

Ex post evaluation - Region Wittenberg

Deliverable 6.3

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1 Introduction

1.1 Background

The SmartMove project addresses key action on energy-efficient transport of the Intelligent Energy Europe programme (STEER). In line with the Transport White Paper it focuses on passenger transport and gives particular emphasis to the reduction of transport energy use.

1.2 The SmartMove project

The delivery of public transport (PT) services in rural areas is faced with tremendous challenges: On the one hand the demographic dynamics of ageing and shrinking societies have particular impacts on the PT revenues depending on the (decreasing) transport demand. On the other hand, PT stops density and the level of service frequency are often of insufficient quality. Thus, there is a need for the development of effective feeder systems to PT stops and for the adaptation of the scarce PT resources to user needs. For the SmartMove project, feeder systems are the different ways of linking a specific region with the back bone PT system, usually a bus or train network or a combination of both. This can be done by improving the walking and cycling facilities to and around the stations, by implementing flexible bus systems or by promoting carpooling or car sharing etc.. However, even if sufficient rural PT systems are available, large parts of the population face diverse subjective barriers to use PT. This is even more relevant for PT feeder systems: in many cases citizens are not even aware of their existence or, if they are aware of them, there exist subjective barriers to their use.

These problems are addressed within SmartMove project by implementing “Active Mobility Consultancy” (AMC) campaigns for PT lines and their feeder systems in eight rural and peripheral areas. The objective of the AMC campaigns within the project aims at promoting the use of PT via personalised travel marketing approach. The word ‘active’ in the term “active mobility consultancy” has a twofold meaning. On the one hand, it refers to the active process of informing people on PT: it is not PT users, who have to inform themselves about PT services; rather the PT operators that have to inform their (current and potential) customers according to their individual needs. For this purpose, current and potential PT users are contacted to provide them with demand based information via different communication channels. The second meaning refers to several active measures aimed at decreasing subjective barriers such as overestimating prize and travel time whereas underestimating the supply and options to the use of rural PT systems.

The AMC campaigns are more than purely the provision of information: active measures will be offered in addition to the written information and the consultancy talks that are usually applied in similar campaigns. This might include actions like practical traveller training, citizen participation in planning or guided tours for PT feeder schemes. Additionally, information and feedback on user needs can be

collected within the AMC campaign. This supports the adjustment of PT offers in line with users' requirements.

The AMC concept used in SmartMove builds on existing approaches, which will be further developed through SmartMove based on the exchange of experience and mutual learning. In particular, we will develop existing AMC approaches along 4 lines:

- (i) the adaptation of the existing approach to recent developments,
- (ii) the consideration and inclusion of feeder systems into the AMC campaign,
- (iii) the development and application of a common monitoring and evaluation method and,
- (iv) the adaptation of the AMC concept to specific requirements of the implementing regions.

The result is an easy to use AMC concept that can be applied by PT operators all over Europe. The aim is to solve the specific, significant challenges of PT schemes in rural areas.

A main pillar of the concept is the extension of the AMC concept to PT feeder systems as they are crucial factors for rural PT systems. Better knowledge gained on this subject helps to improve public transport in rural areas. From a scientific point of view, the information attained about a feeder system based AMC campaign makes an important contribution to the further development of personalized travel marketing approaches. Even more important, by implementing a large range of dissemination activities, such as webinars and take-up seminars, not only the SmartMove partners, but also a broad range of stakeholders are informed about the manifold possibilities and advantages of an AMC campaign.

Eight rural and peripheral regions in Europe prepare, implement and evaluate a local Active Mobility Consultancy campaign. PT operators achieve insight into the demands of both current PT users and those who do not currently use PT systems, by applying the AMC campaign. If the non-use of PT is caused by hard facts – e.g. the location of the PT stops or schedule organization – PT operators can adapt their services to the demand of potential users. This will increase opportunities to make PT systems attractive for new passengers. Each of the AMC campaigns to be conducted through SmartMove will be based on a shared methodological approach which will then be tuned in practice to the needs of the local specific situation. These include the specific target groups, the specific cultural barriers, barriers and enablers, the type of PT feeder system (a possibility to reach PT stops by individual or public means), the spatial aspect (e.g. compactness vs spread, topography and geography, environment), the socio political aspects at the appropriate decision making level, the administrative aspects, the economic aspect and the planning aspects. Within each region, we have defined targets of several hundreds of households to be contacted. As a result, we expect a substantial mode shift to public transport, which in turn will lead to a substantial increase on energy efficiency, a decrease of resources consumed and a reduction of the greenhouse gas emissions caused by road traffic.

1.3 Content of this Deliverable

The impacts of the AMC campaigns are evaluated in a process- and output evaluation. Output evaluation refers to the measurement of the direct quantitative effects of the campaigns, e.g. the number of additional public transport passengers. This information is used as input to calculate secondary effects of the campaigns, e. g. the reduction of CO₂ emissions. Statistical figures of the process are collected at each stage of the campaign, e. g. number of people contacted, response rate, figures about materials ordered etc., in order to identify factors of success or failure of the AMC campaigns (process evaluation). Interviews with current and potential public transport users give additionally information to public transport operators about customer satisfaction and the needs of improvement.

The aim of this deliverable is to present and evaluate key figures that had been collected during and after the AMC campaign. There are six aspects, which are analysed for this matter:

- (1) Significant changes of the framework conditions during the AMC campaign, if any (e. g. modifications in the public transport supply), need to be documented.
- (2) The experiences made with the implementation process, the participation and the cost of the AMC campaign. These data were collected by the staff responsible for the implementation of the campaign.
- (3) Any changes in behaviour, information level and attitude of the participants of the AMC campaign. These data were collected in personal interviews with the participants after the AMC campaign. In the course of the ex-post analysis, some questions were repeated to see, if changes occurred before and after the AMC campaign. Additional questions were included to be able to understand the perception of or experience made during participating in the AMC campaign.
- (4) Requested and delivered information material and other items in the course of the AMC campaign. This was recorded by the staff responsible for the implementation of the campaign.
- (5) Comparison with external data. In parallel to the campaign, bus passenger counting took place before and after the implementation of the AMC campaign, which allows a plausibility check, if results are in line with the statements of the participants.
- (6) IEE indicators as impact of the AMC campaign. These data were calculated based on the information collected above. Additionally, these results were compared with the targets defined in the beginning of the project.

2 Framework conditions during the implementation of the AMC campaign

In the district of Wittenberg, the public transport supply remained basically the same during the implementation of the AMC campaign. However, some little changes were introduced with the timetable change on 13 December 2015, also concerning the three bus lines included in the campaign. Most of the bus schedule changes are due to the new train schedule. So, departure times of line 303 were adapted to the train schedule, and departure times of call-a-bus lines 363 and 364 were, in turn, adapted to the schedule of line 303. On the line 364, two additional regular rides have been established. The number of on-demand rides remained unchanged.

The three lines 303, 363 and 364 contain several rides that are only realised on schooldays. Major touristic influence on pt demand cannot be expected in the Wittenberg region. The tariff remained unchanged. The price for fuel at petrol stations significantly decreased during the campaign. The road infrastructure for cars, cyclists and pedestrians remained unchanged in the region.

All in all, there have been some changes during the implementation of the campaign, but they are marginal and we do not expect them to have major influence on the passenger demand and the results of the AMC campaign.

3 Process evaluation and cost of the AMC campaign

The process evaluation includes the response of the target groups for the dialogue marketing and the active measures part of the AMC campaign, including its costs and the experiences made in the course of the implementation of the AMC campaign.

3.1 Response towards the dialogue marketing part of the campaign

The process of the dialogue marketing campaign is evaluated by collecting information about the response of the people contacted according to the standardised list of variables below. The response illustrates the resources needed in order to receive a reasonable amount of participants (Table 3-1). In course of the campaign two leaflets were distributed.

The intention of the first leaflet “Test rider wanted” was to get in contact with as many people as possible because the registration office denied our request for addresses. A prize draw with the chance to get one out of ten monthly tickets for the whole region was promoted on the leaflet. Through intensive supervision by the pt-operator the winners had the chance to get to know the pt-system of Wittenberg. The media response was positive. Newspaper articles were published and radio station spots were produced. Unfortunately, the response was too low. That’s why we created a second leaflet “Your opinion is important to us” and distributed it in more populated areas. Besides written communication personal talks during market days and citizen audits (“How to use public transportation in rural areas”; “Elderly people – stay active and mobile”) were organised.

Table 3-1: Variables for reporting the response towards the dialogue marketing

Category	Variable name	Number of households	Number of persons
Response	People contacted with initial letter (gross sample)	5,528	11,608
	Persons to which communication could be established:		
	- Leaflets	40	84
	- Presentations	32	67
	- Market days	47	99
	- Active informing of people at pedestrian areas	90	189
	Persons willing to participate in the campaign (4% of all contacted), of which:	209	439
	Persons with no need for further information (pt-users)	12	25
	Persons with no need for further information (non pt-users)	67	141
	Persons with need for further information (pt-users)	24	50
Persons with need for further information (non pt-users)	106	223	

Including both strategies (written communication and personal talks) a total response rate of 4% was achieved.

130 Households wanted to get an information package with personal information. The rest of the participants could have helped by answering urgent questions during the events or on the telephone. The majority of these declared, basic information was available via web or application. Figure 3-1 shows the segmentation of the participants, distinguished between users and non-users of the public transport system in the region. Because of direct contact all participants could identified as users on non-users.

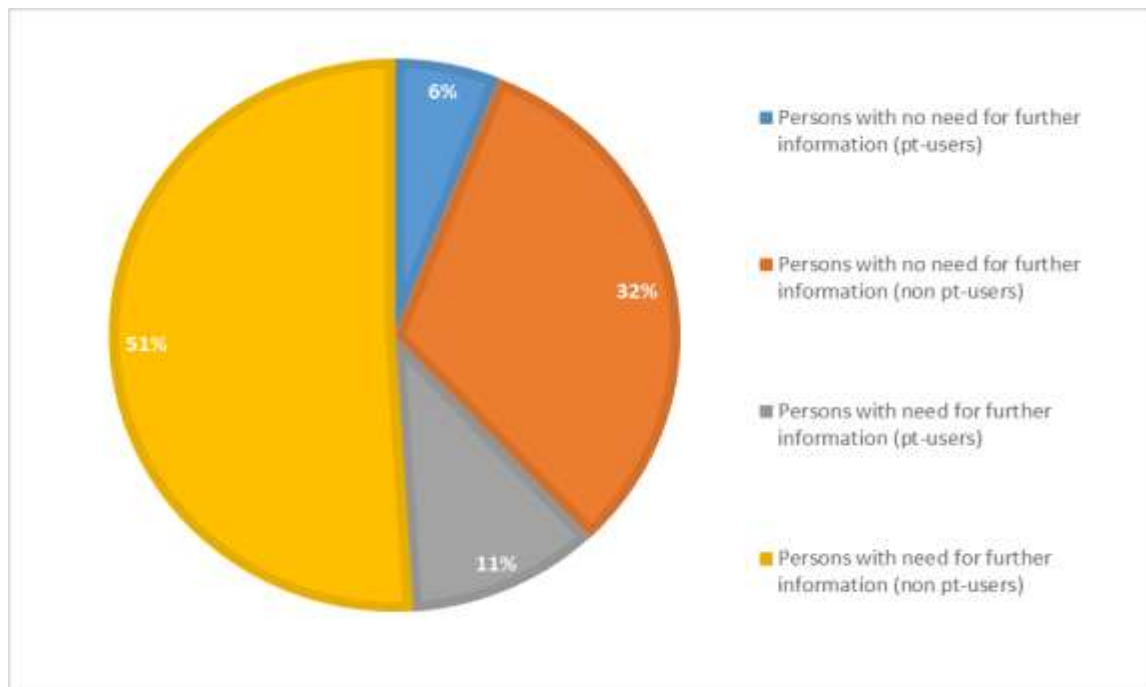


Figure 3-1: Segmentation of participants of the AMC campaign

As it can be seen, the majority of participants expressed their need for further information (62%). In comparison to the share of public transport usage in the region, which is 6,4 % [Mobilität in Deutschland 2008 (MiD 2008)] of all trips, the share of public transport users with 17% is clearly higher in the campaign.

3.2 Narrative description of the process of dialogue marketing

This section includes a short report on each step of the dialogue marketing reflecting on the implementation plan and answering the questions: What went well? Which problems occurred? Which strategies and actions were taken to face these problems?

Preparation phase

Over all, the preparation phase was in line with the implementation plan. The cooperation with the local stakeholders (majors, regional mobility agency, bus operators, and public transport consortium) worked smoothly. During these consultations decisions like which information materials are needed and how they should look like were taken.

Problems occurred because all municipal registration offices rejected the request for addresses. We decided to mandate a private mailing service that distributed the initial letters to all households in a defined area. In order to avoid sending letters to minors all letters were sent without personal salutations. NASA acts on behalf of the province Saxony-Anhalt, so misdirected mails needed to be avoided.

Social organisations, churches and large employers were contacted and informed about the campaign by phone or mail.

Lessons learned:

- Check, what kind of materials are available right now and which materials are missing
- Check, what kind of organisations exist in your implementation area and which persons they attract

General contact phase of target persons

Despite huge media interest, the response of the first leaflet was very poor. Obviously the offer to win a monthly pass worth 160€ and report us about good and less good aspects of the pt-system was not stimulating enough. Because of the deadline of the first leaflet a second was created.

The recruitment during active measure events was much more successful. After presentations and a short discussion almost everybody showed interest to get more information about the pt-system.

The duration of the campaign was extended because such presentations need to be planned carefully.

Lessons learned:

- Written communication (mail-out mail back) reach first of all pt-users
- To attract non pt-users active measure events are needed
- In order to avoid much dispersion, it is advisable to contact only inhabitants who live close to a bus station

Segmentation phase: Identifying the information needs

Besides the segmentation in users of public transport and non-users both with and without information needs, further segmentation took place, which allowed to adapt the order form to the needs of the contacted households (e.g. are there pupils in the household? Is there a car available in the household?). The basic segmentation can be seen in Figure 3-1 above. To some of the respondents no contact could be established via phone after their response to the announcement letters. From this group we got only rudimentary information (e.g. users or non-users of the public transport system).

In the case of participants who sent us the answering card without telephone number we used the telephone register. If we did not find them in the register, we contacted them by e-mail.

Lessons learned:

- For the preparation of the telephone call, it is helpful to know the topic of the conversation. That is why we asked for special interests beforehand (tariffs, call bus, timetable)
-

Individualised contact phase: Send the service form

During the phone calls or at the event, the questionnaire was filled in by the questioner. According to the given answers (e.g. neighbourhood, preferred use of transport mode and age) the participant could choose from a personalized list at the end. All material was available until the end of the project. In course of the project we created two more materials because of the huge need.

Lessons learned:

- Combining the identification of information needs and the individualised contact phase was very time consuming but gave us the possibility to get deep insights of each participant and avoid dispersions of the service form delivery

Delivering phase: Hand over the service packages and thank you presents

The information packages were delivered to the target area not later than two weeks after getting the order. The packages included a personalized initial letter, the ordered materials and a little present.

Participant who gave us information about their mobility behaviour but did not need materials got a little thank you package as well.

All items were recorded in the excel sheet database. The packages were delivered by deposit at the door. No unknown or unclear address was recorded.

Lessons learned:

- The quick response is important, otherwise participants cannot remember

3.3 Implementation process and response of accompanying active measures

Based on discussion with local stakeholders in the beginning of the project, possible events for the SmartMove project were discussed.

Events like market days in Lutherstadt Wittenberg, Jessen and Annaburg could be identified as promising. The regular events attract a lot of inhabitants from the cities as well as from rural areas. The attendance was not difficult. The stand was free of charge in Jessen and Annaburg. Only in Lutherstadt Wittenberg we had to pay 17€ for the whole day. The stand and chairs were provided by the NASA GmbH.

Regular meetings of the German Red Cross were another way of getting in touch with people. Each month members of the social organisation meet each other and organize trips and celebrations. Here again the attendance was free of charge. Table 3-2 describes the event in Lutherstadt Wittenberg and Jessen.

Table 3-2: Variables for reporting the process of the accompanying active measures: Market day of Lutherstadt Wittenberg

Category	Variable label	
Type of event	description of event	Market day at Admiralsplatz
	type of event (presentation, discussion, demonstration, interactive demonstration) according to active measures guidelines	Information stand, active contacts to residents, recruiting of participants and delivering information at site
	Alone standing event/event in combination with	The market day takes place every week, offers local products and handcraft.
	Dates and duration of event	16.12.2015 07:00-16:00
	People invited	Posters and announcements at local newspaper and radio by the organisers of the event
	People participated	400
	People personally contacted at event	100
	People within the target group	60
	People recruited for AMC (if foreseen)	22
	Description of implementation process (story of success, problems occurred, strategies to overcome problems etc.)	The market is located close to a shopping mall. To enter the mall people need to pass the market. The information stand was placed close to the entrance of the mall. To get more attention a call bus was provided by the pt-operator. To recruit people two employees walked around the market and referred to the stand. Most people contacted lived in the city or suburbs, which means the majority was in the target group.

Table 3-3: Variables for reporting the process of the accompanying active measures: German Red Cross presentation “Elderly people – stay active and mobile” at Jessen

Category	Variable label	
Type of event	description of event	Presentation at DRK-Sozialstation
	type of event (presentation, discussion, demonstration, interactive demonstration) according to active measures guidelines	The presentation “Elderly people – stay active and mobile” informed the audience about the possibilities they have to get to the closest big city and provided some advice for a comfortable and fast ride.
	Alone standing event/event in combination with	The aim of the meeting was to share breakfast with other members and to get information of the upcoming Red Cross events (trip to other cities, swimming, celebrations)
	Dates and duration of event	07.10.2015 8:00-11:00
	People invited	180
	People participated	45
	People personally contacted at event	40
	People within the target group	20
	People recruited for AMC (if foreseen)	11
	Description of implementation process (story of success, problems occurred, strategies to overcome problems etc.)	Mrs. Richter, the organiser of the meeting, was very dedicated and suggested us to present it to other groups in Axien, Prettin and Annaburg. The presentation should not last longer than 20 minutes. A group discussion with personal experiences followed.

3.4 Costs of AMC campaign

Costs for the dialogue marketing campaign as well as for all accompanying events (active measures) are reported in this chapter. Table 3-4 presents the full cost for the campaign, assuming all material need to be printed for the campaign and all labour resources are extra costs. The staff costs for the development of the process as well as for the implementation of the campaign form a substantial part of the total cost. For the concrete campaign in Wittenberg, staff cost, commission for ISUP (supports the Nahverkehrsservice Sachsen-Anhalt GmbH throughout all phases of the campaign), the paper and stamps for communication, the individual documents printed on request and the giveaway items were additional costs within the campaign.

All standardised brochures used were printed in any case and provided by the responsible organisations, which reduced the cost for the campaign by approximately 1300 €. The other information materials are printed on demand.

Table 3-4: Costs of dialog marketing campaign (full cost calculation)

Cost item	Quantity	Unit price	Total [€]
Developing the process: creating database, composing announcement letters and response cards, preparing, collecting and printing of information material and give away items			
Staff costs [person-hours]	43 hours	27.5€	1,183€
Company support/ share of a fixed price (ISUP)			4,000€
Conducting the campaign: printing and sending letters and respond cards, creating and compiling the required information material, conducting ex-ante-interviews			
Staff costs [person-hours]	250 hours	27.5€	6,875€
Company support/ share of a fixed price (ISUP)			4,000€
Material costs for announcement letters and respond cards			
Leaflets with respond card	8870 copies	0.20€	1,774€
Announcement letters	5528 copies	0.11€	608€
Distribution of leaflets and announcement letter (envelopes included)	5528 pieces	0.35€	1,935€
Postage stamps for reply letters	46 pieces	0.45€	20.70€
Follow-up work after the campaign: conducting ex-post interviews, reporting and documenting the feedback			
Staff costs [person-hours]	73 hours	27.5€	2,007.50€
Company support/ share of a fixed price (ISUP)			6,000€
Costs of informational material			
Initial letter information package	121 pieces	0.35€	42.35€
Distribution of information package (Initial letter, material, small gift)	121 pieces	1.49€	180.29€
Timetable for requested connections	101 pieces	0.35€	35.35€
Comparison between price for public transport and car	8 pieces	0.35€	2.80€
Surrounding area map of public transport stops	15 pieces	0.35€	5.25€

Timetable of specific public transport stop	15 pieces	0.35€	5.25€
Business Card "call bus"	67 pieces	0.05€	3.35€
Leaflet INSA (intermodal information system) ¹	500 pieces	0.06€	30€
Brochure "Cycle paths in Saxony-Anhalt" ¹	1500 pieces	0.25€	375€
Brochure "Walking paths in Saxony-Anhalt" ¹	1500 pieces	0.25€	375€
Pocket map "Train route map Saxony-Anhalt" ¹	1500 pieces	0.12€	180€
Pocket timetable RE 14 and RB 51 ¹	500 pieces	0.16€	80€
Leaflet "Tariffs" ¹	500 pieces	0.16€	80€
Route map City of Lutherstadt Wittenberg	18 pieces	0.35€	6.30€
Route map District of Wittenberg	27 pieces	0.35€	9.45€
Leaflet changes of timetable	45 pieces	0.35€	15.75€
Give away items			
Pens ¹	200 pieces	0.28€	56€
Keyring ¹	100 pieces	0.15€	15€
Umbrella ¹	3 pieces	6.90€	20.70€
Smartphone Cleaner ¹	200 pieces	0.18€	36€
Ticket	3 pieces		470.90€
Total sum of costs			30,427€

¹⁾ These items were provided by public transport operator or NASA GmbH for free. The costs listed in this Table 3-4 represent the full cost of the information items, which were not charged for this campaign.

Table 3-5 to Table 3-7 list the average costs for the nine active measure days, again as full cost calculation. The costs are about 610€ per event day. Because of the long distance to the implementation area Wittenberg and the high time expenditure personal cost are the most significant item. The stand was free of charge in Jessen and Annaburg. Only in Lutherstadt Wittenberg we had to pay 16€ for the whole day. The stand and chairs were provided by the NASA GmbH. At the presentations no room rental accrued. The costs for each activity are comparable as employed staff is the main cost factor and the durations of the events are comparable. As the number of visitors was similar the number of items distributed was more or less similar as well.

Table 3-5: Average costs of market day (3x)

Cost item	Quantity	Unit price	Total [€]
Preparation and execution of the event			
Staff costs for 1 person [person-hours]	24 hours	27.5€	660 €
Staff costs ISUP [share of a fixed price]			700€
Stand rental	1	16€	16€
Information material			
Questionnaire including order form	100 pieces	0.70€	70€
Give away items			
Sweets			20€
Pens	40 pieces	0.28€	11.20€
Total sum of costs			1,477.20 €

Table 3-6: Average costs of presentation (4x)

Cost item	Quantity	Unit price	Total [€]
Preparation and execution of the event			
Staff costs for 1 person [person-hours]	32 hours	27.5€	880 €
Staff costs ISUP [share of a fixed price]			800€
Information material			
Questionnaire including order form	100 pieces	0.70€	70€
Give away items			
Sweets			20€
Pens	40 pieces	0.28€	11.20€
Total sum of costs			1,781.20 €

Table 3-7: Average costs of consultation at central points (2x)

Cost item	Quantity	Unit price	Total [€]
Preparation and execution of the event			
Staff costs for 1 person [person-hours]	16 hours	27,5€	408.64€
Staff costs ISUP [share of a fixed price]			700€
Information material			
Questionnaire including order form	50 pieces	0.70€	35€
Give away items			
Sweets			24.73€
Pens	40 pieces	0.28€	11.20€
Total sum of costs			1,210.93€

The whole dialog marketing campaign costs are about 33.500€

4 The impact towards the participants

In this chapter the results of the follow-up interviews which were conducted after the active mobility campaign had been carried out are presented and - in case - compared with the ex-ante situation. These interviews included questions which were already raised before the campaign to illustrate the impact of the AMC campaign.

4.1 Respondents of the campaign

Table 4-1 shows the key parameters of the impact of the AMC campaign carried out in the NASA region. 90 % feel better informed now and 82 % found the information materials they received helpful. Those who did not find the information helpful mainly stated that the pt supply they got aware of is not corresponding to their personal needs. Considering the 50 % share of participants included in the ex post evaluation not having a car, 16 % of the car owners feel motivated to reduce their car use as a consequence of the campaign. However, most car owners could not be convinced to reduce car use.

23 % of the participants increased their pt use thanks to the AMC campaign. These are not all car owners, so that the overall share of participants who have shifted car trips to public transport is 10 %. On average, they shifted 2.83 trips per week.

Those participants who have not increased their pt usage after the campaign were asked if they plan to do so. 23 % intend to use the public transport more often thanks to the campaign, which means that the campaign had an effect probably leading to more pt use on a total of 46 % of the participants.

As the focus of the campaign was the full household, interviewed participants were asked if the whole household was involved actively in the campaign, which was confirmed by 52 %. 54 % of the participants talked with other people than household members as well, which means a big multiplier effect outside of the households can be expected as well.

88 % agree to an extension of the campaign. In addition to general approval of the campaign, participants expressed the need for such information particularly amongst the elder population. Some persons declared that information campaigns are necessary, but that the pt supply has to be attractive.

Table 4-1: Variables for reporting situation after AMC campaign – specific questions (52 interviews)

Category	Variable name	Value
Specific questions after AMC campaign	People who feel better informed	90%
	Were the information materials helpful to you?	82%
	Motivation to reduce car use	
	<i>motivated</i>	8%
	<i>not motivated</i>	42%
	<i>no car</i>	50%
	People who increased the usage of pt	23%
	People who shifted trips from car to pt	10%
	Average number of trips shifted from car to pt per person and week (for people who shifted trips from car to pt)	2.83 trips per week
	People who intend to increase the usage of pt (from those who did not (yet) increase the usage of pt)	23%
	Average number of additional pt trips that people intend to make (for people who did not yet increase the usage of pt)	2.06 trips per week
	People who have talked about the campaign within the household	52%
	People who have talked about the campaign with other persons than household members	54%
	People who agree to an extension of the campaign	88%

Table 4-2 shows average rating of the viewed bus lines before and after the campaign. Although no infrastructural or operating changes were carried out the average rating improved. Better information caused less travel time and comfortable changes.

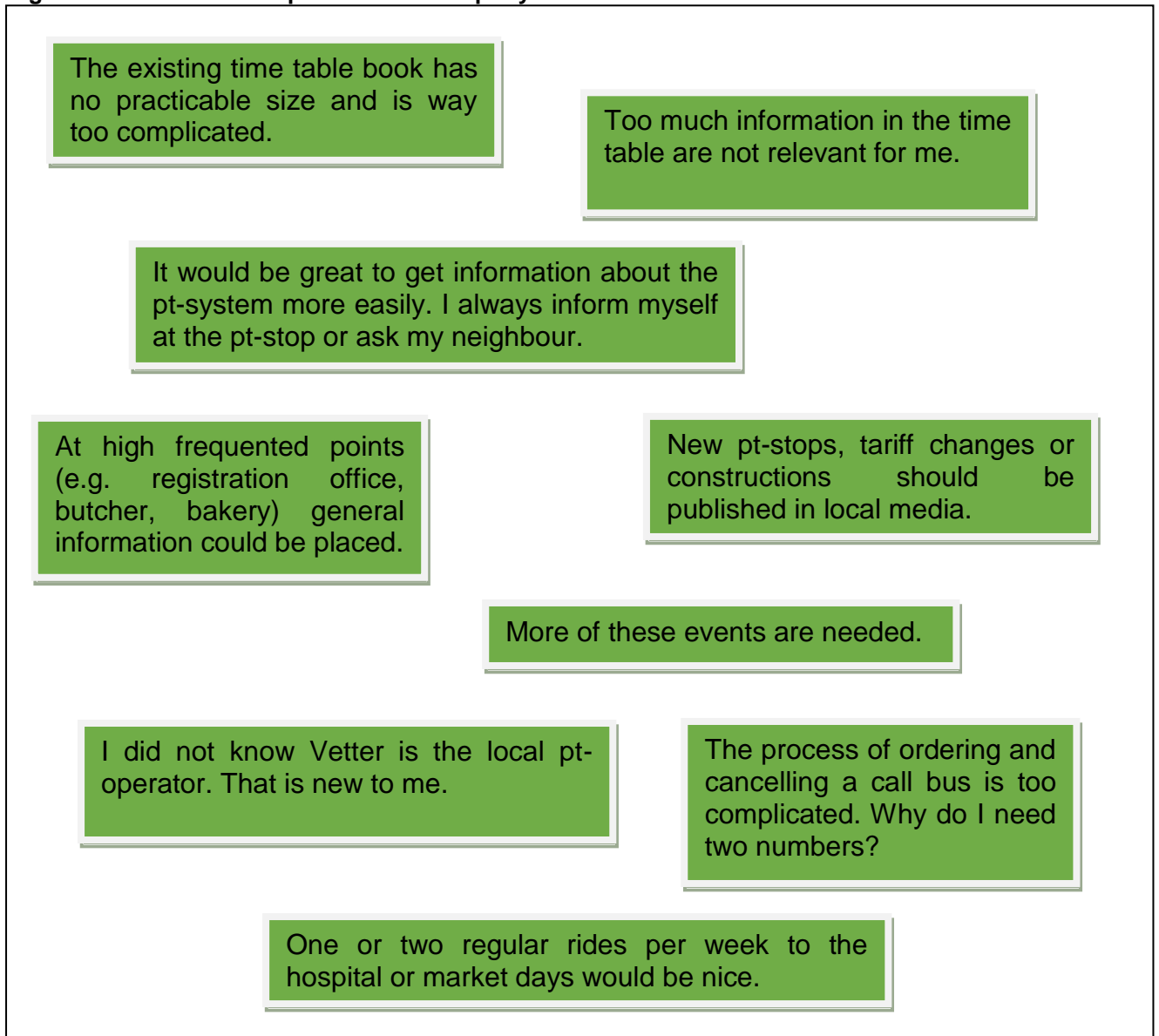
Table 4-1: Variables for reporting situation after AMC campaign – line usage of respondents (n= 52 people)

Category	Variable name	Before	After
Usage of line of respondents	Average rating of performance of line 303, 363, and 364	7,93 out of 10 ¹⁾	8,1 out of 10 ¹⁾

¹⁾ Where 1 equals poor and 10 equals best performance

During the events we gathered a lot of needs of the residents and transformed them into theses. At a workshop we discussed that theses with all stakeholders and tried to find solutions. A lively discussion emerged about which ideas could be part of the next local transportation plan. Figure 4-1 shows some of the theses.

Figure 4-1: Residents opinion about the pt-system



5 Requested material by the participants

Table 5-1 illustrates the requests for the proposed information items, both standardised and individualised as well as for the giveaway items (according to the order form).

Table 5-1: Variables for reporting requests of participants

Category	Name	Description	Number of distributed items
Information material	“Ihr persönlicher Fahrplan”	Timetable for requested connections	101
	”Anrufbus-Karte”	Business Card “call bus”	67
	“Änderungen zum Fahrplanwechsel”	Leaflet changes of timetable	45
	“Radwege in Sachsen-Anhalt”	Brochure “Cycle paths in Saxony-Anhalt”	31
	“Linienetzplan Landkreis Wittenberg”	Route map District of Wittenberg	27
	“Linienetzplan Lutherstadt Wittenberg”	Route map City of Lutherstadt Wittenberg	18
	“Wanderwege in Sachsen-Anhalt”	Brochure “Walking paths in Saxony-Anhalt”	17
	“Haltestellenumgebungsplan”	Surrounding area map of public transport stops	15
	“Ihr persönlicher Haltestellenfahrplan”	Timetable of specific public transport stop	15
	“Linienetz Sachsen-Anhalt”	Pocket map “Train route map Saxony-Anhalt”	11
	“Kostenvergleich Pkw-ÖPNV”	Comparison between price for public transport and car	8
	“Fahrplan RE 14” und “Fahrplan RB 51“	Pocket timetable RE 14 and RB 51	7
	“INSA”	Leaflet INSA (intermodal information system)	6
	Tarifübersicht Vetter	Leaflet “Tariffs”	2
Giveaway items	“Kugelschreiber”	Pens	98
	“Putztuch”	Smartphone Cleaner	83
	“Schlüsselanhänger”	Keyring	45
	“Schirm”	Umbrella	3
	“Testticket”	Test ticket	3

The most ordered documents are the time tables and the call bus business card. On the basis of personal preferences like “no changes” or “bicycle transport allowed” the personal time table illustrates all connections between the origin and destination stop. All symbols and changes are explained. According to the age of the participant the font size varied. Older participants got timetables with bigger font. Another highly requested item was the call bus business card. The size of a business card is very handy and people can put it into the wallet. All needed information (number to order/cancel the call bus, operation times, region) are depicted. Because line 363 and 364 are only call busses participants wanted to get a business card.

With regard to the giveaway items, pens and smartphone cleaner were most desired.

6 Public transport demand data

Besides the interviews with the participants, the evolution of the demand is evaluated by measuring the number of ordered on-demand rides and the number of passengers of the on-demand bus lines in the Wittenberg region. This approach allows to cross-check the data generated from the participants.

There has been a timetable change in December 2015, where departure times of many bus lines in the region have slightly been modified, but key parameters of the promoted bus lines such as travel time and number of stops remained unchanged (see Table 2). So, the bus supply is still the same as when the AMC has started.

Demand data is available for January 2015 (“before the campaign”) and January 2016 (“after the campaign”). The number of ordered on-demand rides has increased by 9 %; the number of passengers by 17 %. This positive trend corresponds to the statements of the participants observed during the ex post survey.

Table 2: Variables for reporting the public transport demand and supply before and after the campaign

Category	Variable label	Before	After	Unit
Supply (on-demand rides according to schedule)				
Characteristics of bus line 303	maximum travel time (terminal to terminal)	103	103	[min]
	maximum length of bus line (terminal to terminal)	87	87	[km]
	maximum number of stops (terminal to terminal)	61	61	[number]
	total seat-km per workday (both directions), 8 seats mini bus	7,789	7,789	[seat km per workday]
	total number of links per workday and direction (on schooldays/during school holidays)	9/13	9/13 ¹	[number of links]
Characteristics of bus line 363	average travel time (terminal to terminal)	34	34	[min]
	average length of bus line (terminal to terminal)	26	26	[km]
	average number of stops (terminal to terminal)	13	13	[number]
	total seat-km per workday (both directions), 8 seats mini bus	8,320	8,320	[seat km per workday]
	total number of links per workday and direction	20/14	20/14	[number of links]
Characteristics of bus line 364	average travel time (terminal to terminal)	62	62	[min]
	average length of bus line (terminal to terminal)	46	46	[km]
	average number of stops (terminal to terminal)	32	32	[number]
	total seat-km per workday (both directions), 8 seats mini bus	14,352	14,352	[seat km per workday]
	total number of links per workday and direction	20/13	20/13	[number of links]

¹ Some rides only cover parts of the whole line

Demand (ordered on-demand rides)					
Bus line bundle (northeast side of Elbe river)²	number of ordered on-demand rides	2,078	2,268	[number of rides]	of
	number of passengers ordering on-demand rides	3,377	3,942	[number of passengers]	of

² Including bus lines 303, 363, 364 and 20 other bus lines in the Wittenberg/Annaburg/Jessen region

7 Data processing and reporting

7.1 Common IEE performance indicators

The information about changes in travel behaviour based on the before and after survey and the average trip length per person, average fuel consumption per vehicle and average CO₂-emission per vehicle form the basis for calculating changes in fuel-consumption and CO₂-emissions:

$$\text{saved fuel consumption [l/a]} =$$

$$\text{travel milage saved [km]} \times \text{average fuel consumption per km [l/km]}$$

and

$$\text{saved CO}_2 \text{ emission [t/a]} =$$

$$\text{travel milage saved [km/a]} \times \text{average CO}_2 \text{ per km [t/km]}$$

and

$$\text{Travel mileage saved [km/a]} =$$

$$\text{average trip length per person [km/a]} \times \text{number of saved trips per year [-]}$$

and

$$\text{saved trips per year [-]} =$$

$$(\text{number of car trips per week before} - \text{number of car trips per week after}) \times 52$$

Four scenarios are calculated (Table 7-1):

- (1) The saved trips of the participants of the AMC campaign
- (2) Crossing up, if all contacted persons would participate
- (3) Crossing up, if the whole population of the implementation area would participate
- (4) Crossing up, if the whole population of the region would participate

Table 7-1: Table IEE performance indicators

Scenario	Persons	Number of saved car trips per week	Number of saved car trips per year	Average trip length [km]	Travel mileage saved per year [km]	average fuel consumption per kilometre	average CO ₂ -emission per kilometre [g/km]	Saved fuel-consumption [l/a]	Saved CO ₂ -emissions [t/a]
(1) participants	273	74	3,864	16.90	65,303.63	0.07	170.40	4,636.56	11.13
(2) All contacted	11,608	3,160	164,298	16.90	2,776,633.60	0.07	170.40	197,140.99	473,14
(3) Whole population of the implementation area	79,201	21,558	1,120,999	16.90	18,944,879.20	0.07	170.40	1,345,086.42	3,228.21
(4) Whole population of the Wittenberg region	139,000	37,834	1,967,385	16.90	33,248,000.00	0.07	170.40	2,360,664.80	5,665.60

The direct effect of the AMC campaign in the Wittenberg region is a saving of 11.13 tons of CO₂ per year. There is a potential of 5,665.6 tons savings of CO₂ per year, if the residents of the whole region of the Wittenberg line bus network would be accessed. Because of the high number of older participants, the expectations of CO₂ reduction could not be fulfilled. Most of the older people do not own a car anymore respectively are pt-users already.

7.2 Evaluation of individual targets at local implementation area level

Additionally to the common evaluation procedure described above, each region defined strategic objectives, key output and quantifiable performance indicators of the individual AMC campaigns (see Table 7-2 and Table 7-3).

Table 7-2: Implementation area specific objectives and key outputs

Specific objectives proposed according to description of work	AMC campaign achievements	Method of evaluation
Improve the use of existing forms of PT in sparsely populated areas	23% of participants stated to have increased their pt use.	Interviews
Improving the accessibility of public facilities	Information materials with the aim of improving the accessibility (e.g. surrounding area maps of public transport stops or cycle paths brochures) were highly requested. 84% of all information packages included one of these items.	Recording at data base
Reduction of road traffic induced CO ₂ -emissions	On average 2.8 trips were shifted by 10% of the participants	Interviews
Specific key outputs proposed according to description of work	AMC campaign achievements	Method of evaluation
AMC-campaign conducted with at least 650 participants	273 participants in the AMC campaign ordered and received information material.	Recording at data base
Accompanying active measure packages conducted with at least	460 persons in total were directly contacted by SmartMove project staff in	Counting of visitors

250 participants	all active measures.	
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Table 7-3: Impacts, performance indicators and quantified targets

Impacts, performance indicators and quantified targets	AMC campaign achievements	Method of evaluation
Substantial increase of PT users: at least 15 % of the advised persons use PT more often	23% of participants stated to have increased their pt use.	Interviews
Increased number of PT feeder scheme users (alternative forms of bus transport, call buses, call taxis):10%	In course of the campaign the number of pt feeder scheme users increased by 17%.	Countings of the pt operator
Reduction of CO ₂ -emissions from road traffic: Decrease of 4-6 %	10% of participants shifted trips from car to public transport. Additionally, 23% of the participants are willing to use pt more often in future times.	Interviews
Increased knowledge of users and potential users about PT service: 60 % of participants feel better informed on PT	90% of participants stated to feel better informed on PT supply in the region.	Interviews

Generally, it can be stated, the envisaged objectives as well as the quantified targets could be reached within the AMC campaign. The quantified targets could be reached as well, except for the number of participants who ordered information material.

8 Summary and conclusion

The ex post report on the Wittenberg implementation region gives an overview on the process, the costs and the impact of the AMC campaign implemented from spring 2015 to February 2016.

During the campaign the framework conditions remained unchanged, which allows the conclusion, any changes in the transport demand in the region are mainly driven by the impact of the AMC campaign. The response of the mail-based dialogue marketing was not sufficient, but many participants could be recruited via active measures like presentations and consulting for rural associations, stands on weekly markets and consultations at transfer points. Finally, 4% of the initially contacted households participated in the campaign.

Main impacts of the AMC campaign are (based on the interviews with the participants after the AMC campaign): 90% feel better informed about the public transport than before the campaign. 23% increased their usage of pt and other 23% intend to do so in the future after having received information within the AMC campaign.

10% shifted trips from car to public transport, with an average shift of 2.8 trips per week. This caused a reduction of CO₂ emission by ca. 11.3 tons per year. Generally, it can be stated, the envisaged objectives as well as the quantified targets could be reached within the AMC campaign.

There is a clear potential in AMC campaigning to reduce energy consumption and CO₂ emission. Extending the campaign to other areas or intensifying the participation within the region by increasing the direct contacts to AMC target persons could lead to considerable energy savings and lower CO₂ emissions.

Besides, the AMC campaign in the Wittenberg area gave people the possibility to express their needs and suggestions for improvement of the public transport system in their region. The very constructive remarks are leading to intensive deliberations between all stakeholders and will contribute to a user-friendly evolution of the public transport.