



2nd SCIENCE MEETING (MID-TERM PROJECT MEETING)

18-19 October, 2023

Delft (The Netherlands), hybrid format



SCOPE

RI-URBANS is a European Commission (EC) Horizon-2020 funded project (<https://riurbans.eu>; grant agreement 101036245) to demonstrate how Service Tools (STs) from atmospheric Research Infrastructures (RIs) can be adapted and enhanced to provide advanced air quality (AQ) measurements in European cities and industrial, harbour, airport and road traffic hotspots, as well as areas with significant levels of air pollution and associated health effects. RI-URBANS combines advanced scientific knowledge and innovative technical work to develop pilot STs that will enhance the capacity of the Air Quality Monitoring Networks (AQMNs) to provide the necessary observations to evaluate, predict and abate urban air pollution. The project is directly connected with ACTRIS (Aerosol, Clouds and Trace Gases Research Infrastructure; <http://www.actris.net>) and ICOS (Integrated Carbon Observation System; <https://www.icos-cp.eu>) in terms of use of STs, networking supersites and data management. RI-URBANS focuses on human exposure to outdoor ambient ultrafine particles (UFP, particle number concentrations, PNC and particle size distribution, PSD), atmospheric particulate matter (PM, in mass concentration) in terms of their sizes and constituents, as well as their gaseous precursors (including volatile organic compounds, VOCs and ammonia, NH₃).

The **scope of the RI-URBANS 2nd Science Meeting (MID-TERM PROJECT MEETING)** is in the following major topics of the project:

- Outputs of the 1st reporting period (M01-M18, October 2021 – March 2023) evaluation of RI-URBANS
- Pan-European reports on advanced AQ parameters. Most data compilation of the advanced AQ parameters has been finished but updating will take place.
- Open access of compiled data and flow of data towards ACTRIS of further measurements.
- STs on 3D measurements.
- Analysis of health outcomes, city mapping, citizen involvement, pollution, hotspots.
- First results on emission inventories and modelling.
- Progress of the 5 RI-URBANS pilots.
- How ACTRIS and RI-URBANS might support implementation of Articles 7 and 10 of the new AQ Directive on UFP in hotspots and advanced AQ parameters in supersites.
- Progress of upscaling actions.
- The case study of upscaling for Warsaw, Poland.

At the same time, a major goal of the 2nd Science Meeting is to **involve AQ policy stakeholders in the interpretations and discussions** of the project results, as well as pilots and applications of the STs.

The 5 RI-URBANS pilots focus on the demonstration of the following STs:

- P1: Near-real-time PM source apportionment.
- P2: Near-real-time UFP-PSD.
- P3: Mapping, 3D, mobile measurements and citizen science.
- P4: Health effects of advanced AQ parameters and source contributions.
- P5: AQ in and from urban hotspots (traffic, airports, industry, harbours).

Concerning AQ policy stakeholders, RI-URBANS intends to invite experts from DG-ENV, DG-SANTE, EEA, EMEP, WMO, and WHO as well as representatives of the cities, regions and countries involved in the pilot studies and others with potential interest in the STs.

PROGRAMME

18th October 2023 (Day 1)

Day 1 – [Link \(click here\)](#)

Meeting link from 09:00 h CEST. All timing refers to CEST

09:00-09:30 Registration of delegates (for on-site participants), welcome and technical information, Caroline Kohlmann (TU-Delft), Alicia Arroyo and Marta Monge (CSIC)

INTRODUCTORY SESSION

09:30-09:45 Welcome, logistics and safety issues

TU-Delft and KNMI

09:45-10:00 Comments on RI-URBANS from the Project Officer

Gustavo Naumann (H2020, EC) ([Online](#))

10:00-10:15 RI-URBANS progress report and outputs of the RP1 evaluation

Tuukka Petäjä (UHEL) / Xavier Querol (CSIC)

10:15-10:30 Progress of WHO on Air Quality & Health and on new air quality parameters

Roman Perez Velasco (WHO) ([Online](#))

10:30-10:45 EU Project: STARGATE: Ultrafine particles in airports

Jan Peters & Martine Van Poppel (VITO)

10:45-11:00 Oxidative potential of PM and components: Where we are to reach harmonisation?

Gaelle Uzu (University Grenoble, CNRS)

11:00-11:30 Invited talk: Lessons learnt from 10 years boundary-layer research in the Amsterdam Atmospheric Monitoring Supersite

Gert-Jan Steeneveld (Wageningen University, Meteorology & Air Quality Section)

11:30-12:00 Coffee break + Poster session

PROGRESS OF RI-URBANS' WPs

12:00-12:20 What should we know about UFP and PNSD in terms of urban AQ

Roy M. Harrison (University of Birmingham)

12:20-13:00 WP1

12.20 – 12.25 **Welcome** (Andre Prevot / [Andrés Alastuey](#))

12.25 – 12.40 **T1.1: PNSD/PNC** (Merixell García ([Online](#)) / [Xavier Querol](#))

12.40 – 12.55 **T1.1: eBC / Absorption** ([Marjan Savadkoohi](#) ([Online](#)) / Marco Pandolfi ([Online](#)) / Andrés Alastuey)

12:55-13:45 Lunch

PROGRESS OF RI-URBANS' WPs

13:45-15:45 WP1 (continuation)

13.45 – 13.55 **T1.1: Chemistry offline** (Andrés Alastuey)

13.55 – 14.05 **T1.1: Chemistry online** (Benjamin Chazeau)

14.05 – 14.15 **T1.1: VOCs/NH₃** (Thérèse Salameh)

14.15 – 14.30 **T1.2: Recommendations for source apportionment techniques for PM and emerging pollutants** (Fulvio Amato) ([Online](#))

14.30 – 14.45 **T1.2: Service tool for NRT source apportionment** ([Olivier Favez](#) ([Online](#)) / J. Eudes Petit)

14.45 – 15.15 **T1.3: Developing products and methods for AQ from profiling observations**
([Lucia Mona](#) / [Christoph Mahnke](#))
15.15 – 15.45 **Discussion and next steps** ([Andre Prevot](#) / [Andrés Alastuey](#))

PROGRESS OF RI-URBANS' WPs

15:45-16:05 Health effects of air pollutants, conventional versus advanced AQ parameters

[Gerard Hoek](#) (Utrecht University) ([Online](#))

16:05-16:45 WP2

16.05 – 16.25 **T2.1: Health effects** ([Vanessa Nogueira](#) ([Online](#))) / [Ioar Rivas](#) ([Online](#)) / [Xavier Basagaña](#) ([Online](#)))

16.25 – 16.35 **T2.2: Oxidative potential** ([Gaelle Uzu](#))

16:35-16:50 Coffee break + Poster session continuation

PROGRESS OF RI-URBANS' WPs

16:50-17:45 WP2 (continuation)

16:50 – 17.05 **T2.3: Urban mapping** ([Martine Van Poppel](#) & [Jelle Hofman](#))

17.05 – 17.15 **T2.4: Synergy support** ([Teresa Moreno](#)) ([Online](#))

17.15 – 17.45 **Discussion and next steps** ([Roy Harrison](#) / [Gerard Hoek](#) ([Online](#)))

17:45-18:45 Website progress and Steering Committee (WP Leaders, Data Manager, Innovation Manager & Risk Manager)

20:00 Dinner at [Vakwerkhuis Restaurant](#)

Professor [Snijdersstraat 2](#), Delft

Each delegate will pay for the dinner in advance. Price is fixed: 36€.

There will be a buffet with 5 vegetarian dishes, including free drinks (soft drinks, beer, and wine), and as dessert coffee/tea with a pastel de nata.

Payment will be made with pin in advance during the day/at the registration in the morning.

19th October 2023 (Day 2)

Day 2 – [Link \(click here\)](#)

Meeting link from 08:30 h CEST. All timing refers to CEST

PROGRESS OF RI-URBANS' WPs

08:30-08:50 Modelling ultrafine particles in Europe

[Spyros Pandis](#) (Patras University)

08:50-10:20 WP3

08:50 – 09:00 **WP3 Overview** ([Maria Kanakidou](#) ([Online](#))) / [Augustin Colette](#))

09:00 – 09:15 **T3.1: Urban dispersion: street scale and vertical structure** ([Leena Jarvi](#))

09:15 – 09:30 **T3.2: Emissions: UFP, downscaling, top-down and bottom-up**

([Jeroen Kuenen](#) / [Marc Guevara](#))

09:30 – 09:45 **T3.3: Regional modelling (OP, UFP, BC, VOC)** ([Augustin Colette](#) / [Spyros Pandis](#))

09:45 – 10:00 **T3.4: Implement novel AQ indicators in tools supporting policy decision making to improve citizen health** ([Hilde Fagerli](#))

10:00 – 10:30 **Discussion and next steps** (Augustin Colette / Maria Kanakidou ([Online](#)))

PROGRESS OF RI-URBANS' WPs

10:30-10:50 What will we deliver for 3D measurements for AQ that can be offered to stakeholders to be implemented? Martial Haeffelin (IPSL/CNRS) ([Online](#))

10:50-11:30 WP4 Welcome (Teresa Moreno ([Online](#)) / Tuukka Petäjä)

10:50 – 11:05 **T4.1: Aerosol source apportionment** ([Jean-Eudes Petit](#) / [Hilkka Timonen](#))

11:05 – 11:20 **T4.2: Aerosol number size distribution** ([Juha Sulo](#) / David Beddows)

11:20 – 11:35 **T4.3: Novel health indicators** (Andres Alastuey / [Kaspar Daellenbach](#))

11:35-11:12:00 Coffee break + Poster session continuation

PROGRESS OF RI-URBANS' WPs

12:00-13:15 WP4 (continuation)

12:00 – 12:15 **T4.4: Urban mapping** ([Karine Sartelet](#) / Gerard Hoek ([Online](#)))

12:15 – 12:30 **T4.5: Pollution hot spots** (Arnoud Apituley)

12:30 – 12:45 **Collaboration between RI-URBANS & ICOS-Cities pilots** (Tuukka Petäjä)

12:45 – 13:15 **Discussion and next steps** (Tuukka Petäjä / Teresa Moreno ([Online](#)))

13:15-14:15 Lunch

PROGRESS OF RI-URBANS' WPs

14:15-14:35 DEFRA's network of supersites: An example supporting implementation and upscaling [Anja Tremper](#) (ICL) / Ian Chen (ICL)

14:35-16:00 WP5

14:35 – 14:55 **T5.1: Data management Plan (DMP) progress and data gathered**
([Wenche Aas](#) / Markus Fiebig ([Online](#)) / Cathrine Lund Myhre ([Online](#)))

14:55 – 15:10 **T5.2: Establishing data quality controls to upscale** (Ali Wiedensohler ([Online](#)))

15:10 – 15:25 **T5.3: Implementing the modelling framework** ([Augustin Colette](#) / Maria Kanakidou ([Online](#)))

15:25 – 15:40 **T5.4: The case study for replicating RI-URBANS in Warsaw** (Iwona Stachlewska)

15:40 – 16:00 **T5.5: The road map for upscaling: How WP5 will upscale STs?**
(Paolo Laj)

16:00 – 16:30 **Discussion and next steps** (Paolo Laj)

16:30-17:30 Wrap up of Day 2 & Joint final discussion

End of the Science Meeting

VENUE

The RI-URBANS 2nd Science Meeting will be carried out on **18-19 October 2023** in a hybrid mode (both face-to-face and online) in **Delft, The Netherlands**.

The venue will be at the **Green Village Delft**.

[Link to Google Maps](#)



TU Delft campus

Co-Creation Centre



How to arrive to the venue? You will find the most recent info here:

<https://www.thegreenvillage.org/en/how-to-get-there/>

Address

The Green Village

Building: Co-Creation Centre

Van den Broekweg 4

2628 CR Delft

- **By Bus**

The Green Village is easily accessible with public transport. Take the train to the Delft Station and from there you can take one of the following buses to the TU Delft Campus:

- Bus 69 (towards "Technopolis"), get off at "Van der Burghweg" bus-stop;
- Bus 174 (towards "Rotterdam"), get off at "Bakemastraat" bus-stop.

- **By Car**

The Green Village at the TU Delft Campus is easily accessible from the highway A13. Take junction 10 (TU Delft) and follow the signs "Sports". The new parking garage at "Sports" offers enough paid parking spaces directly besides the Green Village.

- **By Bicycle or Foot**

On the Mekelweg (opposite "Sports"), take the glass bridge to reach the Green Village. You can park your bicycle besides our office .



Field lab The Green Village

Public Transport to Delft

By airplane

There are 2 airports near Delft:

- **The Amsterdam Schiphol Airport:** main airport of the Netherlands with many flight options.
- **The Rotterdam / The Hague Airport:** local airport with mostly low-cost flight operations.

From Amsterdam Schiphol Airport

The Amsterdam Schiphol Airport is 40 minutes away by train. The train station is located directly at the Schiphol Airport nearby the Arrival Hall 3.

More information on the Dutch Railway company NS (*Nederlandse Spoorwegen*), incl. a Journey Planner, you can find on the website <http://www.ns.nl/en/>

Price of the train ticket:

- One-way ticket from Schiphol Airport to Delft (or vice versa) costs €11,60 (2nd class) or €19,72 (1st class) ordered online
- Using the Journey Planner on the website, you can find out the price of your intended journey and buy the ticket.

Other locations to purchase a printed ticket for €1 extra:

- NS self-service ticket machine (you can select option with English language) on the train station
- NS Service Desk

From Rotterdam / The Hague Airport

The Rotterdam / The Hague Airport is only a few kilometres away from Delft but has poor and limited public transport connections. The bus no.33 (*Stadsbus 33*) can take you to the Rotterdam Central Station. From there you can take a train to Delft. During the day the bus operates regularly (about every 10 minutes).

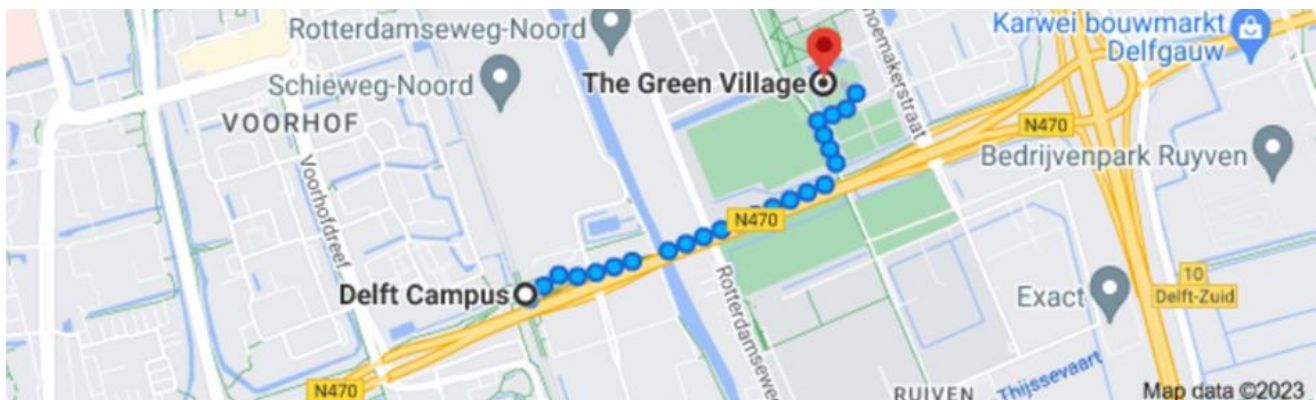
For actual information on public transport (including train, bus, tram, etc.) in the Netherlands, you can use the Travel Planner: <http://9292.nl/en>

By train

From surrounding countries (Belgium, France, Germany, etc.), it is possible to come to Delft by train.

Delft has two train stations:

- **Delft Centraal / Central Station**, from which it is a half-hour walk (about 2,7km) to the Green Village
- **Delft-Campus**, from which it is only a 17-minute walk (about 1,4km) to the Green Village



Delft

City information

Information on Delft (e.g., accommodations, shopping, eating & drinking, history of Delft) can be found on the City Website: <https://www.delft.com>

- Map of Delft city centre: <https://www.delft.com/storage/plattegrond-web-2017.pdf>



Hotels in Delft

Delft has a lot of hotels that can be easily booked via www.booking.com. The following hotels are located near the Delft station.

Ibis Hotel Delft

Website: <https://www.ibisstylesdelftcity.nl/en/>

Address: Van Leeuwenhoekpark 2, 2611DW Delft

Distance from the Delft station: 100 m / 1-min walk

Student Hotel Delft

Website: <https://www.thestudenthotel.com/stay/hotel-stay/>

Address: Van Leeuwenhoekpark 1, 2611 DW Delft

Distance from the Delft station: 100 m / 1-min walk

Best Western Museum Hotel Delft

Website: <https://www.bestwestern.nl/booking-path/hotel-details/best-western-museumhotels-delft-delft-92579>

Address: Phoenixstraat 50A, 2611 AM Delft

Distance from the Delft station: 600 m / 8-min walk

Grand Canal Hotel Delft

Website: <https://www.grandcanaldelft.nl/en>

Address: Breestraat 1, 2611 CB Delft

Distance from the Delft station: 300 m / 4-min walk

General Information

Time difference

The Netherlands is in the Central European Time Zone. Central European Standard Time (CET) is 1 hour ahead of Greenwich Mean Time (GMT+1).

Currency & Banking

The currency in The Netherlands is the Euro (€). Credit cards are accepted in most of the restaurants and shops.

Electricity

Standard power supply in The Netherlands is 220V/50Hz (two-pin power outlet).



Delft, Oostpoort