



# 1<sup>st</sup> Southeast Europe Smart Society Conference

Ljubljana  
20<sup>th</sup> December 2019

## Idrija, Slovenia

- 1 hour from Ljubljana,
- 2 1/2 hours from Venice
- 6000 inhabitants in the city
- 12000 in Municipality



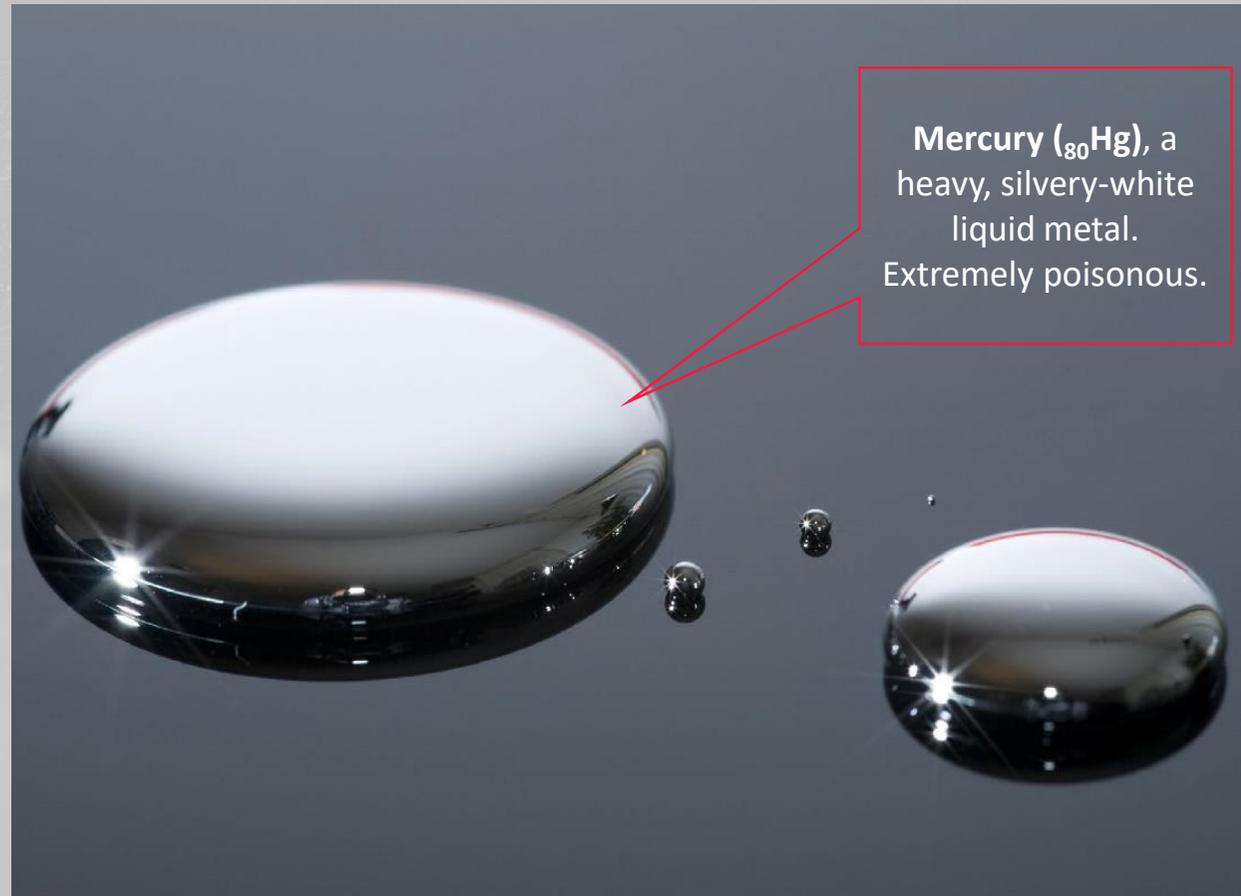
*Sometimes less is more!*

## Idrija, mining town

- 500 years old mining history
- Production of Mercury [Hg]
- Idrija was one of the biggest Hg mine in Europe

### **BUT....**

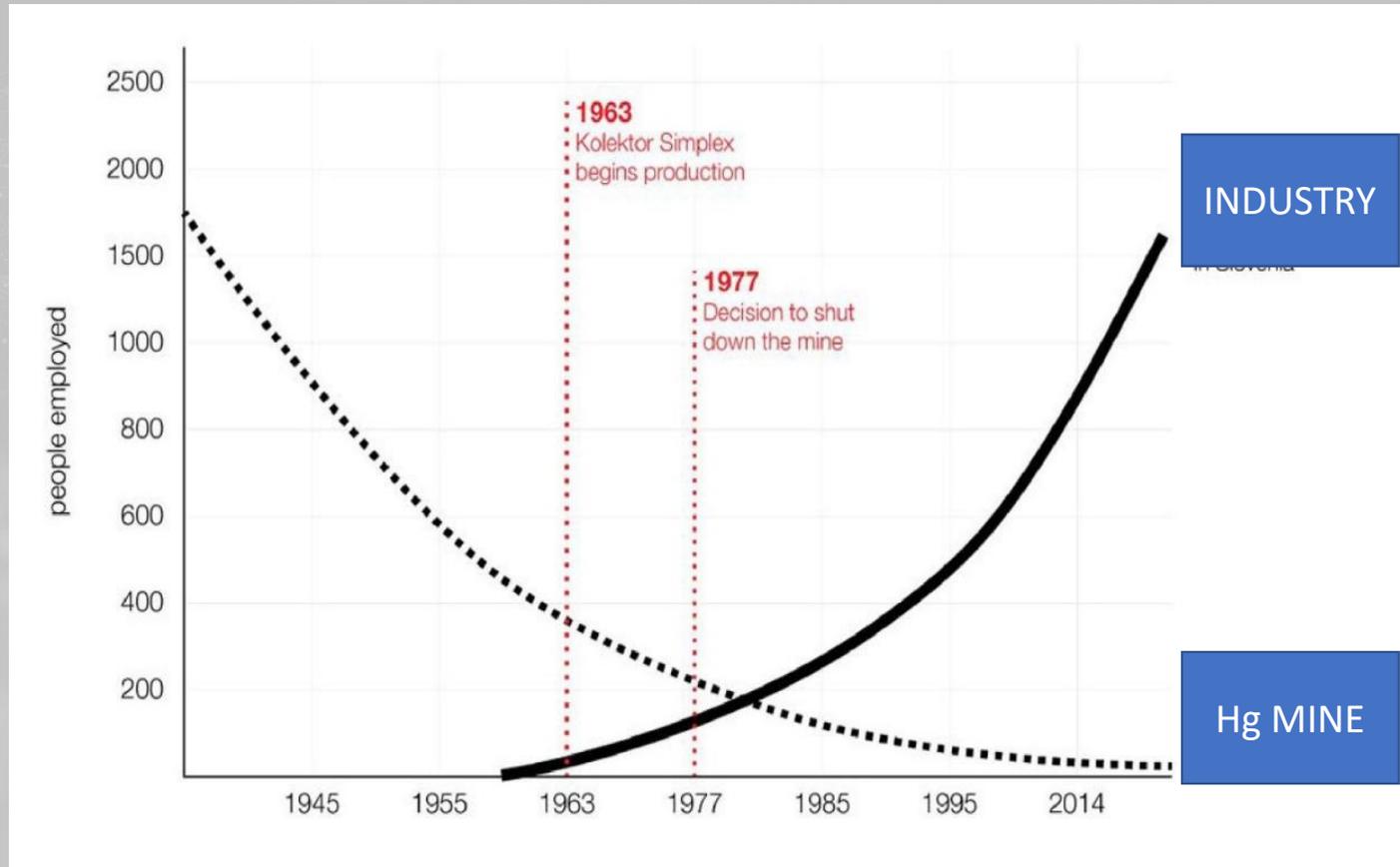
- Mercury is poisonous
- Scientists found supplements for Mercury use in industry
- Health awareness and new innovations caused Mercury demand- and production decreasing



**Mercury ( $_{80}\text{Hg}$ ),** a heavy, silvery-white liquid metal. Extremely poisonous.

## Smooth transition from mining to industry

- Hundreds of workers found jobs in rapid increasing industry branch
- They were highly skilled, resourceful and educated – a treasure for boosting the factory's development
- For decades City lived in atmosphere of progress and development
- With much appreciated help and cooperation from industry, city management continuing to push their efforts toward progress, heritage preservation and saving the environment - for the benefit of their citizens



## Municipality of Idrija

### Adopted strategies

- Innovative Strategy of Sustainable Development,
- Youth Strategy,
- Sustainable Urban Mobility Plan
- **Smart City Strategy.**

# More than 50 projects!

Integrated spatial data

**TBI**

**AQUIS**



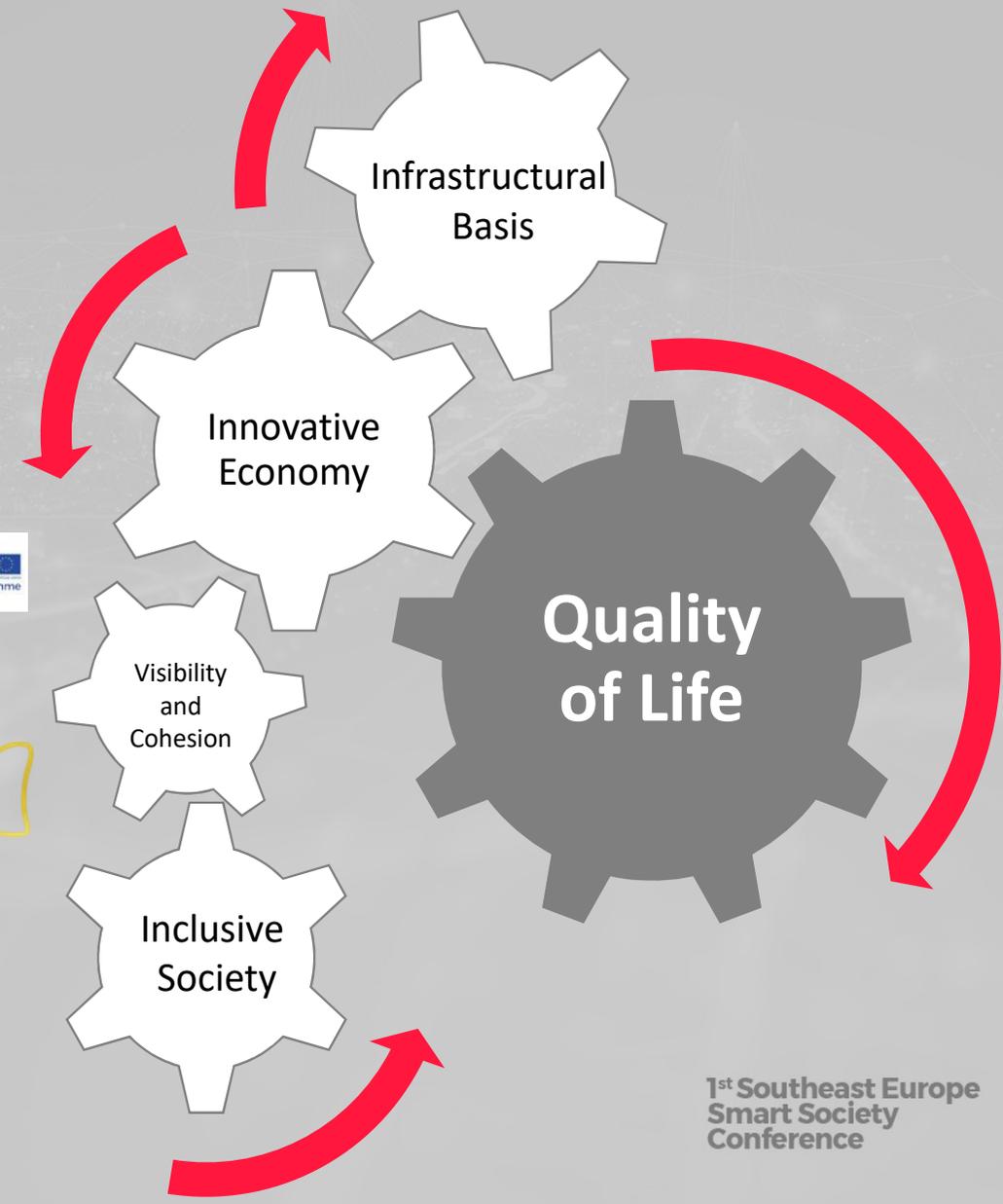
**UNESCO**  
United Nations Educational, Scientific and Cultural Organization

World Heritage Centre



**UNESCO**  
United Nations Educational, Scientific and Cultural Organization

UNESCO Global Geoparks



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## Ongoing projects in the field of energy management

### 3Smart



- Primary School and Sports Centre
- Complete Building Energy management
- Modular structure
- Individually every room
- Energy Production units (PV 30kW, CHP 50kW/95 kW)
- Weather forecasting and scheduling
- Demand – response capabilities

## Ongoing projects in the field of energy management NEDO

- Japan – Slovenian project
- Aerial Energy Management System
- Islanding operation
- 1,3 MWh battery storage system
- BEMS in 16 public buildings
- HEMS in 30 private households



## Municipality of Idrija Short term priorities



Control access within  
geopark Zgornja Idrija



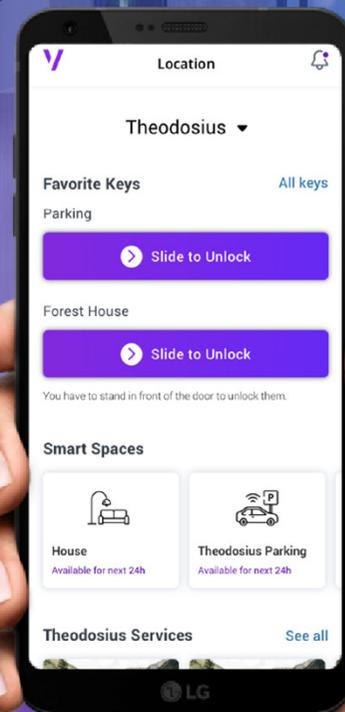
Increasing Energy efficiency  
and lowering CO2 footprint



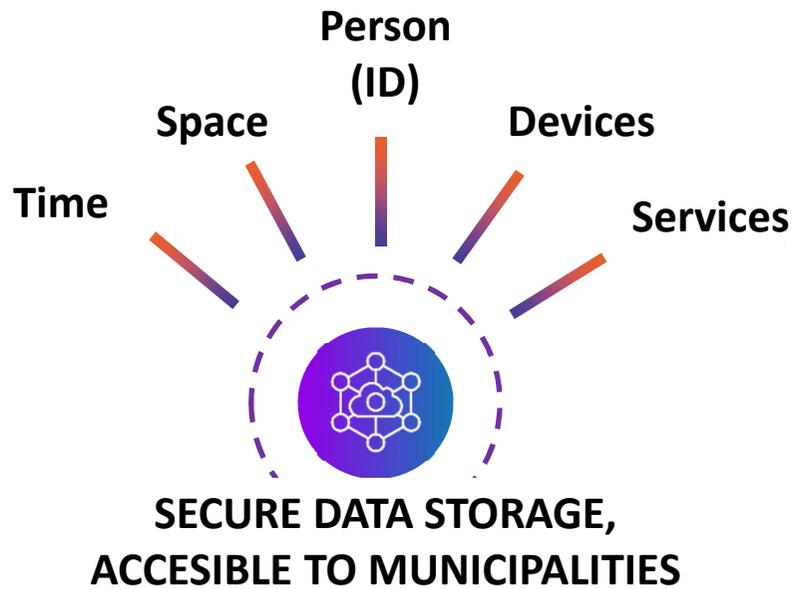
Enabling platform for safe  
collection and use IoT data

# VIVIOT

AI empowered smart space automation  
and digital access for  
managing your facilities professionally.



## VIVIOT platform



### FOOTPRINTS

for preference based smart  
space automation and access  
management



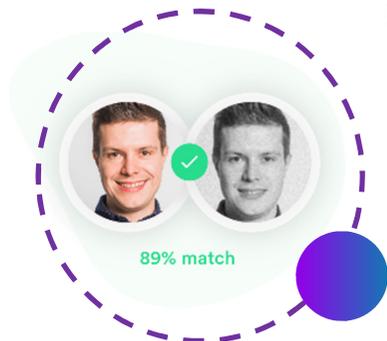
### REAL TIME TRIGGERS

for services and energy  
optimization



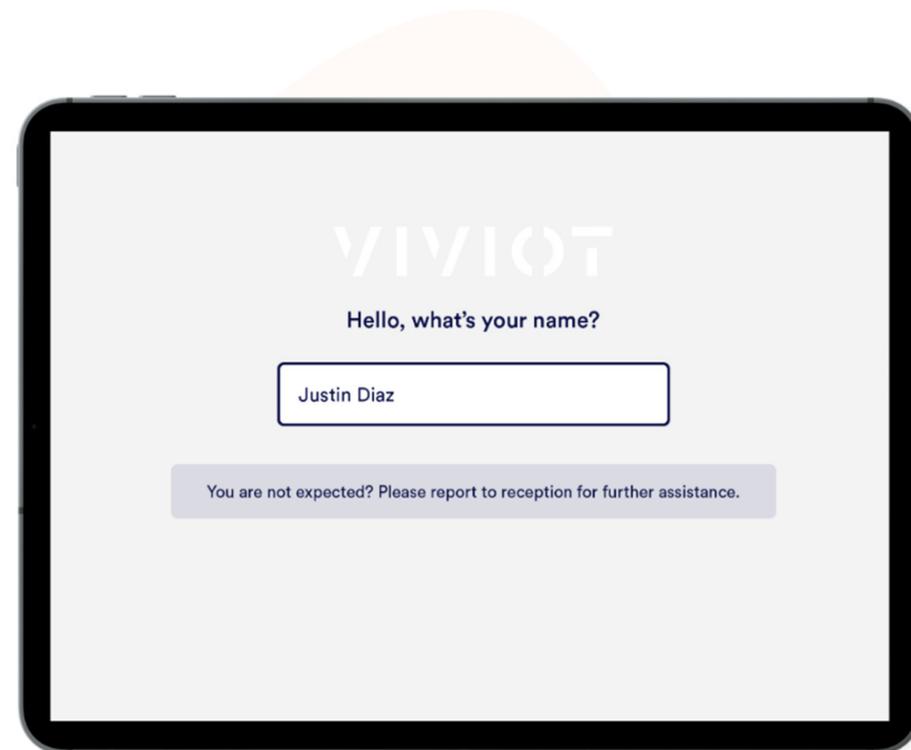
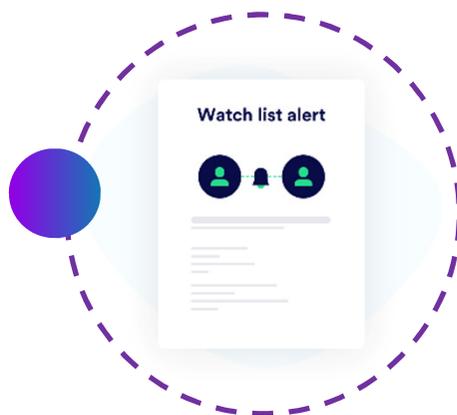
## Our solutions

**DIGITAL ACCESS**  
(time & space)



**IDENTIFICATION**  
Know exactly who you're inviting to your office

**REAL TIME NOTIFICATIONS**  
Detect, decide and act on unusual events or potential hazards. Record entries and more,...



# Our solutions

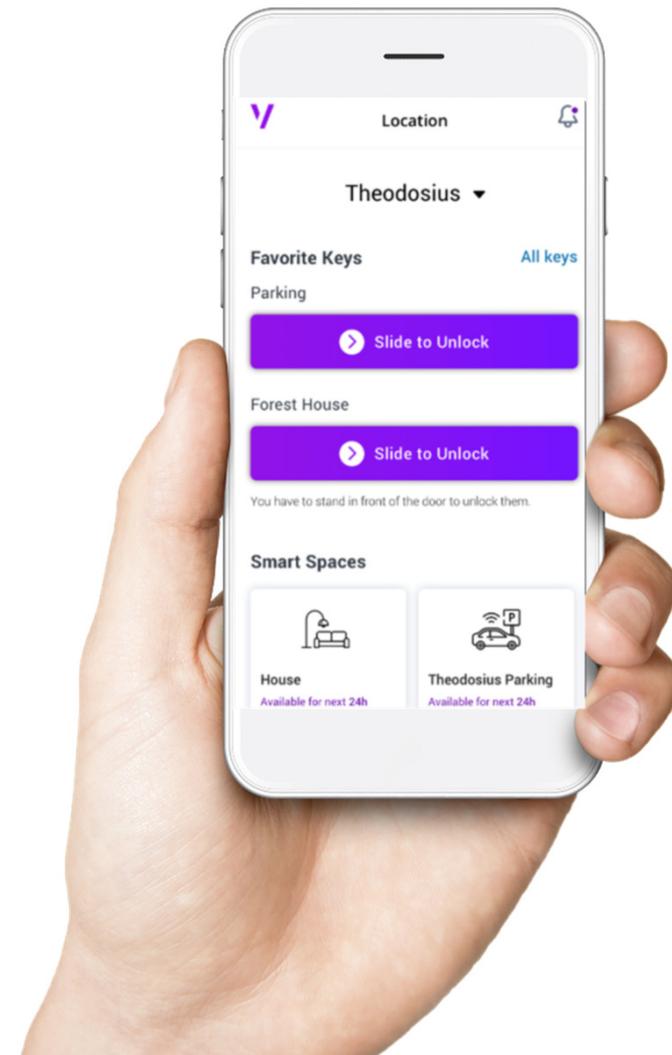
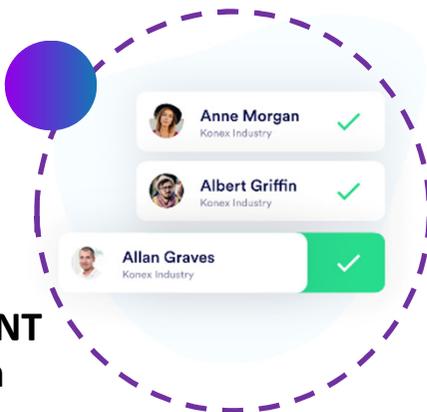
**COMFORT & PREFERENCES**  
Control IoT



**SERVICES & EXPERIENCE**  
Explore near by services (Idrija's restaurants, take a taxi,...)



**ENERGY EFFICIENCY & WORKFLOW MANAGEMENT**  
AI Based Energy optimisation (COS)



## OUR USIBILITY



GLAMPING, AIRBnB  
& HOTELS



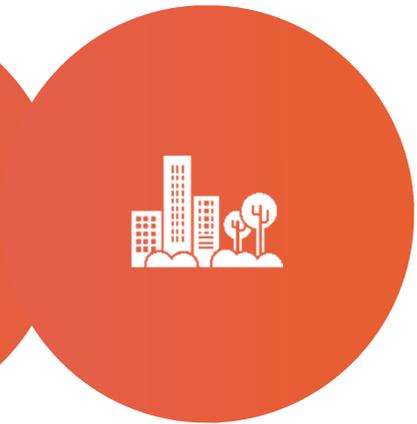
APARTMENT  
BUILDINGS



ELDERLY CARE



SECURITY  
ON-DEMAND



MUNICIPALITIES

## Inline with EU initiatives and Municipalities priorities



Control access within natural parks and parking control systems



Increasing Energy efficiency and lowering CO2 footprint



Enabling platform for safe collection and use IoT data



**TRANSFORM YOUR MUNICIPALITY TODAY WITH VIVIOT**



Our plans connected to OASC – Enabling  
an Open City Market



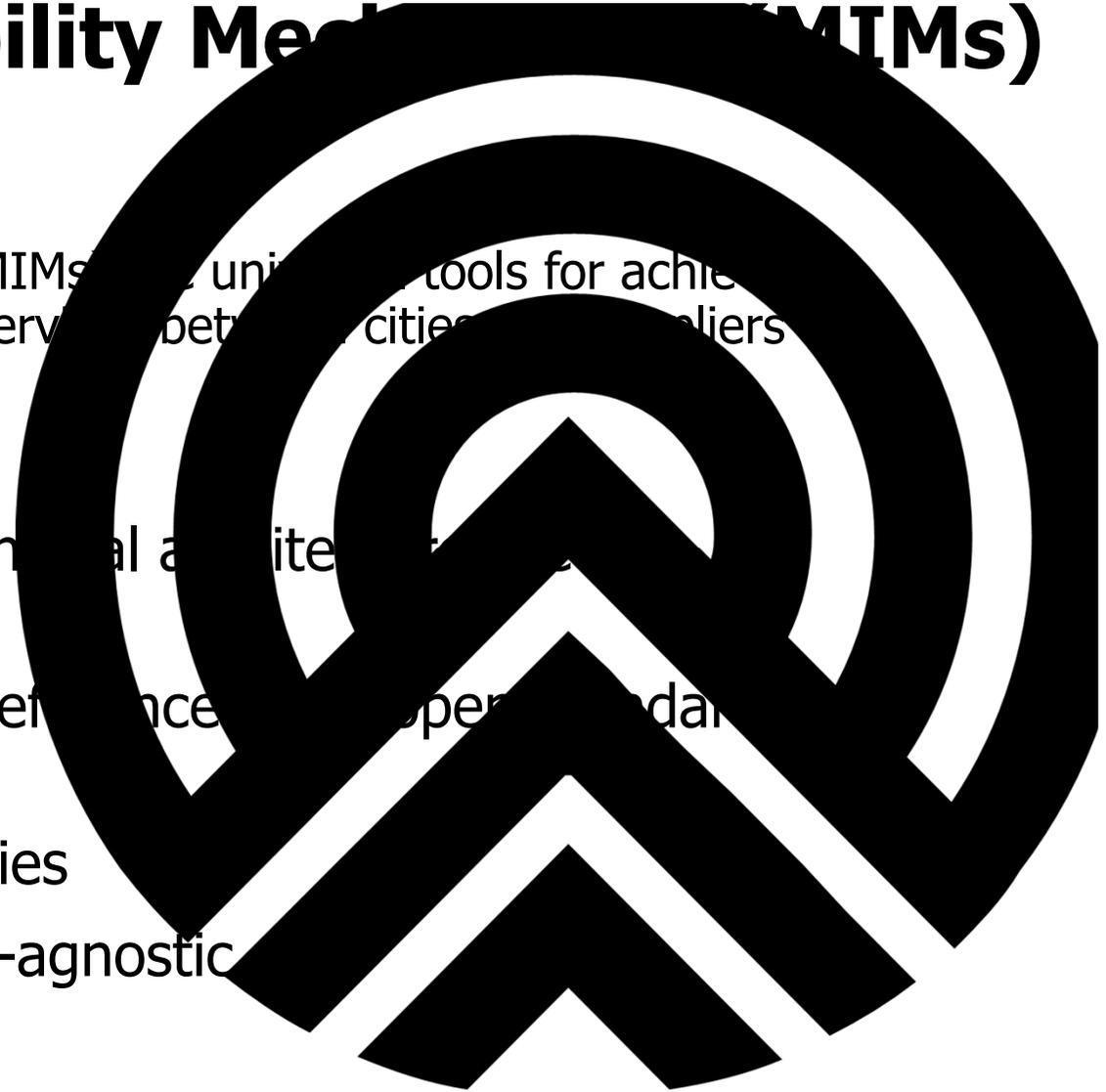
# » Minimal Interoperability Mechanisms (MIMs)

Adopted by 150 cities

Minimal Interoperability Mechanisms (MIMs) are unified tools for achieving interoperability of data, systems, and services between cities and suppliers around the world.

## **MIMs are:**

- Points of interoperability in technical architecture (e.g., platform)
- Inclusive list of baselines and reference interoperable standards and APIs)
- Based on consensus among cities
- Vendor-neutral and technology-agnostic



# » MIMs

## Benefits

### Benefits for Cities

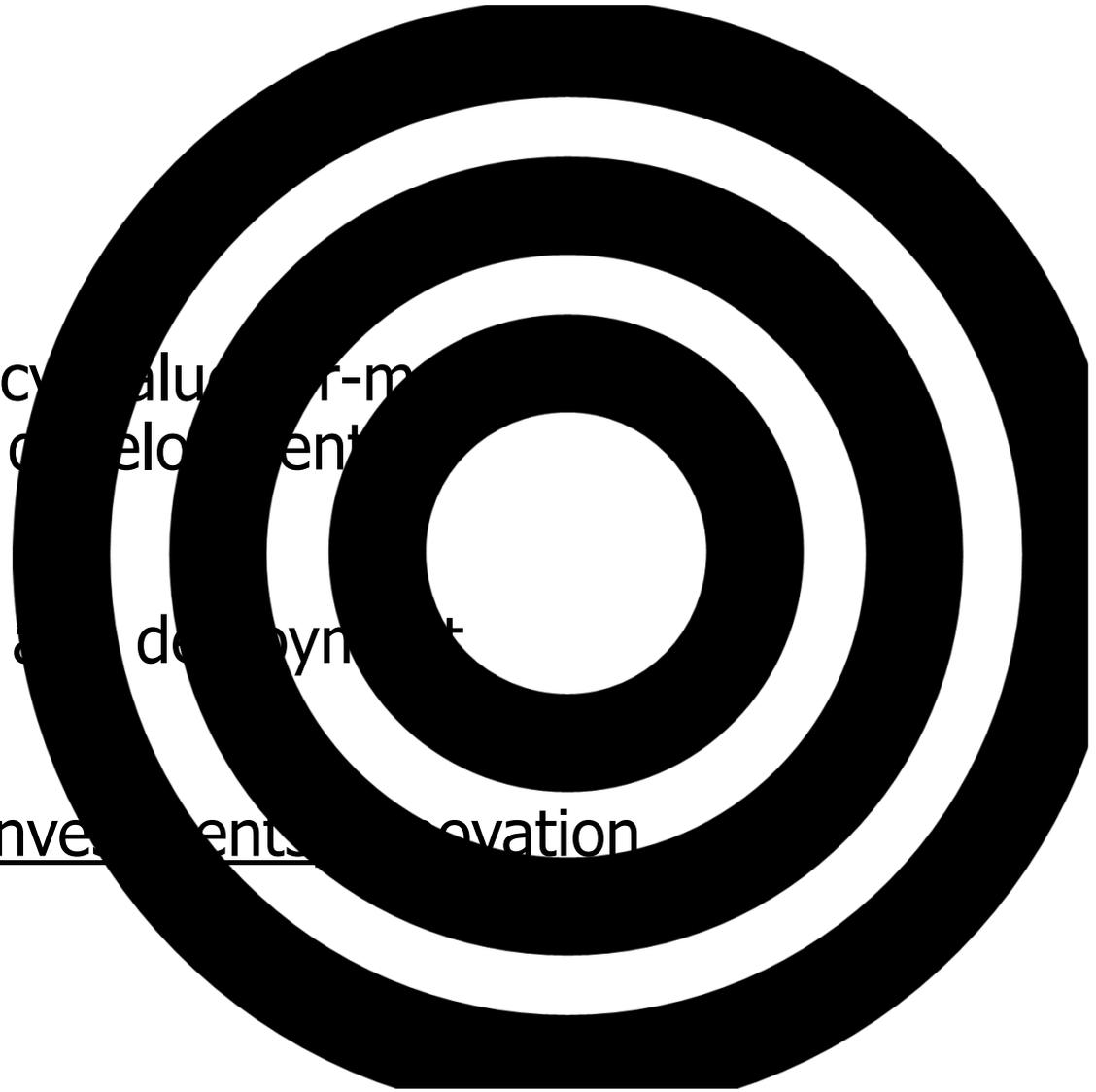
Choice, flexibility, efficiency, value for money, independence, economic development

### Benefit for Businesses

Scale, agile development and deployment

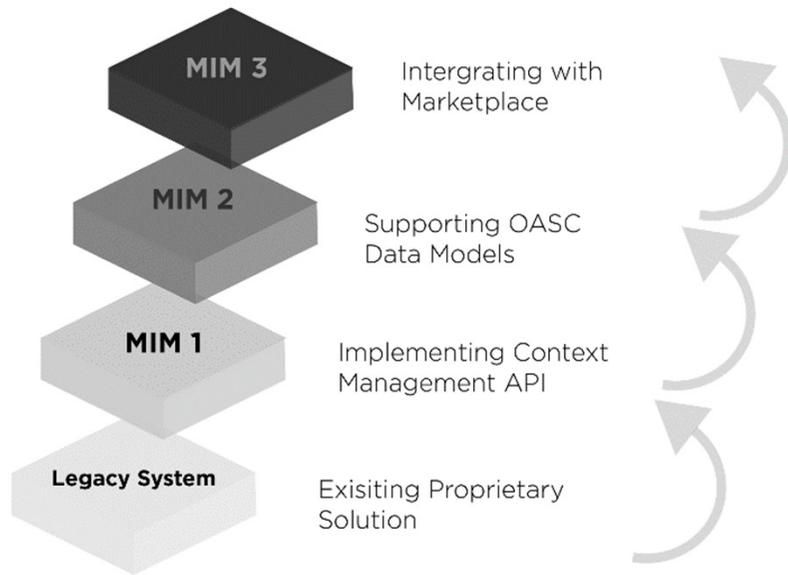
### Benefit for all

Reduced risk, increased investments, innovation



# » MIMs

Adopted by 150 cities



SYNCHRONICITY

MIM 4: Control Information Requirements  
Implementation:

Priority (PRE)  
Score (EC)  
Data Sensing  
Objective  
TB (ongr)  
TB (DS)

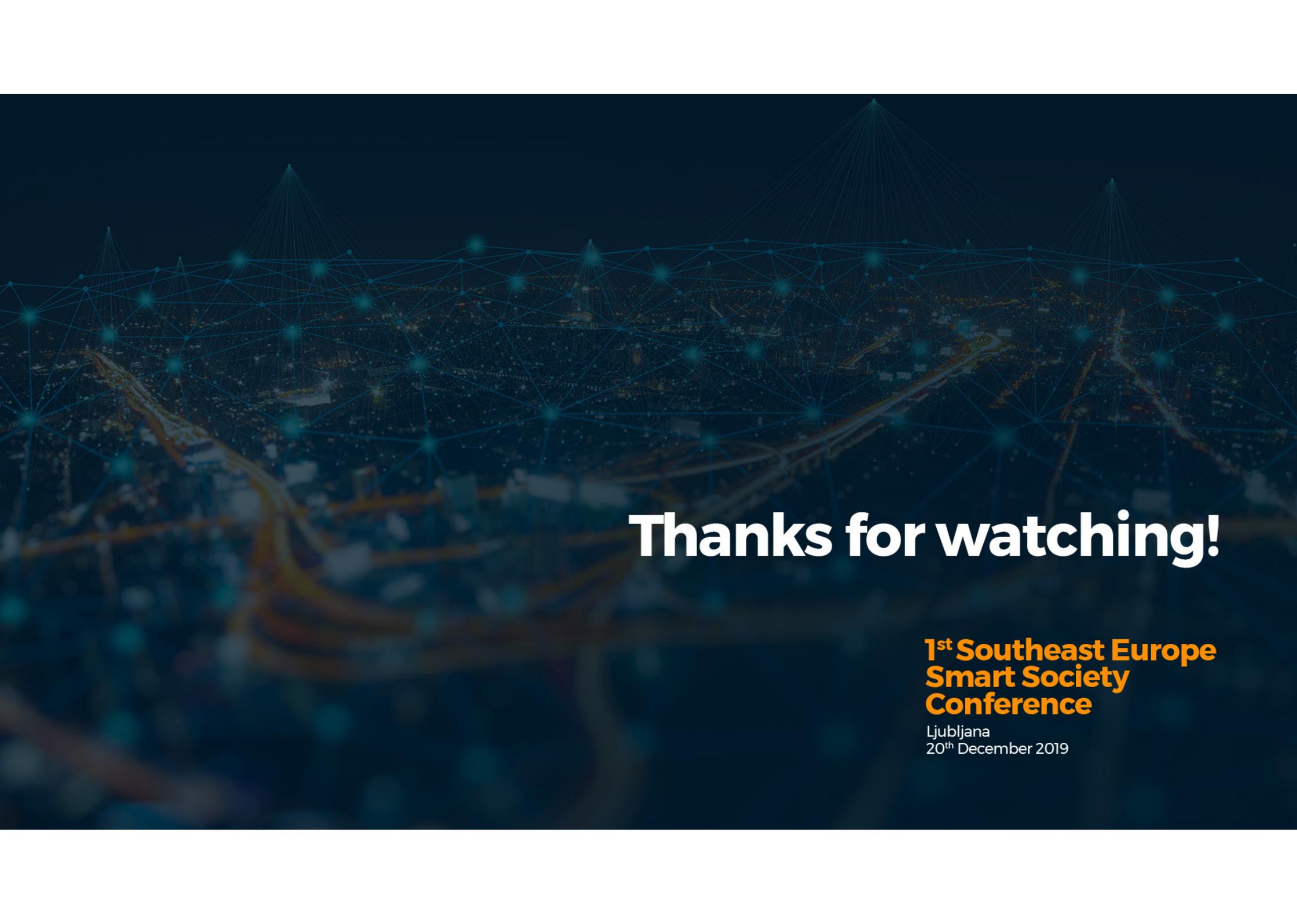
MIM 2: Supporting Data Models

MIM 3: Existing Information Systems

**MIM 4: Personal Data Management (proposed)**

**MIM 5: Fair AI (proposed)**



The background of the slide is a dark blue aerial night view of a city, likely Ljubljana, with its lights visible. Overlaid on this is a complex network of glowing blue lines and dots, representing a smart city or data network. The lines connect various points across the city, creating a web-like structure.

# Thanks for watching!

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