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2023

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Bringing Transport Data into the Digital Age

Digital Traffic-Flow Optimisation - City of Stuttgart

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STUTTGART



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2023

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30 November 2023

9:00 AM



SESSION 4B

[HTTPS://POLISCONFERENCE2023.EU/](https://polisconference2023.eu/)



DVFO – Background, Facts and Goals

Background & Motivation

- Major air quality challenges caused by traffic emissions
- Preliminary assessment showed high emissions & road-safety problems caused by high accelerations
- Causing reduction of emissions & increase of road safety by consistent traffic flow

Project Facts

- Project cofunded from the federal government
- Project-budget: 6,2 Million €
- Digital & data driven concept
- Collaborate project of 7 departments of the city administration of Stuttgart

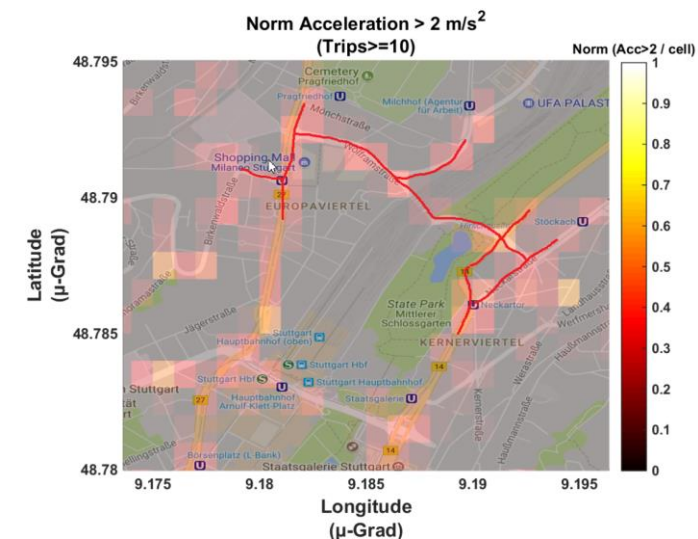
Gefördert durch:



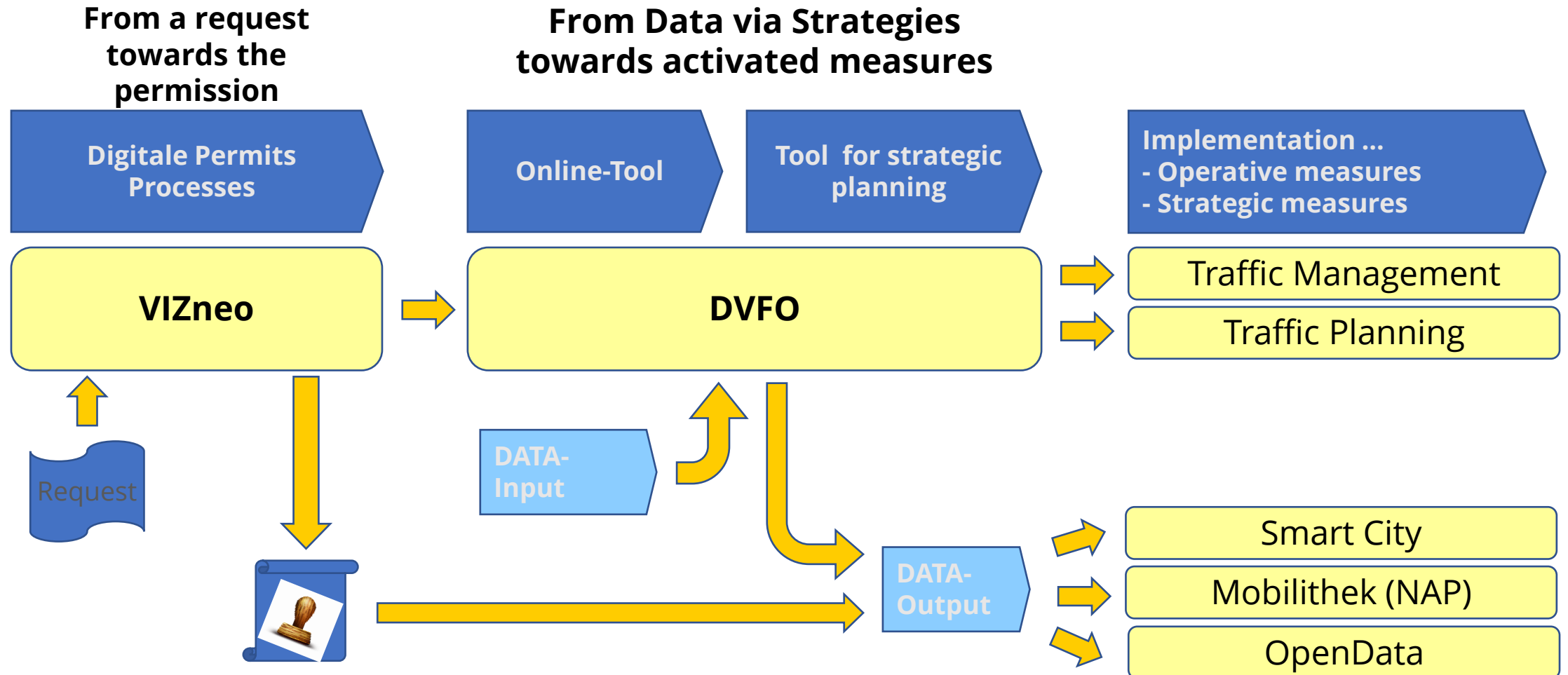
aufgrund eines Beschlusses
des Deutschen Bundestages

Goal

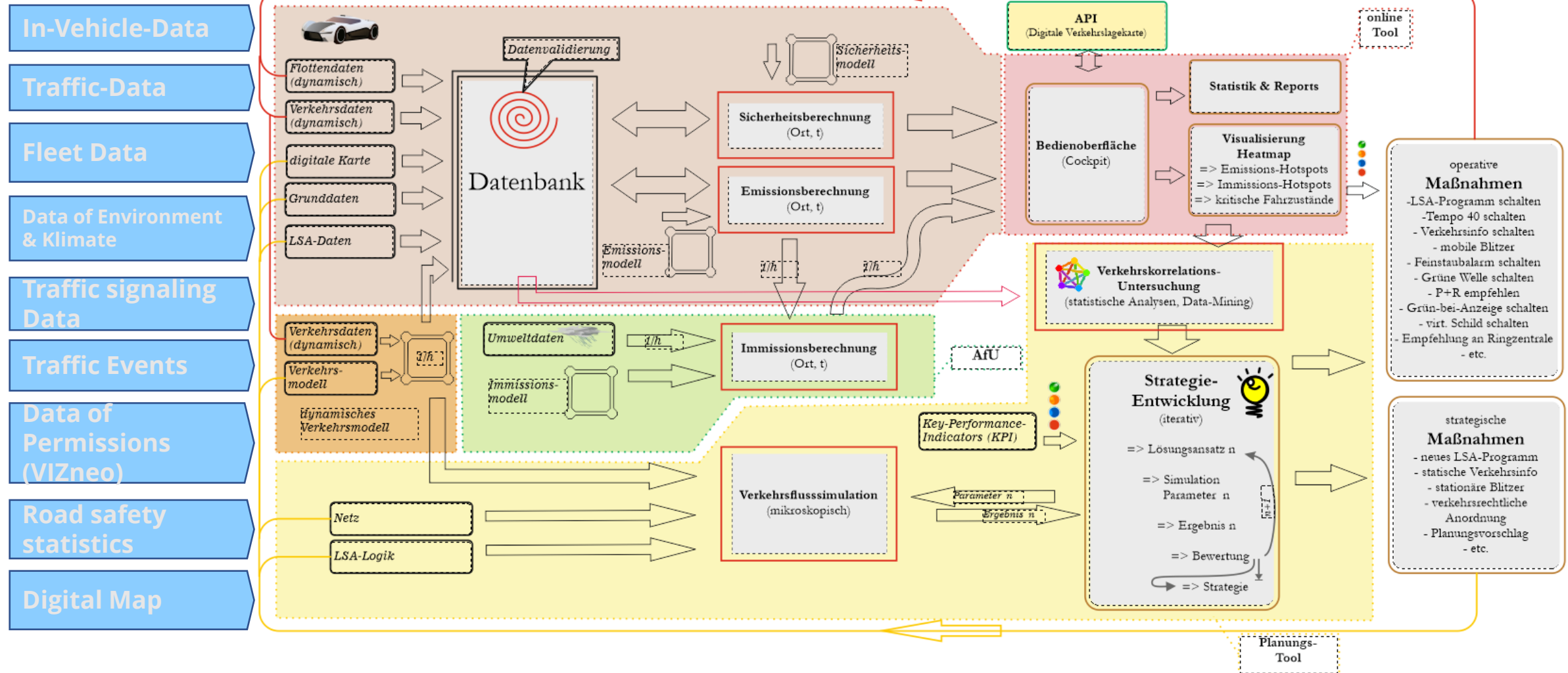
- achieving traffic flow and lowering traffic emissions, immissions and increasing road safety



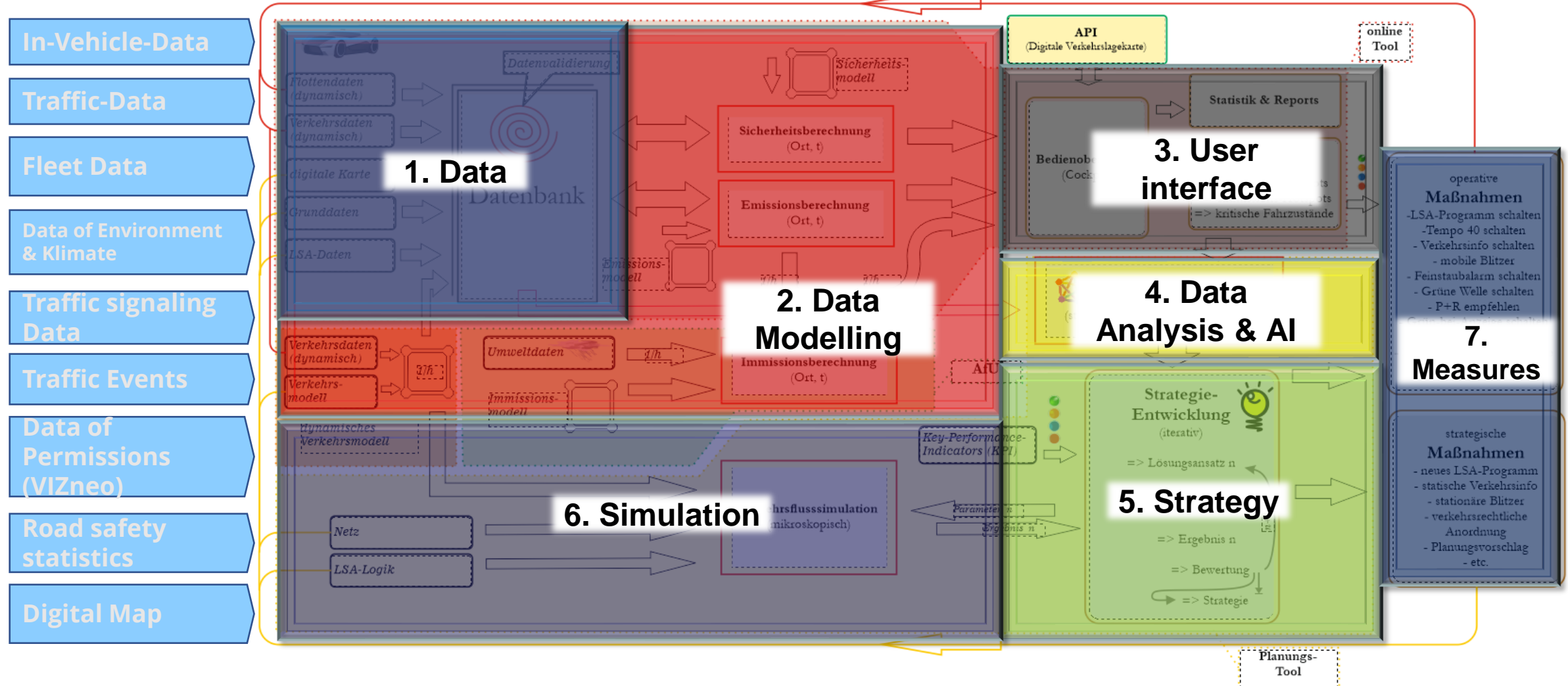
Integration into the administrative Processes of the Traffic Licensing Department



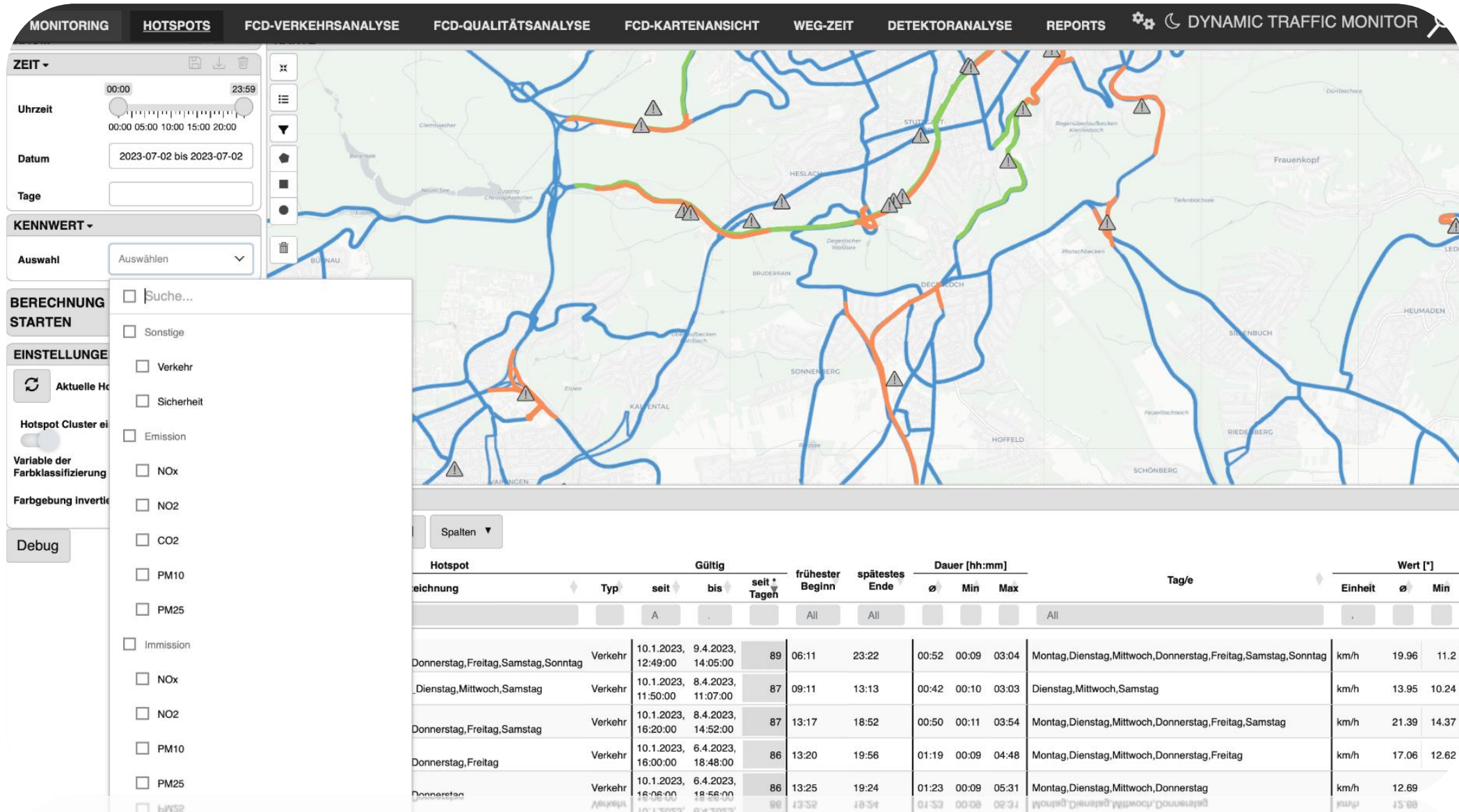
DVFO - Concept



DVFO - Concept



DVFO – Emissions & Road Safety-Hotspots



DVFO – Strategy Development

Strategieeditor

= zentraler C2N-Zugangspunkt

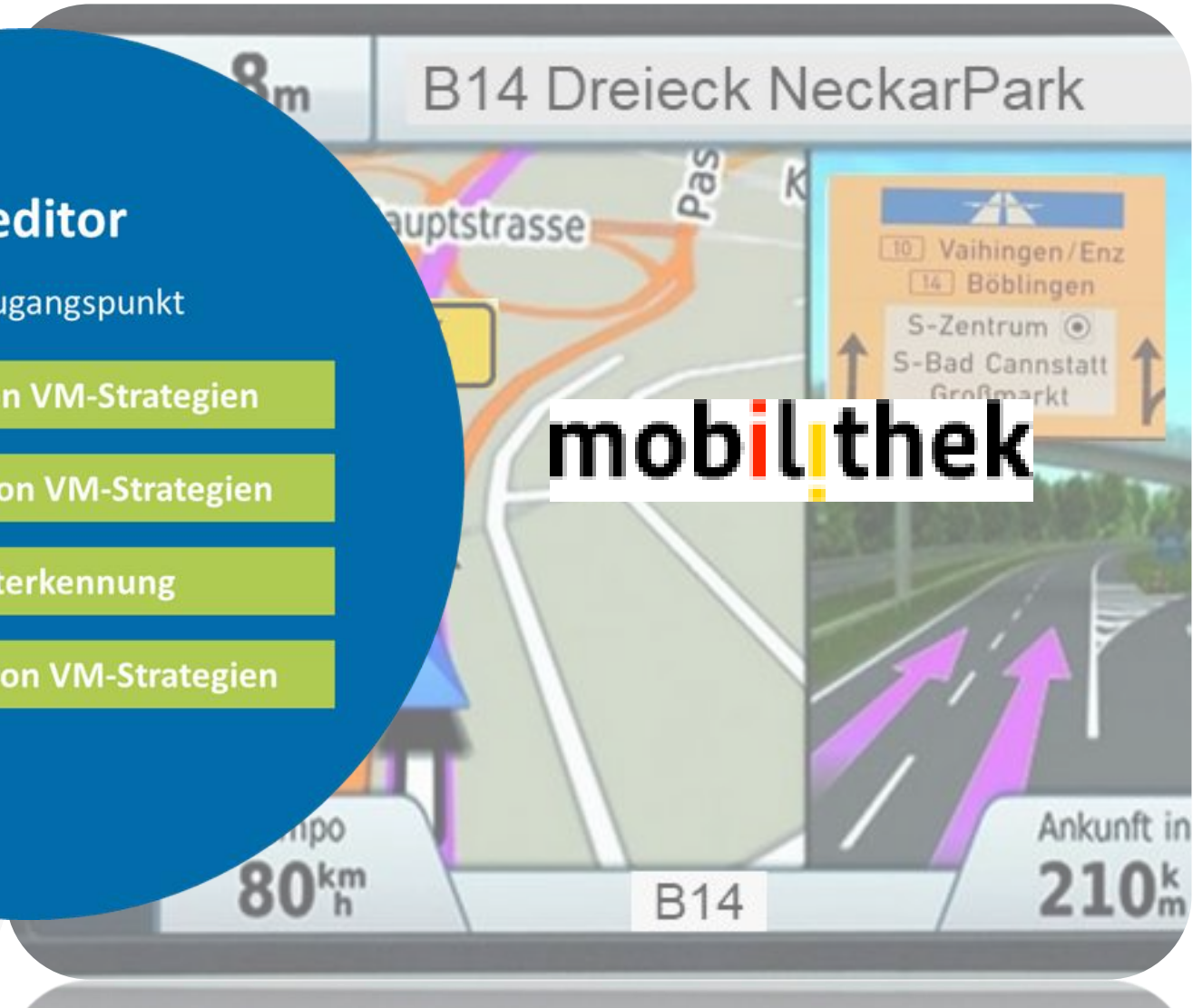
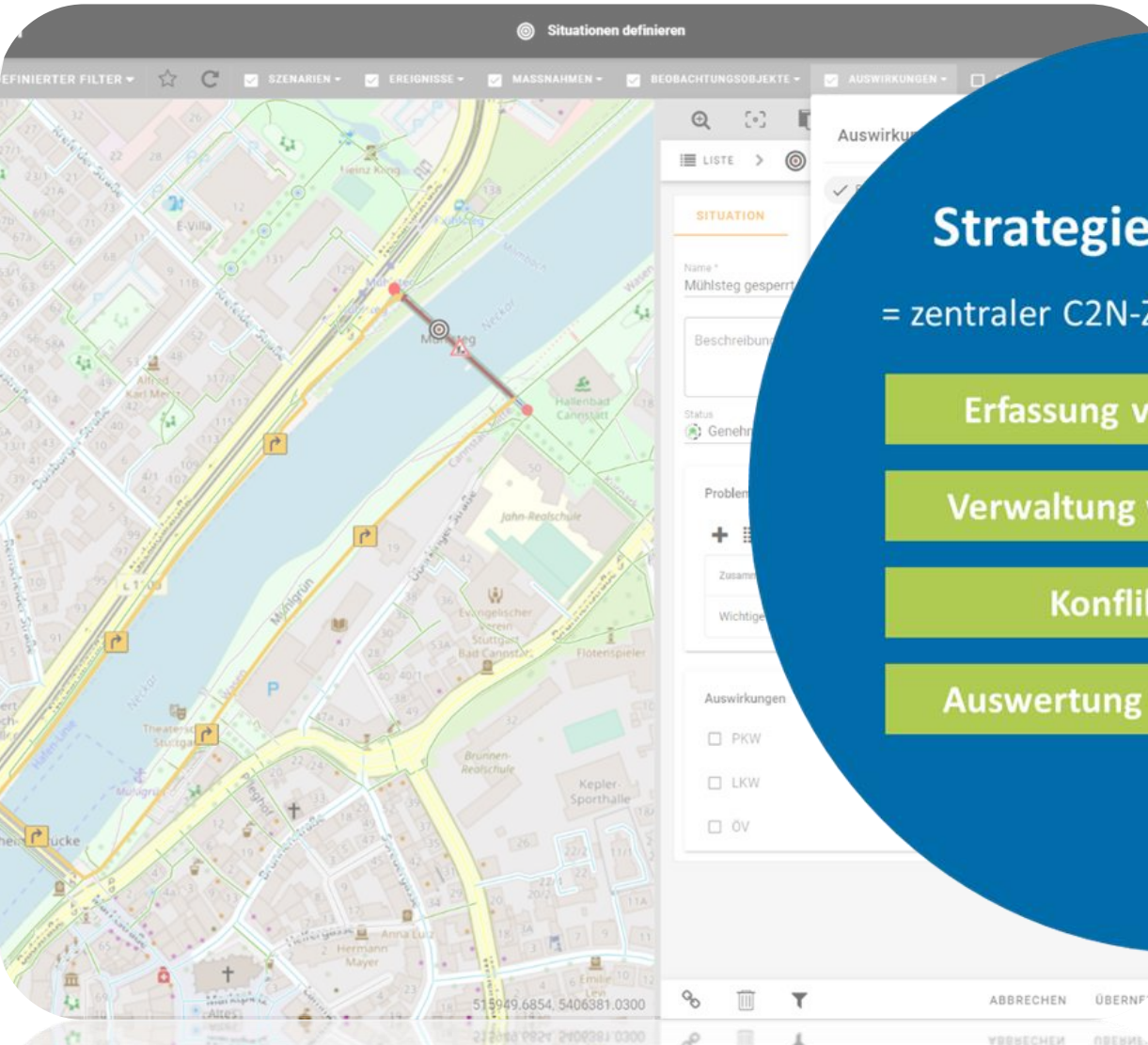
Erfassung von VM-Strategien

Verwaltung von VM-Strategien

Konflikterkennung

Auswertung von VM-Strategien

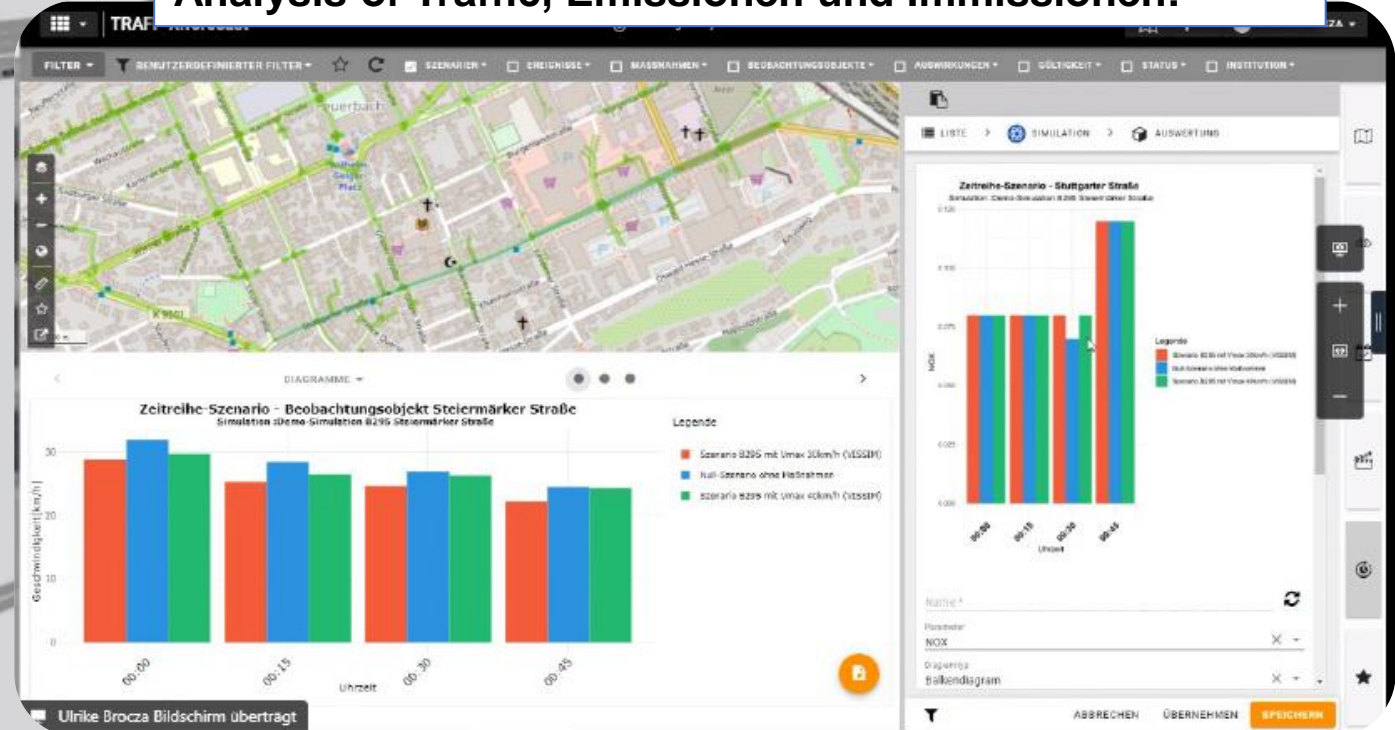
mobilithek



DVFO – Simulation and Effect Analysis

Simulation: Beispiel Steiermärker Straße

Analysis of Traffic, Emissionen und Immissionen:



DVFO – Data Sources

In-Vehicle-Data

Traffic-Data

Fleet Data

Data of Environment
& Klimate

Traffic signaling
Data

Traffic Events

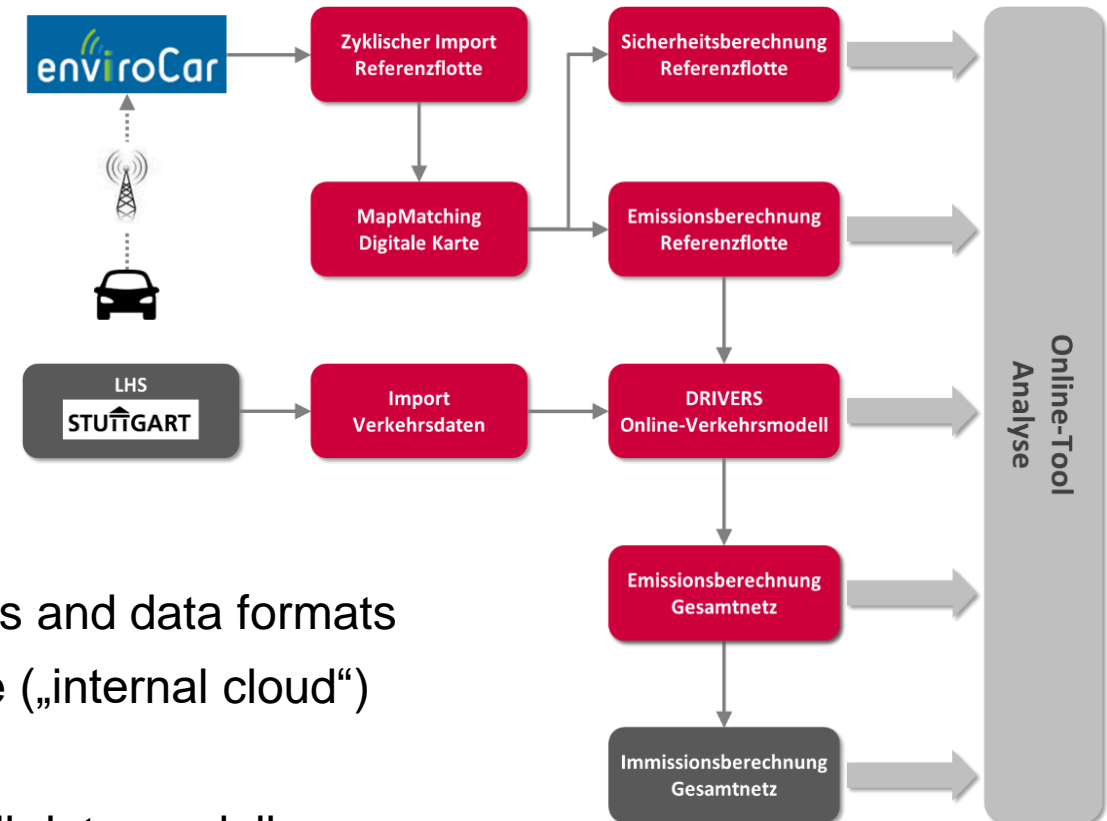
Data of
Permissions
(VIZneo)

Road safety
statistics

Digital Map

Key factors

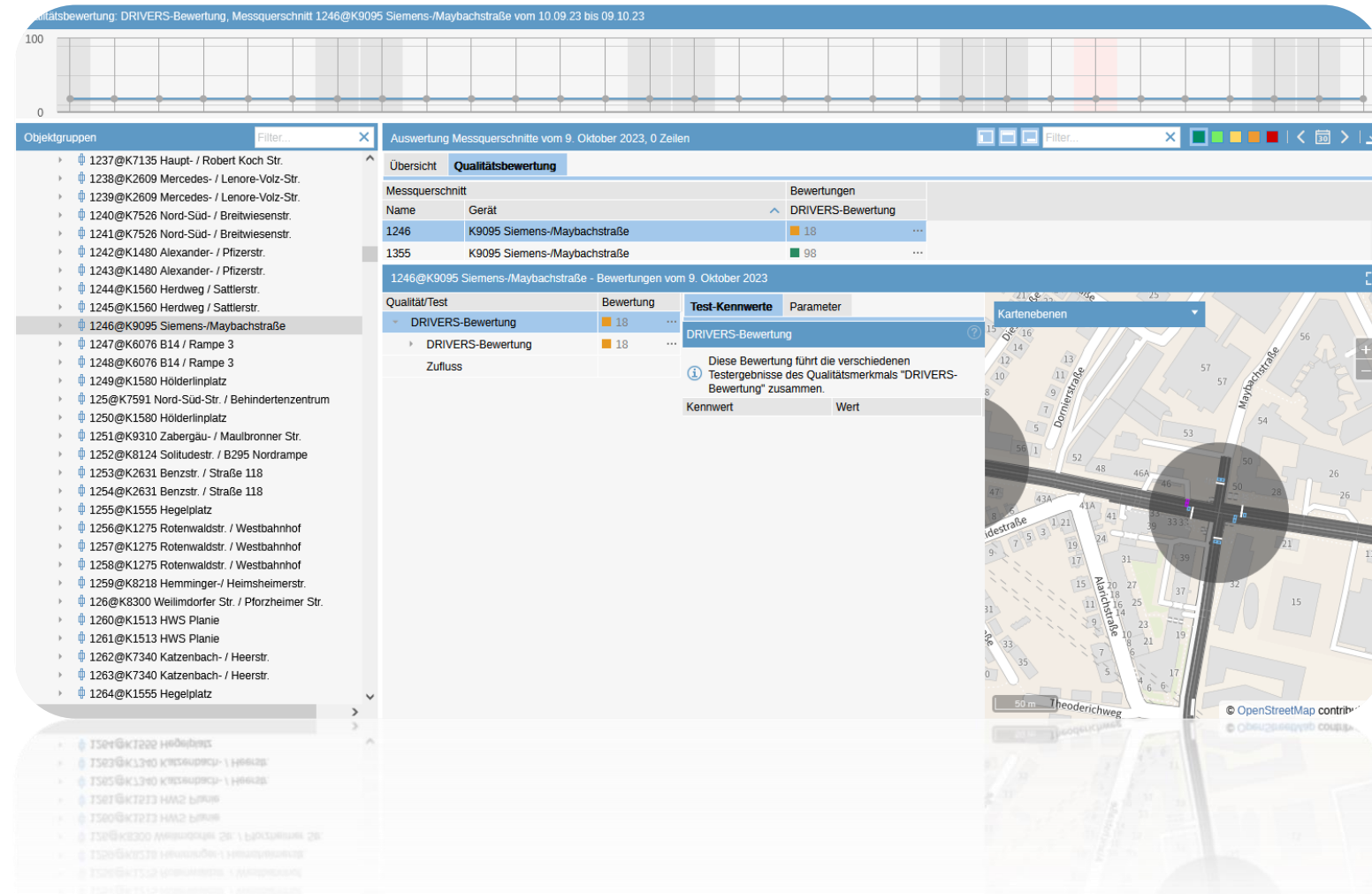
- Using Standard interfaces and data formats
- Powerful IT infrastructure („internal cloud“)
- Using Community Data
- Owning the licenses of all data models
- Using web-technology



DVFO - Dataquality

Key factors

- Quality control of all data!
- Using various QM methods
- Using open standards for Data
- Installing processes for data maintenance
- Using digital workflow processes





Thank you for your attention!



For information: