SMART SURVEYORS FOR LAND AND WATER MANAGEMENT
CHALLENGES IN A NEW REALITY

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Smart Mapping - the new VectorTiles Map of Germany

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The situation today

People (even public administrations) mainly use OSM data, rather than official data.
Key Question

How should the official map of the future look like?

To answer this question we launched a project two years ago, called "Smart Mapping"
Design Decisions of Smart Mapping

- Application of an **easy to use data model** ("OSM like")
- Implementation of modern technology (**VectorTiles**, **open API**) 
- Mobile first, performant web application
- Open Source Software (**OSS**) first
- **Central data processing** and nation-wide data coverage
- High actuality of the web map (**1 day**) 
- Guidance for use (tutorials etc.)
- Developed by own experts, located all over Germany
- **Agile software development**
- Use of **cloud technologies** (Software as a Service)
- Production of raster web maps (**WMTS**) as well as **printed maps**
What you get: Smart Mapping Standard Maps in different Styles

Hill shades
3D Buildings
Night
Orthoimagery
Smart Mapping **Map Editor** for individual Styling and Publishing
New:
3D-Buildings (LoD2)
Smart Mapping: new ways for data integration

The new vector-based web map is MUCH more than a map. It allows a lot of use cases by combination with external data.
Combination with historical sites in a 3D visualization
Combination with municipal data (tree cadastre of Hamburg)
Use of VectorTiles API: Web clients und GIS (examples)
Conclusion

- Traditional GIS-technology often limits the usability of official spatial data
- There is **modern web technology** available to overcome the identified shortcomings
- **Agile software development** allows a fast adoption of new technology also in public administrations
- With this approach official data will play again an important role in decision making processes also in future!
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