Finansowane przez
Unię Europejską

RI-URBANS aims to demonstrate how Service Tools (STs) from atmospheric Research Infrastructures (RIs) can be adapted and enhanced to better address the challenges and societal needs concerning air quality (AQ) in European cities and industrial hotspots. RI-URBANS responds to urgent needs to substantially reduce air pollution across EU by providing enhanced AQ observations in support of advanced AQ policy assessment. We develop and enhance synergies between AQ Monitoring Networks (AQMNs) and RIs in the atmospheric domain and combine advanced science knowledge and innovative technologies to develop pilot STs. These will enhance the AQMNs capacity to evaluate, predict and support policies for abating urban air pollution. RI-URBANS deploys tools and information systems in the hands of citizens and communities to support decision-making by AQ managers and regulators. The focus is on ambient nanoparticles and atmospheric particulate matter, their sizes, constituents, source contributions and gaseous precursors. RI-URBANS will evaluate novel AQ parameters, source contributions, and their associated health effects to demonstrate the European added value of implementing such STs. The project builds on existing initiatives for advanced research-driven AQ observations at supersites from European cities to provide the innovative AQ STs. Five implemented pilots in 9 cities will demonstrate the ability to integrate complementary STs in AQMNs and data management using FAIR (Findable, Accessible, Interoperable, Re-usable) principles. RI-URBANS will address all aspects of sustainability, including efficient curation, preservation and provision of access to data, training and capacity building, and how the use of tools will be secured in the future. Finally, upscaling and sustainability will be provided to the offered AQMNs-RIs interoperable services, using advanced instrumentation, modelling, source apportionment, integrated citizens observatories and mobile measurements.