Item 1

Welcome Address

Parliamentary State Secretary Achim Großmann
Federal Ministry of Transport, Building and Housing (BMVBW)

A-Model Open Day
Berlin, 17 March 2005

Open Day on 17 March 2005

Item 1: Welcome Address (10 min.)

Parliamentary State Secretary Achim Großmann; Federal Ministry of Transport, Building and Housing (*BMVBW*)

Item 2: Development of the A-Model (10 min.)

Item 3: Project Organisation on the Part of the Contractor (10 min.)

Item 4: A-Model: Key economic elements (20 min.)

Item 5: Risk allocation under the A-Model (20 min.)

Item 6: Structured Negotiated Procedure (20 min.)

Item 7: A-Model Remuneration System (20 min.)

Item 8: Tolling System – Conceptual design (20 min.)

Item 9: Invoicing and Enforcement (20 min.)

Item 10: Discussion (30 min.)

Item 2

Ministerialdirigent Andreas Krüger, BMVBW
Head of the Road Construction Directorate

Development of the A-Model

A-Model Open Day
Berlin, 17 March 2005

10 minutes

A - Model

The introduction of a distance-based toll for heavy goods vehicles (≥ 12 tons permissible maximum weight) on motorways allows for the realization of an operator model for widening motorways to six lanes without prejudice to the Private Sector Funding of Trunk Road Construction Act (*FStrPrivFinG*). The operator model's features are as follows:

- Construction of the 5th and 6th lane, maintenance (of all lanes), operation (of all lanes) and financing are assigned to a private operator
- HGV tolls collected on the respective motorway sections to be transferred to the private operator
- Infrastructure costs incurred in connection with the use of passenger cars will be paid from the budget for road construction by way of start-up financing

5 A-Model Pilot Projects

A 8 in Bavaria (Augsburg – Munich/Allach)

A 4 in Thuringia (Waltershausen – Herleshausen, so-called „Hörselberge by-pass“) with a newly constructed road section

A 4 / A 1 in North Rhine-Westphalia (Dueren – Cologne/North)

A 5 in Baden-Württemberg (Baden-Baden – Offenburg) and

A 1 in Lower Saxony (interchange Buchholz – interchange Bremer Kreuz).

Item 3

Ministerialrat Bernd von Glisczynski, *BMVBW*
Head of the Private Financing, Special Road Construction Programs Division

Project Organisation on the Part of the Contractor

A-Model Open Day
Berlin, 17 March 2005

10 minutes

1. Working Group A-Models

S (BN) 50 00
Straßenbau, Straßenverkehr
MDir Wolfgang Hahn

Work Group A-Model
Head: MDirig Krüger, UAL S 2
GF: MR v. Glisczynski, RefL S 26

S 1 (BN) 50 01
Unterabteilung S 1
- Straßenplanung, -recht und Technik -
MDirig Stolle

S 2 (BN) 50 02
Unterabteilung S 2
- Straßenbau, Erhaltung und Finanzierung -
MDirig Krüger

S 3 (BN) 50 03
Unterabteilung S 3
- Straßenverkehr -
MDirig Burgmann

S 10 (BN) 51 00
Straßennetzplanung, Fachinformationssysteme
BDir Rohloff

S 20 (BN) 52 00
Gebietsaufgaben für Bremen, Hamburg, Schleswig-Holstein, Mecklenburg-Vorpommern
BDir'in Gipper

S 30 (BN) 53 00
Straßenverkehrssicherheit, BASt (Unfallforschung)
MR Bialleck

S 11 (BN) 51 10
Straßenverkehrstechnik, kommunaler Straßenbau
MR Dr.-Ing. Krause

S 21 (BN) 52 10
Gebietsaufgaben für Niedersachsen und Nordrhein-Westfalen
BDir Johnen

S 31 (BN) 53 10
Straßenverkehrsrecht (Zulassung von Personen zum Straßenverkehr); Fahrlererrecht
RDir Weibrecht

S 12 (BN) 51 20
Bauvertrags- und Verdingungswesen
MR Poppinga

S 22 (BN) 52 20
Gebietsaufgaben für Baden-Württemberg, Rheinland-Pfalz und Saarland
BDir Mellmann

S 32 (BN) 53 20
Ordnung des Straßenverkehrs (Verhaltensrecht)
RDir Marquardt

S 13 (BN) 51 30
Umweltschutz im Straßenbau
RDir Strick

S 23 (BN) 52 30
Gebietsaufgaben für Bayern und Hessen
MR Bartsch

S 33 (BN) 53 30
Kraftfahrzeugtechnik (Fahrzeugtechnik)
MR Kretschmann

S 14 (BN) 51 40
Straßenbauforschung, intern. Zusammenarbeit, verkehrs-politische Beiträge, BASt
MR Boos

S 24 (BN) 52 40
Gebietsaufgaben für Sachsen, Sachsen-Anhalt und Thüringen
BDir Herborn

S 34 (BN) 53 40
Kraftfahrzeugtechnik (Umweltschutz)
BDir Meyer

S 15 (BN) 51 50
Straßenbaurecht, Straßenverwaltung, Rastanlagen, Ausbildung
MR Rinke

S 25 (BN) 52 50
Straßenbauhaushalt, VIFG
MR Dr.-Ing. Müller

S 35 (BN) 53 50
Straßenverkehrsrecht (Zulassung von Fahrzeugen zum Straßenverkehr), Sozialvorschriften, Gebührenrecht, KBA
MR Vogt

S 16 (BN) 51 60
Rechtsfragen des Bauvertrags- und Verdingungswesens, Gemeingebrauch, Leitungsrecht, Kreuzungsrecht, Grunderwerb
RDir Bergs

S 26 (BN) 52 60
Privatfinanzierung, Sonderprogramme und Innovationen im Straßenbau
MR von Glisczynski

S 36 (BN) 53 60
Gewerblicher Straßengüterverkehr, BAG
MR Näke

S 17 (BN) 51 70
Straßenbautechnik
BDir'in Kraus

S 27 (BN) 52 70
Erhaltung und Straßenbetriebsdienst, Autobahnfernmeldenetz
MR Schliebitz

S 37 (BN) 53 70
Gewerblicher Straßenpersonenverkehr
MR Doose

S 18 (BN) 51 80
Brücken-, Tunnel- und sonstige Ingenieurbauwerke
MR Naumann

S 01 (B) 50 50
Übergreifende Aufgaben im Bereich Straßenbau, Gebietsaufgaben für Berlin und Brandenburg
MR Brandenburger

S 02 (B) 50 70
Übergreifende Aufgaben im Bereich Straßenverkehr
MR Niggestich

Working Group A-Models

Supervision: MDirig Krüger, UAL S 2
Manager: MR v. Glisczynski, RefL S 26

Permanent members

- **Ref. S 12** – Building contracts and contract procedures
- **Ref. S 11** – Road construction technology
- **Ref. S 16** – Legal issues relating to building contracts
- **VRefL‘in S 26** – ORR`in Tegtbauer
- **S 26** – RR Schumann
- **S 26** – OAR`in Damm

Non-permanent members

- **Ref. S 17** – Road construction technology
- **Ref. S 18** – Bridges, tunnels, engineering work
- **Ref. S 25** – Budget, VIFG
- **Ref. S 27** – Maintenance, operation

Back office
- secretariat
- documentation

Staff functions
e.g., coordination

Project and Organisation Structure A-Models

BMVBW and Expert Advisers

Working Group A-Models

Supervision: MDirig Krüger

Management: MR v. Glisczynski

Law	Reports S 16, S 26
Public Procurement	Reports S 12, S 16
Technology and Operation	Reports S 11, S 17, S 18, S 27
Traffic Forecast	Report S 11
Financing	Report S 26

Expert Advisors

Coordination: Schüßler-Plan Engineering Company

Law	Norton Rose and CMS Hasche Sigle
Public Procurement	Norton Rose
Technology and Operation	Schüßler-Plan Engineering Company
Traffic Forecast	Schüßler-Plan and Harloff Hensel Urban Planning
Financing	Investment Bank of Schleswig-Holstein and Alfen Consult

Item 4

Torsten R. Böger, *VIFG*, Managing Director

A – Model: Key economic elements

A-Model Open Day
Berlin, 17 March 2005

20 minutes

A-Model Open Day

A-Model: Key economic elements

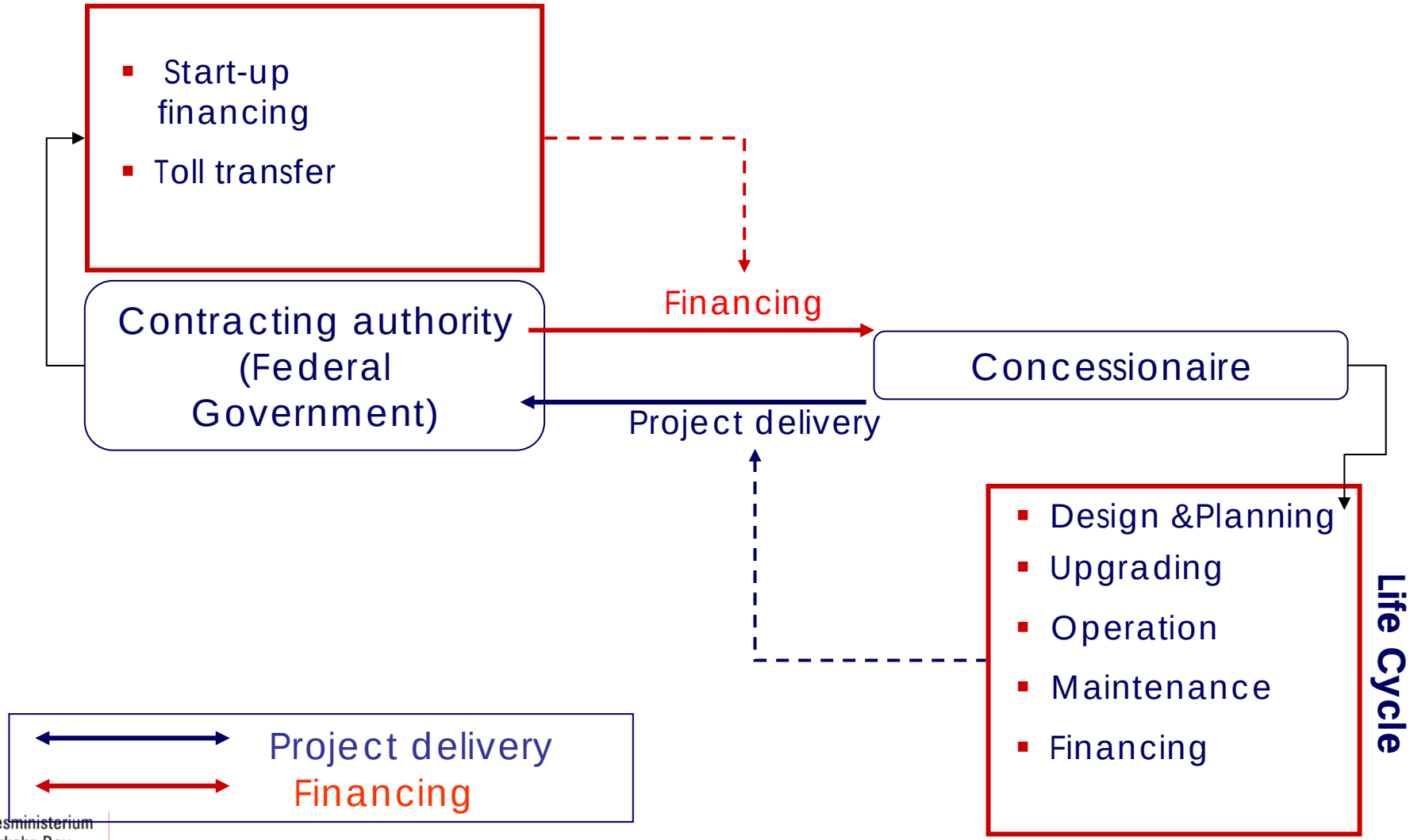
Berlin, 17 March 2005

Torsten R. Böger, VIFG, Managing Director (*Geschäftsführer*)

Introduction

- New features of the A-Model in comparison with traditional procurement:
  - Provision of transport infrastructure by the private concessionaire along the whole added-value chain
  - Refinancing by way of (1) start-up financing (construction grant) and (2) transfer of HGV tolls raised on the respective road section
- Project-specific concession agreements are based on the so-called Model Concession Agreement (MCA) and the corresponding feasibility study
- Contracting parties (pursuant to the principle of execution of Federal Laws by the federal states or municipalities according to the instructions of the Federal Government):
  - Federal Government represented by the federal state
  - Concessionaire (project company)
- Duration of agreement: 30 years

A-Model - Performance



What is to be delivered under the A-Model? – Planning

- For the first A-model projects, „traditional planning“ was chosen, i.e. plan approval has been granted
- In „traditional planning“, the concessionaire is responsible for the design planning in accordance with the tender documents

What is to be delivered under the A-Model? – Upgrading

- **Motorway section in question to be widened by the concessionaire in accordance with the tender documents; in general: widening from 4 to 6 lanes (plus emergency lane)**
- **As a rule, the motorway is to be widened without closing it to traffic**
- **The concessionaire also has to provide the auxiliary premises**
- **Concessionaire has to deliver the complete road infrastructure in an operable state**
- **Risk allocation is specified in the concession agreement**

What is to be delivered under the A-Model? – Operation and Maintenance

- **Concessionaire is to operate the contracted motorway section**
- **Operation is to "permanently ensure a smooth and safe flow of traffic on the contracted motorway section"**
- **No specifications as to how operation is to be organized by the concessionaire (→ output-oriented description of services)**

What is to be delivered under the A-Model? – Financing and transfer

- **Financing of construction measures, operation and any other measures agreed upon incumbent upon the concessionaire**
- **Refinancing through (a) start-up financing and (b) toll transfer**
- **Transfer of the contracted motorway section to the contracting authority upon expiry of the Concession Agreement. Concession Agreement contains provisions as to:**
  - **Quality/condition at the time of transfer**
- **Financing structure**
  - **No provisions on equity ratios in invitation to tender**

Tax Arrangements (1)

- **Federal Ministry of Finance (BMF) has clarified turnover tax arrangements for the A-model in its circular of 3 February 2005 (IVA5-S7100-15/05)**
- **Main features:**
  - **The widening of a motorway section is to be carried out with the concessionaire's own materials and supplies (*Werklieferung*) and is therefore subject to turnover tax at the time of final acceptance of the motorway section**
  - **All other services are considered parts of the overall package with annual delivery and are therefore subject to turnover tax**
- **Implementation of tax arrangements set out in the *BMF* circular, numbers 10 – 17**

Tax Arrangements (2)

- ***BMF*** **has set out income tax arrangements for the A-model in a second circular.**
- ***BMF*** **is in the process of consulting the federal states on the proposed rules.**
- **Subsequently, industry associations will be given the opportunity to submit comments.**
- **Provisions to be published thereafter.**

Item 5

ORR‘in T. Tegtbauer;
BMVBW,
Deputy Head of Division S 26: Private Financing,
Special Road Construction Programs

Risk allocation under the A-Model

A-Model Open Day
Berlin, 17 March 2005

20 minutes

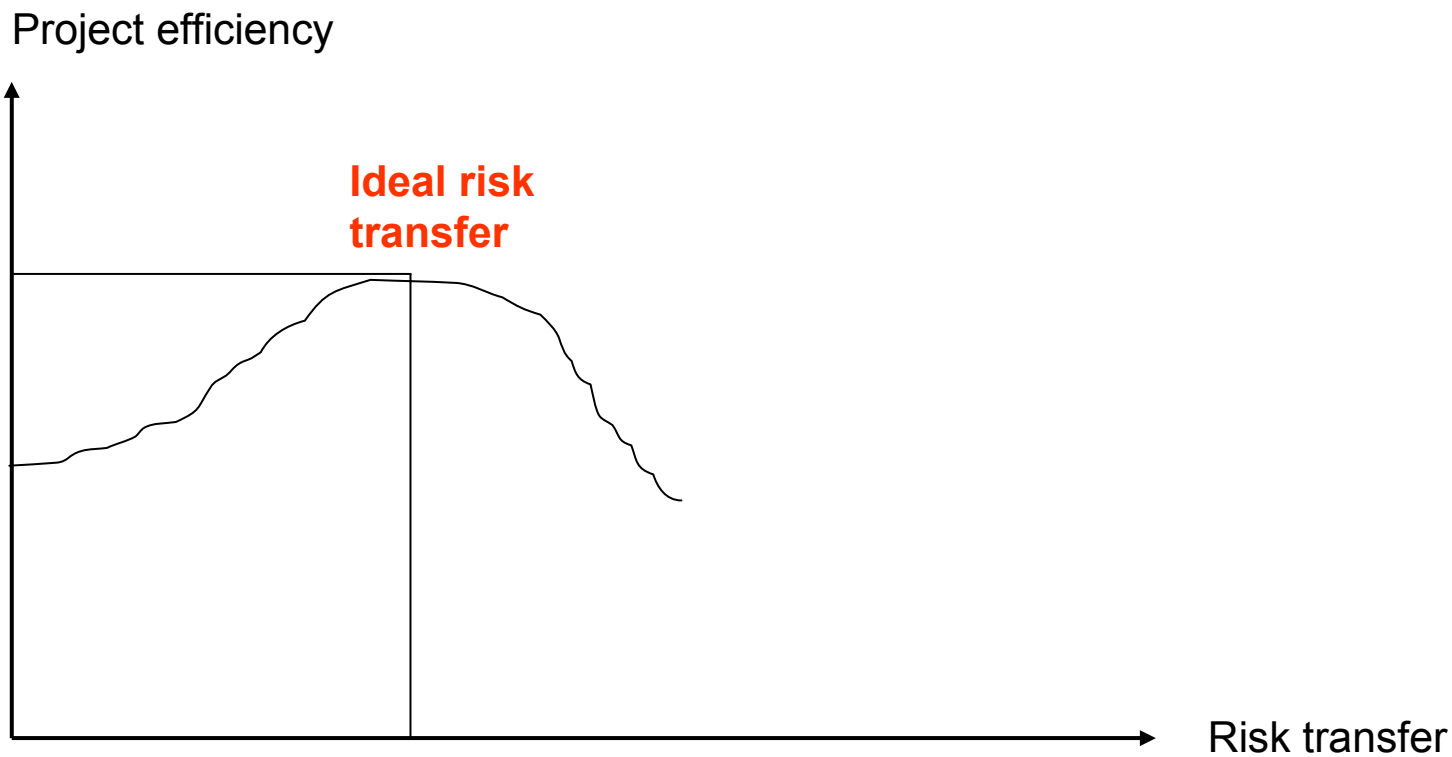
Risk does not equal danger

- **In business administration, a „risk“ is seen as a „venture”, meaning uncertainty of either a positive or a negative nature.**
- **Every risk has its price.**
- **„No venture, no gain!“**

Concept: Cooperation between the Private Sector and Public Authorities

- **PPP concept: profitability and partnership**
- **Objective: profitability for both contracting parties (win-win situation)**
- **Central element: risk allocation (efficient and economical allocation of risks and opportunities)**

Ideal Risk Allocation ≠ Maximum Risk Transfer



Main Criteria For Efficient Risk Allocation

Each party bears the risks it can actively control and influence most efficiently.

- **As a rule, the concessionaire assumes the risks on which he has the most active influence**
- **The contracting authority (Federal Government) assumes the risks it can best influence**
- **Proportionate risk sharing where neither party can influence or control risk**

General Risk Allocation (Model):

Risks principally remaining with the Contracting Authority

	Contracting Authority	Concessionaire
Risk of toll collection	x	
Risk of planning and plan approval	x	
Risk of land acquisition	x	
Unpredictable construction of parallel or alternate routes	x	

General Risk Allocation (Model):

Risks principally assumed by Concessionaire

	Contracting Authority	Concessionaire
Risk of completion		x
Risk of maintenance and operation		x
Risk of traffic volume		x
Risk of road condition (upon termination of Concession Agreement)		x

General Risk Allocation (Model):

Risks principally borne by both contracting parties

	Contracting Authority	Concessionaire
Force Majeure	x	x
Geological risk	x	x
Risk of legislative changes	x	x

Every project is different

- **Identification and assessment of project-specific risks and opportunities**
- **Hence, in the individual projects, the details of risk allocation may differ from the above risk allocation model**
- **Objective: optimum risk sharing at the end of the negotiated procedure**

Item 6

Michael Werner;

Partner, Norton Rose

Structured Negotiated Procedure

A-Model Open Day
Berlin, 17 March 2005

20 minutes

Advantages of the Structured Negotiated Procedure

- **Increased *flexibility*, particularly suitable for more complex PPP infrastructure projects**
- **Optimization potential, risk allocation to be determined through negotiation**
- **Opportunity for bidders to provide innovative technological and/or financial solutions**

Advantages of the Structured Negotiated Procedure

- **Negotiated procedure particularly suitable for A- model projects:**
  - **BOT project character (life cycle approach) Evaluation of bids as to construction, operation, maintenance and finance**
  - **Particular need for negotiation with regard to contractual provisions for risk allocation**

Procedure

- Twofold procedure:
  - **Pan-European competition to submit tender (prequalification)**
  - **Negotiated procedure (bidding phase, negotiation phase, evaluation)**

Competition to submit tender (Prequalification)

- **Conformity and suitability evaluation**

- **In case of A-Model, higher performance requirements compared to traditional infrastructure projects:**
  - **Proof of additional expertise in the areas of finance, maintenance and operation**
  - **References on project financing experience and technological competence**

Competition to submit tender (Prequalification)

- **Evaluation of technological and financial competence using a pre-defined evaluation matrix**

- **Objective: selection of four suitable bidders which are then invited to tender**

Bidding Phase

- **Tendering documents sent upon invitation to tender**
- **Output-oriented description of services**
- **When submitting their bid, bidders state what points they wish to negotiate**

Negotiation Phase

- **Various negotiation rounds (technical, financial, legal aspects etc.)**

- **Successive reduction in number of bidders (pre-selection and final selection)**

Bid Evaluation

- **Evaluation:**
  - **Conformity evaluation as to form and content**
  - **Identification of most economically efficient bid**

- **Evaluation method varies according to what part of the package is being assessed**

Construction concession

- **Concession for** construction**,** operation **and** maintenance **for 30 years**
- **Construction is funded by a mixture of** private funding **and** public start-up financing**:**
  - **Start-up funding, amount (percentage of construction costs) to be defined by operator in bid**
  - **Remaining costs to be covered by revenues from HGV tolls**

Procedure

Publication

Prequalification

Request

Presentation

Presentation of consortium

Presentation of concept: Construction, Maintenance, Operation, Financing

Verification of suitability

4

Selection

Pre-qualified candidates

1 preferred bidder

max. 2 alternative bidders

Negotiation

Bid

Indicative bid that states where there is a need to negotiate

- Unaltered bids
- Inquiries by Contracting Authority
- binding clarification/explanation by bidder

Clarification

Evaluation

Pre-selection

Preferred bidder

2 (2 reserve bidders)

Negotiation

[Planning negotiations]

Technical negotiations

Financial negotiations

Legal negotiations

- Both bids with equal risk structure
- Financing commitment

Bid

Best and final offer

Final offer

Final selection

Evaluation

Contracting party

1

Award

ITEM 7

Frank Ulber, VIFG, Head of PPP Department

A-Model Remuneration System

A-Model Open Day
Berlin, 17 March 2005

1. Basic Principles of the Remuneration System

- **Concessionaire to finance entirety of contractually agreed services**
- **Two components can be used for re-financing:**
  - **Start-up financing (optional)**
  - **Transfer of contractually agreed share of tolls raised on the contracted road section**
- **Start-up financing provided in accordance with the payment plan and depending upon the progress of the construction work**

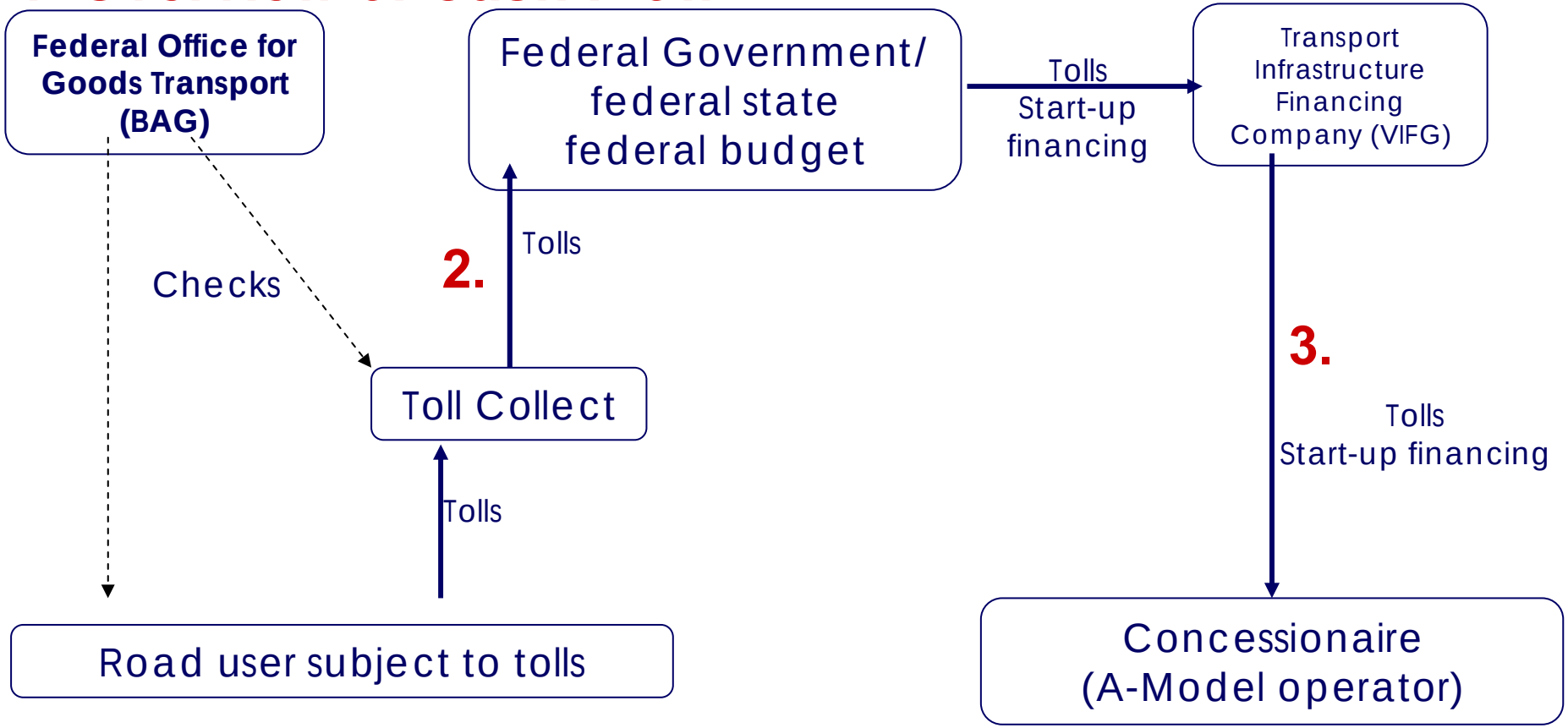
2. Start-up Financing (Road Construction Subsidy)

- **Contracting authority can provide start-up financing to concessionaire**
- **Bidder to specify required amount of seedcorn funding in the bid**

3. Toll Transfer

- **During term of concession, private concessionaire receives contractually agreed share of tolls raised on the respective section**
- **Amount of tolls transferred is linked to traffic-volume risk**
- **Toll transfer starts as soon as the contracted road section is finished**

4. Overview of Cash Flow



ITEM 8

Ministerialrat Dr.-Ing. Krause; BMVBW

Head of the road transport engineering, municipal road construction division

Toll System – Conceptual design

A-Model Open Day
Berlin, 17 March 2005

HGV Tolling Scheme in Germany
Introduced on 1 January 2005

Federal Motorway Toll Act for Heavy Goods Vehicles (*ABMG*) of 12 April 2002

- **Toll revenue earmarked for transport infrastructure improvements**
- **Levelling the playing field to help hauliers**
- **HGVs of more than 12 tons permissible maximum weight**
- **Tolls charged based on the exact number of kilometres driven**
- **Tolls charged on motorways**
- **Varied toll rates according to number of axles and emission categories**
- **Federal Government authorised to adopt new regulations**

Tolled Road Network

Forecast for 2003

Federal motorways

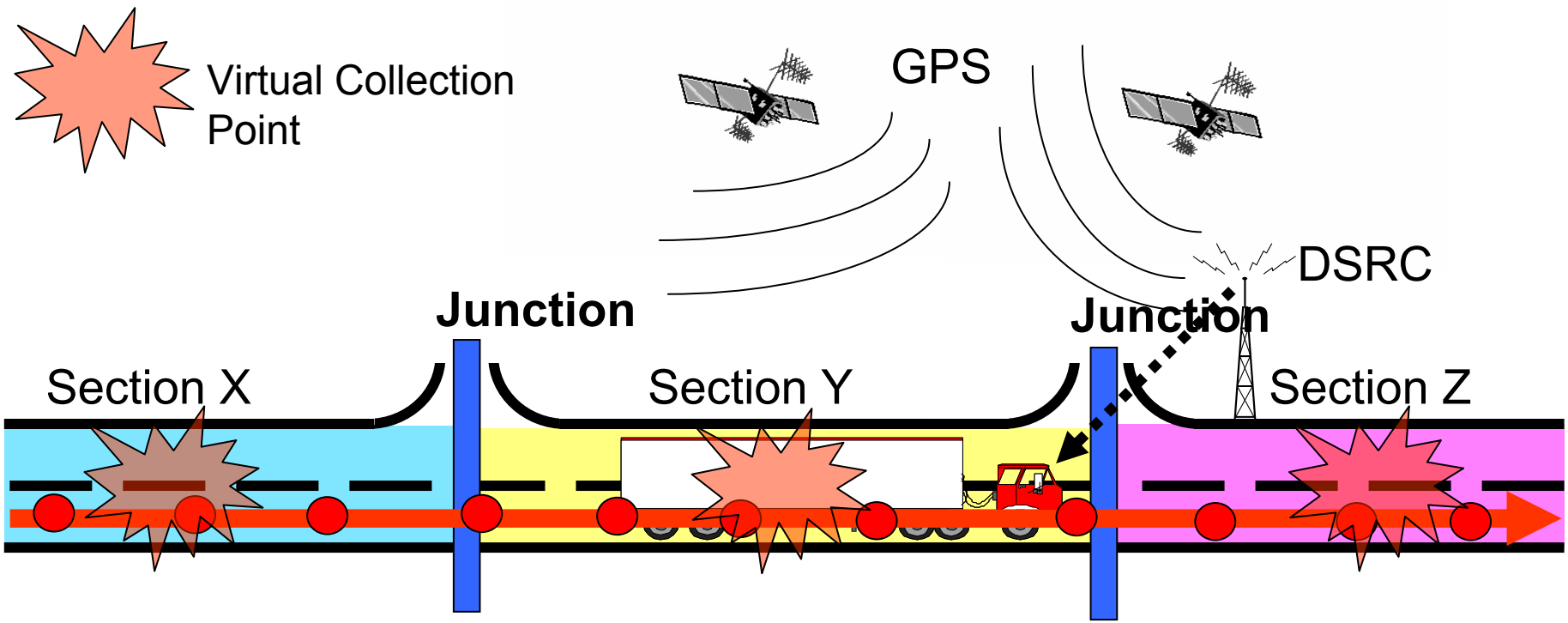
Length	approx. 12,000 km
Motorway junctions	2,213
Motorway interchanges	251

Mileage subject to toll

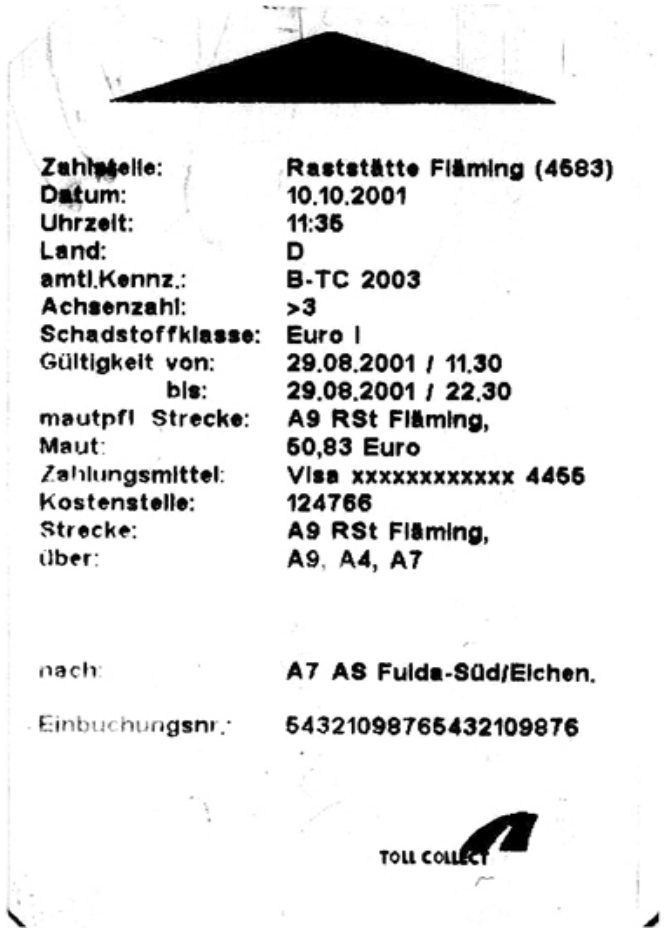
Approx. 22.7 billion vehicle kilometres per year, about 35 per cent of which are accounted for by foreign vehicles

The Toll System at a Glance
Terminals and OBU

Automatic Toll Collection
Charges established by virtual collection points



Manual Log-on at Terminal



Zahlstelle:	Raststätte Fläming (4583)
Datum:	10.10.2001
Uhrzeit:	11:35
Land:	D
amtl.Kennz.:	B-TC 2003
Achsenzahl:	>3
Schadstoffklasse:	Euro I
Gültigkeit von:	29.08.2001 / 11.30
bis:	29.08.2001 / 22.30
mautpfl Strecke:	A9 RSt Fläming,
Maut:	50,83 Euro
Zahlungsmittel:	Visa xxxxxxxxxxxx 4455
Kostenstelle:	124766
Strecke:	A9 RSt Fläming,
über:	A9, A4, A7
nach:	A7 AS Fulda-Süd/Eichen.
Einbuchungsnr.:	54321098765432109876

TOLL COLLECT

- Location of terminal
- Date of entry
- License plate number
- Fee parameters
- Validity
- Route selected
- Amount of charges
- Means of payment
- Log-on number

HGV Tolling System: OBU Figures

Registrations (as at 4 March 2005):

93,000 companies
616,000 vehicles subject to toll

Installed OBUs (as at 6 March 2005):

396,000

HGV Tolling System: Current Results

Log-ons in terms of turnover (in per cent, first week of March):

1.5	18.5	80
Internet	Terminal	OBU

HGV Tolling System: Revenue (Turnover)

January 2005	**€ 209 million**
February 2005	**€ 215 million**
Expected revenue in 2005	€ 3.0 billion

Forecast for 2005
Toll Transfer under A-Model

- monthly toll statement for road section

  broken down in

  - number of vehicles
  - axle categories
  - emission categories

ITEM
9

BAG

Invoicing and Enforcement

A-Model Open Day
Berlin, 17 March 2005

„Enforcement and Invoicing in the HGV Tolling System“

A-Model Open Day
17 March 2005, Berlin

1 Presentation Outline

- Enforcement of tolls
- Fine proceedings and recovery of unpaid tolls
- Verification of toll revenues

General assumptions on toll enforcement

- Basic assumption:
  - Toll revenue is directly linked to enforcement efforts. Insufficient enforcement efforts will cause shortfall in revenue.

General assumptions on toll enforcement

- Assumptions in detail:
  - 100 million one-way trips subject to toll per annum
  - 10 per cent thereof, i.e. 10 million vehicles have to be checked in order to keep the rate of toll dodgers below 5 per cent
    (For comparison: in order to confirm compliance with driving and rest period rules, EU law stipulates checks of no more than 1 per cent of vehicles)
- Solution:
  - Efficient spot checks with adequate fines.

2 Enforcement

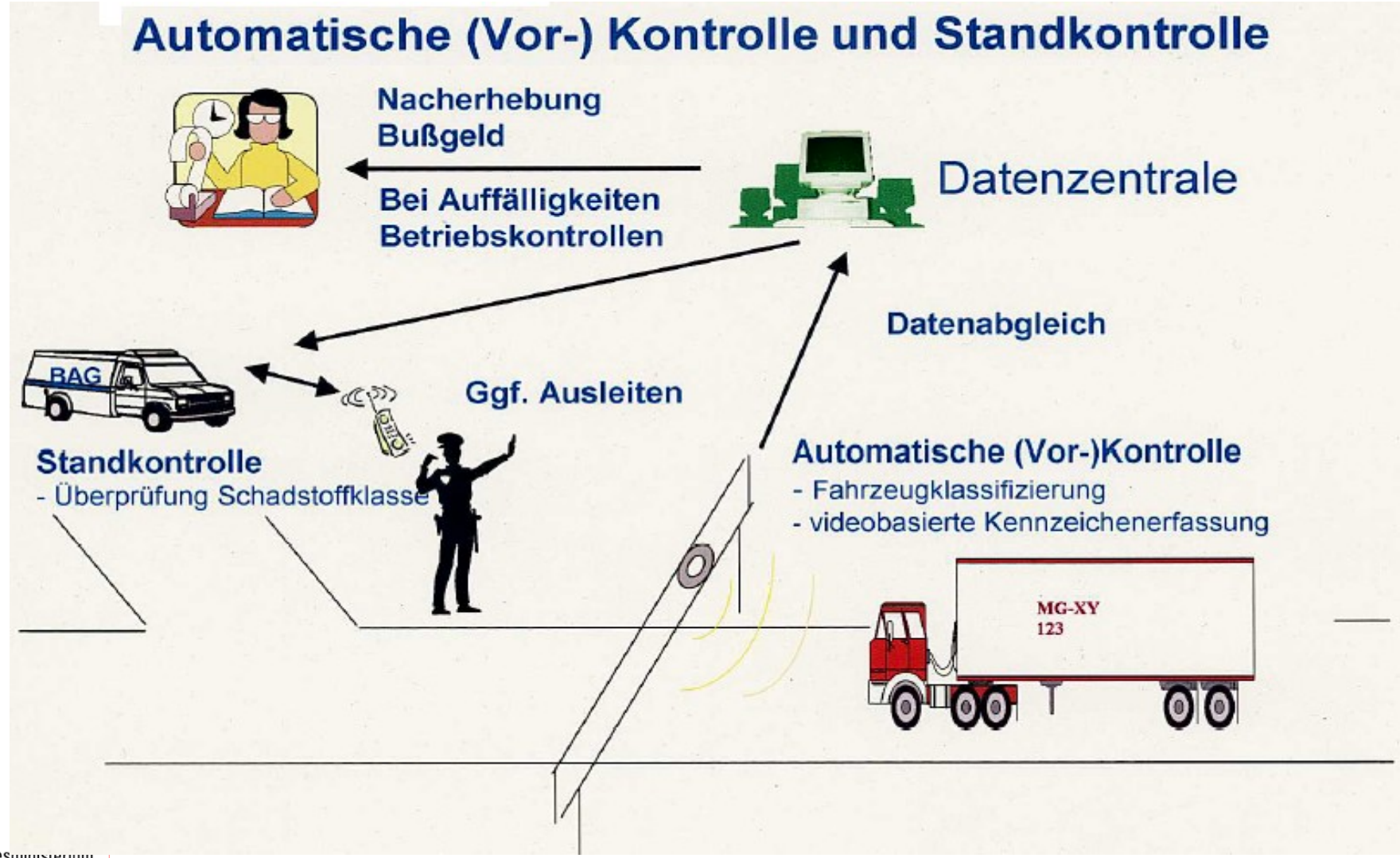
Types of Enforcement:

- automatic checks (300 enforcement gantries)
- stationary checks (BAG checks at parking lots near a gantry)
- mobile checks (approx. 280 BAG vehicles)
- BAG checks on hauliers' premises (companies based in Germany only)

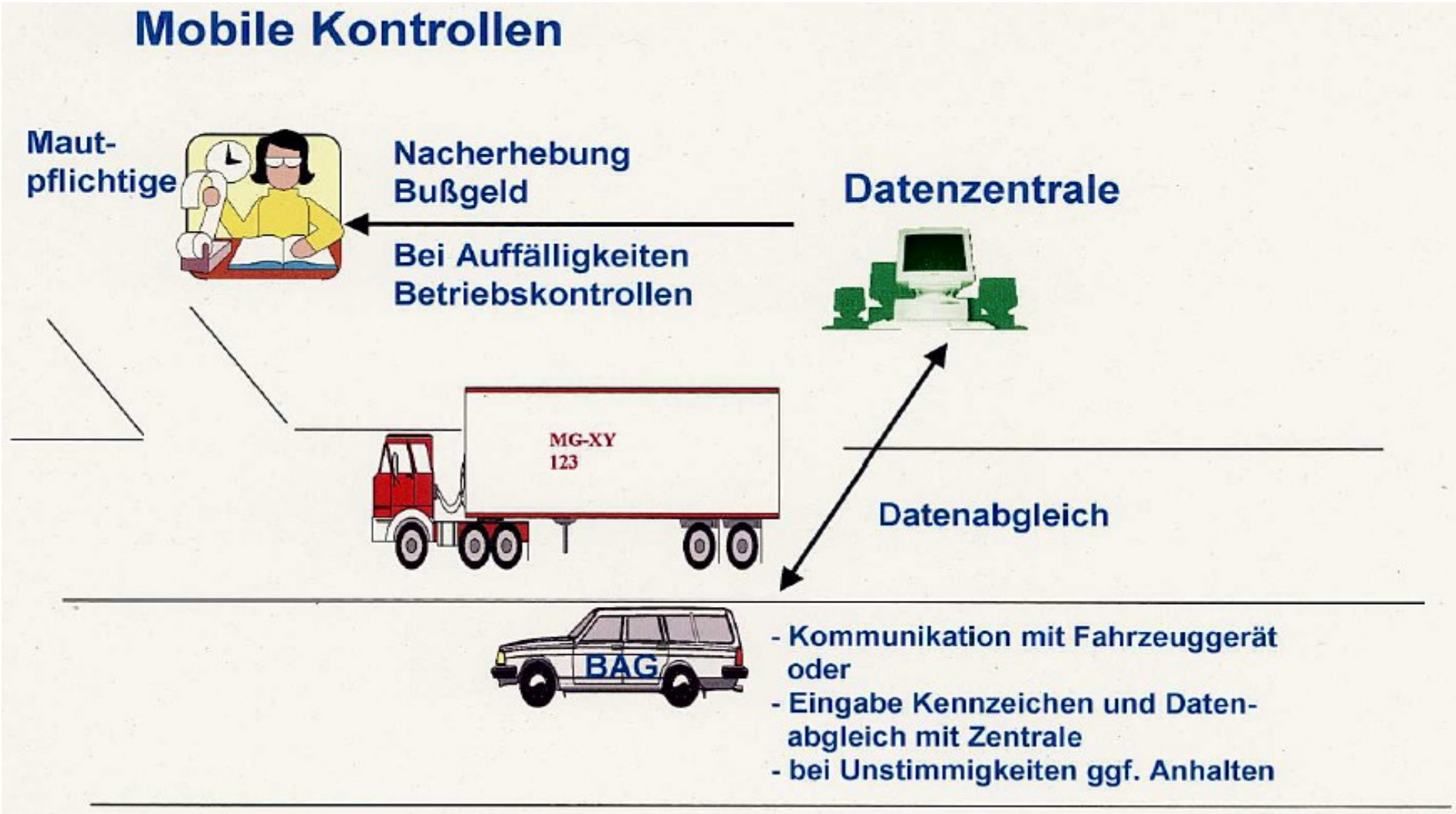
2 Enforcement

2 Enforcement

2 Enforcement



2 Enforcement



2 Enforcement

First enforcement results:

- In January 2005 alone, vehicles checked totalled 1.4 million. Tolls had been paid by 97 per cent of them, while the rate of dodgers was 3 per cent.

- In February 2005, the toll dodger rate fell below 3 per cent.

3 Fine Proceedings and Recovery of Unpaid Tolls

Pursuant to Sec. 10 of the Federal Motorway Toll Act (ABMG), an administrative offence is committed by any person who

1.) fails to pay toll charges or to pay them in due time;
2.) fails to have toll payment receipt ready to hand; or
3.) instructs drivers not to carry a receipt or permits them to do so

3 Fine Proceedings and Recovery of Unpaid Tolls

For the fine proceedings, there is a differentiation between

- the driver and
- the owner of the vehicle or the person deciding on its use

as well as between

- deliberate and
- negligent acts.

3 Fine Proceedings and Recovery of Unpaid Tolls

Example: Pursuant to Sec. 10 of the Federal Motorway Toll Act (ABMG), an administrative offence is committed by any person who fails to pay toll charges or fails to pay them in due time.

The fines are:

Verstoß durch	Fahrer	Unternehmer
Fahrlässig	75 €	150 €
Vorsätzlich	150 €	300 €

3 Fine Proceedings and Recovery of Unpaid Tolls

Pursuant to Sec. 10 ABMG , fines of up to € 20,000 can be imposed for serious offences and repeat offenders.

In addition, unpaid tolls are recovered. If it is not possible to determine the actual amount of kilometres driven on tolled motorway sections, a lump sum for 500 km is recovered (Sec. 8 (2) ABMG).

4 Verification of Toll Revenue

Objective: Full and accurate collection of toll revenues

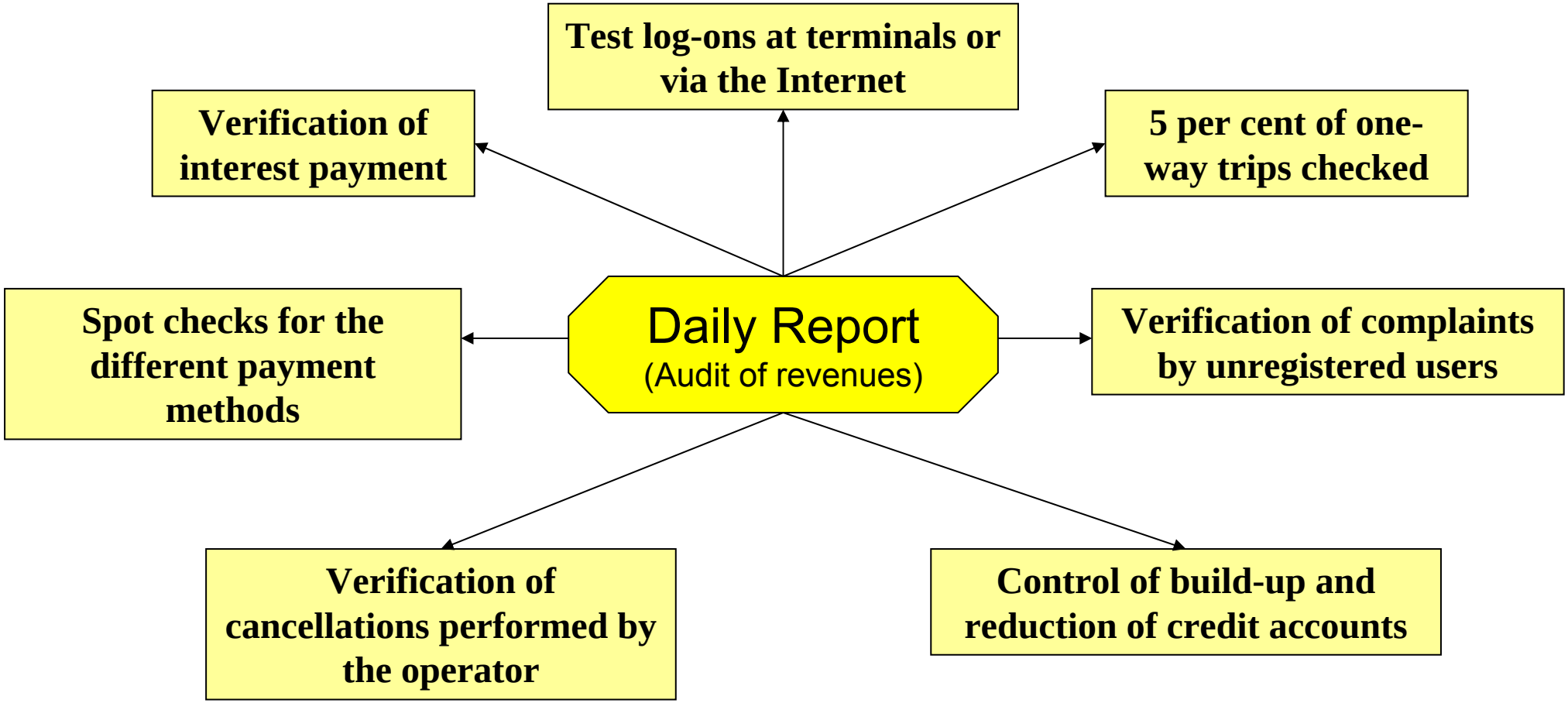
Types of log-on:

- Automatic log-on
- Log-on at terminal
- Log-on via the Internet
- Toll by call

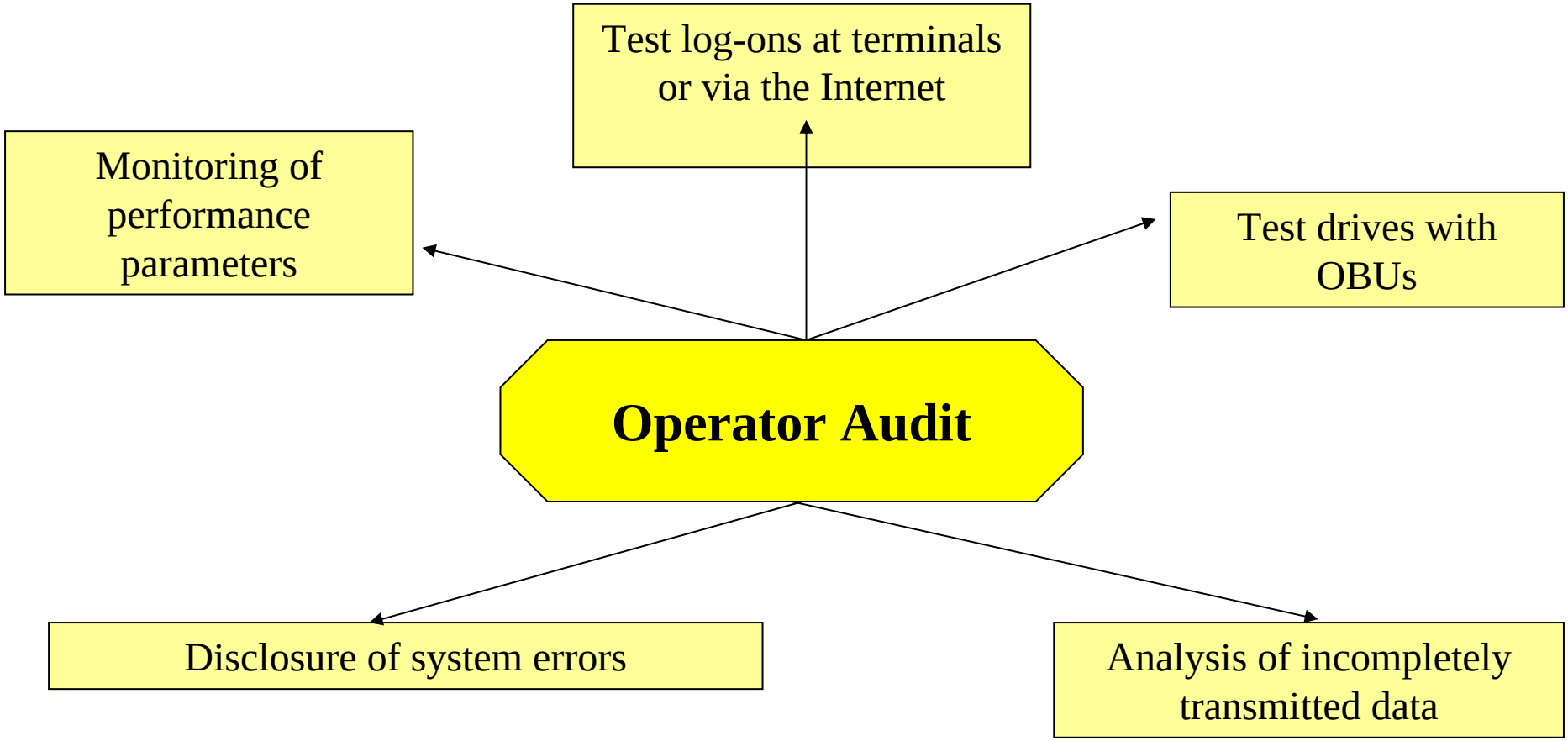
The tolls are transferred to the Federal Government once a day (daily report) according to the contract with the operator.

Verification of daily report : Audit of revenues and operator

4 Control of Toll Revenues



4 Verification of Toll Revenue



ITEM
10

Discussion

A-Model Open Day
Berlin, 17 March 2005