

Online platform for carbon dioxide-free deliveries

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Credit: AI-generated image (disclaimer)

City centres are becoming increasingly congested by traffic, many of which are delivery vehicles. An EU-funded project has developed a solution for delivering packages that reduces traffic and eliminates carbon dioxide (CO_2) and other harmful emissions.



The Horizon 2020 TiMMi Transport project has developed an online ride-sharing platform for inner-city deliveries that offers a high level of service while minimising environmental impacts. "The platform connects 'job requesters' who need their goods transported, such as package companies, online shops, laboratories and <u>private individuals</u>, with 'transporters', professional bike couriers who know how to do emission-free delivery, fast!" says project coordinator Dr. Christina Kleinau.

Increased capacity

A mobile web app that allows registered users to upload and accept delivery jobs is at the heart of TiMMi Transport's success. To upload a job, requesters enter details like the dimensions of the package, pick-up and delivery addresses, and their contact information. The TiMMi system also has open interfaces to web shops and other internal systems so that jobs can be automatically submitted en masse.

The job details are then displayed online, to be accepted by the network of professional bike couriers, who are connected to the platform. Transporters receive notifications about jobs in their area, and if they accept one, the contact details of the sender and the recipient are exchanged privately. When a job is completed, the courier marks the job as done and the delivery confirmation is submitted back to the job requester.

It has long been known that bicycles are the quickest way to move goods from A to B within an urban environment. Until recently, there has not been a technically advanced system for the bike courier companies to coordinate orders from diverse mediums and locations. Now with the TiMMi system, bike couriers can receive orders from an online form, and online retail customers can select the CO₂-free express delivery option for their purchase.



The future of logistics – cargo bikes

The project has developed a business relationship with some of Germany's largest <u>logistics</u> companies and conducted tests on last-mile package delivery using large volume cargo bikes. "The test projects successfully proved the feasibility of cargo bikes, reducing pollutant emissions in inner-city areas. We are now discussing the best way to implement bike delivery on a wider scale," comments Dr. Kleinau. A lot is possible using large-volume cargo trikes and bike trailers, which can carry up to 250 kg, or a volume of 1.7 m³.

TiMMi Transport is set to become the inner-city <u>delivery</u> service of choice, firstly for the ethical consumption sector, but also as a mainstream solution as climate protection becomes standard. "Approximately 20 percent of customers we deliver to express their appreciation of being delivered to by bike, instead of by van. The network of businesses we deliver for will be continually expanded to maximise the economic and ecological efficiency of the TiMMi network. We will also continue to expand and look forward to operating the service in international locations," concludes Dr. Kleinau.

Provided by CORDIS

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