# IPCH CLASSIFICATION MANUAL OCTOBER 2018

ALL RULES, POLICIES AND PROCEDURES FOR ATHLETE CLASSIFICATION





IPCH CLASSIFICATION COMMITTEE CLASSIFICATION@POWERCHAIRHOCKEY.ORG



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# CLASSIFICATION MODEL RULES FOR IPCH

Model Rules consistent
with the 2015 IPC
(International Paralympic
Committee) Athlete
Classification Code
and accompanying
International Standards

SECTION A

### 1 SCOPE AND APPLICATION

# Adoption

- 1.1 The Classification Rules and Regulations are referred to throughout this document as the 'Classification Rules'. They have been prepared by IWAS PowerChair Hockey (IPCH) to implement the requirements of the 2015 IPC Athlete Classification Code and International Standards.
- 1.2 The Classification Rules have been adopted by IPCH during the Sport Assembly 2016 held on 18 July 2016 in De Rijp (NED).
- 1.3 The Classification Rules refer to a number of Appendices. These Appendices form an integral part of the Classification Manual.
- 1.4 This Classification Manual forms part of the IPCH Rules and Regulations.
- 1.5 The Classification Rules are supplemented by a number of Classification forms that have been prepared to assist Athlete Evaluation. These forms are available from IPCH, and can be amended by IPCH from time to time.

# Classification

- 1.6 Classification is undertaken to:
- a) Define who is eligible to compete in Para sport and consequently who has the opportunity to reach the goal of becoming a Paralympic Athlete.
- b) Group Athletes into Sport Classes which aim to ensure that the impact of Impairment is minimised and sporting excellence determines which Athlete or team is ultimately victorious.

# Application

- 1.7 These Classification Rules apply to all Athletes and Athlete Support Personnel who are registered and / or licensed by IPCH, and / or participate in any Events or Competitions organised, authorised or recognised by IPCH.
- 1.8 These Classification Rules must be read and applied in conjunction with all other applicable rules of IPCH, including but not limited to the sport technical rules of IPCH. In the event of any conflict between these Classification Rules and any other rules, the Classification Rules shall take precedence.

# International Classification

- 1.9 IPCH will only permit an Athlete to compete in an International Competition if that Athlete has been allocated a Sport Class (other than Sport Class Not Eligible) and designated with a Sport Class Status in accordance with these Classification Rules.
- 1.10 IPCH will provide opportunities for Athletes to be allocated a Sport Class and designated with a Sport Class Status in accordance with these Classification Rules at Recognised Competitions (or other such occasions as defined by IPCH). IPCH will advise Athletes, National Bodies and National Paralympic Committees in advance as to such Recognised Competitions (or other such occasions).

# Interpretation and Relationship to Code

- 1.11 References to an 'Article' mean an Article of this Classification Manual, references to an 'Appendix' mean an Appendix to this Classification Manual, and Capitalised terms used in this Classification Manual have the meaning given to them in the Glossary (see Section A Part 12).
- 1.12 References to a 'sport' in these Classification Rules refer to the sport PowerChair Hockey.

- 1.13 The Appendices to these Classification Rules are part of these Classification Rules both of which may be amended, supplemented and / or replaced by the IPCH from time to time.
- 1.14 Headings used in these Classification Rules are used for convenience only and have no meaning that is separate from the Article or Articles to which they refer.
- 1.15 These Classification Rules are to be applied and interpreted as an independent text but in a manner that is consistent with the 2015 IPC Athlete Classification Code and the accompanying International Standards.

# 2 ROLES AND RESPONSIBILITIES

2.1 It is the personal responsibility of Athletes, Athlete Support Personnel, and Classification Personnel to familiarise themselves with all the requirements of these Classification Rules.

# Athlete Responsibilities

- 2.2 The roles and responsibilities of Athletes include to:
- a) Be knowledgeable of and comply with all applicable policies, rules and processes established by these Classification Rules;
- b) Participate in Athlete Evaluation in good faith;
- c) Ensure when appropriate that adequate information related to Health Conditions and Eligible Impairments is provided and / or made available to IPCH;
- *d)* Cooperate with any investigations concerning violations of these Classification Rules;
- e) Actively participate in the process of education, awareness, and Classification research, through exchanging personal experiences and expertise.

# Athlete Support Personnel Responsibilities

- 2.3 The roles and responsibilities of Athlete Support Personnel include to:
- a) Be knowledgeable of and comply with all applicable policies, rules and processes established by these Classification Rules;
- b) Use their influence on Athlete values and behaviour to foster a positive and collaborative Classification attitude and communication:
- c) Assist in the development, management and implementation of Classification Systems;
- d) Cooperate with any investigations concerning violations of these Classification Rules.

# Classification Personnel Responsibilities

- 2.4 The roles and responsibilities of Classification Personnel include to:
- a) have a complete working knowledge of all applicable policies, rules and processes established by these Classification Rules;
- b) Use their influence to foster a positive and collaborative Classification attitude and communication;
- c) Assist in the development, management and implementation of Classification Systems, including participation in education and research;
- D) Cooperate with any investigations concerning violations of these Classification Rules.

# 3 Classification Personnel

3.1 Classification Personnel are fundamental to the effective implementation of these Classification Rules. IPCH will appoint a number of Classification Personnel, each of whom will have a key role in the organisation, implementation and administration of Classification for the IPCH.

# Head of Classification

3.2 IPCH must appoint a Head of Classification. The Head of Classification is a person responsible for the direction, administration, co-ordination and implementation of Classification matters for IPCH.

# Duties and tasks of the IPCH Head of Classification Committee:

- a) Examines the current status of classification on a regular basis.
- b) Leads the design, planning and recommendation of classification programs.
- c) Advises to the IPCH Executive Committee on appointment of classifiers and chief classifiers for appropriate competitions.
- d) Organizes and conducts training / certification Classifiers Courses.

- e) Maintains / updates the classification database (IPCH Master List).
- f) Communicates with classifiers of any relevant changes and liaises with all relevant external parties.
- *g)* Reports to the IPCH Executive Committee.

- 3.3 If a Head of Classification cannot be appointed, IPCH may appoint another person, or group of persons collectively (provided such person or group of persons agrees to comply with the Classifier Code of Conduct), to act as the Head of Classification.
- 3.4 The Head of Classification is not required to be a certified Classifier.
- 3.5 The Head of Classification may delegate specific responsibilities and / or the transfer specific tasks to designated Classifiers, or other persons authorised by IPCH.
- 3.6 Nothing in these Classification Rules prevents the Head of Classification (if certified as a Classifier) from also being appointed as a Classifier and / or Chief Classifier.

# Classifiers

3.7 A Classifier is a person authorised as an official and certified by the IPCH to conduct some or all components of Athlete Evaluation as a member of a Classification Panel.

# Duties and tasks of an IPCH Classifier:

- a) Works as a member of an IPCH Classification Panel.
- b) Works eventually as a member of a protest panel.
- c) Attends all classification meetings at the relevant competitions.
- d) Assists in training and certification courses.

# Chief Classifiers

- 3.8 A Chief Classifier is a Classifier appointed by the IPCH Executive Committee on advise of the IPCH Head of Classification, to direct, administer, coordinate and implement Classification matters for a specific Competition or at such other location as defined by IPCH. In particular, a Chief Classifier may be required by IPCH to do the following:
- a) Identify those Athletes who will be required to attend an Evaluation Session:
- b) Supervise Classifiers to ensure that the these Classification Rules are properly applied during Classification;
- c) Manage Protests in consultation with IPCH.
- d) Liaise with the IPCH Technical Delegate of the event / competition and with the relevant Competition organisers to ensure that all travel, accommodation and other logistics are arranged in order that Classifiers may carry out their duties at the Competition
- 3.9 A Chief Classifier may delegate specific responsibilities and / or transfer specific tasks to other appropriately qualified Classifiers, or other appropriately qualified IPCH officers or representatives, and / or appropriately qualified persons in the local organising committee of a Competition.
- 3.10 A Chief Classifier reports tot he Head of Classification.

# Trainee Classifiers

- 3.11 A Trainee Classifier is a person who is in the process of formal training by IPCH.
- 3.12 IPCH may appoint Trainee Classifiers to participate in some or all components of Athlete Evaluation under the supervision of a Classification Panel, to develop Classifier Competencies.

# Duties and tasks as IPCH Trainee:

- a) Takes an active part in the IPCH Classifiers Course.
- b) Observes during classification sessions in order to learn classification rules and to develop competencies and proficiencies to achieve certification.
- c) Attends all relevant classification meetings at events.
- d) Assist the IPCH Classifier nationally when doing national classifications.

3.12 All licenced IPCH Classifiers are listed in the IPCH Classifiers register, which is Updated after every Classifier Course and Classification Session. All IPCH Classifiers can be members of the IPCH Classification Committee.

- 4 CLASSIFIER COMPETENCIES, TRAINING AND CERTIFICATION
- 4.1 A Classifier will be authorised to act as a Classifier certified by IPCH for having the relevant Classifier Competencies.
- 4.2 IPCH must and will provide training and education to Classifiers to ensure Classifiers obtain and / or maintain Classifier Competencies.
- 4.3 The Classifier Competencies for IPCH are:
- a) A thorough understanding of the Classification Manual:
- b) An understanding of Powerchair Hockey, the rules

of the sport and of the game;

- c) An understanding of the IPC Code and the International Standards for Classification.
- d) A professional qualification(s), level of experience, skills and / or competencies in order to act as a Classifier for IPCH. These include that IPCH Classifiers must either:
  - a) Be a certified health professional in a field relevant to the Eligible Impairment category which IPCH at its sole discretion deems acceptable, such as a physician or physiotherapist for Athletes with a Physical Impairment;
  - b) have an extensive coaching or other relevant background in Powerchair Hockey or a recognised and reputable academic qualification which encompasses a requisite level of anatomical, biomechanical and / or sport-specific expertise, which IPCH at its sole discretion deems to be acceptable.
- 4.4 IPCH has established a process of Classifier Certification by which Classifier Competencies are assessed (see Attachment "IPCH Classifier Training and Certification".) This process includes:
- a) A process for the certification of Trainee Classifiers; succesfully completed the Classification Course. The Trainee is not allowed to allocate a sportclass without supervision;
- b) Quality assessment for the period of certification; upon suggestion of the HoC with agreement of the SEC Technical and Classification Officer;
- c) A process for handling substandard performance, including options for remediation and / or withdrawal of certification; upon recommendation of the HoC to the SEC Technical and Classification Officer;
- d) A process for Re-certification of Classifiers (see Attachment: "IPCH Classifier Training and Certification").

- 4.5 IPCH has specified Entry-Level Criteria applicable to persons who wish to become Trainee Classifiers (described in Section A art.4.3 d) and in the (Attachment "IPCH Classifier Training and Certification"). IPCH will provide Entry-Level Education to Trainee Classifiers.
- 4.6 IPCH will provide Continuing Education to Classifiers for the purposes of Certification and Re-certification. This continuing education can be given, for example, by sending "Examples of best practice" by email to all IPCH Classifiers in which Classification Matters or specific Classification Cases are described.
- 4.7 IPCH may provide that a Classifier is subject to certain limitations, including (but not limited to):
- a) A limitation on the Impairment type for which a Classifier is certified to act as a Classifier;
- b) A limitation on the components of Athlete Evaluation that a Classifier is certified to conduct; this will be done with the PCH Technical Classifiers without competencies on MRC testing: they will not do the Physical Assessment:
- c) A limitation on the level of Competition or Event in which a Classifier is authorised to act as a Classifier;
- d) The maximum time that a Classifier Certification is valid.
- e) That Classifier Certification is subject to review within a specific time frame by reference to the Classifier Competencies.
- f) That a Classifier may lose Classifier Certification if IPCH is not satisfied that the Classifier possesses the required Classifier Competencies;
- G) That a Classifier may regain Classifier Certification if IPCH is satisfied that the Classifier possesses the required Classifier Competencies.

### 5 CLASSIFIER CODE OF CONDUCT

- 5.1 The integrity of Classification in IPCH depends on the conduct of Classification Personnel. IWAS, mother organisation together with IPCH has therefore adopted a set of professional conduct standards referred to as the 'Classifier Code of Conduct'.
- 5.2 All Classification Personnel must comply with the Classifier Code of Conduct. In order to be appointed as IPCH Classifier, all Classifiers have to undersign the IWAS / IPCH Code of Conduct.
- 5.3 Any person who believes that any Classification Personnel may have acted in a manner that contravenes the Classifier Code of Conduct must report this to IPCH.
- 5.4 If IPCH receives such a report it will investigate the report and, if appropriate, take disciplinary measures.5.5 IPCH has discretion to determine whether or not
- a Classifier has an actual, perceived and / or potential conflict of interest.

# PART THREE: ATHLETE EVALUATION

### 6 GENERAL PROVISIONS

- 6.1 IPCH has specified in this Classification Manual the process, assessment criteria and methodology whereby Athletes will be allocated a Sport Class and designated a Sport Class Status. This process is referred to as Athlete Evaluation.
- 6.2 Athlete Evaluation encompasses a number of steps and these Classification Rules therefore include provisions regarding:
- a) An assessment of whether or not an Athlete has an Eligible Impairment for PCH;
- b) An assessment of whether an Athlete complies with Minimum Impairment Criteria for PCH;
- c) The allocation of a Sport Class (and designation of a Sport Class Status) depending on the extent to which an Athlete is able to execute the specific tasks and activities fundamental to PCH.

### 7 ELIGIBLE IMPAIRMENT

- 7.1 Any Athlete wishing to compete in Powerchair Hockey governed by IPCH must have an Eligible Impairment and that Eligible Impairment must be Permanent.
- 7.2 Part B 1. of this Classification Manual specify the Eligible Impairments an Athlete must have in order to compete in Powerchair Hockey.
- 7.3 Any Impairment that is not listed as an Eligible Impairment in Part B 1. is referred to as a Non-Eligible Impairment. Part B 2. includes examples of Non-Eligible Impairments.

# Assessment of Eligible Impairment

- 7.4 IPCH must determine if an Athlete has an Eligible Impairment.
  - 7.4.1 In order to be satisfied that an Athlete has an Eligible Impairment, IPCH may require any Athlete to demonstrate that he or she has an Underlying Health Condition. (Part B 3. lists examples of Health Conditions that are not Underlying Health Conditions).
  - 7.4.2 The means by which IPCH determines that an individual Athlete has an Eligible Impairment is at the sole discretion of IPCH. IPCH may consider that an Athlete's Eligible Impairment is sufficiently obvious and therefore not require evidence that demonstrates the Athlete's Eligible Impairment.
  - 7.4.3 If in the course of determining if an Athlete has an Eligible Impairment IPCH becomes aware that the Athlete has a Health Condition, and believes that the impact of that Health Condition may be that it is unsafe for that Athlete to compete or there is a risk for the Athlete's health or others if that Athlete competes, it may designate the Athlete the status as Classification Not Completed (CNC) in accordance with Section A Part 3 Art. 10 of these Classification Rules. In such instances IPCH will explain the basis of its designation to the relevant National Body and / or National Paralympic Committee.
- 7.5 An Athlete must (if requested to do so) provide IPCH with Diagnostic Information that must be provided as follows:
- a) The relevant National Body and / or National Paralympic Committee must submit a Medical Diagnostics Form to IPCH, upon completing the registration of an Athlete for an official IPCH Classification Session;
- b) The Medical Diagnostics Form must be completed in English and dated and signed by a certified health

# care professional;

- c) The Medical Diagnostic Form must be submitted with supportive Diagnostic Information if required by IPCH:
- 7.6 IPCH may require an Athlete to re-submit the Medical Diagnostics Form (with necessary supportive Diagnostic Information) if the IPCH at its sole discretion considers the Medical Diagnostic Form and / or the Diagnostic Information to be incomplete or inconsistent.
- 7.7 If IPCH requires an Athlete to provide Diagnostic Information it may consider the Diagnostic Information itself, and / or may appoint an Eligibility Assessment Committee to do so.
- 7.8 The process by which an Eligibility Assessment Committee is formed and considers Diagnostic Information is as follows:
- a) IPCH by its Technical and Classification Officer will notify the relevant National Body or National Paralympic Committee that Diagnostic Information must be provided on behalf of the Athlete explaining what Diagnostic Information is required, and the purposes for which it is required.
- b) IPCH will set timelines for the production of Diagnostic Information.
- c) IPCH, upon suggestion of the Head of Classification, will appoint an Eligibility Assessment Committee. The Eligibility Assessment Committee must, if practicable, be comprised of the Head of Classification and at least two other experts with appropriate medical qualifications. All members of the Eligibility Assessment Committee must sign confidentiality undertakings.
- d) If the Head of Classification believes that he or she does not hold the necessary competencies to assess the Diagnostic Information, he or she will not participate in the review of the Diagnostic Information, but will

assist the Eligibility Assessment Committee.

- e) Wherever possible all references to the individual Athlete and the source(s) of the Diagnostic Information should be withheld from the Eligibility Assessment Committee. Each member of the Eligibility Assessment Committee will review the Diagnostic Information and decide whether such information establishes the existence of an Eligible Impairment.
- f) If the Eligibility Assessment Committee concludes that the Athlete has an Eligible Impairment the Athlete will be permitted to complete Athlete Evaluation with a Classification Panel.
- g) If the Eligibility Assessment Committee is not satisfied that the Athlete has an Eligible Impairment the Head of Classification will inform the IPCH SEC Technical and Classification Officer who will provide a decision in writing to the relevant National Body or National Paralympic Committee. The National Body or National Paralympic Committee will be given an opportunity to comment on the decision and may provide further Diagnostic Information to the Eligibility Assessment Committee for review. If the decision is subsequently revised, the IPCH SEC Technical and Classification Officer will inform the National Body or National Paralympic Committee.
- h) If the decision is not changed, the IPCH SEC Technical and Classification Officer will issue a final decision letter to the National Body or National Paralympic Committee.
- i) The Eligibility Assessment Committee may make its decisions by a majority. If the Head of Classification is part of the Eligibility Assessment Committee, he or she may veto any decision if he or she does not agree that the Diagnostic Information supports the conclusion that the Athlete has an Eligible Impairment.
- 7.9 IPCH may delegate one or more of the functions described above to a Classification Panel.

### 8 MINIMUM IMPAIRMENT CRITERIA

- 8.1 An Athlete who wishes to compete in a sport must have an Eligible Impairment that complies with the relevant Minimum Impairment Criteria for that sport.
- 8.2 IPCH has set Minimum Impairment Criteria to ensure that an Athlete's Eligible Impairment affects the extent to which an Athlete is able to execute the fundamental specific tasks and activities for PCH.
- 8.3 Section B. 5 of this Classification Manual specifies the Minimum Impairment Criteria applicable to PCH and the process by which an Athlete's compliance with Minimum Impairment Criteria is to be assessed by a Classification Panel as part of an Evaluation Session.
- 8.4 Any Athlete who does not comply with the Minimum Impairment Criteria for PCH must be allocated Sport Class Not Eligible (NE).
- 8.5 A Classification Panel must assess whether or not an Athlete complies with Minimum Impairment Criteria. This will take place as part of an Evaluation Session. Prior to participating in an Evaluation Session, an Athlete must first prove to the IPCH that he or she has an Eligible Impairment.
- 8.6 Minimum Impairment Criteria must not consider the extent to which the use of Adaptive Equipment might affect how the Athlete is able to execute the fundamental specific tasks and activities for PCH.

# 9 SPORT CLASS

9.1 A Sport Class is a category defined by IPCH in this Classification Manual, Athletes are grouped by

reference to the impact of an Eligible Impairment on their ability to execute the fundamental specific tasks and activities for PCH.

- 9.2 An Athlete who does not have an Eligible Impairment or does not comply with the Minimum Impairment Criteria for PCH must be allocated Sport Class Not Eligible (NE) for that sport in accordance with the provisions of Section A Part 5 Art. 18 of this Manual.
- 9.3 An Athlete who complies with the Minimum Impairment Criteria for PCH must be allocated a Sport Class (unless provisions described in Section A Part 7 Art. 29 and 30 are applicable).
- 9.4 Except for the allocation of Sport Class Not Eligible (NE) by IPCH (in accordance with Section A Part 5 Art. 18), the allocation of a Sport Class must be based solely on an evaluation done by a Classification Panel of the extent to which the Athlete's Eligible Impairment affects the fundamental and specific tasks and activities for PCH. This evaluation must take place in a controlled non-competitive environment, which allows for the repeated observation of key tasks and activities.
- 9.5 Section B of this Classification Manual specifies the assessment methodology (Section B Part 6) and assessment criteria (Section B Part 7) for the allocation of a Sport Class and the designation of Sport Class Status.

# 10 CLASSIFICATION NOT COMPLETED

10.1 If at any stage of Athlete Evaluation IPCH or a Classification Panel is unable to allocate a Sport

Class to an Athlete, the Head of Classification or the relevant Chief Classifier may designate that Athlete as Classification Not Completed (CNC).

10.2 The designation Classification Not Completed (CNC) is not a Sport Class and is not subject to the provisions in this Classification Manual concerning Protests. The designation Classification Not Completed (CNC) will however be recorded in the IPCH Classification Master List.

10.3 An Athlete who is designated as Classification Not Completed (CNC) can not compete in PCH.

# PART FOUR: ATHLETE EVALUATION AND THE CLASSIFICATION PANEL

# 11 THE CLASSIFICATION PANEL

- 11.1 A Classification Panel is a group of Classifiers appointed by IPCH to conduct some or all of the components of Athlete Evaluation.
- 11.2 An IPCH Classification Panel must consist of at least two (2) certified Classifiers. In exceptional circumstances a Chief Classifier or the Head of Classification in agreement with the Technical and Classification Officer may provide a Classification Panel consisting of only one Classifier, when that Classifier is holding a valid medical qualification.
- 11.3 A Trainee Classifier may be part of a Classification Panel in addition to the required number of certified Classifiers, and may participate in Athlete Evaluation.

# 12 CLASSIFICATION PANEL RESPONSIBILITIES

- 12.1 A Classification Panel is responsible for conducting an Evaluation Session. As part of the Evaluation Session the Classification Panel must:
- a) Assess whether an Athlete complies with Minimum Impairment Criteria for PCH.
- b) Assess the extent to which an Athlete is able to execute the fundamental specific tasks and activities for PCH.
- c) Conduct (if required) Observation in Competition.
- 12.2 Following the Evaluation Session the Classification Panel must allocate a Sport Class and designate

- a Sport Class Status, or designate Classification Not Completed (CNC).
- 12.3 Prior to the Evaluation Session, the assessment as to whether an Athlete has an Eligible Impairment must be undertaken by IPCH, unless IPCH requests this to be undertaken by a Classification Panel.
- 12.4 The Evaluation Session must take place in a controlled non-competitive environment that allows for the repeated observation of key tasks and activities.
- 12.5 Although other factors such as low fitness level, poor technical proficiency and aging may also affect the fundamental tasks and activities for PCH the allocation of Sport Class must not be affected by these factors.
- 12.6 An Athlete who has a Non-Eligible Impairment and an Eligible Impairment has to be evaluated by a Classification Panel only on the basis of the Eligible Impairment, provided the Non-Eligible Impairment does not affect the Classification Panel's ability to allocate a Sport Class.
- 12.7 The Sport Class allocated to the Athlete will be in accordance with the processes specified in Section B "IPCH Classification System".

#### 13 EVALUATION SESSIONS

- 13.1 This Article applies to all Evaluation Sessions.
- 13.2 The Athlete's National Body or National Paralympic Committee is responsible for ensuring that Athletes comply with their duties in relation to the provisions in this Article.

#### 13.3 In respect of Athletes:

- a) Athletes have the right to be accompanied by a member of the Athlete's National Body or National Paralympic Committee when attending an Evaluation Session. The Athlete must be accompanied if the Athlete is a minor or has an Intellectual Impairment.
- b) The person chosen by the Athlete to accompany the Athlete at an Evaluation Session should be familiar with the Athlete's Impairment and sport history.
- c) The Athlete and accompanying person must acknowledge the terms of the IPCH Classification Consent Form.
- d) The Athlete must verify his or her identity to the Classification Panel or to other IPCH Officials / Personel, by providing a document such as a passport or ID card.
- e) The Athlete must attend the Evaluation Session with any sports attire or equipment relevant to PCH: T-stick or Handstick, Powerchair and strapping.
- f) The Athlete must disclose the use of any medication and / or medical device / implant to the Classification Panel.
- g) The Athlete must comply with all reasonable instructions given by a Classification Panel.

#### 13.4 The Classification Panel:

- a) May request that an Athlete provides medical documentation relevant to the Athlete's Eligible Impairment if the Classification Panel believes that this will be necessary in order for it to allocate a Sport Class.
- b) Will conduct Evaluation Sessions in English unless otherwise stipulated by IPCH. If the Athlete requires an interpreter, a member of the Athlete's National Body or National Paralympic Committee will be responsible for arranging for an interpreter. The interpreter is permitted to attend the Evaluation Session in addition to the per-

son referred to in Section A Part 13 - Art 13 a.

- c) The Classification Panel may at any stage seek medical, technical or scientific opinion(s), with the agreement of the Head of Classification and / or a Chief Classifier if the Classification Panel feels that such opinion(s) is necessary in order to allocate a Sport Class.
- d) In addition to any opinion(s) sought in accordance with c), a Classification Panel may only consider the evidence supplied to it by the relevant Athlete, National Body, National Paralympic Committee and IPCH (from any source) when allocating a Sport Class.
- 13.5 The Classification Panel may make or use video footage and / or other records to assist it when allocating a Sport Class.

#### 14 OBSERVATION IN COMPETITION

- 14.1 A Classification Panel may require that an Athlete undertakes Observation in Competition Assessment before allocating a final Sport Class and designating a Sport Class Status to that Athlete.
- 14.2 The methods by which Observation in Competition Assessment may be undertaken, and the matters to be observed, are described in Section B in the "IPCH Classification System".
- 14.3 If a Classification Panel requires an Athlete to complete Observation in Competition Assessment, the Athlete will be entered in the Competition with the Entry Sport Class allocated by the Classification Panel after the conclusion of the initial components of the Evaluation Session.
- 14.4 An Athlete who is required to complete Obser-

vation in Competition Assessment will be designated with Tracking Code: Observation Assessment (OA). This replaces the Athlete's Sport Class Status for the duration of Observation in Competition Assessment.

- 14.5 Observation in Competition Assessment must take place during First Appearance:
  - 14.5.1 First Appearance is the first time an Athlete competes in an Event or during a Competition in a particular Sport Class.
  - 14.5.2 First Appearance within a Sport Class applies to participation in all Events / Competitions within the same Sport Class.
  - 14.5.3 An Athlete must make First Appearance during the preliminary rounds of a Competition. First Appearance can not take place in the elimination rounds of a Competition. If an Athlete does not fulfill the Classification, including the Observational Assesment, withing the preliminary rounds, he / she won't be allowed to participate in the elimination round.

#### 14.6 If an Athlete is:

- Subject to a Protest following Observation in Competition; and
- The second Evaluation Session is conducted at that same Competition; and
- Pursuant to the second Evaluation Session the Athlete is required to undergo Observation in Competition. Then observation in Competition must take place at the next opportunity within the Sport Class allocated to the Athlete by the Protest Panel with Tracking Code Observation Assessment (OA).
- 14.7 The Classification Panel must allocate a Sport Class and replace the Athlete's Tracking Code Observation Assessment (OA) by designating a Sport Class

Status upon completion of First Appearance (or completion of any Observation in Competition conducted as part of a Protest). If changes to an Athlete's Sport Class or Sport Class Status are made following Observation in Competition, the changes are effective immediately.

14.8 The impact of an Athlete changing Sport Class after First Appearance on medals, records and results is detailed in the IPCH Rules and Regulations.

#### 15 SPORT CLASS STATUS

15.1 If a Classification Panel allocates a Sport Class to an Athlete, it must also designate a Sport Class Status. Sport Class Status indicates whether or not an Athlete will be required to undertake Athlete Evaluation in the future; and if the Athlete's Sport Class may be subject to Protest.

15.2 The Sport Class Status designated to an Athlete by a Classification Panel at the conclusion of an Evaluation Session will be one of the following:

New (N)

Confirmed (C)

Review (R)

Review with a Fixed Review Date (FRD)

#### Sport Class Status New

15.3 An Athlete is designated Sport Class Status New (N) by IPCH prior to attending the Athlete's first Evaluation Session. An Athlete with Sport Class Status New (N) must attend an Evaluation Session prior to competing at any International IPCH sanctioned Competition / Event, unless IPCH specifies otherwise.

#### Sport Class Status Confirmed

15.4 An Athlete will be designated Sport Class Status Confirmed (C) if the Classification Panel is satisfied that both the Athlete's Eligible Impairment and the Athlete's ability to execute the fundamental specific tasks and activities for PCH are and will remain stable.

15.4.1 An Athlete with Sport Class Status Confirmed (C) is not required to undergo any further Athlete Evaluation (save pursuant to the provisions in this Classification Manual concerning Protests (Section A - Part 6), Medical Review (Section A - Part 8) and changes to Sport Class criteria (Section A Part 4 - art 15.7)).

15.4.2 A Classification Panel that consists of only one Classifier may not designate an Athlete with Sport Class Status Confirmed (C) but must designate the Athlete with Sport Class Status Review (R).

#### Sport Class Status Review

15.5 An Athlete will be designated Sport Class Status Review (R) if the Classification Panel believes that further Evaluation Sessions will be required.

15.5.1 A Classification Panel may base its belief that further Evaluation Sessions will be required based on a number of factors, including but not limited to situations where the Athlete has only recently entered Competitions sanctioned or recognised by IPCH; has a fluctuating and / or progressive Impairment / Impairments that is / are permanent but not stable; and / or has not yet reached full muscular or skeletal maturity.

15.5.2 An Athlete with Sport Class Status Review (R) must complete Athlete Evaluation prior to competing at any subsequent International Competition, unless IPCH specifies otherwise.

#### Sport Class Status Review with Fixed Review Date

15.6 An Athlete may be designated Sport Class Status Review with a Fixed Review Date (FRD) if the Classification Panel believes that further Athlete Evaluation will be required but will not be necessary before a set date, being the Fixed Review Date.

15.6.1 An Athlete with Sport Class Status Review with a Fixed Review Date (FRD) will be required to attend an Evaluation Session at the first opportunity after the relevant Fixed Review Date.

15.6.2 An Athlete who has been allocated Sport Class Status Review with a Fixed Review Date (FRD) may not attend an Evaluation Session prior to the relevant Fixed Review Date save pursuant to a Medical Review Request and / or Protest.

15.6.3 A Classification Panel that consists of only one Classifier may not designate an Athlete with Sport Class Status Review with a Fixed Review Date (FRD) but must designate the Athlete with Sport Class Status Review (R).

#### · Changes to Sport Class Criteria

15.7 If IPCH changes any Sport Class criteria and / or assessment methods defined in Part B of this Manuel, then:

- a) IPCH may re-assign any Athlete who holds Sport Class Status Confirmed with Sport Class Status Review (R) and require that the Athlete attends an Evaluation Session at the earliest available opportunity.
- b) IPCH may remove the Fixed Review Date for any Athlete and require that the Athlete attends an Evaluation Session at the earliest available opportunity.
- c) In both instances the relevant National Body or National Paralympic Committee shall be informed as soon as is practicable.

#### 16 MULTIPLE SPORT CLASSES

16.1 This Article applies to Athletes who are potentially eligible to be allocated more than one Sport Class.

#### Athletes with Physical Impairment

16.2 An Athlete who has a Physical Impairment may be allocated more than one Sport Class relevant to that Physical Impairment subject to any applicable IPCH Rules and Regulations (including but not limited to those in relation to the use of equipment);

#### 17 NOTIFICATION

- 17.1 The outcome of Athlete Evaluation must be notified to the Athlete and / or National Body or National Paralympic Committee and published as soon as practically possible after completion of Athlete Evaluation.
- 17.2 IPCH must publish the outcome of Athlete Evaluation at the Competition following Athlete Evaluation, and the outcomes must be made available post Competition via the Classification Master List at the IPCH website.

#### PART FIVE: SPORT CLASS NOT ELIGIBLE

#### 18 SPORT CLASS NOT ELIGIBL

#### General Provisions

- 18.1 If a Classification Panel determines that an Athlete:
- a) Has an Impairment that is not an Eligible Impairment;
- b) Does not have an Underlying Health Condition: it must allocate that Athlete Sport Class Not Eligible (NE).
- 18.2 If a Classification Panel determines that an Athlete who has an Eligible Impairment does not comply with Minimum Impairment Criteria for PCH that Athlete must be allocated Sport Class Not Eligible (NE).

#### Absence of Eligible Impairment

18.3 If a Classification Panel determines that an Athlete does not have an Eligible Impairment, that Athlete:

- a) Will not be permitted to attend an Evaluation Session.
- b) Will be allocated with Sport Class Not Eligible (NE) and designated with Sport Class Status Confirmed (C).
- 18.4 If another International Sport Federation has allocated an Athlete with Sport Class Not Eligible (NE) because the Athlete does not have an Eligible Impairment IPCH may likewise do so without the need for the process detailed in Section A Part 3 Art.7 of this Classification Manual.
- 18.5 An Athlete who is allocated Sport Class Not Eligible (NE) by IPCH or a Classification Panel (if delegated by IPCH) because that Athlete has:
- a) An Impairment that is not an Eligible Impairment;
- b) A Health Condition that is not an Underlying Health Condition:

has no right to request such determination be reviewed by a second Classification Panel and will not be permitted to participate in PCH.

#### Absence of Compliance with Minimum Impairment Criteria

18.6 A second Classification Panel must review by way of a second Evaluation Session any Athlete who is allocated Sport Class Not Eligible (NE) on the basis that a Classification Panel determines that the Athlete does not comply with Minimum Impairment Criteria. This must take place as soon as is practicable.

18.6.1 Pending the second Evaluation Session the Athlete will be allocated Sport Class Not Eligible (NE) and designated Sport Class Status Review (R). The Athlete will not be permitted to compete before such re-assessment.

18.6.2 If the second Classification Panel determines the Athlete does not comply with Minimum Impairment Criteria (or if the Athlete declines to participate in a second Evaluation Session at the time set by IPCH); Sport Class Not Eligible (NE) will be allocated and the Athlete designated with Sport Class Status Confirmed (C).

18.7 If an Athlete makes (or is subject to) a Protest on a previously allocated Sport Class other than Not Eligible (NE) and is allocated Sport Class Not Eligible (NE) by a Protest Panel, the Athlete must be provided with a further and final Evaluation Session which will review the decision to allocate Sport Class Not Eligible (NE) made by the Protest Panel.

18.8 If a Classification Panel allocates Sport Class Not Eligible (NE) on the basis that it has determined that an Athlete does not comply with Minimum Impairment Criteria for PCH the Athlete may be eligible to compete in another sport, subject to Classification Rules for that sport.

18.9 If an Athlete is allocated Sport Class Not Eligible (NE), this does not question the presence of a genuine Impairment. It is only a ruling on the eligibility of the Athlete to compete in PCH

#### PART SIX: PROTESTS

#### 19 SCOPE OF A PROTEST

- 19.1 A Protest may only be made in respect of an Athlete's Sport Class. A Protest may not be made in respect of an Athlete's Sport Class Status.
- 19.2 A Protest may not be made in respect of an Athlete who has been allocated Sport Class Not Eligible (NE).

#### 20 PARTIES PERMITTED TO MAKE A PROTEST

A Protest may only be made by one of the following bodies :

- a) A National Body (Section A Part 6 Art. 21-22);
- b) A National Paralympic Committee (Section A Part 6 Art. 21-22).
- c) IPCH (Section A Part 6 Art. 23-24).

#### 21 NATIONAL PROTEST

- 21.1 A National Body or a National Paralympic Committee may only make a Protest in respect of an Athlete under its jurisdiction at a Competition or venue set aside for Athlete Evaluation.
- 21.2 If the outcome of Athlete Evaluation is published during a Competition (pursuant to Section A Part 4 Art. 17 of this Classification Manual) a Protest must be submitted within one (1) hour of that outcome being published. If the outcome of Athlete Evaluation is published following Observation in Competition a Protest must be submitted within fifteen (15) minutes of that outcome being published.

21.3 If an Athlete is required by a Classification Panel to undergo Observation in Competition Assessment, a National Body or a National Paralympic Committee may make a Protest before or after First Appearance takes place. If a Protest is made before First Appearance takes place the Athlete must not be permitted to compete until the Protest has been resolved.

#### 22 NATIONAL PROTEST PROCEDURE

- 22.1 To submit a National Protest, a National Body or a National Paralympic Committee must show that the Protest is bona fide with supporting evidence and complete a Protest Form, that must be made available by IPCH at the Competition and via IPCH website, and must include the following:
- a) The name and sport of the Protested Athlete;
- b) The details of the Protested Decision and / or a copy of the Protested Decision;
- c) An explanation as to why the Protest has been made and the basis on which the National Body or National Paralympic Committee believes that the Protested Decision is flawed.
- d) Reference to the specific rule(s) alleged to have been breached;
- 22.2 The Protest Fee set by IPCH is 100 Euro. The fee must be delivered together with the Protest Form.
- 22.3 The Protest Form must be submitted to the Chief Classifier of the relevant Competition within the timeframes specified by IPCH. Upon receipt of the Protest form the Chief Classifier must conduct a review of the Protest, in consultation with IPCH, of which there are two possible outcomes:
- a) The Chief Classifier may dismiss the Protest if, in

the discretion of the Chief Classifier, the Protest does not comply with the Protest requirements in this Article 22: or

- b) The Chief Classifier may accept the Protest if, in the discretion of the Chief Classifier, the Protest complies with the Protest requirements in this Article 22.
- 22.4 If the Protest is dismissed the Chief Classifier and / or the Technical Delegate must notify all relevant parties and provide a written explanation to the National Body or National Paralympic Committee as soon as practicable. The Protest Fee of 100 Euro will be forfeited.

#### 22.5 If the Protest is accepted:

- a) The Protested Athlete's Sport Class must remain unchanged pending the outcome of the Protest but the Protested Athlete's Sport Class Status must immediately be changed to Review (R) unless the Protested Athlete's Sport Class Status is already Review (R);
- b) The Chief Classifier must appoint a Protest Panel to conduct a new Evaluation Session as soon as possible, which must be either at the Competition the Protest was made or at the next Competition the Athlete participates
- c) IPCH must notify all relevant parties of the time and date the new Evaluation Session is to be conducted by the Protest Panel.

#### 23 PCH PROTESTS

- 23.1 IPCH may, in its discretion, make a Protest at any time in respect of an Athlete under its jurisdiction if:
- a) It considers an Athlete may have been allocated an incorrect Sport Class.
- b) A National Body or National Paralympic Committee makes a documented request to IPCH. The assessment of the validity of the request is at the sole discretion of IPCH.

#### 24 PCH PROTEST PROCEDURE

- 24.1 If IPCH decides to make a Protest, the IPCH must inform the relevant National Body or National Paralympic Committee of the Protest at the earliest possible opportunity.
- 24.2 IPCH must provide the relevant National Body or National Paralympic Committee with a written explanation as to why the Protest has been made and the basis on which the Head of Classification considers it is justified.

#### 24.3 If IPCH makes a Protest:

- a) The Protested Athlete's Sport Class must remain unchanged pending the outcome of the Protest;
- b) The Protested Athlete's Sport Class Status must immediately be changed to Review (R) unless the Protested Athlete's Sport Class Status is already Review (R);
- c) A Protest Panel must be appointed to resolve the Protest as soon as is reasonably possible.

#### 25 PROTEST PANEL

- 25.1 A Chief Classifier may fulfil one or more of the Head of Classification's obligations in this Article 25 if authorised to do so by the Head of Classification.
- 25.2 A Protest Panel must be appointed by the Head of Classification in a manner consistent with the provisions for appointing a Classification Panel in this Classification Manual.

#### 25.3 A Protest Panel must not include:

a) Any person who was a member of the Classification Panel that made the Protested Decision;

- b) Any person who conducted any component of Athlete Evaluation in respect of the Protested Athlete within a period of 12 months prior to the date of the Protested Decision, unless otherwise agreed by the National Body, National Paralympic Committee or IPCH.
- 25.4 IPCH must notify all relevant parties of the time and date for the Evaluation Session that must be conducted by the Protest Panel.
- 25.5 The Protest Panel must conduct the new Evaluation Session in accordance with this Classification Manual. The Protest Panel may refer to the Protest Documents when conducting the new Evaluation Session.
- 25.6 The Protest Panel must allocate a Sport Class and designate a Sport Class Status. All relevant parties must be notified of the Protest Panel's decision in a manner consistent with the provisions for notification in this Classification Manual.
- 25.7 The decision of a Protest Panel in relation to both a National Protest and an IPCH Protest is final. A National Body, National Paralympic Committee or IPCH may not make another Protest at the relevant Competition.
- 26 PROVISIONS WHERE NO PROTEST PANEL IS AVAILABLE
- 26.1 If a Protest is made at a Competition but there is no opportunity for the Protest to be resolved at that Competition:
- a) The Protested Athlete must be permitted to compete in the Sport Class that is the subject of the Protest with Sport Class Status Review (R), pending the resolution of the Protest;
- b) All reasonable steps must be taken to ensure that the Protest is resolved at the earliest opportunity.

#### 27 SPECIAL PROVISION

27.1 IPCH may make arrangements (subject to the approval of IWAS) for some or all of the components of Athlete Evaluation to be carried out at a place and at a time away from a Competition. If so, IPCH must also implement Protest provisions to enable Protests to take place in respect of any Evaluation Sessions carried out away from a Competition.

Application during Major Competitions

• 28 AD HOC PROVISIONS RELATING TO PROTESTS

28.1 IPCH may issue special ad hoc provisions to operate during IPCH sanctioned Competitions / Events.

## PART SEVEN: MISCONDUCT DURING EVALUATION SESSION

#### 29 FAILURE TO ATTEND EVALUATION SESSION

29.1 An Athlete is personally responsible for attending an Evaluation Session.

29.2 An Athlete's National Body or National Paralympic Committee must take reasonable steps to ensure that the Athlete attends an Evaluation Session.

29.3 If an Athlete fails to attend an Evaluation Session, the Classification Panel will report the failure to the Chief Classifier. The Chief Classifier in agreement with the IPCH Technical Delegate of the Competition / Event may, if satisfied that a reasonable explanation exists for the failure to attend and subject to the practicalities at a Competition / Event, specify a revised date and time for the Athlete to attend a further Evaluation Session before the Classification Panel.

29.4 If the Athlete is unable to provide a reasonable explanation for non-attendance, or if the Athlete fails to attend an Evaluation Session on a second occasion, no Sport Class will be allocated and the Athlete will not be allowed to compete at the relevant Competition.

#### 30 SUSPENSION OF EVALUATION SESSION

30.1 A Classification Panel, in consultation with the Chief Classifier and with the IPCH Technical Delegate, may suspend an Evaluation Session if it cannot allocate a Sport Class to the Athlete, including but not limited to, in one or more of the following circumstances:

a) A failure on the part of the Athlete to comply with any part of the Classification Rules;

- b) A failure on the part of the Athlete to provide any medical information that is reasonably required by the Classification Panel;
- c) The Classification Panel believes that the use (or non-use) of any medication and / or medical procedures / device / implant disclosed by the Athlete will affect the ability to conduct its determination in a fair manner;
- d) The Athlete has a Health Condition that may limit or prohibit complying with requests by the Classification Panel during an Evaluation Session, which the Classification Panel considers will affect its ability to conduct the Evaluation Session in a fair manner;
- e) The Athlete is unable to communicate effectively with the Classification Panel;
- f) The Athlete refuses or is unable to comply with any reasonable instructions given by any Classification Personnel to such an extent that the Evaluation Session cannot be conducted in a fair manner;
- g) The Athlete's representation of his or her abilities is inconsistent with any information available to the Classification Panel to such an extent that the Evaluation Session cannot be conducted in a fair manner.
- 30.2 If an Evaluation Session is suspended by a Classification Panel, the following steps must be taken:
- a) An explanation for the suspension and details of the remedial action that is required on the part of the Athlete will be provided to the Athlete and / or the relevant National Body or National Paralympic Committee;
- b) If the Athlete takes the remedial action to the satisfaction of the Chief Classifier or Head of Classification, the Evaluation Session will be resumed;
- c) If the Athlete fails to comply and does not take the remedial action within the timeframe specified, the Evaluation Session will be terminated, and the Athlete

must be precluded from competing at any Competition until the determination is completed;

30.3 If an Evaluation Session is suspended by a Classification Panel, the Classification Panel may designate the Athlete as Classification Not Completed (CNC) in accordance with Section A Part 3 Art. 10 of this Classification Manual.

30.4 A Suspension of an Evaluation Session may be subject to further investigation into any possible Intentional Misrepresentation.

#### PART EIGHT: MEDICAL REVIEW

#### 31 MEDICAL REVIEW

- 31.1 This Article applies to any Athlete who has been allocated a Sport Class with Sport Class Status Confirmed (C) or Review with Fixed Review Date (FRD).
- 31.2 A Medical Review Request must be made if a change in the nature or degree of an Athlete's Impairment changes the Athlete's ability to execute the specific tasks and activities required by PCH in a manner that is clearly distinguishable from changes attributable to levels of training, fitness and proficiency.
- 31.3 A Medical Review Request must be made by the Athlete's National Body or National Paralympic Committee (together with a €100 non-refundable fee and any supporting documentation). The Medical Review Request must explain how and to what extent the Athlete's Impairment has changed and why it is believed that the Athlete's ability to execute the specific tasks and activities required by the sport has changed.
- 31.4 A Medical Review Request must be received by IPCH as soon as reasonably practicable.
- 31.5 The Head of Classification must decide whether or not the Medical Review Request is upheld as soon as is practicable following receipt of the Medical Review Request.
- 31.6 Any Athlete or Athlete Support Personnel who becomes aware of such changes outlined in Article 31.2 but fails to draw those to the attention of their National Body, National Paralympic Committee or IPCH may be investigated in respect of possible Intentional Misrepresentation.

31.7 If a Medical Review Request is accepted, the Athlete's Sport Class Status will be changed to Review (R) with immediate effect.

## PART NINE: INTENTIONAL MISREPRESENTATION

#### 32 INTENTIONAL MISREPRESENTATION

- 32.1 It is a disciplinary offence for an Athlete to intentionally misrepresent (either by act or omission) his or her skills and / or abilities and / or the degree or nature of Eligible Impairment during Athlete Evaluation and / or at any other point after the allocation of a Sport Class. This disciplinary offence is referred to as 'Intentional Misrepresentation'.
- 32.2 It will be a disciplinary offence for any Athlete or Athlete Support Personnel to assist an Athlete in committing Intentional Misrepresentation or to be in any other way involved in any other type of complicity involving Intentional Misrepresentation, including but not limited to covering up Intentional Misrepresentation or disrupting any part of the Athlete Evaluation process.
- 32.3 In respect of any allegation relating to Intentional Misrepresentation a hearing will be convened by IPCH to determine whether the Athlete or Athlete Support Personnel has committed Intentional Misrepresentation.
- 32.4 The consequences to be applied to an Athlete or Athlete Support Personnel who is found to have been guilty of Intentional Misrepresentation and / or complicity involving Intentional Misrepresentation will be one or more of the following:
- a) Disqualification from all events at the Competition at which the Intentional Misrepresentation occurred, and any subsequent Competitions at which the Athlete competed;
- b) Being allocated with Sport Class Not Eligible (NE) and designated a Review with Fixed Review Date (FRD)

Sport Class Status for a specified period of time ranging from 1 to 4 years;

- c) Suspension from participation in Competitions in all sport for a specified period of time ranging from 1 to 4 years;
- d) Publication of their names and suspension period.
- 32.5 Any Athlete who is found to have been guilty of Intentional Misrepresentation and / or complicity involving Intentional Misrepresentation on more than one occasion will be allocated Sport Class Not Eligible with Fixed Review Date Status for a period of time from 4 years to life.
- 32.6 Any Athlete Support Personnel who is found to have been guilty of Intentional Misrepresentation and / or complicity involving Intentional Misrepresentation on more than one occasion will be suspended from participation in any Competition for a period of time from 4 years to life.
- 32.7 If another International Sports Federation brings disciplinary proceedings against an Athlete or Athlete Support Personnel in respect of Intentional Misrepresentation which results in consequences being imposed on that Athlete or Athlete Support Personnel, those consequences will be recognised, respected and enforced by IPCH.
- 32.8 Any consequences to be applied to teams, which include an Athlete or Athlete Support Personnel who is found to have been guilty of Intentional Misrepresentation and / or complicity involving Intentional Misrepresentation, will be at the discretion of IPCH.
- 32.9 Any disciplinary action taken by IPCH pursuant these Classification Rules must be resolved in accordance with the applicable Board of Appeal of Classification Bylaws.

#### 33 CLASSIFICATION DATA

33.1 IPCH may only Process Classification Data if such Classification Data is considered necessary to conduct Classification.

33.2 All Classification Data Processed by IPCH must be accurate, complete and kept up-to-date.

#### 34 CONSENT AND PROCESSING

34.1 Subject to Article 34.3, IPCH may only Process Classification Data with the consent of the Athlete to whom that Classification Data relates.

34.2 If an Athlete cannot provide consent (for example because the Athlete is under age) the legal representative, guardian or other designated representative of that Athlete must give consent on their behalf.

34.3 IPCH may only Process Classification Data without consent of the relevant Athlete if permitted to do so in accordance with National Laws.

#### 35 CLASSIFICATION RESEARCH

35.1 IPCH may request that an Athlete provide it with Personal Information for Research Purposes.

35.2 The use of Personal Information by IPCH for Research Purposes must be consistent with this Classification Manual and all applicable ethical use requirements.

35.3 Personal Information that has been provided

by an Athlete to IPCH solely and exclusively for Research Purposes must not be used for any other purpose.

35.4 IPCH may only use Classification Data for Research Purposes with the express consent of the relevant Athlete.

35.5 If IPCH wishes to publish any Personal Information provided by an Athlete for Research Purposes, it must obtain consent to do so from that Athlete prior to any publication. This restriction does not apply if the publication is anonymised so that it does not identify any Athlete(s) who consented to the use of their Personal Information.

#### 36 NOTIFICATION TO ATHLETES

- 36.1 IPCH must notify an Athlete who provides Classification Data as to:
- a) The fact that IPCH is collecting the Classification Data;
- b) The purpose for the collection of the Classification Data:
- c) The duration that the Classification Data will be retained:

#### 37 CLASSIFICATION DATA SECURITY

#### 37.1 IPCH must:

a) Protect Classification Data by applying appropriate security safeguards, including physical, organisational, technical and other measures to prevent the loss, theft or unauthorised access, destruction, use, modification or disclosure of Classification Data.

b) Take reasonable steps to ensure that any other party provided with Classification Data uses that Classification Data in a manner consistent with this Classification Manual.

#### 38 DISCLOSURES OF CLASSIFICATION DATA

38.1 IPCH must not disclose Classification Data to other Classification Organisations except where such disclosure is related to Classification conducted by another Classification Organisation and / or the disclosure is consistent with applicable National Laws.

38.2 IPCH may disclose Classification Data to other parties only if such disclosure is in accordance with these Classification Rules and permitted by National Laws.

#### 39 RETAINING CLASSIFICATION DATA

- 39.1 IPCH must ensure that Classification Data is only retained for as long as it is needed for the purpose it was collected. If Classification Data is no longer necessary for Classification purposes, it must be deleted, destroyed or permanently anonymised.
- 39.2 IPCH must publish guidelines regarding retention times in relation to Classification Data.
- 39.3 IPCH must implement policies and procedures that ensure that Classifiers and Classification Personnel retain Classification Data for only as long as is necessary in order for them to carry out their Classification duties in relation to an Athlete.

#### 40 ACCESS RIGHTS TO CLASSIFICATION DATA

- 40.1 Athletes may request from IPCH:
- a) Confirmation of whether or not that IPCH Processes Classification Data relating to them personally and a description of the Classification Data is held;
- b) Copy of the Classification Data held by IPCH;
- c) Correction or deletion of the Classification Data held by IPCH.
- 40.2 A request may be made by an Athlete or a National Body or a National Paralympic Committee on an Athlete's behalf and must be complied with within a reasonable period of time.

#### 41 CLASSIFICATION MASTERLIST

- 41.1 IPCH must maintain a Classification Master List of Athletes, which must include the Athlete's name, gender, year of birth, country, Sport Class and Sport Class Status. The Classification Master List must identify Athletes that entered International Competitions.
- 41.2 IPCH must make the Classification Master List available to all relevant National Bodies on the IPCH website.

#### PART ELEVEN: APPEALS

#### 42 APPEAL

42.1 An Appeal is the process by which a formal objection to how Athlete Evaluation and / or Classification procedures have been conducted is submitted and subsequently resolved.

#### 43 PARTIES PERMITTED TO MAKE AN APPEAL

43.1 An Appeal may only be made by one of the following bodies:

A National Body; or

A National Paralympic Committee.

#### 44 APPEALS

- 44.1 If a National Body or National Paralympic Committee considers there have been procedural errors made in respect of the allocation of a Sport Class and / or Sport Class Status and as a consequence an Athlete has been allocated an incorrect Sport Class or Sport Class Status, it may submit an Appeal.
- 44.2 The Board of Appeal of Classification (BAC) will act as the hearing body for the resolution of Appeals.
- 44.3 An Appeal must be made and resolved in accordance with the applicable BAC Bylaws.

#### 45 AD HOC PROVISIONS RELATING TO APPEALS

45.1 IWAS and / or IPCH may issue special ad hoc provisions to operate during IPCH Sanctioned Competitions / Events.

Implements and apparatus adapted to the special needs of Athletes, and used by decision during Athletes during Competition to facilitate participation and / or to achieve results.

# ppeals

The means by that IPCH has made an unfair the Classification process is resolved.

# Athlete

For purposes of which a complaint Classification, any person who participates in sport at the international this Classification level (as defined by IPCH) or nation- that an Athlete al level (as defined may be allocated by each National Federation) and any additional person who participates in sport at a lower level if designated by the person's National Federation.

# thlete

The process by which an Athlete is assessed in accordance with Manual in order a Sport Class and Sport Class Status.

### Athlete Support Personnel

Any coach, trainer, manager, interpreter, agent, team staff, official, medical or para-medical personnel working with or treating Athletes participating in or preparing for training and / or Competition.

#### BAC

The IPC Board of Appeal of Classification.

A classifier appointed by IPCH to direct, administer, coordinate and implement Classification matters for a specific Competition according to this Classification Manual.

# Classification

Grouping Athletes into Sport Classes according to how much their Impairment affects fundamental Athlete and / or activities in each specific sport or discipline. This is also referred to as Classification Athlete Classifica- Organisation in tion.

## Classification ata

Personal Information and / or sensitive Personal Information provided by an a National Body and / or any other person to a connection with Classification.

## Classification ntelligence

Information obtained and used by an International Sport Federation in relation to Classification.

## Classification Master List

A list made available by the IPCH that identifies Athletes who have been allocated a Sport Class and designated a Sport Class Status.

### Classification

#### Not

#### Completed

The designation applied to an Athlete who has commenced but not completed Athlete Evaluation.

## Classification Organisation

Any organisation that conducts the Evaluation and allocates Sport Classes and / or holds Classification Data.

# Classification

A group of Classifiers, appointed by process of Athlete IPCH, to determine Sport Class and Sport Class Status in accordance with this Classification Manual, Classification Personnel: Persons, including Classifiers, acting with the authority of a Classification Organisation in relation to Athlete Evaluation, for example administrative officers.

# Classification

Also referred to as Classification Rules and Regulations. The policies, procedures, protocols and descriptions adopted by IPCH in connection with Athlete Evaluation.

# System

The framework used by IPCH to develop and designate Sport Classes within PCH.

### Classifier

A person authorised as an official by IPCH to evaluate Athletes as a member of a Classification Panel.

### Classifier Certification

The processes by which IPCH must assess that a Classifier has met the specific Classifier Competencies required to obtain and maintain certification or licensure.

# Classifier Ompetencies

The qualifications and abilities that IPCH deems necessary for a Classifier to be competent to conduct Athlete Evaluation for sport(s) governed by IPCH.

# Classifier Code of Conduct

The behavioural and ethical standards for Classifiers specified by IWAS / IPCH.

Code

The Athlete Classification Code 2015 together with the International Standards for: Athlete Evaluation; Eligible Impairments; Protests and Appeals; Classifier Personnel and Training; and Classification Data Protection.

# Competition

A series of individual events conducted together under one ruling body.

## Compliance

The implementation of rules, regulations, policies and processes that adhere to the text, spirit and intent of the Code as defined by the IPC. Where terms such as (but not limited to) 'comply', 'conform' and 'in accordance' are used in the Code they shall have the same meaning as 'Compliance.'

# Continuing Education

The delivery of higher knowledge and practical skills specified by IPCH to preserve and / or advance knowledge and skills as a Classifier in PCH.

# **Diagnostic**

Medical records and / or any other documentation that enables IPCH to assess the existence or otherwise of an Eligible Classification Impairment or Underlying Health Condition.

An Impairment designated as being a prerequisite for competing in Para sport, as detailed in these Rules.

# Assessment

An ad hoc body formed to assess the existence or otherwise of an Eligible Impairment.

Standards set by IPCH relating to the expertise or experience levels of persons who wish to be Classifiers. This may be, for example, former Athletes or coaches, sports scientists, physical educators and medical professionals, all of whom have the qualifications and abilities relevant to conduct all, or specific parts of, Athlete Evaluation.

# Entry-level Education

The basic knowledge and practical skills specified by IPCH to begin as a Classifier in the sport(s) under its governance.

# I

# Evaluation Session ompetencies

The session an Athlete is required to attend for a Classification Panel to assess that Athlete's compliance with the Minimum Impairment Criteria for PCH: and allocation of a Sport Class and Sport Class Status depending on the extent to which that Athlete is able to execute the fundamental specific tasks and activities for PCH. An Evaluation Session may include Observation in Competition.

# Event

A single match, game or singular sport contest.

The second of the secon

# Appearance

The first time an A date set by a Athlete competes Classification Pa in an Event during el prior to which a Competition in an Athlete desig a particular Sport nated with a Sport Class. Class Status Re-

# Fixed Review Date

A date set by a
Classification Panel prior to which
an Athlete designated with a Sport
Class Status Review with a Fixed
Review Date will
not be required
to attend an Evaluation Session
save pursuant to
a Medical Review
Request and / or
Protest.

# Head of

## Classification

A person appointed by IPCH to direct, administer, coordinate and implement Classification matters for IPCH.

## Health Condition

A pathology, acute or chronic disease, disorder, injury or trauma.

# mpairment

## A Physical, Vision or Intellectual Impairment.

# ntellectua mpairmen

A limitation in intellectual functioning and adaptive behaviour as expressed in conceptual, social and practical adaptive skills that originates before the age of eighteen (18).

# presentation ntentional

A deliberate attempt (either by fact or omission) to mislead an International Sport Major Competi-Federation or National Body as to the existence or extent of skills and / or abilities relevant to a Para sport and / or the degree or nature of Eligible Impairment during Athlete Evaluation and / or at any other point after the allocation of a Sport Class.

# Competitions nternational

A Competition where the IPC, an International Sport Federation or a tion Organisation is the governing body for the Competition and / or appoints the technical officials for the Competition.

# International Sport

### Federation

as the sole world-wide representative of for the Disabled act as an International a sport for Athletes with an Impairment that has been granted the status as a Para sport by the IPC. The IPC and

A sport federation recognised by the IPC the International Organisations of Sports Sport Federation for certain sports.

# Σ

International Standards

A document complementing the Code and providing additional technical and operational requirements for Classification.

 $\Gamma$ 

International Paralympic Committee.

Maintaining Certificatior

The advanced training, education and practice necessary for continued competency as a Classifier.

Competition Organiser

An organisation that functions as the ruling body for an International Competition.

# Medical Diagnostics Form

A form that a National Body or National Paralympic Committee must submit in order for an Athlete to undergo Athlete Evaluation, identifying the Athlete's Health Condition if so required.

## Medical Review

The process by which IPCH identifies if a change in the nature or degree of an Athlete's Impairment means that some or all of the components of Athlete Evaluation are required to be undertaken in order to ensure that any Sport Class allocated to that Athlete is correct.

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A request made by a National Body or National Paralympic Committee for Medical the implementa-Review, made on behalf of an Athlete.

# Models

An ad hoc guidance document prepared by the IPC to assist in tion of the Code and International Standards.

Refers to the national member of an International Sport Federation.

The national data protection and privacy laws, regulations and policies applicable to a Classification Organisation.

# National Paralympic Committees

The national member of the IPC who is the sole representative of Athletes with an Impairment in that country or territory. These are the national members of the IPC.

## National Protest

A Protest made by a National Body or a National Paralympic Committee in respect of an Athlete under its jurisdiction.

# Competition

Any place or location (outside of a Competition) designated by IPCH as being a place or location where Athlete Evaluation is made available to nation as to the Athletes in order that they may be allocated a Sport Class and designated with a Sport Class Status.

# Observation

The observation of an Athlete in a Competition by a Classification Panel so that the Classification Panel can complete its determiextent to which an Eligible Impairment affects that Athlete's ability to execute the fundamental specific tasks and activities for PCH.

# Permanent

The term Permanent as used in the Code and Standards describes an Impairment that is unlikely to be resolved meaning the effects are lifelona.

# Information Personal

Any information that refers to, or relates directly to, an Athlete.

# Physical Impairment

An Impairment that affects an Athlete's biomechanical execution of sporting activities, comprising Ataxia, Athetosis, Hypertonia, Impaired Muscle Power, Impaired Passive Range of Movement, Limb Deficiency, Leg Length Difference and Short Stature.

## Process / Processing

The collection, recording, storage, use or disclosure of Personal Information and / or sensitive Personal Information.

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An Athlete whose Sport Class is being challenged. Protested Decision: The Sport Class decision being challenged.

# Protest Documents

The information provided in the Protest Form together with the Protest Fee

# Protest Fee

The fee prescribed by IPCH, payable by the National Body or National Paralympic Committee when submitting a Protest.

# Protest Form

The form on which a National Protest must be submitted.

## Protest

The procedure by which a reasoned objection to an Athlete's Sport Class is submitted and subsequently resolved.

## Protest

### Panel

A Classification Panel appointed by the Chief Classifier to conduct an Evaluation Session as a result of a Protest

The process by which IPCH must assess that a Classifier has maintained specific Classifier Competencies.

# Recognised Competition

Research into matters pertaining to the development of sports within the Paralympic Movement, including the impact of Impairment on the fundamental activities in each specific sport and the impact of assistive technology on such activities.

# Signatories

Any organisation that accepts the Code and commits to implement reference to the it and the International Standards by way of its Clas- form the specific sification Rules.

# Sport Class

A category for Competition defined by IPCH by extent to which an Athlete can pertasks and activities required by a sport.

# Sport

## Class

## Status

A designation applied to a Sport Class to indicate the extent to which an Athlete may be required to undertake Athlete Evaluation and / or be subject to a Protest.

Tracking Code Observation Assessment (0A)

A designation given to an Athlete that replaces the Athlete's Sport Class Status until Observation in Competition has been completed.

Underlying Health Condition

A Health Condition that may lead to an Eligible Impairment.

## IPCH CLASSIFICATION SYSTEM

SECTION B

- 1.1 The IWAS Powerchair Hockey (IPCH) coordinates PowerChair Hockey movement worldwide. This sport is addressed to people with severe physical disabilities as an attractive, competitive, fair and well-organised team sport, including sport on elite level. It is a mixed sport for men and women without age limits.
- 1.2 Classification is necessary to establish eligibility to compete in this sport and to group together in a transparent, regular and fair way those athletes who have eligible physical impairments that are approximately equal in the loss of movement potential, particularly in playing Powerchair Hockey, ensuring that teams can compete in an equal and fair way.
- 1.3 The classification procedure is aimed to ensure a fair and equal competition, where the outcomes of the games are as much as possible related to trainings and personal abilities and talents rather than to the impact of impairments.
- 1.4 The classification system is, as far as possible, based on the motoric abilities required forPowerchair Hockey and is applicable to athletes with eligible physical impairments as defined by the International Paralympic Committee (IPC) / International Wheelchair and Amputee Sport Federation (IWAS) as stated in Section B Part 2.
- 1.5 Classification is an ongoing process whereby all athletes are under regular observation by classifiers to ensure consistency and fairness for all athletes.
- 1.6 The classification process in Powerchair Hockey is under the responsibility of the IPCH Technical and Classification Officer and the IPCH Classification

Committee for recommending policies, guidelines and procedures with respect to the IPC / IWAS Classification Codes.

- 1.7 Classification Panels / Classifiers are always acting according to the IPC / IWAS Code of Ethics. Classifiers have undersigned a Code of Conduct that apply not only for or during the competition, they can be appointed for but also further.
- 1.8 Classification has to be specific enough to achieve standardisation, but yet general enough in other areas to permit flexibility in team composition and ensuring, therefore, the attractiveness of the competitions. The IPCH Classification Committee shall ensure that classification rules are independent of gender, nationality, race, religion, economic status, political opinions or any other social conditions or statuses.

# 2 ELIGIBLE IMPAIRMENT TYPES FOR PCH ATHLETES

### ELIGIBLE IMPAIRMENT

mpaired Muscle Power

Athletes with Impaired Muscle Power have a Health Condition that either reduces or eliminates their ability to voluntarily contract their muscles in order to move or to generate force.

ımb Jeficiency

Athletes with Limb Deficiency have total or partial absence of bones or joints. Short Stature

Reduced length in the bones of the upper limbs, lower limbs and / or trunk.

### EXAMPLES OF HEALTH CONDITIONS

Examples of an Underlying Health Condition that can lead to Impaired Muscle Power include spinal cord injury (complete or incomplete, tetra-or paraplegia or paraparesis), muscular dystrophy, post-polio syndrome and spina bifida.

Examples of an Underlying Health Condition that can lead to Limb Deficiency include: traumatic amputation, illness (for example amputation due to bone cancer)or congenital limb deficiency (for example dysmelia).

Examples of an Underlying Health Condition that can lead to Short Stature include achondroplasia, growth hormone dysfunction, and osteogenesis imperfecta.

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Athletes with hypertonia have an increase in muscle nated movements tension and a reduced ability of a muscle to stretch caused by damage to the central nervous system.

Athletes with Atax- Athletes with ia have uncoordicaused by damage to the central nervous system.

# Athetosis

Athetosis have continual slow involuntary movements.

Athletes with Impaired Passive Range of Movement have a restriction or a lack of passive movement in one or more joints.

Examples of an Underlying Health Condition that can lead to Hypertonia include cerebral palsy, traumatic brain injury, stroke and multiple sclerosis.

Examples of an Underlying Health Condition that can lead to Ataxia include: cerebral palsy, traumatic brain injury, stroke and multiple sclerosis.

Examples of an Underlying Health Condition that can lead to Athetosis include cerebral palsy, traumatic brain injury, stroke and multiple sclerosis.

Examples of an Underlying Health Condition that can lead to Impaired Passive Range of Movement include (1) Arthrogrypsis and (2)Contractures resulting from chronic joint immobilisation or trauma affecting a joint.

### 3 NON-ELIGIBLE IMPAIRMENT TYPES

Examples of Non-Eligible Impairments include, but are not limited to the following:

- Pain
- Hearing impairment
- · Low muscle tone
- Hypermobility of joints
- Joint instability, such as unstable shoulder joint, recurrent dislocation of a joint.
- Impaired muscle endurance.
- Impaired motor reflex functions.
- Impaired cardiovascular functions.
- Impaired respiratory functions.
- Impaired metabolic functions.
- Tics and mannerisms, stereotypes and motor perseveration

# 4 HEALTH CONDITIONS THAT AREN'T UNDERLYING HEALTH CONDITIONS FOR ALL ATHLETES

A number of Health Conditions do not lead to an Eligible Impairment and are not Underlying Health Conditions. An Athlete who has a Eligible Impairment but who does not have an Underlying Health Condition will not be eligible to compete in PCH.

Examples of not Underlying Health Conditions are Health Condition that:

- 1 Primarily cause pain;
- 2 Primarily cause fatigue;
- 3 Primarily cause joint hypermobility or hypotonia.
- 4 Are primarily psychological or psychosomatic in nature

Do not lead to an Eligible Impairment.

Ad 1: Examples of Health Conditions that primarily cause pain include myofacial pain-dysfunction syndrome, fibromyalgia or complex regional pain syndrome.

Ad 2: An example of a Health Condition that primarily causes fatigue is chronic fatigue syndrome.

Ad 3: An example of a Health Condition that primarily causes hypermobility or hypotonia is Ehlers-Danlos syndrome.

Ad 4: Examples of Health Conditions that are primarily psychological or psychosomatic in nature include conversion disorders or post-traumatic stress disorder.

### 5 MINIMUM IMPAIRMENT CRITERIA PCH

# 5.1. CLASSIFICATION FORMULA PCH AND CLASSIFICATION PROFILES

### · Classification Formula PCH

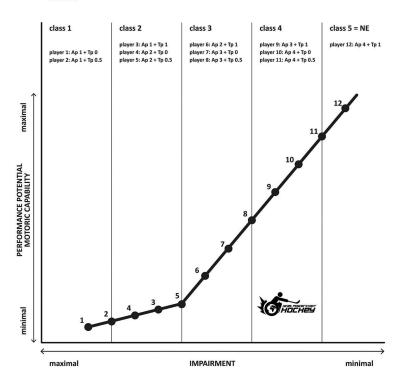
Sportclass = sum Arm profile (Ap) + Trunk profile (Tp) (Arm profile is the profile of the playing arm).

Possible Arm profiles: Ap 1, Ap 2, Ap 3 and Ap 4.

Possible Trunk profiles: Tp 0, Tp 0.5 and Tp 1.0

Trunk profile: TIC (Trunk Impairment Classification): see Attachment. TIC: applicable on all PCH Impairment types.

#### POWERCHAIR HOCKEY Relation impairment and motoric capability kvb 2017



Ap = Arm power
Tp = Trunk power
Players 2, 5, 8 and 11 have maximal motoric capability / performance potential in their classes: favorite players for coaches

In the scheme is shown that PCH Athletes do have one of the 12 possible profiles.

#### 5.2. MINIMUM IMPAIRMENT CRITERIA (MIC) GENERAL

# Sport Entry Class / Minimum Impairment Criteria:

Maximum score of sum Arm profile + Trunk profile may NOT exceed score 4.5 for all Athletes independant of impairment type: score 4.5 is the highest possible score to be eligible for PCH.

See scheme "Relation Impairment – Motoric Capability": player profile 9 (Ap 3 + Tp 1), player profile 10 (Ap 4 + Tp 0) and player profile 11 (Ap 4 + Tp 0.5) are Eligible players. They are class 4 players.

The player with the 5.0 profile (Ap 4 + Tp 1), player 12 in the Scheme 'Relation Impairment – Motoric Capability', will be an Ineligible PCH player. Class 5, NE, player.

# 5.3. MINIMUM IMPAIRMENT CRITERIA (MIC) > SPECIFIC FOR EACH IMPAIRMENT TYPE

(see Attachment: Classification Form)

- a) Strength Impairment: Ap 4 means general profile of the playing arm of MRC 4 or MRC 5.
- b) Range of Movement (ROM) Impairment: Ap 4 means ROM falls into the 76% 100% of normal ROM of Shoulder, Elbow and Wrist / Hand.
- c) Short Stature: Ap 4 means ROM 76% 100% of normal ROM Shoulder, Elbow and Wrist / Hand. Osteogenesis Imperfecta / Achondroplasia: Men: Arm-length exceeds 38 cm ánd ROM 76% 100% range: Ap 4. Women: Armlenght exceeds 34 cm ánd ROM 76% 100% range: Ap 4 (explanation / motivation: (Section B Part.7).
- d) Limb Deficiency / Amputation: Ap 4 means no amputation playing arm or an amputation which does not

have an impact on both Ballhandling & Hitting/pashing. The player having such amputation of the playing arm (Ap 4) must have a Trunk impairment (maximum Tp 0.5) in order to be eligible to play PCH.

e) Coordination Impairment: Ap 4 means Arm without Coordination limitations of Arm with Coordination impairment (only) in Fingers and Wrist (see Attachment: Coordination Tests).

All of the above Arm profiles will lead to inegible players, when their Trunk score is 1.

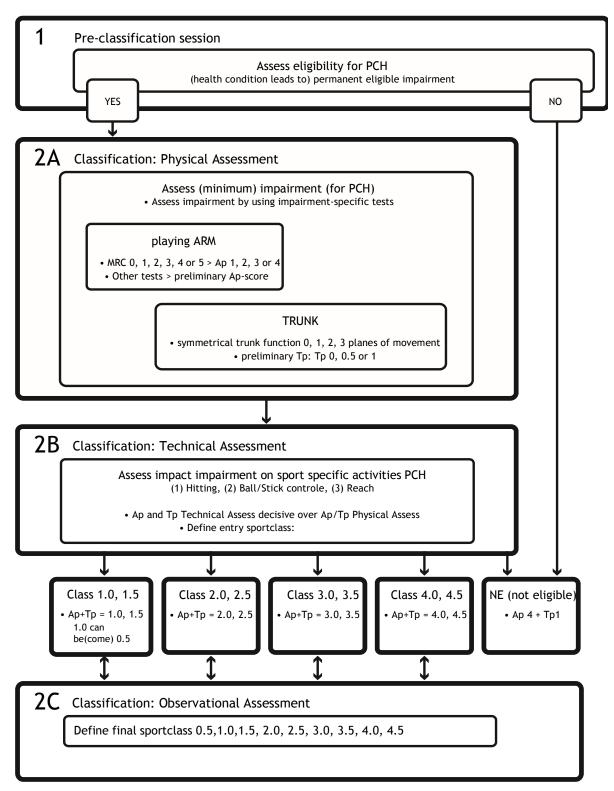
$$(Ap 4 + Tp 1 = 5 = NE).$$

In Section B - Part.7. Assessment Criteria, the other Arm profiles (Ap 1, Ap 2 and Ap 3) are further detailed.

## 6 ASSESSMENT METHODOLOGY PCH

The Classification Process for PCH will be described

## PCH Classification process Flowchart



Ap = Arm profile / Tp = Trunk profile

#### 6.1. PCH CLASSIFICATION PROCESS

In the Pre-classification session the Eligibility of the PCH Athlete is assessed in advance by using the Medical Diagnostic Form (See Attachment "Medical Diagnostic Form"). This document can be downloaded from the IPCH website or can be requested from the IPCH Technical and Classification Officer at any time. Before each Classification Session it will also be sent to the National Federations / Organizations interested or involved. The form has to be returned to IPCH, correctly filled in and 6 weeks before the athlete undergoes evaluation. The Athlete should have an Eligible Impairment and Health Condition. If not: sportclass NE will be allocated with Sport Class Status C. If possible, it should also be indicated that the Athlete fulfils the MIC (Minimum Impairment Criteria) in order to be able to participate in the PCH Competition.

The Athlete who comes out of the Pre Classification Session as an Eligible Athlete can go through the actual PCH Classification after signing the Consent Form: (see Attachment "Classification Consent Form". The actual Classification contains three steps:

Physical Assessment

Technical Assessment and

Observational Assessment (if needed, indicated by Tracking Code: OA).

Physical Assessment and Technical Assessment are done in a non-competitive environment. The PCH Classification Form will be used (see Attachment "Classification Form") during these Assessments.

#### 6.2. PHYSICAL ASSESSMENT

In the Physical Assessment the Arm profile (Ap) and Trunk profile (Tp) will be assessed. Impairment specific Tests will be used: MRC scaling for Strength Impaired Athletes, Range of Motion Assessment for ROM Impaired Athletes, lenght measurement for Limb Deficiency Impaired Athletes, lenght measurement and ROM testing for Athletes with Short Stature and Coordination Tests for Coordination Impaired Athletes. For the Trunk Assessment the TIC, Trunk Impairment Classification, will be used (see Attachment TIC, Trunk Impairment Classification).

These Trunk Impairment Tests from the scientific work from Altmann, are very useful here: these tests are clearly described and can be executed by the players very easily, are non-demanding and can be done in very limited time. And important: for PCH only 4 Trunk tests out of the original Altmann's TIC 10 tests battery are used. No muscle testing is performed in this phase, only execution of Trunk movements to define the Reaching capabilities of a player.

See Trunk Tests: in the Appendix TIC.

- Trunk test 1: sitting straight, unsupported
- Trunk test 3: forward / rearward flexion.
- Trunk test 4: rotation to both sides.
- Trunk test 5: lateral flexion to both sides.

Trunk test 1: will differentiate between Trunk-profile 0 (zero: fail Test 1) and Trunk-profile 0.5 (succeed Test 1).

Trunk tests 3, 4 and 5: when the athlete is not able to perform all three (fail one or two Tests), he / she will, still, become the Trunk-profile 0.5. When succeeding all three Trunk Tests, he / she will have the Trunk-profile 1.0.

### PCH eligible Impairment types and their measuring tests

Impairment type	Test		
	Arm	Trunk	
Impaired muscle power	MRC	TIC tests	
Impaired passive range of motion	PROM (goniometer / degrees)	TIC tests	
Limb deficiency / anatomical malformation(s)	Length Measurement	TIC tests	
Short stature	PROM (goniometer / degrees and lenght measure- ment)	TIC tests	
Hypertonia, Ataxia and Athetose	Coordination test/ASAS	TIC tests	

#### 6.2.1. WITH IMPAIRED MUSCLE POWER

#### Arm

MRC (Medical Research Council) test by MMT (Manual Muscle testing).

Test the playing arm: not the drive arm / hand. (unless to differentiate between 0.5 and 1.0). Test the muscles / joint movements as described on the PCH Classification Form (see Attachment: "PCH Classification Form").

Assessment of the strength of the muscle groups of this arm will be done after the athlete is asked to perform each separate movement 10 times. This has

to be done to include the component of endurance, while the fatigue of muscles is an inclusive aspect of Muscular Dystrophies / neuromuscular diseases and doing the manual muscle testing in this way will result in a more realistic strength score.

**Grade 5** 

Muscle group has maximal strength: maintain end-point range against maximal resistance. Examiner cannot break the athletes hold position.

Grade 4

Muscle group can tolerate strong resistance without breaking the test position. The grade 4 muscle 'gives' or 'yields' to some extent at the end of its range with maximal resistance. When maximal resistance clearly results in a break, the muscle is assigned a grade 4.

Grade 3

The muscle or muscle group can complete a full range of motion against only the resistance of gravity. If a tested muscle can move through the full range against gravity but additional resistance, however mild, causes the motion to break, the muscle is assigned a grade of 3. For PCH we use the following refinement:

- 3 5-10 repetitions
- 3 10 repetitions
- 3 + 10 repetitions then minimal / mild resistance

N			
ade			
Gra			

The grade 2 muscle is one that can complete the full range of motion in a position that minimizes the force of gravity. This position often is described as the horizontal plane of motion

Grade Grade

Visually or by palpation, The grade o muscle is there is some contractile activity. There is, however, no movement inspection. of the body part as a result of this minimal contractile activity.

completely quiescent on palpation or visual

- gravity elimi-2 natedmovement that is less than full range of motion.
- against gravity, 2 + up to half of full range of motion.

#### Trunk

See TIC tests in the Appendix.

# 6.2.2. WITH IMPAIRED RANGE OF MOTION OR SHORT STATURE

#### Arm:

**PROM** 

Passive Range of Motion' involves placing a body part through its various directional motions, all without the activation of the athletes' muscles, so that the movement is performed entirely by an external source.

Measure the PROM in shoulder, elbow, wrist, fingers of the playing arm, in degrees, with a goniometer. Joint movements which need to be measured are stated in the "Clasification Form" (see Attachment: "Classification Form"). For Athletes with Osteogenesis Imperfecta / Achondroplasia or similar Health Conditions also the length of the playing arm will be measured.

#### Trunk:

The Trunk profile will be measured in this Physical Assessment with the TIC: (see Attachment "TIC, Trunk Impairment Classification"), but need to be checked as well again in the Technical Assessment to be able to decide on the Trunk profile and to define the Entry Sport Class.

#### 6.2.3. WITH LIMB DEFICIENCY / AMPUTATION

### • Arm

Length Measurement. Describe eventually the anatomical malformation.

#### Procedure:

Measurement of loss of limb / limb deficiency (see Attachment 8 "Measurement of loss of limb / limb deficiency").

### · Legs:

Length Measurement of amputation(s) (if needed).

#### • Trunk:

TIC (see Attachment "TIC, Trunk Impairment Classification").

#### 6.2.4. WITH HYPERTONIA, ATAXIA, ATHETOSE

#### • Arm

Coordination tests of shoulder, elbow, wrist and fingers of the playing arm (see Attachment: "Coördination Tests") The athlete will be instructed to do quick alternating movements to detect type, location and severity of the coordination impairment.

#### · ASAS SCORE 0-4

0	<del></del>	N	M	4
No Catch on 'rapid passive movement' (RPM).	Catch occurs on RPM followed by release: there is no resistance to RPM throughout rest of range.	Catch occurs in second half of available range (after halfway point during RPM and is followed by resistance throughout remaining range.	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.	When attempting RPM, the body part appears fixed but moves on slow passive movement. Besides the Physical Assessment, the Technical Assessment is (very) necessary in order to be able to define the Entry
Spasticity Assessment			range.	Sports Class.
Scale) will also be used to detect eventual 'catches' in biceps and / or triceps :				2,5 2.100 0.000.

#### Trunk:

TIC (see Attachment "TIC, Trunk Impairment Classification").

The function of the TIC test here is, as for the arm profile, to detect the type, location and severity of the coordination impairment. It is advisable not to score the trunk with 0, 0.5 or 1.0, but first to focus at the impact of the trunk function on the execution of the PCH sport specific activities in the Technical Assessment, before an Entry Sport Class is given..

#### 6.3. TECHNICAL ASSESSMENT

The Technical Assessment will be an evaluation of the relation between the Impairment and the Sport Specific Activities that determine proficiency in PCH. It is an Assessment of the impact of the Impairment on these Sport Specific Activities.

#### 6.3.1. ACTIVITIES THAT DETERMINE PROFICIENCY IN PCH

Three core determinants which determine the proficiency in PCH are:

Hitting Power
Ball / stick-control
Reach

### 1 - Hitting power

Is the result of the player's ability to lift the stick and while doing that being able to make 'explosive' movements with the stick.

This can be describe as the vertical 'Volume of Ac-

tion': the way the stick is used in the vertical plane.

Example Strength Impaired Athlete:

A player with the Arm impairment score / profile 1 or 2 (MRC score 1 on average or 2 on average) will use the stick most of the time on the ground and has for that reason, limited or no 'vertical volume of action'. The 'hitting' will be often 'pushing', while he does not often lift the stick, does not have the capacity for explosive movements and for that reason the power of the hit (push) will be limited.

The player with the Arm impairment score / profile 3 (MRC score 3 for the arm on average), is able to lift the stick but the power is still limited because of the strength impairment. This player can 'hit' the ball (there is 'vertical volume of action' making that possible) but with less power as done with a normal, not impaired arm.

The player with the Arm impairment score / profile 4, has almost normal strength (MRC 4 score) or normal (MRC 5 score) in his playing arm. His hitting power is for that reason not limited.

#### 2 - Ball / stick-control

Do refer to the capability and control of the arm / hand operating the ball / stick combination. This capability and control can be limited by strength, range of motion, limb deficiency or coordination, influencing the accuracy in ball-handling (receiving the ball and forehand to backhand manoeuvres and reverse). Although ball / stick-control can be seen both in the horizontal plane as in the vertical plane, it is most obvious in the horizontal plane / on the ground.

#### 3 - Reach

This third determinant of PCH performance is especially related to the Trunk and can be described as the 'Horizontal Volume of Action'

Definition 'Horizontal Volume of Action':

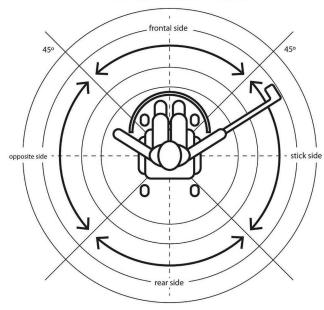
The limit to which a player can move his stick blade voluntarily in any horizontal direction (stick side, frontal side, opposite side and rear side) and with control return the stick blade to the stick side of the powerchair.

When a player does not have Trunk movements, the result will be a limited 'Horizontal Volume of Action', a limited covered space around the power-chair which will limit the Reaching possibilities (see the drawings with Horizontal and Vertical ('Volume of Action)' to define the different sides of the powerchair and Reaching-circles).

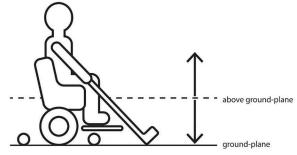
# IPCH Classification Form kvb | januari 2016



#### Horizontal 'Volume of Action'



#### Vertical 'Volume of Action'



With the Arm profile 4, but without Trunk movements, the player will be able to cover a certain space around the powerchair, but limited to the smaller 'circles' (see drawing 'Volume of Action). The forward flexion, rotation and lateral flexion of the Trunk will increase the 'Horizontal Volume of Action' and by that the reaching possibilities and proficiency in PCH. The player will now be able to cover also the outside circles around the powerchair.

# 6.3.2. ASSESSMENT OF THE IMPACT OF THE IMPAIRMENT ON THE ACTIVITIES IN PCH

The allocation of a Sport Class must be based on an evaluation of the extent with which the Impairment affects the specific tasks and activities fundamental to PCH. This evaluation must take place in a controlled non-competitive environment, which allows the repeated observation of key tasks and activities.

The Technical Assessment contains three Tests.

These three Tests will assess the impact of the Impairment on the PCH sport-specific activities:

Hitting Power
Ball / stick-control
Reach

Before the Technical Assessment the Classification Panel decides which tests the Athlete should perform based on the result of the Physical Assessment.

Athletes who have an Arm-impairment measure which fits the class 1.0 in the Physical assessment AND do use a T-stick, do not need to do these tests.

In these Tests term 'Volume of Action' will be used. The 'Volume of Action' of a Powerchair Hockey player is described as "the limit to which a player can move his stick blade voluntarily in any direction and with control return the stick blade to the stick-side of the powerchair.

The Horizontal 'Volume of Action' includes all four horizontal directions: (1) Stick-side, (2) Front-side, (3) Opposite-side, (4) Rear-side and the smaller or larger Reaching-circles into these sides: that will play a role in Test 3 (Reach).

The 'Vertical Volume of Action' of a Powerchair-Hockey player describes the way the stick is used in the vertical space:

Only used in the ground-plane,

Only used in the Ground-plane and in the vertical space till seat height.

Used without compensations / passive movements in the regions of the vertical space.

See drawing 'Horizontal and Vertical Volume of Action'

Look for the quality of the movement of Arms and Trunk and not score only the result (in terms of quantity) of the tests..

#### TEST 1. HITTING POWER

Hitting a moving ball as hard as possible from the stick side while driving the Powerchair. Same from the opposite side of the Powerchair.

#### Test goal:

Define the 'Vertical Volume of Action'. This test will assess the impact of the Arm / Hand Impairment on PCH sport specific activity 1: 'Hitting'. the Goal is to define and check the Arm-profile.

#### Instruction:

The Athlete starts driving. The classifier stands at more or less 20 meter and rolls the ball towards the player. Assess both forehand Hitting and backhand Hitting. Perform as many repetitions as needed. If doubting about the role of fatigue / the endurance aspect, repeat in fast pace 10 (ten) time hitting and look for difference in hitting power / explosivity at last trials.

"Hit ball as hard as you can back to me, first your forehand, later your backhand."

Ask the Athlete to perform the task with use of rotation of the powerchair and without it. Rotation of the powerchair will help the athlete, by centrifugal force, to lift the stick higher enabling him to hit the ball with more force.

#### Test observation :

Assess the impact of the Arm / Hand Impairment on the execution of the sport specific activity 'Hitting': look for the 'Vertical Volume of Action' which is responsible for Hitting-power / explosiveness.

Be cautious for 'equipment-use': the rotation of the powerchair will help the athlete to perform the task at a higher level, but 'equipment' is not taken into ac-

count when classifying PCH players. Classifiers only score the motoric capability to perform the task.

Using the stick blade (1) in the ground-plane only, using the stick-blade (2) on ground-plane and low vertical volume (till seating height) or being able using the stick blade also often (3) in the higher regions of the 'Vertical Volume' (without compensations) refers to the quality of the Hitting-movement.

When only used in ground-plane, the hits will be softer / not explosive. When the stick blade can be used however above ground-plane, the hits will be harder / more explosive. In ground-plane, hitting will be often 'pushing', while with more available muscle strength, the stick can be lifted higher and with force brought to the ball: the result will be that more speed is given to the ball and / or the movement can be executed faster.

#### Arm profile 1:

Most players will use the T-stick, but some do still use the Handstick. When the Handstick is used, the action will be 'Pushing' instead of 'Hitting': no vertical 'Volume of Action'. When the trunk has some function, the trunk movements in combination of the powerchair's rotation can lift the stick blade above the ground: not the arm movements themselves.

#### Arm profile 2:

The 'Vertical Volume of Action' of the player using the Handstick will be limited, on average, to the vertical space below seat height. Still more 'Pushing' than 'Hitting' will be observed. Sometimes the player is using the 'leverage' technique to get the stick blade higher: by using a part of the leg or chair. This is compensation and not executed by active movements, so not taken into account in the evaluation of the Hitting power.

#### Arm profile 3:

There is 'Vertical Volume of Action', possible above seat height: so there is 'Hitting Power' while the arm is lifted to execute the hitting, but this Hitting Power is still limited (due to for example MMT 3 or restricted ROM), making the executed movements not (really) explosive. The executed movements will be often done by the underarm and fewer by the entire arm initiated from the shoulder.

#### Arm profile 4:

Stick blade can be used in the entire vertical space and while the strength or ROM is not limited, the 'Hitting Power' is not limited and can / will be explosive. The movements will be often initiated from the shoulder moving the entire arm and not, like in profile 3, from the elbow.

#### TEST 2. BALL / STICK CONTROL

Pushing the ball and performing a slalom with the ball around cones and around one cone. Repeat the Test as many times as needed to have a clear idea about Ball / stick-control.

#### Test goal:

This test will assess the impact of the Arm / hand Impairment on PCH sport specific activity 2: 'Ball / stick-control'.

Define the ability to control the ball with the stickblade using (quick) forehand and backhand manoeuvres: the goal is to define and check the Arm-profile (like in test 1).

#### Instruction:

5 cones in a lane with 1,20 meter distance from each other. The athlete drives along the cones and does the slaloms with the ball between the cones. Do the test also from standstill manoeuvring the ball around one cone.

#### Test instruction:

"Drive along the cones and perform a slalom with the ball between the cones: first slowly, then faster and faster. Do the same from standstill manoeuvring the ball around one cone".

#### Test observation:

Assess the impact of the Arm / Hand Impairment on the execution of the sport specific activity 'Ball / stick-control'. Look for endo / exo-rotation problems / limitations shoulder. Evaluate the flexion in the elbow and the anteflexion / abduction of the arm. Look for pronation / supination problems / limitations elbow. Look for stick-handling problems / limitations. Look for strength- or coordination problems / limitations. Do differentiate between skill and impairment / motoric ability / activity limitation.

#### Arm profile 1:

Transitions from forehand to backhand and reverse (needed to perform the slalom with the ball) will be executed with the arm 'hanging' from the shoulder while there is no 'Vertical Volume of Action' (player cannot or hardly, actively, lift the hand with the stick). For that reason these transitions, while doing the slalom, will be executed slowly / are time-consuming.

#### Arm profile 2:

Active flexion of the elbow can be observed. Lifting the hand with the stick: the combination of endo- and exo rotation in the shoulder with pro- and supination in the elbow, do give more possibilities for the Ball / stick handling when the elbow is flexed and the hand is not only hanging on the extended arm. Result will be better control and somewhat faster transition between forehand and backhand compared with profile 1.

#### Arm profile 3:

Transitions from forehand to backhand and reverse, can be executed with lifting the upper arm / elbow to enable better control of the stick blade making quicker forehand / backhand movements possible when executing the slalom in a quicker pace with the powerchair.

#### Arm profile 4:

No problems observed in the execution of the forehand and backhand movements: they can be performed quickly with flexion in elbow and anteflexion / abduction of the arm: no restriction in shoulder-, elbow- and wrist-movements.

Skill-factor: an athlete with MRC 4 / 5 on the playing arm and no other impairments is, theoretically, able to execute the slalom, but when he is untrained, he will maybe not show this Ball / stick-control in the slalom because of lack of skills instead of lack of abilities. Classifiers do look HOW the test is executed!

The results of Test 1 'Hitting' will be decisive in the case of a doubt between the Arm profiles.

#### TEST 3. REACH

Touching the basis and top of cones with the stickblade, standing still with the powerchair in between three cones: one placed on the Stick side (border between Stick side and Rear side), one placed on the Frontal side (mid Frontal side) and one placed on the Opposite side (border between Opposite side and Rear side). See drawing 'Horizontal and Vertical Volume of Action'.

#### Test goal:

This test will assess the impact of the Trunk Impairment on PCH sport specific activity 3: Reach.

Define the ability to move the Trunk in different planes of motion: forward / rearward, rotation left / right and lateral flexion left / right. The goal is to check and assess the Trunk-profile. With a better Trunk Profile the 'Horizontal Volume of Action' can be enlarged creating better Reaching possibilities.

#### Instruction:

The athlete stand still sitting in his powerchair. In front and at the sides of him cones are placed: one in front, one at the left side and one at the right side. The athlete is asked to touch the basis and top of the cones with the stick blade. Cones are placed at such a distance from the athlete that he has to lean maximal forward, lean and rotate maximal to the left side and lean and rotate maximal to the right side (so for every Athlete the distances of the cones can be different). Classifiers look for active movements. so leaning against chair parts is not allowed: they should be removed if possible to get a clear idea about the active reaching possibilities. The test can be repeated as many times as needed to get a clear idea about the trunk movement possibilities / active reaching possibilities.

#### Test instruction:

Do touch the basis of the three cones leaning as far as possible forward and leaning and rotating as far as possible sidewards. Repeat with touching the top of the cones'.

#### Test observation:

Assess the impact of the Trunk Impairment on the execution of the sport specific activity 'Reach'. Look for active (not passive) forward flexion, rotation and lateral flexion of the trunk. The use armrest of the powerchair: Trunk movements must be active movements without support of the armrest. Classifiers do not classify passive movements / use of equipment. They look for the quality of the trunk movements: quickly executed versus slowly / time consuming.

TIC score 0 / 0.5 - Horizontal 'Volume of Action':

Reaching dominant on Stick-side and / or Frontal side of the Powerchair. Limited in Opposite side (limited to the inner circles and not getting the stick blade in the outer circles) while there is not a complete forward flexion, rotation and lateral flexion.

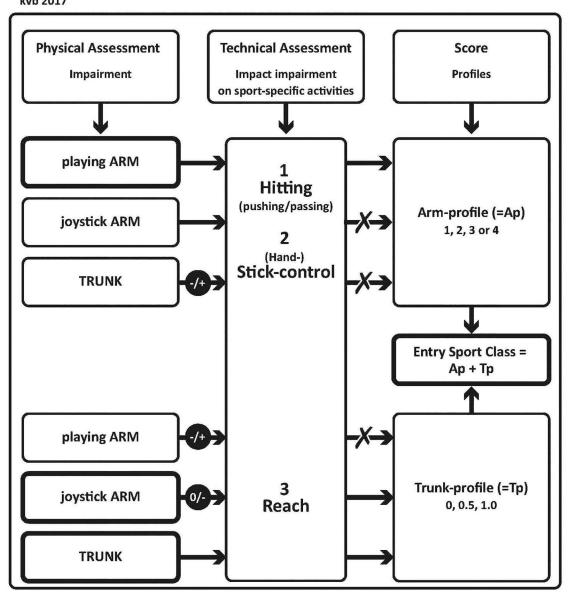
With Arm-profile 3 the Opposite-side can be reached, so occasionally the player can show (mostly slow) actions on that Opposite-side. With Arm-profile 4 the Opposite side will be reached more often and with quicker movements than with Arm-profile 3, but the reaching is still limited on that Opposite-side (to the inner circles) because the absence of complete forward flexion / rotation / lateral flexion of the Trunk.

TIC score 1.0 Maximal Horizontal 'Volume of action': Active Reaching on both Stick-side, Frontal-side and outer circles of the Opposite-side of the Powerchair, while the trunk movements are not limited: forward flexion, rotation and lateral flexion of the trunk are present. Even reaching on the Rear side can be observed.

#### 6.3.3. PCH CLASSIFICATION PROCESS DETAIL

The PCH 'Classification Process Detail' Scheme do show the relation between the Physical Assessment, Technical Assessment and the Arm- and Trunk score profiles. Also the impact of the Arm- and Trunk Impairment on the Sport Specific Activities (1) Hitting, (2) Ball / Stick control and (3) Reach.

### PCH Classification process detail kvb 2017



Relation between Impairments, sport-specific activities PCH and profiles.

#### 6.4. OBSERVATIONAL ASSESSMENT

Provisions in Section A Part 4 Art. 14 regarding the Observational Assessment, are followed here.

Observation starts already with the observation of the execution of the Sport Specific Activities in the Technical Assessment: as described for each of the three sport specific PCH Tests in the paragraphs about Test Observation.

After the Physical and Technical Assessment the Entry Sport Class will be defined.

6.4.1 During competition, Observation of the Athletes with Tracking code OA (Observation Assessment) continues: Classifiers do look here for the confirmation of their decision concerning the Sport Entry Class with goal to define the final Sportclass. The Observation Form (Attachment page 159) can be used for this purpose.

The Classifier do constantly analyse both Arm profile and Trunk profile during the Game.

Classifiers have the completed Classification Form of the specific player as basis for the Observation. Classifiers do observe / analyse (1) Shoulder movements (anteflexion, retroflexion, abduction, endorotation, exorotation), (2) Elbow movements (Flexion, Extension, Pronation, Supination) and (3) Wrist / Hand movements (Flexion, Extension, Radial Deviation, Ulnair Deviation, Grip: Finger flexion and Thumb opposition). Classifiers do also observe the Trunk movements of the Athlete. This with the aim to get confirmation of the decisions made in the Physical and Technical Assessment concerning these joint movements and Trunk movements as documented on the Classification Form.

Classifiers do analyse the above mentioned joint movements when looking at the PCH Sport Specific Activities which are:

Receiving / Controlling the ball, Passing / Hitting Reaching.

Classifiers analyse the above mentioned joint movements / Trunk movements in the sport specific activities during full effort of the Athlete.

PCH Observational Assessment (except for coordination impaired athletes) General model for Observation, to formulate Athlete specific observation goals: see pages 120 and 121 and also on the Observation Form (in Attachment).

#### ARM PROFILES

Arm: 'Hanging' vertically with extended elbow. Pro-supination possible. Flexion or extension elbow/wrist possible: 'unopposed movement couple(s)'.

 $\Omega$ AP

Arm: Upperarm movement with weak/limited excursion. 'Opposed movement couples' present, although weak or restricted.

 $\mathcal{C}$ 

Arm: Lifting upperarm possible, but movements preferably with forearm (elbow kept low) when strength impairment or limitation(s) in movement couple(s) when ROM impairment.

4

Arm: Shoulder movements not restricted. Complete arm movements without limitation in movement couples: No restriction in Hitting and Receiving/Ball-control.

#### SPORT SPECIFIC ACTIVITIES

#### RECEIVING AND CONTROLLING

Receiving ball and transition backhand to forehand slow / timeconsuming and only seen in combination with Tp 0.5 / 1.0 + rotation tions due to ROM chair.

Combination endo/ exorotation shoulder with pro / supination elbow: easier ball-control, but still slowly executed lifting upperarm + due to weakness or with severe restricimpairment.

Preference forearm movements / backhand movements. Combination of flexion / extension elbow give easier control, quicker forehand / backhand movements. quicker slalom.

Quick, efficient receiving / controlling and slalom without limitations.

#### PASSING AND HITTING

No vertical Volume of Action.
Pushing instead of Hitting, slowly executed and only in one direction possible due to unopposed movement(s).

No (real) vertical Volume of Action. With Tp 0.5 / 1.0 + rotation chair vertical VOA till seatheight is possible. Pushing (not limited to one direction) instead of Hitting.

Vertical VOA above seatheight possible, so Hitting instead of Pushing but with limitation in shoulder movement couple(s), so with restricted power or ROM Maximal vertical VOA: hard / not limited Hitting possible.

#### REACHING

Tp 0 / 0.5

Tp 1.0

No or not all three Trunk movements observed. Can struggle in coming up with Trunk / slow(er) movements / time consuming.

Limited horizontal VOA:
Reaching dominant on stick side and / or frontal side.

Reaching limited in opposite side: inner circles.

All three Trunk movements observed / possible. Quick Trunk movements in all directions.

Maximal horizontal VOA:
Reaching is active and on both stick-side, front-side and outer circles opposite side.

Even Reaching on rear side possible.

## 7 ASSESSMENT CRITERIA FOR THE ALLOCATION OF A SPORT CLASS AND THE DESIGNATION OF SPORT CLASS STATUS IN PCH

#### 7.1. ASSESSMENT CRITERIA ARM PROFILE

In the "Assessment Criteria Arm Profile", the Assessment Criteria for the determination of the Arm profile as determinant of the PCH Sport Classes are described (to be used in, especially, the Physical Assessment).

Assessment Criteria Arm Profile -

#### ARM PROFILES

AP 1

AP 2

AP 3

AP 4

#### STRENGTH MRC<sup>1</sup>

Strength: MRC : Medical Research Council - Manual Muscle Testing Scaling

0/1 2	3	4/5
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#### • ROM DEGREES / % 2

ROM: Range of Motion - %: Degrees / Percentage of full Range Range of Motion

0%-25%	26% - 50%	51% - 75%	76% - 100%
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#### AMP <sup>3</sup>

3 AMP : Amputation

T-stick use

Limitation in (1) receiving, ball control
ánd (2) hitting

Limitation in (1)
receiving, ballcontrole.

Amp is not limiting the execution
of the sportspecific activities

#### SHORT STATURE: LENGHT AND ROM

\*/\*\* Short Stature: Maximum Ap 3 when strongly reduced (\*) length playing arm. Arm profile can be even lower (Ap 2 or Ap 1), depending on ROM limitations. (\*) Strongly reduced means for Man: 38 cm or shorter. For Women(\*\*): 34 cm or shorter.

0%-25%	26% - 50%	Arm lenght ≤ 38 / 34 or 51% - 75%	Arm lenght > 38* / 34** or 76% - 100%
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#### · COORD. JOINT

COORD.: Coordination - ASAS: Australian Spasticity Assessment Scale - F: Fingers - W: Wrist - E: Elbow - S: Shoulder

F,W,E,S	F,W,E,S	F,W,E,S	
+ ASAS	+ ASAS	+ ASAS	F,W
3/4	2	1	

#### Motivation Short Stature criteria :

Research data: for men the shortest length of the Arm, including the length to the mid-hand (in a population of 545 men) was 43 cm: the sum of the shortest Upper arm (20 cm), shortest Forearm (16 cm) and shortest length to the mid-hand (7 cm). An arm with length 5 cm shorter than this shortest 43 cm arm, will and can be considered as 'strongly reduced' length and seen as a lenght impairment: 43 - 5 = 38 cm.

That means that the length of the arm, including mid fist, of a man with Short Stature needs to be equal

or shorter than 38 cm to be considered as Ap 3.5 instead of the normal Ap 4.

Research data: for women the shortest length of the Arm, including the length to the mid-hand (in a population of 502 Women) was 39 cm: the sum of the shortest Upper arm (19 cm), shortest Forearm (14 cm) and shortest length to the mid-hand (6 cm). An arm with length 5 cm shorter than this shortest 39 cm arm, will and can be considered as 'strongly reduced' length and seen as a length impairment: 39 - 5 = 34 cm.

That means that the length of the arm, including mid fist, of a Women with Short Stature needs to be equal or shorter than 34 cm to be considered as Ap 3.5 instead of the normal Ap 4.

#### Reference:

(Canda. A., 2009, Stature Estimation from Body Segment length in Young Adults – Application to people with Physical Disabilities-. Journal of Physiological Anthropology).

After the Worldchampionship 2018 a further differentiation is made in the PCH classes in 'half points', based on evidence based research concerning the Trunk profiles (see 7.2). That gives us the op-

portunity to 'work' as well with half points In the Arm profiles, making the PCH classification system balanced and more precise: we do not longer have to choose between, for example, Ap 2 or Ap 3, but can decide now on Ap 2.5. So the Ap 1.5, 2.5, 3.5 become now available. On the next page you will find the criteria for each Arm profile, now including the half point Arm profiles.

#### Arm profile table \*:

\*The 1.0 Arm profile will have a further differentiation in the 0.5 or 1.0 Arm profile. Only players without any Trunk function and without any arm/hand/finger function can become 0.5 players. This differentiation In 0.5/1.0 is detailed on the additional Classification Form in the Attachment.

#### Arm Profile Table

ARM PROFILE (AP)	IMPAIRMENT ATHLETE:  STRENGHT  INSTRUMENT: MRC	IMPAIRMENT ATHLETE:  RANGE OF MOTION  INSTRUMENT: MEASURING DEGREES	IMPAIRMEI AMPUTAT INSTRUME - MEA - ASS AME HAI
4.0	MRC 4/5 4 movement couples indicate 4	ROM 76%-100% 5 movement couples indicate 4.0	No impact or
3.5	Mov. couple aa/ra = 3 Other couples indicate > 3.0	5 movement couples indicate ROM inbetween 3.0 and 4.0	Inbetween ,
3.0	MRC 3 Mov. couple aa/ra = 3 All couples indicate 3.0 ór Serratus max. 2	ROM 51%-75% 5 movement couples indicate 3.0	Impact on E
<sup>AP</sup> 2.5	Mov. couple aa/ra = 2 All couples indicate > 2.0, Serratus 2	5 movement couples indicate ROM inbetween 2.0 and 3.0	Inbetween ,
<sup>AP</sup> 2.0	MRC 2 Mov. couple aa/ra = 2 All couples indicate 2.0 ór Serratus 0/1	ROM 26%-50% 5 movement couples indicate 2.0	Impact on E
1.5	Mov. couple aa/ra = 1 Other couples indicate 1.5	5 movement couples indicate ROM inbetween 1.0 and 2.0	Inbetween ,
1.O	MRC 0/1 Mov. couple aa/ra = 1 Other couples indicate 1 (óne can be 2)	ROM 0%-25% 5 movement couples indicate 1.0	Athlete use

NT ATHLETE:  TION  NT:  ASURING LENGHT &  ESSMENT IMPACT  PUTATION ON HITTING,  NDLING AND REACHING	IMPAIRMENT ATHLETE: SHORT STATURE INSTRUMENT: MEASURING LENG- HT & ROM IN DEGREES	IMPAIRMENT ATHLETE:  COÖRDINATION  RMT (REPETITIVE MOVEMENT  TESTS) JOINTS, ASAS (AUSTRALIAN  SPASTICITY ASSESSMENT SCALE)	
n Ballhandling & Hitting	Arm lenght > 38/34 cm ór 5 mov. couples indicate 4.0: ROM 76% - 100%	RMT: impairment fingers, wrist ASAS: no catch	
Ap 3 and Ap 4	Arm lenght <_ 38/34 cm ór 5 move- ment couples indicate ROM inbetween 3.0 - 4.0	RMT: impairment elbow, shoulder ASAS 1 catch wrist ór pro-/supina- tion, or no catch	
Ballhandling	Arm lenght <_ 38/34 cm ánd 5 mov. couples indicate 3.5, ROM 51% - 75% 5 mov. couples indicate 3.0	RMT: imp. fingers, wrist, elbow, shoulder ASAS 1 catch wrist ánd pro-/supination	
Ap 2 and Ap 3	5 movement couples indicate ROM inbetween 2.0 and 3.0	RMT: imp. fingers, wrist, elbow, shoulder ASAS 2 catch biceps ór triceps /ór catch 2 wrist ánd pro-/ supination	
Ballhandling & Hitting	ROM 26%-50% 5 mov. couples indi- cate 2.0	RMT: imp. fingers, wrist, elbow, shoulder ASAS 2 catch biceps ánd triceps	
Ap 1 and Ap 2	5 movement couples indicate ROM inbetween 1.0 and 2.0	RMT: imp. fingers, wrist, elbow, shoulder ASAS 3 catch biceps and/or triceps	
s T-stick	ROM 0%-25% 5 mov. couples indicate 1.0	RMT: imp. fingers, wrist, elbow, shoulder ASAS 4 catch biceps and/or triceps	

#### 7.2. ASSESSMENT CRITERIA TRUNK PROFILE

The Trunk profile is the second determinant of the PCH Sport Class. The Trunk Impairment Tests from the scientific work from Altmann¹ (TIC: Trunk Impairment Classification: see Attachment "TIC Trunk Impairment Classification"), are very useful: these tests are clearly described and can be executed by the players very easily, are non-demanding and can be done in very limited time and space. No muscle testing is performed, but simply executing Trunk movements to define the Reaching capabilities of a player.

1 Altmann V, 2015,

Impact of trunk impairment on activity limitation with the focus on Wheelchair rugby, Dissertation KU Leuven 2015.

See Trunk Tests: test 1, 3, 4, and 5 in the Attachment: "TIC: Trunk Impairment Classification".

#### Trunk test 1:

Sitting straight, unsupported.

#### Trunk test 3:

Forward / rearward flexion.

#### Trunk test 4:

Rotation to both sides.

#### Trunk test 5:

Lateral flexion to both sides.

#### 7.2.1 TRUNK TEST 1, 3,4 AND 5:

Trunk test 1 can differentiate between Trunk-profile 0 (zero: fail Test 1) and Trunk-profile 0.5 (succeed Test 1). (Trunk mobility is necessary however to overcome the rotational forces of the Powerchair: if not able to counter these forces, the Trunk profile will stay 0).

#### Trunk tests 3, 4 and 5:

When the athlete is not able to perform all three (fail one or more Tests), he / she will, still, become the

Trunk-profile 0.5. When succeeding all three Trunk Tests, he / she will have the Trunk-profile 1.0

The Assessment criteria of these Tests (when failed and when succeed) are described in Attachment 2: "TIC, Trunk Impairment Classification".

Additional for Athletes with Limb Deficiency / Amputation: An Athlete with double Above Knee Amputation ≤ 2/3 has the Tp 0.5. profile. Athletes with Limb Deficiency / Amputation and with leg(s) longer than 2/3, do have the Tp 1 profile

#### Note 1

The focus is not only on the quantity of the movement (being able to perform the movement or not), but also on the quality of the movement.

How is for example the forward flexion executed: is the athlete able to make the movement in a normal rhythm or does he 'struggle' to perform / bringing the trunk back to the upright position after performing the forward flexion? And / or is the movement time-consuming. In that case, Classifiers still score the movement as 'failed' also when the 45 degrees criterion is achieved.

This is important while Classifiers are often dealing with generalized impairments of muscle power (muscular dystrophies) instead of localized impairments of muscle power (spinal cord injury) making the trunk movements (much) slower and not effective in real game situations.

Athletes with muscular dystrophies can show you all three trunk movements in the Physical Assessment: (1) forward flexion / rearward extension, (2) rotation to both sides and (3) lateral flexion to both sides. Still that does not automatically mean that they end-up with a Trunk profile 1.

Again: the quality of the movements has to be taken into consideration after the athlete has been asked to perform each specific movement 10 times. If the result is a slow trunk movement which cannot be 'speeded-up', then the Trunk Profile can be scored 0.5.

A non-disabled person does have the trunk profile 1, while not only all three movements can be executed, but also in a quick pace with excellent quality. The slow executed movements of the athlete with muscular dystrophy are leading to Reaching activity limitations resulting from the impairment and are impacting in a negative way on the sport performance of these athlete(s). For that reason the 0.5 Trunk score is a better and more realistic reflection of their Trunk performance potential.

#### Note 2

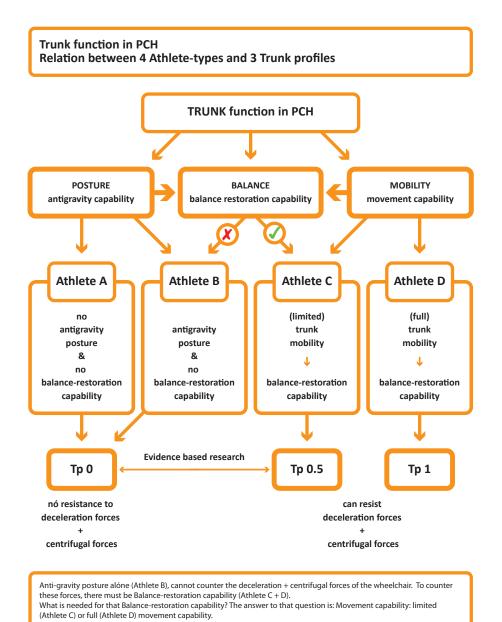
Some athletes do have fixation rods in their Trunk (Harrington rods or similar). These rods are placed because of the Trunk weakness causes the Trunk to collapse into a scoliosis because the anti-gravity force could not be overcome by the weak Trunk muscles. Such Athlete does not automatically get Trunk Profile 0 (zero).

The assessment continues with test 3 (forward flexion / rearward extension), 4 (rotation) and 5 (lateral flexion) to assess the movement potential for Reaching. It is sometimes possible for the athlete with rods in the Trunk to have (some) forward flexion / active rearward extension and by having this capability, he / she does have Reaching options: a Trunk score of 0.5 will be realistic in that case. The maximum Trunk score of 1, will not be possible in this case while the rotation as well as the lateral flexion will be limited by those fixation rods.

#### Note 3

If the athlete does have an Arm Impairment, which is scored with MRC Grade 3, or lower he / she

can / will have a difficulty holding the arms in the requested position of maximal elevation. With this lower arm position it becomes easier to fulfil the 45 degrees forward flexion. It is important to consider this while making the decision of the forward flexion criterion is fulfilled or not.



Kees van Breukelen MSc January 2018

#### 7.3. PCH SPORT CLASSES

A player can have 8 different Arm profiles (0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0) and 3 different Trunk profiles (0, 0.5, 1.0), together making 9 possible different Eligible Sport Classes: 0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5

A player with Arm-profile 4 and Trunk-profile 1 has class NE and is a not eligible player.

All players will play with their class scores on the floor. Each team (5 players) shall play with the maximum total points of 12: (see IPCH Game Rules art. D.2.3).

#### 7.3.1 T-STICK USE

Classification is an assessment of the motoric capabilities of the player. The player is free to use his/her equipment (T-stick or handstick) but that will not change his/her class. The class is based on his/her functional capabilities and not based on the equipment which is used. So every player using a T-stick will play with his/her functional class on court:

The 0.5 player with 0.5 points The 1.0 player with 1.0 points The 1.5 player with 1.5 points The 2.0 player with 2.0 points Etc.

(because the class do represent the motoric capabilities of that group of athletes, the class 1 should reflect the motoric capabilities of class 1 athletes and nót the motoric capabilities who belong to class 2, class 3 or class 4 players).

#### **ATTACHMENTS**

# SECTION C

## ATTACHMENT 1 IPCH CLASSIFIER TRAINING AND CERTIFICATION PROGRAM

#### 1. INTRODUCTION AND PCH CLASSIFIER CANDIDATE PROFILE

IPCH certifies Classifiers who have abilities and qualifications relevant to conduct Athlete Evaluation in respect of Athletes with Physical Impairments.

#### 1.1. PARTICIPANTS PROFILE

## 7.3.3 CANDIDATES SHOULD HAVE AT LEAST THE FOLLOWING:

Medical certification as a physician, physiotherapist and / or equivalent;

A requisite level of anatomical, biomechanical and sport-specific expertise in the sport of PowerChair Hockey;

All candidates needs to master business level English.

#### 7.3.4 IN ADDITION CANDIDATES SHOULD HAVE:

Interest in Paralympic sports and / or PowerChair Hockey;

Complete the IPC Academy online course "IPC Introduction to Para Sport".

Recommendation by the NPC or National Federation. To serve as an International Classifier one may not have a conflict of interest (such as being the National team physician or physiotherapist).

The costs of the training will be with the responsibility of the candidate and / or its NPC / NF.

#### 1.2. PATHWAY PCH CLASSIFIER TRAINING



#### (PARA) MEDICAL / TECHNICAL IPC ACADEMY QUALIFICATION + ENGLISH ONLINE INTRODUCTION TO CLASSIFICATION SKILLS Certificate of qualification Certificate of completion STEP 1: INTERNATIONAL CLASSIFIER SEMINAR PRACTICAL AS-**THEORY** SESSMENT AND SIMULATION OF WRITTEN EXAM CLASSIFICATION CERTIFICATION CLASSIFIER TRAINEE (NATIONAL CLASSIFIER) COMPETENCY **TRANSCRIPT** INTERNATIONAL STEP 2: **CLASSIFICATION OPPORTUNITY SUPERVISED** CERTIFICATION **CLASSIFICATION** INTERNATIONAL ASSESSMENT AND CLASSIFIER IPCH **OBSERVATION** CERTIFICATION INTERNATIONAL **CLASSIFIER IPCH**

#### 2. THE PCH CLASSIFIER PATHWAY CONSIST OF 2 STEPS

#### STEP 1

#### 2.1. PCH CLASSIFIER SEMINAR, CONTENTS, OUTCOMES

#### 2.1.1. TEACHING MODELS

Theoretical sessions (about the classification steps, rules, assessments, procedures)

Practical assessment training

Simulated Classification situations

Video observation

Assessment through Written exam and competency transcript (see 2.1.2. 'Learning Outcomes').

#### 2.1.2. LEARNING OUTCOMES

## 7.3.5 THE FOLLOWING LEARNING OUTCOMES SHOULD BE ACHIEVED:

Know the role of classifier;

Understand and apply the conceptual basis of classification;

Understand and conduct relevant medical tests / functional assessments for Physical Impairment;

Know all Minimum Impairment Criteria (MIC) and where to locate it within the IPCH Classification Rules and Regulations;

Understand Observation assessment:

Learn how to properly communicate classification outcomes;

Understand risks in classification;

Understand and be able to follow the proper procedures of classification of athletes with Physical Impairments to the IPCH standards, including all paperwork.

#### 2.1.3. PROGRAM OUTCOMES

Participant will receive a certificate of completion.

Can serve as a National Classifier for their home

NPC (if regulations of the NPC allows it).

#### STEP 2

## 2.2. PARTICIPATE IN IPCH INTERNATIONAL CLASSIFICATION OPPORTUNITY

#### 2.2.1 PARTICIPANTS PROFILE

Have successfully completed Step 1

Have no conflict of interest (e.g. not working as an National team physician or therapist)

Business level English

Have experience as a National classifier,

#### 2.2.2 TEACHING MODELS

Observation of classification assessments by (senior) classifiers, including paperwork, communication, athlete assessment, decision making

Conduct classification assessments under supervision, including all paperwork etc.

Observation of the sport specific activities in a controlled environment (Technical Assessment) and in

competition of the classified athletes will complete the classification assessments.

Participate / observe in all other classifier activities, like attending team-captain- meeting, handling protests, educational sessions for coaches and athletes. The International Classifier trainee will be mentored by Senior classifiers and assessed by the competency transcript (see 2.2.3. 'Learning Outcomes').

#### 2.2.3 LEARNING OUTCOMES

## 7.3.6. THE FOLLOWING LEARNING OUTCOMES SHOULD BE ACHIEVED:

Know the role of classifier;

Understand and apply the conceptual basis of classification to a high standard;

Know and be able to complete all relevant medical tests / functional assessments for Physical Impairment to a high standard of validity and reliability;

Know all Minimum Impairment Criteria (MIC) and where to locate it within the IPCH Classification Rules and Regulations rapidly, accurately and efficiently;

Know and conduct an in competition Observation assessment on court to high standard;

Know how to properly communicate classification outcomes accurately and efficiently;

Understand and demonstrate leadership in the management of risks in classification;

Ability to classify athletes with Physical Impairments to the IPCH standards, including all paperwork;

Know the requirements for an athlete evaluation.

#### 2.2.4 PROGRAM OUTCOMES

Participant will receive an IPCH International Classifier Certificate of Competency.

Be eligible for appointment as a Junior IPCH International Classifier at sanctioned competitions.

#### 3. MAINTAINING CERTIFICATION

To maintain IPCH International Classifier certification a Classifier must:

Classify at least once every 2 year at an International IPCH sanctioned Classification Session;

Follow yearly update workshops or update calls / e-mails ('Examples of best practice');

Classify nationally each year PCH Athletes.

## 4. RECERTIFICATION AFTER PERIOD OF INACTIVITY (MORE THAN TWO YEARS)

The recertification process is dependent on the classifier's experience before the period of inactivity and performed classification activities during inactivity.

The inactive Classifier who wants to recertify must send a letter to the IPCH Technical and Classification Officer with cc to the IPCH Head of Classification explaining the reason of absence and performed activities. Decision on the recertification pathway will be made by the IPCH SEC (Sport Executive Committee) upon suggestion and advise from the IPCH Technical and Classification Of-

ficer and from the Head of Classification.

A experienced Classifier (senior, level 2) can have a gap of 3 years, but must have an update session (on new rules etc.) with a senior classifier before recertification.

A less experienced Classifier (junior, level 1) can have a gap of 2 years, will need an update session (on new rules etc.) with an senior classifier AND also supervised classification at an IPCH Classification Session, a competency transcript will be used as assessment tool (step 2 of the pathway).

After longer periods of inactivity the inactive classifier will have to follow both steps of classifier pathway, starting with the IPCH Classifier Course.

#### 5. JUNIOR INTERNATIONAL CLASSIFIERS

Junior International Classifier is a Classifier who has successfully completed all steps of the IPCH Classifier training program and has been certified as a member of a Classification Panel an IPCH International Competition.

The duties of a Junior Classifier may include, but are not limited to:

Being part of a Classification Panel at IPCH sanctioned or recognised events.

Being part of a Protest Panel at IPCH sanctioned or recognized events.

Attending classification meetings at Competitions.

Assisting in Classifier training and certification as requested by the Head of Classification.

#### 6. SENIOR INTERNATIONAL CLASSIFIERS

A Senior Classifier acts in a leadership capacity at IPCH International competitions and reports to the Chief Classifier. Senior Classifiers have completed IPCH classifier training, showed leadership, participated in research and development of the classification system, and have sufficient experience to implement the IPCH Classification Regulations at a Competition.

#### The duties of a Senior Classifier may include, but are not limited to:

Assisting in the research, Development and clarification of the Classification Regulations and profiles for IPCH.

Participation in Classifier workshops.

Assisting in regular reviews of Classification Regulations and Sport Profiles.

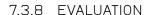
Supervising and evaluating Junior / recertifying Classifiers.

## ATTACHMENT 2 TIC (TRUNK IMPAIRMENT CLASSIFICATION)

#### TRUNK TEST NO. 1

#### 7.3.7 TEST DESCRIPTION

Athlete sitting unsupported. Athlete sitting in the powerchair not supported by backrest, or sitting on plinth with legs hanging over edge of plinth with the feet unsupported. The athlete crosses the arms in front of his chest, to prevent support for sitting balance from the arms. Bring athlete into upright position with hand on sternal bone and hand on back and slowly let go of support.



Observe sitting position after removing support from classifier's hands: straight / upright or kyphotic? Observe stomach: flat or "quad belly".



Sits straight / upright, without marked kyphosis and with flat belly.

7.3.10 SCORE: FAILS

Sits with marked kyphosis or with quad belly.







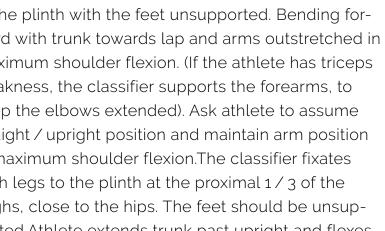




#### TRUNK TEST NO. 3

#### 7.3.11 TEST DESCRIPTION

Athlete sitting on plinth, legs hanging over the edge of the plinth with the feet unsupported. Bending forward with trunk towards lap and arms outstretched in maximum shoulder flexion. (If the athlete has triceps weakness, the classifier supports the forearms, to keep the elbows extended). Ask athlete to assume straight / upright position and maintain arm position in maximum shoulder flexion. The classifier fixates both legs to the plinth at the proximal 1/3 of the thighs, close to the hips. The feet should be unsupported. Athlete extends trunk past upright and flexes forward to assume upright position again.



7.3.12 EVALUATION

Observe movement, standing lateral to the athlete.

7.3.13 SCORE: SUCCEEDS

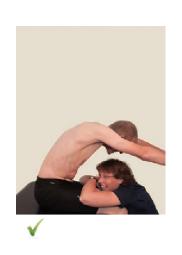
Athlete performs trunk flexion to at least 45° line between pelvis and C7 and vertical and maintains position. Athlete performs at least 30° trunk extension and maintains position. Resumes straight position without support of arms.

7.3.14 SCORE: FAILS

(1) Athlete does not perform flexion to 45° degrees and extension to 30° or (2) compensates by kyphosis / lordosis or (3) cannot resume straight position

without support or compensation.











#### TRUNK TEST NO. 4

#### 7.3.15 TEST DESCRIPTION

Athlete sitting on plinth, legs hanging over the edge of the plinth with the feet unsupported. Arms crossed in front in 90° shoulder flexion. Ask for maximum rotation to both sides. The classifier fixates both legs to the plinth at the proximal 1/3 of the thighs, close to the hips. The feet should be unsupported.

#### 7.3.16 EVALUATION

Observe from the front, back and lateral from the athlete

#### 7.3.17 SCORE: SUCCEEDS

Athlete stays in upright position in sagital plane. Rotates 45° or more to both sides, measured in straight line between both shoulders and line between ASIS on both sides.

#### 7.3.18 SCORE: FAILS

Athlete does not rotate or rotates less than 45°, or athlete cannot maintain upright position in sagital plane while rotating (e.g. assumes kyphotic posture). Or athlete can perform test to one side, but not to the other.







#### TRUNK TEST NO. 5

#### 7.3.19 TEST DESCRIPTION

Athlete sitting on plinth, legs hanging over the edge of the plinth with the feet unsupported. Arms in horizontal (90°) abduction in the shoulders, maximum elbow flexion and hands on the back of the head. Ask for maximal lateral flexion to both sides and hold this maximum position for two seconds, before returning to the upright position. One classifier fixates both legs firmly to the plinth at the proximal 1 / 3 of the thighs, close to the hips to prevent the athlete from shifting weight to one leg. The feet should be unsupported. The athlete is not allowed to abduct the legs. The other classifier palpates the ASIS (anterior superior iliac spine).



#### 7.3.20 EVALUATION

Observe movement quality and range from front and back of athlete.

#### 7.3.21 SCORE: SUCCEEDS

Athlete stays in upright position in sagital plane and performs lateral flexion at least with suprasternal notch in vertical line above the ASIS to both sides. And can hold this position for two seconds before resuming the upright position.



#### 7.3.22 SCORE: FAILS

Athlete cannot perform lateral flexion to the level where the suprasternal noth is in a vertical line above the ASIS. Or athlete cannot maintain straight position in sagital plane while performing lateral flexion(e.g. kyphotic posture). Or perfoms lateral flexion without holding the position in the end range, but falls to the side. Or athlete can perform test to one side, but not to the other.











### **Medical Diagnostics Form**

The form is to be completed in English by the athlete's individual physician.

Depending on the athlete's health condition and impairment, additional medical information is to be attached to this form (see page 2).

The form has to be sent to <a href="mailto:classification@powerchairhockey.org">classification@powerchairhockey.org</a> no later than six (6) weeks before the athlete undergoes the evaluation.

Gender: port:	☐ Female				
port:		■ Male	Da	te of Birth:	
	POWERCHA	AIR HOCKEY			
Years/months	competing in	the sport at nation	nal level:_		
Medical Infor	mation				
Description o	f the Athlete'	's medical diagnos	is <u>and</u> the I	oss of function this health condition results in:	
Health cond	ition is:	□ progressive	□ stab	е	
		□ progressive	□ stab	e	
Medical histo	ory:				
<b>Medical histo</b> Health cond	ory: itionis:	□ a	cquired	☐ congenital	
<b>Medical histo</b> Health cond If acquired, a	ory: ition is: age of onset:	□ a	cquired		
		□ progressive	□ stab	е	
<b>Medical histo</b> Health cond If acquired, a	ory: ition is: age of onset:	□ a	cquired	□ congenital	





Attachments	
The athlete's health condition as stated function exhibited by the athlete durin classification panel, as stipulated in the II	on this form and the resulting impairment must fully explain the loss ong athlete evaluation. Otherwise no sport class can be allocated by the PC Sport's classification rules.
Therefore, additional, recent and relevants	ant medical documentation has to be attached to this form if the athlete
,	cannot be ascertained by clear signs and symptoms;
a complex or rare health condition	
<ul> <li>a spinal cord injury (recent ASIAs</li> <li>one of the coordination related scorestobeenclosed).</li> </ul>	impairments ataxia, athetosis or hypertonia (Modified Ashworth Scale
Reports on additional testing by physi where relevant, to complement the med	icians, physiotherapists and other health professionals are welcomed lical diagnostic information.
The IPCH Sport and the Classification Paindividual athlete's health condition and	nel may ask for further information to be submitted depending on the
I confirm that the above information i	is accurate
Name:	
Healthcare profession:	
Registration Authority and Number:	
Address:	
City:	Country:
Phone:	Email:
Date:	Signature:
Date:	Signature:
Date:	
Date:	

IPCH Medical Diagnostics Form Athletes' Classification

March 2017



#### **IWAS Powerchair Hockey** (IPCH)

#### Sport Section of the IWAS





Classification Consent Form				
I, undersigned, (name)				
will undergo the classification procedure IPCH Classification Articles				
Signature Athlete:	Date :			
rase the athlete has the are <18 signature of narent	/ quardian			

#### This agreement includes:

- The willingness to undergo a complete Classification Process, including all components as required by the IPCH and to take part co-operating fully with the classifiers and give maximal effort during all tests.
- Acknowledgement that classifiers are not held liable for any pain or suffering experienced in the course of the evaluation.
- Agreement to allow photographs and/or videotaping for educational purpose.

Classifiers will test the playing arm: it is not allowed to change playing arm during the competition.

#### Misconduct during Evaluation:

- Failure to attend Evaluation session.

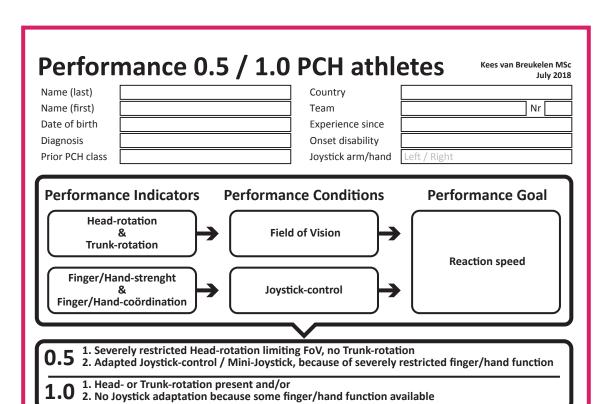
  A Classification Panel, in consultation with the Chief Classifier, may suspend an Evaluation Session if it cannot A Classification Panel, in consultation with the Chief Classifier, may suspend an Evaluation Session in it cannot allocate a Sport Class to the Athlete: (1) failure on the part of the Athlete, (2) a failure to provide any medical information, (3) use (or non-use) of any medication, (4) a Health Condition that may limit or prohibit an Evaluation Session, (5) unable to communicate effectively, (6) refuses or is unable to comply with any reasonable instructions, (7) the Athlete's representation of his or her abilities is inconsistent. If an Evaluation Session is suspended by a Classification Panel, the Classification Panel may designate the Athlete as Classification Not Completed (CNC).

#### Intentional Misrepresentation:

- It is a disciplinary offence for an Athlete to intentionally misrepresent his or her skills and/or abilities and/or the degree or nature of Eligible Impairment during Athlete Evaluation and/or at any other point after the allocation of a Sport Class.
- allocation of a Sport Class.

  Consequences: (1) disqualification from all events, (2) being allocated with Sport Class Not Eligible (NE) and designated a Review with Fixed Review Date (FRD) Sport Class Status for a specified period of time ranging from 1 to 4 years, (3) Misrepresentation on more than one occasion will be allocated Sport Class Not Eligible with Fixed Review Date Status for a period of time from four years to life.

vb   july 2	2018	u33		ition Fo		*(	HOCHEY
Name (la					Country		N. C
Name (fi					Team		Nr
Date of b					Experience since		
Diagnosi Prior PCI					Onset disability Playing (arm)	Left / Right	T-stick
Diamina			\				
	cal Assess		ımpairi	ment Measure	Additional Info		Yes/No
Joint		Score	Scor	e	Headstrap	Hip/pel	
		MRC/d	legrees sub A	p scores movementcouples	Cheststrap	Knee st	
Shoulder		00		4 Mov. couples	Belly Binder	Foot st	rap
retroflex	ion/abd 18		$\dashv$ I	MRC	Spinal deformity		
serratus			ᅱᄂ	Examples: 3/1=1*	Contractures	-	
exorotat	ion 90		$\neg \vdash$	3/2=2	Surgery		
endorota	ation 70			4/2=3 * 'unoppose	Spasticity		
Elbow flexion 1	50		$\neg \vdash$	moveme		. ——	
extension			$\neg$ I		Ability to ambulate	E	
supinatio			<b>=</b> :	5 Mov. couples	Ap + Tp	= Class	Status
pronatio			<b>⊣</b> ;	ROM Examples:			
Wrist/Ha		=	_::	3/1=2	T-stick (0.5 or	1 (1) Class	Status
flexion 8		$\vdash$	$\dashv$ I	3/2=2.5 4/2=3	1-5000 (0.5 0)	1.0) Class	Status
radial de			$\dashv$ $\vdash$	4/2=3	Classification	Dotaile	
ulnair de	v. 30		$\dashv$		Classification	date	class status
fingerflex					Entry sportclass +	- date	
thumb o	pp.				Athlete notified of	decision	
Final Ap	score Phy	/s. Ass.=			Final sportclass de	termined	
	renght R	ЮМ	AMP.	COÖRD.	Tournament		
profile M Ap 4 4/		egrees 5%-100%	Lenght &	Joint F,W, no catch	Location / date		
Ap 3 3		0%-75%	Impact	F,W,E,S + ASAS 1 wr			
Ap 2 2	2	E9/ E09/	on	F,W,E,S + ASAS 2 b/ti	Classifiers		
Ap 2 2		5%-50%	Hitting Handling	F, W, E, S + ASAS 2 D/U			
Ap 1 0/		%-25%	Reaching	F,W,E,S + ASAS 4 b/t	<b>□</b>		
	ical Asses Hitting (p		accing)	Score	Volume Of Action		
	Ball-hand				draw stick		
					draw stickprint	rear side	
Final Ap	score TA				II X.		$\times$
Trunk (	(Impact	) Impai	irment f	Measure			7
Trunk (Impact) Impairment Measure A) Physical Assessment			-1/(1/2)		$\langle J \rangle \rangle$		
• TIC 1 > fail: 0 / succeed: 0.5				(0 0	( )   )		
			/o: 0.5 / su	icceed all: 1.0	stick side		opposite side
	ical Asses Reaching				opposite side	COLLO	stickside
	tickprint (		raw)				*///
			mits reachi	ing?			(2)/
Final Tp score							
Final Tp	score				43. V		/ 45°



0.5 - 1.0 Differentiation				
	Physical Assessment	Equipment Assessment		
Indicator 1 Head rotation	(only) eyes rotate to side: 0.5 indicator (small head movement allowed for 0.5)	☐ head/neck support lateral: 0.5 indicator ☐ head/neck support only at rear: 1.0 indicator		
Indicator 2 Finger/Hand strenght & Finger/Hand coördination	□ one-handed control: 1.0 indicator □ two-handed control: 0.5 indicator • Elbow flex/ext  MRC 3: L □ R □: 1.0 indicator  MRC 2: L □ R □: 0.5 indicator • Wrist flex/ext  MRC 3: L □ R □: 1.0 indicator  MRC 2: L □ R □  MRC 1: L □ R □: 0.5 indicator  MRC 1: L □ R □: 0.5 indicator  Test: lifting hand from Joy-stick plateau: □ yes: 1.0 indicator □ no: 0.5 indicator • Finger flex/ext  MRC 3: L □ R □: 1.0 indicator  MRC 2: L □ R □  MRC 1: L □ R □: 0.5 indicator  Pincet grip + strenght:  Pincet gauge:	normal Joy-stick: 1.0 indicator adapted Joy-stick: 0.5 indicator mini Joy-stick: 0.5 indicator wind-protector: 0.5 indicator  Remarks:		



### IWAS PowerChair Hockey (IPCH)



HOCHES	Sport Section of the IWAS	JIWAS
	Classification Protest Form	1
Protest against classification	n decision concerning:	
Name of Athlete:		
Nation:		
Date of Classification:		
Protested decision:		
Reason for the protest:		
Number and dates of		Please use backside if needed
documents attached to support the protest:		
Name of National Member Organisation of IWAS:		
Name:		Signature:
To be filled in by the Chief	Classifier	
Received Fee:		
Receiving Date: (of fee and documents)  Chief Classifier Name:		Signature :

# ATTACHMENT 7 ORGANISATION OF A CLASSIFICATION SESSION

A national member organisation of IWAS may request the to officially sanction or recognize a competition for Powerchair Hockey in order to organise a sanctioned IPCH Classification Session, at least 6 months before the proposed date of the event.

IPCH decides to approve the competition and IPCH Classification Session and is communicating with the IPCH Head of Classification Committee at least 4 months before the proposed date of the event.

The IPCH Head of Classification Committee advises the IPCH Executive Committee for appointment of an IPCH Chief Classifier and as much classification panels as asked. The appointed classifiers will receive the confirmation of their appointment at least 3 months before the proposed date.

The IPCH Technical and Classification Officer or the IPCH Technical Delegate appointed for the competition / event will receive (and will share with appointed Chief Classifier and / or with the Head of Classification) from the Organising Committee of the approved competition all necessary information, including the list of the athletes to be classified including the Medical Diagnostic Forms of the Athletes. Also information about the organisation of the classification session (competition schedule, room for classification and available equipment, lodging and transfers of classifiers, administrative support, etcetera) at least 6 weeks before the proposed date.

The IPCH Chief Classifier will suggest a detailed time schedule for the classification, including eventual

protest classification, and in-competition-observation to the Sport Execute Committee or to the IPCH Technical Delegate for approval at least 2 weeks before the proposed date of the event.

The appointed IPCH Classifiers will arrive the day before the start of classification educational sessions or, when there are no such sessions, before the classification process and the IPCH Chief Classifier will chair a preparatory meeting with all the classifiers on that day.

Immediately after the classification process a classifiers meeting will be organized by the IPCH Chief Classifier in agreement with the IPCH Technical Delegate of the competition / event to discuss and decide about the classification results, to prepare an eventual protest classification including the composition of the Protest Classification Panel and to prepare the in-competition-observation.

The results will be communicated to the athletes, team managers and the organizing committee in accordance with the IPCH Classification Manual.

After the in-competition-observation a meeting will be organized by the IPCH Chief Classifier in agreement with the IPCH Technical Delegate appointed for the competition / event to discuss and decide about the results of the in-competition-observation and to discuss and prepare the Final Classification Report.

The IPCH Chief Classifier will communicate the results to all relevant persons in accordance with the IPCH Classification Manual and send this report to the IPCH Head of Classification Committee.

The classification room offers possibilities to perform the Physical Assessment and Technical Assessment testing.

The classification of one player will take approximately 45 minutes.

To perform the Physical Assessment it is necessary to have the possibility to shield the classification room visually and auditory according the rules of the privacy laws.

The room shall consist 1 broad examination table, mechanically or electronically adjustable in height, 1 table and 3 chairs for each classification panel, appropriate equipment (goniometer, tape measure, etcetera), administrative equipment (paper, pens, eventually ITC equipment). Dimensions of the room: at least 20 m<sup>2</sup>

To perform the Technical Assessment testing, a (sports) hall with a flat floor is necessary. Equipment: 1 table and 3 chairs for the classification panel, 10 cones of 55 cm height and a diameter of 30 cm at the basis, tape for taping lines on the floor, match balls, administrative equipment (paper, pens, eventually ITC equipment). If possible, video registration equipment.

# ATTACHMENT 8 MEASUREMENT OF LOSS OF LIMB/LIMB DEFICIENCY

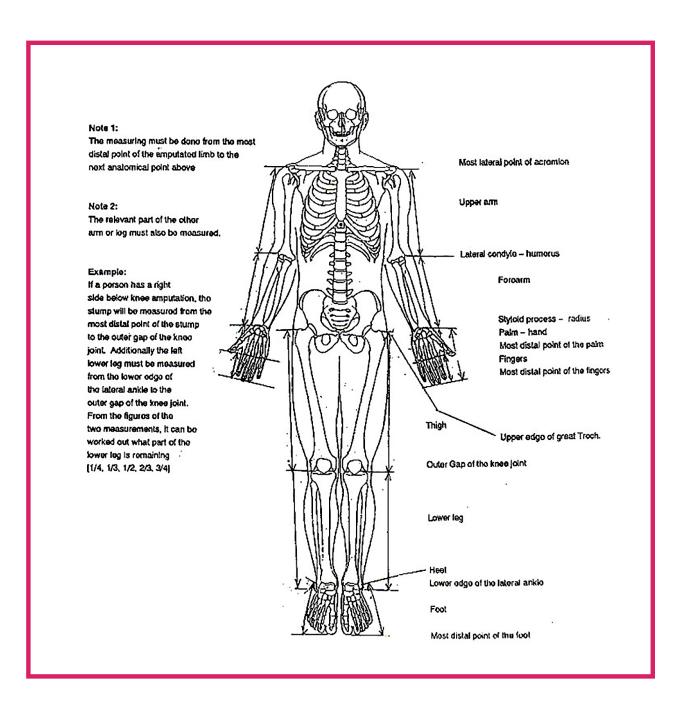
Measurement of loss of limb / limb deficiency should be taken in centimetres and a tape measure should be used to conduct the assessment.

Loss of limb / limb deficiency should be highlighted to indicate where the limb loss is present. Figures of measurement should be accounted for from the distal point of the stump to the next marked measuring point on the body. The relevant parts of all limbs must be measured.

Stump or limb deficiency length measurement assessment should take into consideration the following:

When taking measurements for double above knee amputees / dysmelia take the measurement from the point of the elbow [the olecranon process] to the tip of the middle finger. The reason for doing this measurement is that when the femur is intact, the length from the greater trochanter to the lower end of the femur is the same as from the olecranon process to the tip of the middle finger.

The diagram shows the measurement points for limb measurement. Measurement should take place from the distal point of the limb extremity to the measuring point above. All measurements are to be made in centimetres.



## ATTACHMENT 9 COORDINATION TESTS

#### 7.3.23 REPETITIVE MOVEMENT TEST:

These tests consists of five (5) repetitive movements of the joints of the upper extremities.

The scheme "Coordination Tests" contains a more detailed description of the repetitive movements per level:

#### First

The passive ROM (PROM) of the shoulder, elbow, forearm, wrist and fingers of the participant will be determined by a classifier prior to the repetitive movements. The repetitive movements will be tested in ROM as described or maximal PROM of the participant if the PROM is limited.

#### Secondly

The participants will be asked to perform the movement slowly to determine whether the participants are able to perform the movement.

#### Thirdly

The participants are asked to perform the repetitive movements as fast as possible during 10 seconds with the side of the playing arm within the previously determined ROM of the fingers, wrist, forearm, elbow and shoulder.

coordination Tests



DESCRIPTION OF THE REPETITIVE MOVEMENTS.

#### Coordination Tests

#### LEVEL

Starting position argets

Movement

#### FINGERS

Forearm and back of hand supported full length on table, elbow in flexion, palm facing up. Begin:

Full finger extension

End:

Full finger flexion

Finger flexion to full fist or maximum PROM if less.

#### WRIST

Forearm resting on table, palm facing down, wrist and hand over the edge of the table.

Begin:

90° wrist flexion

End:

90° wrist extension

Wrist extension or maximum PROM if less.

#### FOREARM

Forearm and back of hand supported full length on table, elbow in flexion, forearm in maximum supination, palm facing up, fingers in extension. Begin :

Table

• End:

Table

Pronation until palm on table.

#### ELBOW

Arm with extended elbow in 45 anteflexion, hand palm facing up. • Begin: 45° anteflexion

• End:

Max. Flexion

Elbow flexion to 150° or maximum PROM if less.

#### SHOULDER

Arm with elbow extended, hand palm facing down, in zero anteflexion.

• Begin: zero anteflexion

• End:

Max. Elevation

Anterior flexion from start position to maximum or maximum PROM if less.

# ATTACHMENT 10 ASSESSMENT FORM PART 3 OBSERVATION

#### PowerChair Hockey Assessment Form: part 3 Observation Kees van Breukelen MSc. Wheelchairsport classifier. Sport Entry Class: **PCH Assessment Form** Name: Country/Team: Shirtnumber: Physical Characteristics: Previous class: Diagnose: Physical Assessment (PA): **Technical Assessment (TA):** Result PA + TA: Hitting/Pushing Ap score: Test 1: Hitting/Pushing: Final Ap score: Test 2: Ball/Stick controle: Ball/Stick controle Ap score: Final Tp score: Final Ap score PA: Final Ap score TA: = Sport profile: Tp score PA: Test 3: Reaching: Tp score TA: **Observational Assessment:** Role on court: A1: A. Ball/Stick control A2: 1. Receiving & Controling 2. Stick side handling A3: 3. Opposite side handling B. Pushing/Hitting B1: 1. Forehand B2: 2. Backhand C. Active Reaching (in A + B) C1: 1. Forward 2. Sideward L/R C2: 3. Rearward L/R C3: Final class: Rational:

## ATTACHMENT 11 PCH ARM PROFILES

A SYSTEMATIC APPROACH TO DETERMINE THE ARM PROFILE IN PCH

Kees van Breukelen, MSc. HoC PCH / July 2018

#### Trunk profiles

After the WC 2018 the half point scores of the Trunk will be counted, making classes from the 'inbetween' profiles. Example: the Arm profile (Ap) 4.0 + Trunk profile (Tp) 0.5 profile will become the 4.5 class, etc.

(Many) years ago WheelchairBasketball and WheelchairRugby did the same: WB went from 3 to 8 classes and WR from 3 to 7 classes, decreasing the range of activity limitations in one class. We will now do the same based on the result from evidence based research concerning the impact the Trunk does have on the sportspecific activities in PCH.

#### Arm profiles

Working with half point classes will give us new opportunities: we can, easily, integrate ALSO half point Arm profiles without changing the way we do assess the athlete currently. The classification system is still 'out of balance' when we only integrate half point Trunk scores but no half point Arm scores. Explanation: till now we did only worked with full point Arm profiles: 1 or 2 or 3 or 4. We assessed the sub-Ap scores during the Physical Assessment, searched for confirmation in the Technical Assesment, and than made a decision which was written down on the classification form.

profile 2 or 3 and 0.5 Trunk profile can only become a class 2.5 or class 3.5: not a class 3.0. This current procedure is (a) to 'rough', putting athletes with a big range in activity limitation in one class and (b) the current procedure allowed different interpretations between classifiers leading to different scores of the same arm.

We classifiers can improve on assessing the Arm profile by using a more systematic approach: 'breaking down' the PCH arm movements in kinematic 'pieces', called 'movement couples', which enables us to be more precise. In this way we can work more consistently without changing the way we are assessing now.

#### Research

Research on the Arm profiles was done in April, May and June 2018 on the classification data of 70 recently classified Dutch national players and on the classification data of another 70 international players from Italy, Swiss, The Netherlands, Belgium, Germany, Finland and Denmark, 140 athlete data in totall. The results were discussed within the classification committee. With the practical, systematic classification procedure described below we can quite easily make (more) reliable Arm profiles in full scores of half points, without changing the way we are assessing currently. This will make the PCH classification system (more) precise and balanced.

Please do look at the following attached documents:

- 1. Arm profile table (in attachment)
- 2. The Arm profiles of the national team athletes of your country (in separate mail)
- 3. (updated) classification form July 2018

#### 4/5 Movement couples

4 kinematic 'movement couples' can be recognised in the arm. Those movement couples work closely together in executing the sport specific activities in PCH. There are 2 movement couples in the shoulder, 1 in the elbow and 1 in the wrist/hand.

- Shoulder: Anteflexion/Abduction Retroflexion/ Adduction (aa/ra)
- 2. Shoulder: Exo rotation Endo rotation (s-e/e)
- 3. Elbow: Flexion Extension (e-f/e)
- 4. Wrist: Flexion Extension (w-f/e)

The pro- and supination of the forearm is the fift movement couple, but the supination is also done by the biceps which is already 'counted' in the elbow flexion (third couple) and the pronation is also done by the wrist flexor (flexor carpi radialis) which is counted already in the wrist flexion (fourth couple). For that reason, when assessing a strenght impaired athlete, we do not score the MRC of the pro- and supination in assessing the arm. In assessing the ROM (ROM impairment as primary impairment of the athlete) it is, for sure, necessary to assess this fift movement couple/the pro- and supination scores while limitation of these movements do have impact on the proper execution of the sport specific activities.

For the same reason as described for pro- and supination, the wrist radial and ulnair deviation is assessed in the playing arm of athletes with ROM impairment (like our OI players), but not MRC measured in players with a strenght impairment: the radial and ulnair deviation strenght is already part of the already assessed strenght of the wrist flexion and wrist extension.

#### Sub-Ap scores

Those 4 (strenght impairment) or 5 (ROM impairment) movement couples do give 4 or 5 sub-Ap scores, to be filled in the 4/5 boxes on the classification form.

#### Strenght impaired athletes:

Example: movement couple one: aa/ra: scores MRC 2/2. Put in box: (sub-Ap score) '2'. Movement couple two: s-e/e: scores 3/3. Put in box: (sub-Ap score) '3'. When the MRC scores do differ in one movement couple:

a) When one of the MRC strenght scores from the movement couple is 1, than ALWAYS give the (sub-Ap score) '1'. Rational:

#### Rule 1: unopposed muscle activity.

Active movement in a joint can only be possible when the agonist and antagonist are working bóth. When the agonist is MRC 2 or 3, but the antagonist is however MRC 1, than you speak of 'únopposed movement'. In that case the player can make just one movement in that joint (examples: elbow flexion but no active elbow extension or wrist flexion but no wrist extension) and the player has to rely on the gravity, compensation movements and/or chair movements to bring the armsegment back into position to make the next move.

Example: scores 3/1: is scored as (sub-Ap score) '1'. When the player does have 'opposed' muscle groups to work with, than this means that both agonist and antagonist have at least MRC 2. With opposed muscle groups working, the VOA (Volume of Action) will increase and the movements will be much more efficient, independent from gravity, compensation movements and/or chair manouvering to reposition the armsegment.

- b) When the difference in MRC is 1 in a movement couple, for example 3/2, than take the lowest score: (sub-Ap score) '2' in this example. Rational: the efficiency of an opposed movement can not be higher than the 'weakest link'.
- c) When the difference in MRC is 2 in a movement couple, for example 4/2, than take the average score: (sub-Ap score) '3' in this example.

### Defining the final Ap score in the Physical Assessment

Now look at the result of the 4 sub-Ap scores and define the final Ap score.

#### Rule 2: first movement couple is leading:

- When the first movement couple aa/ra is 1: the player will receive the máximal final Ap 1.5, so nót a higher final Ap score. In this case the upper arm is only passively hanging in the shoulder joint.
- When the first movement couple aa/ra is 2: the player will receive the máximal final Ap 2.5, so nót a higher final Ap score. In this case the upper arm cannot be placed 10 times in full 180 degrees anteflexion /abduction (scored as MRC 2). (Lówer is still possible: a movement couple score 2,1,1,2 can be given the 1.5 score).
- When the first movement couple aa/ra is 3: the player will receive the máximal final Ap 3.5, so nót a higher final Ap score. In this case the upper arm does have the strenght of MRC 3 in the anteflexion/abduction, and the arm can never be scored higher than final Ap score 3.5 even when the other sub-Ap scores, more distally, are higher.

Rational: the shoulder anteflexie/abductie (called 'scaption' when the arm is elevated diagonally) is crucial for the effective use of all (other) more distal arm movements. Absence of power or weakness in

this/these movement(s) will cause severe activity limitation in executing the sport specific activities by limiting the VOA (Volume of Action) and reducing the efficiency of these sport specific activities. Even when the other sub-Ap scores are scored higher, the shoulder anteflexion/abduction-strenght- score will determine the maximal final Ap for the strenght impaired athlete. The next question is: what does make the difference between Ap 1.0 and 1.5? Between Ap 2.0 and 2.5? And between Ap 3.0 and 3.5 for those strenght impaired athletes?

The Serratus score in combination with the totall of the 4 movement couple scores will be decisive to determine between the lower and higher Arm profile scores: see below.

#### Serratus

The Serratus anterior muscle is often impaired when the athlete does have a muscle disease. Especially when the scapula is involved in those diagnosis leading to strenght impairments.

Weakness of the Serratus will limit the protraction/ abduction and upward rotation of the scapula, which is a necessary motion of the scapula to raise the arm (anteflexion/abduction). 'Winging' (also called 'scapula alata') of the scapula will be often seen during the assessment: the medial border of the scapula, on the back of the trunk, moves away from the ribcage. That scapula weakness, causing limitation in arm elevation, will not only lead to limited arm reach, limiting the horizontal VOA, but also create an unstable shoulder while the upperarm (humerus) does not have a 'fixed' point from were it can initiate powerfull movements. This will be reflected in the Technical assessment/Observational assessment in weaker. less efficient arm movements during stickhandling/ pushing/hitting. And 'the fight for the ball' will be lost more easily due to that unstable shoulder. For the

above given reason, the Serratus strenght is so important for the (effective) arm movements of the PCH player. With this in mind we can now better distinquish between, especially, 2 and 2.5, 3.0 and 3.5.

#### Final Ap 1.0 or 1.5:

The Serratus can never have a higher score than the shoulder anteflexion-score: for that reason the Serratus score will be also MRC 1 like the anteflexion/ abduction score in athletes with the Ap 1.0/1.5 profile and will not differentiate between final Ap score 1.0 or 1.5. The sub-Ap scores will, together, define or the player does have the 1.0 or 1.5 final Ap score. A player with '1112' as the 4 sub-Ap scores, is still a 1.0 player while the weak wrist movement (movement couple 4) is so limited that the 1.0 final Arm profile is still justified. A player with '1113' scores however will show you, in the Technical assessment, a horizontal VOA which is better and quicker and can for that reason be given the final Ap score of 1.5. The '1122' profile will be a 1.5 as well. Although scientifically not right it can help you as classifier sometimes when adding up the 4 scores and look at the average: in the last case: 1+1+2+2 = 6 divided by 4 = 1.5.

Remember however that 'weighting' of the different movement couples (looking at and analysing the impact they have togéther on the sport specific activities) is much more important than the 'mathematical' way of adding up and dividing numbers.

#### Final Ap 2.0 or 2.5:

#### Rule 3: Serratus (1):

when the aa/ra score (first movement couple) is '2' and the Serratus score is 0/1, the athlete will receive the maximal Ap 2.0 profile and nót the Ap 2.5 profile.

Rational: a non-functioning Serratus will cause a severely unstable shoulder joint which does not allow the upperarm to lift above the 60 degrees, severely

limiting: (1) reaching, (2) horizontal VOA and (3) power and efficiency of more distal arm movements.

Example: the profile '2234' for the 4 movement couples is, together with the Serratus score 0/1, an example of a player with the Ap 2.0 disregarding the fact that the distal scores of the arm (elbow MRC 3, wrist MRC 4) are higher scores. When the Serratus has the score 2, the athlete with the first movement couple score of 2, can be given the 2.5 Arm profile, but also the 2.0 score or even the 1.5 profile, depending on the other 4 sub-Ap scores.

(please study on Serratus scoring in 'Daniels & Worthingham' Muscle Testing, in order to be able to differentiate between the Serratus scores).

#### Final 3.0 or 3.5:

#### Rule 3: Serratus (2):

when the aa/ra score (first movement couple) is '3' and the Serratus score is '2', the athlete will receive the maximal Ap 3.0 profile and nót the 3.5 profile.

Rational: it is the Deltoïd muscle with grade MRC 3 which is, in this case, enabling the athlete to raise the arm 10 times agaings gravity in the full range (but can not tolerate resistance). The Serratus score of '2', still means a weak Serratus leading to the same limitations as above: an unstable shoulder, limiting efficient arm movements and making them less powerfull due to the inability to counter the reaction forces of the executed movements. Example: the profile '3444' for the 4 movement couples is, together with the serratus '2' score, an example of a player with the Ap 3.0, disregarding the fact that the distal scores of the arm are higher.

When the Serratus has the score 3, the athlete (with the first movement couple 3) can be given the maximal 3.5 Arm profile, depending on the other sub-Ap scores.

#### ROM impaired athletes:

Example: movement couple one: aa/ra: scores MRC 2/3. Put in box the average: (sub-Ap score) '2.5' Movement couple two: s-e/e: scores 1/3. Put in box the average: (sub-Ap score) '2' Defining the final Ap score for ROM impaired athletes is simpler: just take the average of the 5 assessed sub-Ap scores (including the pro- supination movement couple-score).

Example: player has the '33444' profile. This player will get the Ap 3.5.

#### Technical Assessment

We should not forget that the above does result in the Ap in the Physical assessment: we still continue our evaluation of the players motoric capacities in the Technical assessment. After the Physical assessment we do have now a solid base score of the Ap, and we will observe in the Technical assessment or the sport specific activities are, indeed, executed in line with our Physical assessment. Try to analyse the Arm profile in the Technical assessment without considering the Trunk function/profile. Trunk function will enhance the arm performance, but that extra function will be taken into account in the Tp score and may not contaminate the Arm score. After the Physical and Technical assessment, the 'entry sport class' will be given as the result from both Ap and Tp in both assessments. The Observational assessment has to confirm the entry sport class.

#### · Summary:

- 1. After the WC 2018 we will 'work' in the PCH classification with both half point Trunk profiles (Tp) ánd half point Arm profiles (Ap).
- 2. 4 movement couples (strenght impaired athletes) or 5 movement couples (ROM impaired athletes: see updated classification form) will

be assessed in the Arm to be able to determine the Arm profile:

(1) anteflexion/abduction - retroflexion/adduction, (2) shoulder exo rotation - endo rotation, (3) elbow flexion - extension, (4) wrist flexion - extension. The movement couple (5) pro- supination will also be scored in ROM impaired athletes.

- 3. These 4 or 5 movement couples will result in 4 or 5 sub-Ap scores which will determine the final Ap in the Physical Assessment.
- 4. For strenght impaired athletes we do follow 3 'rules':

Rule 1: 'unopposed' movement in one of the movement couples will result in the sub-Ap score '1' for that movement couple.

Rule 2: the first movement couple (anteflexion/abduction – retroflexion/adduction) will be leading: when scored '1', than the player will get the máximal final Ap 1.5, nót higher. When scored '2', the player will get the máximal final Ap of 2.5, nót higher. When scored '3', the player will get the máximal final Ap of 3.5, nót higher.

Rule 3: The Serratus muscle will be decisive between the 2.0 and 2.5 Arm profile and between the 3.0 and 3.5 Arm profile. Between 2.0 and 2.5: when the Serratus score is MRC 0/1, than the final Ap will be máximal 2.0. When the Serratus score is however 2, than the final Ap score can be maximal 2.5, depending on the other sub-Ap scores. The Serratus score will also be decisive between 3.0 and 3.5: when the Serratus score is MRC 2, than the maximal Ap will be 3.0. When the Serratus score is however 3, than the final Ap score can be maximal 3.5, depending on the other sub-Ap scores.

In ROM impaired athletes it is the average of the 5 sub-Ap scores which will tell you which final Ap (in the Physical Assessment) score to give. See for the overview (1) the Arm profile table

and (2) the Arm profile scores from the (national team) athletes of your country as example how this refined PCH classification system 'works'.

For the athletes with amputations: as you see on the 'Arm profile table' in the attachment, we have skipped the former Ap definitions based on lenght only. These definitions came from Wheel-chairrugby were they make sence while in WR the lenght of the amputated arm will determine the pushing capabilities of the manual driven wheelchair. In PCH however the relation between lenght and motoric capability is less obvious: the first movement couple is still very important while this one will determine the strenght and therefor the hitting power.

Analyse further the impact of the remaining lenght of the amputated arm on the totall of the PCH specific activities Hitting, Ballhandling and Reaching, to determine the final Ap. Let the Technical Assessment be decisive on the final Ap score but, of course, the skill factor/trainings factor must be avoided: classification is not about skills and/or training. When new, more objective criteria will become available for the athletes with amputations, we will integrate those in the system.

In first instance this research-based practice may look difficult. However: if you study on it and understand the classification job you do, you will see that in fact it is easier than you tought. It will give (more) fair and reliable PCH classifications in which all athletes are evaluated consistently in the same way with a minimum of subjectivity between individual classifiers. And that is what our players deserve.

ARM PROFILE (AP)	IMPAIRMENT ATHLETE:  STRENGHT  INSTRUMENT: MRC	IMPAIRMENT ATHLETE:  RANGE OF MOTION  INSTRUMENT: MEASURING DEGREES	IMPAIRMEI AMPUTAT INSTRUME - MEA - ASS AMF HAI
4.0	MRC 4/5 4 movement couples indicate 4	ROM 76%-100% 5 movement couples indicate 4.0	No impact or
3.5	Mov. couple aa/ra = 3 Other couples indicate > 3.0	5 movement couples indicate ROM inbetween 3.0 and 4.0	Inbetween a
3.0	MRC 3 Mov. couple aa/ra = 3 All couples indicate 3.0 ór Serratus max. 2	ROM 51%-75% 5 movement couples indicate 3.0	Impact on E
<sup>AP</sup> 2.5	Mov. couple aa/ra = 2 All couples indicate > 2.0, Serratus 2	5 movement couples indicate ROM inbetween 2.0 and 3.0	Inbetween ,
<sup>AP</sup> 2.0	MRC 2 Mov. couple aa/ra = 2 All couples indicate 2.0 ór Serratus 0/1	ROM 26%-50% 5 movement couples indicate 2.0	Impact on E
1.5	Mov. couple aa/ra = 1 Other couples indicate 1.5	5 movement couples indicate ROM inbetween 1.0 and 2.0	Inbetween ,
1.O	MRC 0/1 Mov. couple aa/ra = 1 Other couples indicate 1 (óne can be 2)	ROM 0%-25% 5 movement couples indicate 1.0	Athlete use

NT ATHLETE: FION NT: ASURING LENGHT & ESSMENT IMPACT PUTATION ON HITTING, NDLING AND REACHING	IMPAIRMENT ATHLETE: SHORT STATURE INSTRUMENT: MEASURING LENG- HT & ROM IN DEGREES	IMPAIRMENT ATHLETE:  COÖRDINATION  RMT (REPETITIVE MOVEMENT  TESTS) JOINTS, ASAS (AUSTRALIAN  SPASTICITY ASSESSMENT SCALE)
n Ballhandling & Hitting	Arm lenght > 38/34 cm ór 5 mov. couples indicate 4.0: ROM 76% - 100%	RMT: impairment fingers, wrist ASAS: no catch
Ap 3 and Ap 4	Arm lenght <_ 38/34 cm ór 5 move- ment couples indicate ROM inbetween 3.0 - 4.0	RMT: impairment elbow, shoulder ASAS 1 catch wrist ór pro-/supina- tion, or no catch
Ballhandling	Arm lenght <_ 38/34 cm ánd 5 mov. couples indicate 3.5, ROM 51% - 75% 5 mov. couples indicate 3.0	RMT: imp. fingers, wrist, elbow, shoulder ASAS 1 catch wrist ánd pro-/supination
Ap 2 and Ap 3	5 movement couples indicate ROM inbetween 2.0 and 3.0	RMT: imp. fingers, wrist, elbow, shoulder ASAS 2 catch biceps ór triceps /ór catch 2 wrist ánd pro-/ supination
Ballhandling & Hitting	ROM 26%-50% 5 mov. couples indi- cate 2.0	RMT: imp. fingers, wrist, elbow, shoulder ASAS 2 catch biceps ánd triceps
Ap 1 and Ap 2	5 movement couples indicate ROM inbetween 1.0 and 2.0	RMT: imp. fingers, wrist, elbow, shoulder ASAS 3 catch biceps and/or triceps
s T-stick	ROM 0%-25% 5 mov. couples indicate 1.0	RMT: imp. fingers, wrist, elbow, shoulder ASAS 4 catch biceps and/or triceps

