



## D8.7-Network of Interest Workshop report

WP8 – Communication, Dissemination and Exploitation



## Document Information

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## Executive summary

The project hackAIR aims improve awareness about air quality in Europe and contribute to a change towards more pro-active and environmental friendly behaviour. hackAIR builds an open technology platform that citizens can use to access, collect and improve air quality information in Europe.

As part of its activities to disseminate and communicate the project, hackAIR also organises a couple of events and workshops to bring together stakeholders to inform about hackAIR and receive valuable feedback and to strengthen the hackAIR project. This report gives an overview of the events that have been organised until the end of the second project year 2017.

## 1 Introduction

hackAIR recognises that it is active in an ecosystem of various organisations, projects and initiatives also involved in air quality monitoring on different levels. hackAIR aims to involve these diverse stakeholders in the project and undertakes several activities to build this “network of interest”. One central element of our strategy is the organization of regular events to bring together other stakeholders. This report informs about these events.

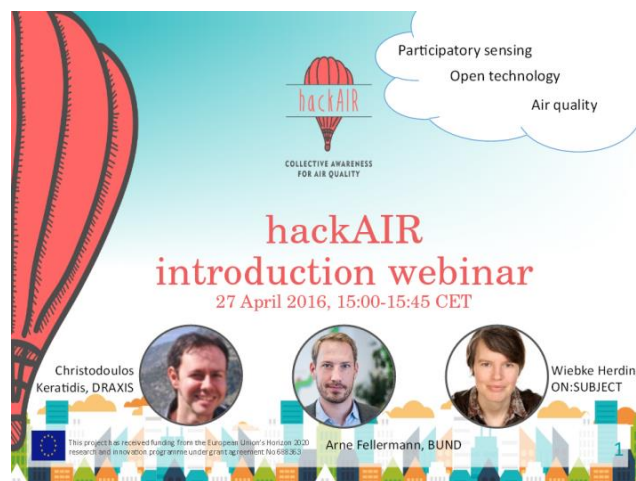
Further activities of the network of interest can be found in the Deliverable “D8.4 - Network of Interest established (1st meeting report)”

## 2 Past Events

In its first 2 project years, the hackAIR project organised 3 events with a total number of 51 participants.

### 2.1 hackAIR stakeholder webinar

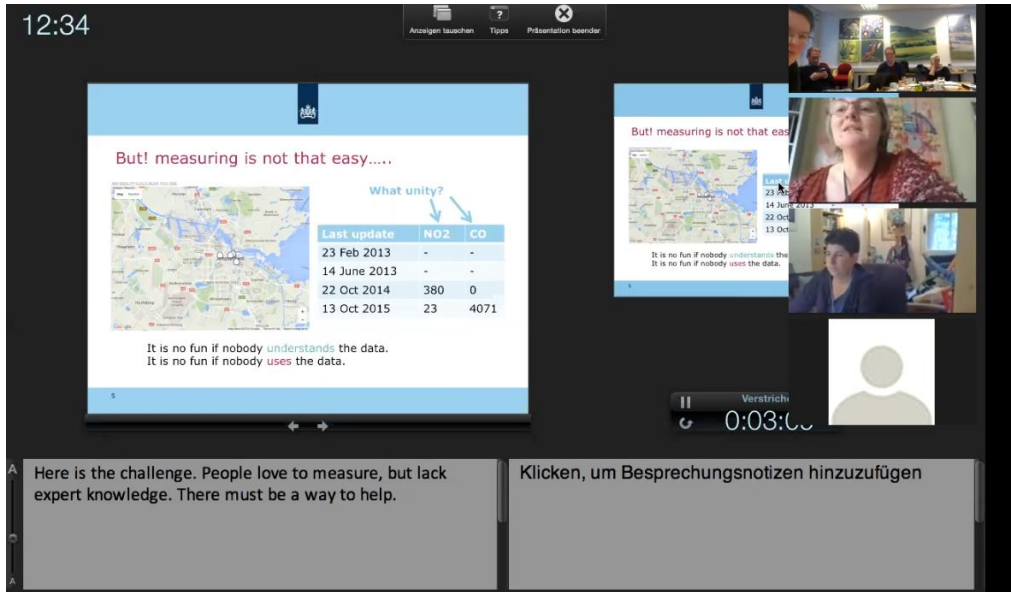
The first event took place on the 27th of April 2016, when hackAIR organized a webinar to present the project to 8 interested stakeholders. Further information about this event can be found in the Annex 4.2



Screenshot of the webinar presentation

### 2.2 hackAIR stakeholder workshop and webinar

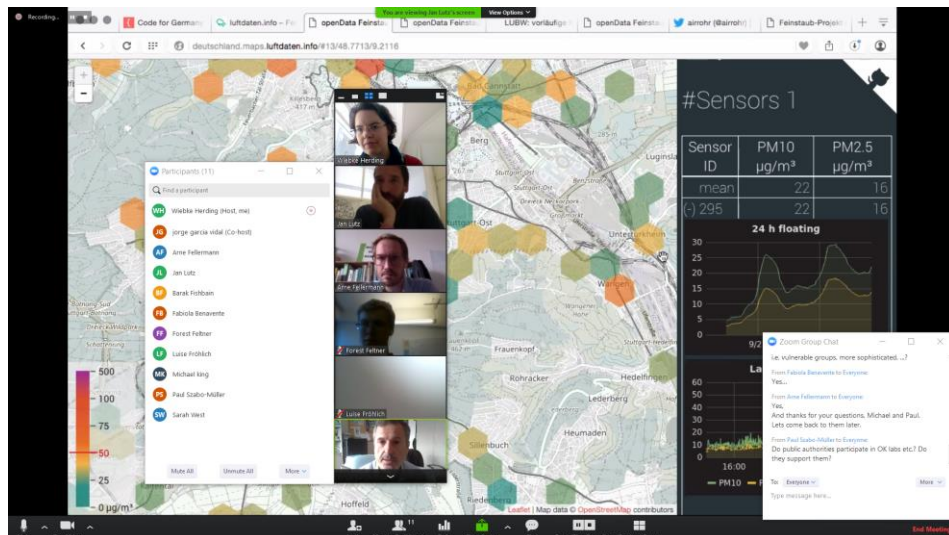
The second event was organised as a tool to bring together a number of stakeholders also from the newly founded “Air Sensing” google group and took place on November 18th, 2016 in Berlin. It had a total of 23 participants from 8 European countries, 5 locally in Berlin and 18 virtually over the conference tool ZOOM. The event featured presentations from the German Environment Agency (UBA) and the Dutch National Institute for Public Health and the Environment (RIVM).

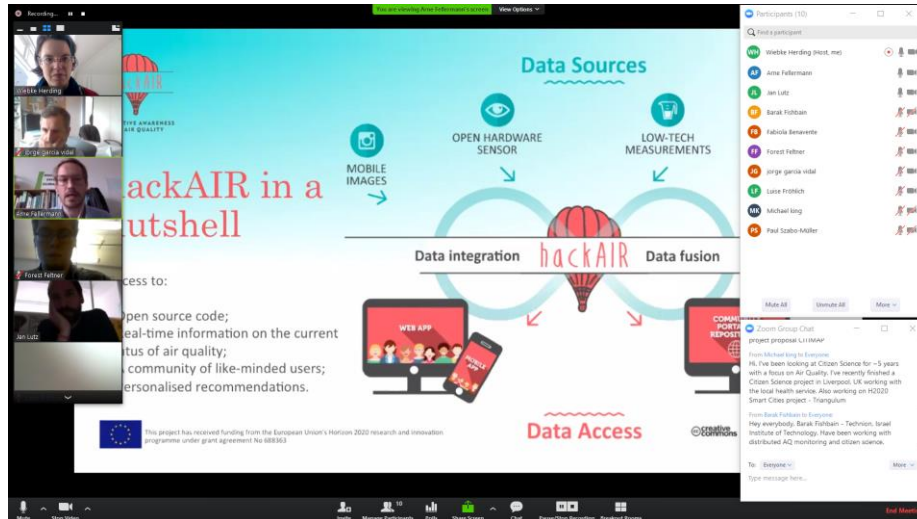


The agenda and a short summary with main outcomes are attached in Annex 4.3

### 2.3 hackAIR 2nd webinar

The third event was a follow-up webinar for the Air Sensing google group, organized on September the 26<sup>th</sup> 2017. The webinar featured 10 participants and focused on the exchange of different projects and an updated presentation of the hackAIR platform as well as updates from the projects CAPTOR and LUFTDATEN.info. Hot topics of discussion were data reliability, validation and calibration, communication and relation with public authorities as well as community relations.





## 2.4 EEB air quality working group activities

As part of the activities of the network of interest, the project partner BUND kept regular contact with the network of European NGOs working on air quality, organized and maintained by the European Environmental Bureau (EEB). Since the start of the project, there were three air quality working group meetings of the EEB.

BUND kicked off these activities in the hackAIR project by setting the topic on the agenda of EEB clean air working group on the 24 and 25 February 2016. On the second day, BUND coordinated the dedicated session "Air quality measurement: science and innovative citizens' initiatives' initiatives". In this session Luc Int Panis from Vito spoke about personal exposure to air pollution, Romain Lacombe from Plume Lab presented the companies vision for an easy AQ measurement device and Arne Fellermann from BUND presented the project hackAIR.

[Documentation can be found in Annex 4.4.]

Subsequently BUND regularly updated the working group about activities of hackAIR, including the next two working group meetings on the 1 and 2 of December 2016 in Brussels and on the 15th of November 2017 in Paris.

## 2.5 Further activities

The whole consortium has been very active to stay in contact with stakeholders and keep a live conversation with those interested. All partners participated in a broad range of events to present and explain the hackAIR project. These activities are listed in the Annex 4.5.

### 3 Next steps

So far hackAIR established an air sensing google group with currently 57 members and organised three events for the network of interest. hackAIR members also presented and spoke at a long series of events and stakeholder groups with a current list of 49 external events where hackAIR project partners presented hackAIR.

In the 3rd project year, hackAIR will focus its activities even more on the exchange with its stakeholders. The projects pilot will start in February and will be accompanied with an invitation to the network of interest to test the platform. After a couple of weeks up to two months, the project will again host a webinar to discuss lessons learnt and possibilities for future cooperation or need for further activities.



## 4 Annex

### 4.1 Dissemination indicators

Indicator	Current Status	% Target Value reached	Target value
Number of meetings	3	75%	4
Total number of participants (of the network of interest) (workshops & google group)	92	92%	100
Number of external meetings with hackAIR representation	49	490%	10

### 4.2 Documentation of the hackAIR introduction webinar (27. April 2016)

The first webinar was organised on the 27th of April 2016 and aimed to present the project to interested stakeholders. The invitation was sent to the list of interested stakeholders, to subscribers of the hackAIR newsletter and other email groups. It gave 8 participants the opportunity for questions and the project a good estimate of the interest for further discussion.

Participating institutions were the Centre for Social Innovation (CSI), the Vrije Universiteit Brussel (VUB), the Trinity College Dublin, the Helmholtz-Centre for Environmental Research, the European Environmental Citizens' Organisation for Standardisation, the German Environmental Aid (DUH) and the Health and Environment Alliance HEAL.

### 4.3 Documentation hackAIR stakeholder workshop and webinar (18. November 2016)

#### 4.3.1 Agenda

10:45	Start arriving for the online and in-person meeting - informal hello & coffee
11:00	<b>Welcome &amp; Introduction</b> Wiebke Herding (ON:SUBJECT) & Arne Fellermann (BUND)
11:15	<b>Round of introductions</b> Who's here? Initiatives & projects working on air quality and participatory sensing
11:45	<b>Current developments in official monitoring networks in Germany and the EU</b> <ul style="list-style-type: none"> <li>Ute Dauert (German Environmental Agency UBA)</li> </ul>
12:30	<b>What governments can do to stimulate citizen science - a perspective from the Netherlands</b> <ul style="list-style-type: none"> <li>Hester Volten, Joost Wesselink &amp; Frans Snik</li> </ul>
13:00	Lunch

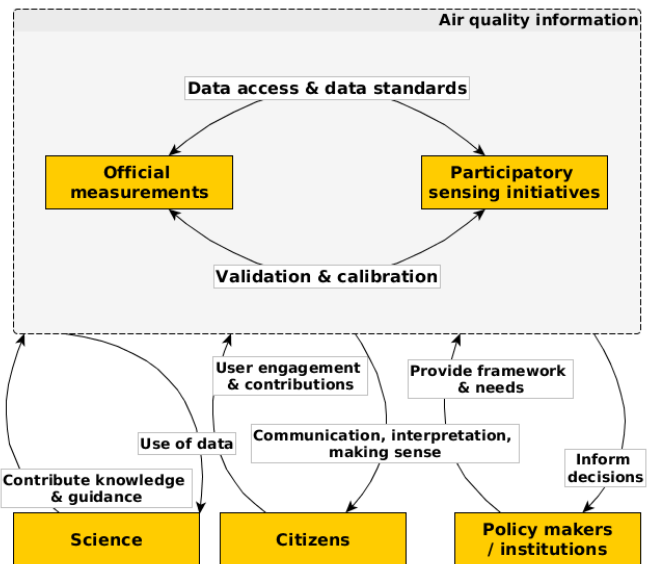
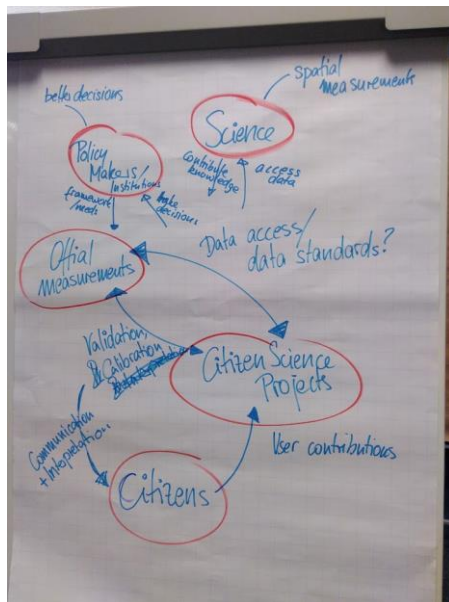
14:00	<b>hackAIR: current plans and co-creation</b> Feedback and perspectives, including: <ul style="list-style-type: none"> <li>• User-centred design (Yaela Golumbic)</li> <li>• Gamification (Stavros Lounis)</li> <li>• and all other participants</li> </ul>
15:00	Coffee break
15:20	<b>Campaigning, participatory sensing and data quality</b> <ul style="list-style-type: none"> <li>• Discussion: How can we use the data gathered to make an impact on air quality?</li> </ul>
16:15	<b>Conclusion and outlook.</b> How to improve coordination between projects and increase the impact of participatory sensing?
17:00	End of the workshop

### 4.3.2 Feedback on Prototype

Impressions	Keep
<ul style="list-style-type: none"> <li>• Overall positive Great that "Good" is the first thing that catches the eye. It creates some tension that most of the map is kind of red</li> <li>• First Impressions – a lot, possibly too much information</li> <li>• Complex</li> <li>• I think it looks good, there is a lot of information on each page</li> <li>• It has a very nice and sophisticated graphical interface, and provides a lot of info.</li> <li>• great for a millennial or tech savvies, challenging for other demographics</li> <li>• Very dark, generally friendly, lots of information</li> <li>• seems to be an open data platform (well designed) with a social dimension ~ attractive</li> </ul>	<ul style="list-style-type: none"> <li>• I like the comparison to other cities</li> <li>• A simple, easy to interpret air quality indicator – however the challenge is that this has to operate in different contexts for different audiences dependent on their health or other needs.</li> <li>• Personal profiles</li> <li>• local information, clear indication of current situation, "how do you feel?"</li> <li>• Ask for user's feelings</li> </ul>
Change	Delete
<ul style="list-style-type: none"> <li>• Maybe moving the contributors and their contributions to another page, perhaps profile page, rather than the main one</li> <li>• The 15% on the center needs elaboration via a Word on what I am looking at, rather than the phrase (That was for what to change)</li> <li>• Map overview, zoomed out, better to be personalised to where you are and show air</li> </ul>	<ul style="list-style-type: none"> <li>• I think the colour spectrum is too much, maybe just green to red</li> <li>• Such a 'great atmosphere' categories.</li> <li>• Pictures- if they are not of that specific day and place</li> <li>• Friends &amp; profiles; "improve your rank"</li> </ul>

<p>quality in your location – finer grained detail to enable individuals to make decisions. This is difficult though, air quality can change from street to street.</p> <ul style="list-style-type: none"> <li>• Have one main think to look at (e.g. map), add other information as optional buttons</li> <li>• Quantification / numbers. Recommendations?</li> <li>• Index? No mg<sup>3</sup>?</li> <li>• Compare feature is good to interest people but I would prefer to see more cities - like the top 10</li> <li>• Simplify Home: Information about data now, maybe time period.</li> </ul>	<ul style="list-style-type: none"> <li>• Photo upload (I don't see the point)</li> </ul>
<p><b>Questions</b></p>	
<ul style="list-style-type: none"> <li>• How is data collected?</li> <li>• Has the development of the interface gone through a user-led or co-design process with a citizen that has a real need for the service?</li> <li>• Why day averages? What are they based on? What pollutants are presented?</li> <li>• What is the AQI here? For me, as a scientist, it's always something relative, and may be driven by whatever reason.</li> <li>• What are the numbers? How does 'submit your feelings' influence the index?</li> </ul>	

### 4.3.3 Summary of challenges / relationships



### 4.4 Documentation of the dedicated session at the EEB air quality working group meeting in Brussels on the 24<sup>th</sup> and 25<sup>th</sup> of February 2016.

Agenda screenshot

## Day 2 – 25 February

9:30-10:15 Taking stock of previous day's discussions: next steps for advocacy work on NEC and other relevant policy files (domestic heating, shipping, road, industry, etc) – **NGO internal discussion**

### ***Session 5 – Air quality measurement: science and innovative citizens' initiatives***

10:15-10:50 Personal exposure to air pollution: latest developments & discussion  
Luc Int Panis, VITO

**10:50-11:00 Coffee break**

11:00- 11:30 Plume Lab's mobile application & discussion  
Romain Lacombe, Plume Lab

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11.30- 12:00 Presentation of the new HACK AIR project & discussion  
Arne Fellermann, BUND

## 4.5 List of Activities

Although not part of the workshop report of the hackAIR project it might be interesting to see the larger context of outreach activities undertaken by the hackAIR project partners in discussing the project and keeping contact to stakeholders.

Activities	Date	Partners involved
Presentation hackAIR at expert panel talk “Fachgespräch Luftreinhaltung“ (DUH), Berlin	16. February 2016	BUND
Dedicated session “Air quality measurement: science and innovative citizens’ initiatives“ at Clean Air Working Group of the European Environmental Bureau (EEB)	24-25. February 2016	BUND
European Geosciences Union General Assembly 2016 (Vienna, Austria)	17-22 April 2016	NILU
Making Sense. Advances and explorations in participatory sensing during the Design and the City conference (Amsterdam, Netherlands)	22 April 2016	ON:SUBJECT
Living Planet Symposium 2016 (Prague, Czech Republic)	9-13 May 2016	NILU
1st International Workshop on the Social Web for Environmental and Ecological Monitoring (SWEEM)	17 May 2016	CERTH
CAPS community meeting and workshop (Berlin, Germany)	18 May 2016	DRAXIS
Technology Forum 2016 (Thessaloniki, Greece)	18 May 2016	DRAXIS
The ECSA Citizen Science Conference 2016 (Berlin, Germany)	19-21 May 2016	DRAXIS
GEO European Projects Workshop (Berlin, Germany)	31 May – 2 June 2016	NILU
10th GEO European Projects Workshop (Berlin, Germany)	1 June 2016	NILU
Making Sense workshop: Co-Designing for Citizen Sensing, (Brussels, Belgium)	7-8 June 2016	VUB
Citizen Observatories for Water Management (COWM) workshop (Venice, Italy)	7-10 June 2016	NILU
CAPS Policy Workshop on Digital Social Innovation organised by the DSI4EU (Brussels, Belgium)	29 June 2016	VUB
Launch of the “Air Sensing“ google group - email discussion list for interested stakeholders	2. August 2016	
28th Annual conference International Society for Environmental Epidemiology (ISEE) (Rome, Italy)	1-4 September 2016	NILU
Eindhoven Maker Faire (Eindhoven, Netherlands)	10 September 2016	ON:SUBJECT
1st International Workshop on Internet and Social media for Environmental Monitoring (ISEM 2016) during 3 <sup>rd</sup> International Conference on Internet Science (Florence, Italy)	12-14 September 2016	CERTH, DRAXIS
Workshop New Perspectives for the Control and Prevention of Air Pollution in Urban Environments (Bucharest, Romania)	23 September 2016	NILU
ICT Proposers’ Day (Bratislava, Slovakia)	26-27 September 2016	
CIENS Urban Conference: Smart and green cities – for whom? (Oslo, Norway)	13 October 2016	NILU
Mapping, Sensing, and Crowdsourcing Geographic Information (London, UK)	13-14 October 2016	NILU
Round table ‘citizen air quality meter’ (Brussels, Belgium)	18 October 2016	VUB

European Stakeholder Round Table on Citizen and DIY Science and Responsible Research and Innovation (Berlin, Germany)	8 November 2016	BUND
Workshop (Un)plugging Data in Smart City-Regions (Brussels, Belgium)	14 November 2016	VUB
Informal meeting on hackAIR and Expair	30. November 2016	VUB, BUND
Project update to the Clean Air Working Group of the EEB	1. December 2016	BUND
VDI/DECHEMA/GDCh Expert Forum on Atmospheric Chemistry – New and emerging technologies: Impact on air quality and climate (Frankfurt am Main, Germany)	5-6 December 2016	BUND
Citizen Science COST Action – Citizen Science to promote creativity, scientific literacy, and innovation throughout Europe (Berlin)	12-13 December 2016	NILU
Digital Social Innovation Fair 2017 (Rome, Italy)	1-2 February 2017	DRAXIS
Haldenkanalen som nasjonalt laboratorium for Det Gronne Skiftet (Eidsverket, Norway)	27 February 2017	NILU
SmarterLabs – Citizen Science for Brussels Air (Brussels, Belgium)	13 March 2017	VUB
Researchers Breakfast on Air Quality & Citizen Science (Brussels, Belgium)	27 March 2017	VUB
European Geosciences Union General Assembly 2017 with (Vienna, Austria)	23-28 April 2017	NILU
Making Sense – Citizen Science Air Quality Meetup with ON:SUBJECT (Amsterdam, Netherlands)	5 May 2017	ON:SUBJECT
Levende grønne byer (Oslo, Norway)	22-23 May 2017	NILU
GDC webinar ‘Gamification, a driver for behaviour change in sustainable cities’ with VUB and DRAXIS (online)	6 June 2017	
Beijing International Forum on Metropolitan Clean Air Actions (Beijing, China)	8-9 June 2017	NILU
Urban Air Quality Partnership – Stakeholders Workshop (London, UK)	13 June 2017	DRAXIS
2nd CAPS Community Workshop (Volos, Greece)	10-14 July 2017	several
82nd Thessaloniki International Fair (Thessaloniki, Greece)	9-17 September 2017	DUTH
REQUA Final Workshop (Thessaloniki, Greece)	18-19 September 2017	DRAXIS
Health Equity: The New Urban Agenda and Sustainable Development Goals (Coimbra, Portugal)	26-29 September 2017	NILU
NTNU Sustainability Science Conference (Trondheim, Norway)	18-20 October 2017	NILU
Lecturer 2 – Air pollution Teacher Course (Tromsø, Norway)	25-26 October 2017	NILU
Citizen Science Researchers Meeting on Air Pollution (Brussels, Belgium)	8 November 2017	VUB
Clean air working group (Paris, France)	15 November 2017	BUND
4th International Conference on Internet Science (Thessaloniki, Greece)	22-24 November 2017	CERTH, DRAXIS, VUB
DUH Air Quality Roundtable (Berlin, Germany)	28 November 2017	BUND