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Co-operation Traffic Management and Traffic Information

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Kuala Lumpur, Malaysia
14 to 16 August 2006

Agenda

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- The Idea Behind Traffic Management
- Traffic Management Capability
- Traffic Information Capability
- Traffic Management and Traffic Information on a Single Platform
- Complexity along three Dimensions
- Public-Private Operation Models for Traffic Management and Traffic Information
- Conclusion

The Idea Behind Traffic Management

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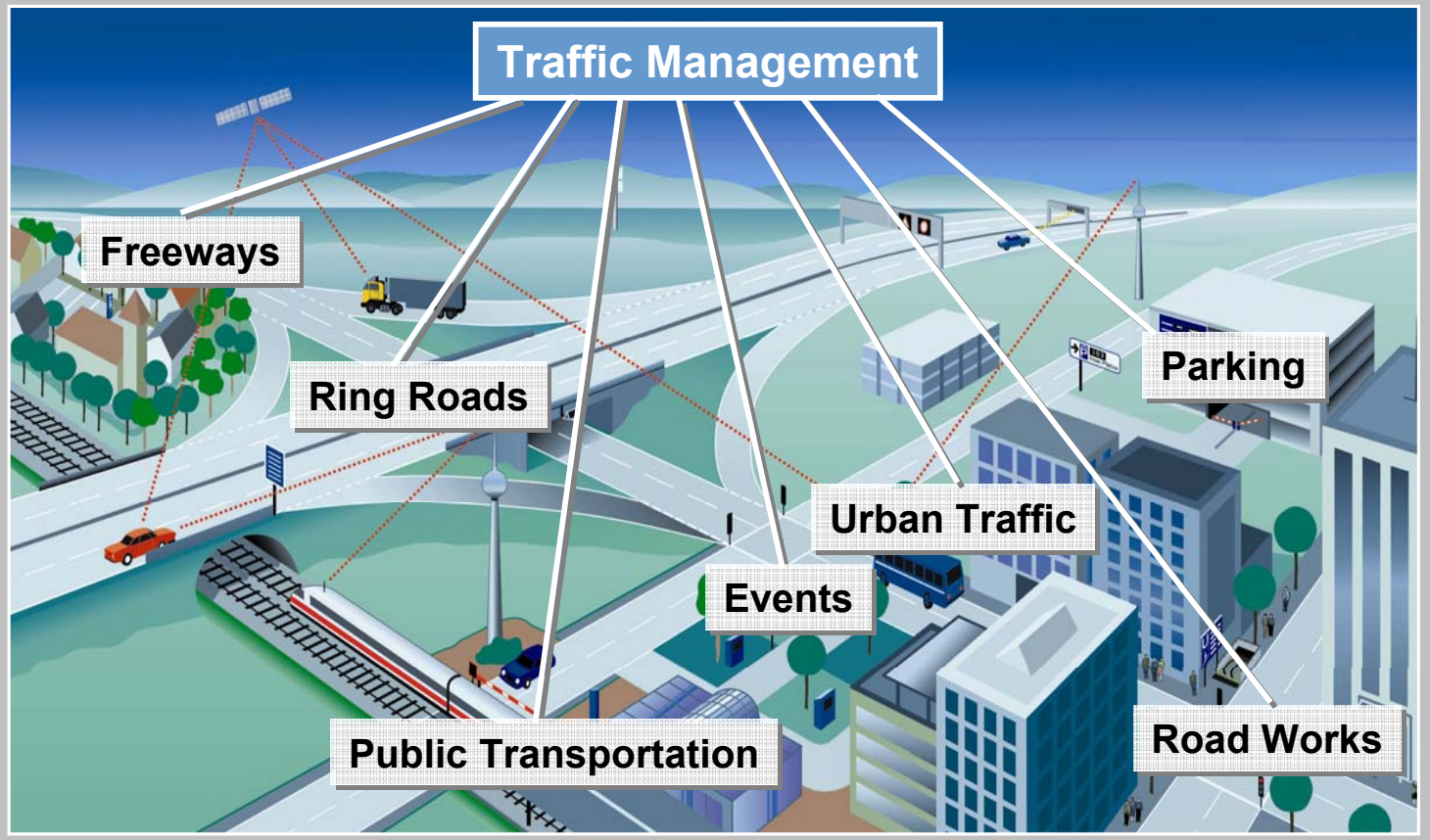

The Multi-Level System Architecture

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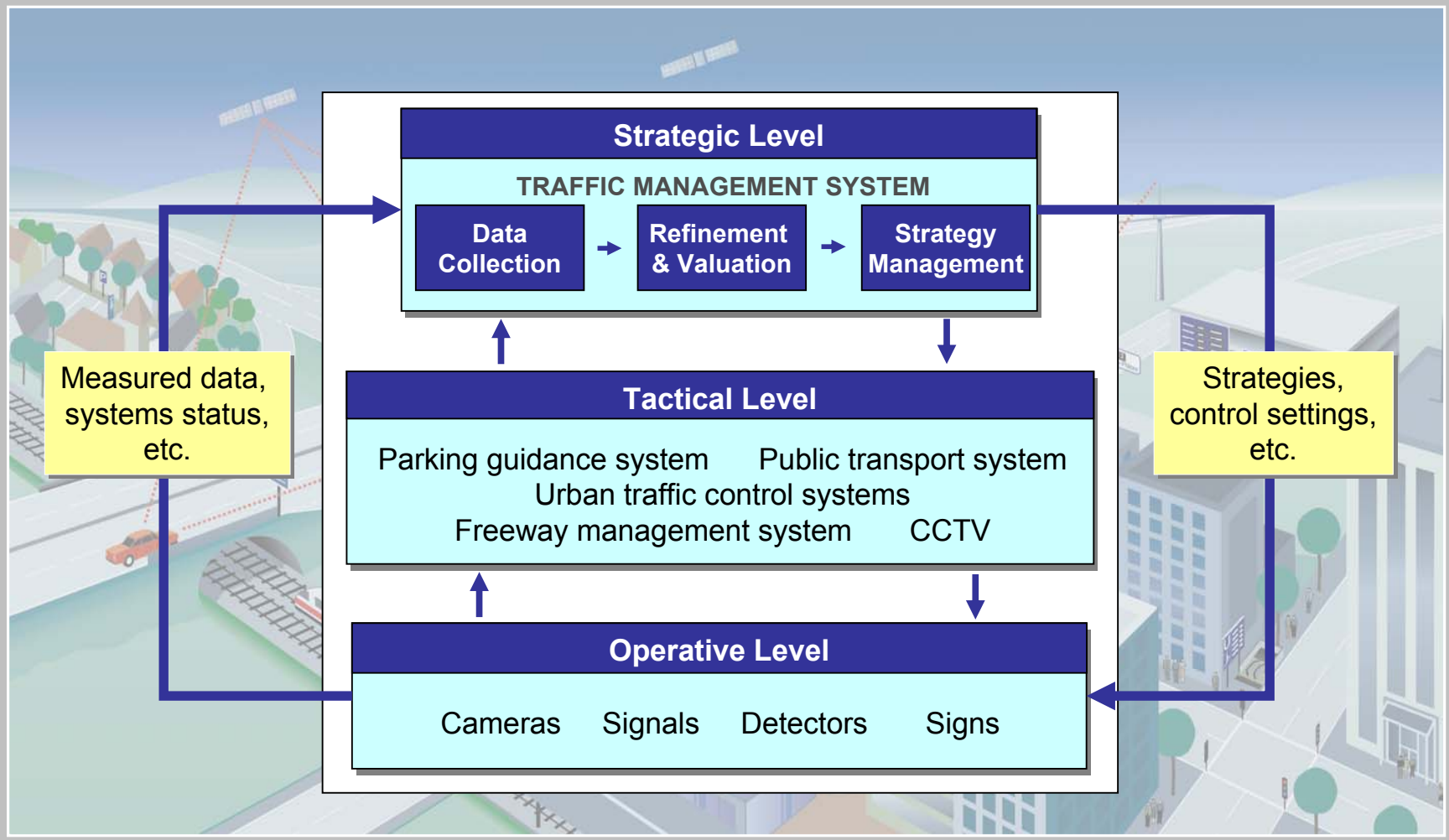

The Idea Behind Traffic Management

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- Cities run various independent traffic systems
- Most systems do not interchange data
- A TMS integrates these systems into a single application
- Traffic Management thereby provides the basis for

1 Cross-System Traffic Strategies **&** **2 Distribution of Traffic Information**

How Can Traffic Management Help Your City?

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- Achieve collaboration & central control of existing, independent traffic subsystems
- Comprehensively monitor & visualize traffic conditions in real time
- Provide value-added traffic information services to the public
- Improve road safety through incident detection & response management
- Prevent and actively fight congestion by intelligently influencing traffic on the road
- Demonstrate civil responsibility through a pro-active approach to traffic improvement

Traffic Management Capability

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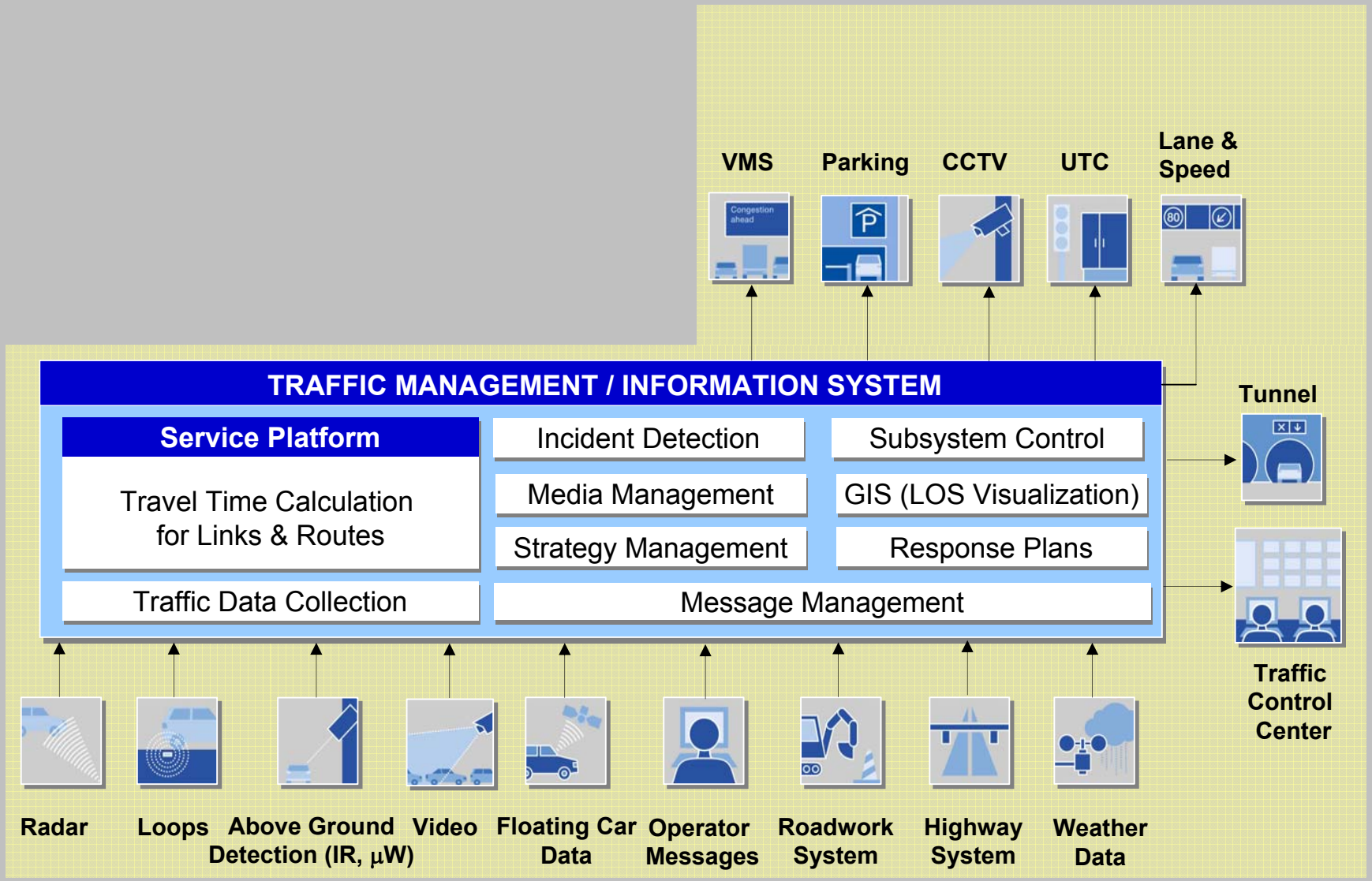

Traffic Information Capability

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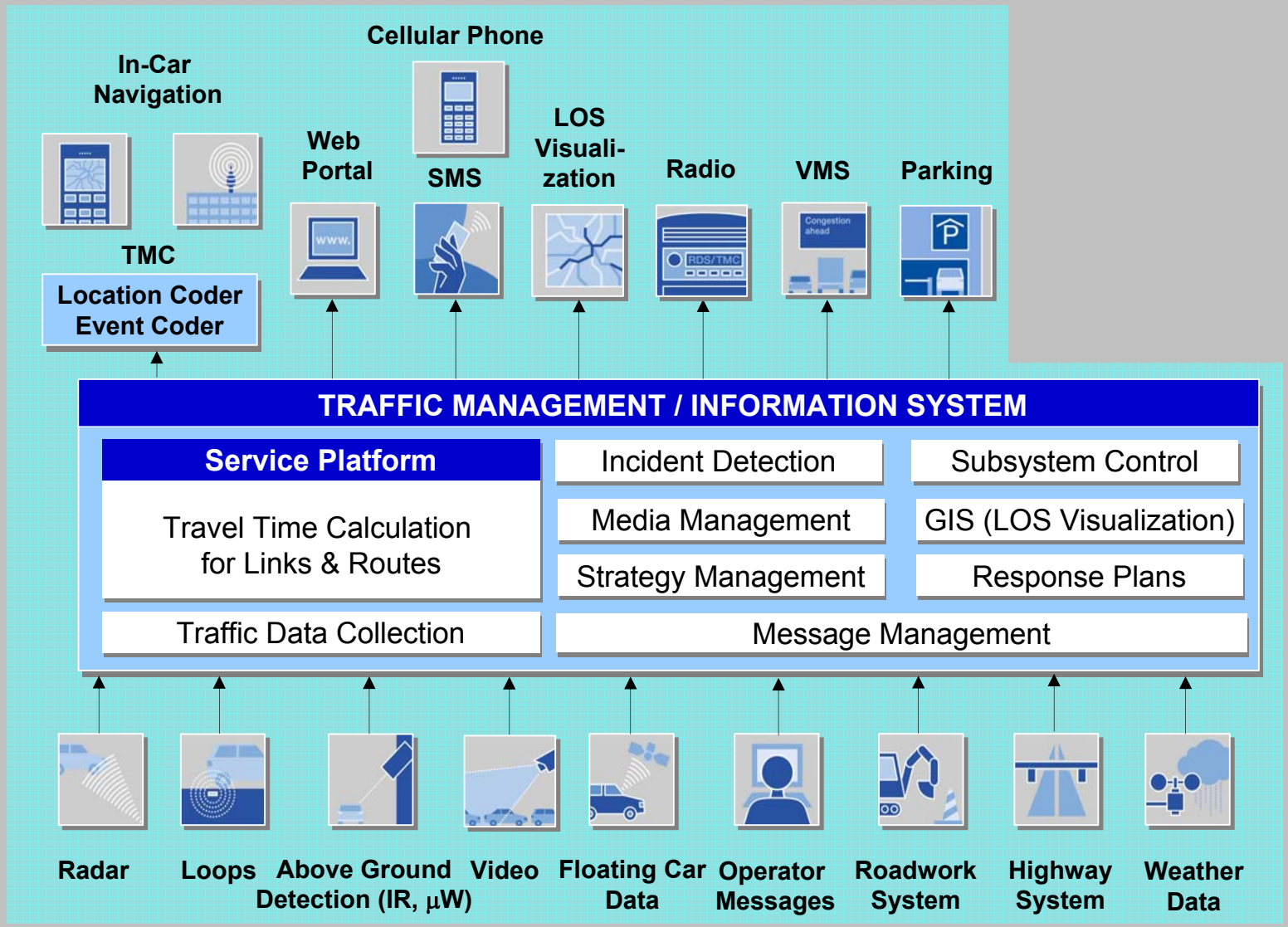

Traffic Management and Traffic Information on a Single Platform

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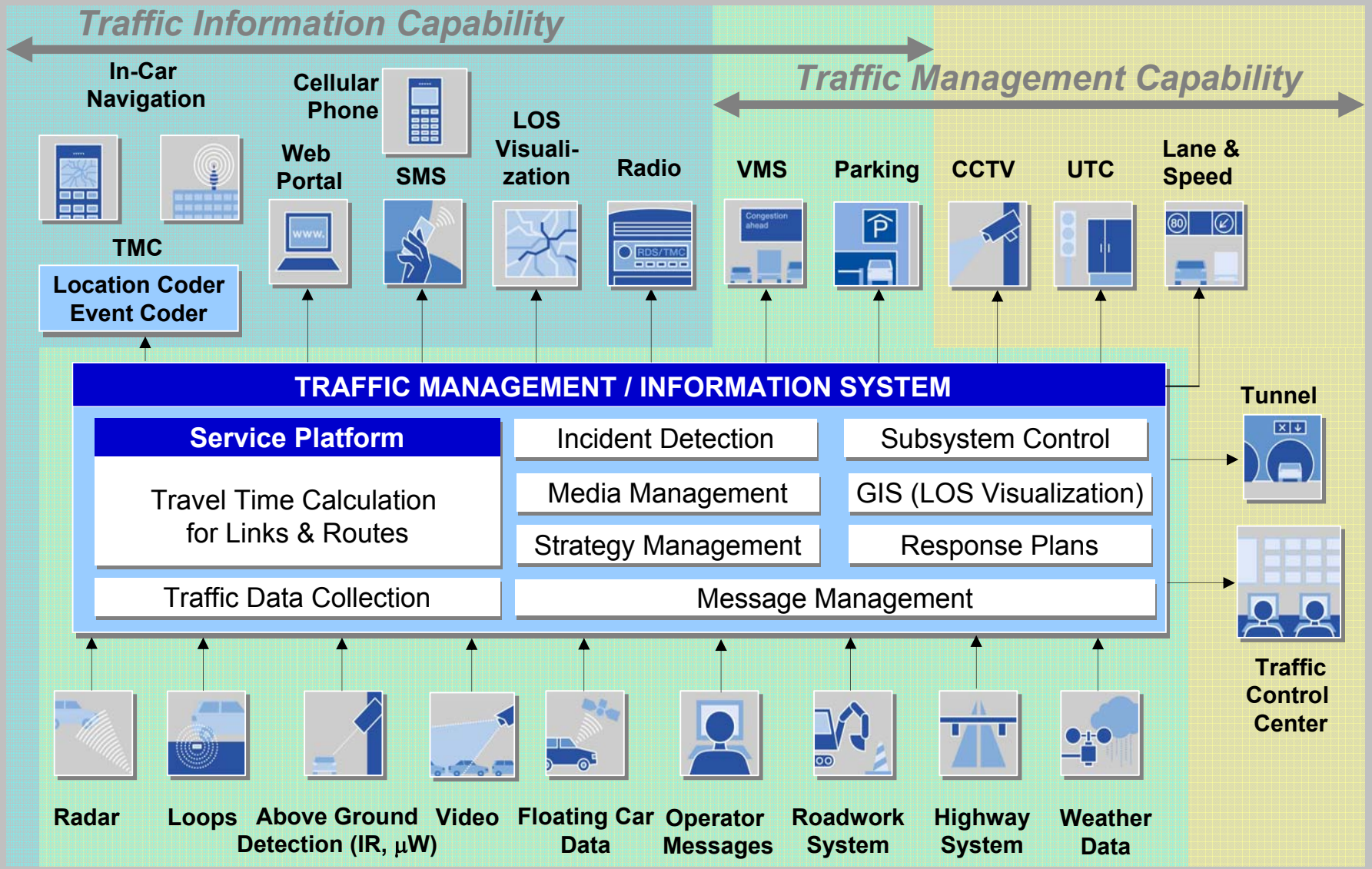

The Value Chain for Integrated Traffic Management & Traffic Information Services

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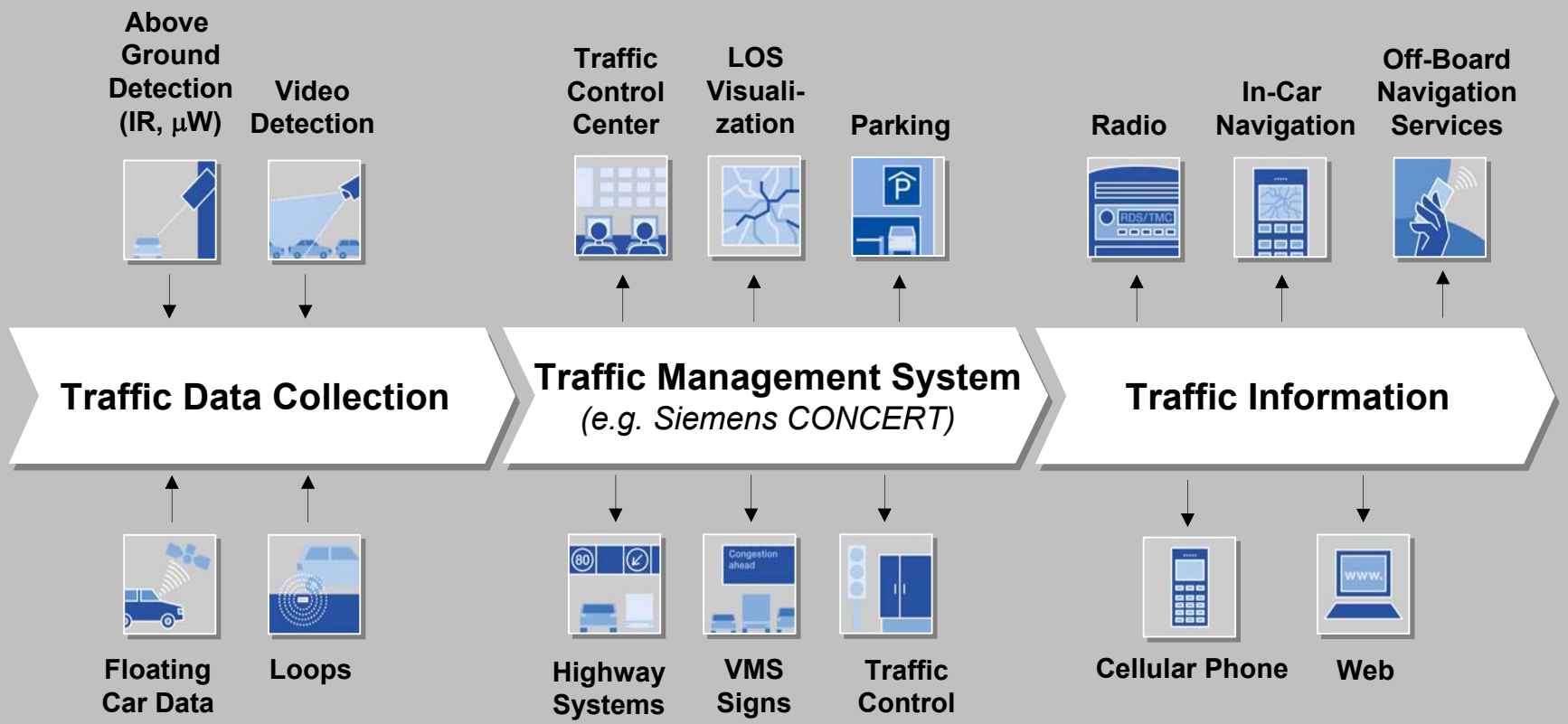

Acquisition and collection of relevant data from various sources

Data fusion

Data qualification, aggregation and completion
Intelligent processing of traffic data
- Real-time traffic situation
- Traffic forecast

Use of data for traffic management

Service generation
- Information transmission to various receivers
- Management of customer relation

Use of data for traffic information

Public-Private Operation Models for Traffic Management and Traffic Information in Germany

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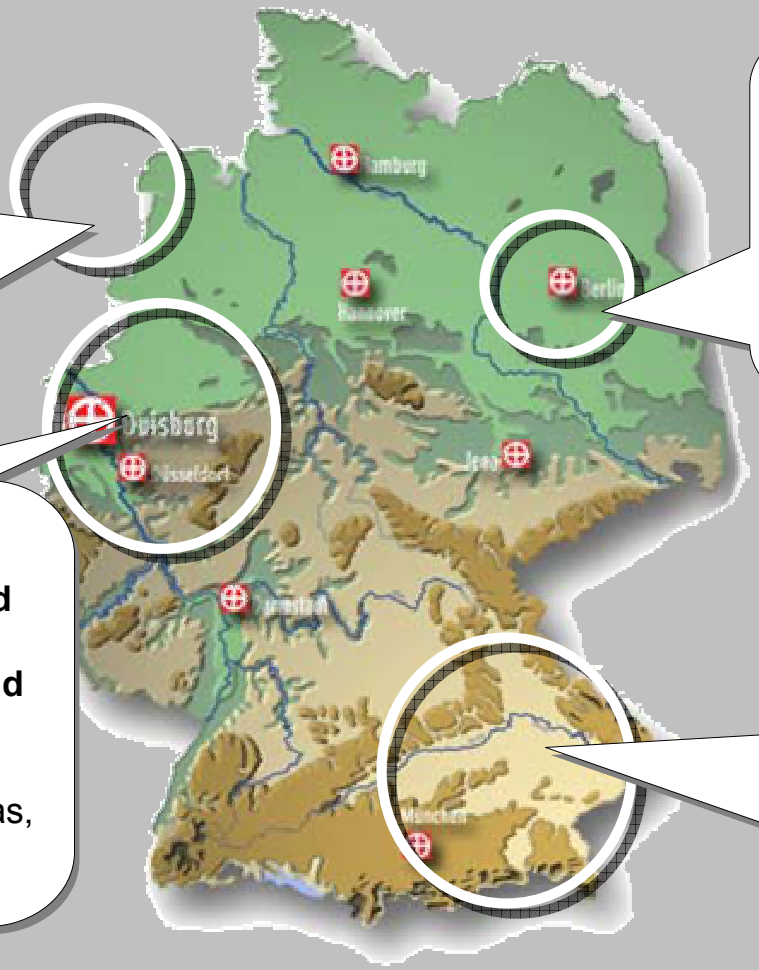
The Netherlands
(Population: 18 Million)
Operation of **TMC4U – Traffic Information Services** for Car Navigation Devices
Contract: since 2003



City of Berlin/Brandenburg
(Population: 6 Million)
VMZ Berlin – Design, Build and Operation of Traffic Management Systems and Traffic Information Services
Contract: 2000-2010

North Rhine Westphalia
(Population: 15 Million)
Ruhrpilot – Design, Build and Operation of Traffic Management Systems and Traffic Information Services across 15 cities incl. Freeways, Urban Areas, Public Transport
Contract: 2004-2017

Province of Bavaria
(Population: 12 Million)
VIB Bavaria – Design, Build and Operation of Traffic Management Systems and Traffic Information Services
Contract: 2006-2015

In PPP Siemens is taking the lead as industry partner for public authorities

Berlin:
Integrated Traffic Control and Mobility Management

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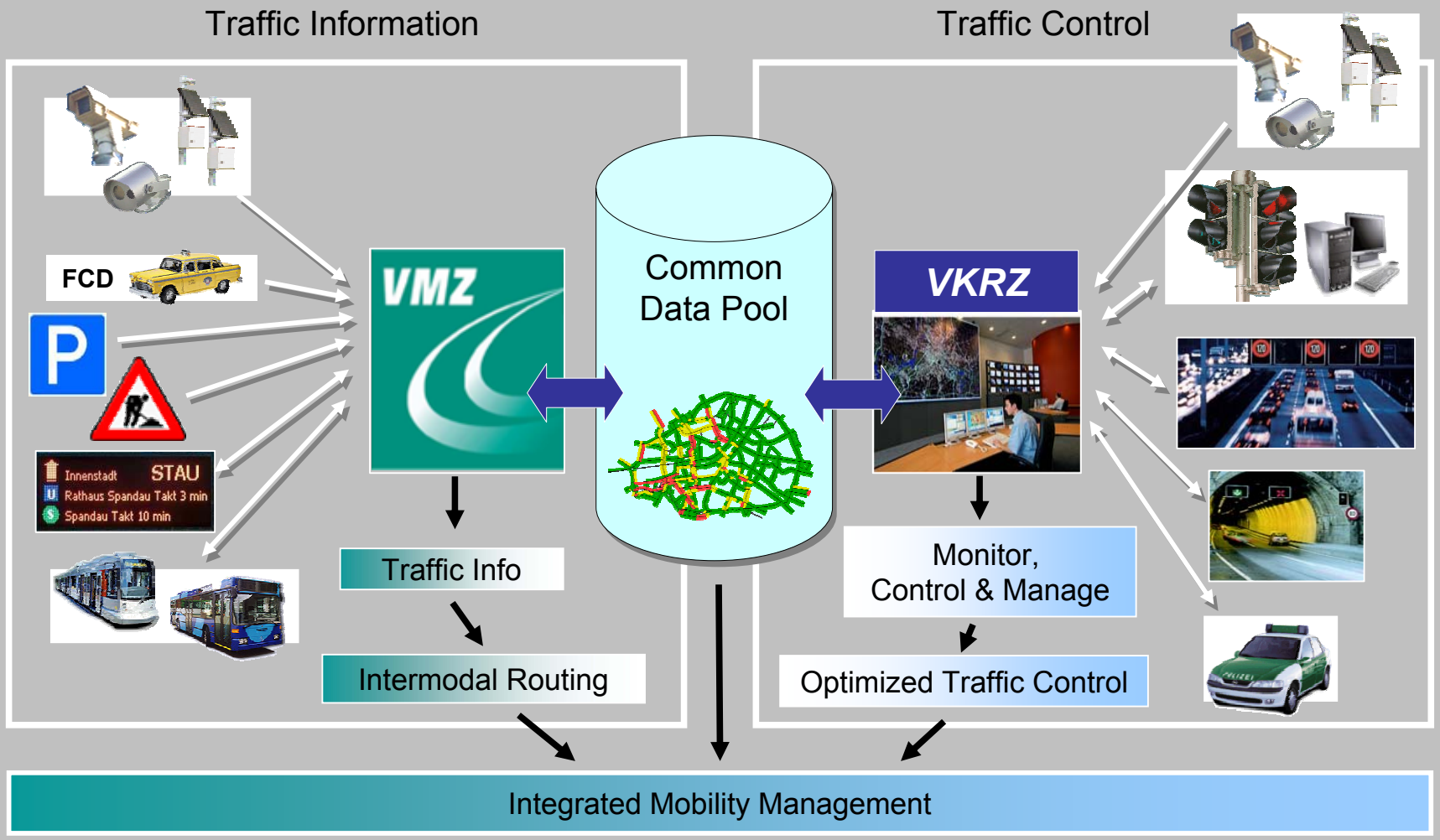

Berlin:
Integration of New and Existing Systems

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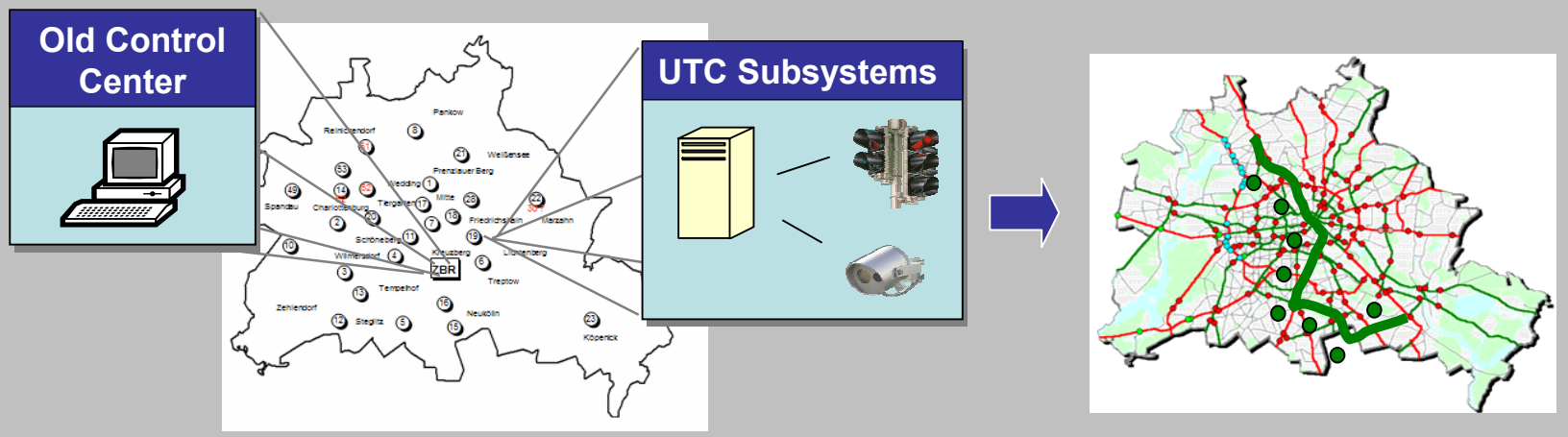
- Inconvenient control of UTC subsystems
  - 22 old traffic control systems by different manufacturers
  - Limited possibilities for global traffic strategies across various independent UTC



- Challenges
  - No change to existing systems
  - Once a connection is severed, it can not be reestablished
  - Step-wise substitution approach

Ruhrpilot:
Regional Network of Traffic Management Systems

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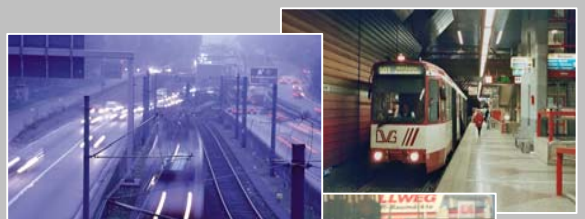
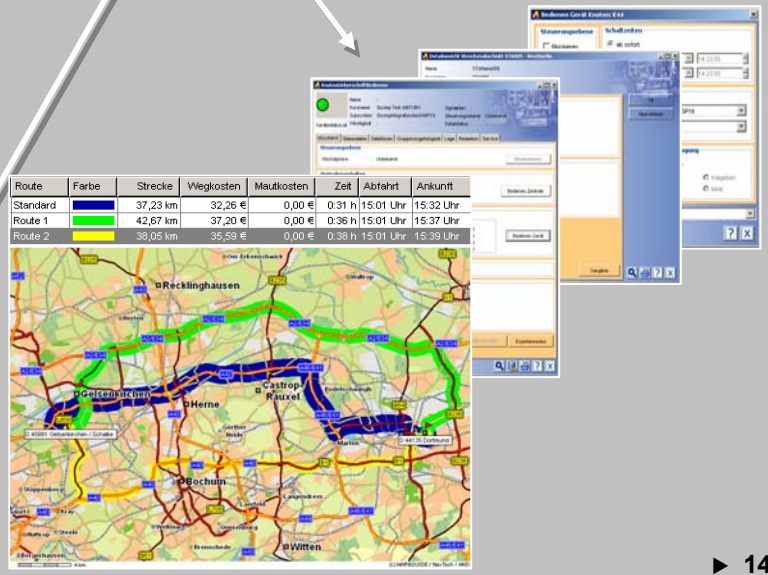
5500 km² area

15 Cities
42 Municipalities
13 Transit operators

- Objectives
  - Monitor mobility conditions
  - Provide mobility services
  - Define and deploy cross-jurisdictional transportation management strategies





Complexity along 3 Dimensions: Commercial, Administrative and Technological

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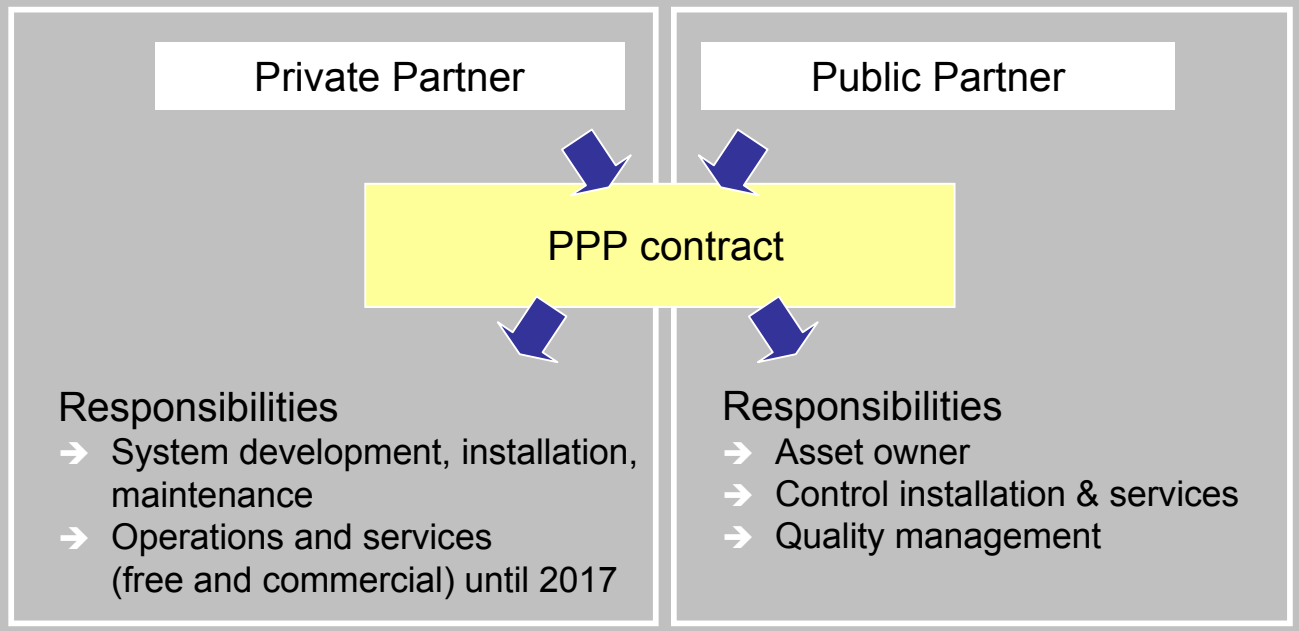
- Commercial



Joint Forces Leverage the Deployment of Traffic Management Systems and Traffic Information Services

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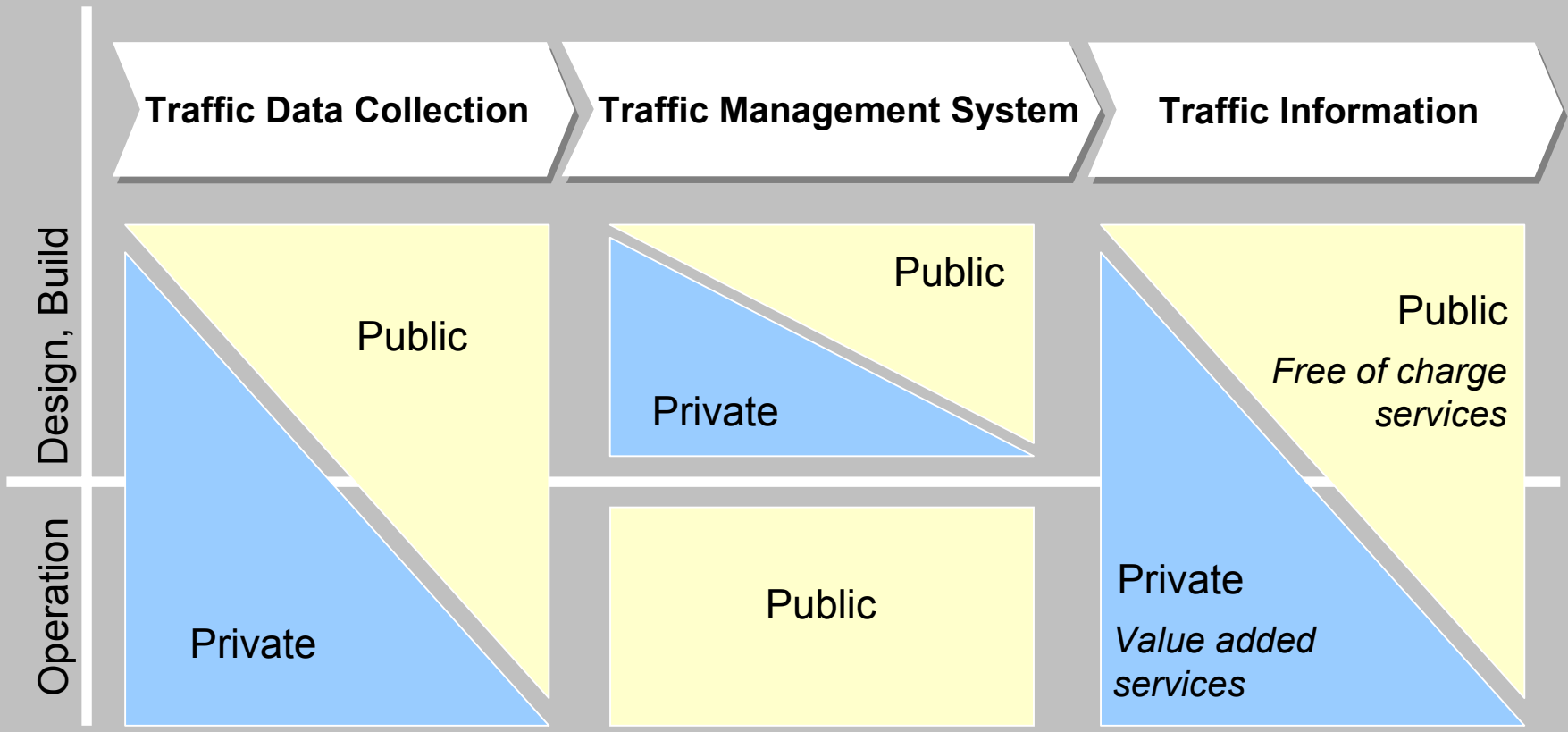

Siemens is committed to cooperating with public authorities

Complexity along 3 Dimensions: Commercial, Administrative and Technological

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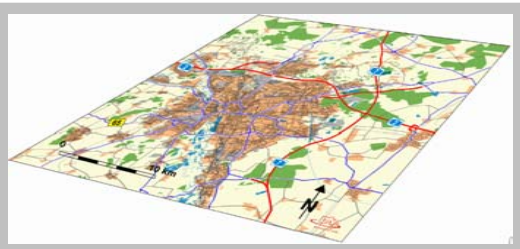
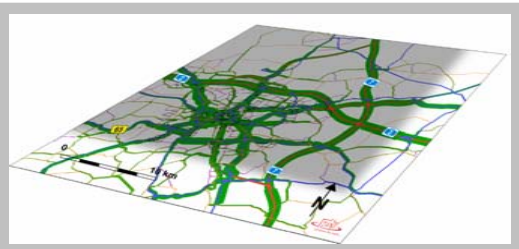
- Administrative





Agreements
- ➔ Availability of traffic data for common road network
- ➔ Scope of transport management strategies

Complexity along 3 Dimensions: Commercial, Administrative and Technological

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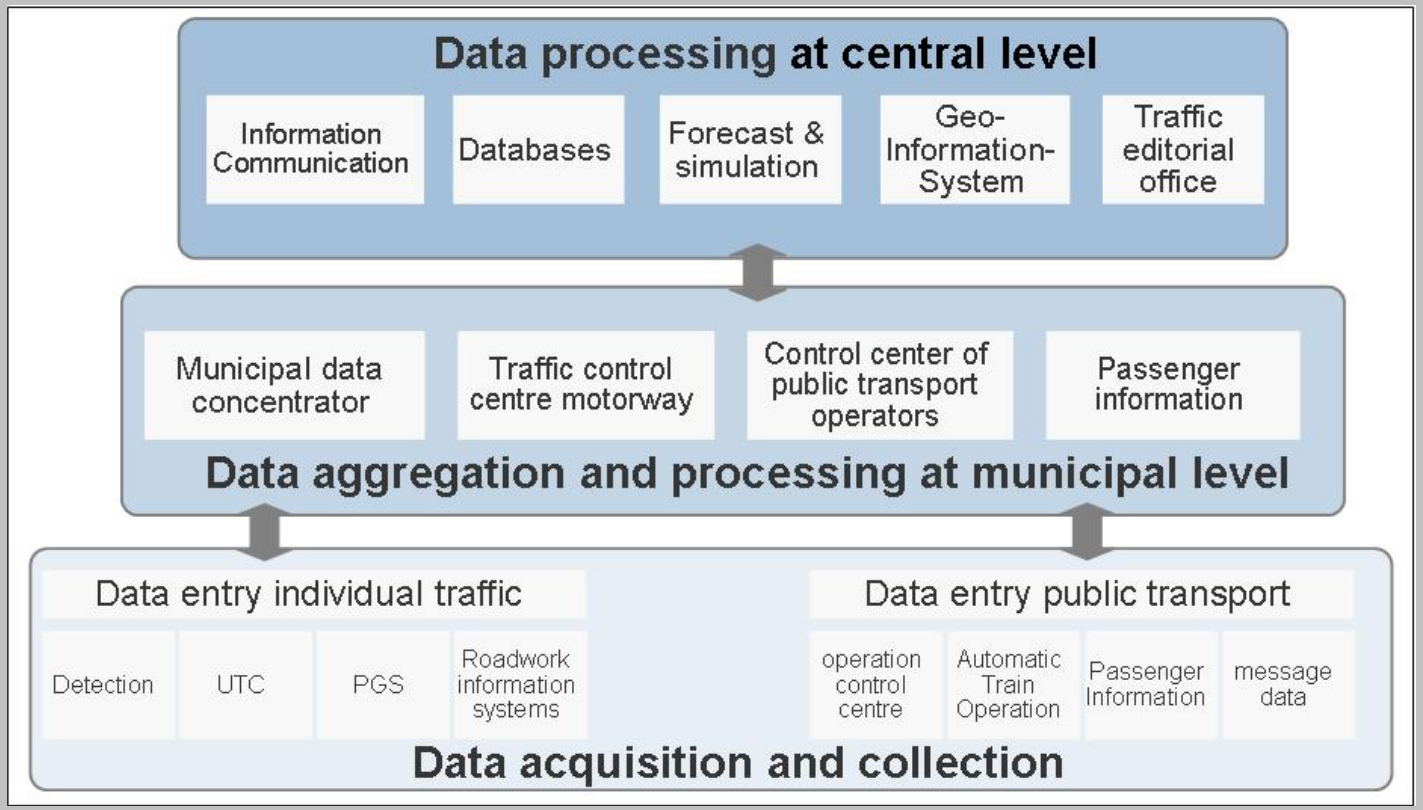
- Technological



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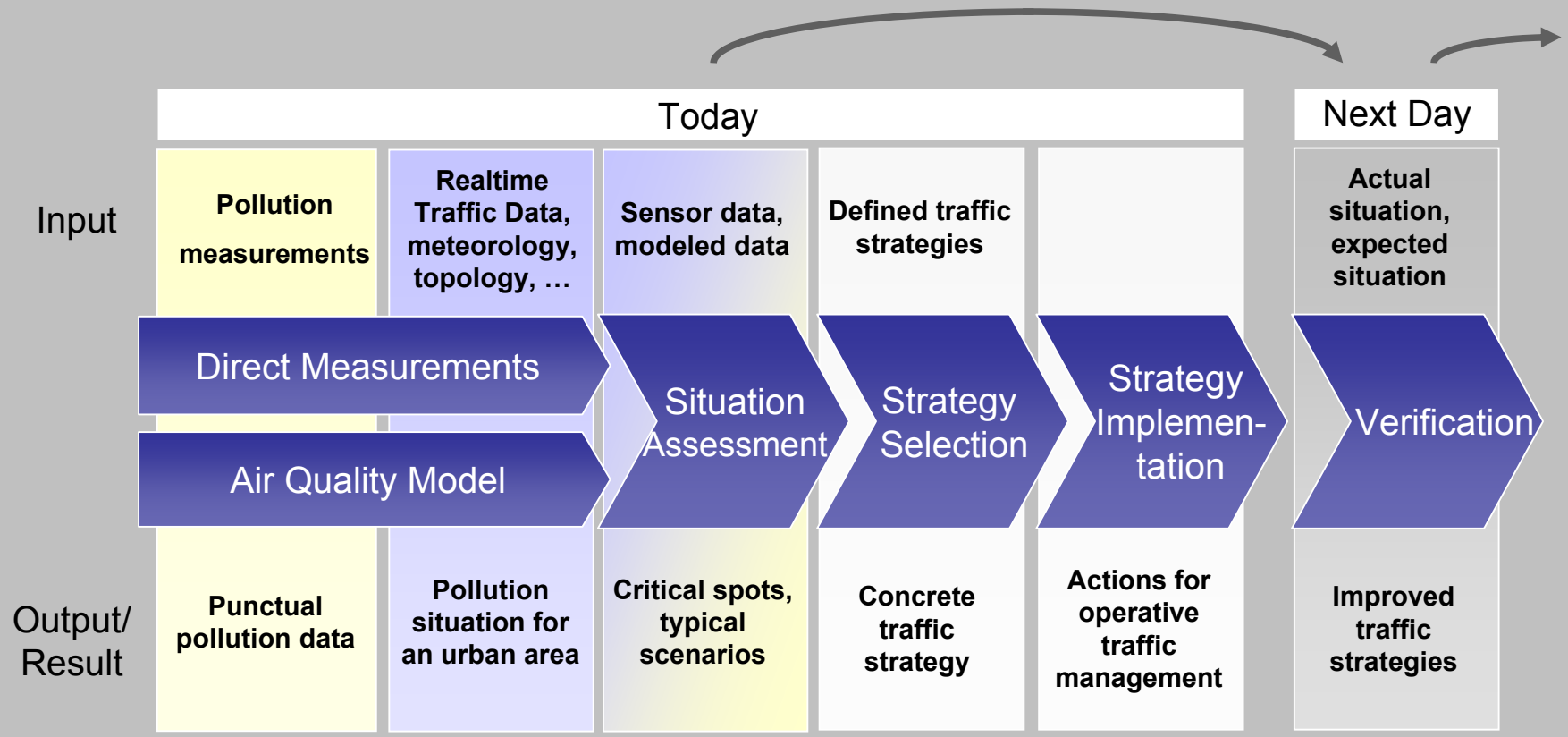

Conclusion

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- **Traffic management, information and control solutions**
  - Integration is more than the sum of single parts ...
  - Traffic management, information and control on a single platform
- **Various aspects of integration**
  - Functional
  - Spatial / regional
  - Old and new
- **Lessons learned**
  - PPP contracts with high accuracy, tailored to the project specifics
  - Preserve and integrate existing infrastructure
  - Take into account the local transport policy and political guidelines

System modularity and open interface are Siemens SITRAFFIC CONCERT´s highly valued features

Thank you for your attention

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