



1

The image shows the Kadaster logo in the top left corner. The background is a light blue gradient with a faint 3D visualization of land parcels. The title 'The Dutch Land Registry' is centered at the top. Below the title, there is a bulleted list of information. At the bottom left, there is a small circular icon. At the bottom center, there is a small number '2' followed by a horizontal line and a dot.

The Dutch Land Registry

- Land Registry maintains:
 - Public land registers (documents/deeds), and
 - Key Register Cadastre (parcel based registration)
- Nationwide Land Register and Cadastre
- Number of deeds registered (2018): 950.000
- Number of land registrars: 10
- Number of employees with mandate: 250
- Third party protection: not based on Key Register but on inquiring documents/deeds in the Public land register.
However: governments must rely on the Key Register when carrying out public duties

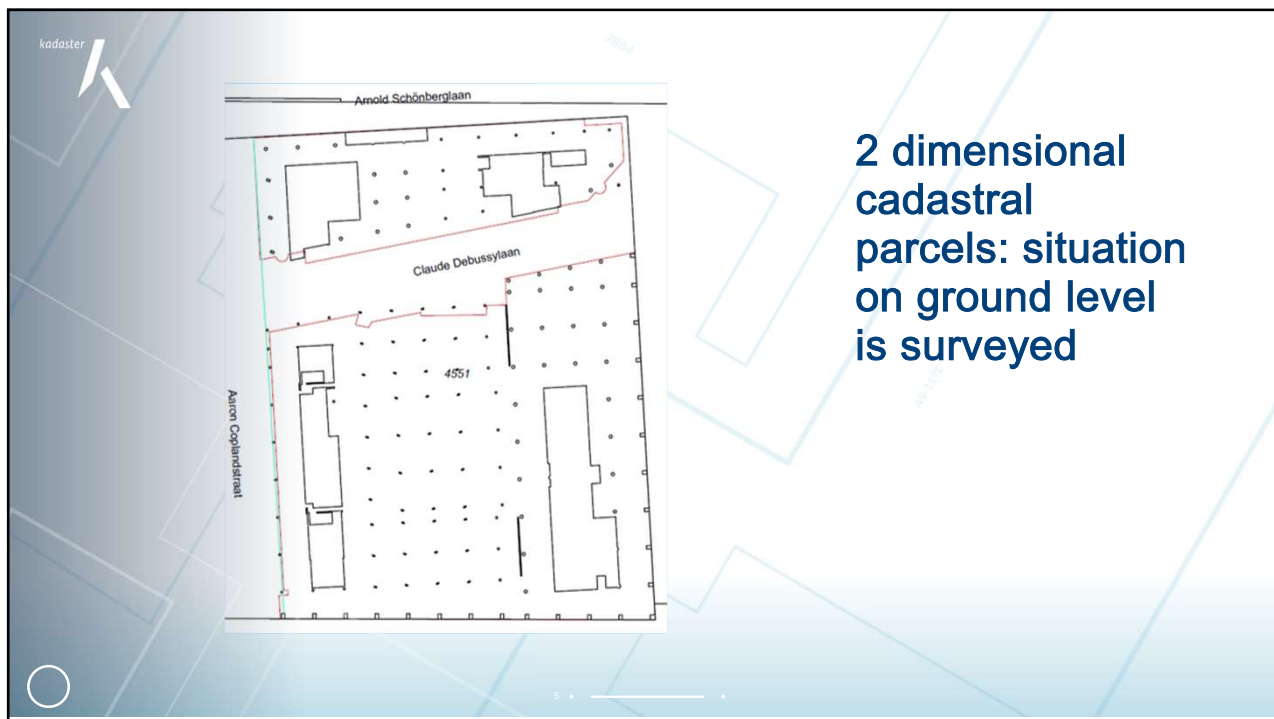
2



3



4



5



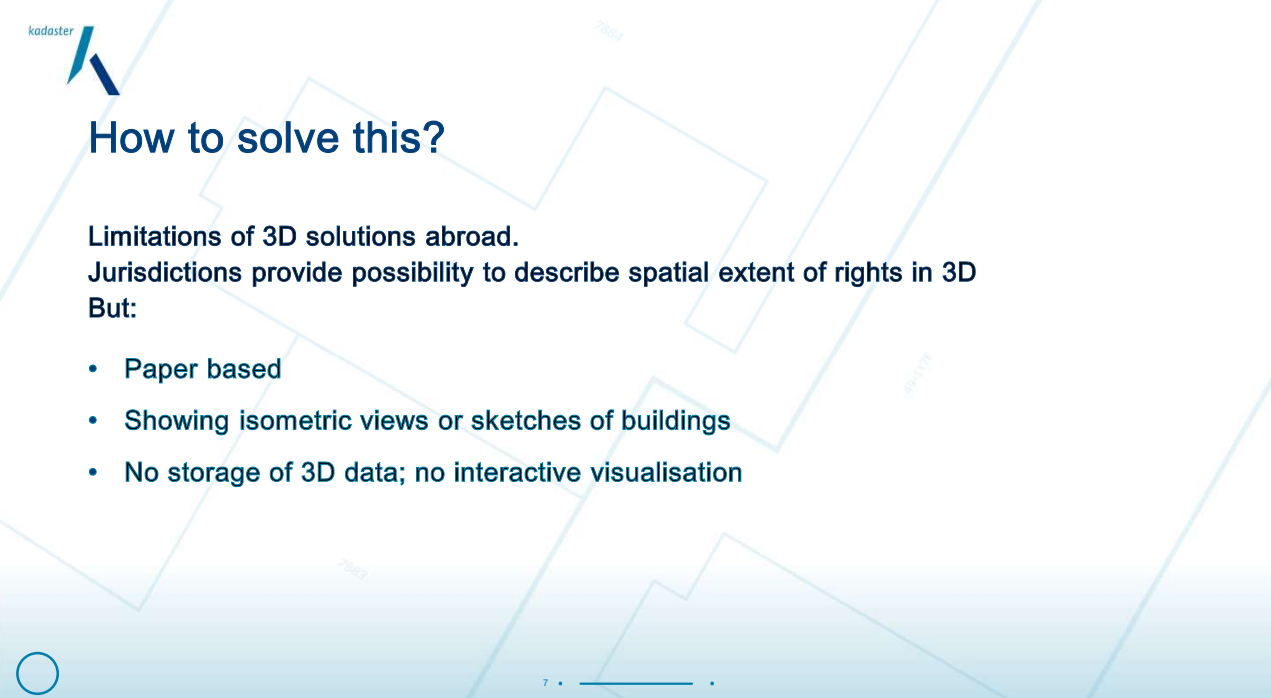
6



How to solve this?

Limitations of 3D solutions abroad.
Jurisdictions provide possibility to describe spatial extent of rights in 3D
But:

- Paper based
- Showing isometric views or sketches of buildings
- No storage of 3D data; no interactive visualisation



7



How to solve this?

Research TU Delft and VU University of Amsterdam

- Technical solution → 3D pdf file
- Legal → Add it to the deed in the Land Register
- Find a project →.....?



8

What is the legal value of a 3D file?

Binding for the determination of what has been transferred and delivered?
Or should it be used for further guidance only?

- Compare this with a drawing of a 2D map:
- Third party effect because of registering in LR
- But: drawing can never have greater value than shown by the drawing itself (in this case: "sketchy" significance)

9



10



11



12



Real estate rights involved

- Building right railway tunnel (Railinfratrust B.V.)
- Building right travellers area (Railinfratrust B.V.)
- Building right railway hall (NS Vastgoed)
- Building right elevator/stairs (NS Vastgoed)
- Building right technical installations (NS Vastgoed)
- Ownership: (Municipality Delft)



13 • — •

13

Prerequisites of the land registrar

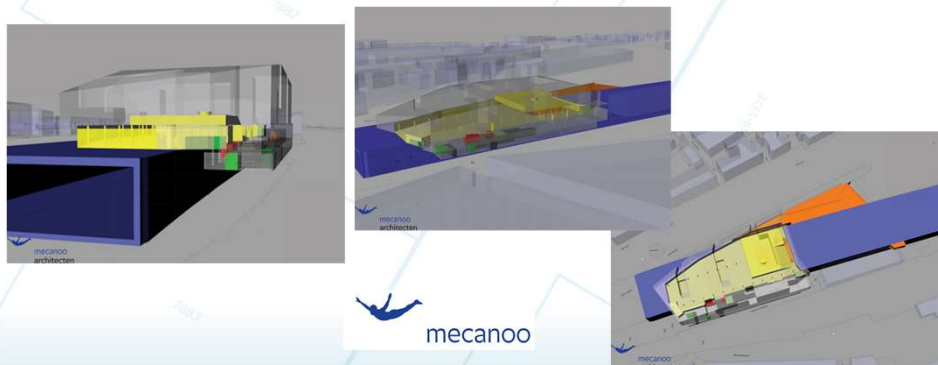
Consistency with 2D registration!!

- Define a 3D complex of parcels
- Visualise all real estate rights in the complex
- Give each real estate right an index number which is related to the index number shown in the 3D file
- No visualisation of personal rights
- Not necessary for the land surveyor to measure exact boundaries in 3D

14

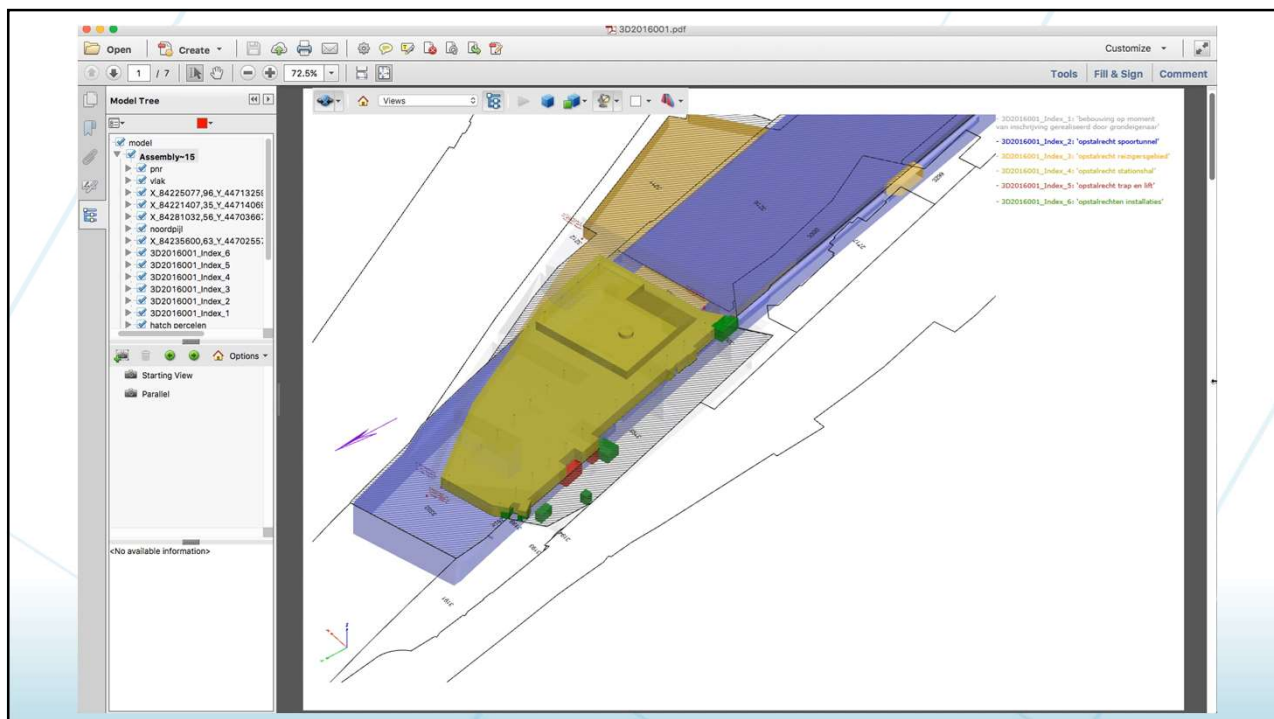
Converted architectural data (BIM) into a 3D Pdf

3D cadastral file



mecanoo

15



16



17

Challenges

- We need an easier process to develop the 3D file.
- Changing a registered file must be easier and less time consuming
- We have to provide stakeholders with a smooth workflow

18

Other research questions

- Can the specialization principle be reconsidered: when entering a 3D file of the complex measuring the outer boundary of a complex will be sufficient.
- Must the land registrar be able to enforce a 3D file in certain cases?
- Could updating of the 3D file made compulsory if new real estate rights are established?
- What to do if there is a difference between the deed and the 3D visualisation?
- How to store the underlying 3D data in the best way.

19

Ultimate goal:

Offer inquirers of the public land register more legal certainty against less costs!

20