

Municipalities Use SDI in transportation

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SDI – transportation - municipalities

SDI platforms are usually esablished at national / regional levels

Transportation poses specific challenges

- Heterogeneous responsibilities
- Different views needs of stakeholders
- Static (infrastructure), dynamic (roadworks), real-time (traffic)
- High public interest large number of (global) players

The role of municipalities?

- In data provision
- In information use and service?

Challenges



- Large number of small/medium sized municipalities (< 100.000 population)
 - → Heterogeneous capacities for dealing with ITS
- Broad range of municipal tasks
 - → transportation planning poorly integrated with ITS solutions
- Municipal ITS solutions concentrate on small scale solutions
 (e.g. local parking management or municipal fleet management)

How can medium sized municipalities

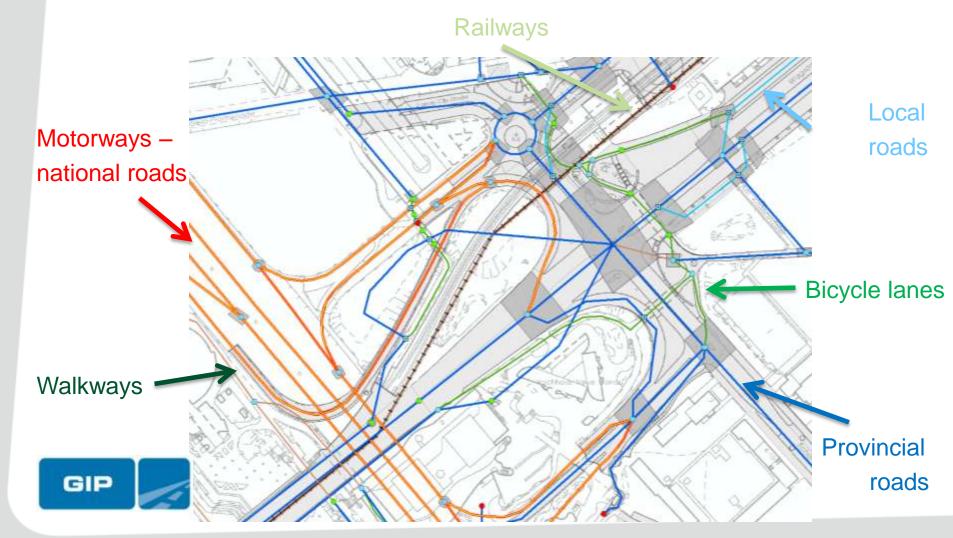
secure municipal traffic management goals?

("against regional/national government and big industry)

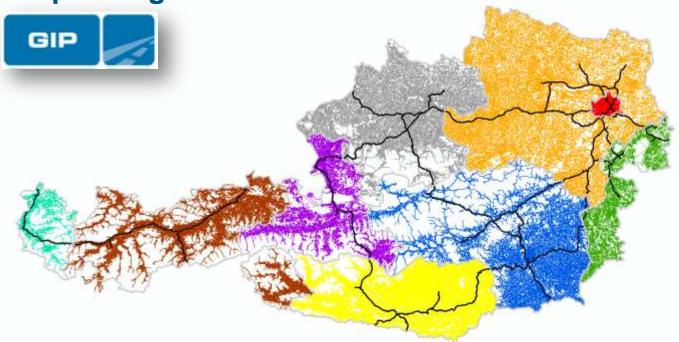
become institutionally involved into traffic planning and traffic management beyond municipal borders?



Challenge: heterogeneous responsibilities



Multimodal reference network of Austria: Graph Integration Platform



- Austrian-wide multimodal reference network roads, rails, bike and pedestrian ways
- Governmental data
- Synchronisation between all partners (regions, ASFINAG, OeBB)













The status – Austrian example

GIP developed in 2006-2009

- Data model
- Tools
- Standards for implementation

GIP into production 2009 – 2012

- Austrian regions
- Motorway/railway companies
- Large municipalities

GIP as a service base

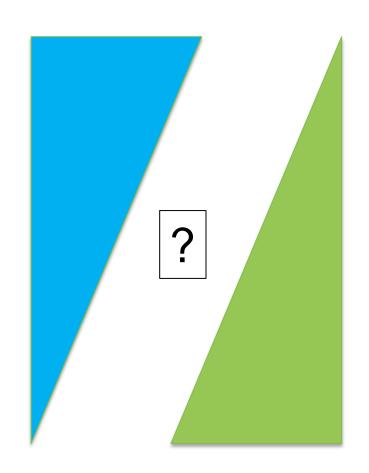
- Austrian basemap
- Austrian wide jorney planner (VAO)

GIP and small/medium municipalities - ???



Regions vs. Municipalities

- Network infrastructure
- Routing Information
- Roadworks
- POI
- Location reference systems
- Traffic regulations
- Road infrastructure assets
- Road conditions
- Road maintenance
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Solutions - Organisation

Concerning information management

Municipal islands
Cooperation of municipalities
Cooperation with regional/national institutions

Concerning ressources

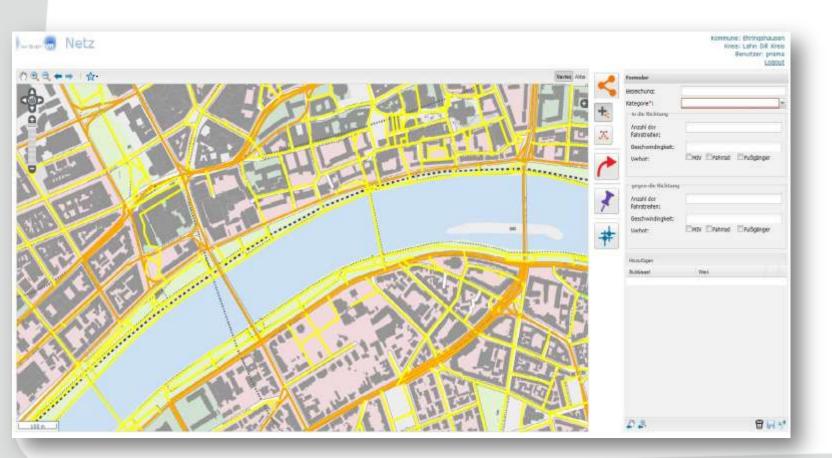
Municipal ressources Shared ressources External ressources

and combinations



Dedicated, centrally provided tools?

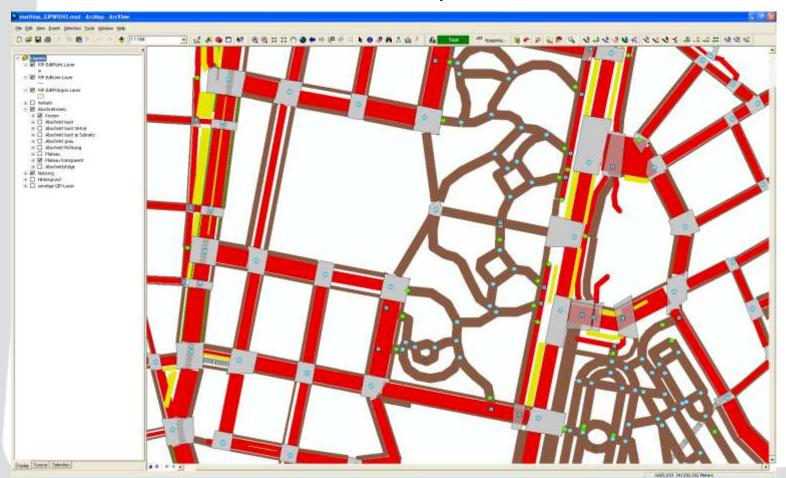
• intuitive webclient for network management





Or Functionality within known base system?

• Generic functions within desktop GIS environment





Traffic management – issues

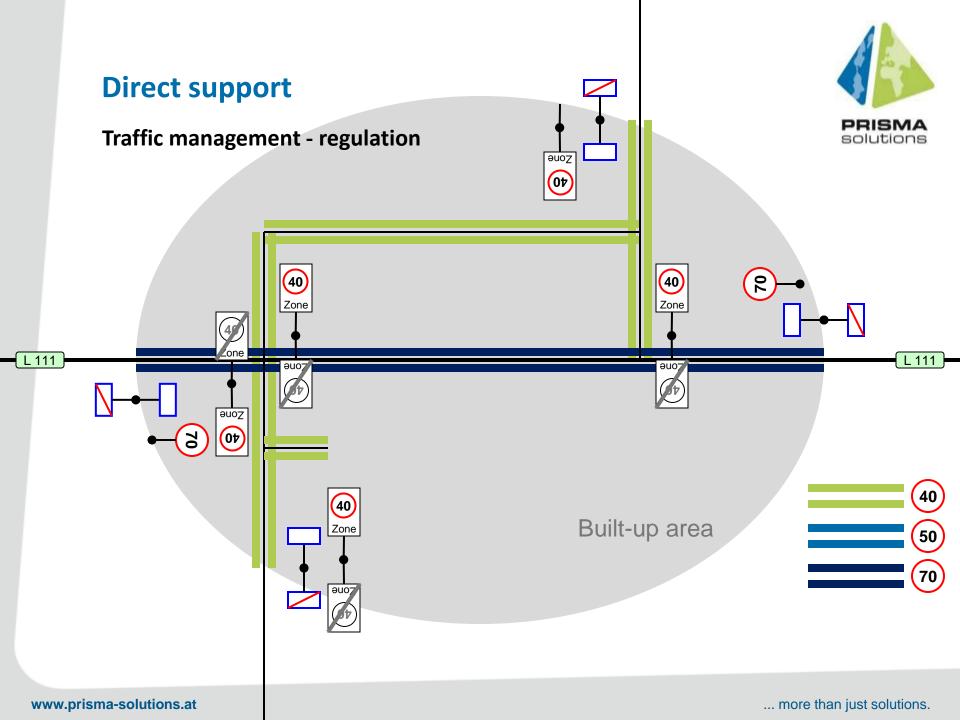
Integrated processes for solving real-world problems (instead of tackling data gaps)













Integrate traffic management

One tool for integration



Solutions - Workflows



- Improve transportation related eGovernment processes and information
 - → traffic regulation, infrastructure maintenance, roadwork management

- Participate in seamless information integration
 - → support national / international standards and policies for information integration

- Integrate municipal traffic management strategies into ITS services
 - → by continuous information integration and mutual policy arrangements



Added value at municipal level

Potential positive effects

- Improved (reliable/optimised) traffic organisation
- Improved legal quality of traffic organisation
- Continuous update of traffic infrastructure and traffic organisation information
- Continuous update of routing relevant information
- Municipal traffic management strategies become visible

Based on integrated solutions, concerning

Technique – Organisation – Work-flows



Questions for further thoughts

The role of the public sector in transportation - in 5/10/15 years:

- Information?
- Services?
- Budget ?
- Cooperation Communication Competition?
 (Citizens, Administration, Economy)
- Local vs. Global or Local and Global?



Thank you for your attention

