

The **Bicycle and Intelligent Transport Systems (BITS)** project is the first of its kind, multi-country, multi-stakeholder, €5 million budget ITS project in the cycling sector funded by the European Union.

The purpose of the BITS project is to stimulate cycling by making cycling more attractive, safe, comfortable with the use of ITS.

BACKGROUND

Poor air quality and heavy congestion are a major problem in many cities and regions in Europe. Approximately 85% of this congestion is caused by car traffic. This threatens public health, economy and livability of these cities.

Cycling is one of the best ways to combat these negative impacts. 10% increase in cycling:

Reduces emissions (NOx, particles) with 6%

Relieves congestion by 11-15%

Improves public health by 3%

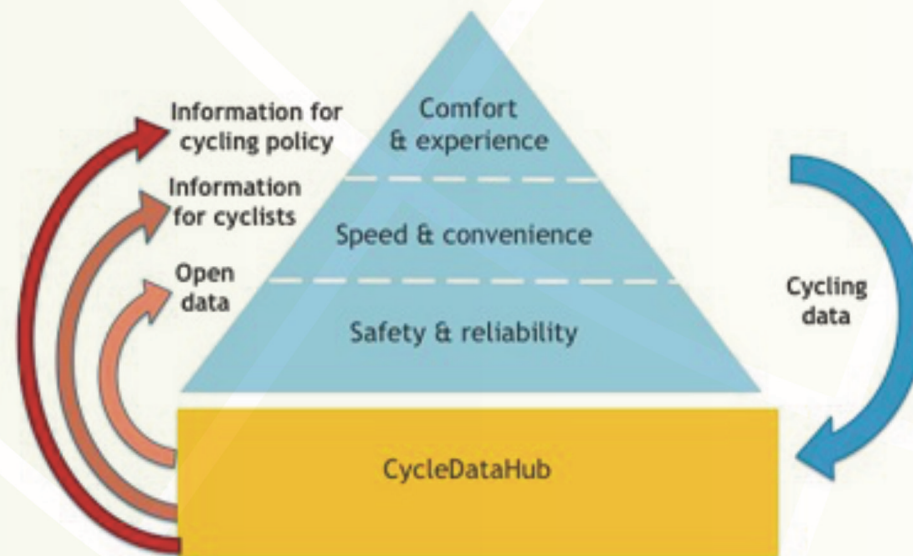
Reduces the need for parking places by 20%

Reduces CO₂ emissions and noise by 2-3%

THE BICYCLE PYRAMID AND CYCLE DATA HUB

Governments seek ways to encourage travelers to take up cycling. ITS improves the safety, reliability, speed, convenience, comfort and experience of cycling. The approach taken in the BITS project is to close the data loop on cycling data and open up these data for cyclists, policymakers and other stakeholders (e.g. app developers or other businesses). Through applications for cyclists (e.g. interactive/smart traffic lights, nudging apps, smart routing and parking, tracking) cycling will become a more attractive transport mode. At the same time, these ITS applications will generate valuable data that is collected in the so called 'CycleDataHub'.

The approach of BITS is based on the Bicycle Pyramid, derived from Maslow's pyramid. The pyramid structures need from cyclists and conditions to stimulate cycling.



EXPECTED PROJECT RESULTS:

10% increase in cycling use of commuters, students, school children and recreational cyclists within the project period

9% more CO₂ reductions thanks to cycling use within the project period

100 cycling data sets accessible through the realization of a **CyclingDataHub** as an open platform to share cycling data in the North Sea Region

PROJECT PARTNERS

Ten partners from regions with high bicycle use (NL, DK, BE) or have the ambition to increase bicycle use (UK, DE) came together in a consortium to raise awareness of best practices of "Smart Cycling", and to provide implementers with ready-to-use information and evidence from different regions.

