


# National Spatial Data Infrastructure:

Between Necessity and Possibility

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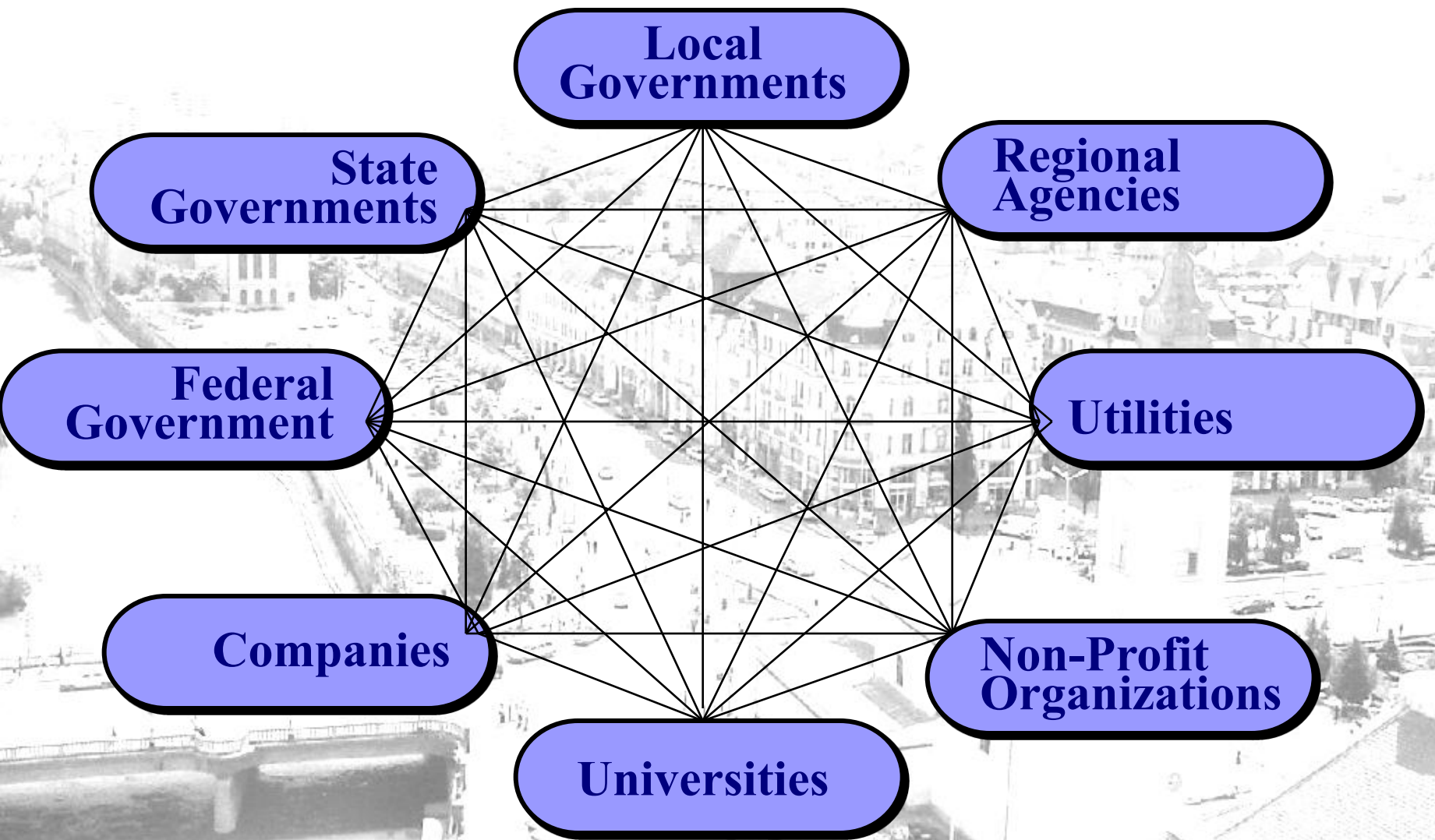


# **The power of GIS is the power of partnership.**



An universal approach and extensive  
government support make it all  
possible

# Partnership Organization





# Standards

## Information Architecture

Data Maintenance

Training

*Data Models*

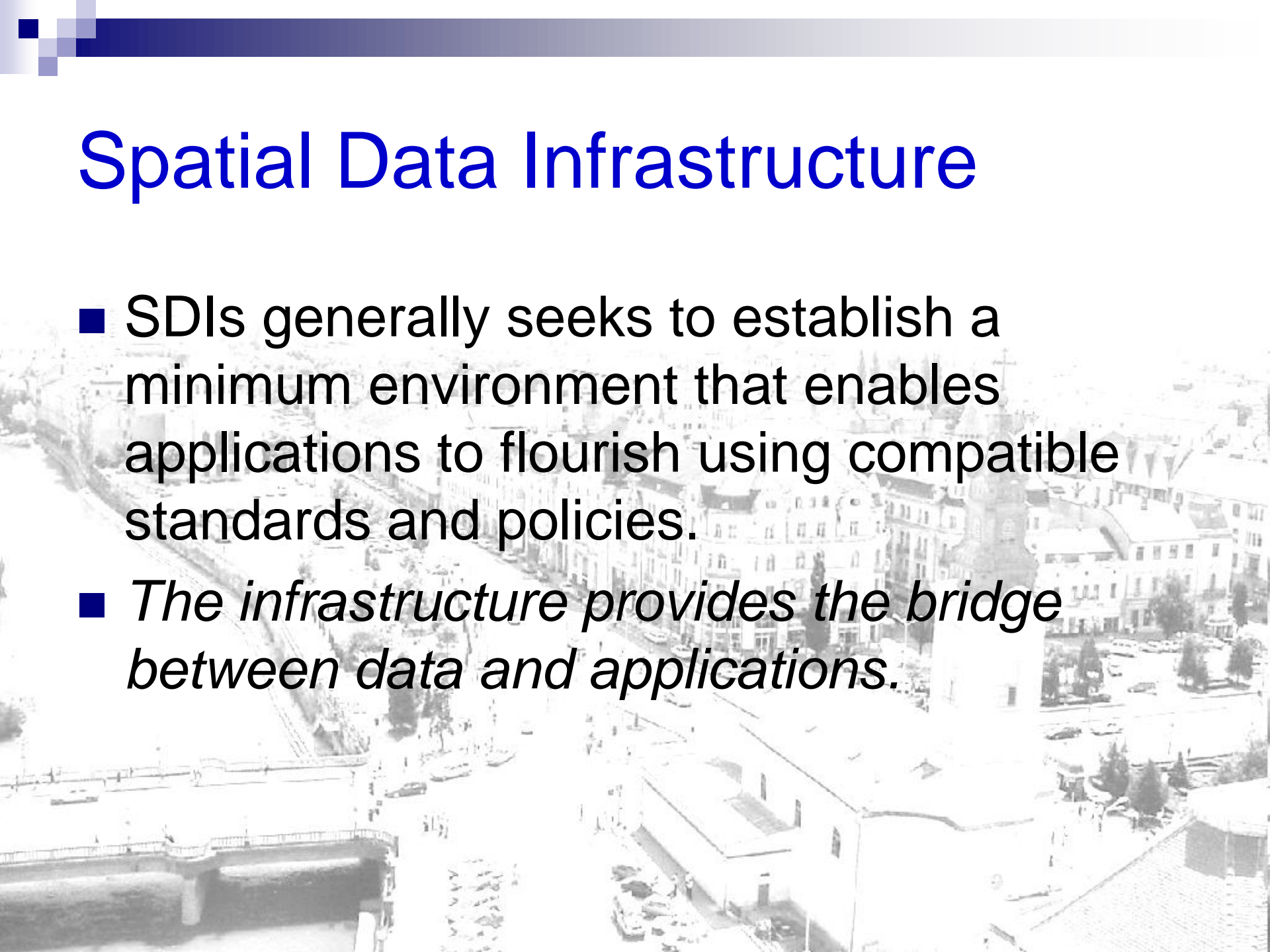
Formal  
Agreements

High-speed  
Networks

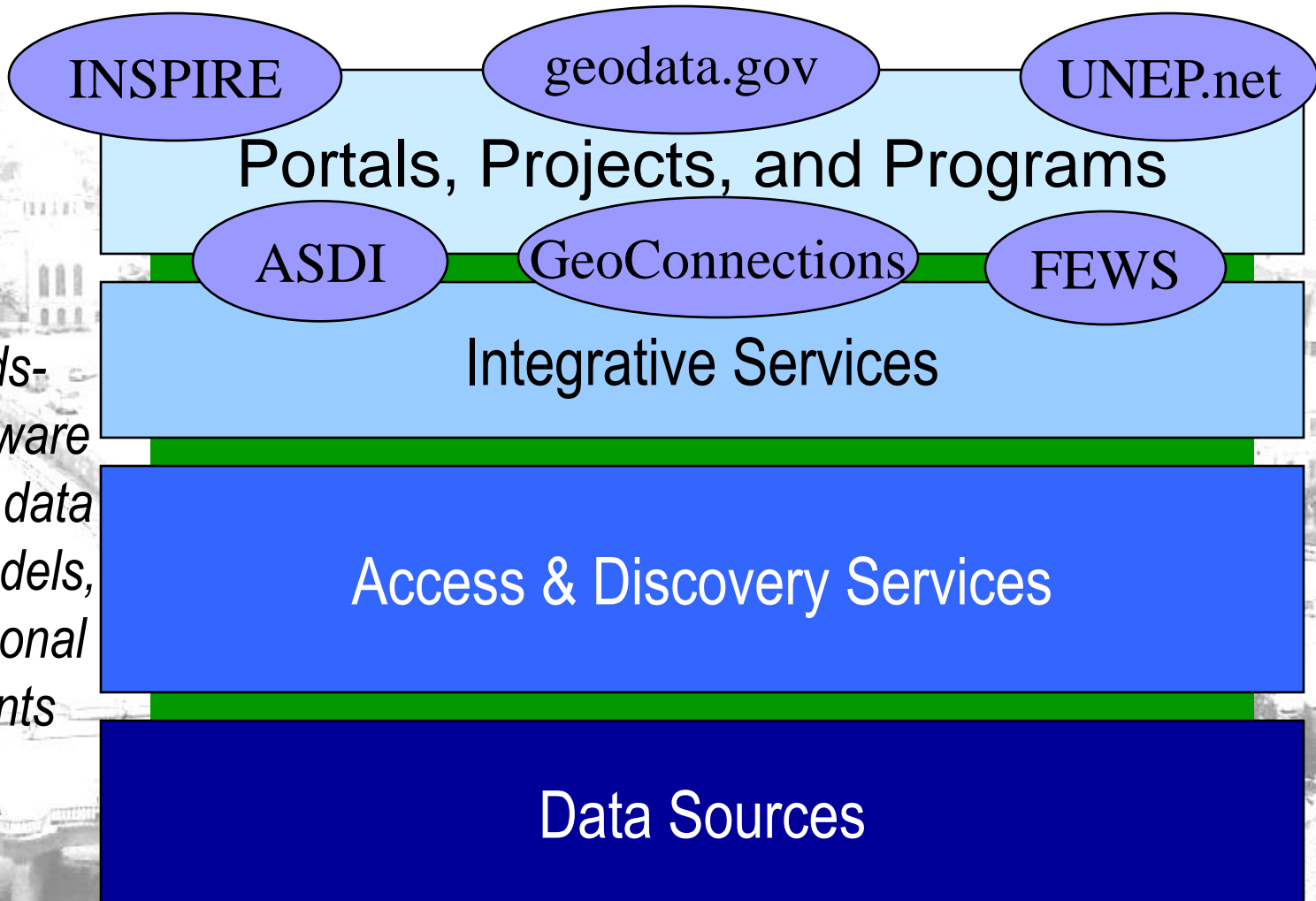
*Synchronized Schedules*



# Spatial Data Infrastructure

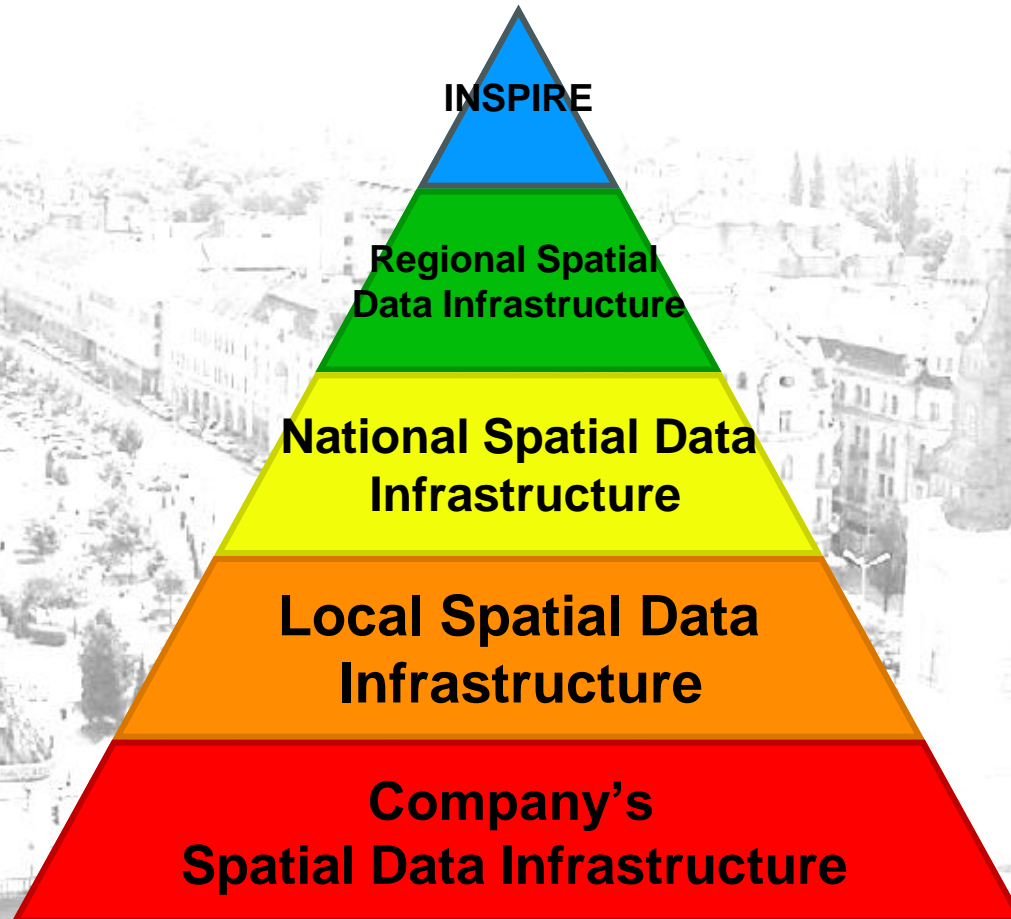
- 
- SDIs generally seeks to establish a minimum environment that enables applications to flourish using compatible standards and policies.
  - *The infrastructure provides the bridge between data and applications.*

# The New Paradigm of SDIs



*Standards-based software Interfaces, data content models, and operational agreements*

# Spatial Data Infrastructure





# Levels of interoperability

## **Institutional level:**

- Access rules**
- Data protection**
- Copyright**

## **Technical level:**

**Hardware, software and communication  
protocols compatibility**

## **Semantic level:**

**Data standards  
Public data**

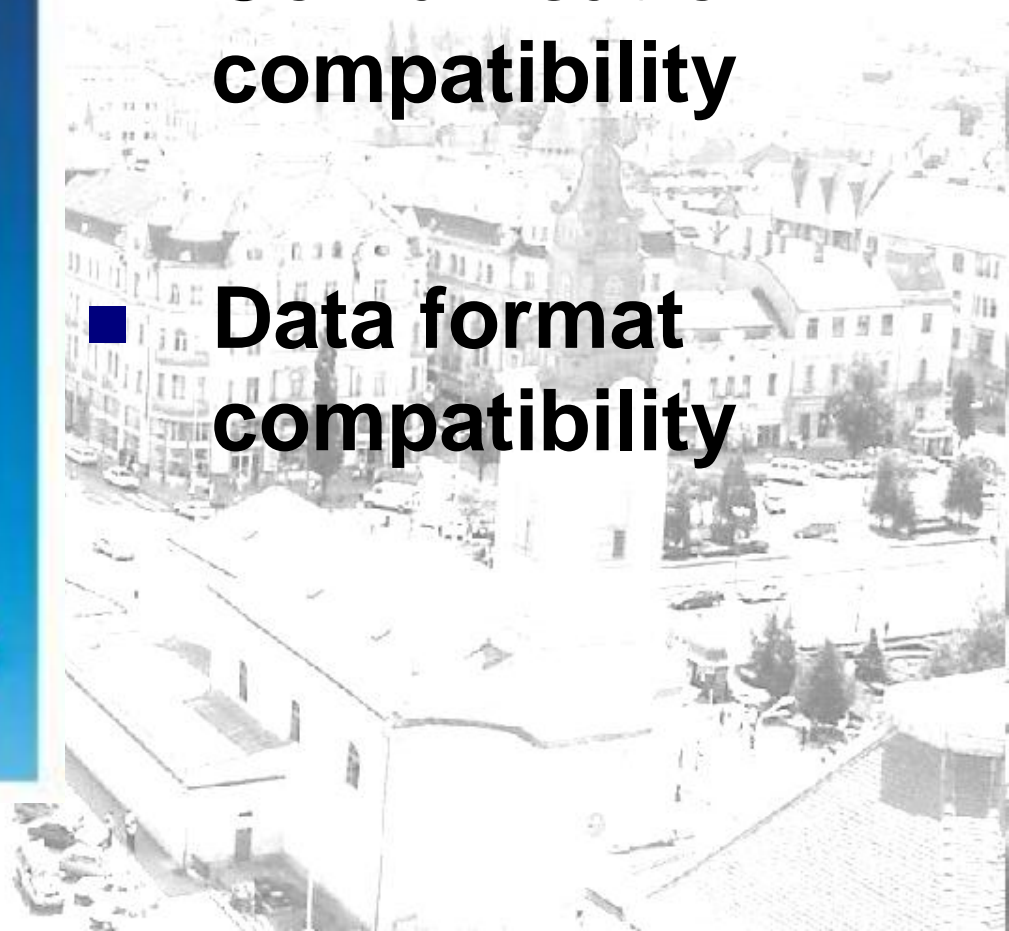




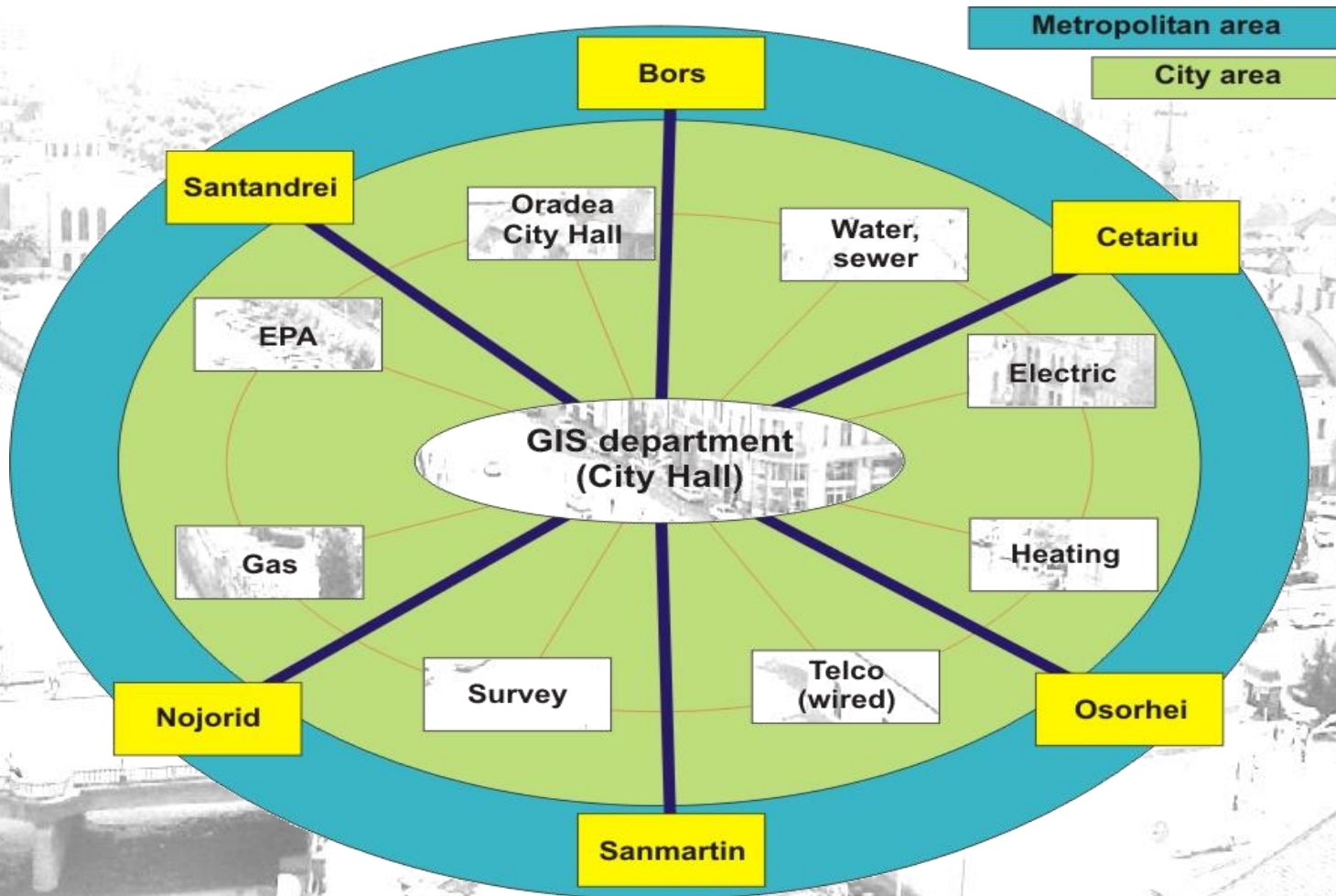
# Interoperability- example



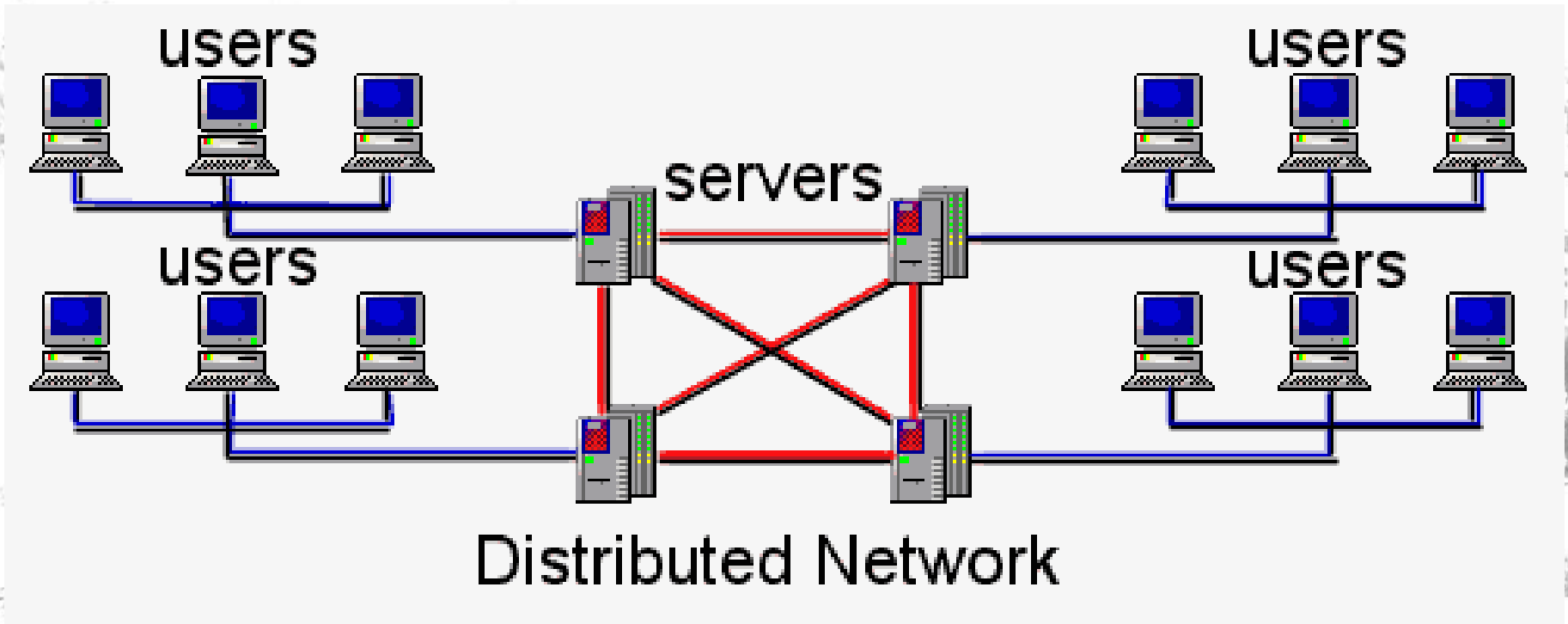
- **Communication compatibility**
- **Data format compatibility**



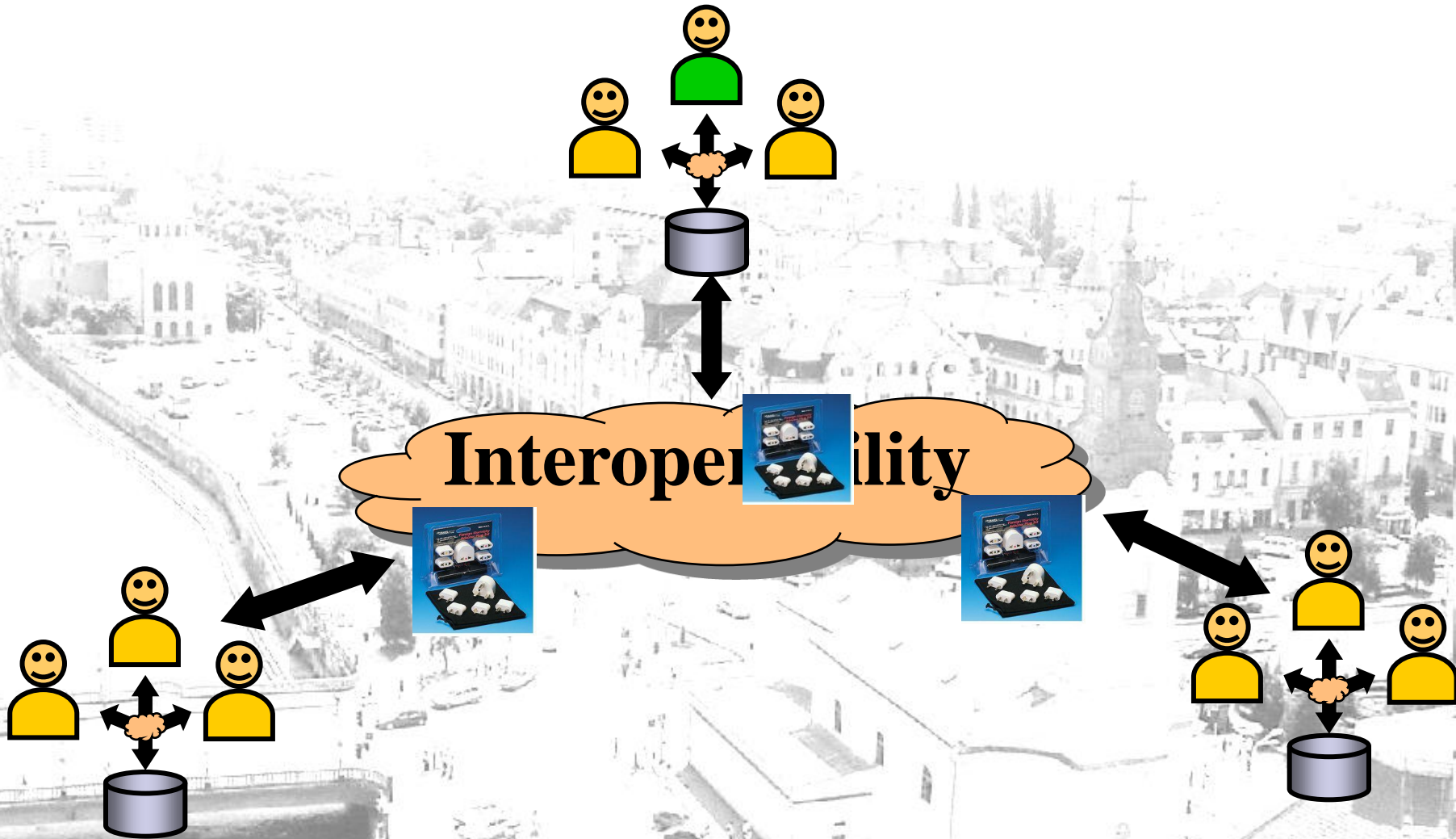
# Vision



# The chosen SDI



# The chosen SDI



# Necessary Steps

## Preliminary steps

- To define the geospatial data structures and data standards,
- To establish and to define classified lists of unique codes at metropolitan level
- To solve the communication and problems at metropolitan level
- **To establish the access and sharing rules for data (public data, private data, shared just between partners)**
- To establish the data transfer format which is recognized by all the software used by the partners

# Necessary Steps

- The correlation of existing geospatial data with the established data standards for each partner
- The integration of all geospatial data and alpha numeric data
- The implementation of necessary software modules for data exchange and interrogation
- The implementation of necessary software modules for Intranet and Internet portals

### Serviciul GIS - Primaria Oradea

#### Legend

- Spitale
- Scolii
- PARCARI
- poluatori
- Cladiri
- Strazi
- Zona functionala
- A
- C1

#### Measure

m

sq m

#### Map Size

Medium



1,250 m

### Serviciul GIS - Primaria Oradea

**Legend**

- Spitale
- Scoli
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- C1

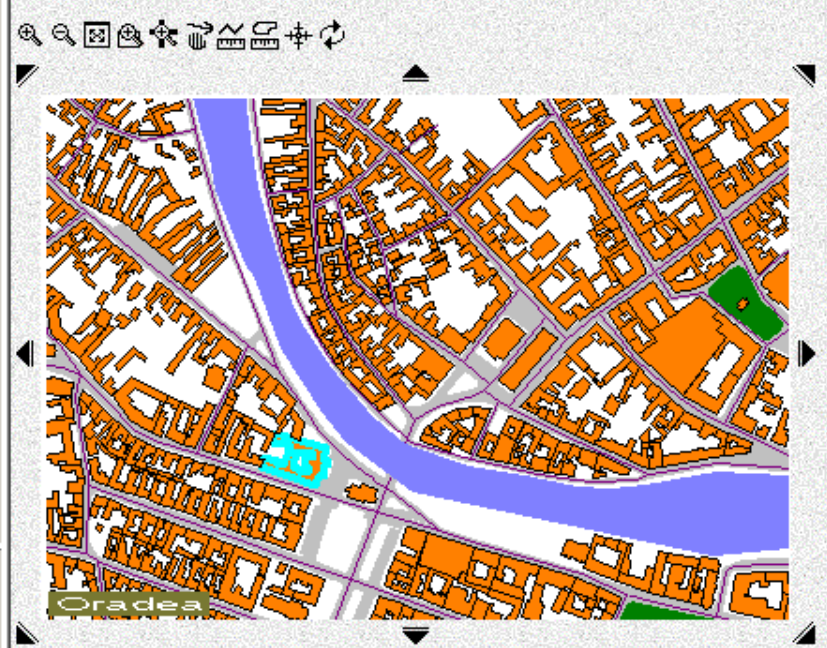
**Measure**

Line: m

Poly: sq m

**Map Size**

Medium



100 m

**Nivele**

Obs Primaria

zona\_FISCala A

LITERA

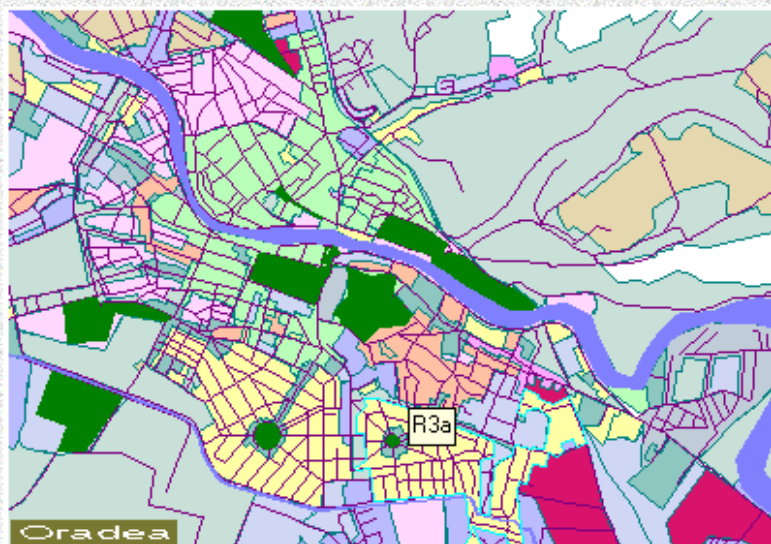
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## Serviciul GIS - Primaria Oradea

## Legend

- |                                     |  |                  |
|-------------------------------------|--|------------------|
| <input type="checkbox"/>            |  | Spitale          |
| <input type="checkbox"/>            |  | Scoli            |
| <input type="checkbox"/>            |  | PARCARI          |
| <input type="checkbox"/>            |  | poluatori        |
| <input checked="" type="checkbox"/> |  | Cladiri          |
| <input checked="" type="checkbox"/> |  | Strazi           |
| <input checked="" type="checkbox"/> |  | Zona functionala |
|                                     |  | A                |
|                                     |  | C1               |



## Measure

 m  
 sq m  

## Map Size

cod\_zona R3a

## DESCRIERE

Zona R3 permite in conformitate cu situatia existenta ,realizarea de lcuinte unilaterale sau pentru doua familii, cu o densitate mai mare decat zona R1 si R2 .Zona permite de locuinte in sistem izolat ,cuplat si/sau insiruit.Pentru utilizarea eficienta a terenului se recomanda ca suprafata suprafata etajului 1 sa fie de minim 75% din suprafata parterului.

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