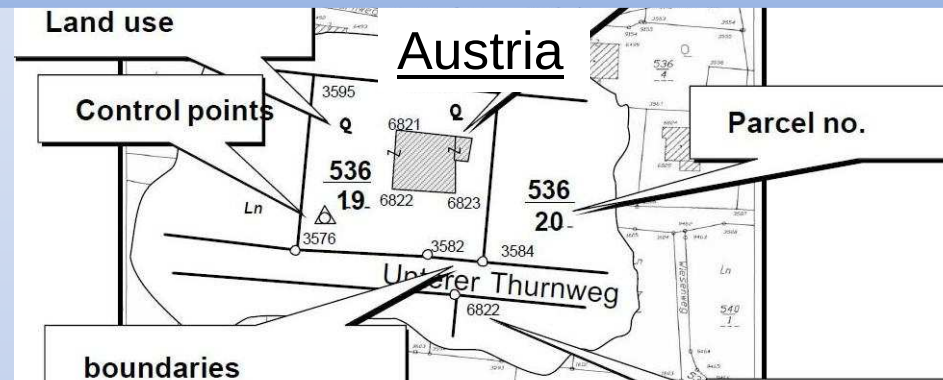
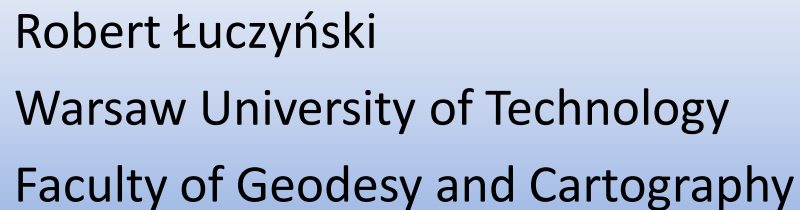




BORDERS OF LAND PARCELS ON ASPECT OF COHESION OF TECHNOLOGICALLY - LEGAL AREA



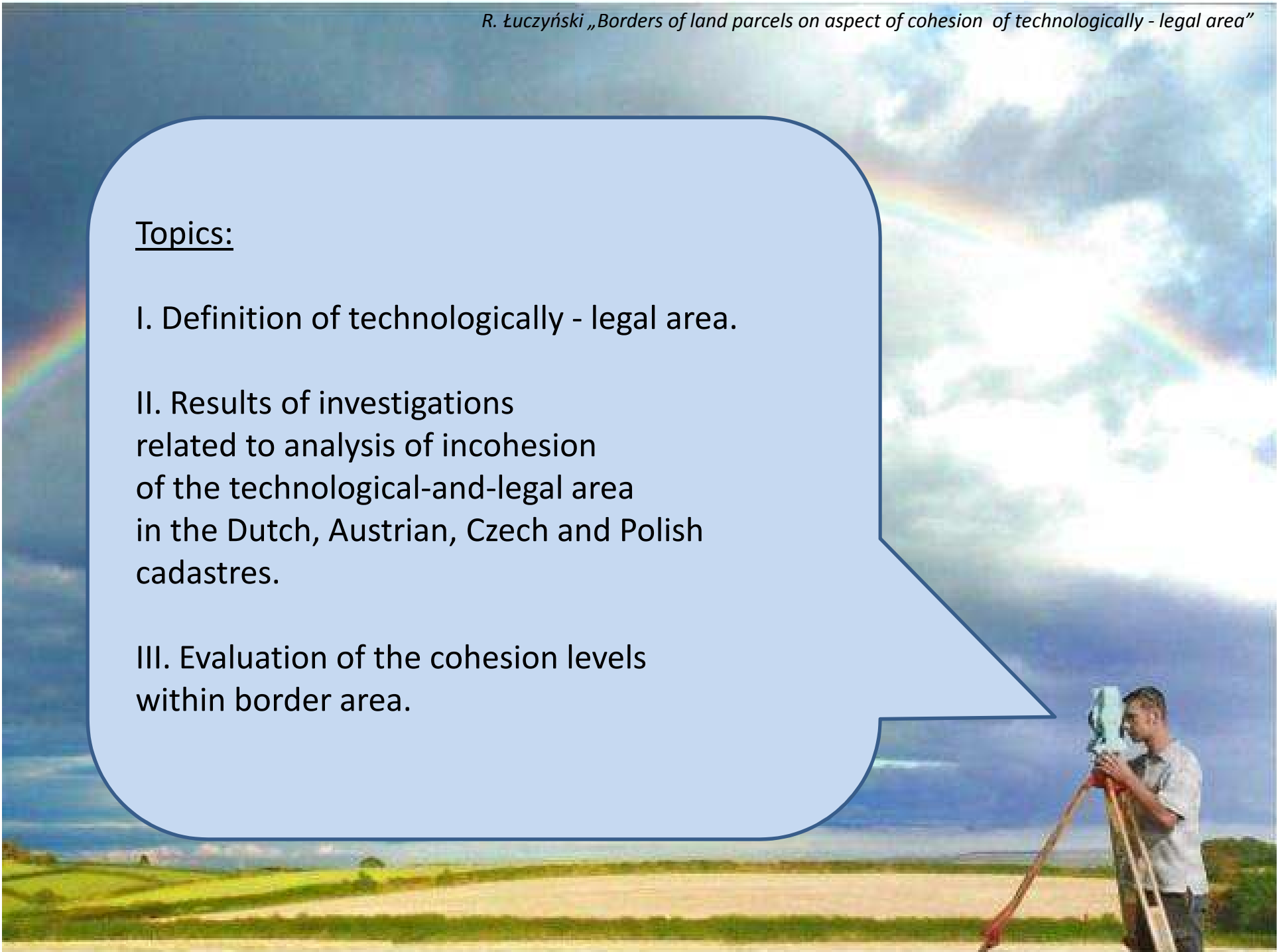
„GIS ODYSSEY 2010“, 3rd to 7th of September 2010
Conference & Exhibition, Croatia: Brijuni, Istra & Pula

Topics:

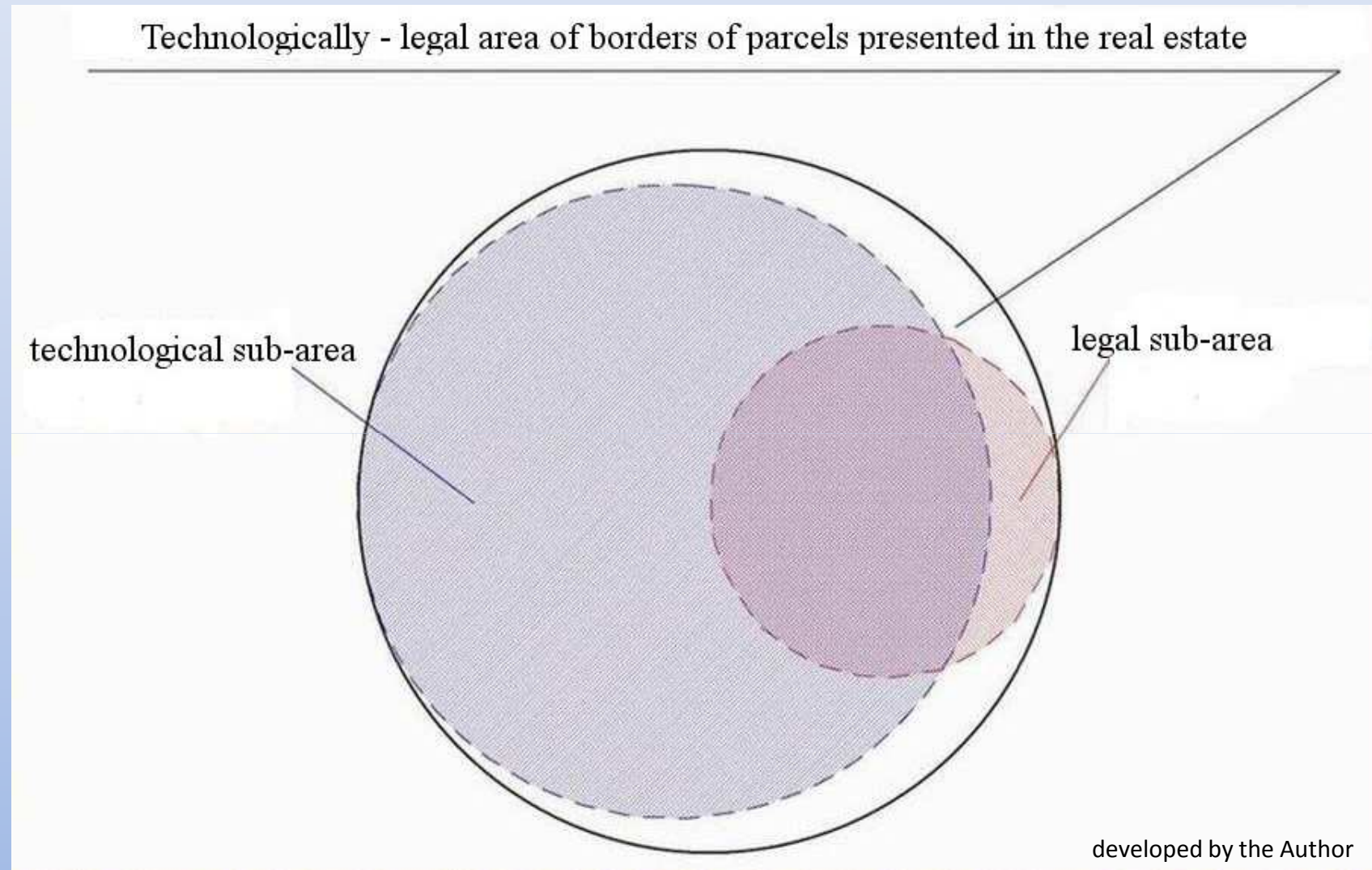
I. Definition of technologically - legal area.

II. Results of investigations related to analysis of incohesion of the technological-and-legal area in the Dutch, Austrian, Czech and Polish cadastres.

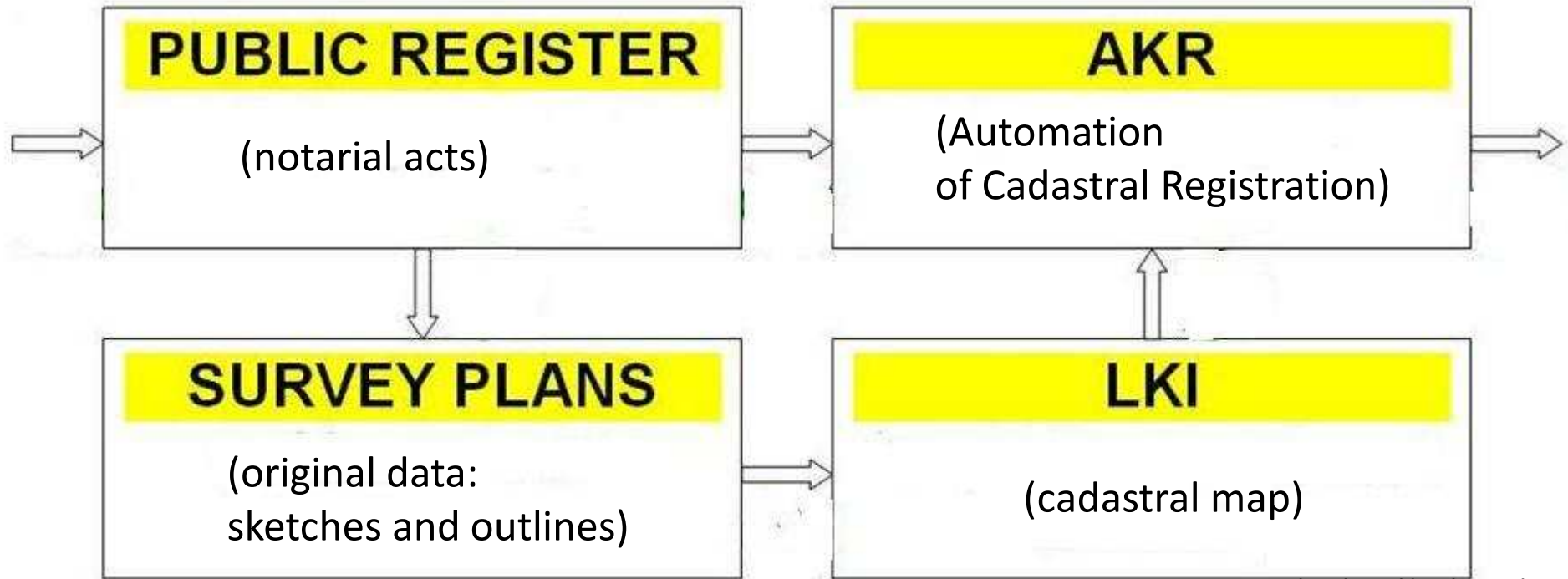
III. Evaluation of the cohesion levels within border area.



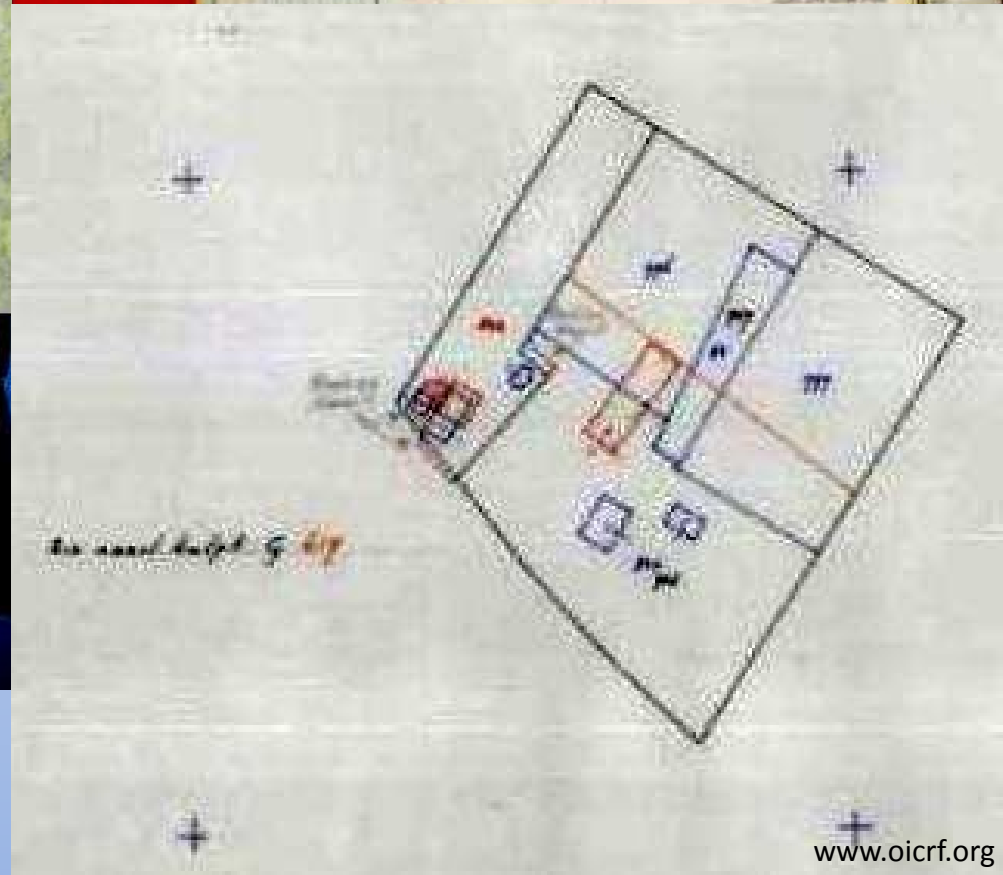
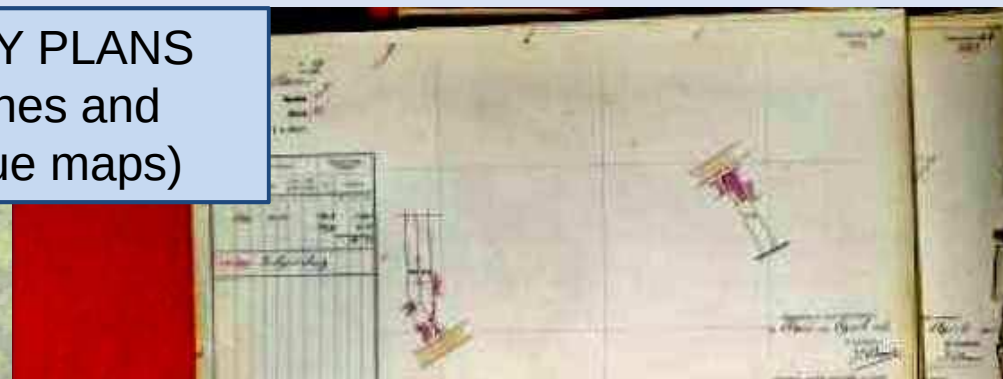
I. Definition of technologically - legal area („border area”)



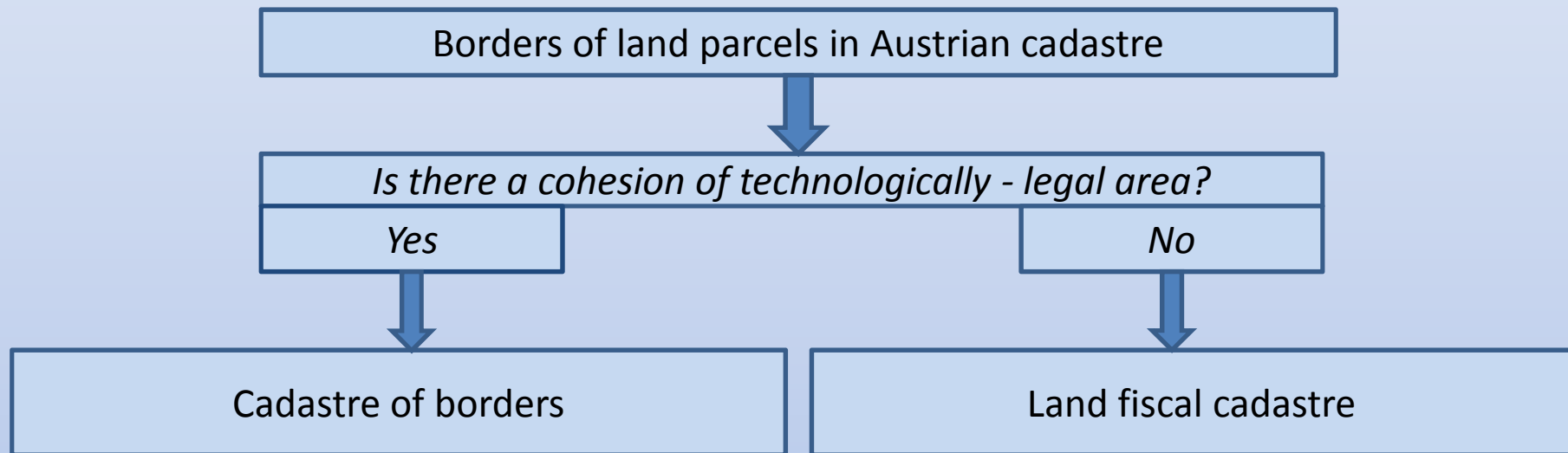
II. Results of investigations related to analysis of incohesion of the technologically - legal area
- Netherlands



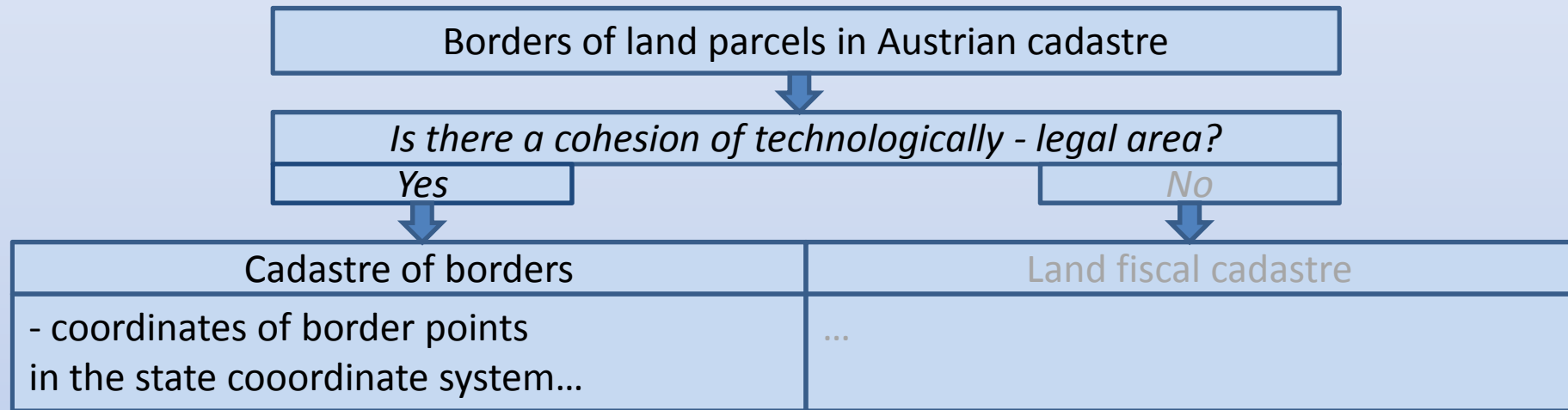
developed by the author

[illegible]

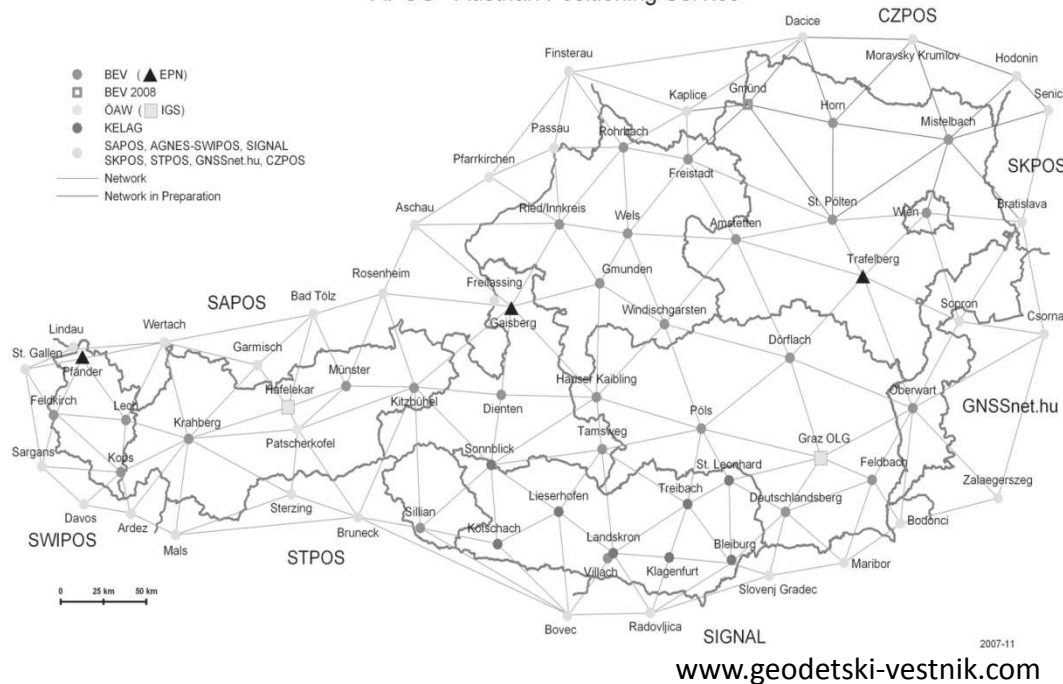
II. Results of investigations related to analysis of incohesion of the technologically - legal area
- Austria



II. Results of investigations related to analysis of incohesion of the technologically - legal area - Austria



APOS - Austrian Positioning Service



APOS – the basis for uniformity
of surveying and cartographic works

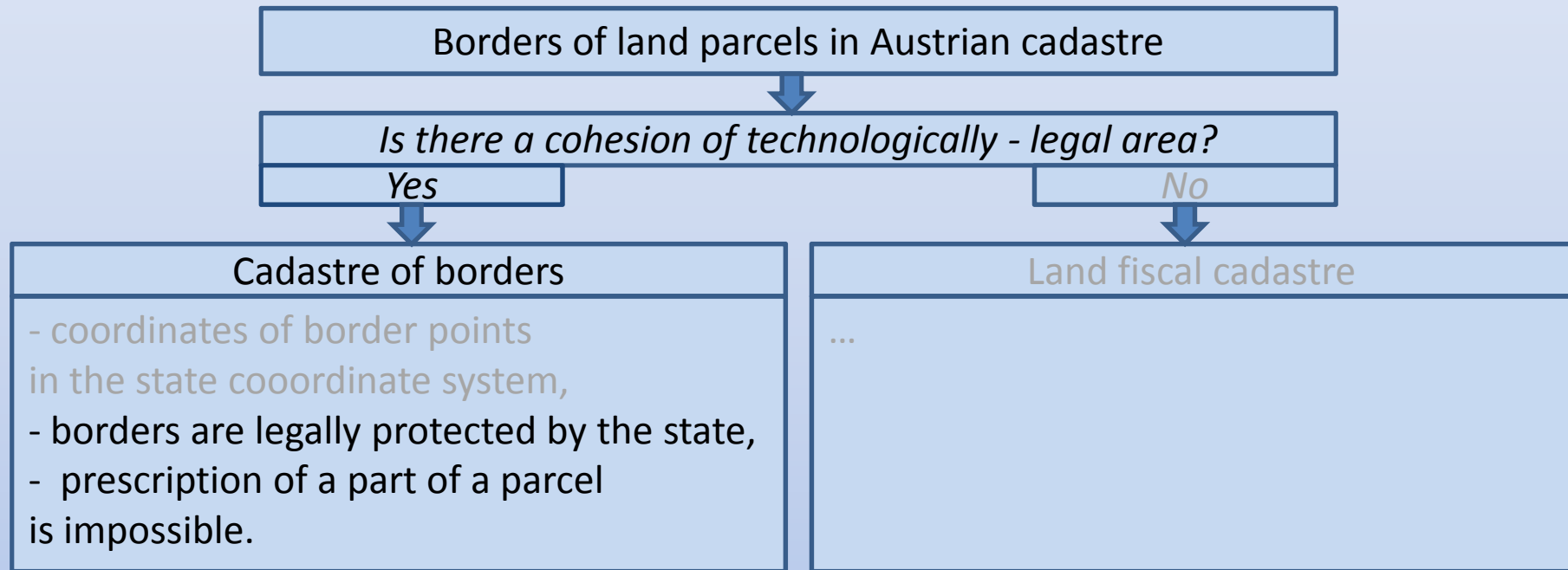
The mean accuracy of network point location:

- triangulation points: ± 5 cm,
- densifying points: ± 7 cm.

The mean accuracy of location of measuring stations: ± 10 cm
and border points: ± 15 cm is not exceeded.

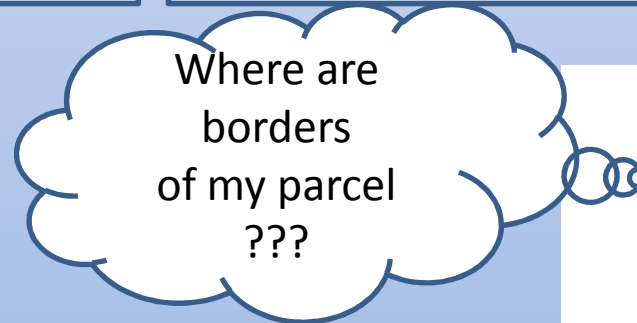
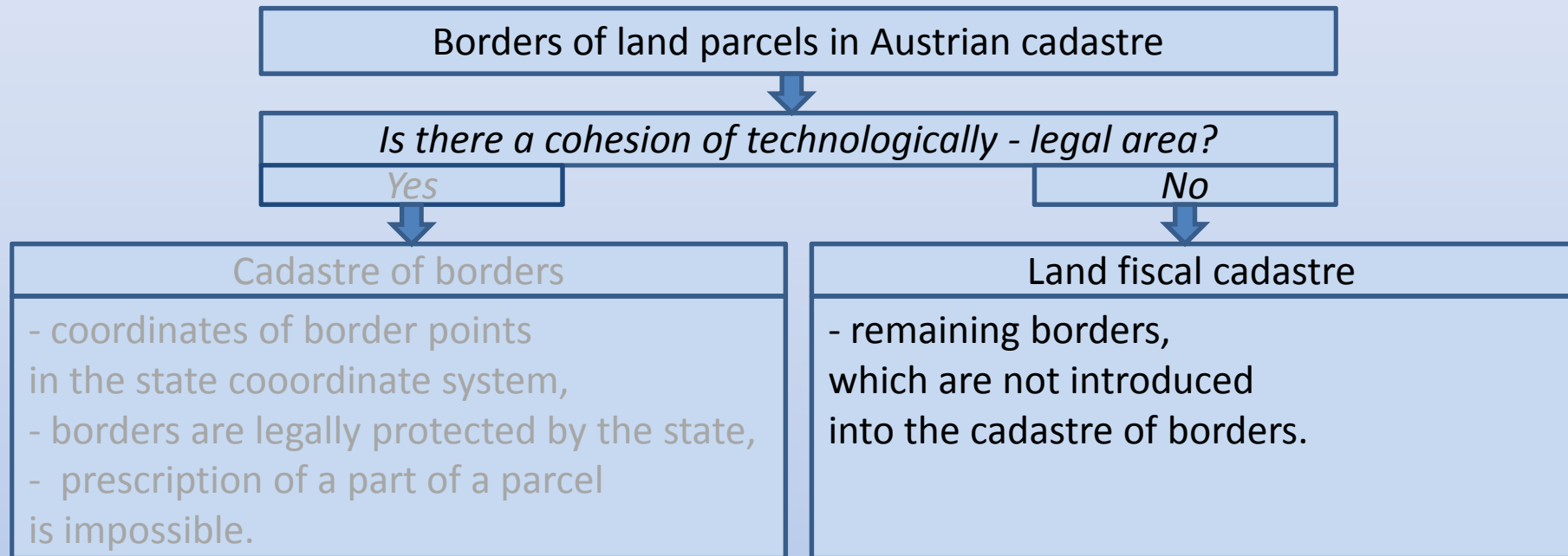
II. Results of investigations related to analysis of incohesion of the technologically - legal area

- Austria



II. Results of investigations related to analysis of incohesion of the technologically - legal area

- Austria



II. Results of investigations related to analysis of incohesion of the technologically - legal area
- Austria

The **procedure of entering a parcel into the cadastre of borders**, in the case of division of real estates, is as follows:

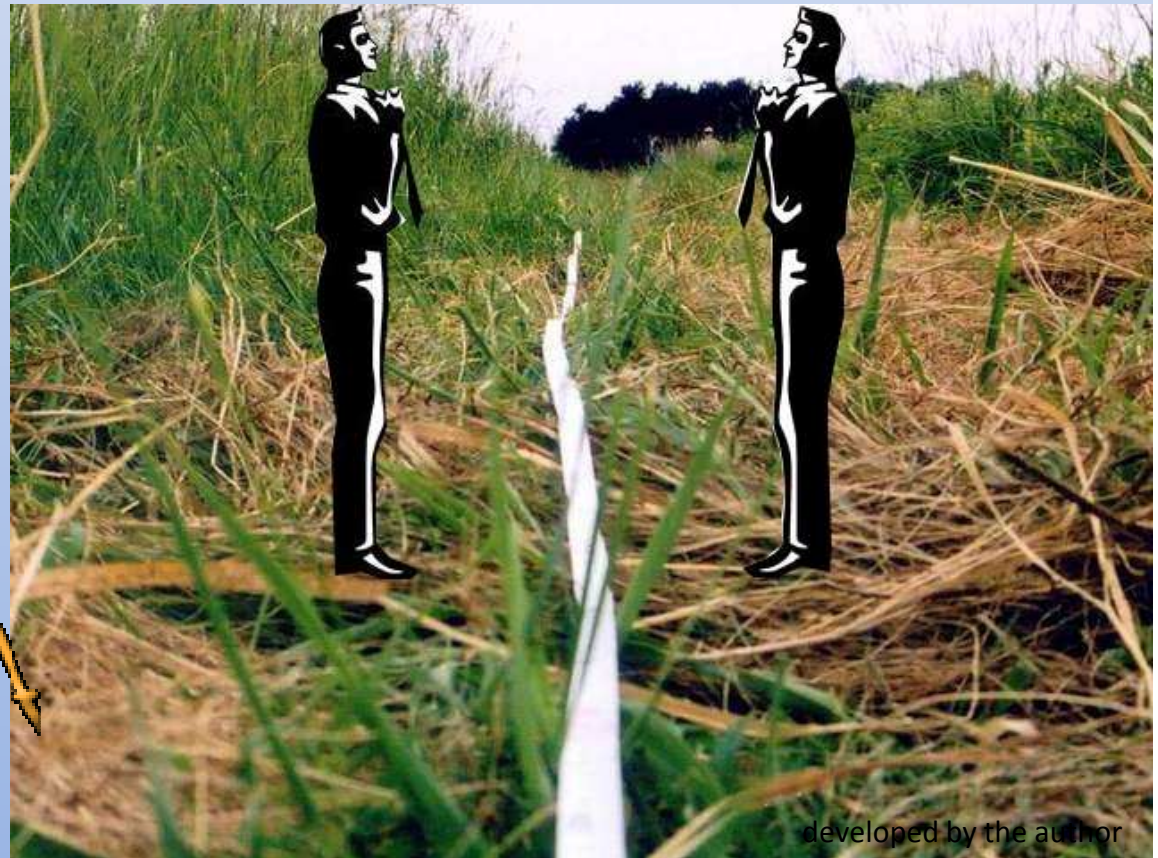
- 1) the surveyor invites interested parties** to participate in the hearing concerning borders...



II. Results of investigations related to analysis of incohesion of the technologically - legal area - Austria

The **procedure of entering a parcel into the cadastre of borders**, in the case of division of real estates, is as follows:

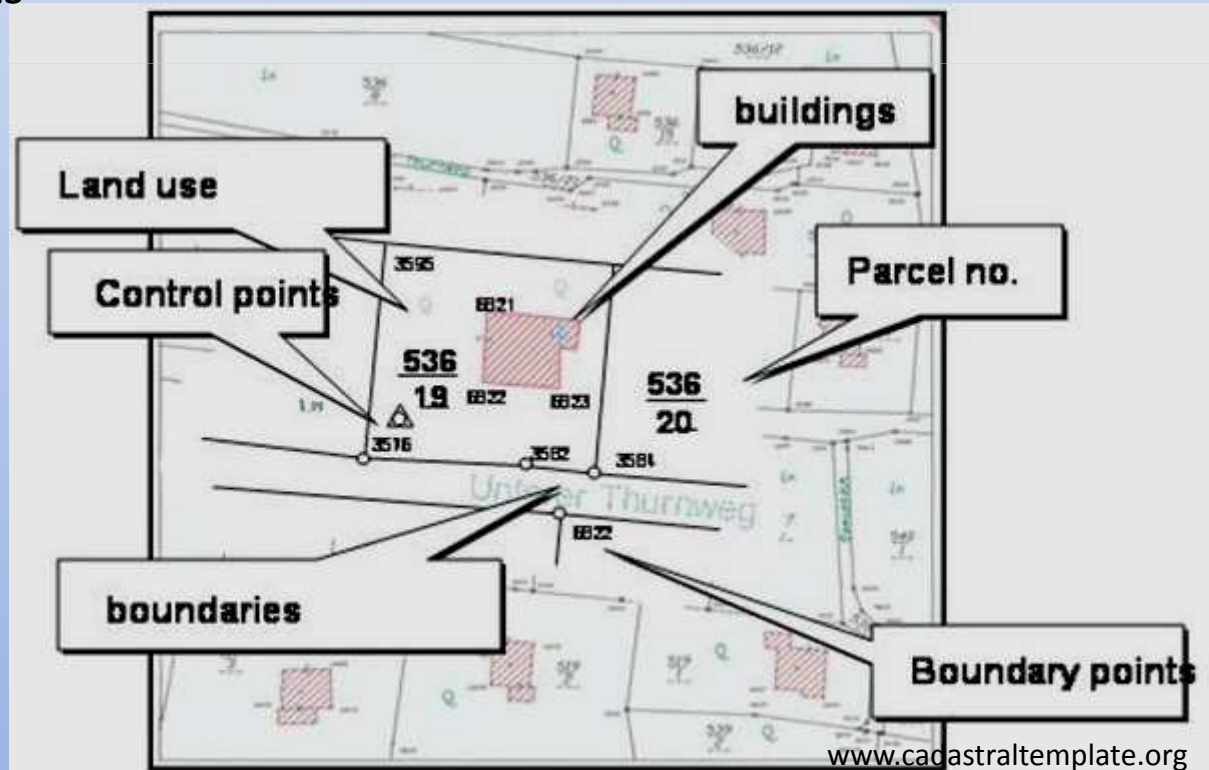
- 1) the surveyor invites interested parties to participate in the hearing concerning borders,
- 2) the surveyor conducts **hearing concerning borders...**



II. Results of investigations related to analysis of incohesion of the technologically - legal area - Austria

The procedure of entering a parcel into the cadastre of borders, in the case of division of real estates, is as follows:

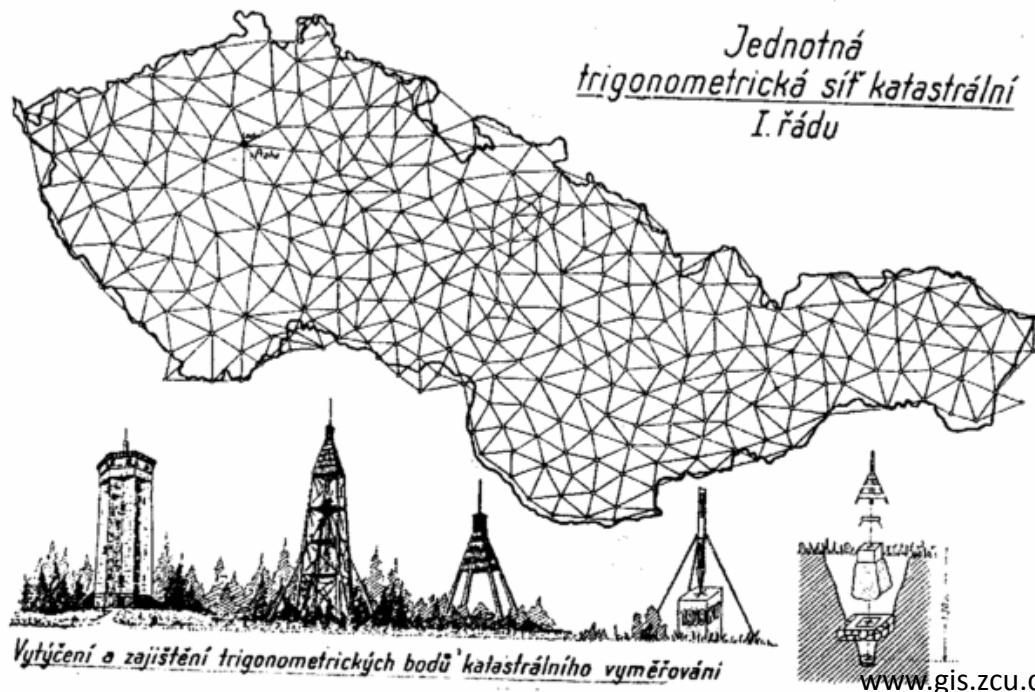
- 1) the surveyor invites interested parties to participate in the hearing concerning borders,
- 2) the surveyor conducts hearing concerning borders,
- 3) surveyor passes all documents to a local cadastral office and the **parcel is introduced to the cadastre of borders.**



II. Results of investigations related to analysis of incohesion of the technologically - legal area - Czech Republic

Borders of land parcels in Czech cadastre (after procedure of cadastral resurvey)

Technologically subarea	Legal subarea
- uniform cadastral network exists (JTSK), - the accuracy of determination of location of a border point equals to 0.10 m,	...



Uniform cadastral network (JTSK), ensures the maximum linear deformations of 14 cm/km.

II. Results of investigations related to analysis of incohesion of the technologically - legal area
- Czech Republic

Borders of land parcels in Czech cadastre (after procedure of cadastral restoration)

Technologically subarea

- uniform cadastral network exists (JTSK),
- the accuracy of determination of location of a border point equals to 0.10 m,
- border points are fixed in the field, measured by the surveyor and marked on the prepared ground sketch

Legal subarea

- parcel borders are approved by an administrative decision or by the legal decision,
- border conflicts are investigated by courts only.

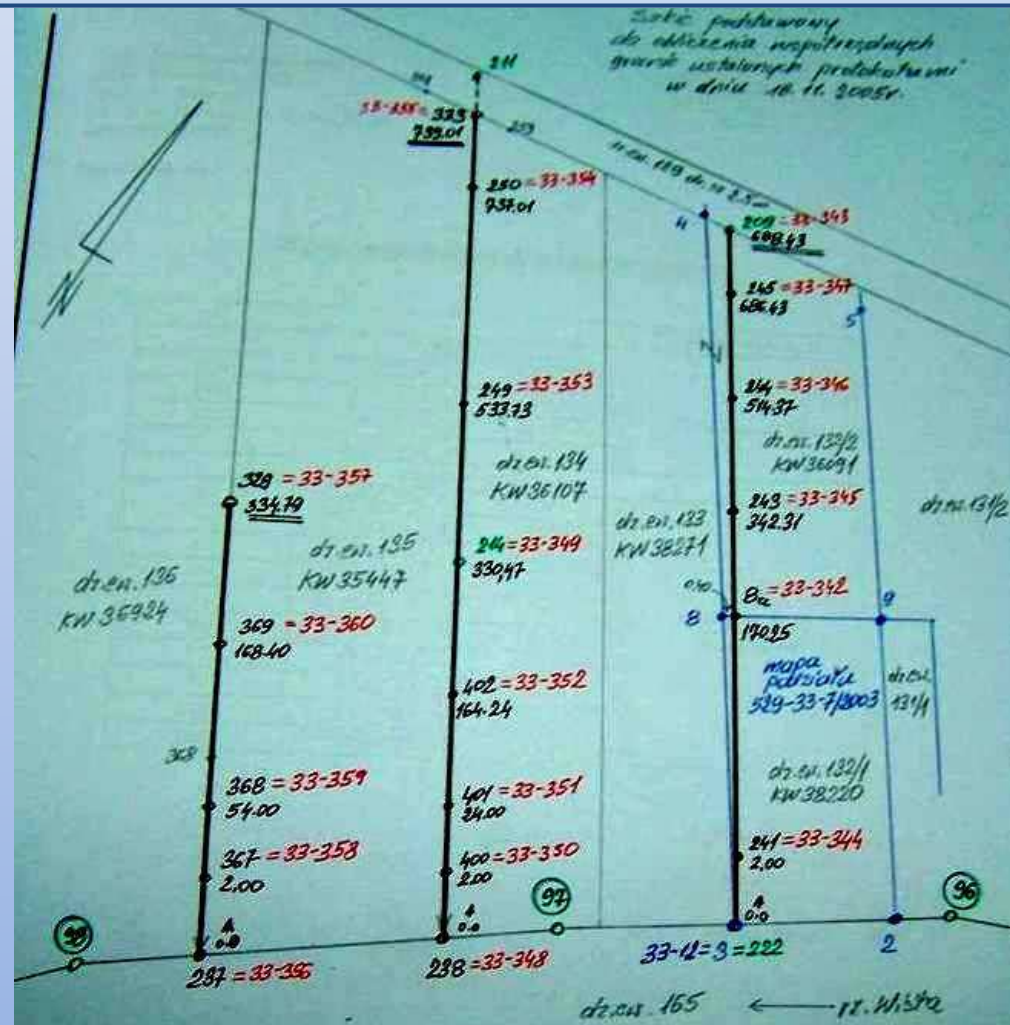


II. Results of investigations related to analysis of incohesion of the technologically - legal area

- Poland

Borders of lands parcels in Poland land registration are recorded on base of documentation established in procedures:

- delimitation of a real estate...



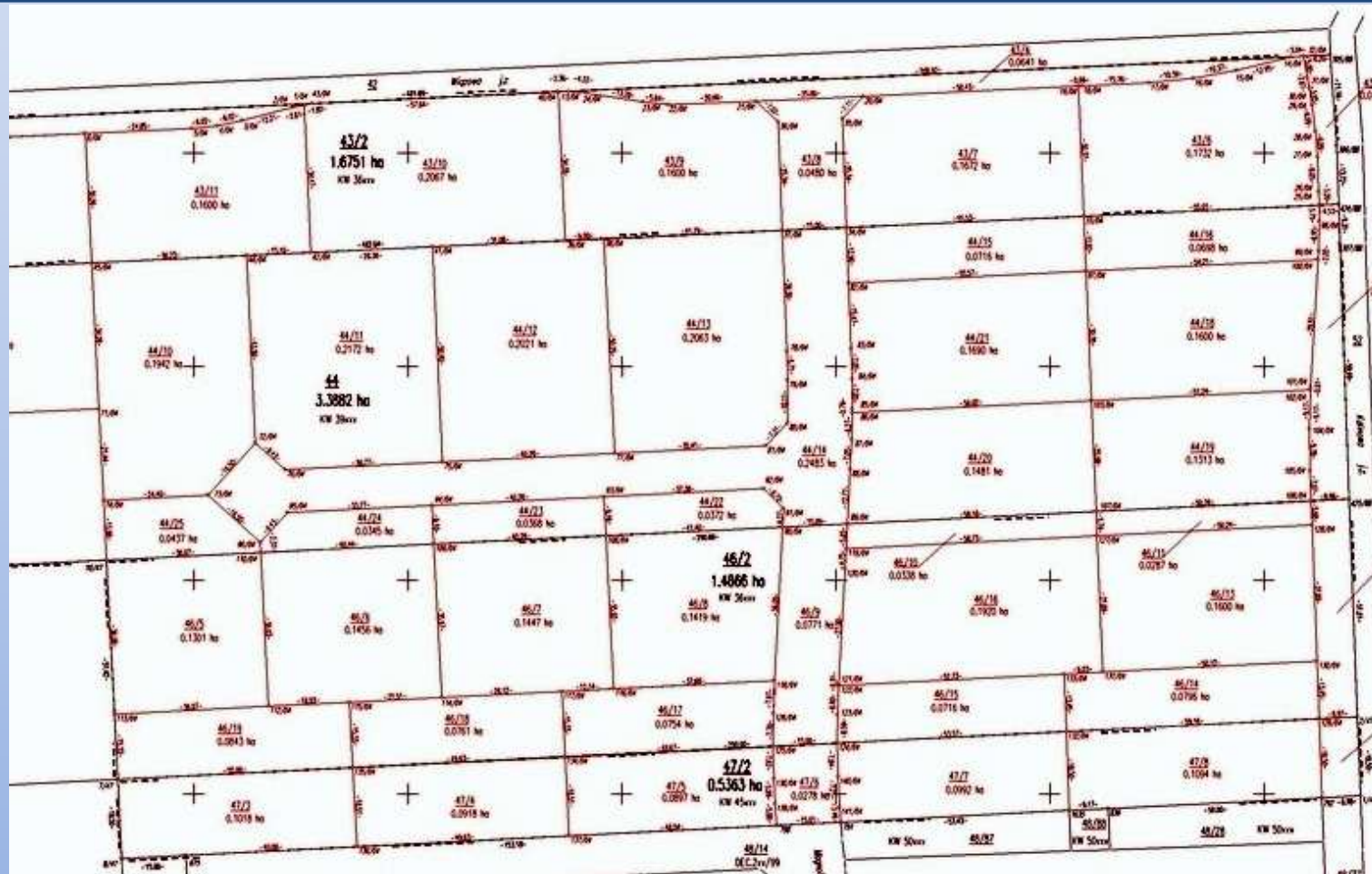
Author's investigations

II. Results of investigations related to analysis of incohesion of the technologically - legal area

- Poland

Borders of lands parcels in Poland land registration are recorded on base of documentation established in procedures:

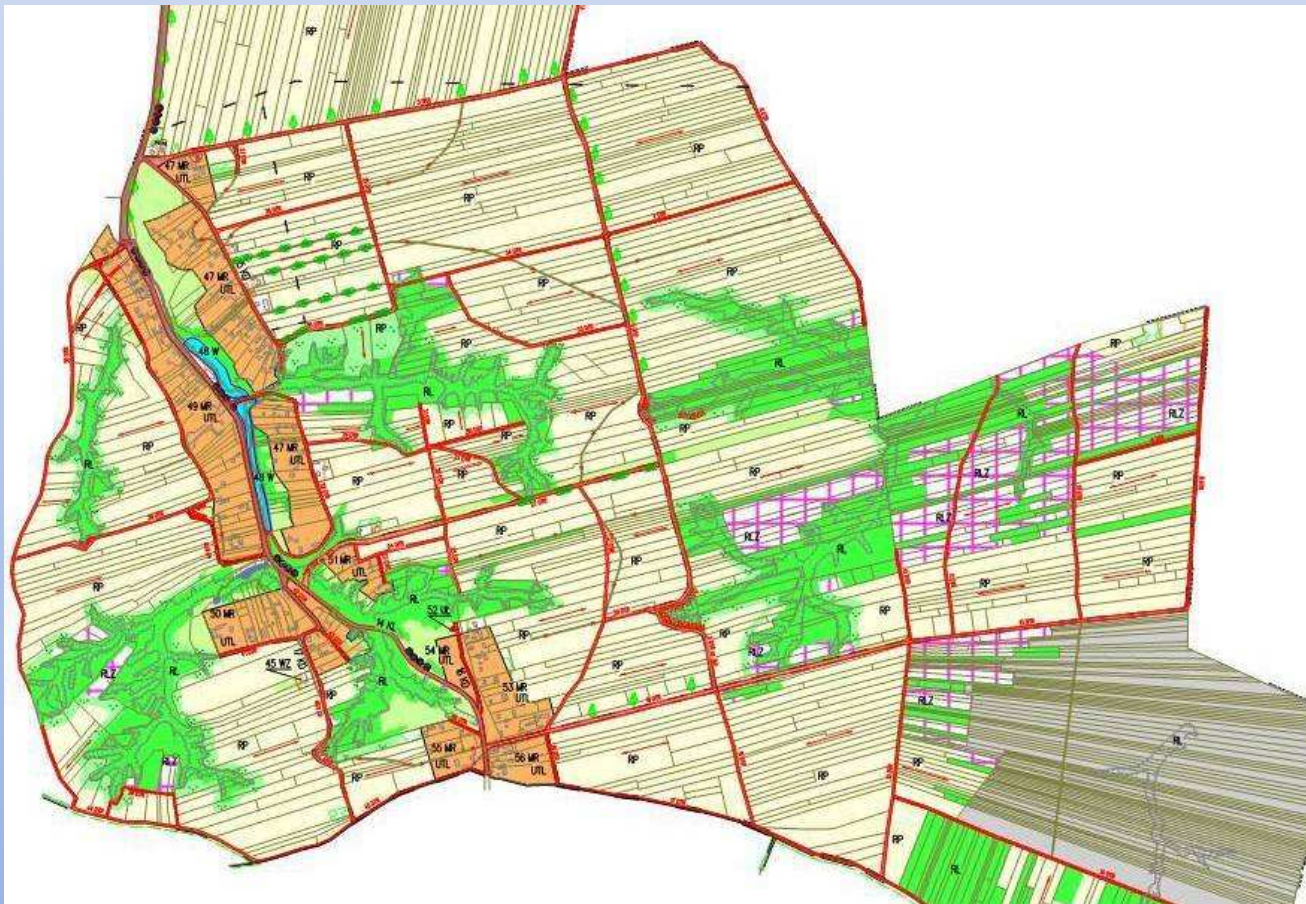
- delimitation of a real estate,
- division of a real estates...



II. Results of investigations related to analysis of incohesion of the technologically - legal area - Poland

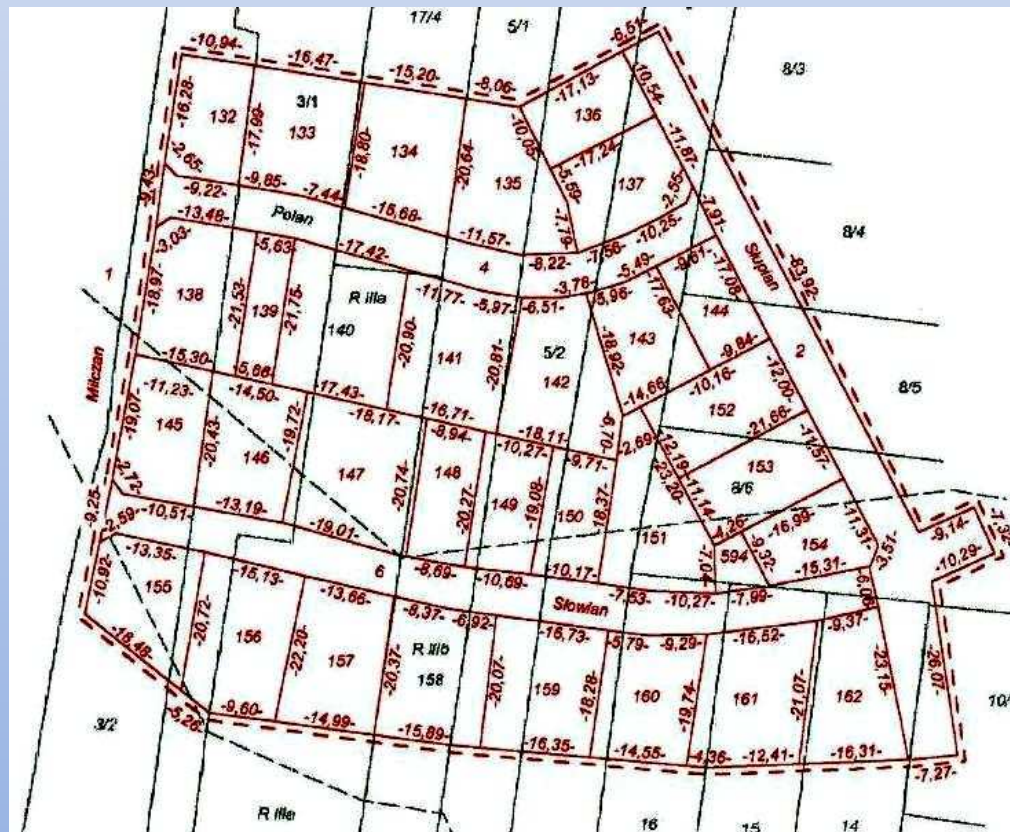
Borders of lands parcels in Poland land registration are recorded on base of documentation established in procedures:

- delimitation of a real estate,
- division of a real estates,
- consolidation and exchange of agricultural plots...



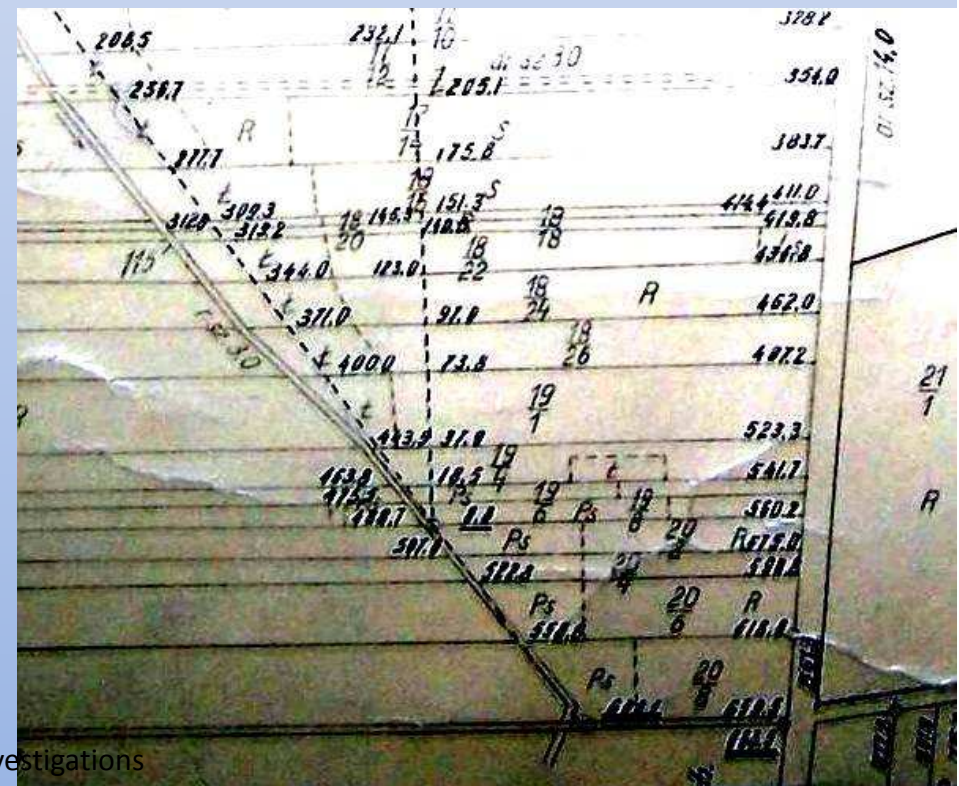
Author's investigations

- delimitation of a real estate,
- division of a real estates,
- consolidation and exchange of agricultural plots,
- consolidation and division of a real estates...



Author's investigations

- delimitation of a real estate,
- division of a real estates,
- consolidation and exchange of agricultural plots,
- consolidation and division of a real estates,
- on base of documentation in result of measurements related with set-up of land registration...



II. Results of investigations related to analysis of incohesion of the technologically - legal area

- Poland

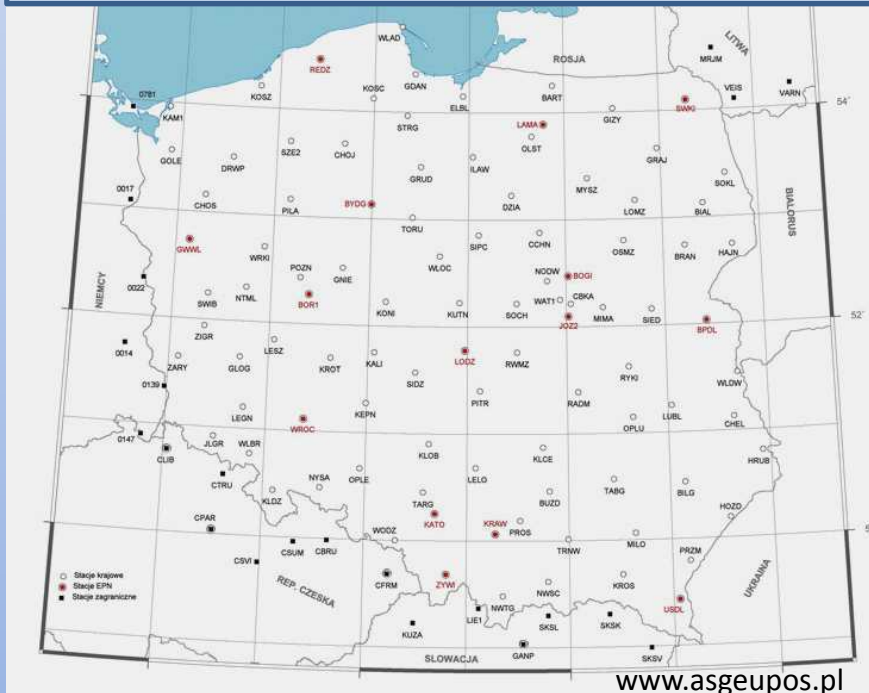
Borders of land parcels in Poland cadastre - present surveying

Technologically subarea

- spatial reference system,
- rectangular coordinate system „2000”,
- ASG-EUPOS System,
- the accuracy of determination of location of border points cannot exceed 0.10 m

Legal subarea

...



ASG-EUPOS System,

- the basis for uniformity of surveying and cartographic works
- ensures the correctness of implementation of the state, spatial reference system.

II. Results of investigations related to analysis of incohesion of the technologically - legal area

- Poland

Borders of land parcels in Poland cadastre - present surveying	
Technologically subarea	Legal subarea
- spatial reference system, - rectangular coordinate system „2000”, - ASG-EUPOS System, - the accuracy of determination of location of border points cannot exceed 0.10 m	- administration decisions, - legal decisions...

II. Results of investigations related to analysis of incohesion of the technologically - legal area

- Poland

Borders of land parcels in Poland cadastre - present surveying	
Technologically subarea	Legal subarea
- spatial reference system, - rectangular coordinate system „2000”, - ASG-EUPOS System, - the accuracy of determination of location of border points cannot exceed 0.10 m	- administration decisions, - legal decisions - independent procedures...



„Sami swoi”,
Polish comedy, 1967

III. Evaluation of the cohesion levels within border area

Cadaster in...	Technologically subarea	Legal subarea	Cohesion of technologically – legal area
Netherlands (LKI)	-	-	-
Austria (Cadastre of borders)	+	+	+
Czech Republic (after procedure of cadastral restoration)	+	+	+
Poland	+ / -	+ / -	+ / -

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