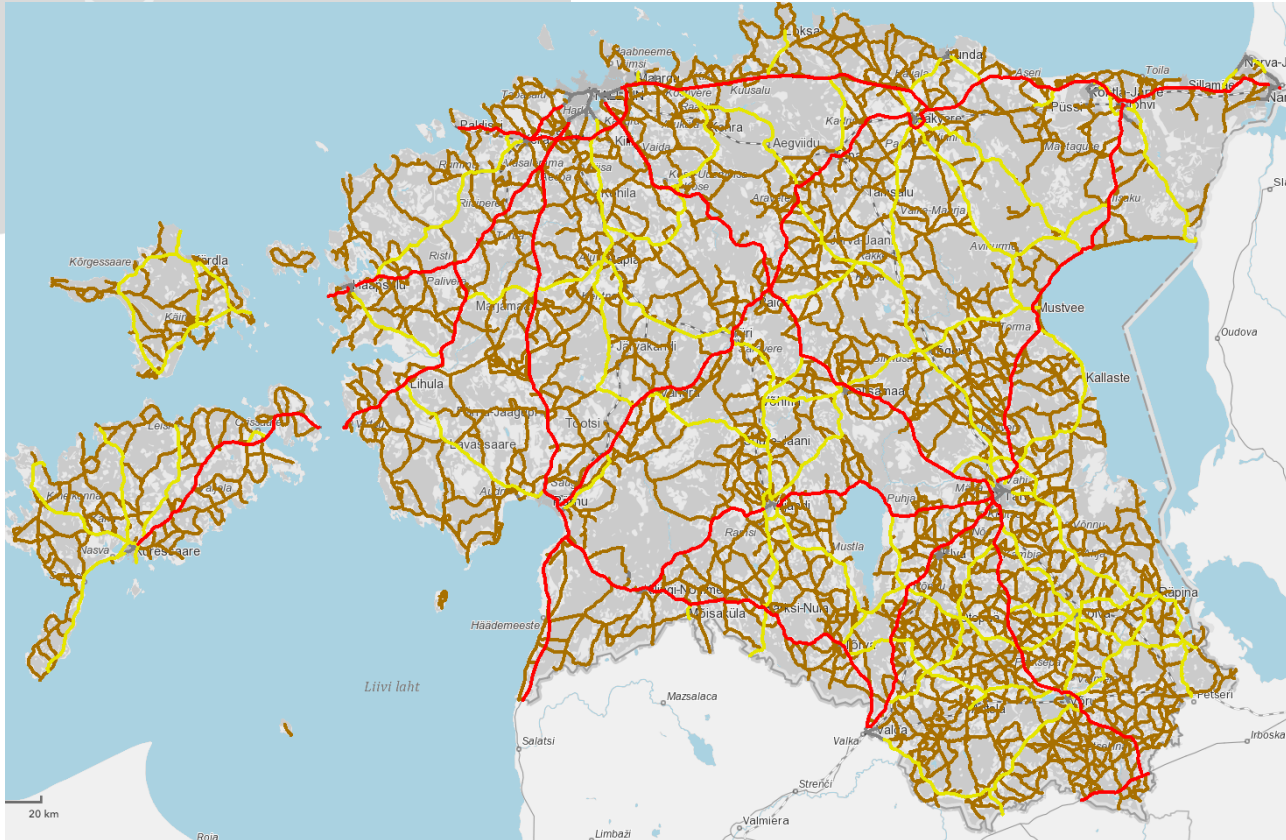# USE OF DATA IN DESIGNING

Estonian Road Administration
Erko Puusaag
05.04.2019

MAANTEEAMET

Estonia

- National roads – 16 605 km
  - Main roads – 1 609 km
  - Basic roads – 2 405 km
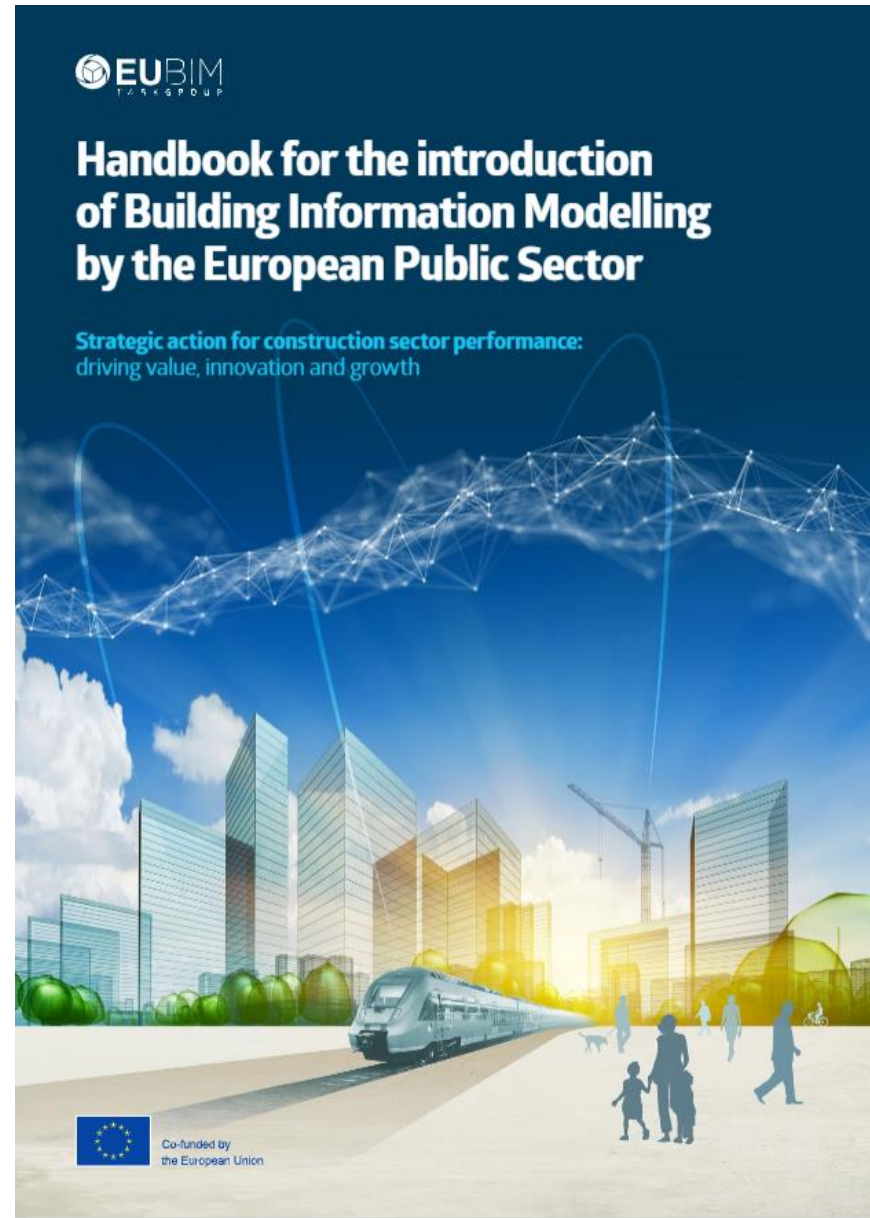 - Secondary roads – 12 481 km

Initiation

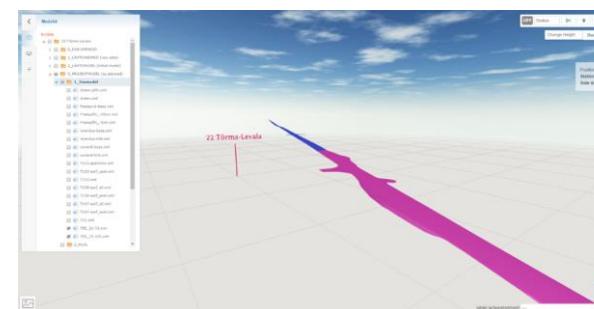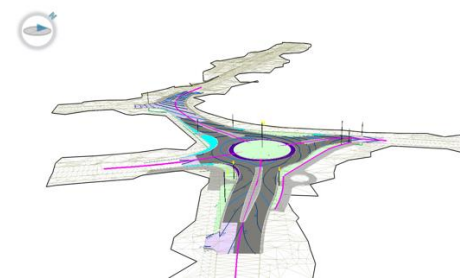# The Handbook

- What?
- Why?
- How?

BIM pilot projects

- ## Tõrva roundabout
  - Civilpoint (Trimble Quadri,Novapoint, Trimble Connect, Tekla Field)

- ## T22 Tõrma-Levala km 3,12-10,37 overlay project
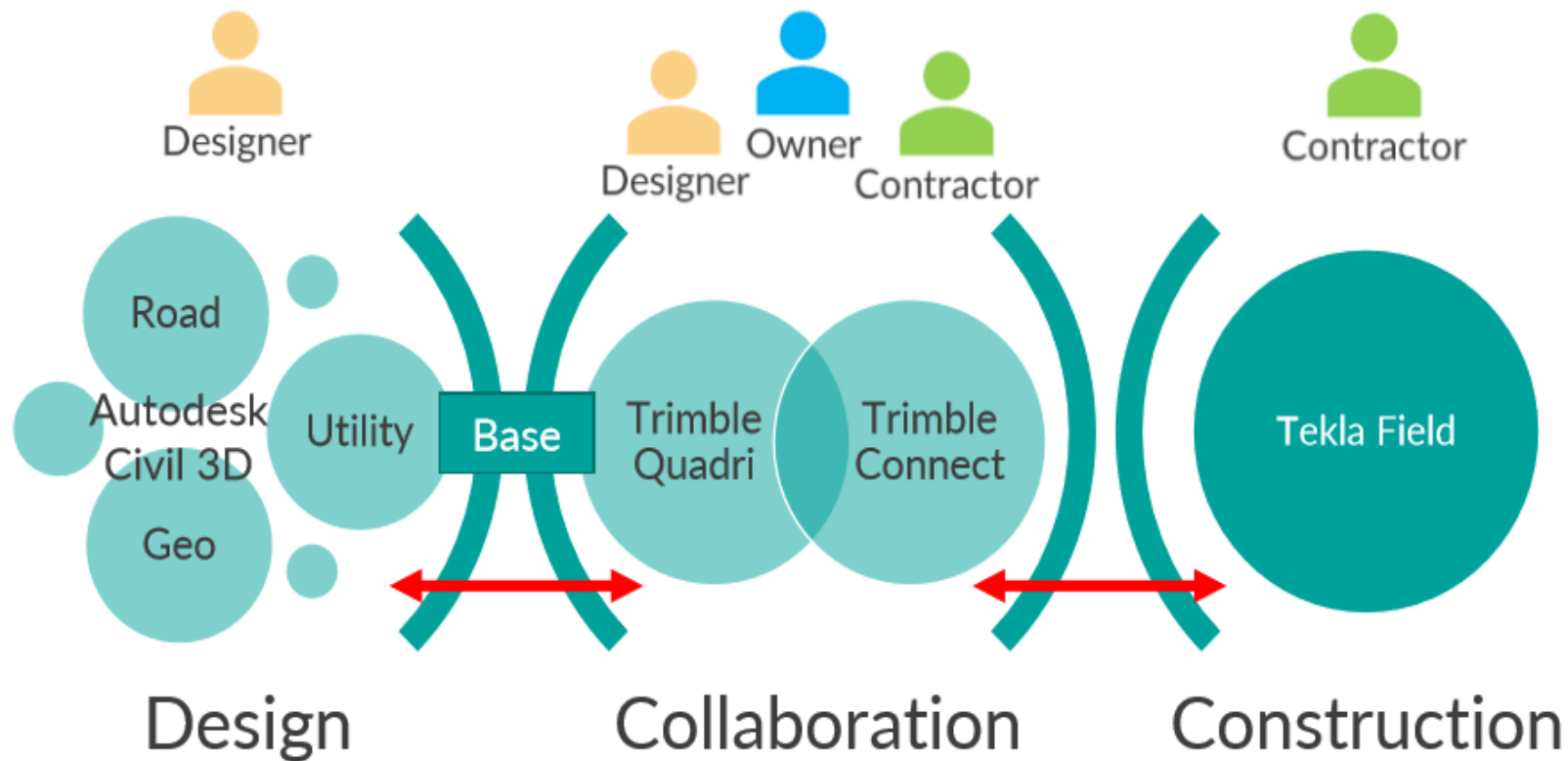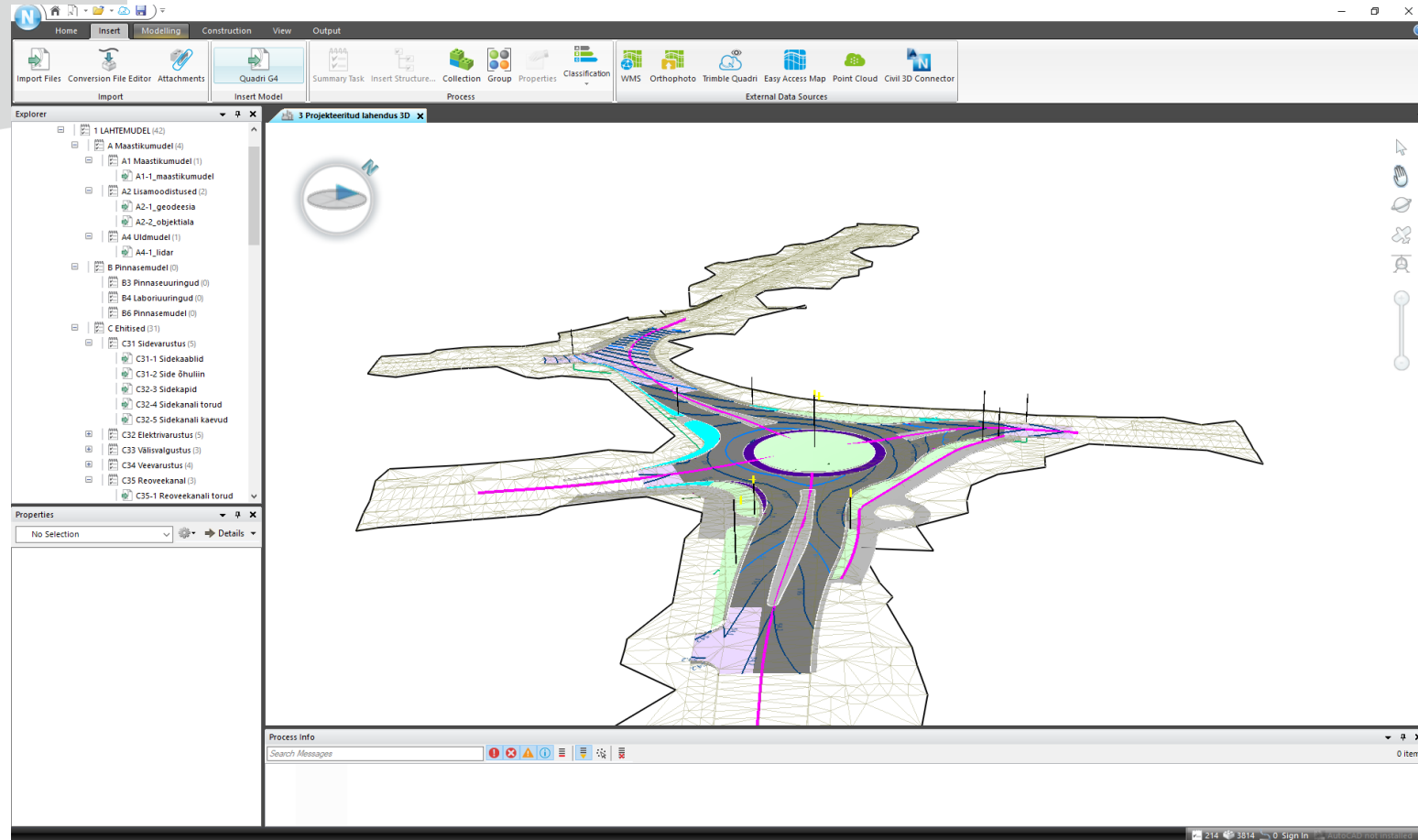 - Infrakit

Tõrva roundabout

- Design – Tinter Projekt (2D) and Roadplan (3D)
- Construction – YIT Infra Eesti
- Solutions from Civilpoint:
  - Trimble Quadri
  - Novapoint
  - Trimble Connect
  - Tekla Field

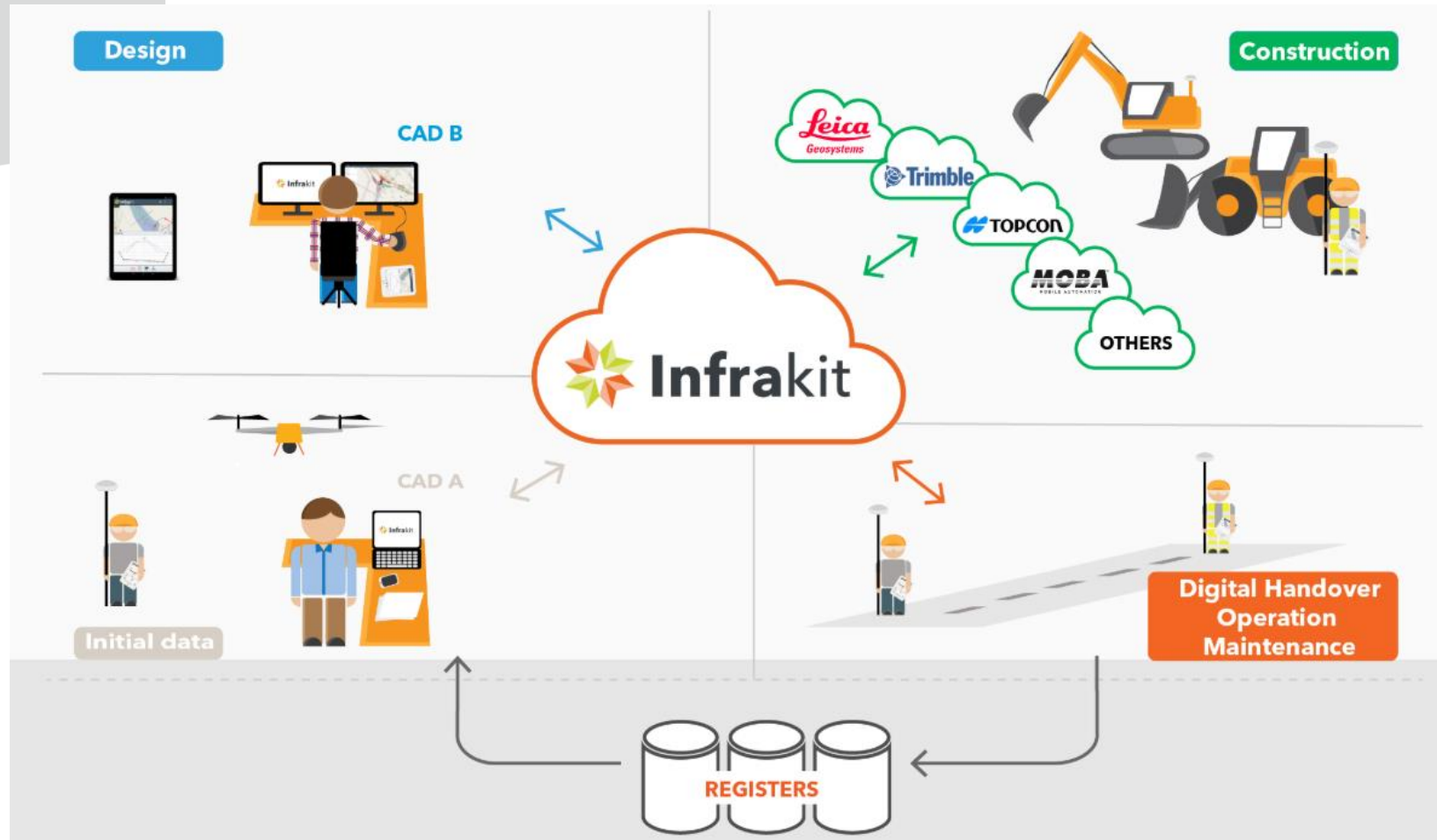# Tõrva roundabout

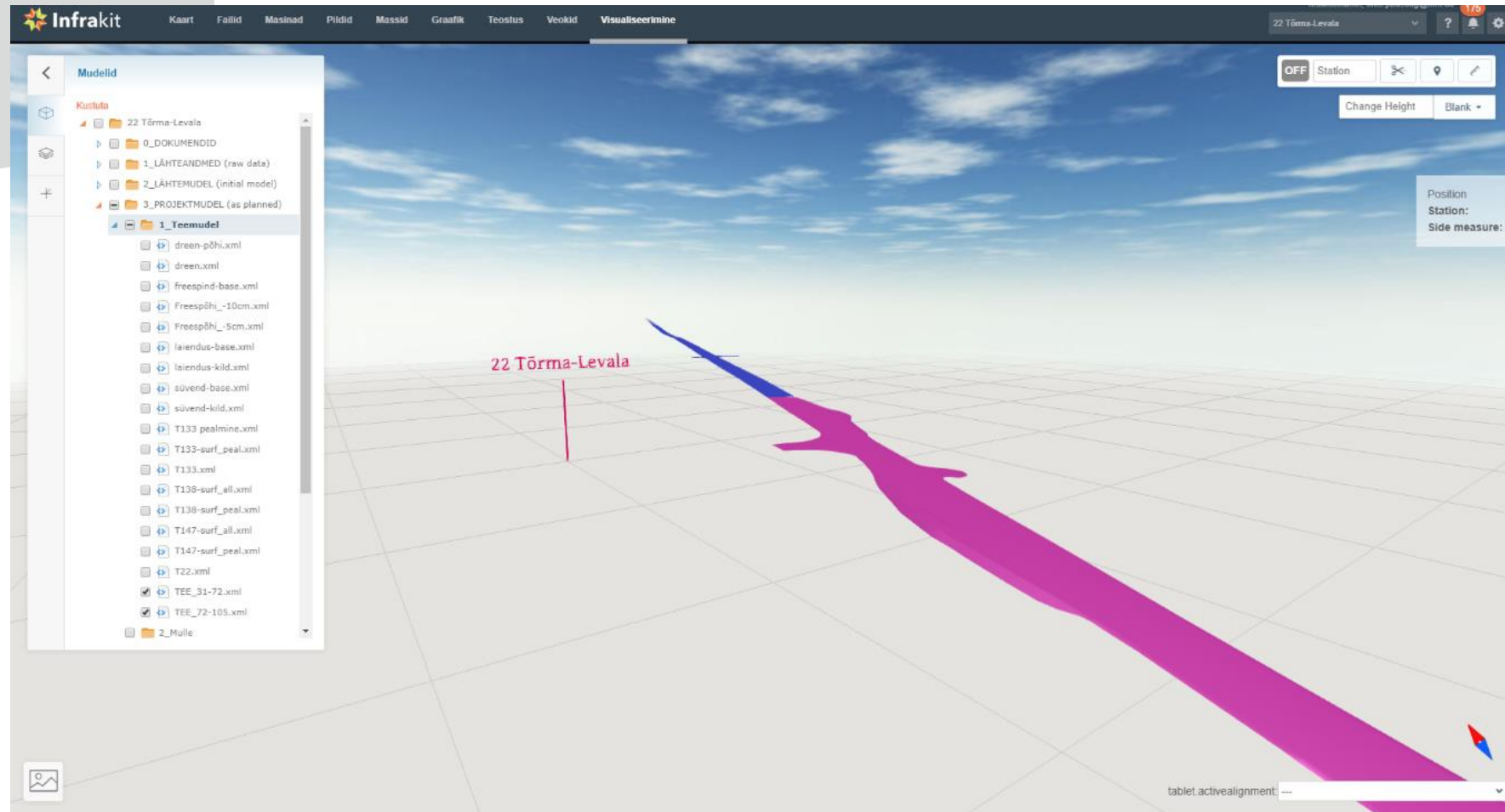# Tõrva roundabout

T22 Tõrma-Levala overlay project

- Design – Tinter Projekt
- Construction – TREV-2 Grupp
- Solution - Infrakit

T22 Tõrma-Levala overlay project

T22 Tõrma-Levala overlay project

Lessons learned

- Clear objectives are needed
- Clear roles and responsibilities need to be defined
- Guidelines, including data structure, are needed
- Change will take time and a lot of effort
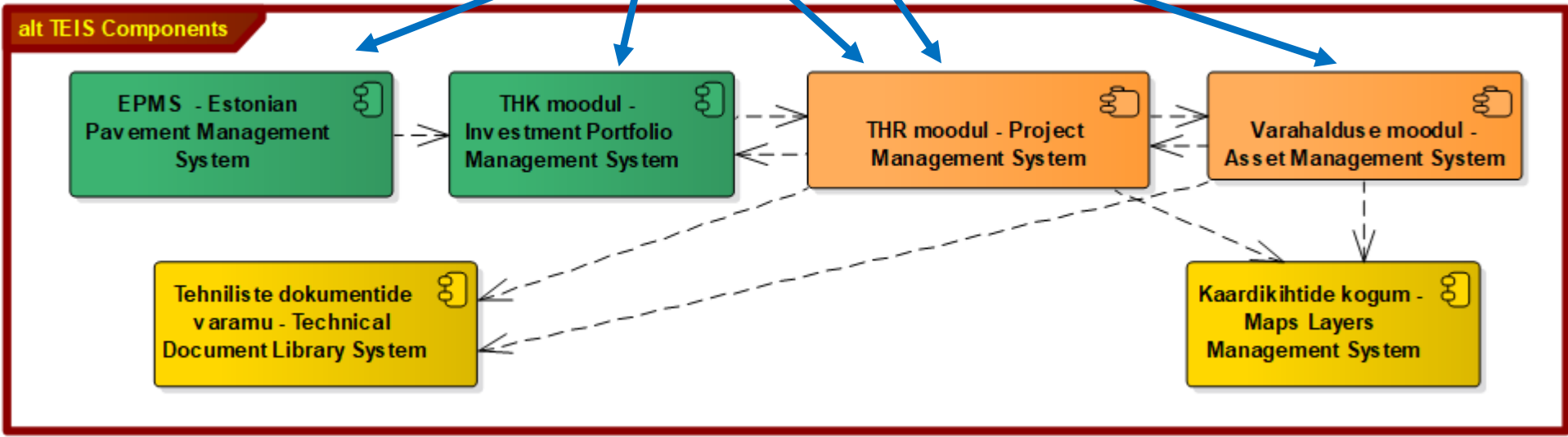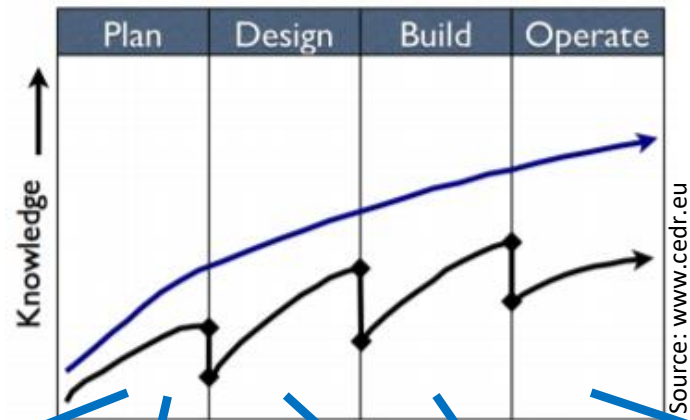- We need to reverse-engineer the data need

Building Information Management

- The value is created through data management
- The model itself is just representation of data
- Software used is not the main issue, especially when talking about open formats

Road Life-Cycle Information System

What next?

- Piloting continues:
  - 2 projects with Civilpoint
  - 2(+1) projects with Infrakit
  - 1 project with Autodesk
- Co-operation with Rail Baltic
- Guidelines
- Trainings and skill development
- Communication and cooperation with the industry

Questions?

ERKO PUUSAAG
Road Development and Investement Department
Project Manager
Erko.Puusaag@mnt.ee