



# The Role of Clusters in S3

## A spatial perspective from US analysis

Working Package No. 2 Cluster Policy and Spatial Planning

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## Outline

### I. The role of Clusters in Smart Specialisation

- The need of a new Development policy paradigm
- S3 and Clusters
- The advantage of Clusters in S3 implementation
- Six leverage points of Cluster

### II. Spatially-oriented methodology Cluster Analysis

- The core of S3: Place-Based Approach and Entrep. Discovery Process
- How to maximise EDP

### III. The need to spatialise clusters in supporting Discovery Process: MAPS-LED

- The input to activate the EDP: The Knowledge Fragmentation
- MAPS-LED: a support in activating the EDP

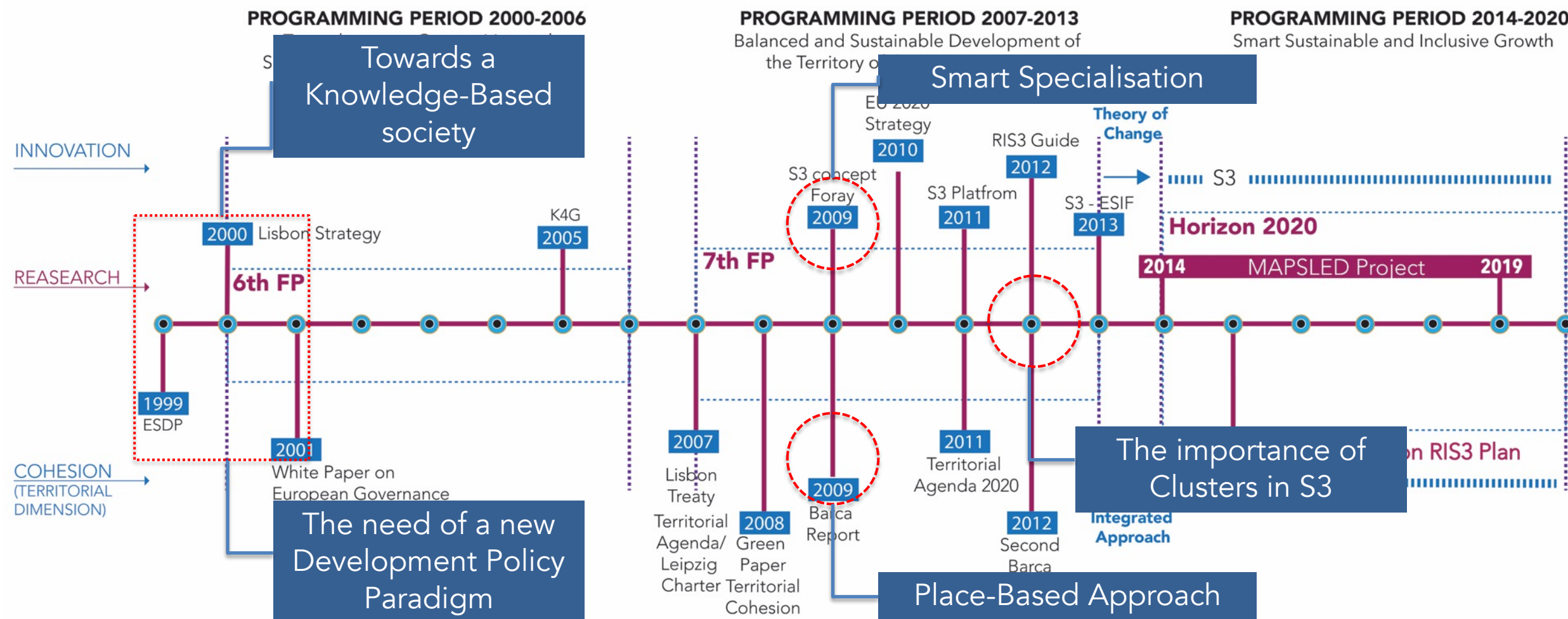
### IV. A spatial oriented perspective within EDP for S3 implementation

- Cluster Spatialisation: Boston and Cambridge

### V. Key preliminary insights

## I. The role of Clusters in Smart Specialisation

The need of a new Development policy paradigm: Innovation and Territorial Dimension



## S3 and Clusters

### S3 Policy

Specific Innovation-intensive sectors  
transformation of regional economies around  
unique, knowledge-based, new activity domains  
higher emphasis on the exploitation of related  
variety and knowledge spill overs between  
knowledge domains, with a premium on emerging  
new market niche opportunities new activity  
domains

### Cluster (Policy)

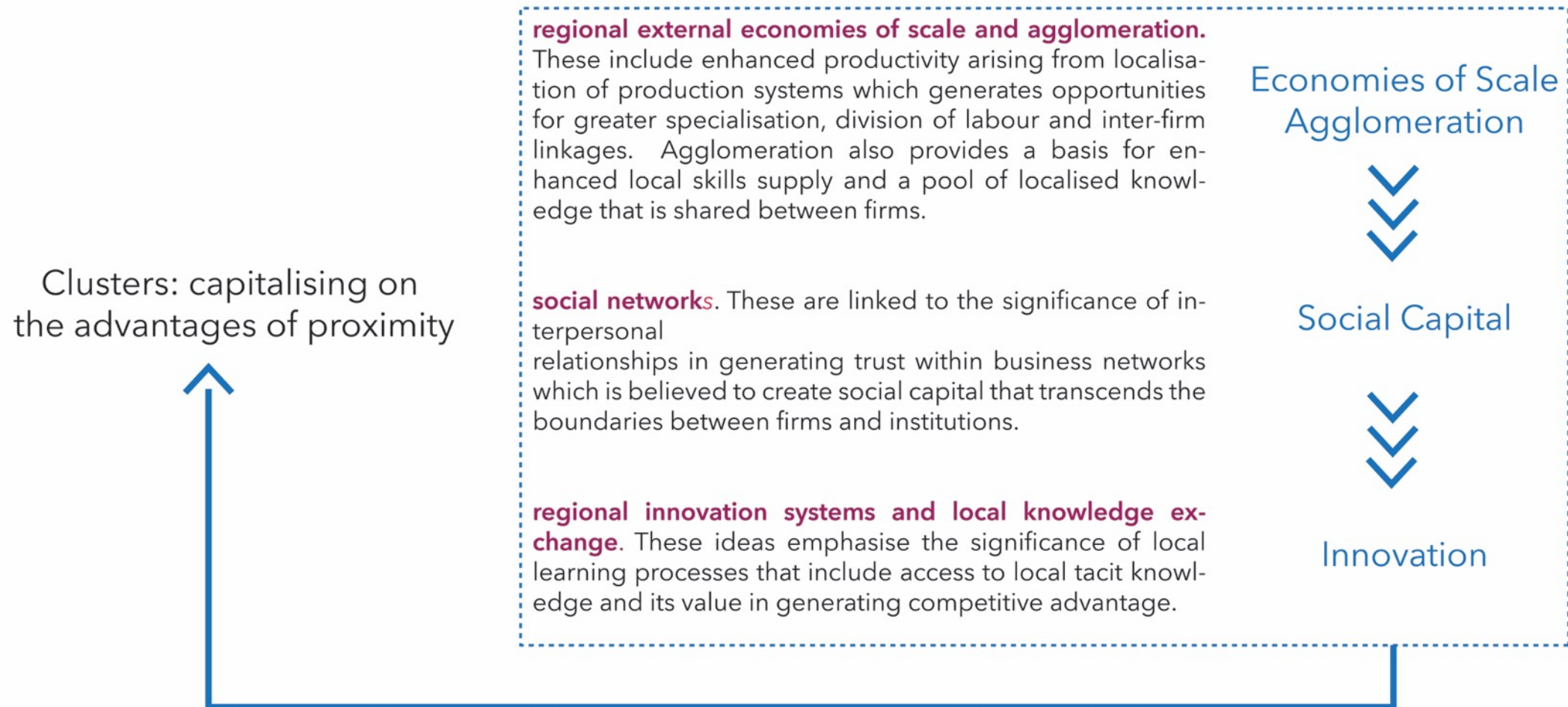
broader set of sectors in the economy  
enhance the performance of the  
companies that are members of the cluster  
tend to concern firms in related industries  
characterised by a critical mass and commonalities  
in infrastructure and resource base

#### similarities

- a) a focus on productivity and innovation as key drivers of **competitiveness**
- b) fostering regional embeddedness with a view to capitalise on the **advantages of proximity**

Clusters in S3  
implementation

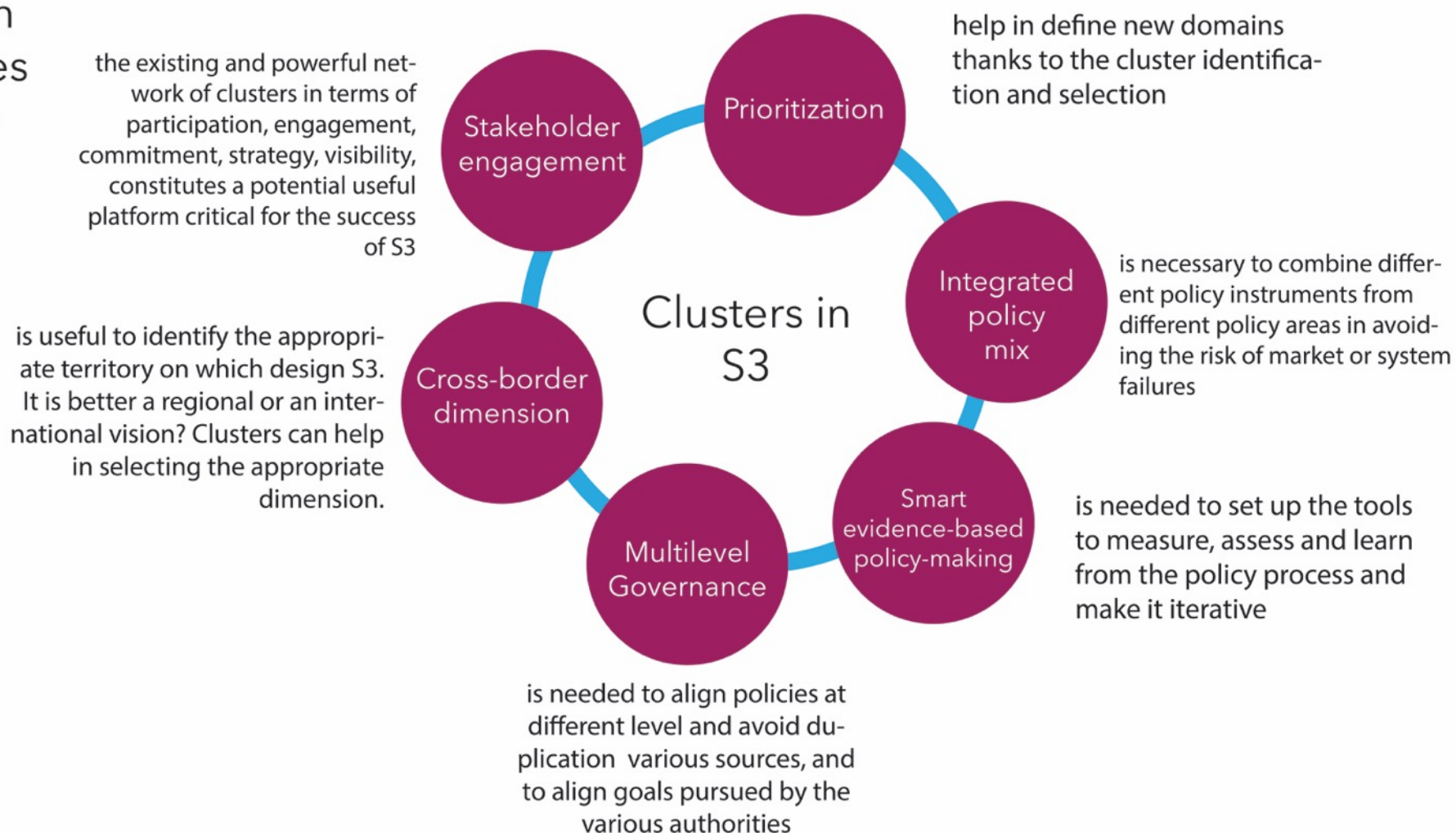
## The advantage of Clusters in S3 implementation



## The advantage of Clusters in S3 implementation

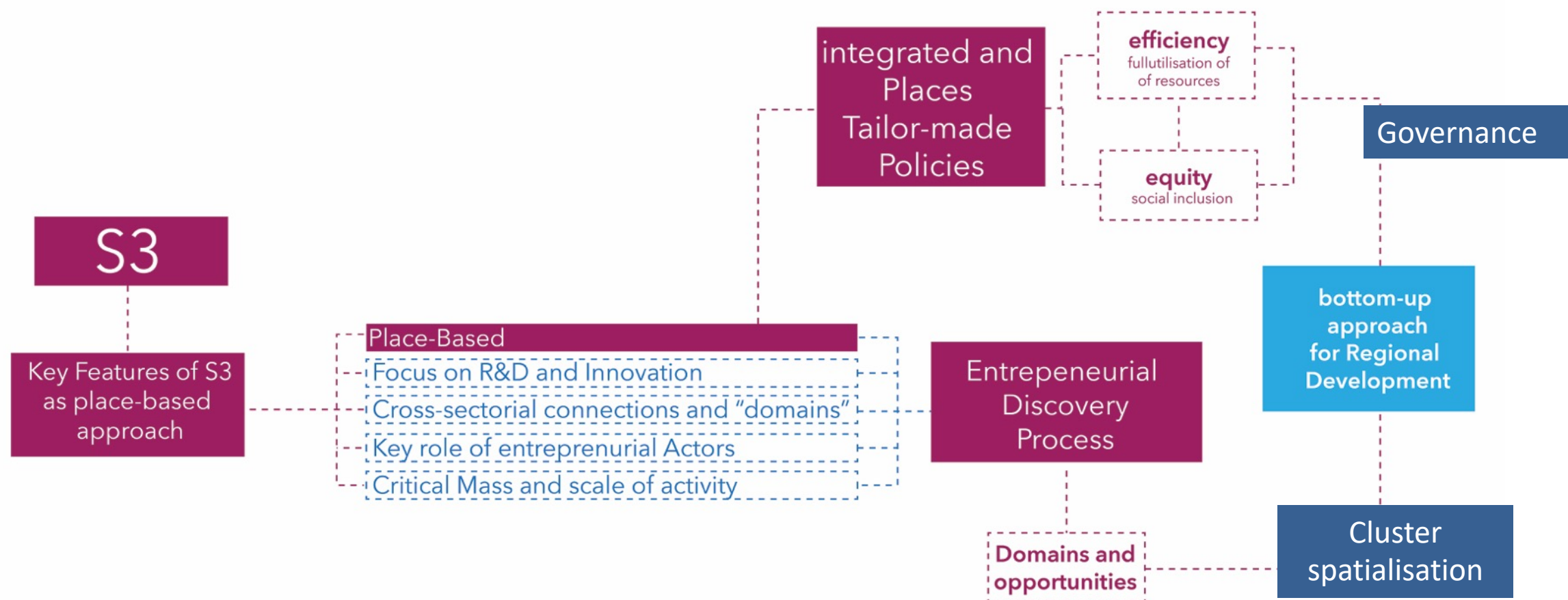
Cluster:  
capitalising on  
the advantages  
of proximity

### 6 leverage points



## II. Spatially-oriented methodology Cluster Analysis

The core of S3: Place-Based Approach and Entrep. Discovery Process



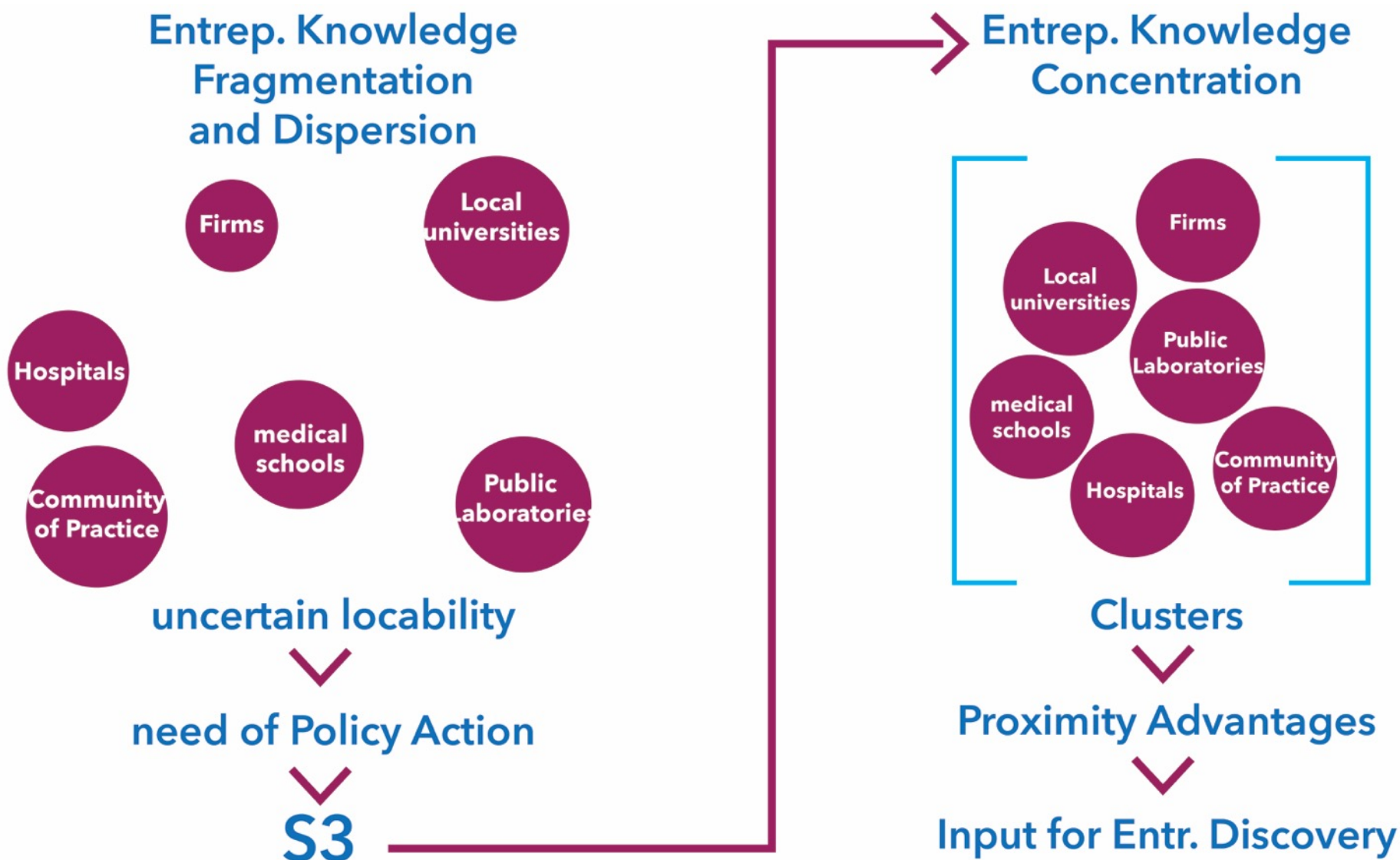
## The core of S3: the Entrepreneurial Discovery Process



What is the input activating EDP?

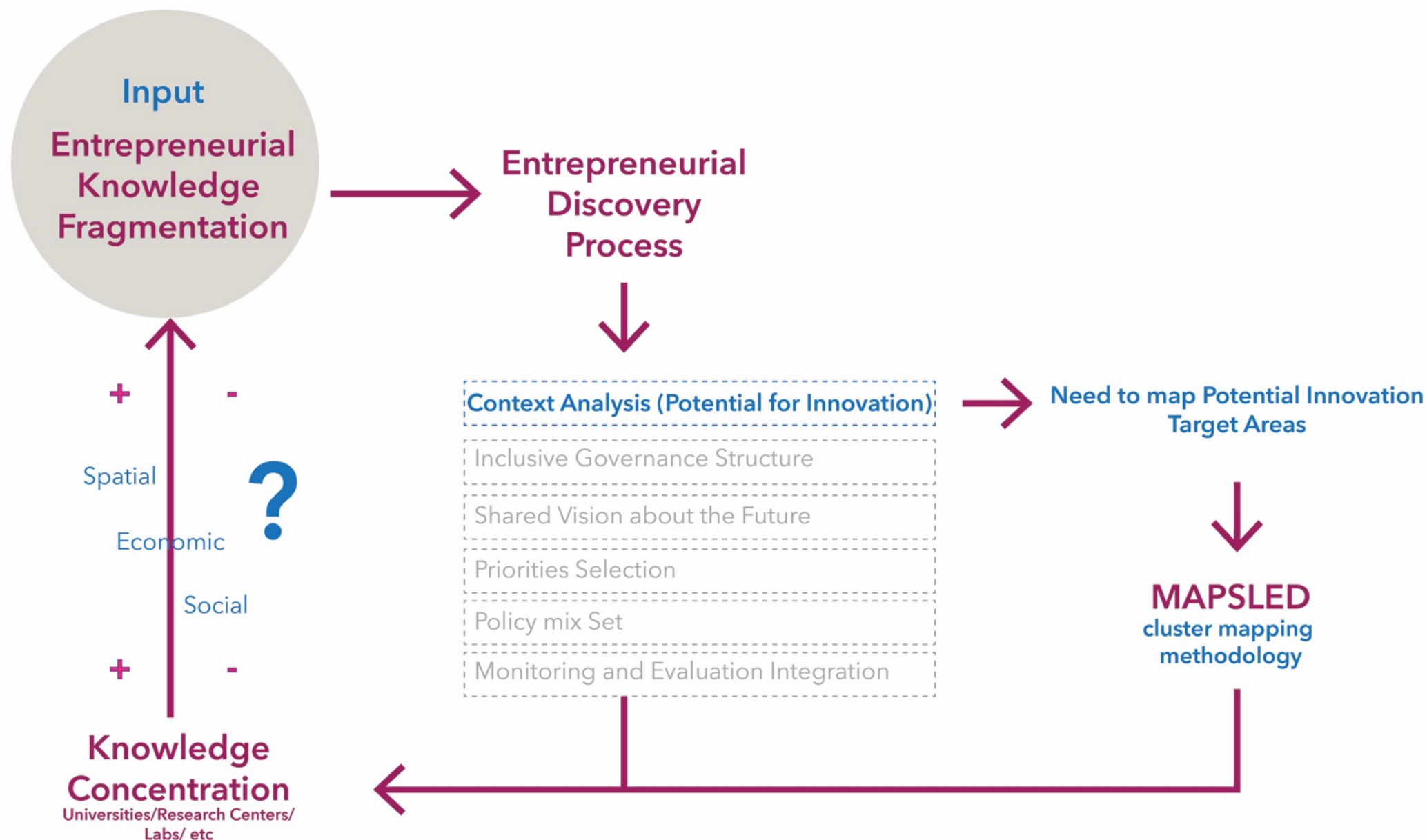
### III. The need to spatialise clusters in supporting Discovery Process: MAPS-LED

The input for EDP (Foray, 2012) and the MAPS\_LED project

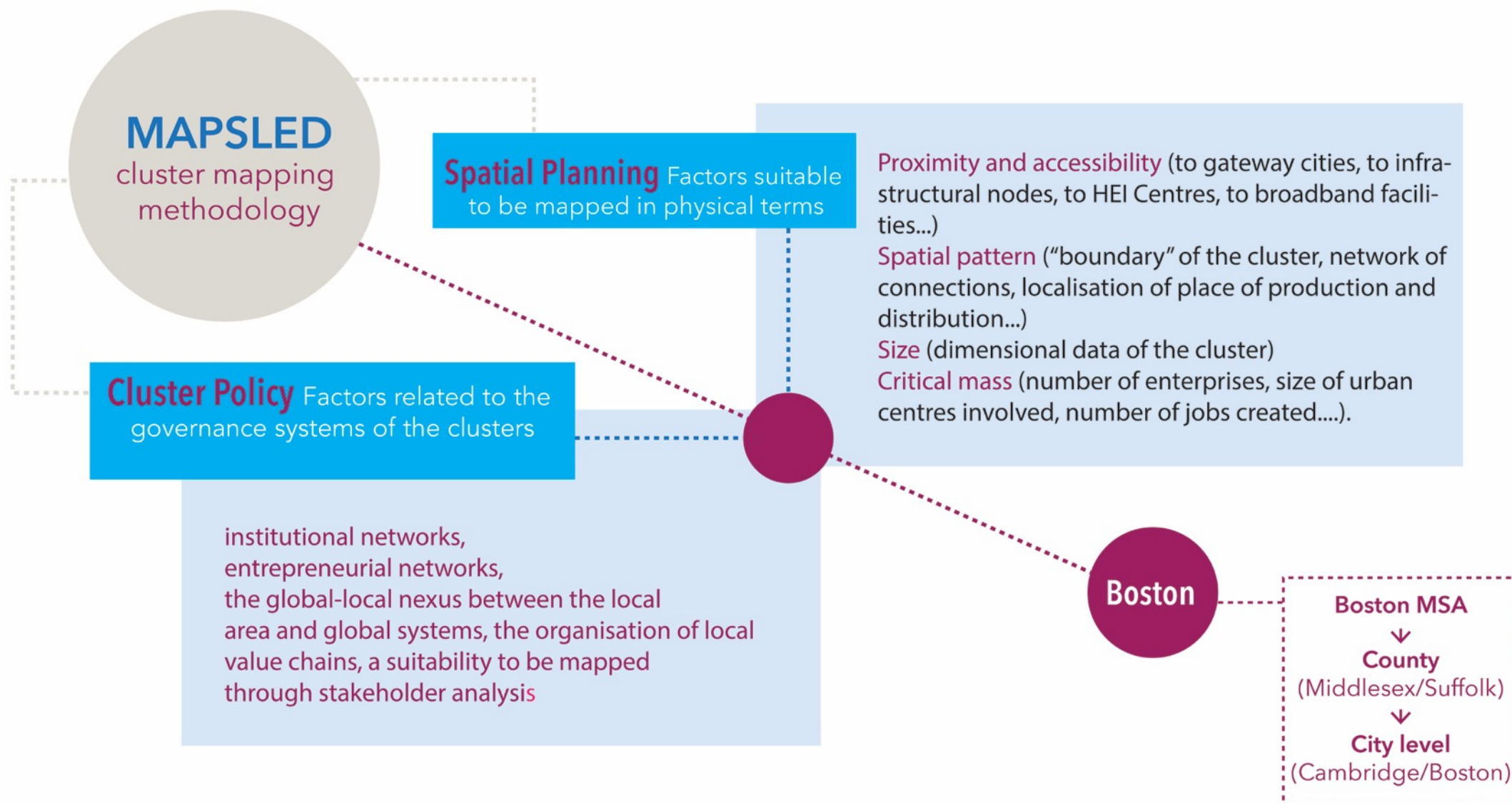


# The need to spatialise clusters in supporting Discovery Process: MAPS-LED

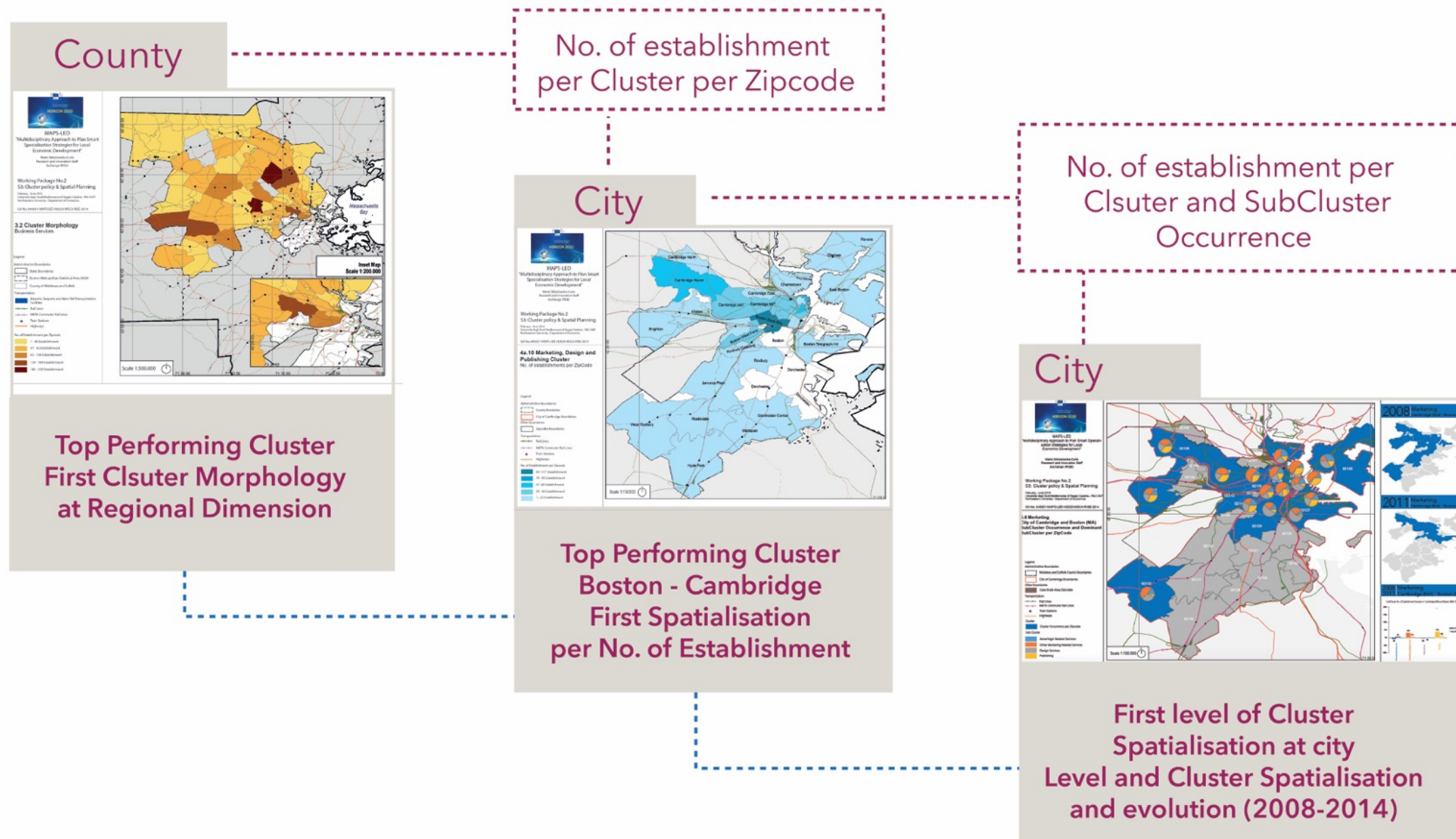
The input for EDP (Foray, 2012) and the MAPS\_LED project



#### IV. A spatial oriented perspective within EDP for S3 implementation: MAPS-LED as support in activating the EDP



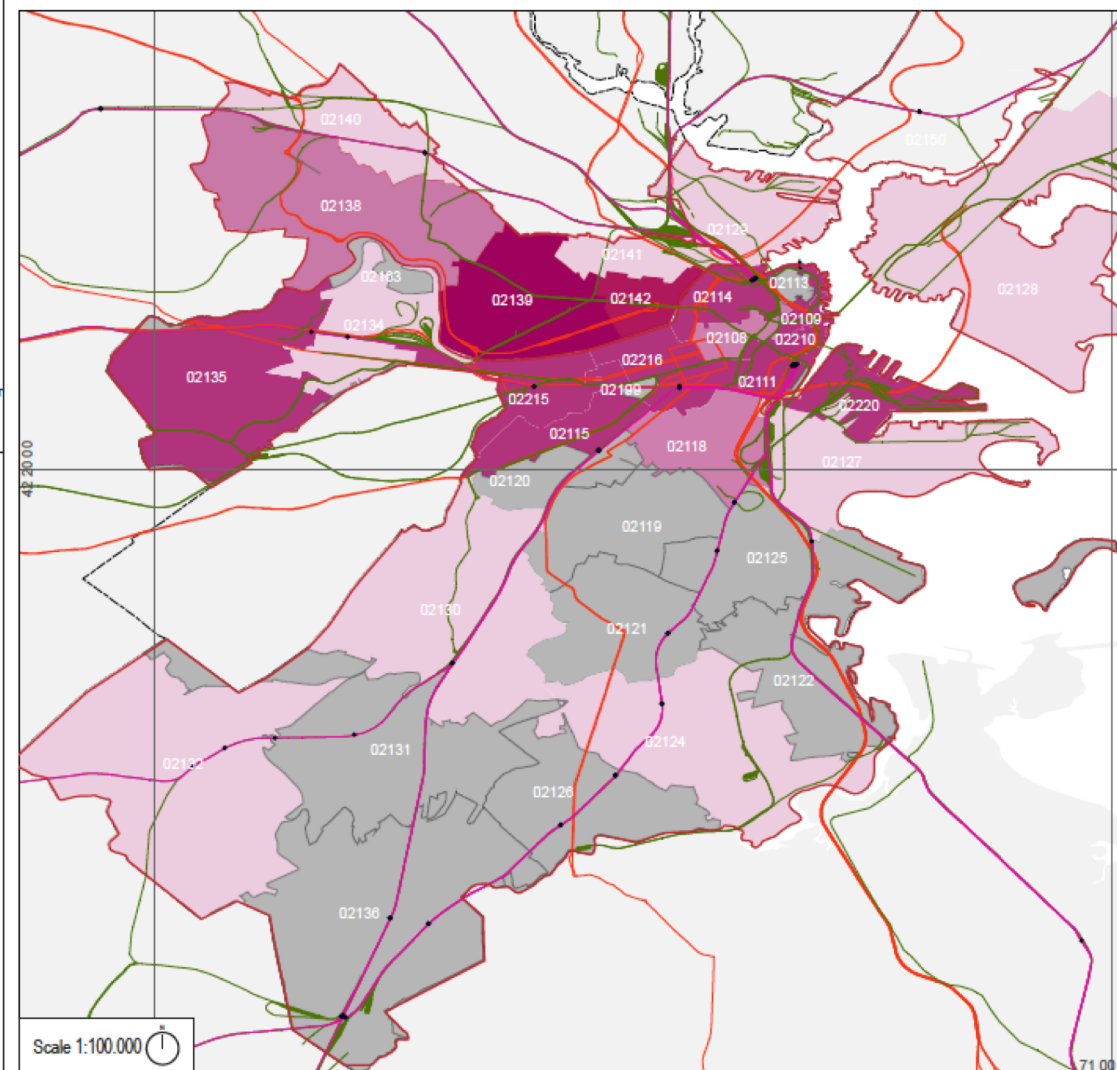
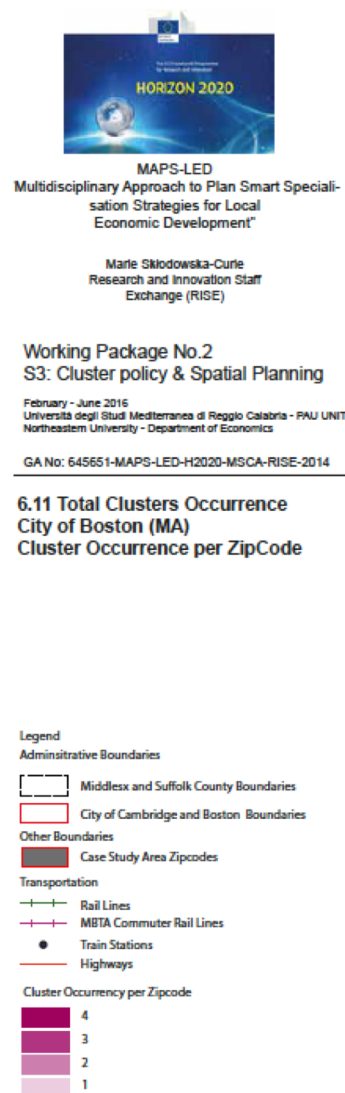
## MAPS-LED as support in activating the EDP



MAPS-LED as support in activating the EDP

Cluster Occurrence  
per Zipcode

Spatial Cluster  
Concentration?  
or  
Spatial Cluster  
Fragmentation?



## V. A spatial oriented perspective within EDP for S3 implementation

The NAICS-Land Use association

### Second Level Cluster Spatialisation Urban Level

### NAICS-Land Use Association

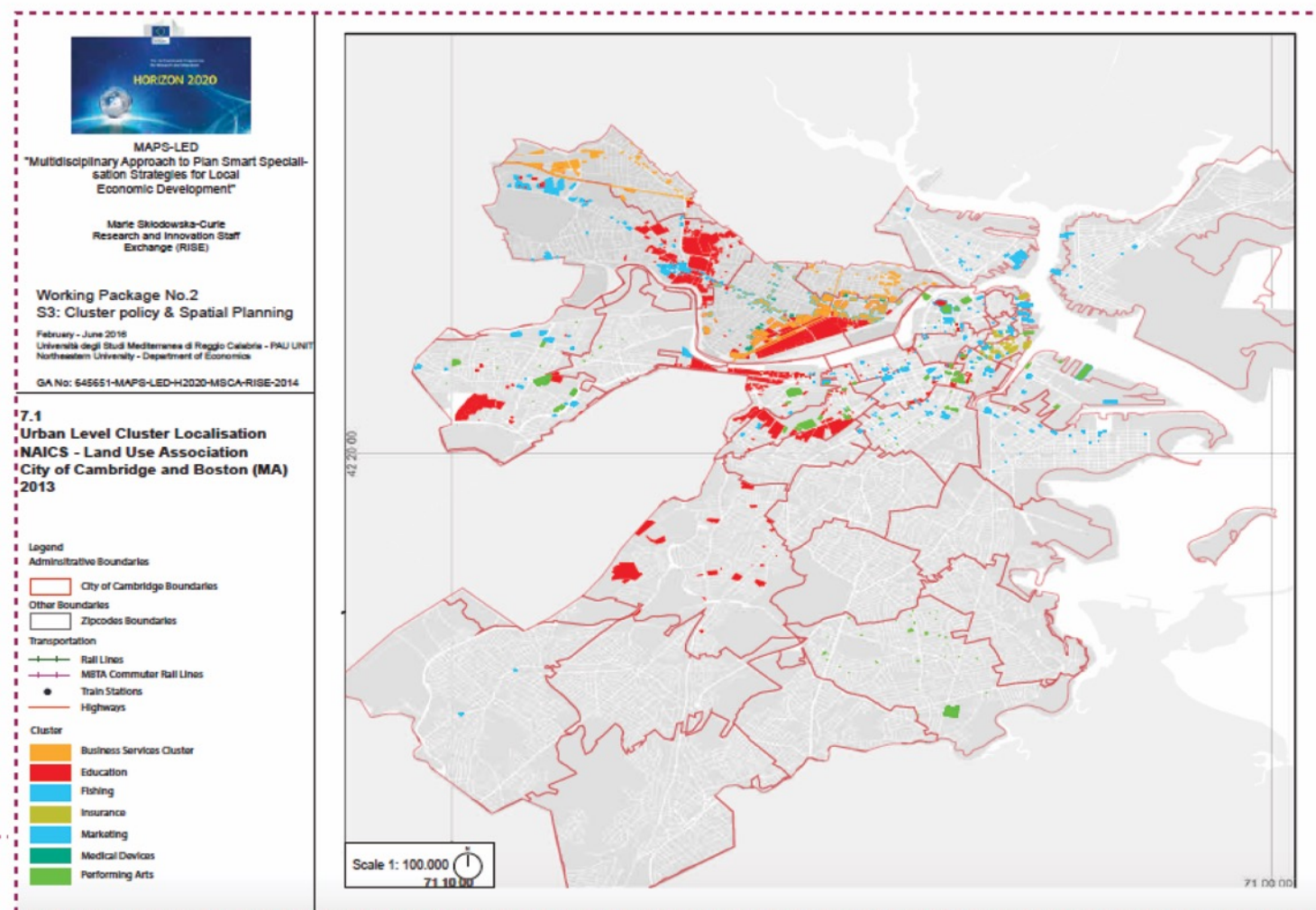
tested in August 2015 - updated in 2016

### Zoning Analysis

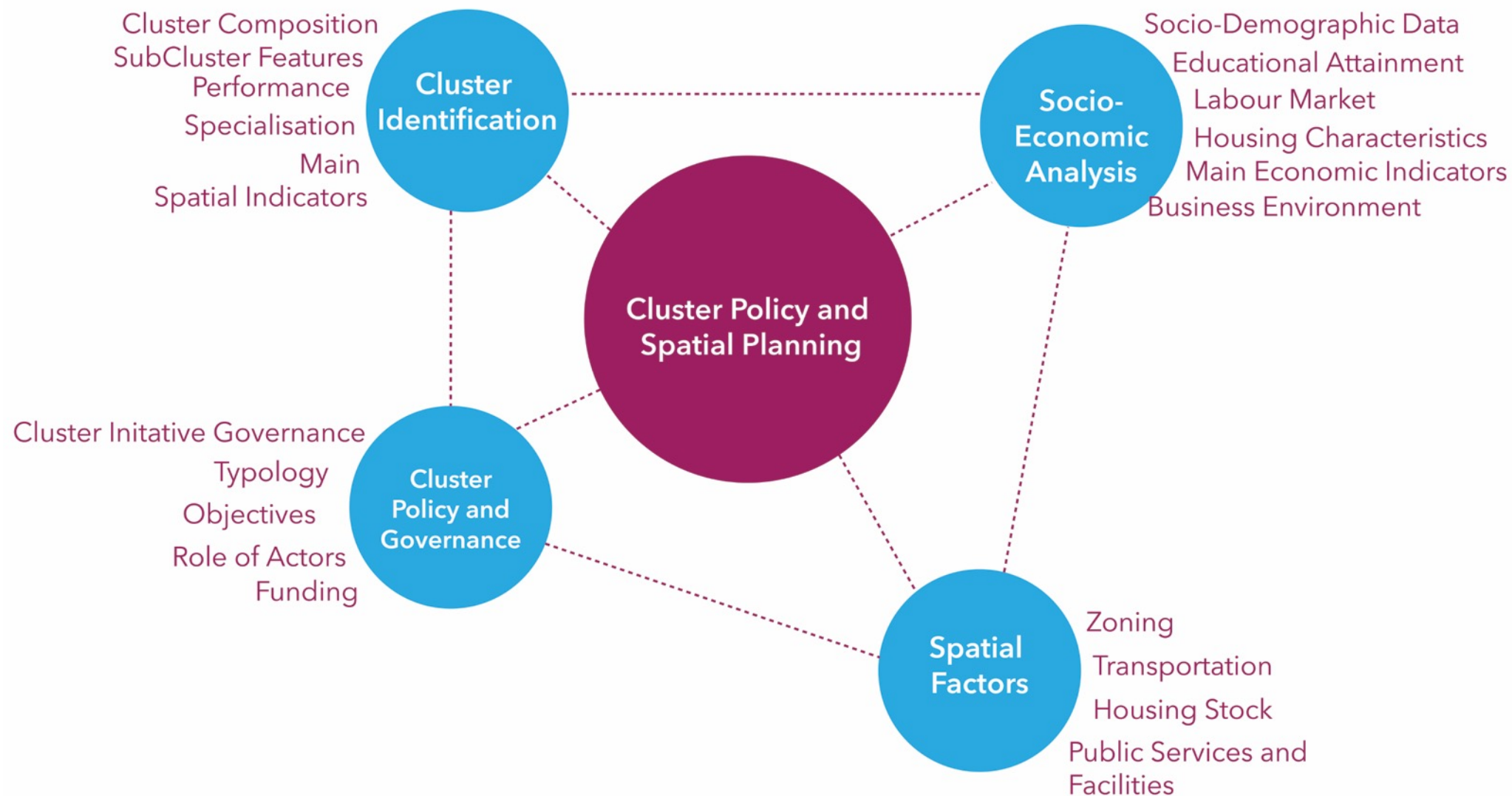
Zoning Code (Boston) - Zoning Code Cambridge  
Data Parcels Fiscal Assessment Land Use Categories  
Mass - Cities

### Correspondence between Zoning Categories and NAICS

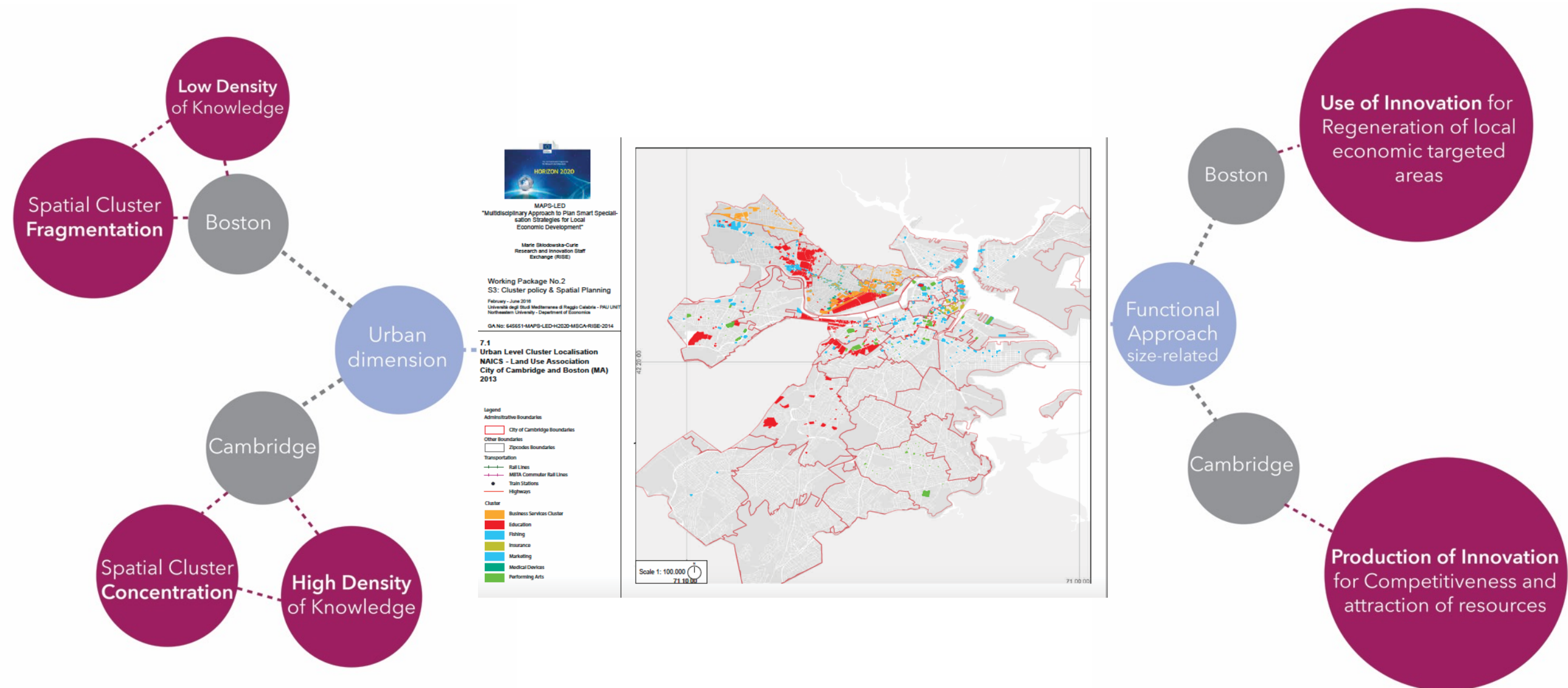
### Cluster Spatialisation



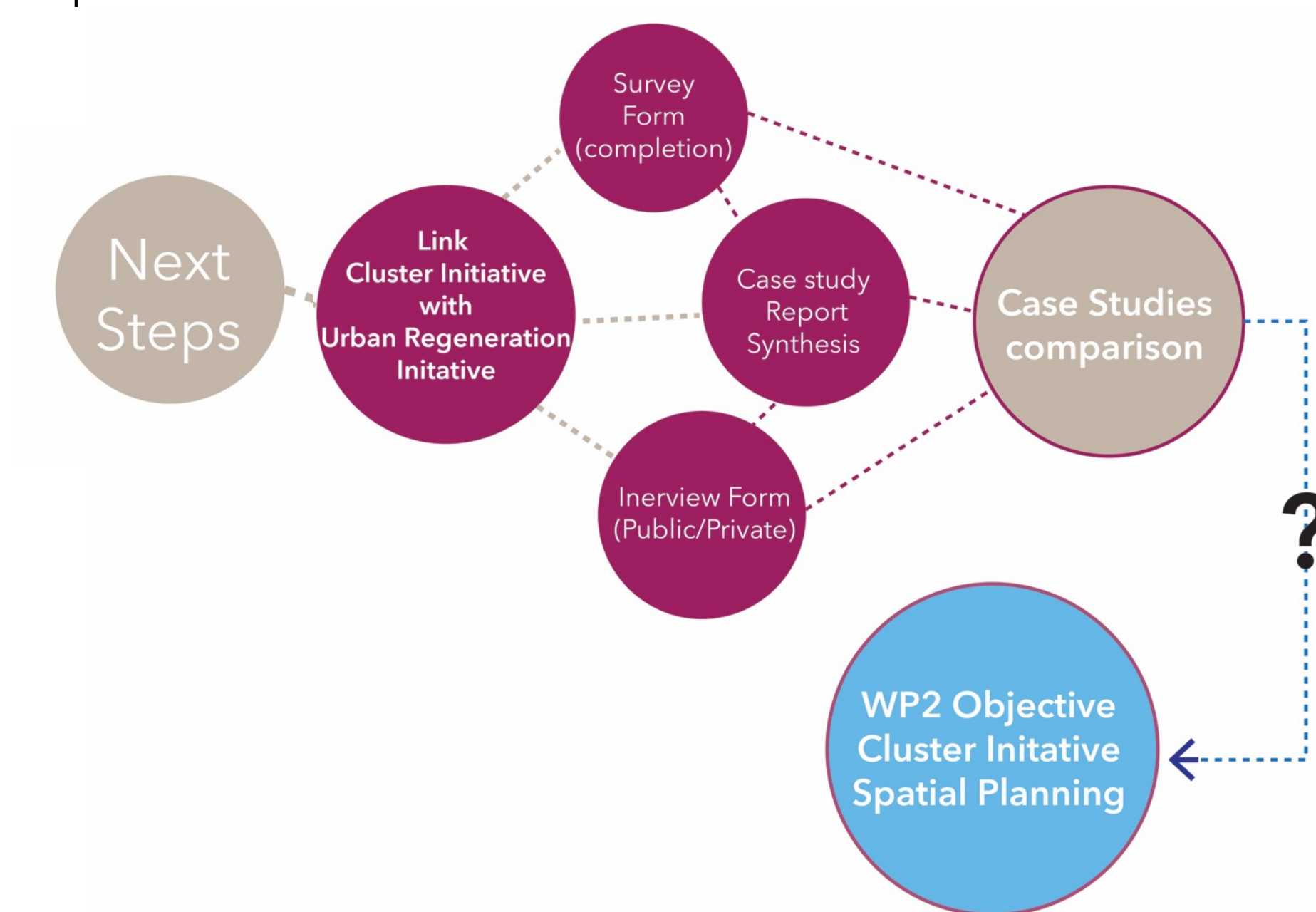
## Setting the Context through the MAPS-LED methodology



# Potential Preliminary Findings



# Next Steps





Marie Skłodowska-Curie RISE  
MAPS-LED  
Multidisciplinary Approach to Plan Smart Specialisation Strategies  
for Local Economic Development



# Thank You!

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