

Estonia

Delivering 3D open data for Estonia

“It is essential that we keep searching for ways to model our world in the best and most intuitive way. Since we live in three-dimensional world, the possibility to see and use digital 3D models for every building in our country as open data will mark a great leap forward.”

Tambet Tiits
Director General,
Estonian Land Board

The delivery of 3D open data is bringing a new perspective to geospatial information provided by the Estonian Land Board.

In accordance with the Land Board's mission to provide open geospatial data for society, the first 3D dataset covering the whole country has been produced using LOD2 models of buildings.

3D shapes for buildings were produced fully automatically by combining aerial laser scanning point cloud and footprints from topographic database. The geometry was later refined and enriched with attributes, such as building height and type, and links to key state registries, including

the topographic database, address register, land cadastre and register of buildings, in the post-processing phase.

The use and value of the new datasets is demonstrated via a prototype 3D application. More research is planned to create a new presentation and services platform for the seamless integration of 2D and 3D data. This continuing research and development project aims to produce additional 3D datasets in the coming years to form a solid basis for creating realistic digital twins.



The app is available here
<https://3d.maaamet.ee/kaart/>

Benefits

- Available as open data to everyone.
- Enables more people to benefit from geodata by moving from traditional 2D maps to intuitive 3D apps.
- Improves public sector decision-making by providing better data.
- Delivers cost savings for using mass-produced 3D data. For example, new 3D models of buildings are already actively used in planning and construction sectors.
- Provides a solid foundation for the production of more 3D datasets which will create even more opportunities for users in the public and private sectors.

