

Mobility and traffic in large cities Experiences and case studies



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Contents:

- TÜV Rheinland Group, overview
- Selected experiences
- Case studies and Tools

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TÜV Rheinland Group

■ Status, figures and facts 2003



	2002	2003
• Turnover (€mill.)	640	700
• Personnel	7,500	8,200
- of which employed abroad	2,600	3,100
• Companies (operative)	93	98
- of which located abroad	65	71
• Locations	298	over 300
• Business fields		31
• Business streams		5

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Locations

Over 100 companies at 300 locations in more than 50 countries

Pretoria Witbank
Cape Town Port Elizabeth

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Business Streams and Fields

Industrial Services	Mobility and Transport	Product Safety and Quality	Education and Consulting	IT Services and Innovation
<ul style="list-style-type: none"> Pressure Vessels and Materials Technology Conveyor and Machine Technology, Elevators Electrical Engineering and Building Technology Industrial Engineering Safety Civil Engineering <i>Environment and Energy Technology *)</i> Occupational Health and Safety Certification of Management Systems 	<ul style="list-style-type: none"> Vehicle Inspection Driver Licences and Traffic-Related Psychology Value and Damage Appraisal, Garage and Car Dealer Services <i>Traffic Telematics and Traffic Consulting</i> International Vehicle Approval <i>Automotive and Aviation Technology</i> <i>Railway Technology</i> 	<ul style="list-style-type: none"> Electrical Services Mechanical and Machinery Services Medical Services EMC and Telecommunication Services Ergonomic Services Chemical Services International Approvals/FEMAC LifeCycle Management 	<ul style="list-style-type: none"> Professional Training for Job Applicants Professional Training for Management and Technical Staff Private Schools Human Resources Services Management Consulting Publishing Research Administration and Project Management 	<ul style="list-style-type: none"> IT and Communications Systems Security

Working Fields →

Air Pollution Control
Noise Abatement
Test Center Energy Technologies

*) TÜV Immissionsschutz und Energiesysteme GmbH
Managing Director: Dr. Wolfgang Jockel

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Mobility and Transport
Traffic Telematics and Traffic Consulting



Tomorrow's solutions



More efficiency, more safety and more comfort on our roads - that should be ensured by *modern traffic control systems*.

With practical tests, system analyses, planning and development concepts, we support you as a manufacturer or operator, *on the way to contemporary traffic management*.



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Mobility and Transport
Automotive and Aviation Technology



The most important component of every vehicle is the human



Nowhere else do man and machine so frequently and so closely enter into a symbiosis than in road traffic. As a neutral and independent partner, we serve you on the way to *more safety on the road and in the air*. From aircraft crash safety, via improved passenger protection through modern restraint systems, right up to emergency training - together we shape the future also above the clouds.



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■ **Mobility and Transport**
Railway Technology



Setting the course for a *mobile future*

Our *centre of competence* for *innovative railway concepts* and *modern high-tech trains* supports you in the certification of products and technical systems. With our many years of practical experience, we are also a reliable partner for *project control* and *management services*.

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■ **Our vision**



We are becoming the leading international service group for certified safety, quality, energy and environment

controlling and consulting

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Tool: **TESM**

EnerKey

TESM

International conference on urban sustainability and air quality management
Mexico City
 May, 23rd-24th, 1995

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Mexico City Metropolitan Area (MCMA) 1994

Road Traffic

Legend:

0 - 10	11 - 20
21 - 30	31 - 40
41 - 50	

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EnerKey

Selected experiences and case studies

Strategic Transport-Energy-Environment Decision Support

STEEDS

VEEM Vehicle Energy & Emission Model

Target:
Choosing vehicles for a cleaner Europe

By order of: EUROPEAN COMMISSION (EC), 1999

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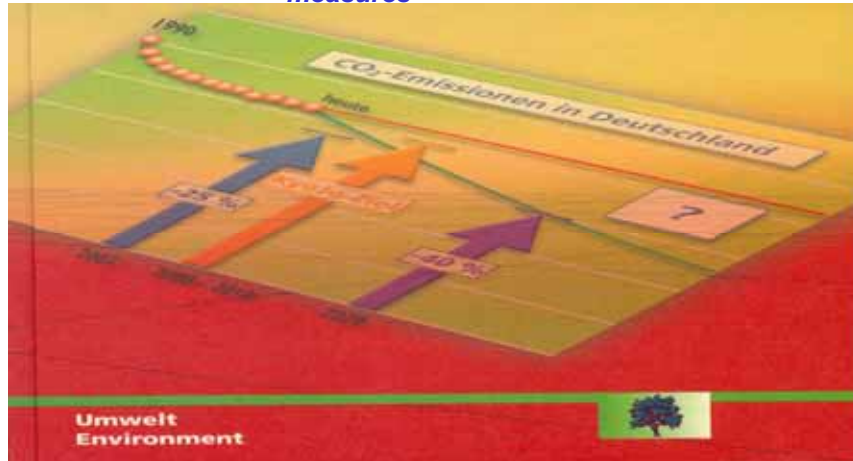
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Selected experiences and case studies



IKARUS:
Instrument to calculate energy and emissions of transport measures



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Selected TOOL:



IKARUS Transport Modell (ITM)

Developed in a
co operation between

and

TÜV Immissionsschutz
und
Energiesysteme GmbH,
Cologne

Forschungszentrum Jülich



Details will be presented
in
the working session
Friday, November 4th 2005

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■ **Thank you for your kind attention**



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