# EUROPEAN DISABLED GOLF ASSOCIATION

## Definitions of impairments enabling participation in EDGA tournaments

These definitions have been created to give a proper and fair evaluation for participation.
The general idea is that a person who has severe difficulty to play golf due to physical impairments is eligible to compete in an EDGA golf tournament.

## Section A1

**Locomotor disabilities**
From a medical standpoint in general, diagnoses determine the treatment. The diagnosis in itself is of minor interest in determining the physical restrictions in daily life. Therefore, the magnitude of physical restrictions must be the qualifying factor for participation in tournaments for 'Golf for the disabled'. The conventional handicap system in golf provides a very good and fair way to compare different individuals with different impairments with regard to results, so they can play in one class. The only requirement is to decide whether the impairment meet the minimal disability criteria to qualify for the tournament. The physical impairment has to be either stationary (confirmed status)or variable (increasing or decreasing) (review status). Evaluation contains a physical examination, a functional golf profile status and an observation during competition.

**To play golf, you are dependent upon the following functions:**

- leg, range of motion, strength and length
- limb deficiency
- grip
- arm length
- shoulder range of motion and strength
- elbow range of motion and strength
- wrist range of motion and strength
- back range of motion
- vision
- neurological function

Major impairment in any of above mentioned functions, or in combination, will qualify for participation according to the following criteria:

**METHODS of MEASURING**

**Functional Range Of Motion in Golf ( FROMG)**
*Upper extremity*

- the extended joint is in general measured as 0.
- the midway position between pronation and supination of the wrist is measured as 0.
- shoulder in standing neutral position 0.
  maximal abduction and elevation is measured as 180.
  the position between internal and external rotation is measured as 0.

*Lower extremity*

- the hip joint in extended position is measured as 0.
- the knee joint in extended position is measured as 0.
- the movements of the ankle are measured as follows: the position between dorsal flexion and plantar flexion and between supination and pronation is measured as 0.

*The spine*

- the neutral starting position is the generally accepted anatomic position with the body upright. This is measured as 0.
  The range of motion of the spine is from this starting point lateral bending of the spine to the left and right, rotation, flexion and extension.

**Measurement of the amputated limb:**
The measurement must be done from the most distal point of the amputated limb to the next anatomical point above. The relevant part of the other arm or leg must also be measured.

**Muscle testing (power scale):**
0 - Total lack of voluntary contraction
1 - Faint contraction without any movement of the limb (trace, flicker)
2 - Contraction with very weak movement through full range of motion when gravity is eliminated (poor)
3 - Contraction with movement through the complete joint range against gravity
4 - Contraction with full range of movement against gravity and some resistance (good)
5 - Contraction of normal strength through full range of movement against full resistance
(Daniels and Worthingham 1980)
Grades 4-, 4, 4+ may be used to indicate movement against slight, moderate and strong resistance respectively.

**Australian Spasticity Assessment Scale:**
0 - No catch on rapid passive movement (RPM)
1 - Catch occurs on RPM followed by release; there is no resistance to RPM throughout rest of range
2 - Catch occurs in second half of available range (after halfway point) during RPM and is followed by resistance throughout remaining range
3 - Catch occurs in first half of available range (up to and including halfway point) during RPM and is followed by resistance throughout the remaining range.
4 - When attempting RPM, the body part appears fixed but moves on slow passive movement.

**Neurological Coordination tests / Ataxia:**

- Finger to nose test: the Classifier presents his index finger and asks the player to touch his nose with his index finger from the crucifix position with closed eyes.
- Finger to finger test: the Classifier presents his index fingers and asks the player to touch his index fingers with closed eyes.
- Finger to toe test: the Classifier presents his index finger and asks the player to touch his toe with his index finger with closed eyes.
- Heel Draw test: draw the heel of one leg along the length of the contralateral leg, from ankle to knee and then in the reverse direction.
- Romberg test: the player stands with his feet together and both arms in horizontal position in extension. When the player closes his eyes and is not able to stand still the Romberg sign is positive
- Tandem Romberg: straight line heel to toe walking

**Impaired Functional passive Range Of Motion in Golf ( FROMG)**

***Lower limb:***

| | | | |
|---|---|---|---|
| **Hip:** | full flexion | $130^0$ | full extension $20^0$ |
| FROMG | extension - flexion | $0\text{-}35\text{-}130^0$ | = eligible |
| **Knee**: | full flexion | $135^0$ | full extension $0^0$ |

| | | | |
|---|---|---|---|
| FROMG | extension – flexion | 0-30-135$^0$ | = eligible |

| | | | | |
|---|---|---|---|---|
| **Ankle**: | dorsal flexion | 20$^0$ | plantar flexion | 40$^0$ |

If the only impairment is a stiff ankle, the player is not eligible.

***Upper limb:***

| | | | | |
|---|---|---|---|---|
| **Shoulder:** | full flexion | 150$^0$ | full extension | 50$^0$ |
| | full ext.rotation | 60$^0$ | full int.rotation | 95$^0$ |
| | full abduction | 180$^0$ | full adduction | 60$^0$ |

The FROMG is always measured including movements between scapula and thorax.

| | | | |
|---|---|---|---|
| FROMG: | adduction or abduction | < 30$^0$ | = eligible |
| | rotation | < 45$^0$ | = eligible |
| | flexion | < 20$^0$ | = eligible |

Impaired shoulder extension is not eligible

| | | | | |
|---|---|---|---|---|
| **Elbow:** | full flexion | 150$^0$ | full extension | 0$^0$ |
| | full pronation | 90$^0$ | full supination | 90$^0$ |

| | | | |
|---|---|---|---|
| FROMG | flexion-extension in the traject | > 45 to 150 $^0$ | = eligible |
| | pronation and supination | < 45 (on at least one side) | = eligible |

Right- handed players

| | | |
|---|---|---|
| flex the right elbow | < 90$^0$ | = eligible |
| flex the left elbow | < 60$^0$ | = eligible |
| (Reverse for left-handed players) | | |

| | | | | |
|---|---|---|---|---|
| **Wrist**: | dorsal flexion | 60$^0$ | palmar flexion | 75$^0$ |
| | Total radio- and ulnar deviation | 70$^0$ | | |

•<u>righthanded players</u> R side

| | | |
|---|---|---|
| dorsal flexion | < 10 $^0$ AND | |
| radio - ulnar deviation | < 5$^0$ | = eligible |
| (Reverse for <u>left-handed</u> players) | | |

**Back and cervical spine:**

Measurement has to be taken with a fixed pelvis.

Rotation of the back is fundamental in a golf swing!

| | | |
|---|---|---|
| Rotation thoraco-lumbar | < 10$^0$ | = eligible |
| Rotation cervical spine | < 20$^0$ | = eligible |

Other impairments such as extension and flexion and side to side movements of the thoraco-lumbar spine do not qualify.

•In all cases reports from International Classifier or Chief Classifier are compulsory

**Impaired muscle power (Scale: Daniels-Worthingham)**

***Lower limb:***

- **Hip:** Reduction of strength below 3 in abduction, extension and flexion will be eligible

- **Knee**: Reduction of strength below 3 in flexion and extension will be eligible

***Upper limb:***

- **Shoulder:** Reduction of strength < 3 in abduction, adduction, rotation and flexion will be eligible.
- **Elbow:** Reduction of strength < 3 in flexion, extension, pronation and supination in the same elbow will be eligible.
- **Wrist:** Reduction of strength < 3 in dorsal flexion, in radio deviation and ulnar deviation in the right hand of the right-handed player and left hand for the left-handed player will be eligible on both sides!

**Grip:**

Complete lack of grip will qualify.

Lack of sensation involving the median and ulnar nerve on both sides will qualify. Final decision is made by the Chief Classifier.

**Leg length difference**

Leg length difference should be at least 20 cm to qualify.
Arm length difference should be at least 15 cm to qualify.

**Short stature**

When both legs are short the length of the person and the legs are to be given in the report in cm, measured as described on the Measurement of Amputated Limb Form.
The leg length has to be measured between the trochanter major and the medial malleolus.
When both arms are short the length of the person and the arms are to be given in the report in cm, measured as described on the Measurement of Amputated Limb Form.

**Limb deficiency: see Measurement of Amputated Limb Form**

*lower limb*

- an amputation on Syme level or above on at least one side will be eligible.

•*Upper limb*

amputation of any part of the upper limb to be eligible as follows:

- 2 digits of 4 fingers amputated in one hand
- 2 digits of 6 fingers in two hands
- 3 fingers of one hand amputated incl. the thumb

**Neurological disorders**

**Hypertonia:**

Measurement of spasticity is done by the Australian Spasticity Assessment Scale.

Monoplegia : spasticity grade 2 or more in upper limb will be eligible

Hemiplegia : spasticity grade 2 or more in upper limb and balance problems in lower limb on affected side will be eligible

Diplegia : spasticity grade 2 in lower limbs but able to stand and swing and walk is eligible.

In cases of doubt the player has to be observed by the Classifier during training or competition.

**Ataxia**

Ataxic movement must be demonstrable and clearly evident during classification.
Clearly evident ataxia should be observable during at least one of the following tests:

- Finger to Nose test
- Finger to Finger test
- Finger to toe test

- Heel draw test
- Tamdem Romberg
- Walking
- Romberg test

**Athetosis**

Athetosis must be demonstrable and clearly evident during classification.
Clearly evident athetosis is unwanted movement and posturing that is characteristically athetoid and is observable in one of the following test:

- Involuntary movements of the fingers/toes or upper/lower extremities, despite the person trying to remain still
- Inability to hold the body still, swaying of the body.

**Hearing impaired , cardiopulmonary disorders, impairments due to normal ageing and mental disorders :**

so far are not eligible to play in EDGA competition.

**Cumulative disorders**

In some cases there are multiple disorders, which do not qualify solely, but cumulatively result in severe difficulty to perform a normal golf swing, than the golfer can be eligible. Reports from both the classifier and chief classifier are compulsory after investigation and observation. Investigation and observation always takes place with all the aids and supports the golfer needs to play normally in competition.

**Functional status reported**

If for instance an orthosis increases the degree of impairment, it is the status with the orthosis applied that has to be given to the player for reason that on that moment it is the condition in which he is going to play.

**Changed impairment**

If a player, previously approved, for any reason has a decreasing impairment, it must be reported to the authority giving the license immediately. The authority giving the license then has to decide the course of action with respect to new medical examination or not for continued license. The penalty for violation of this rule has to be decided by the Classification Protest and Appeal.

**Permanently wheelchair bound**

The player permanently in a wheelchair with a normal grip and swing in at least one hand and arm is eligible for golf. The player must have a helper to push him between the shots.

**Golf club aids**

Investigation and observation always takes place with all the aids and supports the golfer needs to play normally in competition. Assuming that all competitions are played to the EGA handicap system, the most significant aspect is that the aids, support and assistance is taken into consideration when assessing the handicap. The provided aids, support and assistance have to be in accordance with the Modification of the Rules of Golf for Golfers with Disabilities as published by The Royal and Ancient Golf Club of St. Andrews. In international competitions the EGA handicap has to be fairly and equally assessed.

**Use of buggy**

The general intention is that buggies are only allowed in competitions for those who have an urgent or absolute need related to the impairment that makes them eligible. Players who are eligible due to disorders of the lower extremities neurological or balance problems should have a buggy.
If it can be considered that a medical condition can be worsened by walking or for safety reasons a buggy should be provided.

Golfers with upper extremity problems only are not allowed to use a buggy. In cases of doubts the chief classifier of the competition will make a final decision.

### Section A2

Impaired vision
Blindness or vision equal or below 0,1 (B3, 6/60 Snellen) on the best side after compensation with a lens will qualify. Reports from both a MD specialized in eye illnesses and Optician are compulsory.

### Section A3 (in progress)

Mental disorders do not qualify.

### Section A4

Impaired hearing does not qualify.

**Code of Conduct / Code of Ethics**
The codes are included in these Definitions of Impairments, being the same as those used by all Paralympic sports organizations and can be found in the IPC handbook section 2 chapter 1.1

**Pre-tournament activities on the Medical Committee**
Tasks:

- Checking the players as to their eligibility
- Checking the classification facilities
- Advising on medical problems of the players on the locomotor system related to the golf sport.
- Observing the players if there is a possibility of cheating.

**Responsibility of the local organization**

- Providing a buggy for the Classifiers at all times
- Cover travel and hotel expenses for the Classifiers

**Decisions**
In each EDGA competition there has to be a Classifier and a Chief Classifier appointed by the medical committee (head of classification) that confirms the results of the national classification and approves the players eligibility.

Each country is also very strongly recommended to follow these rules in their national competitions. We recommend that the national medical classifier have both personal experience and knowledge of golf so as to be aware of, and familiar with the restrictions and difficulties, which will occur with regard to playing golf.

All the reports for evaluation, written in English, have to be sent to the responsible member of the EDGA medical committee for approval.

**Protests**
Any player can be subject to protest, and only if the sport rules and regulations allow for such a protest. All protests must be lodged in accordance with the policies and procedures as detailed in this guide in order to be considered. A player may only be subject to one protest during each season. Anyone can lodge a protest. All protests must be submitted on the Classification Protest Form and submitted as stated below.
These forms will be available at the Chief Classifier's desk. In order for a protest to be considered by the Chief Classifier, all sections of the Classification Protest Form must be completed in their entirety, in English and without error. The Classification Protest Forms must be signed by the Chief Classifier present at the competition and the NPC Chef de Mission or his/her authorized representative.
Protests must be submitted not after the last competitor has left the 9th tee in the last round of the

competition.

A protest submitted is subject to a fee of 200 Euros equivalent, paid in cash to the Chief Classifier. The Chief Classifier has to make his decision, eligible or not, not later then two hours after the last player has finished the last hole of the competition. In the case that a protest is upheld, the amount paid will be refunded. The final protest decision will be documented on the official Classification Protest Form. The original form will be kept by the Chief Classifier and copies will be distributed to the player concerned. It is the responsibility of the Chief Classifier to inform the player and the National representatives of the final decision of a protest. If a player does not appear for classification re-evaluation, the player will be deemed ineligible to compete further in the current competition.

**Appeals**

The term "appeal" refers to the procedure by which a formal objection to the manner in which a player's evaluation procedure has been conducted. An appeal can be made to the Chief Classifier not after the first competitor has left the 1st tee of the competition.

It must be emphasised that the identity of players who have been subject to a protest and/or an appeal, may not be publicly disclosed by anyone to whose knowledge it might have come before completion of the Protest or Appeal procedure.

**Duration of license**

The license is valid as long as:

- the Rules are not revised related to the disability at hand
- there has been no changes, for any reason, in the participant's physical restrictions.

**Administration**

The "Report for evaluation", written in English, has to be sent to the responsible member of the EDGA Medical Committee for approval.

Responsible for:

- **North West Europe**: P. Köhler, MD, Apelvägen 27, 182 75 Stocksund, Sweden.
- **North East Europe**: M. Varpela, MD, Etelätie 35A 02710 Espoo, Finland and
  Mrs. E. Helminen, PT, Kirsikkakuja 3 D, 02620 Espoo, Finland.
- **Mid Europe**: Prof. J.H. Arendzen, MD, PhD, Wilhelminalaan 7,9752 LL Haren, the Netherlands
  Prof. W.H. Eisma, MD, Beek en Bosch 25, 9301 JX Roden, the Netherlands.
- **Mid East Europe**, J. Esser, PT, Brendenbachweg 12, 9450 Altstaetten, Switzerland.
- **France :** Dr B. Leroux, MD, 18 rue Sadi Carnot, 10300 Sainte-Savine, France.
- **Italy**: Prof. M. Benazzi, MD, PhD, Via Gherardini 2, 20145 Milano, Italy.
- **Spain:** J. M. Osuna Chambon, MD, Calle San Martin nº5, 28220 Majadahonda, Madrid, Spain.

For actual data of addresses, telephone numbers, e-mail addresses etc. please check the EDGA website under "Committees" → "Medical Committee" → "Committee Members".

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