

The Bilsim project wants to utilize drive simulation to improve overall road safety without at the same time reducing the mobility of older people and patients unnecessarily.



The idea is to develop an objective, accurate, realistic, inexpensive and scientifically proven method of measuring drivers' ability to drive and handle potentially dangerous situations in public traffic. Such a test could provide a basis for the acquisition and re-acquisition of driving licenses, as well as guidance on driving restrictions for patients with illness or after surgery.

Bilsim is a collaboration between specialists from Odense University Hospital, Foreningen af Køretekniske Anlæg i Danmark and The University of Southern Denmark.

The background of the Bilsim project

Several studies indicate that a number of diseases and disabilities can result in extended reaction times, wrong reactions, lack of overview and thus reduced driving skills.

Today, the evaluation of the individual's ability to acquire or re-acquire a driver's license is purely based on a subjective judgment made by general practitioners, medical officers, vehicle inspectors and the National Health Service.

The Bilsim project aims to produce new evidence based knowledge and develop a scientific basis, which clinically can reveal how different chronic diseases affect driving.

The focus of the Bilsim project

The Bilsim project works on 3 fronts:

1. ...to generate, collect and disseminate knowledge about simulator technology and use of drive simulators.
2. ...to collect and analyze data from performance tests in simulators of different population groups.
3. ...to promote road safety by offering training, education and behavioral regulation, especially to young drivers, through courses and events.

The equipment of the Bilsim project

The Bilsim project has laboratory and simulator facilities at both Odense University Hospital and the University of Southern Denmark. In addition, there are 3 mobile simulators available, which can be easily activated by tests, projects and events across Denmark.

Future visions

Eventually one can imagine that it will be possible for the **køretekniske anlæg** to implement clinically useful screening tests as part of their service. This could ensure that persons, who would pose a potential risk to others on public roads, are not issued a driver's license. Furthermore, such a test could prevent destroying the mobility of persons with formal diseases by showing the real increased risk of driving. Finally it will be possible to clarify whether any modifications of the car could make it possible for the screened person to obtain the right to drive.

In short the Bilsim project will:

- Develop a test function that enables objective, realistic, precise, risk-free, rapid and inexpensive measurements of individual's ability to drive and handle difficult and dangerous situations.
- Develop a scientific basis for assessing individual license issues.
- Develop approach to research and illustrate the various diseases and disabilities impact on driving ability.
- Develop a method that can form the basis for the development and validation of simple, clinically useful screening tests for use in several places in the country



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