



# Milestone M25 (M4.9) Setting up links with WPs 1-3



**RI-URBANS**

**Research Infrastructures Services Reinforcing Air  
Quality Monitoring Capacities in European Urban &  
Industrial Areas (GA n. 101036245)**

**By**

**KNMI & UHEL**



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**Milestone M25 (M4.9): Setting up links with WPs 1-3**

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<b>Work package (WP)</b>	WP4 - Pilot implementations for testing and demonstrating services
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<b>Lead beneficiary</b>	KNMI
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## 1. About this document

This document summarises the actions that have been taken to establish the links between WP 4 and the WPs 1–3.

This is a public document, available at the RI-URBANS website, <https://riurbans.eu/work-package-4/#milestones-wp4>, and distributed to all RI-URBANS partners for their use as well as submitted to European Commission as RI-URBANS milestone M25 (M4.9).

## 2. Objectives

WP 4 tackles RI-URBANS' SOJB2 to test and demonstrate solutions for advanced urban AQ monitoring systems and evaluation of exposure to air pollutants (SP1, WPs 1-3) at urban background representative areas and hot spots in Europe. Specifically, it will implement 5 testing and demonstration pilots in (at least) 9 cities (Athens, Barcelona, Birmingham, Bucharest, Helsinki, Milano, Paris, Rotterdam-Amsterdam and Zurich, with at least 3 cities in each pilot) and create synergies with SP3 to devise the roadmap for upscaling STs. These pilots encompass diverse European urban environments and will demonstrate at a real scale the ability to integrate complementary AQ measurement systems in existing AQMNs, addressing modalities where the RIs are engaged with the national/local authorities, proposing innovative solutions such as mobile instrumentation and building on citizens' observatory initiatives, applying tools developed, and improving their operational integration in AQMNs.

As such, the work in WP4 has many essential connections to other work packages, in particular:

- WP 1 - Novel AQ metrics and advanced source apportionment STs for PM, and nanoparticles. In particular, to establish which observations are needed from the pilot studies in WP4, how these can be made available, and what measurement, sampling and analysis protocols shall be followed.
- WP 2 - Health effect assessment of PM, PM components, nanoparticles, and their source contributions. The health effect assessments are guiding in which parameters need to be addressed in specific pilots. This WP2 also includes the use of STs for mapping air pollution at urban scale and in and around hotspots, and the citizen involvement. These STs will be implemented in another pilot study.
- WP 3 - Improving modelling and emission inventories for policy assessment using advanced observation-based methodologies. A specific pilot study from WP4 will generate data that need to be coupled to computational models. The modelers need to be aware which observational data will be available and how these can be used to address e.g., the health effects.
- WP 5 – the STs developed in WP4 will be upscaled with a facilitation from WP 5. Here we need to pay attention to data management and data structures, which need to be compatible with the existing structures. The quality control of the service tools needs to be verified and optimized. The connection to air quality modeling needs to be reinforced with a strategic vision connecting the regional air quality structures and ACTRIS research infrastructures.

### **3. Actions in RI-URBANS to facilitate communication between WP 4 and WP 1,2,3**

To initiate communication and interaction between the teams in RI-URBANS WPs, we have established WP specific mailing lists. While populating the lists, we paid a specific attention to have WP 4 leaders and WP 4 task leaders participating in WP 1,2,3 mailing lists. This facilitates the interaction the connection in a practical level.

The WPs have started to organize internal WP meetings and the invitations are sent to the mailing lists. As the key people from the WP 4 are involved in the other WP mailing lists, they will be informed about the meeting schedules and can attend, when the agenda and timing is suitable. If they are unable to join the meeting, they can catch up with the WP 1-3 development via shared meeting minutes.

The communication is further improved with the office platform established by CSIC. The platform facilitates internal communication and sharing of documentation, but also allows interactions between the WPs. The forthcoming meetings and events are included in the home page on the platform for easy access and scheduling.

In practice, within WP 4, we have held regular meetings (virtually to this date) to elaborate on the needs from the WP 4 point of view that is required from WP 1-3. This is for example synthesis results of data analysis from long-term aerosol source apportionment in European cities. This is needed to understand the new results obtained via WP 4 pilots regarding aerosol sources. Another example is ensuring that the modelling studies (WP 3) can support the data interpretation in WP 4.

Internally in WP 4 we have elaborated on the pilot plans and schedules of the actions. Based on internal discussions we are in the process of expanding some of the pilot activities to include other cities beyond the original plan in the application phase. This is done with additional resources available from the beneficiaries via co-aligned projects.

To facilitate pilot-to-pilot communication, we have had joint discussions and meetings between the urban air quality mapping (Task 4.3) and hot spot pilots (Task 4.5). The joint planning will ensure that both pilots are progressing as planned. This also enables coherence in the work between the pilots.

We have initiated the WP 4 work with the stakeholder board. This will allow us to communicate with the cities hosting the pilots. At the same time this link will allow the city administration and air quality networks to contribute to the pilots during the planning phase already. This will increase the impact of the pilots in a long-term perspective as the actions are connected to the needs of the cities and regional air quality networks.