



Milestone M36 (M5.8)
Guidance for co-design of service tools with stakeholders



RI-URBANS

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

**By
CSIC**



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Milestone M36 (M5.8): Guidance for co-design of service tools with stakeholders

Authors: Marta Monge & Xavier Querol (CSIC)

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Milestone	M36 (M5.8)
Lead beneficiary	CSIC
Means of verification	Report describing
Estimated delivery deadline	Planned originally for M30, changed to M45 (30/06/2025) to include more complete guidance, but finally reached in M32 (31 May 2024), because the discussion of the new Air Quality Directive and the need for guidance on measurements of advanced air quality parameters for this.
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Reviewed by	WP5 leaders
Accepted by	RI-URBANS Project Coordination Team
Comments	This document provides a short description of how RI-URBANS has worked to reach a co-design of the Service Tools (STs) for the measurement of advanced air quality suggested by our project and currently included in Art 10 and Annex VII of the new EU Air Quality Directive.

Table of Contents

1. ABOUT THIS DOCUMENT.....	1
2. SCOPE	2
3. FAVOURING CO-DESIGN BEFORE THE RELEASE OF THE PROPOSAL FOR A NEW AIR QUALITY DIRECTIVE	2
4. FAVOURING CO-DESIGN DURING THE DISCUSSION OF THE PROPOSAL FOR A NEW AIR QUALITY DIRECTIVE.....	3
5. FAVOURING CO-DESIGN AFTER THE DISCUSSIONS FOR THE PROPOSAL FOR A NEW AIR QUALITY DIRECTIVE.....	4
6. FURTHER WORK	5

1. About this document

This document provides a short description of how RI-URBANS has work to reach a co-design of the Service Tools (STs) for the measurement of advanced air quality suggested by our project and currently included in Art 10 and Annex VII of the new EU Air Quality (AQ) Directive (NAQD).

In WP5, T5.5 focuses on strategic guidance for European up-scaling. This is providing an up-scaling strategy based on the outcome of the whole RI-URBANS tasks will be provided. T5.5 develops a roadmap document targeting AQMNs and authorities involved in AQ (and health) management at national, regional and local scales, defining the most suited practices for up-scaling and replicating the RI-URBANS solutions.

In WP6, T6.3 deals with the interaction with EC bodies and agencies on AQ and AQ-health. Here key EC bodies and European and international agencies (such as EEA, UNECE-EMEP, WHO, WMO, the Copernicus Program) were and are being approached to show the European added value of RI-URBANS STs and the guidance results for implementing STs for these. For modelling tools (WP3) and open data of measurements (WP1) have approached CAMS to interact with RI-URBANS.

Thus, most of WPs contributed to obtain a co-design of the guidance for STs provided by RI-URBANS.

This is a public document, available at the RI-URBANS website, <https://riurbans.eu/work-package-5/#milestones-wp5>, and distributed to all RI-URBANS partners for their use as well as submitted to the European Commission as an RI-URBANS Milestone 36 (M5.8).

This M36 (M5.8) was planned originally with the deadline of M30 (31/03/2024) and proposed to move to M45 by prior leaders of WP5). However, we decided to move it to M32 (31/05/2024) because the reasons described below.

First, we elaborated the proposal in late 2020 and early 2021 and we were not aware of the timing of the new AQ Directive (NAQD). In late 2021 and early 2022 we send the RI-URBANS's Grant Agreement with all technical details on the proposed advanced AQ parameters to Dr Christian Nagl (leading the base documents for the NAQD).

EC-DG-EC issued of a draft for a NAQ Directive ([NAQD, in 20/10/2022](#)) that contained in Art 10 the same AQ advanced parameters that we selected in RI-URBANS (see below). Subsequently a [version from the discussion and approval by the Council of the European Union \(CEU\) \(in 09/11/2023\)](#) was proposed. And Finally, a [subsequent version one from the provisional agreement between the CEU and the European Parliament \(EP\) \(in 08/03/2024\)](#) was released, still keeping these advanced AQ parameters in Art 10 and Annex VII.

The above timing drove us to advance this milestone, in such a way that the results of RI-URBANS are applicable for the elaboration of the AQD, but also in official guidance documents that are being prepared by a consortium driven by RICARDO to supply these to EC-DG-ENV. Thus, we supplied the RI-URBANS's guidance information during the discussions for a NAQD and elaboration of official guidance documents. If we would had wait until M45 (as originally planned, without knowing the timing of the elaboration and

implementation of the NAQD) the effectiveness of RI-URBANS's guidance on STs would have been much lower.

2. Scope

The scope of this M36 (M5.8) is favouring the co-design of the STs for advanced AQ parameters that RI-URBANS proposes and that nowadays are included in Art 10 and Annex VII of the NAQD. This is directly related with WP6, R6.3 on stakeholder involvement for codesign. RI-URBANS' M38 (M6.2) of WP6 and M32 (M5.4) of WP5 show how intense has been this interaction (and it is) the contact with EU and national and international agencies, and SMEs on AQ and AQ-health. To reach an adequate interaction with stakeholders, including AQUILA, EMEP, ACTRIS, IAGOS, DG ENV, WHO and WMO, as well as the AQMNs, a number of actions and meetings were organized in two stages, before and after the elaboration by DG ENV and Council of Europe of the draft for a new EU AQ Directive (AQD). See M32(M5.4).

Here we describe how the co-design of the STs were and is being reached.

3. Favouring co-design before the release of the proposal for a new Air Quality Directive

On 26/10/2022 DG ENV from the EC issued a [proposal for a new AQD](#). Nearly one year before this date, replying their request, we sent the RI-URBANS' Grant Agreement to the consortium that elaborated the base documents for the proposal for a new EU AQD (Framework Contract No ENV.C.3/FRA/2017/0012). The proposal for the new AQD includes the requirement and recommendation to measure in supersites the advanced AQ parameters from RI-URBANS, including ultrafine particles (UFPs), particle size distribution (PNSD), black carbon (BC), oxidative potential (OP) of PM, NH₃, PM speciation and VOCs, among others. Thus, the DG-ENV base document [Systematic assessment of monitoring of other air pollutants not covered under Directives 2004/107/EC and 2008/50/EC: With a focus on ultrafine particles, black carbon/ elemental carbon, ammonia and methane in ambient air](#) states in page 16 that *"..... contact was established to the project RI-URBANS, which aims at innovative urban air quality service tools, complementing existing air quality monitoring networks in selected cities, and providing innovative tools to better quantify the impact of atmospheric species most harmful to human health."* (Figure 1).

Before the release of the NAQD, on 30/05/2022 the 1st stakeholder meeting was held (online) to establish the first contacts with stakeholders and to show the RI'URBANS of the STs ([see summary of this meeting in the RI-URBANS' website](#)), with a total of 57 participants. Among the stakeholders, delegates of the European Environmental Agency (EEA), the World Health Organization (WHO), and the World Meteorological Organization (WMO), together with delegates from several European Commission institutions (EC-DG-ENV, JRC, or AQUILA) and ASQMNs provided valuable feedback on RI-URBAN'S progress during its first year.



Systematic assessment of monitoring of other air pollutants not covered under AAQDs

1.2. International organisations

ACTRIS

The national focal points (NFP) of the ACTRIS⁺ network were asked for information regarding additional pollutants to be monitored and their priorities. In their replies UFP, particle number size distribution (PNSD), aerosol composition (including BC/EC) were named as pollutants which are of interest to ACTRIS and for which the ACTRIS network aims at harmonising monitoring.

In addition, contact was established to the project RI-URBANS⁺, which aims at innovative urban air quality service tools, complementing existing air quality monitoring networks in selected cities, and providing innovative tools to better quantify the impact of atmospheric species most harmful to human health. Next to this, the importance was highlighted to monitor biogenic VOC as ozone precursor by an ACTRIS NFP.

Figure 1. Reference to RI-URBANS as source of information for the base documents of the NAQD.

4. Favouring co-design during the discussion of the proposal for a new Air Quality Directive

Once the proposal for a NAQD was issued we had several meetings with RI-URBANS, ACTRIS, EMEP and AQUILA experts to elaborate and discuss a document with recommendations from RI-URBANS and ACTRIS for the discussion of the NAQD proposed by DG ENV in the CEU. Result of these discussions, 2 documents with recommendations on the implementations of measurements of advanced AQ parameters in the NAQD were sent to DG ENV to this end, one on [07/02/2023](#) and a final one on [06/03/2023](#).

Following these actions we interacted with the Spanish Presidency during the discussions of the proposal of the AQD in the Council Europe until the approval of the [proposal document for negotiations with the European Parliament](#).

In parallel with the above actions, the meetings described below were held, with both international and national stakeholders and SMEs, to i) present the recommendations sent to DG ENV on the proposal for a new AQD, and ii) to show results on the added value of implementing measurements of the advanced AQ parameters, and the progress of the guidance documents of the specific STs.

On 23/02/2023 a 2nd stakeholder meeting was held (hybrid, face to face and online) in Warsaw to support upscaling the RI-URBANS/ACTRIS strategy for advanced AQ parameters in Poland.

On 19/06/2023 a 3rd stakeholder (online) meeting of RI-URBANS was organized in collaboration with ACTRIS, AQUILA and EMEP to discuss with AQUILA and national AQMNs experts the recommendations sent.

On 04/12/2023 we co-organised with the Green Deal (GD) Support Office (GD-SO) the Webinar Clearing the Air: Research Findings on New Additions to the EU AQD, where we presented the STs and the guidance strategy.

5. Favouring co-design after the discussions for the proposal for a new Air Quality Directive

On 08/03/2024 the [version of the NAQD proposal agreed between the CEU and the EP](#) was issued. From now the two bodies have to internally approve the Directive to be published.

On the international field, DG-ENV-EC, EEA, WHO and WMO have been approached several times, and delegates from these bodies have attended, and in many cases give talks, to/in our four stakeholder meetings described above and in [the 1st](#) and [2nd scientific](#) meetings. We have now direct links with these bodies. They will be invited to the 3rd (and Final) scientific meetings. Furthermore, we have presented RI-URBANS' results in specific talks for WHO in the headquarters in Bonn, Germany. Another specific remote meeting was held to present RI-URBANS' results to DG-ENV-EC, EEA, and EMEP. And the results on health outcomes to the exposures to UFP will be presented in a WHO meeting.

Very importantly, we have contacted with the RICARDO-coordinated consortium that is elaborating guidance for measurements under the new AQD for DG ENV, and we are sending our preliminary guidance documents to this team to favour co-design. Furthermore, one of the co-authors of our RI-URBANS guidance from FMI is also contributing to the DG-ENV document.

One of the two co-leader of RI-URBANS' WP6 (Katriina Kyllonen, FMI) is a member of the RICARDO's consortium and she is sending the RI-URBANS' STs guidance documents to this writing team to reach a consensus (co-design) for each STs. The discussions with AQUILA on these have also favoured co-design.

The RI-URBANS' coordination office compiled a list of 756 stakeholder contacts arising from the interaction with them to discuss and co-design STs.

6. Further work

From now to the end of 2024 we will exchange information with AQUILA, the RICARDO's consortium and CAMS and the on the guidance for STs for the co-design of these and to have harmonised guides, and in case of conflict to get a consensus.