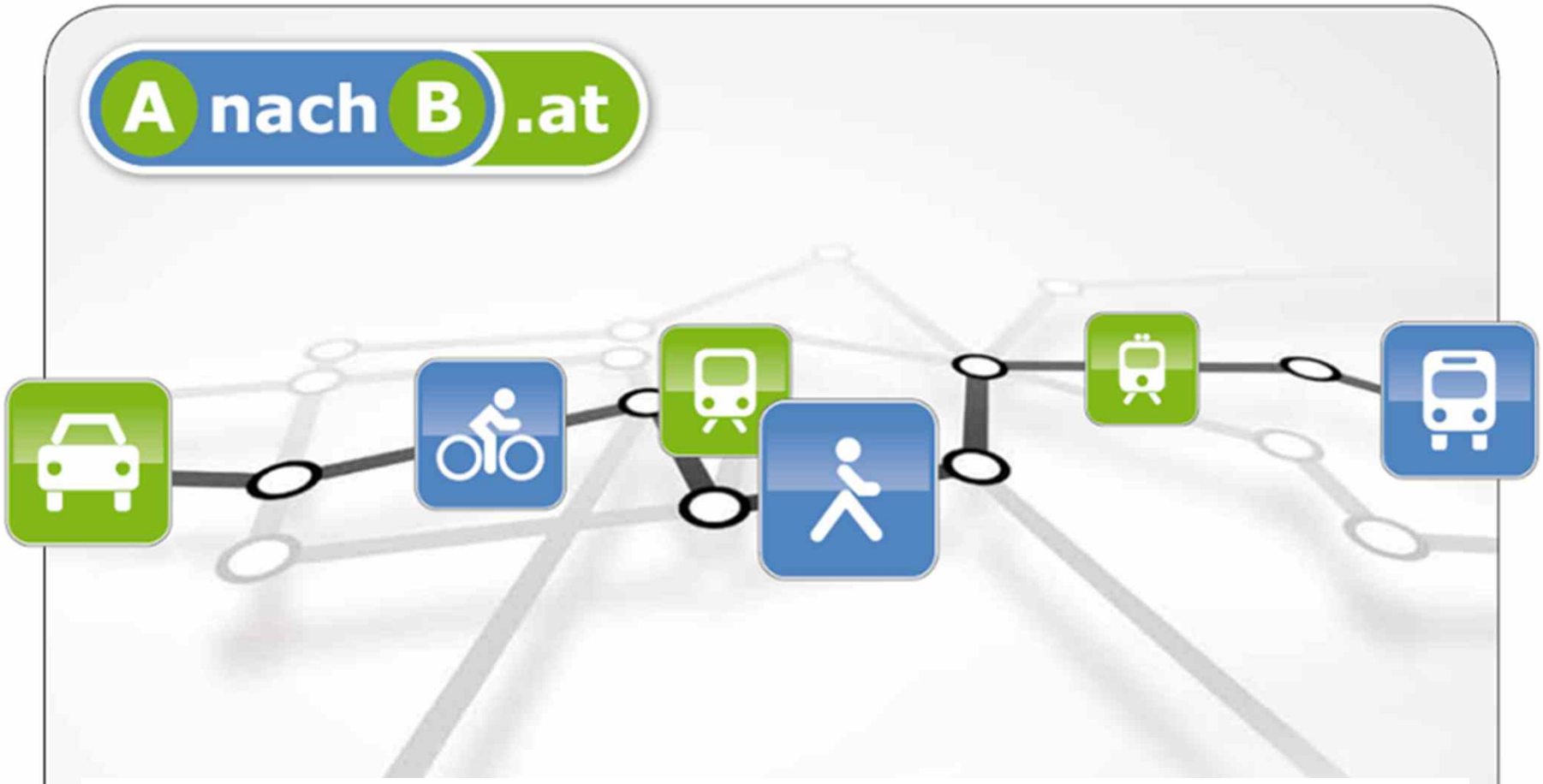


ITS Vienna Region / AnachB.at / GIP

the innovative traffic management project for the eastern region of Austria

Hans Fiby, project leader ITS Vienna Region

ITS Vienna Region
Intelligent Transport Systems

the Vienna Region

Vienna

Lower Austria

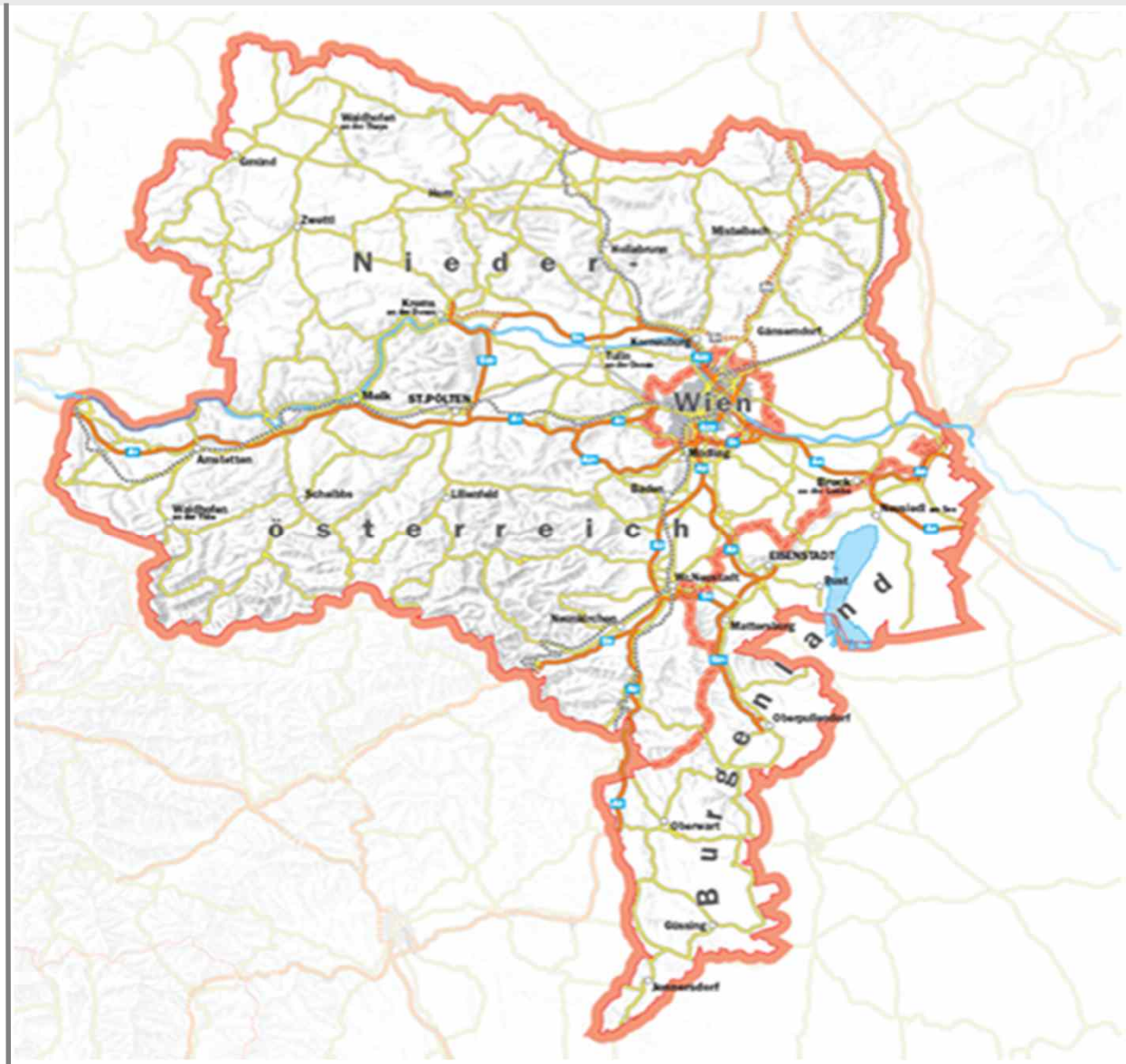
Burgenland

23.500 km²

3,5 million inhabitants

40% of all Austrians

200.000 commuters / day



ITS Vienna Region
Intelligent Transport Systems

new challenges

completion of infrastructure development in Austria
(Westbahn, Regionenring, local bypasses, …)

level of motorisation will reach its limit soon

We have to face new challenges:

- expensive energy
- accessability of suburban regions
- climate, air and noise pollution, …
- traffic control via telecommunication (navigation systems)

ITS Vienna Region

- initiated by Vienna, Lower Austria, Burgenland
- financed by Vienna, Lower Austria, Burgenland
- funded by BMVIT, EU (research procets)
- embedded in the Verkehrsverbund Ost-Region (VOR)

Web, iPhone, networking

all mea

ic data

partners

covering the entire Vienna Region

June 2011:
1.000.000 route calculations

ITS Vienna Region
Intelligent Transport Systems

data and services

Taxi (Floating Car Data, 3500 Taxis)

Detectors, Sensors
(traffic measurement,
radar measurement)

traffic news
(ASFINAG, Police,
Ö3 editorial office)

Public Transport
(Wiener Linien, ÖBB, P&R)

ITS Vienna Region
Intelligent Transport Systems

Graph Integration Platform GIP
traffic model

Vienna
Lower Austria
Burgenland
VOR

A nach B .at

- **services for end users**

- **traffic management**
- **e-government**

http://AnachB.at

ITS Vienna Region
Intelligent Transport Systems

traffic telematics platform Vienna Region

A nach B .at

… door to door

widget / gadget

www.AnachB.at

iPhone App

partner websites

quality control

development

know how

…

multimodal data:

- public transport
- individual traffic (dynamic data with FCD (3.500 taxis), traffic news, detectors, sensors,…)

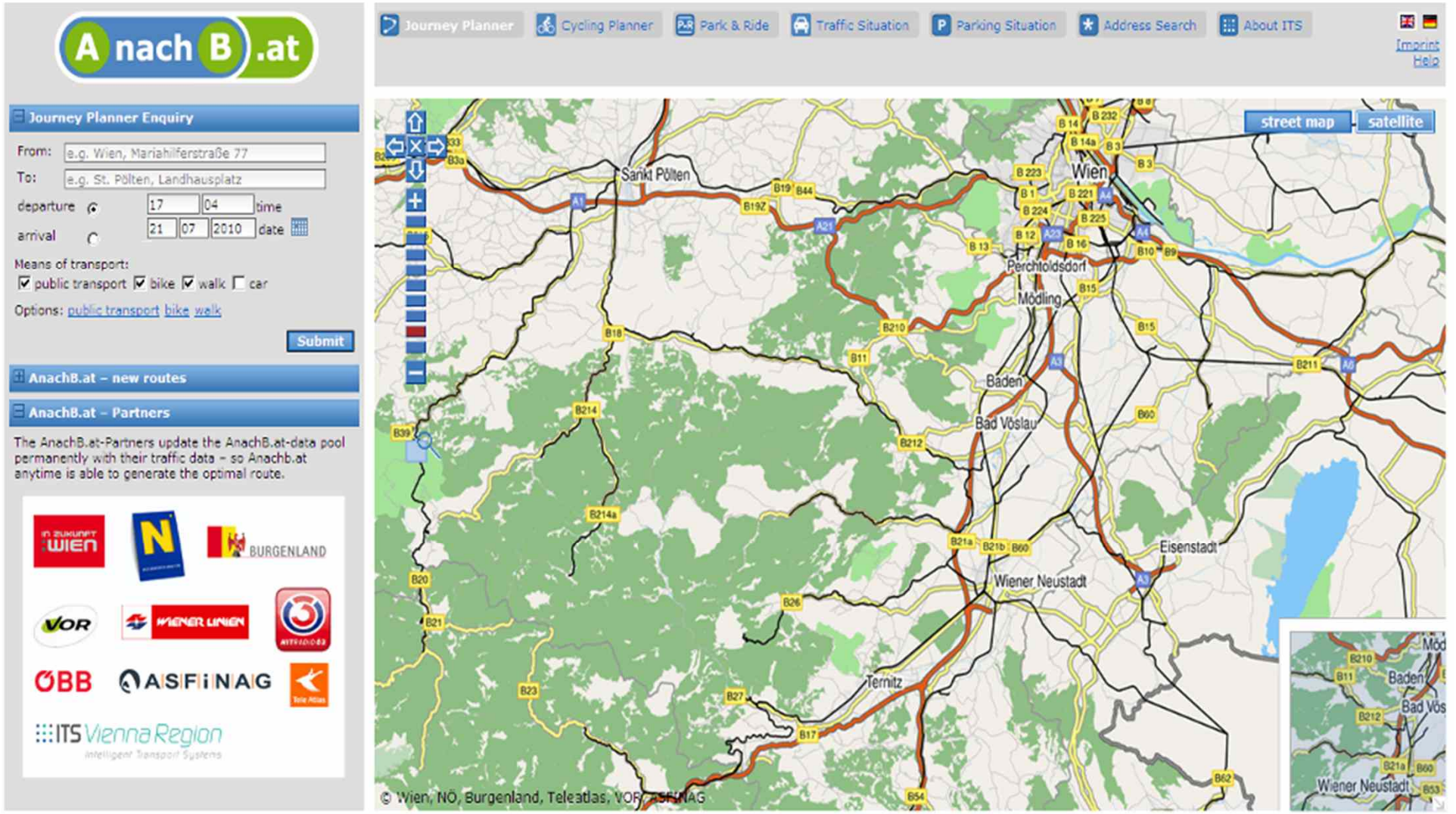
traffic forcasts – traffic model

Vienna GIP.at

Nö GIP.at

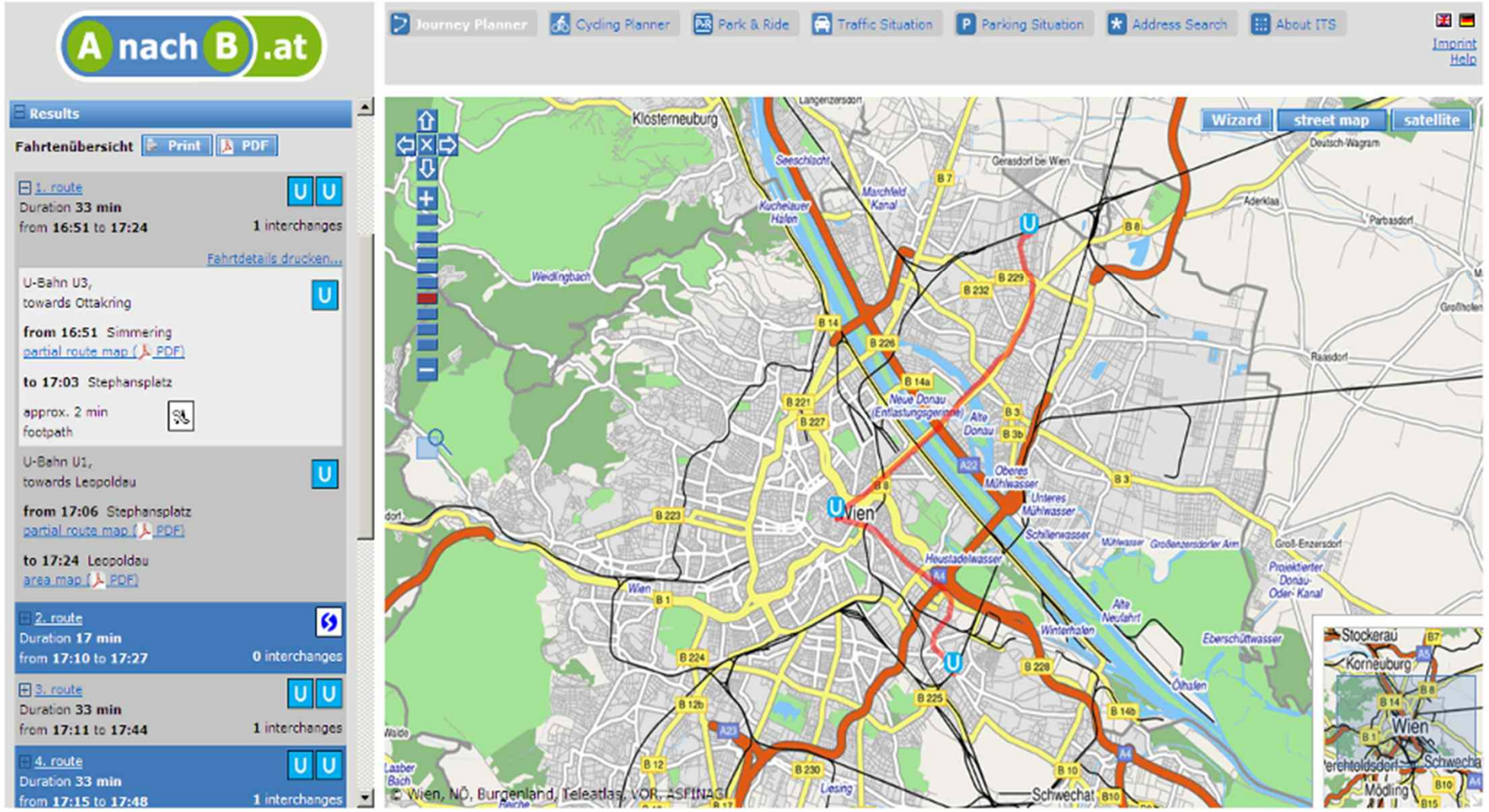
Bgl. GIP.at

AnachB.at homepage



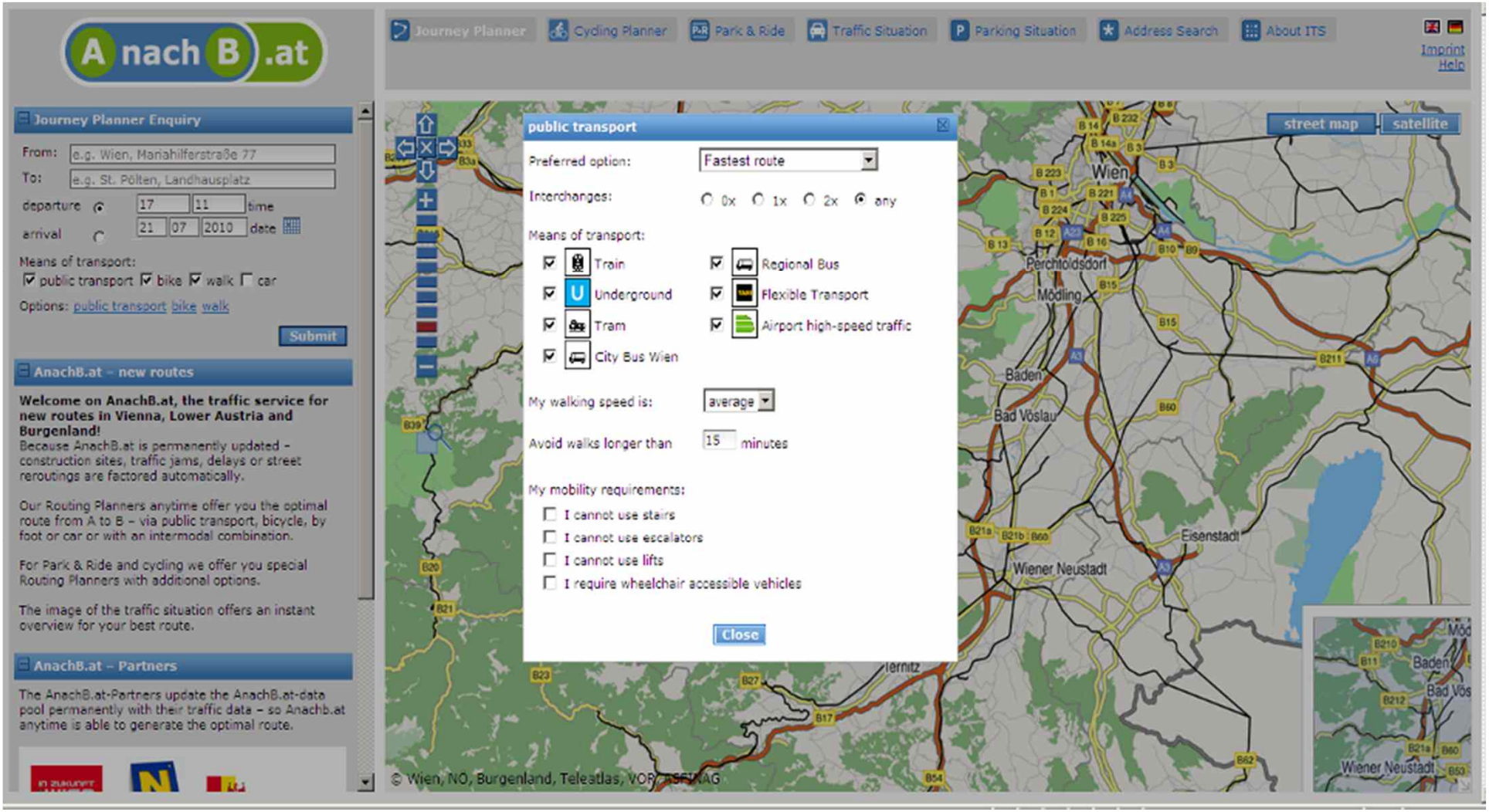
ITS Vienna Region
Intelligent Transport Systems

AnachB.at routing for public transport



ITS Vienna Region
Intelligent Transport Systems

options / accessability



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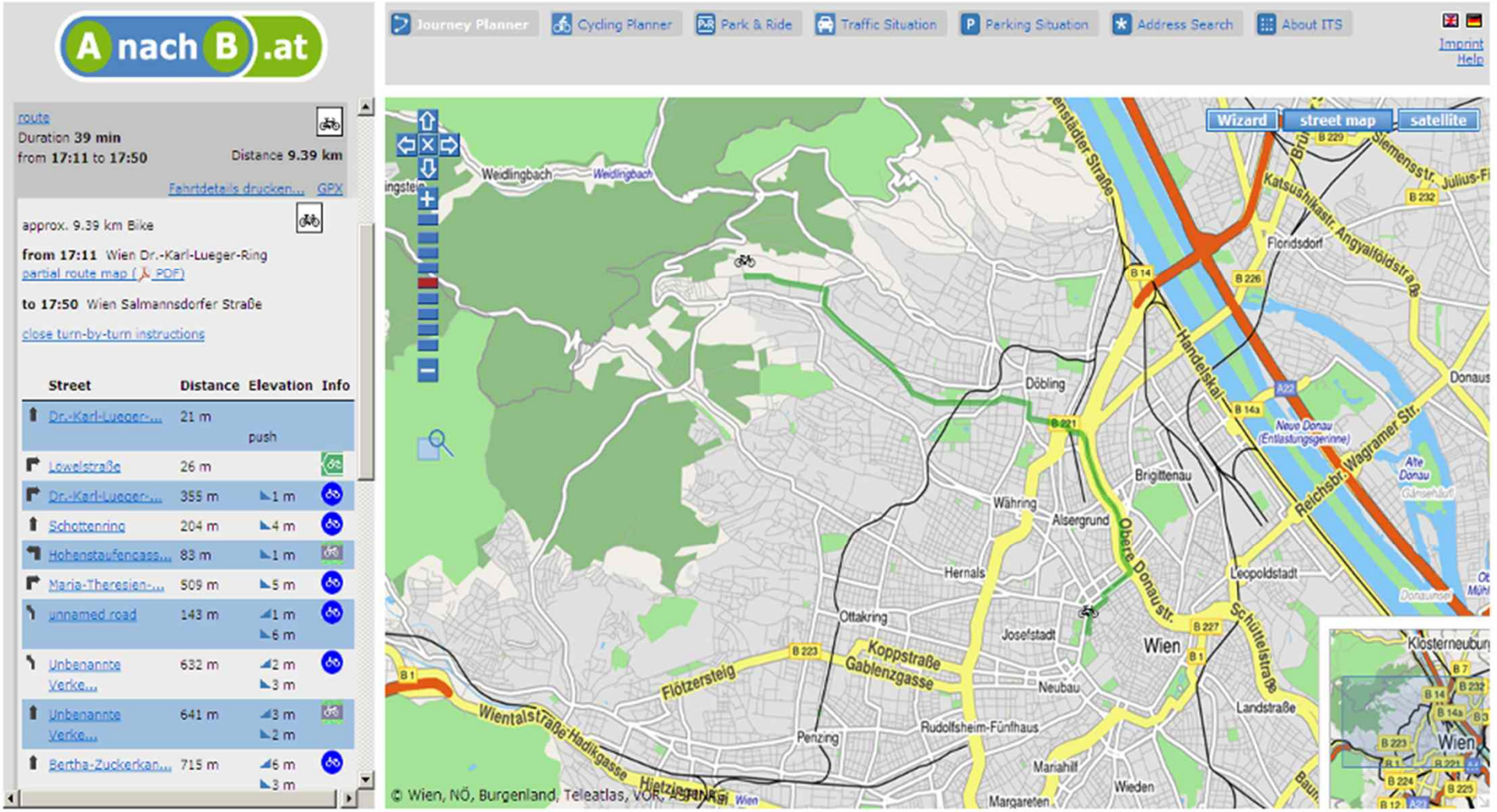
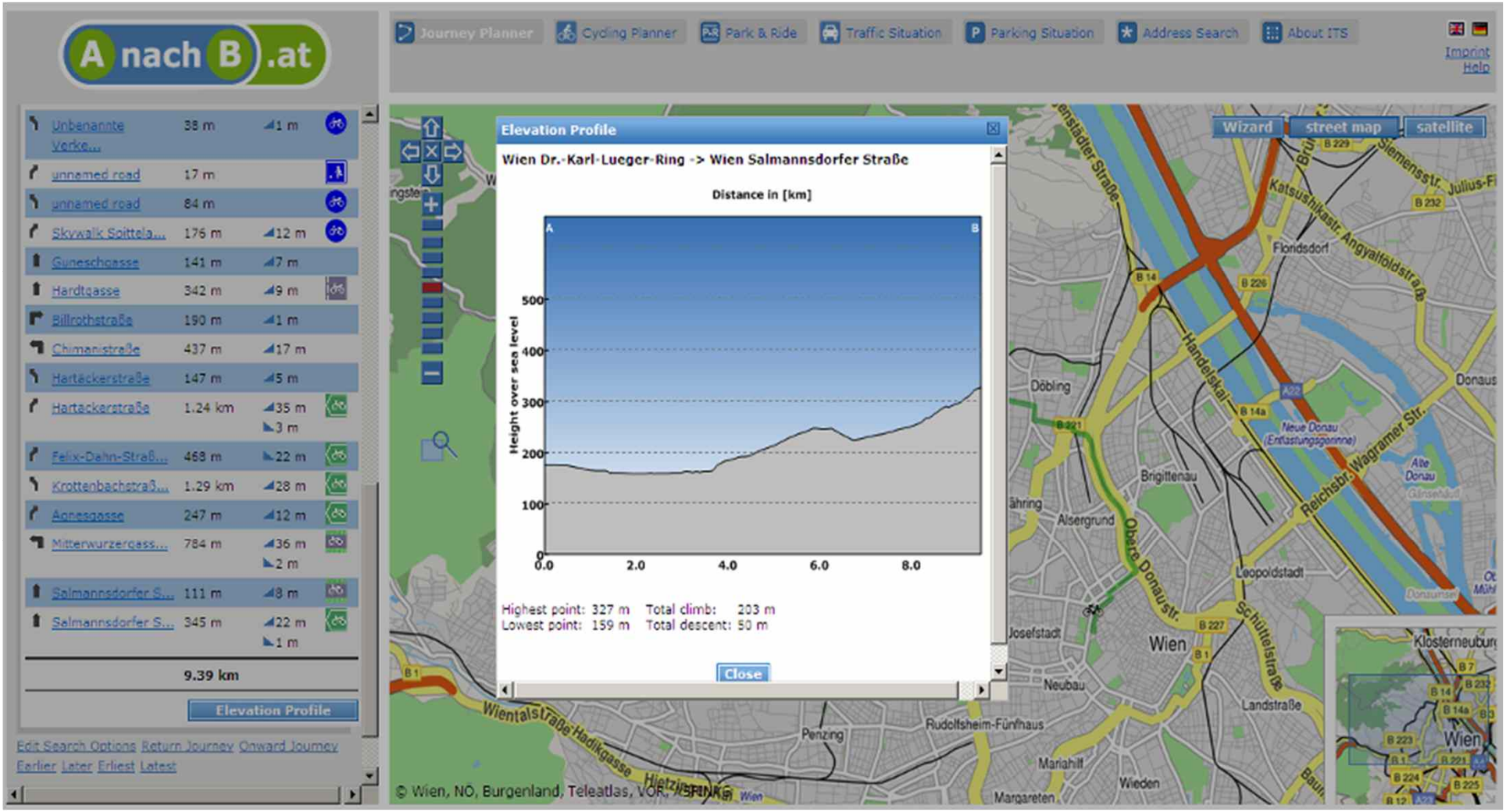
AnachB.at routing for cycling



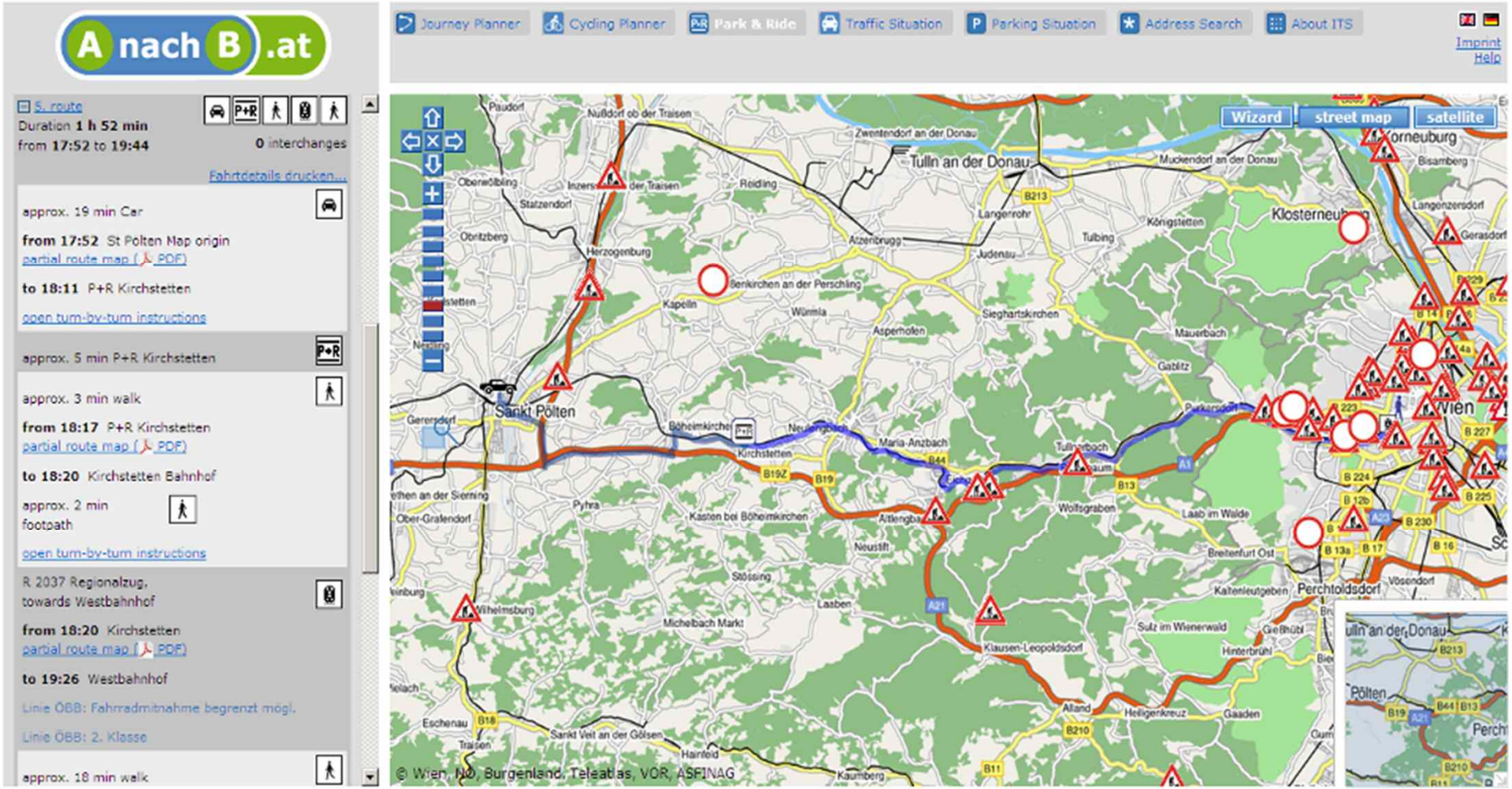
ITS Vienna Region
Intelligent Transport Systems

AnachB.at elevation profile



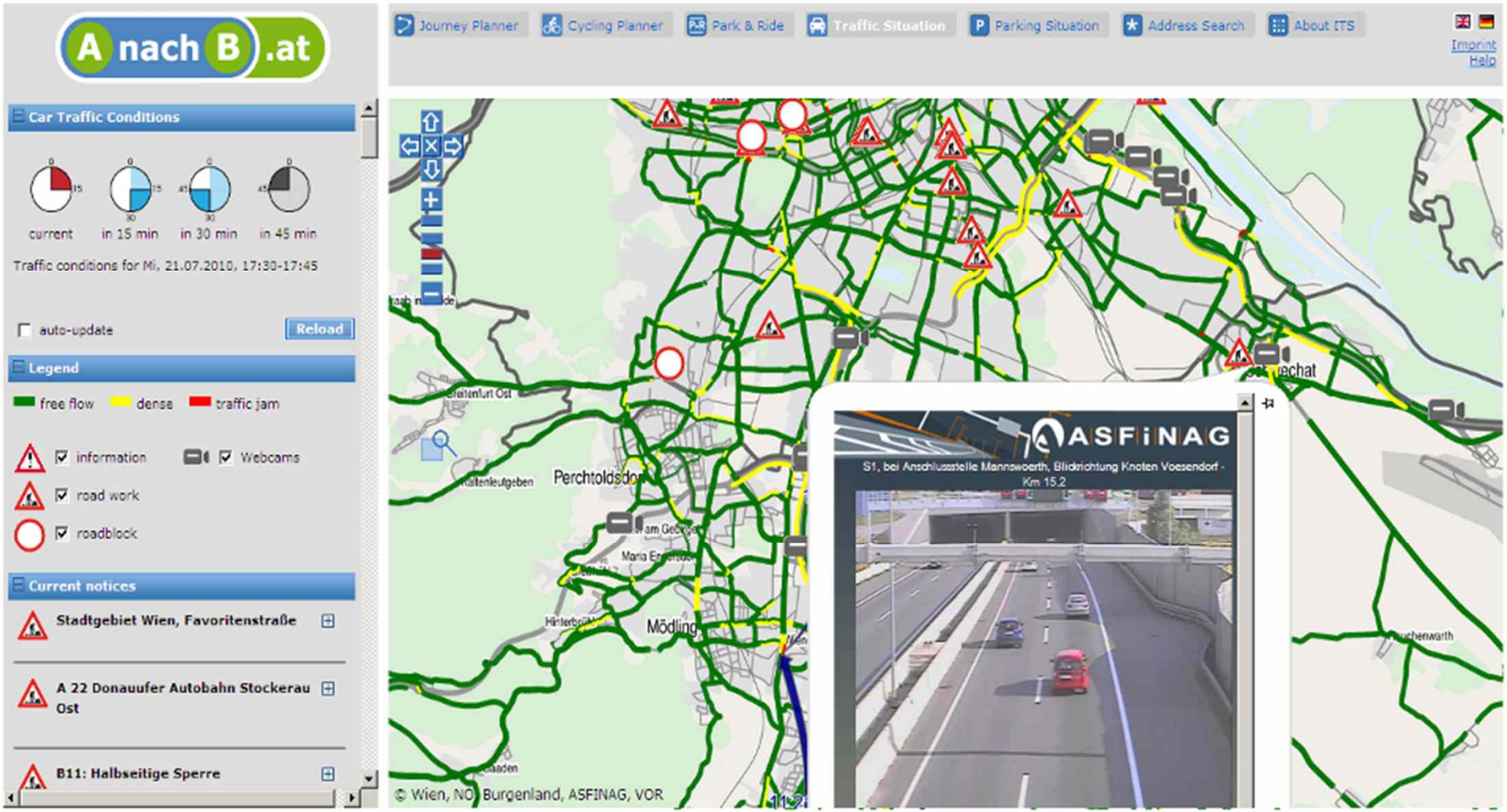
ITS Vienna Region
Intelligent Transport Systems

AnachB.at Park & Ride



ITS Vienna Region
Intelligent Transport Systems

AnachB.at dynamic traffic map



ITS Vienna Region
Intelligent Transport Systems

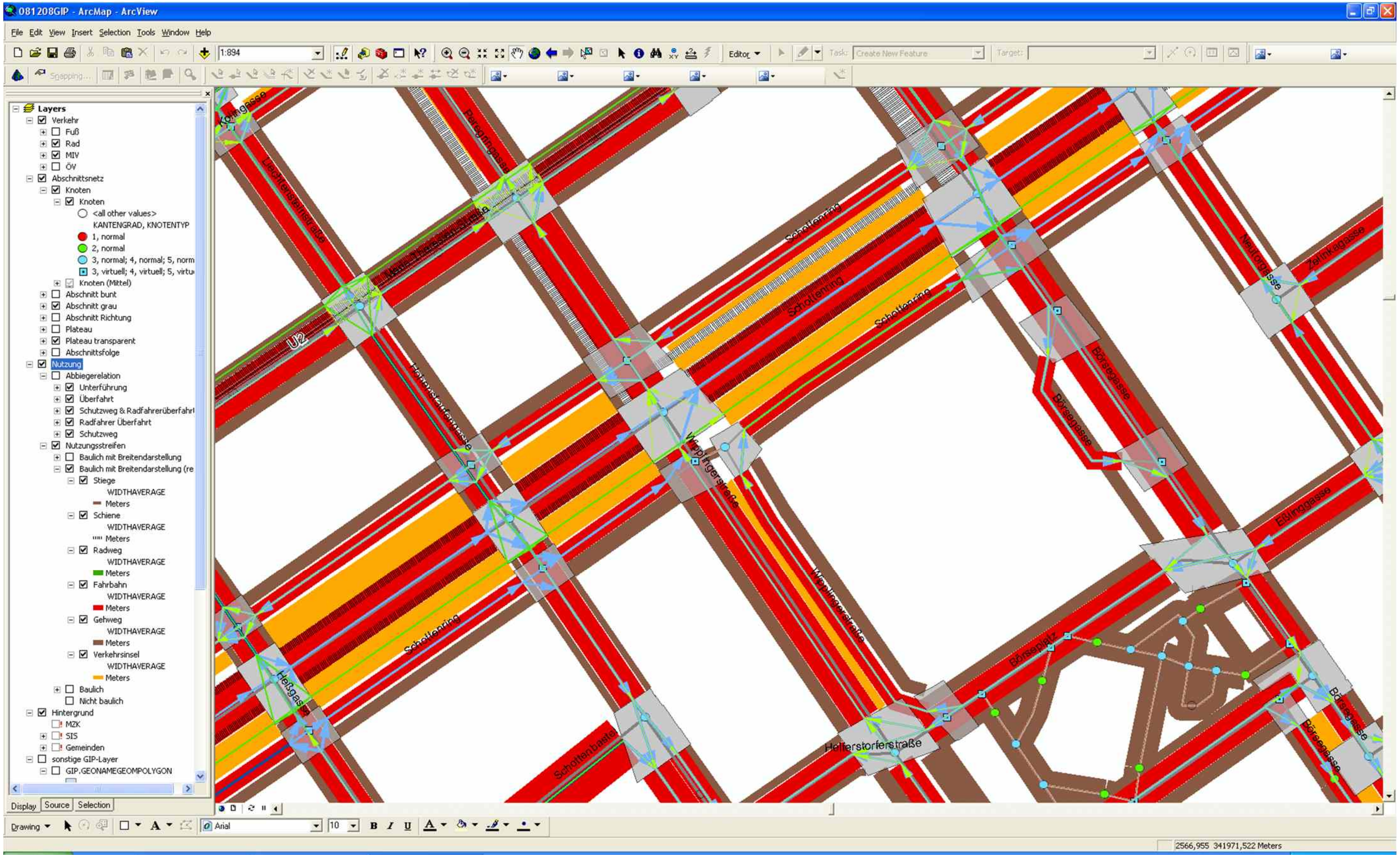
GIP graph integration platform

- **One common GIS network for**
  - ITS Vienna Region
  - traffic administration of Vienna
  - traffic administration of Lower Austria and Burgenland
  - further projects in Styria, Carinthia, Salzburg and Tyrol
- common basic data model and software development
- decentralised update
- E-Government applications collect incident records for the traffic management

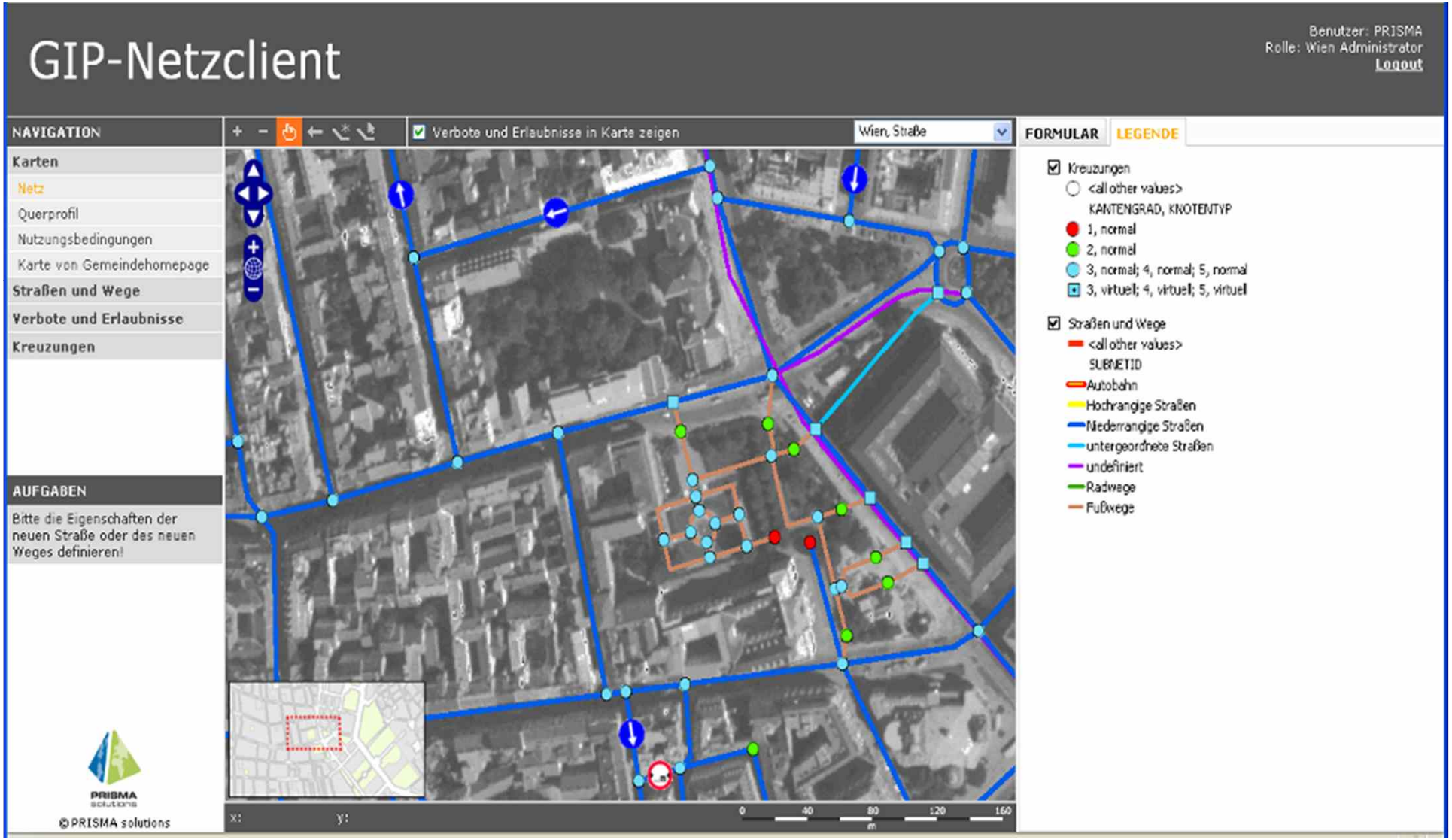
advantages for cities and communities

- door to door routing becomes possible –
  - business location,
  - tourists,
  - emergency
  - influence on navigation systems without costs
- bicycle routing,...
- internet presence of cities and communities, always up to date planning basics
- communities can use all ITS data (regional projects)

GIP screenshots



GIP webclient



ITS Vienna Region
Intelligent Transport Systems

GIP as base for e-government

ITS Vienna Region
Intelligent Transport Systems

GIP.at, GIP.gv.at und KLI.EN

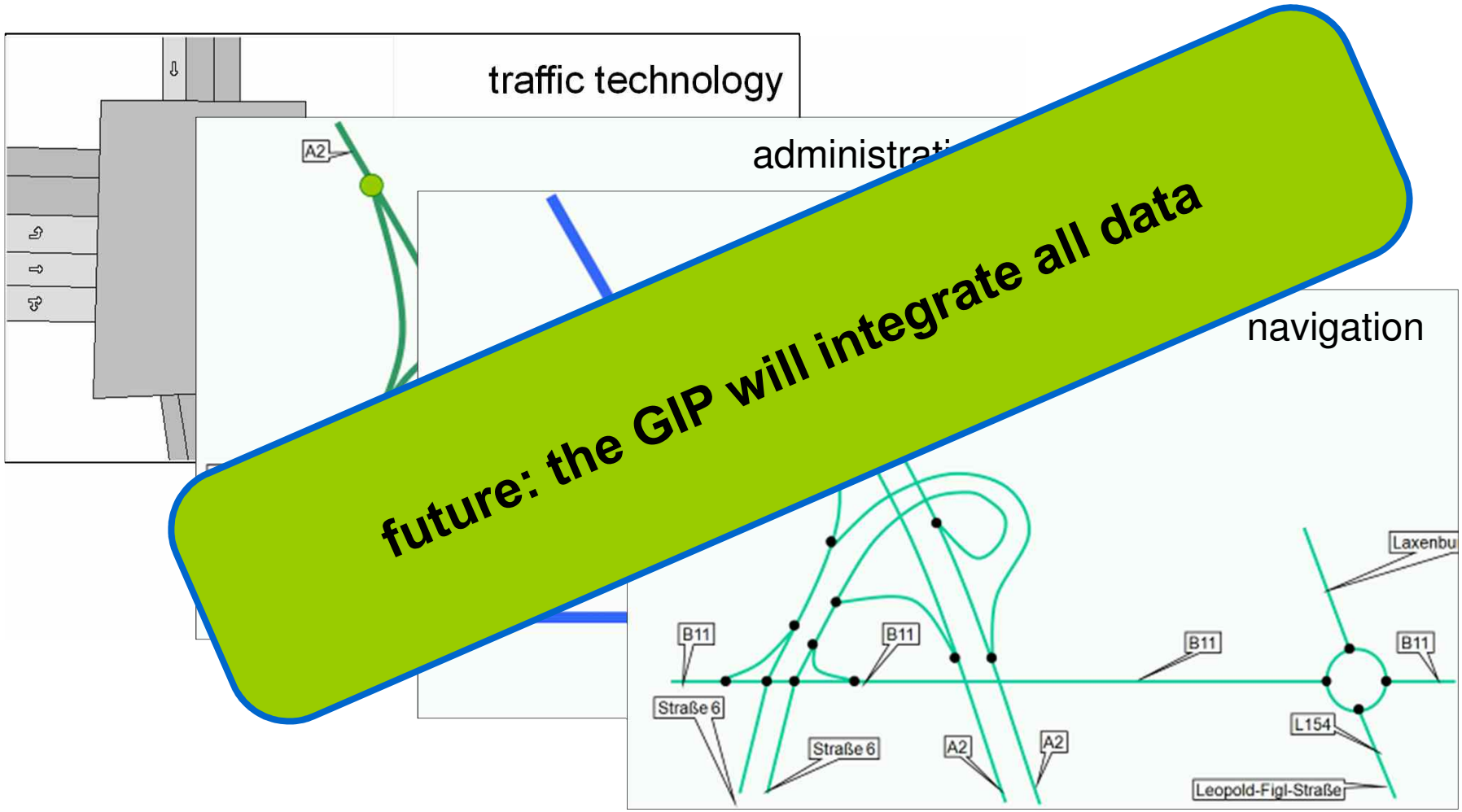
common intermodal graph for traffic data throughout Austria (budget ca. € 2 mio.)

e-government processes ensure always up to date data in the GIP (budget ca. € 2 mio.)

50 % gefördert durch

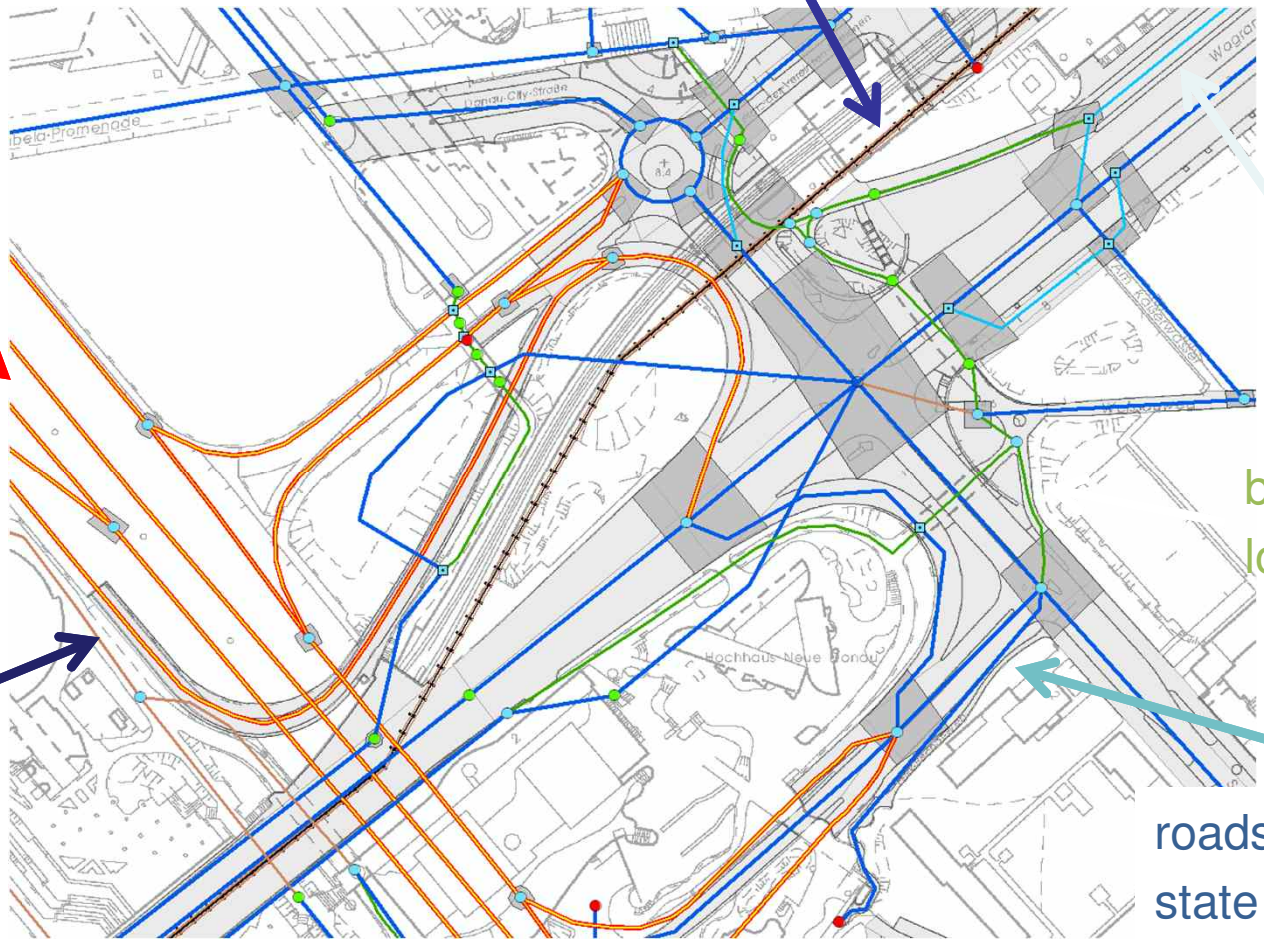
made it possible to provide licences for all public sector bodies throughout Austria

until now: multiple data administration



interdependent competences

Bahnnetz -
Wiener Linien ...



roads –
local authority

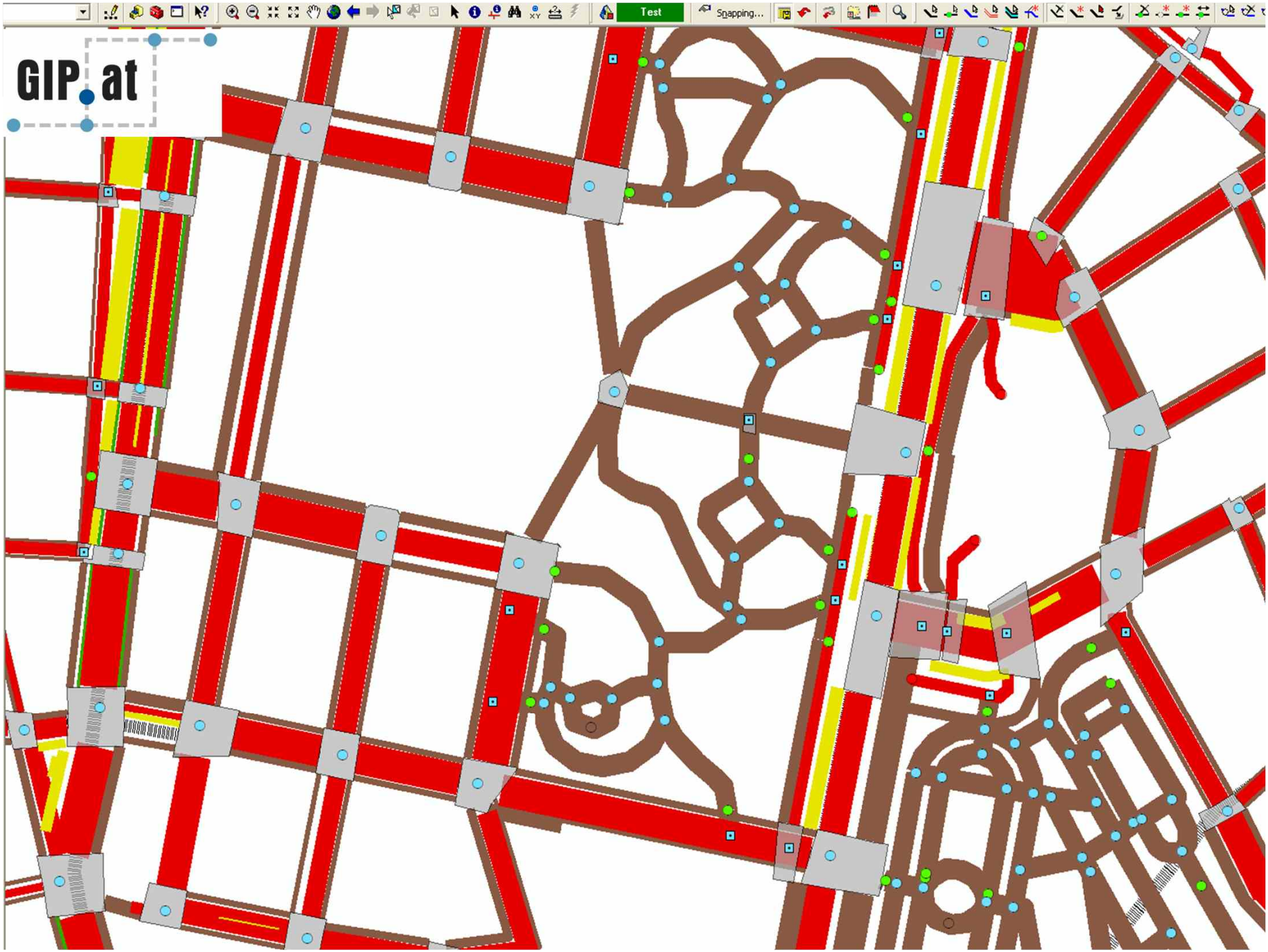
motorways -
ASFINAG

bicycle pathes -
local authority

footpathes -
local authority

roads -
state authority

ITS Vienna Region
Intelligent Transport Systems


Test
Snapping...
GIP.at

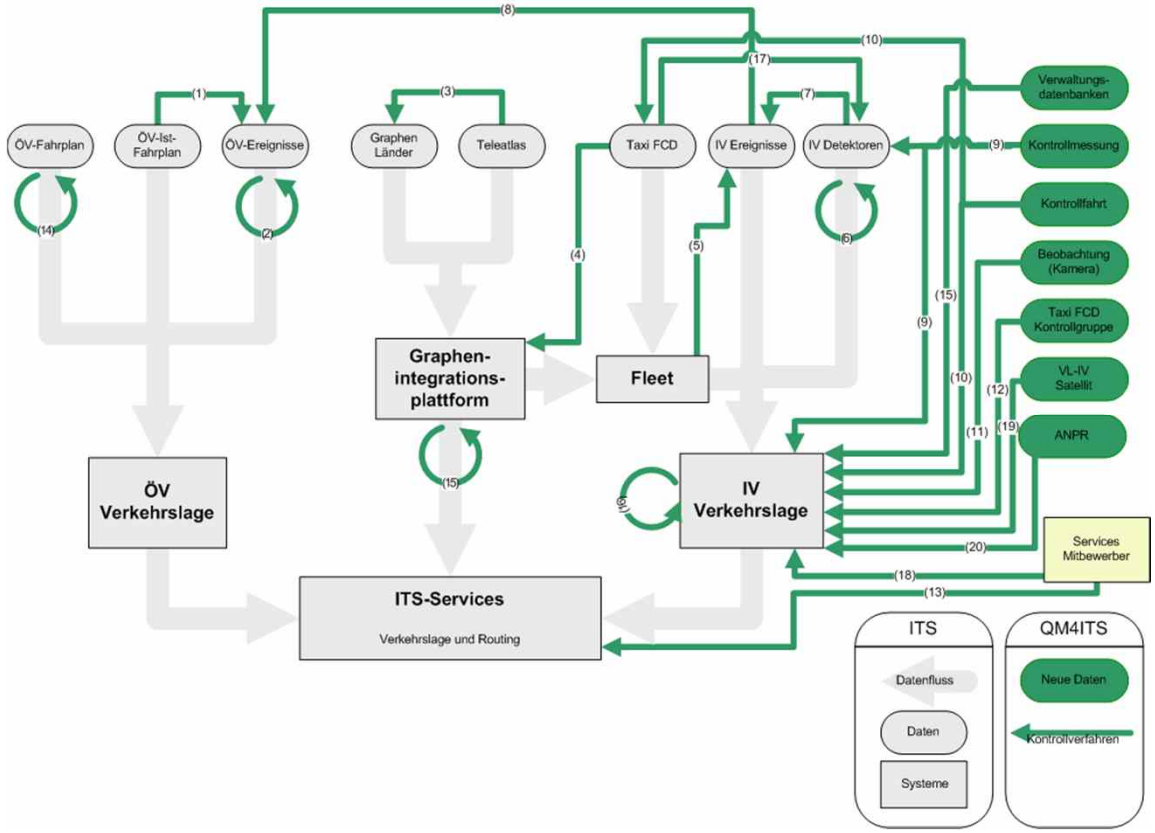
quality management

- **aspects:**
  - graph
  - dynamic traffic map
  - routing
- **services**
  - friendly user tests
  - focus groups
  - testing laboratory
  - management of reportings

QM aspects

project QM4ITS

- 19 tests in which permanently the quality of content and results is measured

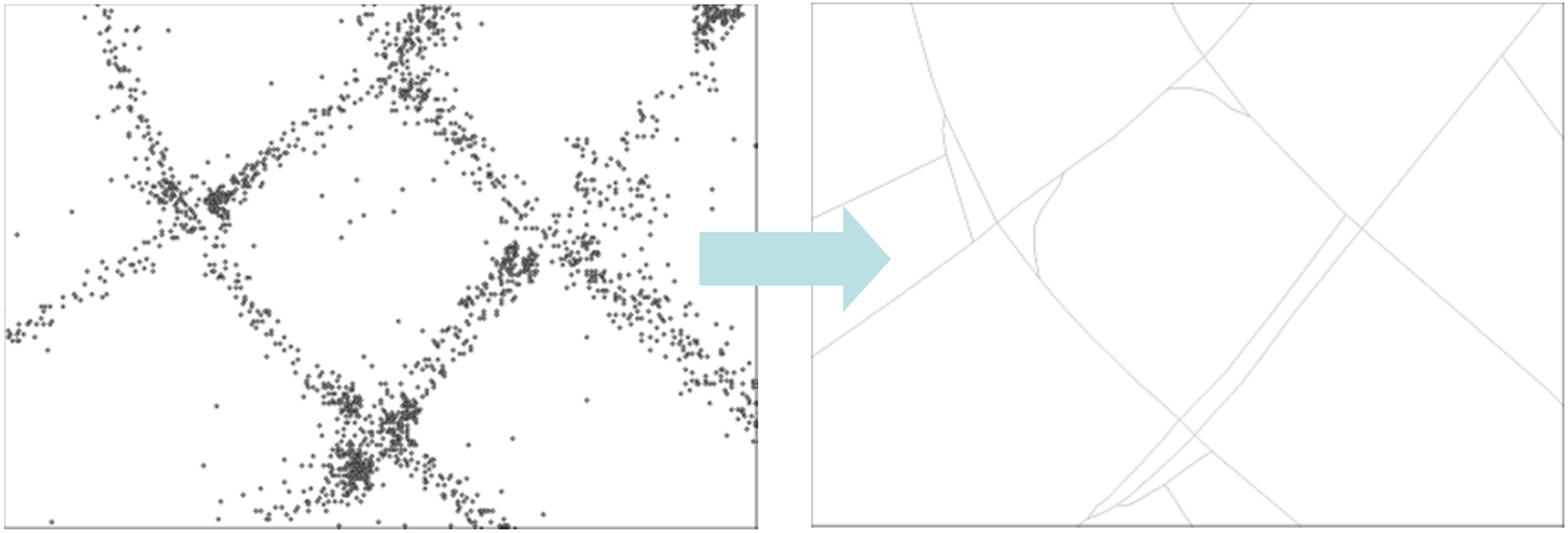


QM aspects

- graph
  - graphs of the federal states are now in operation
  - Vienna has started review and correction of pedestrian and cycling infrastructure
  - MA46 is reviewing one way streets and turning relations in Vienna
  - transit network is coordinated with MA46 / MA21 and Lower Austria´s road network group
- to be done:
  - cycling infrastructure in Lower Austria
  - road network of Lower Austria´s communes (-> Teleatlas)

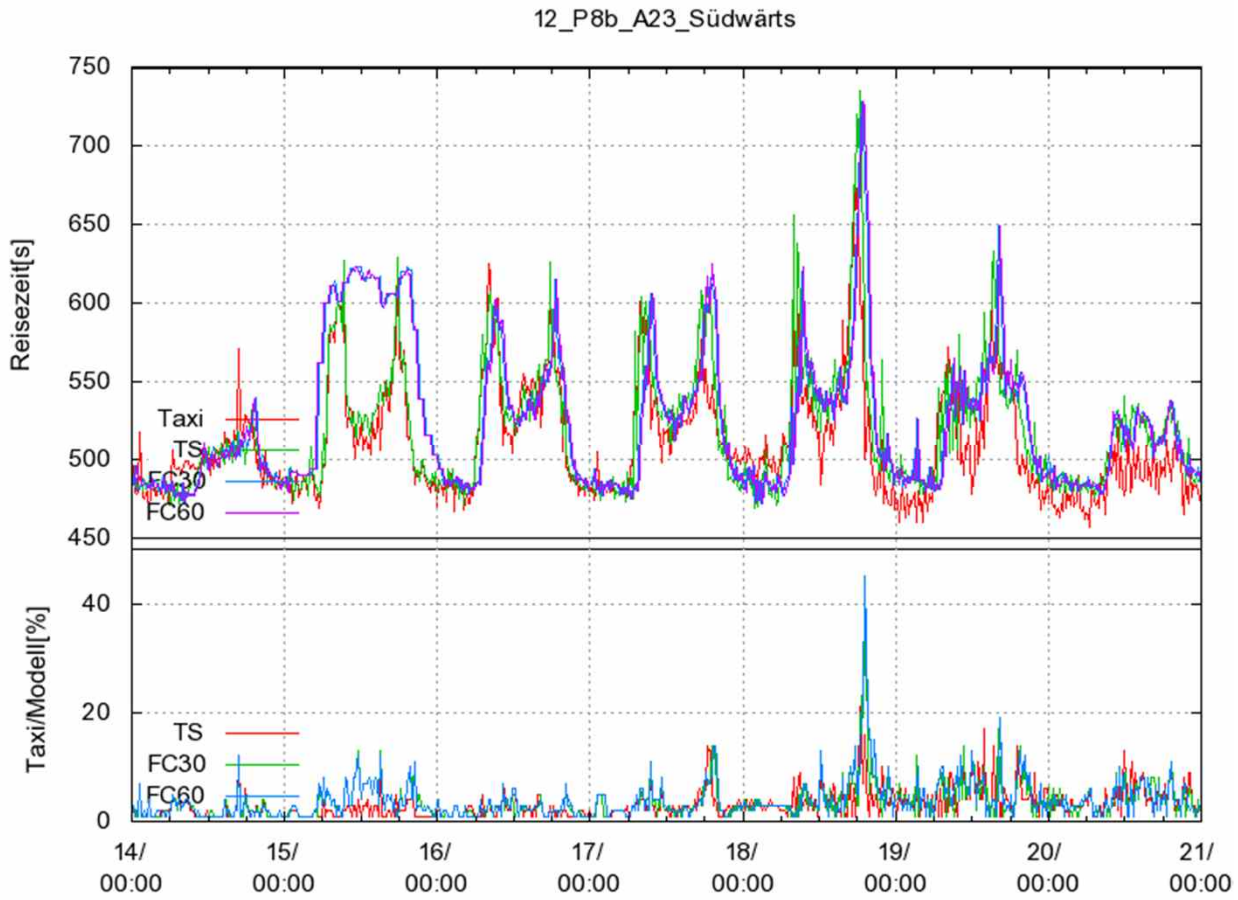
QM graph

comparison of GPS data and graph



QM dynamic traffic map

- comparison of travel times: online traffic management vs. taxis



QM dynamic traffic map

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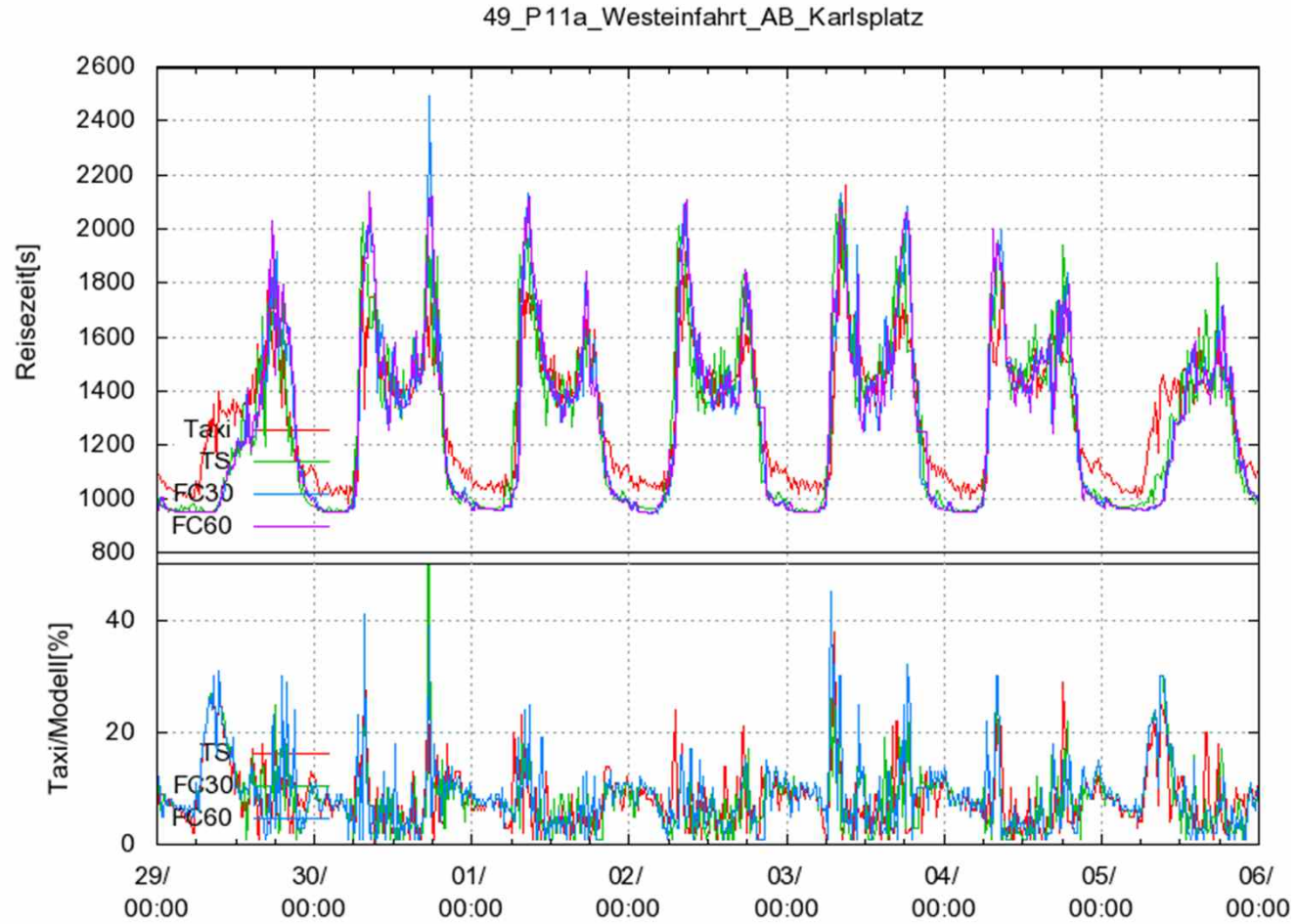
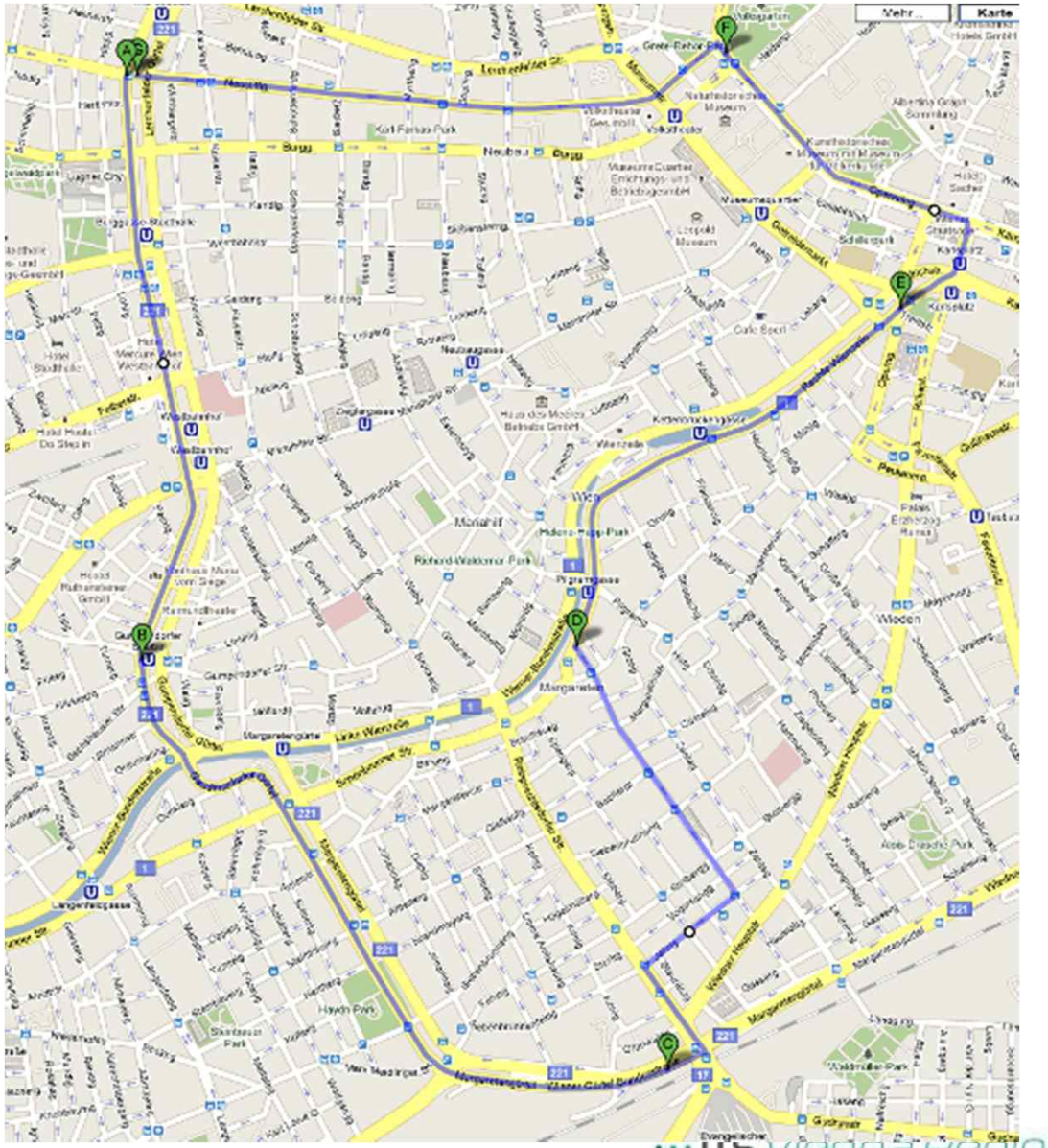


QM routing

inspection tours

- 5 vehicles
- 6 laps
- 6 routes
  (30 times a day)



QM routing

- Taxi velocities

QM routing

TerraSAR-X DRA Campaign

Schwechat, 07:08:58 local time

Acquisitions on

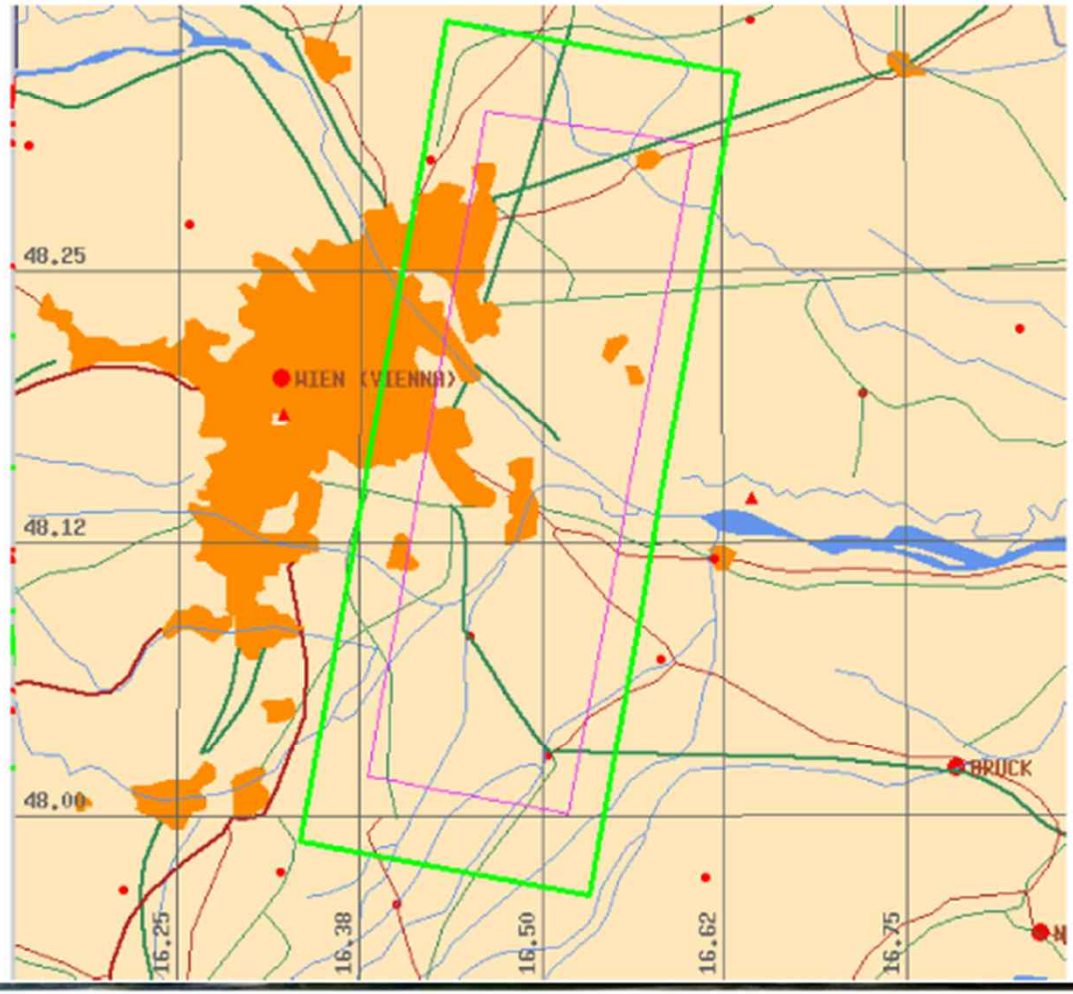
15.04.2010,

26.04.2010,

7.05 2010

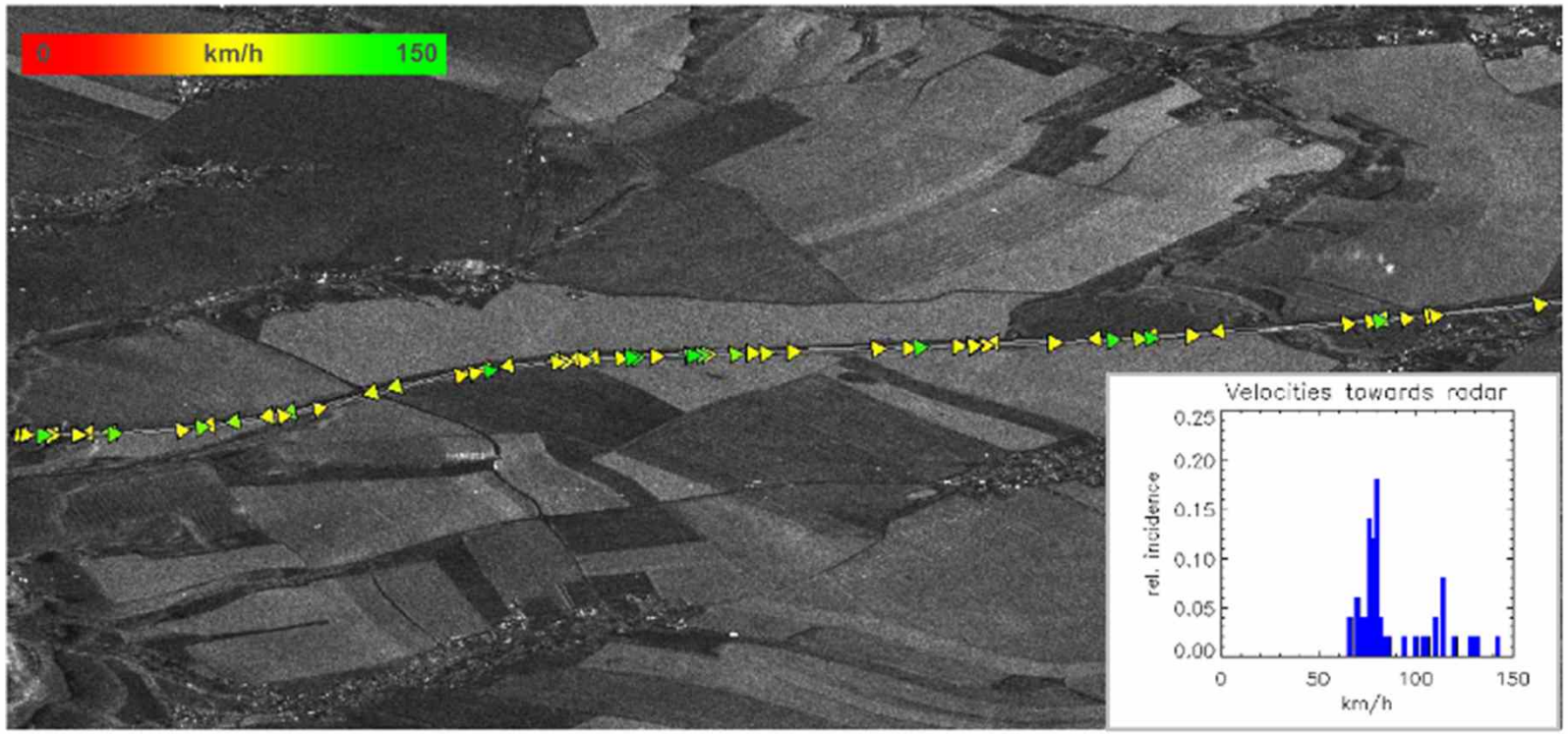
Scene dimensions:

56 km (N-S), 15 km (E-W)



QM routing

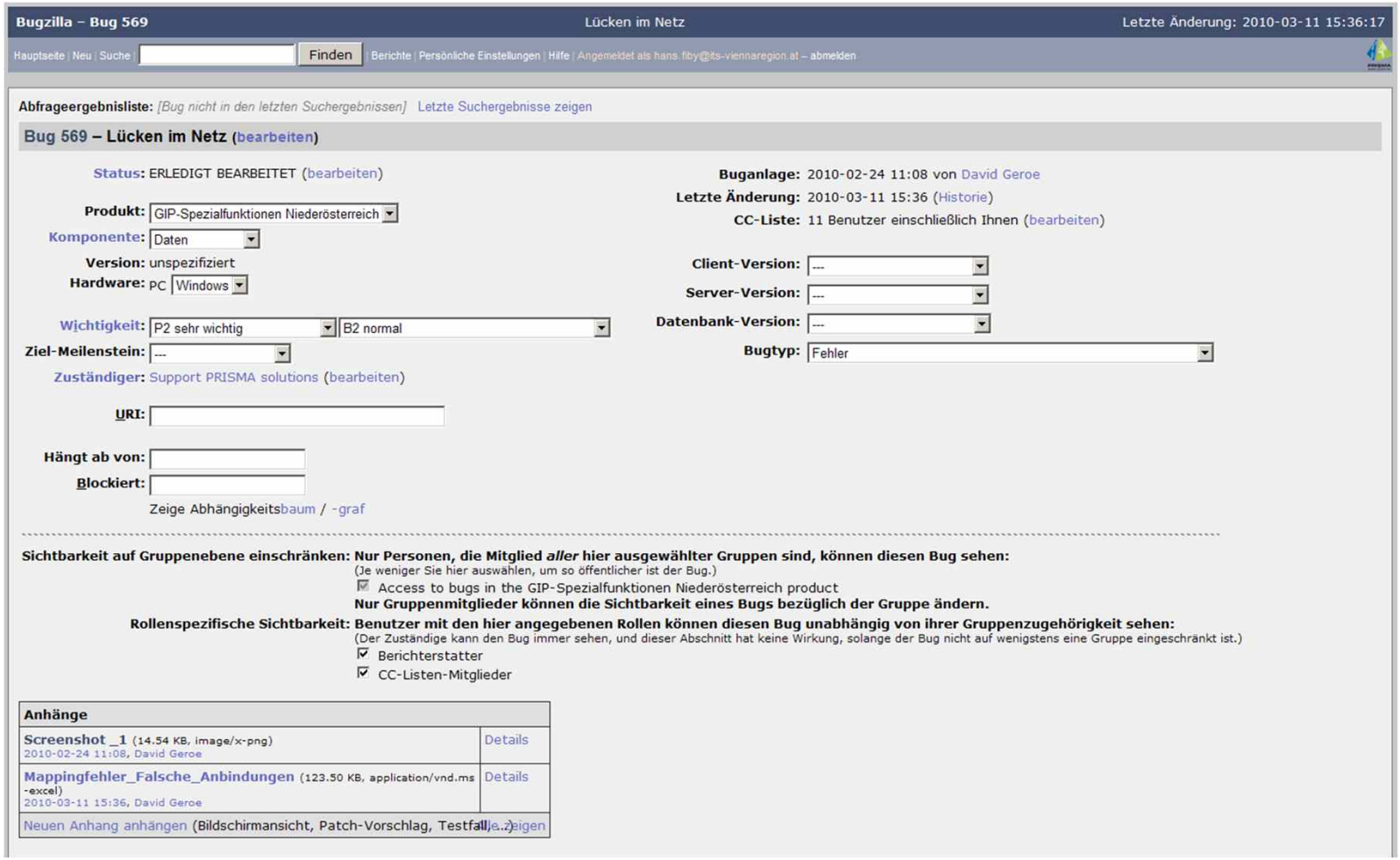
- comparison of measured velocity with values determined from DLR´s satellite data
- 3 flight lines on fixed dates



QM management of reportings

currently: Bugzilla

planned: management of reportings used by VOR



what´s important to remember:

1. visit Vienna and try www.AnachB.at!

2. for more information contact ITS Vienna Region!