

IN THE FRAMEWORK OF:

**SESEI**

Seconded European  
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Enabling Europe-India Cooperation on Standards



# 4<sup>th</sup> Indo-European Conference on Standards & Emerging Technologies

7th December 2023 | The LaLiT, New Delhi, India



POLICY & STANDARDS

A CASE STUDY:

**SMART CITY LIVING LAB**

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# Experiment at IIIT Campus.. A LIVING LAB



- Partner key objectives:**
- Facilitating smart city Living Lab for business and societal impact

- Living Lab objectives:**
- Bringing innovative parties & stakeholders to the campus
  - Extending field of research
  - Acting as a role model for Indian scenario as a industry- academia collaboration



- Partner key objectives:**
- Implementing solutions to urban challenges which improve the quality of life for the citizens

- Living Lab objectives:**
- Solving challenges of the Municipality of Hyderabad
  - Improve the liveability for inhabitants



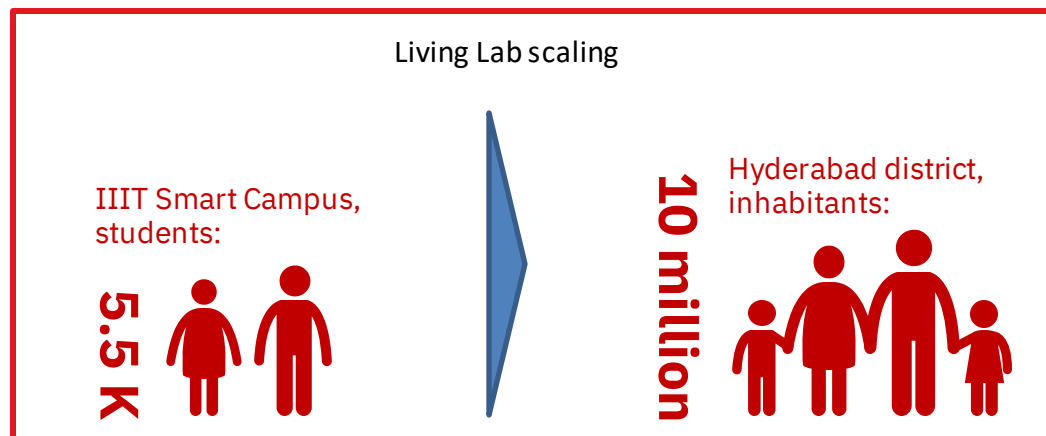
- Partner key objectives:**
- 100 Smart Cities across India
  - Improve quality of life for Indian citizens

- Living Lab objectives:**
- Small-scale testing and research for replication in smart cities
  - Provide handholding and mentorship through R&D and innovation ecosystem of IIT HYD and from MSH and partners



- Partner key objectives:**
- Transforming India into a knowledge-based economy and digitally empowered society based on technology

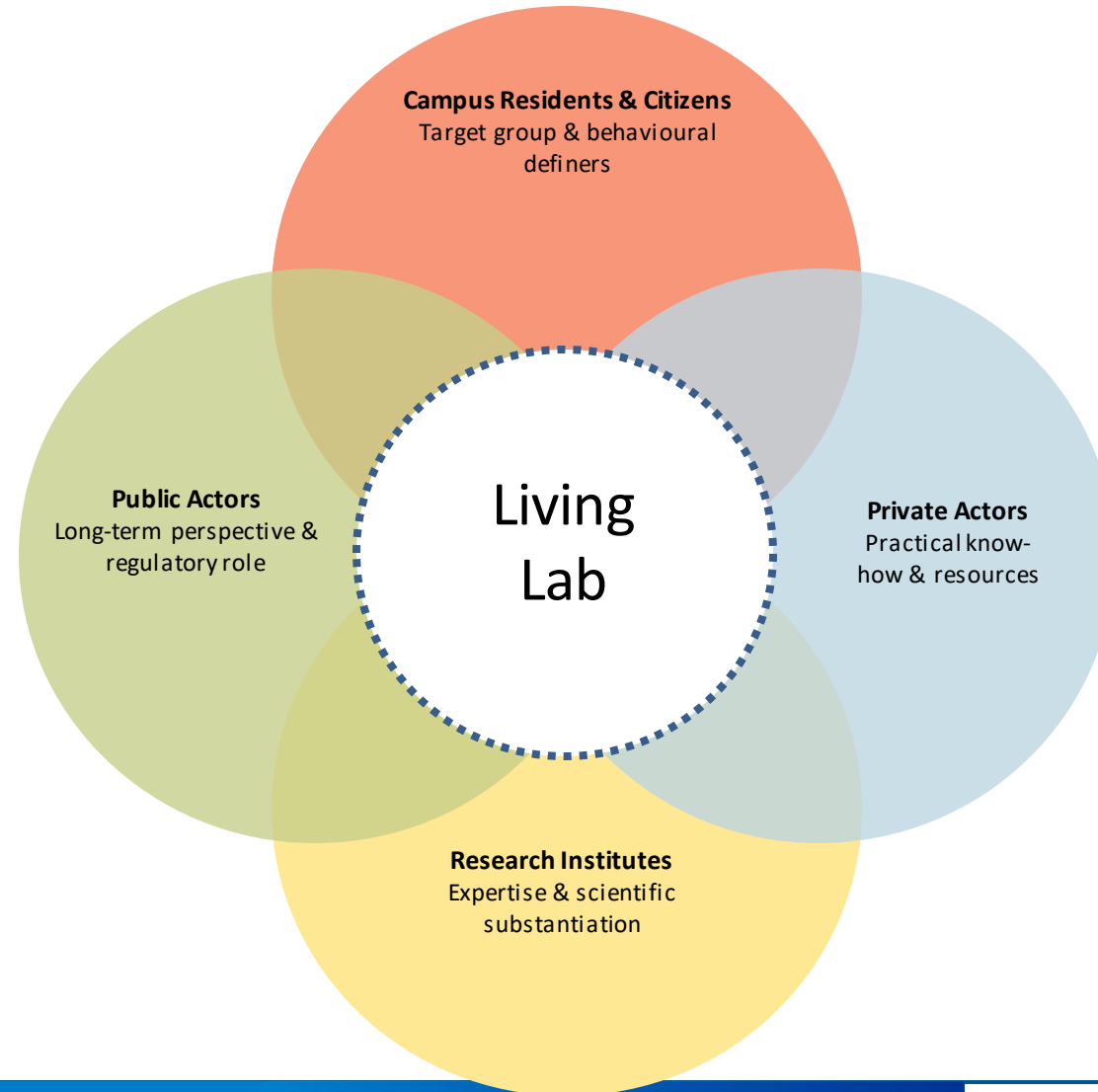
- Living Lab objectives:**
- Living Lab research as input for the Smart City Mission



# The *Living Lab* brings together a dynamic ecosystem



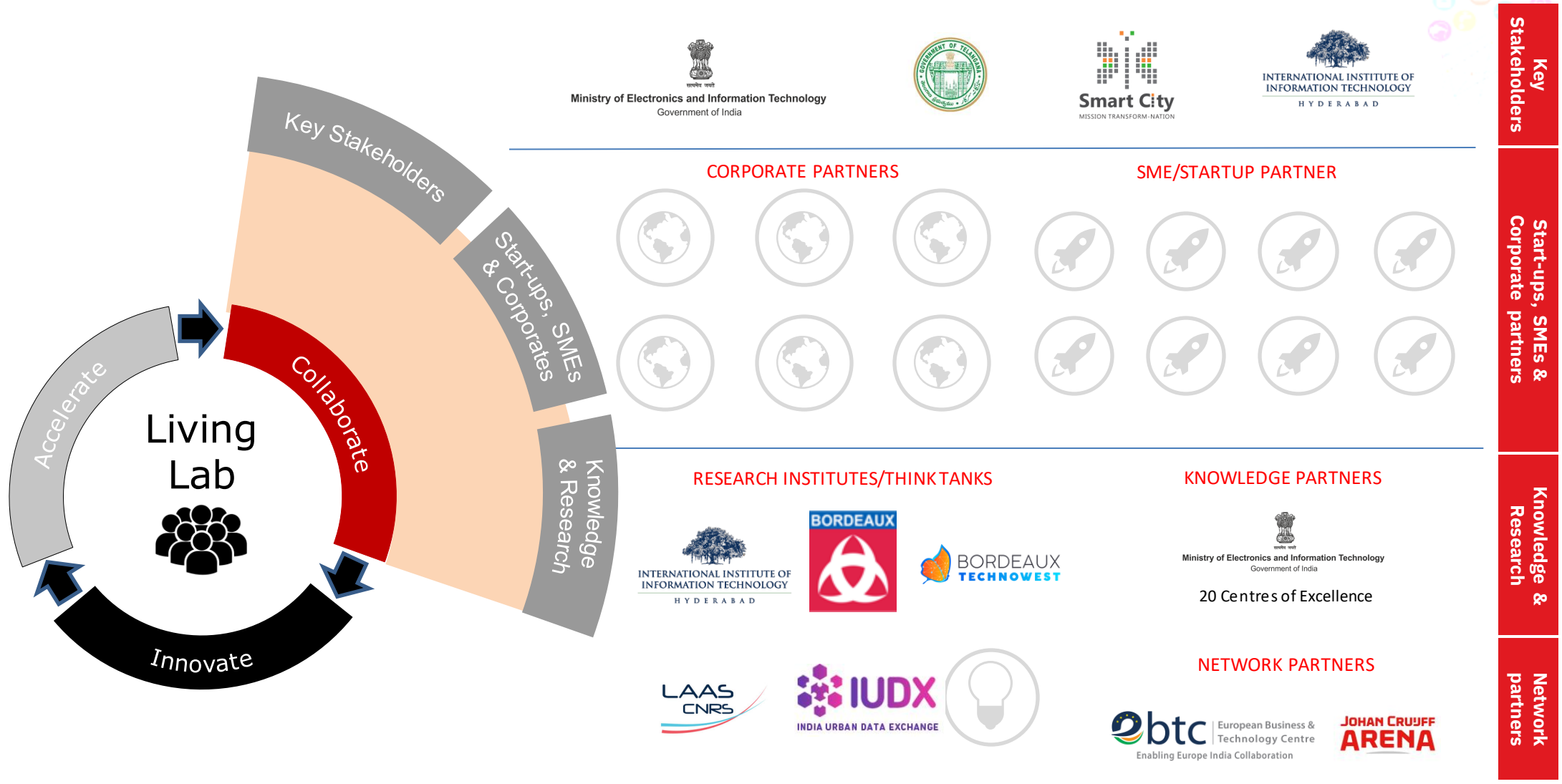
Campus residents and citizens, private actors, knowledge institutes and public actors in real life context



Innovation. Solutions to specific problems. Cross stakeholder deliberations. Policy dialogs.

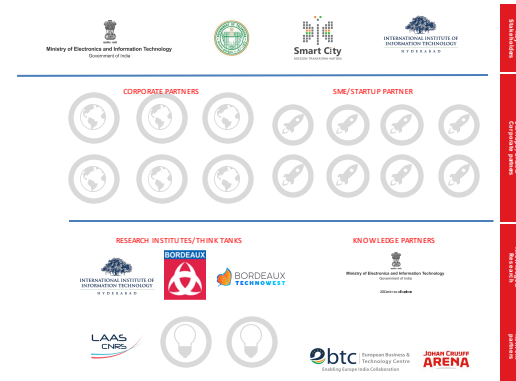
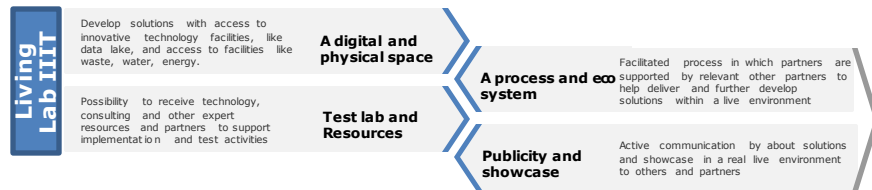
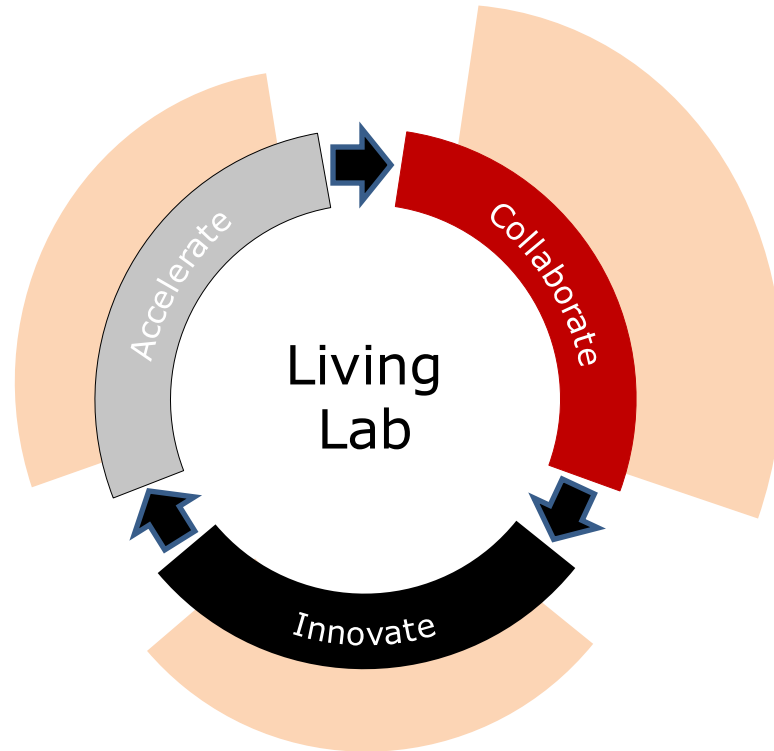


# Platform for collaboration, to realise the vision and values



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# .. and, Enable Innovation



## True business development for ecosystem partners

- **Creating new solutions**
- **Criteria-based selection of solutions**
- **Validation of business cases / valuation tooling**
- **Tested PoCs, scalable solutions**
- **Global communication campaign**
- **Showcase solutions and business to others**

**= True Value (economical, social and sustainable value for business, organization and brand)**

# Research Projects, in addition to startup challenges

Research Projects Commenced.

More to follow.

## Smart Buildings

- Smart home research activity in progress
- Wireless smart motion sensors
- Indoor air quality monitoring
- Evaluating task control systems for integration with smart grid
- Test bed enhancement for smart room research

## Energy

- Research on energy analytics and developing interactive voice-based interfaces

## Pollution monitoring System

- IoT Network-Based Analysis of Variations in Particulate Matter Due to COVID-19 Lockdown
- Hierarchical Clustering based Spatial Sampling of Particulate Matter Nodes in IoT Network
- Comparative evaluation of new low-cost particulate matter sensors
- Low-Cost Air Quality Monitoring device.

## Pollution modelling

- Security Analysis of Large Scale IoT Network for Pollution Monitoring in Urban India

## Water

- Low-Cost Retrofitting of Analog Water Meter for Digitization.
- Non-invasive mechanism for water Quality analysis

## Mosquito Corridor

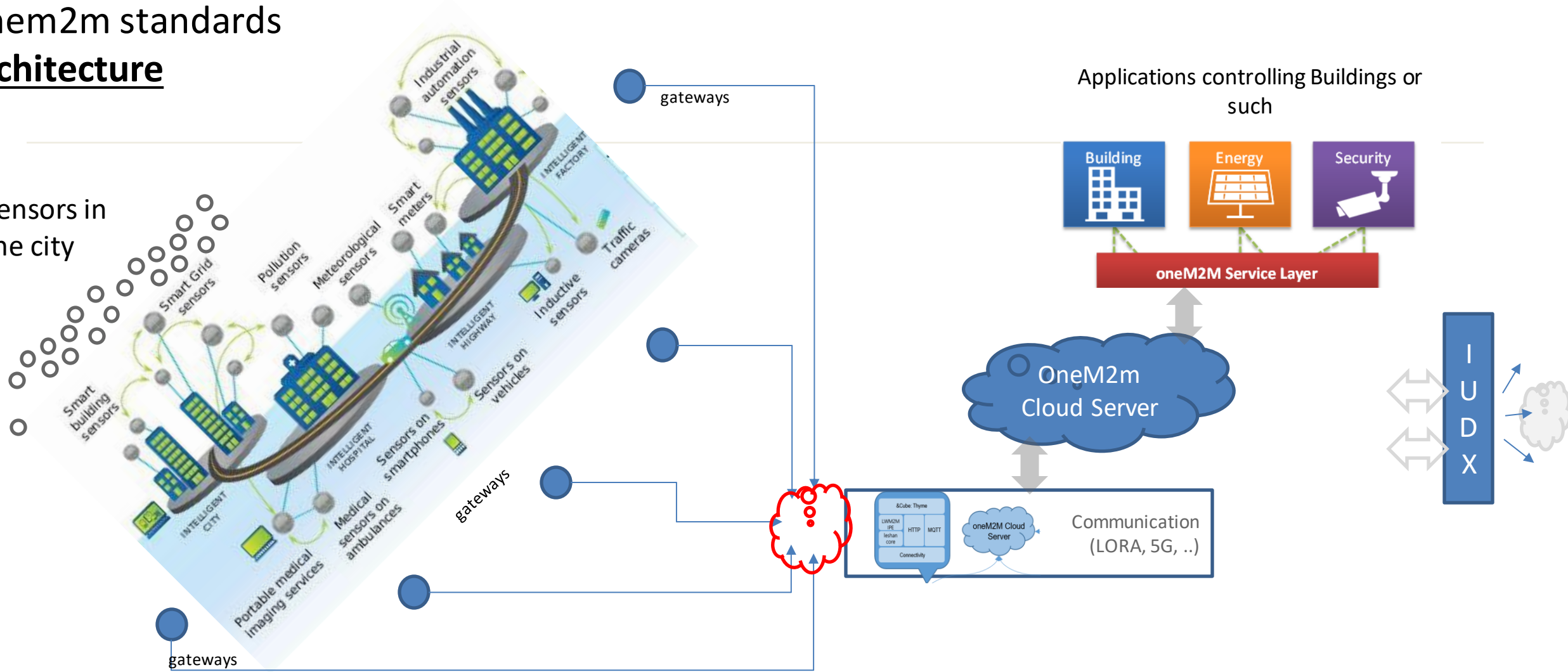
- Modelling Mosquito movements for effective intervention

# Strategic Conversations & Policy deliberations, at the Living Lab



# Onem2m standards Architecture

Sensors in the city



OneM2M  
Data layer



OneM2M  
AE (app entity)



OneM2M  
NSE (Network)

OneM2M  
Common Services

OneM2M  
APPLICATIONS

Data  
Interchange



# Thanks

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