

Electronic Toll Collection in Poland – achievements and perspectives

EUROPEAN TRANSPORT TRENDS: TOLL SYSTEMS IN EUROPE

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Agenda

- **viaTOLL - achievements**

- Facts and numbers

- **viaTOLL – perspectives**

- Unification of tolling systems in Poland
- Multi Lane Free Flow
- EETS and interoperability
- National Road Management System



viaTOLL - achievements



ETC in Poland - three years of successful operation

- Currently collecting tolls (both manually and electronically) on over **2,600 km** of national roads, expressways, and highways run by Polish road operator GGDKiA (extention envisaged)
- Put in operation in July 2011 after **set up in a record time of eight month**
- Generated revenue since then: **EUR 718 million**
- More than **760,000 vehicles** (over 3.5 tons) currently registered
- Approximately **1.5 million viaBOXes** handed out
- **50 million operations** registered each month
- System implementation **costs recouped in 18 months**



viaTOLL - system implementation

- The **toll rate** depending on vehicle Euro class, vehicle category (MPW) and road category
- KTS responsibility for manual tolling for light vehicles and motorbikes (at state governed motorway sections) also
- **217 distribution points** in Poland
- Post-pay (21,2%) Pre-pay (68,8%) accounts
- Mandatory Onboard Unit
- Technology **DSRC** (selected by Contractor)
- viaAUTO (C-Tag) service for passenger vehicles

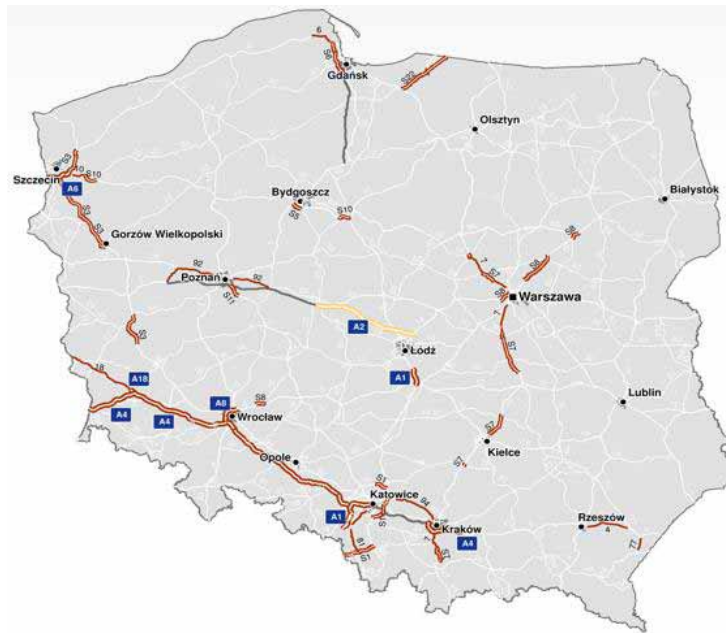


viaTOLL

HGV ETC Tolled Road Network – First Three Years of Development

Initial (July 2011) – 1543 km

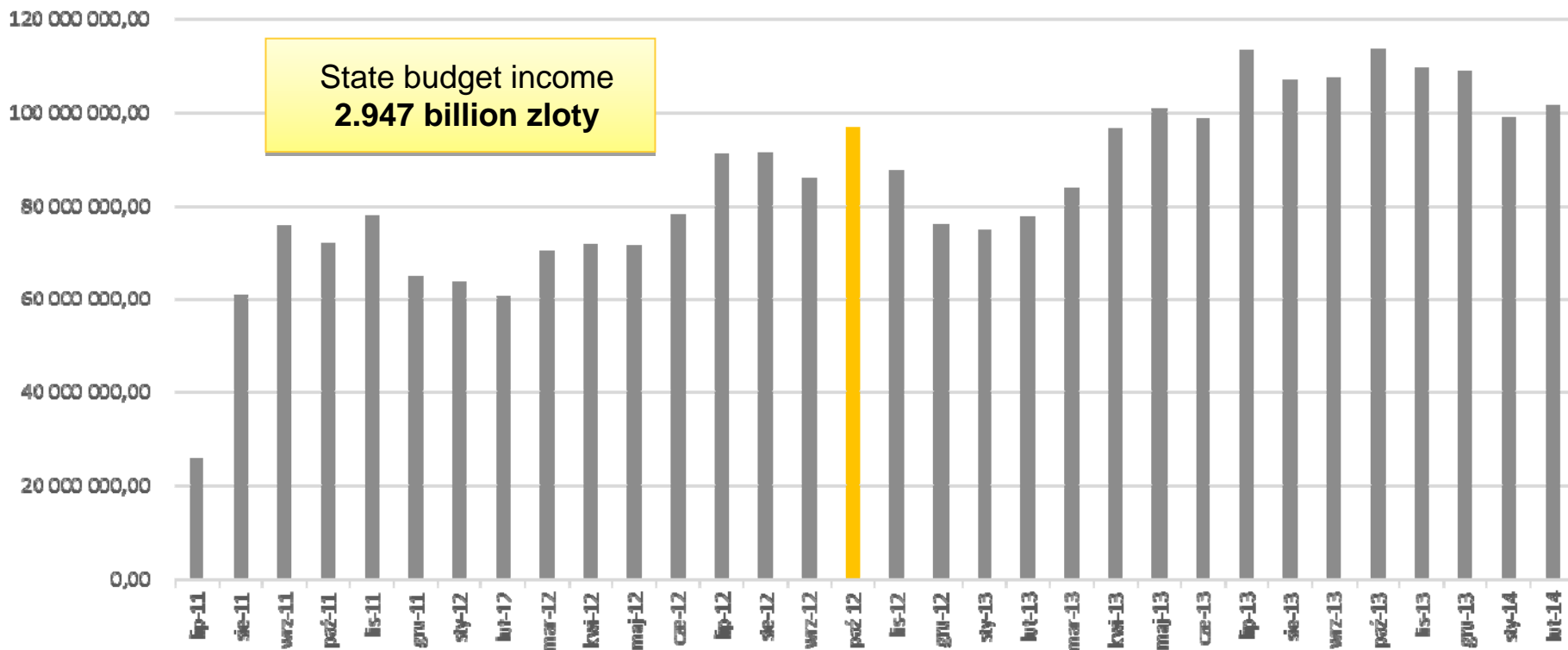
Current (Jan. 2014) – 2653 km



Efficiency of the tolling system –
over **99,95%**



viaTOLL in numbers



Daily income - approx 3,5 million zloty

50 mln transactions per month

Over 760 000 registered vehicles, 428 000 users and more than 1 550 000 OBU delivered

Over 7100 C-Tags sold and 1200 handed out to the emergency services units

viaTOLL - perspectives



Unification of tolling systems in Poland

- 4 different tolling system operators in Poland:
 - **viaTOLL** system (ETC + MTC)
 - 3 manual tolling introduced by concessionaires (motorways: A1, A2 and A4 sections)
- The issue is to **unify motorway tolling** under one system (different rates, categorization, accounting, taxes) – to assure internal interoperability
- **EETS** requirements



Multi Lane Free Flow

According to the report of consulting company - expertising in economy and transport:

- estimated overall costs of manual tolling system in Poland - **15 billion zloty** between 2016 and 2025
- time spent each year in Poland at tolling plazas - **8 million hours**
- estimated amount of **carbon dioxide** which is emitted unnecessarily by vehicles when jammed at toll plazas – **11 500 tonnes**



Multi Lane Free Flow

- There is a **political will** to implement Multi Lane Free Flow tolling system for light vehicles by 2016
- MLFF can be introduced **at least 1 year earlier** than manual tolling (as planned)
- From technical point of view **Kapsch is ready** for this operation



MLFF – characteristics

- ✓ No barriers
- ✓ Passing the tolling points at the normal highway speed
- ✓ Significant savings in infrastructure investments
- ✓ No jams caused by tolling barriers
- ✓ Road safety improvement



- ✓ Much faster introduction of LV tolling
- ✓ Enabling the unification of all tolling systems in Poland
- ✓ Usage of transactional data for traffic management, control authorities etc.

EETS (European Electronic Toll Service) – Main Characteristics

USER'S POINT OF VIEW



- „free flow“
- „single continuous service“
- „single OBU“
- „single contract“

PROVIDER'S POINT OF VIEW

- Technical interoperability
- Procedural interoperability
- Service level agreements
- Data privacy and security



ETC and EETS in Poland - what has been done

EETS-compatibility of the Polish ETC system

- Definition of EETS interfaces
- Definition and Application of EETS architecture
- Implementation of new Transaction
- Implementation of Backoffice Interface



ETC and EETS in Poland – what has been done

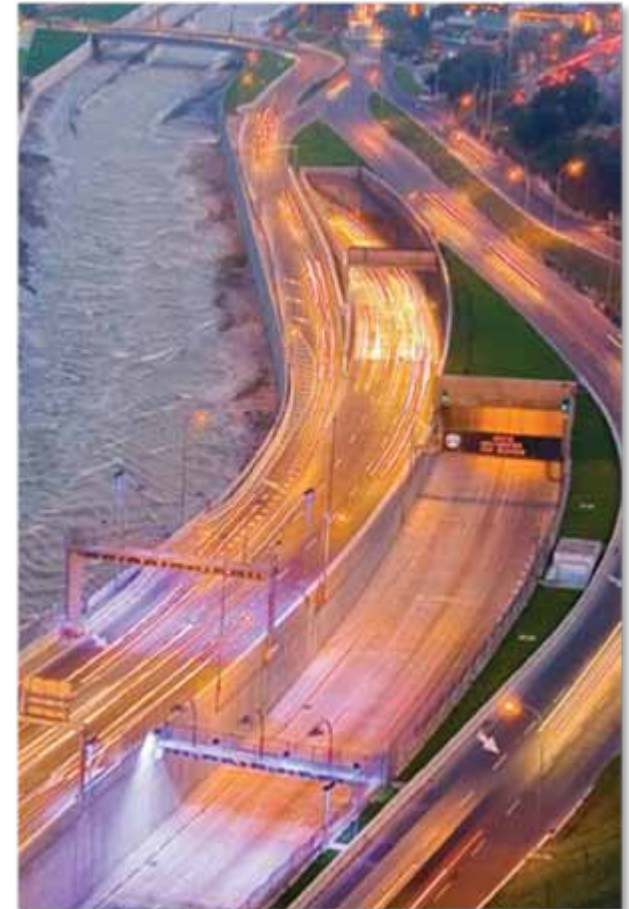
EETS-compatibility of the Polish ETC system

- Upgraded Operational System
- Upgraded Commercial System
- Operations
- Security Settings
- Acceptance Testing



EETS and interoperability

- May 2013: **Kapsch completed first successful trial of EETS**
- Proofing the technical feasibility of EETS in the real-time environment of the Polish ETC system **viaTOLL**
- **First time that all EETS standards** implemented seamlessly in a single system
- Since **May 2013 viaTOLL ready** for European interoperability



National ITS

- Ordering party: General Directorate for National Roads and Motorways (GDDKiA)
- Overall objectives of NITS :
 - raising the level of road traffic safety,
 - time loss reduction,
 - optimization of road maintenance management,
 - increase in the travelling comfort.
- NITS will cover the entire national road system managed by the GDDKIA – 19 000 km
- viaTOLL data and infrastructure to be used as the backbone of NITS



Summary

- **viaTOLL - achievements**
 - ETC – fully successful project for Polish government
- **viaTOLL – perspectives**
 - Unification of tolling systems in Poland – viaTOLL as the possible reference system
 - Multi Lane Free Flow – technical ability of viaTOLL
 - EETS and interoperability – certified ability of viaTOLL
 - National Road Management System – viaTOLL as the infrastructural basis



Thank you

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