

kadaster



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Euroweographics QKEN
1 December 2022

Sourcing Data from multiple sources

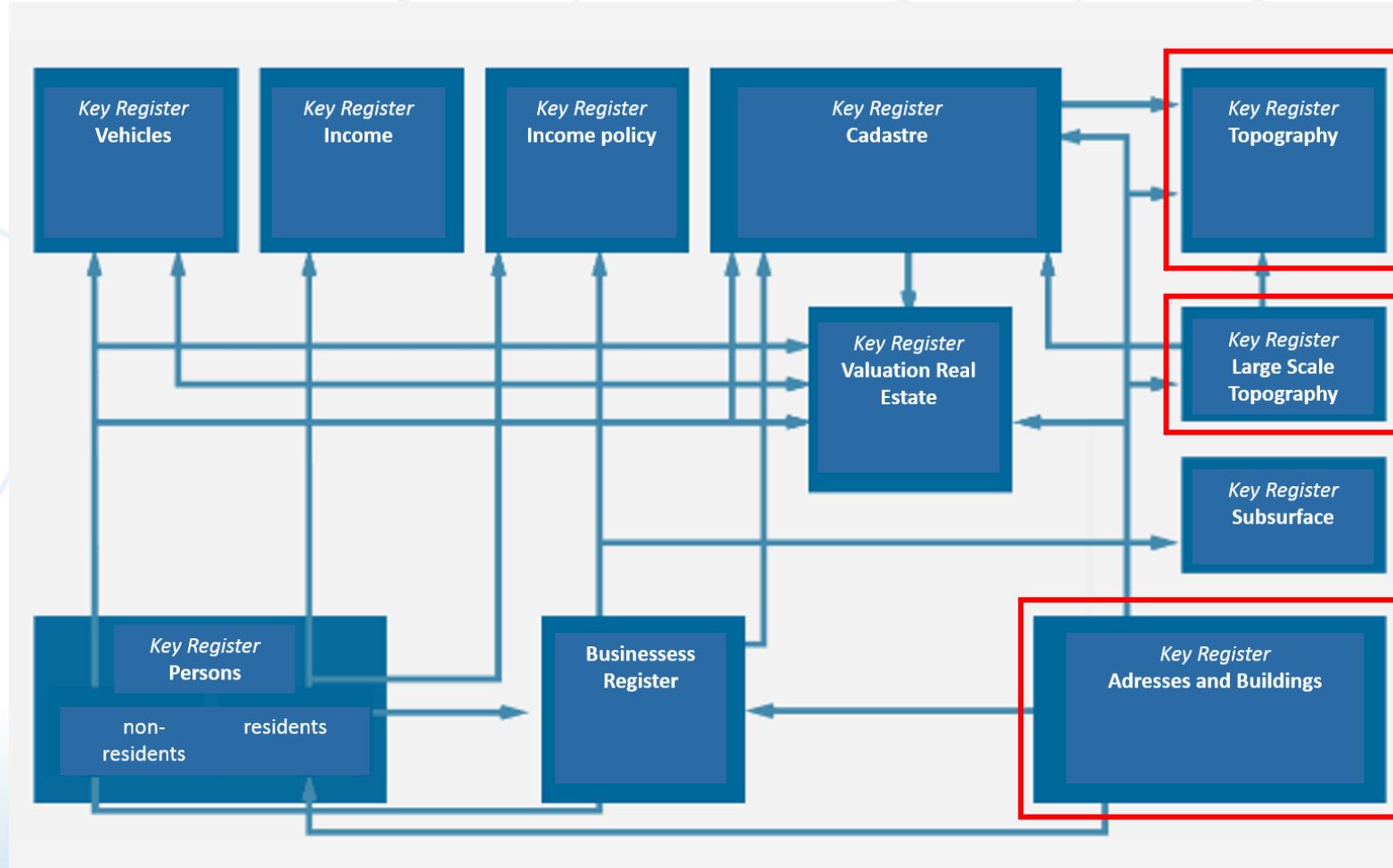
Redefining our Topography



Introduction

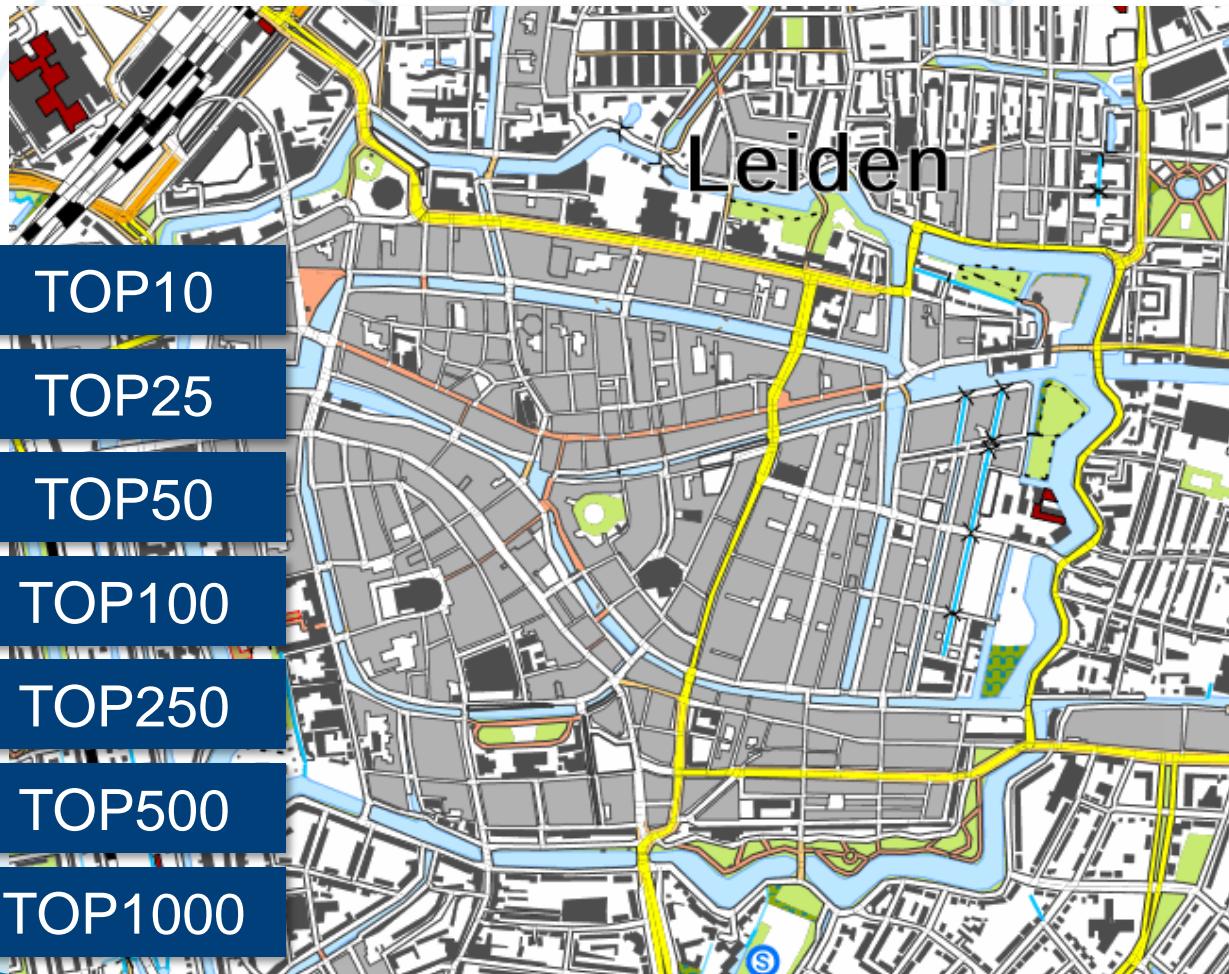
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Dutch system of Key Registers





Key Register Topography (BRT)



Small scale topography

Produced by Kadaster

Fully updated yearly in 5 releases with uniform quality

Automatically generalised

Key Register Large Scale Topography (BGT)

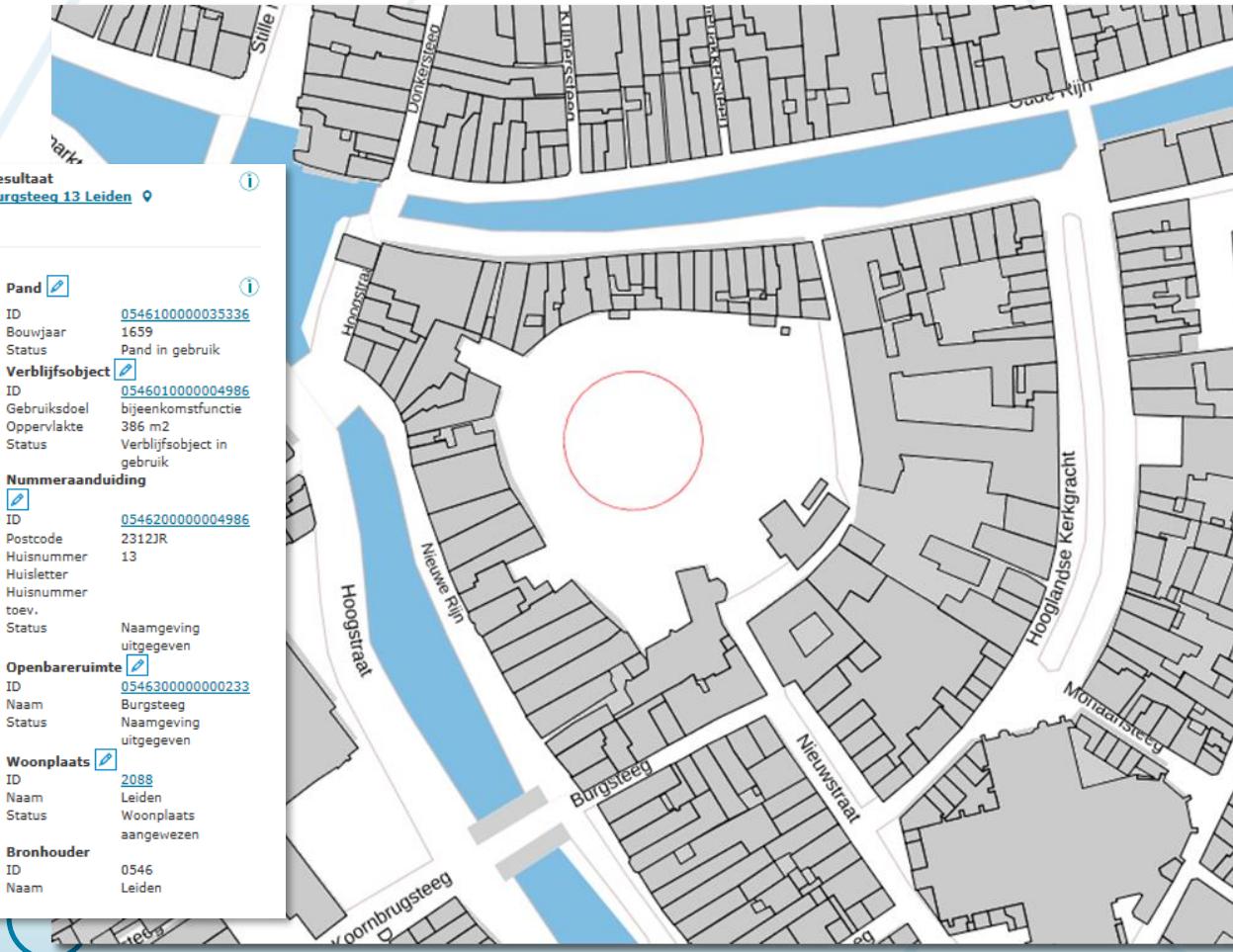


Produced by local, regional and national authorities (418)

Updates after changes in the field (6 months for buildings and roads, 18 months for other objects)

Scale 1:1.000

Key Register Addresses and Buildings (BAG)



Unique objects with address, area, contour and purpose

Produced by municipalities (380)

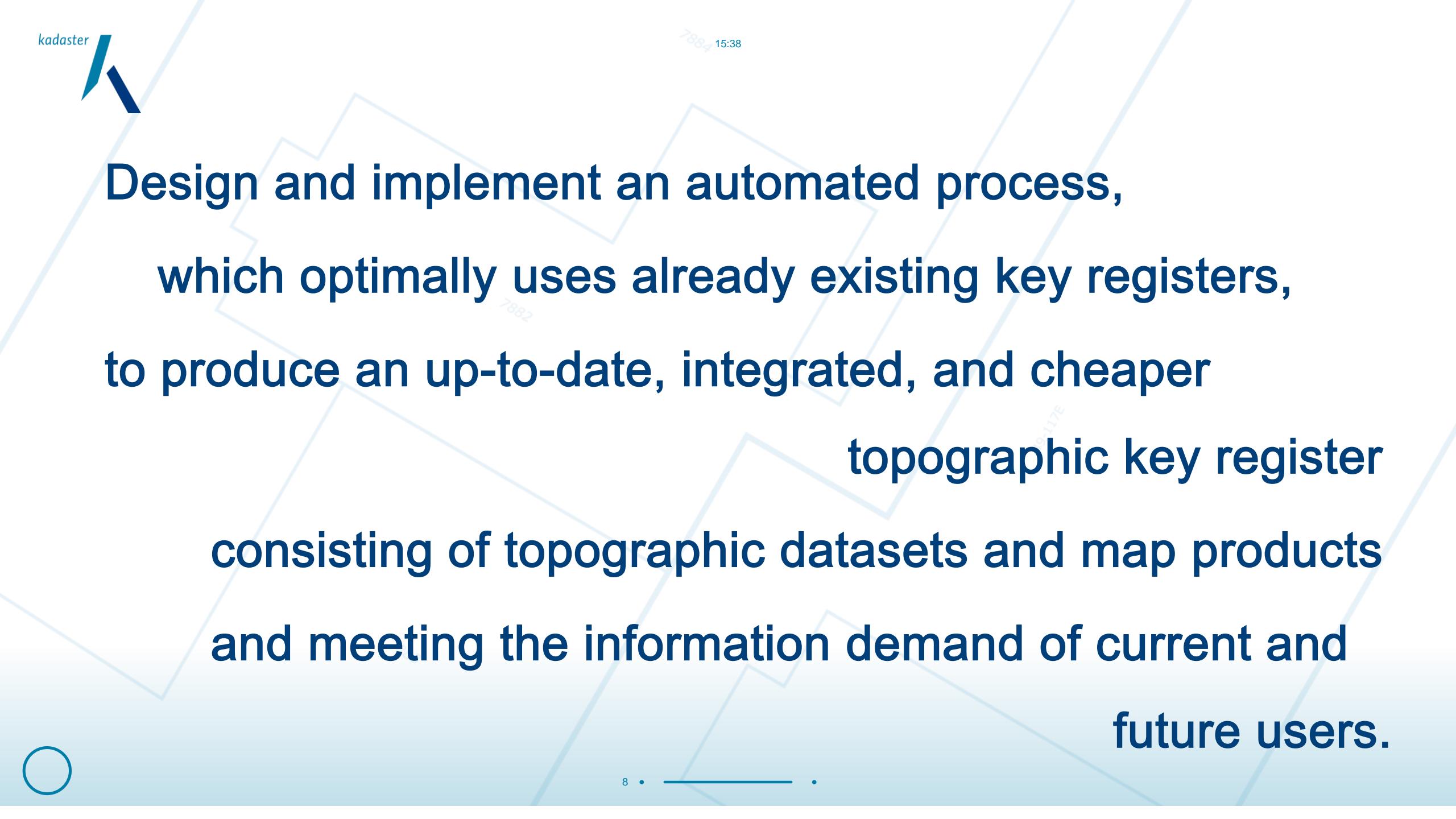
Scale 1:1.000



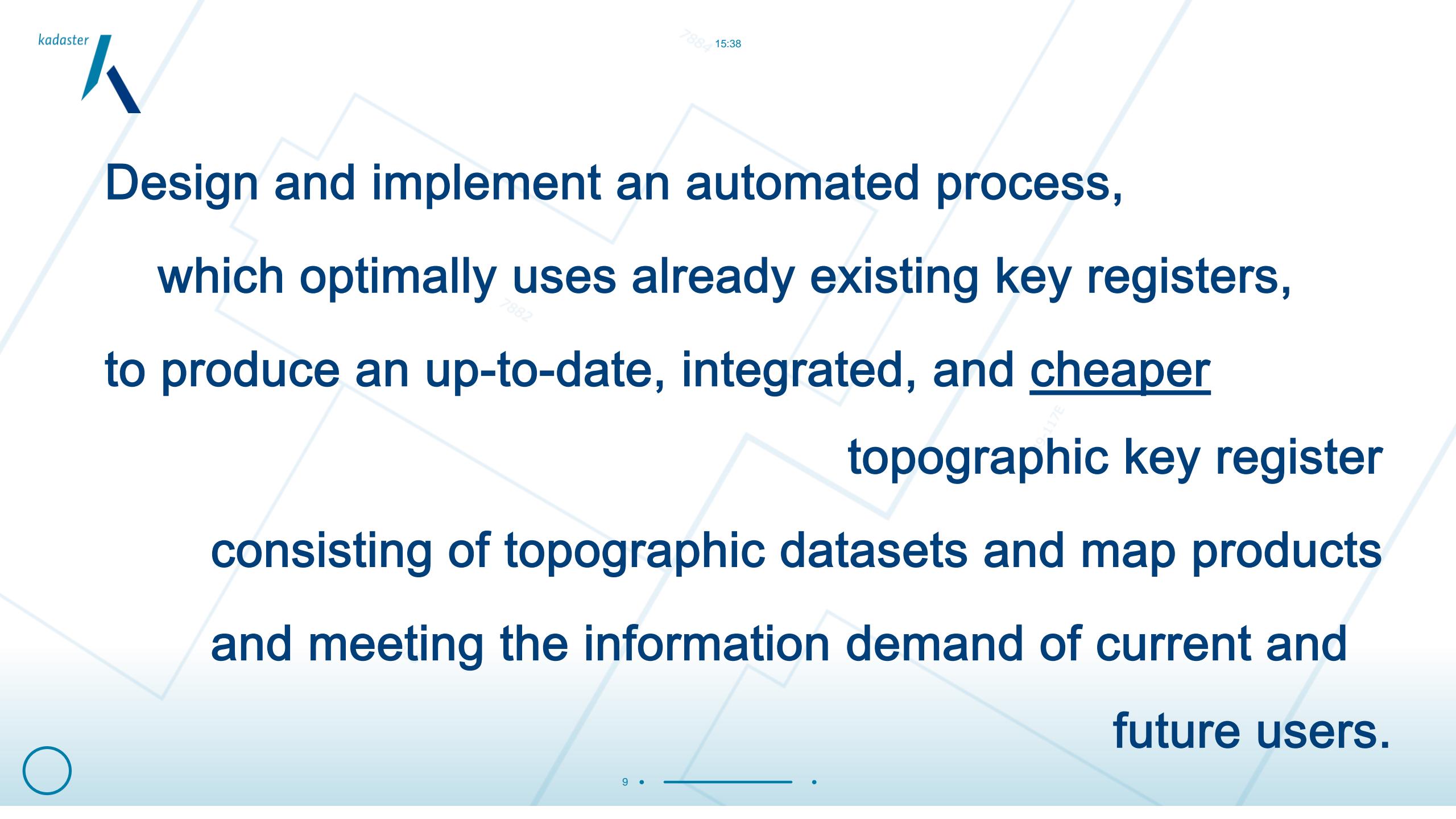
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The task at hand

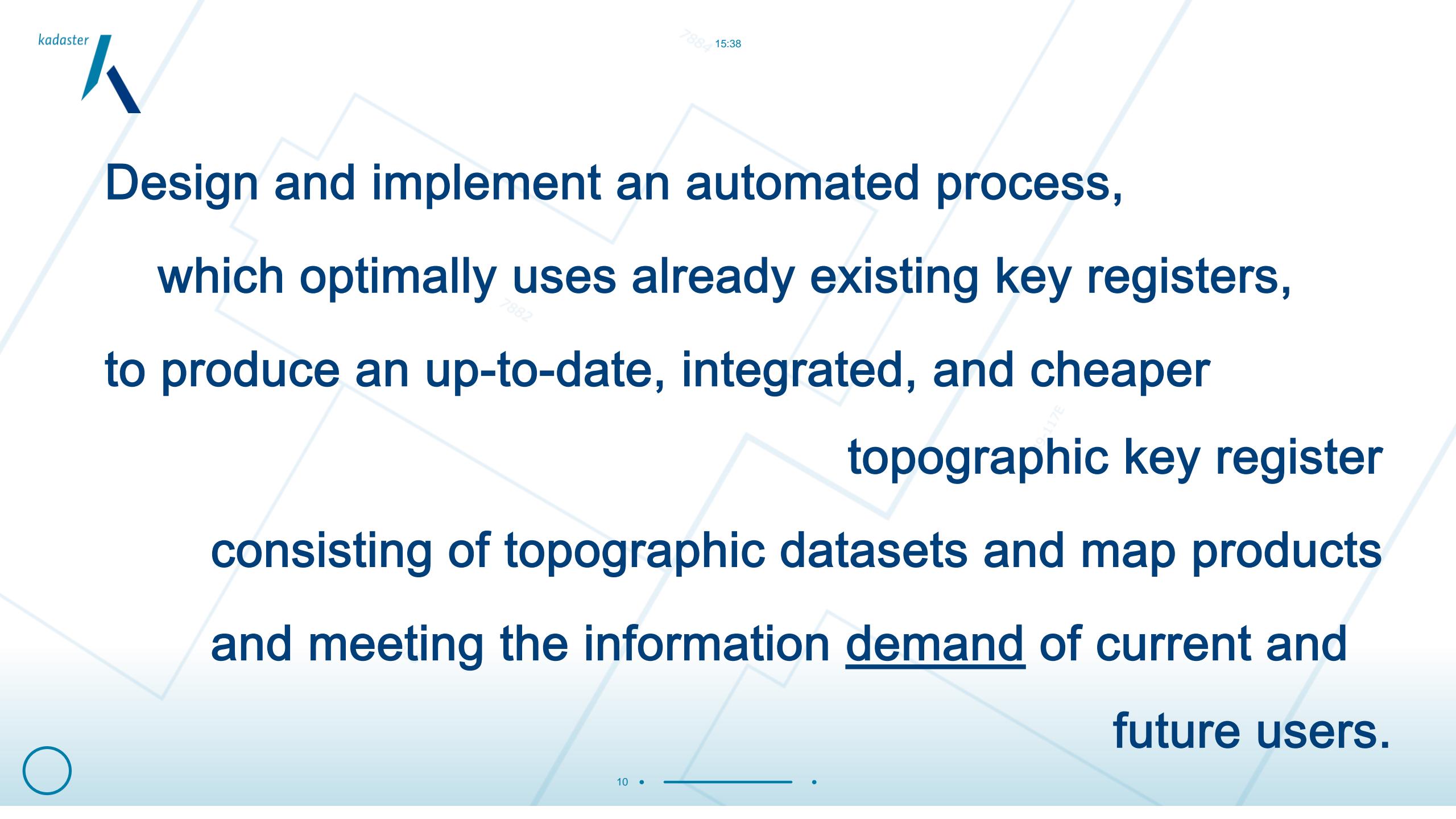
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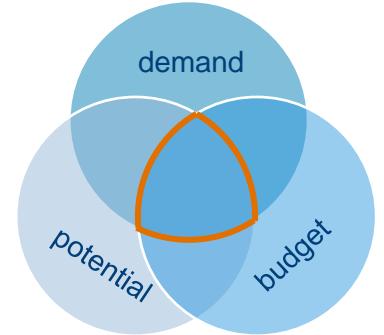
Design and implement an automated process,
which optimally uses already existing key registers,
to produce an up-to-date, integrated, and cheaper
topographic key register
consisting of topographic datasets and map products
and meeting the information demand of current and
future users.



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BRT.Next

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Challenges

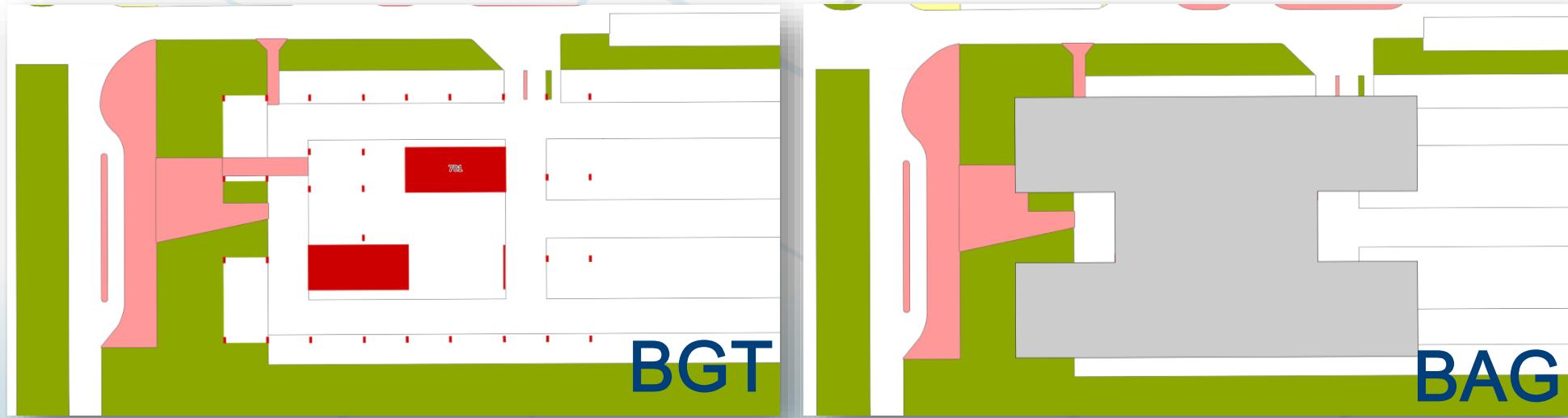
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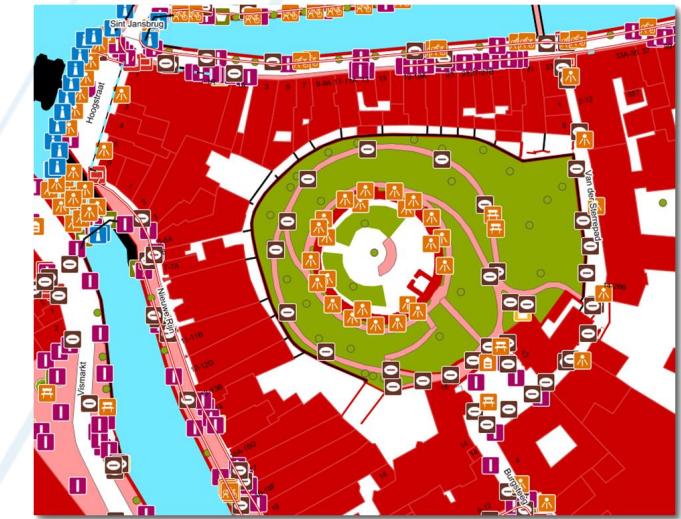


Three different Key Registers: overlaps and differences

Different scales (1k vs 10k-1M)

Different purposes (managing public space versus mapping)





Key register Large scale Topography

1:1000 scale

400+ producers

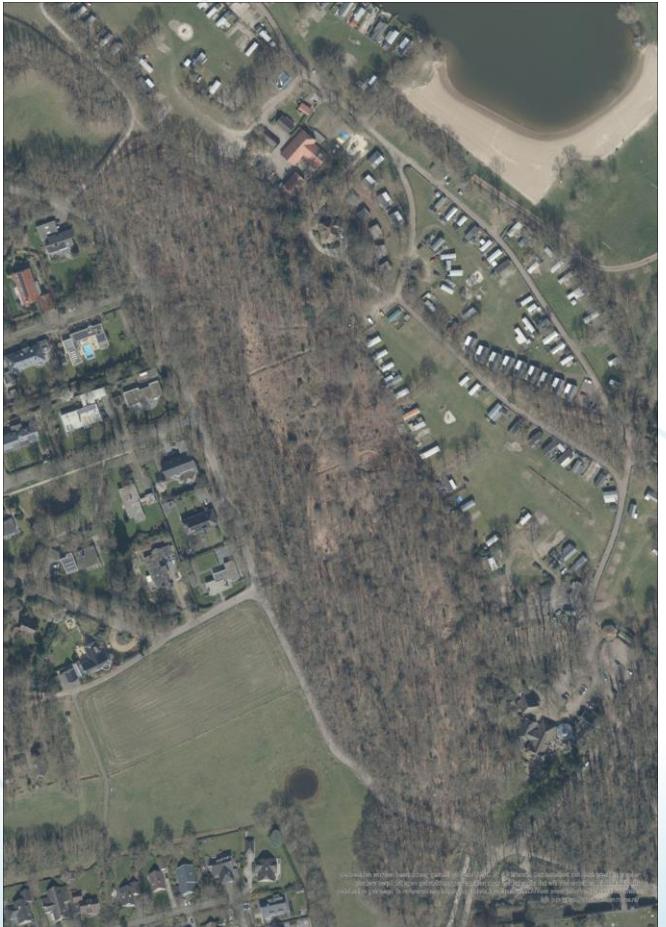
Mandatory vs. optional content

Primarily for managing public space, asset management

Room for interpretation means heterogeneous data



Example



Key Register Large Scale
Topography (BGT)

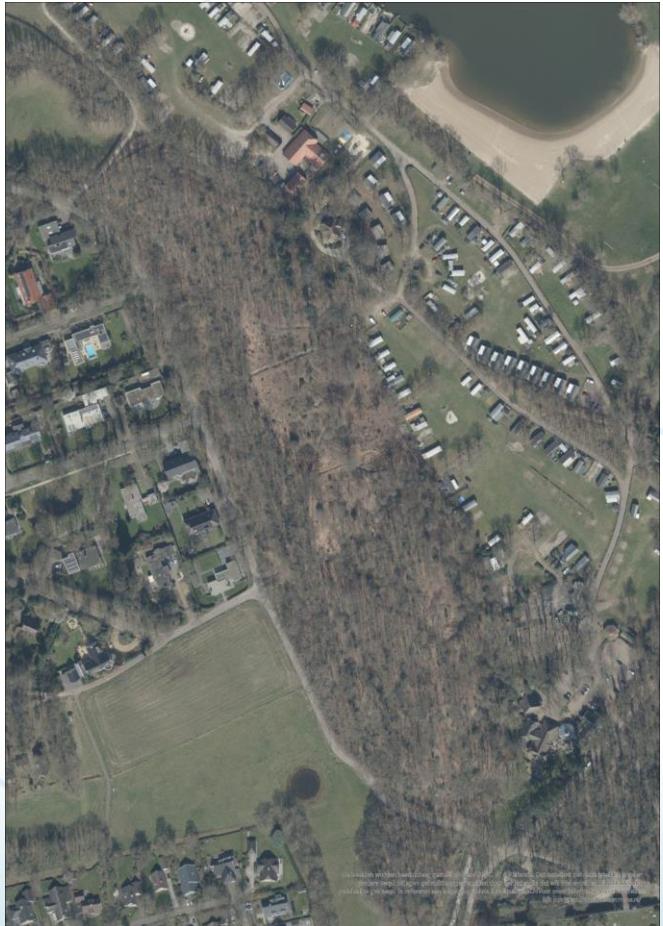


Key Register Topography
(BRT)





Example



BGT = 1:1,000



BRT = 1:10,000





Three different Key Registers

Different scales (1k vs 10k-1M)

Different purposes (managing public space versus mapping)

Different temporal accuracy

Different content



Approach

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Approach

- **Reuse existing geometries of current 1:1.000 as much as possible**
- **Maintain current value of the BRT but port this to 1:1.000 scale**
- **Treat geometry and attributes separately, don't stick to a single source**
- **Provide an update mechanism which can mitigate changes to products**

The CANVAS principle



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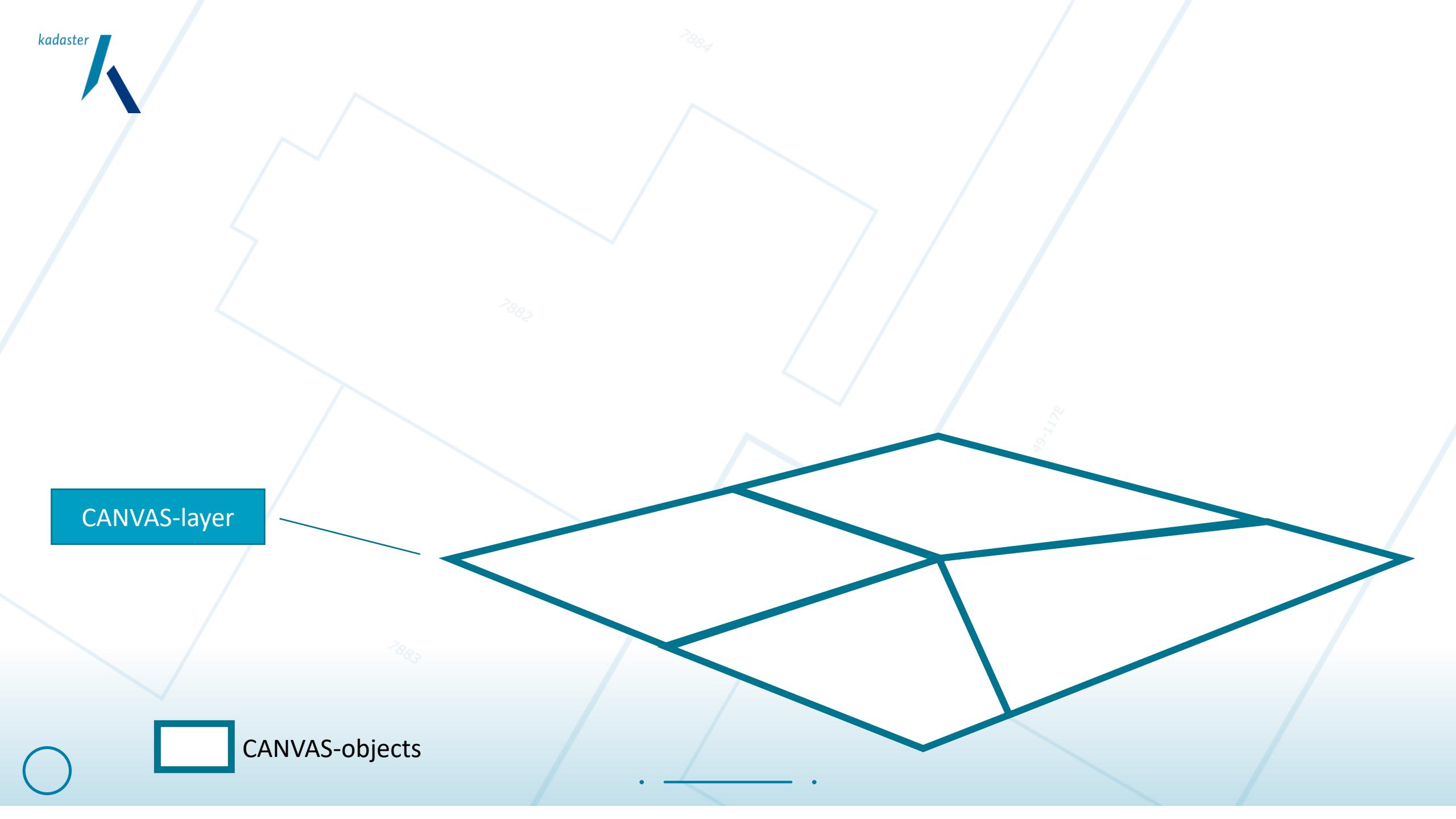
CANVAS

3 types of CANVAS

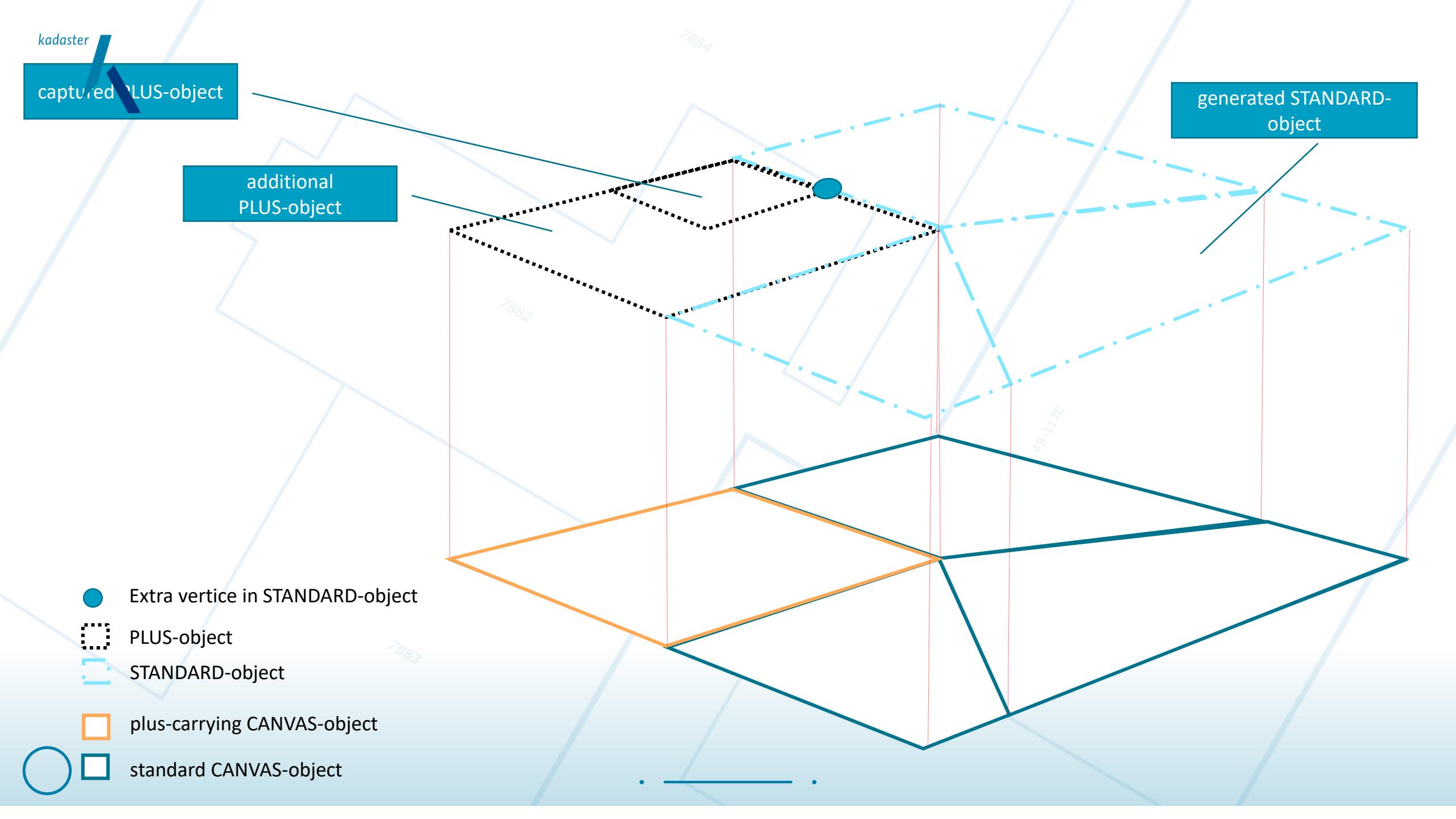
Skin-of-the-Earth CANVAS

Other (not completely filled) CANVAS

Fuzzy CANVAS







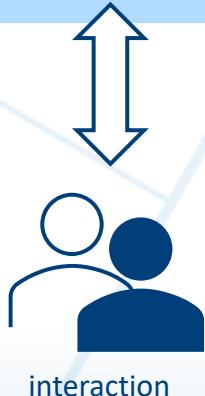
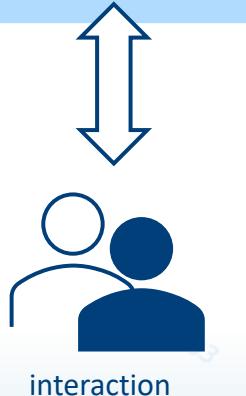
Planning & prospects



ArcGIS Pro
FME
Python
...

automated process

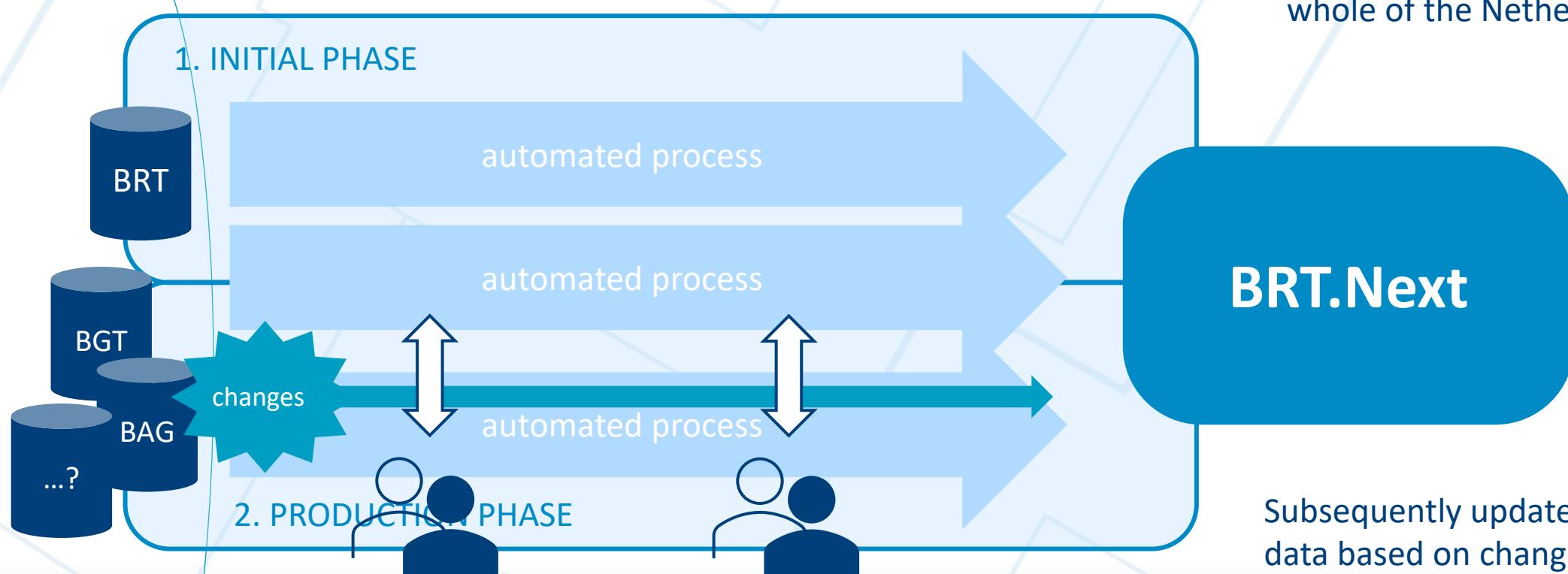
BRT.Next



SWEET

SWEET

Planning & prospects

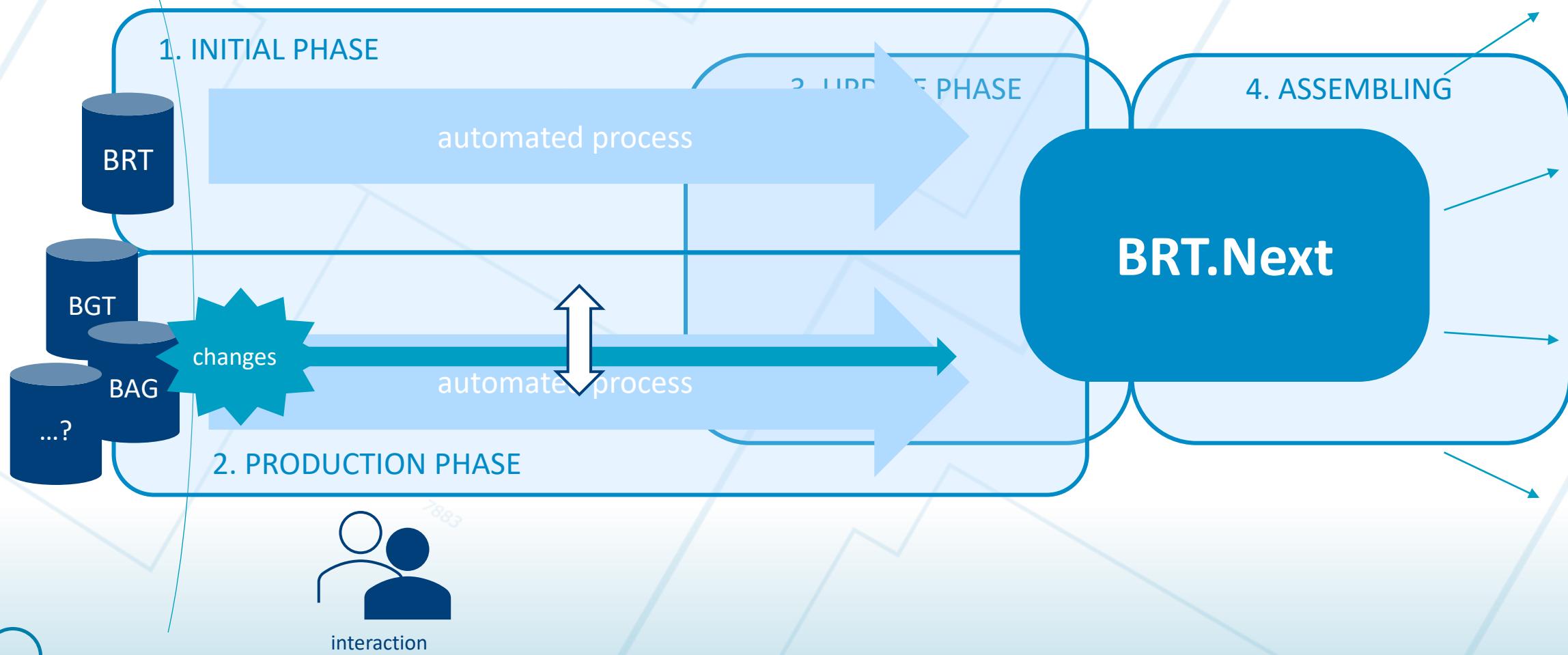


Create a starting point for the whole of the Netherlands

BRT.Next

Subsequently update the data based on changes in the sources

Planning & prospects





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Work in progress



Current state

Initial phase

Several tools developed

Constructing workflow as we go

Setting up SWEET-apps

Developing, but also: consolidating in the organisation

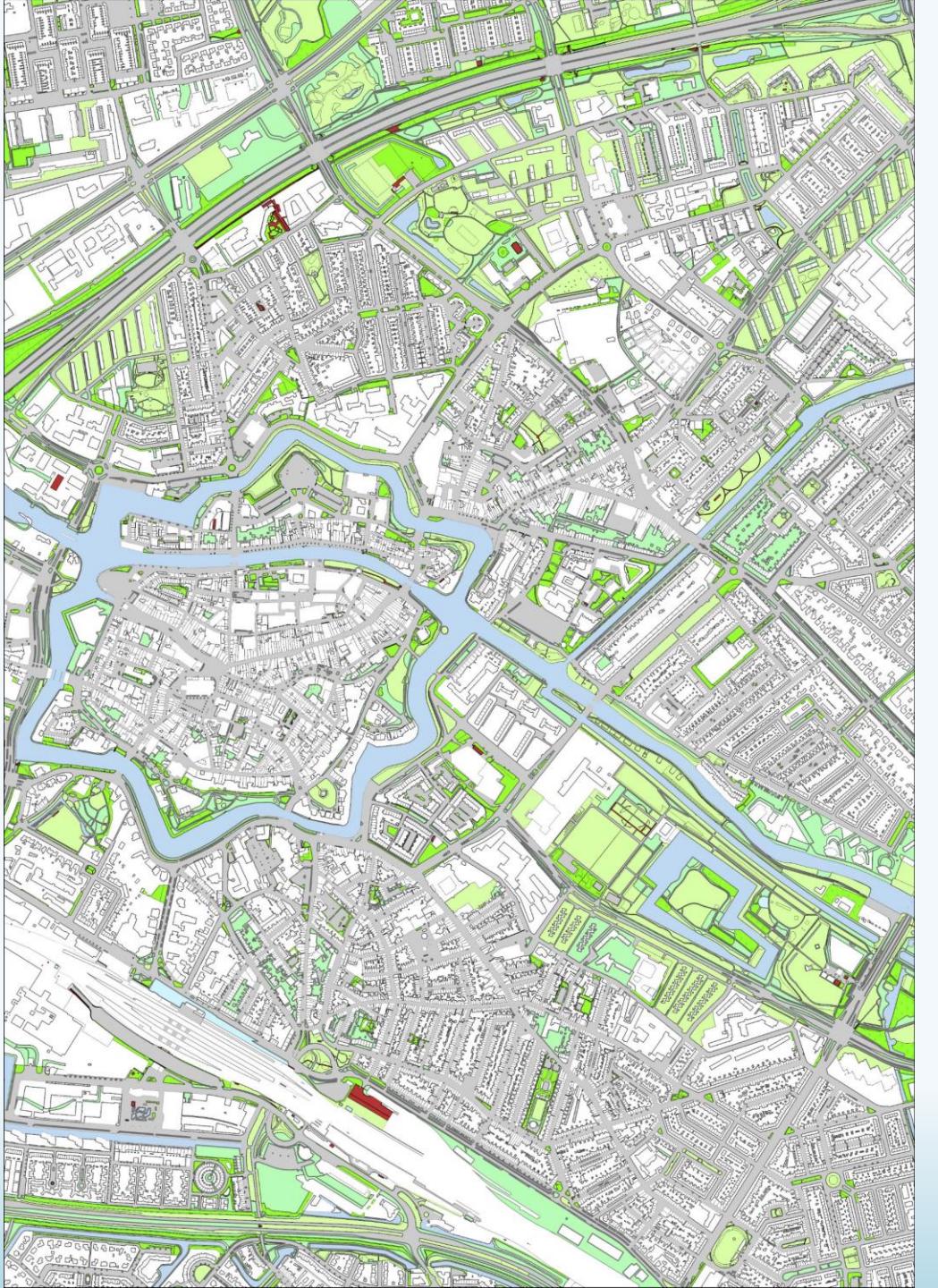
User interaction

Our way forward

Setting up Workflow Manager

Building change mechanism for production phase

Developing product assembly and generalisation processes





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Questions?

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