



BiTiBi

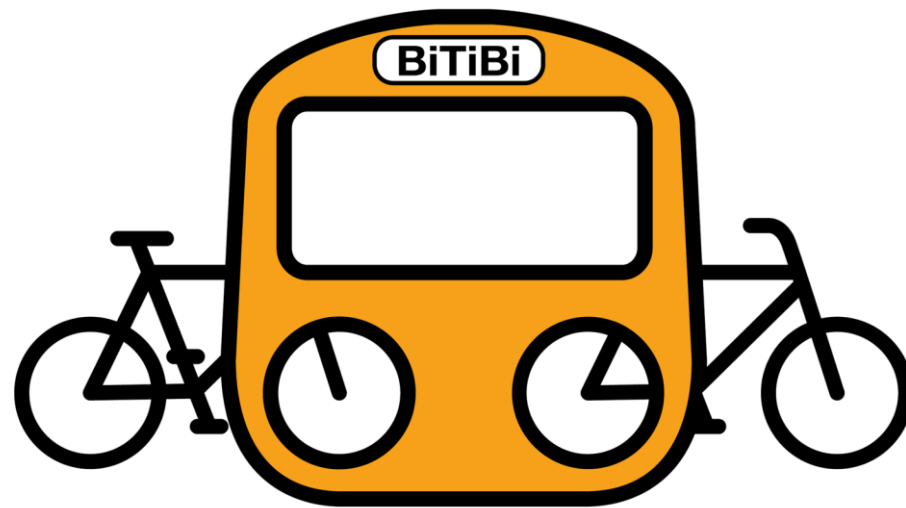
Bike-Train-Bike – faster, cooler, easier
Seamless energy efficient from door to door
400% return on investment – How to implement?

Bruno Van Zeebroeck- BiTiBi Coordinator (TML)

BiTiBi is...

COMBINING ENERGY
EFFICIENT modes!!

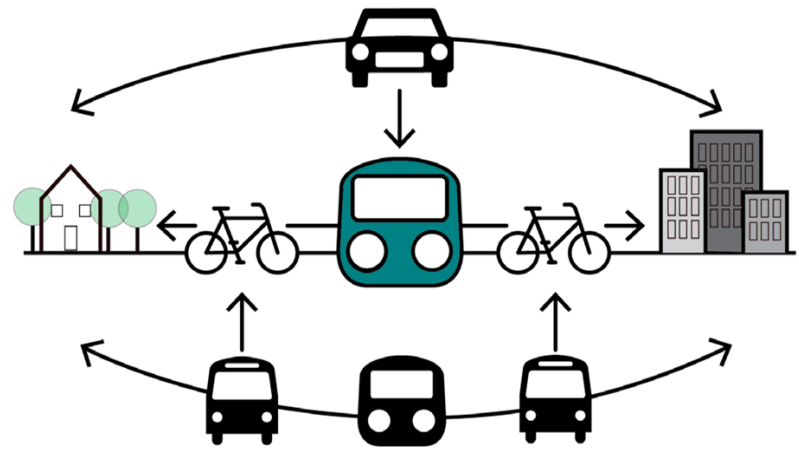
- Short distance
- Long distance



icid bike
one train
stei bike

Why BiTiBi?

Radius X 5 =
Catchment area around station X 25



More train users. More cyclists. Less car users

More liveable cities

Healthier citizens

Cheaper public transport

Why BiTiBi?

	Flexibility	Speed
Car	Average	Average
Train	No	Yes (Super fast)
Bike	Yes (Super flexible)	No
BiTiBi	Average	Average

	Access mode	Station + Train	Egress mode	Total Journey
BiTiBi in NL's	+/-12 min.	+/-38 min.	+/-17 min.	+/-67 min.
	25%	50%	25%	
Local PT + Train	+/-24 min.	“ “	+/-34 min.	+/- 96 min.
	33%	33%	33%	

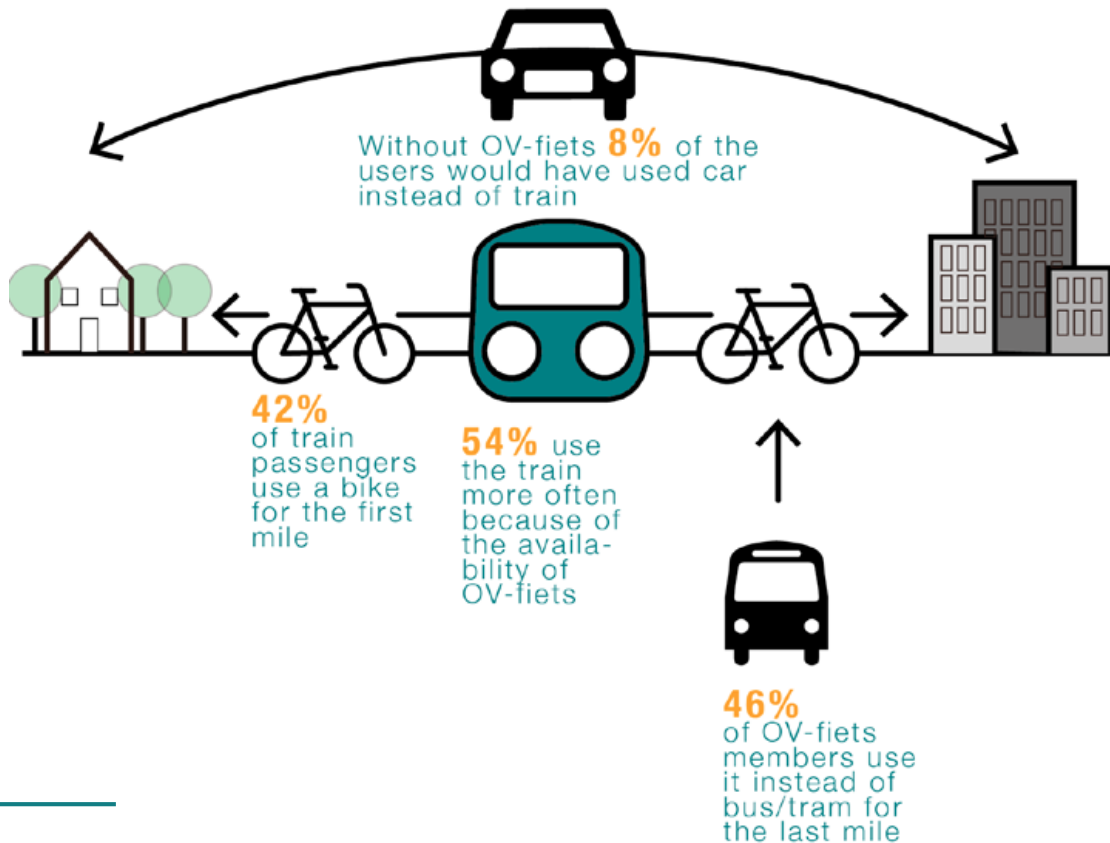
	Walking distance	Bicycle distance	Electric bicycle
Distance to station	< 1 km	< 5 km	< 7,5km
% of tot. population living in radius around station	19%	69,1%	81,2%

Why BiTiBi...



Capacity utilisation	Km. on bike per inhabitant per day.	
		CPH
		Madrid

BiTiBi really works! In the Netherlands...



It's worth expanding the concept

Step 1: Current BiTiBi project

Step 2: You in the near future

Get inspired !

Step 3: BiTiBi Plus project

Belgium, UK, France, Spain, Italy, Greece,
... maybe more

International Railway Union (UIC) support

A 3-year project | :

from 2014 to 2017

4 pilot projects...

- Barcelona (Sant Boi & Sant Cugat)
- Milan (Como & Bollate)
- United-Kingdom (Liverpool)
- Belgium (Ghent & Liège)



Implementing BiTiBi services in a good way is
easy.

Only one thing is **easier.**

Implementing BiTiBi services in the **wrong way.**

icidbike
onerttrain
steibbike

Implementation = easy Wrong implementation = easier



The project defined 6 Building Blocks to overcome barriers

BB1: safe and sheltered bicycle parking (first mile)

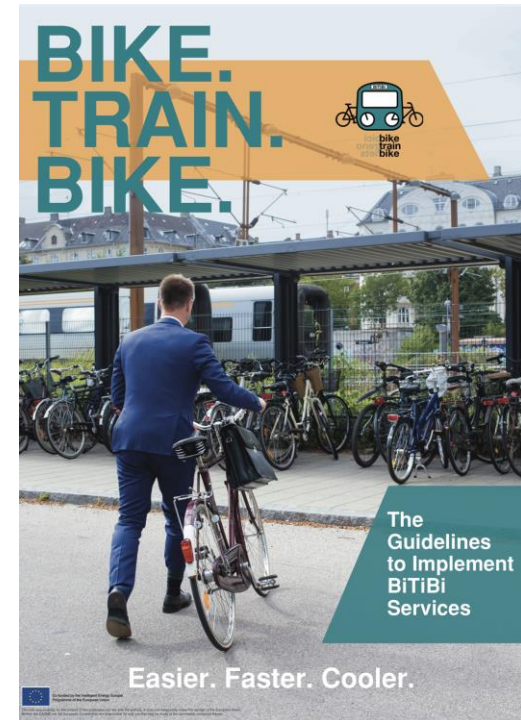
BB2: provide shared bicycle (last mile)

BB3: integrated organisation

BB4: integrated payment system

BB5: positive communication

BB6: safe bicycle infrastructure to reach the station



BB1: Safe and Sheltered Bicycle Parking



Como Borghi: bike parking opening on platforms

BB2: Shared Bicycle



BiTiBi.eu – Velo city
Nijmegen – June 13, 2017

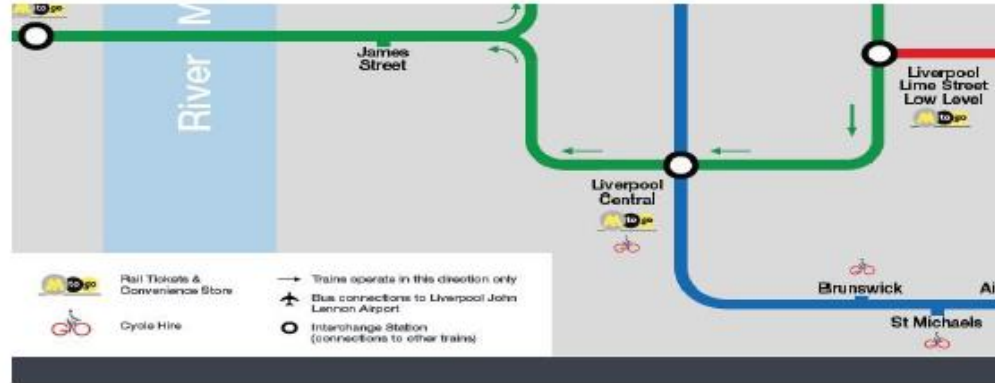


Co-funded by the Intelligent Energy Europe
Programme of the European Union



BB3: Integrated Organisation

Bike&Go (Liverpool - Merseyrail) Visibility, signage of the bike service



BB4: Integrated Payment System



Oostvaardersplassen

Special

% Dal Voordeel + OV-fiets
40% discount during off-peak hours and at weekends plus a subscription to OV-fiets

The 1st year
€ 35 instead of €60

[Add to cart](#)

IDEAL: secure payment

BB5: Positive Communication - Easy, Fast & Cool



BB5: Positive Communication - Making Cycling Desirable

- Make the product visible
- Create partnerships – third party payment
- Build a community of users



BB6: Safe Bicycle Infrastructure



ReCYCLE City tool - Noor Scheltema

(right) Pyramid Public space for cyclist. (left) Successful cycle conditions with sub criteria (Scheltema, N.(2012) Recycle city: Manual p.67)

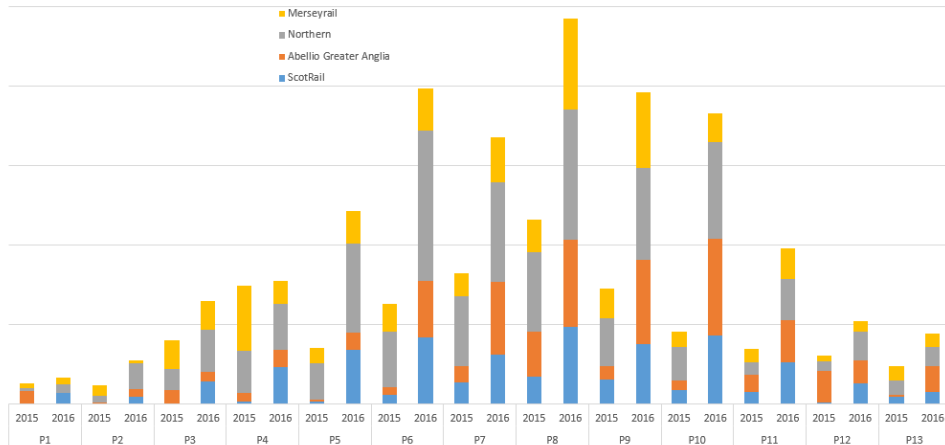


Some Results From Pilots Projects

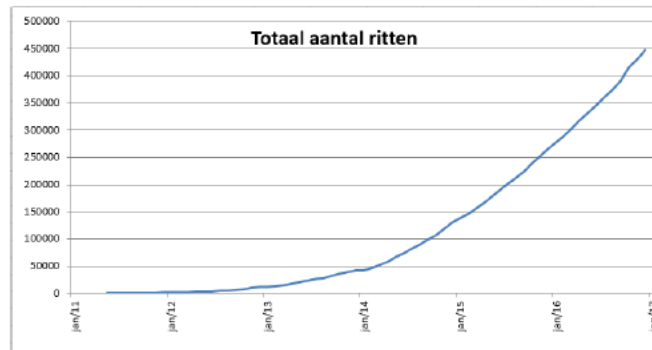
Lombardy-Italy

BIKE STATIONS COMPLETED AND OPEN UNTIL 2015	BIKE PLACES	VELOSTAZIONI TO BE OPENED BY June 2017, WITH ELECTRONIC CARD	BIKE PLACES	VELOSTAZIONI TO BE OPENED BY 2020
Bollate Centro	330	Busto Arsizio 	105	2017
Bollate Nord	100	MI Bruzzano 	54	Merone
Bovisio Masciago	120	Castano Primo 	30	Garbagnate Parco Gr.
Cesano Maderno	160	Cesate 	70	2018-2020
Como Borghi 	90	Cormano Cusano 	96	Como Camerlata
Cislago	20	Gerenzano Turate 	100	Como Lago
Garbagnate Milanese	68	Magnago 	36	Fermo – Lonate P.
Novate	100	Paderno Dugnano 	150	Grandate Breccia
Varedo	150	Saronno 	96	Meda
		Turbigo 	30	MI Affori
				MI Domodossola
				Malnate
				Tradate
				Rovello Porro
				Varese
				Varese Casbeno
9	1.138	10	767	14

UK

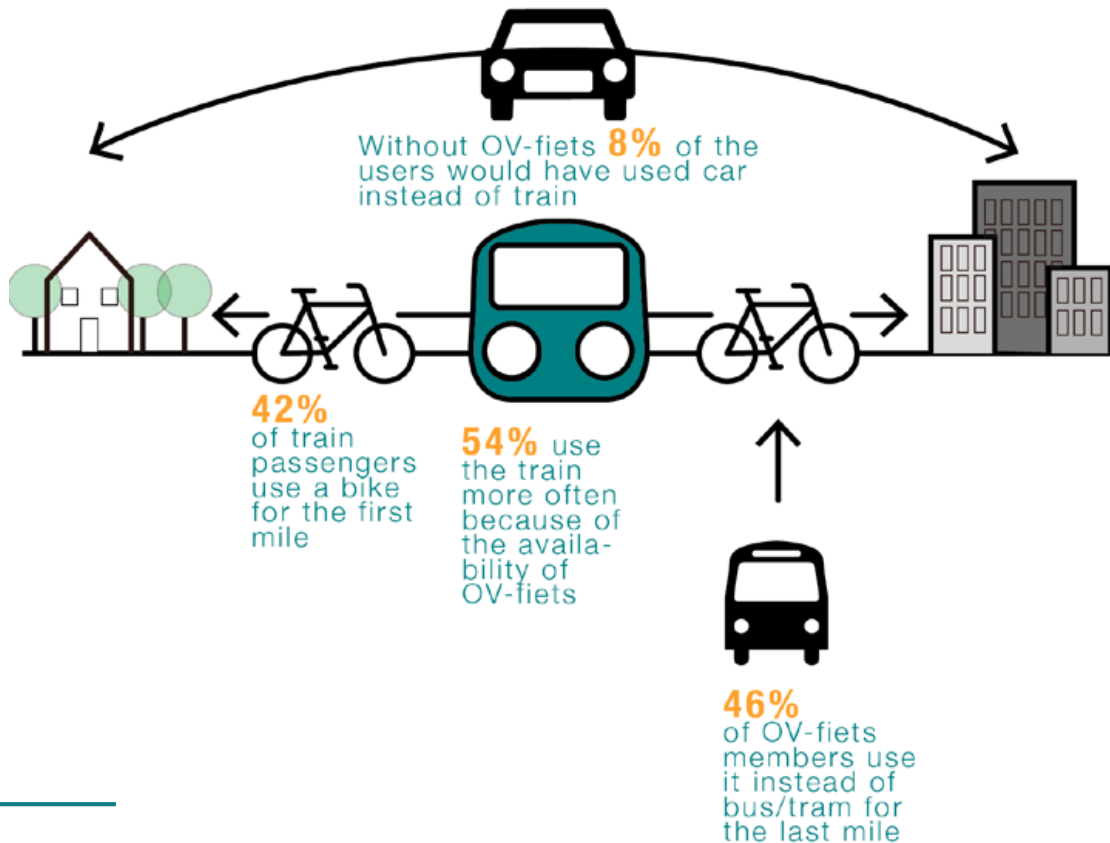


Belgium

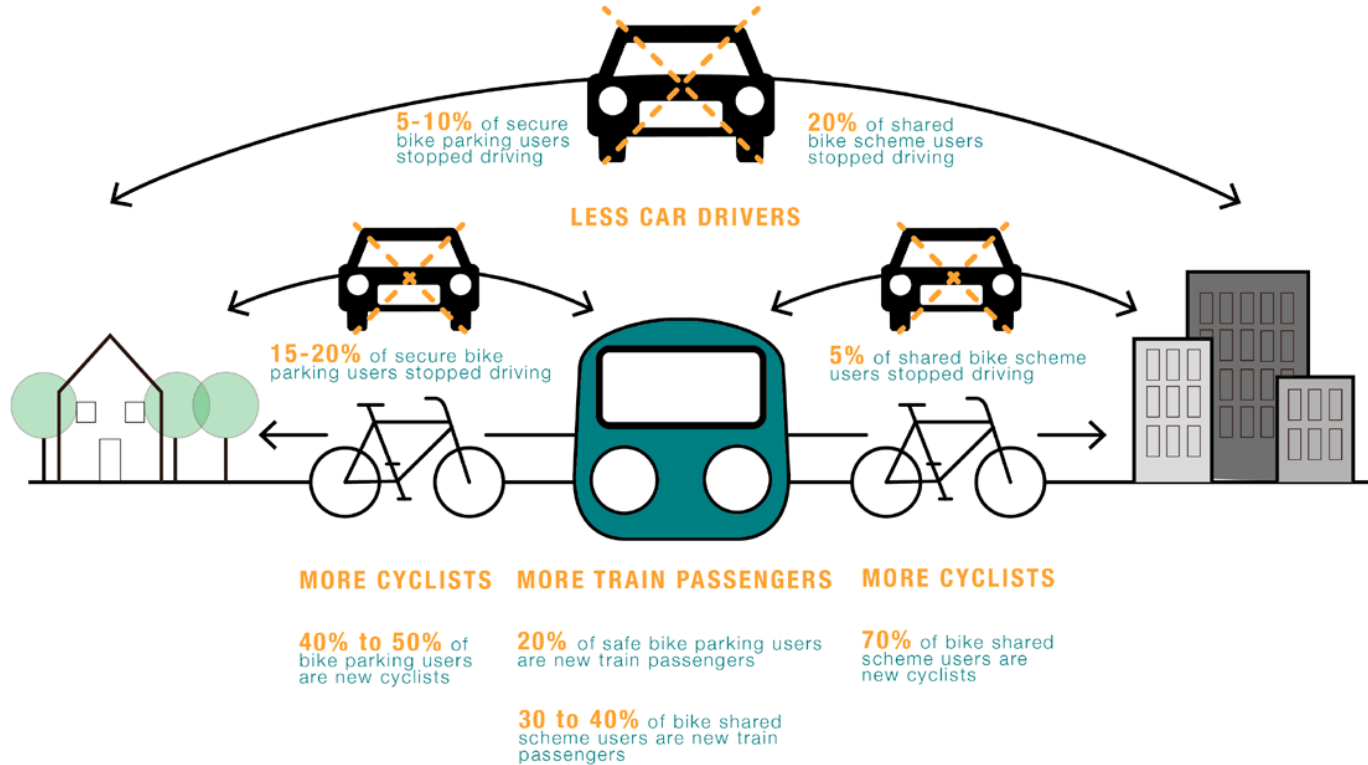


2013: 30.000 rides
 2014: 90.000 rides
 2015: 140.000 rides
 2016: 180.000 rides

BiTiBi really works! In the Netherlands...



...and elsewhere



2030 BiTiBi societal impacts of massive BiTiBi introduction

20% railwayusers cycling to station (4% today)



250 million more railway users annually



5 billion fewer pkm driven by cars annually



Reduction of emissions annually: 800 ktons of CO₂
55 tons of PM
250 tons of NOx



Reduction in annual energy use: 2,500 Mwh



1,200 lives saved annually



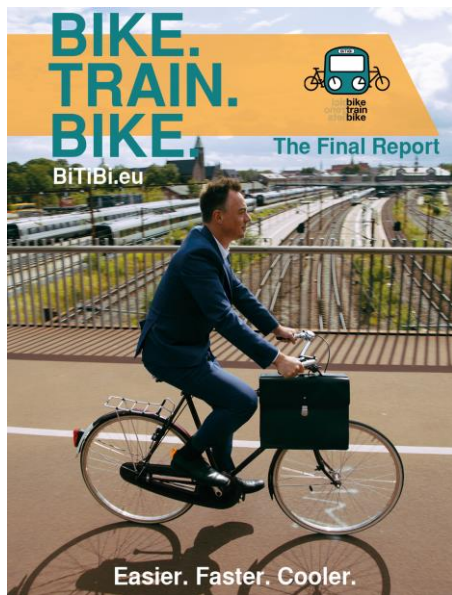
400% return on investment rate (bicycle parking)

Be **ENTHUSIASTIC, CREATIVE**
and **PATIENT**

If one door is closed, just find
another door that is open

Get inspired

Final report



Guidelines



Another Guidelines: Railtoolkit 2
By Rail Delivery Group

Main deliveries also at
www.tmleuven.be

Evaluation



The BiTiBi Partners



bruno.vanzeebroek@tmleuven.be
(Bruno Van Zeebroeck - coordination)



ci@copenhageneu.eu
(Clotilde Imbert - communication)

er@inno-v.nl
(Eduard Röntgen - Guidelines)

acabre@aimsl.com
(Anna Cabré – Evaluation)

chiara.bresciani@polimi.it
(Chiara Bresciani - Implementation)

