



CitiMeasure - using citizen measurements to create smart, sustainable, and inclusive cities

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Acronyms

BZK	Ministry of the Interior and Kingdom Relations of Netherlands
EU	European Union
ICTU	Information and Communications Technologi(es) (U)
NGOs	Non-Governmental Organisations
UCD	University College Dublin
UWE	University of the West of England - UWE Bristol
WG	Working Group

1 Executive Summary

Following a co-creation approach, members of each CitiMeasure working group discussed and agreed upon a vision and a number of objectives for their working group. The current report describes the process and outputs of this co-creation approach. The co-creation process included two co-design sessions, one at the inception meeting of the working groups in September 2021, and another one in October 2021. Processing of the outputs of these sessions, and the feedback from the Strategy and Oversight working group helped consolidate the vision and the objectives of the instrument working groups. The final visions of the working groups are as follows:

- **The Comparability working group:** “The CitiMeasure Comparability WG investigates and compares existing technical (data) and interoperability standards that supports the gauging of consumer-grade air quality sensors with reference sensors of (regional national, and municipal) authorities. The aim is to develop a basic guideline that informs citizens and city officials on what sensors to use to ensure the comparability of data with other citizen science initiatives, as well as with official observations.”
- **The Digital Inclusion working group:** “The CitiMeasure Digital Inclusion WG works towards advancing the understanding of the issue of ‘competencies’ for digital inclusion. This includes both unpacking competencies required by citizens to participate in citizen science initiatives, as well as those of policy makers, decision makers and municipal employees to engage citizens in such initiatives.”
- **The Behaviour & Policy working group:** “The CitiMeasure Behaviour & Policy WG works towards increased understanding of the changes in behaviour of different stakeholder groups, as well as decision and policy making processes. This includes changes in trust, participation behaviour, new culture of collaboration, sharing responsibilities, as well as established decision and policy making processes.”
- **The Strategy & Oversight working group:** “To oversee the development of the instruments, implementation of the pilots and creation of the Knowledge Centre by identifying linkages between the instruments being developed, sharing good practices and new information, ensuring connections with external stakeholders, and being advocates for citizen science and CitiMeasure.”

2 Introduction

2.1 ABOUT CITIMEASURE

Citizen measurement (or citizen science) initiatives contribute to a sustainable transition in European cities. By using an array of tools and instruments, citizens can play a role in measurement and monitoring of indicators on air quality, temperature, soil moisture, biodiversity, or risk management, among other environmental areas. Citizen measurement initiatives also can foster communications and interactions among stakeholders and contribute to the democratisation of science and policy.

The CitiMeasure project (2021-2023) aims to bring together the experiences and expertise of European cities, organisations and networks in implementing citizen science initiatives (in the form of guidelines, toolbox, web-platform, Apps, etc.). The project builds upon the lessons learned from the Dutch City Deal Working Groups, a network of stakeholders working on the broader area of smart cities, which includes the topic of citizen measurement initiatives. The City Deal partners have been

working closely with the Dutch Ministry of Interior and Kingdom Relations for over a year. CitiMeasure builds upon these experiences and will use those to develop and pilot three ‘instruments’ namely:

1. An instrument that allows the outputs of different city measurement initiatives to be compared.
2. An instrument that safeguards the digital inclusivity of city measurement initiatives (maximising the opportunities for participation of interested individuals and communities).
3. An instrument that connects information to behaviour change and policy.

There is a 4th (Strategy and Oversight) working group that focuses on providing strategic direction and ensuring cohesion of activities across the three Instrument Sub-Groups, and the project in general.

CitiMeasure will also raise awareness of the importance of citizen measurement initiatives and capitalise on the results and tools of similar citizen science projects by creating an online European Knowledge Centre with a repository of good practices.

2.2 PURPOSE OF THIS REPORT

This report presents the vision and objectives of the four CitiMeasure working groups. It includes descriptions of the methodology that was designed and followed to co-create the visions and objectives in a collaborative way, and also who participated in the process.

2.3 STRUCTURE OF THE REPORT

This report is structured in four main sections: the methodology section which includes a step-by-step approach to co-create and refine the vision and objectives of the CitiMeasure working groups, an overview of the participants at the inception meeting and at the first co-design sessions as well as people who expressed interest to join the project, the visions and objectives of each working group, and, finally, concluding remarks.

3 Methodology

The methodology for co-creation of visions and objectives of the working groups consisted of five main steps: (1) an interactive co-creation session during the inception meeting of the working groups on 29 September, (2) processing of the outputs of the inception meeting to draft visions and objectives, and to provide feedback to the members of the working groups, (3) interactive co-creation workshops for the three instrument working groups to discuss and validate the draft visions and objectives, (4) Further processing and consolidation of the visions and objectives based on the outputs of the previous step, and (5) sharing the (semi-)final visions and objectives with the Strategy and Oversight working group for their feedback. Figure 1 summarises these steps, and further details about each step are presented in sections 3.1 to 3.5.

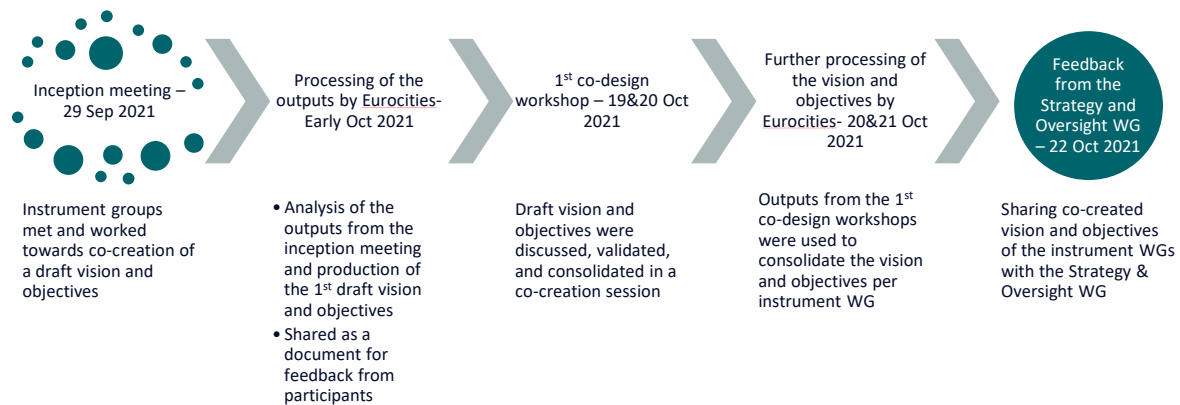


Figure 1: Steps taken to co-create visions and objectives of the CitiMeasure working groups

3.1 CO-CREATION SESSION DURING THE INCEPTION MEETING

During the inception meeting of CitiMeasure that was held online on 29th of September 2021, participants were divided into four breakout rooms and participated in a co-creation exercise. The aim of this moderated exercise was to discuss and agree on a first draft of visions and objectives for each working group. Participants were assigned to the breakout rooms based on their expressed interest and sign-ups for the specific working groups. For practical purposes, the breakout sessions were organised in parallel. Participants who expressed interest in more than one working group were assigned to only one breakout room. Nevertheless, participants could switch to another breakout room if they requested it. The total length of the parallel co-creation sessions was 80 minutes. Each session had a moderator from Eurocities and followed a five-step approach as illustrated in Figure 2.

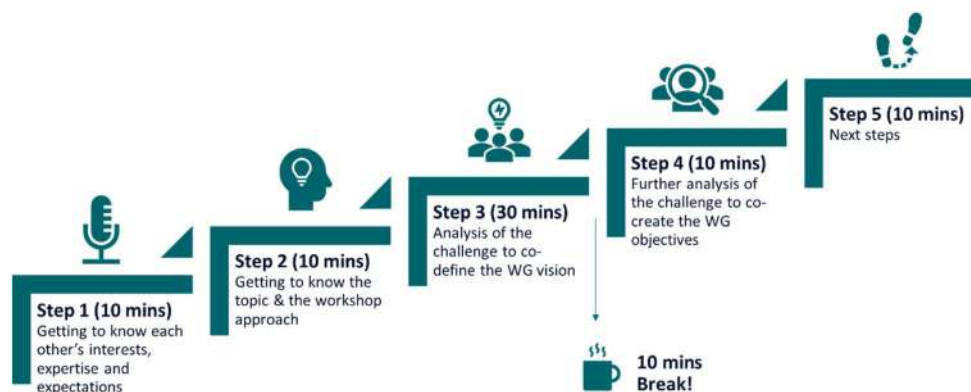


Figure 2: Steps and division of time of the parallel co-creation session at the CitiMeasure inception meeting

A major part of the session was dedicated to discussing and drafting a shared vision and a number of objectives that appealed to the participants in each working group. In the case of the instrument working groups, this included discussion and exchanges on the working group topic. We used a modified version of the AtKisson's Pyramid Model (AtKisson et al., 2004), to breakdown the challenges related to the topic of each working group and jointly agree on *what* each working group wants to achieve, i.e., a joint vision, and *how* exactly the working group members plan to achieve that, i.e., the objectives. Figure 3 illustrates the steps and guiding questions used to arrive at the vision and

objectives. Participants started from the bottom of the pyramid and reflected on the questions, first individually, and then together. Mural was used as an interactive tool for this purpose. Participants used virtual post-its to write down their ideas. The moderator of each session would then start grouping the ideas and ask for elaborations and further discuss the ideas written by the participants. After discussing each question, the participants were asked to reflect on the next question (moving up the pyramid) using the same procedure.

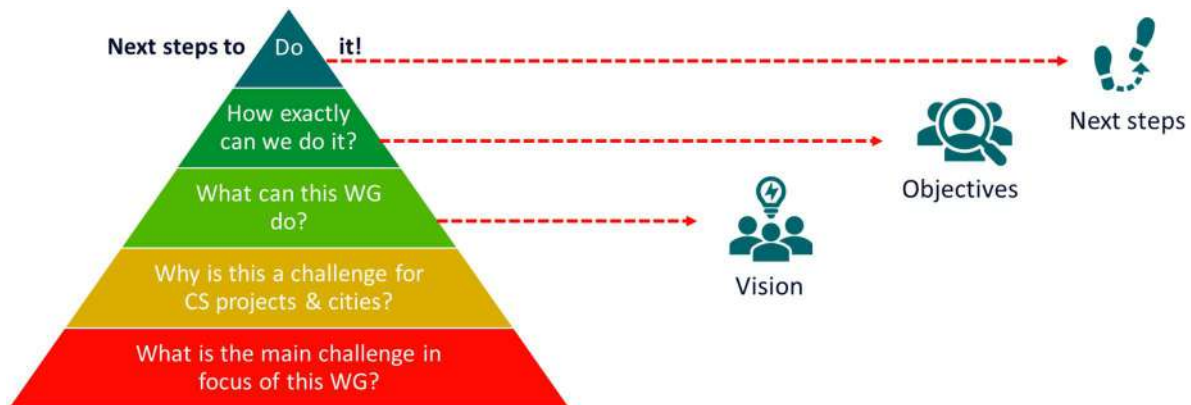


Figure 3: Approach and steps for defining visions and objectives of the instrument working groups during the inception meeting

Since the Strategy and Oversight working group doesn't really engage with a specific topic, this step of the co-creation session was different and focused mainly on the processes of feedback, information exchange and interactions with the three instrument groups.

The Mural boards created in the four sessions are presented in Annex 1.

3.2 PROCESSING OF THE OUTPUTS OF THE INCEPTION MEETING

After the inception meeting, the moderators of each session processed the ideas generated in the breakout groups. Not all the groups managed to finish all parts of the pyramid exercise, nevertheless, the outputs of the discussions in all four working groups provided enough inputs for drafting a 1st version of the vision and objectives. The outputs of the breakout groups on Digital Inclusion and Strategy and Oversight had a clear focus and it was possible to create the 1st draft of one vision and a set of objectives. In the case of the Comparability and Behaviour and Policy it was difficult to draft a single set of vision and objectives and we decided to present the members with two possible sets of vision and objectives to choose from. These draft vision and objectives, along with a summary of the main points of discussions were then shared with the members of the working groups. Everyone who showed interest in joining the CitiMeasure working groups, received an email with a link to an online document containing the draft vision and objectives, as well as a summary of discussions of all four working groups. This also included the members who couldn't participate in the inception meeting. Working group members were given one week to provide feedback on this document. Only two participants provided feedback on the document, which triggered the need for validation during the 1st co-design workshops.

3.3 1ST CO-DESIGN WORKSHOPS

The 1st co-design workshops of the CitiMeasure working groups were organised in the week of 18-22 October 2021. Unlike the inception meeting, the 1st co-design sessions of the working groups were held on different dates/timeslots to enable the participation of members who had shown interest in more than one working group. One of the main aims of this 2 hour workshop was to further discuss and validate the vision and objectives of the working groups. In case of the Comparability and Behaviour and Policy, there was also a need for voting and choosing one set of visions and objectives. Mural was used as a tool for brainstorming, discussing, and voting on the visions and objectives. Participants worked towards consolidating the formulation of the chosen vision and objectives and reflecting on what it means to achieve these objectives. The Mural boards created in the four sessions are presented in Annex 3.

3.4 PROCESSING OF THE OUTPUTS OF THE 1ST CO-DESIGN WORKSHOPS

Similar to the processing of the outputs of the inception meeting, the outputs of this co-creation session were also processed at Eurocities, with the aim of improving and clarifying the formulation of the visions and objectives. This resulted in a near final version of the objectives per instrument working group.

3.5 FEEDBACK FROM THE STRATEGY & OVERSIGHT WORKING GROUP

Instead of sharing the near final version of the visions and objectives with the members of the instrument working groups, the visions and objectives were presented to the Strategy and Oversight working groups to receive their feedback during the 1st co-design workshop of this working group. The feedback from the members helped reflect on the feasibility of some of the objectives and provided guidance on how to avoid duplication with existing initiatives, e.g., EU-Citizen.Science¹.

¹ <https://eu-citizen.science/>

4 Expressions of interest and participants

The visions and objectives of the CitiMeasure working groups were co-created by the members of those working groups, during the inception meeting, and the 1st co-design session. The majority of those who showed interest in each working group were present at the two, or at least one of those sessions. Nevertheless, it is important to have an overview of the cities and organisations who have shown interest in the CitiMeasure working groups (Section 4.1), and those who participated in the co-design process (Section 4.2).

4.1 OVERVIEW OF INTEREST IN CITIMEASURE WORKING GROUPS

Through extensive communication and outreach efforts, we have created a network of cities and organisations that have expertise, and/or interest, in the CitiMeasure working groups. These are the cities and organisations that participated in the process of co-creating the visions and objectives of the four working groups. This includes both members who participated in the inception meeting and the 1st co-design workshops, as well as those members who couldn't participate in the meetings, but received communications about the draft visions and objectives. Figure 4 is a visual representation of the CitiMeasure's network of interested cities and organisations. As the Figure 4 illustrates, some cities and organisations are member of more than one working group. In addition, some of the cities and organisations are represented with more than one individual. Due to the fact that this is a public deliverable, and for privacy purposes, we have provided an anonymised version of the list of individual members in Annex 2. It is important to mention that because of the 'open door policy' of CitiMeasure, this network is evolving, and Figure 4 only captures the current status at the time of writing this report (i.e., October 2021).

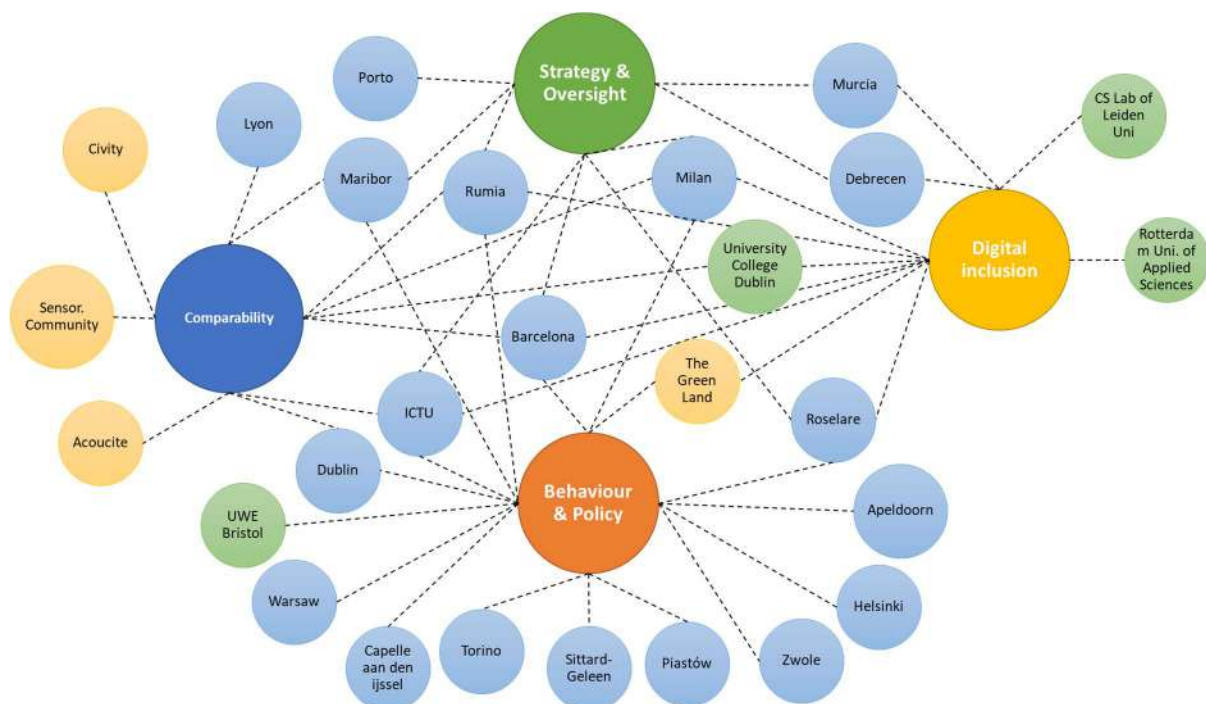


Figure 4: CitiMeasure's network of interested cities and organisations – October 2021

Bigger circles are the four CitiMeasure working groups and the smaller circles represent: Blue (cities); Yellow (NGOs); Green (Academia)

4.2 PARTICIPATION IN THE CO-DESIGN MEETINGS

This sub-section includes details about the two main meetings where the visions and objectives of the CitiMeasure working groups have been co-designed and refined. It is divided in 4.2.1 which includes details about the agenda and the participants at the inception meeting, and 4.2.2 which includes details about the agenda and the participants that joined the four co-design meetings that were held with the working groups separately.

4.2.1 Inception meeting

The inception meeting of the CitiMeasure project took place on the 29th of September from 9 am to 12 pm. The main goal was to kick-off the working groups and to start working on their visions and objectives for the development of the instruments. Table 1 showcases the agenda of the event. A representative from the Dutch City Deal introduced their work and approach. We had also an institutional representative from the Ministry of the Interior and Kingdom Relations of the Netherlands.

We invited 48 people that had at some point expressed interest in becoming a member of the CitiMeasure working groups. Eventually, the inception meeting was joined by 39 participants representing 16 European cities and 7 organisations, including Eurocities. The CitiMeasure team members (5 people) organized the event, moderated the breakout rooms, and supported the communications in social media.

Time	Description
09.00 - 09.10	Introduction to CitiMeasure by Mohammad Gharesifard
09.10 – 09:20	Learning about the Dutch City Deal by Jan-Willem Wesselink
09.20 – 09:30	Getting to know each other (using Mentimeter)
09.30 – 09:40	Introduction to breakout rooms and questions
09.40 – 11:10	Parallel breakout sessions + Break! Moderated by Eurocities staff <ul style="list-style-type: none"> - Room 1: Comparability working group - Room 2: Digital Inclusion working group - Room 3: Behaviour and policy working group - Room 4: Strategy & oversight working group
11:10-11:30	Feedback from breakout rooms
11:30-12:00	Next steps, questions & wrap up

Table 1: Agenda of the inception meeting

The following Table shows more details about the name of the cities and organisations that joined the inception meeting as well as the number of participants that represented them at the meeting.

Cities and organizations	Participants
Barcelona	2
Debrecen	1
Dublin	2
Guests	2
Helsinki	2
ICTU	2
Eurocities staff	5
Leiden	1
Lyon	1
Milan	7
Municipality of Apeldoorn	1
Murcia	1
Piastów	1
Porto	1
Rotterdam University of Applied Sciences / Research Centre Creating 010	2
Rumia Municipality	1
Sensor.Community	1
Sittard- Geleen	1
Torino	2
Warsaw	1
Zwolle	1
Other	1
Grand Total	39

Table 2: Name of city/organization and number of participants at the inception meeting

Table 3 showcases the number of cities and organisations that joined each break-out room (excluding the Eurocities staff and guests). Although we had designed the breakout rooms based on the Expression of Interest and the profile of the participants, some members requested to join a different breakout room. Moreover, not all participants at the inception meeting joined the breakout rooms.

Breakout rooms, participants, and organizations	Participants
Behaviour & Policy	11
Dublin	1
Helsinki	2
ICTU	1
Milan	1
Municipality of Apeldoorn	1
Piastów	1
Sittard- Geleen	1
Torino	1
Warsaw	1
Zwolle	1
Comparability	6
Dublin	1
ICTU	1
Leiden	1
Milan	1
Rumia Municipality	1
Sensor.Community	1
Digital inclusion	6
Milan	2
Murcia	1
Rotterdam University of Applied Sciences	1
Rotterdam University of Applied Sciences / Research Centre Creating 010	1
Debrecen	1
Strategy and Oversight	3
Barcelona	1
Milan	1
Porto	1
Grand Total	26

Table 3: Number of participants per breakout rooms

4.2.2 1stco-design meeting of the working groups

It was agreed at the inception meeting that the working groups will meet monthly in maximum 2-hours meetings organised in the same week of the month. The first co-design meetings were thus organised in the week of 18-22 of October in the following dates/timeslots:

- Digital inclusion – Tuesday 19th of October (2.30 – 4.30 pm)
- Behaviour & Policy – Wednesday 20th of October (2.30 – 4.30 pm)
- Data comparability – Tuesday 19th of October (10.00 – 12.00)
- Strategy & Oversight – Friday 22nd of October at 2.30 pm

The agenda for the three instrument working groups was defined with two main goals: a) the validation of the vision and objectives as discussed by the participants at the inception meeting, and b) starting the discussion about the instrument design and the implementation plan. Table 4 presents the details of this common agenda:

Draft agenda	Duration
Welcome and opening	10 mins
Validation of vision and objectives	35 mins
Break	10 mins
Discussions of the type, functionalities, and application of the instruments	35 mins
Implementation plan	20 mins
Collaboration platform	10 mins

Table 4: Draft agenda for instrument working groups

The Strategy & Oversight working group has different goals than the instrument working groups. The agenda was therefore adapted to the needs of this working group. Their session had two main goals: a) discuss specific objectives of the implementation plan and b) provide overall feedback to the vision and objectives defined by the three instrument working groups.

Time	Draft agenda
2:30 – 2:45	Welcome and introduction
2:45 – 3:15	Strategy & Oversight Implementation Plan (Obj 1&4)
3:15 – 3:20	Break
3:20 – 3:50	Vision and objectives of the instrument groups – feedback & alignment
3:50 – 4:00	Collaboration platform and next steps

Table 5: Agenda of the 1st meeting of the Strategy & Oversight working group

Table 6 showcases the number of participants per organisation who joined each of the working group meetings. The total number of participants was 26, excluding Eurocities staff.

Organizations per working groups	Number of participants
Eurocities staff	2
Behaviour & Policy	7
Barcelona	1
ICTU	1
Rumia	1
Sittard-Geleen	1
The Green Land	2
Warsaw	1
Comparability	4
Maribor	1
Milan	2
Rumia	1
Digital Inclusion	9
Debrecen	2
ICTU	1
Milan	2
Roselare	1
Rotterdam University of Applied Sciences / Research Centre Creating 010	1
The Green Land	2
Strategy & Oversight	6
Barcelona	1
Debrecen	1
Maribor	1
Milan	2
Porto	1
Grand Total	28

Table 6: Number of participants in each WG meeting

5 Vision and objectives

5.1 COMPARABILITY WORKING GROUP

Members of the Comparability working group found a common interest in comparing existing technical (data) and interoperability standards with available sensors. The majority of the members preferred to have a clear focus on one environmental domain, and they chose the topic of air quality for this purpose. The vision and objectives of this group are as follows:

Vision: “The CitiMeasure Comparability WG investigates and compares existing technical (data) and interoperability standards that supports the gauging of consumer grade air quality sensors with reference sensors of (regional national, and municipal) authorities. The aim is to develop a basic guideline that informs citizens and city officials on what sensors to use to ensure the comparability of data with other citizen science initiatives, as well as with official observations.”

Objectives:

1. Identify and compare air quality sensor standards at different levels (regional national, and municipal) across Europe.
2. Investigate and compare the sensors used in existing citizen science initiatives (Including DIY sensors) measuring air quality.
3. Share best practices (incl. ideas and examples) for sensor guidelines in citizen science initiatives measuring air quality, and possibly other domains, to learn from.
4. (Optional) analyse the market of consumer grade air quality sensors.
5. By March 2022, create a user-friendly guideline for citizens and city officials that helps them select and calibrate sensors according to applicable data and interoperability standards for reference air quality sensors.
6. Pilot the developed guideline in at least one air quality citizen science initiative between April and December 2022.
7. Consolidate the guidelines with lessons learned from the pilot phase and further analysis by March 2023.

Due to the fact that the working groups have limited time for the development of the instruments, objective 4 “analyse the market of consumer grade air quality sensors” was identified as an ‘optional’ objective that can strengthen the instrument but may not be feasible to achieve within the instrument development timeframe.

5.2 DIGITAL INCLUSION WORKING GROUP

The Digital Inclusion working group members agreed on investigating the issue of competencies (knowledge, skills, attitude) related to topic of digital inclusion. This includes both the competencies needed by citizens to be able to participate in citizen science initiatives, and also competencies required by policy makers, decision makers and municipal employees to engage citizens in such initiatives. The vision and objectives of this group are as follows:

Vision: “The CitiMeasure Digital Inclusion WG works towards advancing the understanding of the issue of ‘competencies’ for digital inclusion. This includes both unpacking competencies required by citizens to participate in citizen science initiatives, as well as those of policy makers, decision makers and municipal employees to engage citizens in such initiatives.”

Objectives:

1. Share ideas, case studies, best practices of digital inclusion in citizen science initiative, with a close attention to issue of competencies.
2. Jointly analyse and document competencies (knowledge, skills, attitude) required by citizens to participate in citizen science initiatives, as well as those of policy makers, decision makers and municipal employees to engage citizens in such initiatives.
3. Map the identified competencies against specific purposes/applications for citizens, policy makers, decision makers and municipal employees.
4. By March 2022, develop a guideline that helps cities and citizen science initiatives to understand, identify and enhance capacities and competencies required for digital inclusion of different actors.
5. Pilot the developed guideline in at least one real life example of citizen science initiatives between April and December 2022.
6. Consolidate the guidelines with lessons learned from the pilot phase and further analysis by March 2023.

5.3 BEHAVIOUR AND POLICY WORKING GROUP

The behaviour and policy working group focuses on changes in behaviour and policy. This includes changes in trust and participation behaviour of a wide range of actors, changes in forms of collaboration and sharing responsibilities, as well as established decision and policy making processes. The vision and objectives of this group are as follows:

Vision: “The CitiMeasure Behaviour & Policy WG works towards increased understanding of the changes in behaviour of different stakeholder groups, as well as decision and policy making processes. This includes changes in trust, participation behaviour, new culture of collaboration, sharing responsibilities, as well as established decision and policy making processes.”

Objectives:

1. Share ideas, case studies, best practices related to behaviour and policy change in citizen science initiatives. These best practices are documented with a close attention to their context (e.g., geographic, cultural, legal, and social context).
2. Jointly analyse and document the lessons learned from (un-)successful initiatives in terms of catalysing changes in behaviour of different stakeholders (e.g., trust, participation behaviour, new culture of collaboration, sharing responsibilities), as well as established decision and policy making processes.
3. By March 2022, develop guidelines and principles on behaviour and policy change that help cities and citizen science initiatives foster such changes.
4. Pilot the developed best practice in at least one real life example of citizen science initiatives between April and December 2022.
5. Consolidate the guideline/principles with lessons learned from the pilot phase and further analysis by March 2023.

5.4 STRATEGY AND OVERSIGHT WORKING GROUP

The main function of the Strategy and Oversight working groups is to oversee the development and application of the instruments developed by the three instrument working groups. The role of this working group was already defined in the project, but further clarified using the following vision and objectives:

Vision: “To oversee the development of the instruments, implementation of the pilots and creation of the Knowledge Centre by identifying linkages between the instruments being developed, sharing good practices and new information, ensuring connections with external stakeholders, and being advocates for citizen science and CitiMeasure.

Objectives:

1. Ensure strong oversight, support and advice of the WGs and the instruments being developed, including thorough review of the outputs and periodic meetings.
2. Monitoring and supporting the pilots and ensuring the lessons learned are shared.
3. Developing foresight for citizen science and CitiMeasure.
4. Supporting the development of the Knowledge Centre and its long term business plan.
5. Engage with external stakeholders and policy-makers through events, presentations and the development of policy briefs.

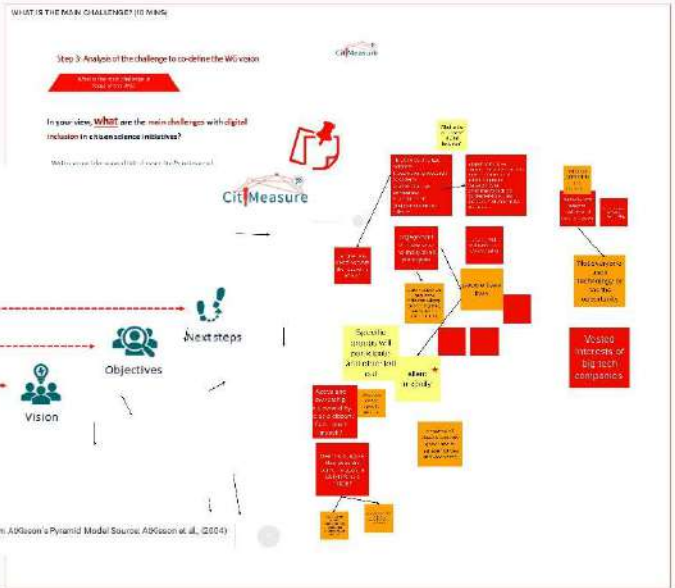
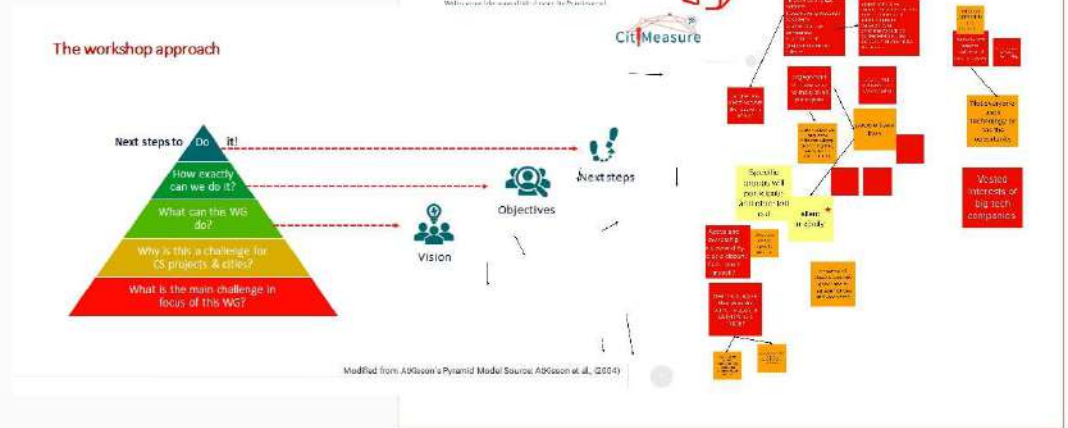
6 Concluding remarks

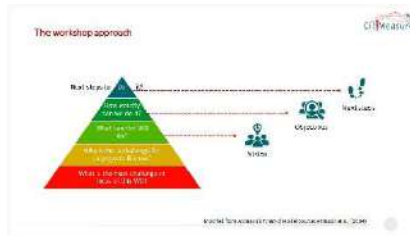
Having a shared vision, and concrete objectives is a prerequisite for developing instruments that connect to the needs of different cities, citizens, and citizen science practitioners. In addition, shared vision and objectives fosters ownership and collaboration of different stakeholders in achieving what matters to them. Following a co-creation approach, members of each CitiMeasure working group discussed and agreed upon a vision and a number of objectives for their working group. The current report described the process and outputs of this co-creation approach, namely a shared vision and a number of concrete objectives per working group. The members of all three instrument working groups decided that a set of guidelines and/or principles is the most appropriate form of instrument that can help them achieve their shared vision. Sharing knowledge and expertise, and also joint analysis of case studies, best practices, successful approaches, and existing standards is a common entry point for the next steps of the three CitiMeasure instrument working groups. Although the vision and objectives of the working groups are co-created and agreed upon, based on the progress of the work in the development phase, and the evolved understanding of the working groups about their topic of interest, slight changes may be expected to the vision and objectives of the working groups.

References

AtKisson, A., Hatcher, R. L., Green, S., & Lovins, H. (2004). *Introducing pyramid: A versatile process and planning tool for accelerating sustainable development*. Draft paper for publication in *The Natural Advantage of Nations*. Australia: EA Books.

Slide 29





WHAT IS THE MAIN CHALLENGE (OR WIS)?

What is your main challenge or wis? Write it on a sticky note.

In your view, what are the most important issues that you think we should be addressing in our area? Write your ideas on sticky notes.

What are the most important issues that you think we should be addressing in our area? Write your ideas on sticky notes.

WHY IS IT A CHALLENGE (OR WIS)?

Step 3: Analysis of the challenge to understand the WIS

What is your challenge?

In your view, **Why** each identified issue is a challenge for changing behavior or actions?

- Write your ideas on 40 small (50x70) mini-sticky notes (one per post-it)
- You can also choose the sticky notes for each challenge to be related
- Grouped (10 minutes)

WHAT CAN THIS WE DO TO WIN?

Step 5: Analyzed the challenge to create the WIS

In your view, what can we do to change or address this WIS?

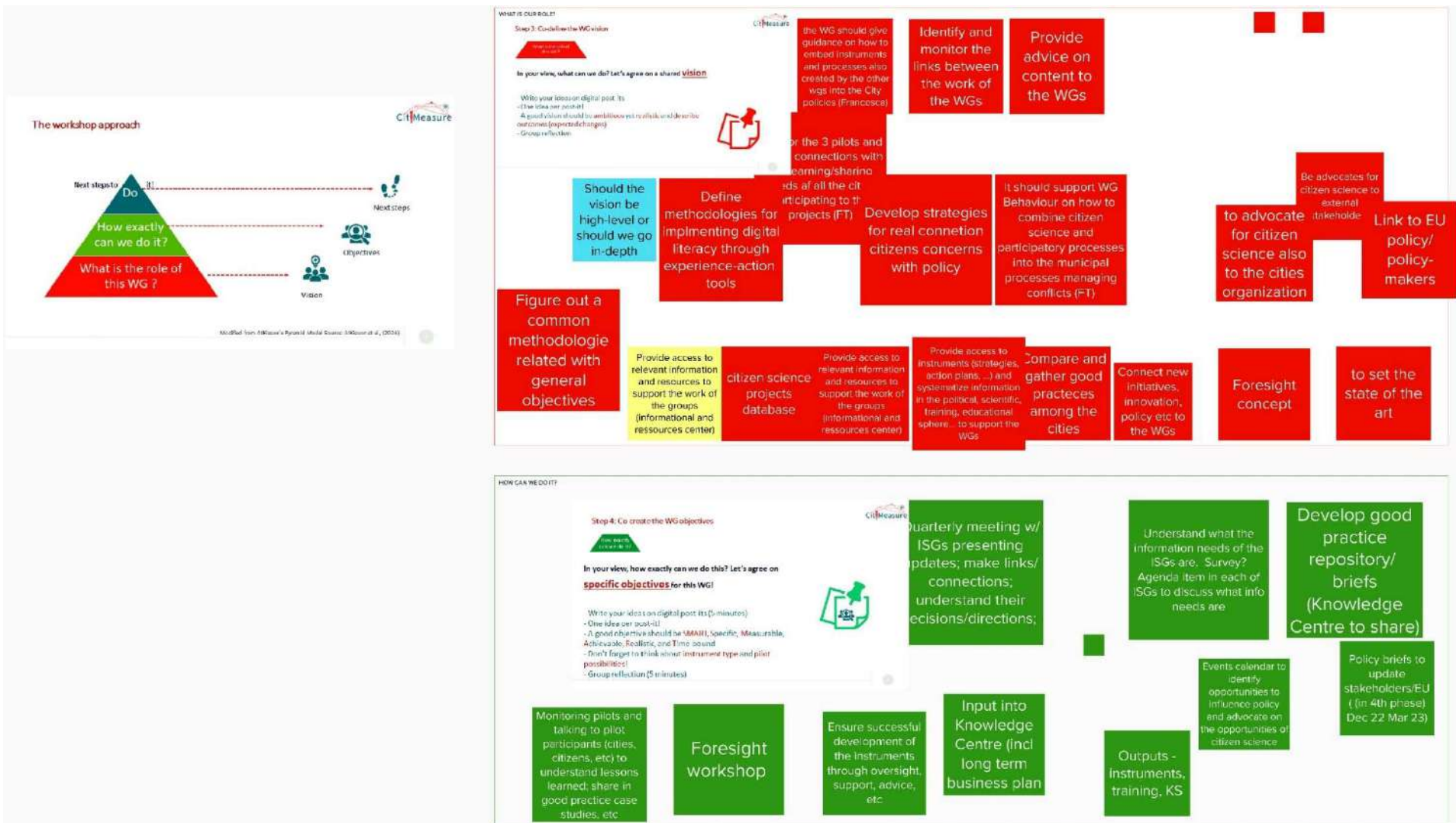
- Write your ideas on 40 small (50x70) mini-sticky notes (one per post-it)
- You can also choose the sticky notes for each challenge to be related
- Grouped (10 minutes)

HOW CAN WE DO THIS?

Step 6: Further analysis of the challenge to create the WIS objectives

In your view, how exactly can we do this? Let's agree on **specific objectives** for this WIS:

- Write your ideas on 40 small (50x70) mini-sticky notes (one per post-it)
- A good objective should be SMART: Specific, Measurable, Achievable, Realistic, and Time-based
- Don't forget to think about how many you need and their possibility!
- Group reflection (10 minutes)



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Annex 2 – List of members (anonymized)

Participant name	City/organization	Country	Comparability WG	Digital Inclusion WG	Behaviour & Policy WG	Strategy & Oversight WG
Member 1	Dublin	Ireland	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Member 2	Porto	Portugal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Member 3	Torino	Italy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Member 4	Civity	Netherlands	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Member 5	Dublin	Ireland	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Member 6	Milan	Italy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Member 7	Milan	Italy	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Member 8	Barcelona	Spain	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Member 9	The Green Land	Netherlands	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Member 10	Torino	Italy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Member 11	Debrecen	Hungary	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Member 12	Milan	Italy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Member 13	Milan	Italy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Member 14	UCD - University College Dublin	Ireland	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Member 15	The Green Land	Netherlands	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Member 16	Barcelona	Spain	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Member 17	Roeselare	Belgium	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Member 18	Zwolle	Netherlands	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Member 19	Dublin	Ireland	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Member 20	Warsaw	Poland	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Member 21	Helsinki	Finland	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Member 22	Barcelona	Spain	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Member 23	Helsinki	Finland	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



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Member 24	Municipality of Apeldoorn	Netherlands	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Member 25	Murcia	Spain	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Member 26	Debrecen	Hungary	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Member 27	Maribor	Slovenia	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Member 28	Sittard- Geleen	Netherlands	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Member 29	Sensor.Community	Germany	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Member 30	Milan	Italy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Member 31	Barcelona	Spain	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Member 32	Leiden University	Netherlands	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Member 33	Debrecen	Hungary	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Member 34	Porto	Portugal	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Member 35	Dublin	Ireland	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Member 36	Piastów	Poland	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Member 37	Milan	Italy	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Member 38	Milan	Italy	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Member 39	Milan	Italy	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Member 40	Acoucite	France	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Member 41	Rumia Municipality	Poland	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Member 42	Rotterdam University of Applied Sciences	Netherlands	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Member 43	Milan	Italy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Member 44	Acoucite	France	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Member 45	ICTU	Netherlands	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Member 46	UWE	UK	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Member 47	Rotterdam University/ Research Centre Creating 010	Netherlands	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Member 48	Capelle aan den IJssel	Netherlands	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Member 49	ICTU	Netherlands	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Member 50	Dublin	Ireland	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Annex 3 – MURAL boards of the 1st co-design meetings

Choose and validate vision & Objectives

Introduction:

- The objective is to choose and validate the vision and objectives of the instrument.
- The objective is to choose and validate the vision and objectives of the instrument.
- The objective is to choose and validate the vision and objectives of the instrument.
- The objective is to choose and validate the vision and objectives of the instrument.

Vision - Suggestion 1:

The objective is to choose and validate the vision and objectives of the instrument.

Vision - Suggestion 2:

The objective is to choose and validate the vision and objectives of the instrument.

Value Proposition:

The objective is to choose and validate the vision and objectives of the instrument.

Objectives - Suggestion 1:

The objective is to choose and validate the vision and objectives of the instrument.

Objectives - Suggestion 2:

The objective is to choose and validate the vision and objectives of the instrument.

Discussions on characteristics of the instrument

Types of instruments:

- The objective is to choose and validate the vision and objectives of the instrument.
- The objective is to choose and validate the vision and objectives of the instrument.
- The objective is to choose and validate the vision and objectives of the instrument.

Direct funding:

- The objective is to choose and validate the vision and objectives of the instrument.
- The objective is to choose and validate the vision and objectives of the instrument.
- The objective is to choose and validate the vision and objectives of the instrument.

Indirect funding:

- The objective is to choose and validate the vision and objectives of the instrument.
- The objective is to choose and validate the vision and objectives of the instrument.
- The objective is to choose and validate the vision and objectives of the instrument.

Partnership:

- The objective is to choose and validate the vision and objectives of the instrument.
- The objective is to choose and validate the vision and objectives of the instrument.
- The objective is to choose and validate the vision and objectives of the instrument.

Other:

- The objective is to choose and validate the vision and objectives of the instrument.
- The objective is to choose and validate the vision and objectives of the instrument.
- The objective is to choose and validate the vision and objectives of the instrument.

Implementation plan

What type of resources are needed/you can provide for the development of this instrument?

Time	Budget	Expertise	Other
<ul style="list-style-type: none"> - The objective is to choose and validate the vision and objectives of the instrument. - The objective is to choose and validate the vision and objectives of the instrument. - The objective is to choose and validate the vision and objectives of the instrument. 	<ul style="list-style-type: none"> - The objective is to choose and validate the vision and objectives of the instrument. - The objective is to choose and validate the vision and objectives of the instrument. - The objective is to choose and validate the vision and objectives of the instrument. 	<ul style="list-style-type: none"> - The objective is to choose and validate the vision and objectives of the instrument. - The objective is to choose and validate the vision and objectives of the instrument. - The objective is to choose and validate the vision and objectives of the instrument. 	<ul style="list-style-type: none"> - The objective is to choose and validate the vision and objectives of the instrument. - The objective is to choose and validate the vision and objectives of the instrument. - The objective is to choose and validate the vision and objectives of the instrument.



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Choose and validate Vision & Objectives

Background

- Develop a digital inclusion strategy for the City of London
- Develop a digital inclusion strategy for the City of London
- Develop a digital inclusion strategy for the City of London

Work description

The CitiMeasure Digital Inclusion WG works towards advancing the understanding of the issue of digital inclusion and 'competencies' for digital inclusion. This includes both unpacking 'capabilities' and competencies required by citizens to participate in citizen science initiatives, as well as those of policy makers, decision makers and municipal employees to engage citizens in such initiatives?

Objective expectation

- Share ideas, case studies, best practices of digital inclusion in citizen science initiative
- Jointly analyse and document capabilities and experiences required by citizens to participate in citizen science initiatives, as well as those of policy makers, decision makers and municipal employees to engage citizens in such initiatives
- By March 2022, develop a guideline that helps CTEs and citizen science initiatives to understand, identify and enhance capabilities and competencies required for digital inclusion of different actors
- Roll out the developed guideline in at least one real life example of citizen science initiatives between April and December 2022
- Consolidate the guidelines with lessons learned from the pilot phase and further analysis by March 2023

Discussions on characteristics of the instrument

Types of stakeholders to be included (citizens, business, sector partners, Agencies)

Target audience (Citizens, Policy Makers, Decision Makers, etc.)

Current status (Implementation in local level, national, international)

Formal (the instrument can be used online/offline, only)

Implementation plan

What type of resources are needed/can you provide for the development of this instrument?

Time	Budget	Expertise	Other
<ul style="list-style-type: none"> Time needed for development Time needed for implementation Time needed for evaluation 	<ul style="list-style-type: none"> Budget needed for development Budget needed for implementation Budget needed for evaluation 	<ul style="list-style-type: none"> Expertise needed for development Expertise needed for implementation Expertise needed for evaluation 	<ul style="list-style-type: none"> Other resources needed for development Other resources needed for implementation Other resources needed for evaluation

Choose and validate vision & Objectives

- Key words:**
- How can it be done with existing or potential assets? (40%)
 - How can it be done with the existing assets? (40%)
 - How can it be done with the existing assets? (40%)
 - How can it be done with the existing assets? (40%)
 - How can it be done with the existing assets? (40%)

Vision - suggestion 1

The City Measure (CitiMeasure) will be a digital platform for the city of London, providing a central hub for all the city's data and services, enabling the city to make better use of its resources and improve its services to its citizens.

Key words: digital platform, central hub, data, services, city of London, resources, citizens.

Vision - suggestion 2

The City Measure (CitiMeasure) will be a digital platform for the city of London, providing a central hub for all the city's data and services, enabling the city to make better use of its resources and improve its services to its citizens.

Key words: digital platform, central hub, data, services, city of London, resources, citizens.

Objectives - suggestion 1

1. To provide a central hub for all the city's data and services, enabling the city to make better use of its resources and improve its services to its citizens.
2. To provide a central hub for all the city's data and services, enabling the city to make better use of its resources and improve its services to its citizens.
3. To provide a central hub for all the city's data and services, enabling the city to make better use of its resources and improve its services to its citizens.
4. To provide a central hub for all the city's data and services, enabling the city to make better use of its resources and improve its services to its citizens.

Objectives - suggestion 2

1. To provide a central hub for all the city's data and services, enabling the city to make better use of its resources and improve its services to its citizens.
2. To provide a central hub for all the city's data and services, enabling the city to make better use of its resources and improve its services to its citizens.
3. To provide a central hub for all the city's data and services, enabling the city to make better use of its resources and improve its services to its citizens.
4. To provide a central hub for all the city's data and services, enabling the city to make better use of its resources and improve its services to its citizens.

Discussions on characteristics of the Behaviour & Policy instrument

Discussions on:

Key words: digital platform, central hub, data, services, city of London, resources, citizens.

Key words: digital platform, central hub, data, services, city of London, resources, citizens.

Key words: digital platform, central hub, data, services, city of London, resources, citizens.

Key words: digital platform, central hub, data, services, city of London, resources, citizens.

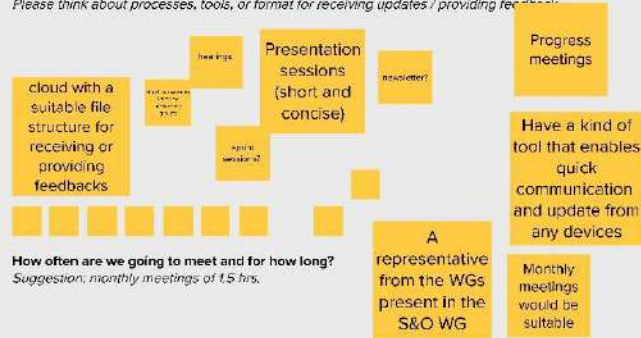
Implementation plan

What type of resources are needed/you can provide for the development of this instrument?

Time	Budget	Expertise	Other
<ul style="list-style-type: none"> • Time needed for development • Time needed for testing • Time needed for deployment 	<ul style="list-style-type: none"> • Budget needed for development • Budget needed for testing • Budget needed for deployment 	<ul style="list-style-type: none"> • Expertise needed for development • Expertise needed for testing • Expertise needed for deployment 	<ul style="list-style-type: none"> • Other resources needed for development • Other resources needed for testing • Other resources needed for deployment

Objective 1: Ensure strong oversight, support and advice of the WGs and the instruments being developed, including through review of the outputs and periodic meetings.

How would you like to receive/provide feedback to the instrument working groups?
Please think about processes, tools, or format for receiving updates / providing feedback



Objective 4: Supporting the development of the Knowledge Centre and its long term business plan

How would you like to provide inputs into the design of the Knowledge Centre?
Please think about processes, tools, or format for providing inputs



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