THE INTERMODAL BIKE - Multi-modal integration of cycling mobility through product and process innovations in bicycle design

Fact Sheet

Project Information

BIKE INTERMODAL

Grant agreement ID: 234374

Project website

Project closed

Start date
1 April 2010

End date
31 March 2014

Funded under
Specific Programme "Cooperation": Transport (including Aeronautics)

Total cost
€ 2 114 060,00

EU contribution
€ 1 581 000,00

Coordinated by
TRILIX SRL
Italy

This project is featured in...

Objective

Goals • Object of this work is to provide -by means of product and process innovations- an advanced compactable bicycle, making it practical to carry along a bicycle aboard public transportation, easily, safely and for a large number of passengers. The ultimate goal is a synergic, intermodal integration of public transport and cycling, expanding the share of both modalities in the urban mobility. Drivers • Bicycling, very efficient in the short range, but not so on longer distances, could be re-introduced into daily travel to handle the trip’s end portions, enhancing the effectiveness of other modalities through an additive effect, re-balancing in a cost-effective way the modal mix in favor of micro-mobility and public transport. The state of the art doesn’t allow a collective, pervasive use of the folding bikes in “intermodal duty”, because of excessive weight and volume when collapsed -often exceeding the baggage limits of city bus and metros- discouraging their use out of practicality and safety on board. • The proposed research aims at providing a solution developing a fully engineered, production-ready, new bike typology, based on an innovative concept for a bike frame already tested on mock-ups and working models. The advantage over the state of the art is an unprecedented compactness (factor 6 over common folders) and low weight (factor 3) obtained combining a collapsible, pre-tensioned space-frame with a modern industrial process centered on the use of contemporary engineering plastics. The process innovation will also allow low cost, quality control, opening-closing automation, electric power assistance and last, but not least in a design-conscious world, aesthetic value. The work program will develop a new supply-chain, assembling several application-specific know-how modules of mature and well known technologies, all commonly and economically available. • Both direct, project-specific, and extended, broadly applicable results are expected.

Fields of science (EuroSciVoc)

engineering and technology > electrical engineering, electronic engineering, information engineering > electrical engineering > **electric energy**

social sciences > sociology > industrial relations > **automation**

social sciences > social geography > transport > **public transport**

Programme(s)

FP7-TRANSPORT - Specific Programme "Cooperation": Transport (including Aeronautics)

Topic(s)

SST.2008.3.1.1. - New mobility concepts for passengers ensuring accessibility for all

Call for proposal

FP7-SST-2008-RTD-1
See other projects for this call

Funding Scheme

CP-FP - Small or medium-scale focused research project

Coordinator

TRILIX SRL

EU contribution

€ 396 700,00

Total cost

No data

Address

Largo Francia 114
CAP 10100 Torino
Italy

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

Contact the organisation
Participation in EU R&I programmes
HORIZON collaboration network

Participants (6)

TICONA GMBH

Germany

EU contribution

€ 7 500,00

Address

PROFESSOR-STAUDINGER-STRASSE
65451 KLESTERBACH

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

Contact the organisation Website
Participation in EU R&I programmes
HORIZON collaboration network

Total cost

No data

UNIVERSITA DEGLI STUDI DI FIRENZE

Italy

EU contribution

€ 120 800,00

Address

Piazza San Marco 4
50121 Florence

Region

Centro (IT) > Toscana > Firenze

Activity type

Higher or Secondary Education Establishments

Links

Contact the organisation Website
Participation in EU R&I programmes
HORIZON collaboration network

Total cost

No data

Tecnologie Urbane SRL

Italy

EU contribution

€ 607 400,00

Address

Via Alessandro Volta 17
20121 Milano

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

Contact the organisation
Participation in EU R&I programmes
HORIZON collaboration network

Total cost

No data

---

maxon motor ag

Switzerland

EU contribution

€ 304 600,00

Address

Brünigstrasse 220
6072 Sachseln

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

Contact the organisation Website
Participation in EU R&I programmes
HORIZON collaboration network

Total cost

No data

ATAF SPA

Italy

EU contribution

€ 72 000,00

Address

Viale Dei Mille 115
50131 FIRENZE

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

Contact the organisation Website
Participation in EU R&I programmes
HORIZON collaboration network

Total cost

No data

JAVNO PODJETJE LJUBLJANSKI POTNISKI PROMET DOO

Slovenia

EU contribution

€ 72 000,00

Address

CELOVSKA CESTA 160
1000 Ljubljana

Region

Slovenija > Zahodna Slovenija > Osrednjeslovenska

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

Contact the organisation Website
Participation in EU R&I programmes
HORIZON collaboration network

Total cost

No data

Last update: 16 July 2019

Permalink: https://cordis.europa.eu/project/id/234374