
Horizon 2020 ETC 636126

Close-out Report

—

Deliverable 1.4: FINAL

30 April 2018



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 636126.

Any dissemination of results reflects only the author's view. The Agency is not responsible for any use that may be made of the information it contains.

1 Introduction

1.1 Introduction & Summary

This document describes Deliverable 1.4 Close-out Report and is part of work package 1 *'Project Management, Program Office & Reporting'*.

This report will focus on the recommendations for the (near) future and is based upon the results of the ETC project and feedback from the final stakeholder meeting.

Objectives

The objective of work package 1 is the management of the whole program.

Summary

For the recommendations for the (near) future we used input from our stakeholders (see Annex A). We invited the relevant stakeholders to experience the ETC system during a day of travelling and discussion in the pilot region of Aachen and Maastricht. Stakeholders were presented with our draft lessons learned and were asked to respond. Next to that we also invited them to provide general feedback.

ACCEPT gathered all feedback and drafted this deliverable. We will use the outcome in the next steps of the (possible) roll-out of our system.



2 Content

1	Introduction	2
1.1	Introduction & Summary	2
2	Content	3
3	Stakeholder meeting.....	4
3.1	Invitation.....	4
3.2	Vision of the ETC	6
3.3	Lessons Learned as presented	7
4	Feedback and consequences for lessons learned	8
4.1	General feedback on the ETC concept.....	8
4.2	What needs to be improved - overall	9
4.3	Feedback on lessons-learned.....	10
Annex 1:	List of Participants	13



3 Stakeholder meeting

On January 30th the ETC project had its final stakeholder meeting. The meeting was held in Aachen and Heerlen, in the pilot area of the ETC project.

3.1 Invitation

Please find below the invitation which was sent to 15 European e-ticketing schemes (*see Annex 1 to this document for an overview of all participants*).



European Travellers Club

ABT in the field

30 January 2018

Dear Sir/Madam,

The **European Travellers Club (ETC)** has the objective to ensure that all travellers in Europe can use trusted, easy and seamless Account-Based Ticketing services (ABT) across the whole of Europe, integrated with journey planning and travel information.

Under the H2020 program 3 pilots have been deployed in Luxembourg, the Netherlands and Germany. The latter two pilots are currently in operation in the Aachen/Maastricht-region.

The **ETC consortium, together with Aachener Verkehrsverbund**, invites you to reflect with us on the vision for ABT and the steps we have set with the implementation of the pilots. Also you will have the opportunity to experience cross border travelling with ABT in the field.

We are looking forward to seeing you in Aachen on the **30th of January 2018!**

Best regards,

On behalf of the H2020 ETC Consortium,
Roel Testroote, Project Coordinator















Program

Date: 30 January 2018
 Location: Novotel Aachen City
 Peterstraße 66, 52062
 Aachen, Germany

Experience ABT

09:30: Reception

10:00 – 11:30: Opening, sharing a vision on interoperable Account-Based Travelling systems in Europe and introduction to the pilots in Aachen and Maastricht

Lessons Learned

11:30 – 14:00: Experience cross border Account-Based Travelling on Arriva/ASEAG bus line 44 between Aachen (Germany) and Kerkrade (the Netherlands) **including lunch**

14:00 – 16:30: Lessons learned from the pilots for schemes, next steps for realizing the vision and wrap-up

RSVP
before 3
January
2018

RSVP please **before 3 January** to
Janine.zwiers@acceptinstitute.eu

For any questions please contact Janine Zwiers
 by email or phone: +31 (0) 33 737 02 62



translink



((eTicket
Deutschland



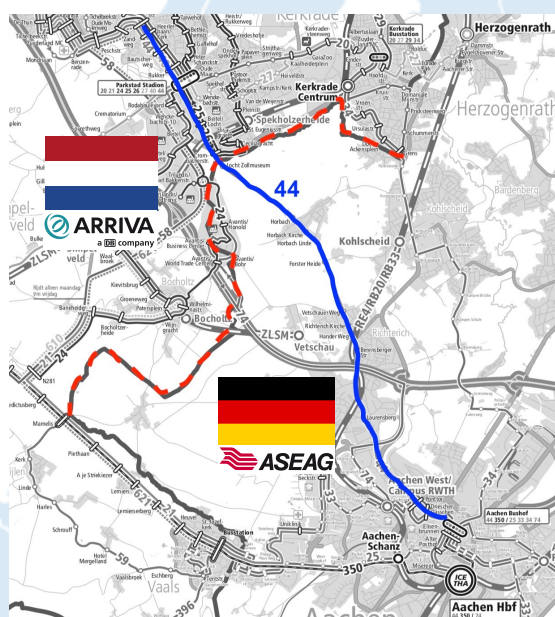
ACCEPT
Institute





Travel
Route

Line 44



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 636126.



translink



eTicket
Deutschland



ACCEPT
Institute



3.2 Vision of the ETC

We started the day with a presentation on the vision of the ETC:

In 2020 every traveller in Europe can travel with ease and trust across Europe and use all modes of travel ...

- *with one single account*
- *from account-based ticketing to account-based travelling*
- *layer on existing infrastructure, but also without infrastructure*



- *mobile as terminal*
- *multiple identifiers possible*

3.3 Lessons Learned as presented

The following lessons learned, coming from the ETC consortium, were presented to the group.

The group was asked to provide feedback on these lessons learned:

1. It's about Travelling not Ticketing
2. It's more about the app than the token
3. A roaming model allows for travelling across Europe
4. National ticketing schemes simplify cross-acceptance
5. Be careful not to fossilize old structures with new technology
6. Virtualization creates new business roles
7. An active travel authority can use ABT for sustainable mobility
8. Sustainable mobility requires more than public transport: an app/account that both car drivers use as well
9. Cost reductions can follow from simplifying or eliminating validators and sharing tokens
10. Member States can remain free in organizing their Public Transport sectors

Finally, the participants were asked to provide feedback on the ETC concept in their own words.

Chapter 4 provides the overview of the lessons learned feedback and the more general feedback from all participants.



4 Feedback and consequences for lessons learned

4.1 General feedback on the ETC concept

Below an overview is presented of the general feedback of the ETC concept.

Travel, usage of the system

- From the customer's point of view it was not necessary to understand what happens 'behind the scenes' as it just worked.
- The fact that my card was not charged twice even though I checked-out on the German bus service (which was a flat fare, check-in only service).
- The speed of boarding and no driver interaction. This provides a more convenient customer proposition.

Concept

- Travel seamless across national borders the chip card from your home country. You only have to have one account that enables you to use various services.
- The simplicity of the (ticketing) concept related to the considered respect to the schemes involved.
- The ease of enrolment – The fact that the customer only has to enrol with one Service Provider.
- Easy to implement with existing card solutions.
- Interoperability between two countries with different systems. Ease of use with existing card-products.
- Not to think about what bus to take.
- It simplifies the infrastructure and generate costs savings (1 reader for multiple ticketing worlds).

Smartphone app

- The update of the transactions made on the smartphone app, showing that the validation was good. This creates a lot of potential for further added value services to the customer.
- Although due to geo fencing as a UK mobile phone account holder I could not utilise the app, its capability and the convenience available to passengers was impressive.
- Instant insight on your travels and transactions made. Hassle-free travel between countries, across border.



Other

- I also liked the validators, very nice large screen and clear visual feedback showing successful validation.
- The ease of use by the customer.

4.2 What needs to be improved - overall

Below the feedback of the stakeholders is presented on what needs to be improved:

Travel, usage of the system

1. Clear branding/instructions for the customer are needed (e.g. which validator to use and the method of operation on each service (i.e. check-in check-out as opposed to check-in only)).
2. The difference in usage between the German and the Dutch busses is most likely not an issue for regular travellers, but for the occasional user (e.g. tourist) some more guidance may be needed. Difference in check-in only, and check-in/check-out.
3. Transaction time to read the token cards at the terminal should be increased.
4. Ensuring driver education is provided as appropriate.
5. Come to one tariff for cross-border trips; no changes between the same trip from Germany to the Netherlands and from the Netherlands to Germany. Fare policy should be clearer and consequently the political framework needs to take that into account when designing cross border fares.

Smartphone app

6. The ETC/Arriva app could do with some improvement. E.g. help/instructions on what to do if the check-in does not appear on the trip history.
7. Being able to check-in with a smartphone.
8. Further mature the smartphone app: add journey planning.
9. Support of Mobile App (via QR-Code) as an alternative to the Smartcard.



Other

10. The lifecycle management of a token should be clarified. Maybe this would lead to a token numbering scheme like PAN of a payment card, so locally issued tokens are accepted whereas “foreign” tokens require a whitelist based on a visiting customer’s registration or equivalent.

4.3 Feedback on lessons-learned

Below the feedback on and additions to the lessons learned as presented (see paragraph 3.3).

General feedback

- Do not mix up ticketing and travelling: the way people can/must pay for transportation differs from WHAT people must pay and WHAT kind of ticket(s) are needed. A clear cross-border ticket offer helps the way people like to pay for it.
- Validators in the bus are simple and effective but a cost factor and time consuming for large groups and during rush hours, smartphone apps like Fairtiq and Lezzgo (*in Switzerland*) provide a virtual solution that could cover cross border travel very soon. Why not virtualize the check-in/out process? In my opinion post-payment and post-pricing solutions will soon gain much more attention.
- Current (old) infrastructures support mostly 1 card type/token type. Future infrastructure requires support for multiple tokens/media. 1 account should support multiple different tokens. 1 account based app to support all account based travels on all account related tokens.
- A logical step would be to virtualise the plastic card.
- How do non-digital people (without a smartphone) get access to this information and services? Online portal? SMS service? Other readers? Call Center? Service Desk? Etc.).

Feedback per lesson learned

1. It’s about Travelling not Ticketing



All agree to this statement, with one important remark: ticketing in the sense of charging and payment is also important.

2. It's more about the app than the token

All agree to this statement. This is not only important for the customer, but also for the scheme providers (scheme authorities).

3. A roaming model allows for travelling across Europe

Most of the participants agree, but with a remark that most of the use cases will be in areas where there are cross-border services.

4. National ticketing schemes simplify cross-acceptance

No feedback came to this statement.

5. Be careful not to fossilize old structures with new technology

No feedback came on this statement.

6. Virtualization creates new business roles

Most participants agree to this. No further comments were made.

7. An active travel authority can use ABT for sustainable mobility

Most participants agree, although this is not the only solution towards sustainable mobility: an active travel authority can use ABT *as a building block* towards sustainable mobility.

8. Sustainable mobility requires more than public transport: an app/account that both car drivers use as well

Most participants agree, but authorities or public transport operators should not wait for the ultimo solution in multi-modality as long as in public transport itself there are many possibilities to improve public transport-services.



9. Cost reductions can follow from simplifying or eliminating validators and sharing tokens

Most participants agree when validators are concerned, but only if there is a competitive market for devices and only if the back-end systems can integrate into any suppliers' devices.

10. Member States can remain free in organizing their Public Transport sectors

Most participants agree, with the following remarks: The more important question is, if it also gives full freedom in selecting ticketing concepts and ticket types, both at the national, regional and at the local level.



Annex 1: List of Participants

Scheme	NAME	30-01-18
AFIMB	Bernard Schwob	1
BMC	Michel Genot	1
	Tim de Schrijver	1
	Koen van de Cloot	1
	Pierre-Paul Bertleaux	1
IOAS	Frode Færø	1
ITSO	Michael Cuthbertson	1
	Steve Wakeland	1
National Entitlement Card Programme		
Transport Scotland	Mary Docherty	1
	Stephen York	1
NTA	Barry Dorgan	1
Rejsekort	Gregers Mogensen	1
	Peter Kristiansen	1
	Ole Vildrik Thougard	1
Samtrafiken	Kimiko Sørensen	1
	Laila Berkahn	1
Translink		
TLS	Peter Schonewille	1
	Arco Groothedde	1
	Roy/Annefloor	2
TVV		
VDV eTicket Service	Sjef Janssen	1
	Joe Lutgen	
Verkeleersverbond	Christian Mousel	1
	Frederic Foeteler	
SBB	Daniel Galley	1
	Silvio Ciccone	1
	Christoph Almer	1
Ministry of Infrastructure of the Republic of Slovenia		
OTHER		
Arriva	Klaas Steffens	1
	Onno van Drunen	1
	Thomas Clemens	1
EC		?
AVV	Dominik Elsmann	1
NVR	Andreas Warnecke	1
ASEAG	Frank Standke	1
partners in NRW		?
UL	Christian Brafine	1
	Menno de Bell	1
	Rogier Boogaard	1
Calypso	Ralph Gambetta	1
ACCEPT Institute	Roel Testroote	1
	Bas van Os	1
	Jeroen Kok	1
	Stijn Minderhoud	1
	TOTAL	39