# **Explanations to the Practical Vehicle Test**

## General explanations:

In each bold edged field the score is marked by underlining or encircling. A selection is to be made between scores which are separated by a thin line. For example: the scores for the splasher of front and rear wheel and also the splash guard are independent to one another, whereas the weight of the vehicle can be only one of the given values. If the requirements are not satisfied, no scores will be given (example: weight over 25 kg). The total score is the sum of the scores in each field. The scores in brackets are the maximal possible scores in this sector. Here some notes to the most important catchwords:

# 1. Komfort

## Suspension:

## Range of the spring, heavier loaded axle, othe axle:

The force on the wheels can be determined by rolling slowly over a scale (one for humans) that is on the same level than the wheels. With tricycles the wheels that stand in a group count as one wheel. Normally, the front wheel is stronger loaded on short wheel base recumbents (swb) while long wheel base recumbents (lwb) show a stronger load on the rear wheel.

The suspension path is measured beside the axle of the wheel from the ground to a point that is fastened to the frame (luggage carrier, rack). The difference between the unloaded und fully loaded state is the suspension path.

### Seat suspension:

A soft seat cover can be an isolation mat or any other foam material. A tightened weg is a frame seat that is covered with a web or with band material.

A seat suspension means that all the seat is suspended versus the frame.

## Seating Komfort:

### Sweat permeability:

Moulded seat with holes: seat and cover have holes

With permeabel cover: air permeable mat, for example a light mat out of coco-fibres or polyamide

Permeable tightened web: Frame with permeable web or bands.

#### Seat above bottom bracket:

The higher the seat is versus the bottom bracket, the lower is the tendency that the feet loose contact with the padals.

#### Adjustability:

A seat is adjustable when it can be adjusted in a range of min. 10 cm. For the adjust of the bottom bracket, 5 cm are enough.

A back slope that is steeper than  $45^\circ$  (versus the horizon) makes it easier to turn round.

## **Rain protection:**

### Rain protection driver:

A front fairing protects feets and legs when it is raining, during riding also some parts of the body. Additionals values for rain protection of the upper part of the body, the head and rain protection from the side. All parts are valued that are fastened to the bike or which have a container or a box fixed to the bicycle just for that porpose. The rain protection must be brought everytime.

### Chain protection:

A chain protection that offers partial protection can be a for example a protection shield that is fastened on the right side of the chain.

A full protection of the chain is a complete protection to all sides on the whole chain length. (Example: some bicycles from the Netherlands have a chain box; chain tubes with chain guard.

# 2. Handiness

## Get on, get off, parking:

should be possible to both sides. It should be possible for example to get out at a stop if cars are standing left or right.

### Access height:

The access height is the height that one has to mount over when getting on the vehicle.

## Total length:

Length of the bicycle, the cranks can be set vertically.

#### Parking stand:

The score will be given to a stand for a bicycle with two wheels. A threeor fourwheeler with a parking brake get the same value.

# 3. Security

## Sight:

From an eye level of 100 cm on, recumbent riders can look through the screens of a normal car. With this eye level, a sight contact is also possible via the rear view mirror of a car.

### Windscreen:

The sight through a scrren with a flat angle is hindered when raining. Scores are given if there is no screen at all or if the screen of the vehicle is steeper than 35° against the horizon. The score is given only if there is a wiper or a solution that gives similar results.

#### Looking back:

There is a direct sight backwards if there is no fairing at all or if there is a screen in the rear part of the vehicle that allows a sight back without mirror.

## Lighting and conspicuousness:

### Additional reflecting spots:

should be yellow if they show to the side, white if they show to the front and red if they show to the rear of the vehicle.

## Turning:

The score is given if hand signs can be given or if there is a turn signal. The turn signal should have a bulb with 10 W power at least, otherwise it will be to weak in daylight. When giving hand sign, the whole arm should be visible (and not only two or three fingers).

## Security in accidents:

Full fairings give only protection if there is a sidal protection out of a tube or similar things or if the fairing is out of a material that is a hard shell on the side or a composite material. A composite material consists out of a strong fibre material and a filling resin. Example: glass reeinforced epoxy polymer.