BIKE. TRAIN. BIKE.

The Final Report

BiTiBi.eu

Easier. Faster. Cooler.

Co-funded by the Intelligent Energy Europe Programme of the European Union

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EXECUTIVE SUMMARY

Bike-Train-Bike or BiTiBi services combine energy efficient transport modes into one seamless transport service.

• The bicycle is by far the most energy efficient transport for short distances.

• The train, especially the low speed train, is the most efficient transport mode for longer distances.

BiTiBi services create an energy efficient transport mode with catchment areas significantly larger than the train alone.

Catchment area around a station: around 25x higher
(79 sq km instead of 3 sq km)

Furthermore, BiTiBi services provide:

• less pollution from pollutants like fine dust (PM) and nitrogen dioxide (NOx)

• more liveable cities

• healthier citizens

• a cheaper public transport system

Following a hypothetical scenario, with 20% of all commuters travelling to the train station by bicycle, Europe would witness/ benefit from/ realise:

• 250 million more railway users

• 5,000 million less car pkms

• a reduction of 800 ktons of CO2, 55 tons of PM and 250 tons of NOx emitted

• a reduction in energy use of 200,000 toe (tonnes oil equivalent) or 2,500 MWh (megawatt hours)

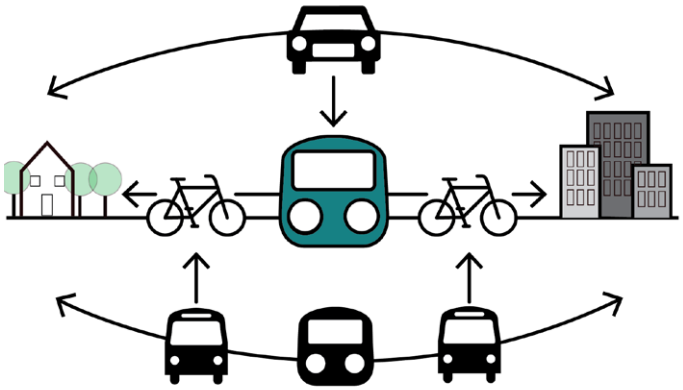
• 1,200 lives saved EACH year, worth 3 billion EUR annually

• 400% return on investment rate for investments in bicycle parking

• more liveable cities.

Today seamless BiTiBi services are only provided in a few EU countries. The Netherlands is the best example among those countries with 42% of rail passengers joining the station by bicycle. Furthermore, the Dutch railway system boasts 420,000 bicycle racks, an average of 1,000 per station.

With large societal advantages and the good Dutch example in mind, the BiTiBi project made the first steps to expand the intermodal concept all over Europe. Therefore it described the concept in six Building Blocks inspired by the Dutch best practices. Each of these Building Blocks provides a solution to overcome the potential barriers when implementing BiTiBi services. The potential barriers and the Building Block solutions are provided in the following table.



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Barriers for implementing BiTiBi	BiTiBi solution	BB
Lack of safe and bicycle friendly railway access (first mile)	bicycle routes towards station thanks to implication of local authorities	BB6
Lack of secure bike parking (first mile)	secure sheltered bicycle parking	BB1
Lack of shared bicycle systems (last mile)	Shared bicycle systems	BB2
Lack of coherence between bike and train service	Unity in bike and train organisation	BB3
Lack of fare integration	Integrated payment system	BB4
Lack of knowledge among users	Communicate about service	BB5
Cultural barrier	Make the service desirable	BB5

Besides describing the six Building Blocks in guidelines, the project also tested the BiTiBi concept in four pilot locations in the UK, Belgium, Spain and in Italy to evaluate the replicability of the concept.

In Belgium and UK, the pilot projects concentrated on shared bicycles, witnessing an increase in shared bicycle usage 2 to 5 times from 2014 to 2017.

In the Barcelona area in Spain, tests making public bicycles available for commuters have been done.

In the Milan area in Italy, the local infrastructure provider started a BiTiBi strategy and implemented bicycle parkings at 20 railway stations with plans to continue expanding the service.

Based on these pilots, best practices, inspiring examples, and main conclusions to ease starting up BiTiBi services have been derived. The BiTiBi guidelines and the inspiring examples have been put together in the BiTiBi guidelines.
Here are the main conclusions to set up successfully BiTiBi services.

For railway operators

1. Build partnership between local, regional, national authorities, and railway operators.

Partnerships are crucial to remove two important barriers, financing the facilities and provision of safe and direct cycle routes towards the railway station.

2. Provide bike parking (safe and sheltered) before investing in bike share systems. The largest societal gains are provided by bike parking compared to shared bicycles as the investment is quite low and the usage is high.

3. Provide shared bicycles as a “value adding service” to your customers. Do this once potential users are familiar with the use of bicycles in combination with the train.

4. Communicate in an attractive way with your target groups.
Put the emphasis on the themes of easy, fast, and cool.

5. Integrate your BiTiBi services into one seamless service.

6. Free bicycle in train transport if you have excess capacity. The Danish State Railways provide bicycle transport for free in their urban Copenhagen trains. This is a beneficial operation as excess capacity was available in their trains.

For local authorities

1. Build partnerships with railway operators on financing and BiTiBi service provision.

2. Provide high quality cycle routes around and towards railway stations.

3. Communicate about the BiTiBi service as an easy, cool, and fast transport service.

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1. SEAMLESS BIKE TRAIN BIKE SERVICES FOR AN ENERGY EFFICIENT EUROPE

1.1 Combining energy efficient modes for energy efficiency and so much more

The main aim of the BiTiBi project is reducing energy use and climate emissions of our transport system. Nothing seems so straightforward for doing this as combining the most energy efficient transport modes available.

- The bicycle is by far the most energy efficient transport for short distances.
- The train, especially the low speed train, is the most efficient transport mode for longer distances.

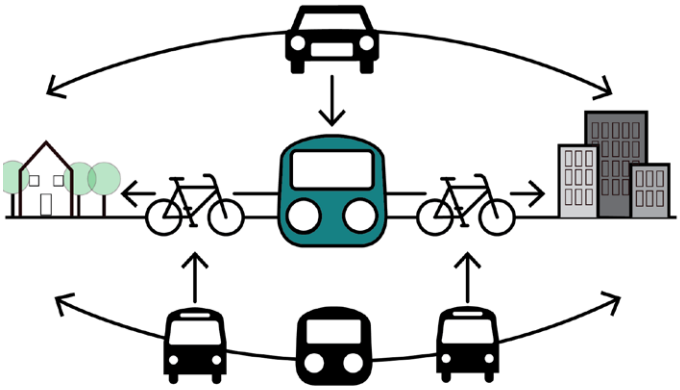

Figure 1: Illustration of the BiTiBi concept

By combining both modes into a seamless BiTiBi service, society gets a new energy efficient door -to-door transport mode. BiTiBi services replace less energy efficient transport like car and bus as illustrated by the figure below.

The bike-train-bike combination contributes to making our transport system more energy efficient. Besides this it also contributes to:

- less pollution from pollutants like fine dust (PM) and nitrogen dioxide (NOx)
- more liveable cities
- healthier citizens
- a cheaper public transport system
- a more accessible transport system as the catchment area of potential train users increases 25 times.

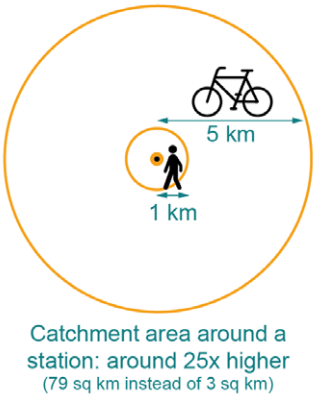

Figure 2: Increased catchment area for trains thanks to BiTiBi

Such seamless BiTiBi services are reality in the Netherlands.

- 42% of train users use the bicycle for the first mile, to join the railway station.
- On average Dutch railway stations have parking for 1,000 cycles, or in total 420,000 cycle parkings.
- The OV-fiets, the shared bicycle of the Dutch railways company has been used nearly 2,000,000 times in 2016, mainly for the last mile, to join the destination.
- Bicycle and train services are provided by only one integrated organisation.
- The complete door-to-door BiTiBi service is paid for by one chip card.

The aim of the BiTiBi project was to replicate and fine-tune, where necessary, the Dutch approach in other European countries.

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1.2 Replicating BiTiBi over Europe equals 2,000 million EUR of annual gains by 2030

To help illustrate the large potential societal gains BiTiBi can bring to Europe, the BiTiBi team worked out a scenario in which 20% of EU railway users would connect journeys to and from the railway station by bicycle: 20% is less than half the share of Dutch travellers going to the railway station by bicycle today. At the same time it is 5 times more than the assumed 4% of European railway users joining railway stations by bicycle. 4% was the BiTiBi pilot average modal share when the project began.

Following a hypothetical scenario, with 20% of all commuters travelling to the train station by bicycle, Europe would witness/ benefit from/ realise:

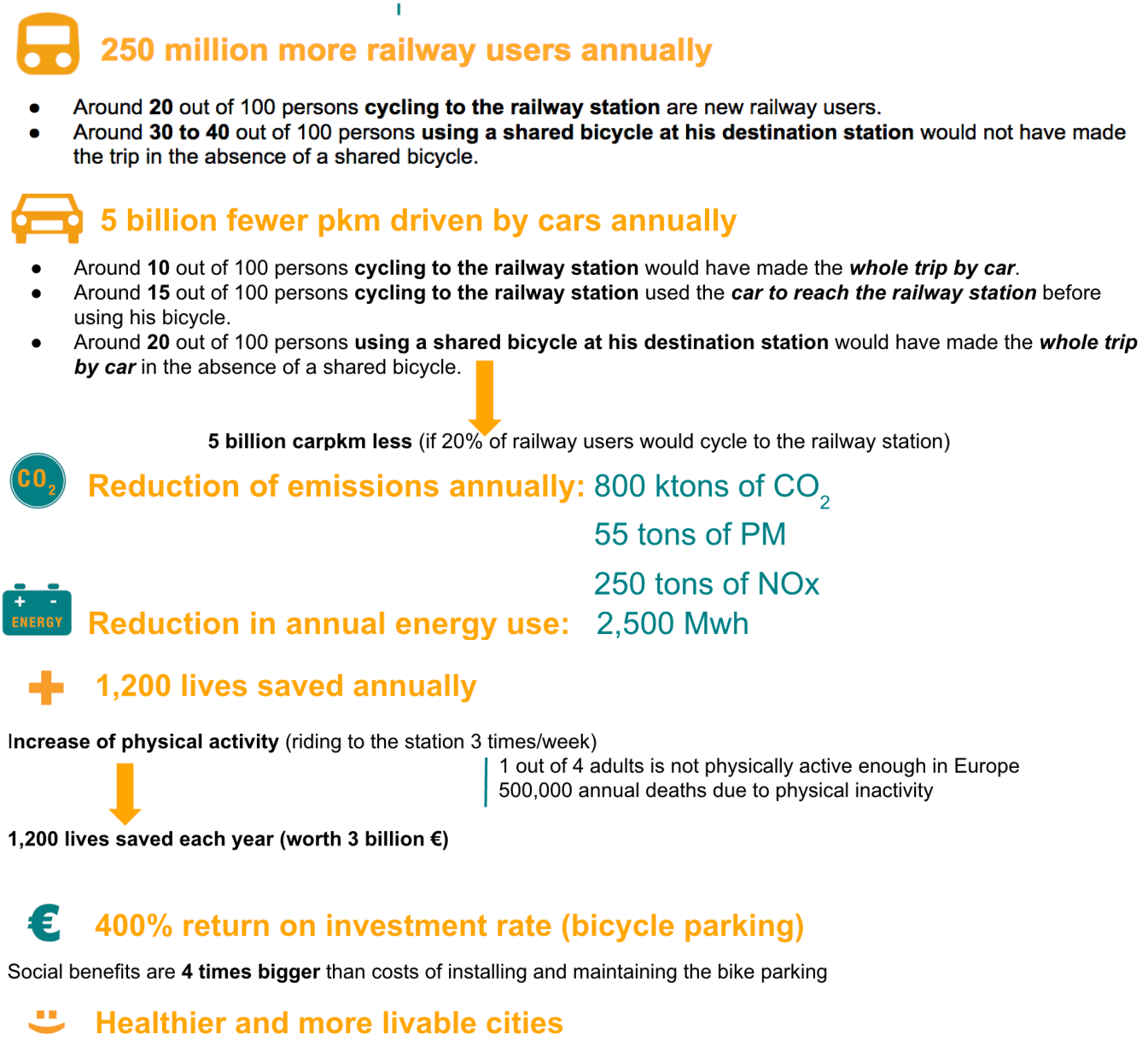

Figure 3: Overview of BiTiBi impacts

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Extra explanation on the lives saved and the extremely high rate of societal return on investments in bicycle parking:

1,200 lives saved each year

1 out of 4 European adults are not sufficiently physically active. Physical inactivity contributes to 500,000 deaths each year in Europe (ISCA-Cebr, 2015). Cycling to railway station just three days a week provides people with the necessary physical exercise to avoid premature death due to inactivity.

The HEAT tool tells us that 1,200 lives worth 3,000 million EUR can be saved each year. The HEAT tool calculates the number of premature deaths cycling can avoid. It is provided by the World Health Organisation (WHO) (http://www.heatwalkingcycling.org).

A 400% rate of return

Taking into account in a rudimentary way, the costs of installing bicycle parking at the destination alongside other intermodal benefits as mentioned above, a 400% societal return from the investment in bicycle parking is witnessed. In other words, society gets four times more benefits than costs from bicycle parking. Annually bicycle parking provides 3 billion of benefits (mainly health benefits) while they cost 750 million in capital and operating expenses. Local authorities and railway operators would struggle to find investments with a higher rate of return.

Remarks

This is an exercise based on the BiTiBi project results and some further hypothesis. The aim is to give a first insight in the societal value of the BiTiBi approach for Europe. Further refining of the calculation is possible.
All figures in the 1.2 section are based on the BiTiBi project evaluation, the ADEME study (Gioria, 2016) for mobility impacts, and the WHO HEAT tool for health impacts.

You find more details about the calculations in the BiTiBi evaluation report (D4.4) on the BiTiBi website.
It's worth noting that although these figures are encouraging, much more is needed to make our transport system more energy efficient and reach our climate goals. Today around 80% of pkm are done by car while around 7% are done by train in the EU. Even a doubling of train pkm will only reduce car pkm by 7% to a little over 70% (EUROSTAT).

1.3. Project mission: spreading BiTiBi services over Europe

Although implementing the BiTiBi concept seems to be straightforward, taking into account the societal advantages mentioned above, it actually isn't. It faces real difficulties to spread over Europe. We assume only around 4% of European train users use the bicycle to reach the railway station today.

Therefore, the BiTiBi project aims to facilitate the spreading of BiTiBi services over Europe. The project began studying and analysing the Dutch approach, described it and replicated it partly or entirely in the Milan, Barcelona, and Liverpool metropolitan areas as well as in Belgium. 10 partners were involved in the project.

This report provides more details about the Dutch approach and how it was implemented in the pilots in different contexts to inspire people to make their own transport system more energy efficient. It provides furthermore some concrete suggestions for policymakers and railway operators.

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2. HOW TO IMPLEMENT THE BITIBI ENERGY EFFICIENT TRANSPORT SYSTEM HAPPEN?

To implement BiTiBi services, some barriers need to be overcome. The table below shows the main barriers and the proposed BiTiBi solutions based on the Dutch approach. These solutions are explained in the section below.

Barriers for implementing BiTiBi	BiTiBi solution	BB
Lack of safe and bicycle friendly railway access (first mile)	bicycle routes towards station thanks to implication of local authorities	BB6
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Lack of knowledge among users	Communicate about service	BB5
Cultural barrier	Make the service desirable	BB5

Table 1: Overview of barriers to overcome to implement seamless BiTiBi services and BiTiBi solutions

2.1 Dutch BiTiBi approach: 6 building blocks

BB1 Bicycle parking

Imagine a city with no car parking… Right, there would be no single car in that city! The very same is true for cycling. A destination without safe and sheltered bicycle parking means no cyclists.

Providing safe and sheltered bicycle parking at a convenient place for the cyclist is crucial. A convenient place means a place as close as possible to the platform and easy reachable by cyclists. The most ideal place would be a parking on the platform. This is nearly what was done in the Dutch city of Houten. Bicycle parking was built under the platform with direct access to it. Also in Como, Italy, the bicycle parking was built nearly on the platform (see photograph).

Bicycle parking in the Netherlands:

- 450,000 bicycle parkings at 410 stations mostly free.
- Capacity is permanently increasing, from 300,000 in 2000 to a planned 600,000 in 2030.
- 500 to 1,000 guarded, fee-based parking places at each of the 90 largest stations, bicycle lockers at the smaller stations.
- A new management model is developed for guarded parking where first 24 hours are free.

Financing is provided by partnership of NS, the Dutch railways, Pro Rail, the Dutch infrastructure manager, the local authorities and the national transport Ministry.

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Figure 4: Bicycle parking in Houten and Como with direct access to the platform

		Construction (one-off)	Organization (structural)		
			Management, Conservation and Maintenance	Operations Security[2]	Maintenance
2000-2012	€	€ 25 mln	€ 7 mln	€ 13 mln	€ 5-10 mln
	%	100%[1]	100% ProRail	100% NS	100% Municipality
Present 2012-2020	€	€ 30 mln	€ 10 mln	€ 15-20 mln	€ 10-15 mln
	%	50% / 50% Municipality	50% ProRail / 50% Municipality	33% Municipality / 33% NS / Prov/SR!?	100% Municipality
2020-2025	€	€ 30 mln	€ 10-15 mln	€ 20 mln	€ 5-10 mln
	%	Prov./SR!? (now:Min. I&M) / 50% Municipality	50% ProRail / 50% Municipality	33% Municipality / 33% NS + Other traincompanies / Prov/SR!	100% Municipality
>2025	€	€ 10 mln	€ 20 mln	€ 20 mln	€ 5-10 mln
	%	? Prov/SR	50% ProRail / 50% Municipality	50% Train company / 50% NS	100% Municipality

Figure 5: Illustration of how partnerships for bicycle parking building evolved over time in the Netherlands (indicative amounts in EUR, mln = million)

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BB2 Shared bicycles

Imagine your destination is 3 km from a railway station.

- Walking takes you nearly 45 min.
- Public transport takes you 15 minutes due to congestion and detours. Waiting time before catching your bus is 10 minutes. Altogether, it would last at least 25 min in total.
- A taxi takes you 10 minutes but can be quite expensive.
- A bicycle would take you 15 minutes of good time, if only there was a bicycle available at the train station.

A shared bicycle is a comfortable and robust bicycle, available at the destination station of the railway passengers. It allows bringing them to their final destinations, finishing the last few kilometres of the total journey. It bridges the last mile and adds lots of comfort and convenience to the rail service.

Shared bicycles in the Netherlands, named OV-fiets:

- From pilot project to public society called OV-fiets in 2003, to a subsidiary of NS in 2008.
- From 800 bikes in 2003 and 11,000 users to 8,500 bikes and 1,5 million uses in 2015.
- The OV-fiets service breaks even without public subsidies.
- OV-fiets is available to everybody having subscribed and paying between 3,85€ for each use via a smart public transport card.
- It's a convenient and recognisable bicycle.

Figure 6: OV-fiets, the Dutch shared bicycle, convenient and recognisable

BB3 Unity of bike-train-bike organisation

The importance of a door-to-door approach (instead of a station-to-station approach) is obvious.

Almost nobody travels from station-to-station. Almost each rail traveller needs to bridge the first and last miles. In some cases, walking, public transport or a taxi provides a solution. However, in quite some cases other services can do better. It is therefore important that a railway company, organising the biggest part of the door-to-door journey, takes care of providing services for its clients to bridge these first and last miles.

Unity of organisation in the Netherlands:

- NS has a particular branch taking care of door-to-door services for their clients.
- This branch, "NS Retail and Transfer" includes NS-fiets (bike parkings), Park-and-Ride services, NS zone taxi (taxi for first and last mile organised via NS) and Carsharing.
- In 2008, it took over OV-fiets to ensure a maximum unity between rail and last mile bicycle services.

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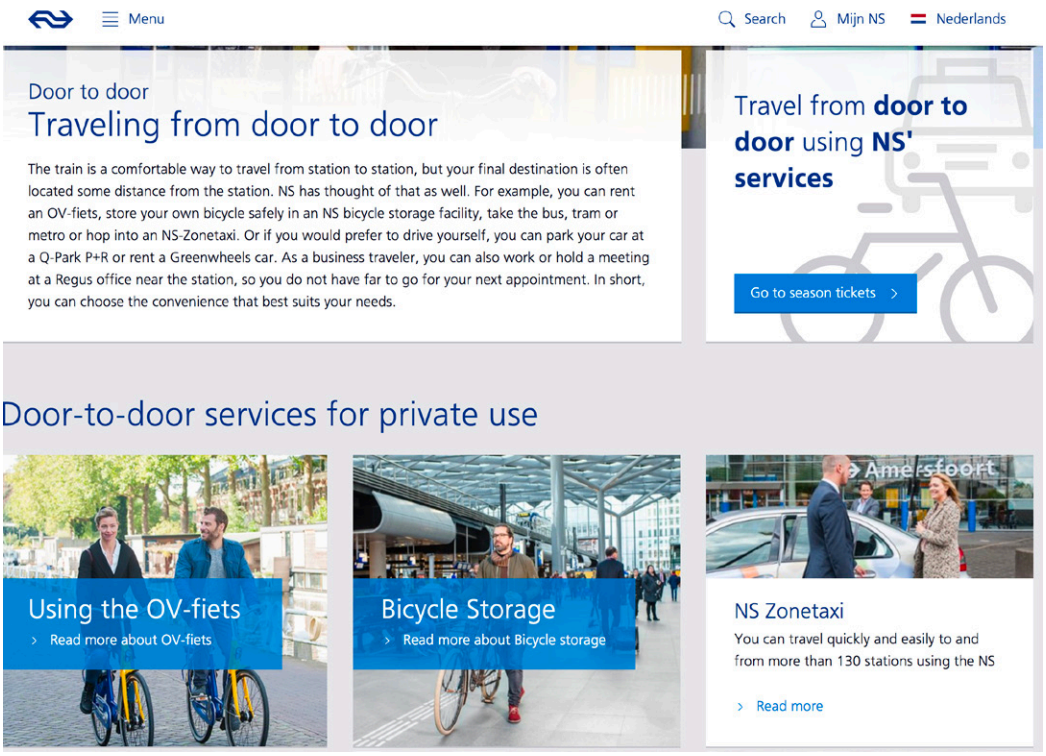

Figure 7: NS-web shop enabling customers to order subscriptions to OV-fiets and bicycle parkings besides train tickets

BB4- One easy payment system

One public transport payment system able to pay for all available public transport services is of course much more convenient than a different payment system for each public transport service or for each separate service that is part of one bigger service. One integrated payment system has furthermore the advantage that commercial and marketing actions can be organised more efficiently.

Easy payment in the Netherlands:

- Since 2012, the public transport chip card (OV-chipkaart) can be used nationwide for all kinds of public transport, including the use of bicycle parkings and OV-fiets.
- Marketing actions are eased like in September–October 2015 when NS combined the discount on off-peak hours & weekend cards for trains with the OV-fiets membership.

Figure 8: The Dutch "OV Chip card" used by people all over the country

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Figure 9: Promotion built on the fast, easy and cool concept in the BiTiBi project

BB5- Communication

It's important to raise awareness around effective door-to-door transport solutions, especially among potential users. In non-bicycle-friendly cities, it will be important to stress the convenience of a bicycle for the first and last miles.

Communication in the Netherlands:

- NS promotes door-to-door travel rather than only a train journey.
- NS recommends to look after at alliances that will leverage the communication, companies can be partners promoting the approach among employees, cities among staff and citizens, and members among their friends and relatives. Existing clients/members are often the best ambassadors. Therefore, an OV-fiets member can invite a friend to have an OV-fiets journey for free during member gets member actions.

In countries beyond the Netherlands, where there is less awareness around cycling as a means of transportation, extra communication efforts to make cycling desirable will be necessary. Communication can best be built around the themes: easy, fast, affordable, convenient, and cool.

BB6- Cycle ways to the railway station

The primary condition to enable people to do the first and last miles of a door-to-door bike-train-bike journey is safe cycling conditions towards the station. This is very well illustrated by the "Re Cycle tool pyramid" from Noor Scheltema. Without safe and (to a lesser extent) direct access to railway stations, current and potential cyclists are much less likely to see the bike as a part of their journey. The pyramid has been inspired by the Maslow pyramid displaying in the bottom the most fundamental needs.

Cycle routes in The Netherlands:

- Railways stations in the Netherlands are in most cases safe to reach thanks to good cycle infrastructure, certainly in comparison with other countries.

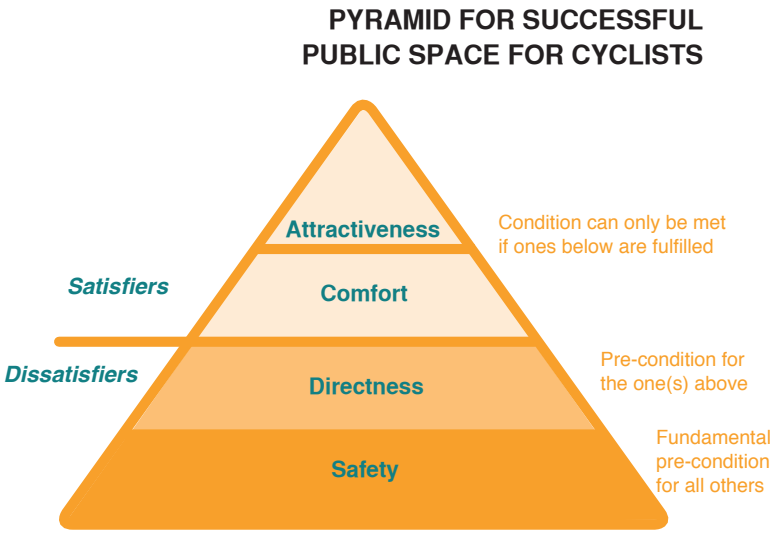

Figure 10: Re Cycle tool (© Noor Scheltema) illustrating the importance of safe cycle routes towards railway stations

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Build partnership to leverage the approach

Partnerships with (local) authorities are in most cases necessary to successfully implement the BiTiBi approach. If not strictly necessary, those partnerships will provide at least a boost to the approach. In the Netherlands, local and national authorities, Pro Rail, the railway infrastructure manager, and NS, the railway operator collaborate to implement the BiTiBi approach. Each of the partners provides financial means to implement the approach as illustrated above.

Local authorities furthermore take care of cycle infrastructure in their city and around the railway station. Without safe cycle routes, the BiTiBi approach cannot be a success.

Beyond the Netherlands, authorities can also have an important role in communications, increasing the desirability of cycling.

2.2 Replicate and adapt the BiTiBi approach

The BiTiBi project replicated the Dutch approach, or at least parts of it, in four very different pilot situations. These pilots were supported by local consultants and by Dutch experts during the three-year project. during this period, site visits and workshops were organised. The next section provides more information on how pilots implemented the approach.

More detailed information on the BiTiBi approach and how to implement it can be found in the report titled Guidelines to implement BiTiBi services on the BiTiBi website. Also the cycle-rail toolkit2 from the British rail delivery group is a very useful to start implementing a BiTiBi approach and can be found on the Rail Delivery Group website.

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3. THE PROJECT ACTIONS IN THE PILOTS

The table below provides an overview of the pilot projects – based on the BiTiBi approach -, their locations, main objectives and size. The map below illustrates the pilot locations.

Figure 11: The BiTiBi pilots in Europe, including the Dutch example to replicate

Pilot location	Operational partner	Objective
Belgium wide (53 stations)	Blue-bike, shared bicycle operators, subsidiary of SNCB, Belgian national railways.	Sustain development of shared bicycles (Blue-bike) via user community building and third payment partnerships.
UK - greater urban area of Liverpool for the development of bicycle parking; UK-wide for the development of shared bicycles	Merseyrail, urban rail operator in Liverpool	Sustain development of shared bicycles (Bike & Go) and to a lesser extent concept of secure bike shelters.
Spain: Barcelona area - 2 commuter stations in Barcelona metropolitan area	FGC, railway operator in Catalonia region (including urban rail in Barcelona metropolitan area)	Development of bike parking in each station. development of shared bicycles for last mile for company employees.
Italy: Milan area, 3 commuter stations around Milan (1 station in Como and 2 stations in Bollate)	FN, infrastructure operator in the Northern Italy region of Lombardy	Development of new bike parking and promotion of use of them including use of smartcard

Table 2: Overview of pilots with main characteristics

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3.1 Belgium

The Belgian BiTiBi pilot focussed on the shared Belgian railway bicycles (BB2), the Blue-bikes, its promotion, and its integration in an integrated payment system. Bicycle parking (BB1) was already quite wide spread in Belgium, especially in Flanders, the Northern part of Belgium.

Blue-bikes are, like the Dutch OV-fiets, comfortable city-bikes with an easy registration process and card that can be used on all 53 Blue-bike locations.

Figure 12: Blue-bikes parked at Liège Guillemins railway station

The most inspiring actions and lessons provided by the Belgian BiTiBi pilot are:

- **Third party payment system: the ultimate leverage for financing and promotion.**
- **Integrated payment system: interesting way to reach millions of potential customers.**
- **Building a user community to promote and improve your service.**
- **Insight in the three main success factors of Blue-bike locations.**
- **An assessment of cycle routes to the railway station to make those more attractive.**

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Inspiring actions

• Third party payment system: the ultimate leverage for financing and extra promotion

Blue-bike organised cooperation with cities in which the city pays 1€/ Blue-bike rental, and the region pays another euro. The user fee is in that way reduced to 1€ instead of 3€. A clear advantage of the system is that the very low user fee reduces the threshold for using the system and increases attractivity. Another less visible advantage is that cities get involved in Blue-bike and take themselves care of local promotion. An agreement concerning local marketing efforts contributes to the success. Since 2017, this system is also introduced in Wallonia.

Figure 13: Cities themselves organise promotion activities

• Integrated payment system: interesting mean for reaching millions of potential customers

The Mobib card is the first initiative towards a Belgian integrated payment card for the use of public transport. Joining the Mobib card platform means for Blue-bike the instant possibility for all Mobib card holders to access and use Blue-bikes without a separate 'Blue-bike' card. People will be able to subscribe online to Blue-bike with their Mobib card number and hire a bike straight away. This is not only a quick win on both the level of the customer and supplier, it is also a main tool for marketing and communication.

The Mobib card implementation is a slower than foreseen process. User identification on the Mobib cards is finally expected after the end of the BiTiBi project from April 2017 onwards, to ensure the further Blue-bike development in the coming years.

• Building a user community to promote and improve your service

Blue-bike reaches potential users by communicating on different media levels. In social media, Facebook was used to post promotional campaigns, a live feed of the twitter account was implemented on the homepage. The Facebook page has 3010 followers, the Twitter page has 1300 followers, and Instagram has 93 followers. The newsletter is sent to 8300 addresses. The Blue-bike 'community' is activated through gamification, such as photo contests, free gadgets, free coffee (figure below) to encourage users to participate in service and product development. Short surveys about where users want Blue-bike to be installed in the future, what they want the future Blue-bike bicycle to be like, a challenge to invent the new slogan and so on.

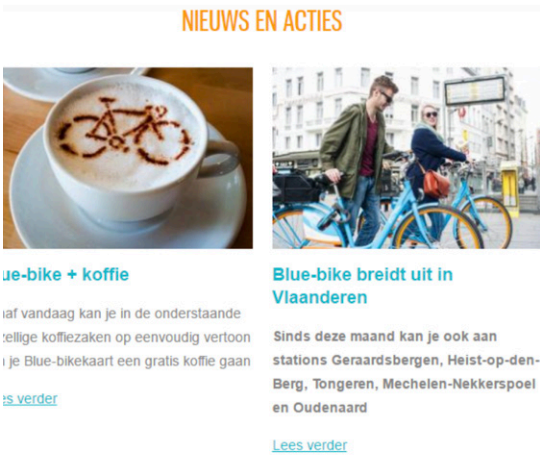

Figure 14: News content for digital media

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• **Insight in the three main success factors of Blue-bike locations**

Blue-bike investigated the success factors of the existing Blue-bike locations. The three main success factors are:

• The number of companies around the Blue-bike location.

• The degree of local promotion for the system.

• The city involvement via the third party payment system.

• **Assessment of the cycle routes from and towards the railway station**

Several cycle routes to and from the stations of Ghent Sint Pieters and Liège Guillemenins have been assessed with the Re Cycle tool from Noor Scheltema. In Ghent, there are some good cycle routes available. These are however not signposted. As a consequence, people arriving in Ghent St Pieters don't know how to reach their destination in a cycle friendly way.

In Liège also efforts have been made to improve cycle conditions, but further efforts are certainly necessary. Important improvements in cycle conditions are foreseen with the arrival of the tram in the near future.

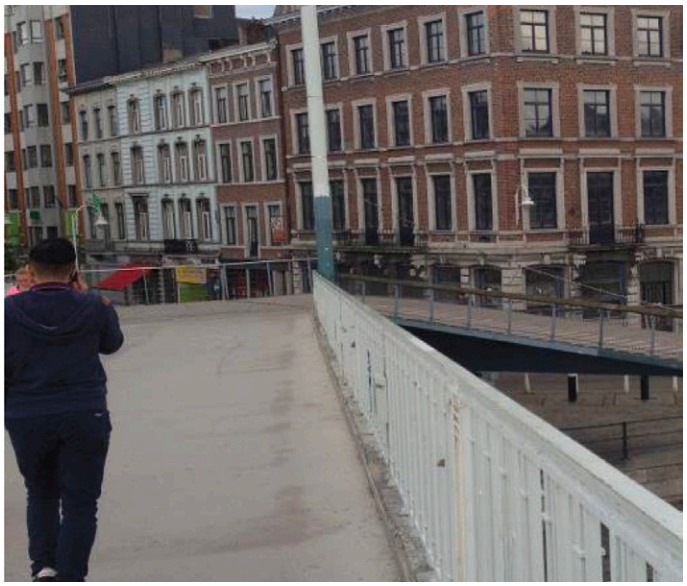

Figure 15: Liège - A special slow-traffic bridge connects the city centre with the eastern neighbourhoods.

Figure 16: Ghent - Some special bicycle amenities implemented around town: a box left turn for cyclists

Inspiring results

• **Exponential growth**

The Blue-bike rentals exploded during the project, from 30,000 rides/year to 160,000 rides/year in 2016. Also the registered users recorded a similar increase, from 2000 in 2013 to 15,000 in 2016 (see following graphs).

• **Happy clients**

More than 85% of Blue-bike users are "satisfied" or "very satisfied" with the service (Ipsos, 2015). More than half of Blue-bike users intends to promote the service to other people.

• **Less cars, more train users**

BiTiBi surveys learned that:

• 22% of Blue-bike trips in combination with the train replace a car trip.

• 7% of Blue-bike users would have otherwise been picked up by car

• 32% of Blue-bike users wouldn't have taken the train if Blue-bike had not been there!

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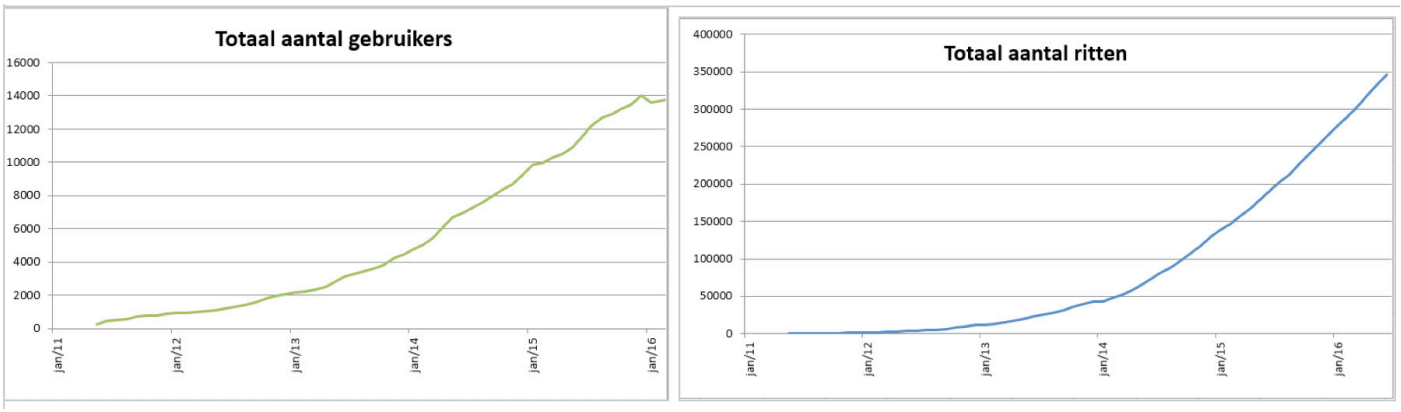

Figure 17: Growth of Blue-bike users (left) and rides (right)

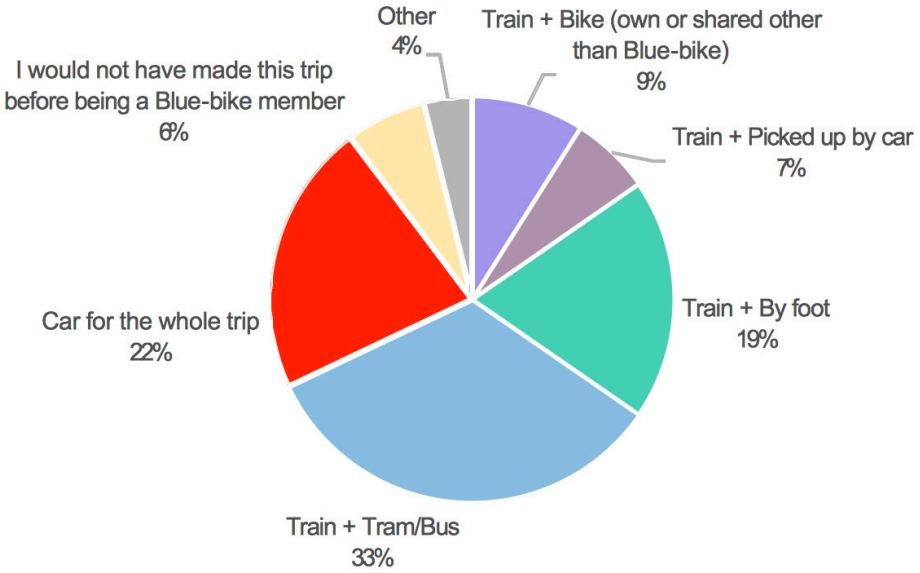

Figure 18: How people would have made their journey in the absence of Blue-bike

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Belgium

Blue-bike

Country Population: 11,250,585 (2015)
871,233 Passengers / weekday (2014)

15,200 Blue-bike Members (Mar. 2016)
2020 Goals: 55,000 members
500,000 rides/year

Bike Parking Supply at Stations

Bike Sharing Units Around Stations

Bike Rentals per Month

Average Trip Distance

Find out more at **BiTiBi.eu**

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BiTiBi

bike train bike

Important Actions

1. Blue-bike will join Mobib card platform, the main Belgian transportation card
2. Creation of a "3-party payment system":
   - 1 € paid by Flemish Government
   - 1 € paid by city
   - 1 € paid by user
3. Development of community of users from social media and positive support of city

Transportation Modal Shift of Blue-bike Members considering a same trip

CO_2 emissions: -116 t/yr

7% would have not made this trip before being a Blue-bike member.

Data based on a 78-participants online survey (June 2016)
***Last** : in this survey most of the respondants replied about their last mile habits.*

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3.2 UK Liverpool area (parking) and whole UK (shared bicycle)

In the UK, the project provided secure, free bicycle parking as well as a shared bicycle system (Bike & Go). Merseyrail, BiTiBi's project partner, and operator of urban railways in the Liverpool area operates both bicycle parking and shared bike system.

Bike & Go is a nationwide, A-to-A, shared bicycle scheme available at 70 railway stations across the UK. Most of the project activities were nation-wide and created significant results at the majority of the participating stations.

Secure cycle shelters are offered for free at 90% of Merseyrail's stations. These are situated in the larger Liverpool area.

The most inspiring actions and lessons provided by the UK BiTiBi pilot are:

• A corporate Bike & Go offer to leverage Bike & Go subscription

• Increased Bike & Go visibility and on the spot subscription increases subscription impressively

• An assessment of cycle routes to the railway station to make those more attractive

Inspiring actions

• Corporate Bike & Go offer

A number of actions was performed to launch a corporate Bike & Go offer. The corporate offer offers organisations' staff the possibility to hire a bike on their journey to work or meetings. Following actions were launched:

• A corporate membership page was added to www.bikeandgo.co.uk so interested businesses could find more information on the scheme and the call to action to contact the operator.

• A workshop with stakeholders and corporate sales managers of the participating TOCs (train operating companies) was held to discuss how the corporate offer can best be sold to corporate clients.

• The Bike & Go PR team officially launched the scheme with a local event in Liverpool: a large real estate company signed up for the scheme and their story was used for an official press release.

• Increase Bike & Go visibility at stations and ease on-the-spot subscription

In most of the Bike & Go locations, the public bikes were tucked away in secured shelters and not really visible for the public. In addition, from staff feedback, it was found that a lot of customers were not aware of the fact that you can hire a bike straight away if you sign up on the spot. Although it is known that the possibility of subscribing on the spot increases subscription rates significantly. Therefore, the following marketing

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Bike & Go Launches Corporate Scheme

Figure 19: More examples from the Bike&Go corporate offer

activities to promote the service were performed:

• All Bike & Go stations across the country received a Bike & Go flag reading: "Want to hire me today? I only cost £3.80 per 24 hours. Ask a member of staff or visit www.bikeandgo.co.uk for more details." Each station took a Bike & Go bike from the shelter and placed it in a visible location with the flag attached to it.

• All stations put up new large banners promoting the 'hire me today message.'

• Key stations received additional branding for gate paddles and vinyl for walls to enhance the Bike & Go promotion.

• New posters were put up at all the locations right next to the bikes. In addition, all the Merseyrail locations received a new poster to promote the secure cycle shelters.

• The homepage and especially the registration page of the Bike & Go website were redeveloped to accommodate mobile devices.

The effects of the actions were immediate and impressive :

• Rentals more than tripled immediately after the new posters and branding were rolled out. Compared to the same period the year before, rentals doubled. One station went from two rentals in the month before the branding, to 27 rentals in the month after.

• Approximately 50% of new customers signing up, hired a bike on the same day, indicating that the message is coming across.

• Assessment of the cycle routes from and towards the railway station

The cycle friendliness of the environment of the Liverpool Southpark and South Parkway railway station has been assessed. Close to the South Parkway station, infrastructure is well adapted to cyclists. Further away, improvements are a necessity. For the Southpark station, improvements are necessary in a more general way.

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Figure 20: Examples of promotional activities in the UK pilot

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Inspiring results

• **Bike & Go rentals tripled during the project**

The take-off of Bike & Go has been difficult in the beginning of the project in a country that is not very cycle minded. Since 2016, the new actions have been quite effective, especially the increase of the visibility of Bike & Go in stations and the possibility of immediate subscription. Also the suggestion of the train+bike leisure trips has been successful. The annual rentals tripled between 2014 and 2016. Another advantage of the train+bike leisure trip is that those trips are taking place outside rush hours, contributing to a better occupancy of trains without reducing comfort of passengers. Furthermore, the use of go cycle facilities in the Liverpool area increased by 50%.

• **Increasing awareness – High satisfaction**

The awareness of Bike & Go and Go Cycle increased dramatically during the project. 5% of train users knew about Bike &Go and Go Cycle, 45% of train users knew about those in 2016.

The Go Cycle and Bike and Go users are happy with the service. The figure below illustrates this for the satisfaction with the bike parking.

Figure 21: Satisfaction with secured parking (Go Cycling) in the Liverpool area by users

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• **Less cars**

It is worth noting that in the Liverpool case, the introduction of secure bicycle parking and a bike share scheme impacted car use.

For the safe shelters, Go Cycle, it was observed that

• 9% of Go Cycle users would have otherwise made the whole trip (bicycle-train) by car

18% of Go Cycle users used the car to come to the railway station

• 26% of Go Cycle users already used the bicycle-train combination before the availability of the safe shelter

• 22% of Go Cycle users wouldn't have made the train journey

• 19% of Bike & Go trips in combination with the train replaces a car trip.

• 48% of Bike & Go users wouldn't have taken the train if Bike & Go hadn't been there

The latter high percentage is due to the fact that lots of the Bike & Go trips are leisure trips.

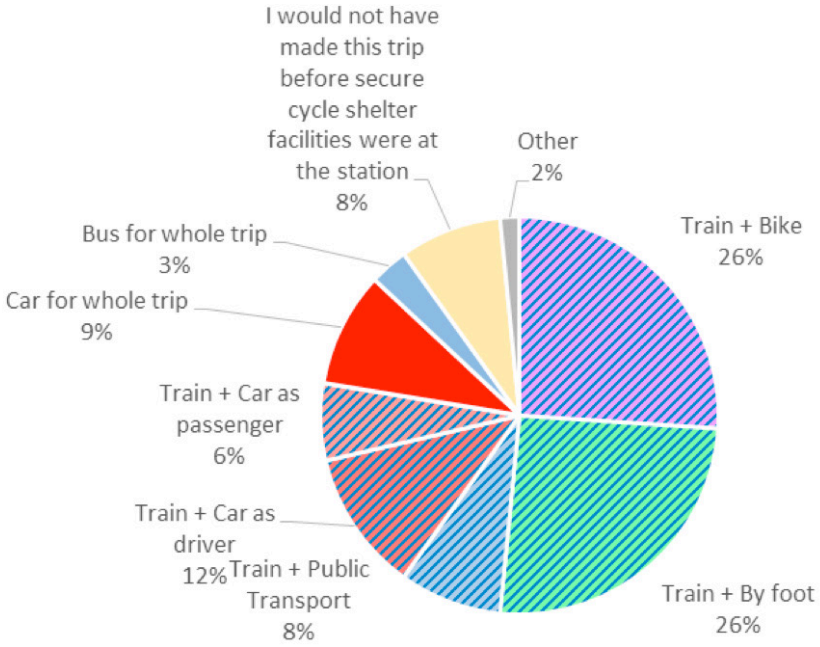

Figure 22. How secure bike shelters users would have done their trip in the absence of safe shelters (source: User survey to Go Cycle users – June 2016).

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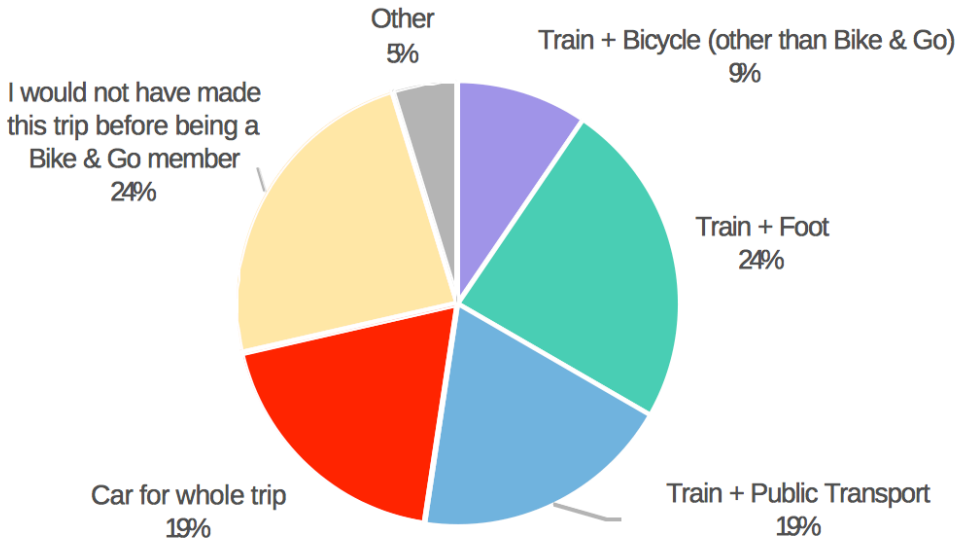

Figure 23. How Bike & Go users would have done their trip in the absence of shared bicycles (source: User survey to Bike & Go users – June 2016).

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The United Kingdom

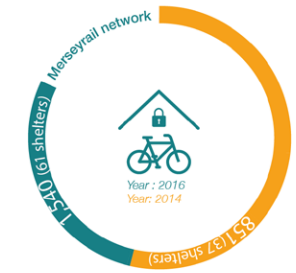
BIKE&GO

Merseyrail

Population: UK 65,110,000 (2016)
Liverpool City Region 1,517,467 (2014)
100,000 Passengers / weekday on the Merseyrail network (2015)

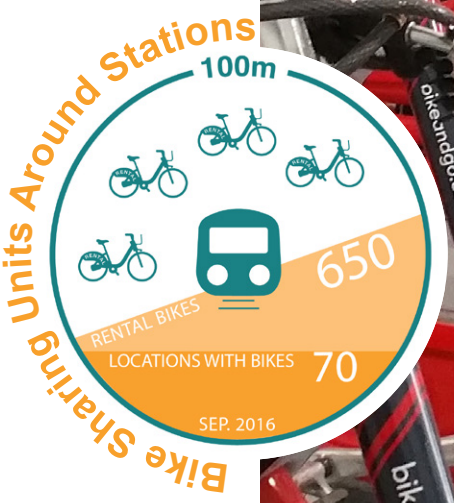
Membership from Sep. 2016 to Sep. 2014:
Bike & Go: + 142%
Secure bike shelters: + 98%

Bike Parking Supply at Stations



Secured bike shelters

Bike Sharing Units Around Stations



Bike Rentals Increase

Shelters

162 to **241** uses/day

Average Trip Distance

Find out more at **BiTiBi.eu**

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BiTiBi

bike train bike

Important Actions

1. Corporate webpage added to Bike & Go website for businesses; events dedicated to Bike & GO
2. Increased visibility of Bike & Go thanks to communications and new signage
3. Website registration page improved to adapt to mobile devices and allow "on-the-spot" registration

Transportation Modal Shift of Secure Bike Shelter Users and Bike & Go Members

considering a same trip

CO_2 emissions: -16 t/yr

10% would have not made this trip before being a Bike & Go member or a safe bike parking user.

Data based on a 264-participants online survey (June 2016)

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3.3 Barcelona area

In the Barcelona area, the project focuses on bicycle parking and bicycle sharing in Sant Boi and San Cugat in the regional railway network of FGC. FGC is a small Catalonian railway operator, operating mainly two railway lines.

The most inspiring actions and lessons provided by the Barcelona BiTiBi pilot are:

- **building of bicycle parking**
- **an ambitious business case for pedelec rental to companies leading to a favourable legal framework**
- **actions to lower the threshold for BiTiBi use**

Inspiring actions

- **Building bike parkings**

Before the BiTiBi project, secure bike parking was already available in both FGC stations. Capacity was however very limited with just seven spaces at Sant Boi, and 28 at Sant Cugat. These shelters, called Bicibox, were provided and maintained by the Barcelona metropolitan area institution.

Two projects of secure parking for bikes were developed. Serious delays in construction occurred due to discussions about resources to finance the parking solutions. A shared financing solution between different stakeholders was found and bike parking were built in 2016. It's worth noting that the European BiTiBi project does not include funding for bicycle parking infrastructure nor for creating a bike fleet service.

In Sant Boi, the parking for 24 bikes was constructed on land owned by the train operator and opened on 18th of October 2016. At this point, extension of the facilities seems difficult.

In Sant Cugat the location was opened in early 2017 on municipality grounds. The project was developed in coordination with the BiTiBi team. The total capacity of the space is 300 bikes.

Both parking access control systems are supported and managed by the AMB's service Bicibox, and in fact, it is anticipated that the second phase of the parkings will be managed by Bicibox.

Figure 24: Bike park work-in-progress in Sant Cugat

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Figure 25: Bike parking ready for the opening in Sant Boi

• An ambitious business case for pedelec rental to companies leading to a favourable legal framework

In both Sant Cugat del Vallès and Sant Boi de Llobregat, there were no shared bicycles available at the beginning of the BiTiBi project.

After several meetings with the stakeholders and discussions with the target groups, the Catalan BiTiBi team decided to create a bicycle fleet for renting to companies. In the future, those can also be rented for tourism to improve the business case. The aim is to make it an economically sustainable service. This is seen as a large challenge, as the fleet is small and in the Netherlands it took OV-fiets eight years to be break even.

Twelve electrical bikes are available at Sant Cugat and eight at Sant Boi. Renting those bikes include a complete service package for the bikes like insurance, locks, helmets, maintenance, and even help on the road in case of incidents. The initial idea was to

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distribute the costs and investments between the train operator, (under constraint that the bike users take the train before using the bike), the final users and the companies where the users work.

However, at this point in time, companies are not willing to pay for the bicycle rental, even if those companies support the idea of participating in the program. Neither is there a legal framework in place that obliges companies to pay part of the commuting of their employees.

Following this challenge and thanks to the meetings with the Catalan BiTiBi team, public bodies (local and metropolitan) got perceptive of the importance of generating incentives, using taxes to encourage their employees to use sustainable mobility to get to their work place. Preparing these incentives takes time however. In the meantime, municipalities agreed to pay the companies' part of the rentals. Companies and their employees can now use the service for free during three months (two bikes per company).

• Lowering the threshold for BiTiBi use: try a bike and BitiBi.cat website

The 'Try a bike' event was offered free of charge to companies in Sant Boi and Sant Cugat. This was an opportunity to create interest among employees, giving them an opportunity to test the route between the company location and the FGC station. A professional service, electrical bikes, and snacks at the end the route are included. Besides offering the opportunity to try an electric bike for the first time, the try a bike activity also reinforces the relationship between the workers.

Specific Web (bitibi.cat), Facebook and Twitter profiles have been created to bring the BiTiBi project closer to the people working in companies, in San Boi and Sant Cugat. It also contributes to disseminating the BiTiBi concept among people, as in Spain potential users had not even realised how useful and beneficial the service could be for them.

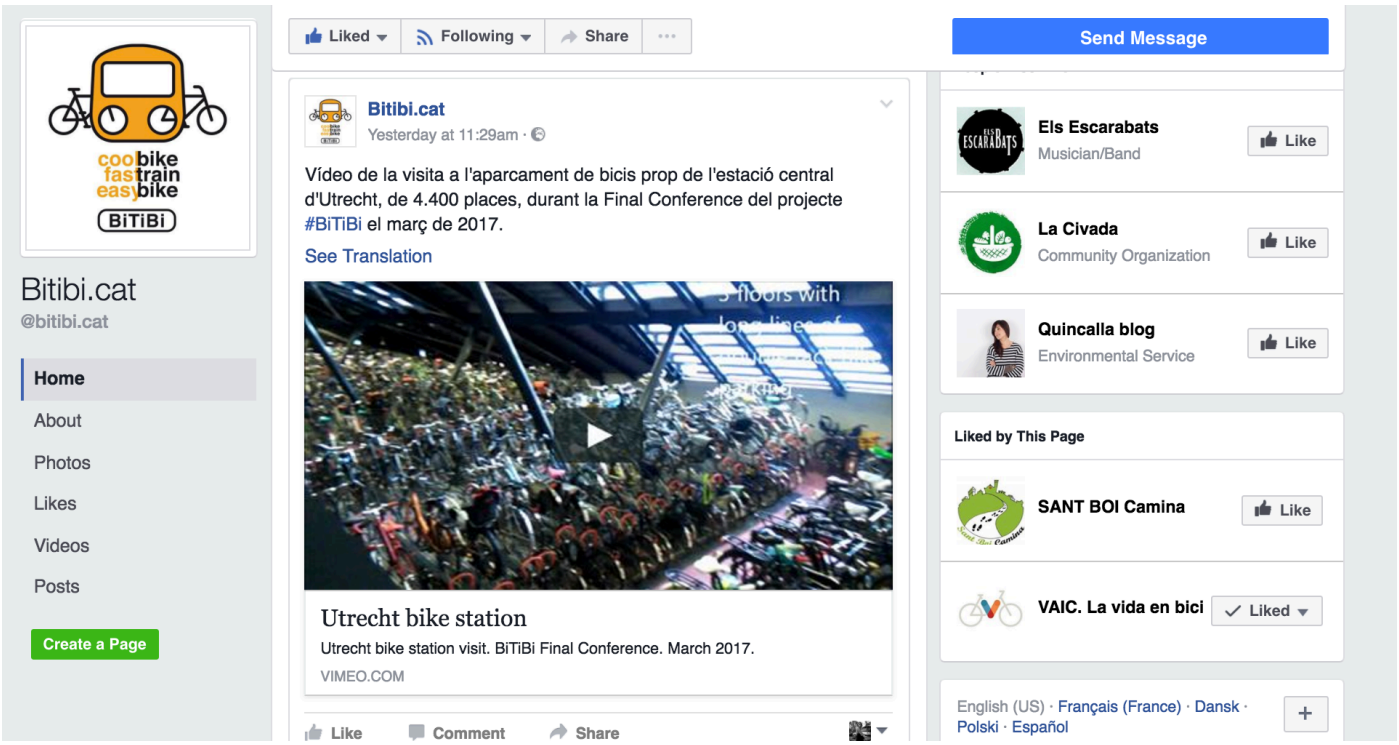

Figure 26: BiTiBi.cat. Facebook page

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Figure 27: BiTiBi.cat. Twitter page

Inspiring results

In spite of difficulties in building the secure bike parking and implementing the bicycle rental service, the pilot was able to provide some encouraging results:

• A framework with a tax incentive for companies encouraging their employees to cycle will be put in place soon for the whole metropolitan area of Barcelona. This will be an important leverage factor to develop BiTiBi services beyond the BiTiBi project ending in March 2017.

• 70% of people who subscribed to the BiTiBi.cat website are willing to start using a bicycle if bicycle conditions improve.

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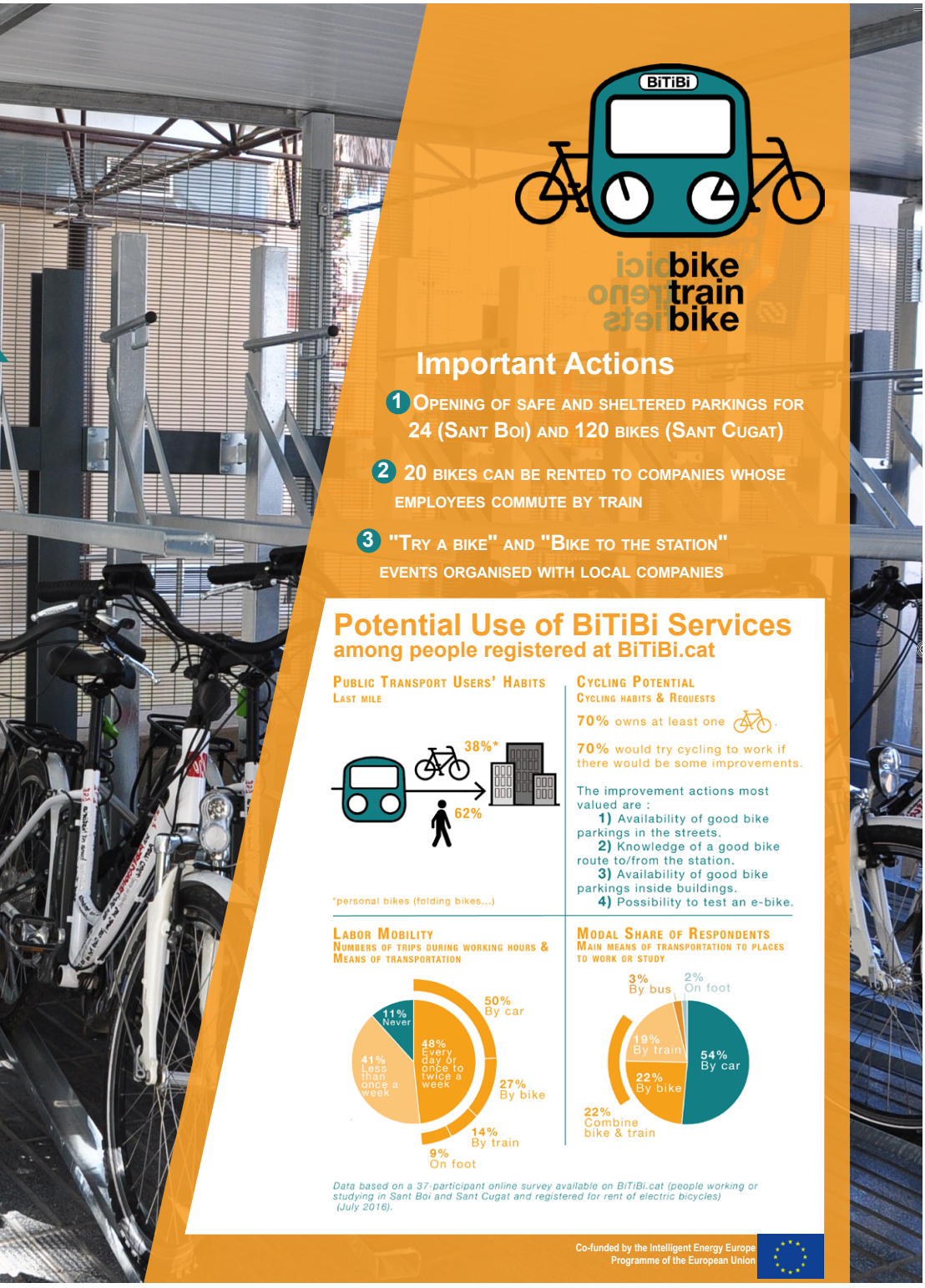
BiTiBi
bike
train
bike
Important Actions
1 Opening of safe and sheltered parkings for 24 (Sant Boi) and 120 bikes (Sant Cugat)
2 20 bikes can be rented to companies whose employees commute by train
3 "Try a bike" and "Bike to the station" events organised with local companies
Potential Use of BiTiBi Services
among people registered at BiTiBi.cat
Public Transport Users' Habits
Last mile
38%*
62%
*personal bikes (folding bikes...)
Cycling Potential
Cycling habits & Requests
70% owns at least one
70% would try cycling to work if there would be some improvements.
The improvement actions most valued are :
1) Availability of good bike parkings in the streets.
2) Knowledge of a good bike route to/from the station.
3) Availability of good bike parkings inside buildings.
4) Possibility to test an e-bike.
Labor Mobility
Numbers of trips during working hours & Means of transportation
11% Never
48% Every day or once to twice a week
41% Less than once a week
50% By car
27% By bike
14% By train
9% On foot
Modal Share of Respondents
Main means of transportation to places to work or study
3% By bus
2% On foot
19% By train
54% By car
22% By bike
22% Combine bike & train
Data based on a 37-participant online survey available on BiTiBi.cat (people working or studying in Sant Boi and Sant Cugat and registered for rent of electric bicycles) (July 2016).
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3.4 Milan area

In the Milan area, the project focused on bike parking in Bollate Nord, Bollate Centro and Como Borghi. In Bollate, bike parking were available, in Como a new bike parking was built during the project. All these stations are in the area managed by Ferrevienord, the local infrastructure manager.

The most inspiring actions and lessons provided by the Italian pilot are:

• creation of a BiTiBi team at FN planning and boosting investment in railway parking

• actions to lower the threshold for BiTiBi use.

Inspiring actions

• Creation of a BiTiBi team at FN planning and boosting investment in railway parking

A BiTiBi team was created within Ferrevienord (FN) consisting of one experienced engineer, a communication expert, and a marketing expert.

A major consequence of the creation of this team was an expedited building of new bicycle parkings at the FN railway stations. This has led to the opening (and/or to plan for the opening) of a grand total of 20 bike parking stations (including the BiTiBi pilots in Bollate Centro, Bollate Nord and Como Borghi) in 2015-2017.

BiTiBi has therefore led to the setting up of a comprehensive strategy of bike-train-bike services by the local rail operator, Ferrovienord, using the BiTiBi brand as a unifying factor. It is particularly important to underline the change of both mentality and behaviour within the Italian society with respect to the use of bikes, and the use of the BiTiBi model. The demand for more bike parking is widespread, and the plan created by Ferrovienord is ambitious.

• Interact with users to collect feedback – physical living lab

The physical living lab events focused on providing information and increasing awareness about the bike-train-bike programme. These included disseminating information on BiTiBi opportunities as well as collecting feedback on the bike parking station services. These aspects were communicated through project posters and the distribution of leaflets and gaming activities.

The BiTiBi physical living lab events took place in June 2016. They have been branded “Bici-Treno-Brinda! (Bike-Train-Make a Toast!)” as they included a free refreshments for the participants.

A total of about 150 people took part in the events. Further activities were held in cooperation with the cyclist associations in October 2016.

The involvement of citizens, bike users, and non-bike users was implemented through some simple interactive activities such as participation in a picture

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contest, providing opinions on service improvements on post-its, and through surveys.

The results of the different activities highlighted a general and overall high degree of satisfaction with the bike parking services. Numerous responses show unwillingness to change habits (mainly because the person lives/works respectively too close or too far to the station); other perceived difficulties are related to electronic barriers in the registration, and a perception of unsafe conditions for cycling.

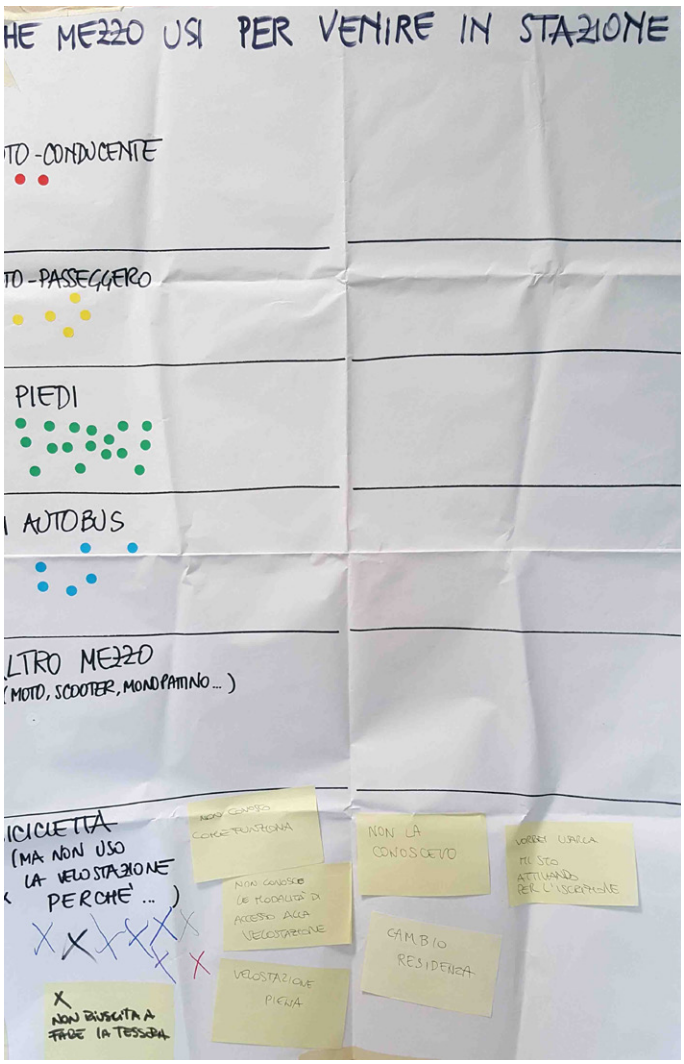

Figure 28: Images from the "Bici-Treno-Brinda!" events

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• Provision of 100 bikes for Milan expo

In Bollate Nord, there was initially no public bike share service available until the first half of 2015, when a bike rental service with 100 bikes was created. This particular public bike share service was implemented to link to the Expo 2015 Milan site.

The Expo 2015 universal exhibition site is located less than 3km away from Bollate Nord station. The inauguration of the public bike share service with 100 bikes was a perfect answer to the great demand for reaching the Expo site form May 1st to October 31st 2015. It furthermore encouraged passengers to get off at a less frequented railway station in an effort to reduce congestion in others (most notably Bollate Centro and Rho Fiera). The Bollate Nord bike rental service also serves the exhibitions at Villa Arconati, a XVII century country villa that customarily hosts concerts and musical events in the summer. Villa Arconati is easily reachable by dedicated bike lanes from both Bollate stations, and in particular from Bollate Nord.

BiTiBi has, in particular, supported the Municipality of Bollate in launching the new bike rental service, with the loan contract signed and the service launched in May 2015.

• More users and uses

Especially the user and uses increase in the velostazioni (bike parkings) in Bollate is important, nearly a tripling of users and an increase of the uses by more than 50%. The Bollate velo stazione (bike parking facility) existed already before the start of the BiTiBi project. In Como, the velostazione that was opened only during the project, early take up is slower.

Figure 29: Opening of the new BiTiBi-facilitated bike-renting service at Bollate Nord

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ITALY				
Velostations				
	2014	**2016**	***Increase***	***%***
BOLLATE: Members	220	625	*405*	*184%*
BOLLATE: Annual uses	48,000	74,400	*26,400*	*55%*
Increase of uses/year			**13,200**	
COMO BORGHI: Members		123	*123*	
COMO BORGHI: Annual uses		2,168	*2,168*	
Increase of uses/year			**2,168**	
Increase of trips by velostations users/year			**30,735**	

Table 3: Increase of annual BiTiBi trips due to the bike parking at FN network in Italy (source: Ferrovienord and Fabbrica dei Segni)

• **Less cars**

For the secure bike parking shelters, we observed that:

• 7% of Bike parking users would have made the whole trip (bicycle-train) by car

• 16% of Bike parking users used the car to come to the railway station

• 17% of Bike parking users already used the bicycle-train combination before the availability of the safe shelter

• 7% of Bike parking users wouldn't have made the train journey.

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BiTiBi
bike
train
bike
Important Actions
1 Como: Opening of safe and sheltered parking for 90 bikes
2 Organisation of Physical Living Labs with users to collect feedback and provide bike repair and training courses
3 Creation of bike-train-bike team within Ferrovienord; developping a Velostation regional plan (11 new stations in 3 years)
Transportation Modal Shift of Bike Parking Members considering a same trip
7% stopped driving
43% are new cyclists for the first/last mile
20% are new train passengers
7% stopped using the bus-tram-metro for the first/last mile
17% stopped driving for the first/last mile
CO2 emissions: -4 t/yr (Como and Bollate)
7% would have not made this trip before the opening of the bike parking.
24,503 new BiTiBi trips/year.
Data based on a 30-participants face-to-face survey (Sept. 2016)
Co-funded by the Intelligent Energy Europe Programme of the European Union

4. TRANSPORTING BICYCLES IN THE TRAIN: A GOOD IDEA?

Figure 30: Bicycle transport at DSB service in Copenhagen

The BiTiBi model encourages travellers and commuters to bike to the railway station, and park their bike at the station before continuing their journey without their bike. At the destination station travellers should use a publicly available shared bicycle to reach their final destination.

BiTiBi promotes this approach primarily because of limited space onboard trains. Promoting taking bicycles on the train would reduce capacity for passengers. As many train lines in urban areas are already faced with capacity issues, adding to these problems doesn't seem to be a good idea.

However, in some cases, allowing passenger bicycles on the train, even during peak hours, can be a really good idea, if trains have available capacity.

The often cited Copenhagen example illustrates this well. Around Copenhagen, bicycles can be taken on the train free of charge. In the rest of Denmark, in most cases bicycles can be taken on board for an added fare.

Why?

The answer is Copenhagen trains have unused capacity. Instead of wasting this capacity, DSB, the Danish train operator, decided to admit cycles on their trains for free. The operator consequently witnessed a significant increase in revenues and rider traveling with bicycles.

Between 1996 and 2007, Copenhagen's entire train fleet was replaced. New trains have significantly greater capacity over the older ones as a growth in transport demand was expected. This expansion did not occur. In 2010, DSB took the decision to accept bicycles for free on their trains. The new trains were well suited for this thanks to the much greater width compared to standard trains and stations were adapted to promote taking bicycles on board.

Results were immediate. Bikes taken on the trains

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doubled a first time in 2010, and a second time in 2012. The amount of passengers with a bike increased of course, but more interesting was the fact that also the amount of passengers without a bike increased significantly. For each new passenger with a bike there was also a new passenger without a bike.

The net impact of the promotion of bicycle transport on Copenhagen trains was a 25 million DKK (3, 4 M EUR) net income increase as the figure below illustrates. In 2014, the result was double that.

To summarise this incredible case study, we can say that, by promoting bicycle transport for free on the Copenhagen regional commuter trains, DSB, the Danish rail operator was able to:

- Maintain punctuality
- Increase passenger trip lengths
- Boost customer satisfaction
- Increase total number of trips
- Increase net income

This was possible thanks to excess capacity in the new rolling stock.

The figure below comparing the Madrid and Copenhagen transport situation puts this story in perspective:

Urban train capacity utilisation is more than four times higher in Madrid (54% compared to 12% in Copenhagen) while Copenhageners cycle 30 times more than Madrilenians (0.1 km/day in Madrid vs. 3 km/day in Copenhagen).

One can only imagine, that if Madrilenians would cycle as much as Copenhageners, their public transport system would suddenly be less crowded.

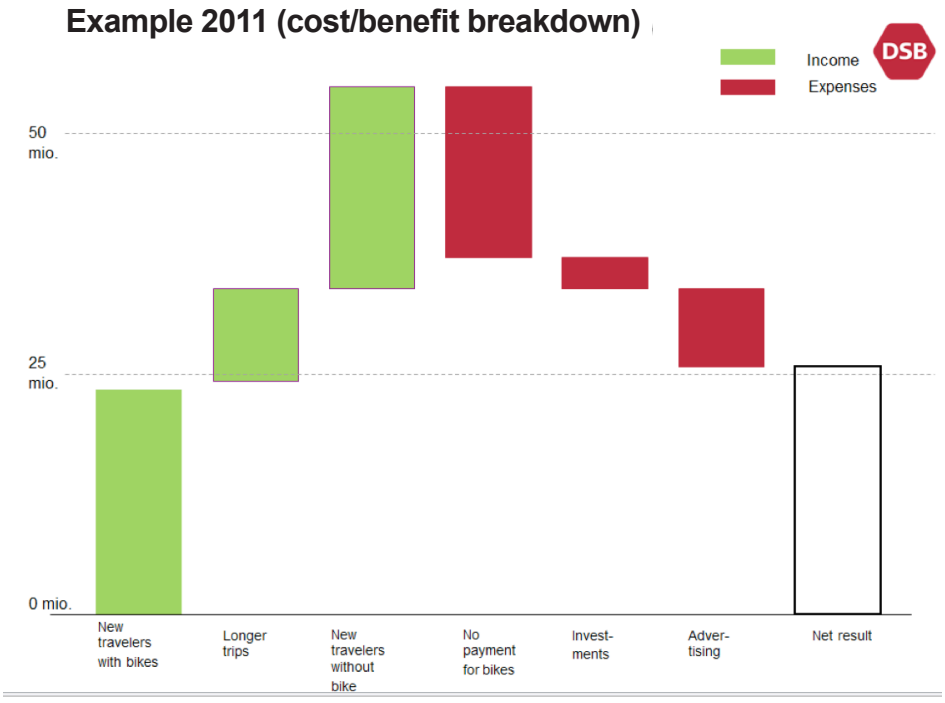

Figure 31: The impact of offering free bicycle transport on Copenhagen S-trains in 2011 (DKr) (source DSB)

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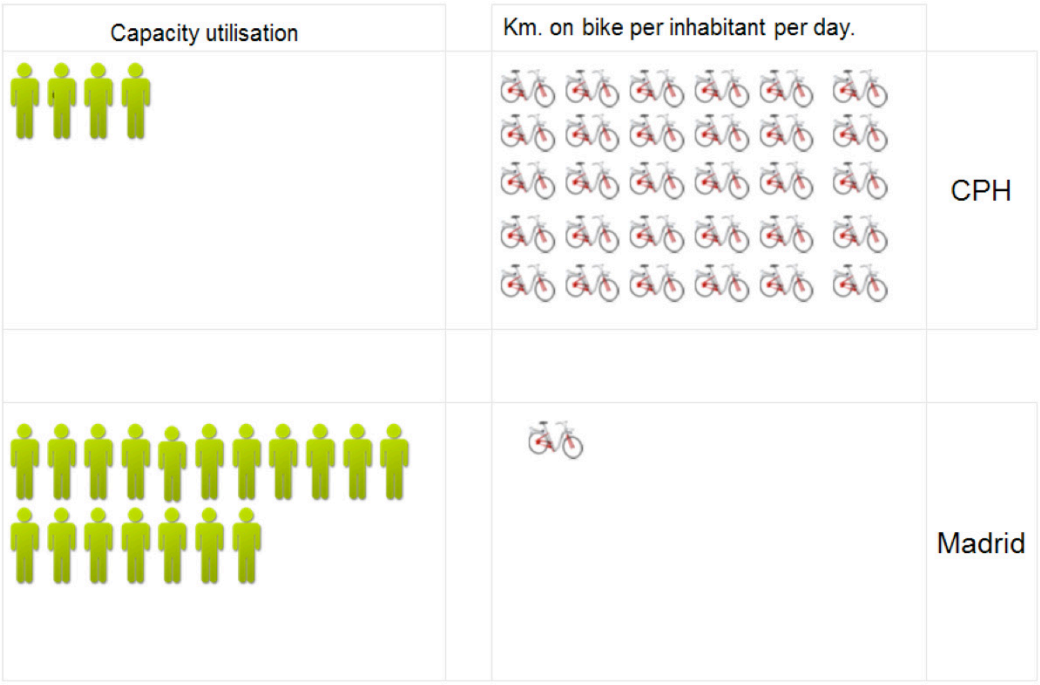

Figure 32: Comparison of capacity utilisation in urban trains and km cycled in Madrid and in Copenhagen (source, DSB)

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5. POLICY CONCLUSIONS

Combining efficient transport modes into one seamless transport service provides promising results. A situation where authorities and railway operators would enable 20% of rail users to combine bicycle and train at EU scale would entail:

- 250 million more railway users
- 5,000 million less car pkm
- a reduction of 800 ktons of CO2, 55 tons of PM and 250 tons of NOx emitted
- a reduction in energy use of 200,000 toe or 2,500 MWh
- 1,200 lives saved EACH year worth 3,000 million EUR
- a 400% return on investment rate for investments in bicycle parking

Societal net benefits would reach up to 2,200 Million EUR each year.

In order to realise the above mentioned gains to facilitate the spread BiTiBi-like services across Europe, the project team has following recommendations based on the project experience.

For railway operators

• Build partnership between local, regional, national authorities and railway operators

Two crucial barriers to get the BiTiBi transport services operational are financing of bicycle facilities in and around stations, and the availability of safe and direct cycle routes towards the railway station.

A partnership between authorities and railway operators has the potential to provide financial resources for the bicycle infrastructure at the railway station.

In The Netherlands, the BiTiBi approach took really off when financing was shared between railway companies, operator and infrastructure managers, and local, regional, and national authorities.

In Belgium, Blue-bike, the shared bicycles system, got a real boost; in cities where local authorities got involved in the financing and promotion activities.

In Barcelona, the project didn't take off before creative solutions for financing were found.

Around Milan, Ferrevienord, the infrastructure manager, was able to engage in an ambitious plan for bicycle parking building thanks to the financing by the regional authorities.

Good cycle routes to reach the station by local authorities.

As already mentioned, lack of safe cycle routes to the railway station is the main barrier for the development of BiTiBi services.

Partnerships between authorities and railway operators will furthermore involve authorities and make them promotors of the BiTiBi transport service.

Engaging other stakeholders, such as cycle groups, companies, (potential) users, in a well thought way in the discussions can give a further boost to the service. It will help create a BiTiBi transport service that is user centred. The engaged stakeholders will furthermore become promoting ambassadors for the BiTiBi service.

• Choose bike parking (safe and sheltered) before investing in shared bicycles

The BiTiBi approach clearly provides societal gains. Societal returns on investment are biggest for safe sheltered bike parkings. The investment costs are relatively low, and a huge number of very regular users are reached.

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It is only thanks to the provision of hundreds of thousands of bicycle parkings that the Dutch BiTiBi service became a success.

For shared bicycles, the investment cost is higher as extra hardware and bicycle maintenance is necessary. The number of users is also significantly lower.

• Provide shared bicycles as a "value adding service" to your customers

Bike sharing schemes require relatively high set up costs besides non negligible operational costs and need critical mass to get break even. The product does not lend itself for high direct revenues from costumers neither, It is important to take this into account before launching the service.
In the Netherlands, it took eight years to reach break-even in the shared bike system OV-fiets by the Dutch railways.

However, the perspective on shared bicycles needs to be broader. Shared bicycles bring non negligible added value to the rail customers. They provide in many cases the opportunity for your customer to reach in a more convenient way their final destination.

In Belgium, 3 shared bicycle users out of 10 would not have taken the train if there had not been a shared bicycle.

In the UK, shared bicycles attract new rail users for leisure trips that take place out in off peak time, where marginal revenues for railway operators are biggest, as marginal cost for an extra passenger is zero.

• Communicate in an attractive way with your target groups

Communicate about your BiTiBi service as an easy, fast and cool transportation service. Only for the early adopters the environment is an salient argument for a buying into the BiTiBi service. For the large majority of users, the convenience of the service will be most important, the positive environmental characteristics are nice to have but not decisive.

Build a community of BiTiBi service users and make them your best ambassadors.

In Belgium, a major success factor for Blue-bike, the shared bicycle operator is its force to build a community with the help of social media.

• Integrate your BiTiBi services into one seamless service

The final aim is to have BiTiBi services included in the mobility payment chip card, providing an easy way to pay. The easiness is the reason why it is needed to keep on working towards this objective, even if the process to get a national or regional mobility card is a slow process.

• Don't hesitate to provide free bicycle in train transport if you have excess capacity

The Danish railways provide bicycle transport for free in their urban Copenhagen trains. Thanks to the particular context of available excess capacity on the Copenhagen trains, the provision of free bicycle transport provided 7 million EUR in extra revenues.

For (local) authorities

• Build partnerships with railway operators on financing and BiTiBi service provision

Financing good quality bicycle facilities like secure parking is often a challenge for the railway company. Co-financing this kind of infrastructure will boost the set of BiTiBi services.

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• Provide high quality cycle routes around and towards railway stations

The availability of good cycle infrastructure to reach the railway station is probably the most important condition for success of a BiTiBi service. Railway companies can't do anything about it. Only local authorities are able to provide high quality cycle routes towards the railway station. In that you make your transport system more sustainable.

• Communicate about the BiTiBi service as an easy, cool, and fast transport service

In large parts of Europe, cycling is not considered cool. Effective promotion and marketing activities will help to give the bicycle an attractive image.

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6. YOU WANT TO KNOW MORE ABOUT…

… the project results?
Have a look at the BiTiBi deliverable The Global Evaluation Report.
For more general impacts of BiTiBi services, you can also have a look at a study on the impacts of BiTiBi services by the French environmental agency on the Ademe website.

… the actions in the pilots?
Have a look at The Final Report on the BiTiBi Pilots.

… evaluating cycle infrastructure?
Have a look at The Quality Level of Infrastructure Used by BiTiBi Cyclists in 8 Pilot Locations.

… implementing the BiTiBi approach yourself?
Have a look at The Guidelines to Implement BiTiBi Services and the Cycle-Rail Toolkit 2 from the Rail Delivery Group.

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For further information please visit: bitibi.eu

BiTiBi final report:
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Utrecht - March 2014 - Kick-off meeting

Utrecht - March 2017 - Final Conference

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