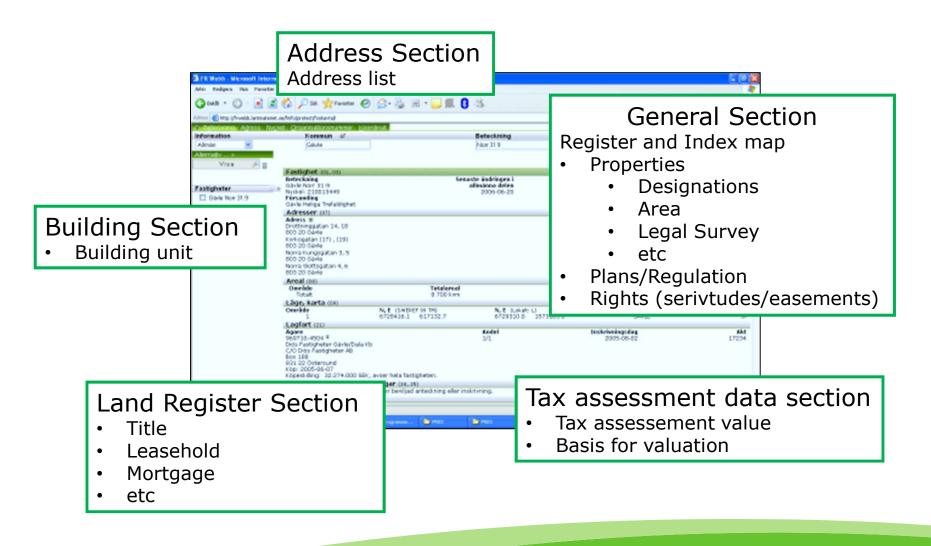
# Visualization of quality in the Real Property Register and Cadaster Index Map

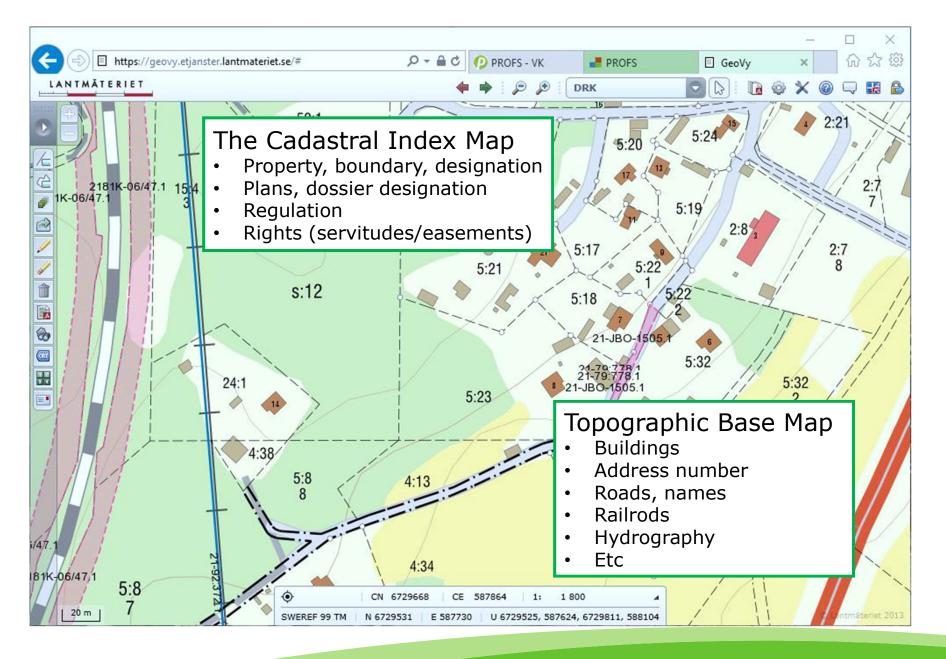
Torsten Svärd Mikael Andersson Sara Sand

Lantmäteriet, Sweden
The Mapping, Cadastral and Land Registration Authority



#### The Cadastral Index system

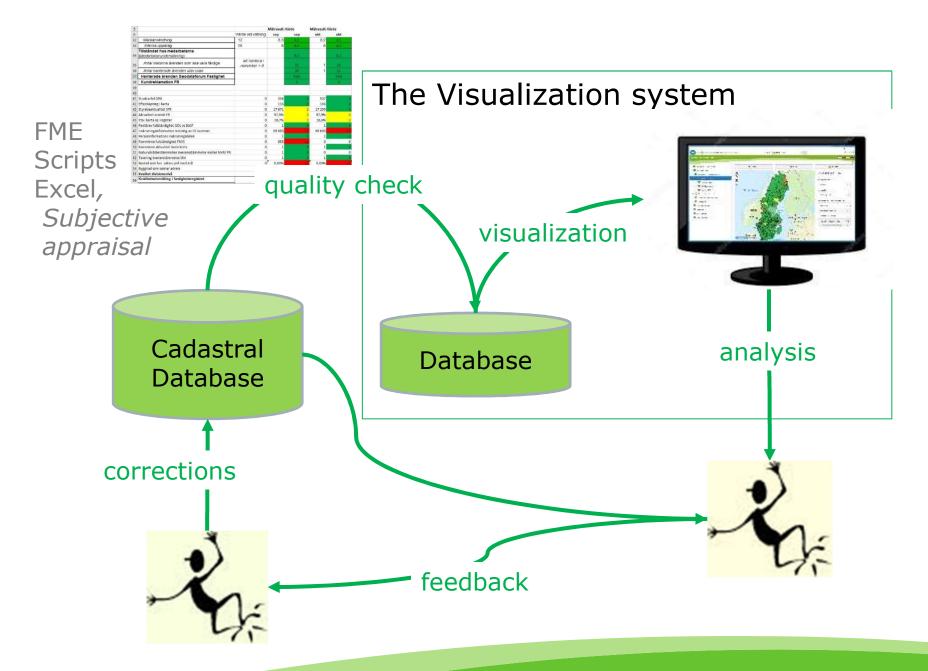


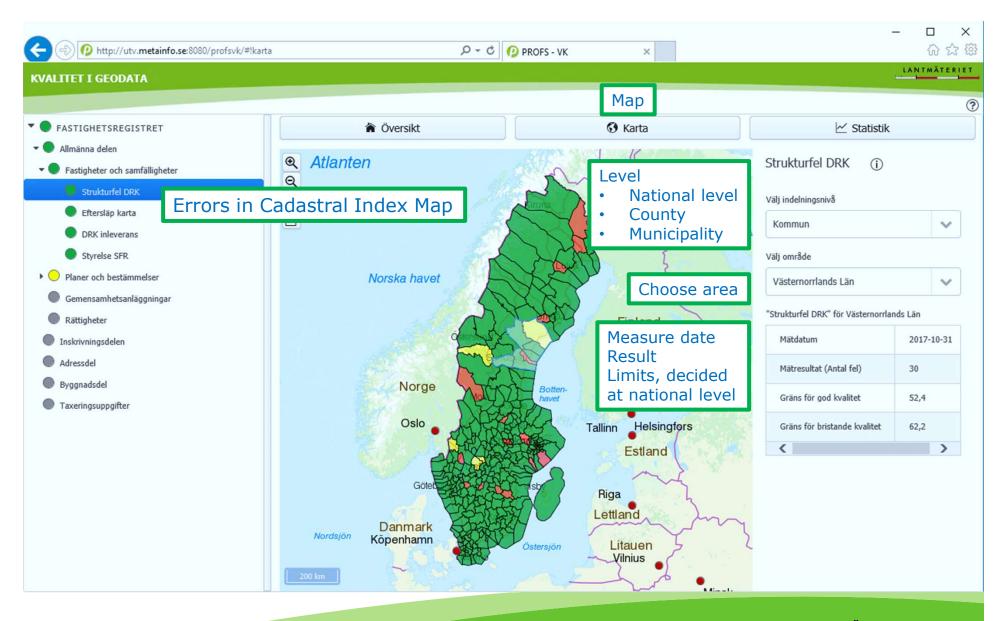


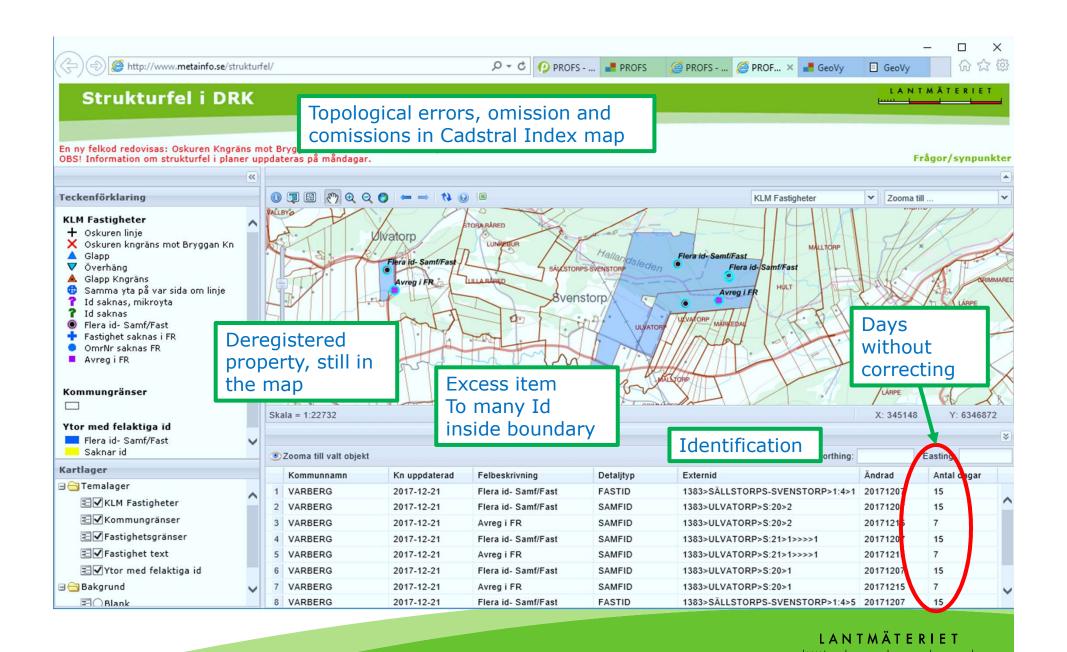
#### Goals with the system for visualization

- A view of the quality in the cadaster index map today
- A basis for priority of quality actions
- Detect new error sources, get opportunity to preventing activities
- Follow quality increasing effort over time

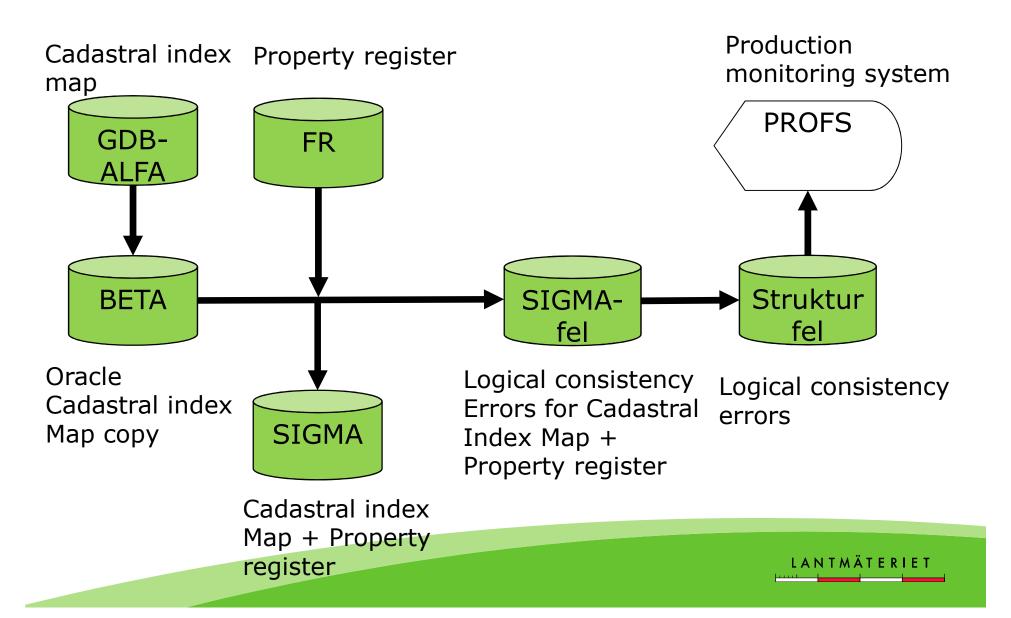




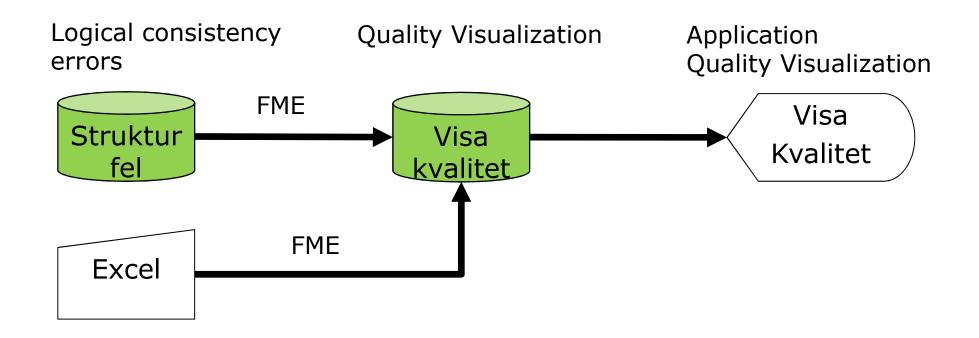




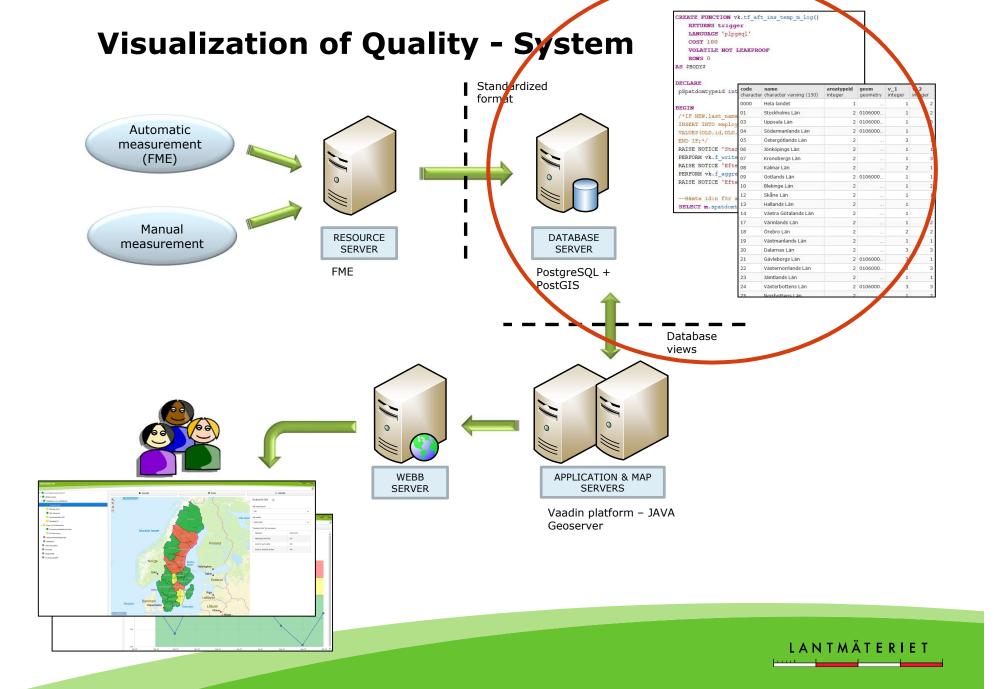
## Logical consistency errors Strukturfel



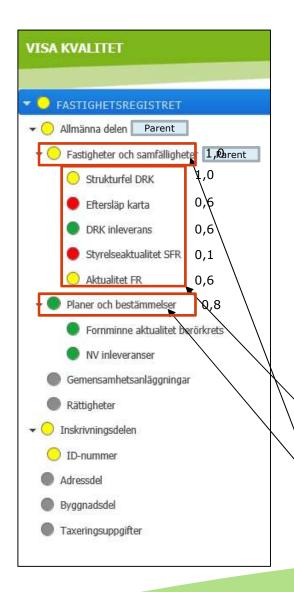
#### **Measurement to Visa Kvalitet**







#### **Visualization of Quality - Aggregation**



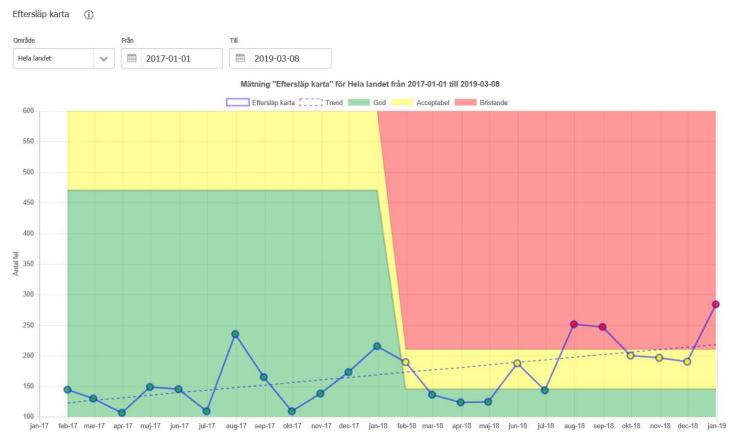
### Logic for aggregation of measurement results is a bit complex...

Quality can be of level Good, Acceptable or Poor (or Undefined)



- A quality level (colour) has an aggregationvalue (0 3)
- A measurement has defined limits for each quality level ("Strukturfel" – National level, Good quality < 350 errors)</li>
- A measurement has a defined weight (0,0 1,0)
- A node in the tree has a defined weight (0,0 1,0)
- 1. Aggregation of measurement results from Municipality to County to National level
- 2. Aggregation of measurement results to their "parent" according to their colour and weight
- Aggregation of nodes in the tree structure to their "parent" according to their colour and weight

#### **Visualization of Quality - Statistics**



- · We schedule measurements monthly, but results can be written to the system anytime
- Limits for quality levels can change, commonly yearly
- Statistics can be presented for each measurement and information node, for each geographical area

