

Package delivery system for the smart cities

The persistent development of Internet trade is driving the rise in courier services. It is predicted that in the next couple of years, there will be even more packages, nevertheless the delivery technology is not developing alongside this growth process.

While cities strive to impose limitations on power-driven vehicle traffic, packages are carried by means of non-efficient delivery lorries. As areas are being developed that are restricted to public traffic, couriers are forced to cover bigger distances from vans to their recipients, transporting packages on their own.

The project aims at upgrading the delivery system, focusing on the "last phase". The proposed structure is based on autonomous transport modules that are potentially able to merge with each other.

In such a form, they travel from the sorting office to the city where they meet couriers in scheduled places. The segments with packages meant to be delivered in person will assist couriers to the recipient's door, while others will travel to different zones where they will serve as parcel lockers. The packages themselves will be reusable, owned by the courier companies, and must be borrowed. Sending and receiving happen simultaneously, and once a package has been emptied, it can be reused.

After merging together, modules go to the sorting office. This concept is in answer to the challenges of the future. It enhances the quality of the courier's job, and eliminates empty journeys, since the amount of modules is adapted to the needs. Innovation in this field is inevitable in the following years •

