Easy ticketing for European Public Transport passengers

The german approach

Easier and more attractive public transport - and passengers join regions

8th Annual General Meeting and Conference of the European Passengers' Federation
March 20th 2010, Malmö, Sweden

J.(Sjef) A.L. Janssen
VDV-Kernapplikations GmbH & CO. KG

Introduction

VDV, VDV-Kernapplikations GmbH and VDV core application

What does the VDV represent?	What does the VDV core application represent?
■ Association of Germany's Public transport companies and further transport companies and transport authorities	■ The VDV core application (KA) is a standard which describes the data exchange between the components of an electronic fare management system (EFM)
■ VDV was founded in 1895. 540 ordinary and 53 extraordinary members	■ The KA rules the organisational and contractual cooperation of different parties in an interoperable EFM
■ VDV-Kernapplikations GmbH was founded 2004 as a daughter-company for the development and introduction of a standardised chip card scheme in Germany	■ The KA defines standardised customer interfaces in order to simplify the handling for the customer.

28 million Passengers/day

Conclusions

- There is a need for new and better services in public transport

- Introduction of eTicketing makes sense

- You need a standard for eTicketing

- It isn't necessary to develop a new own standard; there are standards available (which are involved in the development of European interoperability)

OstalbMobil ... kommt gut an!

Kontiki Aalen 2009

ov-chipkaart

kaartinformatie www.ov-chip.nl of 0900 0980 / ov reisinformatie 0900 9292

Marieke van der Hoef

geboortedatum

17.05.78

geldig vanaf

10.11.04

de algemene voorwaarden ov-chipkaart zijn van toepassing

1234567890021234

connexxion

BOB

DAS KONTO

MoBIB

BUSSIKORTTI

KAUSIKORTTI

ck.et

ches Ticketing

VB

Berlin-Brand

Feldversuch

FAHRSMART

BS-1995

ov-chipkaart

A 89000000000123456789

DEBIT 97

KOLIBRICARD

Schneller ans Ziel!

NVH

Baden-Württemberg

3-LÖWEN-TAKT

CITTA DI VENEZIA

tournica
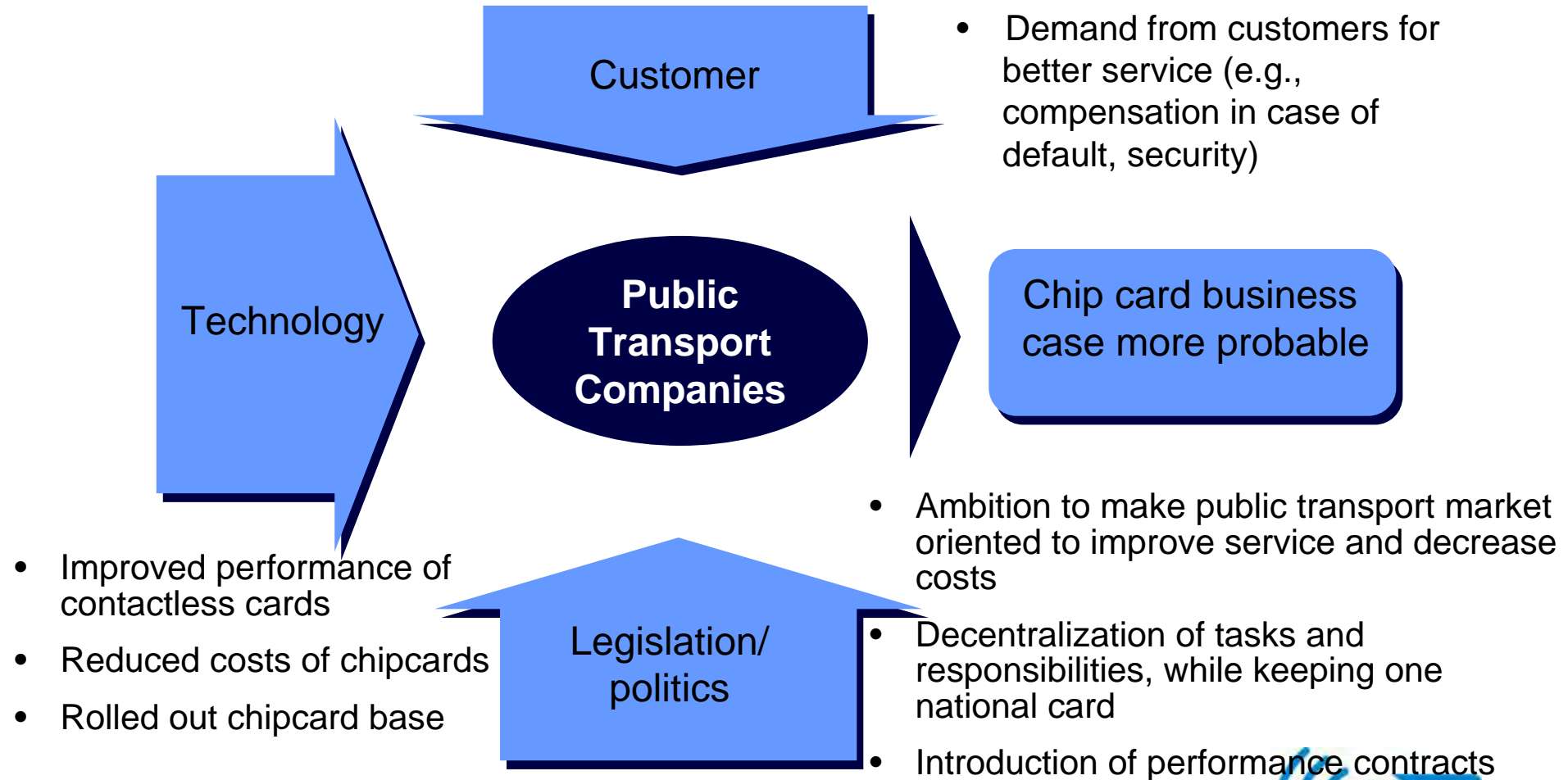
tripper

ket2000

MER KARTE

SUKARTE

Gültig bei

inter

Hfl 2,50

PATHFINDER

Shuttle Services

GOLD CARD

kortet

Tageskarte Erw.

von 5000 nach 5000

über 0000 Pf. 03

Gültig am 30.03.06

ZURÜCK WEITER

KAUSI

RIODK

De groene stree

The need for eTicketing

Customer

Technology

Public Transport Companies

Legislation/ politics

Chip card business case more probable

- Demand from customers for better service (e.g., compensation in case of default, security)

- Improved performance of contactless cards

- Reduced costs of chipcards

- Rolled out chipcard base

- Ambition to make public transport market oriented to improve service and decrease costs

- Decentralization of tasks and responsibilities, while keeping one national card

- Introduction of performance contracts

V D V – K E R N A P P L I K A T I O N S G m b H & C o. K G

What does the customer wants?

Source: Resenärs Forum at the LINK-forum March 2009

Car drivers have an easy choice

- same road signs
- pays petrol, oil and repair
- with a credit card one month later

Easy - wherever you go

The smart PT-user has great problems

- Different price systems
- Different ticket systems
- Different ways of buying tickets
- Pay cash – or must you not pay cash?
- -> you always risk to have a wrong ticket!
- " we want to pay for our trips, but it must be easy!"

Smart cards are developed all over

- But most smart cards are much delayed or (much) more expensive than expected
- Most regions and cities only see to travel within their own borders
- Too much effort is concentrated on "branding" instead of development useful for customer
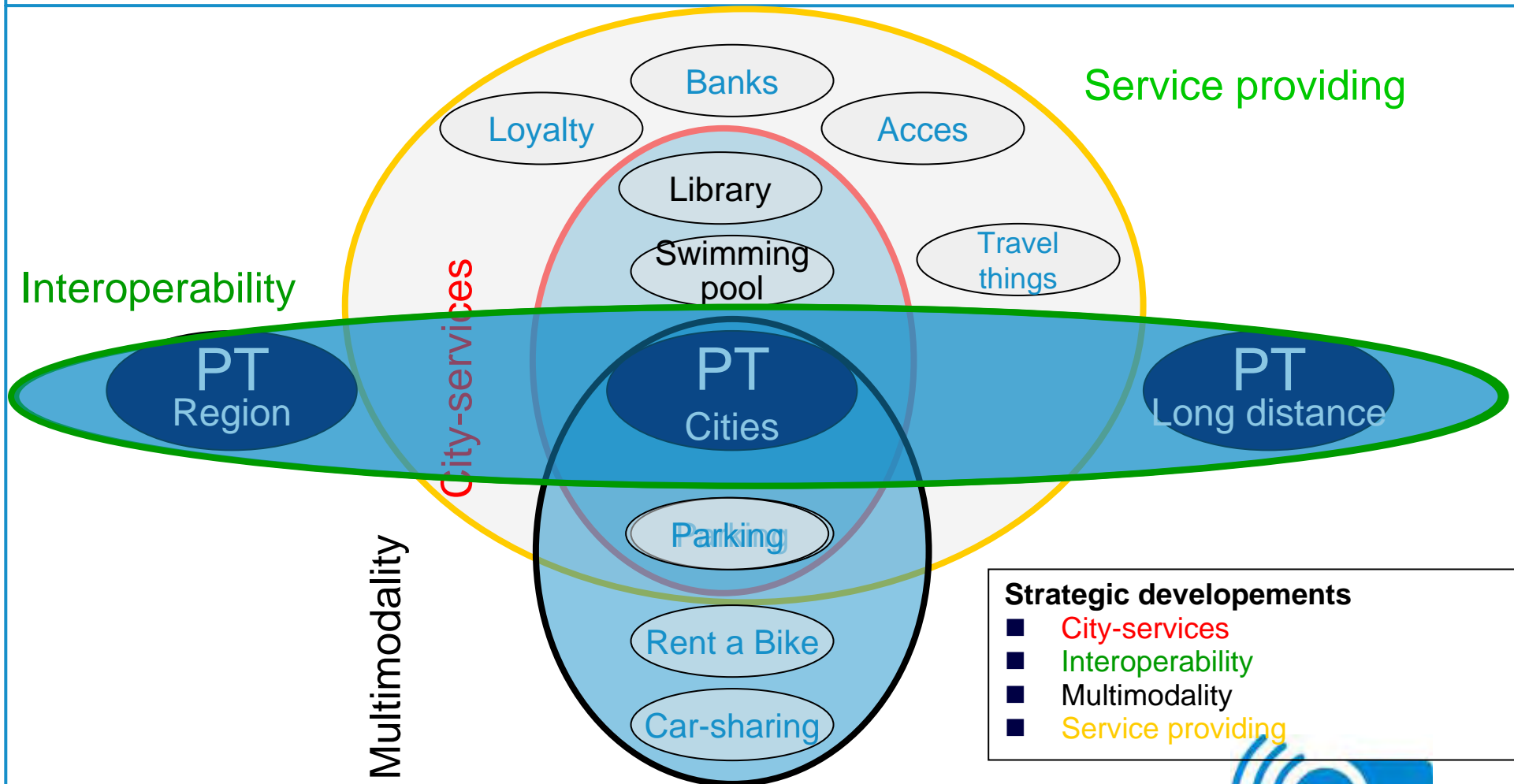- Smart cards must be compatible!

Compatible smart cards can make public transport easy

- All companies can have their own prices
- The computer can find the price easily
- The travelling person does not have to find the price first
- Basic quality: to use your own monthly card in other cities and regions
- Different ticket vending machines need a standard protocol/customer interface
- Without a EU directive this will never happen

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Source: Kurt Hultgren, Resenärs Forum

Introduction of eTicketsystems

strategic developments in Europe

Banks

Loyalty

Acces

Library

Swimming pool

Travel things

Service providing

Interoperability

City-services

PT Region

PT Cities

PT Long distance

Multimodality

Parking

Rent a Bike

Car-sharing

Strategic developements
- City-services
- Interoperability
- Multimodality
- Service providing

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Source: VDV-KA-KG

The German Approach

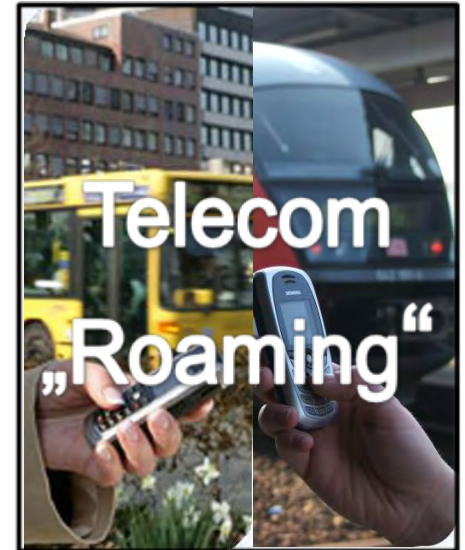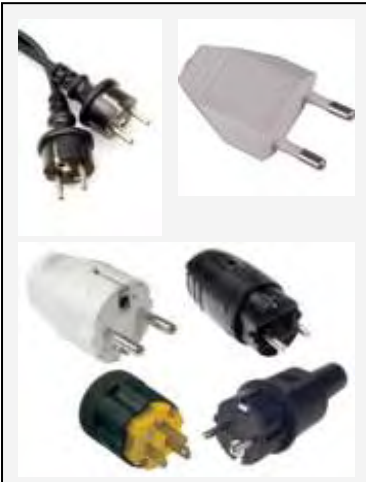*EFM Projects in PT in Germany 1992-2002*

Projects complete differs:

- Own cards, issued by third parties

- Contact, contactless, dual interface

- General purse, public transport purse

- Prepaid, Postpaid
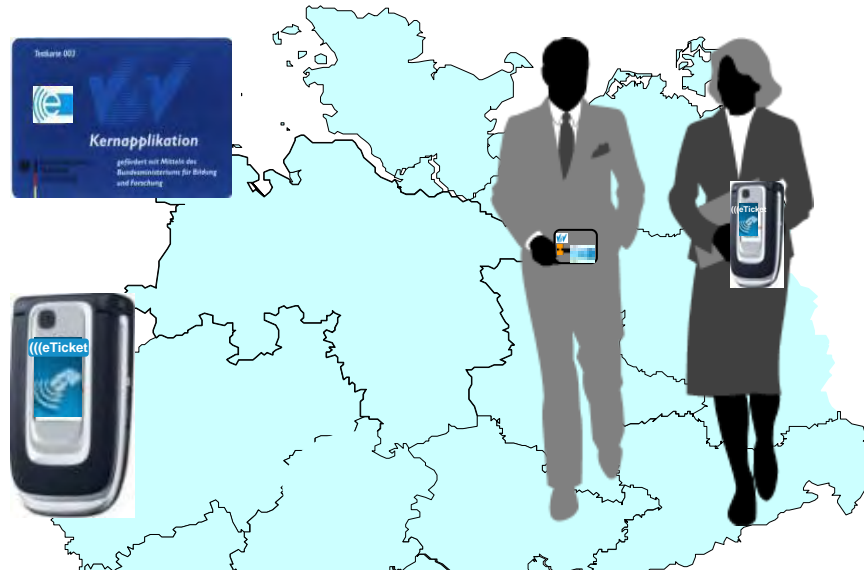
- Check-in only, CiCo, BiBo

Need for coordination

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Source: VDV-KA-KG

Interoperability

Pardon?

The German Approach

Focus on Interoperability

- Customers are able to use all EFM-systems continuously with only one user medium
- Three IFM-variants:
  - cashless electronic payment
  - Electronic ticket (with electronic entrance control)
  - automated fare collection (CiCO, BiBo)

- (((eTicket Deutschland as common roof
- Standardised customer interface in every variant
- The eTicket standard defines for each variant
  - Common procedures and handlings
  - Common logo and pictograms

Einfach grenzenlos und grenzenlos einfach!

Das neue (((eTicket für ganz Deutschland.

eBezahlen   eTicket   Check-in / Check-out   Automatische Ticketerfassung

www.vdv-kernapplikation.de
www.eticket-deutschland.de

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Role model of the VDV core application
Based upon EN/ISO 24014-1

Kunde/Fahrgast
user/customer

Kundenvertragspartner
Product retailer

Produkteigentümer
Product owner

Dienstleister
service provider

Vertrieb
Sales

Clearing
Clearing

Kontrolle
Inspection

Kundenservice
Service

Erfassung Daten
Usage data collection

Applikationsherausgeber
Application owner

| **Zertifizierung** *Certification* | **Registrar** *Registrar* | **Sicherheitsmanagement** *Security management* | **Sperrlisten** *Blocking lists* |

The German Approach

Introduction of schemes, based on the VDV-CA
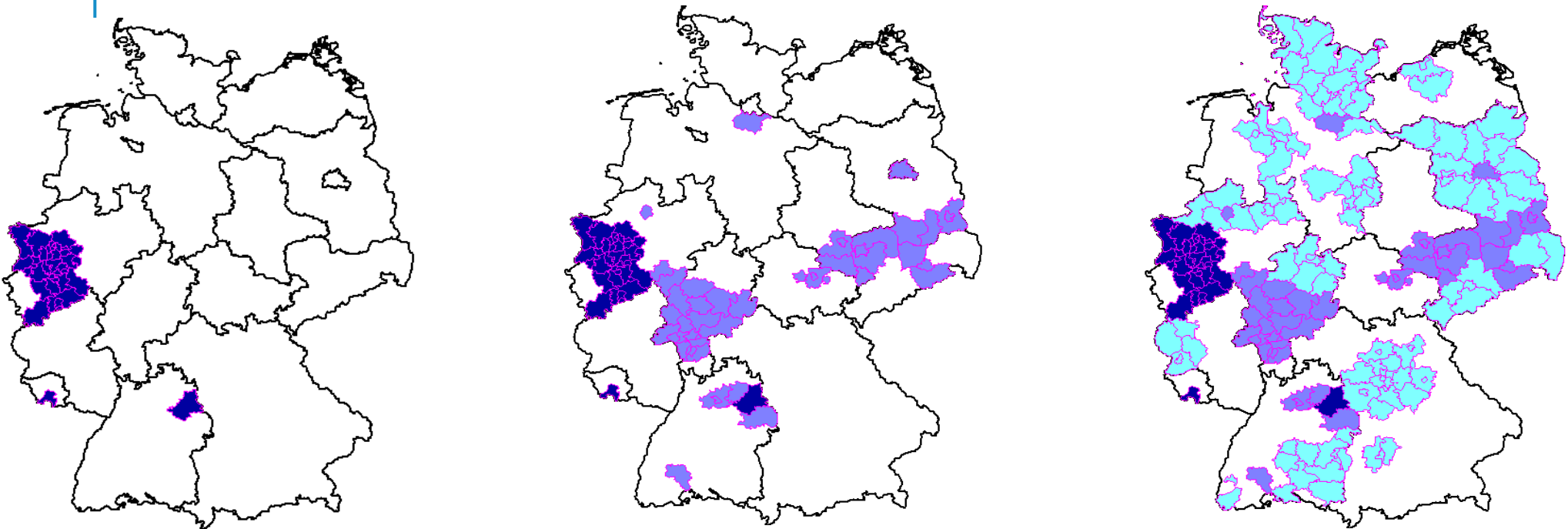
2007
2 million cards

2011
5 million cards

2015
>10 million cards

Situation February 2010, based on survey August 2008 + actualisation

Benefits of eTicketing/EFM

User	Authority	Operator
Seamless Journey	**Simplify commercial agreements**	**Reduced Maintenance costs**
No knowledge tariffs	**Remove barrier to implementation**	**Competitive procurements Reduced costs**
Easy Access	**Reliable System which works trustfully**	
	Easy and Fair Settlement	
	Increase Boarding capacity	
	Reliable data for Transport planning	
Customer adapted Products	**Easy to extend to larger transport areas and new services**	
	Enlarged Tariff Product Range	

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Benefits of a standard for eTicket systems

For the passenger

- Convenience: one medium, interoperability

- Easiness: same user interface everywhere

- A secure system; blocking lists when card is lost or stolen

- Transparency about data and data protection

For the public transport authorities and public transport operators

- Cost-saving components and distribution forms, e.g. by using bank cards

- New marketing platforms for more efficient market cultivation and customer-oriented offers

- An improved image of the transport industry

- Sustainability of investments

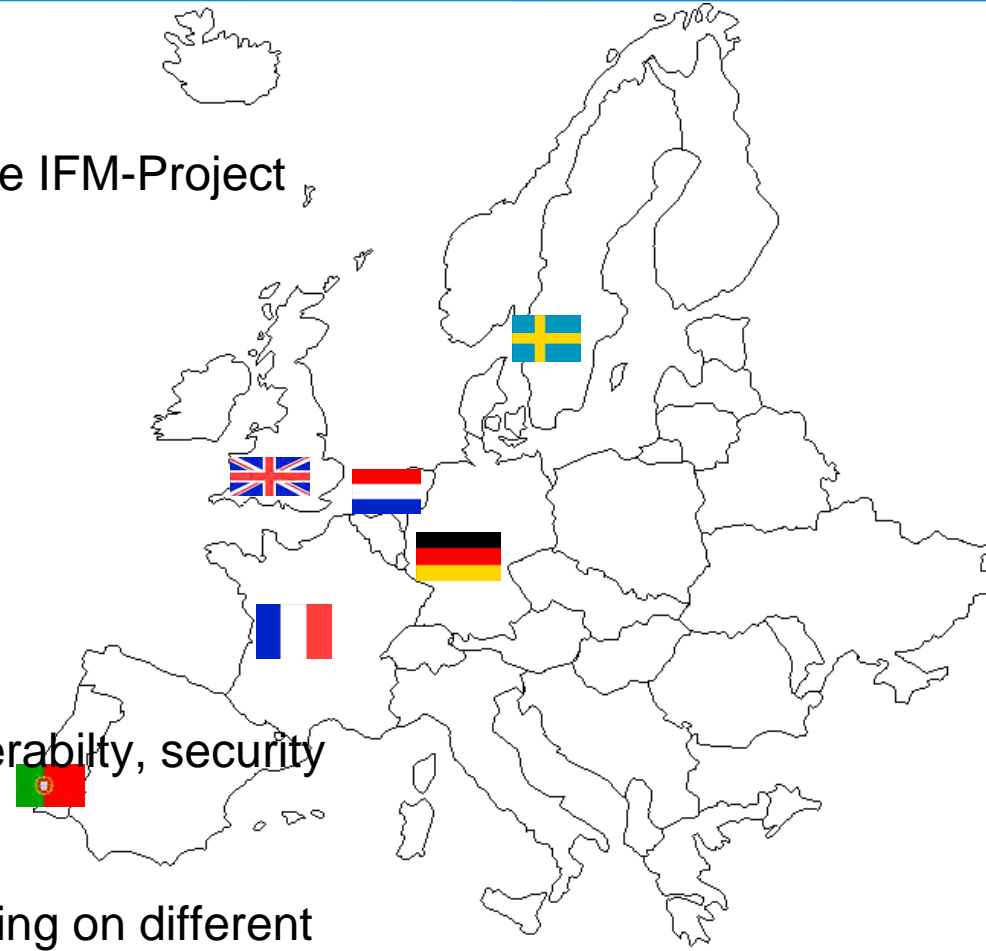- Certification guarantees functionality and will allow "plug & play".

The VDV Core Application does not represent

- Implementation of a standardised tariff

- Implementation of standardised sales and distribution

- An obligation to implement all of the three EFM-variants

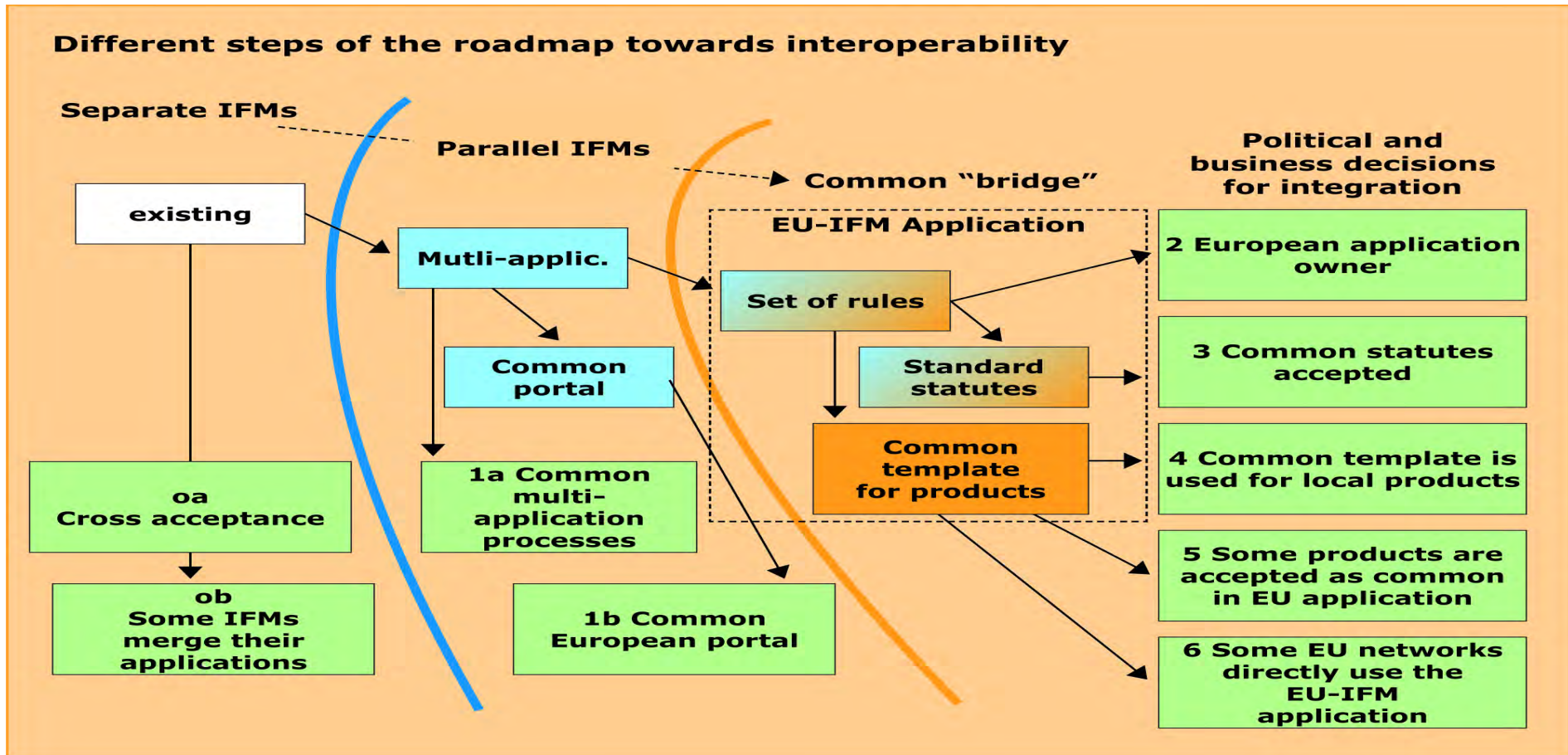- The CA compels no one to implement EFM!

And elsewhere in Europe..........

• eTicket in nearly every European country

• migration to European interoperabilty: The IFM-Project

• The basis are the existing schemes:
  • **Calypso**
  • **ITSO**
  • Lisbon/Portugal
  • Sweden (RFK)
  • TLS Netherlands (SDOA)
  • **VDV-Core Application**

• large differences in questions on interoperabilty, security and technology.

• Migration steps allow interoperable ticketing on different levels of convenience for the EU citizens.

IFM in Europe
The Roadmap towards interoperability, IFM-1 and IFM-2

Different steps of the roadmap towards interoperability

Separate IFMs

Parallel IFMs

Common "bridge"

Political and business decisions for integration

EU-IFM Application

existing

Mutli-applic.

Set of rules

2 European application owner

oa
Cross acceptance

Common portal

Standard statutes

3 Common statutes accepted

Common template for products

4 Common template is used for local products

1a Common multi-application processes

ob
Some IFMs merge their applications

1b Common European portal

5 Some products are accepted as common in EU application

6 Some EU networks directly use the EU-IFM application

Source: IFM-Project

Conclusions

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VDV-Kernapplikations GmbH & Co. KG

We help you to introduce the (((eTicket

VDV-Kernapplikations GmbH & Co. KG, Kamekestraße 37 -39 D – 50672 Köln
Phone: +49 221 57979 160,   Fax:+49 221 57979 8160,   E-Mail: janssen@vdv.de