

# U4SSC deliverable on Redefining smart city platforms: Setting the stage for Minimal Interoperability Mechanisms

U4SSC deliverables

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# The data challenges facing cities and communities

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The need to manage increasing complexity



Siloed nature of city and community management



Cities relying on incomplete, inconsistent and unreliable information



The need for affordable and transformative solutions

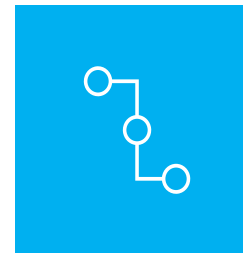


# The evolving landscape of smart cities

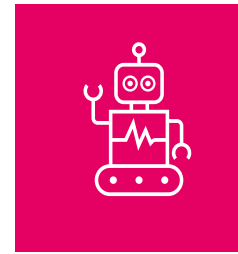
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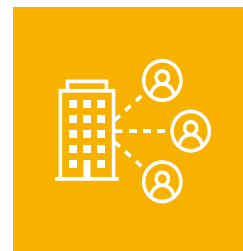
Data life cycle management by default



Interoperability



New Technologies



Data-enabled cities and communities



Data lakes and data spaces



Local digital twin



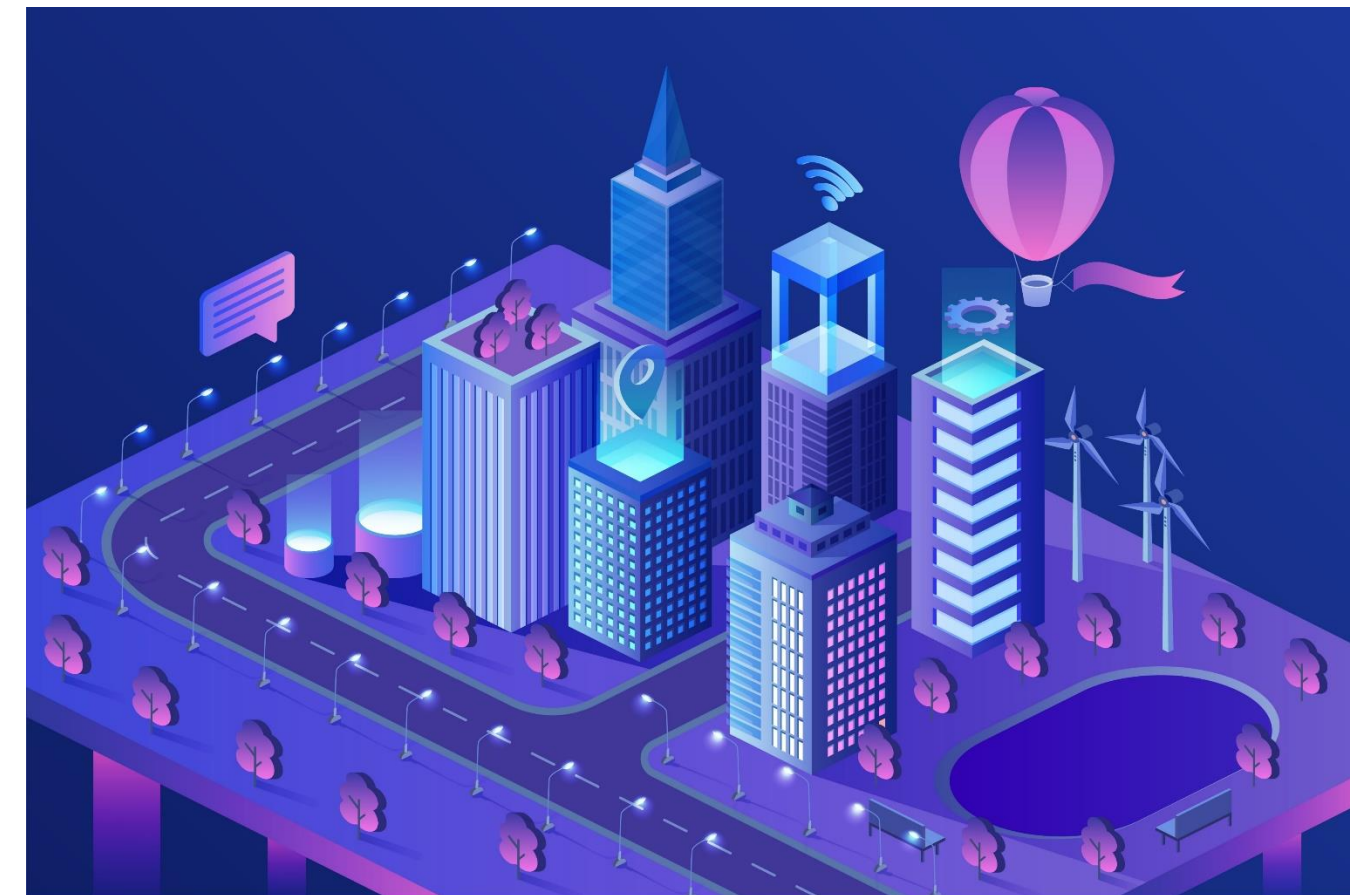
# What is the role of MIMs

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## Minimal Interoperability Mechanisms

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Can enable all communities, whether large or small, to put in place effective local data sharing ecosystems and to enable solutions to be shared between cities and communities around the world



# Redefining smart city platforms



Report provides guidance to governments and cities at all levels on setting up smart city platforms, as well as on procuring the requisite elements for building them.

# Redefining smart city platforms

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Introduction: The challenges facing cities and communities

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The evolving landscape of smart cities and communities

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Eight steps that cities and communities can take

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Blueprint:  
Architectures and platforms

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The requirements needed by the platform enabled ecosystem

6

Interoperability that is minimal yet sufficient

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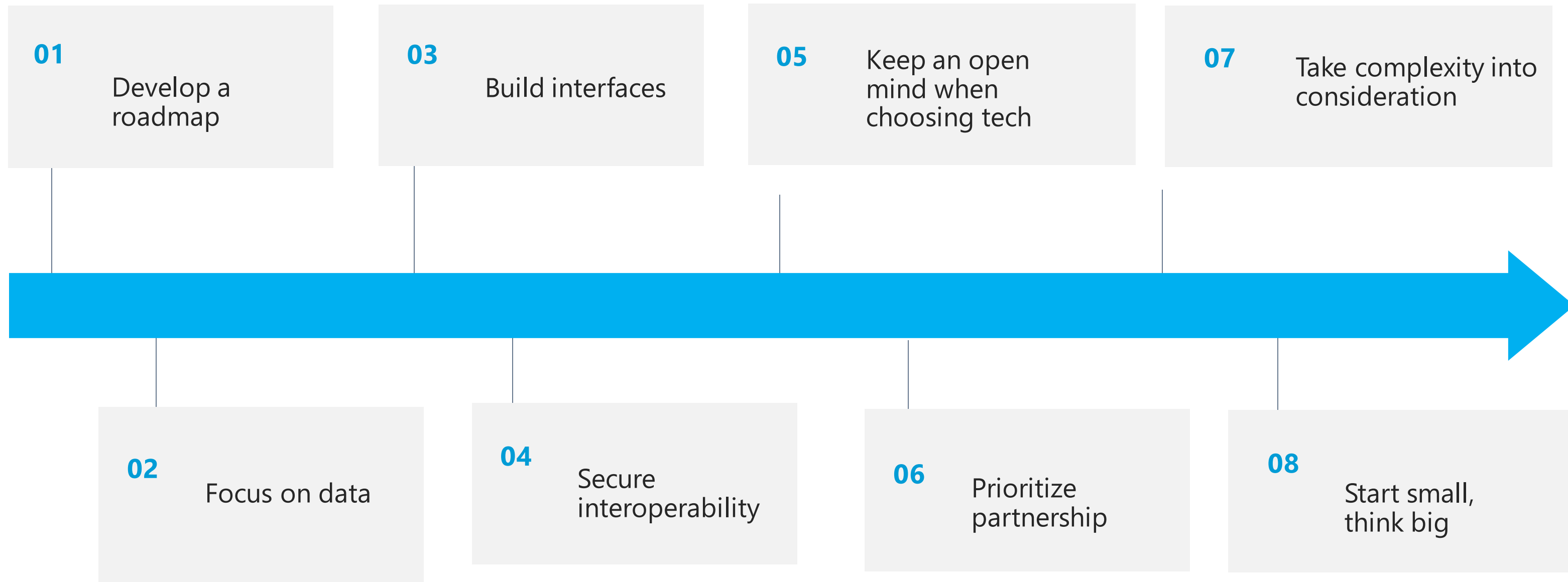
Architecture framework supporting minimal yet sufficient interoperability

8

Useful results from the work on MIMs

# Eight steps that cities and communities can take

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# Y.MIM and ITU Study Group 20 (Standardising the MIMs format)

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The MIM structure is being developed as an ITU Recommendation within ITU Study Group 20: *IoT and Smart Cities and Communities*.

## Introduction

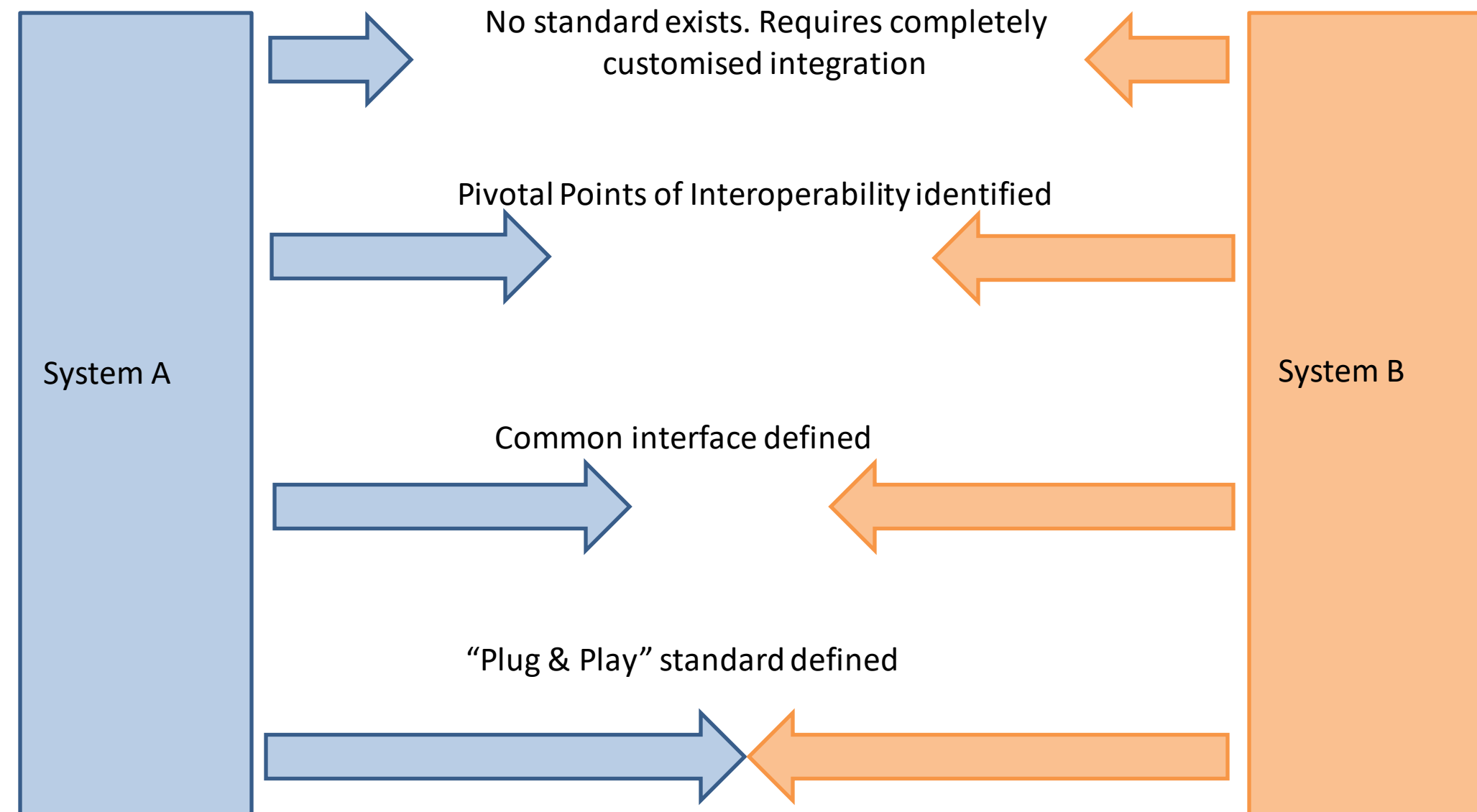
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“This Recommendation defines Minimal Interoperability Mechanisms (MIMs) as a method of specifying sets of requirements that will enable minimal but sufficient interoperability for smart and sustainable cities and communities.”



# Why Minimal Interoperability?

Complete interoperability is ideal  
However, there is value in achieving  
at least a level of interoperability.  
The greater the level of  
interoperability, the less work needed  
for integration.



## Y.MIM standardises the MIM structure

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We decided to focus on standardising the MIM structure and not on the set of MIMs covered by MIMs/MIMs Plus.

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We think the MIMs are a good model for any issue where minimal but sufficient interoperability would be valuable for a city – not simply for data sharing ecosystems.

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OASC/Living-in.eu can continue to develop the set of MIMs we feel are important, and other agencies can develop MIMs to support issues relevant to them.

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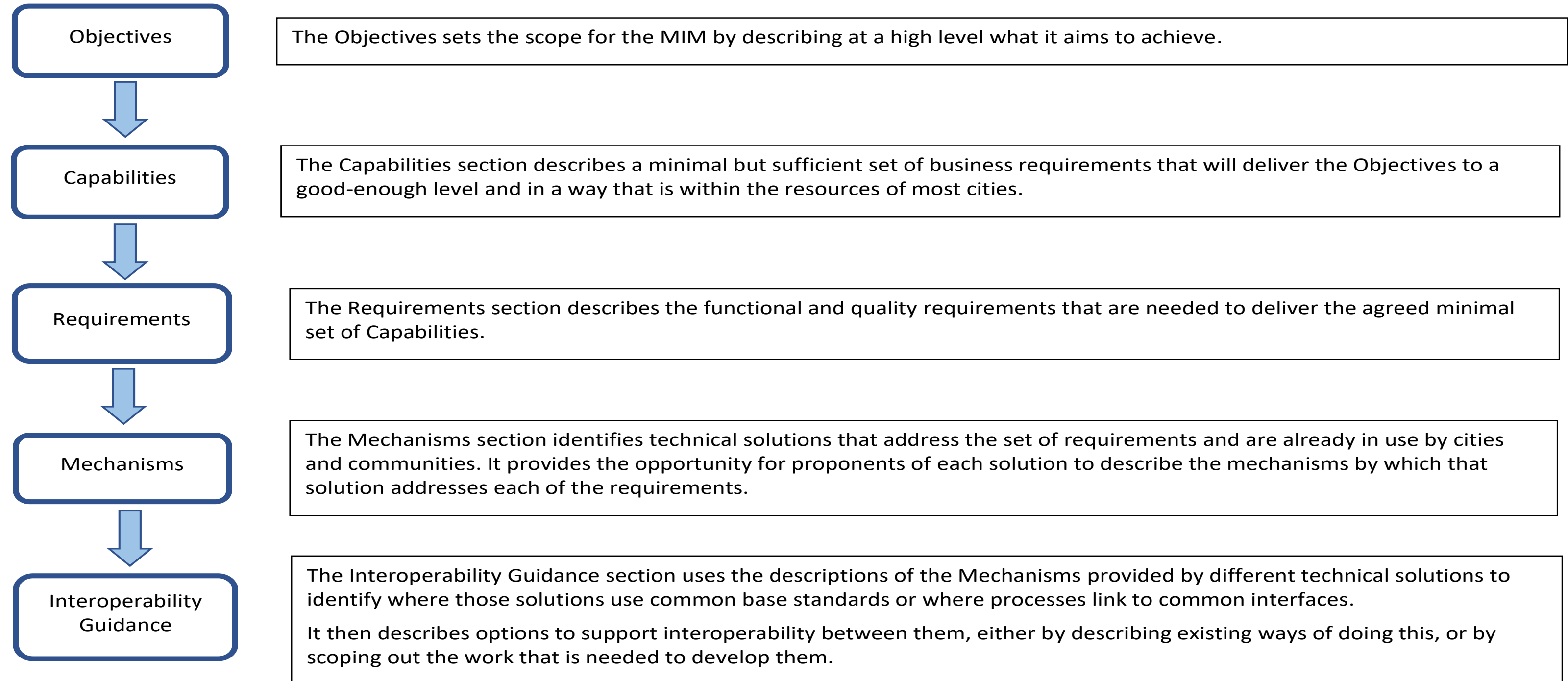
## The proposed new description of a MIM

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A MIM is a description of a common set of requirements that will provide a **Minimal** but sufficient set of capabilities that a city needs to achieve a certain objective, along with a description of the **Mechanisms** by which one or more different technical solutions addresses those requirements.

It also provides guidance to help gain a useful level of **Interoperability** between the different mechanisms that may be used to achieve that set of capabilities.

# The proposed new format for each MIM



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Thank you!

