Local Data Spaces

CxC Festival ‘22

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EU Policy Context

- EU Green Deal & Europe Fit for the Digital Age: ‘Twin green and digital transitions’; need to tackle the twin challenge in a holistic and systemic way

- Smart cities and communities use digital technologies to reduce resource input and improve the quality of life for their citizens (- > ‘twin digital and green’ transition)

- European Digital Strategy:
  - Shaping Europe's Digital Strategy
  - Excellence and Trust in Artificial Intelligence
  - European Data Strategy

- 2030 Digital Compass: the European way for the Digital Decade

- EU Zero Pollution Action Plan, EU Climate Adaptation Strategy, Digital Day 2021 - Declaration on 'A Green and Digital Transformation of the EU', EU Mission: Climate-neutral and Smart Cities
Digital capacity building for cities and communities

Smart and Sustainable City Ecosystem

Application building block & Smart Green services

Analytics and Intelligence
- Local Digital twins

Interoperability
- Local Data Platforms

Data
- Data space for climate-neutral and smart cities

Infrastructure

Processes

EDIHs for smart cities

AI TEFs for smart cities

Sustainability Goals

People & Skills

Digital Transformation

Capacity Building & Scaling-up at EU level

Technology & Value Chains
- Cybersecurity & Privacy
- Data Governance & Stewardship

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• Difficult to access public, but sensitive / not open data (for analytics/AI) – see Data Governance Act

• Open data paradigm helped to increase transparency, citizen engagement and create innovative services, but the data cities need is often not open data

• European cities recognise citizen data as a public asset, while they need to ensure citizens’ digital rights (personal data management)

• Data held by platform economy companies is of high interest (dynamic, good quality), but difficulty to access and reuse of private data with public interest (B2G); current operational models do not scale up – see Data Act

• Data under-utilised: only 7% of government departments’ data has been open for public access in the majority of countries worldwide and today only 12% of city data is analysed and used for decision making and management*

• Governance, organisational, legal and cultural challenges

• Difficult to create portable, innovative cross-domain services

*Source: https://doi.org/10.1007/978-3-030-14446-3_5, 2019, Forrester, 2014 and Digitranscope project
EU common data spaces

Data space: interoperable and secure environment, where currently fragmented and dispersed data can be shared among those, who become part of this data space based upon voluntary agreements and under certain conditions.
• Data governance (principles, rights, functions, roles and responsibilities to facilitate secure exchange of quality data, etc.)

• Conceptual architecture, interoperability, re-usable tools, data models and standards (EIF4SCC, MIMs, middleware, CEF/EC building blocks, etc.)

• Priority datasets (use-case driven) linked to environment and climate-related challenges to help meet the objectives of the European Green Deal
Preparatory actions for Data Space for Smart Communities

(i) developing a multi-stakeholder data governance scheme
(ii) developing a ‘blueprint’ for the data space for smart communities
(iii) bringing an agreed set of priority datasets into conformity with the new blueprint standards and principles and propose a strategy for their take-up
(iv) developing a roadmap towards a full-fledged pan-EU smart communities’ data space.

Data space for smart communities (deployment)

Validation of the blueprint on at least two of the European Green Deal action areas

Numerous workshops and events

- **Expert Consultation**
- **Data-driven cities : fostering common data spaces for urban sustainability**
- **B2G data sharing in cities**
- **Info Day**
Thank you!