

Grant Agreement: 814966



# CARES

## CITY AIR REMOTE EMISSION SENSING

Deliverable 3.5 Summary report on learnings from Cities' Exchange Network

WP3/Task 3.5



This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement No 814966. The sole responsibility for the content of this document lies with the authors. It does not necessarily reflect the opinion of the funding authorities. The funding authorities are not responsible for any use that may be made of the information contained herein.

CARES website: [www.cares-project.eu](http://www.cares-project.eu)

June 2023

## Document history and validation

| When          | Who                                    | Comments   |
|---------------|--|--|
| 6 April 2023  | Peter Mock, ICCT                       | First complete report  |
| 11 April 2023 | Ake Sjodin, IVL<br>Yoann Bernard, ICCT | Review of the deliverable                                      |
| 20 April 2023 | Ake Sjodin, IVL                        | Deliverable submitted  |
| 7 June 2023   | Ake Sjodin, IVL                        | Revised deliverable submitted after Project Officer's comments |

Author: Peter Mock, International Council on Clean Transportation (ICCT)

Contact: [peter@theicct.org](mailto:peter@theicct.org)

Deliverable No. D.3.5 Public report.

## 1. About the Cities' Exchange Network

An important objective of WP3 is to bring together representatives from cities across Europe, with experience and/or an interest in carrying out remote sensing. To foster this exchange among cities, the CARES City Exchange Network (CEN) group was founded and regularly met throughout the course of the project.

A list of CEN meetings that took place, as well as detailed minutes of the meetings, are provided in a separate deliverable (D3.6).

The following description will focus on learnings from the CEN meetings as well as an outlook and next steps.

## 2. Learnings from the Cities' Exchange Network

The CEN in total met 8 times throughout the CARES project. Taking into account that during several months the project was essentially on ice, due to the implications of COVID-19 restrictions, this means that the group met about 3 times per year. This is slightly less than the quarterly meetings originally foreseen in the project proposal.

Already from the beginning, during the first meeting of the CEN, it became clear that the cities directly involved in the project (Krakow, Milan, Prague) had a strong preference to keep the CEN meetings restricted to this core group of cities, rather than inviting more cities to the meetings. At least during the initial phase of the project, it was argued, there are so many practical questions to discuss and solve about the practical steps necessary to prepare for the scheduled demonstration measurements in the cities.

For similar reasons, it was also decided after the first meeting - that one still having been held jointly with the Chinese partners - to focus the CEN meetings on an exchange between European cities, rather than trying to integrate the quite different questions from Chinese cities into the meetings. Instead, the CARES project partners organized regular exchange meetings with the Chinese partners, including but not limited to city representatives.

While the first CEN meetings were still held in person, following the COVID-19 pandemic, all meetings from 2020 onwards were held online. One lesson learned certainly is that these online meetings turned out to be a very efficient and well received way of meeting and discussing. Rather than having to travel across Europe, all CEN participants could easily get together for 90 minutes, have a fruitful discussion, and then continue with other tasks right after.

In terms of participation, the CEN meetings typically had about 10-15 participants involved, including work package leaders from the CARES project and on average about 2 representatives from each of the partner cities involved (Krakow, Milan, Prague). A lesson learned is that while occasionally actual city officials did show up for the CEN meetings, generally it turned out difficult to ensure their participation. Instead, most of the time the cities were represented by partner organizations - for example, AMAT in the case of Milan. A likely reason, aside of availability issue, is the more technical nature of the discussions in the CEN group.

While the initial meetings were indeed focused on a discussion of the necessary preparations of the planned demonstration measurements, for later meetings we had guest speakers who reported about already successfully completed remote emission sensing measurements that took place in other cities, namely Berlin, Frankfurt, Brussels, Sofia, and Antwerp.

Once the first demonstration measurements had been successfully completed, in the City of Milan, there was a lot of interest from the other two cities (Krakow and Prague) to learn about the practical lessons learned in Milan, e.g. with regards to selecting suitable measurement cities. Similarly, later, when the measurements in Krakow and then Prague were completed, the succeeding CEN meeting focused on a presentation of the lessons learned during these measurement campaigns and the other city representatives listened carefully.

It turned out that a number of topics are of common interest for all city representatives, as they all are facing similar challenges when planning for remote emission sensing measurements. These topics in particular include questions around understanding the potential and limits of the technology, selecting suitable measurement sites, obtaining necessary permits and complying with GDPR, and later interpreting the measurement results. It turned out that the discussions in the CEN meetings were most lively and fruitful whenever we touched on these topics - no matter if one of the CARES partner cities reported or one of the guest cities invited to the meetings.

On the other hand, it also became clear that there are some topics that are very specific to each individual city measurement campaign, such as the meteorology or the process for obtaining technical vehicle specifications from the respective ministry. Those topics were less suitable for a discussion within the group and typically were tackled in separate bilateral meetings.

Overall, the CEN meetings were successful in reducing the hurdles for practical mainstream application of remote emission sensing, by informing city representatives and by allowing them to ask questions and for help with regards to any challenges they were facing when carrying out measurements in their own city.

### 3. Outlook and next steps

The CEN meetings were successful in establishing a new network of city representatives and technical experts. It became clear that this network as well as the exchange and learning it allows provide an added value to the participant. It therefore is clear that the CEN will continue to exist beyond the duration of the CARES project. Even now that the actual demonstration measurements have been successfully completed, there remain plenty of promising topics for a continued exchange, in particular around the analysis and interpretation of measurement results.

At the upcoming May CARES stakeholder workshop, the project results and also the CEN will be presented to a broader public. We will aim at sparking interest from additional cities, beyond the core partner cities of the CARES project (Krakow, Milan, Prague). Using funding from FIA Foundation, the ICCT will then aim at organizing a regular exchange of cities interested in remote emission sensing also for the future, taking the CEN established as part of CARES to the next level and securing a continued and fruitful exchange for the future.