

Riga's e-Ticketing System



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Where is Riga – Latvia?



Latvia: 2.3 millions inhabitants
part of Soviet Union till 1991
member of the EU since 2004
3 medals in the Olympics in Beijing!
Capital: Riga, 800 000 inhabitants

Riga Transport System

Operator: Rīgas Satiksme, 100% municipal company, 150 M€ revenue per year, operating public transport and city parkings

Fleet:

- 460 buses – 56 routes
- 322 trolley buses – 22 routes
- 252 Tramways – 11 lines



Ridership:

- Over 300 millions passengers per year
- 300 000 round trips per day

Previous fare collection system:

- Paper monthly pass for pensioners, students...
- Paper tickets sold onboard by Conductors or Drivers, or in kiosk

Riga Transport System – the Challenge

Lack of personnel - Conductors

No transport usage statistics available

Lot of cash handling

Fraud and theft (who knows?)

The only solution: implement a modern ticketing system



Riga Ticketing System – the Other Challenge

What is a modern ticketing system?

Obviously a system that:

1. Offers convenient fare payment services
2. Improves availability of services
3. Helps enhance the revenue of operation
4. Helps reduce expenses of operation

You probably know a lot about that, but ...



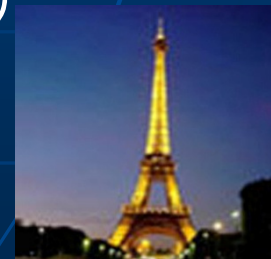
Riga Ticketing System – the Other Challenge

... four subsequent questions:

1. What does it look like?
2. Where do we find modern ticketing system?
3. How do we implement it?
4. What are the main issues?

- > start writing requirements specifications
- > tour of the state-of-the-art technology
- > launch a tender
- > get responses (Ticketing systems are so expensive!)

Decision: ...



Riga Ticketing System – the Decision

Doing it by ourselves:

1. Very high investment cost
2. Disturbance of other Riga Transport teams
3. Contractual relationship with various companies (ticketing system provider, installer, cards and tickets providers..)

...a lot of headaches

Then 2 major decisions:

Transfer the risk through a BOT agreement

Go for a full contactless solution

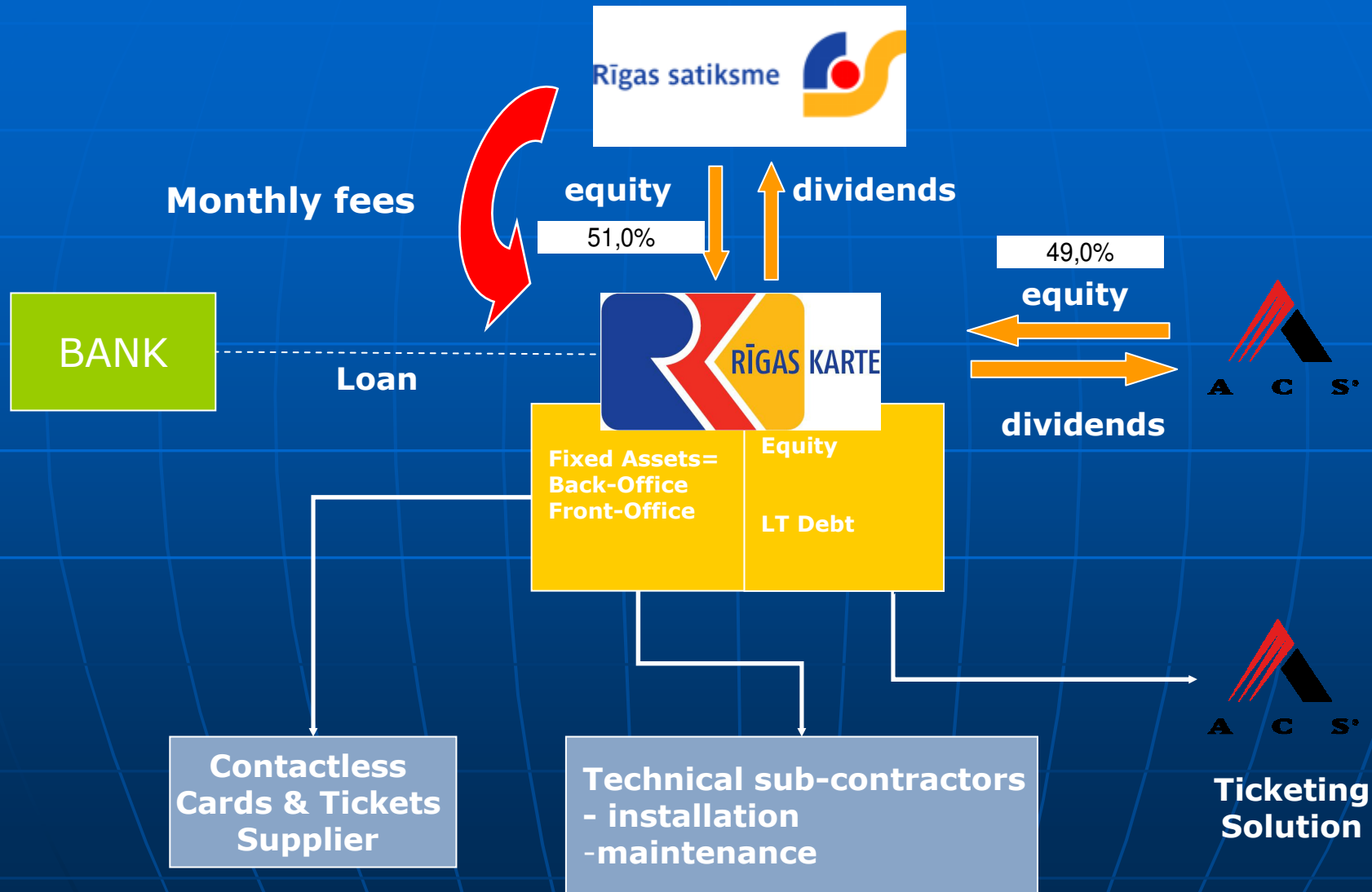


About the BOT agreement



- Joint Venture between Rigas Satiksme and Affiliated Computer Services
- Objective: Build, Operate and Transfer the bus, tram and trolley's ticketing system of Riga city:
 1. Build: acquire and implement the system
 2. Operate: maintain and operate during 12 years the whole system, distribute tickets, manage a call center and communicate to customers
 3. Transfer: at the end of the BOT agreement, the system belongs to Rigas Satiksme

Business Model Summary



About the ticketing system

Basic features:

Open technology: more a question of acceptance by the system than the system technology itself: open to various types of cards, tickets, NFC, contactless bank cards...

Multimodal: open to various transport means: buses, trolleybuses, trams, regional trains, taxis, park&ride systems etc...

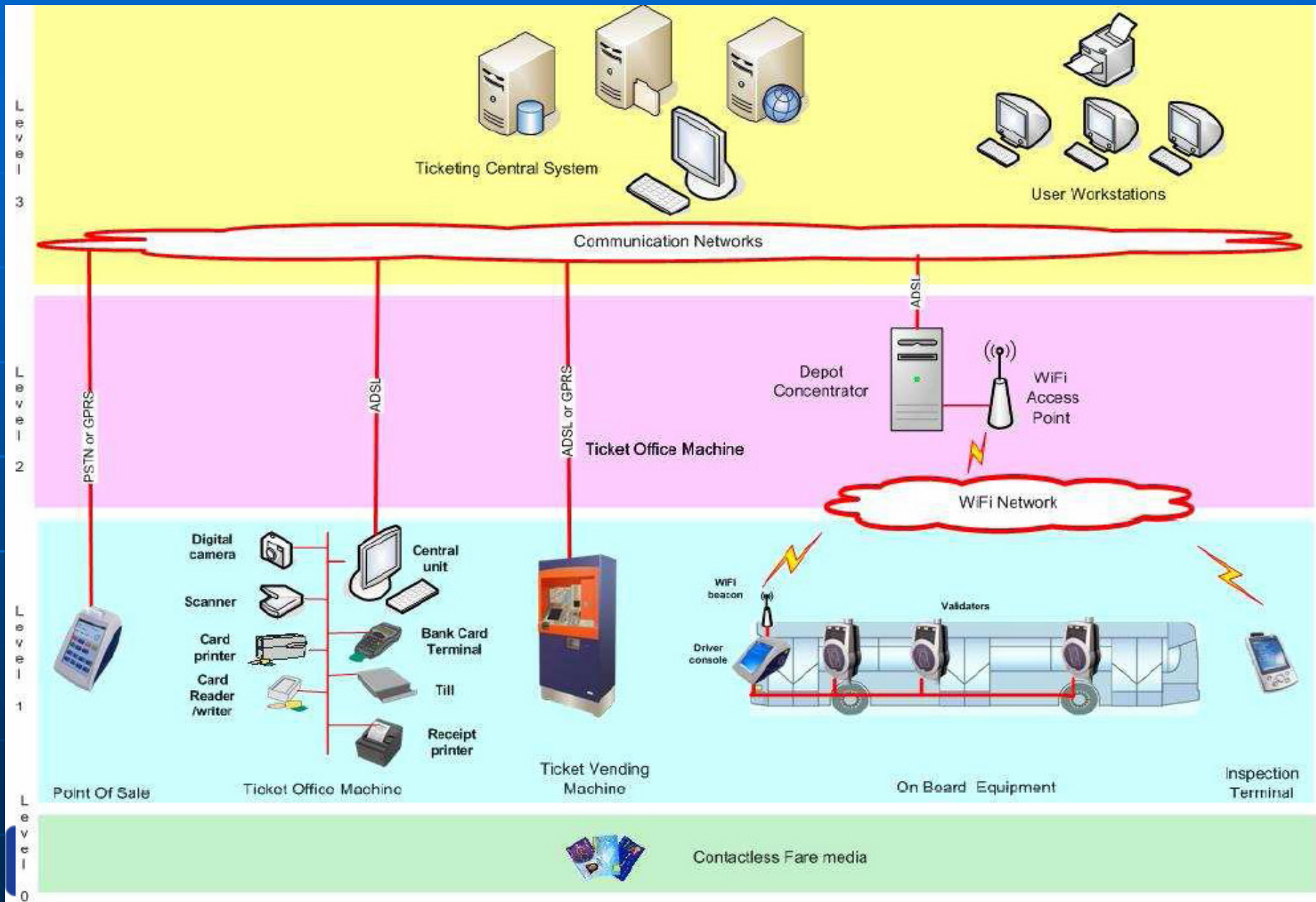
Multi-operators: collecting and processing data from several transport operators whilst ensuring security and confidentiality between the participating operators

Interoperable

Open to fare products issued by other transport networks



Ticketing System Layout



Smartcard choice criteria

1st idea: the cheapest

...but think about:

- 1. Functionality (multi fare products, other services)**
- 2. Data storage capacity**
- 3. Security**

-> combination of Calypso cards and Mifare UL tickets

Anyway, System accepting any type of standardized cards

Contactless tickets: use the in-built security and grant limited value and validity



The choice on the logotype

The main criteria:

- observable design;
- accessible.

Riga smartcard - **E-talons...**

e – reference that this smartcard deals with electronic system

4 arrows – easy to develop the system



Main issues

- Technical (installation, configuration)

But the most sensitive:

- Smart cards personalization process (collecting data)
- Public relation:
 - Advertisement plan
 - Ensure we touch all people (e.g. pensioners)
- Internal acceptance and coordination



Electronic ticketing system Integration opportunities

Integration with

- Park&Ride, parking places
- Railways
- Regional transport operators

Potential partners:

- retail networks
- entertainment centers
- State and municipality companies

Functional integration with other card systems:

- ID-cards – identification
- Bank cards
- Social / Insurance cards
- Loyalty cards (discounts etc.)
- Park&Ride (payment and access card systems in parking places)
- Mobile phones (NFC)
- Other cards



Immediate benefits to Rigas Satiksme

- **Remove 600 conductors**
- **Reduce the sales workforce by 100 headcounts**
- **Simplify the fares**
- **Automating of the pass reload**
- **Introduce new fares (multitrip tickets)**
- **Knowledge of riders' behavior**
- **Improved image of public transports**



Conclusion

Any question?

Thank you, Paldies,
Спасибо, Merci

