



Overview

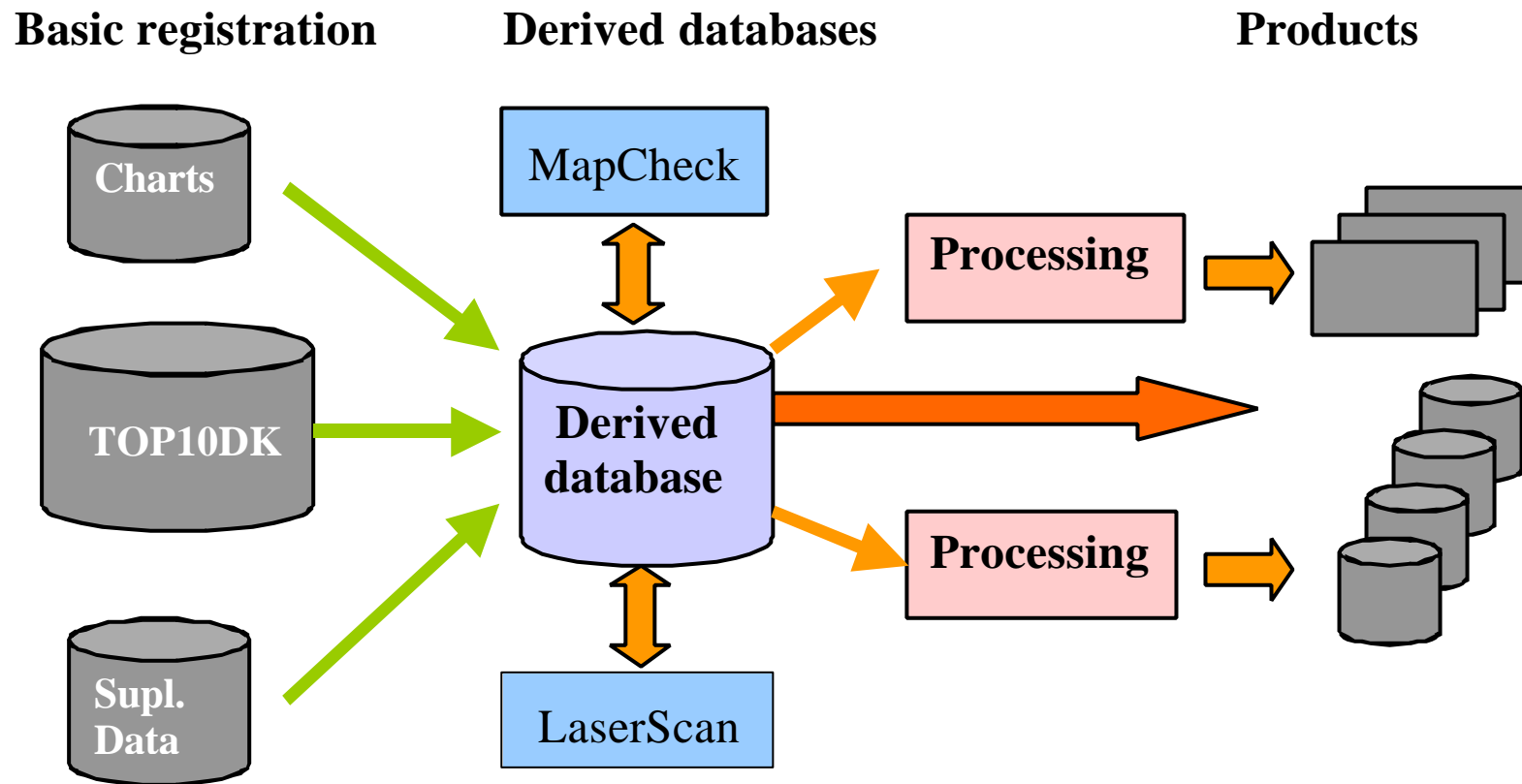
- Establishment of a new production system
- Implementation of required generalisation processes for 1:50.000.
- Establishment of a generalisation workflow
- Conclusion



Requirements for production system

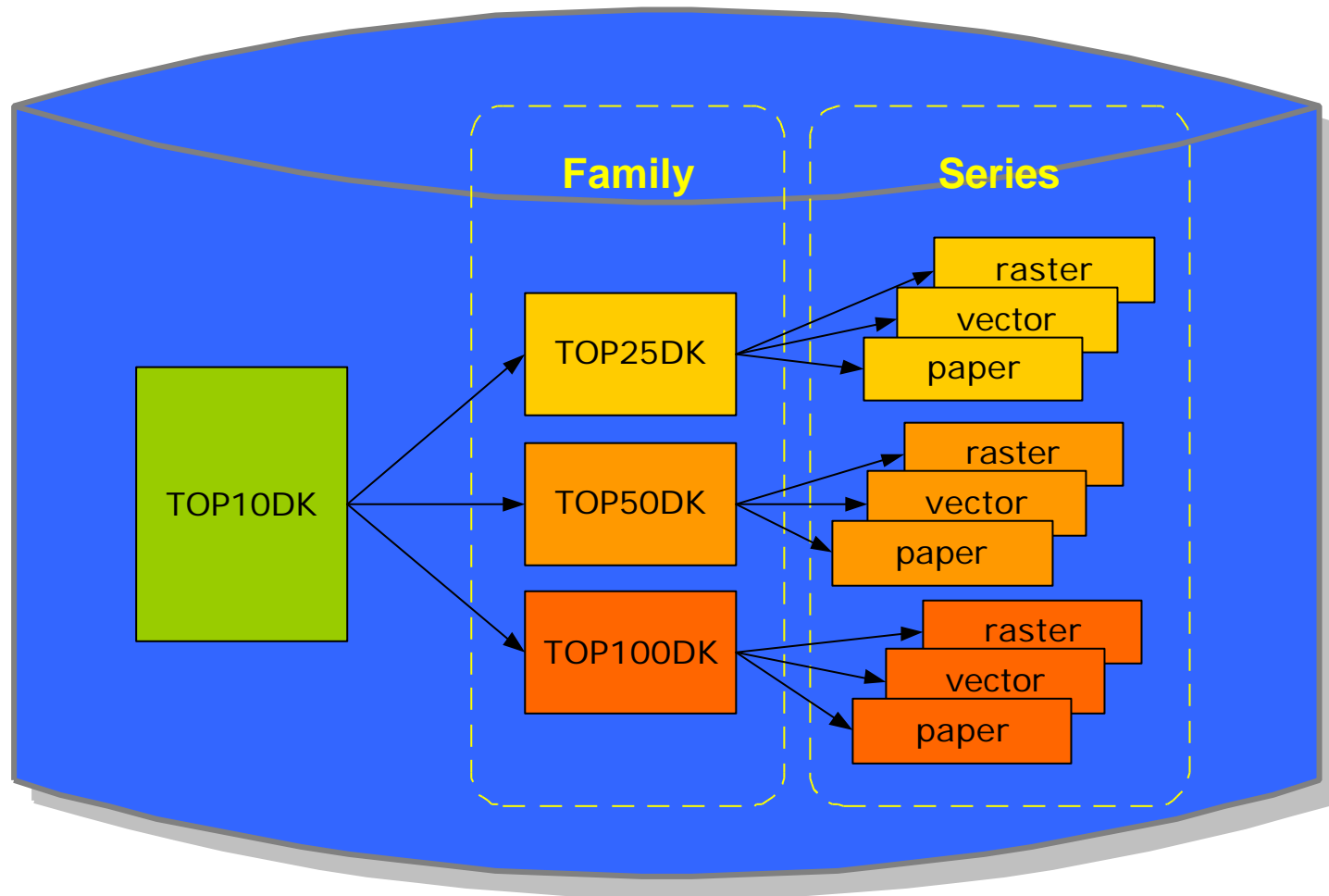
- One flexible system for the production of existing and new map products – The central database is the *main key*..
- Open interface between the databases and the software tools to be used for the production.
- The software tools for the generalisation and the editing support selected part of the TOP10DK data model.
- The software tools and the production processes from earlier production system of paper maps, will be retained.

Design of production system – 1. version

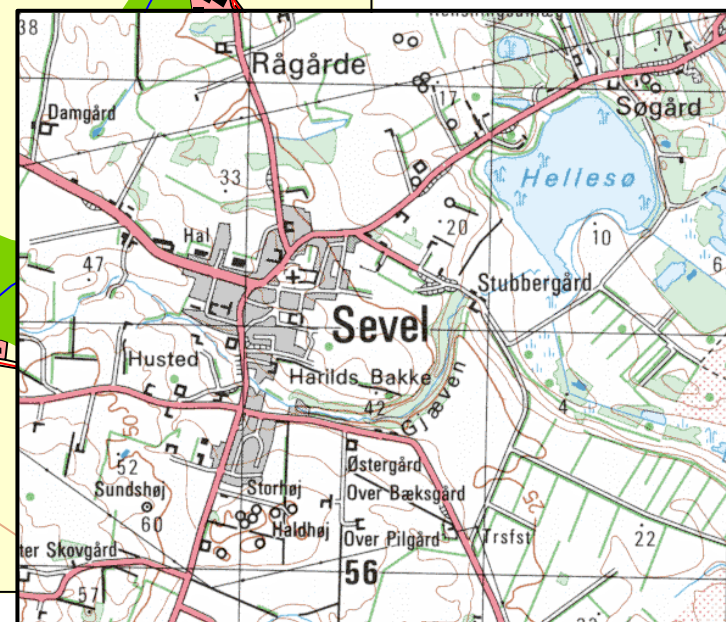
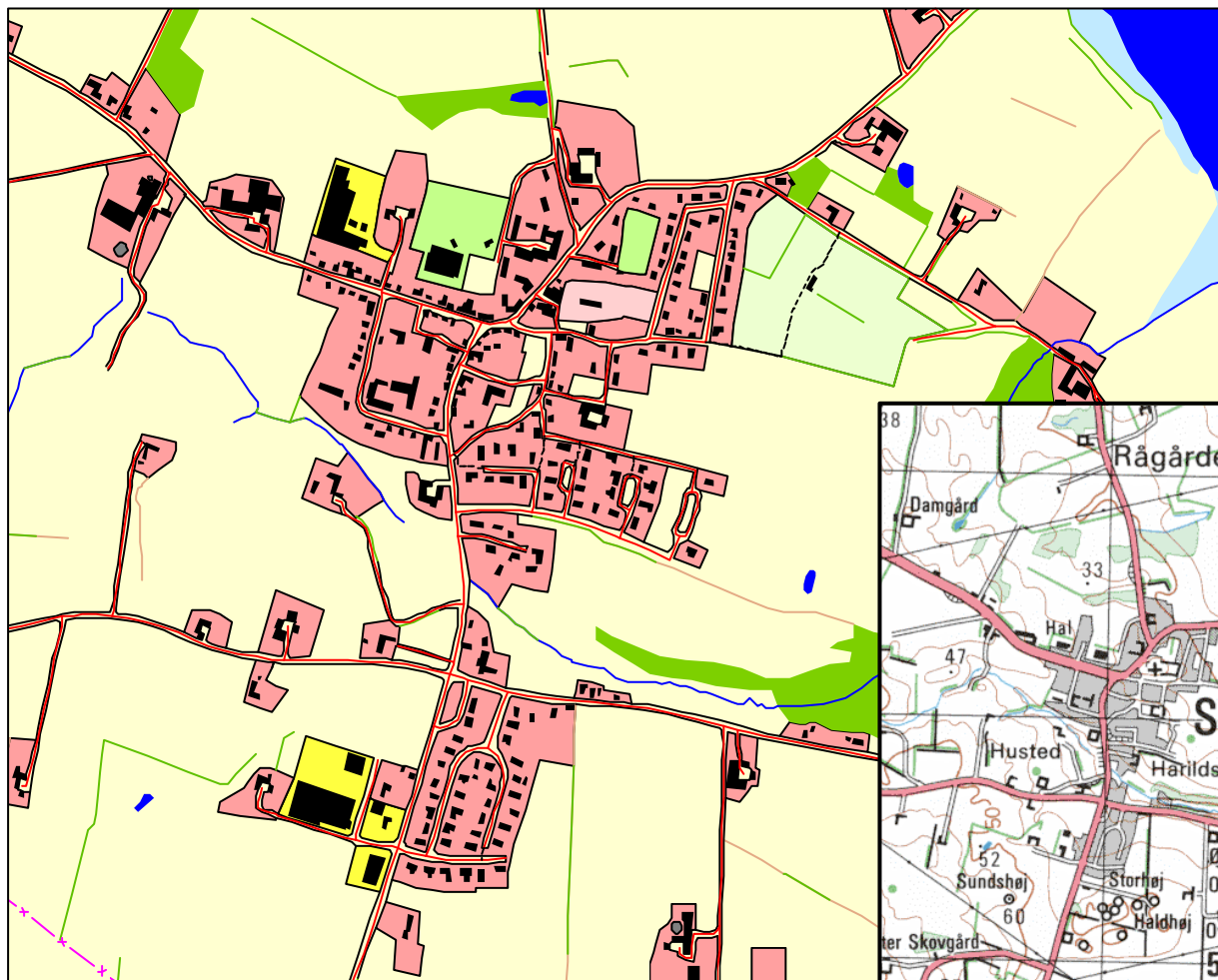




Design of the derived database



From 1:10.000 to 1:50.000

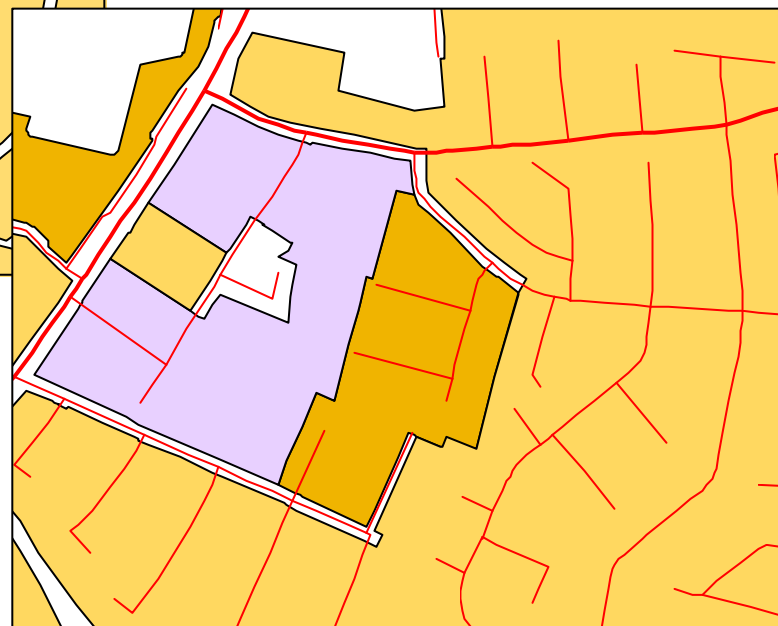
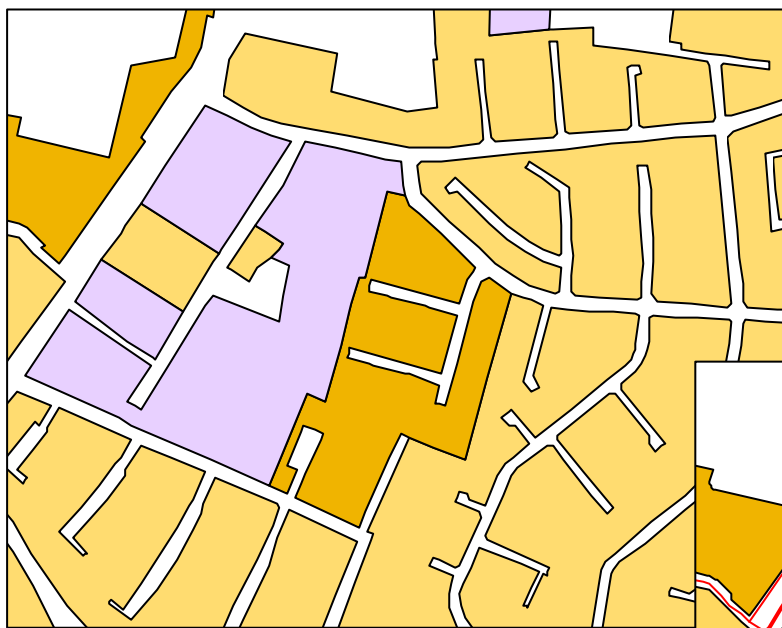




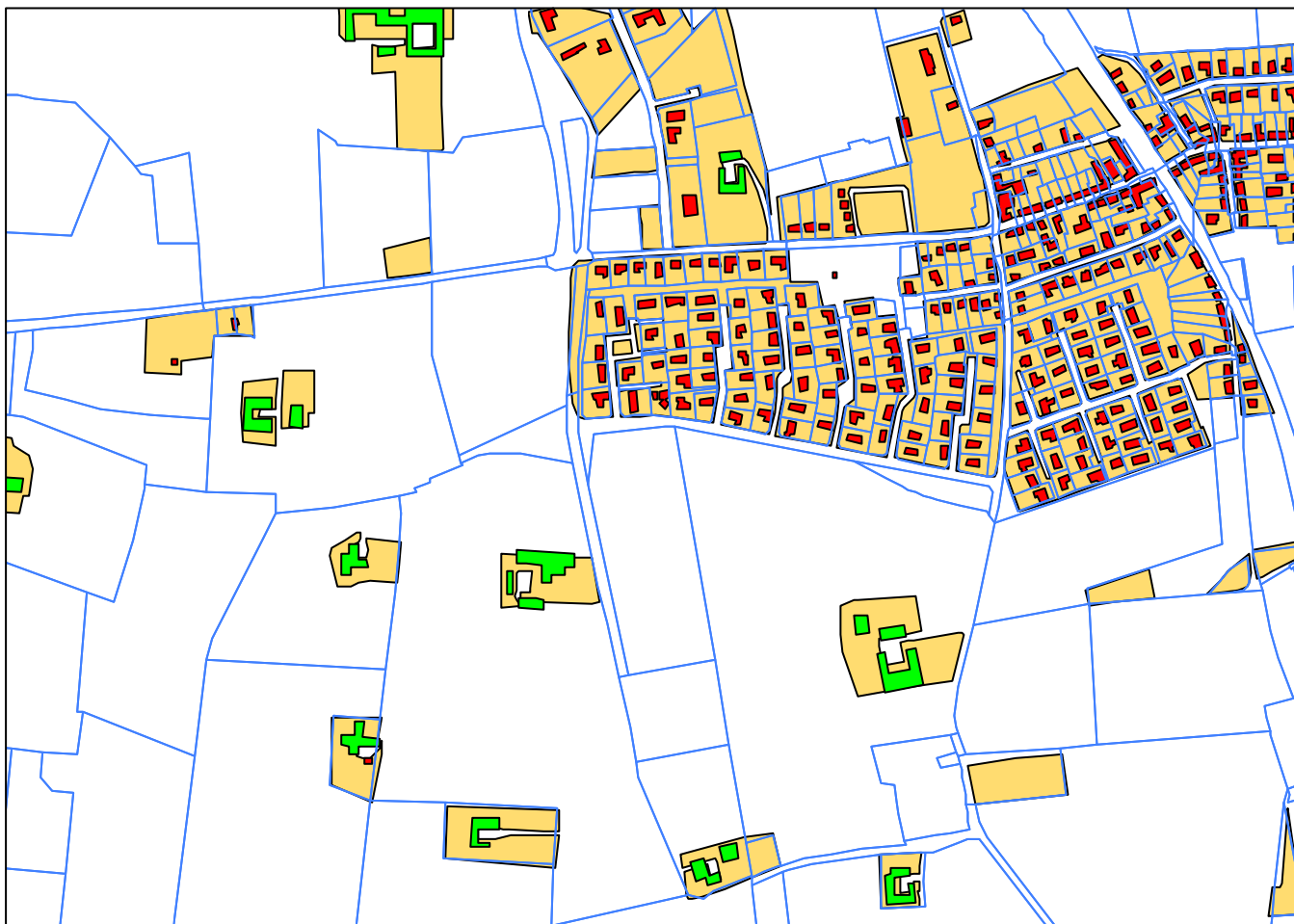
- Generalisation of areas – in TOP10DK the areas are specified not to cross the roads, so they are divided along the roads.
- Generalisation of roads – parallel road centerlines have to be collapsed. Small roads/-parts have to be deleted.
- Generalisation of buildings – different rules for urban and rural areas.



Generalisation of the areas

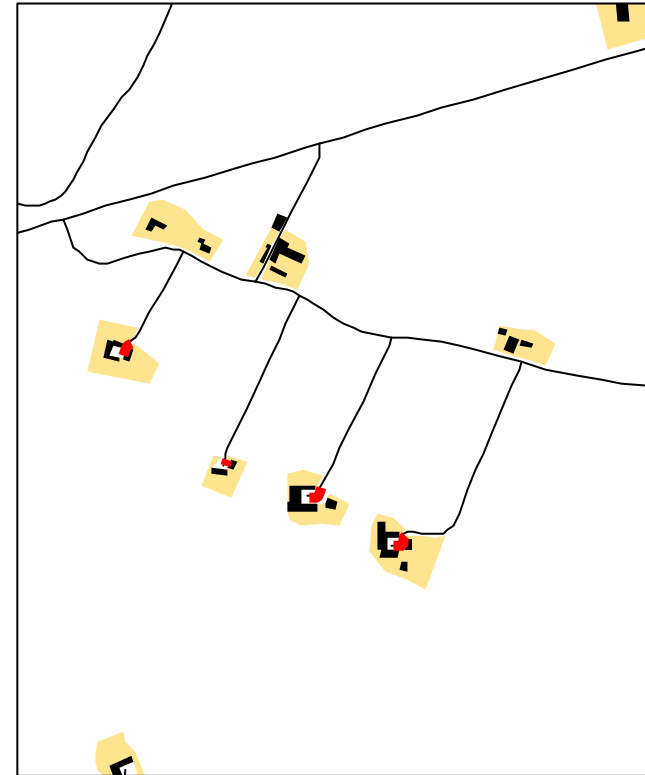
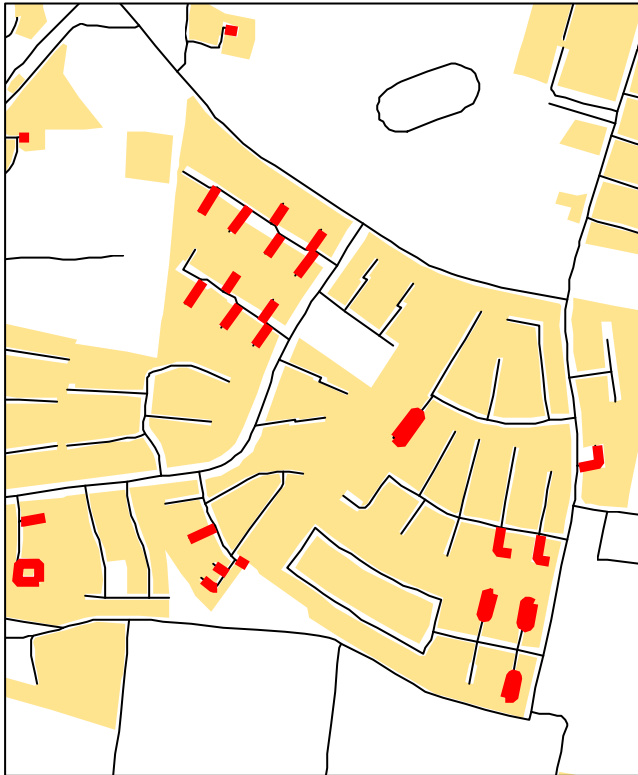


Selection of buildings





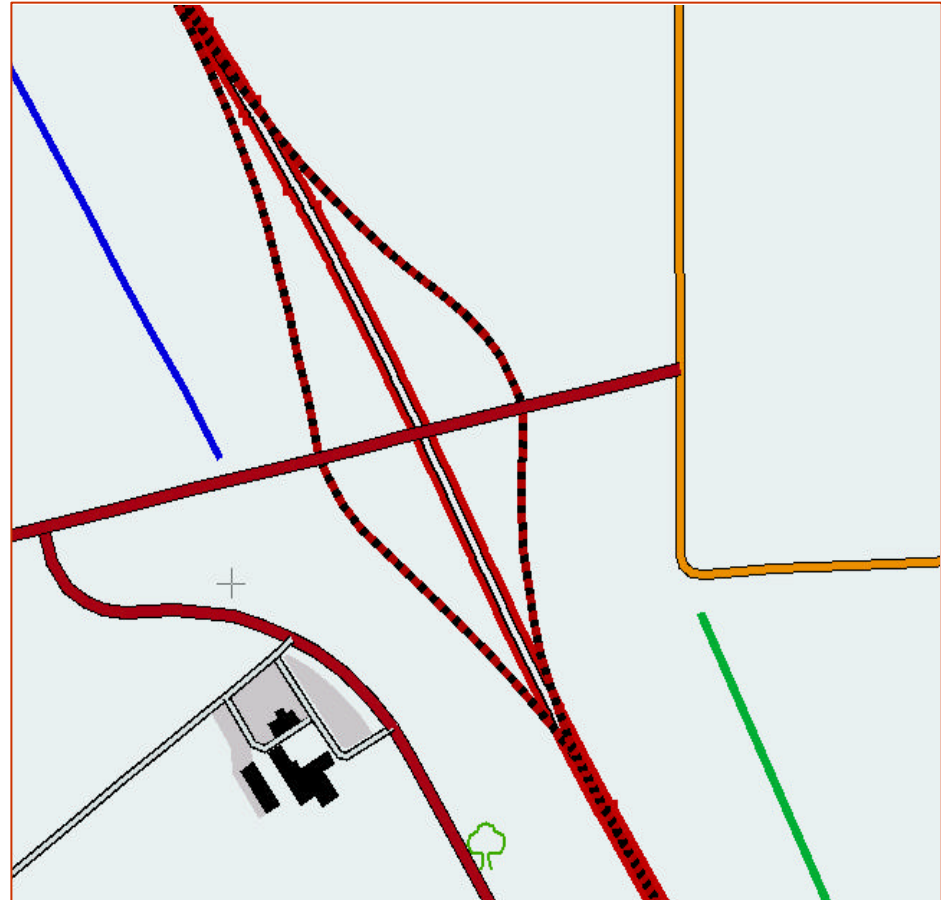
Selection of roads





Generalisation of the larger roads

- Identify sliproads and reclassify sliproads
- Collapse the road centerlines
- Reestablish the topological relation between the collapsed roads and the other roads.

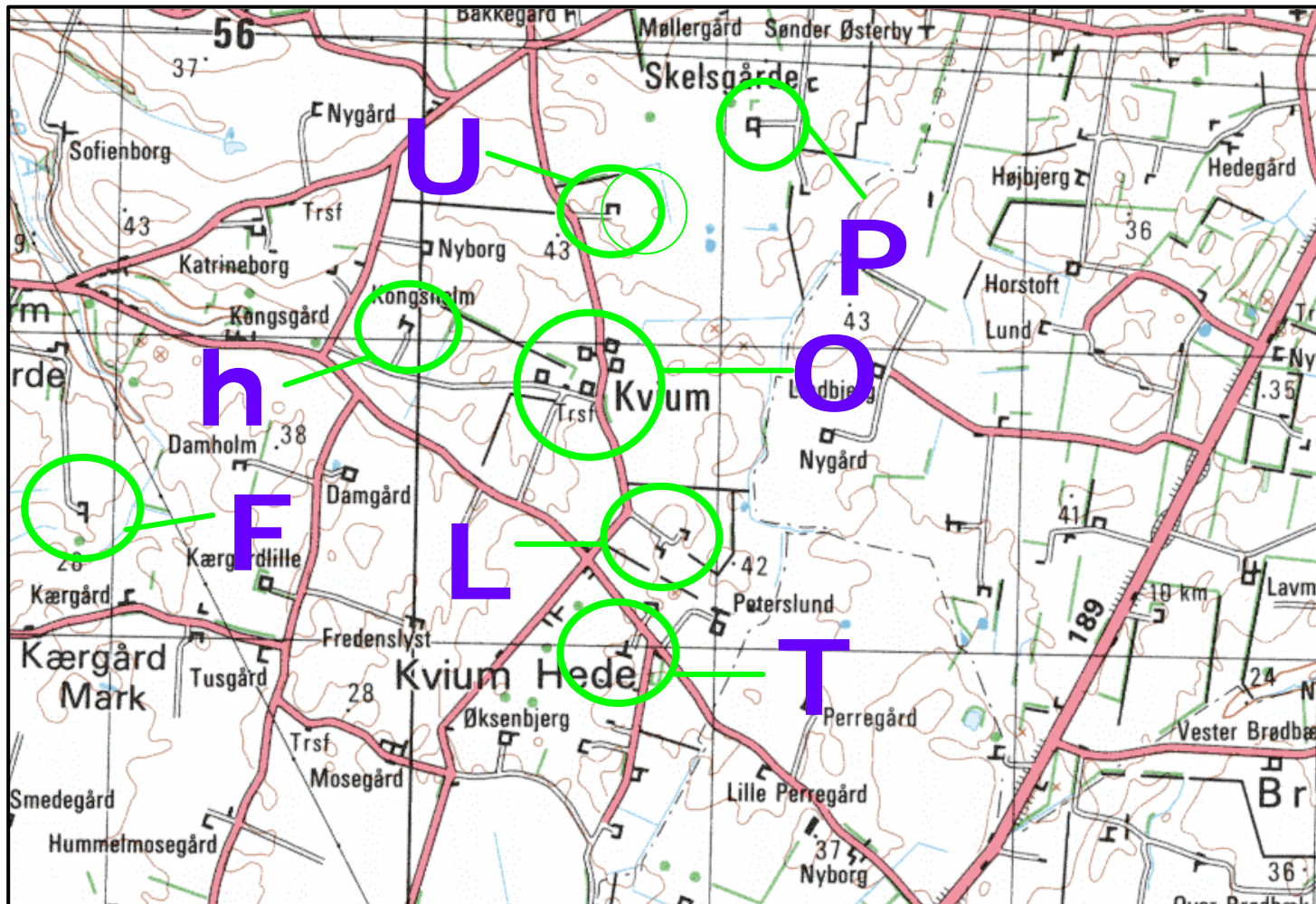




Generalisation of the buildings

- Using *Agent technology* for solving conflicts during simplification and displacement of buildings.
- Setting up constraints for how to simplify and displace buildings or cluster of buildings in a block.
- Symbolization of buildings between 25-400 m² as rectangles or quadrants.
- Farms: simplification or symbolisation by using letter-templates as O-, U-, L-, T-, h, P-, I, or F-shapes.

Farm templates in D/50



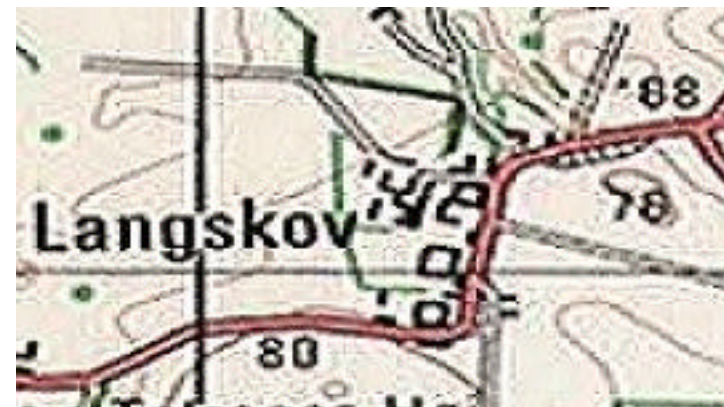
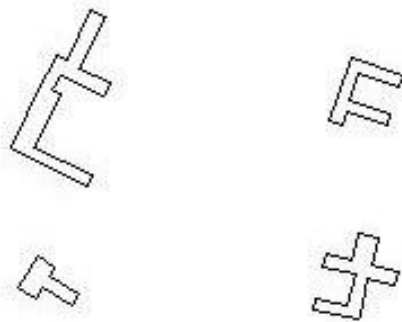
Use of farm templates

1:10,000

Typification

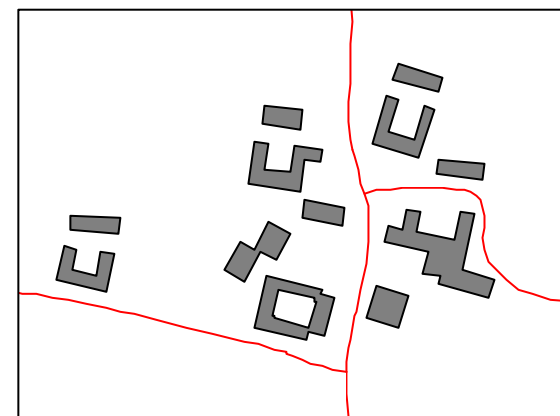
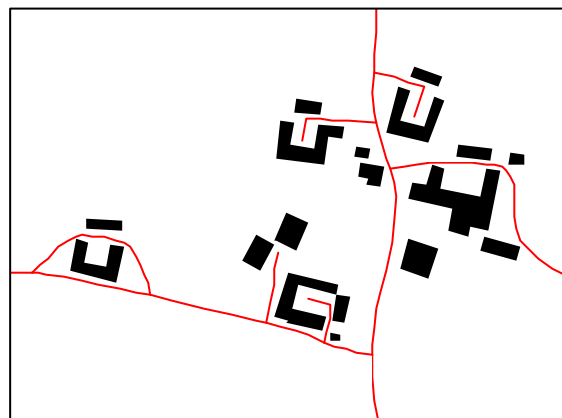
1:50,000

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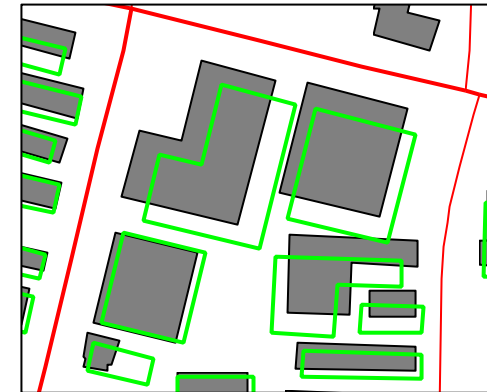
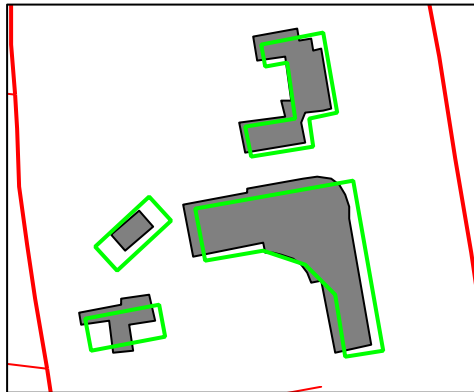


Simplification and displacement - farms



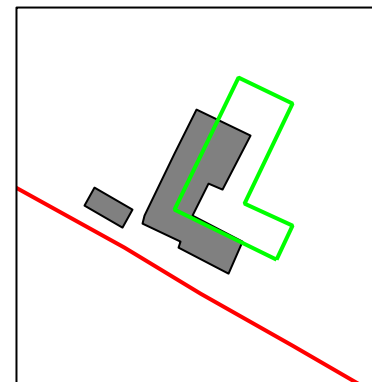
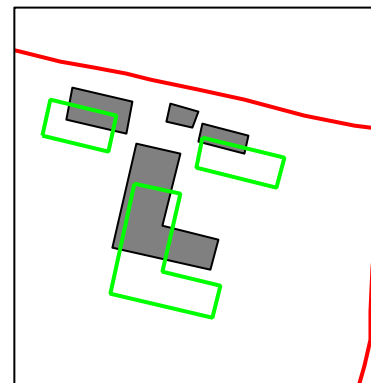
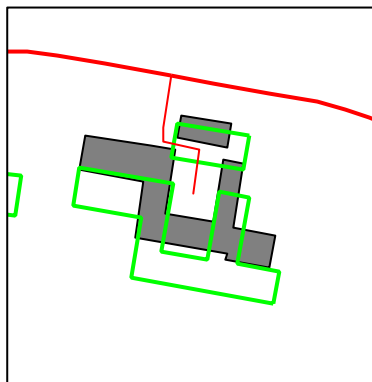
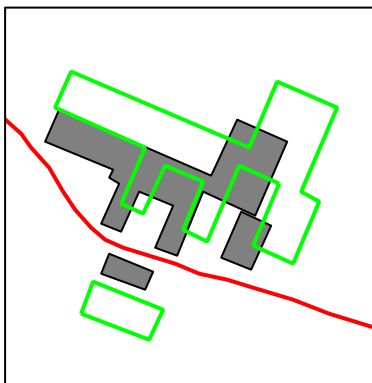


Simplification and displacement



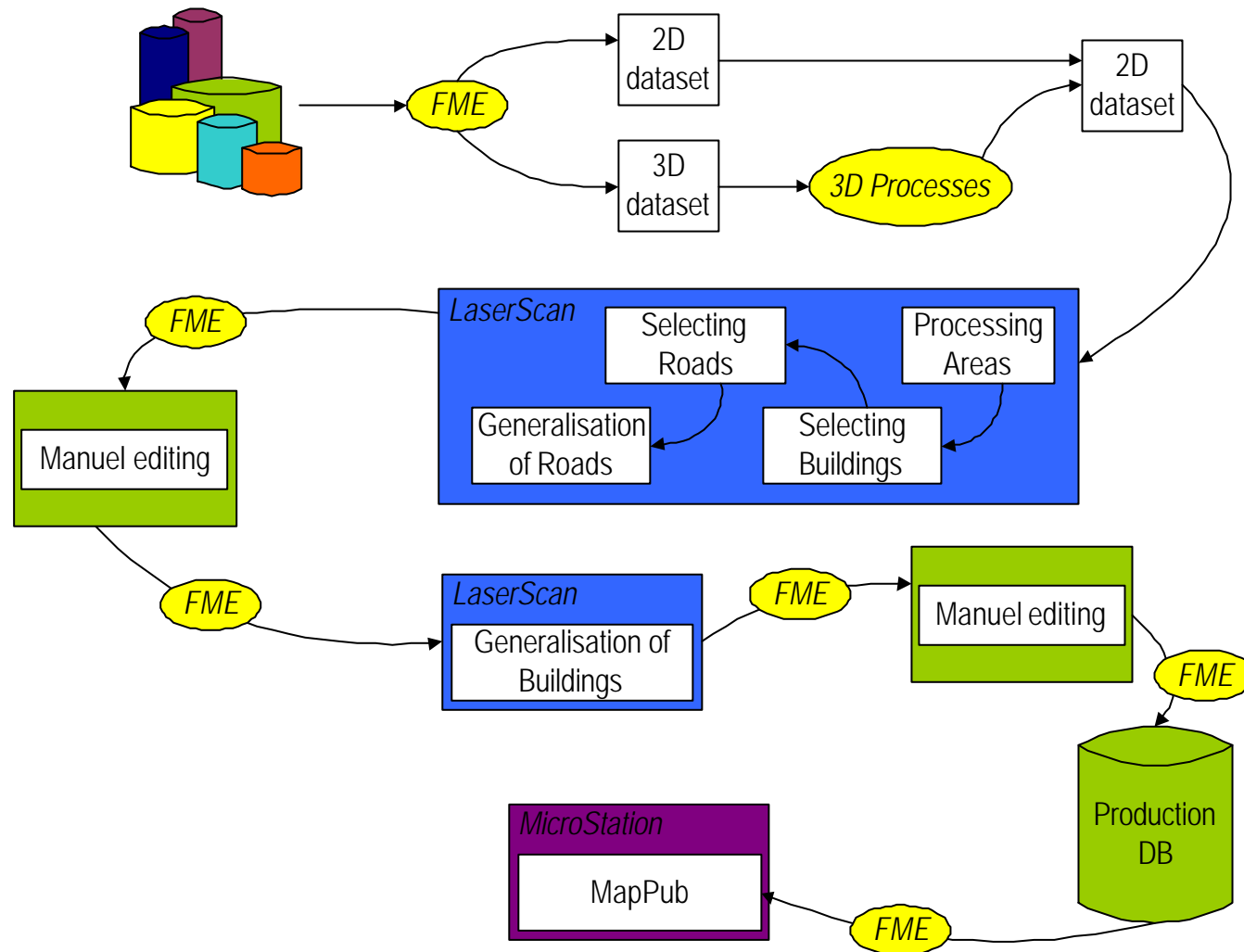


Simplification and displacement - farms





Workflow for D/50 paper map

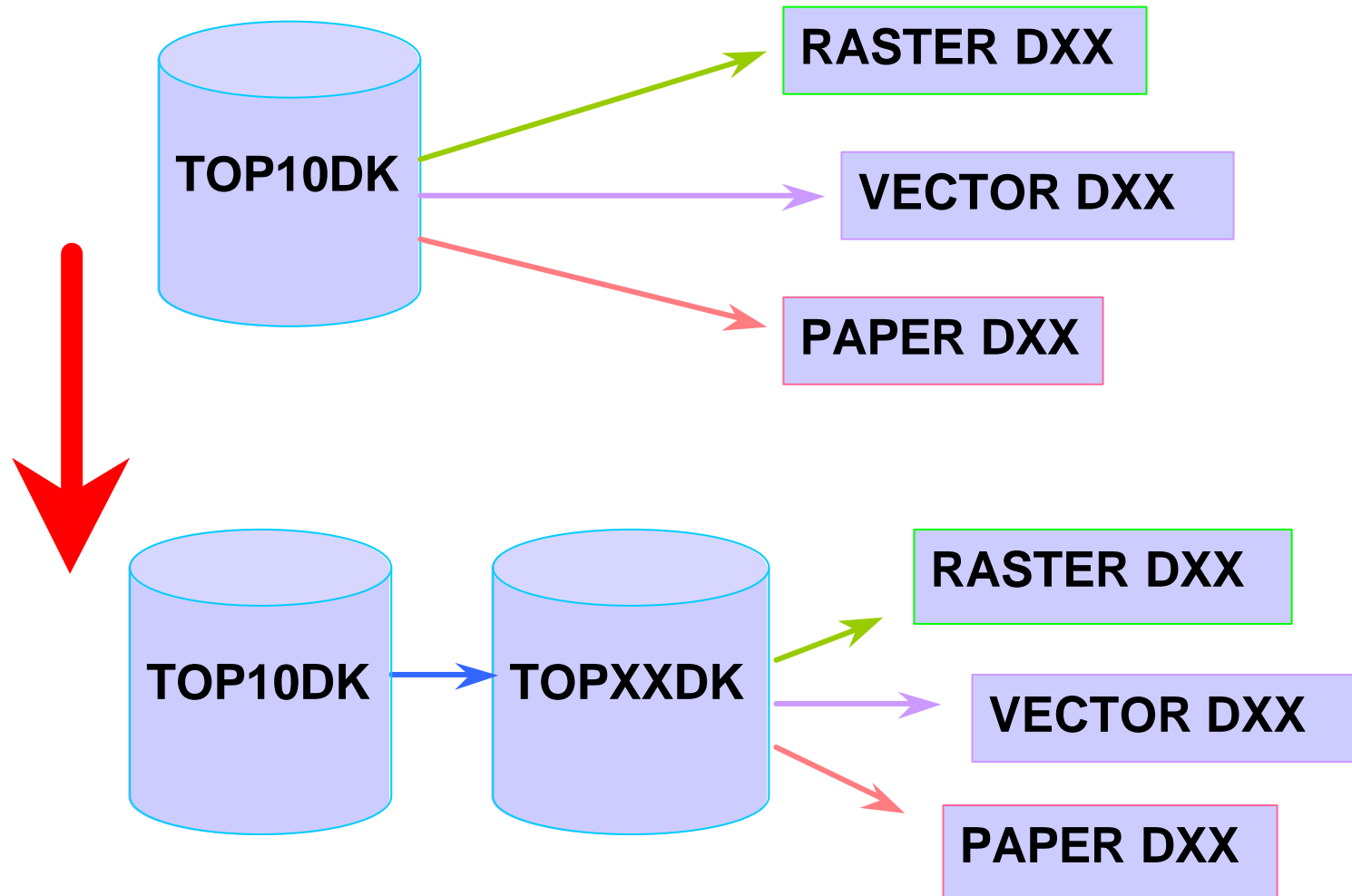




Conclusion

- Kort & Matrikelstyrelsen
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The future production system





Basic and product datasets

- **Basic derived dataset – TOPxxDK**
 - Specific requirements to datastructure
 - Uniform derivation
 - Full automatic generalisation
 - References to the basic dataset – TOP10DK
 - Basic for the cartographic generalisation
- **Product derived dataset – Raster, vector, paper**
 - Requirements to datastructure depend on product
 - Derivation will be done in different tools
 - Both automatic and manual generalisation
 - References to the master dataset – TOPxxDK