

# Intelligent Cities Challenge

Conceptual overview to the ICC methodology

15 September, 2020



European  
Commission

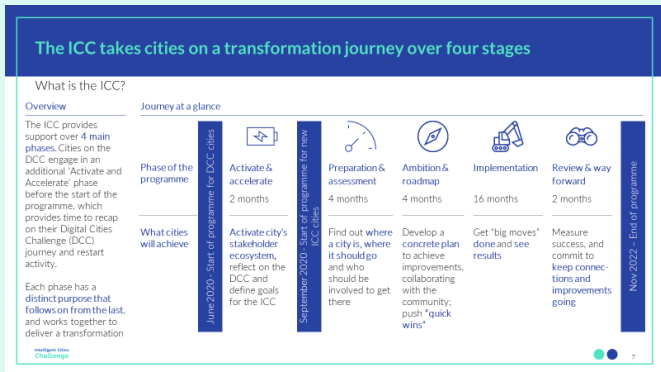
The Intelligent Cities Challenge is funded by COSME, the EU  
programme for the Competitiveness of Enterprises and SMEs



# The ICC has three supporting guides to help make the programme a success

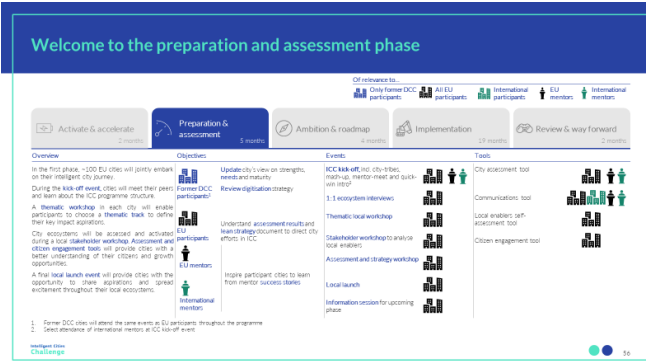
This document

## Methodological overview



Conceptual guide to the Intelligent Cities Challenge, including the high level city journeys, working norms, and the main types of activities and tools

## City 'flip book'



A more detailed guide that follows the journey of a participant city, describing each phase in turn and what to expect and prepare for success

## Lead expert addendum

**Local launch | Suggested agenda**

Schedule	Agenda item	Format	Lead	Suggested activities
4.00-4.15	Welcome address	Keynote speech	Mayor	Opening of local launch, incl. warm welcome to ecosystem partners and citizens and high-level vision
4.15-4.45	Programme overview and city vision	Presentation	ICC city representatives	Introduction of the ICC programme, the city vision, city opportunities and quick-win activities
4.45-5.30	Top city opportunities	Panel discussion	ICC city representatives and local ecosystem partners	Discussion of city's top city opportunities as developed in core workshops and highlighted by assessment results
5.30-6.15	Citizen Q&A	Interactive presentation	ICC city representatives	Interactive Q&A with citizens, using audience participation tool to gather views and concerns, and clarify how city's ICC participation can positively impact citizens' daily lives
6.15-7.00	Press conference	Press conference	Mayor	Press conference with local media in order to increase awareness and publicity of programme
7.00-8.00	Relationship building and refreshments	Networking activity with a gallery walk	ICC city representatives	Get-together with all local launch participants. Gallery walk showcasing intelligent city transformation case studies with a focus on thematic track chosen

Intelligent Cities Challenge

A supporting document that contains suggested agendas and templates for all activities, for Lead Experts to build on in delivery

# Purpose of this methodological overview to the ICC

## What this document will provide



- An **overview of the Intelligent Cities Challenge**, covering the **participants, methodology** and **resources** provided
- A **description of roles and players** involved as well as the **types of events** during the programme
- **General guidance** on what cities should put in and what cities should expect to get out

## What this document will not provide



- **Details on all activities involved in the ICC**, which are covered in the ICC city 'flip book' detailing activities chronologically through the stages
- **All delivery materials**, e.g., workshop agendas, which are provided to lead experts separately in the 'Lead Expert addendum'

## Who this document is directed at and how they can use it

### EU participant cities

- Understand the high-level **programme structure**
- Understand the **objectives and value proposition to a participant**
- Familiarise with the **topics and activities** covered by the ICC

### EU and international mentors

- Understand the high-level **programme structure**
- Understand overall **proposition** to a mentor

### Lead and thematic experts

- Understand the high-level **programme structure**
- Reflect on **role** and **responsibilities**

# Welcome to the Intelligent Cities Challenge

## Opening words

**Thank you for joining the European Commission's Intelligent Cities Challenge (ICC).**

The ICC is a tailored support programme of coaching, facilitation and inspiration launched by the European Commission. The ICC programme brings together a community of cities with untapped potential, clear aspirations and strong commitment to grow. Through the use of digital and advanced technology, these cities will transform their performance, providing a higher quality of life for citizens and improving the competitive environment of businesses.

Cities will participate in a series of high-level events where they receive training as a group, learn from peers, and plan together for large-scale change. Individually, cities will receive in-city advice on how to motivate an ecosystem, define a strategy and set a measurable action plan. Along the way, world-class EU and international cities will inspire and orchestrate change. Finally, cities will get exposure to state-of-the-art intelligent city solutions, engage with impactful digital tools facilitating citizen and stakeholder engagement, and on-demand access to a variety of downloadable material. Cities will be supported to become an intelligent city of the future, today.

This document will provide support throughout the lifetime of the ICC, guiding city involvement and helping participants organise their efforts. Do not hesitate to return to it while working towards the ICC objectives.

The ICC journey has great potential for all involved, but ultimately cities get out what they put in. The programme requires dedication over its duration, but there are many resources and individuals at your disposal to help. Commit to actions, share success and failures openly with your peers, and receive support whenever you need it.

We are glad to have you onboard and look forward to accompanying you on your intelligent city journey.



# Contents

**Introduction to the Intelligent Cities Challenge:** what is it and what does it set out to achieve?

**What is the city journey through the ICC?:** the major phases and outputs of the programme and how different cities involved along the way?

**Who is involved and how do we work together?:** the city teams and the experts

**What activities take place?** Introducing types of events and tools

**How do things kick off?** The first three activities of the ICC

# The ICC will help European cities use digital and advanced technologies to shape the future of the continent

What is the context of the ICC?

## Cities shape the future of the EU

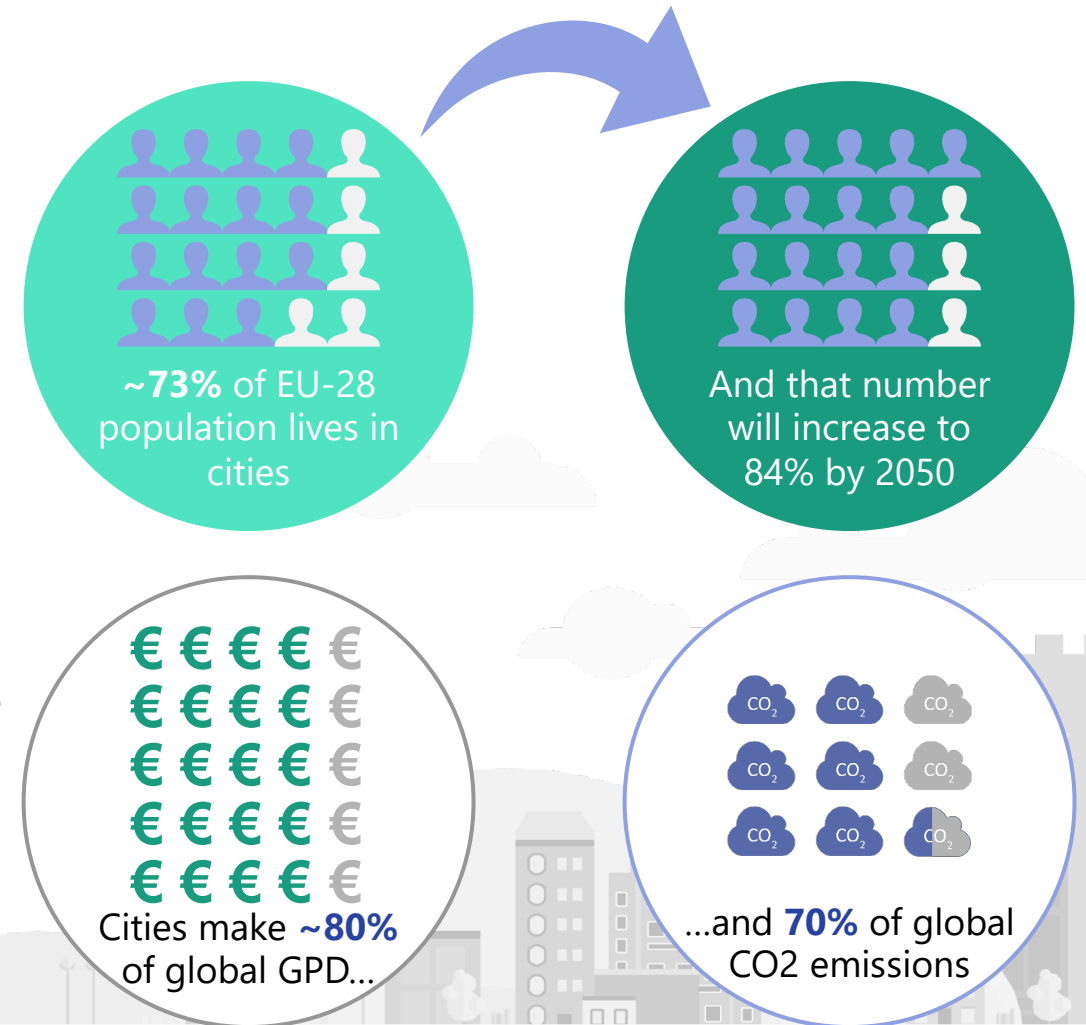
72% of EU citizens live in urban areas and their ecosystems are powerful actors of change. ~50% of the reductions necessary for net zero emissions can be achieved at city level. Effective technologies are offering solutions to challenges like these. There are emerging world leaders in innovative technologies and their business models – both in the EU and abroad. Others can profit from their knowledge.

## The ICC aims to bring cities together to drive use of advanced technology

The 100 Intelligent Cities Challenge (ICC) will unite EU cities in seizing the opportunity for green smart sustainable growth, improving the quality of life and fostering new opportunities for citizens. 100 cities will gain expert consultant support on the ground, facilitated sessions at several high-profile multi-city events, and a suite of online tools. In addition, they will benefit from the steering of cutting-edge mentor cities who help small groups of participant cities scale solutions together.

The ICC is part of a wider EU support contributing to a European Green Deal, an economy that works for people and a Europe fit for the Digital Age.

SOURCE: C40, EUROSTAT



# Who will participate in the ICC programme?



## Core cities



### EU core cities

who are the main beneficiaries on the programme, consisting of two primary groups:

- 26 incumbent cities who previously participated in the preceding Digital Cities Challenge (DCC)
- 54 new applicant cities who will participate in the ICC for the first time



**International core cities**  
for select involvement during implementation phase

## Mentor cities



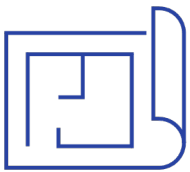
### EU and international mentors

experts with a proven track record in at least one thematic area who provide mentor support and drive action



# The ICC aims to prepare cities for a transformation, support them through that journey, and grow a community that is larger than the sum of its parts

What are the objectives of the ICC?



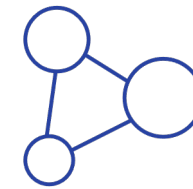
## Prepare cities for transformation

Review and refine existing strategies based on **real stakeholder needs** and form a **prioritised step-by-step roadmap**



## Support cities to create impact

Use these to deliver **quick win projects in the first 6 months**, followed by larger projects that result in a **measurable improvement on city performance KPIs** by programme end<sup>1</sup>



## Build a community along the way

Become part of an **international self-sustaining network** of innovation and collaboration working towards the SDGs



# The ICC takes cities on a transformation journey over four stages

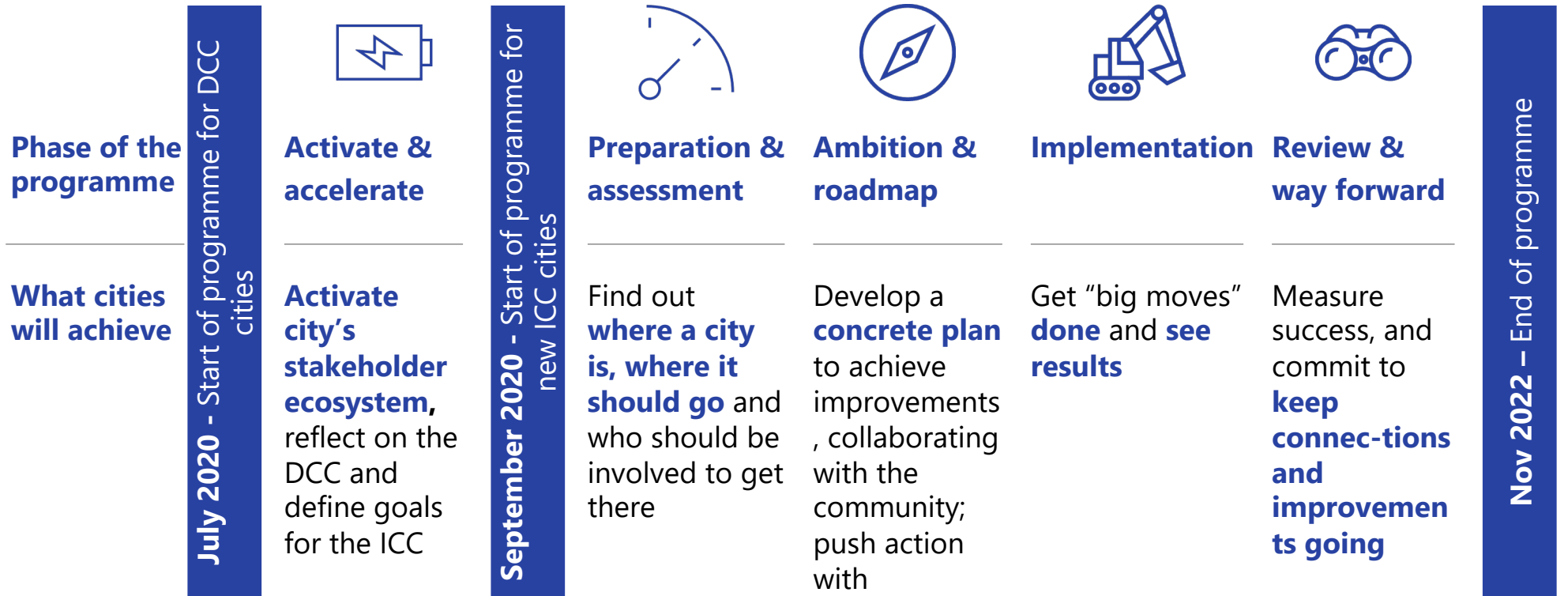
## What is the ICC?

### Overview

The ICC provides support over **4 main phases**. Cities on the DCC engage in an additional 'Activate and Accelerate' phase before the start of the programme, which provides time to recap on their Digital Cities Challenge (DCC) journey and restart activity.

Each phase has a **distinct purpose that follows on from the last**, and works together to deliver a transformation

### Journey at a glance



# The ICC helps cities to get more out of resources and stakeholders already present on their doorstep

What is the proposition to core cities?

## What the **ICC can offer cities**

**Be part of a close, aspirational community that does things** – cities only meet when they want to make commitments, review actions and form lasting relationships together. The community supports one another as peers.

**Mobilise an ecosystem** – lead experts support cities with getting others in the ecosystem to work for the city (helping them see it is in their interests) and to work with city representatives to build their own capability

**Structure, plan and prioritise through new tools** – cities benefit from tools that help diagnose problems at a high level, assess the best technological solutions to solve them to more detail, and give guidance that helps weigh up alternative implementation paths

**Unblock implementation (including funding)** – cities gain access to guidance that solves common problems on the path to solutions, including access to funding/finance through both learning and access to stakeholders



## What the ICC **does not offer**

**Conferences for discussing ideas** – there are 100s of intelligent city and city themed conferences around in the EU where people can go and listen to speakers

**An in-house intelligent cities team** – the ICC provides resources to accelerate change, but cities are in the driving seat. Sustainable change also comes when a city develops its own capability long-term, which is a focus

**Resources to perform detailed technical design** – cities receive expert support in the high level design of solutions but may need to seek additional guidance for detailed solution design

**Funding** – the ICC cannot provide grants for programmes (but the ICC can help cities find it elsewhere)

# Contents

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**Challenge:** what is it and what does it set out to achieve?

## **What is the city journey through the**

**ICC?:** the major phases and outputs of the programme and how different cities involved along the way?

## **Who is involved and how do we work**

**together?:** the city teams and the experts



**What activities take place?** Introducing types of events and tools

**How do things kick off?** The first three activities of the ICC



# The ICC engages 2 groups of core cities

ACTIVITIES DISCUSSED IN MORE DETAIL IN 'WHAT ACTIVITIES TAKE PLACE'

	Value proposition to cities	Engagement formats	Target # participating
 <p><b>EU core cities</b> (incl. DCC and new ICC cities)</p>	<p><b>Operationalise city strategies</b> and <b>receive implementation support</b></p> <p>Engage in <b>international knowledge</b> networks of experts, cities and other stakeholders</p> <p>Develop <b>relationships with peer cities and mentors across the EU and beyond</b></p> <p>Become a <b>regional role model</b> with enhanced <b>city performance</b> contributing to improved quality of life and new citizen opportunities</p>	<p>Attendance at:</p> <ul style="list-style-type: none"> <li>• <b>ICC kick-off/closing</b></li> <li>• <b>13 expert in-person</b> visits: <ul style="list-style-type: none"> <li>— 9 x <b>lead</b> expert incl. facilitated <b>local workshops</b></li> <li>— 2 x 2 <b>thematic</b> experts incl. facilitated <b>local workshops</b></li> </ul> </li> <li>• 15 lead and 6 thematic expert <b>check-ins via VC</b></li> <li>• 5 <b>multi-city city labs</b></li> <li>• 2 <b>mayor conferences</b></li> </ul> <p>Participation in <b>thematic action groups</b> (mentor-led working sessions); additional lead expert support between workshops; additional local activities led by city reps; local closing event (unfacilitated)</p> <p>Access to <b>digital tools</b> and <b>ICC marketplace</b></p>	80
 <p><b>International core cities</b></p>	<p>Gain opportunity to <b>be a part of efforts to scale solutions in specific thematic areas</b></p> <p>Be introduced to network of <b>peer cities and mentors across the EU and beyond</b></p> <p>Engage in <b>international knowledge</b> networks of experts, cities and academia</p> <p>Become a <b>regional role model</b> with enhanced <b>city performance</b> contributing to improved quality of life and new citizen opportunities</p>	<p>Attendance at:</p> <ul style="list-style-type: none"> <li>• <b>2 cross-city lab,</b></li> <li>• <b>ICC closing</b></li> </ul> <p><b>Interface</b> with particular ICC <b>marketplace solutions</b> and <b>access to digital tools</b></p> <p><b>Participation</b> in select <b>thematic action groups</b> (mentor-led working sessions)</p>	5

# New EU core cities will enjoy a four stage impact journey



## Preparation & assessment

5 months:  
September 2020 – January 2021

### What cities will achieve

Find out **where the city is, where it should go** and who should be involved to get there

### How it happens (main events & activities)

Meet other cities, understand the programme and start forming city networks at the **1<sup>st</sup> cross-city lab**; begin thinking of quick wins

Choose a thematic track and begin the assessment process, drawing on tools including **citizen engagement**

First, develop an understanding of city needs and possible solutions at a **needs assessment workshop**

Secondly, understand your maturity of solutions and how your city can grow at the **solution assessment & strategy workshop**

In parallel, assemble and energise the city's ecosystem with a **stakeholder workshop**

Spark excitement with a **local launch**



## Ambition & roadmap

3 months:  
February 2021 – April 2021

Develop a **concrete plan** to achieve improvements, collaborating with the community; push **quick wins**

Test intelligent city strategies with peers at the **2<sup>nd</sup> cross-city lab**; at the same event, bring together mayors of participating cities at the **mayors summit**

Receive coaching in mentor-driven **Thematic action group ('TAG') working sessions**; start to form **shared ambitions in this community**

Learn how to plan and measure intelligent city projects at the **Roadmap & Monitoring workshop**

Peer-review action plans with other cities at the **3<sup>rd</sup> cross-city lab**

Make commitments to scale solutions in continuing **'TAG' working sessions**



## Implementation

15 months  
May 2021 – July 2022

Get "big moves" **done** and **see results**

Organise a **cycle-planning session** to define half-year priorities

Jointly scale solutions in mentor-driven **TAG working sessions** through the phase

Receive guidance and support in additional **lead expert visits** (including transversal support for issues like funding) and additional **thematic expert visits**

Collect direct feedback on projects using the **citizen engagement tool**

Review progress, reflect on learning and problem-solve blockers at more **cross-city labs** (2 over 3 cycles)

**Track progress** and celebrate successes en route



## Review & way forward

2 months  
August 2022 – September 2022

Measure success, and commit to **keep connections and improvements going**

Assess city's progress by applying the **assessment tools** again

Discuss feedback on the programme and on the progress made in a **programme review workshop**

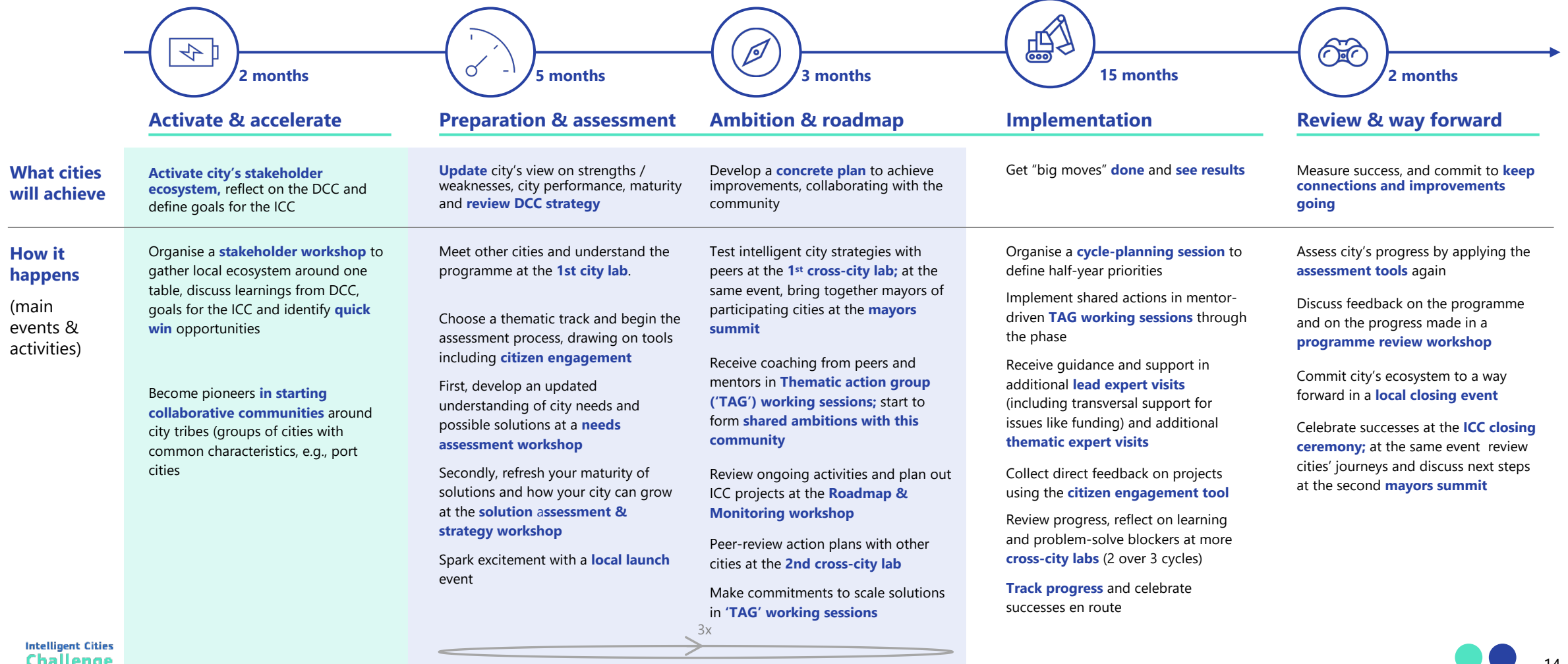
Commit city's ecosystem to a way forward in a **local closing event**

Celebrate successes at the **ICC closing ceremony**; at the same event review cities' journeys and discuss next steps at the second **mayors summit**

# DCC cities will have a head-start: a new 'activate and accelerate phase' and an increased focus on implementation early on

Elements of Implementation will run concurrently with these phases

■ New stage ■ Adjusted focus





# Selected international core cities will work with EU core cities, primarily in the implementation phase

## International core cities will deliver impact and relationships beyond the EU

Involving international cities will underline the EU's openness and assertiveness as a **global knowledge hub**, bring in **international learning**, deliver **impact beyond EU boundaries**, and could spark **connections to other programmes** (e.g., ASEAN smart cities network)

As the implementation phase progresses, participant EU cities will commit to shared plans that **grow into significant shared commitments**

**There may be opportunities to engage international core cities in this ongoing thematic activity**—e.g., if 10 EU cities are developing their own mobility payment system, it could be possible to expand to engage 1 or 2 international cities with similar needs

The selection will ultimately be chosen by a **vote of preference** among participating cities from a shortlist of expert-picked international candidates. Alternatively, core cities may suggest international cities, followed by an expert evaluation and approach.

## International participant cities will be primarily engaged in the implementation phase

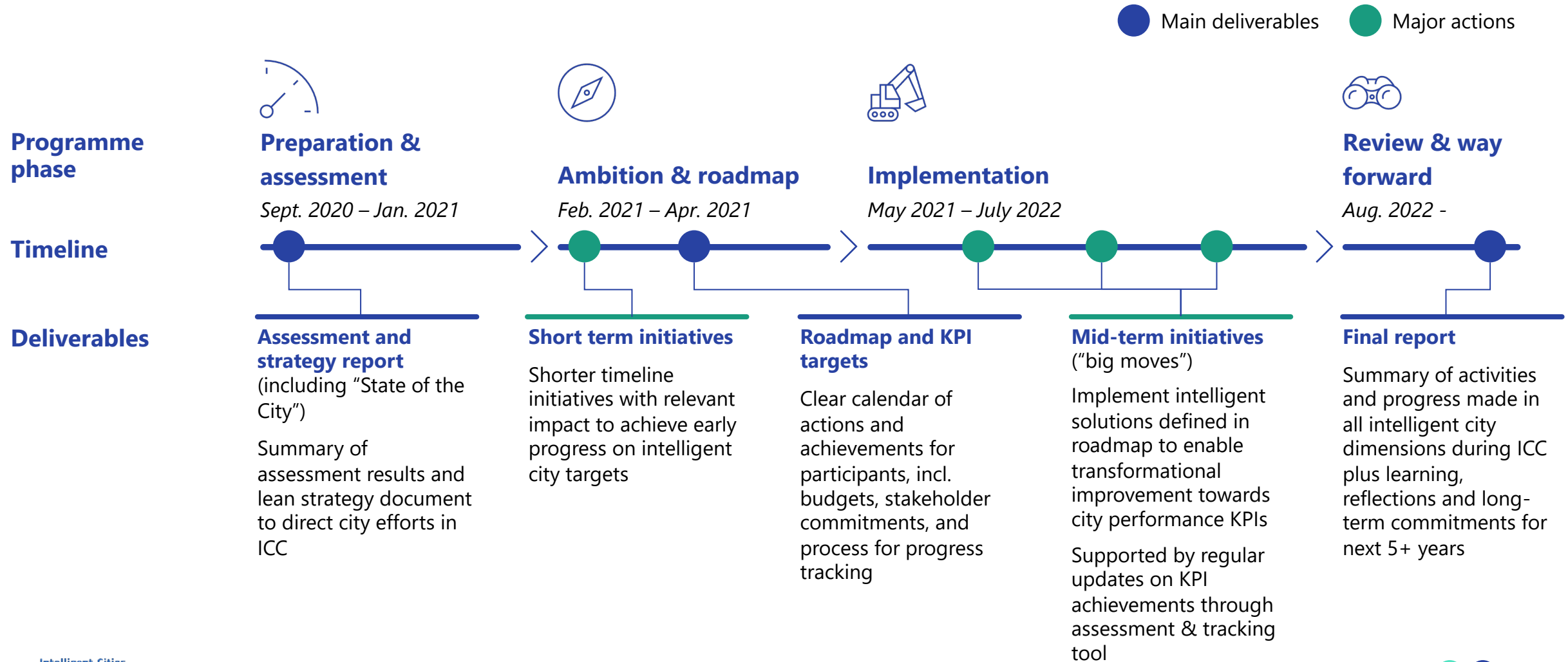


When a connection is found between ongoing implementation and an international participant, they will be invited to two cross-city labs to:

- **Present how specific thematic issues manifest themselves differently** in their context, and what can be learnt
- Engage in working sessions to understand if **shared commitments can be expanded**
- **Network** with cities more broadly

Engaged international participant cities will come to the closing event for discussion of **what they have done differently as a result of the programme** and how relationships can be built for the future

# Core cities are expected to deliver 5 types of deliverables or actions, in addition to generating measurable progress on their transformation



# The ICC engages 2 groups of mentor cities



## EU mentors

### Value proposition to cities

**Give back to the EU community** as recognised best practice cities and gain political **visibility** and **recognition**, acting as the pioneers shaping a new EU network through city diplomacy

**Share and scale** existing intelligent city solutions through the ICC marketplace<sup>1</sup>

**Interact** and **develop long-term relationships** over the most cutting-edge solutions with other international and European high-performing cities and other stakeholders (e.g., funders)

**Drive change** in strategically important areas with **advisory support**

Benefit from learning in selected **participant activities**

### Engagement formats

Select attendance at:

- **ICC 1<sup>st</sup> city lab/closing**
- **Cross-city labs**
- **Multi-city events**
- **Mentor-driven thematic action groups**
- Inputs in **digital material**, e.g., case studies

### Quantity

**~10**  
mentor cities

**~5** mentor cities



## International mentors

1. The marketplace connects cities with solutions readily available across EU, leveraging peer cities' experiences with SMEs/solutions they have implemented



# Creative elements in the programme design enable richer interactions

## INITIATIVES UNDER CONSIDERATION

### Build relationships

- 1 min self-made **video intros** of participant cities
- **Communications platform** for direct and group messaging between all participants
- Self-made **video diary** (15 min/every 3 months<sup>1</sup>) **reporting on key developments** in select cities



### Encourage action

- **Publish top cities on KPI leaderboards** on ICC website (carefully curated)
- **Quick-win "talent show"**, vote on highest impact/most compelling project
- **Closing ceremony "ICC Awards"** based on ambition & action plan progress
- **"Team player" / "Best mentor"** – peer reviewed award for participant and mentor city



### Harness city creativity

- **Elevate great ideas from cities** for engaging citizens to ICC level
- **Use citizen engagement tool** to present KPIs and progress and invite commentary



### Keep up the momentum

- **Awards to specific ecosystem players** as nominated by local cities to acknowledge outstanding contributions by businesses and individuals
- **Visualize progress** in interactive digital art at major events, e.g., rich pictures of common barriers and enablers, timeline of projects launch or money invested since start of ICC



These are features under review for **ongoing components of the ICC program** that may enable richer interactions

**In-person events** like cross-city labs will also have a range of **innovative content delivery models**, detailed later

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# Cities and supporting representatives work together on the ICC

## 1. City stakeholders

Participant cities are made up of 4 main stakeholder groups.



City mayor



City representatives



City ecosystem



Citizens



Collaborative and  
supportive  
relationship, working  
together  
for city success



## 2. Supporting experts

Participant cities will be supported by 3 types of experts

Lead experts



Thematic  
experts

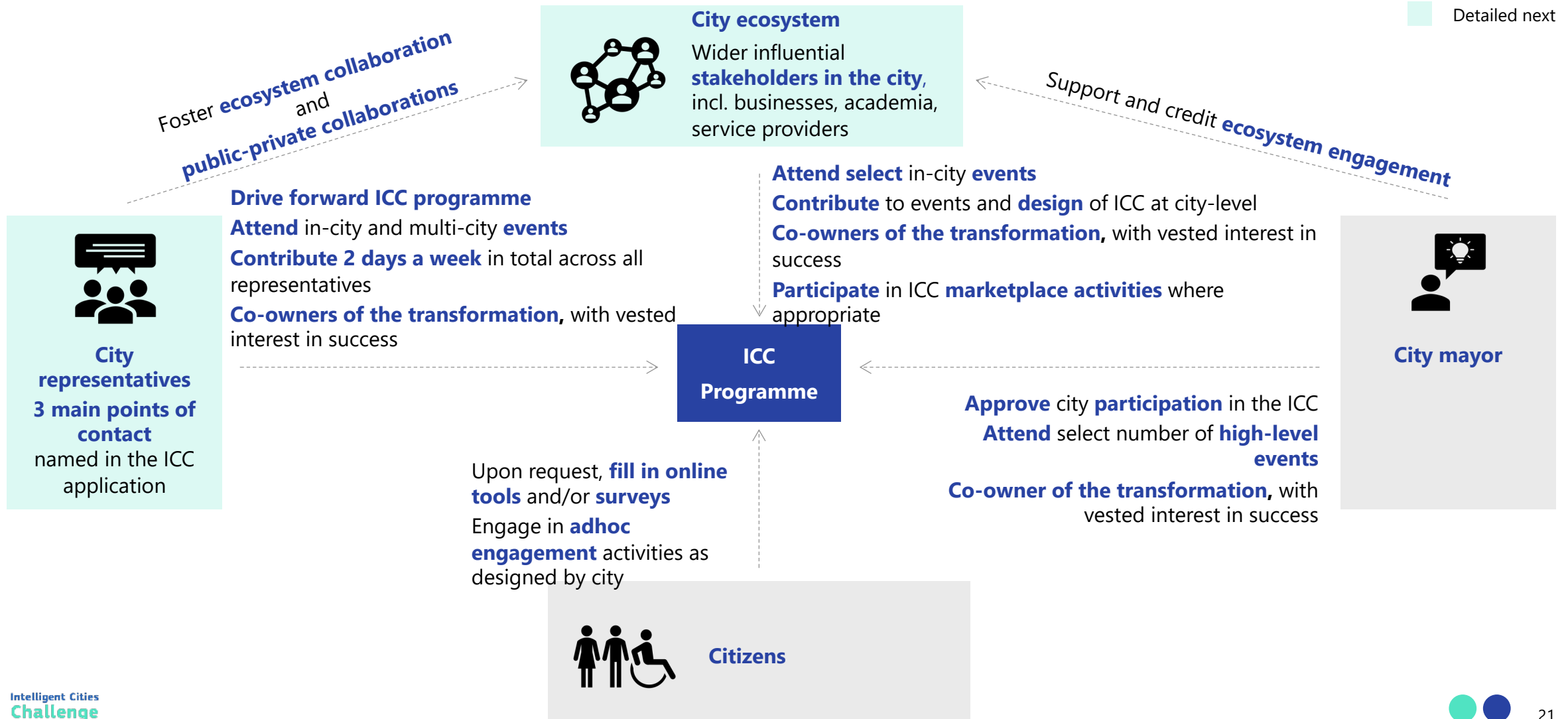


Thematic  
network  
coordinator

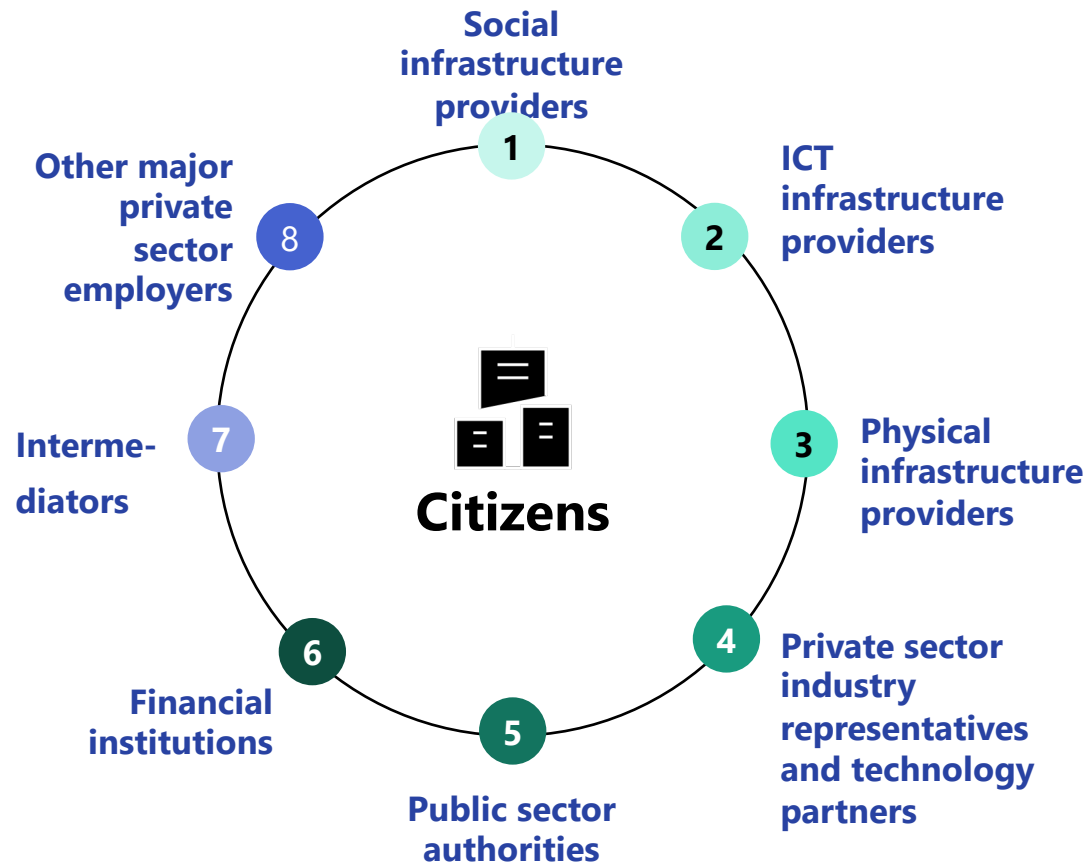




# 1. City representatives lead the engagement in ICC, but all parties work together to achieve success

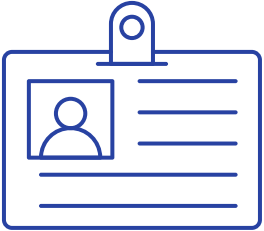


# While each city's ecosystem is unique, there is a wide range of ecosystem players that should be engaged



- 1 **Social infrastructure providers**, incl. academia and education (e.g., universities, schools, research institutions), healthcare providers (e.g., hospitals, care centers)
- 2 **ICT infrastructure providers**, incl. city connectivity and digital infrastructure, security providers and services
- 3 **Physical infrastructure service providers**, incl. energy utility, water utility, waste management, transport utility, postal services, real estate developers
- 4 **Private sector industry representatives and technology partners**, incl. startups, tech and media companies, incubators, accelerators
- 5 **Public sector authorities**, incl. administration, district government, judiciary infrastructure and law enforcement
- 6 **Financial institutions**, incl. banks, trust companies, venture capital funds, insurance companies
- 7 **Intermediators**, incl. trusts, foundations, cross-ecosystem networks, trade unions and associations, citizen interest groups
- 8 **Other major private sector employers**, incl. retail, hospitality, food, leisure and legal services

# Role descriptions: ICC city representative



The ICC city representatives **lead the city's intelligent transformation journey** by representing the city at all ICC events, coordinating ecosystem collaboration and respecting deliverable deadlines. There should be at least one from the city itself

## Representative from city x 1

**Experience:** Ability to integrate across city silos (essential), project management in public sector (desired), experience with intelligent city transformation (desired))

## Representative from ecosystem x 2

**Experience:** Ability to motivate the local ecosystem (essential),, experience with intelligent city transformation (desired))

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**Skills:** English professional proficiency, enthusiasm and passion for the city and its residents

## Main tasks:

- **Lead the city's journey** through the ICC and **attend all events** scheduled throughout the ICC programme
- **Excite the city** about the engagement with the ICC; **proactively interact with other cities** on the programme
- Coordinate **cross-city collaboration efforts** as well as **joint projects** within the city
- Facilitate effective programme participation by **collating required documentation** and **making logistical arrangements** ahead of scheduled events and expert visits
- Lead and **prepare unfacilitated in-city events**
- Ensure **deadlines are respected** and **deliverables** are in the correct format

## 2. Lead experts are a city's permanent coach; thematic experts provide targeted specialist advice along the way, overseen by the coordinators

### Expert type

### Overview of role



#### Lead experts

- Acts as a city's **dedicated coach** for the full duration of the programme, providing 1:1 support
- Provides guidance on **common features of the programme** such as the assessment, strategy and roadmap activities
- Typically **native speaker** who can help you **interact with your ecosystem**



#### Thematic experts

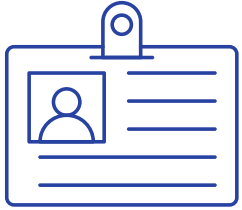
- Serves as **targeted specialist support** for areas where cities wish to specialise
- Provides support to a **range of cities**, in **both 1:1 and 1:many** arrangements
- Speaks the language where possible



#### Thematic network coordinator

- Oversees all activities related to the **operation of each thematic network** and **creates and curates Thematic Action Groups**
- **Monitors quality and fit of materials and guidance** but does not advise cities directly

# Role descriptions: lead expert



The lead expert is the city's champion, who **guides the city through the ICC programme**. They act in a range of capacities - as a **coach, advisor, cheerleader, coworker and critical friend**. **The lead expert is invested in the city's success** and will help it shape its trajectory to deliver maximum impact

**Experience:** minimum of 5 years prior experience in the field of technology; experience advising local authorities

**Skills:** strong problem solving skills – structuring problems, suggesting solutions and prioritizing next steps; fluent in local language; strong communicator

## Main tasks:

Facilitate **local events** in person and via VC with stakeholders

Assemble the **correct documentation** prior to each event, and **delegating tasks effectively** in collaboration with the 3 ICC local programme coordinators

Ensure in collaboration with the 3 ICC local programme coordinators that **deadlines are respected**, and **deliverables** are in the correct format for further usage

**Report back to central ICC programme coordinators** regarding local city progress in the programme

Be the **main contact point regarding programme processes** and tools for the city

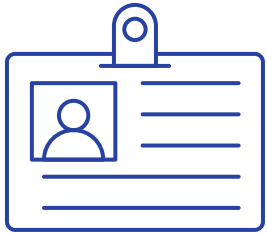
**Coordinate thematic expert visits** for timely, effective and coherent delivery

## Additional selection details

- Lead experts will be selected based on the best quality individuals available of those who qualify
- Lead Experts may have one or several cities, depending on the context
- Having multiple cities per expert has the benefit of providing lead experts with multiple experiences to share learning across, as well as creating small 'families' of cities with the same lead expert



## Role descriptions: thematic expert



The thematic experts are the source of rich, **detailed implementation knowledge**. They will **assist several city's journey throughout the ICC programme** in their individual progress within their chosen thematic track, by sharing his or her expertise in the field. **They help implementations get specific and impactful**

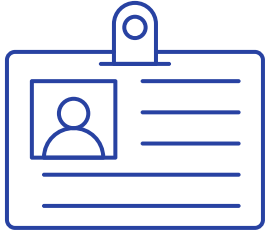
**Experience: minimum 5 years** of relevant city or innovation advisory

**Skills: broad technical experience across a theme**, and deep technical expertise within **one or two particular solutions**

### Main tasks:

- **Facilitate local events, specifically those that involve assessment of needs and solutions** through the relevant workshops
- **Facilitate timely VC calls** with the city (either the 3 ICC programme coordinators only, or with the ecosystem) in order to unblock certain situations regarding the chosen thematic track. This will be done through best practice sharing adapted to the local context and ideation exercises
- **Lead breakout activities** in multi-city events such as the cross-city labs or the ICC kick-off/closing to help cities ideate around thematic tracks, draw on their experience, and share best practice examples
- Provide adhoc thematic advice, for example tailoring solutions to be more specific

## Role descriptions: thematic network coordinator



**The thematic network coordinator is responsible for making sure the thematic guidance has impact.** They match the supply of experts to the needs of the cities, and ensure the themes are energized and groups of cities are correctly curated, particularly in the thematic action groups

**Experience:** Highly experienced in thematic area; well known within field and connected to many relevant experts; involved in contemporary research and/or decision making circles that provides the latest insights on thematic developments

**Skills:** Broad thematic knowledge; strong communicator

### Main tasks:

- **Overseeing thematic support materials** – ensuring the creation of effective thematic materials, and monitoring for when new topics require attention
- **Overseeing the recruitment of thematic experts** – ensuring a suitability and high quality of support is provided
- **Curate the thematic action groups** – match the solution interests of cities and mentors to create small groups focused towards the shared delivery of solutions
- **Design the needs assessment workshops and presentations at city labs** – including the sourcing of speakers
- **Monitor the overall progress of themes**

# Lead experts are cities' intelligent solution co-creators by providing advice, coaching and event facilitation

Working norms between participants and lead experts

## What cities can expect

- Lead experts are the **main contact point** for cities and will serve as **facilitators** of cities' intelligent transformation
- Lead experts support and guide the city by providing **tailored advice, hands-on coaching**, and action-orientated **facilitation** of events and discussions. This will be achieved through **close interaction** with city representatives
- Lead experts should be considered as **co-creators** rather than consultants or contractors
- Lead experts **accompany the city** throughout the entire ICC journey and are **invested in cities' success**. Therefore, cities may contact them beyond dedicated events, while being **respectful of their time**

## What cities should not expect

- Lead experts **do not implement** recommended actions for cities, but help cities implement tailored solutions
- Lead experts may not have **all the answers immediately available**, but they will be dedicated to help cities find the most suitable contact point to address any concern
- Lead experts will work hard to problem-solve and review the deliverables, but if city capabilities are to grow, they should **not author entire deliverables**
- Lead experts are responsible to **support and assist cities** on their journey and have a budget of time to do so outside of scheduled events; however experts do not have **unlimited time and cities** should be respectful of this

## Contents

### **Introduction to the Intelligent Cities**

**Challenge:** what is it and what does it set out to achieve?

### **What is the city journey through the**

**ICC?:** the major phases and outputs of the programme and how different cities involved along the way?



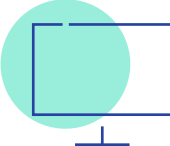
### **Who is involved and how do we work**

**together?:** the city teams and the experts

**What activities take place?** Introducing types of events and tools

**How do things kick off?** The first three activities of the ICC

# The ICC programme supports cities through three main types of activities

	Delivery method	Description
1	 <b>In-city events, calls or visits</b>	Physical visits or digital calls from lead or thematic experts to provide advice highly tailored to your city
	 <b>Multi-city events or calls</b>	Facilitated in-person events or digital calls, where cities interact, e.g., in peer coaching, learning as a group or co-creating a solution
2	 <b>Digital learning</b>	Online tools and materials that provide support at specific points in the journey or that can be accessed at any time



# 1. There are four types of events that will shape cities' ICC journey

		Engagement formats	Purpose	Detailed next
<b>1 Initiation &amp; Closing</b>	In-city	Local launch & local closing	Mobilise ecosystem for the ICC and at the end, thank stakeholders and commit to more action	
	Multi-city	ICC 1 <sup>st</sup> city lab & in-person closing	City lab (incl. inspiration, networking, theme introduction) and close (incl. celebration, learning, transition) the ICC	
<b>2 Planning</b>	In-city	Acceleration workshop	Pre-launch event for former DCC cities to learn from DCC experiences and consider redirection under ICC	
		Stakeholder mobilisation workshop	Discuss local enablers assessment (i.e., the city's strengths and weaknesses) and build shared ambition	
		Needs assessment workshop	Having chosen a theme, discuss city performance assessment results, define vision and long list of solutions	
		Maturity assessment and strategy workshop	Set the city up for success by analyzing the maturity of existing technology solutions (via assessment tool results); from this, define top city opportunities and how the ecosystem could work together to achieve goals	
		Roadmap and monitoring workshop	Develop a concrete action plan and KPI monitoring framework for the implementation phase	
		Programme review workshop	Review achievements and plan continuation of transformation efforts beyond the ICC	
<b>3 Delivery</b>	In-city	Lead experts visits (in-person and VC)	Help track and drive local progress	
		Thematic expert check-ins (in person and VC)	Problem-solve theme-specific issues	
		Transversal workshop	Receive specific support on barriers or enablers (e.g., access to finance)	
	Multi-city	Cross-city labs	Large all-city conference for both learning and sprints of action. Hold thematic working meetings, learn from peers and experts, initiate cross-city collaboration and form networks	
		Thematic action group working sessions	With mentor help, identify shared interests, deep dive on common solutions, drive shared implementation	
<b>4 Process &amp; progress review</b>	In-city	Ecosystem calls	City-led sessions to take action and track progress with local stakeholders	
	Multi-city	Thematic action group progress trackers	Track progress that is being made in thematic action group working sessions	
		Cycle planning sessions	Review past implementation cycle and design upcoming implementation cycle	
		Stage information sessions	Introduce the next phase of the programme	

# Activities are a mixture of one-off events and recurring interactions

	<div> <div>  </div> <div> <b>Activate &amp; accelerate</b> </div> </div>	<div> <div>  </div> <div> <b>Preparation &amp; assessment</b> </div> </div>	<div> <div>  </div> <div> <b>Ambition &amp; roadmap</b> </div> </div>	<div> <div>  </div> <div> <b>Implementation</b> </div> </div>	<div> <div>  </div> <div> <b>Review &amp; way forward</b> </div> </div>
One off activities	Acceleration workshop	Local launch ICC launch (1 <sup>st</sup> city lab) Stakeholder mobilisation workshop Needs assessment workshop Maturity assessment and strategy workshop	Roadmap and monitoring workshop Mayor's summit 1 <sup>1</sup>	Cycle planning sessions	Local closing ICC in-person closing Programme review workshop Mayor's summit 2 <sup>2</sup>

	Activity	Frequency
Recurring activities	<b>Lead experts visits</b> (in-person and VC) <b>Thematic expert check-ins</b> (in person and VC) <b>Cross-city labs</b> <b>Thematic action group working sessions</b> <b>Thematic action group progress trackers</b> <b>Transversal services</b> <b>Ecosystem calls</b>	15 digital visits, 9 in person visits over course of programme 6 digital visits, 4 in person visit over course of programme 5 labs – 3 digital, 2 in person 8 sessions over course of programme 8 sessions over course of programme 3 types over course of programme; As often as cities desire, but suggested every 2 weeks

Intelligent Cities  
 Challenge

1. As part of City Lab  
 2. As part of ICC closing

# The cross-city labs drive collaboration and are one of the most important parts of the methodology



## Objectives

### Continuous objectives

- Build an **EU-level ecosystem** to deliver concrete collaborations
- **Peer review** of progress
- Foster a **knowledge sharing environment** across experts, participants and mentor cities

### Phase-specific objectives

- **Preparation phase:** Cross city lab #1: peer review **strategy** and **showcase DCC participants** success stories with early **quick wins**
- **Assessment phase:** Cross city lab #2: peer review of **roadmap and KPIs** and showcase **success stories of ICC quick wins**
- **Implementation phase:** Cross city labs #3 and #4: **review implementation progress**, ideate on solutions for upcoming cycle, push **firm cross-city commitments**



## Types of activities

### Transversal sessions e.g.,

- Workshops that deliver **transversal services on cross-city barriers/enablers** relevant to all cities, such as open data, public procurement, financing (e.g., how to set up an effective public private partnership)

### Thematic sessions, e.g.,

- Coaching and **best practice sharing on key thematic barriers and enablers** (e.g., how to make a coherent future mobility strategy)
- In-person meetings for thematic action groups, where cities **plan shared implementation of specific solutions** (e.g., smart traffic lights)

### Tribe sessions e.g.,

- City type group discussions around shared **implementation experiences unique to given city characteristics** e.g., touristic, industrial, port






## Logistics

- **For 2 labs: 2 day in-person conference**, with option to be in Brussels or hosted by a EU mentor city, with optional visits to see solutions implemented by the city
- **For 3 labs: digital conference** with span 5 half day interactive sessions
- **~200-300 attendees** constituted of 2 attendees per participating city (170), EU and international mentors (~15), thematic experts (~15)

**City labs are not your usual conference:** high intensity action-orientated 2 day<sup>1</sup> events, where cities quickly absorb learning from experts and each other, then work together to drive action





## 2. Tools in three areas will help ICC cities to achieve their goals

Area	What tools are involved?	What do they help cities do?
 <b>Assessment and tracking</b>	<p>Simple excel tool (KPIs, technology maturity and city performance)</p> <p>Online questionnaire (local enablers)</p> <p>Tractebel Cityscan (optional thematic selection support)</p> <p>Additional detailed thematic needs assessments as brought in by thematic experts</p>	<ul style="list-style-type: none"> <li>• Help cities <b>track progress against KPIs</b> as they progress</li> <li>• Understand <b>city performance</b> ("needs") that matter to citizens, e.g., air quality, number of jobs</li> <li>• Understand city's <b>technology maturity</b> that is the basis for an intelligent city transformation, <i>e.g., 4G coverage, open data platforms</i></li> <li>• Understand what stakeholders think are the city's <b>inherent capabilities in local enablers</b> and how these can help, <i>e.g., good access to finance</i></li> <li>• Support in helping cities <b>decide what themes</b> they would like to specialize in</li> </ul>
 <b>Citizen engagement</b>	<p>Templates to guide interaction</p>	<ul style="list-style-type: none"> <li>• Understand <b>awareness and satisfaction with existing</b> intelligent city solutions</li> <li>• Ask <b>citizens about their priority issues</b>, <i>e.g., in ranking exercises, surveys</i></li> <li>• Capture <b>citizen ideas</b></li> <li>• <b>Show citizens progress</b> on important issues</li> </ul>
 <b>Communication</b>	<p>Microsoft Teams<sup>1</sup></p>	<ul style="list-style-type: none"> <li>• Facilitate <b>best-practice sharing</b> in between events.</li> <li>• Give cities an opportunity to <b>discuss implementation within a carefully curated group</b>, <i>e.g., a thematic action group, comprised of a mentor and 4 or 5 follower cities all working towards implementation of a common solution</i></li> </ul>

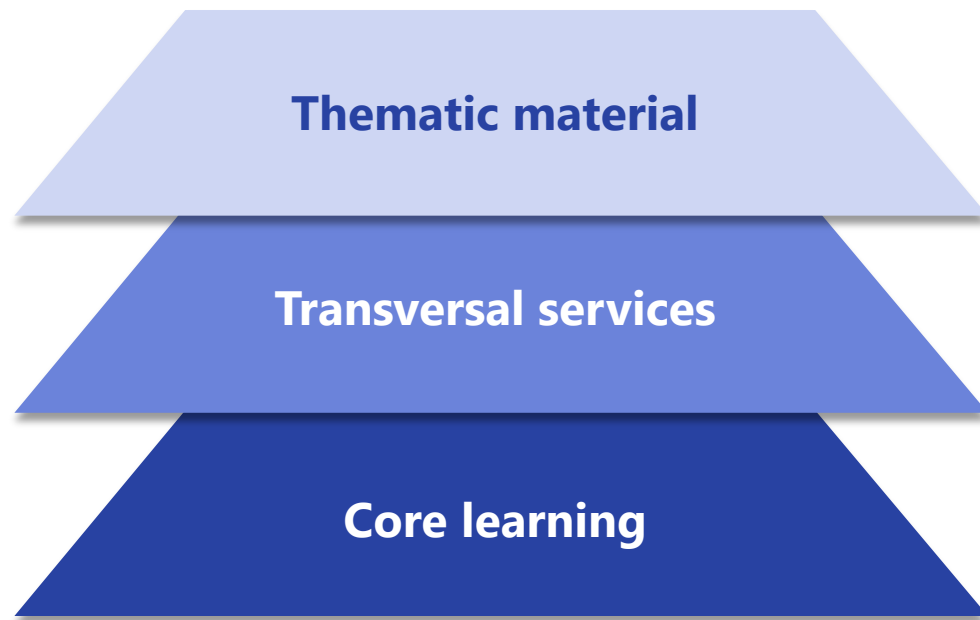
1. Microsoft Teams will be used as the primary communication and collaboration platform during the ICC programme

## 2. There are two additional digital resources that are not classified as tools, but support cities throughout their journey

Tool name	What is it?	What does it help cities do?
 <b>Marketplace</b>	Digital platform on ICC website	<b>Solution sharing platform for and by cities</b> , showcasing: <ul style="list-style-type: none"><li>• City profiles, learning and best practices</li><li>• Solutions, their impact and supplier performance</li><li>• Common challenges and relevant solutions</li></ul>
 <b>“City toolbox” – downloadable content</b>	Section on the ICC website	Provide <b>transversal and thematic learning</b> (beyond the in-person events) that provides cities additional assistance in addressing their challenges, <i>e.g., best-practice case studies</i>



# The ICC has three main types of content that these activities deliver, which layer upon and complement each other



 Detailed next

## Thematic material



**Details around specific city needs and solutions**  
(e.g., improving green economy and environment)



## Transversal services



Flexible support to **help navigate common barriers and enablers** (e.g., how to access financing)



## Core learning



More general support that **drives cities through the programme** (e.g., how to make a strategy, how to plan a roadmap)



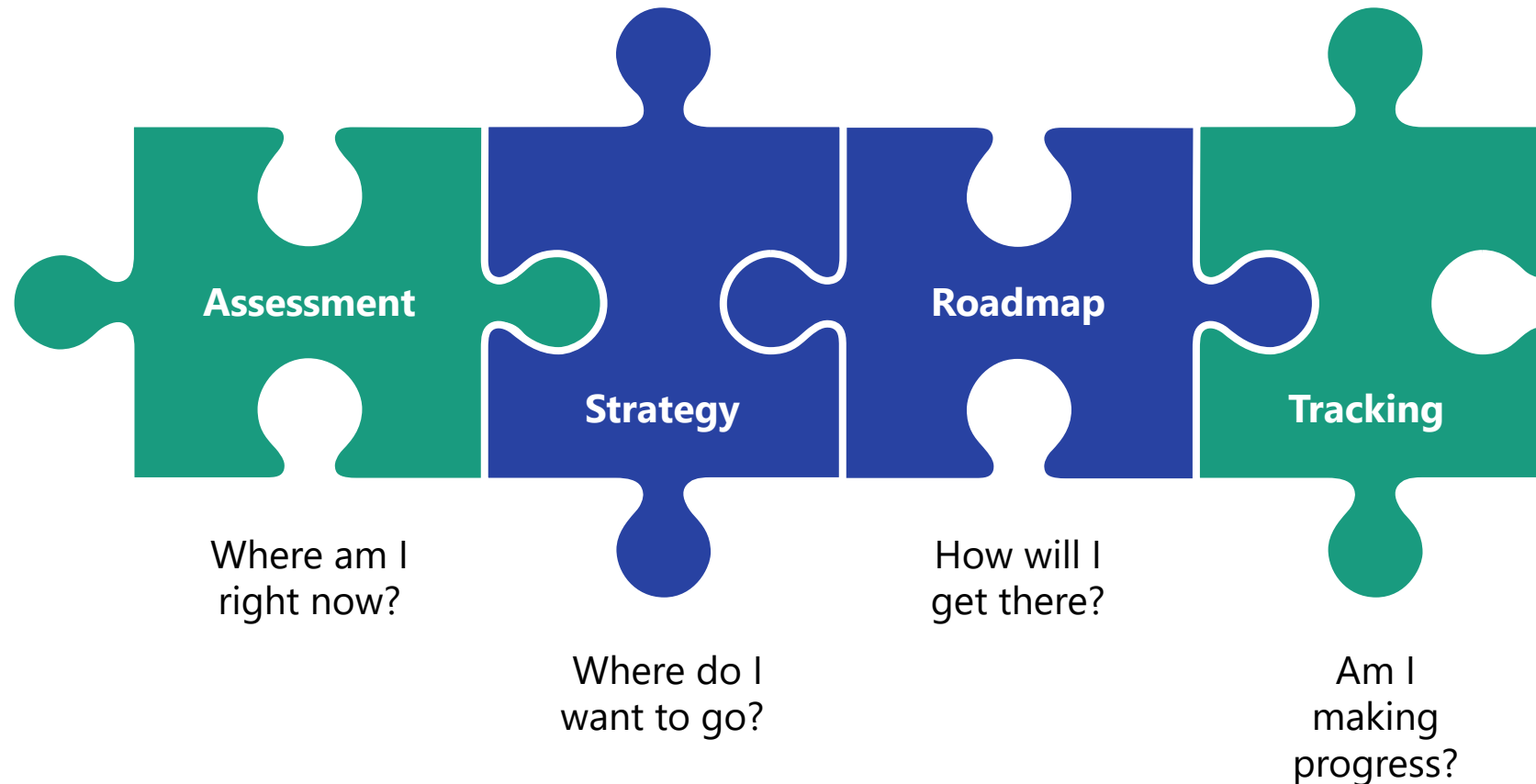
# Within core learning, cities get the basic building blocks of a transformation programme

Elements of the core activities

■ Detailed next



Core learning



# Assessment and tracking are important elements of ICC



Core learning

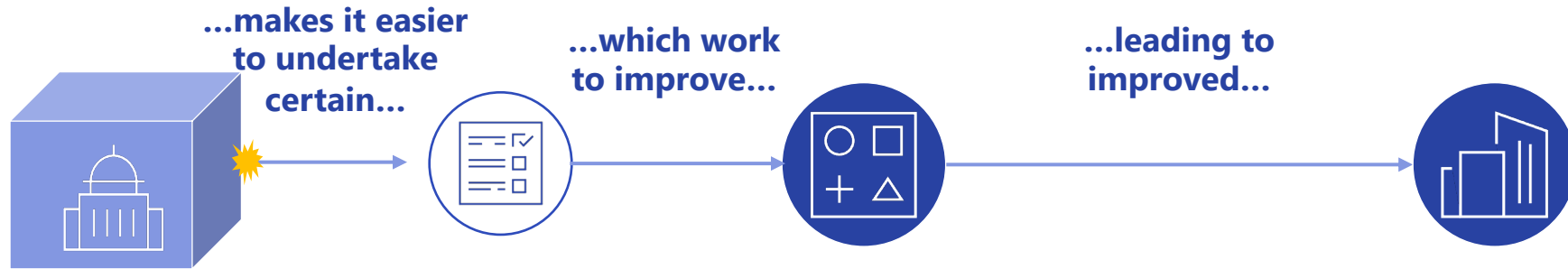
A thorough assessment and progress tracking helps cities during the ICC and beyond

- 1 Understand city's strengths** and leverage them to achieve the city's objectives
- 2 Target activities** to areas with a priority city needs
- 3 Realise which initiatives are effective** and discontinue those that are ineffective
- 4 Improve chances** to receive project funding by clearly communicating demonstrated and expected benefits to third parties (e.g., investors)
- 5 Celebrate successes** in a way that can easily be understood by citizens and stakeholders

# There are four components come together to drive success in the ICC



Core learning



## Local enablers

## Activities – actions and inputs

## Technology maturity – outputs

## City performance – outcomes and impacts

### Description

Each city has **unique strengths and weaknesses that help action happen**. These can be stakeholder networks, local capabilities that drive success in ICC projects.

Cities main intervention is to **take action**. These can be **direct interventions** such as procuring a particular technology, or **indirect interventions**, such as bringing together particular parties or setting the conditions for success

**Cities can deploy technologies** to try and improve city performance. **How well these solutions are currently used can be described as their 'maturity'**, covering issues such as how far are they rolled up, what do users think of them

Success of an intelligent city is ultimately measured by its ability to **address city needs**. These can be considered an **improved quality of citizen life** and a **better environment for stakeholders**.

### Example

A history of strong collaboration between city and a local university...

...allows the creation of a new e-health pilot project using social housing in the city...

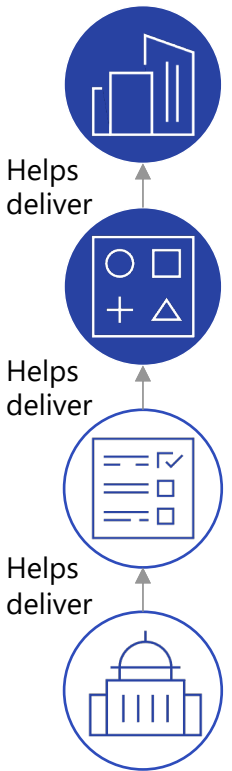
...leads to the launch a new tele-health solution utilising 4G data connections...

...results in pre-emptive diagnosis and lower wait times at medical facilities

# To keep things simple, assessment and tracking both align around the 4 same dimensions



Core learning



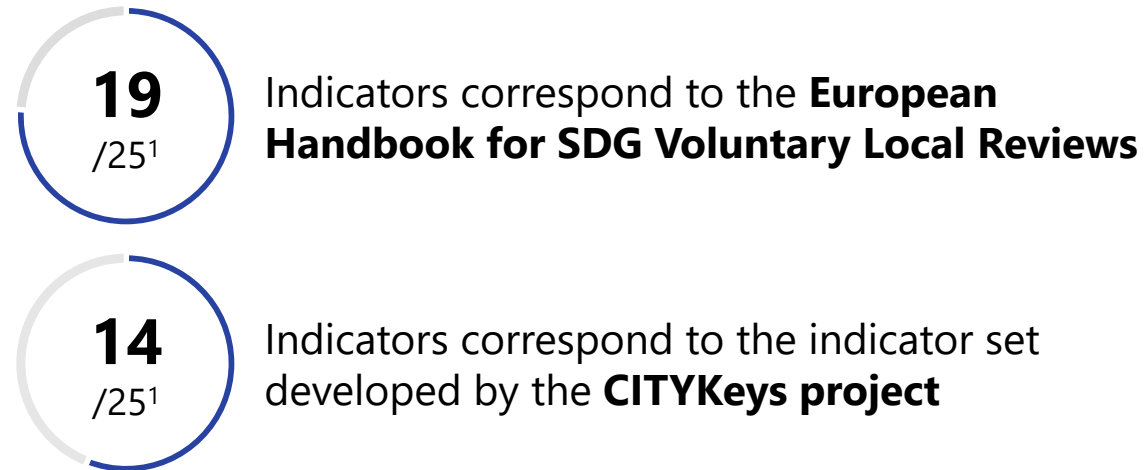
Element	Assessment (at the start of ICC)	Tracking (along the way)
City performance	 Discussed at Needs assessment workshop, using City Assessment tool	Mid-programme <sup>1</sup> and end of programme review Uses ~5-10 indicators
Digital and advanced technology maturity	 Discussed at Solution assessment and strategy workshop, using city assessment tool	Every 3 months Uses ~10-15 indicators
Implementation roadmap	N/A – cities make a roadmap as part of the programme	Tracked by city representatives on local project management processes
Local enablers	 Discussed at ecosystem workshop Uses SAT tool and 1:1 interviews	Not tracked, assumed to be very slow moving. These are useful capabilities but not the end goal of the ICC



# City indicators are aligned with existing EU indicator sets and are generally available to EU cities

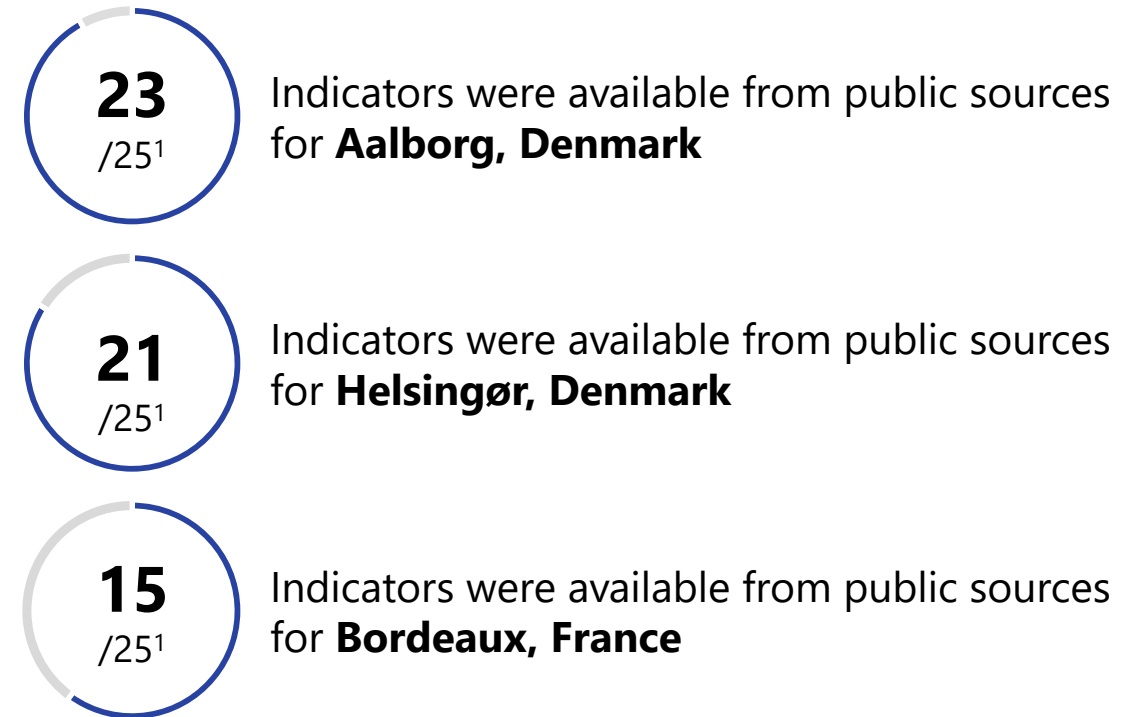
## Alignment with existing indicator sets

To ensure comparability, overlap with other existing intelligent city indicator sets was checked for each of the proposed indicators



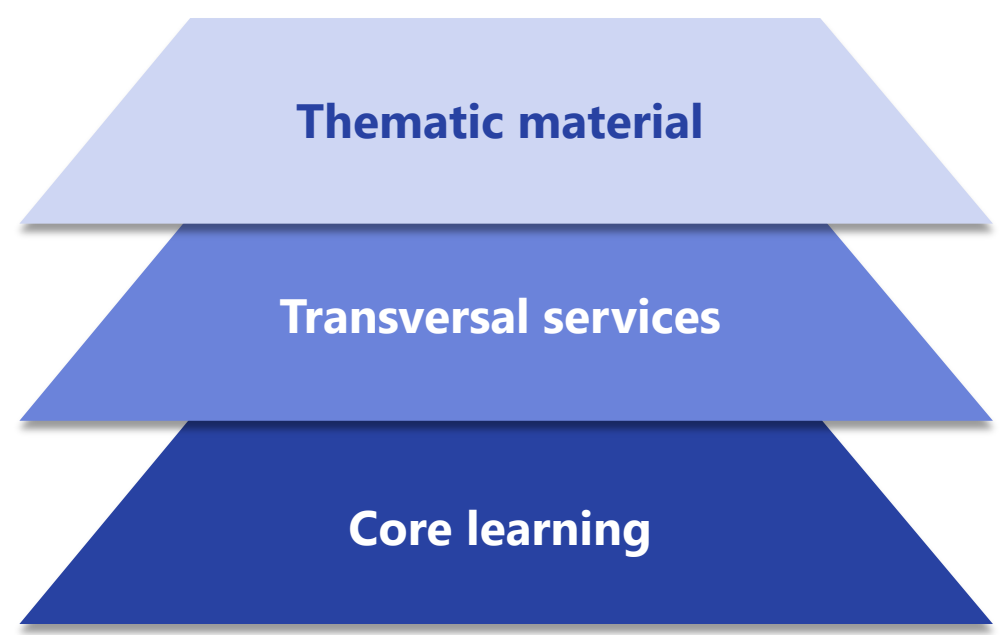
## Data availability

For each proposed indicator, availability was tested for 3 EU cities using public sources. Actual availability will be higher as cities have access to non-public data



1. Random sample from possible KPI options

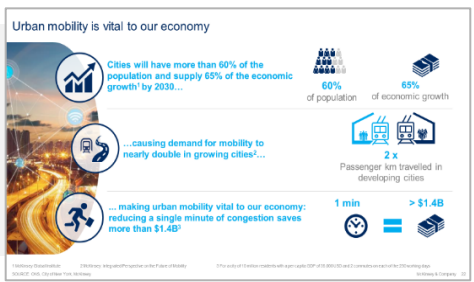
# The ICC has three main types of content that these activities deliver, which layer upon and complement each other



Detailed next

**Thematic material**

**Details around specific city needs and solutions**  
(e.g., improving green economy and environment)



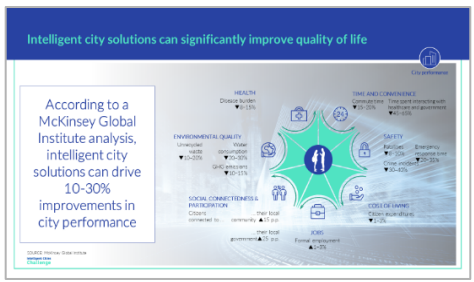
**Transversal services**

Flexible support to **help navigate common barriers and enablers** (e.g., how to access financing)








**Core learning**

More general support that **drives cities through the programme** (e.g., how to make a strategy, how to plan a roadmap)



# Thematic tracks high level scoping

 <b>Green economy and local green deals</b>	 <b>Citizen participation and digitisation of public administration</b>	 <b>Upskilling and Reskilling</b>	 <b>Supply chains, logistics and the economics of mobility</b>	 <b>Green and digital transition in tourism</b>
<ul style="list-style-type: none"> <li>Decarbonising <b>buildings</b>, e.g., renovation wave, retrofitting, green construction</li> <li>Decarbonising <b>transport</b>, e.g., electrification of mobility</li> <li><b>Nature based solutions</b> e.g., green infrastructure, reforestation, urban farming, biofuels, BECCS</li> <li><b>Climate resilience</b> e.g., against flooding, drought or heat waves</li> <li>Decarbonising industry, e.g., <b>green manufacturing</b>, CCS</li> <li>Decarbonising power, e.g., scaling up <b>renewable energy solutions</b></li> <li>Managing <b>waste</b> and the <b>circular economy</b></li> </ul>	<ul style="list-style-type: none"> <li><b>Citizen- and business-friendly public services</b></li> <li>Enhancing <b>citizen and business participation</b> to e.g. new, democratic engagement tools</li> <li>Understanding city <b>stakeholder sentiment</b></li> <li>Reducing <b>digital divide</b> of communities marginalised by a transition of digital services</li> <li>Driving local government digitisation <b>independent of national government</b> agenda</li> <li>Support <b>launching grassroots initiatives</b> by citizens and social actors</li> </ul>	<ul style="list-style-type: none"> <li>Upskilling and reskilling of <b>workforce</b> for a green, digital and social transition – based on assessment of the real city needs, current shifts in socio-economic-environmental trends</li> <li>Mobilising and strengthening <b>skills-ecosystem</b> – educational institutions, industry and businesses, schools, academia, VETs, fablabs, research centres, industrial clusters</li> <li>Reduction of <b>skills gap and preparing the city for a better future</b></li> <li><b>Anticipation of new needs:</b> e.g. moving workforce from idle airport logistics chain to support super-market logistic chains</li> </ul>	<p><b>Disruption of supply chains</b></p> <ul style="list-style-type: none"> <li><b>Improving supply chain resilience</b> post-COVID, inc. self-supply and resource independence e.g. for medication, food systems through better links to rural areas</li> <li><b>Cross-city freight</b>, increasing the competitiveness of industrial <b>transport hubs</b> and flow through economic benefits, including ports, airports</li> <li><b>In-city freight</b>, looking at last mile deliveries, freight consolidation, emission zones</li> </ul> <p><b>Citizen mobility</b></p> <ul style="list-style-type: none"> <li>Driving <b>economic growth</b> through improved mobility</li> <li><b>Reducing congestion</b>, improving experience of citizens on journeys in urban areas (inc. availability, convenience and affordability) by improving new and existing modes</li> </ul>	<ul style="list-style-type: none"> <li><b>Green and digital recovery of tourism: Re-design the tourism sector</b> (e.g. value vs volume, domestic tourism, slow tourism, factoring in benefits for the environment and the local community, etc.)</li> <li><b>Support recovery</b>, especially through support to <b>SMEs</b></li> <li><b>Invest in technologies</b> that will deliver the low-carbon tourism ecosystem</li> <li><b>Diversify tourism offer</b> increasing <b>tourists experience quality</b> in the destination (e.g. through <b>cultural tourism</b>)</li> <li>Providing <b>secure and safe destinations</b> for both tourists and residents</li> <li>Facilitating the <b>interaction</b> and <b>integration</b> of the tourism sector with its environment, increasing as such the <b>destination's competitiveness</b> at global level</li> <li>Improving the <b>leadership of destinations</b> through <b>comprehensive and efficient management</b></li> </ul>

Areas of major interest at 1st City Lab

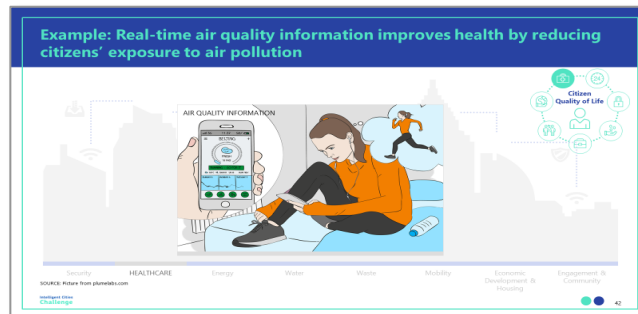
Cross cutting theme: Growing start-ups, SMEs and social economy

# Cities will be provided with rich in-person materials and online resources to guide each stage of their thematic journey

## Example thematic materials

### Intelligent city introduction and use case manual

Cities leverage high-level materials (online) to **explore intelligent use cases** for quick-win and big move initiatives relevant to their theme



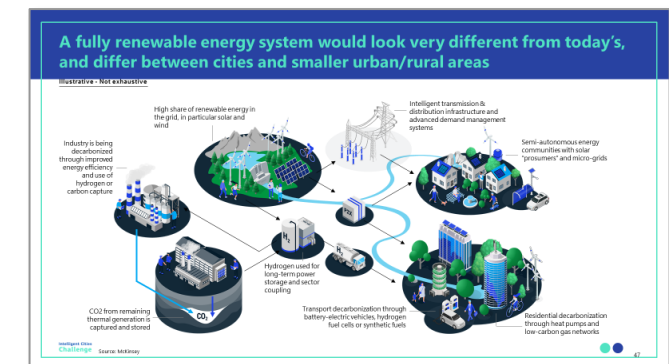
### Vision setting and ideation

Cities explore gallery walks and engage activities to **ideate on their own city vision**



### Thematic roadmap handbook

Cities leverage online materials specific to their chosen themes to **help drive ideas forward**; design of **tailored roadmaps** will be led by thematic experts



# ICC participants will be grouped into thematic clusters based on city priorities, self-assessments, and shared needs



Thematic content

## Process of allocation of themes to EU core cities



### 1. Participants vote on key objectives

As participants fill out the EOI to join the ICC, they are given 16 goals and **asked to prioritise four goals**



### 2. ICC presents thematic clusters to participants for pre-selection

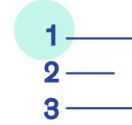
16 objectives have been grouped into **five thematic clusters**  
During the 1<sup>st</sup> city lab, ICC will introduce the grouped thematic clusters. In the weeks that follow, participants will **prioritise a primary cluster – participants may also select a secondary cluster** provided they dedicate the necessary resources



### 3. Participants assess digital and advanced technology maturity and city performance

Each participant will conduct assessment of **city performance and local enablers in the first city assessment workshop**. The assessment includes **thematic specific issues** such as available technology infrastructure, key stakeholders, and any existing strategies

**Assessments of technology maturity are then based on these themes, and discussed in the second city assessment workshop.**



### 4. Participants refine thematic cluster selection

Participants will **work with lead experts** to adapt their learnings from the assessments in order **to determine final primary and optional secondary thematic track**.

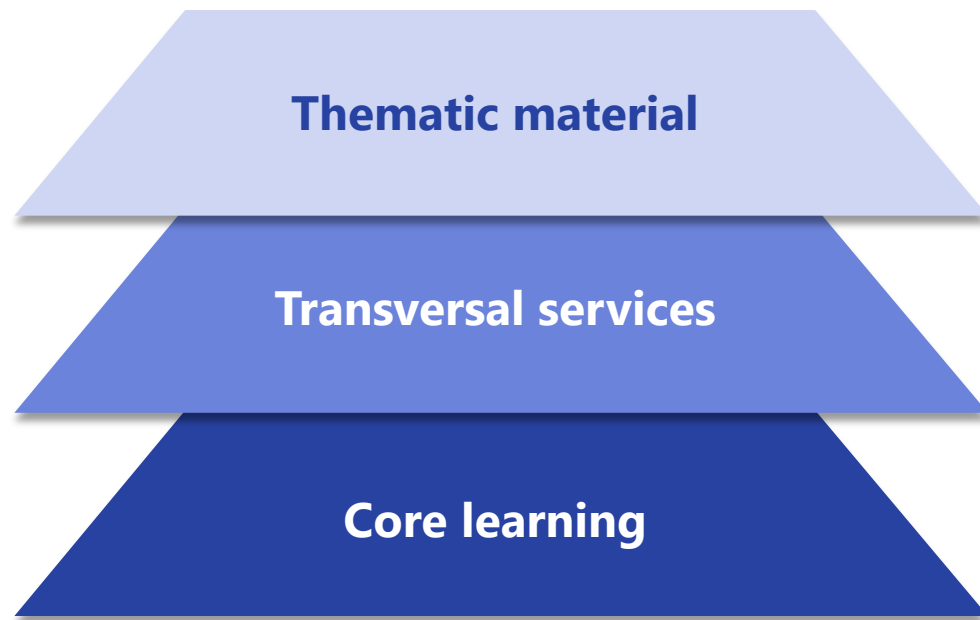


### 5. ICC assigns participants to their thematic tracks

**The ICC will share participants' final thematic track** assignments based on a combination of:

- **City preference**
- Lead expert **feedback**

# The ICC has three main types of content that these activities deliver, which layer upon and complement each other

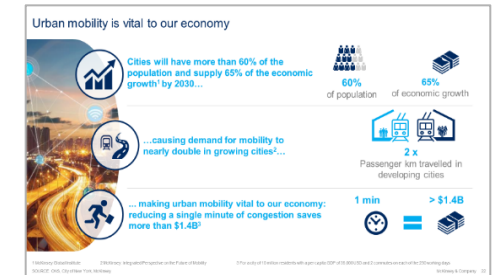


□ Detailed next

## Thematic material



**Details around specific city needs and solutions**  
(e.g., improving green economy and environment)



## Transversal services



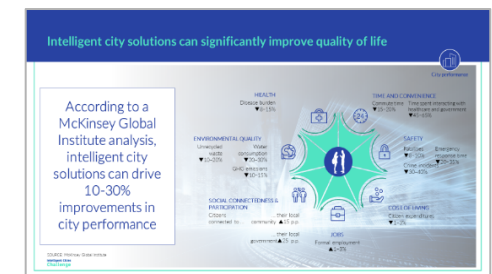
Flexible support to **help navigate common barriers and enablers** (e.g., how to access financing)



## Core learning



More general support that **drives cities through the programme** (e.g., how to make a strategy, how to plan a roadmap)





# Participants can leverage transversal services, both in-person and online, to help overcome common barriers to implementing initiatives



## Participants will have access to a variety of transversal services

Transversal services are **cross-theme coaching opportunities available as needed to participants** during the ambition and road map, implementation, and review and way forward phases of the ICC

**Participants and lead experts<sup>1</sup>** can leverage transversal services to help cities **tackle common barriers and leverage local enablers**, including:



Access to finance



Innovation and social responsibility in procurement and business models



Open data platforms

Post-covid recovery content will be provided across all transversal materials

1. Transversal services will be provided by non-thematic experts, but tailored to the theme in question



## Accessible through transversal-specific online learnings and in-person coaching

### Online learnings:



**E-learning**s, e.g., live sessions incorporating audience interaction via polls, live Q&A / discussion



**Downloadable online toolkits** for reference per topic

### Select topics reinforced in-person:



**In-city**, with locally-relevant follow-up coaching **in lead expert meet ups**



Thematic Action Group discussions and workshops **in cross-city labs**

Transversal services should be delivered with tailoring to a given city's major theme