



Intelligent Traffic Systems



Brains for roads

Brains for Roads – We Make Streets Recognise, Understand and Act

REFERENZ

Traffic Management and Information Systems

Heusch/Boesefeldt GmbH



SAMPLE PROJECT

→ ITS Software for Every Application Area

HB Systems offer the full range of functionality to manage traffic on road networks and to deliver high value traffic information.

Traffic situation determination

- sensor data (traffic and environmental) acquisition
- computation of derived data (level of service, travel times, etc.)
- automatic traffic jam detection
- CCTV image presentation

Traffic flow improvement

- traffic management: speed harmonisation, ramp metering, temporary use of hard shoulder, ...
- directing motorists: route recommendations
- construction site planning with minimized impact on traffic flow

Increasing traffic safety

- congestion warning based on automatic incident detection
- hazard warning (e.g. for wrong-way drivers) incl. lane closure and speed reduction
- traffic management in tunnels

Supply of traffic information

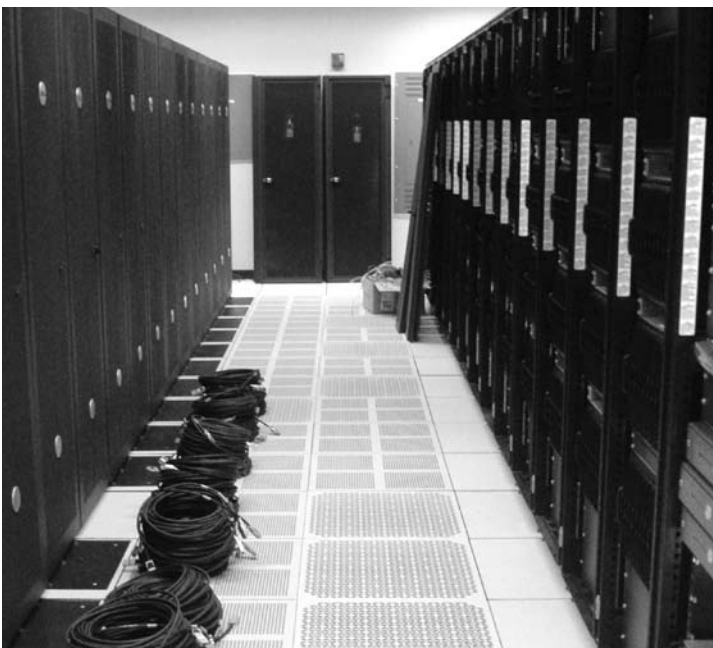
- interoperability based on standard interfaces (DATEX II, ALERT-C, ...)
- comparison of various sources
- cross-border information exchange
- traffic information on the internet: OGC®/WMS, Google™ Maps Mashup, ...

Operational support:

- CSM – Construction Site Management System
- RWIS - Road Weather Information System

Scalable Solutions – Tailored to Your Needs

- **GeoDyn2® Middleware**
product use guarantees short implementation times
and cost optimisation
- **Service Oriented Architecture**
scalable, open multi-tier architecture,
WebService interfaces
- **High performance**
real-time mass data processing with nationwide
coverage
- **High availability**
redundant server environments with hot standby
operation



TECHNOLOGY

Heusch/Boesefeldt systems are based on our ITS Middleware Platform GeoDyn2®, a product combining years of operational experience with up-to-date technology.

System architecture

- SOA – Service Oriented Architecture
- open interfaces for system expansion (APIs for system manufacturers and component vendors)
- data distribution middleware (“publish-subscribe” paradigm); the system can be implemented as a distributed system in the network for easy scalability
- operation with redundant server environment as “hot standby” is possible

Basic functionality

- data management with system-wide database and communication transaction security
- geographic data model with network modelling (GIS kernel); support for all popular geocoding methods
- archiving and re-archiving
- logging and reporting of all data

Platforms

- supported operating systems: Windows, Unix
- use of standard database management systems
- graphical user interface: native Windows, Java web technology