THE INTERNATIONAL SMART CITIES NETWORK

Shaping Smart Cities together in international dialogue.

Germany's approach on Smart Cities
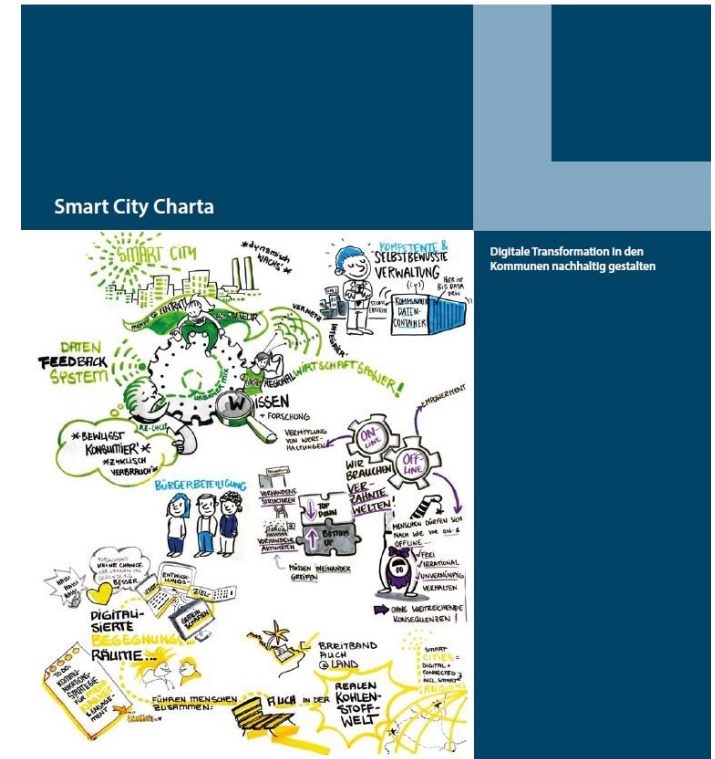

Federal Ministry
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1
The Smart City approach in Germany

1. The Smart City approach in Germany

– Rule of law

– Common good-oriented urban development

– Leave No One Behind (LNOB)

– Multi-stakeholder and cross-country cooperation

– Open Source / Open Data / Interoperability

– Data sovereignty / Data privacy

⇒ Codified in "Smart City Charta", "Data Strategies for common good-oriented urban development", et al.

⇒ "Smart" is **not only** about being **digitally** innovative and efficient, **but** also **institutionally**

1. The Smart City approach in Germany

Smart-Cities-Tracks of BMWSB, Smart Cities division S II 2

**NATIONAL
SMART CITY DIALOGUE**

Dialogue platform Smart Cities

Creation of a common understanding of goals, values, guidelines and recommendations

=> e.g. Smart City Charta

**FEDERAL FUNDING
PROGRAMME SMART CITY**

Model Projects Smart City

Funding programme for currently 73 projects

Coordination and Transfer Consortium MPSC (KTS)

10+ organisations managing knowledge diffusion and replication efforts

EUROPEAN NETWORKING

#connectedinEurope

Information & capacity building opportunities for German & European municipalities to improve European networking
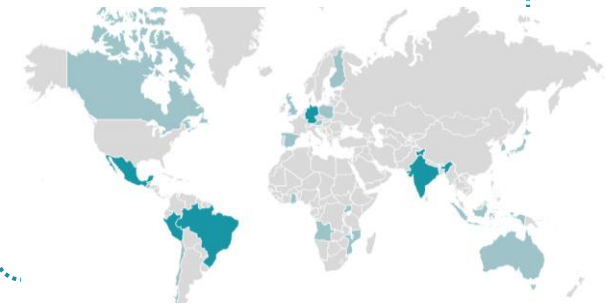
Knowledge transfer on Smart City EU topics

**INTERNATIONAL
KNOWLEDGE TRANSFER**

**International
Smart Cities Network**

International practical exchange, knowledge transfer and learning processes on Smart Cities

1. The Smart City approach in Germany

National Dialogue Platform Smart Cities

– Creates common understanding of goals, values, guidelines, recommendations

– ca. 70 experts from government, associations, scientific community, civil society

– **Smart City Charter** (2017), **Data strategies for common good-oriented urban development** et al.

– August '22 start of "National Dialogue Platform Smart Cities 3.0", leading theme **"Accelerated change and resilience"**

– Technical leadership from BBSR (The Federal Institute for Research on Building, Urban Affairs and Spatial Development), implementation by "Urbanizers"
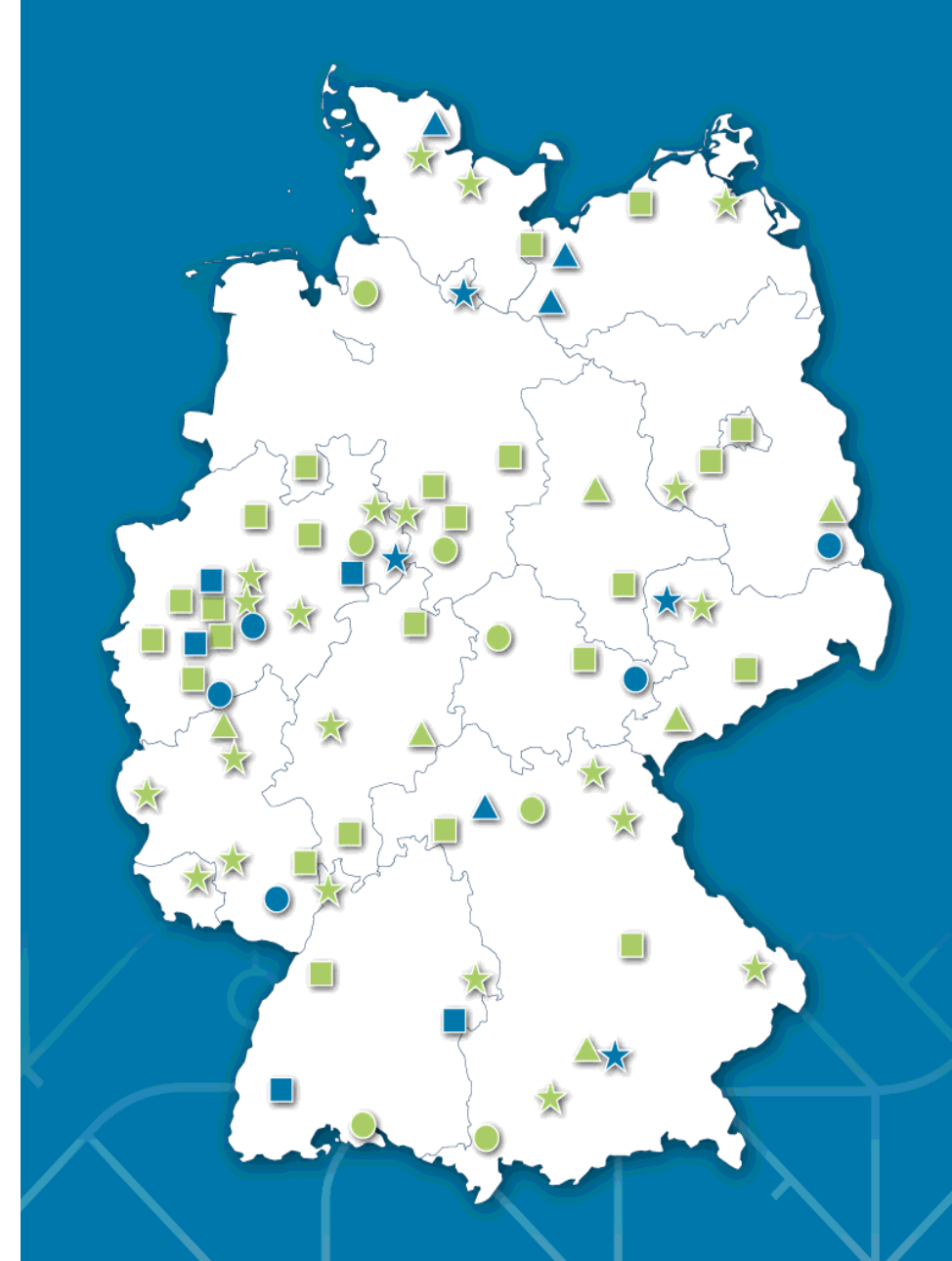

Sources: ISCN

1. The Smart City approach in Germany

Model Projects Smart Cities (MPSC)

– Core of Germany's Smart City approach

– 73 cities projects / ca. 90 municipalities selected

– from Berlin (4 Mn) to Barleben (10,000)

– High diversity of concepts and focusses

– To be replicated in other municipalities

=> Not reinventing the wheel
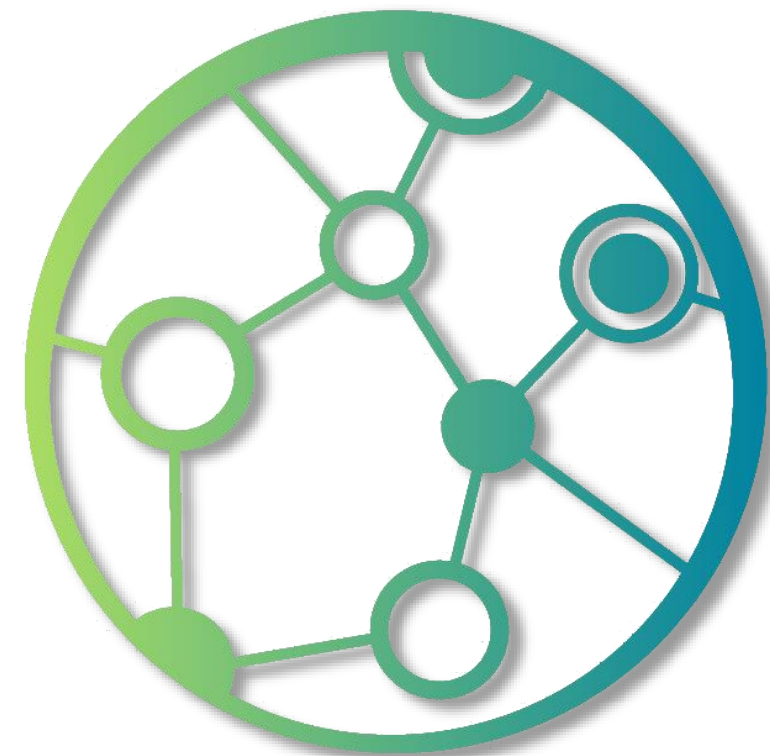
=> Knowledge transfer as the essential element

Source: BMWSB/BBSR

2
The International Smart Cities Network

What we do

The International Smart Cities Network ...

- promotes integration of **digital solutions in citizen-centred urban development** processes

- facilitates the (online) **exchange of good practices and experiences between urban development actors** worldwide

- provides **joint (online) learning processes** between cities and national urban development ministries, as well as academia and civil society **in the thematic field of Smart Cities**

- Partner Countries: **Brazil, India, Mexico, Peru, Germany**

Live Online Formats
The ISCN Online Advisory Programme

– Activities and events address **current challenges and demands of the participating network partners** regarding the sustainable digital transformation for cities in the global North and South

– All exchange and learning formats were successfully translated into **digital online concepts**

– Ideas competition, Peer-to-Peer Consultation, Webinar series, High Level Online Symposium, etc.

Smart Cities for a Green and Resilient Urban Development

ISCN Symposium co-hosted by MoHUA

Dr Rolf Bösinger, State Secretary, Federal Ministry for Housing, Urban Development and Building (BMWSB), Germany

Kunal Kumar, Smart City Mission Director & Joint Secretary, Ministry of Housing and Urban Affairs, India

- National Approaches for Urban Data

- Digital Twins and AI: basis for sustainable smart cities?

- Replication for Success

- Main Take Aways

    - challenges require responses **combining digital solutions and measures to combat climate change and inequality**

    - mobilization of citizens and administrators to **co-create a process oriented towards the common good**

    - **standardized solutions** that can be **adapted by cities on a large-scale** need to be developed

    - local action and cooperation between cities, also to optimize budgets, is crucial

Digital Solution for Local Markets

A citizen-centered Innovation Process implemented by the ISCN

Source: ISCN

#SolutionsForCities
International, Digital Ideas Competition of the International Smart Cities Network

Oct. 2020

CHALLENGE LABS

Cities from Brazil, Germany, India, Mexico & Peru defined their urban challenges and assigned them to six areas of action.

28.10. – 09.11.2020

CALL FOR SOLUTIONS

Digital solutions from around the world were submitted to help cities tackle their challenges during the pandemic.
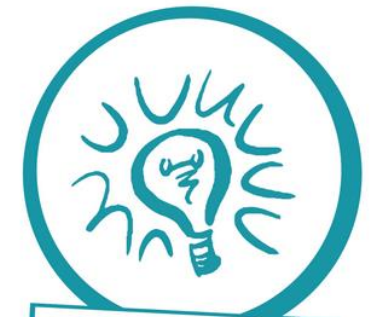
MATCH MAKING

Challenges meet Solutions: Solution providers and challenge owning cities were matched to form teams.

23.–25.11.2020

SCALATHON

In a 3-day workshop, the teams created concepts to refine and adapt solutions to the context and needs of the city.

2.12.2020

PITCHING SOLUTIONS

The winning teams presented their adapted digital solutions at the New Leipzig Charter Digital Symposium.

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Smart City DIALOG

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Digital Solution …

… for the Metropolitan Area of Guadalajara, Mexico

… from Kampala Capital City Authority, Uganda

Strengthening the local markets in the Metropolitan Area of Guadalajara

How to design a sustainable transition to a digital business model to keep markets functioning?
How to reduce economic uncertainty and the risk of unemployment?
How to support the inner city to remain vibrant despite the pandemic?

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Recommendations resulting from the pilot

The implementation process of "Mi Mercado AMG" in Guadalajara, Mexico

- Identify (digital) pioneer market vendors

- Iterations are key

- Accept the dynamic nature of digital solutions

- Set up an operational team in the market

- Integrate the idea of scaling from the beginning

Transfer Package

Digital Solution for Local Markets

- **Transfer Package** and **source code** publicly available

- Target group: municipalities worldwide to **replicate, scale and adapt the digital solution** to their local context.

- Contact **smart-city-dialog@bmwsb.bund.de**

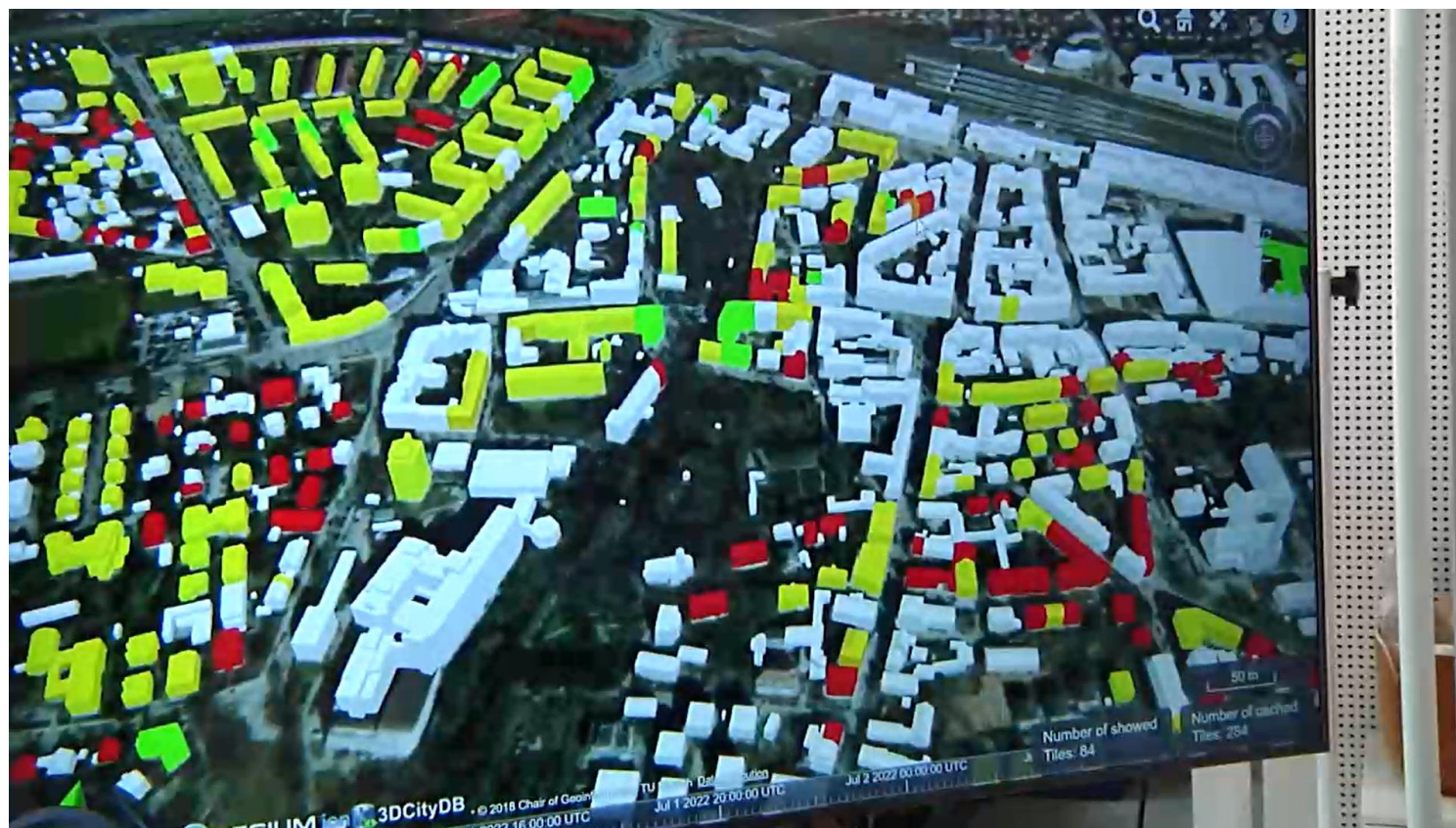**Digital Solution**
FOR LOCAL MARKETS

3
Examples of Digital Twins in Germany

Digital Twin Munich

Digitise, visualise, network
Two main goals and added value

\# **Communication with citizens** → foster participation through visualization; show the future of the city in a tangible way

\# **More efficient predictability and planning** → improving processes and optimising resource use; simulating planning projects

Source: Digitaler Zwilling Muenchen. https://www.muenchen.tv/mediathek/video/digitaler-zwilling/

Digital Twin for Stuttgart Metro Region

Important assets

Mapping → Overview of current and planned land-use features

Data → Socio-economic data
  e.g., demography (population, age); economic development (jobs, taxes)

Models → Implementation of (dynamic) models
  e.g., mobility (traffic, public transport); climate features (temperature, radiation, precipitation)

Analysis → Interrelations/cross-cutting comparison

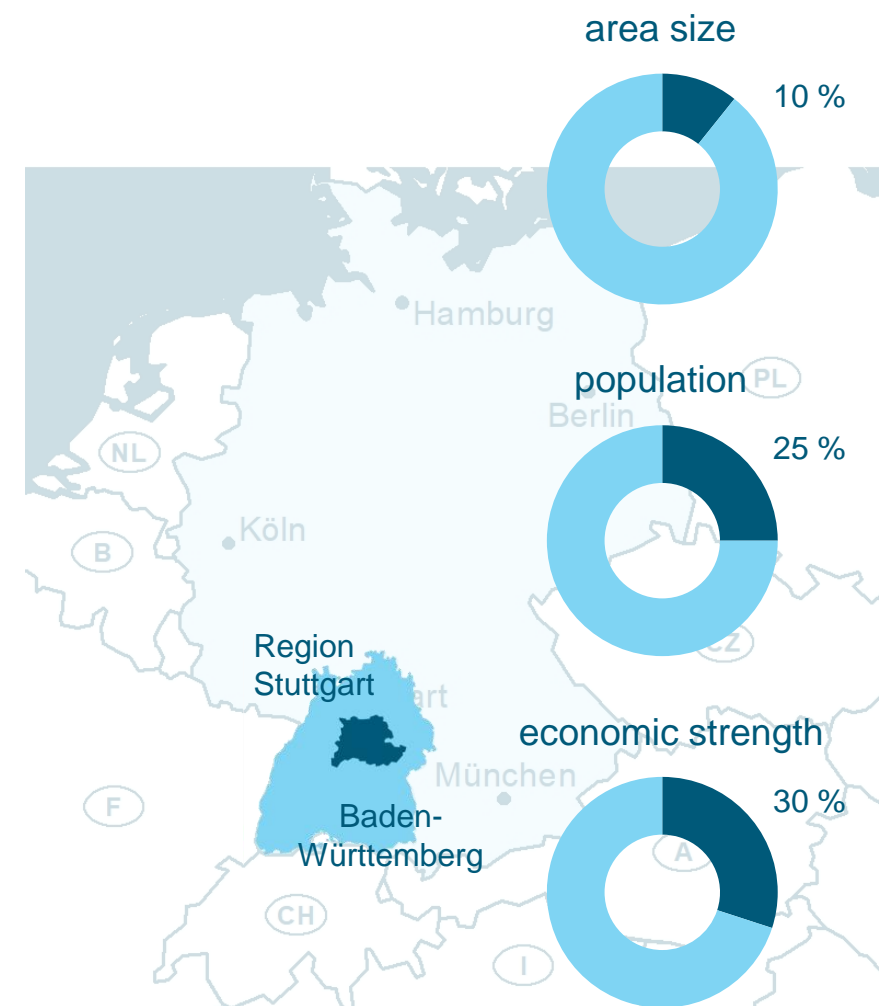# Foresight → Scenarios for different development strategies

Source: Verband Region Stuttgart

Digital Twin for Stuttgart Metro Region

Ongoing development

\# Based on GIS database of the Verband Region Stuttgart
*(implantation of **third-party data** – e.g. federal state, local authorities)*

\# Integration of **mobility model** *(extension and uprate of the until 2025)*

\# Integration of data from **spatial observation**

\# Reports and analysis on **economic development** from the regional economic development agency

\# Graphics/didactic input from **outreach activities**

\# Close cooperation with the University of Stuttgart

area size

10 %

Hamburg

population

Berlin

25 %

Köln

Region Stuttgart

economic strength

Baden-Württemberg

München

30 %

Federal Ministry for Housing, Urban Development and Building

Smart City DIALOG

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Thank you!

Peter Sailer

Project Director for the International Smart Cities Network,
at Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Peter.Sailer@giz.de

Visit us:

https://www.smart-city-dialog.de/en/icsd