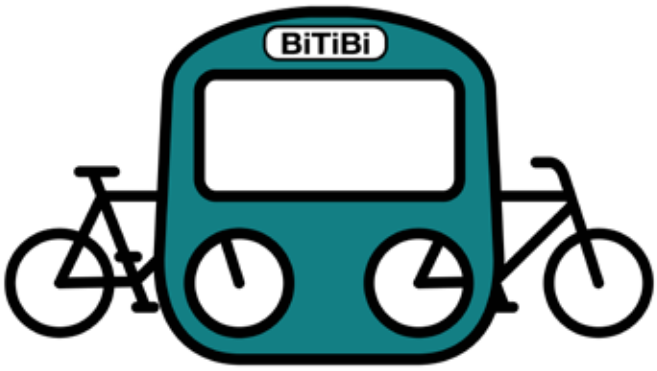


bike
train
bike

# Lessons learned from workshop and site visit

*Site visit: Utrecht (The Netherlands) - March 2014*

**May 2014**

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# Contents

Lessons learned from the first BiTiBi knowledge exchange workshop and study tour on March 26 and 27, 2014 in Utrecht (NL), easy to read-relevant report.

Part of WP2.
Deliverable 2.3.

Target group:
Public version for rail and bike operators and other stakeholders (local and regional authorities, mobility consultancies).

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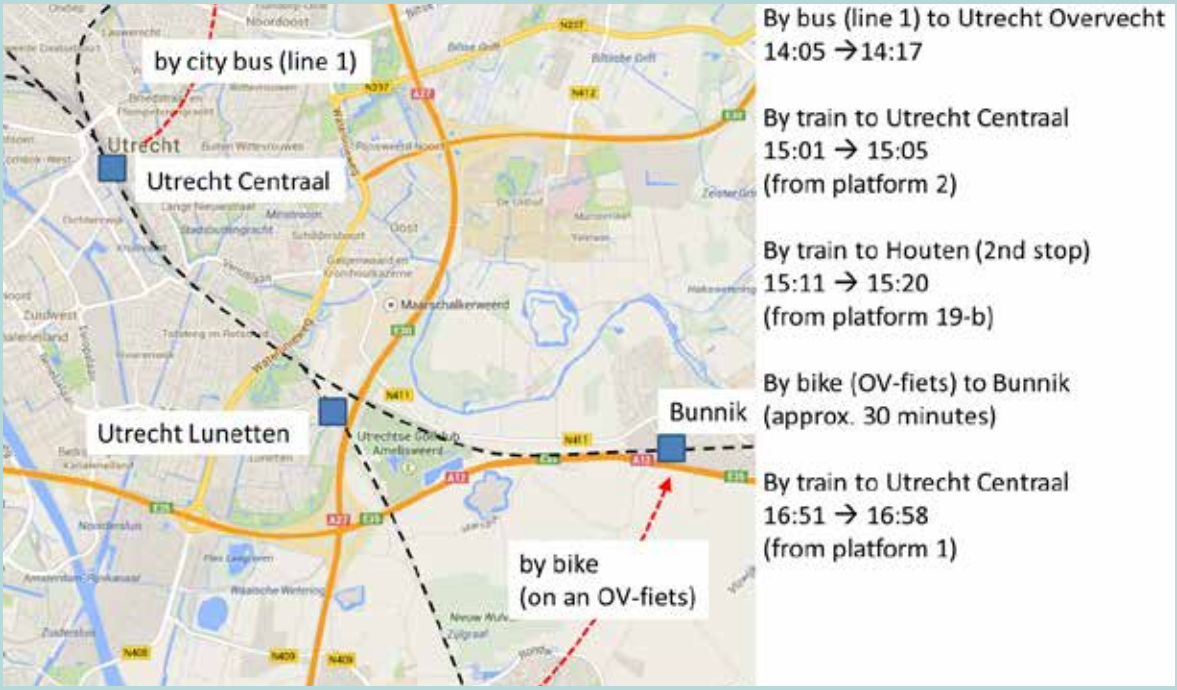
# BiTiBi in and around Utrecht

BiTiBi, convenient bike – train – bike combination, is:

- Safe, sheltered, convenient bike parking
- Availability of convenient public bikes
- Unity of bike – train organizations
- Integrated payment system/fares
- Positive communication and marketing
- Cycle friendly railway station environment




*Timetable of the site visit to Utrecht Overvecht, Houten and Bunnik on March 27, 2014.*



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## A. Seamless bike-train-bike combination, getting started!

Based on the first exchange workshop in Utrecht (NL) on March 26-27, 2014 and a site visit to the stations of Utrecht Overvecht, Houten and Bunnik (NL) we describe below the basics to get started. On March 27, these three example of bike parking and facilities next to train stations were visited. The aim of BiTiBi is not to get people from station to station, but **from door to door**. Especially the last mile can be a problem, because most people don't have a bike at their destination station. Taking bikes on trains in peak hour is getting problematic, and it's not efficient. So a better solution is to provide enough bike parking at most/all railway stations and (shared) bikes for the last mile.

## B. Safe, sheltered, convenient bike parking

Bike parking will be used mostly to conclude **"the first mile"**- the trip from home to the departure station. Some people also use a second bike for **"the last mile"** - the trip from the arrival station to their destination. Mostly for commuters and other people with a regularly used destination station it can be worthy to buy a second bike. For other train travelers a "public bike" –see chapter 3– is a perfect option.

### B.1 Location, location, location

Bike parking should be provided as follows:

- Near the access routes: "in the flow" of the access routes
- Near the departure platforms
- In the view of local residents
- On ground floor level, not in a basement, and easily accessible
- If there are more entrances: divide the bike parking areas (if possible) over all entrances

Choose the **optimal location**: this is easy to define (in the flow of people), but especially at busy stations or in dense areas difficult to achieve. There are conflicting priorities, since the most convenient place for bike parking is also the best place for shops, etc.

The guidelines that will be published at the end of the BiTiBi-project will provide figures showing the economic advantage of putting bicycle racks in the right location.

*Examples of wrong locations in the city of Hilversum: a hidden bike parking area without views from the houses of local residents (left) and a non-used bike parking area situated on a dead end bicycle path (right).*



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*At the other side of the station too few racks are available. Cyclists tend to park their bikes right in front of, and almost inside, the station hall.*

## B.2 Quantity

Provide **enough racks at each station**. Count the number of racks needed:

- Count the number of bikes parked around railway stations
- Even during peak hours there have to be 20% more racks than bikes to avoid overcrowded bike parking
- Take into account the potential "snowball effect" of more bicycle facilities leading to more bicycle users.

Monitoring:

- The sufficient number of racks is determined based on bicycle **counts during hours of peak use**
- Count several times between 10:00 and 14:00 how many bikes have been parked
- For busy "destination stations" where during the night many bikes are standing: count also at night and during peak hours
- Don't count during school holidays
- Monitor every year and provide extra racks when needed.

## B.3 Quality

- Use only high quality racks to limit the risk of damage, e.g. crooked wheels
- (If possible) in countries with high chances of snow or rain: roofed/covered racks
- Fastening feature for separate locks: to reduce the risk of theft
- Bicycle boxes / lockers / guarded bicycle parking: to reduce the risk of theft
- Prefer **"human guarded" bicycle parking** over "digitally guarded" bicycle parking
- **Make parking visible**: it is important that people can see the parking immediately when arriving at the railway station.



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*Without an extra fastening feature this can happen during the day (far left), an example of a "wheel-bender" (center left) and two good examples (center right and far right).*



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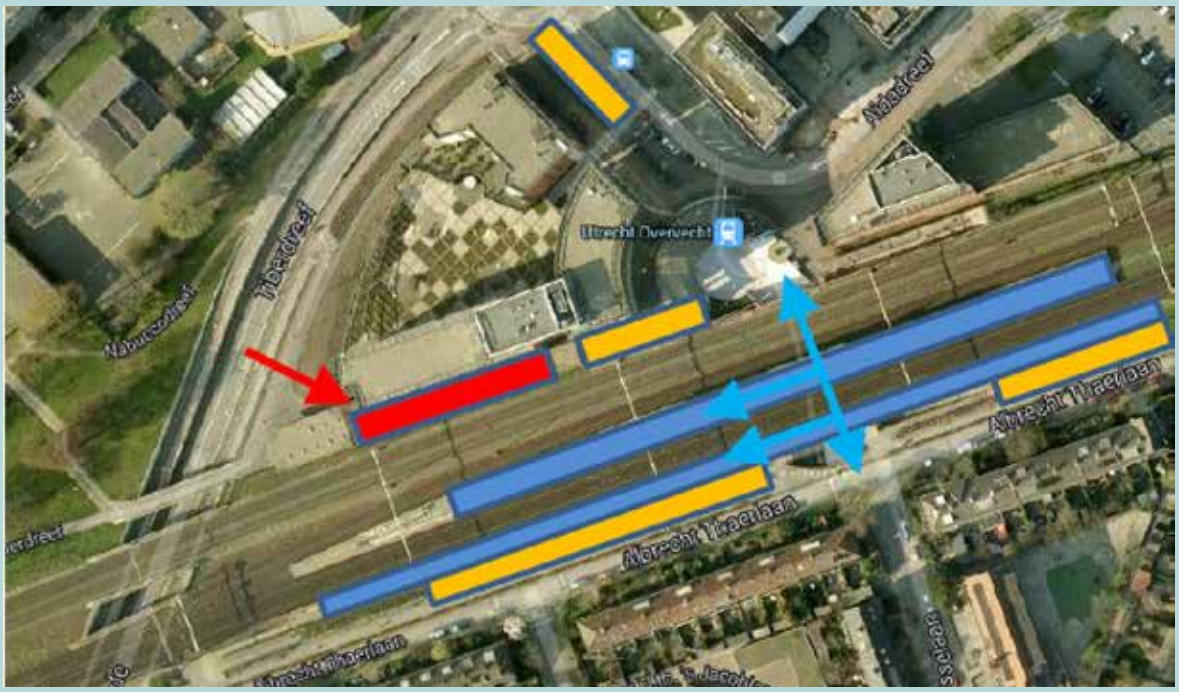
# Station: Utrecht Overvecht

The bike parking at this station is not a good example. Because one can learn from another's mistakes, this bad example has still been included.




*Map of Utrecht Overvecht station, with the entrance (red arrow) of the paid secure bike parking (red), the tunnel and entrance to the the platforms (blue arrows) and the free to use bike parking (orange) near the station entrances.*

*Utrecht Overvecht has a fully automated bike parking with OV-fiets rental services. However, because the system is too complex and not intuitive, these rental bikes are hardly used. Also it's location at the back of the station is not optimal.*



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*The bike parking is designed to prevent anyone taking out another one's bike. It's only possible to take your own bike. Therefore it's very safe to park, but people feel locked up inside.*

*When picking up a bike you need to carry your bike at your left, when bringing it back you need to carry your bike at your right. That's not natural for most people.*

*There are double-layer bike racks at the northern side of the stations and single-layer racks at the southern side. The racks at the southern side are overcrowded. Double-layer racks are possible in order to overcome this problem, but they meet resistance from the residents at the other side of the street because they can, at time, block views.*



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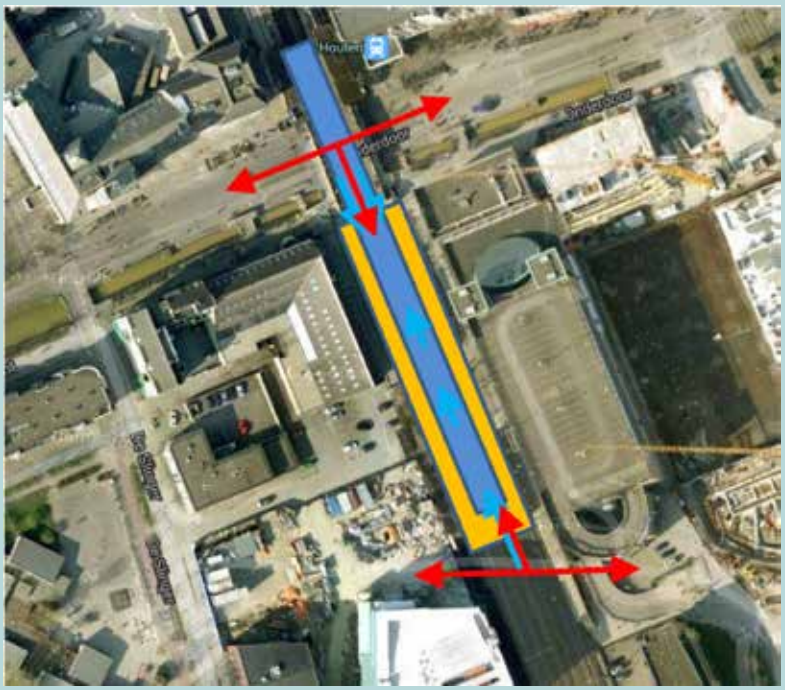
# Station: Houten


*The village of Houten is a new town approx.. 8 km south of Utrecht. It has been designed around two railway stations. The bicycle is the most used transport mode for local trips.*



*Map of Houten station, with the entrances (red arrows) of the free-to-use bike parking "Fietstransferium" (orange) directly below the platforms. From the bike parking several stairs lead directly to the train platforms (blue arrows).*



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*The staffed free-to-use Fietstransferium in Houten is a much more successful example than the unstaffed automatic bike parking at Utrecht Overvecht station.*

*The bike parking has sufficient capacity, is visible from the street and is conveniently located right underneath the train platforms. It is free to park your bike in this guarded and covered bike parking. OV-fiets are also available in Houten station.*


*Opening hours are –just like in Utrecht Overvecht- from the first train to the last train of the day. However the bike repair shop is open only from 8.00 to 18.00. At ground level in the Fietstransferium information about train departure times is already available. No need to hurry when your train is running late.*



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*A free-to-use e-Bike charging point (left) and space for scooters and odd-size bicycles (right).*

*During morning peak hours a "coffee bike" sells all sorts of coffees, teas, croissants and cookies.*



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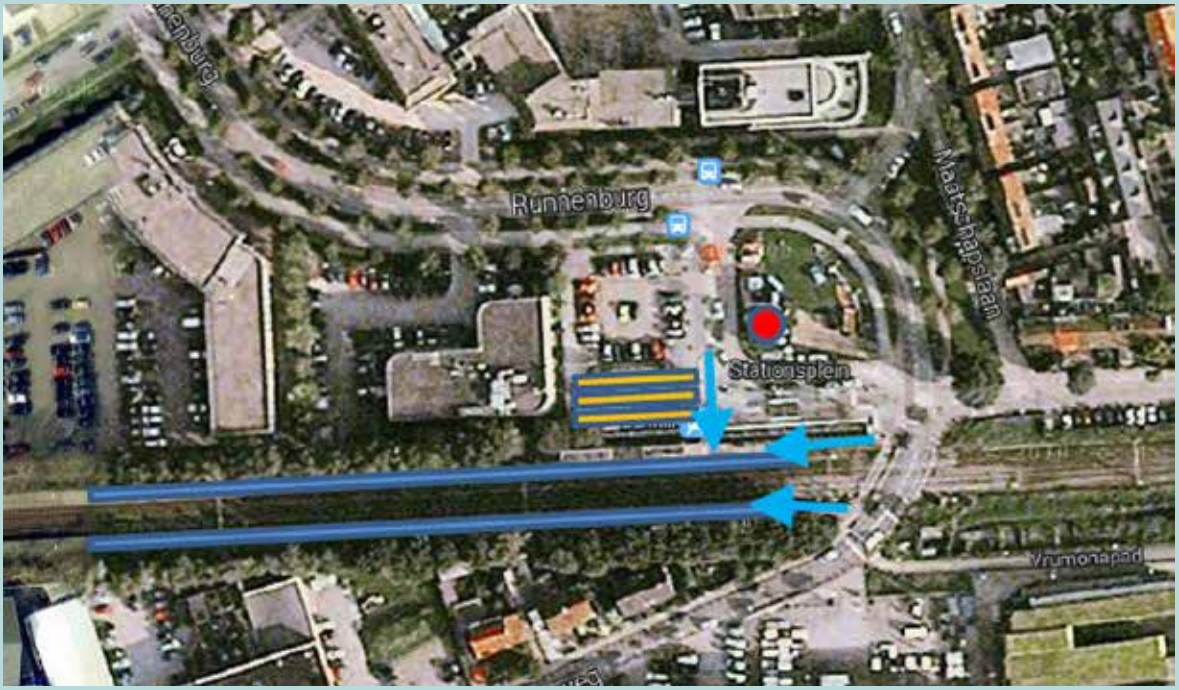
# Station: Bunnik




*Map of Bunnik station, with the OV-fiets carrousel (red) and the bike parking facilities (orange), next to the entrance to the train platforms (blue arrows).*

*Many covered bicycle racks are present at the station of Bunnik (left) and also personal bicycle lockers (right).*



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# B.4 Maintenance, monitoring and regulation

**Monitoring of wrecks, "orphan bikes"** and/or wrong or illegally parked bikes can help to keep the station square tidy. It also helps to keep enough parking spaces for bikes:

- **Maintain and regulate bicycle parking.** Otherwise, parking will quickly start looking messy, as lots of unused bicycles may remain in the parking lot, causing it to become unnecessarily overcrowded.
- Add "orphan bike management" and "improper bike parking management" to Local (Police) Regulations.
- Check if bikes are standing longer than **2 or 4 weeks without being used**. This can be done by labelling "suspicious bikes": old bikes, sometimes with crooked wheels, rusty wheels and dust on the saddle. These bikes probably are "orphans", bikes without an owner.
- After 2 or 4 weeks these bikes can be removed and shipped to a depot. Wrecks and illegally parked bikes can be removed as well.
- This is only allowed after strict procedures are followed. These procedures are part of the local (police) regulations. If there are no procedures or the procedures won't be followed properly, cyclists can start judicial procedures to be compensated for their removed bikes or snipped locks.
- Owners can go to the depot to retrieve their bike after showing a key and/or a proof of purchase.
- Bikes that are not retrieved after several months from the depot can be sold to the public.

*Orphan bikes waiting to be transported to a depot (left) and labeled bikes to warn owners these bikes haven't been used for over 28 days (right).*

*Lack of bike management can lead to messy station squares, like here at Alkmaar station.*



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*In the Netherlands bike management has to be part of Local Police Regulations. It has to be published clearly for cyclists that bikes may be removed if they are parked too long at an undesirable location outside of the racks, or if they are blocking emergency exits.*

## B.5 Attractiveness

Make parking **accessible** and **simple to use**.

- Availability (eg. access key; opening hours; maintenance/guard; no orphan bikes)
- Accessibility
- Reliability
- Ease of use
- Tariff



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## C. Convenient public bike available

A **public bike system** or scheme, is a service in which bicycles are made available for shared use to individuals on a short term or daily basis. The main purpose is **offering "the last mile" transport option**: public bikes allow people to depart from their arrival station to their destination free from the worries of bike ownership. A bike quadruples the catchment radius from a railway station. On a bike distances of **5-7 km are reachable**, on foot distances of 1-2 km are reachable.
There´s a difference between a public bike and a **one-way bike share system**. At railway stations mostly a two-way system is available. This is easier to implement because all bikes will return at the end of the day –or after a couple of days– to the station. **No teams are needed** to redistribute bikes over the locations and users are not penalized for leaving the bike at their destination during the day.

### C.1 Product

In the Netherlands **OV-fiets** is a simple but strong concept:

- Standard Dutch bicycle
- Strong and simple design
- Easy maintenance
- Recognizable (NS style)
- No advertising on bicycles
- Non-commercial look and feel

*OV-fiets bikes at Houten station (left) and the BiTiBi team on OV-fiets bikes at Bunnik station (right)*

### C.2 Price

- Subscription fee: **€10 a year**
- Costs per rental: **€3,15** (max. 24 hours); price per rental roughly equals a return trip by bus (in Belgium and the UK as well)
- **Monthly invoice** by e-mail
- Payment by **direct debit**



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## C.3 Process

- Subscription: on **www.ovfiets.nl**
- Identification: by address, email and bank account plus number of public transport smart card (OV-chipcard)
- Rent: after this you can directly take an OV-fiets bike

## C.4 Place

In the Netherlands OV-fiets is a nationwide concept: in total over **250 locations**:

- Focus on transport hubs (mainly train stations)
- Guarded bike shelters (100 locations)
- Non-guarded self-service bike shelters (38 locations)
- Lockers (119 locations)
- OV-fiets Box, Dispenser or Carrousel (resp. 14, 4 and 5 locations)


*The OV-fiets service team maintains all bikes at non-guarded locations. Also an event team is available to provide extra bikes during events.*

*Bike carrousel at Bunnik station, storing 24 OV-fiets bikes. The municipality has supported and paid for the installment of this carrousel. It is heavily used. However, it is not very comfortable to use for tall people.*



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It is important to complete BiTiBi, because people mostly don't have a bike available at their destination. With a bike the catchment area of a railway station will increase by a huge margin. On foot you will walk about 1 or 2 km. On bike you can go up to 5 or 7 km.

A bike is faster and healthier than a bus. You feel free because **you don't have to wait** at bus stops and you don't have to remember the time you return bus is leaving. It removes the stress or hassle of not having enough time between the arrival or your bus and the departure of your train. On a bike **you are the boss of your own time**.

**Merseyrail (United Kingdom):** The rental fee is higher than in the Netherlands, 3,8 pounds. This is cheaper than a return ticket by bus, which is the main competitor. The bike sharing service is staffed by people in the station that sell the tickets. Staff members of the operators get the card for free, to test the system and to get the brand out (visibility).

**Blue Mobility (Belgium):** There are many more members in Flanders than in Wallonia due to cultural differences and different opinions towards cycling. Marketing Blue-bikes (shared bikes) needs to be much more than translating a Dutch flyer into French, a different approach is needed. The price is 3 euro per day.



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## D. Unity of bike-train organizations

**NS Transfer** is a daughter organization of NS Stations. It is responsible for the development, operation and maintenance of concepts to ease the first and last mile to railway stations, for example: NS Fiets (bike parking), OV-fiets, Park-and-Ride (in cooperation with Q-Park), NS Zonetaxi and Carsharing (in cooperation with Greenwheels).

NS Fiets started in 2000 to operate and maintain all guarded bike parking areas. In the same period an investment plan “Space for Bicycles” was introduced to renew, upgrade and expand both staffed and unstaffed bike parking stations and racks.
OV-fiets started on a small scale in 2003, but since 2008 when OV-fiets became part of the main railway operator in the Netherlands, NS, the concept started to grow immensely.

The number of **users rose from 11.000 in 2004, to 51.000 in 2008 and 160.000 in 2013.** This is thanks to the marketing budget of NS and the **2,2 million regular customers**.

NS promotes OV-fiets in their own magazine for regular customers, by ads in stations and trains and at events like the Olympic Games where hundreds of yellow-blue OV-fiets bikes were transported to London and Vancouver so athletes and visitors were able to use OV-fiets during the games like at home. Brochures about OV-fiets and bicycle parking are available **at each NS ticket counter.**


*Introduction of the OV-fiets e-bike by Dutch cyclists, among them Tour de France winners Joop Zoetemelk and Jan Janssen (left). 500 OV-fiets bikes were transported to London during the Olympics (right).*



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## E. Easy payment systems, easy processes and easy fares

A public bike **must be easy to use**: a simple product, simple procedures and simple fares. Also bike parking must be easy: simple to find, simple to pay and a simple to access.

In the Netherlands all OV-fiets trips can be paid easily using **the nationwide public transport chip card**, the Dutch “OV-chipkaart”. Also as a pilot, the OV-chipkaart can be used to pay at approx. 40 of the 100 staffed bike parking areas at railway stations.

This is a truly integrated payment system. At the moment 18,5 million “OV-chipkaarten” have been provided. Of them 13,6 million cards are in use. With 17 million Dutchmen and almost 13 million tourists per year that is quite a coverage.


*The OV chip card can be used in all means of public transport in the Netherlands, including the train, metro, tram, bus, and even in some ferries. The card can also be used for payment at nearly 40 bike parking locations and for OV-fiets rental at all 250 rental locations. Almost every Dutchman owns an OV chip card.*



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## F. Positive communication and marketing

The successes of OV-fiets is due to the following:

- OV-fiets is **easy to rent**
- OV-fiets is part of a door-to-door transportation system
- OV-fiets subscription is incorporated in the public transport smart card
- OV-fiets **needs little infrastructure** (flexible system)
- OV-fiets is easy and fun to use, it's healthy, hassle-free and fast.

Marketing:

- Fantastic product
- Free publicity
- **Non-commercial look and feel**
- Business customers
- Member get Member
- Free rides offered to new subscribers of cycling magazines

Marketing products:

- Logo
- Catch line
- Design manual
- Promotional project leaflet
- Promotion roll-ups
- Posters
- Merchandising products
- Dissemination materials
- Postcards
- Website
- Social media
- **Brochures available at train stations**
- Information available on websites of other stakeholders
- Links to product on websites of other stakeholders
- Presentations in 5 languages
- Newsletter

**Free publicity** is key and often better (and cheaper) than paid publicity. Get it wherever you can! Be creative. Other marketing techniques include:

- Person to person communication
- Approach large business customers (1 contact, multiple users)
- Member get member (only 4–5% of the new members)
- **Free rides** offered through magazine subscription (14% of the new members)
- Especially the coupon (from magazines and brochures) in combination with a train ticket is a great success.
- Promotion via **large employers** seems interesting, although it can also be a risk. A large bank in the Netherlands offered "BiTiBi schemes" to its employees. As a consequence, sometimes there are no OV bikes available for other clients.

**Blue Mobility (Belgium):** Strange enough Belgian rail provider NMBS/SNCB – although it's a main shareholder– doesn't allow Blue Mobility to provide brochures about Blue Bike at NMBS/SNCB ticket counters, while NS provides OV-fiets brochures at their ticket counters. Unity of bike & train organization doesn't mean all management is convinced of the value of public bikes for the train operating company.



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# G. Other lessons

It's not only the facilities at railway stations themselves, but also the first and last mile to and from the station that must be bicycle friendly and safe.

## G.1 Cycle friendly station environment

Pay attention to the station environment to enable (potential) cyclists to reach the station. Engage cities as much as possible in the BiTiBi process. **Make cities as enthusiastic as possible** about the project. It is the cities and municipalities that can contribute to a bicycle-friendly railway station environment.

*Separate bicycle paths in Houten (left) and the relatively small country road between Houten and Bunnik with marked bicycle lanes on both sides (right).*

### G.1.1 Safe routes with bicycle paths and/or lanes

**Bicycle-friendly and safe routes** help to make a trip to the railway station more pleasant. A pleasant, separated, car-free route helps to increase the number of cyclists. It's the municipalities' role to create these routes.

### G.1.2 Availability of bicycle repair shops

**Bicycle shops** can be combined with guarded bicycle parking. Staff can run a repair shop as well. The concept is: you bring in your bike in the morning, and during the day your bike is repaired so that in the evening when you return you can **pick up your repaired bike**.

*Bike repairs, including a bike shop and bike rental are available at Houten station.*



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## G.1.3 Natural environment

Topography: The majority of the Netherlands is flat. The landscape is only hilly in the southern part of the province Limburg. The highest peak of the country is 321 meters above sea level.

*The man-made mound of Hogebeintum in a flat setting. (photo: Wikipedia - GerardM)*

*Between Houten and Bunnik a barrier exists at the crossing of highway A12. This crossing will be replaced in the near future by a more cycle-friendly crossing.*

Weather conditions: In the Netherlands, on 5 out of 6 days the weather is fine. In total during 10-15% of the year it is:

- (Too) wet: rainfall 6,5% of the time
- (Too) icy: 10 - 25 days per year with snow and ice on the streets
- (Too) cold: 6 - 8 days per year with ice (temperatures below zero during the whole day)
- (Too) hot: there were 39 heat waves in the last 100 years (temperatures over 30° for 3 days or more)
- (Too) windy: in average 2 days per year with gales or hurricanes


*In 2008 bike commuter Gerard Poels started a website "hetregentbijnanooit.nl" to demonstrate it almost never rains during his commuter trips over 18 km (11 miles). He claims only 4 or 5 times a year it rains during the entire ride.*



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# G.2 Bicycle infrastructure at home

## G.2.1 Safe parking: (bicycle) sheds for each (new) house

In the Netherlands (bicycle) **sheds are required for new houses**. For student houses a shared bicycle parking shelter is allowed.

Between 1993 and 2002 a shed wasn't obligatory as a result of a policy to decrease the number of unnecessary rules. The result was: 40% of new houses didn't get a shed. The garage was used as a shed instead or bikes were parked outside. Result: lack of car parking places because everyone parked their cars on the streets rather than in their garages.

In 2012 the (bicycle) shed returned in the building regulations, thanks to the Dutch Cyclists Association (Fietsersbond).

*Safe parking at home in a (bicycle) shed (left). Some cities promote safe bicycle parking in districts with older houses by offering cycle drums (right).*


*Sometimes cities –like the Hague– promote collective neighbourhood bicycle parking areas or citizens create them by themselves.*



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## H. The result of the Dutch approach

According to a 2002 survey, within three years, investment in bicycle racks at railway stations brought:

- **20% more train passengers**
- **11% more bikes**

OV-fiets (survey in 2011):

- 8% of OV-fiets users would have used a car instead of the train without OV-fiets
- 46% use OV-fiets instead of bus/tram for the last mile
- **54% use the train more because of OV-fiets**

Scores:

- Score bicycle racks: grew from 5,3 for the old racks to 7,1 for the new racks (on a 10-pointscale)
- Score OV-fiets: 7,8 (on a 10-pointscale); e-bike OV-fiets: 7,7.



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