



# Integrated, cross border smart (card) ticketing

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# Problem and solution

In 2011, Siim Kallas, European Commission responsible for Transport, said "I cannot yet plan or book my journey through Europe - switching from air to rail or sea, to urban or road transport - in one single go and online".

### With the introduction of:

- account-based travelling and
- the cooperation within the European Travellers Club, (currently) 6 European e-ticketing Schemes,



want to achieve interoperability across Europe and solve this problem.



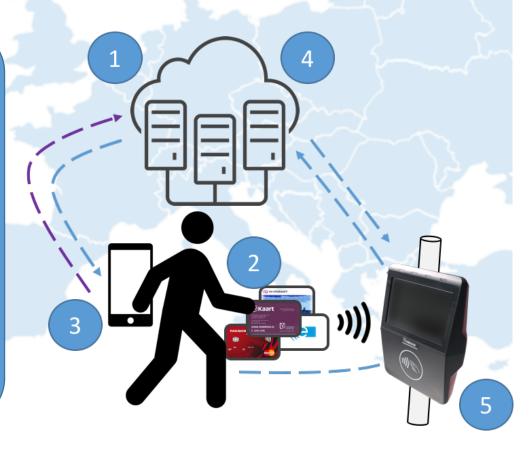
# Account-Based Travelling

### Principles of interoperable Account-Based Travelling (ABT):

- more service towards the customer from card centric to customer centric
- e-ticketing schemes must trust each other and each others passengers
- ABT system can be introduced next to existing e-ticketing systems

#### Travellers:

- 1. have 1 account in their 'home country';
- 2. choose their identifier(s) to connect to their account. Can be travel card, EMV-contactless bankcard etc.;
- 3. plan, book and receive support of a journey within an app;
- 4. store their travel right (ticket, purse value etc.) in their account;
- 5. will travel based upon existing business rules and existing eticketing systems and equipment.





# History of cooperation

 2008
 2010
 2011
 2014
 2015
 2017



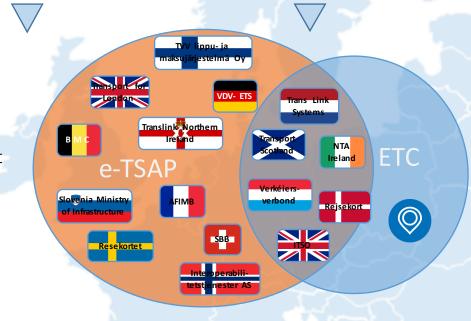
### **Openticketing**

#### 2008

- Mifare Classic 'hack'
- Trans Link Systems initiates knowledge sharing with other schemes, eg:
  - o Denmark
  - Transport for London

#### 2010

- Ministry of Transport and TLS set-up the not-for-profit Open Ticketing Institute (OTI)
- Goal is:
  - implement new security architecture for the Netherlands
  - share knowledge with other schemes in Europe



#### 2011

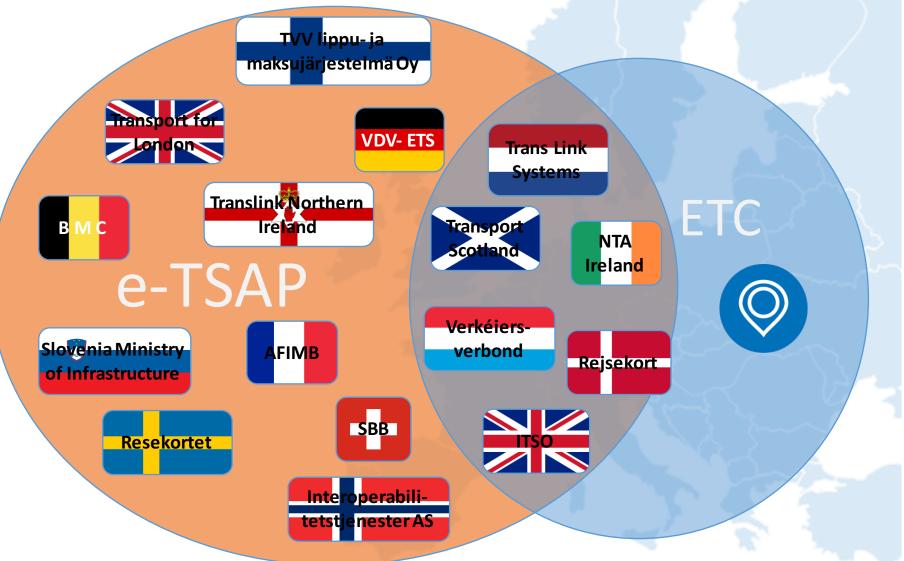
- OTI creates the e-TSAP association. First members are:
  - o Trans Link Systems
  - o Verkéiersverbond
  - o Rejsekort
  - VDV-ETS
  - o Resekortet

#### 2015

- Set-up of the ETC:
  - o Trans Link Systems
  - o Verkéiersverbond
  - o Rejsekort
  - o NTA Ireland
- Funding from the EC under H2020 program



# Stakeholders and members



Cooperation with the Smart Ticketing Alliance and Calypso Network Association



# European Travellers Club

Knowledge Sharing & Best Practices

- ETC Council
- Meets (at least) 2 times per year
- Open to all transport authorities, operators and e-ticketing schemes
- Currently 6 members:



 Set-up of the ETC as a not-for-profit European entity with advice from the European Passengers Federation ETC Project

- Introduce account-based travelling as a solution for cross-border travel
- Consortium with 6 parties from 4 countries (Trans Link Systems, Verkéiersverbond, VDV-ETS, UL en NXP) with the Open Ticketing Institute as coordinator
- Awarded a subsidy of € 4,5 mio (Horizon 2020 budget)
- Goals:
  - set common standards for (cross-border) account-based travelling
  - o provide specifications and interfaces
  - 3 pilots in Luxembourg, the Netherlands and Germany



### Cross-border Pilot in Germany and the Netherlands

- August 2017 January 2018
- Cross-border bus line(s) between Germany (Aachen Region) and the Netherlands (Limburg)
- New and existing e-ticketing infrastructure integrated with ETC system:
  - Aachen region with transport operator **\*ASEAG**



- Limburg region with transport operator **ARRIVA**
- In the Netherlands: travel with pay-as-you-go (price calculation in the TLS back-office)
- In Germany: travel with pre-paid ticket (stored in the ticket store of Aachener Verkehrs Verbund)
- User feedback end of 2017

### Park & Ride Pilot in Luxembourg

- October 2016 February 2017
- Park your car using ETC token and use public transport using existing e-ticketing system
- Existing e-ticketing infrastructure integrated with ETC system
- Existing mKaart integrated with ETC token
- November 2017: decision on further roll-out in Luxembourg



# ETC: open to other initiatives

### Next steps in 2017:

- 2 pilots in the Netherlands and Germany
- Evaluation with travellers results available early 2018
- We will make available all lessons learned, results, interfaces, specifications etc. to all interested parties and initiatives in Europe
- Invite other members to join (early 2017, ITSO form the UK joined)



## THANK YOU

www.europeantravellersclub.eu



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