# How are EU urban initiatives and actions supporting Green, Just and Productive Cities in the EU?

**The Productive City dimension** 

20 September | 14:00 CEST







## Welcome and introduction

Jan Maarten De Vet | Technical Secretariat & Moderator Thomas de Béthune | DG REGIO, European Commission







## **AGENDA**

Time	Session
14:00 - 14:05	<ul> <li>Welcome and introduction</li> <li>Jan Maarten de Vet, Urban Agenda for the EU Technical Secretariat – session moderator</li> <li>Thomas De Béthune, Team Leader for Sustainable Urban Development, DG REGIO, European Commission</li> </ul>
14:05 – 14:35	<ul> <li>PART 1: Dynamics and solutions around UAEU Actions and other EU initiatives</li> <li>Theoni Panteli, Head of Blue Growth Projects Department, Programming and Development Division, Municipality of Piraeus, Greece</li> <li>Patrícia Romeiro, Porto for Talent Consultant, City of Porto, Portugal</li> <li>Filippo Corsi, Head of IT Development Service, City of Florence, Italy</li> </ul>
14:35 – 14:50	Concluding remarks  • Eddy Adams, Programme Expert, URBACT  Q&A with participants
14:50 – 15:20	<ul> <li>PART 2: Future EU opportunities towards productive cities</li> <li>Dana Eleftheriadou, Head of Cities and Proximity, DG GROW and Natalia Gkiaouri, Policy analyst for urban development, DG GROW, European Commission</li> <li>Serge Novaretti, Policy and Programme Officer, DG CONNECT, European Commission</li> <li>Thomas De Béthune, Team Leader for Sustainable Urban Development, DG REGIO, European Commission</li> </ul>
15:20 – 15:50	Guided discussion (with all speakers) and Gerry Muscat, Head of Division on Urban Development, European Investment Bank
15:50 – 16:00	Conclusion and main takeaways



# Part 1: Dynamics and solutions around UAEU Actions and other EU initiatives







# Part 1: Dynamics and solutions around UAEU Actions and other EU initiatives

Theoni Panteli | Head of Blue Growth Projects Department, Programming and Development Division, Municipality of Piraeus, Greece







# Piraeus Blue Growth Strategy

Theoni PANTELI

Municipality of Piraeus,

Entrepreneurship and Blue Growth Dept.

How are EU urban initiatives and actions supporting Green, Just and Productive Cities in the EU?



Piraeus, 20 Sept. 2021





## Piraeus Blue Growth Strategy

### Key policy

- A strategic document covering economic, social and environmental issues in relation to Blue Growth and the Blue Economy.
- A common frame of reference for the business community and society of the city of Piraeus.

## Action plan

- An integrated planning for the development of the city of Piraeus as an innovative, competitive and resilient Blue Economy hub with an international focus and reach.
- Parallel European and National actions



## **BluAct**



- A sustainable urban development initiative in the field of Blue Growth innovation and entrepreneurship. An entrepreneurship competition that offers incubation/acceleration services to start up businesses.
  - The Municipality of Piraeus participated as a Lead Partner in the European project BLUACT network of the programme URBACT III
  - 1st cycle (12/2018-06/2021) The BluAct Transfer Network comprised a network of other 6 European port cities: Mataro (ES), Ostend (BE), Galati (RO), Matosinhos (PT), Burgas (BG) and Salerno (IT).
  - 2<sup>nd</sup> cycle (06/2021-12/2022) The BluAct Transfer Network comprised a network of 4 European port cities: Boulogne sur Mer (France), Gdansk Entrepreneurship Foundation (Poland), Liepaja (Latvia) and Regional development center Koper (Slovenia).

#### Impact

- Promoting smart, sustainable and integrated growth and employment opportunities in the European marine and maritime economy.
- Boosting innovation and job creation.
- Each partner engages key stakeholders in their own cities, to form an Urbact Local Support Group that support the design and implementation of the urban action.



## **Actions of Piraeus Blue Growth**



Center of Entrepreneurship and Innovation for Blue Growth - Blue Lab:

**Municipality of Piraeus/ Region of Attica** 



Piraeus Blue Growth Competition

**Municipality of Piraeus** 



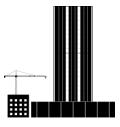
**Business Support Center of Piraeus** 

Municipality of Piraeus/ Integrated Territorial Intervention



**TechRevolution Network** 

Municipality of Piraeus/ EU Progr. Urbact



Capitalization of Marine Commercial Building

**Municipality of Piraeus/ Private Invests** 



## **Green Actions of Piraeus**



**ProGIreg** 

**HORIZON 2020** 



**Smart City Ligthing** 

**Municipality of Piraeus** 



**EuPOLIS** 

**HORIZON 2020** 





**«Actions for Biowaste»** 

Municipality of Piraeus/ Integrated Territorial Intervention

More info https://piraeus.gov.gr/evropaikaprogrammata/



### Pop-Machina

Pop-Machina - Collaborative Production for the circular economy: A community approach.

**HORIZON 2020** 



Pilot mechanisms for information, prevention, management and awareness for acquiring the Climate Change in the Urban environment

Municipality of Piraeus / Integrated Territorial Intervention

## Thank you!

Ms Theoni Panteli blueoffice@piraeus.gov.gr







# Part 1: Dynamics and solutions around UAEU Actions and other EU initiatives

Patrícia Romeiro | Porto for Talent Consultant, City of Porto, Portugal







## The FeelFlorence APP

Filippo Corsi | Head of IT Development Service, City of Florence, Italy







## The challenge: how to manage tourists flows beyond the 5 Km<sup>2</sup> of the UNESCO city center

#### **NUMBERS BEFORE 2020:**

#### Florence Area

• ARRIVALS: 4.867.427

• PRESENCE: 13.802.348

### City of Florence

• ARRIVALS: 4.025.300

• PRESENCE: 11.048.572



## The answer: a strategic project of territorial cooperation

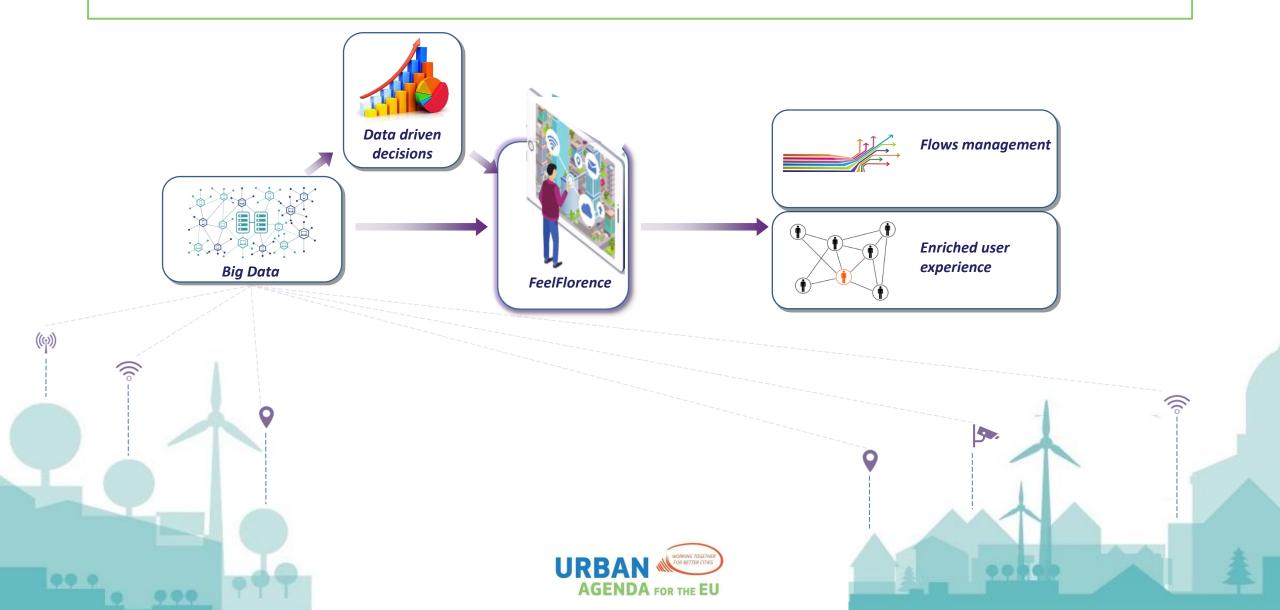
```
# Tuscany
# Florence
# 41 municipalities
# Tourist destination
# 1 project for tourist information
and promotion
# Feelflorence
```

```
# Interoperability
# Real time update
# Georeferencing
# Crowding detection
# Flows orientation
# Territorial involvement
# Storytelling
```

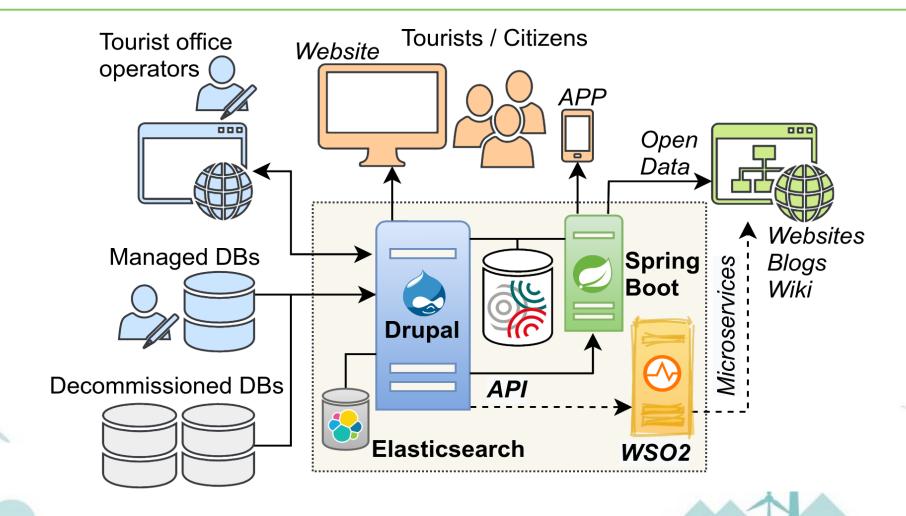
THIS IS FEELFLORENCE...AND EVEN MORE!



## **Smart Tourism Ecosystem**



## FeelFlorence architecture





## Interoperability

#### **Events:**

There are more than 300 events in the next 30 days published via open data, daily updated and used by many third party APPs.

#### **Points Of Interest:**

Coming soon in our open data library.

#### Next step:

**Datasets** 

will be exposed via WSO2 API gateway directly from Drupal CMS.















#### Informazioni generali

Data di creazione: 28/06/2013

Data ultima modifica del dato: 14/09/2021

Data creazione del metadato: 11/07/2018

Data ultima modifica del metadato: 14/09/2021

Numero di visualizzazioni: 9245



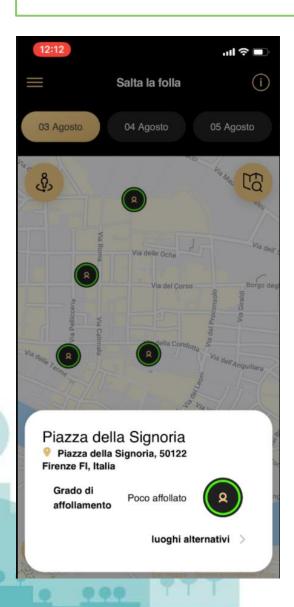
#### ■ Descrizione

Il dato contiene gli eventi in città dalla data odierna a 30 giorni solari, come da programmazione ufficiale esposta sul sito www.FeelFlorence.it.

L'aggiornamento è quotidiano, ed è possibile che la pianificazione degli eventi già pubblicata subisca variazioni ed integrazioni.



## People's flow management: how it works



 There are some main Points of Interest where the level of crowding is monitored. Every point can have three levels of crowding, represented by different colors:

Green: no crowd

Orange: a little crowded

Red: crowded

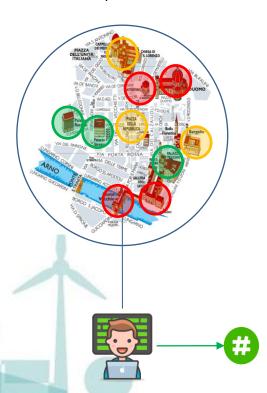
- Tourists and city users can decide to avoid the most crowded places, checking the map before moving.
- Push notification will be sent to the users if they approach very crowded places.
- The push notification will warn about the crowding of that place and will suggest a list of less crowded Points of Interest.



## People's flow management evolutions

#### **PHASE 1: Manual**

The level of crowding is manually chosen by the tourist office, considering past experiences and events planned for a certain period.



#### **PHASE 2: Semi-automatic**

The level is manually chosen by the tourist office for the forecasts but the real-time level is collected from sensors around the city. (e.g. WiFi access points). Now we are here!





#### **PHASE 3: Automatic**

The level is forecasted through big data analysis and machine learning algorithms. Real-time is collected from sensors. We need to collect data to have reliable forecasts.



## Phase 2: Big data collection via WiFi

- Now we are collecting data from the WiFi network of the city of Florence in an anonymous form.
- The network is composed by more than 250 access points.

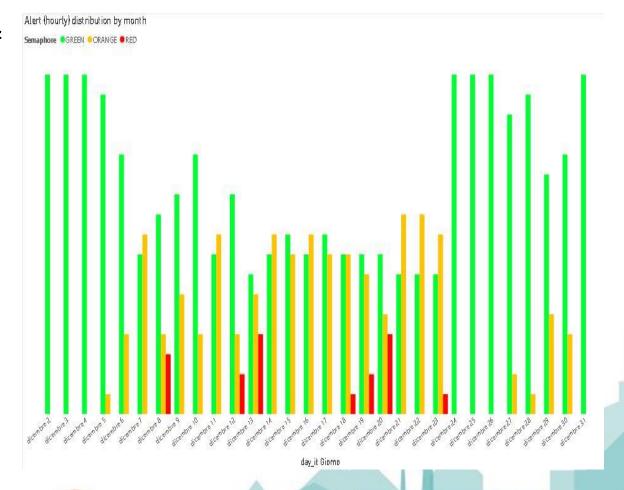


- Crowding is being monitored in 10 main Points of Interests (e.g. Piazza del Duomo, Piazzale Michelangelo)
- In every single place the level of crowding is monitored 3 times per hour. An algorithm translates the level in one of the three colors we have seen before: red, yellow, green



## Does it work? The example of Piazza Duomo

- In this chart we can see the number of green, orange and red detections.
- As we can see, orange and red colors are more frequent during weekends and public holidays like the 8th of December, the day in which many citizens went shopping in the citycentre.
- In the next future we could add other kind of sensors like cameras and others to make more accurate detections also in other parts of the city.





## Goals

 Digital transition as driver of a sustainable urban development

 Having more attractive, more accessible cities through quality digital services open new business opportunities

 Enforce cooperation between many public actors (city of Florence, Tuscany Region, Metropolitan city, other municipalities of the Florence area)





## Part 1: Concluding remarks

**Eddy Adams | Programme Expert, URBACT** 







## **Q&A**

Please use the chat to type your questions or ask to be invited up to the Stage.







## Part 2: Future EU opportunities towards productive cities









## **Intelligent Cities Challenge-**

## Leading the green and digital transition of the local economy and society

Eleftheriadou Dana - Head of Cities and Proximity team— DG GROW

Natalia Gkiaouri — Policy officer — DG GROW

How are EU urban initiatives and actions supporting Green, Just and

Productive Cities in the EU?





## The New Industrial Strategy and 14 Industrial Ecosystems

 Strengthening the resilience of the Single Market

Supporting Europe's Open Strategic
 Autonomy through dealing with dependencies

Supporting the business case for the twin transitions

• Co-creating transition pathways with public authorities, enterprise sand citizens.

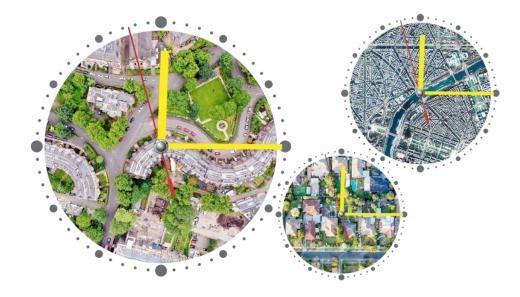






## The role of proximity economy in the productive city

**Proximity economy** includes activities, services and businesses which promote local economic activity, boost local value chains, local production and consumption, and improve citizens' lives through human-centric, circular and sharing models. This includes user friendly 'last mile' services allowing industrial production to reach consumers and improve their quality of life.



- Increased proximity enhances quality of life: access to healthcare facilities, preschools and schools, social services, commercial services, leisure, cultural, and entertainment amenities, and parks and nature
- promotes environmental, social, and economic sustainability

One characteristic vision for the proximity economy, among others, is the "15-minute city", in which everything a citizen needs is within a 15-minute walk or bike ride.





## Cities challenges and responses during and after the pandemic

The COVID-19 crisis provided an opportunity for city dwellers and planners to rethink drastically, their consumption, production, living and travelling paradigm towards cleaner, greener, more human lifestyles that also offer new economic opportunities and jobs for their citizens and businesses.

#### Vision for 2030 - New urban models and call for action

- 1. Collaborative governance
- 2. Urban planning and design / Urban mobility
- 3. Local Green Deals
- 4. Changing stakeholder expectations for sustainable products and services
  - 84% of employees are more loyal to a company that contributes to social / environmental issues
  - Over 30% of consumers are looking to move towards sustainable companies and products after COVID 19
  - Over 81% of companies stated that their commitment to sustainable has increased over 5 years
  - New / more sustainable products are displacing 'old'
  - Capital is shifting to sustainability: More than 30% of capital is sustainable investing environmental, social and governance (ESG) players; investors are becoming Activists
  - Stringent targets are the new normal: 23% of Fortune 500 companies have a science-based target, up from 5% 5 years ago
- 5. Up and reskilling
- 6. Technology for Good





## Cities as proximity economy hubs

The Intelligent Cities Challenge initiative brings together an active community of 136 EU cities from 21 countries, representing 34 million EU citizens, to lead the green and digital transformation of their local economy and foster social resilience, leveraging cutting edge technologies and innovation.

It provides cities with clear direction on local industrial and SMEs development that is environmentally sustainable and socially just. The initiative offers cities one-to-one strategic guidance and expert support, access to city networks, capacity building tools

The ICC helps cities to:

- Foster the local public-private ecosystem joining up all city stakeholders
- Assess local needs, strengths and shape ambitious vision: conduct performance assessments, define strategic goals and implementation roadmaps
- Leverage cutting edge technologies to bring innovation and accelerate the city's transition
- Learn from peer cities and mentors and engage in long-lasting collaborations: EU marketplace for city solutions and joint investments/procurements





#### **ICC Cities**

**MENTOR** 

CORE

CITIES







# The Intelligent Cities Challenge

Making the most of advanced technologies for Green and Digital Recovery and Social Resilience

**136** cities **5** thematic tracks

The European Commission's Intelligent Cities Challenge





## What is a Local Green Deal?

- Most cities already have strategies and policies supporting the goals of the EU Green Deal, but they need better integrated governance and delivery mechanisms to accelerate and scale-up implementation ->
  Local Green Deals
- A Local Green Deal supports effective implementation, based on 4 founding principles: governance and management structures, integrated goals and an actionoriented multi-stakeholder approach based on public-private partnerships.



**Local Green Deals – A blueprint for action** 

SMP call for proposals Social economy and Local Green Deals supporting SMEs to become more resilient - 16<sup>th</sup> September 2021:



## Supporting re-skilling for Intelligent Cities

- Cities and their local economies are key in this major reskilling effort, that was launched with the Pact for Skills. They know best their local needs and they can put in place a tailored, local reskilling network, involving local companies, knowledge institutes, local authorities, trade unions, and citizens.
- Based on innovative and effective examples of cities that lead in reskilling, a Cities Guide for Reskilling has been developed to offer inspiration and advice to the ecosystem stakeholders.
- Prepare cities for transformation with examples to design a reskilling strategy & information on funding opportunities



A pragmatic guide for reskilling





## **Tech4Good Marketplace**

Technology-powered solutions and business models designed to advance economic, social and environmental causes

- Help European cities and social economy stakeholders address the most pressing challenges with technology
- Solutions developed by local SMEs, social enterprises and start-ups.
- Access to trustful, ethical, labelled, efficient solutions
- Purpose-driven, human-centered development of technology and processes: e.g. Al for reskilling, circular industrial activities, assistive technology for job inclusion
- ✓ Sustainable and social public procurement.
- Cross-disciplinary Makers Space, awards and hackathons (e.g. green manufacturing, smart farming, smart teaching, energy efficiency, etc.)



#### The European Commission's Intelligent Cities Challenge

### **Upcoming events**



Smart, green and resilient cities and communities Dialogue of Commissioner Thierry Breton and EU Mayors, 30 September 2021



EWRC Session on Tech4Good: using tech and online platforms to transform communities and SMEs - 12th October











# Local digital twins & data ecosystem

Serge NOVARETTI | EU Commission DG CONNECT

How are EU urban initiatives and actions supporting Green, Just and Productive Cities in the EU?











- Commission strategy for smart communities
- Living-in.eu community
- Data space for smart cities and communities
- Local data platforms and EIF4SCC
- Local Digital Twins
- DIGITAL programme actions





# EC complementary works streams

#### **Local Data Platforms**

Helping cities and communities procure / implement MIMPlus compliant, interoperable data platforms

#### **EU Data space**

create a data
space for smart
communities
(data sharing
governance &
architecture) +
validation pilots

#### **Local Digital Twins**

Create an EU Local
Digital Twin Toolbox
(of open standard based modules),
create EU market and prepare roadmap for large-scale roll-out



#### **Living-in.EU Movement**



Commission

# LIVING-IN.EU

The European way of digital transformation in cities and communities

Over 100 signatures so far...
From Mayors, Regional and national Ministers

https://www.living-in.eu/











# Driven by shared principles and values

#### **Principles:**

- Citizen-centric design
- A city-led approach at EU level
- Technologies as key enablers
- Socially responsible access, use, sharing and management of data
- City as an open, living space
- Interoperable urban platforms with open standards, open/public APIs and shared data models

#### Multi-level governance

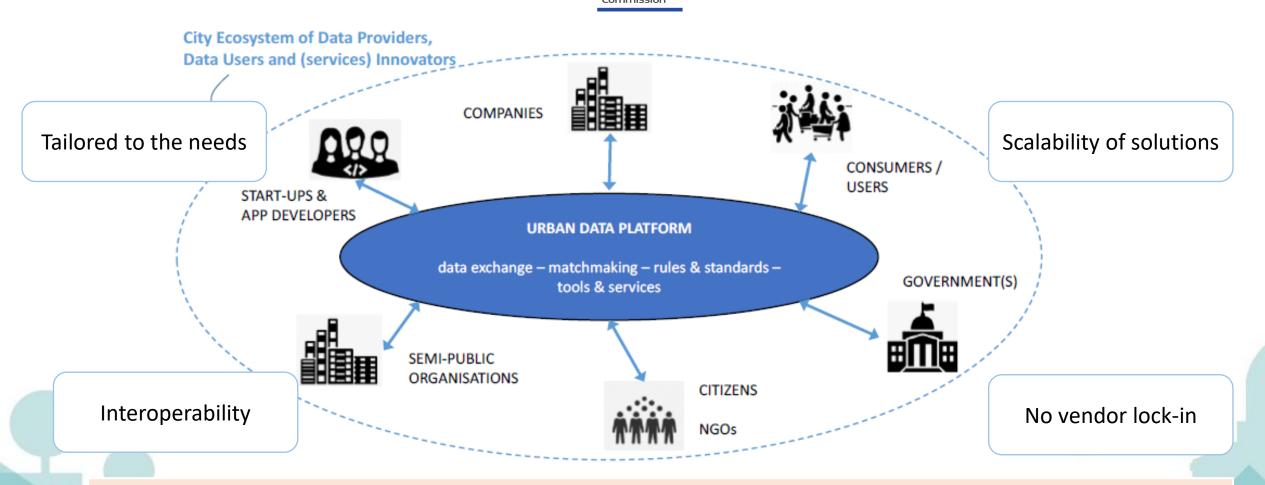
European Commission & Committee of the Regions, Finnish Presidency, EUROCITIES, OASC (Open & Agile Smart Cities), ENoLL (European Network of Living Labs), Digital Transition Partnership and cities

#### Commitments:

- Financial
- Technical
- Legal
- Education & Capacity building
- Monitoring and measuring
- Steering Board



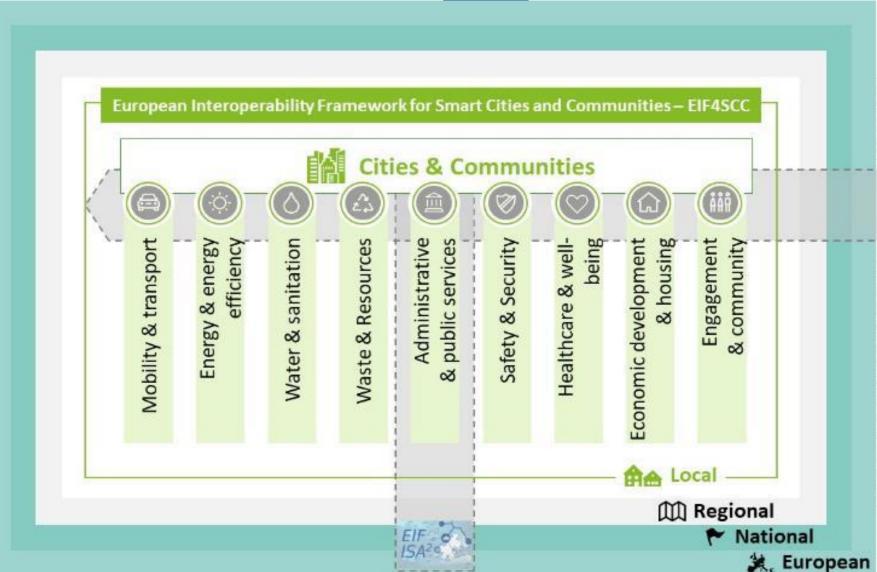
#### Interoperable, standardsbased Local Data Platforms



A **Local Digital Platform** is the "operating system" on which digital services can be provided to smart cities and communities, integrating data flows within and across city systems by exploiting modern technologies, such as sensors, cloud services, mobile devices, analytics, etc.



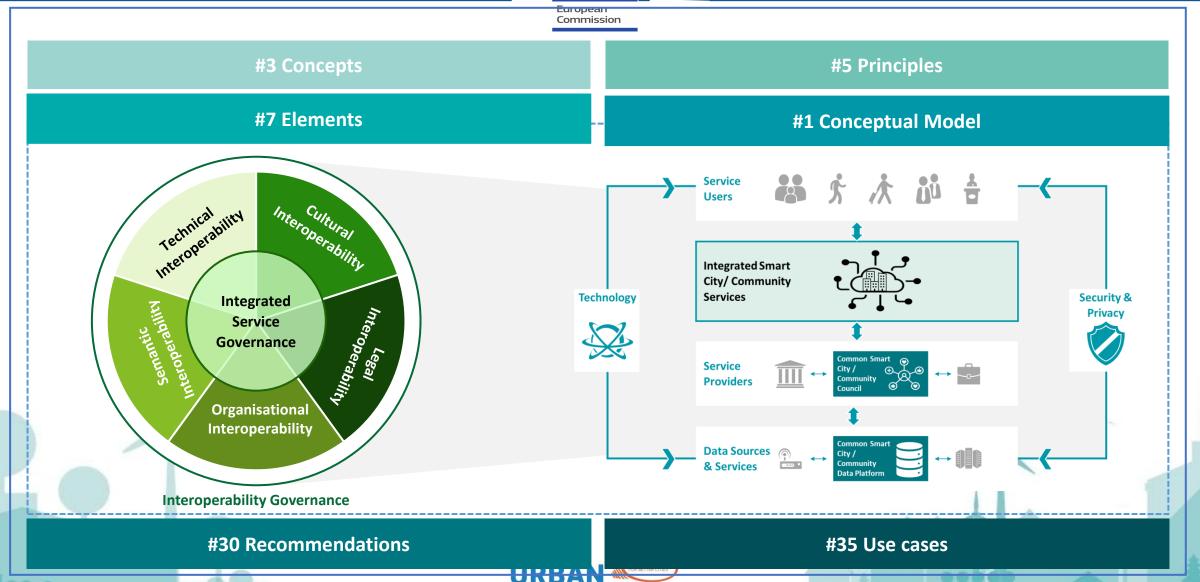
#### **EIF4SCC** and **EU** initiatives







# **European Interoperabilty Framework for SCC**





# Minimal Interoperability Mechanisms (MIMs Plus)

- Context Information Management
- Common Data Models
- Marketplace Enablers (Ecosystem Transaction Management)
- Personal Data Management
- Fair Artificial Intelligence
- ...and many more to come...





A set of practical capabilities based on open technical specifications that allow cities and communities to replicate and scale solutions globally



#### **Local Digital Twins**



Local Digital Twins are the **Digital Replica of a city's physical assets, processes** and systems with additional (live) data to power decision making (prediction & modelling)

Importantly, Local Digital Twins facilitate citizen engagement for participatory urban planning and management

Urban digital twins can change the way cities are planned, operated, monitored and managed ('policy-ready-data-as-a-service')

'A playground for city planners'





# Potential of (Al-enabled) Digital Twins

- Operational decisions (short-term) reactive
   Public safety and crowd dynamics, traffic management, public transport and pedestrian management, facilities management, etc.
- Strategic (long-term) decisions predictive
   Urban planning and development, asset and infrastructure management, environmental and climate monitoring & planning, energy usage and solar deployment, etc.

Local Digital Twins can save USD 280 billion in city planning, development and operating plans

(Source: ABI Research)

#### Local Digital Twins can:

- Reduce operating costs by 35%
- Boost productivity by 20%
- Cut emissions by 50-100%

(Source: CityZenith)





# Examples of cities & regions with Al-powered digital twins



Newcastle



3D copy of Antwerp



Buildings in Finland,

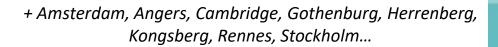


Helsinki



Madrid, The Hague, Budapest, Lyon, Oslo and Porto







# EU funding Digital Europe Programme





Data space for climate-neutral and smart cities

- Developing data governance scheme
- Blueprint of data space (building blocks)
- Priority data sets aligned with blueprint standards and principles
- Roadmap
- Validation of the blueprint on at least two of the European Green Deal action areas

Interoperability



Local Data Platforms

Help prepare the procurement and deployment of the interoperable local platforms



Develop a European toolbox for Local Digital Twins that all European cities could use when developing urban digital twins.





# The Urban Dimension of Cohesion Policy in the 2021-2027 period

**Thomas de Béthune | DG REGIO European Commission** 







### **The Urban Dimension of Cohesion Policy 2021-2027**

#### Reinforced urban dimension, through:

#### **ERDF Art. 11 – Sustainable Urban Development**

8% of the national allocation Directed towards integrated territorial development strategies focused on urban areas, to more effectively tackle the economic, environmental, climate, demographic and social challenges affecting urban areas, with specific attention to green and digital transition and functional urban areas

#### Policy Objective 5 'A Europe Closer to citizens'

Dedicated Specific objective 5.1 - Foster economic, social, and environmental sustainability and resilience in the urban context

- √ cross-cutting territorial policy objective
- ✓ Integrated approach, wide coverage of thematic areas



# Minimum requirements for investments in territorial development

### Definition of the targeted area

 according to development needs and potentials

#### Integrated approach

- Locally coordinated interventions
- cross-sectoral, multistakeholder, multiterritorial

### Handbook of Sustainable Urban Development Strategies

**Available online:** 

https://urban.jrc.ec.europa.eu/#/en/urbanstrategies



### Territorial or local strategies

 Under the responsibility of local or territorial bodies

#### **Project selection**

 local or territorial bodies involved in project selection

#### **Partnership**

 With stakeholders ensured at local level





# The 'Productive dimension' through Sustainable Urban Development – Cohesion Policy

#### Policy Objective 1 « A Smarter Europe » notably covering the objectives of :

- developing and enhancing research and innovation capacities and the uptake of advanced technologies
- reaping the benefits of digitisation for citizens, companies, research organisations and public authorities;
- enhancing sustainable growth and competitiveness of SMEs and job creation in SMEs, including by productive investments;
- developing skills for smart specialisation, industrial transition and entrepreneurship;

High thematic concentration (between 55 % and 25%)

Investments in line with smart specialisation strategies (enabling condition)

**Targeted territorial approach** possible for investments supporting productive and smart development in cities: under Policy Objective 5 or through territorial instruments in other POs; and in particular under PO1 – in both cases **involvement of relevant territorial actors** 

#### Notably for supporting smart city approaches:

- on developing <u>new</u> solutions as well as on testing, piloting and demonstrating for smart cities (PO1)
- or under other objectives for wider deployment of already developed solutions in cities (PO2-3).



### The European Urban Initiative (Art.12 ERDF)



#### Support of **Innovative Actions**

- Testing of new solutions to urban challenges of EU relevance
- Spreading of innovation scaling-up, knowledge dissemination and transfer, in particular, to Cohesion Policy 2021-2027



### Support of Capacity and Knowledge Building, Territorial Impact Assessments, Policy Development and Communication - challenges linked to implementation of sustainable urban development

- space for exchange
- capacity building
- access to thematic & horizontal knowledge and know-how

**Budget allocation:** EUR 450 million (in current price)

Launch of activities: in 2022



#### Coordination and complementarity of the EUI with:

Urbact IV – aiming to raise the capacity of cities in sustainable urban policies and practices by transnational sharing, exchanging and learning



### The Urban Agenda for the EU – Next steps

Parameters of the Urban Agenda for the EU to be renewed through the **Ljubljana Agreement** (November 2021)

**Support** from the European Commission continues through the **European Urban Initiative** and its Secretariat

- Process to launch new partnerships starting in 2022
- Support through other EUI activities (capacity building, knowledge capitalisation), Urbact IV, and Intergovernmental cooperation



Feedback welcome regarding needs and future activities



### **Guided Discussion**

With all speakers &

Gerry Muscat | Head of Division on Urban Development, European Investment Bank





### Conclusion and main takeaways

How are EU urban initiatives and actions supporting Green, Just and Productive Cities in the EU?







### Thank you!





