



# New Trends and Developments in Estonian Cadastre

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# PCC, year ago in Tallinn...





## Legal umbrella for developments

- 1. Acquisition of Immovables in Public Interest Act (01.07.2018)
- 2. Land Cadastre Act (amendment 01.07.2018)
- 3. Land Consolidation Act (amendment 01.07.2018)
- 4. The Procedure for the Formation of Cadastral Parcel (14.08.2018)
- 5. Spatial Data Act (amendment 01.07.2018)
- 6. Law of Property Act (amendment 01.07.2018)

#### **Current situation**

The objective of the maintenance of the cadastre is to register and preserve land information in order to provide the public with up-to-date basic data about land.

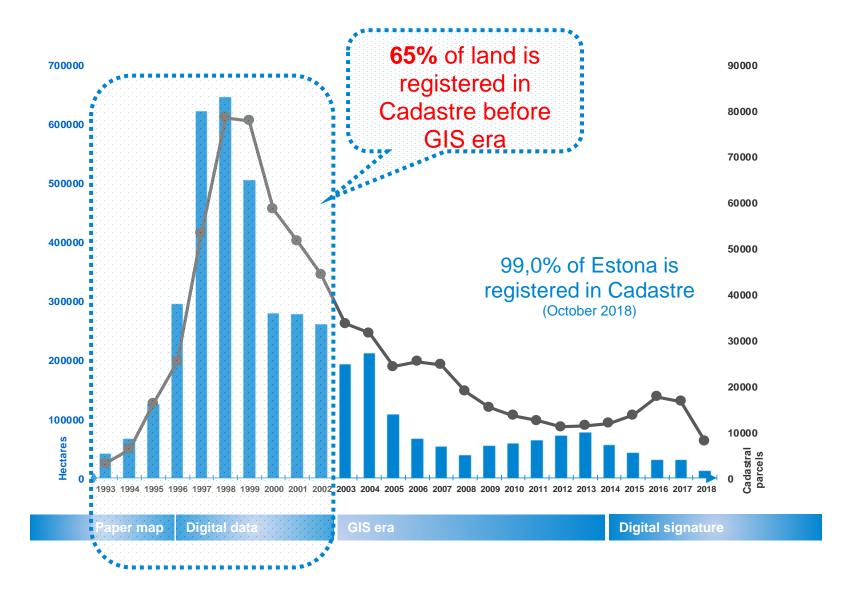
boundary and spatial extent of immovable

land value

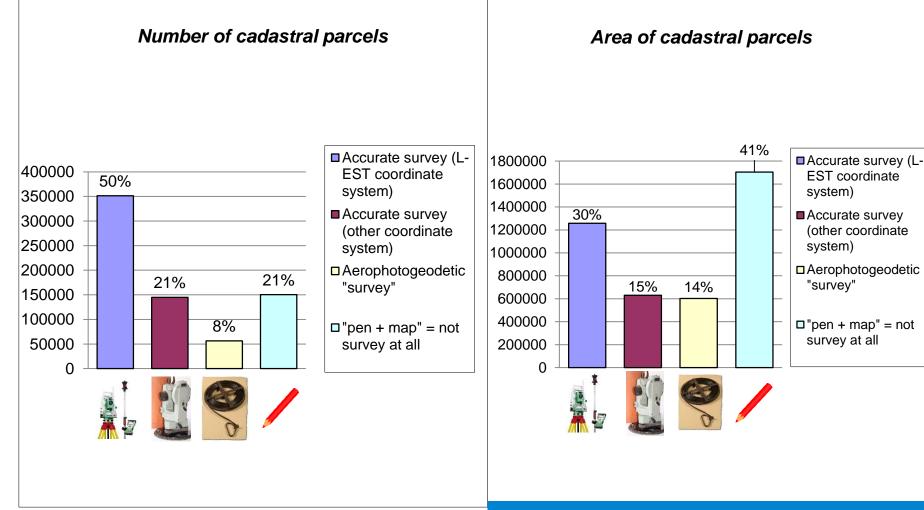
natural status of land

information on land use

### **Current situation**



#### **Current situation**



Only half of the 704 747 parcels have accurate boundaries!

4 methods of cadastral parcel formation (the way of cadastral survey) was allowed during the land reform.

New principle - there may be several notations concerning the parcel in the Cadastre. Notations are entered into the Land Register (Title Book) as well. Notations are made public!

 when the boundary data of adjoining parcels are "Necessity to contradictory, or when the location of boundary points determine property in nature does not coincide boundary" with the boundary data entered into the cadastre when the parcel is formed in general boundaries (pen+map method), or "Area is inaccurate" when the cadastral registrar identifies inaccurate or contradictory boundary data

#### New principle – cadastral registrar has right to form cadastral parcel

# Owner of immovable

• Applies for terms of parcel formation

# Cadastral registrar

- Decides on the extent of survey and form of data submission
- May allow partial surveying
- May join or divide parcels
- Demarcates and surveys the boundary
- Informs ETD of inaccuracies in nature
- Informs cadastral registrar of inaccuracies concerning restrictions
- Must introduce the boundary to the involved owners
- Must determine the boundary in the case of contradictory data

Land surveyor

Cadastral registrar

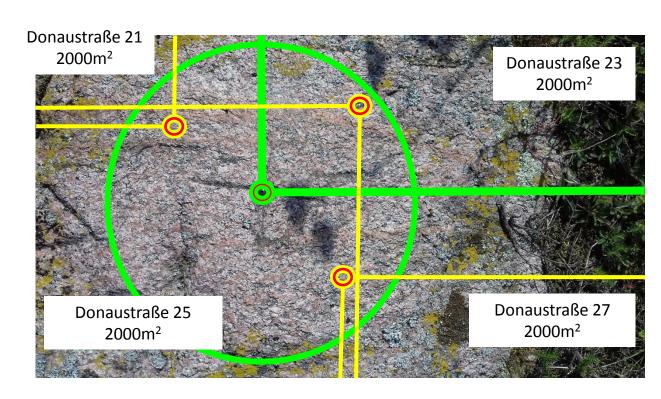
Forms the cadastral parcel, determines the area, land use/cover and registers the parcel

New principle - Correction of cadastral data. The list of possibilities is much longer now.

- The cadastral registrar has the right to correct cadastral data on the basis of cadastral surveys.
- The cadastral registrar has the right to correct cadastral data <u>without</u> <u>a cadastral survey</u> if the following has been established:
  - 1) more exact base data of the boundaries and location;
  - 2) variation from the geodetic network or backdrop map;
  - 3) a conversion mistake
  - 4) an error in making the cadastral entry.
- the owner of the immovable shall not be involved provided that the boundary of the cadastral unit in the field is not subject to change.

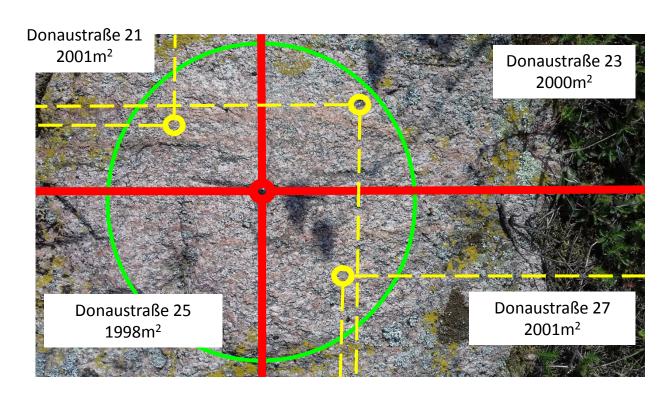
### New principle – boundary points of different parcels will be aligned

From two layer → one layer



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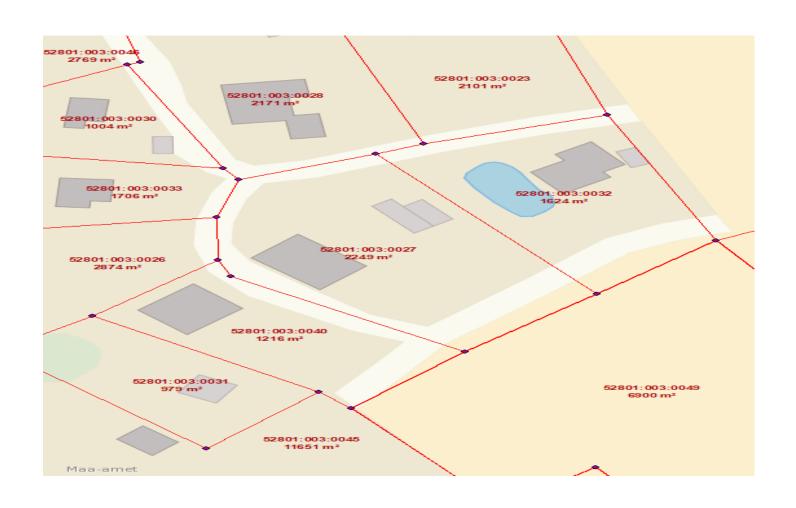
# New principle – some boundaries in the cadastral map will be matched with ETD (Estonian Topographic Database)



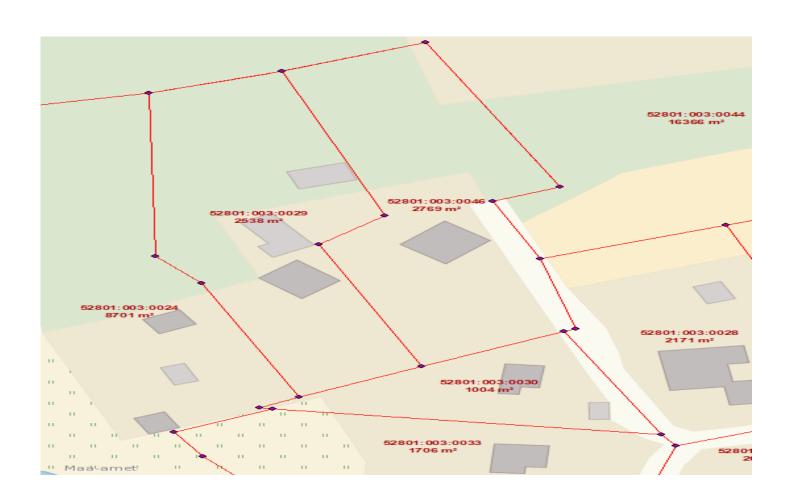




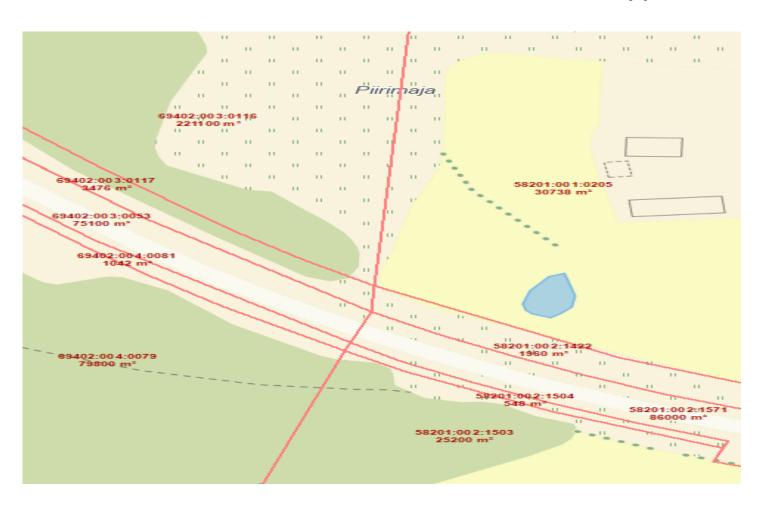
### Example 1: The cadastral registrar decides which boundary points will be surveyed



Example 2: The cadastral registrar may divide cadastral parcels electronically, provided that suitable base data are available



Example 3: The cadastral registrar may carry out land consolidation electronically, provided there is no need to determine a new boundary point in the field.



### Natural status of land

### New principle – topographic database integrated to cadastre



- The map of land use/cover types is compiled based on the Estonian Topographic Database (ETD)
- The map of land use/cover types contains the following land use types: arable land, natural grassland, forest land, yard land and other land.
- Cadastral boundary data will be linked to topographic data to track the changes
- The areas of land use/cover types for every parcel will be calculated once a year

### Impact of changes in shape areas + changes in land use/cover types

- The area of 7287 of cadastral parcels will change more than 10%
- The area of 15938 of cadastral parcels will change 5-10%
- The area of 65657 cadastral parcels will change 1,1-5%

Arable land -3 526 ha Yard land +13 716 ha

Natural grassland +59 464 ha Other land +7 021 ha

Forest land +60 579 ha

The assessed value will increase over 1000 euros for 148 cadastral parcels

The assessed value will decrease over 1000 euros for 135 cadastral parcels

The assessed value will increase over 100 euros for 8948 cadastral parcels

The assessed value will decrease over 100 euros for 7258 cadastral parcels





### Query of land use/cover types of the parcel in Geoportal

Tunnus	15901:001:0299
Maakond	Pärnu maakond
Omavalitsus	Pärnu linn
Asustusüksus	Soeva küla
Lähiaadress	Audru metskond 19
Pindala	Legal area 8908.4 ha
Ruumikuju pindala	Shape area 8905.672 ha
Ruumikuju pindala Sihtotstarve 1	Shape area 8905.672 ha  Maatulundusmaa 100%
	· crostor zma



Vaata andmeid kaardirakenduses

Enne 1. jaanuari 2019 Beffore 01.01.2019

Kõlvik	Pindala
Haritav maa	-
Looduslik rohumaa	-
Metsamaa Forest land	8908.4 ha
Õuemaa	-
Muu maa Other land	-

Maksustamishind: 1 995 480€

Pärast 1. jaanuari 2019 After 01.01.2019

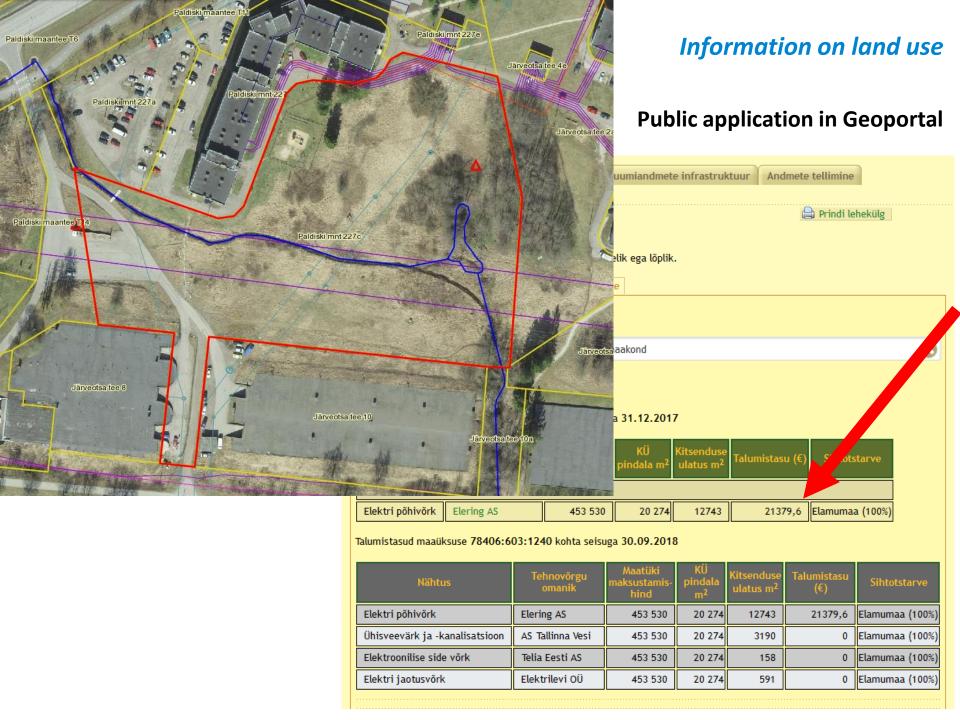
Kõlvik	Pindala
Haritav maa	-
Looduslik rohumaa	-
Metsamaa Forest land	370.5465 ha
Õuemaa	-
Muu maa Other land	8535.1255 ha

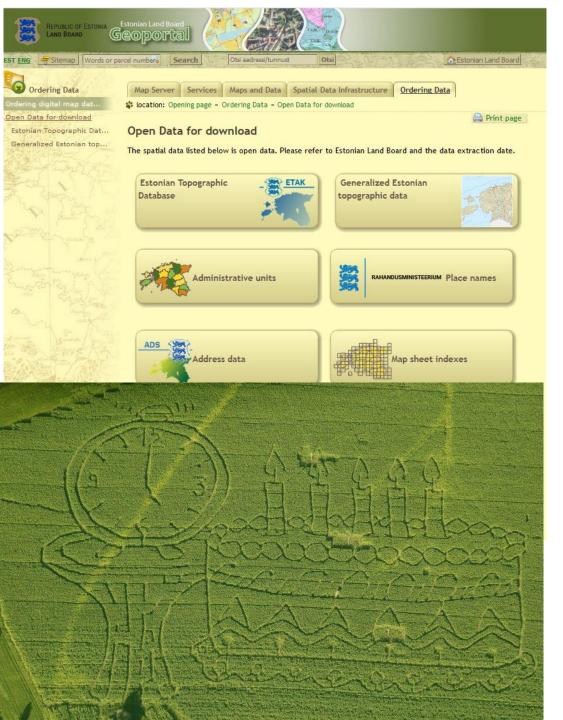
Maksustamishind on arvutamisel.

### Information on land use

### New principle – Payments for tolerating utility networks starting from 01.01.2019

- In order to be compensated for tolerating utility networks, the land owner will submit a request via Geoportal to the owner of utility network.
- The annual payment for tolerating utility networks is 7,5 % of the assessed value of land x coefficients of the restriction.
- Assessed values of land are calculated by the Land Board
- In total, there are data on 440 999 cadastral parcels available
- Public application in Geoportal





### *Open data since 01.07.2018*

- Cadastral parcel data
- Assessed values
- Areas of restrictions (areas of influence)
- Core data from ETD, Thematic datasets for entire Estonia (buildings, transportation etc.)
- Basic Map 1:10K in raster and vector format, 1:20K, 1:50K, 1:250K.
- Soil Map
- Geological Base Map
- Orthophotos since 2002 (RGB, False-color CIR, False-color forestry NRG, densely populated urban areas)
- Elevation Data (Raw LiDAR data, Digital Terrain Model, Digital Surface Model, Canopy Height Model, Shaded relief imagery

### **Challenges for future**

- Development from registration of cadastral parcels to the environment of land procedures, which allows an easy, quick and cheap performance of land management increasing thus the turnover in the property market.
- 2. Land consolidation module development in e-Cadastre workbench.
- 3. Approvals module (for different authorities) development in e-Cadastre workbench.
- 4. Visualization of all kind of restricted real rights (servitudes, encumbrances) having spatial extent.
- 5. From July 2020 only physical person can be cadastral surveyor.
- 6. Ongoing communication.

# New cadastral concept (for Estonia?), the aim of which is to update cadastral data

Boundary points of different parcels will be aligned

Some of boundaries in the cadastral map will be matched with ETD

Natural status of parcel (land use/cover types) will be identified from ETD on regular bases

The boundary in nature does not change.

All changes are made in order to update the register





# Thank you for attention

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