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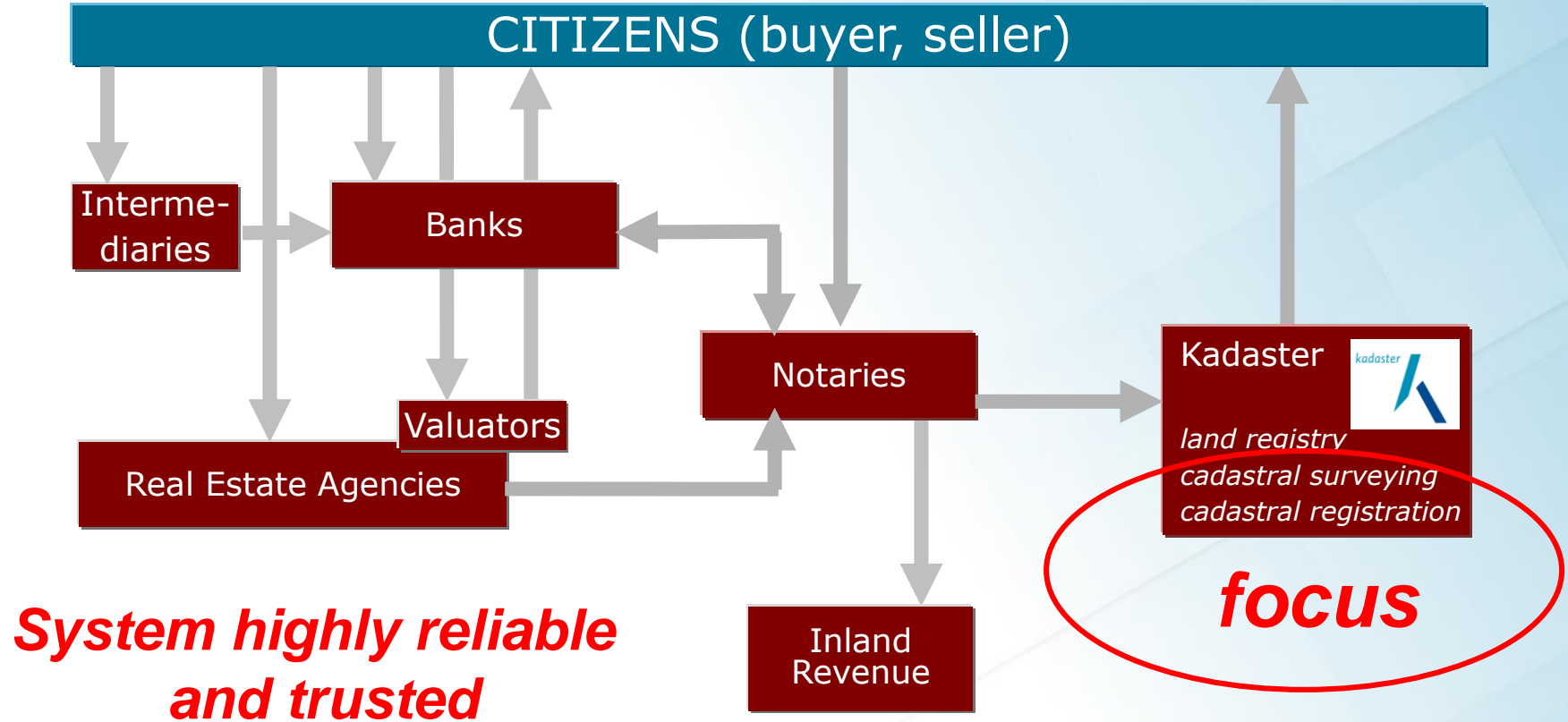
Reliability of the cadastre in a digital world

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Cadastre, Land Registry and Mapping Agency
The Netherlands

PCC Conference Legal reliability of the Cadastre
Vienna, Austria, November 20-21, 2018

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Real estate transaction chain in the Netherlands



Parallel worlds



Real world

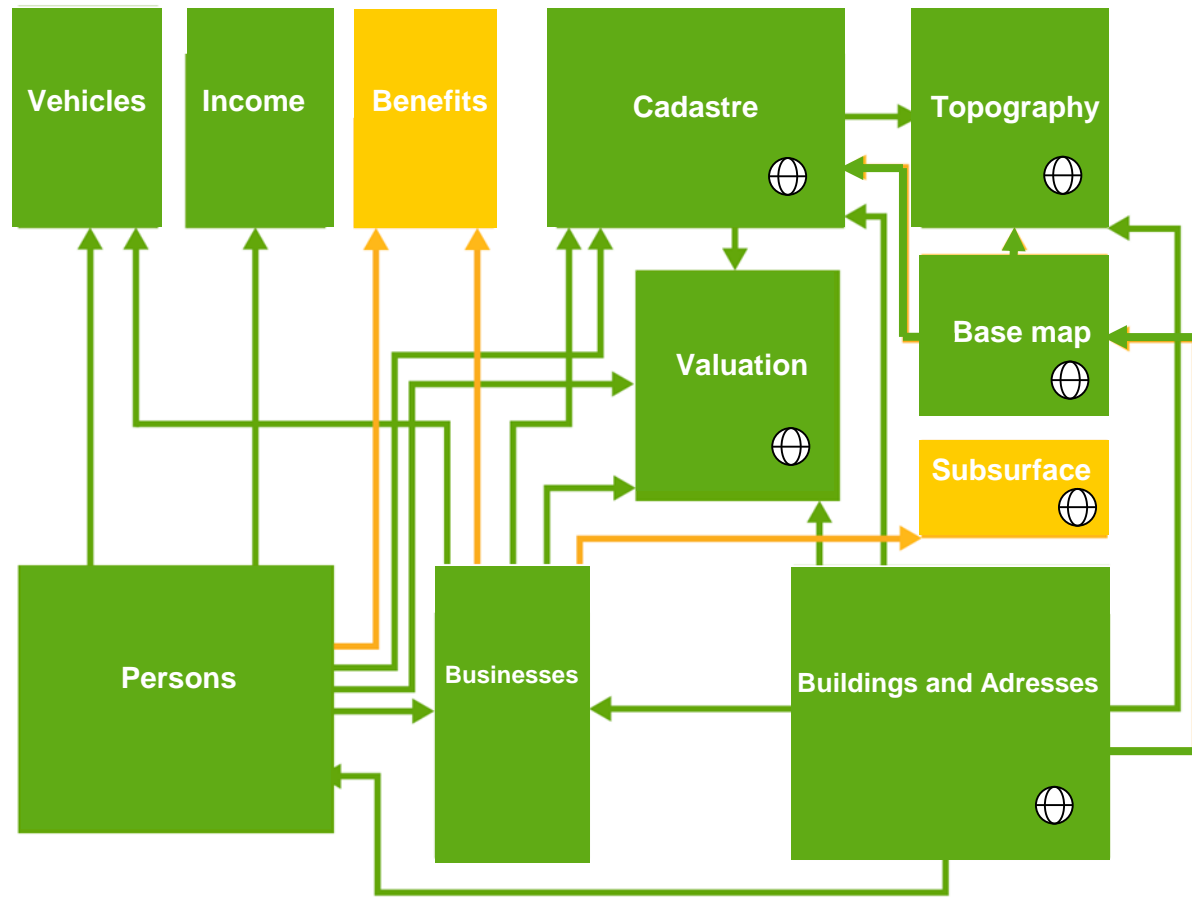
Institutional world



Administrative world



System of key registers in the Netherlands administrative world



Legenda

Orange box: Basisregistratie niet beschikbaar

Green box: Basisregistratie beschikbaar

Orange arrow: Verbinding niet beschikbaar

Green arrow: Verbinding beschikbaar

White globe: BR bevat geometrie

Orange globe: BR bevat nog geen geometrie

Legal Reliability Cadastre (NL-case)



Data driven society

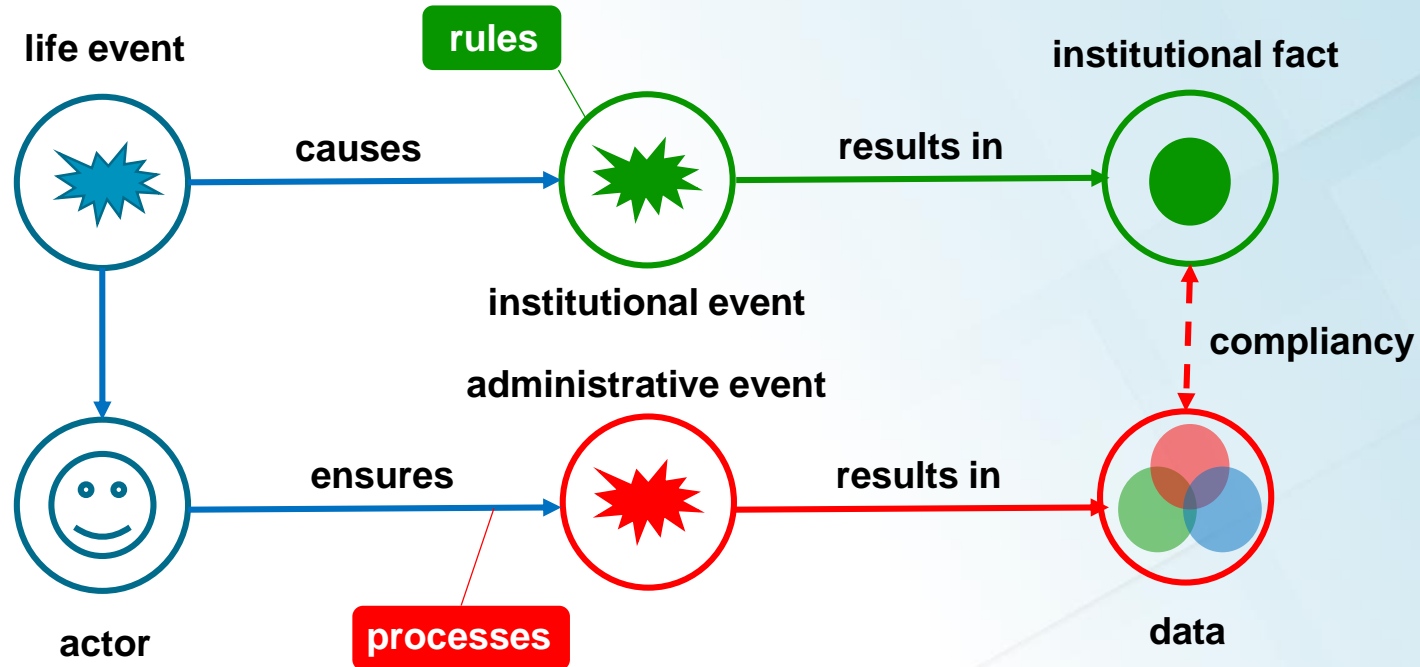
From the world of quality management

“In God we trust; all others need to bring data”

Quote of W. Edwards Deming

To the world of digital society

Relations between the different worlds



Source: Best practices for meaningful connected computing (www.bp4mc2.org)

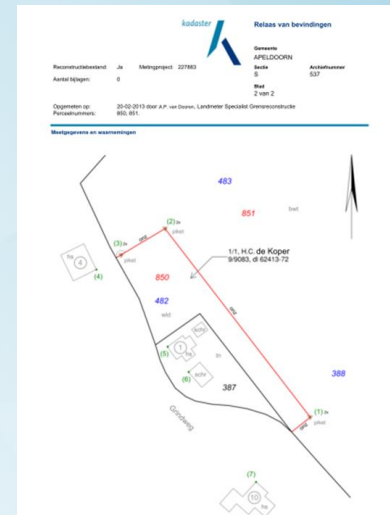


Cadastral Surveying and Mapping

Cadastral (index) map and boundaries

Cadastral map

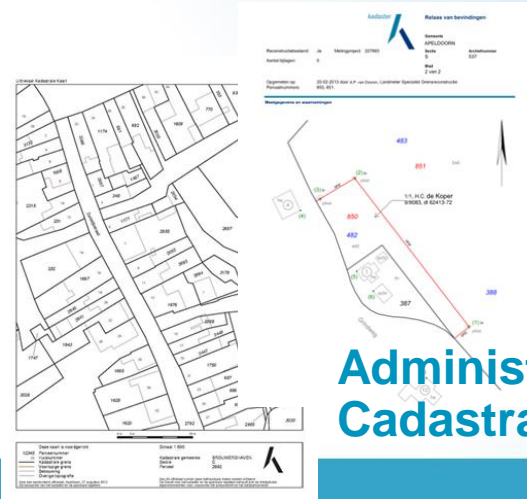
- Nationwide coverage
- Since 1832
- Digital since end of nineties



Cadastral boundaries

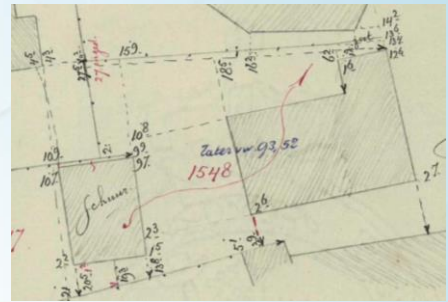
- Archived from \pm 1880
- Measurements on field sheets
- 80.000 boundary measurements

Three worlds in practice



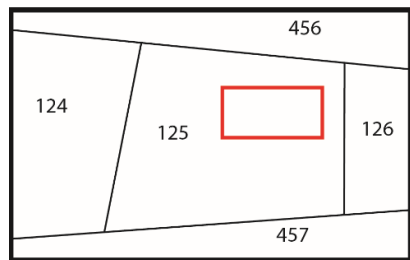
What are the issues?

- Cadastral map depicts parcels;
Users consider map boundaries as legal boundaries
- Boundary information requires setting out
- Boundary information is difficult to access (too technical)
- Geospatial datasets seem to contradict (within specs)
Users experience differences

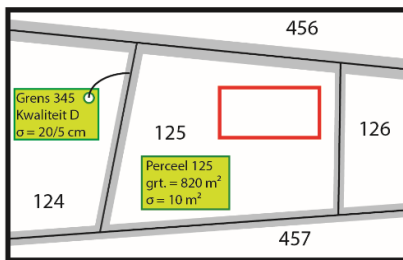


Is the perfect cadastral map the solution?

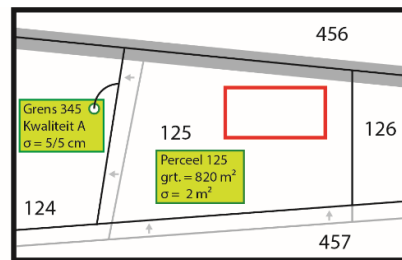
- Cadastral map with information on quality and source (information map)
- Cadastral map based on **accurate** geometry (reconstruction map)



Current (index) map



Information map

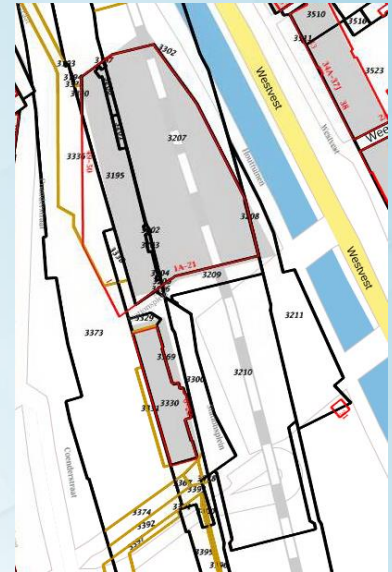


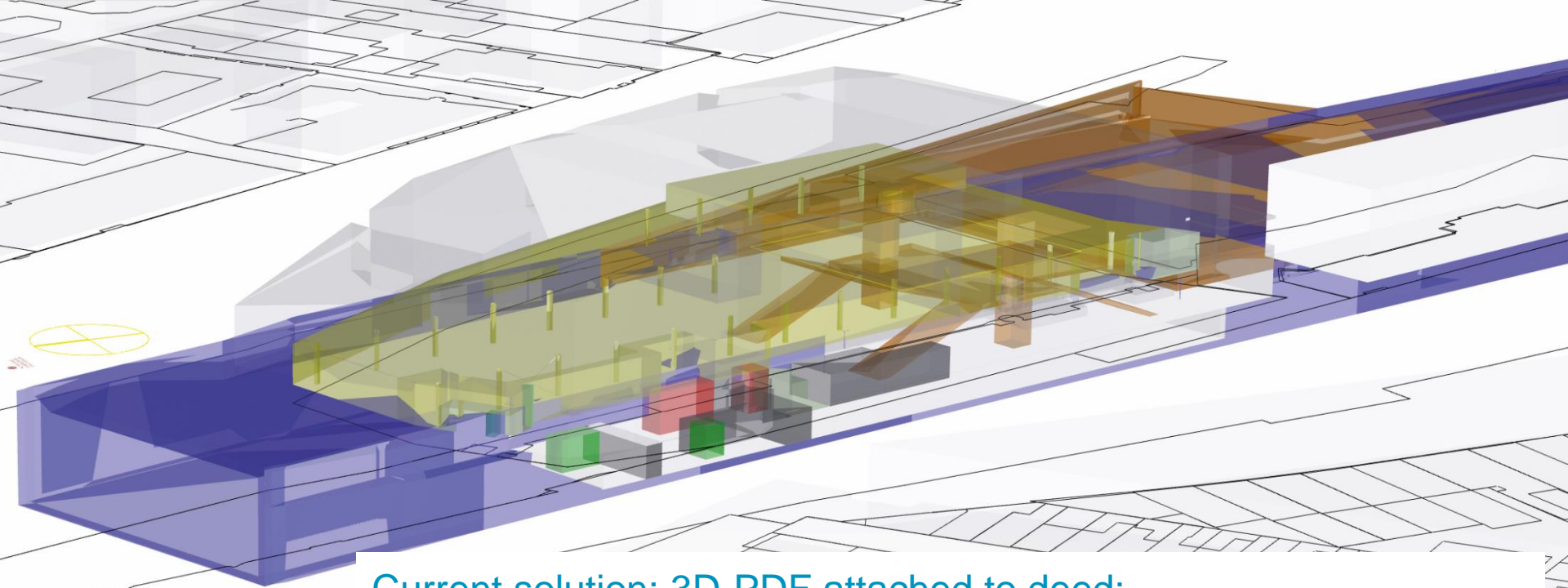
Reconstruction map

Getting closer to physical reality



- rail infrastructure
- railway terminal
- offices





Current solution: 3D-PDF attached to deed;
Increases reliability by providing accessible and usable information

Future: 3D-BIM? (as planned or as built?)

Getting closer to institutional world

Inheritance

- Transfer to heirs by law (takes precedence over ‘cadastral owner’)
- Decease of ‘cadastral owner’ notified in registration
- Encourage registration of succession (free or charge)

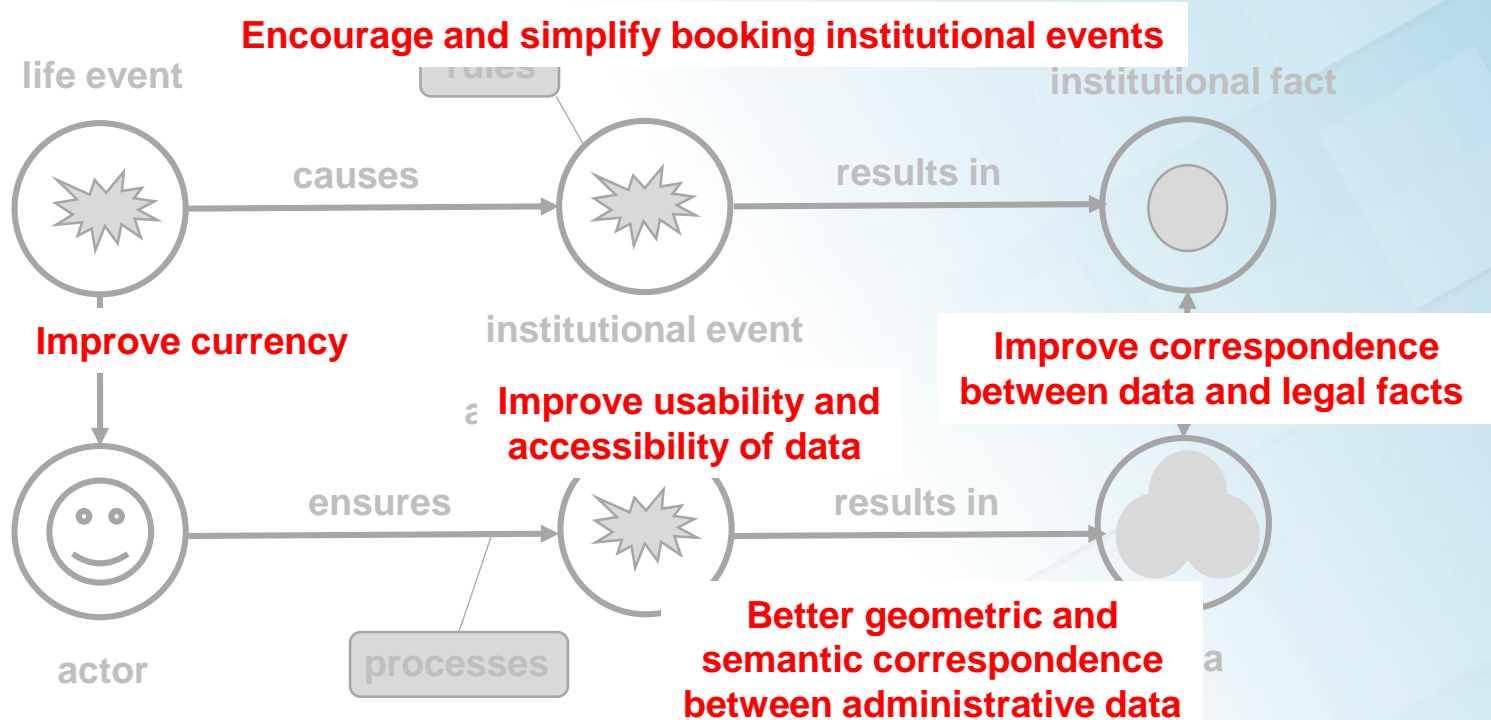
Adverse possession

- Takes effect by law after a transition period
(takes precedence over ‘cadastral owner’)

Public restrictions

- In the process of including all restrictions in the registration

Improvement strategy



Concluding remarks

- Society increasingly relies on data and assumes cadastral data is correct
- Be aware of different perspectives in modelling system
- Bring real, administrative and institutional worlds closer together (content and currency)
- Thereby increasing trust that will be perceived as better legal reliability