



The Legal Boundary Cadastre in Austria 1968-2018: The 50th Anniversary

PCC Conference, Vienna 2018

Toics

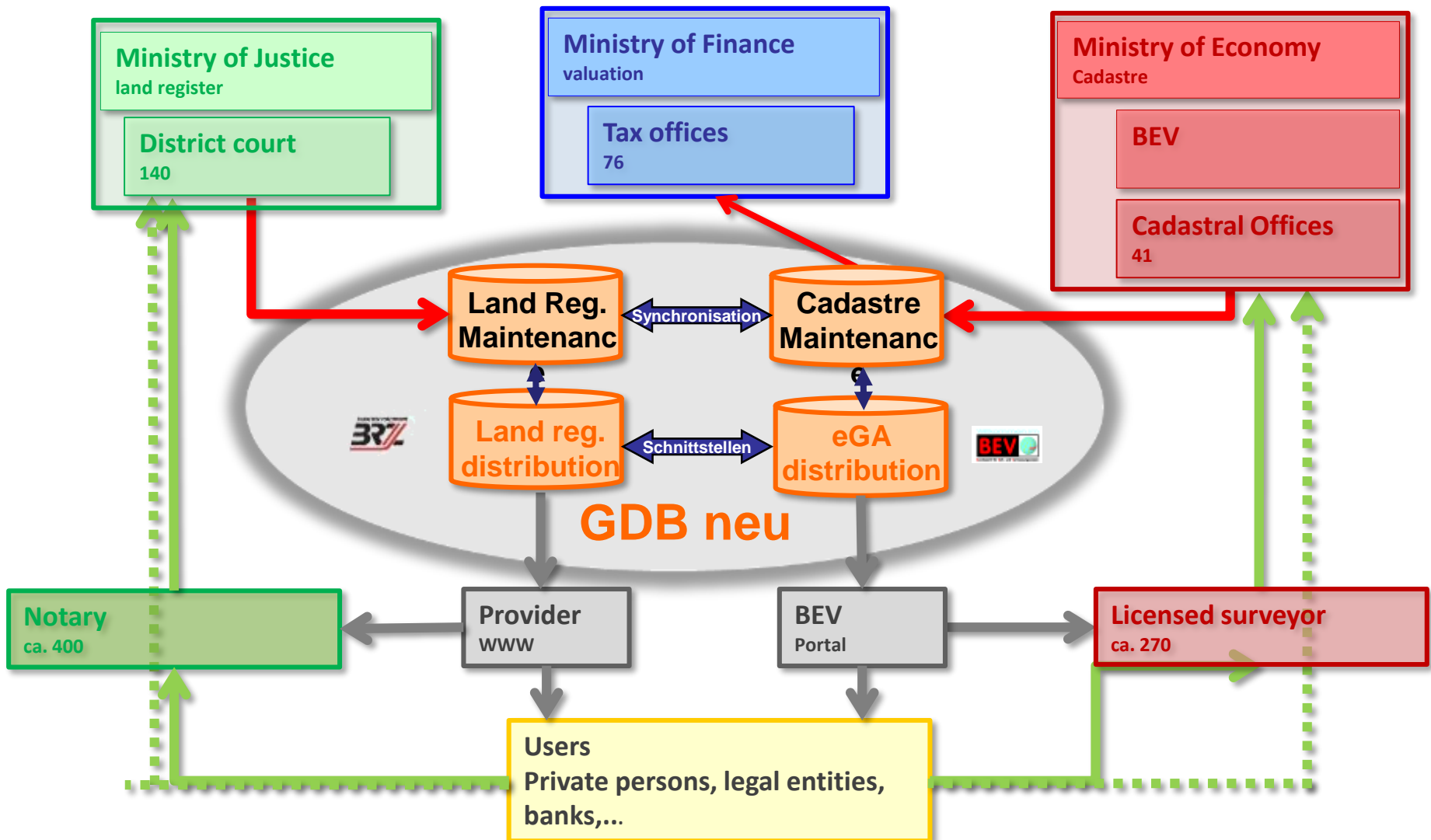
- Main Characteristics of Austrian Cadastre
- Legal Boundary Cadastre
- Transition from Tax Cadastre to Legal Boundary Cadastre
- The legal process
- Legal reliability- why?
- Changing role of the Cadastre
- Challenges
- Developments



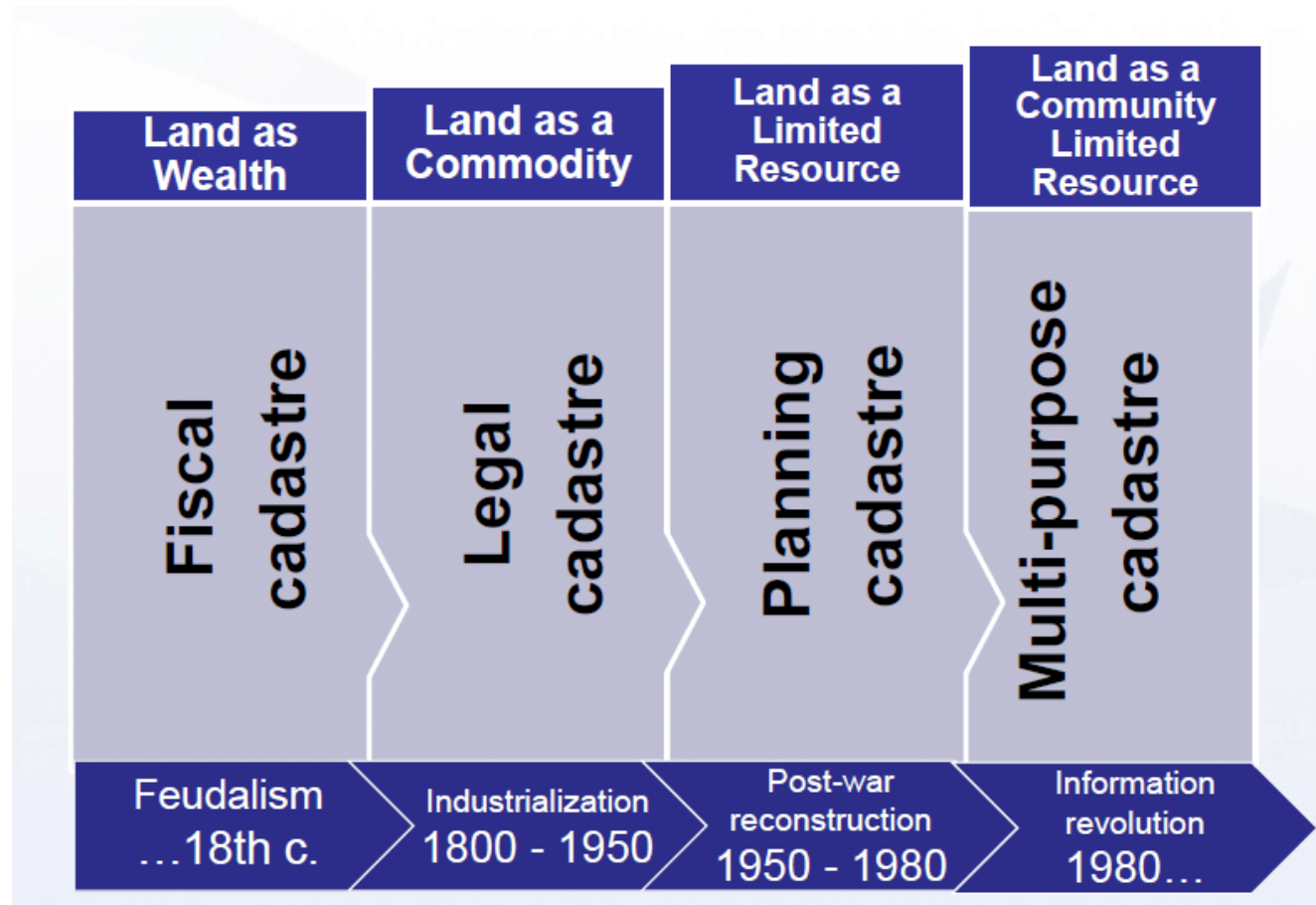
Main Characteristics of the Austrian Cadastre

- Advanced cooperation private licensed surveyors and cadastral authority
 - Shared competences
- Fully coverage with digital information
 - Homogeneous dataset
 - High quality and accuracy
- Up-to-date information and services
- Digital applications
 - electronic submission of surveying documents
- Permanent availability (24/7)
 - Public and open data- access to everyone
 - all changes documented since 1883



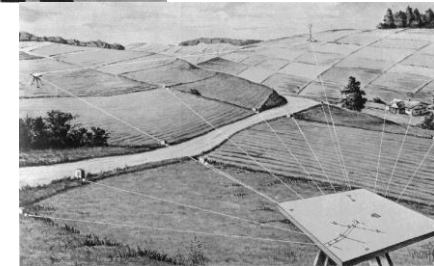
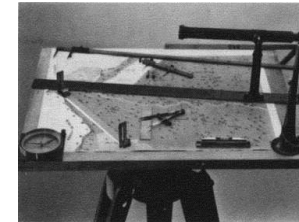


Changig Role of the Cadastre



From the Fiscal (Tax) Cadastre

- Property Tax Act 1817
 - Basis for taxation of agricultural land
 - Surveying of all parcels by means of plane table
 - Graphic documentation in the cadastral map



Erster Kreis.		Fiscaltabelle.										Beilage A.	
		Gemeinde Zbrailau.										Herrschaft Althaus.	
Nr. der Katastralgemeinschaft.	Name der Ursprungskarte und des Ursprungskartenbesizers.	Anzahl der Grundstücke.	Anzahl der Grundstücke.		Anzahl der Grundstücke.					Anzahl der Grundstücke.		Anzahl der Grundstücke.	
			in der Katastralgemeinschaft.	in der Katastralgemeinschaft.	in der Katastralgemeinschaft.	in der Katastralgemeinschaft.	in der Katastralgemeinschaft.	in der Katastralgemeinschaft.	in der Katastralgemeinschaft.	in der Katastralgemeinschaft.	in der Katastralgemeinschaft.	in der Katastralgemeinschaft.	in der Katastralgemeinschaft.
1	Prater Grundbesitz von Johann Baptist...	105	105	105	105	105	105	105	105	105	105	105	105
2	Anton Stannitzer von...	1	1	1	1	1	1	1	1	1	1	1	1
3	Johann Bauer von...	1	1	1	1	1	1	1	1	1	1	1	1
4	Josef Pöschl von...	1	1	1	1	1	1	1	1	1	1	1	1
5	Herrschaft Althaus...	100	100	100	100	100	100	100	100	100	100	100	100



... to Legal Boundaries Cadastre (1968)

- create legal boundaries of the parcels
- boundaries clearly defined and accurate
- avoid disputes over boundaries
 - cadastral office is responsible to solve the dispute
 - based on the original surveying documents
 - Signature by owners and surveying
- create a higher quality in the Cadastre
 - legally binding coordinates



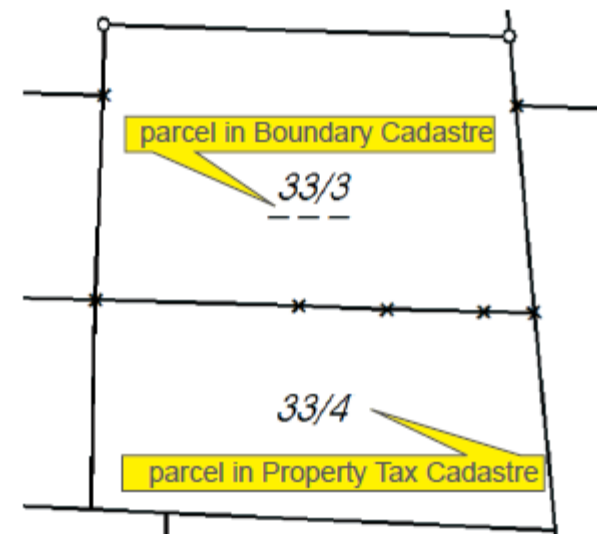
Increasing Trust >< increasing use

- trust in the quality and reliability of the cadastral data/information/services
- increasing trust brings increasing use of the cadastre
- clear legal procedure to be able to guarantee
- to talk about legal reliability needs to talk about quality of data and cadastral procedures



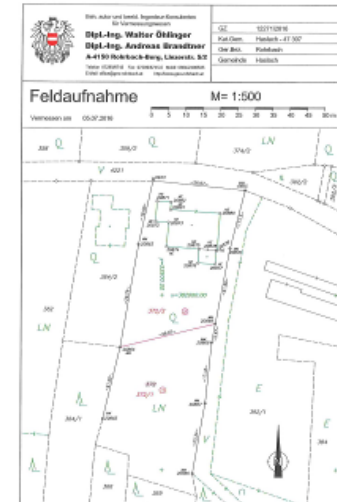
The Legal Consequences

- boundaries are legally binding and secured
- Adverse possession is not possible for partial areas of a parcel
- *'paper boundaries are overruling natural boundaries'*
- Boundary disputes falls under the responsibilities of the cadastral authority
 - Tax Cadastre (legal courts)
 - stacking out of the legally binding coordinates



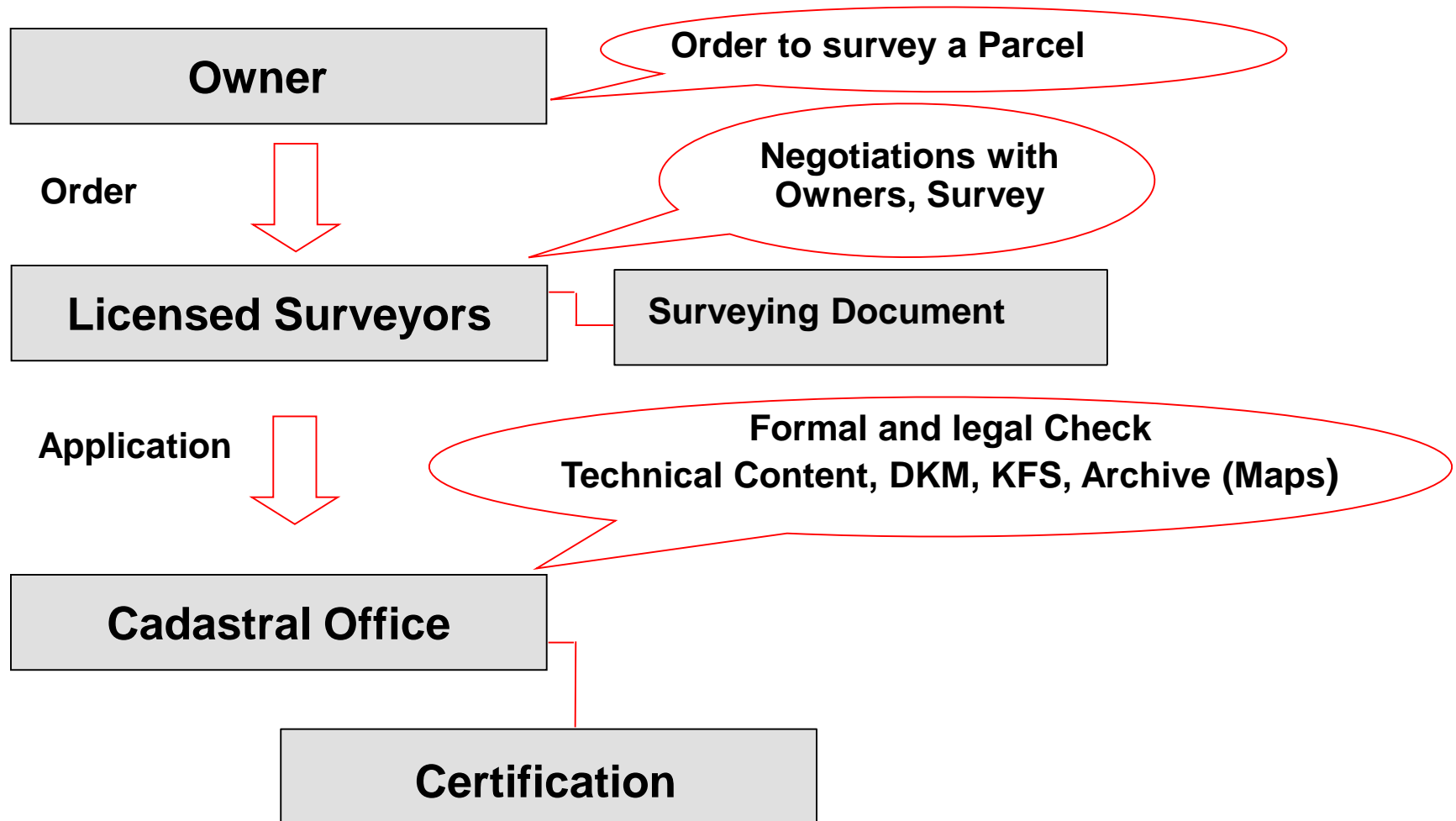
Transition from the Tax Cadastre to the Legal Boundary Cadastre

- Shared task of private licensed surveyors and the public cadastral authority
- Guarantee of boundaries by the state like in Land registry
- Clear legal procedure requires
 - Include the owners: discussion, agreement by signature
 - Surveying > document
 - Check by cadastral authority and certification
 - Results is legal coordinates!

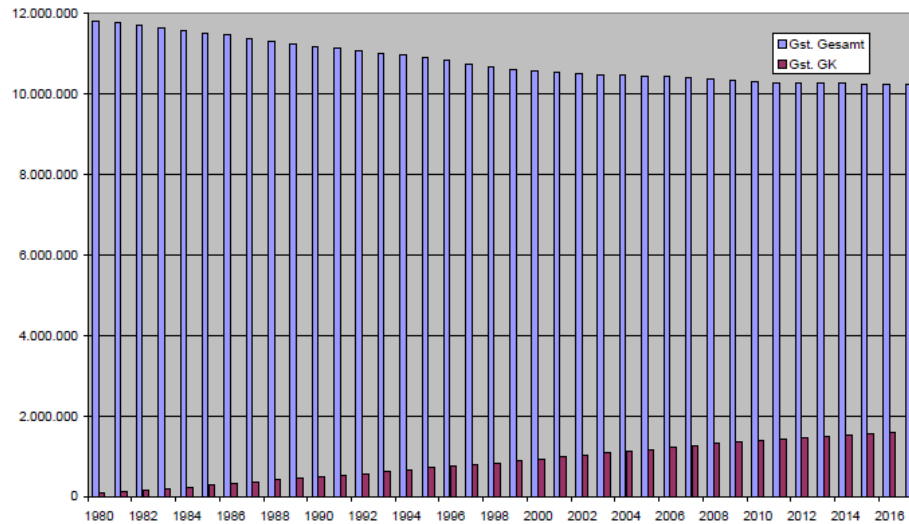


EZ	Obj.Nr.	*1	Eigentümer	Unterschrift	*2
63	1123		Bauk. für Oberösterreich und Salzburg Hauptplatz 10-11 4020 Linz	<i>[Signature]</i>	✓
64	84	✓	Gerhard Winkler geb. 1968-07-03 Heinrich 21 4310 Mauthausen neue Adresse: Hörsing 12 4310 Mauthausen	<i>[Signature]</i>	
65	87 111	✓	Heinz Wolfgang Sturm geb. 1959-12-05 Matzweg 15 4210 Gallneukirchen	<i>[Signature]</i>	
67	86 1122 1124	✓	Anton Riepl geb. 1960-02-15 Gallneukirchen 4210 Gallneukirchen neue Adresse: Dienegasse 10 4210 Gallneukirchen	<i>[Signature]</i>	

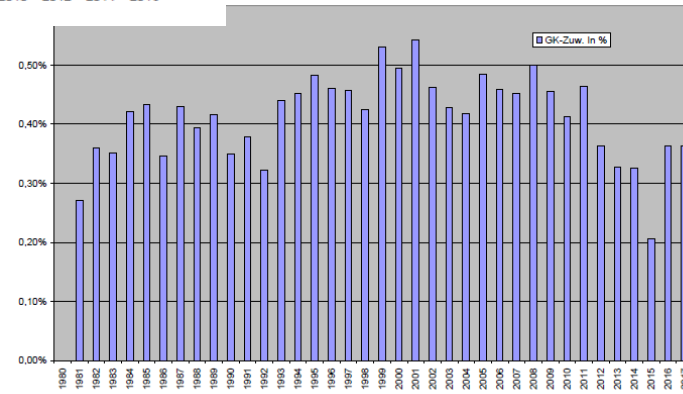
Shared responsibilities



Facts and figures

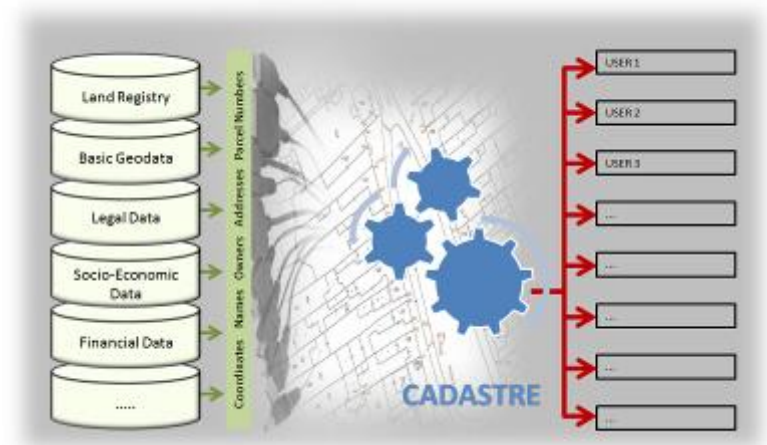


- **2017:**
 - 10.2 Mill. Parcels
 - ~ 16 % in Legal B. Cadastre
- **35000 cases/year**



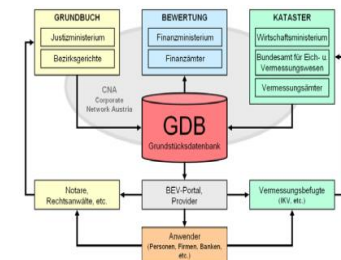
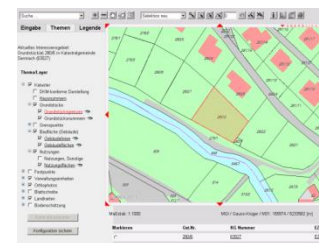
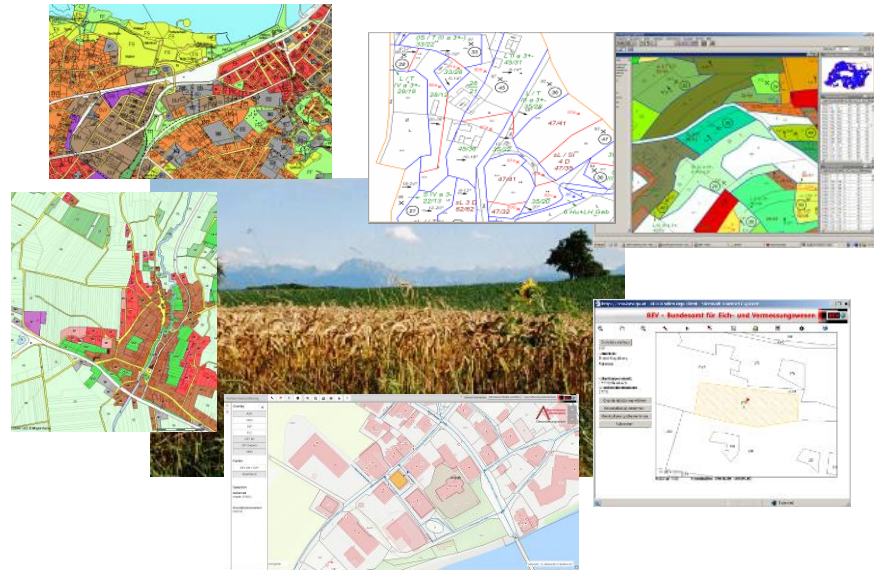
Cadastral information is ..

- not only used for property transactions > but in a multipurpose sense
- is an important infrastructure of a state and the public administration
- is a basic layer at Information Systems of public authorities
 - on municipality, provincial and state level
 - document the legal situation
 - e.g. public rights and restrictions
- Irreplaceable



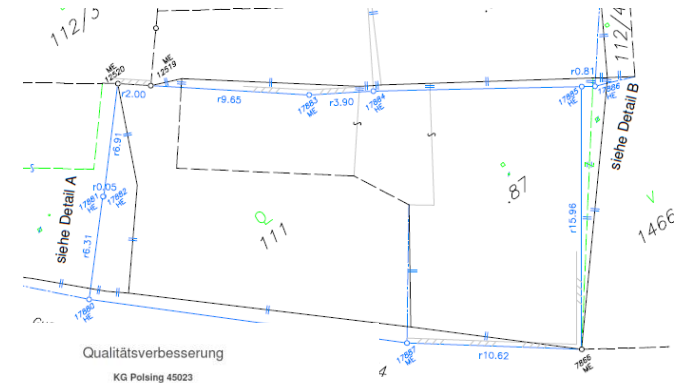
Multipurpose use

- Increasing number of users and access to cadastral information
- Not only professional users (e.g. surveyors)
- Parcel based subsidies
- Spatial planning
- Property taxation
- Public administration
- Austrian Address Register



Legal procedures to improve the quality

- Quality improvement of Cadastral Map
 - Owners are included
 - Cadastral office ex officio
- Improvement of Legal Boundary Cadastre is a legal process
 - Agreement by owners
 - Finally an certification has to be issued to all owners



Die Grenze zwischen den Grundstücken 2/1 und 252/1 wurde unter Verwendung folgender Urkunde rekonstruiert:

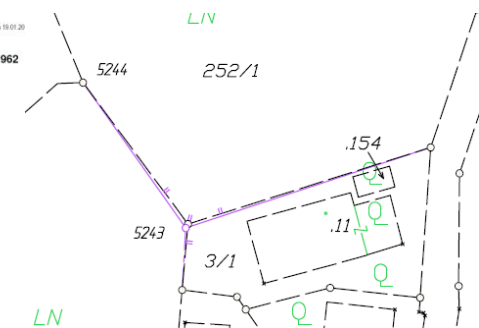
10/1962

Koordinatenverzeichnis

Punkte		Y [m]	X [m]
5243	E	55627.97	347962.34
5244	E	55601.98	347962.07
5243	E	55758.81	347959.80
5246	E	55770.33	347959.76
1131A1		55479.79	348388.01
3435A1		55914.69	347949.68
45023 11A1		55905.64	348225.79
45023 3A1E1		55795.90	347959.26
199001		55920.49	347967.88
199003		55911.61	347969.63

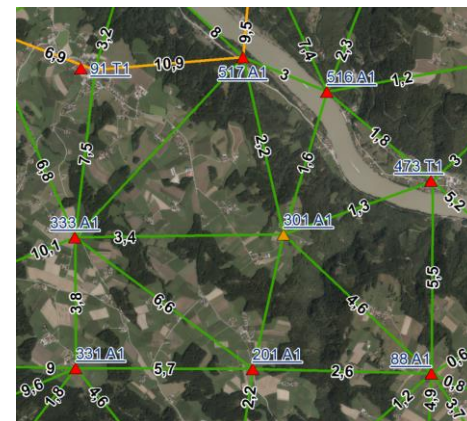
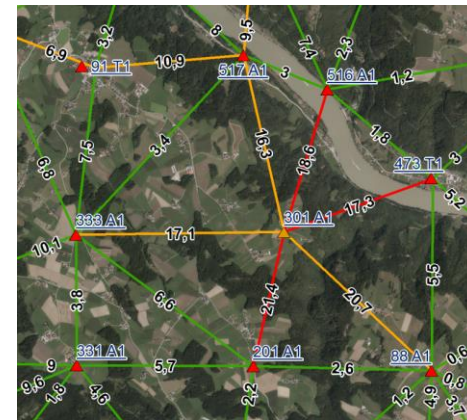
vermessen am 10.01.20

Transformation aus 10/1962



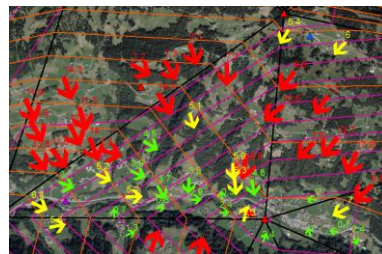
Challenges_1

- Historic based deficit in reference points
 - Differences ETRS89 - MGI-System
 - Homogeneous coordinates in ETRS89
 - Analyse deficits of Reference points
- Local homogenization of the cadastre
- Prepare transfer of the cadastre to UTM/ETRS89



Challenges_2

- Sliding movement of the ground
 - new law and regulations
- Consequences for boundaries of parcels
- No legal boundary cadastre possible



Recent developments

- Change of the law by focusing to strengthen the legal process
 - In case a signature of an owner is missing
 - Legal procedure including the cadastral authority
 - Invitation to border negotiations and
 - Assignment to court
- Optimizing cadastral process
 - Digital entry by “Structured surveying plan” from Surveyor to cadastral office
- Submit certifications in an automated way to the owners
- Digitize historic archive
 - “Close the gap”
 - 4-5 Mill. Surveying plans/documents to be classified and scanned (1883-2012)

Thank you!

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