



Smart Urban Mobility – Example Vienna

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Agenda

- New challenges in the transport domain
- The situation of Vienna
- Smart solutions for supporting multimodality
- The next generation: cooperative systems

new challenges for Austria

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

level of motorisation will reach its limit soon

We have to face new challenges:

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

new challenges



mobility remains a key topic

mobility for all classes of population is a public task...

...new tasks and challenges for the administration!

- **traffic control** via information and
- **traffic management** for optimal accessibility
- organisation across administrative borders

...traffic telematics is the „tool“

Vienna Region

Vienna

Lower Austria

Burgenland

23.500 km²

3,5 million inhabitants

40% of all Austrians

200.000 commuters / day



Data and services

Taxi (Floating Car Data, 3500 Taxis)



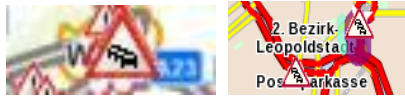
Detectors, Sensors

(traffic measurement, radar measurement)



traffic news

(ASFINAG, Police, Ö3 editorial office)



Public Transport

(Wiener Linien, ÖBB, P&R)



**Vienna
Lower Austria**

ITS Vienna Region
Intelligent Transport Systems

**Graph Integration Platform GIP
traffic model**



A nach B .at

- services for end users



- traffic management
- e-government

<http://AnachB.at>

AnachB.at everywhere



iPhone App



www.AnachB.at

A nach B .at

Integration in partner websites
(ASFINAG, wien.at,...)

- **Widgets** (functional modules for external websites)
- **Gadget** (igoogle)

Integration in external
Websites (via interface)

AnachB.at homepage



Journey Planner Cycling Planner Park & Ride Traffic Situation Parking Situation Address Search About ITS

Journey Planner Enquiry

From:

To:

departure time

arrival date

Means of transport:
 public transport bike walk car

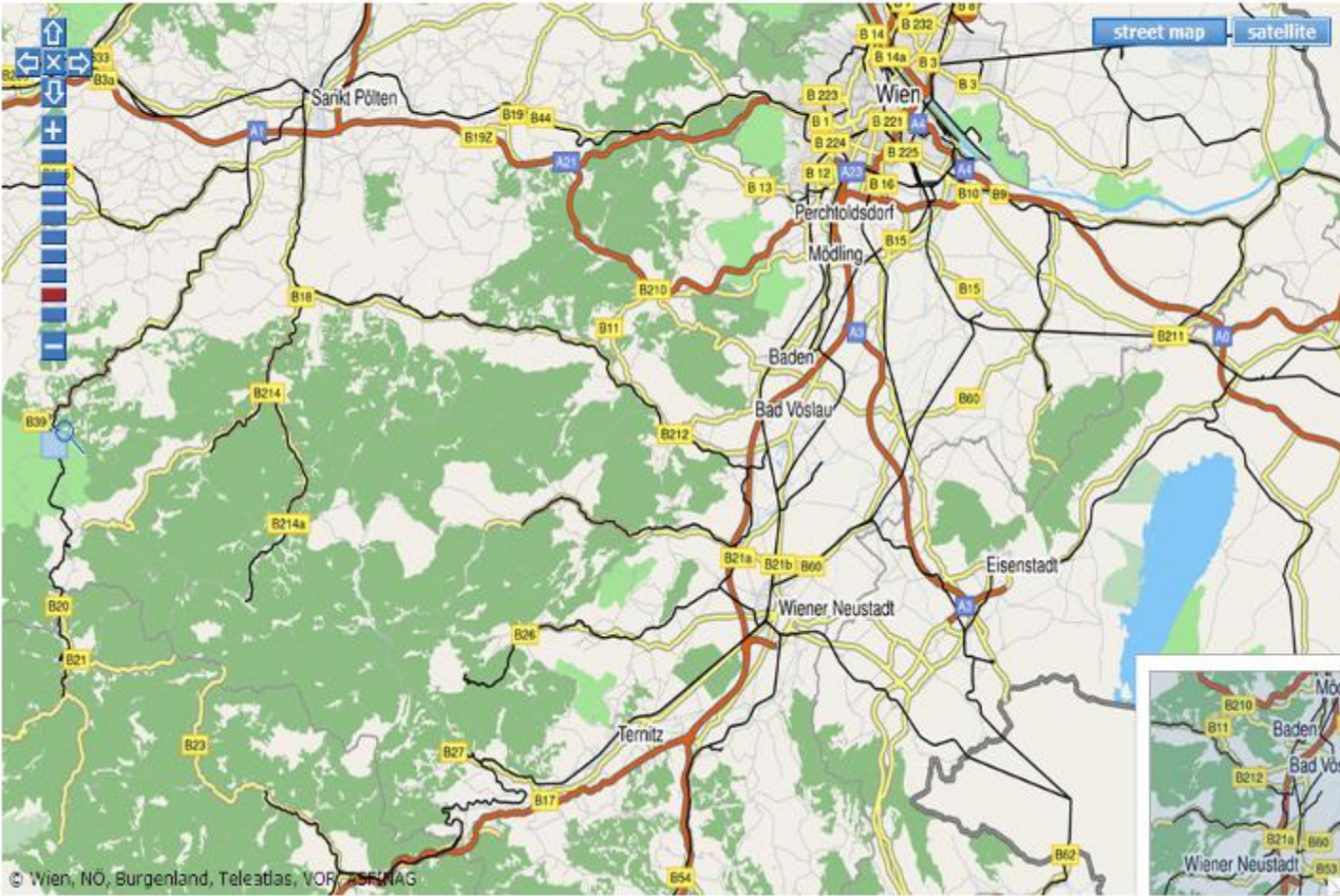
Options: [public transport](#) [bike](#) [walk](#)

Submit

AnachB.at – new routes

AnachB.at – Partners

The AnachB.at-Partners update the AnachB.at-data pool permanently with their traffic data – so AnachB.at anytime is able to generate the optimal route.



© Wien, NÖ, Burgenland, Teletas, VOR, ASFINAG

AnachB.at routing for public transport

A nach B .at

Results

Fahrtenübersicht [Print](#) [PDF](#)

1. route UU
 Duration 33 min
 from 16:51 to 17:24 1 interchanges
[Fahrtdetails drucken...](#)

U-Bahn U3,
 towards Ottakring U

from 16:51 Simmering
[partial route map](#) [PDF](#)

to 17:03 Stephansplatz
 approx. 2 min
 footpath

U-Bahn U1,
 towards Leopoldau U

from 17:06 Stephansplatz
[partial route map](#) [PDF](#)

to 17:24 Leopoldau
[area map](#) [PDF](#)

2. route U
 Duration 17 min
 from 17:10 to 17:27 0 interchanges

3. route UU
 Duration 33 min
 from 17:11 to 17:44 1 interchanges

4. route UU
 Duration 33 min
 from 17:15 to 17:48 1 interchanges

Wien, NÖ, Burgenland, TeleAtlas, VOR, ASFINAG

Wizard street map satellite

Stockerau, Korneuburg, Wien, Schwechat, Modling, Schwechat

AnachB.at routing for cycling

Journey Planner Cycling Planner Park & Ride Traffic Situation Parking Situation Address Search About ITS

route

Duration **39 min** Distance **9.39 km**

from **17:11** Wien Dr.-Karl-Lueger-Ring to **17:50** Wien Salmansdorfer Straße

[Fahrtdetails drucken...](#) [GPX](#)

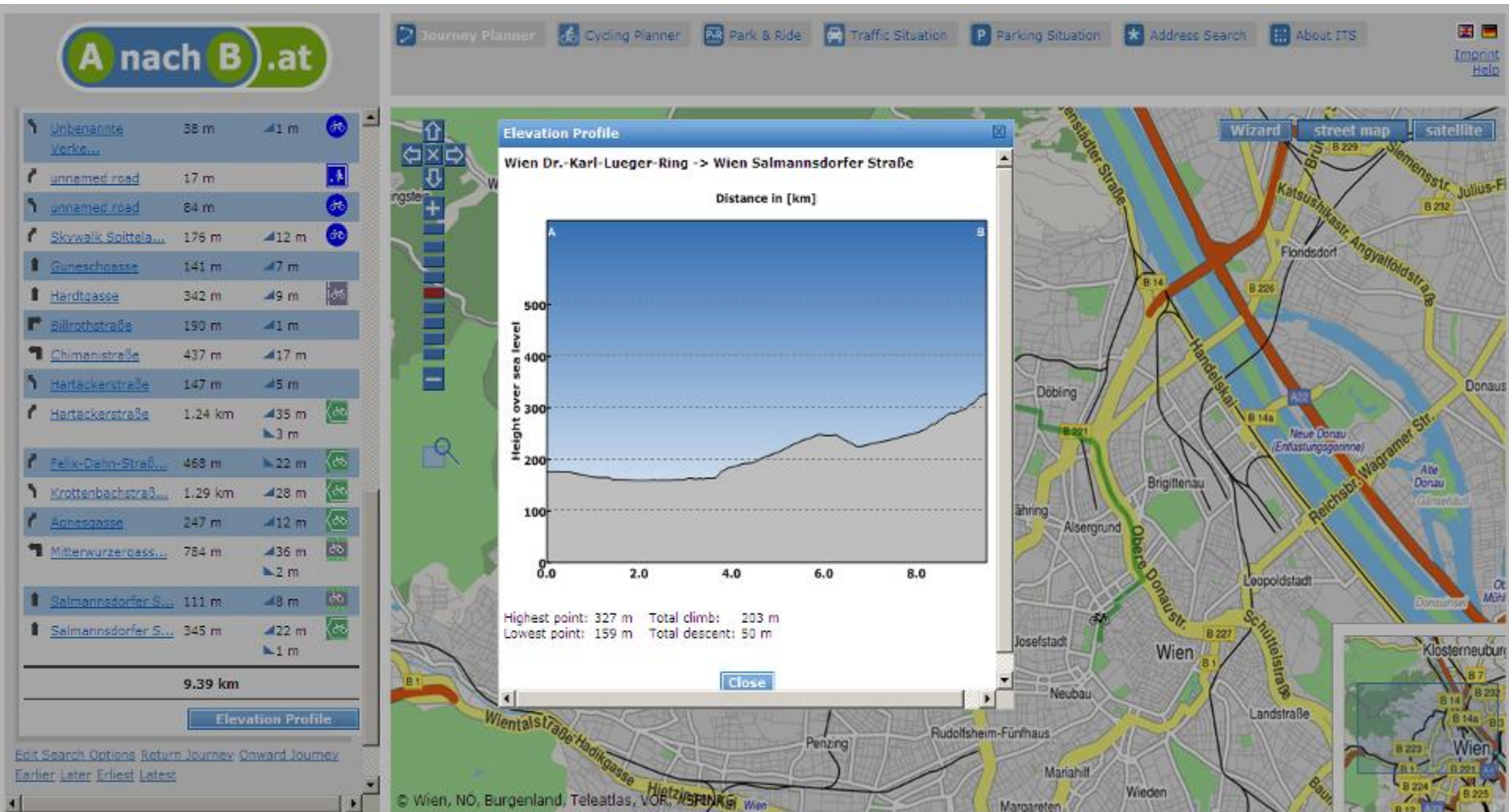
approx. 9.39 km Bike

[partial route map \(PDF\)](#)

[close turn-by-turn instructions](#)

Street	Distance	Elevation	Info
Dr.-Karl-Lueger...	21 m		push
Lowelsstraße	26 m		
Dr.-Karl-Lueger...	355 m	▲ 1 m	
Schottending	204 m	▲ 4 m	
Hohenstaufencass...	83 m	▲ 1 m	
Maria-Theresien...	509 m	▲ 5 m	
unnamed road	143 m	▲ 1 m	
Unbenannte Verke...	632 m	▲ 2 m	
Unbenannte Verke...	641 m	▲ 3 m	
Bertha-Zuckerkan...	715 m	▲ 6 m	

AnachB.at elevation profile



AnachB.at routing for individual traffic

A nach B .at

from 17:11 Wien Bundesrealgymnasium
Krottenbachstraße 11
[partial route map \(PDF\)](#)

estimated walk to car: 3 min

approx. 5.75 km Car

estimated time to find parking: 8 min

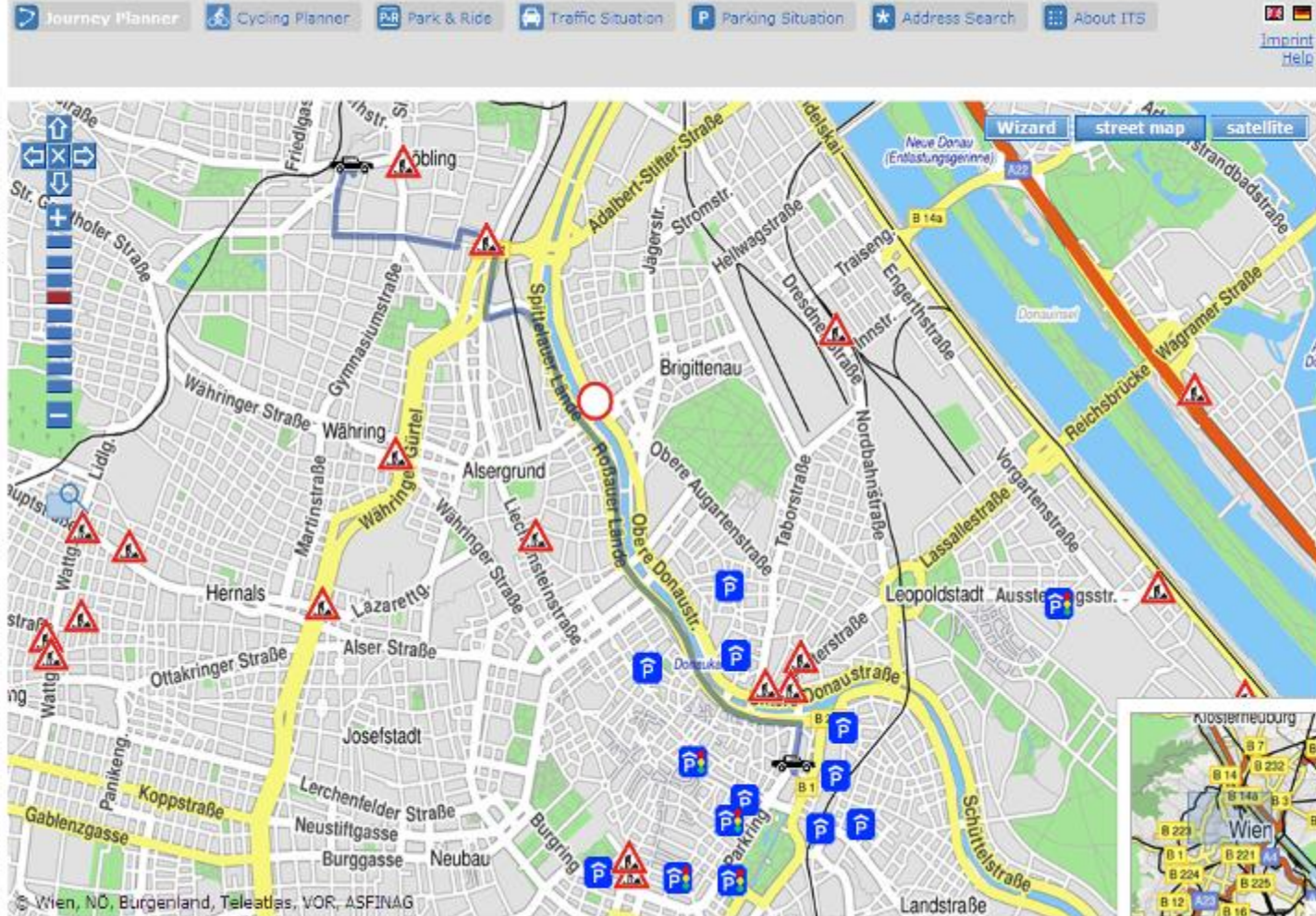
estimated walk to destination: 4 min

to 17:35 Wien Stubenring

[More information](#)

[close turn-by-turn instructions](#)

Street	Distance	Duration
Krottenbachstraße...	35 m	8 sec
Cottagegasse	389 m	47 sec
Peter-Jordan-Str...	778 m	1 min 25 sec
Döblinger Haupt...	96 m	11 sec
Radolmayergasse	256 m	41 sec
Heiligenstädter...	435 m	31 sec
Lichtenwerder P...	25 m	5 sec
Nordbernbrücke/L...	441 m	36 sec
Spittelauer Länd...	1.66 km	2 min 15 sec
Franz-Josefs-Kel...	1.34 km	1 min 59



traffic data

Individual traffic detection

traffic information

- police, ORF Ö3 traffic editorial office
- construction sites

Vienna

- 500 loop detectors
- 10 additional detectors on relevant links
- Floating Car Data (FCD) with 3.500 taxis
- detection of 94% of all car trips in Vienna

Lower Austria, Burgenland

- 75 detectors are upgraded +
60 new detectors in Lower Austria
- 4 new detectors in Burgenland

ASFINAG

- 210 crosssections, extensive cooperation



Public transport detection

■ ÖBB

- messages
- delays
- rural bus service



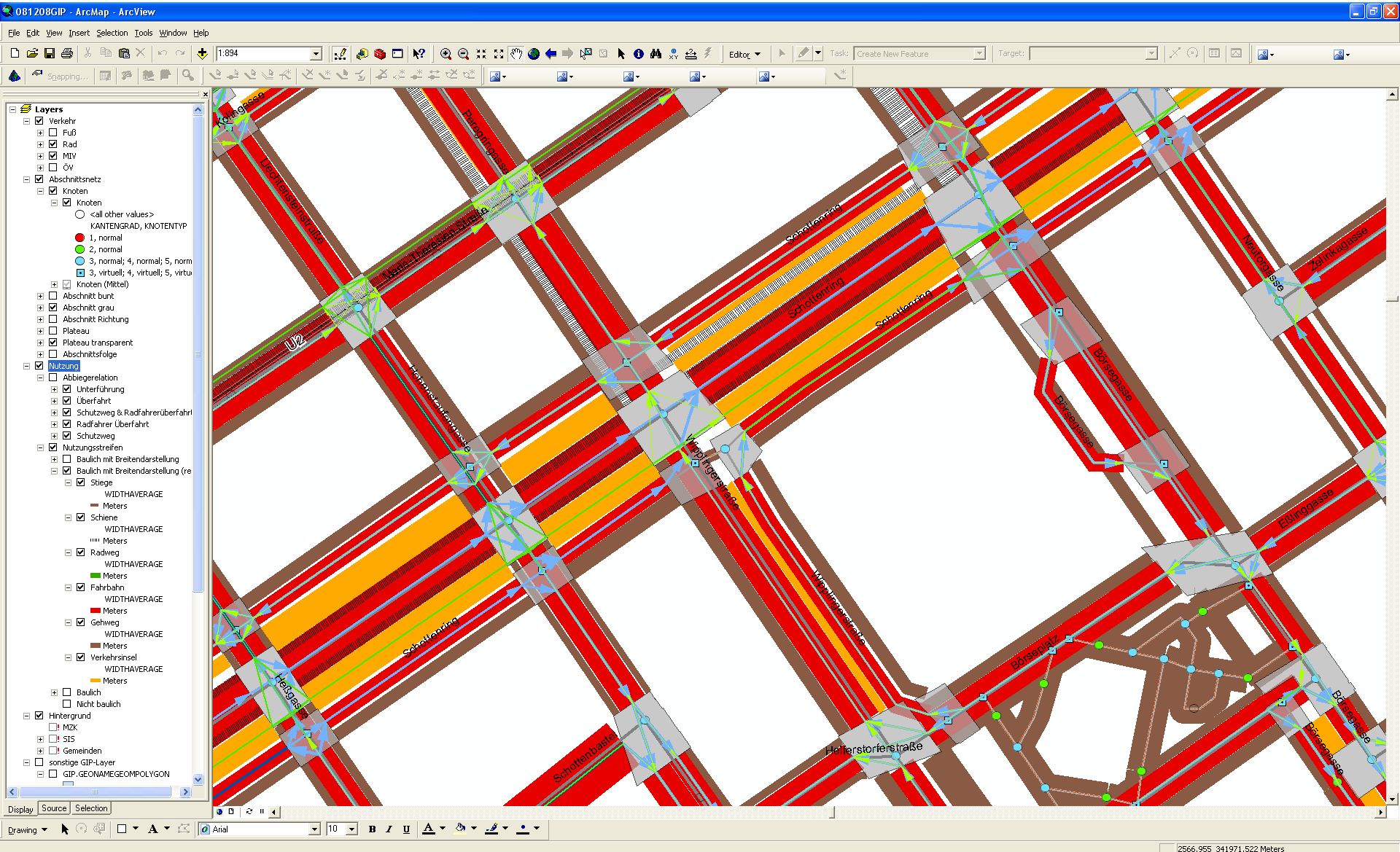
■ Wiener Linien

- messages from the control centers of the metro and surface transport
- data from the intermodal traffic control system

graph integration platform GIP

GIP graph integration platform

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



GIP as base for e-government

Benutzer: dangl
Logout

9.11.2009, 14:25

ANSICHT UND FILTER

Standardfilter:

Datumsfilter
Datum: 09.11.2009

Räumlicher Filter
Karte Straße/km Krzg-Krzk

Immer aktueller Kartenausschnitt
 Kartenausschnitt festlegen

Thematische Filter

AUFGABEN

Verordnung

- Suchen und auswählen
- Auswählen
- Neu erstellen
- Kundmachung bestätigen

Maßnahme

Kreuzung

Auswertungen

Ortssuche

(Geschwindigkeitsbeschränkung (erlaubte Höchstgeschwindigkeit) auf 70 km/h, ohne Zusatztafel(n)) (2009-10-30 10:00:00)
Beginnzeit: 2009-10-30 10:00:00
Datenquelle: Prisma

LISTE FORMULAR OBJEKTSUCHE

Gruppieren nach: Sortieren nach:

Wichtigkeit Name

Wichtigkeit: undefiniert

- Ende der Geschwindigkeitsbeschränkung von 30 km/h, mit Zusatztafel(n): (2009-10-30 10:00:00)
- Ende der Geschwindigkeitsbeschränkung von 70 km/h, ohne Zusatztafel(n): (2009-10-30 10:00:00)
- Fahrverbot für Lastkraftfahrzeuge: (2009-10-30 10:00:00)
- Fahrverbot für Lastkraftfahrzeuge: (2009-10-30 10:00:00)
- Geschwindigkeitsbeschränkung (erlaubte Höchstgeschwindigkeit) auf 30 km/h, mit Zusatztafel(n): (2009-10-30 10:00:00)
- Geschwindigkeitsbeschränkung (erlaubte Höchstgeschwindigkeit) auf 70 km/h, ohne Zusatztafel(n): (2009-10-30 10:00:00)**
- Halten und Parken verboten Anfang, mit Zusatztafel(n): (2009-10-30 10:00:00)
- Halten und Parken verboten Ende, mit Zusatztafel(n): (2009-10-30 10:00:00)
- Parken verboten Anfang, mit Zusatztafel(n): (2009-10-30 10:00:00)
- Parken verboten Ende, mit Zusatztafel(n): (2009-10-30 10:00:00)

STATUS

Alle VKZ anzeigen

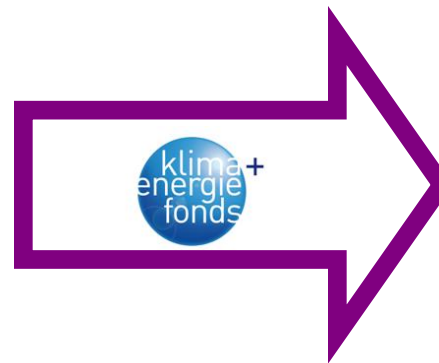
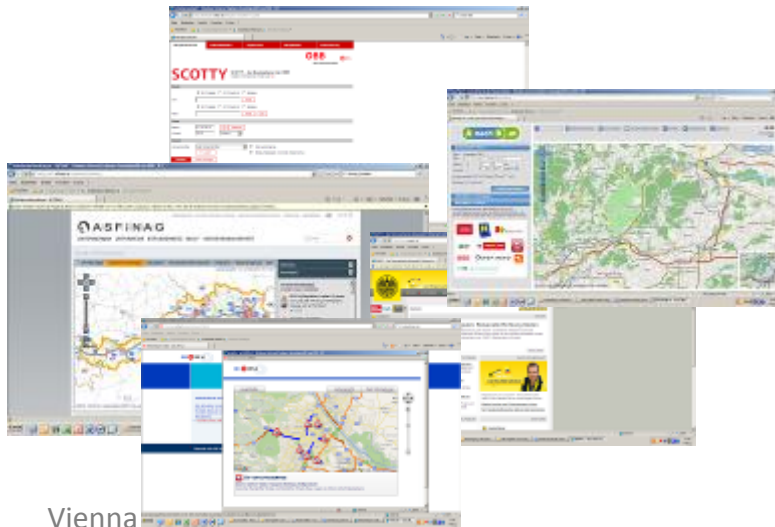
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0 150 300 450 600 1: 6.771

X: Y:

What's next – Austrian wide Traffic Information VAO

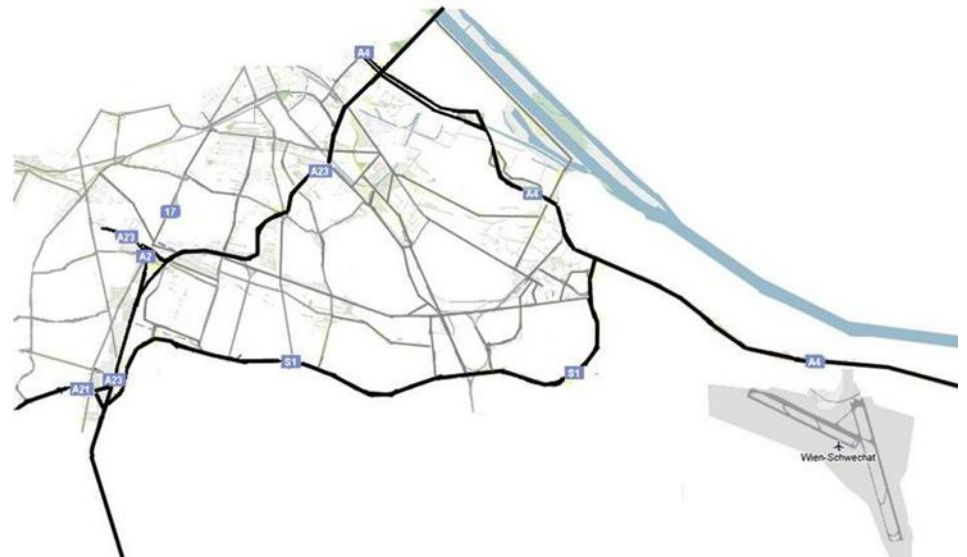
- one common traffic information service:
 - all over Austria
 - all means of transport / multimodal
 - highest quality
- usable for different partners and applications



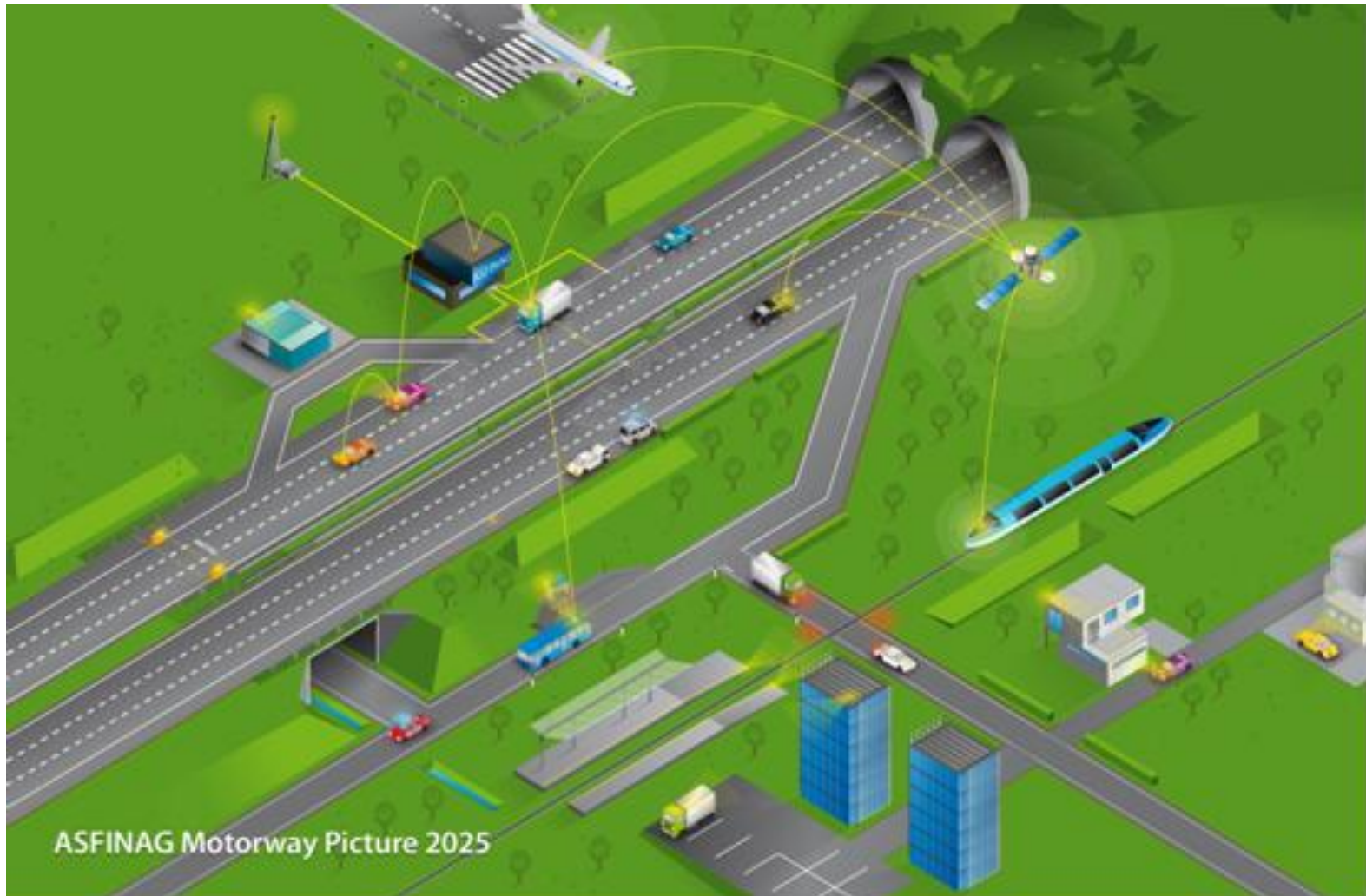
What's next – cooperative systems

- Motorway triangle A4, A23, S1
- Urban network of Vienna
- Interface Public Transport

TESTFELD  TELEMATIK



What's next – cooperative systems





19th **ITS World Congress**
Vienna, Austria
22 to 26 October **2012**



smart mobility
made in austria

**AustriaTech – Federal Agency for
Technological Measures Ltd.**

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