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Manual in English

# Manual

## Kasva Urheilijaksi - Become an athlete

### PHYSICAL ABILITY TEST - 2018-11-30/TT

#### Administration for wheelchair users and tips for ambulatory para-athletes

The physical ability test is used to measure bodily control and motoric coordination and - primarily in this application for wheelchair users - the ability to handle apparatus. The various parts of the test provide athletes, trainers and parents with valuable information about the test subject's fundamental motoric skills and ability to learn and develop more demanding motoric skills. The test is based on the German test, KTK (Körper-Koordinationstest für Kinder) and the Finnish system, Move, for measuring physical mobility.

The physical ability test maps the athlete's balance, mobility, and apparatus handling skills. The test also reveals any development requirements with regard to using both hands, using different movement orientations, levels and rhythms, and the ability to move over the body's centre line.

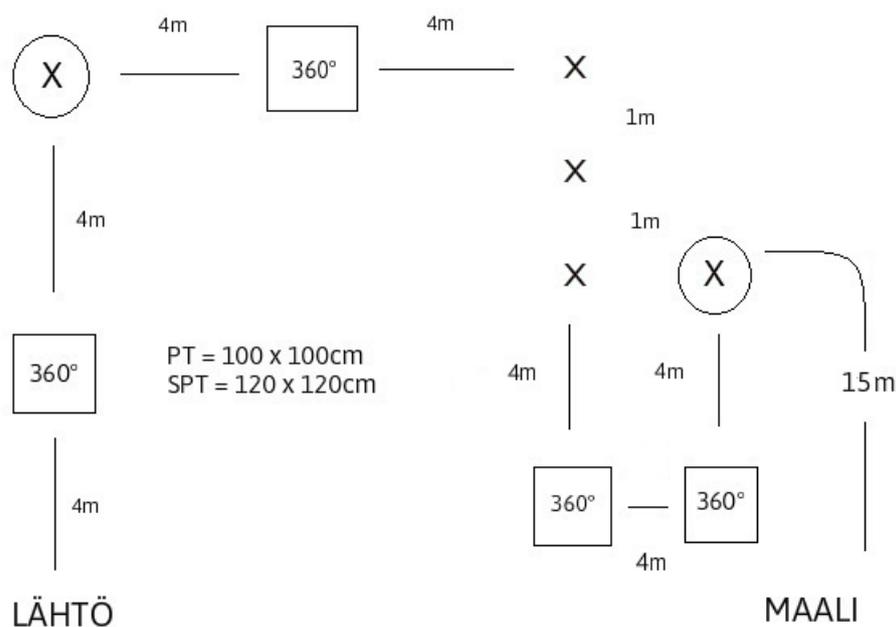
Suitable apparatus for wheelchair users, over and above the basic apparatus included in the physical ability test:

- 10 cones for the manual wheelchair slalom/powered wheelchair slalom
- 12 Airex exercise mats for the obstacle course

Tape to mark out throwing areas, taped squares for the slalom course, and for steering forwards and backwards.

## Test 1: Slalom course (used for wheelchair users instead of reverse balance test)

The test is based on the slalom course used in parasport Junior Games. The test measures the subject's apparatus use skills and physical mobility. The goal is to complete the slalom course as quickly as possible with the minimum possible number of errors. Penalty points are awarded if the manual wheelchair/powered wheelchair's wheel hits the box lines or the plastic cones. The subject shall turn through 360° in the boxes and then continue on. The squares in the powered wheelchair slalom are 120 cm x 120 cm, while for the wheelchair slalom, they are 100 cm x 100 cm. For walking/running slaloms, the distance between the cones is 1 m. 1 error point (hits the line or the cone) = 1 second. Fault seconds are added to the finishing time. The proportions of the course can be adapted in line with the existing space - the most important thing is that the test is the same every time. Round the cones in the boxes: in the first two boxes, the test subject shall round the cones to the left, while in the last two boxes, the cones should be rounded to the right. The cones shall also be rounded in different directions, with the first cone rounded from the right and the last from the left. This ensures that the test subject turns the same number of times to the left and the right while completing the course.



/START/

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**Test 2:** Wheelchair obstacle course (used for wheelchair users instead of hopping over obstacles)

The test measures the subject's mobility skills, apparatus handling skills, dynamic balance and strength use. The aim of the test is to roll over as many Airex mats as possible (the mat is positioned crosswise). The starting point is 1.5 m from the edge of the mat. A maximum of twelve Airex mats shall be placed on top of one another. The subject is awarded 3 points if he or she can get over the mat on the first attempt, 2 points for the second attempt, and 1 point for the third attempt. The subject is not allowed to continue the test if he or she has failed to complete the previous height in a maximum of three attempts. The maximum number of points is  $3 \times 12 \text{ heights (mats)} = 36 \text{ points}$ .

**Test 3: Steering forwards and backwards** (used for wheelchair users instead of the lateral jump)

The test measures the test subject's speed, dynamic balance, ability to handle apparatus, and ability to change direction.

Two lines are taped on the floor, 50 cm apart. The lines shall be 2 m wide, which is the distance between which the subject shall move. The subject shall move away from the line as quickly as possible, roll over the second line, and roll back again. One round takes 15 seconds. The test comprises two rounds with a few minutes' rest in between. The wheelchair's wheels shall completely cross the line. Failed attempts are deducted from the final points total.

#### **Test 4: Lateral movement**

The test measures the test subject's total coordination and use of time, space, and strength. This test requires two wooden boards, which are included in the physical ability test's apparatus. The boards have a rubber doorstop on each corner. A stopwatch is also required. The test comprises three rounds, each of which takes 20 seconds. There should be at least a 10 second pause between each round. The test is carried out in one direction in the first round and in the opposite direction in the second, while in the third round, the test subject may choose the direction for themselves. At the start of the test, one of the boards is placed under the wheelchair and the other alongside. The test begins with a start signal and involves the subject moving the unoccupied boards to the other side of the wheelchair as quickly as possible, initially using two hands. Ask the test subject to try to pick up the board using both hands. The subject is not allowed to drop the board or throw it to the floor. The subject must then steer over the board (the board ends up under the wheelchair) and move the next board. The subject is awarded 1 point for moving a board, and 1 point for steering over the board.

## Test 5: Throw and catch

The test measures the subject's throwing technique and precision, their observation motoric skills, their distance and speed judgement, and their arm strength. Mark out a throwing area, measuring 1.5m x 1.5m on the wall. The lower edge of the area shall be 90 cm from the floor. Mark out a throwing line on the floor (2 m wide). The throwing distance is determined by the subject's age/functional ability and shall be 4-10 m. The subject shall throw a tennis ball a total of 30 times (20 times with the stronger hand and 10 times with the weaker hand). The subject shall throw the ball at the square on the wall and catch it after 1 or 2 bounces. After catching the ball, the subject shall back up to the throwing line. 1 point for every successful throw and catch. The results shall be noted separately for each hand.

Administering the general physical ability test for athletes with significantly impaired vision and/or blind athletes, and for ambulatory athletes with impaired mobility (See Kasva Urheilijaksi physical ability test (Become an athlete) at [kasvaurheilijaksi.fi](http://kasvaurheilijaksi.fi).)

1. Reverse balance test: The battens' colour should contrast with the floor colour. If the floor is dark, the battens should be white, while if the floor is light-coloured, the battens should be dark. Allocate more time for the test and, if necessary, provide an audible signal at the end of the batten. If the reverse balance test is overly difficult, the test subject can also walk forwards during the test. The difficulty experienced in performing the reverse balance test can be tested by allowing the subject to walk backwards on tape fastened to the floor before climbing up onto the batten.

2. When hopping over an obstacle, the colour of the Superlon foam barrier should also be different from that of the floor (dark floor - light Superlon foam barrier, light floor - dark Superlon foam barrier). An audible signal can, if necessary, be provided at the end of the Superlon foam barrier. Allocate more time for the test.

3. Throw and catch, if necessary with a small bell ball (from Tevalla) for athletes with impaired vision. The subject throws the ball against the wall, in their preferred style, from a line that is 4-10 m from the wall, and catches it in their preferred way. The subject shall then return to the throwing location (place a string under the tape so that it is slightly elevated, allowing the subject to feel it). The subject shall throw and catch the ball 30 times, as quickly as possible. The subject may, of course, feel where the wall is and move around the area before taking the test. Measure how long it takes the subject to make 30 throws, 20 times using the stronger hand and 10 times using the weaker hand.

4. Make sure that the lighting in the test location is as good and even as possible (that the ceiling lights are working, are turned on, and do not dazzle. Use anti-glare blinds/curtains if necessary).

5. If the test subject has difficulty in using both hands, e.g. due to their disability, you can allow them to throw and catch the ball with their stronger hand only, or throw from closer quarters with the weaker hand. Do, however, initially try to carry out the test as normally and similarly to the test for athletes without physical disabilities. Challenge the test subject and their weaker side!

6. If the test subject is an athlete with severe physical disabilities, e.g. if they have severe CP (plays boccia, powered wheelchair indoor bandy) and use a powered wheelchair to move about, they can always do the wheelchair slalom test or the one that involves steering forwards and backwards. The test subject can also test their skills in their own sport - for boccia, for example, the observation motoric/decision-making test is good for practicing the subject's abilities. Use a felt pen to write six consonants and six vowels on the white target balls in boccia (twelve balls). The test subject stands in the throwing box and prepares to make a decision. The test leader stands behind the test subject and rolls the consonant and vowel balls onto the court in random order using the boccia ramp. The test subject shall make a decision as quickly as possible and move to the right or the left, depending on whether the ball has a vowel or consonant. If it has a vowel, the test subject shall, as quickly as possible, round a cone standing 5 m to the left and

return to the throwing box to wait for the next ball. If the ball has a consonant, the test subject shall round a cone standing 5 m to the right. The test shall be carried out in as error-free a way (vowel-consonant) as possible and as quickly as possible.

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