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Deliverable 11.3
Acceptance of the Dutch Account in Germany

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

Executive summary

Objectives

1. The validators in the German vehicles must accept the unique identifier which is stored on the Dutch OV-chipkaart. This approach allows the current VDV travelers to use their existing VDV-card and the new (pilot) users to use the OV-chipkaart to pay for the trip and 'travel on account'.

Deviations from these objectives

1. This objective was met, in the sense that the validators in the German vehicles accept the unique identifier stored on the Dutch card. However, instead of the OV-chipcard, a separate smartcard was selected to store the GST to avoid interference with the OV-chipcard scheme.

Work done

- A recruitment plan for Dutch participants was created.
- An enrolment form for Dutch participants was created.
- The whitelisting process for Dutch cards was set up.
- SmartMX cards were configured to carry the GST token and distributed to the Dutch participants.
- Operational service processes (customer care) for Dutch participants were established.
- The invoicing process for Dutch particpants was set up.

Conclusions

- All operational processes and technical requirements were implemented successfully before the start of the German and Dutch pilot.

Contribution to the main goal of the project / Link with other tasks or WPs

- Main contribution of this deliverable to the project is establishing the required hardware and processes to support the Dutch account and GST token in Germany.

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Acceptance of the Dutch account in Germany

In order to support the German pilot, several products and processes should be in place on the Dutch side:

Basically:

1. We will need to recruit, enroll and select Dutch participants
2. Participants should received the required accessories (Card, letter with account information)
3. Operational processes should be in place.

Defined products

ID	Product	Status
11.3.1	Recruitment plan	
11.3.2	Enrolment form	
11.3.3	Whitelisting	
11.3.4	Communication messages	
11.3.5	Cards with GST token	
11.3.6	Operational service processes	
11.3.7	Operational inspection processes	
11.3.8	Operational Invoicing towards and Clearing of Dutch travellers in German busses	

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11.3.1 Proposition

- The pilot on the Dutch side has been rebranded to '**Euregio Travellers**'-pilot.
- All busses of Aseag (Aachen region, AVV) and bus lines 44 and 350 of Arriva will participate in the pilot to support as much cross border traffic as possible.
- Arriva and Aseag agreed on a similar proposition to the participants.
- Special (discount) tariffs will apply to the participants. During the first 2 weeks of the pilot the participants will travel for free.

Tariff model during pilot

Line	Normal ticket price	Pilot ticket price	Valid for	Discount
All involved lines	Km based or flat fare	**EUR 0,00**	2 weeks from start of the pilot	100% discount during the first 2 weeks of the pilot.
Arriva 44	EUR 3,60	**EUR 2,80**	1 trip (distance will not effect price)	Flat fare tariff. Silimar to child ticket (-22,2%)
Arriva 350	Km based	**(-34%)**	1 trip (distance will effect price)	Pay as you go (CiCo)-prices. Similar to Age discount (-34%)
Aseag / AVV (all)	EUR 7,50	**EUR 5,00**	1 day in Aachen region (not valid for cross border)	Day ticket tariff, Similar to child ticket (-34%)

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11.3.1 Recruit and enrollment plan

Step 1:
Recruitment

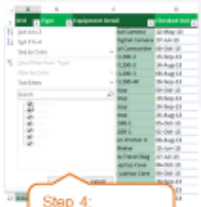
Through Flyers and posters potential participants will be made aware of the 'Eurogio Travellers'-pilot and it's proposition

Step 2:
Inform

They will be lured towards the website of the PTO (www.arriva.nl/etc) where they will find addtional information

Step 3:
Enroll

After clicking on the 'call to action'-banner they will be redirected to the enrollement website



Step 4:
Select

After enrollment the Arriva and Translink will make a selection of participants and whitelisting proces can start.

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11.3.2 Enrollment form

Page 1:
Fill in personal information

Registation will take place in 3 steps. The first is to fill in required personal information (in order to get in contact and send cards).

Page 2:
Details of your travels

The second step is to understand regular use of public transport.

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11.3.2 Enrollment form

Page 3:
Pilot conditions

In the third step pilot conditions and privacy statement should be agreed on .

Page 4:
Thank you for your registration

On the last page, participants will see a thank you message and an e-mail will be send (also see 11.3.4 Communication messages).

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11.3.3 Whitelisting proces

Step 5:
Import users

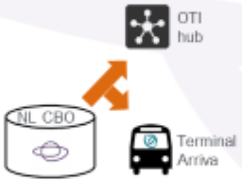
The selected users will be imported into the Back Office of Translink

Step 6:
Create account

An account will be created for the user

Step 7:
Create whitelist

The token will be added to the whitelist



Step 8:
Distribute whitelist

The update on the whitelist will be forwarded to the terminals of Arriva and the OTI Hub (to be forwarded to AVV)

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11.3.4 Communication messages

For interaction with participant, these communication messages are needed:

1. You are registered
2. You are selected to participate
3. Here is the info you need to start travelling with your ETC
4. We would like to know more about your experiences

How does ik look like:

translink

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How does ik look like:

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11.3.5 Card with GST token

- Personalisation of test OV-chipcard has been executed and succesfully tested.
- Testcards have been supplied to suppliers and AVV for development and test.
- Card branded as '**Euregio Travellers Card**' (ETC)
- Card design is aligned with the card used by AVV and finalised (see to the right)
- (Empty) Production Card batch of 150 cards is available
- Personalisation of these Production cards can start when required

Euregio Travellers Card (ETC):

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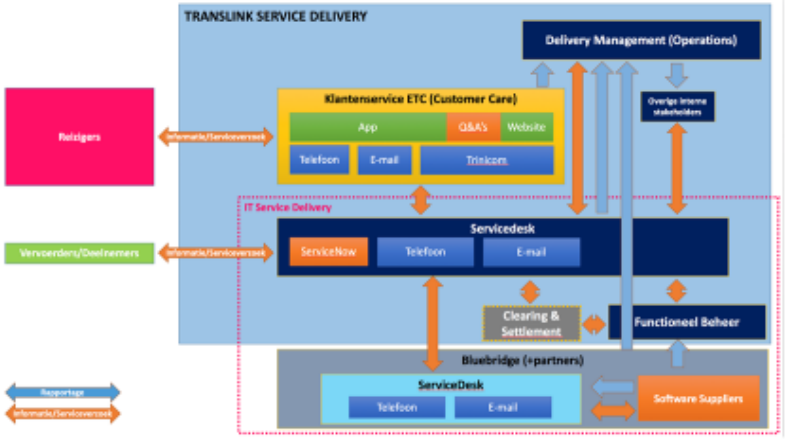
11.3.6 Operational service processes

Service Design Translink



- Service Design has been set up and includes the service process for participants, but also in relation to public transport operators and AVV.
- We have tested and completed this design (no major issues came up).

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11.3.6 Customer Care for the Dutch participants

- E-mail: klantenservice@euregiotravellerscard.nl
- Phone: +31-45-56789234
- Q&A's: on website Arriva

During the pilot we will register and monitor the questions of our participants by category:

Category	Subcategory
1. General question about ETC	
	1.1 Which PTO
	1.2 Which line
	1.3 Pilot conditions
	1.4 Privacy
	1.5 Security
2. Question about enrollent	
3. Question about CKI/CKO	
4. Question about function of app	
5. Question about transactions	
6. Question about discounts	
7. ETC Lost (&stolen)	
8. Quitting the pilot	
9. Specific question of PTO... (referred to)	
10. Data requested	

translink

11.3.7 Operational Inspection processes

Inspection personnel of Arriva, working on line 44 and 350, will receive a briefing short before the pilot starts on the following:

- Inspection personnel will do a visual inspection on the ETC-card. Based on the personalised card and visual features (EU logo, Card ID's, etc), the inspector will accept the traveller as pilot participant and the card as a valid ticket.
- In case of doubt, the participant can show the travel data in the mobile travel app to the inspection personnel to verify a valid check-in.

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11.3.8 Operational Invoicing towards and Clearing of Dutch travellers in German busses

In three scenario's settlement and invoicing is done:

- In scenarios 1 and 2 the Dutch traveller is invoiced by retailer Arriva
- In scenario 3 the German traveller is indirectly invoiced by Arriva via AVV/ASEAG

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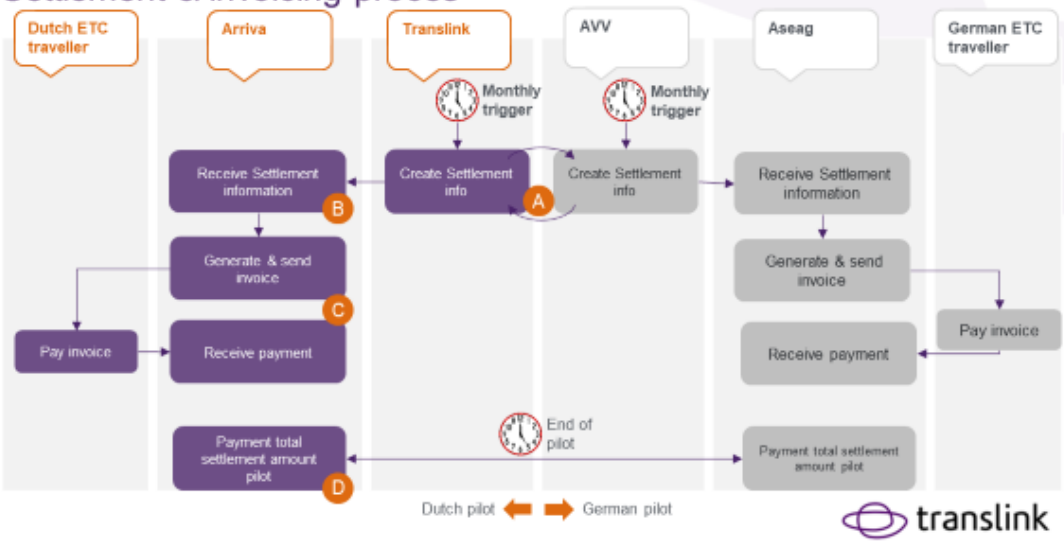
Settlement & invoicing proces



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A Create Settlement Info

- Translink settles the Dutch and German travels made on Dutch busses
- The settlement information containing German travels on Dutch busses is shared with AVV on a monthly basis
- Creating the settlement information is done by periodically manually triggering the create settlement information procedure/function
- The settlement information is stored in a CSV file and shared

- AVV settles the Dutch and German travels made on Dutch busses
- The settlement information containing Dutch travels on German busses is shared with Translink on a monthly basis
- The settlement information is stored in a CSV file and shared

Arriva	B	6/2/2017 10:15	6/2/2017 18:45		Stop 1	Stop 10	150	Silver	1000	XYZ1456789FG589	7/28/2017 17:23
Arriva	B	6/13/2017 23:05	6/14/2017 5:25		Stop 3	Stop 9	100	Silver	1000	XYZ1456789FG589	7/28/2017 17:23
Arriva	B	6/25/2017 14:27			Stop 1		200	Silver	1000	XYZ1456789FG589	7/28/2017 17:23
Arriva	B	6/7/2017 11:12	6/7/2017 12:40		Stop 1	Stop 3	20.5	Silver	1000	XYZ0378489FG589	7/28/2017 17:23
Arriva	B	6/19/2017 20:10	6/20/2017 2:30		Stop 1	Stop 6	90	Silver	1000	XYZ0378489FG589	7/28/2017 17:23
Arriva	B	6/21/2017 10:55	6/21/2017 12:05		Stop 9	Stop 10	25.3	Silver	1000	ABC1982409FG589	7/28/2017 17:23
Arriva	B	6/29/2017 1:10			Stop 1		100	Silver	1000	FVB494747FG589	7/28/2017 17:23
Arriva	B	6/16/2017 11:38	6/16/2017 12:25		Stop 1	Stop2	20.1	Silver	1000	FVB494747FG589	7/28/2017 17:23
Arriva	B	6/11/2017 10:05	6/11/2017 12:15		Stop 6	Stop 11	45	Silver	1000	LOW278767FG589	7/28/2017 17:23

Example Settlement CSV for Dutch bus travels

translink

B Receive Settlement Info

- Translink Creates and sends settlement information to Arriva for invoicing purposes
- Arriva receives the settlement information, which consists of two files:
  - A CSV file with the invoice information based upon trips made by Dutch token travelers in both Dutch and German bus
  - A separate CSV file containing the detailed trip information for detailed invoice specification

John	Silver	Rotterdam	First st. , 1	XYZ1456789FG589	123	450	7/28/2017 17:21	6
Anastasia	Inge	Amsterdam	Second st. , 2	XYZ0378489FG589	123	110.5	7/28/2017 17:21	6
Helen	Blatt	Leiden	Lemon st. , 3	ABC1982409FG589	123	25.3	7/28/2017 17:21	6
Ronald	Englhard	Rotterdam	Apple st. , 4	FVB494747FG589	123	120.1	7/28/2017 17:21	6
Alexander	Asscher	Leiden	Fifth st. , 5	LOW278767FG589	123	45	7/28/2017 17:21	6

Example invoice CSV for Arriva

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C Generate and payment invoice Dutch customer

- Based on the CSV files received from Translink, Arriva generates the invoices and sends the invoice to the Dutch customer by mail
- The customer is required to pay the invoice by means of bank transfer
- Arriva is responsible for the debtmanagement of the Dutch customer

D Payment total settlement amount Pilot

- By the end of the pilot Arriva pays ASEAG the total amount traveled by Dutch travelers on ASEAG busses and
- ASEAG pays the total amount traveled by German travelers on Arriva busses

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