

# get the data in 10x less time

The volume of inquiries related to plans to local governments is reduced by 10 times.

Better-informed decisions with the help of data integration and visualisation.

# smart city and e-Planning

## Planning systems

Created a transparent planning process that is managed by the city of Tallinn, is accessible for everyone and allows communication between all stakeholders: citizens, businesses, and public sector. We are currently developing a state wide planning system, Estonian Planning Register.

## e-construction platform and the 3D twin

One part of the Building Register made for the Estonian state is 3D-Digital Twin. 3D twin, developed by AS Datel, includes three-dimensional models of buildings throughout Estonia. The ground elevation model and 3D models of buildings used in 3D twin are created by the Land Board. This digital tool is especially helpful for the real estate and construction sectors, but can also provide important information to, for example, a private individual purchasing a house. The new digital tool allows a look at what a building would look like in the existing environment, what restrictions should be considered when designing the building, and how shadows will affect the building.

The 3D tool is mainly meant for decision-making when it comes to environmental decisions. The 3D building renders have been created with the help of an automatic data processing program that uses data from Lidar pictures taken from the air. The application allows for data to be entered into regular context, displaying it along with other map layers from the Land Boards databases. In addition to buildings, the map application also shows a height map of Estonia, to go with aerial laser-scanning point clouds and modelled vegetation in some areas. There is also an option to apply for information from different registries about buildings.

## Key benefits:

- makes it easier to find information needed for building lifecycle activities
- improves the quality of data
- fully digital system, paperless proceedings
- guides the construction industry to use innovative planning solutions
- planners can upload their Building Information model (BIM) to see how the planned object blends into the environment

**Target groups:** city governments, designers, architects

## References:

- City Planning Register, Tallinn
- State wide Building Register including 3D-Digital Twin, Estonia
- Permitting and Inspection Portals, Montgomery and Roanoke County, United States
- The Utility Mapping Portal, City of Pulaski, United States

## Contact

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