



# **USE OF AVAILABLE DATABASES AND THE WAY THEY ARE AGREGATED IN THE PROCESS OF INFRASTRUCTURE MAPPING**

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ITU-EC-UKE Regional Conference for Europe  
Broadband Services and Infrastructure Mapping  
Warsaw, 11-12 April 2016

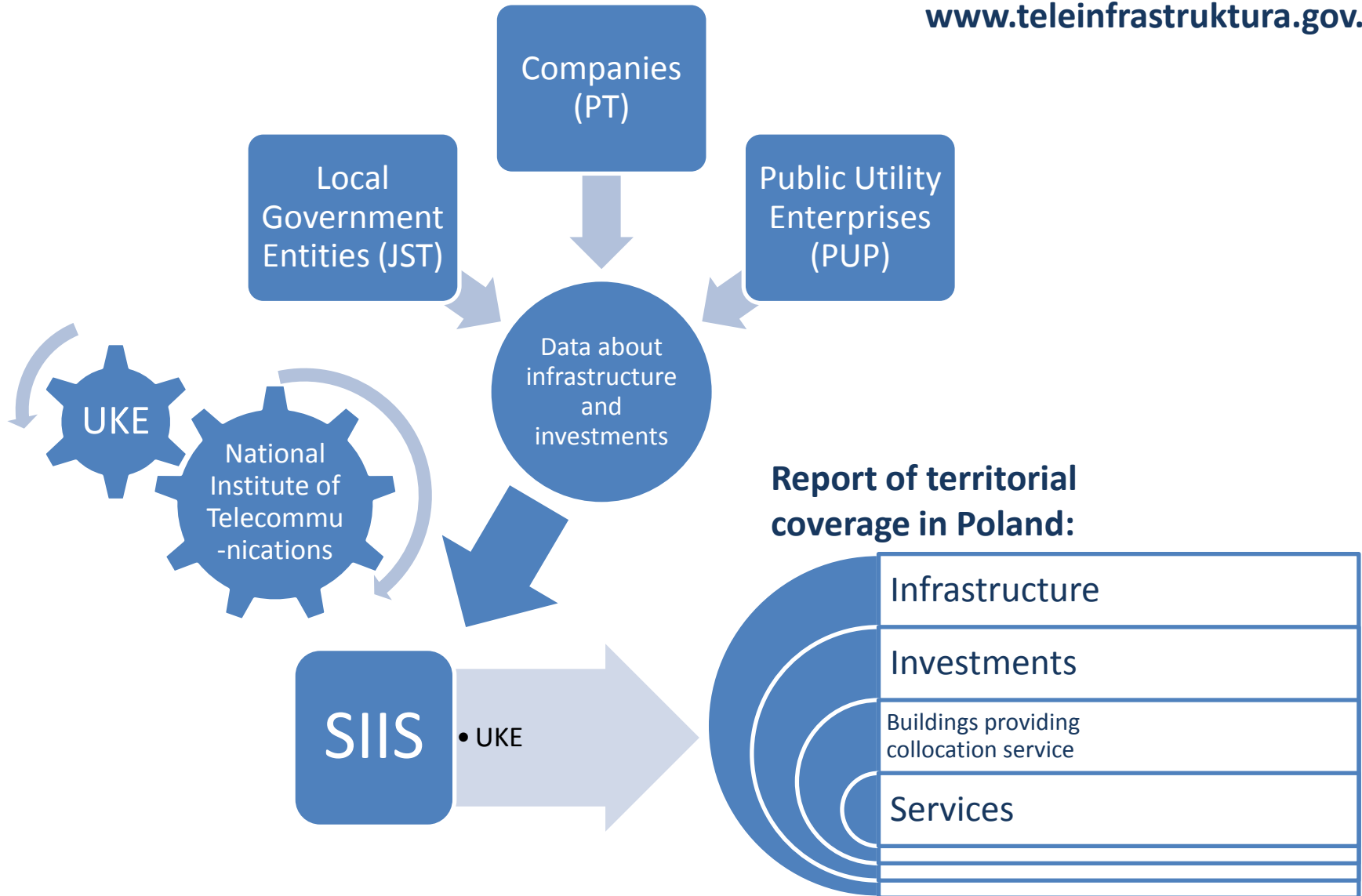


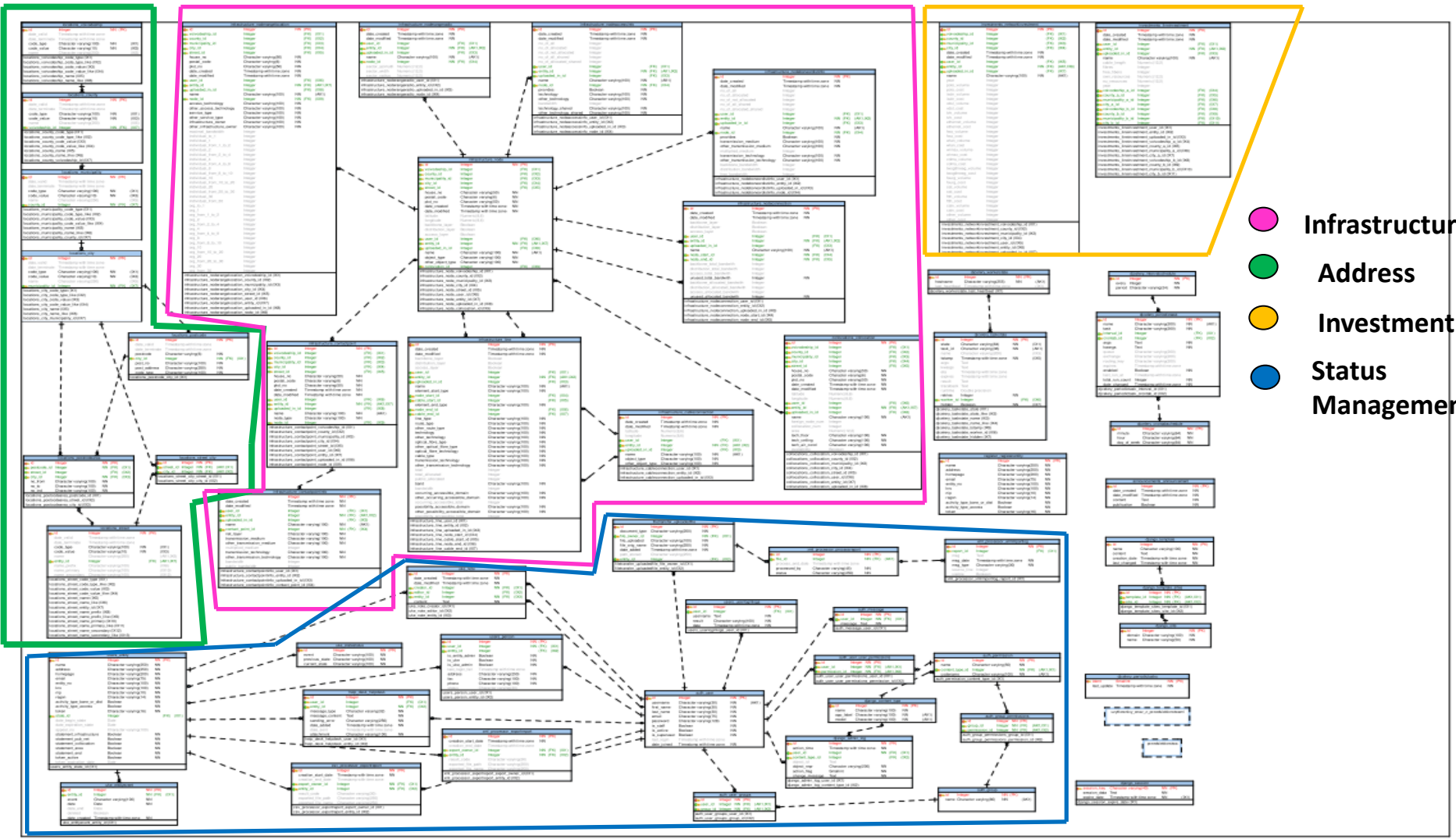
## Databases used by the Office of Electronic Communications

Name	Operator	Scope
SIIS - Information System on Broadband Infrastructure	UKE – Office of Electronic Communications	Data about telecommunications infrastructure and planned investments in Poland
PRG - Polish National Register of Boundaries	GUGIK – General Office of Geodesy and Cartography	Data about boundaries and areas of territorial division units of Poland
BDOT10K -Topographic Database	GUGIK	List of all topographical objects
PESEL - Universal Electronic System for Registration of the Population	MSWiA – Ministry of the Interior and Administration	Database of national identification numbers. Contains data about every resident of Poland. Provides age diagram.
TERYT - National Official Register of the Territorial Division of the Country	GUS - Central Statistical Office	Systems of identifiers and names of units of territorial division and localities, statistical regions and census enumeration areas, identification of addresses of streets, real estates, etc.
Demographics Database	Commercial Supplier	Variables representing living population, building types, commercial activity



# **Information System on Broadband Infrastructure (SIIS) Database**

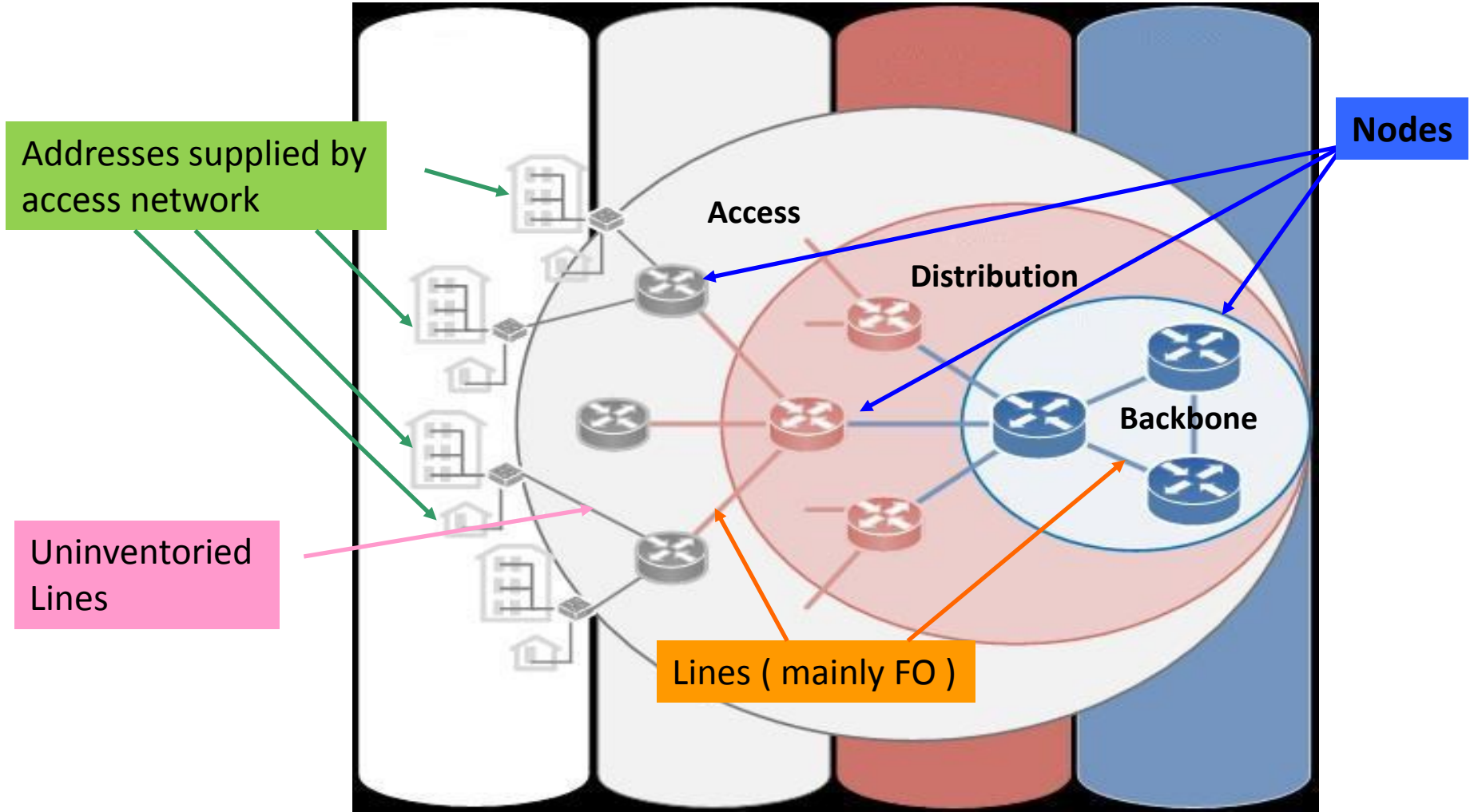


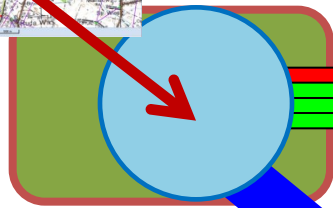


- Infrastructure
- Address
- Investment
- Status Management



## Network model implemented in regulation





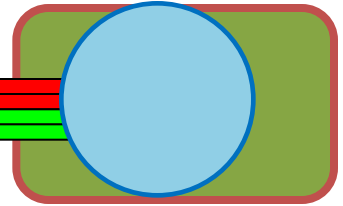
Node A

Number of pairs

Junction e.g. splice for FO)  
(geographical coordination)



Utilization



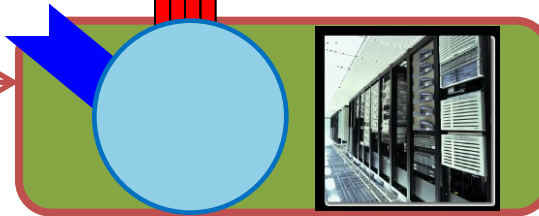
Node B

*Throughput*  
*Logical Relation*

Lease possibility  
• YES / NO  
• No. of pair to lease

Type of location:

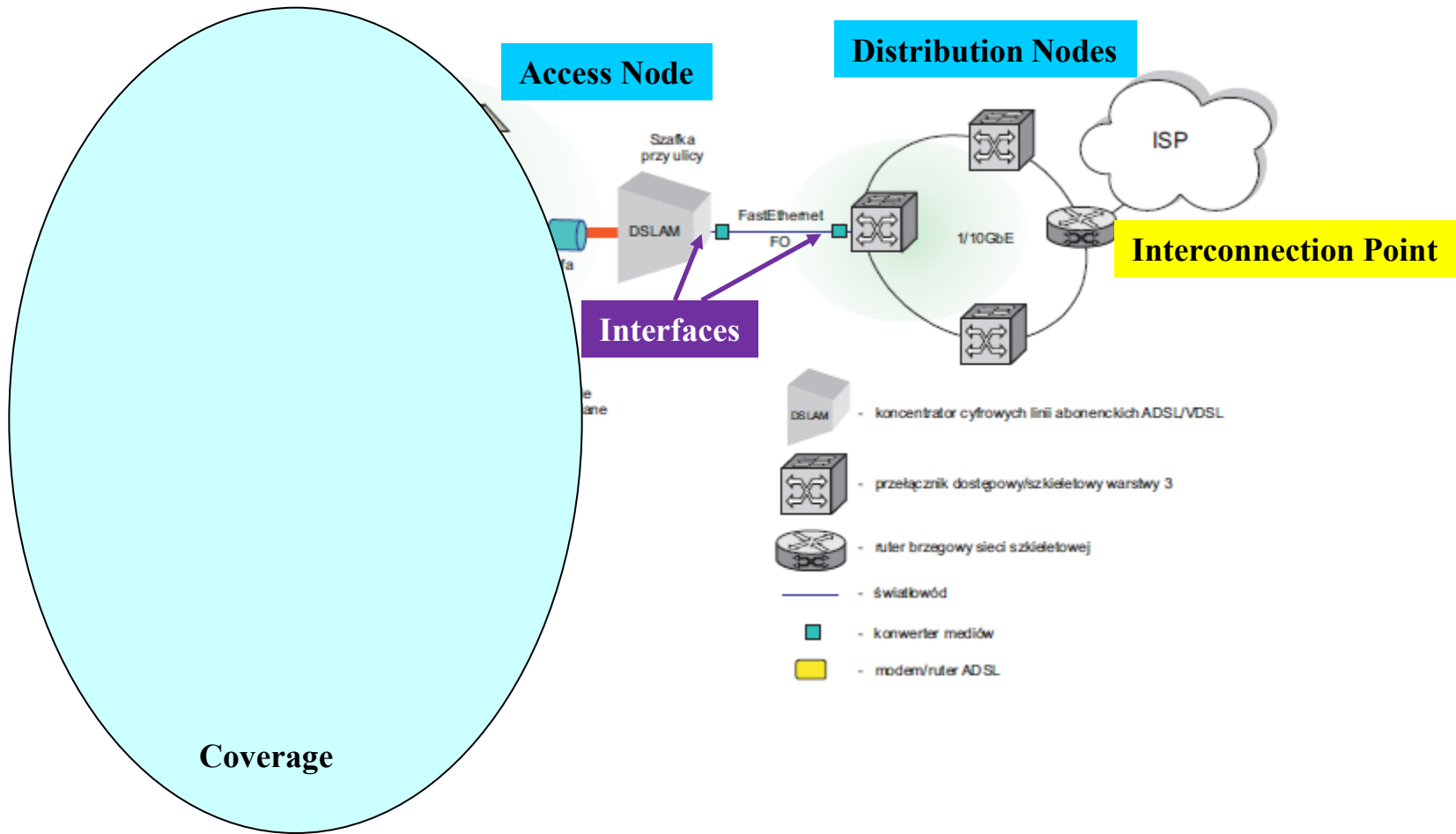
- Building
- Cabinet
- Tower
- Mast
- .....



Node C

**Collocation building**

Ability to collocate,  
technical information  
like : power, airconditon etc.



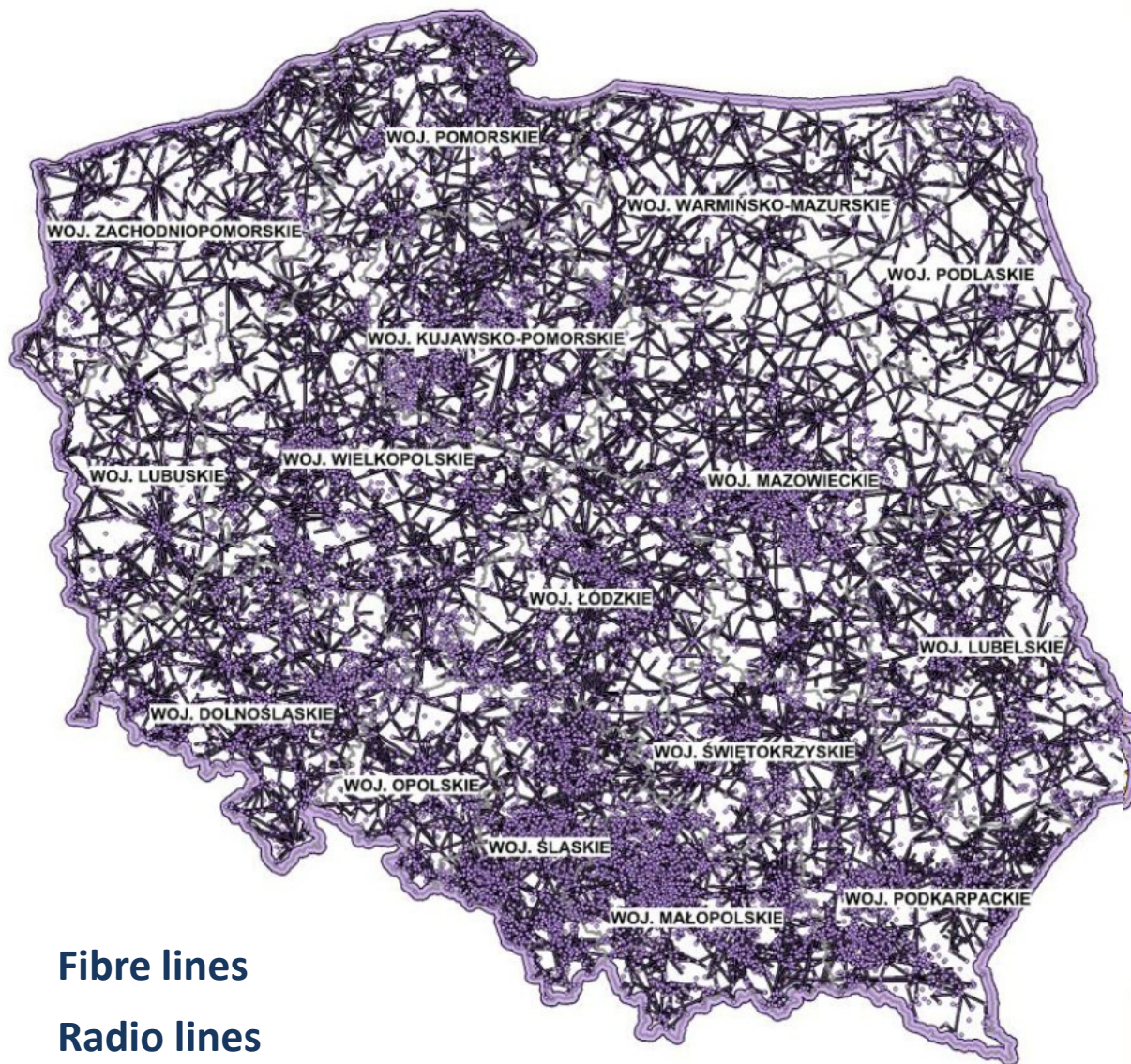




Republic of Poland

Office of Electronic Communications

Data: Infrastructure



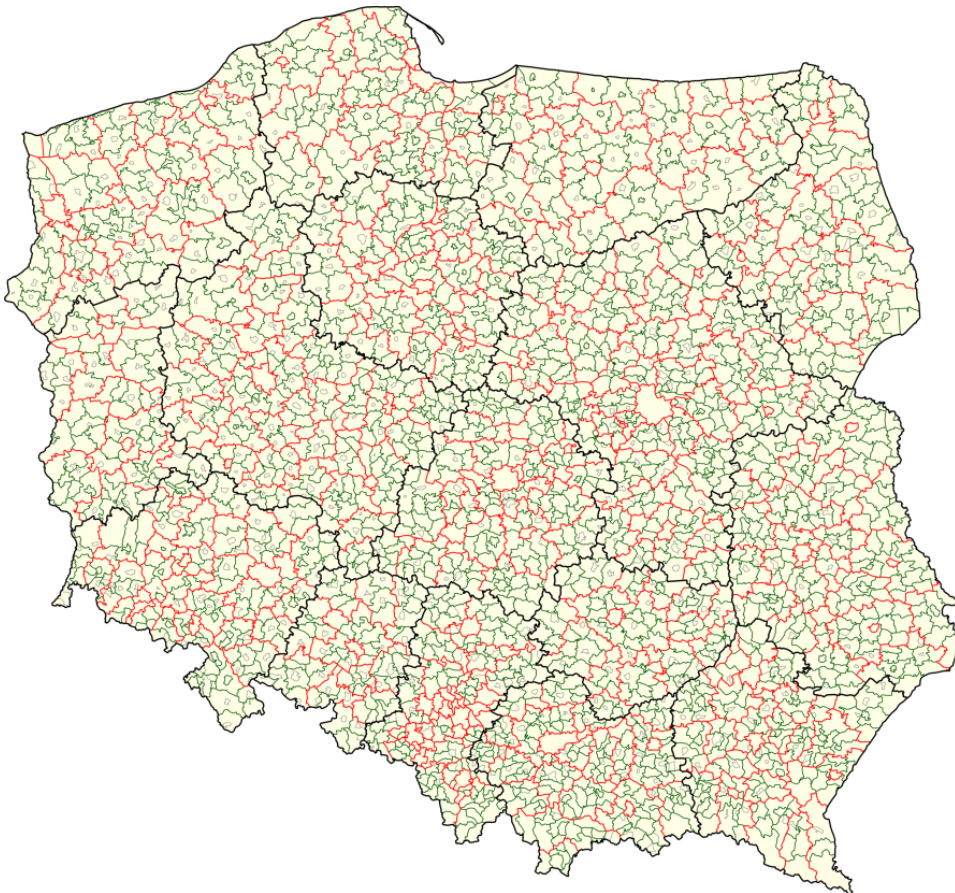
Fibre lines

Radio lines



## PRG – Polish National Register of Boundaries

Provides geocoded data of administrative divisions on all levels (voivodeships, counties, municipalities, special districts etc).





## BDOT10K – Topographic Database

BDOT10K catalogues all topographic data and buildings.

Catalogued list of all buildings in the country - crucial for the analysis conducted at UKE.





## TERYT

The system distinguishes, with the use of separate identifiers:

1. System of identifiers and names of territorial division units - TERC
2. System of identifiers and localities names - SIMC
3. System of statistical regions and census enumeration areas - BREC
4. System for identification of street addresses, real estate, buildings and dwellings - NOBC
5. The central catalogue of streets - ULIC



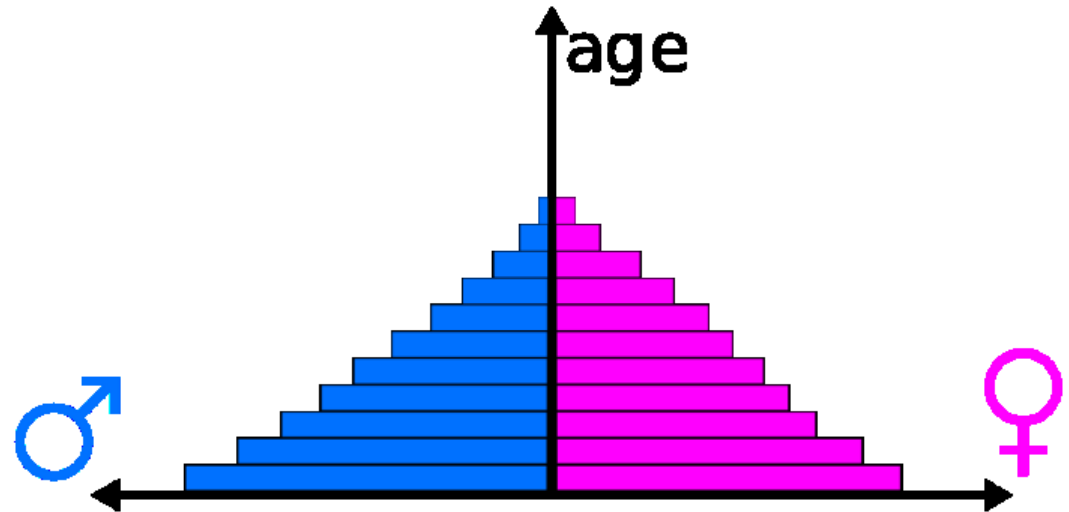


## PESEL

PESEL contains a lot of information

- surname and names;
- date and place of birth;
- sex;
- citizenship;
- marital status;

and more.



Age can be used to compile data about age structure in specified areas.





## Demographics Database:

### Index of telecommunications services usage

Index built on questions regarding:

- mobile phone usage and type of service (pre-paid or post-paid, private or corporate) among household members;
- average expenditures of household members on mobile phones, fixed phones and internet;
- satisfaction with services of mobile and fixed phone operators;
- intention to buy a mobile phone





## Analytical GIS tools



**FME** – a collection of tools for data transformation and data translation



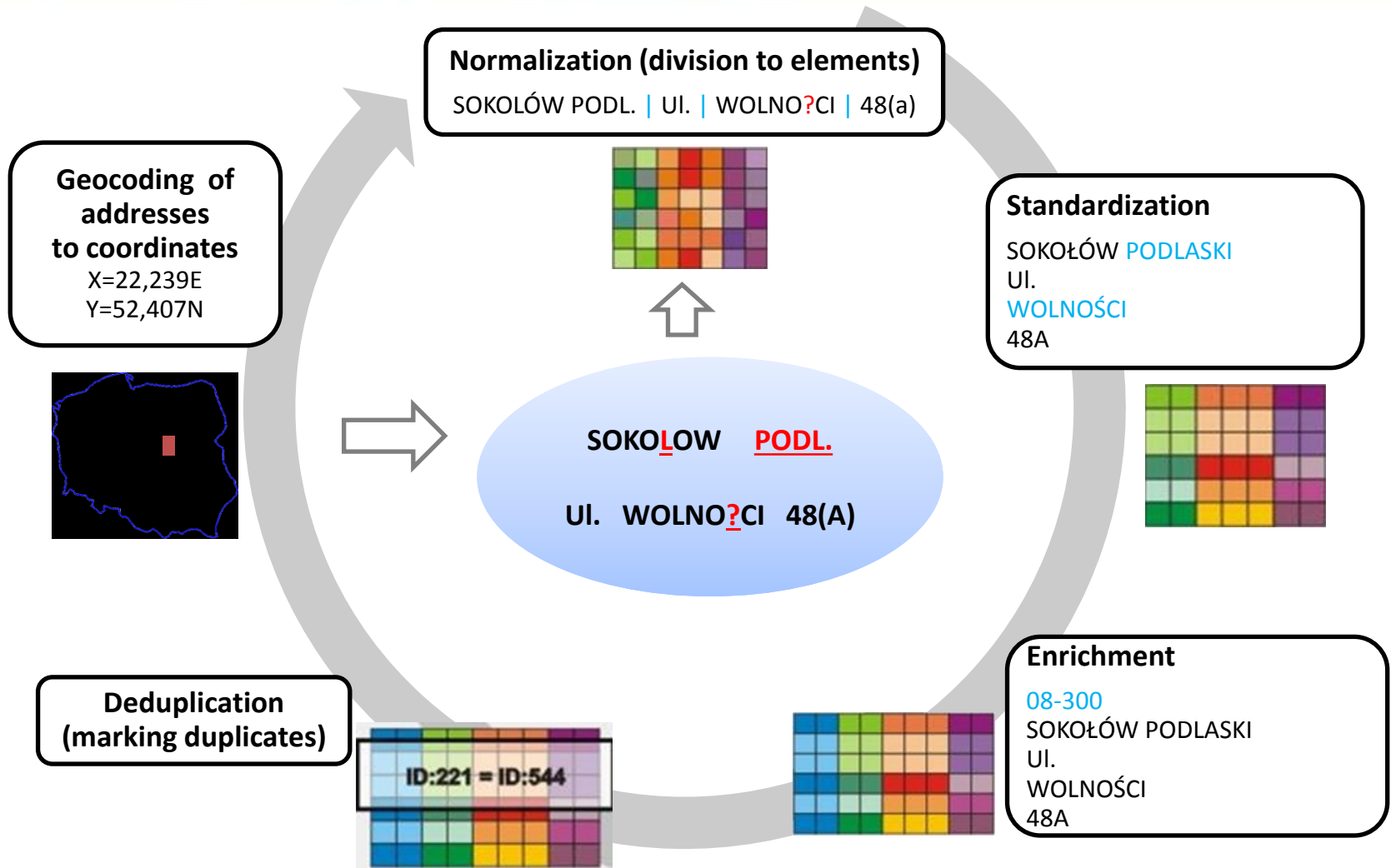
**QGIS** - cross-platform free and open-source desktop geographic information system (GIS) application that provides data viewing, editing, and analysis capabilities



**MapInfo Professional** - allows users to visualize, analyze, edit, interpret, understand and output data to reveal relationships, patterns, and trends



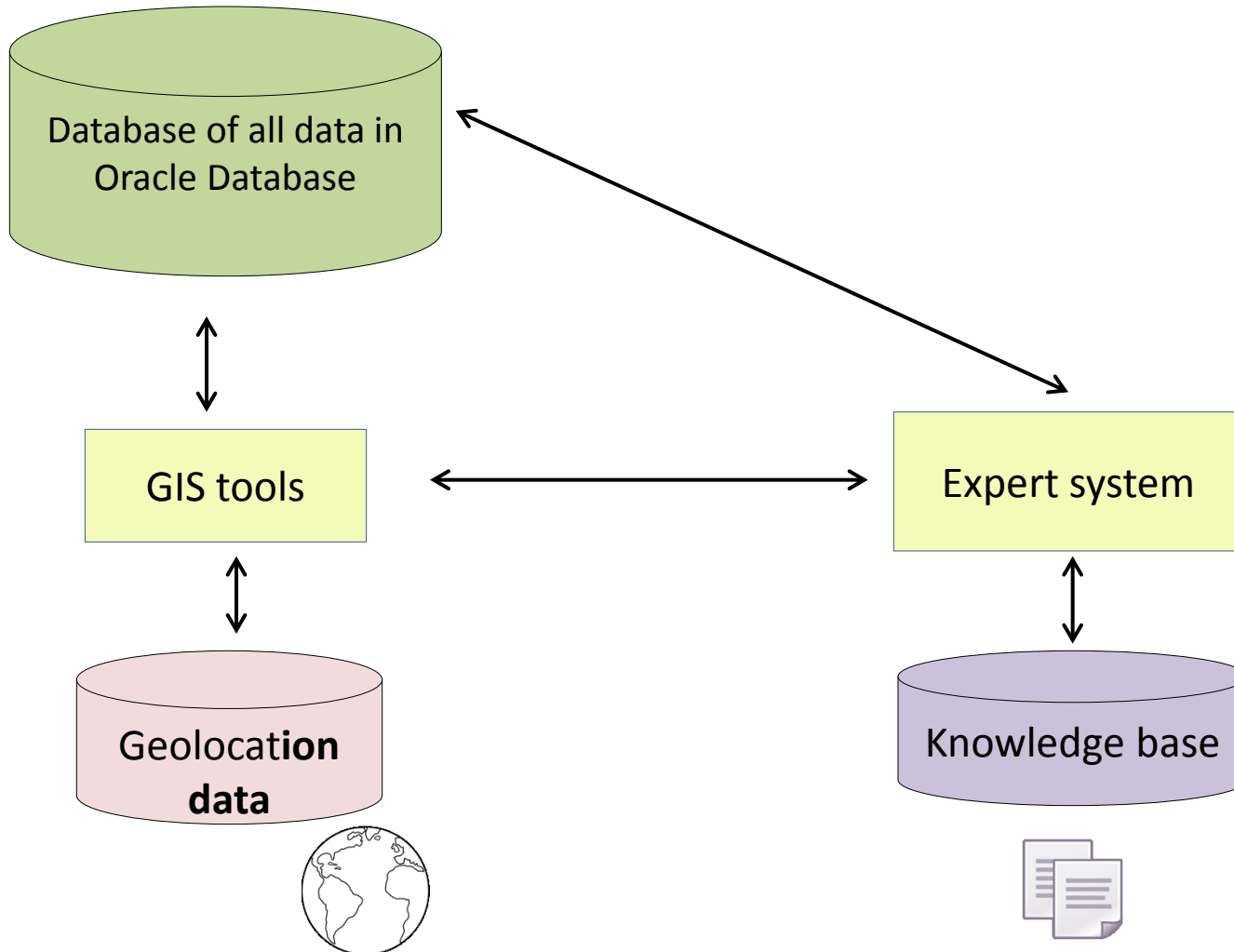
**ArcGIS** - used for: creating and using maps, compiling geographic data and analyzing mapped information





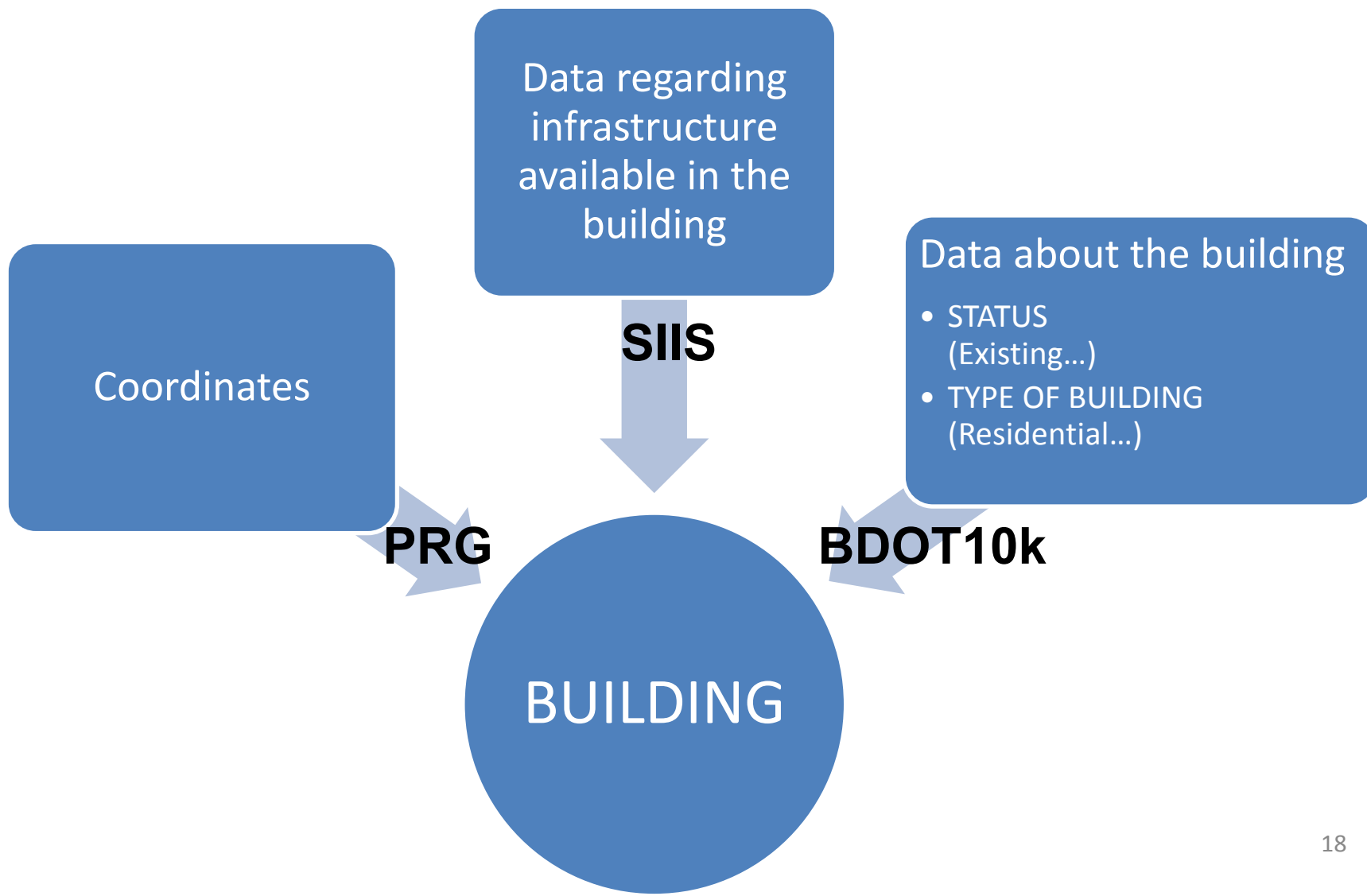


## Aggregation of data



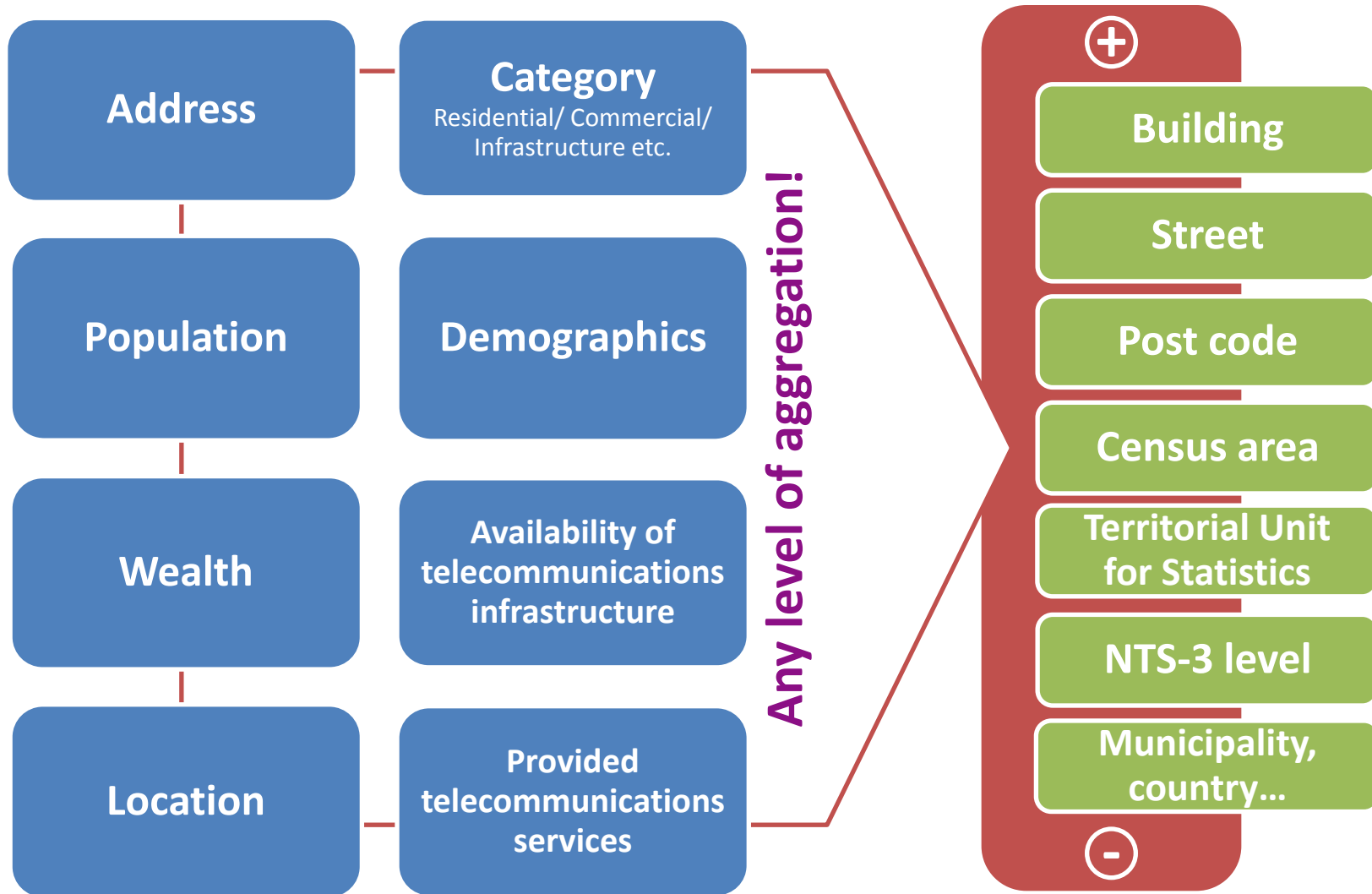


## AVAILABLE DATABASES - buildings





## What kind data do we have?





Google



lon/lat: 20.802935 52.218758

**Address:** ☆ ×

Zgody 9A  
05-850 Ożarów Mazowiecki

[Directions](#) [Search nearby](#) [Save to map](#) [more](#) ▾



Type	Businesses	Age diagram	Street	Availability of telecommunications infrastructure
	0		26 houses	



Republic of Poland

Office of Electronic Communications

# Thank you for your attention

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