

WG3 City Platforms

Transitioning to a new architecture

Presented by:

Martin Brynskov, U4SSC Thematic Leader

7 December 2021



What the deliverable is about

Provides guidance to government stakeholders on setting up/procuring smart city platforms.

Illustrates the current state-of-the-art of interoperable smart city platforms and provides recommendations for technical specifications.

Shows how to build capacity in the use of the standards, mechanisms, services, guidelines and tools that enable the interoperability of data platforms for cities and communities, to speed up the delivery of services leading to innovation and positive local impact.

Data-enabled cities and communities

- A smart city or community is one where increasing amounts of useful data within the city is collected and used wherever it can help the city work better.
- Given the exponentially increasing amount of data being generated in cities and communities by many different agencies and the fact that much of this data could be of value to other agencies, increasing numbers of cities and communities are setting up platforms to support a local data marketplace.
- The aim is to make it easy for organisations to offer up their data and easy for potential users of that data to find and access that data.

Minimal Interoperability Mechanisms (MIMs)

The minimal but sufficient capabilities needed to achieve interoperability of data, systems, and services

The question answered by the MIMs and the architectural framework that underpins them is:

“What are all the basic building blocks needed to enable a city to set up an effective data-sharing ecosystem?”

Minimal Interoperability Mechanisms

Sufficient interoperability to allow:

- “Good enough” integration of systems
- Development of a viable market – cutting costs, minimising risk and preventing vendor lock-in

Minimal to ensure:

- no unnecessary complexity or time-to-implement
- Aim for cost for cities to implement (staff time, software, hardware) to be less than, say, \$50,000

Clearly defined mechanism so that:

- It is easy to determine if a product or service is compliant
- It is easy to determine the steps to implement

The MIMs so far – tackling the requirements of a local data ecosystem

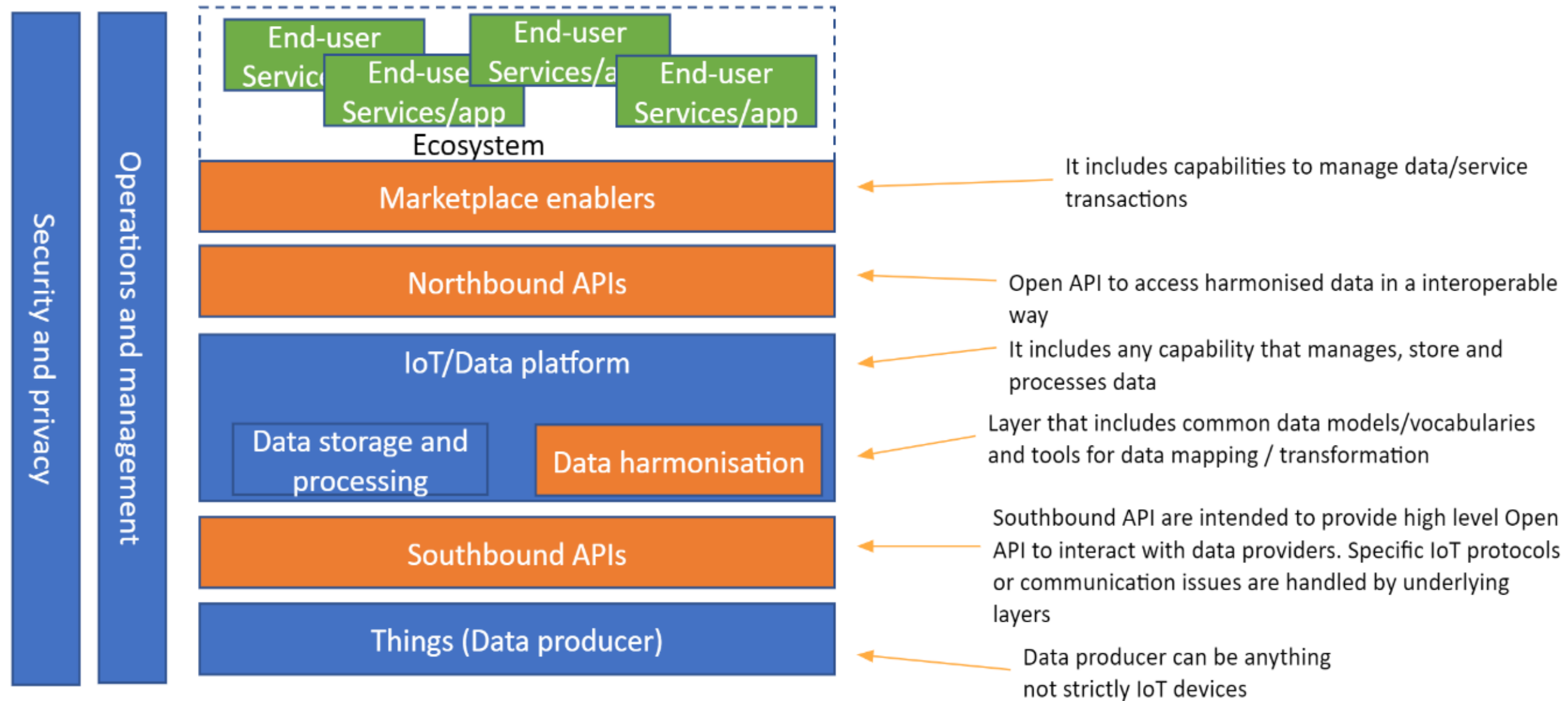
MIM	Subject	Name
MIM1	Context	Context Information Management
MIM2	Data Models	Shared Data Models
MIM3	Contracts	Ecosystem Transactions Management
MIM4	Trust	Personal Data Management
MIM5	Transparency	Fair Artificial Intelligence
MIM6	Security	Security management
MIM7	Places	Geospatial information management
MIM8	Indicators	Ecosystem indicator management
MIM9	Analytics	Data Analytics Management
MIM10	Resources	Resource Impact Assessment

The Architectural Framework

A local data ecosystem needs to be based on open APIs.

A city therefore needs to implement an architecture supporting an open, flexible and easily-distributable open data/API publication platform.

The Architectural Framework



This is a journey

- Let's continue working together to help all cities – especially small and medium sized cities and ones with little resources – build effective smart city platforms
- Work with us in OASC to continue to develop the MIMs
- Work through U4SSC to develop the guidance and support cities need

For more information, please contact:

Martin Brynskov

martin@oascities.org

Michael Mulquin

michael@oascities.org

U4SSC website:

<https://www.itu.int/go/u4ssc>

Thank you!

