TRAFIKVERKET

Report 2011:142

Carriage of cycles on board trains

Opportunities and difficulties

Research study carried out on behalf of the Swedish National Transport Administration

September 2011

TUB
Trafikutredningsbyrån

KOUCKY PARTNERS MILJÖKONSULTER

Translated from the Swedish language. Swedish version first published in November 2009.
Euro currency rates calculated September 2011.

Title: Carriage of cycles on board trains: opportunities and difficulties

Version	Date	Reviewer	Distribution
1.0. First version	2009-10-02	PE	E. Brodén
1.1. Final version	2009-10-13	PE, MK	E. Brodén, Reference group
1.2. Editorial changes	2009-12-02	PE	Free

Author: Pelle Envall, TUB Trafikutredningsbyrån
David Backelin, Michael Koucky, Koucky & Partners AB

Client: NTA, Borlänge, Sweden (Trafikverket)

Contact: NTA: Elina Brodén, Anki Ingelström
TUB: Pelle Envall, Ph. +46 70 65 10 194
Koucky & Partners AB: Michael Koucky

Title picture: Carriage of cycles on board train, Picture: P. Envall

Date of issue: 2011-09-23
Publisher: Trafikverket, Sweden. Ph. +46 771 921 921
Report No. 2011:142
ISBN 978-91-7467-211-4

Summary

This R&D project has investigated why train passengers take cycles with them on board the train. The study looks at the attitudes of train passengers towards the carriage of cycles, the experience of train personnel when it comes to transporting cycles and different types of services for the carriage of cycles that are offered in other countries. The results are based on a questionnaire survey of 318 train passengers on local services in the Swedish region of Skåne and between Skåne and the city of Gothenburg.

The results demonstrate that:

- The carriage of cycles on board train is supported in many European countries and carried out in a variety of different ways. In most cases the service offered is based around the passenger taking their cycle on board the train themselves;

- A significant proportion of train passengers (just over 20 % in this study) have travelled with their cycle on board the train at least once;

- Passengers do not often bring their cycle with them when travelling by train which means that only limited space is needed for the carriage of cycles;

- The price for this service differs greatly throughout Sweden. This lack of coherence runs the risk of being questioned by customers;

- There is a risk that conflicts can arise between the financial interests of train operators and the wider benefits to society when it comes to offering the carriage of cycles on board *long-distance national train lines*;

- The results of the questionnaire survey demonstrate that common concerns about offering the carriage of cycles on board trains to passengers can largely be dismissed.

The results of the study combined with the experience of other countries, suggests that the carriage of cycles on board trains can be introduced immediately on the majority of local services that have low-floor vestibules, outside of peak periods. We have not found any technical barriers or problems of acceptance amongst other passengers or on board personnel in allowing the carriage of cycles on board trains, more than there is a need for suitable space. Further recommendations are presented in detail at the end of the report.

Contents

1. Introduction 5

2. Examples from selected countries 6
2.1. Sweden 6
2.2. Switzerland 6
2.3. Germany 8
2.4. France 9
2.5. Other countries 10
2.6. Design of storage space 11

3. Interviews with on board personnel 14
3.1. Aim and method 14
3.2. Selected results 15
3.3. Conclusions 17

4. Questionnaire survey of train passengers 18
4.1. Aim 18
4.2. Method and approach 18
4.3. Sample size and response rate 18
4.4. Respondents 19
4.5. Geographic distribution of journeys 21
4.6. Analysis of missing responses 21
4.7. Questionnaire results 22

5. Discussion 34
5.1. Introduction 34
5.2. Problem or possibility for other passengers? 34
5.3. Views of on board personnel towards the carriage of cycles on board trains 34
5.4. Financial considerations and pricing 35
5.5. Evaluation of whether demand is increasing or falling 36
5.6. Suggested improvements 36

6. Conclusions 37
6.1. The characteristics of demand 37
6.2. Barriers to implementation 38
6.3. Recommendations 38

7. References 40

Appendix 1. Further international comparison (in Swedish) 41
Appendix 2. Questionnarie design (in Swedish) 44
Appendix 3. Train departures and places for survey distribution (in Swedish) 53

1. Introduction

TUB Trafikutredningsbyrån and Koucky & Partners AB were appointed during Autumn 2008 by the National Railway Administration (now part of the National Transport Administration) to collect data about why train passengers travel with their cycle on board the train, and the attitudes of other passengers towards this. The purpose of the study was to give authorities, elected leaders and train operating companies a better understanding of the social and financial implications of allowing the carriage of cycles on board trains where it is currently not permitted in Sweden today, for example on some national train services.

The results are presented in three chapters. Chapter two summaries how the carriage of cycles on board trains works in other countries and the technical details of the services provided. Chapter three presents the results from a small interview survey of on board train personnel. The results of a questionnaire survey of train passengers are presented in Chapter four. This is followed by two chapters which discuss firstly, the implications of the results for the design of the Swedish train system and secondly, our conclusions and recommendations. Practices from a selection of European countries, including rules for booking and pricing, are presented in Appendix 1.

The report is authored by Dr Pelle Envall, TUB Trafikutredningsbyrån and David Backelin and Michael Koucky, Koucky and Partners AB.

Stockholm and Göteborg

November 2009

TUB Trafikutredningsbyrån and Koucky & Partners AB

2. Examples from selected countries

This chapter presents an overview of how the carriage of cycles on board trains is organised in a number of countries in Europe. In particular, examples where the passenger has responsibility for taking the cycle on board the train themselves. Send and collect or baggage services are not covered in this report. Appendix 1 presents further details about pricing and the securing of cycles on board trains in different countries.

2.1. Sweden

The carriage of cycles on board trains is generally not permitted in Sweden, however the service is offered on a number of routes. The carriage of cycles on board trains is permitted, for example, on trains operated by Skånetrafiken, Tåg i Bergslagen, Öresundstågen and Kinnekullebanan as well as on commuter trains operated by Västtrafik and SL (within the metropolitan regions of Gothenburg and Stockholm respectively). The carriage of cycles on board trains was trialled by SJ (the national operator of long distance services in Sweden) during the summer of 2009. Prices differ between operators. Skånetrafiken charges the equivalent of a child ticket for carriage of cycles. The service is offered free of charge if travelling with SL. Dedicated space for cycles is usually lacking, instead cyclists are asked to secure their cycles in multifunctional spaces with drop down seats or in the vestibules.

The National Transport Administrations website has a current list of all routes where the carriage of cycles is permitted.[1]

2.2. Switzerland

The carriage of cycles on board trains is in principle allowed on all train services in the country, regardless of train operator. SBB's (the state owned train operator) cycle ticket is accepted by all train operating companies.[2]

The carriage of cycles on board trains is always permitted 4,700 out of a total of 5,000 daily departures (93.9%) and on an additional 122 departures during the high season with a reservation. It is only on a total of 183 daily departures (3.7%) that the carriage of cycles is not permitted. These are mostly international trains which are not designed for the carriage of cycles, for example German ICE trains, or the Italian Pendolino trains.[3]

The carriage of cycles on trains is not allowed during peak periods on Zurich's regional train system (S-bahn) i.e. on weekdays between 0600 – 0900 and 1600 – 1900. On certain train models with limited storage space (tilting trains, ICN) reservations are applicable during the period March 21st – October 31st

A day card for the carriage of a cycle on board trains, in combination with any journey, (the passenger takes a cycle on board themselves, accompanied bike carriage ABC) can be purchased for 10 or 15 sFr (with/without discount card, ca. 8/ 12 €, regardless of journey length. The booking of a cycle space on an ICN train costs an additional 5 sFr/ 4 €. Cycles

[1] Updated link, September 2011: http://www.trafikverket.se/Privat/Resan-och-trafiken/Din-resa/Cykel/Cykel-pa-tag/

[2] Source: http://mct.sbb.ch/mct/reisemarkt/services/wissen/velo.htm

[3] Source: Roesli, M. (2007) Accompanied bicycle carriage and SBB – today and tomorrow. Seminar presentation, IG-velo workshop "Bicycle and public transport", Bern 2007-05-17

transported in a special cycle bag measuring less than 90x120cm are carried free of charge and permitted on board all trains. A yearly cycle card is available for passengers that travel frequently by train with their cycle costing 195 sFr, ca. 160 €.

It is largely the case that all trains have dedicated space for the carriage of cycles. This space is even used during winter for transporting skis and other winter equipment. In addition it is also possible to hire cycles from over a hundred train stations in Switzerland; it is even possible to drop off the cycle at a different train station to that where it was hired at an additional cost.[4]

According to information from Markus Röösli, product manager for "bike" at the state owned train operating company SBB, the carriage of cycles on board trains is popular in Switzerland. It is an important part of the marketing of trains for leisure journeys, contributes to creating a positive image and is profitable.

During 2006 around 510,000 cycle tickets were sold, equivalent to a total revenue of around 3.4 M sFr (ca. 2.8M €). Around 3,600 people purchased a yearly cycle card. Approximately 10% of all frequent passengers make use of the opportunity to take their cycle with them on board the train at least once a year.

The carriage of cycles on board trains does not lead to problems for the train operating company in general, according to Röösli. However, during certain periods on some popular routes there can be a problem where demand outstrips capacity. This can be the case on around 20 days or the equivalent of 200 train departures per year.

Picture 1: The carriage of cycles on board trains is permitted on nearly all trains in Switzerland, and is made use of by many, in particular leisure passengers. Picture: Velojournal

[4] Source: Rent A Bike: http://www.rent-a-bike.ch

2.3. Germany

The carriage of cycles on board trains is permitted on many, but not all trains in Germany. Timetables and internet booking indicate whether this is permitted. When booking on the internet one can choose whether to just view journeys where cycles are allowed. Deutsche Bahn has a dedicated telephone number for cyclists where more detailed information can be obtained about the carriage of cycles on a specific train. This number can also be used for group bookings. In addition, information is available on Deutsche Bahns website.[5]

Regional trains

The carriage of cycles on board trains is offered on the majority of regional trains in Germany, space permitting and without guarentee. Train staff can turn away cycles if they believe the carriage of additional cycles would cause disruptions. Time restrictions may be in place to avoid the carriage of cycles during peak periods.

The majority of regional trains have so called multi-use spaces where cycles can be hung up, often at the front and back of each train set. These carriages are marked with a cycle symbol by the doors. The carriage of cycles on board trains is also permitted on regional trains without dedicated multi-use spaces as long the cycles do not block access. Cyclists are encouraged to try and avoid busy commuter times. Advance reservations are encouraged for groups with four or more cycles wishing to travel on board a particular train. Conditions for the carriage of cycles on board trains and prices on regional trains can vary by Bundesland (region). One of the reasons for this is that local public transport is to some extent regulated and financed regionally. The price for the carriage of cycles on board trains varies from free-of-charge to 5€ *per day,* see also Appendix 1.

Long-distance trains

The carriage of cycles on board trains is allowed on many (but not all) long-distance trains. If the journey take place on a so called Regional Express service a cycle ticket (4.50€) must be purchased, however a reservation is not needed. The carriage of cycles is allowed if space permits. Cycle space must be reserved in advance on the faster Inter-City or Euro-City trains with dedicated cycle space. Carriage number and the place where the cycle should be stored is indicated on the cycle ticket. A special ticket with travel information must be attached to the cycle and be visible. Boarding is made faster by indicating where on the platform the dedicated cycle carriages will stop. The price for the carriage of cycles, including booking fee, is 6/ 9€ per one way journey (with/without BahnCard-discount card).

Fast trains, ICE

The carriage of bikes on Germany's fast trains (ICE) is currently not permitted. There are no plans to provide space for cycles on board these trains, at the time of writing. The German Cycling Association (ADFC) has long championed this issue. The German Transport Ministry and German parliament have even put forward demands that Deutsche Bahn should provide for the carriage of cycles on fast trains.

Sleeper trains

On sleeper trains within Germany and even on international sleeper trains that either depart or arrive in Germany, the carriage of cycles on board trains is offered with cycles placed in

[5] Deutsche Bahn's information about the carriage of cycles:
http://www.bahn.de/p/view/service/fahrrad/bahn_und_bike.shtml

a seperate baggage carriage. Cycle spaces must be reserved in advance and costs 6/9€ (with/without BahnCard) within Germany, 15€ per journey to France or Belgium and 10€ on all other international journeys.

Send and collect "baggage" service
In Germany a send and collect service exists where, in combination with a train journey, cycles can be transported door-to-door. Cycles are collected from and delivered to any choice of address. The time between collection and delivery is a maximum of 48 hours. The service costs 25€ per cycle one way between the same cities the passenger has a train ticket for.

2.4. France

The carriage of cycles on board trains is nearly always free-of-charge in France. Trains which can carry cycles are marked with a cycle symbol in the timetable. For more information see SNCFs website and France's cycle organization FUBICY.[6]

Regional and local trains (TER)
On France's regional and local trains (TER, Transilien, RER) cycles are always carried free-of-charge in seven regions (Rhône-Alpes, Alsace, Auvergne, Languedoc-Roussillon, Limousin, Alsace and Provence-Alpes-Côte-d'Azur), space permitting.

In the remaining 15 French regions, the carriage of cycles is allowed on departures marked with a cycle symbol in the timetable, space permitting and free-of-charge.

Cycles are allowed free-of-charge on the entire local train system in Paris (Transilien, RER), outside of peak periods and at weekends.

Long distance trains
Cycles can be taken on board long distance trains (Corail) which are equipped with dedicated cycle space. These trains are marked with a cycle symbol in the timetable. Cycles are carried free-of-charge, space permitting.

On certain newer trains (Corail, Téoz, Corail Luneá) there is space for 5-6 cycles per train set. A reservation is required on these trains and a cycle ticket costs 10€.

High speed trains, TGV
Cycles are allowed on board many TGV trains with a reservation. Cycle carriage costs 10€. Cycles are transported in the dedicated baggage space in one of the carriages on board the train, together with other bulky luggage.

Approximately half of all departures with TGV trains are equipped with space for the carriage of cycles. All new TGV trains have dedicated cycle space. Between five and eight cycles can be transported per train, depending mainly on how much bulky luggage is booked.

[6] Official information from SNCF: http://www.velo.sncf.com/
Information from FUBICY, France's cycle organistion: http://www.fubicy.org/spip.php?article107

Picture 2: Cycle space on a French regional train. Picture: FUBICY

2.5. Other countries

The carriage of cycles on board trains is possible in many other countries, for example in The Netherlands, Denmark, Austria, Czech Republic, Slovakia, Great Britain etc. Prices and regulations for the carriage of cycles vary greatly in Europe. In Great Britain, for example, the carriage of cycles is permitted on, in principle, all train lines. It is nearly always free-of-charge, however a reservation is required on certain services.

Picture 3: Cycles are allowed on board much of the track based public transport in Germany including on board trams in Cologne. Picture: P. Envall

2.6. Design of cycle storage space

There are many different ways to provide storage for transporting cycles on board trains. On commuter and regional trains it is most common to have multi-use space with folding seats where cycles can be stored, when the seats are not in use, usually without special secure fastenings. On longer distance trains there is usually dedicated space where cycles can be secured or hung up. On trains with dedicated space for transporting bulky luggage, it is usually the case that this space can also be used for the carriage of cycles.

Examples of cycle storage space are shown below.

Picture 4: Cycle space for 1-2 cycles on board trains in Seville, Spain. Picture: M.Koucky
Picture 5: Cycle space on a German sleeper train. Cycles are hung on hooks. Picture: M.Koucky

Picture 6: Storage space for pushchairs and cycles. InterCity train in Switzerland. Picture: M.Koucky

Picture 7: Cycle space on InterCity trains in Austria. Picture: M.Koucky

Picture 8: Multi-use space with folding seats, space for cycles and skis. Regional train Austria. Picture: M.Koucky

Picture 9: Multi-use space where cycles can be hung up. Regional train in Austria. Picture: M.Koucky

Picture 10: Multi-use space on a German local train. Picture: M.Koucky

Picture 11: Dedicated storage space for cycles on a German InterCity train. Picture: M.Koucky
Picture 12: Cycle transported in the luggage space on a French high speed TGV train. Picture: FUBICY

3. Interviews with on board personnel

3.1. Aim and method

A number of interviews were carried out with Swedish train staff and other on-board personnel. This was done due to the simple fact that previous studies in the field have not included the views of on-board personnel. An aim of this part of the study was to collect the opinions of personnel in relation to the carriage of cycles on board trains, perceived difficulties and any "must haves" or hopes they have in relation to such a service. A total of six interviews were carried out, four by telephone and two face-to-face. The interviews specifically focused on investigating attitudes, knowledge and understanding of current rules amongst those who work on trains where the carriage of cycles is permitted on a daily basis.

Those interviewed were as follows:

- Two members of staff employed by Arriva who work on Pågatågen, (local trains within Skåne)
- Two members of staff employed by SJ AB who work partly on Västkustbanan trains and partly on Viskadalsbana (Varberg-Borås) as well as on routes where the carriage of cycles on trains is not allowed
- One member of staff from SL who works on Saltsjöbanan trains
- One member of staff from DSB First who works on Öresundtågen between Kastrup and Gothenburg, between Malmö and Växjö and Malmö and Kristianstad.

The six people who were interviewed all work on at least some routes where the carriage of cycles on board trains is permitted. The members of staff who work for SJ work on routes where passengers can travel with their cycles, and where this is not allowed. The selection of interviewees was based on achieving a broad geographic spread. Interviewees were primarily contacted through train operators. In some cases the project reference group helped with contact information for a manager of train personnel who then in turn helped us make contact with the interviewees.

3.2. Selected results

Rules, problems and potential improvements

The table below summarises the regulations in place for permitting the carriage of cycles on trains on those services the interviewees work on and also any problems and potential improvements that exist, according to the interviewees, when it comes to allowing passengers to take their cycle with them on board trains.

Table 1: Overview of the regulations for the conditions of carriage according to the interviewees

Interviewee	Employed on a route that allows/does not allow cycles on trains	Price for carriage of cycle	Personal view/ attitude towards cycle carriage service	Availability of dedicated cycle storage on trains where interviewee works	Weakest link	Easiest changes to makes it easier for passengers/on board personnel
On-board personnel SJ AB	Works on lines that allow/do not allow cycles on trains	50 kronor/ varies according to PTA zones (5€)	Positive if dedicated cycle storage exists, otherwise negative	In one carriage, otherwise cycles stored next to a wall without being securely fastened.	Design of the vehicle/ train car	Create dedicated space for cycles were not available, this would make it easier for both passengers and personnel
On-board personnel SJ AB	Works on lines that allow/do not allow cycles on trains	70 kronor (7.5€)	Positive if dedicated cycle storage exists, otherwise negative	4 cycles can be securely fastened in the low floor sections. Mixed in with other passengers, pushchairs and wheelchairs.	Design of the vehicle/ train car	Create dedicated space for cycles were not available, this would make it easier for both passengers and personnel
On-board personnel Saltsjöbanan	Works on lines that allow cycles on trains	Free	Problematic for me because cycles allowed on board trains without any suitable storage spaces for cycles	In one carriage, otherwise cycles stored next to a wall without being securely fastened.	Design of the vehicle/ train car	Create dedicated space for cycles were not available, this would make it easier for both passengers and personnel
On-board personnel Pågatågen	Works on lines that allow cycles on trains	Same cost as a child ticket	Positive	Separate cycle storage	Lack of information	Improve information around rules and how the carriage of cycles should be managed
On-board personnel Pågatågen	Works on lines that allow cycles on trains	Same cost as a child ticket	Positive	Separate cycle storage	Possibly easier to understand information	Generally very happy with management of service
On-board personnel DSB First	Works on lines that allow cycles on trains	Same cost as a child ticket	Positive	4 cycles can be securely fastened in low floor sections. Mixed in with other passengers, pushchairs and wheelchairs	Design of the vehicle/ train car	Create dedicated space for cycles were not available, this would make it easier for both passengers and personnel

Rules and regulations, and pricing

As summarised in Table 1, there are a number of differences when it comes to the rules and regulations permitting the carriage of cycles on board different train services. On-board personnel must bear this in mind when it comes to, for example, changing between two routes. Certain routes, for example, have restrictions which do not allow the carriage of cycles during peak hours. On many routes where the interviewees work, there are time restrictions as to when cycles can be transported, and it is always if space permits. It is also likely that the interviewees work on train services where the carriage of cycles is *not* permitted. According to the interviewees, it is not very often that they have had to turn cyclists away due to lack of space.

There are also differences in pricing for similar routes/ journeys. For example, it is free-of-charge to take cycles on board Saltsjöbanan services while it costs the equivalent of a child ticket in Skåne and on Öresund trains. Variations in price, or price system e.g. zone pricing, was not considered to affect the attitude of interviewees to the carriage of cycles on board trains, or cause them any direct problems. This perhaps was not surprising given the majority of passengers purchase tickets before they board a train.

Weakest link

It can also be seen from Table 1 that all interviewees thought it was important to have dedicated cycle storage space on board a train. The only one who did not hold this view works on Pågatågen trains which have provided dedicated cycle storage space for a number of years. On Pågatågen services space exists for up to 10 cycles per train, and all cycles can be securely fastened. Interviewees working for Pågatågen instead highlighted the importance of easy to understand information for passengers about where and how cycles can be stored. It was considered to be the case that improved information would make the carriage of cycles smoother.

Interviewees working for Saltsjöbanan were the least satisfied. Cycles are often carried on board trains, however dedicated cycle space is lacking. The cycles are often placed in the open areas near the doors (vestibules), and according to the interviewees create blockages which affect both passengers and personnel. This can lead to longer boarding/alighting times, and the risk for smudging/staining of clothes from dirty cycles. The same view was given by staff working on Viskadalsbanan train services; however the number of cycles carried on these services is a lot less. At the time of the interview there was however one train set on Viskadalsbanan that provided dedicated cycle storage space, which is not usually the case. On this train, with dedicated space for cycles, the interviewee stated that personnel have a positive attitude to the management of the service, as it allows passengers to take their cycles with them occasionally if they want to.

Cycle occupancy

In order to try to find out if the attitude of the interviewees was related to the number of cycles carried, we asked them how many cycles they usually transported per week on the services they were employed on. Answers differed greatly, and no correlation between the attitudes of interviewees and number of cycles carried could be ascertained. On Viskadalsbanan between Varberg and Borås 2-3 cycles are normally carried *per week* during the high season (summer). In comparison, on Pågatågen trains in Skåne there can be up to 10-15 cycles *per departure* during summer i.e. sometimes more than the number of cycle spaces. Many cycles are also carried on services in Skåne and on Saltsjöbanan services in the winter.

Interviewees stated that it was both women as well as men that travel with their cycles, and many that choose to do this are tourists. When it came to age, interviewees stated that young people were under represented. On Viskadalsbanan services the opposite is true where the majority who travel with their cycles are young people. However on this route it is relatively unusual to travel with a cycle. It is most likely to be trips made in the middle of the day where cycles are transported, which according to the interviewees makes sense given that cycles are not allowed on board trains during morning and afternoon peak periods.

3.3. Conclusions

It is worth noting that five out of the six interviewees in general had a positive attitude to the carriage of cycles on trains. Certain rules and infrastructure changes would have to be made in order for all those interviews to be satisfied. According to the interviewees, the most important factor that ensures good operation of the scheme is suitable cycle storage, where passengers themselves are able to secure their cycles. All interviewees perceived this to be important, or at the very least, a condition for the safe and smooth operation of the service. The variety of rules and prices that staff must comply with was not thought to cause any difficulties, according to the interviewees (but could be considered to be complicated for customers to understand).

It is interesting to note that on certain services “space permitting” is explicitly followed, and therefore it is the number of cycle spaces that limits how many cycles can be carried. At the same time many services currently allow an “unlimited” number of cycles, as there is no dedicated cycle space. If a passenger is turned away because cycle spaces are fully occupied, it is quite natural that the different rules and regulations on different services could be difficult to accept (this because train services with no decicated cycle spaces could be considered by passengers to carry more or less unlimited numbers of cycles).

The greatest number of cycles carried on board trains, according to the information given, is during the summer months when the number of tourists and leisure trips are highest. It is probably the case that a large proportion of those who travel with their cycle at these times are in need of information about how and where cycles should be stored on board the train, given that they are unfamiliar with travelling with their cycle, as well as the type of train that is used on a particular line.

4. Questionnaire survey of train passengers

4.1. Aim

This chapter presents the results of a questionnaire survey on board a number of trains operated by Skånetrafiken. The purpose of the survey was to find out what other passengers, who do not travel with their cycle, think about the carriage of cycles on board trains as well as to try and find out more about which passengers actually choose to travel with their cycle and on which sorts of trips. Another aim of the survey was to try and find out if passengers thought any improvements could be made to the current cycle carriage scheme in order to make it work more efficiently.

4.2. Method and approach

Two different versions of the questionnaire survey were developed, one paper-based and one internet survey. In addition invitations to take part in the online survey were made up in business card format.

The survey and invitations were handed out to passengers onboard a number of trains, as well as handed to passengers as they boarded trains on a number of station platforms. Passengers onboard were firstly asked if they would be willing to take part in a survey regarding the design of the train, as well the journeys they make. On platforms, we only handed out invitations to take part in the online survey as we did want to delay passengers. Those who were willing to take part in the survey or took an invitation were given a chocolate bar as a thank-you present.

If passengers were about to alight from the train, or preferred to answer the questionnaire later, they were given a freepost envelope so they could complete the questionnaire at a later date. However the majority of passengers who received a questionnaire completed it directly onboard the train which meant we could gather in replies ourselves and also save on postage. Besides handing out paper versions on board the train and at the cycle parking in Malmö, we also handed out invitations to answer the questionnaire online to passengers boarding selected trains.

A copy of the questionnaire in the Swedish language can be found in Appendix 2. The survey was undertaken during May 2009.

4.3. Sample size and response rate

Sample size

The sample size i.e. the number of train services to be included in the survey was developed in consultation with the National Transport Administration and Skånetrafiken. Skånetrafiken's passengers are allowed to travel with their cycles on a large proportion of train services in the region. In addition, passengers in Skåne often have experience of the way the Danish train system manages the carriage of cycles on board trains. It was therefore considered that Skåne would be the most suitable area for data collection.

Both services between bigger cities and through more rural areas were included in the survey (for example, Simrishamn – Ystad). The survey also included inter-regional routes between larger cities (Øresunds trains between Malmö and Gothenburg). A smaller proportion of the survey was undertaken by handing out surveys to train passengers at the

cycle parking pontoon (floating bridge/pier) immediately outside Malmö Central. The questionnaire was only handed out to people who had arrived or would immediately depart with a train on the survey day. Details of the trains and places visited can be found in Appendix 3.

Response rate

Just over 260 questionnaires were handed out onboard the trains. A total of 204 questionnaires were completed during the train journey and returned directly to survey staff. In addition, just over 30 responses were posted to us. The response rate for this part of the survey was therefore around 90%. 54 responses were returned to us by post from the survey carried out at the cycle parking pontoon in Malmö. The response rate here was above 50%, which is good. Around 30 people completed the questionnaire online. The response rate for this part of the survey was lower, around 10%. In general it can be said that the response rate was good to very good, due to the majority of responses coming from the on board survey.

4.4. Respondents

A total of 318 people completed the questionnaire. As shown in Table 2, 59% of respondents were women and 41% men.

Table 2: Sex of respondents (n. 314)

Respondent	Number	% of responses
Man	128	40
Woman	186	59

As can be seen in Table 3, the greatest proportion of respondents were young (aged between 15-24) or young adults (aged between 25-34). 57% of those who responded were 34 or younger.

Table 3: Age distribution (n. 313)

Age category	Number	% of responses
15-24	107	34
25-34	72	23
35-44	49	15
45-54	43	14
55-64	31	10
65-74	10	3
75-	1	0

The majority of those who responded to the survey frequent train passengers who regularly made the same journey which corresponded to where they received the questionnaire. As shown in Figure 1, 78% of those who responded to the questionnaire undertook the same journey a number of times each week, or at least a number of times per month.

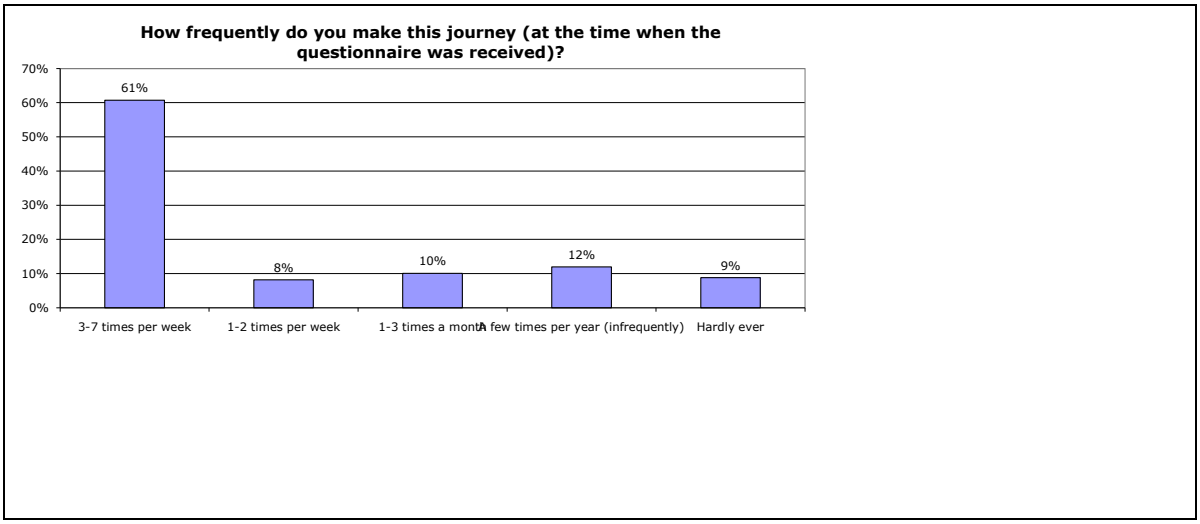

Figure 1: Share of regular train passengers

As shown in Table 4, the majority of those who answered the questionnaire were in employment (58%) or were studying (34%).

Table 4: Occupation of respondents (n. 314)

Response	Number	% of all responses
Employed	183	58
Studying	108	34
Retired	9	3
Parental leave	3	1
Unemployed (looking for work)	6	2
Other	5	2

Figure 2 shows that the majority of those who answered the survey were on their way either to or from work or place of study (71%). 11% were travelling on business when they received the questionnaire and a further 9% stated that they were making the trip for leisure. Service/shopping trips accounted for 3% of all reasons for travelling while 6% were classed as other.

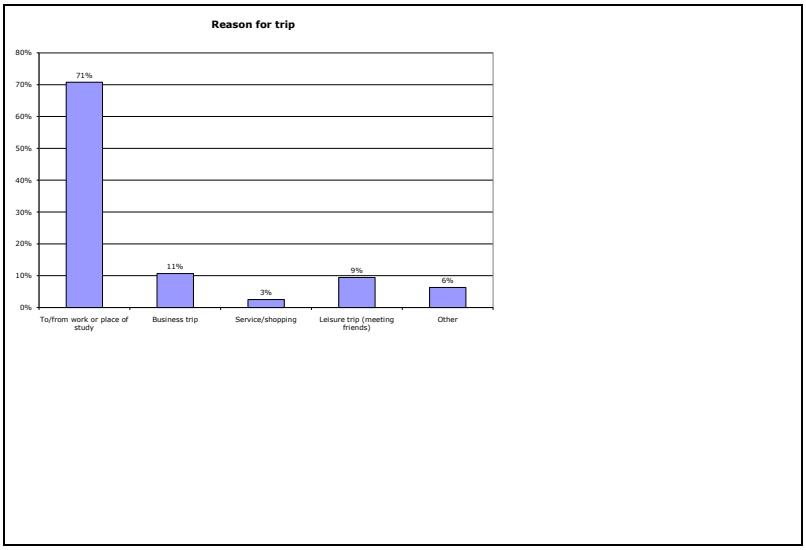

Figure 2: Reason for undertaking trip when given questionnaire

It is once again worth remembering that the survey was only carried out on trains which permit the carriage of cycles. This therefore means that a number of trains with a large proportion of commuters were not included in the study. The reason for this is that Skånetrafiken does not allow the carriage of cycles on trains which depart during peak periods. Despite this, the proportion of commuting trips and journeys made to or from a place of study were relatively high (see Figure 2).

70 (22%) out of a total of 318 respondents had made at least one journey with their cycle on board the train during the last 12 months. This will be discussed in further detail later in the report.

4.5. Spatial distribution of journeys

Table 5, below, identifies which train stations respondents travelled from when they received the questionnaire and also their destination station. Malmö, Gothenburg and Helsingborg were the most common places where respondents started their journey. The majority gave Malmö, Ystad or Kristianstad as their destination station where they would be alighting the train.

Table 5: Boarding and alighting stations, according to the questionnaire

Boarding station	Number	% of responses	Alighting station	Number	% of responses
Malmö	73	23	Malmö	84	26
Other	62	19	Other	84	27
Gothenburg	42	13	Ystad	51	16
Helsingborg	27	8	Kristianstad	20	6
Ystad	20	6	Skurup	19	6
Lund	16	5	Tomellilla	11	3
Tomelilla	13	4	Helsingborg	9	3
Kristianstad	9	3	Svedala	6	2
Skurup	8	3	Bjuv	5	2
Kastrup	5	2	Kastrup	5	2
Copenhagen	5	2	Perstorp	5	2
			Klippan	5	2

4.6. Analysis of missing responses

There are a number of quiet compartments on the trains which were included in the survey. Passengers sitting here have chosen to do so because they do not want to be disturbed by other passengers during their journey. Therefore, and in agreement with train personnel, we chose not to hand out questionnaires to quiet coach passengers.

It is worth noting that the survey was carried out on a Monday and Tuesday at the beginning of May, i.e. before the tourist season gets underway. It is highly likely therefore that trips made by groups of tourists are underrepresented in the survey. It is also the case that it is only those passengers who travelled on the trains where the questionnaire was being handed out are included in the survey.

We noticed that there was a certain tendency for respondents who travelled less frequently by train to be less likely to take part in the survey. For example, a number of passengers said that they hardly ever travelled by train or they were making the journey for the first time on a certain route, and therefore were hesitant to take part in the survey. It is unclear however whether this group of passengers is underrepresented in the study, as in response to this hesitancy the person handing out the questionnaire stated that even the views of people who travelled less often were important, and many of these passengers then went on to fill in the questionnaire. The relatively high proportion of infrequent passengers in the study suggests that it is not the case that this group is underrepresented (see Figure 1).

The questionnaire was only provided in Swedish which meant that those who do not understand Swedish were not included in the survey. Approximately 10 people were not able to complete the questionnaire because of this.

4.7. Questionnaire results

The carriage of cycles on board train as a potential problem

Respondents to the questionnaire were asked to list the factors or characteristics of the design of the train which negatively affected their journey and to what extent. The different aspects they were questioned on included: “other passengers travelling with cycles”, “not enough baggage space”, “other passengers (loud) conversations”, “other passengers pets” and if it was “too warm or too cold on board the train”.

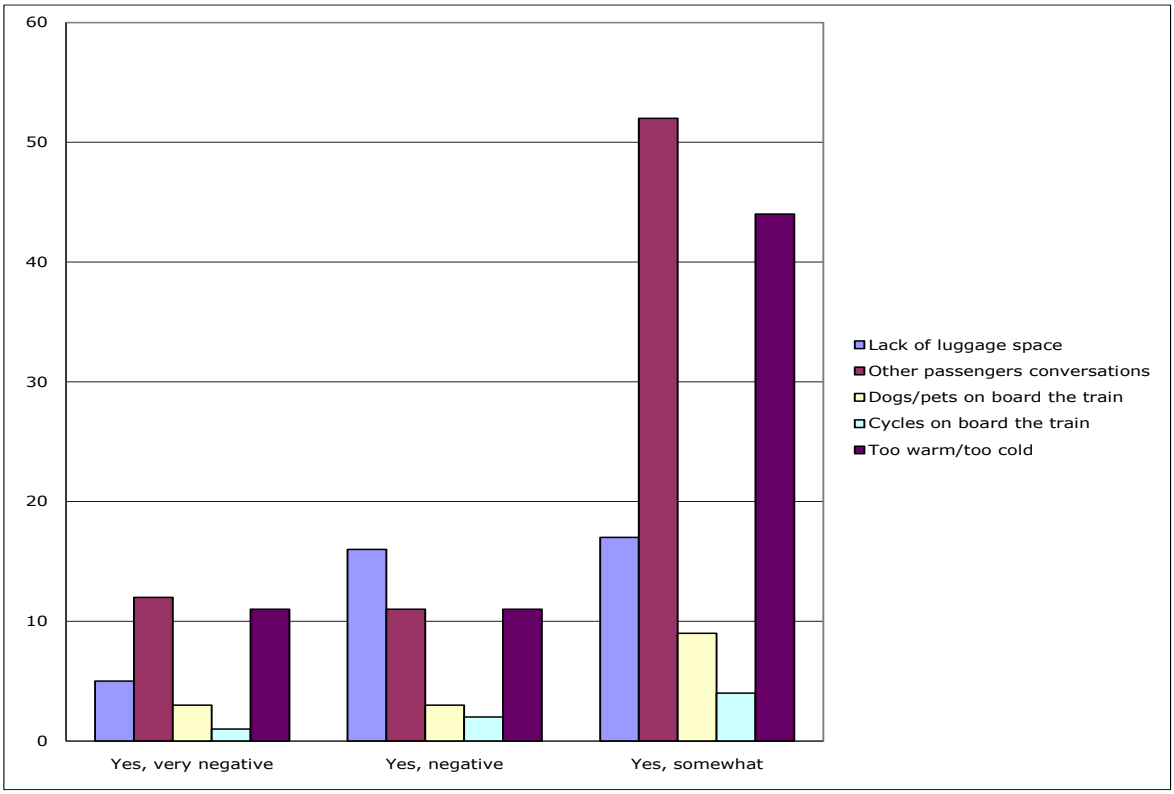

Figure 3: Factors that negatively affected the respondents’ journey

As shown in Figure 3, seven out of a total of 318 respondents stated that they were negatively affected by cycles being on board trains. One person felt that this strongly

affected their journey in a negative way. This can be compared to a total of 75 people who had stated that their journey was negatively affected by other people's conversations, where a total of 12 felt that this strongly affected their journey in a negative way. Even the train being too cold or too hot as well as other passengers' pets was seen as a bigger problem that other passengers travelling with their cycles, at least in the numbers that are carried today on board Skånetrafiken's trains.

Views of passengers on the opportunity to take cycles on board trains

The questionnaire looked into the views of passengers when it came to the opportunity to take cycles on board trains. Passengers were asked: "Skånetrafiken and Öresundståg allow passengers to travel with their cycles on board the majority of trains. What do you think about this?".

As can be seen from Table 6, 88% of those questioned said that they were quite positive or very positive to allowing passengers the opportunity to travel with their cycles on board trains operated by Skånetrafiken and Öresundståg. Only 2 respondents held a negative view.

Table 6: Passengers' views concerning the possibility to take cycles on trains

	Total (n 316)		Only cyclists* (n 73)	
Response	Number	% of responses	Number	% of responses
Very positive	216	68	62	85
Fairly positive	63	20	8	11
Neither positive or negative	20	6	0	0
Negative	2	1	0	0
Don't know/no view	15	5	1	1

*Cyclist here means someone who has taken their cycle on board the train with them in the last 12 months.

Of those who had taken their cycle on the train with them on at least one occasion, 96% had either a fairly or very positive opinion towards the opportunity to do so. Nobody in this group thought had negative thoughts about this. More detail about those who travelled with the cycles is given in the next section.

Many of those who responded to this question chose to leave a comment. A selection of these is presented below:

- Don't use this opportunity, but am positive, green ☺
- It should be good for our environment, sympathetic. Would be stupid if one couldn't do this
- As long as there is dedicated space for cycles am positive
- Not that many do it but it's good that one can if they want to
- Should be allowed on all trains

Many respondents also pointed out in the space for further comments that they felt that in the area where the study was carried out, it was too expensive to travel with their cycles on board the train.

Proportion of passengers who have travelled with their cycle

In response to the question: "Have you ever, during the last year, made use of the possibility to take your cycle on board the train?", 22% (70 people) answered that they had done this, see Figure 4.

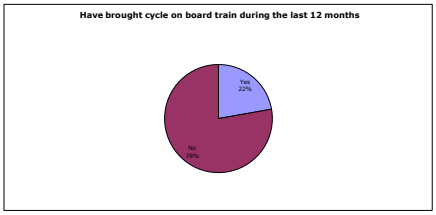

Figure 4: Proportion who have travelled with thier cycle on board the train during the last year

How often have you travelled with your cycle on board the train during the last year?

Of the 70 people who said that they had travelled with their cycle on the train, it was most common that this had only been done on only one occasion. As illustrated in Figure 5, 66% had taken their cycle with them on board the train a total of 1-2 times and an additional 20% 3-5 times. Only 10 people (15%) had travelled with their cycle on board the train on more than 5 occasions during the last year.

The opportunity to travel with their cycle on board the train was only made use of very occasionally by the majority of "cycle passengers".

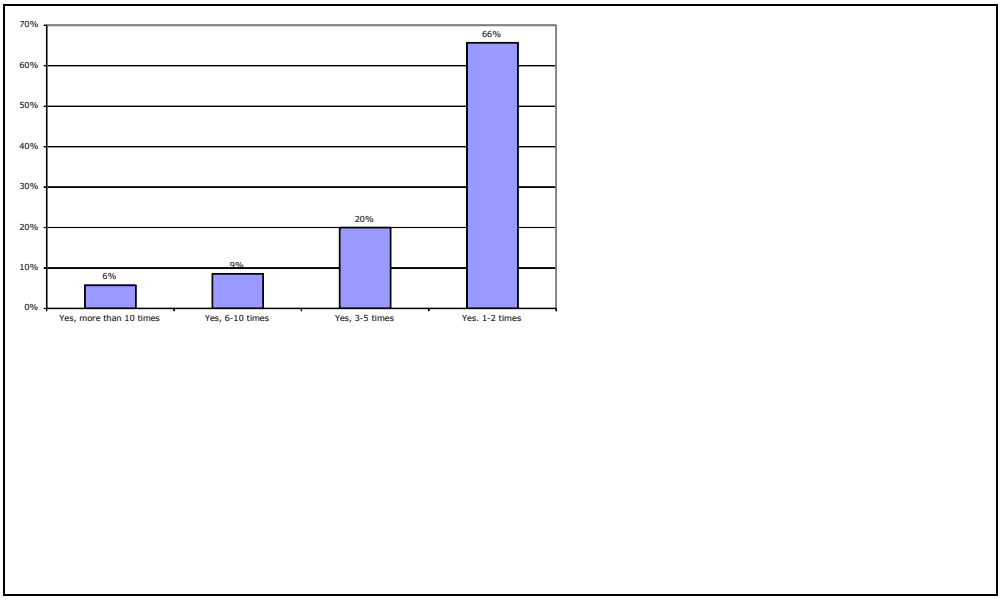

Figure 5: The number of times "cycle passengers" travelled with their cycle during the last year

The result of the questionnaire survey suggests that a total of 300-400 single trips had been carried during the last year out by the 70 respondents who had taken their cycle with them on board the train with them. This figure is based on the results shown in Figure 5 and assumes that approximately half of those trips where a cycle is also transported are single trips i.e. one leaves the cycle at, for example, the workplace and takes it home with them around a week later.

Users of the carriage of cycles on board train scheme

This section identifies the similarities and differences between those passengers who travel with their cycle on board the train and those who do not when it comes to age, sex and income.

Age

As shown in Figure 6 a somewhat larger proportion of respondents who had travelled with their cycle were aged between 25 and 34, followed by those aged between 15 and 24, than amongst the other groups. The number of respondents who had travelled with their cycle was, however, in relation small which must be taken into account when interpreting the information collected. The results therefore sugest that the age of "cycle passengers" is not significantly different from the age of other passengers.

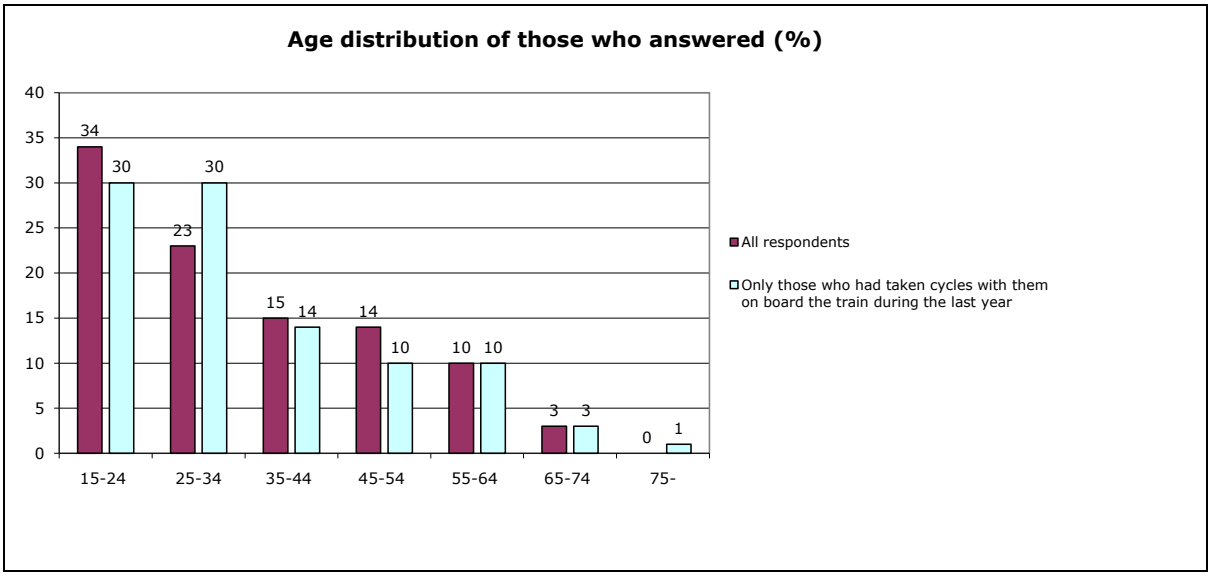

Figure 6: Age distribution of all respondents and those who had travelled with their cycle

Sex

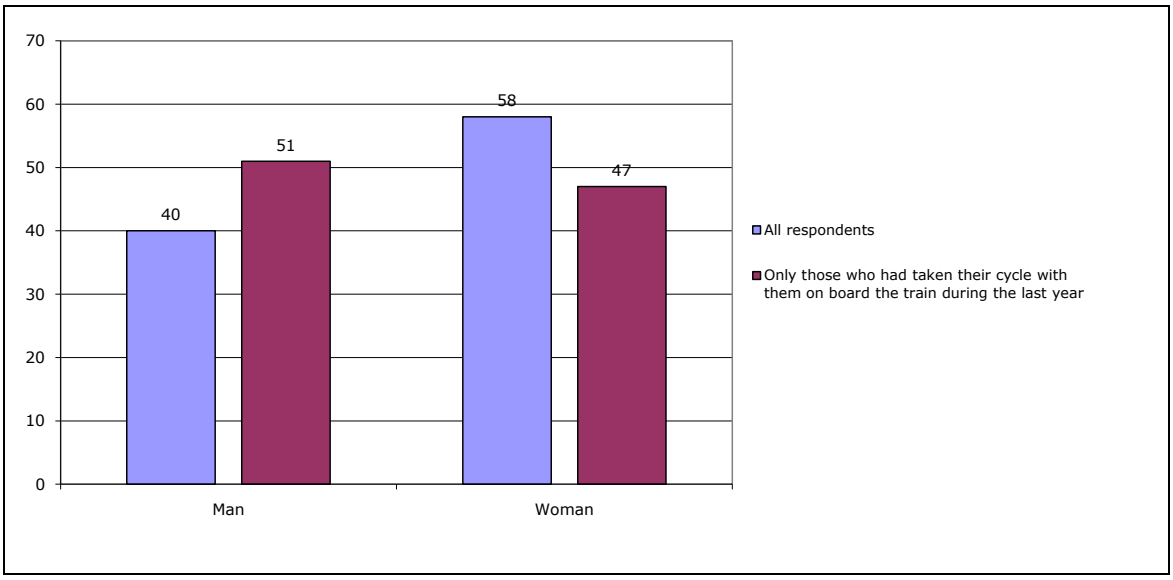

Figure 7: Sex of all respondents and those who had travelled with their cycle

The sex of passengers differs between those who had travelled with their cycles and those who had not. As shown in Figure 7, it was more common that men had travelled with their cycle at least once in the last year than women.

Occupation

Figure 8 shows that it was more common that respondents who travelled with their cycle were employed or studying than amongst other groups. However the difference was small. It must also be remembered that the number of respondents who had travelled with their cycle was small (70 people).

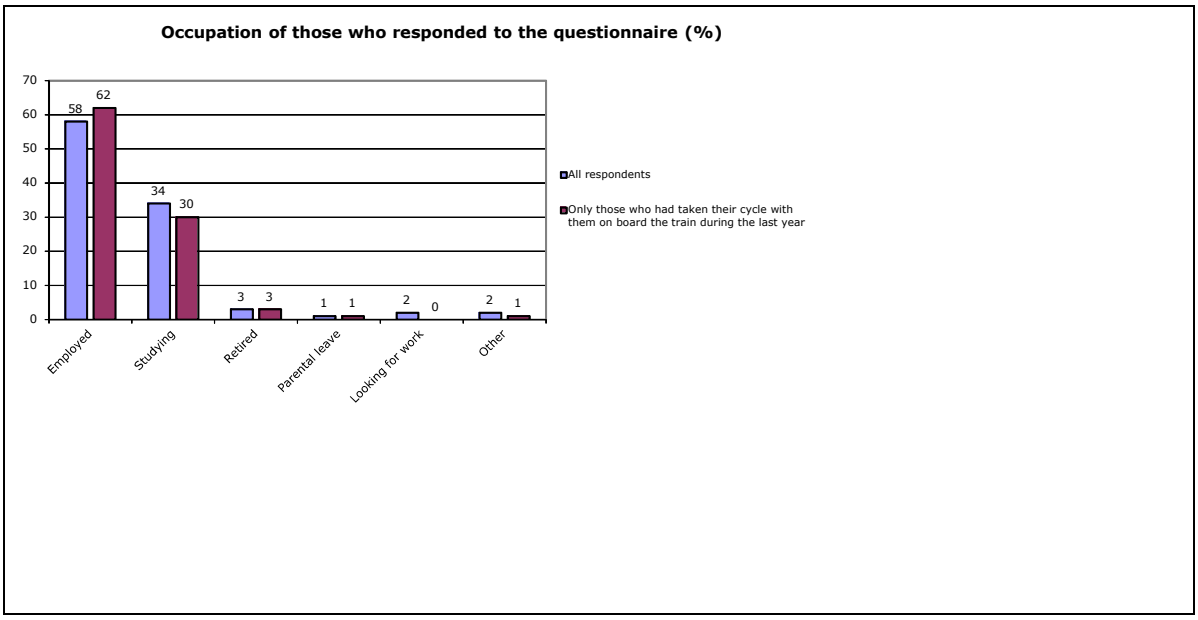

Figure 8: Occupation

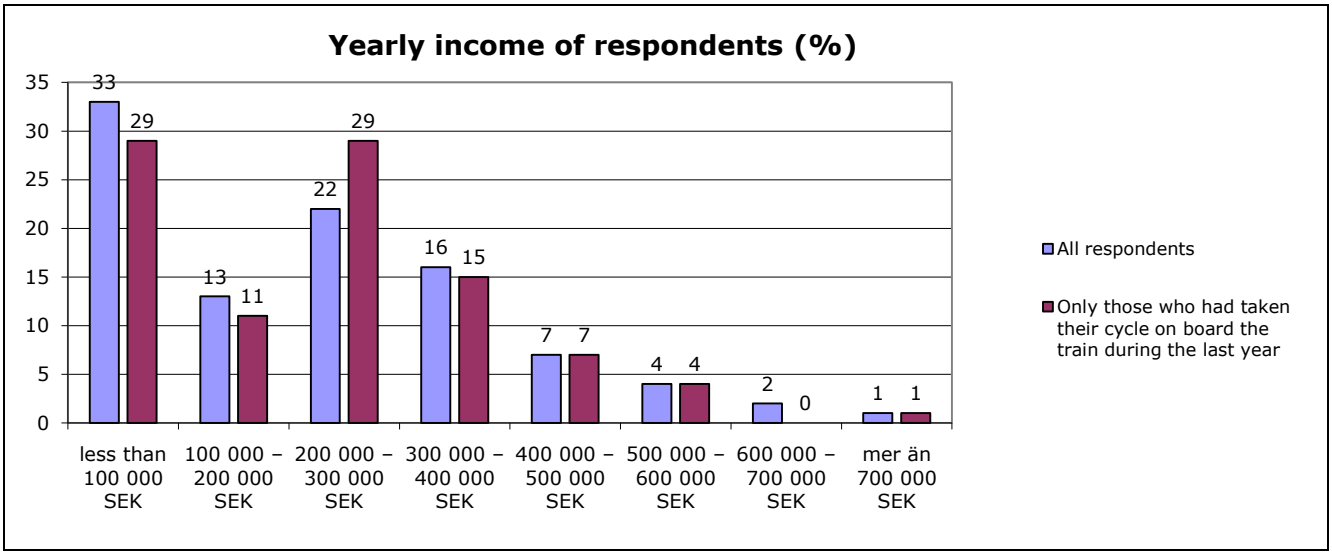

Figure 9: Yearly income of respondents and those who had travelled with their cycle on the train

When it comes to income, it can clearly be seen from Figure 9 that there were no large differences between the two groups. Respondents' weighted average income was 226 000 SEK[7] per year (counted in stages of 100 000 SEK, i.e. 50, 150, 250, 350 000 SEK etc, weighted by frequency). Average income for "cycle passengers" was 229 000 SEK (ca. 24 700€). This means that those who have travelled with their cycle on board the train at least once in the last year are most likely to have a similar or somewhat higher income to that of the average passenger in the sample. This small difference when it comes to income can possibly be explained by the age distribution, as presented in Figure 6.

Method of travel to and from the station

An interesting, but perhaps hardly surprising, result from the study was that many of those who travelled with the cycle on the train during the last year, are more likely to cycle to and from the station than other passengers (see Figures 10 and 11). 47% of those who on at least one occasion had travelled with their cycle on the train, had cycled to the station on the day of the survey, in comparison to the other passengers where only 24% had cycled to the station. 37% of "cycle passengers" had cycled from the train station in comparison to 18% of the other group. This suggests that it is more likely to be those that cycle on a daily basis that travel with their cycle on the train, than those who cycle less frequently, if at all.

[7] Ca. 24 300€)

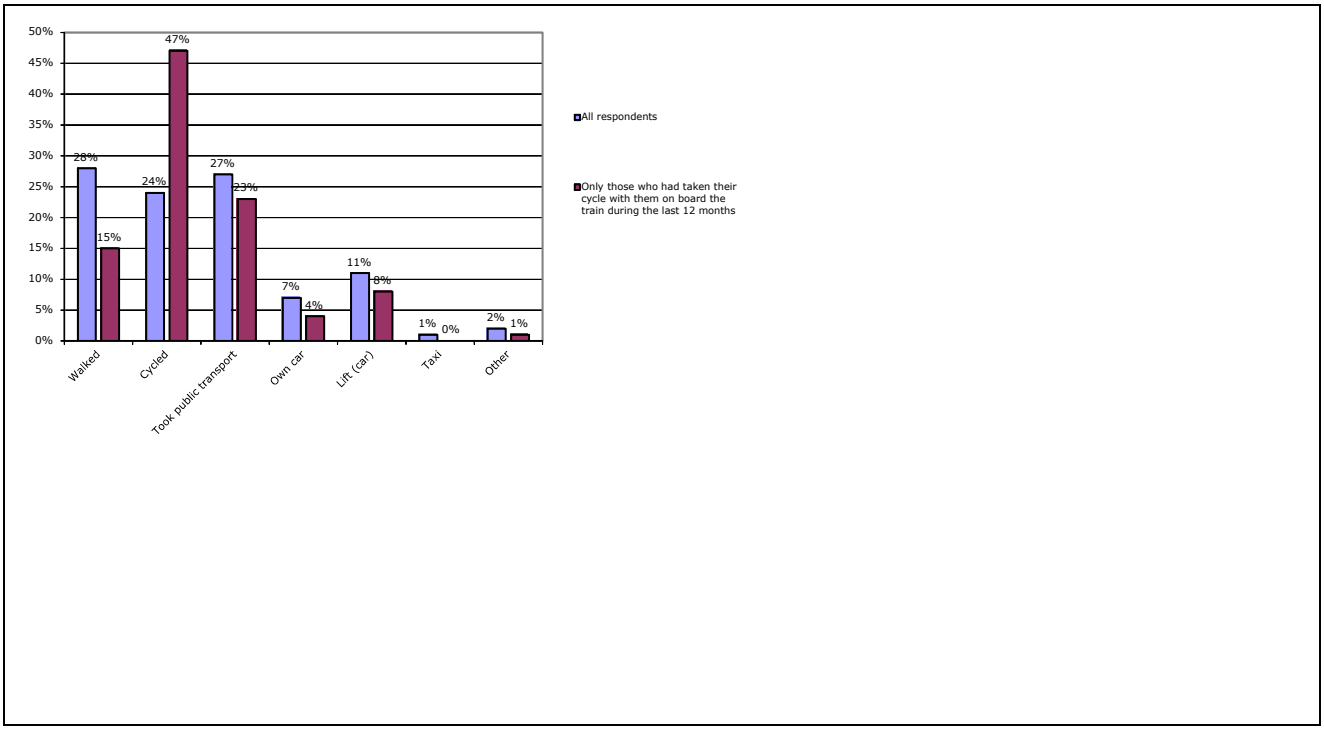

Figure 10: Method of transport to the station amongst respondents and those who had travelled with the cycle on the train.

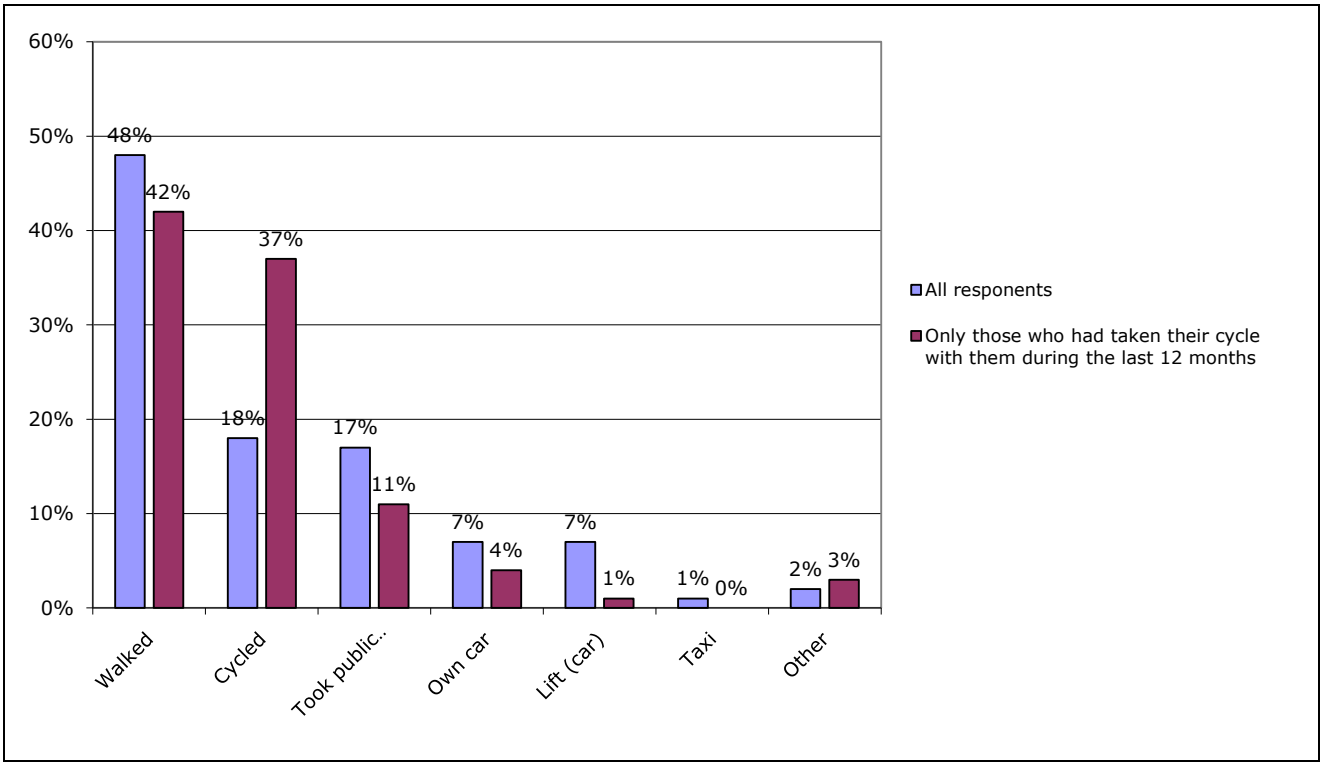

Figure 11: Method of transport from the station amongst respondents and those who had travelled with the cycle on the train.

Reasons for taking cycles on trains

Transporting a cycle to a place where the respondent works or studies was the most common reason for travelling with a cycle on the train. This is shown in Figure 12. Just over one third of respondents (34%) stated that they had taken their cycle on the train for this reason. This perhaps be because a person wants to have a cycle "at both ends" of their train journey (cycle-train-cycle) so that they can easily travel to and from their final destination. Another reason can be that a person occasionally wants to be able to make a journey a short distance from the station, or the place where they work or study. A relatively large share (22%) of respondents also stated that they travel with the cycle on the train in order to visit an acquaintance or friend.

Below are two typical comments that were left in response to these questions:

- Work in Fosie. Bus from the train station can take up to 40 minutes. It takes 20-25 minutes to cycle. In addition it is important from an exercise point of view.
- It is quicker to cycle there than take the bus to and from the station.

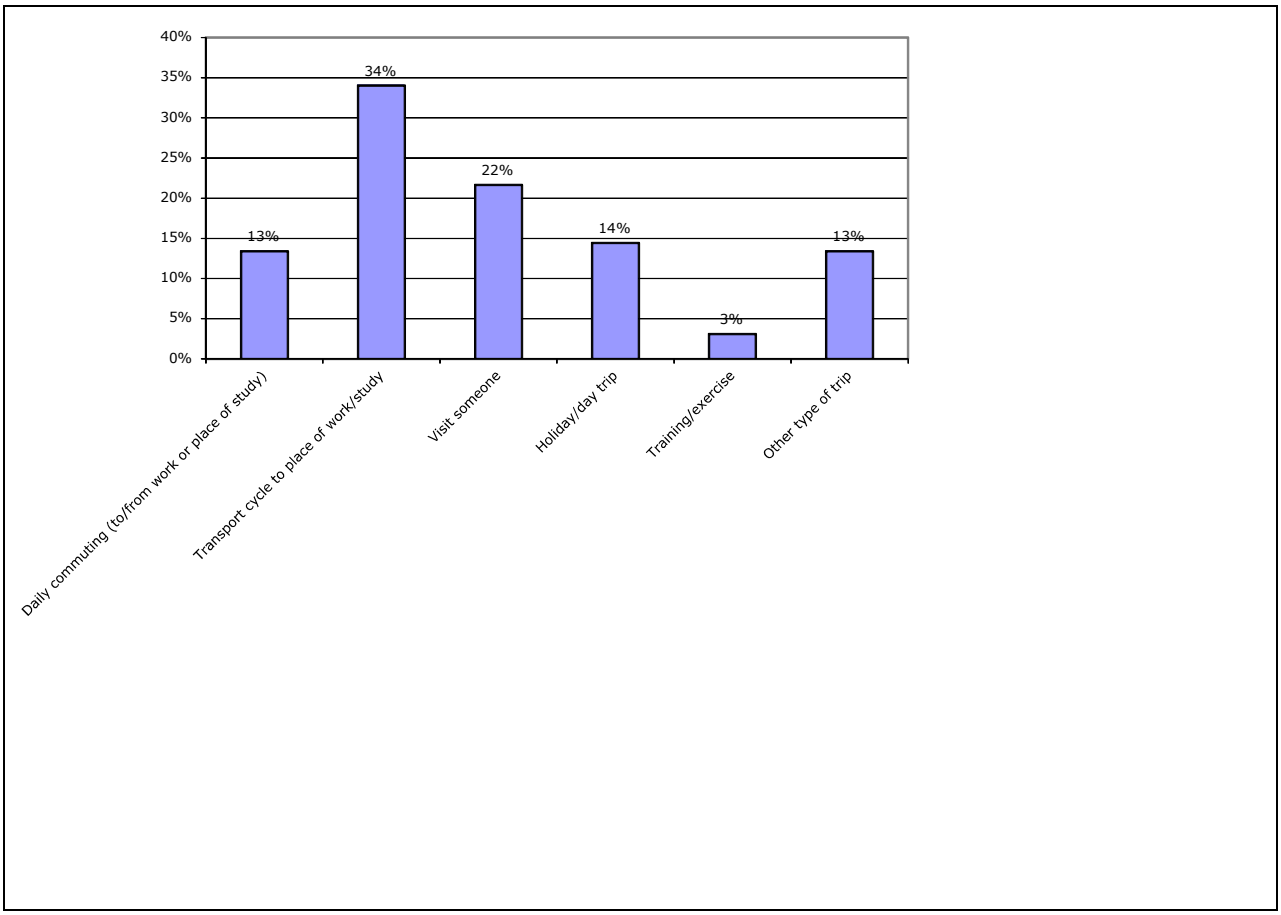

Figure 12: Reasons for travelling with a cycle on board the train

In total, around half of all respondents had travelled with their cycle on the train in conjunction with a work or study visit or daily commuting (47%) whilst just over one third (39%) had travelled with their cycle on a leisure trip i.e. to visit someone, a day out or exercising by cycle. The total demand ("need") of taking cycles on trains, measured in the number of trips, is therefore relatively evenly spread over the different days of the week and times (peak periods/ off peak periods).

When it comes to the time of the week when cycles are taken on the train, 60% stated that it is most important that cycles can be carried on board trains on weekdays while the remainder gave weekends as the most important. When it comes to time of day, the majority (63%) stated that it is important or most important that one can take their cycle on the train between 1500 and 1800, on weekdays.

Alternative travel options

Those who had travelled with their cycle on board the train answered additional questions about alternative travel options for those trips where a cycle is transported by train. As shown in Figure 13, the majority of respondents agree that the opportunity to travel with their cycle on the train allows them to travel to new places. Two out of three respondents fully or to some degree agreed with this statement. Just over one in four respondents (26%) agreed fully or to some degree to the statement that if they were not able to travel with their cycle on the train they would not be able to reach their final destination i.e. if they could not travel with their cycle then the train would not be a travel option for them.

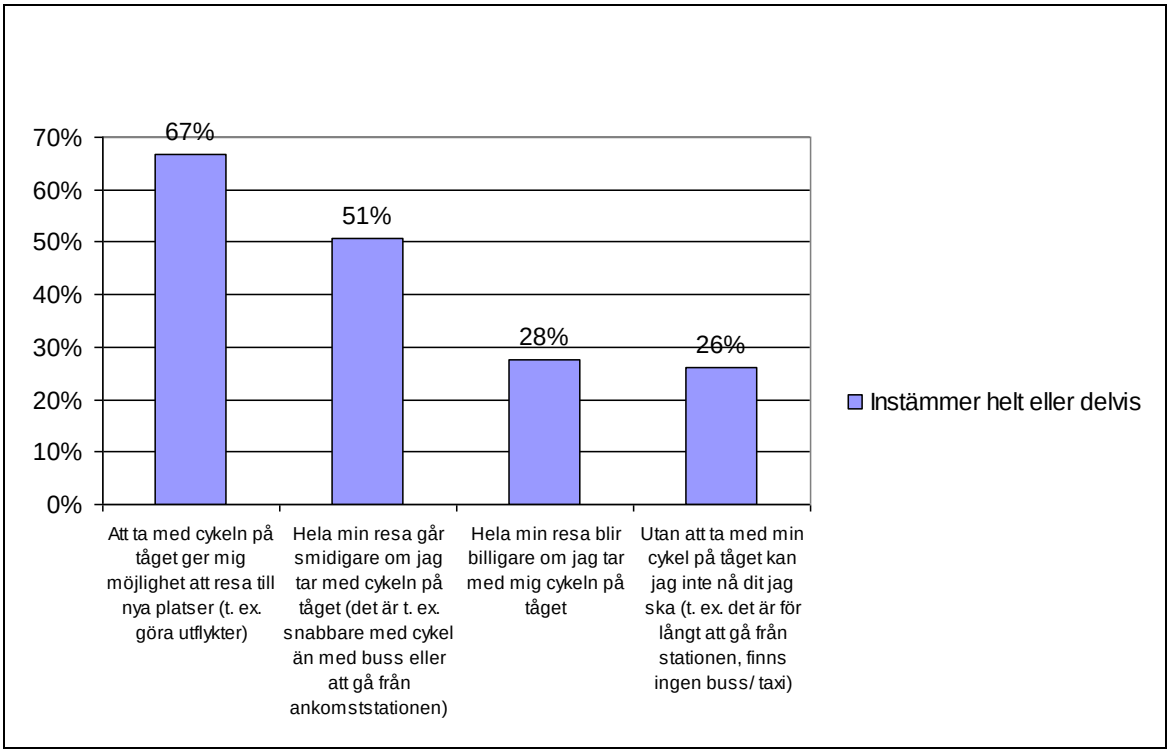

Figure 13: The proportions of respondents who fully or in part agreed with a series of statements about alternative travel options (n.69)[8]

[8] First column (67 %) states: Travelling with my cycle on board the train makes it possible for me to reach new/ additional destinations (e.g. make day trips). Second column (51 %): My door-to-door journey is easier when bringing my cycle on board the train (e.g. quicker with my cycle than walking or travel by bus from the far side station to my destination). Third column (28 %): My door-to-door journey is cheaper when travelling with my cycle on the train. Fourth column (26 %): Without bringing my cycle on board the train I cannot reach my destination (e.g. it is too far to walk from the far side station and no public transport).

Potential improvements

Those who take their cycle on the train were most likely to agree that it is important that there is easy to understand information about the opportunity to take cycles on trains, as well as the rules and regulation governing the scheme. Figure 14 shows that there are other potential improvements that are seen by many to be important, however not as important as easy to understand information.

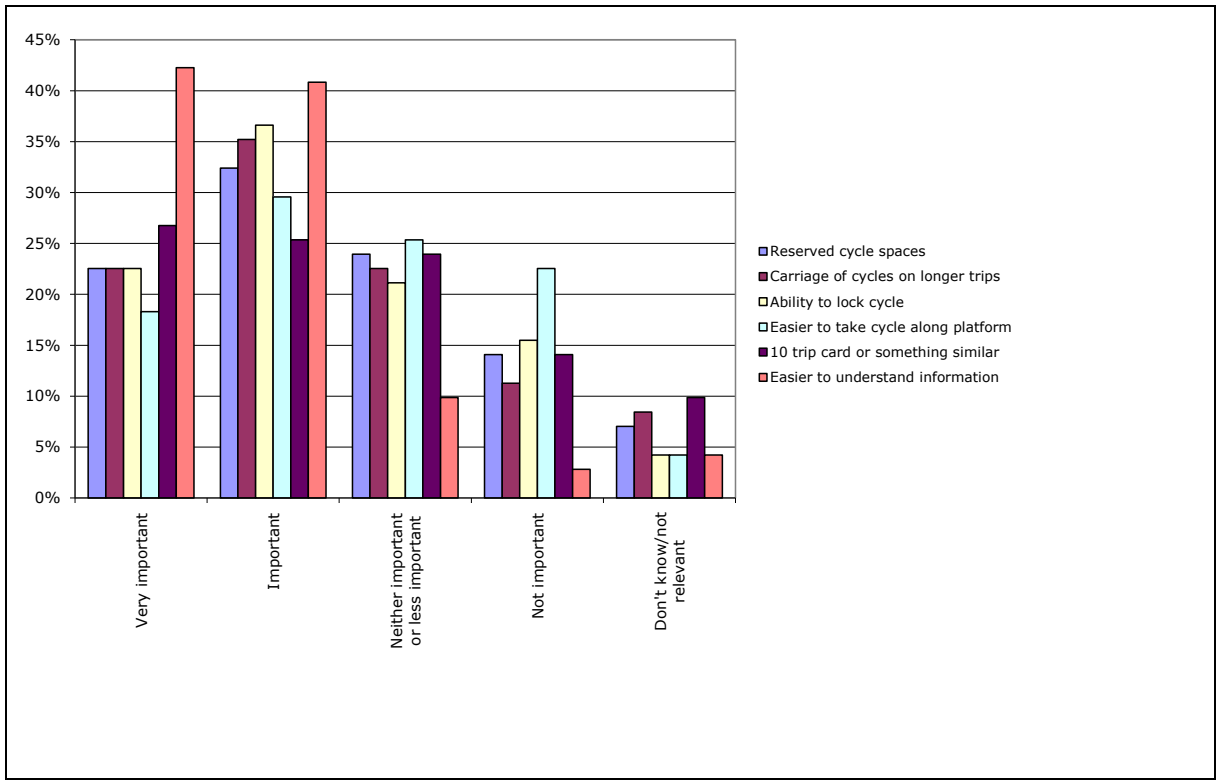

Figure 14: Potential improvements for cyclists on trains

The exact nature of the information that users require in order to make it easier to understand the rules regulations of cycle carriage was not investigated as part of this survey due to lack of space (a questionnaire need to be relatively short in order to maximise response rate). We return to this question later on in the discussion section.

Pricing

As shown in Table 7, 80% of respondents thought that the cost for taking a cycle on Skånetrafiken's trains was very high or somewhat high. Only passengers who had experience of taking their cycle on the train (i.e. had taken their cycle on the train at least once during the last year) were asked this question.

Respondents were asked: "What do you think about the price for taking your cycle on the train on Pågatåg or Öresundstågen services? Do you think that the cost of a ticket is high or low?"

Table 7: Respondents views on pricing

Answer	Number (n 71)	% of those who answered the question
Prices are very high	25	35
Prices are quite high	32	45
Prices are reasonable	14	20
Prices are quite low	0	0
Prices are very low	0	0

Approximately 20 respondents, and even those who had not travelled with their cycle on trains, commented on the price under other questions in the questionnaire. The overall view was that prices were too high and the opportunity to travel with a cycle on the train should be completely free.

Knowledge of the opportunity to take cycles on trains amongst those who had not tried this

The survey also looked into how respondents had found out about the opportunity to take cycles on board the majority of Pågatåg and Öresundtåg trains with them. Only those who had *not* taken their cycle on board the train during the last year were asked to answer this question. The result is shown in Figure 15.

The majority, 69%, knew that it was allowed to take cycles on board the train. 31% of those who answered however were not completely sure or didn't have any knowledge about this opportunity. One respondent commented that the opportunity to take your cycle with you on board the train *"should be marketed even more. Only know about it because I travel a lot by train myself. Would be good to "recruit" more train passengers with this".*

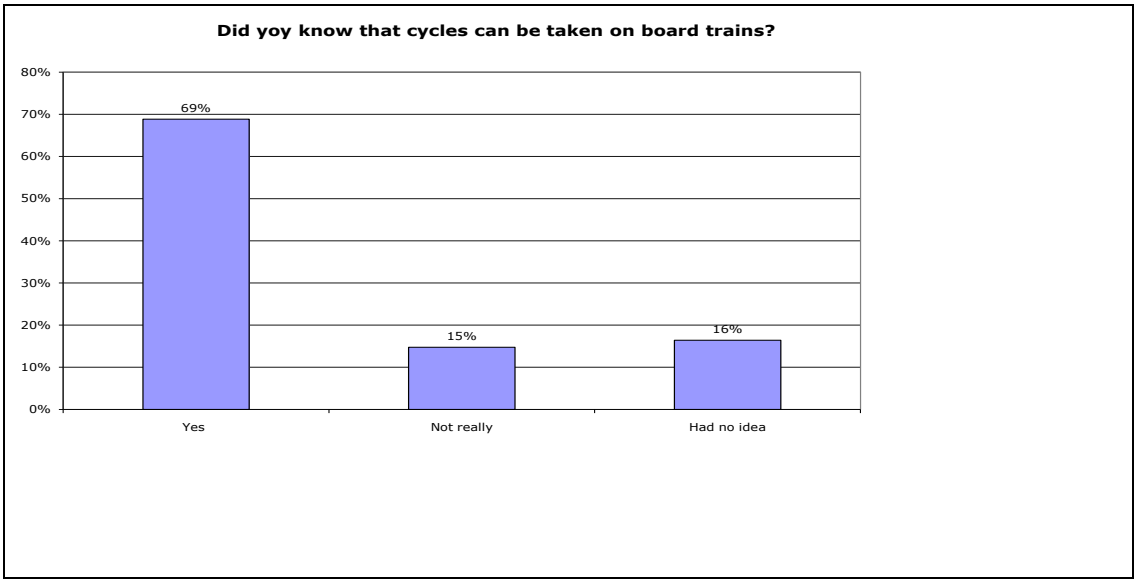

Figure 15: Respondents' who stated that they knew there was the possibility to take cycles on board train services in Skåne and on the West coast line (n.244).

Willingness to try taking cycles on board trains by those who had not tried this

In order to understand the potential for maketing the scheme, those who had not travelled with their cycles on board trains were asked about their willingness to try this. The questions tried to find out if respondents could imagine travelling by train for a holiday or

short trip where they also took their cycle with them on board the train in order to use it when they reached their destination. Only those who had not made use of this opportunity during the last year were asked these questions.

Table 8: Number of respondents who can imagine travelling by train with their cycle for a holiday or short trip

Response	Number (n 191)	% of those who answered the question
Yes	92	48
No	11	6
Don't know	88	46

As shown in Table 8, nearly half of those responding said that they could imagine taking their cycle on the train in the future. It was very few who directly answered no to this question.

5. Discussion

5.1. Introduction

This section describes the relevance of the results from the survey for Passenger Transport Associations (PTAs) and train operating companies who are in the process of considering whether or not to invest in trains that are designed for allowing passengers to take their cycles with them on board. The chapter can also be used as part of an evidence base by those who want to consider the possibility of allowing the carriage of cycles on existing trains that have no dedicated cycle space. In addition, this section highlights a number of possible improvments that could be made to cycles on board trains schemes.

5.2. Problem or opportunity for other passengers?

Certain representatives from Swedish train operating companies, as well as a number of other people, have expressed a negative attitude towards allowing the carriage of cycles on board trains (see for example Dellensten 2009). One argument that has been used against allowing the carriage of cycles on board trains is that other passengers (i.e. those without cycle who have never taken their cycle with them on the train, or are not interested in doing this) consider cycles or "cycle passengers" on board the train to be a problem. That "cycle passengers" is considered a problem is because the cycle may stain or damage the clothes of other passengers. The survey results however did not support this hypothesis, i. e. other passenger groups do not consider cycles on board trains to be a problem (see Figure 3). This conlusion is valid taking into consideration the number of cycles that are currently transported in Skåne. The questionnaire survey of passengers also provided evidence that the majority of respondents (88%), including those who had never taken their cycle with them on board the train, stated that they were positive or very positive to the opportunity to travel with their cycle on board the train (Table 6). These results are in line with those from an earlier survey of 200 train passengers in Bergslagen (Brodén 2008). The difference between the survey in Bergslagen and our survey is that the previous study was carried out on train services where, at the time of the survey, passengers were not able to travel with their cycles on board trains.

5.3. Views of on board personnel towards the carriage of cycles on board trains

Another problem that has been raised in the debate in Sweden about the carriage of cycles on board trains is that currently many train sets do not have any dedicated cycle space, and (a) the creation of dedicated space specially for the storage of cycles would be difficult to organise because of the design of the train, (b) that the cycle storage space would take up space that can be better used and (c) carrying cycles without dedicated storage space where cycles are not secured fast is an unacceptable safety risk.

The results of the interviews carried out with six members of train staff indicate that a dedicated cycle space on board the train is very much an advantage, and makes the job of on board personnel easier. The number of interviews are small, however of those interviews carried out it appears to be the case that the carriage of cycles on board trains is not seen to be a problem if there is dedicated space or places for cycles on board the trains, as cycles do not therefore get in the way of other passengers, and it is also easy for passengers to understand where cycles should be placed or secured.

Another reason which can be used to motivate the inclusion of dedicated cycle storage places on board trains is that it makes it easier for personnel to turn away cyclists if all

spaces are in use, i.e. it is easier to draw the line if there are no available places rather than if applying a more general "space permitting" rule.

It is worth noting that Swedish PTAs/ train operating companies have different opinions about potential safety risks when it comes to the carriage of cycles on board trains without dedicated places for storage. A significant proportion of trains in Sweden allow the carriage of cycles on board without any dedicated places for storage. This, for example, is the situation on the commuter trains in the County of Stockholm (SL Pendeltåg, Saltsjöbanan), and the member of staff working on this service was not at all happy about the carriage of cycles on board trains here.

Solutions for dedicated on board cycle storage or"parking" are in principal available for all trains and are often "off the shelf" designs. This was confirmed by rolling stock suppliers who are a part of the projects reference group. Some of these solutions implemented abroad are shown in Chapter 2 and Appendix 1.

5.4. Financial considerations and pricing

This study has not looked into the financial aspects of offering the opportunity to take cycles on board trains or the cost of installation of dedicated cycle spaces on board trains in any detail. The results of the questionnaire survey however raised two interesting points. Firstly that of those who had, at some point during the last year, travelled with their cycle on board the train in Skåne, 80% considered the price to be very or fairly high (Section 4.7, Table 7), and secondly that usage of this service is approximately the same across all age groups (Figure 6).

We are aware that a direct question about price, such as that in Section 4.7, can steer the answer given, i.e. one will say the price is too high because they wish the price to be lower. We therefore attach limited importance to the answer about price. It is perhaps more interesting to consider that we had expected a greater proportion of young people in the age category 15-24 to have at least on one occasion during the last year travelled with the cycle on board the train. Not least, given that this group on the whole has lower access to a car (those aged under 18 do not have a driving license in Sweden). Train plus cycle can be considered to be a competitive travel alternative for young people than for other age groups on the whole. That the opposite was true in this case suggests that the current price Skånetrafiken charges for the carriage of cycles on board trains limits the number of trips for this group where a cycle is brought on board the train. It can be considered to be likely therefore that a lower price would open up new destinations for young people.

In the area where the survey was carried out, the price for taking a cycle on board the train is the equivalent of a child ticket. As an example, an 18 km trip between Lund and Malmö costs 50 SEK (5€) for a return cash ticket for just the passenger's cycle. For a longer trip between Malmö and Kristianstad, the trip costs 116 SEK (12€) for a return cycle ticket, almost the same as a short taxi journey to and from the far side station. There is no guarantee that there is space for a cycle; it is if "space permits". As an example, in Stockholm one can take their cycle with them on board the train for the 82 km long journey between Kallhäll and Nynäshamn at no extra cost.

It is worth pointing out here that the international examples we have presented in this report suggest that there is a significant difference in willingness to pay for taking a cycle on board trains depending on whether the journey is local or long distance. On the continent one can generally expect to be charged around 60-100 SEK (6-11€) for taking cycles on board long distance trains, while it is usually free to take a cycle with you on local journeys.

5.5. Evaluation of whether demand is increasing or falling

Given that the study was carried out at a specific point in time, it is not possible to firmly evaluate whether the demand for the carriage of cycles on board trains is increasing or decreasing. Further study is needed in order to assess this issue.

However, a number of factors point towards an increasing trend. If the number of passengers travelling by train increases, as is the case in Sweden, and if the carriage of cycles on board trains can be seen to be a function of the demand for train journeys, then there is little reason to believe that demand is decreasing. An increase in cycle tourism in Sweden and more generally in Europe over the last few years (Koucky 2007) is also a reason that support our belief in an increasing trend. This given the evidence provided that holiday/leisure trips are a common reason for many passengers taking their cycle with them on board the train (see Figure 12).

One should take into account the fact that nearly half (48%) of those who had not taken their cycle on board the train during the last year can consider to travel on a holiday /leisure trip by train where they also take their cycle with them in order to use it at the final destination (Table 8). Approximately one in three (31%) in the same group were, at the time of completing the questionnaire, unsure about whether it was possible to take cycles on board the trains they were travelling on (Figure 15). One can draw the conclusions from this that there is likely to be potential to better market the service (carriage of cycles on board trains) and therefore increase the number of trips where cycles are also brought, even in Skåne where this has been possible over a longer period.

However, even if one improves the marketing of the opportunity of taking cycles on board trains, and makes the rules for this easier to understand by, for example, having a special cycle ticket, one should *not* expect a huge upsurge in the number of passengers who want to travel with their cycle. In the survey, only around 10 out of just over 300 respondents had taken their cycle with them at least five times during the last year. This is, of course, a reflection of the price for doing this in the study area. However, it also suggests (and is backed up by experiences from other countries) that train operating companies who want to offer this service as a completely new product, do not need to be worried as only a handful of passengers per train departure will want to travel with their cycle. An exception can occur on those services which go to popular day trip or holiday destinations aimed at cyclists. If this positive problem occurs where many will want to make use of this service at the same time, it is easy to manage by introducing, for example, obligatory advance reservations. Chapter 2 and Appendix 1 provide examples of booking systems in use in Europe.

5.6. Suggested improvements

The most important improvement, for those who travel with their cycles on board trains was considered to be easy to understand information about the rules and regulations which apply. Approximately 83% of those that had travelled with their cycle on board the train

during the last year stated that this was a *very important* or *important* potential improvement for them (Figure 14).

Exactly what sort of information those who had travelled with their cycle on the train lack or consider to be difficult to understand was not a part of this study. Additional studies are needed in order to find out what this could be. One can, however, speculate as to the sort of improvements that are needed. It could be the case, for example, that Skånetrafiken's system with cycle symbols (which in itself can be considered to be easy to understand) as well as cycle symbols with a cross through them in timetables may be considered to be difficult to interpret when one, for example, boards a train at a different station to where the service starts. It may also be the case that "cycle passengers'" answers to this question can be may be the result of the fact that they do not like the rules and regulations that are in place that do not allow the carriage of cycles on certain trains[9], i.e. that passengers are less happy about being forced to take an earlier or late train than the one they wished to travel on, even though they still have to pay to take their cycle with them on board the train. This can be supported by the fact that nearly half of all "cycle passengers" stated that they had taken their cycle with them on board the train for journeys they made to either their place of work or study, i.e. a journey that they would perhaps typically undertake during rush hour (se Figure 12).

It is worth noting that the majority of "cycle passengers" (52 – 62%) considered that increased opporunities to take their cycle with them on board the train on longer trips outside of Skåne, improved possibilities to secure their cycle with a lock, the possibility to reserve cycle spaces on a specifc departure in order to be sure that they could travel with a certain train as well as a ten ticket trip card or some other sort of discounted travel card, to be very important or important potential improvements for them. Simpler transport of cycles from the station entrance to the platform was seen to be a less important problem in the study area. This aspect can, of course, differ depending on the design of the station (number of stairs etc) in different parts of Sweden.

It is unclear about the extent to which the opportunity to travel with cycles on board trains has on car ownership. In general however it should be pointed out, that the opportunity to travel with your cycle on board the train should in many ways be a great advantage for those who do not have a driving license or who do not own a car. This, which the study confirms, increases both freedom of movement and shorter travel times.

6. Conclusions

6.1. The characteristics of demand

This project has through the use of a questionnaire survey explored the reasons why passengers travel with their cycle on board trains in Skåne. To the best of our knowledge this is the first Scandinavian study that in some detail has investigated this topic. The results show that on the train services that have been part of the study, cycles are brought on board trains with passengers for a variety of different reasons. The single most important reason is to transport the cycle to the place of work or study. This service, the carriage of

[9] Following the questionnaire survey, Skånetrafiken removed the earlier restrictions on taking cycles on trains during peak periods.

cycles on trains, therefore can be said to meet one of the Swedish transport policy goals when it comes to the need to travel (see e.g. Prop. 2008/09:93, p. 16-18) for a not that small number of people. The fact that one can take their cycle on board the train with them on a number of different trains and services even makes it easier to fulfil a particular Swedish policy objective of making it easier for people to choose public transport and cycle for their journeys.

6.2. Barriers to implementation

Of the potential barriers to implementation that have been noted whilst carrying out this project (see the discussion section on the previous page), the results of the study have demonstrated that many of these can be rejected. One example of this is the worry that other passengers, i.e. those who have no cycle with them on board the train and no interest in trying out this service, would consider the carriage of cycles by train as a problem (see Figure 3). With dedicated cycle storage/parking on board the train the train personnel that have been interviewed as part of this study are also positive towards the service.

However one possible obstacle to fullscale implementation remains. On certain longer train lines where passengers (always) expect to have a seat, there is clearly competition for space on board the train. It may not be the case that on these trains dedicated cycle storage or parking, from a financial point of view is more profitable than, for example, passenger seating or a small bistro, even if experience from other countries shows that there is relatively good willingness to pay for taking a cycle on board the train. However from a cost benefit analysis perspective, it can be demonstrated that dedicated cycle spaces on long distance trains can be a good idea given that, for example, European cycle tourists on average spend around 400 – 600 SEK (43-64€) per person per day on accommodation and service (see Koucky 2007, p. 10). This expenditure shows that the average cyclist stays in hotels and eats at restaurants, by this we mean that we are not talking about "budget" tourism, even if it is relatively cheap to ride a cycle.

On many regional and local train services the problem of competition for space should be relatively easy to deal with. Many Swedish local train operators have taken away seats to deal with the increase in passenger numbers. This can provide better room for both passengers and luggage during peak hours and is relatively common in other countries as well, see Chapter 2. During off peak periods these spaces can be used to store cycles for passengers that want to travel with them, often without any additional investment costs. By this the use of the available capacity can be optimised during peak periods while accessibility for people in general during off peak periods is improved.

6.3. Recommendations

The interviews with on board staff, experience from other European countries and the questionnaire survey of passengers together create a good picture of a long term vision for the carriage of cycles on board trains. If the Swedish transport policy goals are taken into account, then it can be seen that secure cycle storage in a dedicated cycle storage area or multi-space area should be provided on all train lines. Passengers should secure their cycle on board the trains themselves. "Cycle passengers" should be able to reach all destinations but carriage of cycles must not necessarily be provided on each train departure or in all the carriages. An intermediate solution which can in most cases be implemented straight away is that the carriage of cycles is allowed on all *local train services* and *trams* with low floor vestibules during off peak periods.

Currently one can take their cycle on board full trains during rush hour in one part of the country, without any dedicated cycle storage while in another part of a country on perhaps the same model of train which is nearly empty, cycles are not permitted. There is a risk that this is difficult to understand from a customer perspective. The different prices which currently apply for taking a cycle on board the train in Sweden also run the risk of being questioned by customers.

Regarding the carriage of cycles on board long-distance national train services, for this specific issue national guidelines or some form of regulation need to be considered. This is in order to deliver on previously stated promises from elected leaders in Sweden, i.e. that the service, carriage of cycles on trains, will be available for citizens to all destinations within a reasonable time period. The need to consider regulation is based on the fact that there might be a conflict of interest between socio-economic benefits to society on one hand and train operators commercial interests on the other. A new study is needed to shed some light on the costs and benefits of regulatory measures. Such a study should investigate costs and benefits of regulation for society as a whole, "cycle passengers" as well as for train operators. The potential for sanctions and fees for operators not delivering on a demanded provision of carriage of cycles should also be included in a future study, if appropriate. Further information is also needed on "cycle passengers" willingness to pay for different types and length of journeys. This is in order to be able to draw a firm conclusion on the pros and cons of regulations and other measures.

In order to make it easier to market the carriage of cycles on board trains, and to improve the quality of the service for those customers who are willing to pay for it, the Swedish PTAs should consider the introduction of special cycle tickets and a reservation system on regional and national train lines, similar for example to the one offered in Switzerland.

7. References

Brodén E. (2008) Cykel på tåg: Hur ser efterfrågan ut? C-Uppsats i kulturgeografi. Institutionen för Ekonomi och Samhälle, Högskolan Dalarna, Borlänge.

Dellensten B. (2009) SJ motarbetar cykel på tåg. Artikel publicerad på debattsajten Newsmill 2009-05-28. www.newsmill.se

Koucky M. (2007) Cykelturismen i Europa. Koucky och Partners AB, Göteborg. http://public.tillvaxtverket.se/content/1/c4/63/29/Bilaga2_CykelturismeniEuropa.pdf

Regeringen (2009) Mål för framtidens resor och transporter. Prop. 2008/09:93. Regeringskansliet, Stockholm

Roesli, M. (2007) Accompanied bicycle carriage and SBB – today and tomorrow. Seminar presentation, IG-velo workshop ”Bicycle and public transport”, Bern 2007-05-17.

Appendix 1. Further international comparison (in the Swedish language)

Tabell 1. Jämförelse av regler, priser och antal cykelplatser per tåg. Exempel på linjer.

Linjens namn	Typ av linje* (typ av tåg)	Längd och medelhastighet (antal stopp inkl. ändstation)	Ungefärlig beläggnings-faktor (resenärer per sitt-platskm) Hög/ medel/ låg?	Antal cykel-platser per tåg (antal sittplatser)	Typ av cykellösning	Krav på bokning	Pris för att ta med cykel på kort resa (< 10km)	Pris för att ta med cykel på lång resa (kr/ km)	Begränsningar (t. ex. under rusningstid, stationer)	Kommentar
UK/Frankrike Eurostar, London St.Pancras – Paris Gare de Nord	Höghastighets-tåg TGV373000. 2 drivvagnar, 18 vagnar, 394 m 750 passagerare Tillverkare: Alstom	Restid från 2:15 h (tillfälligt längre pga tunnelarbete). 495 km 218 km/h (1 stop)	Hög	Ca. 5 per tågset, beroende på annan bagage, plus cyklar i handbagage 750 sittplatser	Plats i bagageavdel Cyklar i transportväska tillåts gratis om måtten är tillräckligt små (hjul demonterat, ihopfällbara cyklar)	Ja, om cykeln ska lastas i bagageavdel på samma tåg. Nej om den polleteras, garanterad vid slutdestinationen inom 24h.		20 £, ca. 240 sek (även vid polletering)	Bokningsbara platser i mån av plats	Under 2008 ca. 10 bokade cykeltransporter per dag, kraftig ökning jämfört med tidigare år med endast polletering
Tyskland: Deutsche Bahn, Hannover-Bremen IC 2130	Snabbtåg (InterCity) lokdragen vagntåg	Restid 1:06 h 125 km 114 km/h (3 stop)	?	16 per tågset	En vagn per tågset är en s.k. ”Grossraumwagen ” med ett utrymme för 16 cyklar.	Ja		6/9 € ca. 70-100 sek per väg (med/utan BahnCard)	Endast de bokninsbara platser	
Tyskland: Deutsche Bahn, München-Garmisch-Partenkirchen, RB 30617	Regionaltåg, lokdragen vagntåg	Restid: 1:24 h 90 km 64 km/h (10 stopp)	?	8 per tågset, fler kan tas med I mån av plats	Hängning i vestibul, respektive ställa i bagage-utrymme	Nej (bokn. ej möjlig)	4,50 €, ca. 50 kr, gäller heldag	4,50 €, ca. 50 kr, gäller heldag	Cykeltransport i mån av plats	

Linjens namn	Typ av linje* (typ av tåg)	Längd och medelhastighet (antal stopp inkl. ändstation)	Ungefärlig beläggnings-faktor (resenärer per sitt-platskm) Hög/ medel/ låg?	Antal cykel-platser per tåg (antal sittplatser)	Typ av cykellösning	Krav på bokning	Pris för att ta med cykel på kort resa (< 10km)	Pris för att ta med cykel på lång resa (kr/ km)	Begränsningar (t. ex. under rusningstid, stationer)	Kommentar
Tyskland:Sieg-burg-Köln S-Bahn S12	Lokaltåg, motorvagn, typ BR423 (S-Bahn)	Restid: 0:30h 30 km 60 km/h (9 stop)		I mån av plats, upp till 16	Kombinerade utrymmer, inga särskilda cykelplatser (multifunktionsområde/store vestibul)	Nej	4´€, ca. 45 kr, gäller heldag	4, €, ca. 45 kr, gäller heldag	Transport i mån av plats	
Schweiz Zürich-Bern	Inter-regio-tåg, IR 1928	Restid 1:19 Ca. 120 km 91 km/h (5 stop)		12-16	Särskilt utrymme I ingångsområdet på ensktaka vagnar med plats för ca. 4 cyklar var. cyklar hängs upp	Nej		10/15 sFr (med/utan rabattkort), 70-100 sek		
Schweiz	ICN-tåg 687 (lutande motorvagn, Bobbardier/Alstom)	Restid 3:43 264 km 71 km/h (5 stop)		6 per tågset, vanligtvis 2 tågset kombinierat, dvs. 12 platser	hängning i vestibul	Ja under högsäsong, 21 mars –31 oktober		10/15 sFr (med/utan rabattkort), 70-100 sek under högsäsong bokningsavgift, 5 sFr/35 kr		
Frankrike Paris-Strasbourg	Höghastighetståg, TGV	Restid 2:17h 487 km 213 km/h (1 stop)	?	4-6 cykelplatser	Plats i bagageavdel	Ja, bokning obligatorisk		10 €, ca. 100 sek		

Priser för cykeltransport på regionaltåg i Tyskland

- Schleswig-Holstein, Mecklenburg-Vorpommern, Niedersachsen, Bremen: Cykelbiljett 4,50 €, gäller hela dagen
- Berlin, Brandenburg: I mån av plats, cykelbiljett 2-5 €, månadskort finns från 8,50-15,50 €
- Sachsen-Anhalt: I mån av plats, begränsningar i rusningstrafiken. Cykeltransport är gratis
- Nordrhein-Westfalen: 4,00 €, gäller hela dagen
- Rheinland-Pfalz, Saarland: Måndag till fredag efter kl. 09:00 samt helgdagar: gratis i mån av plats, andra tider 4,50 €
- Hessen: Endast på helgdagar, gratis
- Bayern, Baden-Würtenberg: Cykelbiljett 4,50 €, gäller hela dagen, på vissa sträckor gratis

Appendix 2. Questionnarie design (in the Swedish language)

Enkätundersökning om dina tågresor

För att kunna förbättra för dig som tågresenär vill vi veta mer om hur du reser och hur du upplever dina tågresor. Enkäten består mest av flervalsfrågor. Att svara är snabbt och enkelt. Det tar 5-10 minuter.

Studiens resultat kommer bl.a. att användas för att ge beslutsfattare bättre information för framtida tågutformning.

Studien görs på uppdrag av Banverket i samarbete med Skånetrafiken och Øresundståg.

Missa inte chansen att påverka med dina synpunkter och erfarenheter. Ditt svar är helt anonymt.

Har du frågor om enkäten kontakta Pelle Envall, TUB Trafikutredningsbyrån.
Telefon 070-65 10 194.

Dina resor

1. På vilken station gick du på tåget? .....

Om du har rest med flera tåg idag, skriv namnet på den station du reste ifrån i samband med att du fick enkäten.

2. Ungefär vilken tid gick du på tåget? Klockan .....

3. Var steg du av / ska du stiga av? .....

4. Varför gör du denna resa?

□Till/från arbete eller studier

□Resa i tjänsten

□Service och inköp

□Fritidresa (t. ex. hälsa på bekant)

□Annat ärende .....

5. Hur ofta åker du tåg på *denna* sträcka?

□3-7 gånger/vecka

□1-2 gånger/vecka

□1-3 gånger/månad

□Någon eller några gånger per år

□Mer sällan

6. Med vilket färdmedel tog du dig *till* din avresestation idag?

□Till fots

□Med cykel

□Med kollektivtrafik

□Med egen bil

□Fick skjuts med bil

□Taxi

□Annat sätt

7. Med vilket färdsätt tog du/ planerar du att ta dig *från* stationen där du kliver/ klev av tåget idag?

□Till fots

□Med cykel

□Med kollektivtrafik

□Med egen bil

□Fick skjuts med bil

□Taxi

□Annat sätt

8. Fick du sittplats på tåget du åkte med *idag*?

Om du har rest med flera tåg, svara på om sittplats fanns på tåget där du fick enkäten.

□Ja, för hela resan

□Nej, sittplats fanns *ej* på delar av resan

□Nej, sittplats fanns *ej* på någon enda del av min resa

9. Om du svarade *nej* på fråga 8, i vilken omfattning besvärades du idag av att du ej fick sittplats på delar av eller hela resan?

□I mycket stor grad

□I stor grad

□I någon mån

□Nej, inte alls (t. ex. jag valde att stå eftersom det var en kort resa)

□Vet ej/ ej relevant fråga

Skriv gärna en kommentar: .....

.....

.....

Din reseupplevelse

10. Påverkade något av följande *din resupplevelse negativt* idag?

a) Otillräcklig plats för bagageförvaring ombord på tåget
□Ja, mycket negativt □Ja, negativt □Ja, något negativt □Nej, inte alls □Vet ej/ ingen åsikt

b) Annan resenärs (högljudda) samtal/ mobiltelefonsamtal
□Ja, mycket negativt □Ja, negativt □Ja, något negativt □Nej, inte alls □Vet ej/ ingen åsikt

c) Annan resenärs hund/ husdjur (t. ex. på grund av allergi)
□Ja, mycket negativt □Ja, negativt □Ja, något negativt □Nej, inte alls □Vet ej/ ingen åsikt

d) Annan resenär med cykel på tåget (t.ex. risk för nedsmutsning av kläder)
□Ja, mycket negativt □Ja, negativt □Ja, något negativt □Nej, inte alls □Vet ej/ ingen åsikt

e) Att det var för varmt eller för kallt på tåget
□Ja, mycket negativt □Ja, negativt □Ja, något negativt □Nej, inte alls □Vet ej/ ingen åsikt

Skriv gärna en kommentar: .....

.....

11. Är det något speciellt med tågets utformning som du tycker kan förbättras för att göra din resa trevligare eller bekvämare?

Om du har rest med flera tåg idag, tänk på tåget där du fick enkäten

.....

.....

.....

12. Skånetrafiken och Øresundståg ger resenärer möjlighet att ta med sin cykel ombord på de flesta tåg. Hur ser *du* på denna möjlighet?

□Mycket positivt □Ganska positivt □Varken positivt eller negativt □Negativt
□Vet ej/ har ingen åsikt

Skriv gärna en kommentar:.....

.....

13. Har du någon gång *det senaste året* utnyttjat möjligheten att ta med din cykel på ett tåg?

□Ja, mer än 11 gånger □Ja, 6-10 gånger □Ja, 3-5 gånger □Ja, 1-2 gånger

□Nej – gå till fråga 20.

OM DU SVARADE *NEJ* PÅ OVANSTÅENDE FRÅGA GÅ DIREKT TILL FRÅGA 20 PÅ *SIDA 8.*

14. På vilken typ av resa/ resor har du tagit med cykeln på tåget?

Du kan kryssa flera alternativ

□För dagpendling (till/ från arbete eller studier)

□För att transportera en cykel till arbets-/ studieorten (t. ex. för att använda cykeln för resor till/ från stationen på den ort där du arbetar)

□För att hälsa på någon

□För en semesterresa/ utflykt

□För cykelträning/motionscykling/lopp

□För annan typ av resa (t. ex. för att kunna utföra ärenden en bit från tågstationen)

Skriv gärna en kommentar:

.....

.....

.....

15. Vilka dagar är det viktigast för dig att kunna ta med cykeln på tåget?

□ Vardagar

□ Helger

16. Vilka tider?

Du kan kryssa i flera tider.

□ Klockan 04.30 - 07.00

□ Klockan 7.00 - 9.00

□ Klockan 9.00 - 15.00

□ Klockan 15.00 – 18.00

□ Klockan 18.00 – 24.00

17. Det finns olika skäl att ta med cykeln på tåg. Hur väl stämmer nedanstående påståenden på *dig och dina resor?*

a) Att ta med cykeln på tåget ger mig möjlighet att resa till nya platser (t. ex. göra utflykter)

□ Stämmer helt □ Stämmer delvis □ Stämmer i viss mån □ Stämmer inte alls

□ Vet ej/ ej relevant

b) Utan att ta med min cykel på tåget kan jag inte ta mig till mitt resmål (t. ex. det är för långt att gå från stationen, finns ingen buss/ taxi)

□ Stämmer helt □ Stämmer delvis □ Stämmer i viss mån □ Stämmer inte alls

□ Vet ej/ ej relevant

c) Hela min resa går smidigare om jag tar med cykeln på tåget (det är t. ex. snabbare med cykel än med buss eller att gå från ankomststationen)

□ Stämmer helt □ Stämmer delvis □ Stämmer i viss mån □ Stämmer inte alls

□ Vet ej/ ej relevant

d) Hela min resa blir billigare om jag tar med mig cykeln på tåget

□ Stämmer helt □ Stämmer delvis □ Stämmer i viss mån □ Stämmer inte alls

□ Vet ej/ ej relevant

e) Finns det något annat skäl som är *mycket viktigt* för ditt behov av att ta med cykeln på tåget? .....

.....

.....

18. Nedan ger vi exempel på ett antal tänkbara förändringar. I vilken grad är dessa åtgärder viktiga eller oviktiga *för dig*?

a) Möjlighet att reservera cykelplats *för en viss resa* så att jag säkert vet att min cykel får följa med
□ Mycket viktigt □ Viktigt □ Varken viktigt eller oviktigt □ Oviktigt □ Vet ej

b) Bättre möjlighet att ta med mig cykeln även på längre tågresor till destinationer t. ex. på tåg utanför Skåne
□ Mycket viktigt □ Viktigt □ Varken viktigt eller oviktigt □ Oviktigt □ Vet ej

c) Bättre möjlighet att enkelt låsa fast cykelns ram i tåget för att förhindra stöld under resan
□ Mycket viktigt □ Viktigt □ Varken viktigt eller oviktigt □ Oviktigt □ Vet ej

d) Förändrad stationsutformning som gör det lättare att ta med cykeln till/ från perrongen (t.ex. ramper)
□ Mycket viktigt □ Viktigt □ Varken viktigt eller oviktigt □ Oviktigt □ Vet ej

e) Tiokort eller periodkort *för cykel* som ger mig rabatt vid många resor
□ Mycket viktigt □ Viktigt □ Varken viktigt eller oviktigt □ Oviktigt □ Vet ej

f) *Tydligare* information om möjligheten att *ta med cykel* ombord på tåg och om vilka regler som gäller mm
□ Mycket viktigt □ Viktigt □ Varken viktigt eller oviktigt □ Oviktigt □ Vet ej

g) Andra förbättringar (se också nedan)
□ Mycket viktigt □ Viktigt □ Varken viktigt eller oviktigt □ Oviktigt □ Vet ej

Om du svarade ’andra förbättringar’, ange gärna vad som behöver förbättras:
.....

.....

.....

19. Hur ser du på priset för att ta med cykel ombord på Pågatåg och Øresundståg *med den service som ges idag*? Tycker du att biljettpriset är högt eller lågt?

□ Priset är mycket högt □ Priset är något högt □ Priset är skäligt □ Priset är något lågt
□ Priset är mycket lågt

Skriv gärna en kommentar

.....

.....

GÅ NU DIREKT TILL FRÅGA 23 PÅ *SIDA 9.*

Frågor till dig som *ej* har tagit med cykel på tåg

20. Kände du till att det är möjligt att ta med cykel ombord på de flesta Pågatåg och Øresundståg?

□Ja, det visste jag

□Nej, det visste jag inte säkert

□Nej, det hade jag ingen aning om

Skriv gärna en kommentar

.....

.....

21. Om du tänker dig att du skulle göra en semesterresa eller utflykt med tåg där du *tar med dig din cykel* för att använda den på resmålet, vart skulle du helst vilja åka och varifrån?

.....

.....

.....

.....

22. Hur sannolikt är det att du gör en sådan semesterresa eller utflykt *de närmaste två åren*?

□Mycket sannolikt (helt säkert)

□Ganska sannolikt

□Varken sannolikt eller osannolikt

□Inte alls sannolikt

□Vet ej

Bakgrundsinformation

23. Vilken är din ålder?

□15-24 år □25-34 år □35-44 år □45-54 år □55-64 år □65-74 år □75- år

24. Är du man eller kvinna?

□Man □Kvinna

25. Vad är din huvudsakliga sysselsättning?

□Arbetar □Studerar □Pensionär □Föräldraledig □Arbetssökande

□Annat

26. Ungefär hur stor är din totala årsinkomst innan skatten är dragen?

□mindre än 100 000 kr

□100 000 – 200 000 kr

□200 000 – 300 000 kr

□300 000 – 400 000 kr

□400 000 – 500 000 kr

□500 000 – 600 000 kr

□600 000 – 700 000 kr

□mer än 700 000 kr

Till sist

27. Har du något du vill tillägga? Du kan till exempel förklara dina svar mer ingående och/ eller ge synpunkter på enkätens utformning.

.....

.....

.....

.....

.....

Stort tack för din medverkan

Appendix 3. Train departures and places for survey distribution (in the Swedish language)

Måndag 4 maj

Tabell 1 redovisar de tåg på vilka vi avser att distribuera enkäter alternativt genomföra enkätintervjuer (vid många resenärer kommer endast enkätinbjudningar att delas ut).

Tabell 1. Genomförande/ utdelning av enkät ombord på tåg

Tågnummer	Från	Avgångstid	Till	Ankomsttid
Tåg 1045*	Göteborg C	07.42	Helsingborg	10.04
Tåg 1874	Helsingborg	12.36	Kristianstad	14.04
Tåg 1653	Malmö C	18.15	Simrishamn	19.47

* Øresundståg

Tabell 2 redovisar de stationer och tågavgångar för vilka vi avser att distribuera enkäter på plattform under dagen.

Tabell 2. Utdelning av enkät på stationsplattformar

Station	Tågnummer	Tågets destination (avgångstider)	Ungefärlig tid som vi är på stationen
Helsingborg	Tåg 1818,1870 och 1820	Tåg mot Åstorp/ Kristianstad (kl. 10.36 och 11.15)	10.00- 11.15
Kristianstad	Tåg 1073*, 1881, 1079*, 1052* och 1058*	Tåg mot Malmö (kl. 14.23), Tåg mot Hässleholm (kl. 14.50), Tåg mot Copenhagen (kl. 15.23) samt tåg mot Karlskrona (kl. 14.46 och 15.46)	14.00-16.00

* Øresundståg

Tisdag 5 maj

Tabell 3. Utdelning/ genomförande av enkät ombord på tåg

Tågnummer	Från	Avgångstid	Till	Ankomsttid
Tåg 1612	Simrishamn	7.53	Svarte	8.43
Tåg 1614	Ystad	9.08	Malmö C	9.55
Tåg 1621	Malmö C	10.15	Oxie	10.27

Tabell 4. Utdelning av enkät på stationsplattformar

Station	Tågnummer	Tågets destination (avgångstider)	Ungefärlig tid som vi är på stationen
Malmö C	Tåg 1621	Tåg mot Ystad/ Simrishamn (kl. 10.15)	10.00-10.15

* Øresundståg

Tabell 5. Utdelning av enkät vid cykelparkeringar

Station	Plats	Ungefärlig tid som vi är på stationen
Malmö C	Cykelparkeringspontonen vid Pågatågsplattformar	Cirka kl. 15.00 – 18.00.

TRAFIKVERKET

Trafikverket, 781 89 Borlänge
Telefon: 0771-921 921, Texttelefon: 0243- 750 90

www.trafikverket.se