



# **Towards smart and sustainable cities and communities**

## **Tools and support from the European Commission**

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**European Commission**

***Research & Innovation in Cities of the Future: Opportunities for cities in the next financial period***

**06/02/2020**

- Help **cities and communities improve their services, meet their climate targets, and improve the quality of life** of their inhabitants
- Supporting their **digital transformation** and accelerating the delivery of the **Digital Single Market's** economic and social benefits to all local communities and their citizens

**EU support through:**

- Policy
- Legislation
- Funding
- Convening

## 6 Commission priorities for 2019-24

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### A European Green Deal

Striving to be the first climate-neutral continent



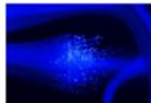
### An economy that works for people

Working for social fairness and prosperity



### A Europe Fit for the Digital Age

Empowering people with a new generation of technologies



### Promoting our European way of life

Building a Union of equality in which we all have the same access to opportunities.



### A stronger Europe in the world

Europe to strive for more by strengthening our unique brand of responsible global leadership



### A new push for European democracy

Nurturing, protecting and strengthening our democracy



- Digital Strategy
  - Data strategy
  - AI White paper
- (Q1 2020)

## Tallinn Declaration

### A guide to Europe's digital transformation



Tallinn Declaration  
on eGovernment

at the ministerial meeting during  
Estonian Presidency of the Council  
of the EU on 6 October 2017

#### Main Principles

1. Digital-by-default
2. Once only
3. Trustworthiness and Security
4. Openness and transparency
5. Interoperability by default
6. Horizontal enabling policy steps
7. User Centricity

#### EIGHT USER-CENTRICITY PRINCIPLES (Annex)

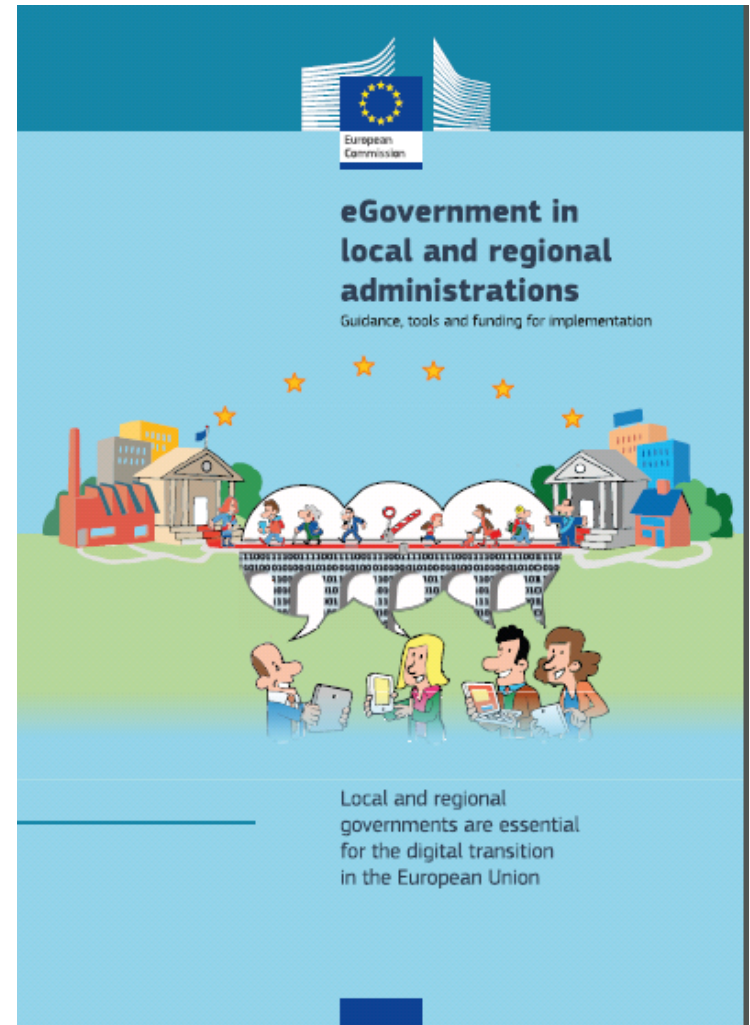
1. Digital Interaction
2. Accessibility, security, availability and usability
3. Reduction of the administrative burden
4. Digital delivery of public services
5. Citizen engagement
6. Incentives for digital service use
7. Protection of personal data and privacy
8. Redress and complaint mechanisms



# Guidance, tools and funding for implementation at local level



<https://ec.europa.eu/digital-single-market/en/news/egovernment-local-and-regional-administrations-guidance-tools-and-funding-implementation>





## The Marketplace of the European Innovation Partnership on Smart Cities and Communities

### DISCOVER

**ACTION CLUSTERS**

**INITIATIVES**

**LIGHTHOUSE PROJECTS**

**GUIDES, TOOLKITS AND BLUEPRINTS**

### WHAT'S ON?

**ACTION CLUSTER WORKSHOP 25 SEP '19**

**EVENTS**

**MATCHMAKING CITIES WITH FINANCE**

**NEWS AND ARTICLES**

<http://eu-smartcities.eu/>



- ❑ 4,600 partners
- ❑ 370 commitments
- ❑ 31 countries

- Common solutions, integrated approach, collaboration
- Focus on Energy, Transport and ICT

## Valorisation of R&D (H2020)

- Lighthouse projects (~100 M€/year; ~4 projects/year; total of ~500M € /7 years)
- CSAs (Espresso, CityKeys, etc.)

# Green Digital Charter (GDC)

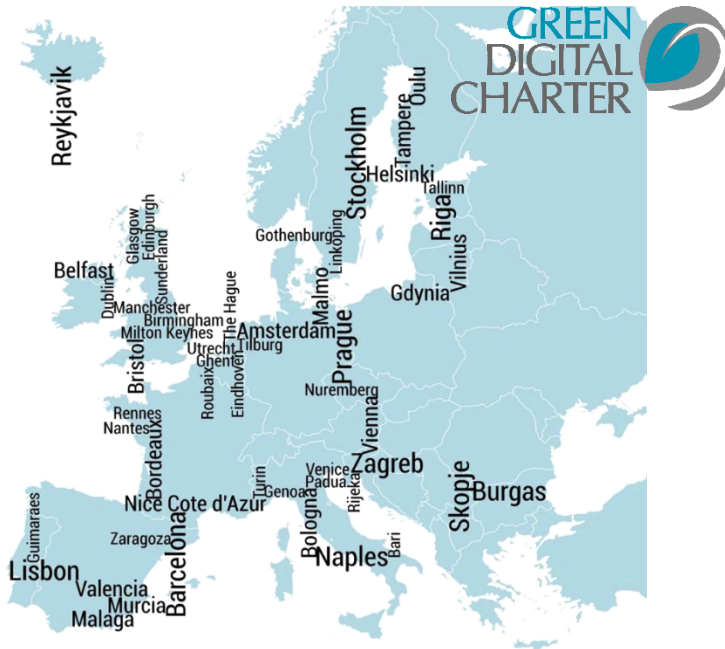


Disaster Resilience & Climate Change

**53** European cities / **21** countries / **27** M citizens

Commitments:

- **Promote** the best applications and results of **ICT solutions**
- **Establish local partnerships** to implement the GDC's commitments
- **Deploy** five large-scale and **replicable ICT pilots** per city within five years
- **Decrease** the direct carbon **footprint** of the ICT sector by **30%** per city within ten years



## Resources:

- A guidebook for peer-to-peer learning for cities: <http://bit.ly/2zXIA1g>
- Awards to the best city projects: <http://anyflip.com/zerr/iamx>
- More than 40 videos with city experts and events: <http://bit.ly/2Rz88aH>

# Digital (Intelligent) Cities Challenge



Leadership and collaboration for a smart governance of the local digital ecosystem



Digital skills and entrepreneurs to accelerate the digital transformation process



Access to data and technologies for applied solutions to local challenges



Key infrastructures and investments for digital launch pads

# Urban Agenda for the EU



European  
Commission



## OBJECTIVES



Culture/Cultural Heritage



Security in Public Spaces



Sustainable Land Use



Public Procurement



Energy Transition



Climate Adaptation



Urban Mobility



Digital Transition



Circular Economy



Jobs and Skills in the Local  
Economy



Urban Poverty



Inclusion of Migrants and  
Refugees



Housing



Air Quality

<https://ec.europa.eu/futurium/en/urban-agenda>

**By 2025, ensure that 300m residents of EU cities are supported by Urban Platform(s) to manage their business with a city and that the city in turn drives efficiencies, insight and local innovation through the platform(s)**



- Solutions to work across borders
- Avoiding vendor lock-in
- Ensuring citizens' digital rights (security, data protection and privacy issues)

How?



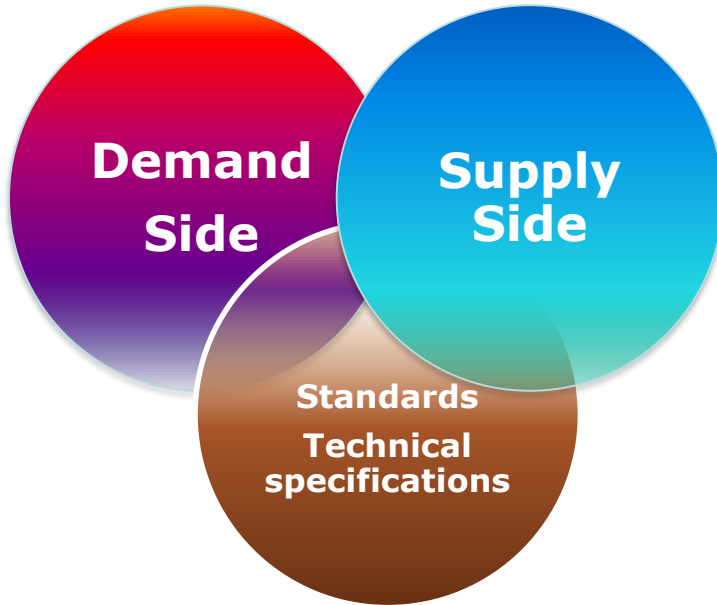
- Deploying and scaling-up open, interoperable, cross-domain and cross-border **urban digital platforms**
- Following the '**European way**'



# Interoperability and standardisation Urban digital platforms



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Data Economy



## Big Data Test Infrastructure

Experiment with big data in a safe environment



## Context Broker

Collect & share real-time data from multiple sources



## eArchiving

Store and preserve digital information



## eInvoicing

Send and receive electronic invoices

eIDAS enablers



## eID

Securely identify European citizens



## eDelivery

Exchange data and documents securely



## eSignature

Create and verify legally recognised electronic signatures



## eTranslation

Provide a multi-lingual public service



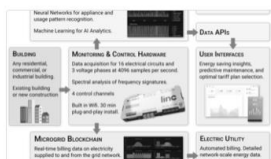
BlueAlpaca



Kimap-City



Kissmybike



Linc

SYNCHRONICITY

## ATOMIC SERVICES

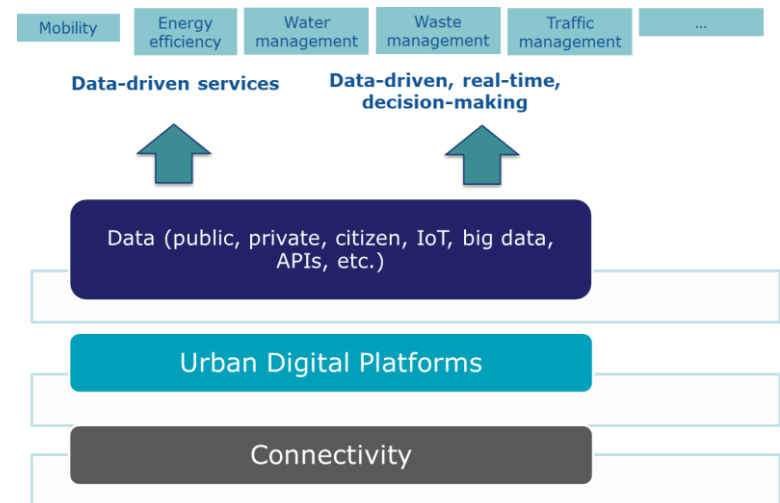
Re-use or create your own building blocks

[Click Here](#)

# Interoperability and standardisation Urban digital platforms



- Minimal but sufficient common open standards and specifications will support large-scale implementation, replication and building a market for bankable smart city solutions
- Interoperability mechanisms avoid vendor lock-in
- Ability to handle a multitude of data flows and stakeholders and easily implement all kinds of urban digital solutions
- Respecting citizens' digital rights
- Sharing and re-using solutions to save time, money and reduce time to market
- Aggregate demand with better chances to attract investments





## Multi-level governance

- European Commission & [Committee of the Regions](#)
- Finish Presidency
- [Eurocities](#)
- [OASC](#) (Open & Agile Smart Cities)
- [ENoLL](#) (European Network of Living Labs)
- [Digital Transition Partnership](#)
- Dutch municipalities, ...

To be signed by city mayors, regions, Member States' ministers, Commissioners...

# Join – Scale – Sustain Declaration



## 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



Join forces to boost sustainable digital transformation in cities and communities in the EU

We  
signed...

## Commitments:

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

Mayor	Municipality of Logatec	Local	Slovenia
Mayor	Municipality of Šmartno pri Litiji	Local	Slovenia
Mayor	Municipality of Novo Mesto	Local	Slovenia



European  
Commission

## DIGITAL IN THE NEXT MFF: OVERVIEW

Emphasis  
On deployment

### Digital Europe: Capacities & roll out

1. High Performance Computing (HPC)
2. Artificial Intelligence (AI)
3. Cybersecurity
4. Advanced digital skills
5. Digital transformation and interoperability

€9.2 billion

### Digital in Horizon Europe R&D&I

1. Digital under "global challenges"
  - Digital and industry cluster
  - Digital in other clusters - health, mobility, energy, environment,...
2. FET Open under Open Innovation
3. Research Infra under Open Science

> €12 billion for digital

### Connecting Europe Facility - Digital Connectivity

- 5G roll out
- BB 4EU, Connecting communities
- Synergies with Transport /Energy

€3 billion

### Creative Europe MEDIA

- Distribution of works
- Creation

€1.1 billion



- Focused on
  - building the strategic digital capacities of the EU
  - facilitating the wide deployment of digital technologies
- Clean, sustainable and smart Communities and Mobility
  - Priority actions for the first two years
    - Deployment of Open Cross-sectorial Urban Platforms and Cross-border Mobility as a Service (MaaS) solutions
    - Deployment of innovative smart city and smart mobility applications by SMEs and start-ups
    - Testing and experimentation facilities (TEF)

**Digital Innovation Hubs will also be used as essential instruments of the implementation of urban digital platforms and the large scale roll-out of AI-driven services in areas such as Smart Energy, Smart Mobility, waste and e-government**

- Intervention area on Smart Cities (but also Smart buildings, mobility, etc.)
- Mission on Climate Neutral and Smart Cities
  - One of 5 in Horizon Europe
  - Cross-cutting
  - “Managing” 10% of budget
  - 15 Board members
  - 30 assembly members
  - Deliver missions descriptions and output document by year end





# Connecting Europe Facility

- 5G smart communities - Fibre backhaul & Gigabit connectivity for socio-economic drivers and citizens
- 5G4EU – Equipment for smart communities
- Digital Operational Platforms and Synergies between Energy/Transport and Digital





# Thank you for your attention!

*Follow us on :*

