



Presented at the FIG Congress 2022  
11-15 September 2022 in Warsaw, Poland

# XXVII FIG CONGRESS

## 11-15 SEPTEMBER 2022

### Warsaw, Poland

Volunteering  
for the future –  
Geospatial excellence  
for a better living

## The City of Poznań – Photogrammetry – from cadastre to digital twin

Zarząd Geodezji i Katastru Miejskiego GEOPOZ (ZGiKM GEOPOZ)

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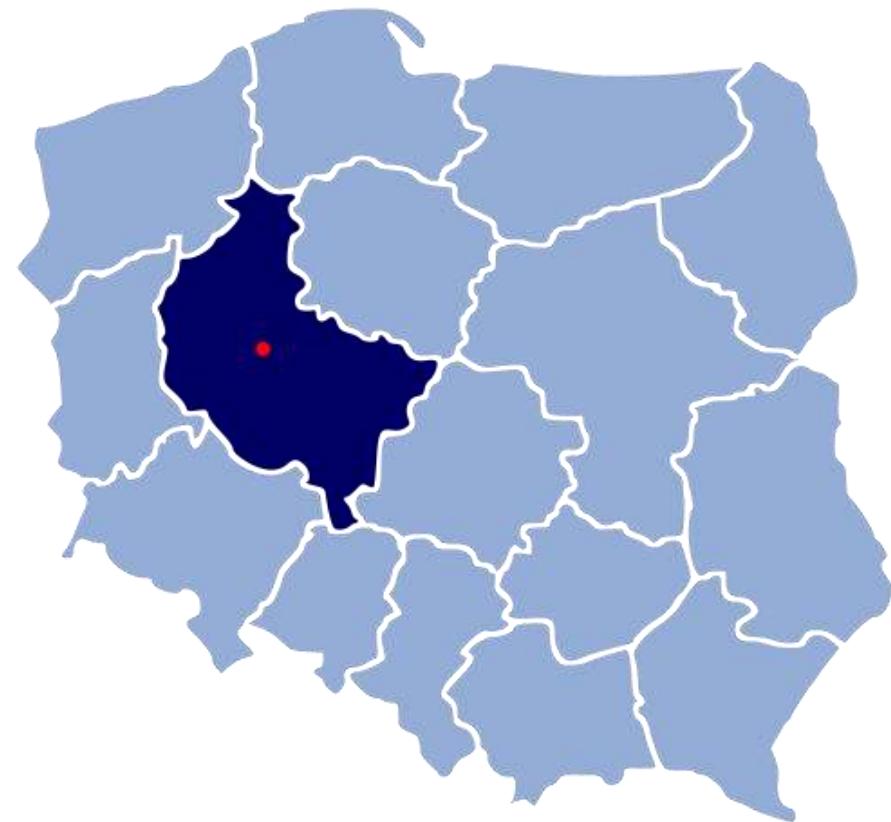


# XXVII FIG CONGRESS

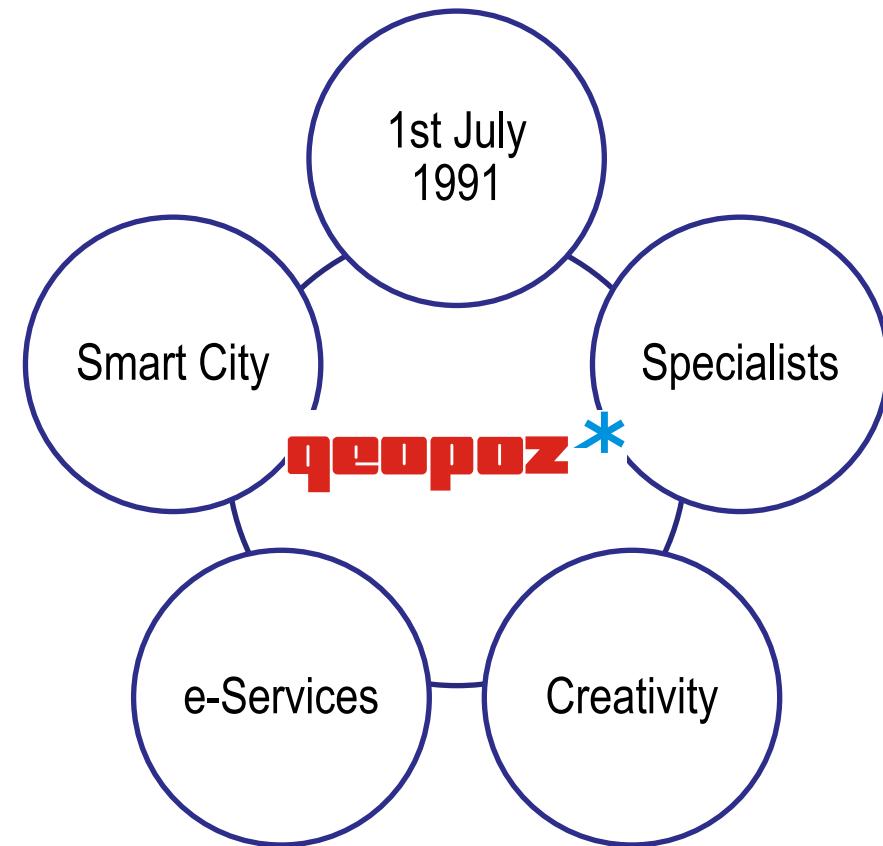
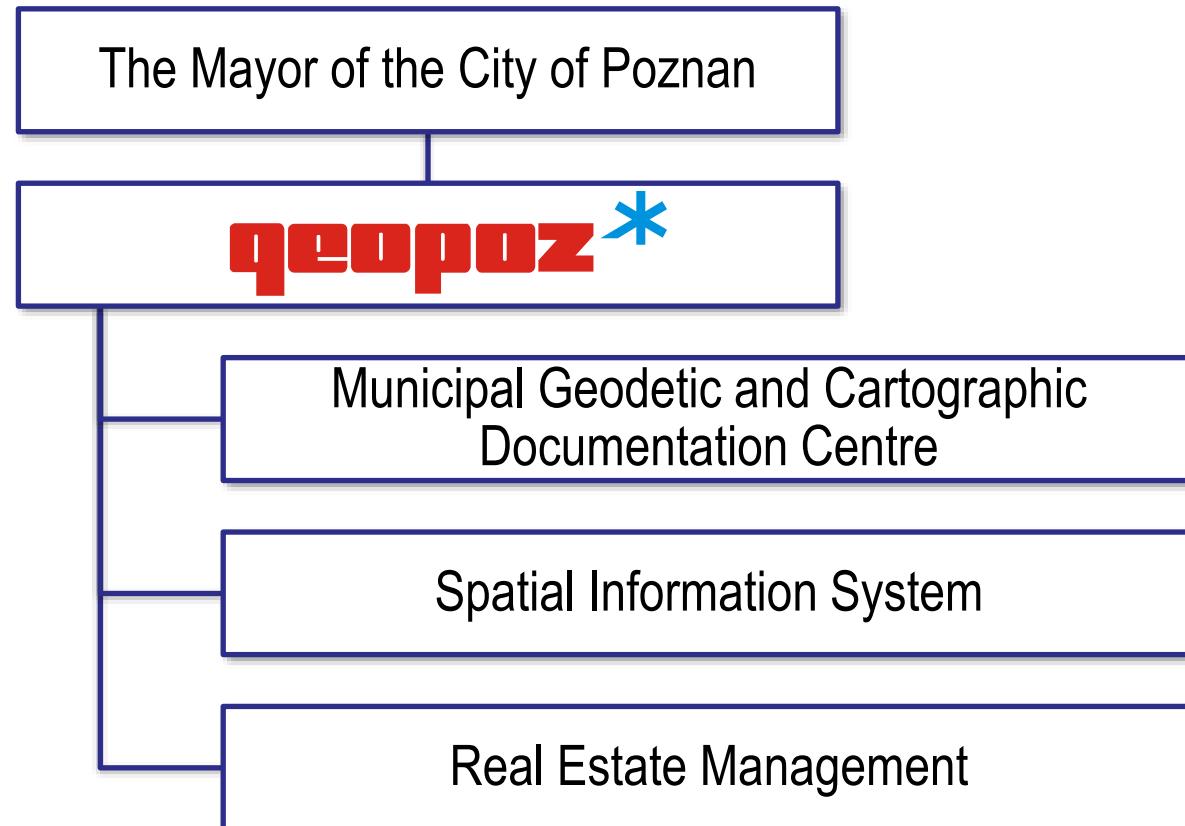
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## The City of Poznań



## Zarząd Geodezji i Katastru Miejskiego GEOPOZ (ZGiKM GEOPOZ)



## Photogrammetric traditions in the City of Poznań

1989

- The first civil aerial photos of the city

1997

- Vector City Map of Poznań

2006

- The first photogrammetric station

2010

- The first fully digital aerial photos of the city

2013

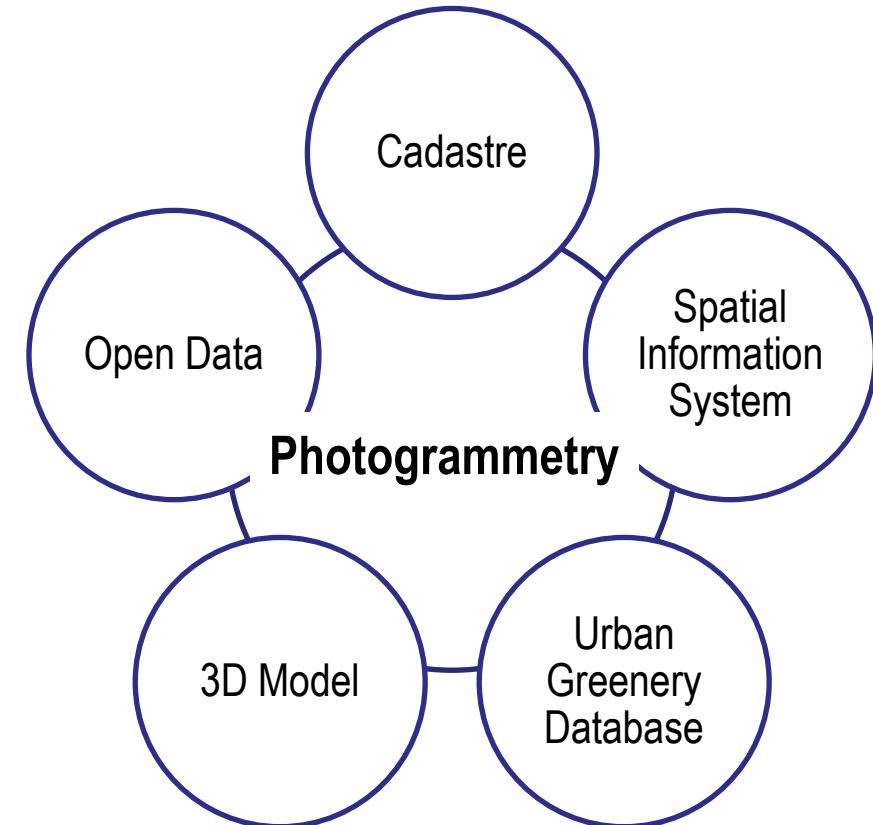
- The first vertical imagery and LIDAR data

2018

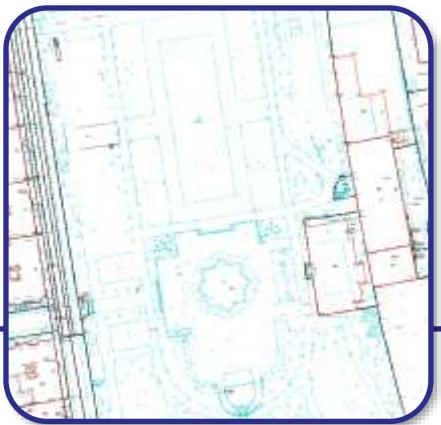
- 3D Model City of Poznań

2021

- Photogrammetric data for the Poznań metropolis



## Geodetic and Cartographic Resource – updating by photogrammetry



Topographic Objects  
Database  
(BDOT500)

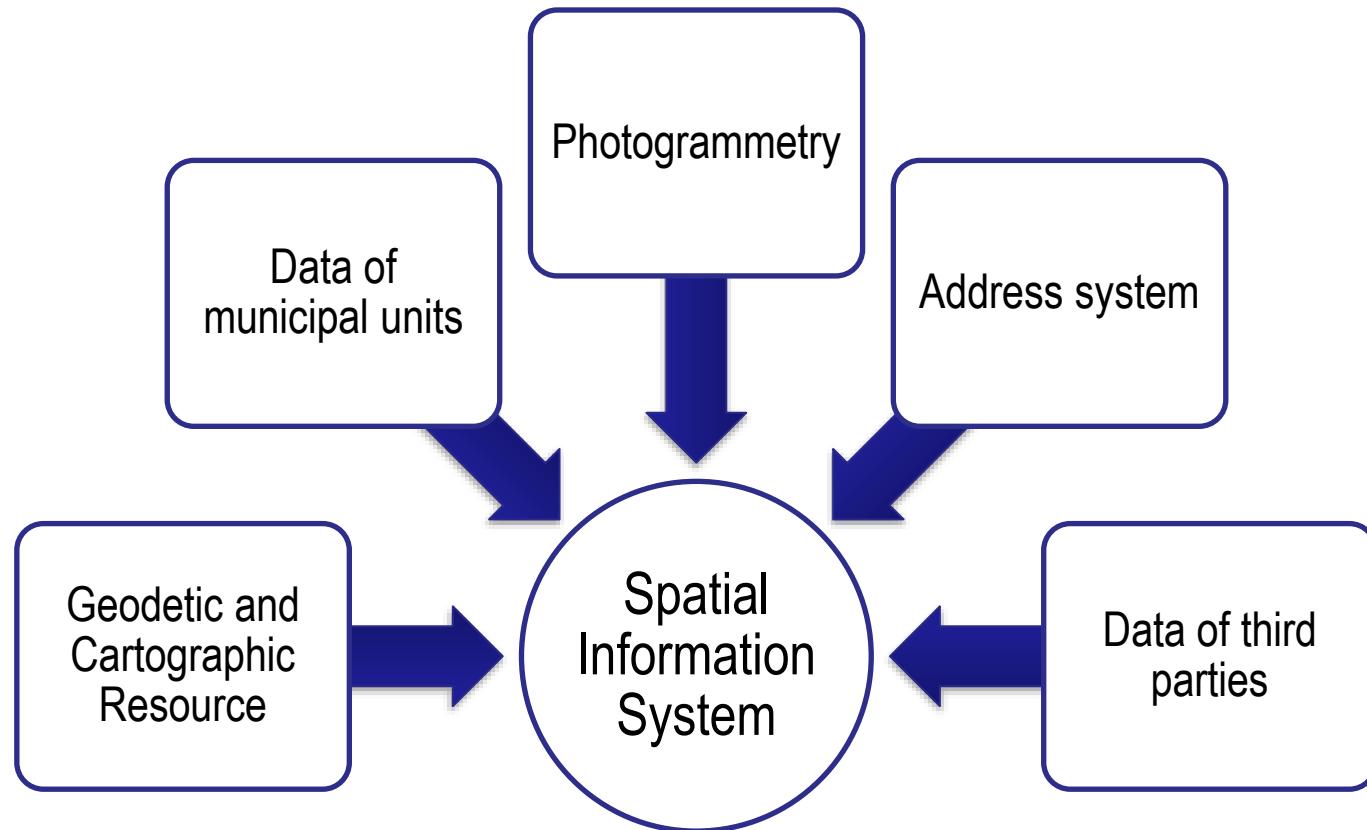
Raster data

Stereodigitalization

Vector data

Update Topographic  
Objects Database  
(BDOT500)

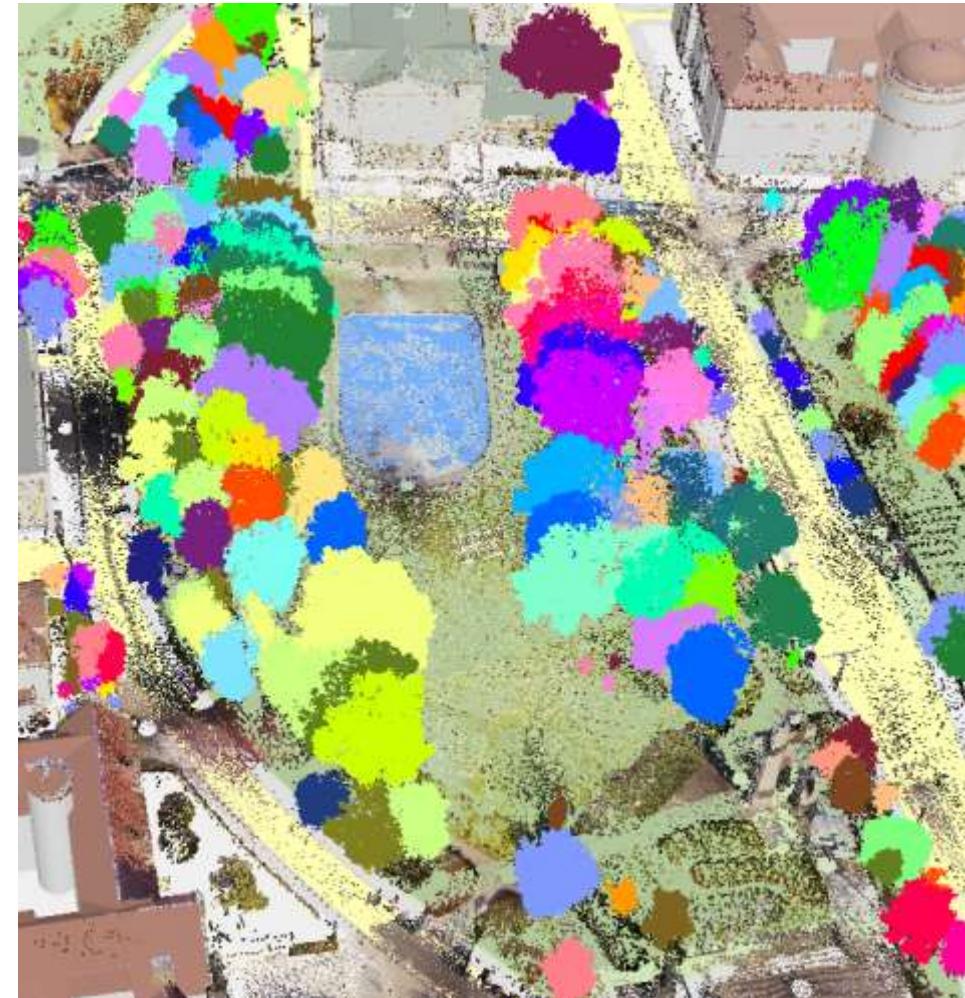
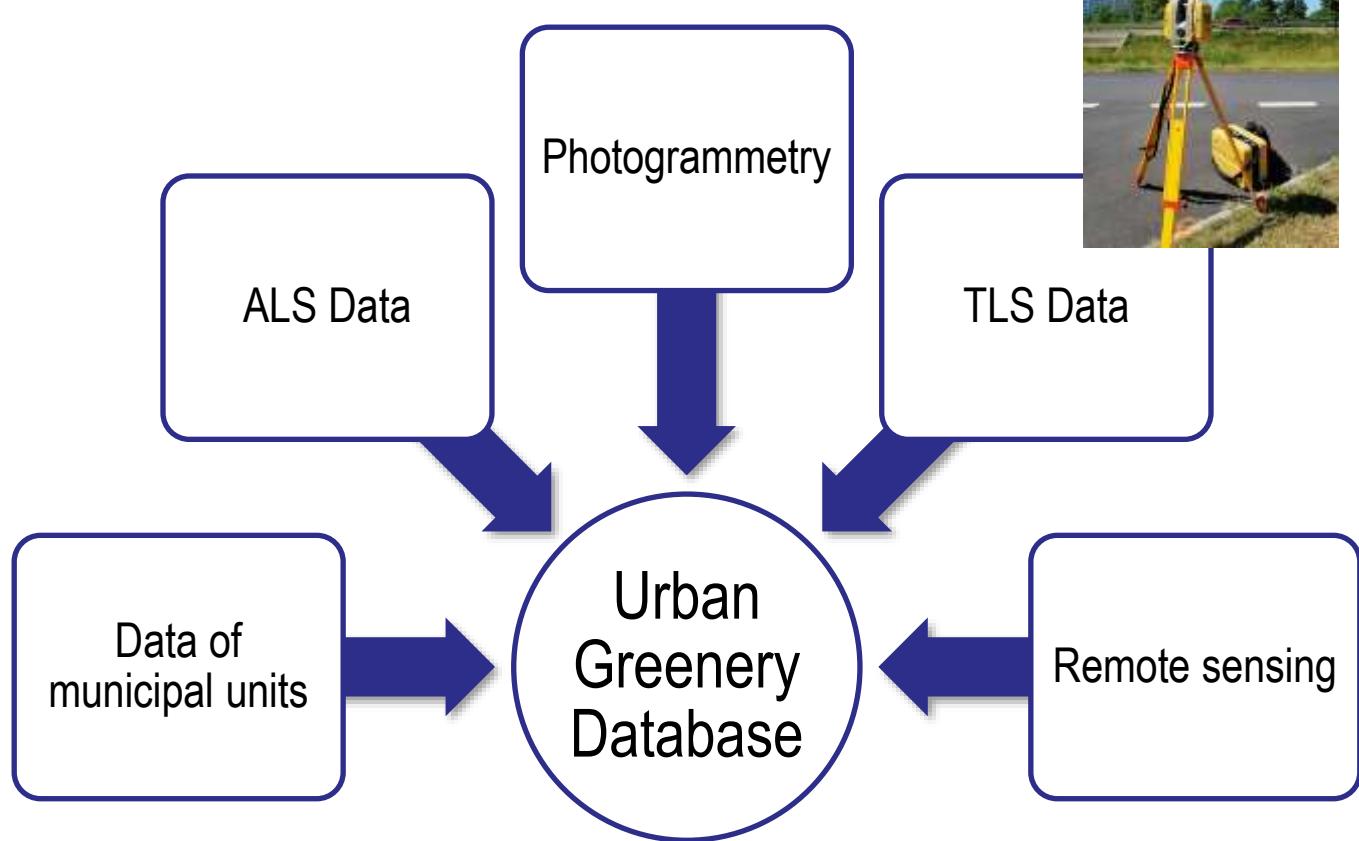
## Spatial Information System of the City of Poznań



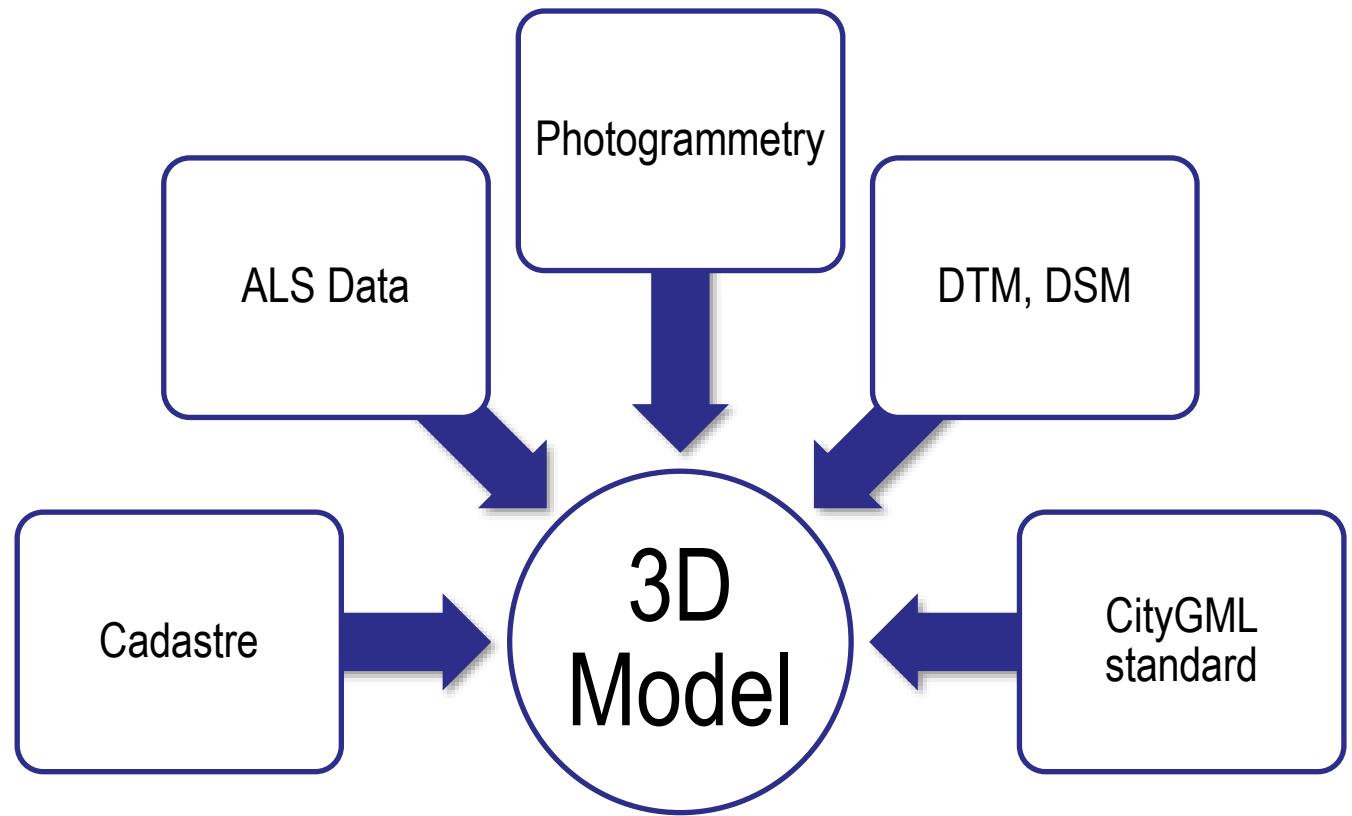
Spatial Information System  
<https://sip.poznan.pl>

3D Model  
<http://sip.poznan.pl/model3d>

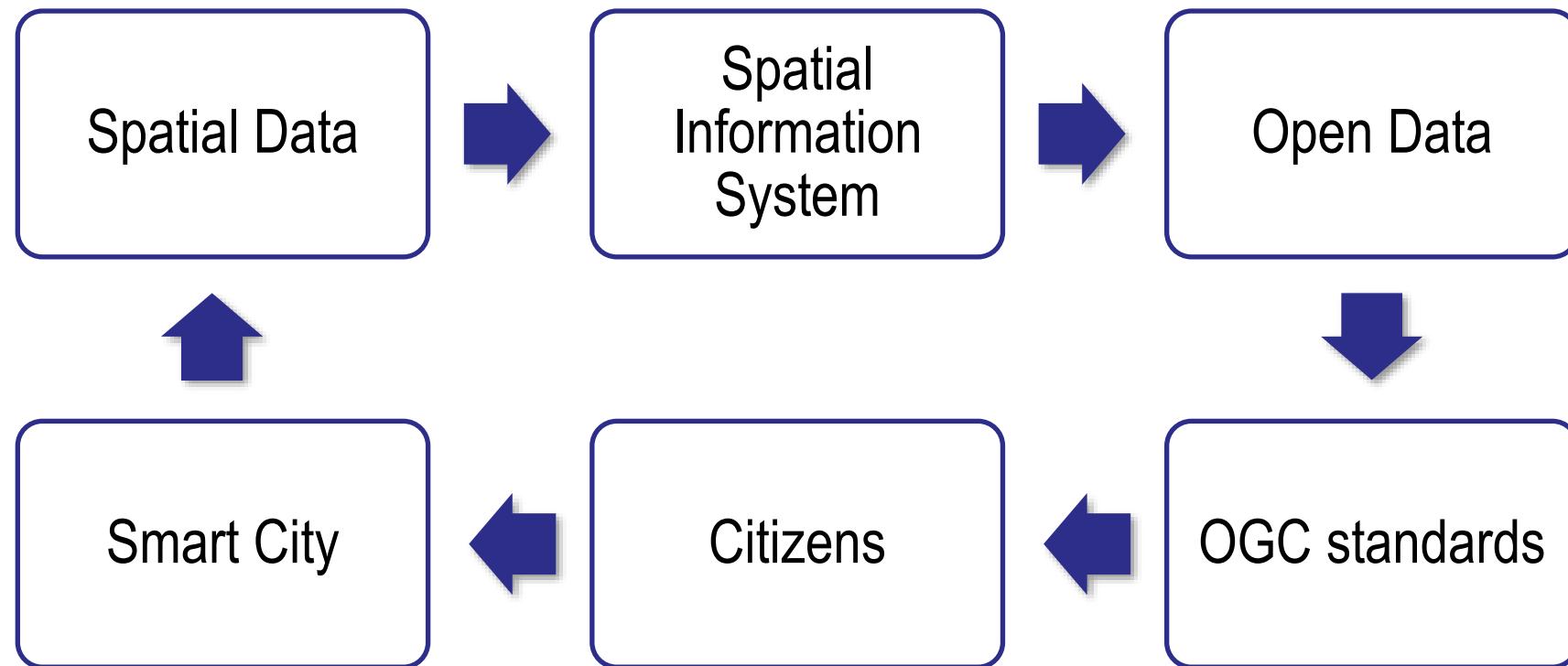
## Urban Greenery Database



## 3D Model – digital twin



## Smart city – open data



## Conclusion

