

THE INTELLIGENT BICYCLE REDUCES THE NUMBER OF ACCIDENTS



Have you ever ridden an intelligent bicycle? A group of elderly people in the Netherlands have already tried it out. Vibrations in the bicycle's handle bars and saddle give the rider early warning of an oncoming vehicle or let them know when someone is overtaking them from behind when they need to turn. Visitors at the Innovation Expo will have the opportunity to find out more about this exceptional bicycle, which TNO developed together with Roessingh Research & Development and the Fietsersbond. Governments gave financial support, and the bicycle industry and the Ouderenbond (a senior citizens' association) were also closely involved. Cyclists make up half of all serious traffic casualties, and sixty percent of these are the result of a one-sided accident. The intelligent bicycle should sharply reduce this percentage. This invention will help vulnerable groups, such as elderly people, children and those with a visual impairment. The intelligent bicycle is part of a larger effort by TNO to make traffic safer. Together with manufacturers we are working on a bicycle-friendly car which will be able to detect bicycles and automatically brake to avoid an accident. A special air bag, developed by TNO and fitted to the outside of the car, would protect cyclists in the event of a collision. Another step further is an intelligent junction where cyclists, cars and infrastructure will be equipped with sensors to warn each other of dangerous situations well in advance.

Call to action: for more information, please contact Stefanie de Hair (stefanie.dehair@tno.nl).

[Article about 'the intelligent bicycle' in TNOTIME](#)

[Smart bicycle results in fewer accidents \(TNOTIME\)](#)

[Video TNO develops bicycle airbag \(ED tv.nl\)](#)

[Traffic deaths among vulnerable road users to zero](#)