Improving the quality of cadastral data specifying the area of the parcel

Priit Kuus
Estonian Land Board

November 21, 2019
Changes in legal grounds

In July 2018 new amendments was adopted at land cadastre act, what determines new principles:

- The extract of cadastral unit data are issued directly based on registered data;
- The cadastral registrar shall form a cadastral unit based on the survey data and available cadastral data and determines the area. The land cover area shall determine based on land cover map data;
- The cadastral land cover map shall be prepared on the basis of data from the Estonian Topographic Database.
Improving data quality based on new principles

- The neighbouring cadastral units shall share boundary points on a field and in register with the same coordinates;
- It is allowed to combine coordinates into one place from the different cadastral survey in a scope of allowed mistake;
- Since border does not change on the field property owners do not need to be involved in action
Calculating the new area for cadastral units

- Area shall be calculated in square meters;
- Area shall be calculated based on registered coordinates;
- Representing area value in low density regions shall be in hectares on 0.01 accuracy.
- Calculation are made by intersecting cadastral unit overlaps among land cover;
- Under the 25 sqm land cover units can be exclude if it is over 5% of catastral unit area;
- Land cover are determined on cultivation, natural grassland, forest land, yard land and other land.
Land cover area changes

Cultivation land
- Erased: 15%
- No changes: 4%
- Changes: 60%
- New units: 21%
- 238319 » 253637 cadastral units

Natural grassland
- Erased: 20%
- No changes: 2%
- Changes: 51%
- New units: 27%
- 232418 » 257863 cadastral units

Forest land
- Erased: 2%
- No changes: 4%
- Changes: 66%
- New units: 28%
- 255907 » 350536 cadastral units

Yard land
- Erased: 10%
- No changes: 7%
- Changes: 54%
- New units: 29%
- 280 566 » 355097 cadastral units

1 January 2019
The basis of data from Topographic Database
Improving data quality project plan

December 12, 2018
- Testing
- eCadastre software update

December 14, 2018
- Cadastre stops proceedings

December 16, 2018
- Calculation are made

December 17, 2018
- Directive of the Director General

December 17-20, 2018
- Preparing all proceedings

December 20-22, 2018
- Making entries
- Entries are made based on counties

December 26, 2018 – January 2, 2019
- Land registry queries data via x-Road

January 3, 2019
- Cadastral register starts normal proceedings
The real estate conveyancing contract...

Data flow

Day 1

Cointract queris from property registry

Cadastral unit area: 1500 m²

Contract approved and entered to property registry

Nea area was calculated
The real estate conveyancing contract...

Day 2

Data flow

Negotiations

X-ROAD

INTERNET

e-CADASTRE
1551 m²

Contract queries from property registry

Nea area was calculated

Contract approved and entered to property registry

Cadastral unit area:
The real estate conveyancing contract…

Day 3

The real estate conveyancing contract...

1500 m²

The real estate conveyancing contract...

Contract queries from property registry

Nea area was calculated

Error!

Cadastral unit area: 1551 m²

Contract approved and entered to property registry
Thank you!

Priit Kuus
priit.kuus@maaamet.ee