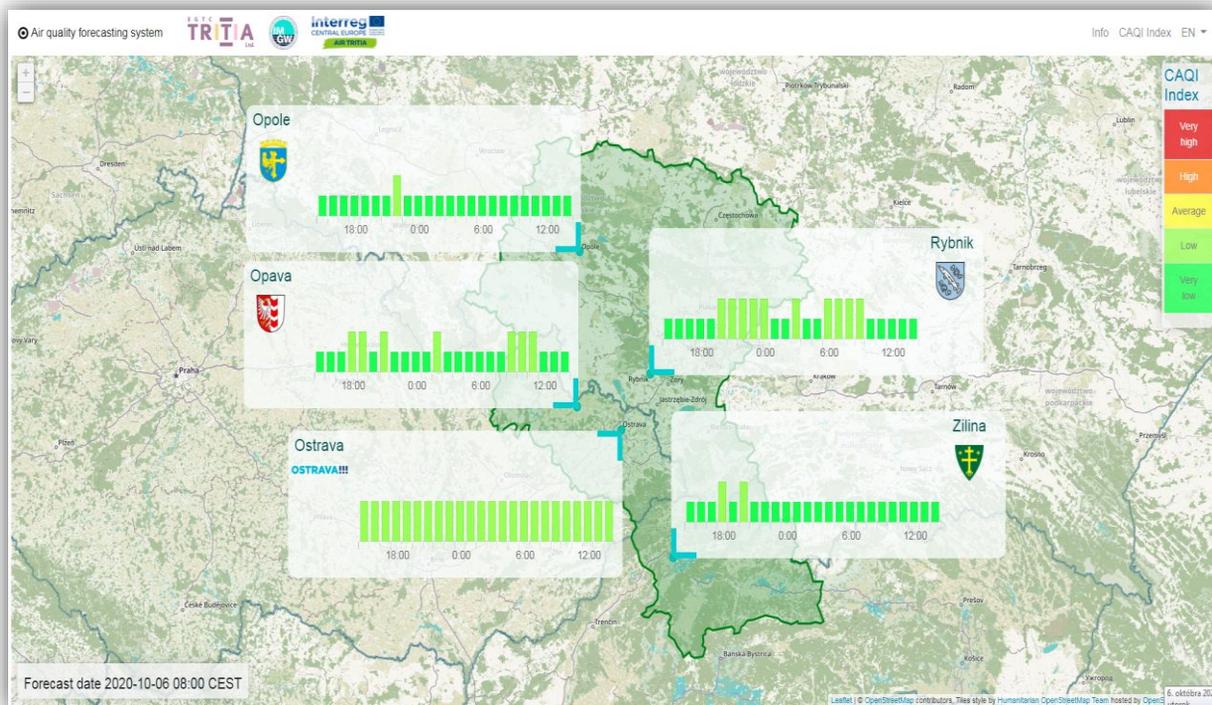


FIG. 2 Visualization of the Prediction warning system



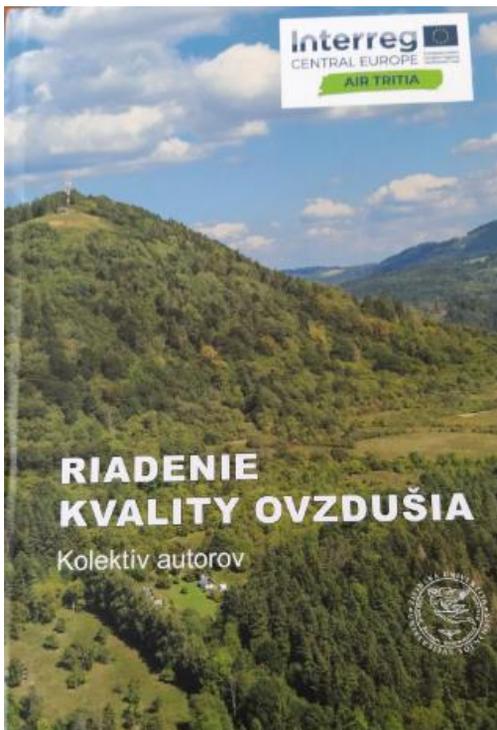
FIG. 3 Air quality forecasting system



**MONOGRAFIA**



Scientific monograph „*Air quality management*“ is the result of three years' work of the international team of the project AIR TRITIA. Authors from academia and research institutions from three counties and five institutions participated on Monograph - University of Žilina, Slovakia, VSB - Technical University of Ostrava, Czech Republic, ACCENDO - Center for Science and Research, Institute, Ostrava, Czech Republic, Central Mining Institute, Katowice, Poland and Institute of Meteorology and Water Management - National Research Institute, Warszawa, Poland.



The monograph presents some of the problems and challenges of environmental air quality management, by which respond to changes in society.

The reader of the monograph will obtain a comprehensive overview and presentation of air quality management at the theoretical and practical level.

Monograph has a role of a reference book to help the target groups to understand better the air pollution topic and the role of a guidance book for municipalities to help them to proceed with appropriate measures.

The Monograph is structured and divided into seven chapters focused in theory, but they also include practical outputs. The first part of monograph describes air pollution sources (industrial, transport, local heating) and meteorological assumptions of dispersion of pollutants. The second part introduces air quality modeling and monitoring. Air quality management tools are described in the end.

*Information about AIR TRITIA project, the opportunity to see the results of the analysis of the problem of air pollution based on modelling, specific tools for recording and forecasting pollution, and much more, will be presented at the Final Conference on 24th of November 2020*



**“AIR TRITIA - clean air in the heart of Europe“**

Due to restrictions in context with the COVID-19 pandemic, the conference will be organized online. Conference registration form will be soon available on web site of the Conference organizer - EGTC TRITIA and on web site of the AIR TRITIA project.

**MORE INFORMATION TO BE FOUND ON THE AIR TRITIA PROJECT WEBSITE**

<https://www.interreg-central.eu/Content.Node/AIR-TRITIA.html>

**This NEWSLETTER was created thanks to the implementation of the AIR TRITIA project UNIFORM APPROACH TO THE AIR POLLUTION MANAGEMENT SYSTEM FOR FUNCTIONAL URBAN AREAS IN TRITIA REGION - CE1101, funded by Interreg CENTRAL EUROPE Program from European Regional Development Fund.**

VŠB TECHNICKÁ  
UNIVERZITA  
OSTRAVA



GiG Instytut  
Badawczy 95 lat

EGTC  
TRITIA  
Ltd.



**Rybník**

Opava

OPOLE

**OSTRAVA!!!**



Mesto Žilina

Moravskoslezský  
kraj



Žilinský  
samosprávny  
kraj

OPOLSKIE  
KWITNĄCE

Śląskie.