
IPCH

CLASSIFICATION MANUAL 2020

ALL RULES, POLICIES AND PROCEDURES FOR
ATHLETE CLASSIFICATION

PCH Classification Committee

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Part A:

IPC Model Rules for Powerchair Hockey



Part One: General Provisions

1. Scope and Application

Adoption

- 1.1 These Classification Rules and Regulations are referred to throughout this document as the 'Classification Rules'. They have been prepared by the **IWAS Powerchair hockey (IPCH)** to implement the requirements of the 2015 IPC Athlete Classification Code and International Standards.
- 1.2 The Classification Manual have been adopted by IPCH during the Sport Assembly 2016 held on 18 July 2016 in De Rijp (NED).
- 1.3 The Classification Manual refer to a number of Appendices. These Appendices form an integral part of the Classification Rules.
- 1.4 The Classification Manual form part of the IPCH Rules and Regulations.
- 1.5 The Classification Manual 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; and
 - b) group Athletes into Sport Classes which aim to ensure that the impact of Impairment is minimized, 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 with IPCH, and/or participate in any Events or Competitions organized, authorized or recognized 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 Recognized Competitions (or other such locations as defined by IPCH). IPCH will advise Athletes, National Bodies and National Paralympic Committees in advance as to such Recognized Competitions (or other such locations).

Interpretation and Relationship to Code

- 1.11 References to an 'Article' mean an Article of these Classification Rules, references to an 'Appendix' mean an Appendix to these Classification Rules, and Capitalized terms used in these Classification Rules have the meaning given to them in the Glossary to these Classification Rules.
- 1.12 References to a 'sport' in these Classification Rules refer to the sport Powerchair Hockey (PCH).
- 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 familiarize 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; and
 - e) actively participate in the process of education and 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 behavior to foster a positive and collaborative Classification attitude and communication.
 - c) assist in the development, management, and implementation of Classification Systems; and
 - 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; and
 - d) cooperate with any investigations concerning violations of these Classification Rules.

Part Two: Classification Personnel

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 organization, implementation and administration of classification for the PCH.
- 3.2 All licensed IPCH Classifiers are listed in the IPCH Classifier Register which is Updated after every Classifier Course and Classification Session. All IPCH Classifiers can be members of the IPCH Classification Committee.

Head of Classification

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

Duties & Tasks of the IPCH Head of Classification:

- 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) Maintains / updates the IPCH Classifier Register.
- g) Communicates with classifiers of any relevant changes and liaises with all relevant external parties.

- 3.4 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.
- 3.5 The Head of Classification is not required to be a certified Classifier.
- 3.6 The Head of Classification may delegate specific responsibilities and/or the transfer specific tasks to designated Classifiers, or other persons authorized by IPCH.
- 3.7 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

- 3.8 A Classifier is a person authorized 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 & 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 Classifier

- 3.9 A Chief Classifier is a Classifier appointed by the IPCH Sport 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.
- a) The Chief Classifier may be required by IPCH to identify those Athletes who will be required to attend an Evaluation Session.
 - b) supervise Classifiers to ensure that 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 Local Organizing Committee to ensure that all travel, accommodation, and other logistics are arranged in order that Classifiers may carry out their duties at the Competition.
- 3.10 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 organizing committee of a Competition.
- 3.11 A Chief classifier at the end of competitions/events/classification sessions for which was appointed for, reports to the Technical Delegate and/or Head of classification and provide a written report in regards of the classification session, results and of the overall organization.

Trainee Classifiers

- 3.12 A Trainee Classifier is a person who is in the process of formal training by IPCH.

- 3.13 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 & Tasks of an IPCH Trainee Classifier:

- a) Takes an active part in the IPCH Classifiers Course.
- b) Observes during classification sessions 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.

4. Classifier Competencies, Training and Certification

- 4.1 A Classifier will be authorized to act as a Classifier if that Classifier has been certified by IPCH as having the relevant Classifier Competencies.
- 4.2 IPCH must provide training and education to Classifiers to ensure Classifiers obtain and/or maintain Classifier Competencies.
- 4.3 IPCH must specify and publish Classifier Competencies in a manner that is transparent and accessible. The Classifier Competencies must include that a Classifier has:
- 1) a thorough understanding of the Classification Rules.
 - 2) an understanding of the sport for which they seek certification to act as a Classifier, including an understanding of the technical rules of the sport.
 - 3) an understanding of the IPC Code and the International Standards for Classification.
 - 4) a professional qualification(s), level of experience, skills and/or competencies 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 or
 - b) have an extensive coaching or other relevant background in the sport PCH; or a recognized and reputable academic qualification which encompasses a requisite level of anatomical, biomechanical and sport-specific expertise, which IPCH at its sole discretion deems to be acceptable.
- 4.4 IPCH establishes a process of Classifier Certification by which Classifier Competencies are assessed. This process must include:

- a) a process for the certification of Trainee Classifiers.
 - b) quality assessment for the period of certification.
 - c) a process for handling substandard performance, including options for remediation and/or withdrawal of certification.
 - d) a process for Re-certification of Classifiers.
- 4.5 IPCH specifies Entry-Level Criteria applicable to persons who wish to become Trainee Classifiers. IPCH will provide Entry-Level Education to Trainee Classifiers.
- 4.6 IPCH provides Continuing Education to Classifiers for the purposes of Certification and Re-certification.
- 4.7 IPCH may provide that a Classifier is subject to certain limitations, including (but not limited to):
- 1) a limitation on the Impairment type for which a Classifier is certified to act as a Classifier.
 - 2) a limitation on the components of Athlete Evaluation that a Classifier is certified to conduct.
 - 3) a limitation on the level of Competition or Event that a Classifier is authorized to act as a Classifier.
 - 4) the maximum time that a Classifier Certification is valid.
 - 5) that Classifier Certification is subject to review within a specific time frame by reference to the Classifier Competencies.
 - 6) that a Classifier may lose Classifier Certification if IPCH is not satisfied that the Classifier possesses the required Classifier Competencies; and/or
 - 7) 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. 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.
- 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 these Classification Rules 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:
- 6.2.1 an assessment of whether or not an Athlete has an Eligible Impairment for the sport PCH;
 - 6.2.2 an assessment of whether an Athlete complies with Minimum Impairment Criteria for the sport PCH; and
 - 6.2.3 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 the sport PCH.

7. Eligible Impairment

- 7.1 Any Athlete wishing to compete in a sport governed by IPCH must have an Eligible Impairment and that Eligible Impairment must be Permanent.
- 7.2 Appendix 1 of these Classification Rules specify the Eligible Impairment(s) an Athlete must have in order to compete in the sport PCH governed by IPCH.
- 7.3 Any Impairment that is not listed as an Eligible Impairment in Appendix 1 is referred to as a Non-Eligible Impairment. Appendix 1 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. Appendix 1 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 to the health of the Athlete (or other Athletes) if

that Athlete competes, it may designate the Athlete as Classification Not Completed (CNC) in accordance with Article 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) supply IPCH with Diagnostic Information that must be provided as follows:
 - 7.5.1 The relevant National Body and/or National Paralympic Committee must submit a Medical Diagnostics Form to IPCH, upon completing the registration of an Athlete.
 - 7.5.2 The Medical Diagnostics Form must be completed in English and dated and signed by a certified health care professional.
 - 7.5.3 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:
 - 7.8.1 IPCH will notify the relevant National Body or National Paralympic Committee that Diagnostic Information must be provided on behalf of the Athlete. The Head of Classification will explain what Diagnostic Information is required, and the purposes for which it is required.
 - 7.8.2 IPCH will set timelines for the production of Diagnostic Information.
 - 7.8.3 IPCH together with 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.
 - 7.8.4 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.
 - 7.8.5 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.

- 7.8.6 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.
 - 7.8.7 If the Eligibility Assessment Committee is not satisfied that the Athlete has an Eligible Impairment IPCH will provide a decision to this effect 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, IPCH will inform the National Body or National Paralympic Committee.
 - 7.8.8 If the decision is not changed, IPCH will issue a final decision letter to the National Body or National Paralympic Committee.
 - 7.8.9 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 specific tasks and activities fundamental to the sport.
- 8.3 Appendix 2 of these Classification Rules specify the Minimum Impairment Criteria applicable for 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 a sport must be allocated Sport Class Not Eligible (NE) for that sport (in this case PCH).
- 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 satisfy the IPCH that he or she has an Eligible Impairment.
- 8.6 In relation to the use of Adaptive Equipment, IPCH has set Minimum Impairment Criteria as follows:

- 8.6.1 Minimum Impairment Criteria for Physical disabled athletes must *not* consider the extent to which the use of Adaptive Equipment might affect how the Athlete is able to execute the specific tasks and activities fundamental to the sport.

9. Sport Class

- 9.1 A Sport Class is a category defined by IPCH in these Classification Rules, in which Athletes are grouped by reference to the impact of an Eligible Impairment on their ability to execute the specific tasks and activities fundamental to a sport.
- 9.1.1 An Athlete who does not have an Eligible Impairment or does not comply with the Minimum Impairment Criteria for a sport must be allocated Sport Class Not Eligible (NE) for that sport in accordance with the provisions of Article 18 of these Classification Rules.
- 9.1.2 An Athlete who complies with the Minimum Impairment Criteria for a sport must be allocated a Sport Class (subject to the provisions in these Classification Rules concerning Failure to Attend Athlete Evaluation and Suspension of Athlete Evaluation).
- 9.1.3 Except for the allocation of Sport Class Not Eligible (NE) by IPCH (in accordance with Article 18.1), the allocation of a Sport Class must be based solely on an evaluation by a Classification Panel of the extent to which the Athlete's Eligible Impairment affects the specific tasks and activities fundamental to sport. This evaluation must take place in a controlled non-competitive environment, which allows for the repeated observation of key tasks and activities.
- 9.2 Appendices 3 and 4 of these Classification Rules specify the assessment methodology and assessment criteria 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 these Classification Rules concerning Protests. The designation Classification Not Completed (CNC) will however be recorded for the purpose of the IPCH Classification Master List.
- 10.3 An Athlete who is designated as Classification Not Completed (CNC) cannot compete in the sport PCH of IPCH.

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.

General Provisions

- 11.2 A Classification Panel must be comprised of at least of two (2) certified Classifiers. In exceptional circumstances IPCH may provide that a Classification Panel comprise only one Classifier, subject to that Classifier 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:
 - 12.1.1 assess whether an Athlete complies with Minimum Impairment Criteria for the sport.
 - 12.1.2 assess the extent to which an Athlete is able to execute the specific tasks and activities fundamental to the sport.
 - 12.1.3 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.
 - 12.4.1 Although other factors such as low fitness level, poor technical proficiency and aging may also affect the fundamental tasks and activities of the sport, the allocation of Sport Class must not be affected by these factors.
- 12.5 An Athlete who has a Non-Eligible Impairment and an Eligible Impairment may be evaluated by a Classification Panel 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.

- 12.6 The Sport Class allocated to the Athlete will be in accordance with the processes specified in Appendices 1, 2, 3, 4.

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:
- 13.3.1 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.
 - 13.3.2 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.
 - 13.3.3 The Athlete and accompanying person must acknowledge the terms of the IPCH Classification Consent Form as specified by IPCH.
 - 13.3.4 The Athlete must verify his or her identity to the satisfaction of the Classification Panel, by providing a document such as a passport, ID card, or event/competition accreditation.
 - 13.3.5 The Athlete must attend the Evaluation Session with any sports attire or equipment relevant to the sport for which the Athlete wishes to be allocated a Sport Class.
 - 13.3.6 The Athlete must disclose the use of any medication and/or medical device/implant to the Classification Panel.
 - 13.3.7 The Athlete must comply with all reasonable instructions given by a Classification Panel.
- 13.4 In respect of the Classification Panel:
- 13.4.1 The Classification Panel may request that an Athlete provide 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.
 - 13.4.2 The Classification Panel 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 person referred to in Article 13.3.1 above.

- 13.4.3 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.
- 13.4.4 In addition to any opinion(s) sought in accordance with Article 13.4.3, a Classification Panel may only have regard to evidence supplied to it by the relevant Athlete, National Body, National Paralympic Committee and IPCH (from any source) when allocating a Sport Class.
- 13.4.5 The Classification Panel may make, create 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 undertake Observation in Competition Assessment before it allocates a final Sport Class and designates 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 set out in Appendix 4.
- 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 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 Observation 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. In this regard:
- 14.5.1 First Appearance is the first time an Athlete competes in an Event during a Competition in a particular Sport Class.
- 14.5.2 First Appearance within a Sport Class applies to participation in all Events/Competition within the same Sport Class.
- 14.5.3 An Athlete who competes in a Team Sport must make First Appearance during the preliminary rounds of a Competition. First Appearance must not take place in the elimination rounds of a Competition.
- 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,
- 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).

- 14.6.1 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.
- 14.7 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:
 - Confirmed (C)
 - Review (R)
 - Review with a Fixed Review Date (FRD)

Sport Class Status New

- 15.3 An Athlete is allocated 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 official IPCH Competition, unless IPCH specifies otherwise.

Sport Class Status Confirmed

- 15.4 An Athlete will be designated with 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 specific tasks and activities fundamental to the sport 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 these Classification Rules concerning Protests (Article 19), Medical Review (Article 31) and changes to Sport Class criteria (Article 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 recognized 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 skeletal or sports 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 the Appendices to these Rules, then:
 - 15.7.1 IPCH may re-assign any Athlete who holds Sport Class Status Confirmed (C) with Sport Class Status Review (R) and require that the Athlete attend an Evaluation Session at the earliest available opportunity; or
 - 15.7.2 IPCH may remove the Fixed Review Date for any Athlete and require that the Athlete attend an Evaluation Session at the earliest available opportunity; and
 - 15.7.3 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.

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 IPCH website.

Part Five: Sport Class Not Eligible

18. Sport Class Not Eligible

General Provisions

- 18.1 If an IPCH Classification Panel determines that an Athlete:
 - 18.1.1 has an Impairment that is not an Eligible Impairment; or
 - 18.1.2 does not have an Underlying Health Condition,
IPCH Classification Panel 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 a sport that Athlete must be allocated Sport Class Not Eligible (NE) for that sport.

Absence of Eligible Impairment

- 18.3 If IPCH Classification Panel determines that an Athlete does not have an Eligible Impairment, that Athlete:
 - 18.3.1 will not be permitted to attend an Evaluation Session; and
 - 18.3.2 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 Classification Panel may likewise do so without the need for the process detailed in Article 7 of these Classification Rules.
- 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
 - 18.5.1 an Impairment that is not an Eligible Impairment; or
 - 18.5.2 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 any sport.

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 the Chief Classifier); 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 the sport PCH, the Athlete may be eligible to compete in another sport, subject to Athlete Evaluation 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 the sport PCH of IPCH.

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

- 20.1 A Protest may only be made by one of the following bodies:
- a National Body (see Articles 21-22); or
 - a National Paralympic Committee (see Articles 21-22); or
 - IPCH (see Articles 23-24).

21. National Protests

- 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 Article 17 of these Classification Rules) a National 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 National 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:
- 22.1.1 the name and sport of the Protested Athlete.
 - 22.1.2 the details of the Protested Decision and/or a copy of the Protested Decision.
 - 22.1.3 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.

22.1.4 reference to the specific rule(s) alleged to have been breached; and

22.1.5 the Protest Fee set by IPCH at 100,00€.

22.2 The Protest must be submitted to the Chief Classifier of the relevant Competition within the timeframes specified by IPCH. Upon receipt of the Protest Documents the Chief Classifier must conduct a review of the Protest, in consultation with IPCH, of which there are two possible outcomes:

22.2.1 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

22.2.2 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.

22.3 If the Protest is dismissed the Chief Classifier/IPCH 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 will be not refunded.

22.4 If the Protest is accepted:

22.4.1 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);

22.4.2 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; and

22.4.3 IPCH must notify all relevant parties of the time and date the new Evaluation Session is to be conducted by the Protest Panel.

23. IPCH Protests

23.1 IPCH may, in its discretion, make a Protest at any time in respect of an Athlete under its jurisdiction if:

23.1.1 it considers an Athlete may have been allocated an incorrect Sport Class; or

23.1.2 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. IPCH Protest Procedure

24.1 If IPCH decides to make a Protest, IPCH and/or the Head of Classification must advise the relevant National Body or National Paralympic Committee of the Protest at the earliest possible opportunity.

- 24.2 A written explanation as to why the Protest has been made and the basis on which the Head of Classification/IPCH considers it is justified must be provided to the relevant National Body or National Paralympic Committee.
- 24.3 If IPCH makes a Protest:
- 24.3.1 the Protested Athlete's Sport Class must remain unchanged pending the outcome of the Protest.
 - 24.3.2 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); and
 - 24.3.3 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 authorized 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 these Classification Rules.
- 25.3 A Protest Panel must not include any person who :
- a) was a member of the Classification Panel that made the protested decision;
 - b) 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 (whichever is relevant).
- 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 these Classification Rules. 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 these Classification Rules.
- 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:
 - 26.1.1 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; and
 - 26.1.2 all reasonable steps must be taken to ensure that the Protest is resolved at the earliest opportunity.

27. Special Provisions

- 27.1 IPCH may make arrangements (subject to the approval of the IWAS and/or IPC) 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 IPC/IWAS and/or IPCH may issue special ad hoc provisions to operate during the Paralympic Games or other Competitions.

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 may, if satisfied that a reasonable explanation exists for the failure to attend and subject to the practicalities at a Competition, 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 permitted to compete at the relevant Competition.

30. Suspension of Evaluation Session

- 30.1 A Classification Panel, in consultation with the Chief Classifier, 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:
 - 30.1.1 a failure on the part of the Athlete to comply with any part of these Classification Rules.
 - 30.1.2 a failure on the part of the Athlete to provide any medical information that is reasonably required by the Classification Panel.
 - 30.1.3 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.
 - 30.1.4 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.
 - 30.1.5 the Athlete is unable to communicate effectively with the Classification Panel;
 - 30.1.6 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; and/or
 - 30.1.7 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:
 - 30.2.1 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;
 - 30.2.2 if the Athlete takes the remedial action to the satisfaction of the Chief Classifier or Head of Classification, the Evaluation Session will be resumed; and
 - 30.2.3 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 Article 10 of these Classification Rules.
- 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 a sport 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 a 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:
- 32.4.1 disqualification from all events at the Competition at which the Intentional Misrepresentation occurred, and any subsequent Competitions at which the Athlete competed;
 - 32.4.2 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;
 - 32.4.3 suspension from participation in Competitions in all sport for a specified period of time ranging from 1 to 4 years; and
 - 32.4.4 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 four 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 four 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 recognized, 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.

Part Ten: Use of Athlete Information

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 underage) 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 by IPCH of Personal Information for Research Purposes must be consistent with these Classification Rules 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. 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 anonymized 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:
 - 36.1.1 that fact that IPCH is collecting the Classification Data; and
 - 36.1.2 the purpose for the collection of the Classification Data; and
 - 36.1.3 the duration that the Classification Data will be retained.

37. Classification Data Security

- 37.1 IPCH must protect Classification Data by applying appropriate security safeguards, including physical, organizational, technical and other measures to prevent the loss, theft or unauthorized access, destruction, use, modification or disclosure of Classification Data; and
 - 37.1.2 take reasonable steps to ensure that any other party provided with Classification Data uses that Classification Data in a manner consistent with these Classification Rules.

38. Disclosures of Classification Data

- 38.1 IPCH must not disclose Classification Data to other Classification Organizations except where such disclosure is related to Classification conducted by another Classification Organization 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 anonymized.
- 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:
 - 40.1.1 confirmation of whether or not that IPCH Processes Classification Data relating to them personally and a description of the Classification Data that is held.
 - 40.1.2 a copy of the Classification Data held by IPCH; and/or
 - 40.1.3 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 Master List

- 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 enter 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:
 - 43.1.1 a National Body; or
 - 43.1.2 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 IPC/IWAS and/or IPCH may issue special ad hoc provisions to operate during the Paralympic Games or other Competitions.

Part Twelve: Glossary

Adaptive Equipment:

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

Appeals:

The means by which a complaint that IPCH has made an unfair decision during the Classification process is resolved.

Athlete:

For purposes of Classification, any person who participates in sport at the international level (as defined by IPCH) or national level (as defined by each National Federation) and any additional person who participates in sport at a lower level if designated by the person's National Federation.

Athlete Evaluation:

The process by which an Athlete is assessed in accordance with these Classification Rules in order that an Athlete may be allocated 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.

Chief Classifier:

A classifier appointed by IPCH to direct, administer, co-ordinate and implement Classification matters for a specific Competition according to these Classification Rules.

Classification:

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

Classification Data:

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

Classification Intelligence:

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 to the satisfaction of IPCH.

Classification Organization:

Any organization that conducts the process of Athlete Evaluation and allocates Sport Classes and/or holds Classification Data.

Classification Panel:

A group of Classifiers, appointed by IPCH, to determine Sport Class and Sport Class Status in accordance with these Classification Rules.

Classification Personnel:

Persons, including Classifiers, acting with the authority of a Classification Organization in relation to Athlete Evaluation, for example administrative officers.

Classification Rule:

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

Classification System:

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

Classifier:

A person authorized 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 Competencies:

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 behavioral 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 the sport(s) under its governance.

Diagnostic Information:

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

Eligible Impairment:

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

Eligibility Assessment Committee:

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

Entry Criteria:

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.

Evaluation Session:

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

Event:

A single race, match, game or singular sport contest.

First Appearance:

The first time an Athlete competes in an Event during a Competition in a particular Sport Class.

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, co-ordinate and implement Classification matters for IPCH.

Health Condition:

A pathology, acute or chronic disease, disorder, injury or trauma. Impairment: A Physical, Vision or Intellectual Impairment.

Intentional Misrepresentation:

A deliberate attempt (either by fact or omission) to mislead an International Sport 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.

International Competitions:

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

International Sport Federation:

A sport federation recognized by the IPC as the sole world-wide representative of a sport for Athletes with an Impairment that has been granted the status as a Para sport by the IPC. The IPC and the International Organizations of Sports for the Disabled act as an International Sport Federation for certain sports.

International Standards:

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

IPC:

International Paralympic Committee.

IWAS:

International Wheelchair and Amputee Sports Federation

Maintaining Certification:

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

Major Competition Organizer: An organization 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.

Medical Review Request:

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

Models of Best Practice:

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

National Body:

Refers to the national member of an International Sport Federation.

National Laws:

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

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.

Non-Competition Venue:

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

Observation in Competition:

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

Paralympic Games:

Umbrella term for both Paralympic Games and Paralympic Winter Games.

Permanent:

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

Personal Information:

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.

Protested Athlete:

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

Re-certification:

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

Recognized Competition:

A Competition that is sanctioned or approved by IPCH.

Research Purposes:

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 organization that accepts the Code and commits to implement it and the International Standards by way of its Classification Rules.

Sport Class:

A category for Competition defined by IPCH by reference to the extent to which an Athlete can perform the specific tasks 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.

Team Sport:

a sport in which substitution of players is permitted during a Competition.

Tracking Code Observation Assessment (OA):

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.

Part B:

Appendices on IPCH Classification System



Mission and Philosophy

- 1.1 The IWAS Powerchair Hockey (IPCH) coordinates PowerChairHockey movement worldwide. This sport is addressed to people with severe physical disabilities as an attractive, competitive, fair and well-organized 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 for Powerchair 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 one.
- 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 Code.
- 1.7 Classification Panels / Classifiers are always acting according to the IPCH / IWAS Code of Ethics.
- 1.8 Classifiers have undersigned a Code of Conduct that apply not only for or during the competition they can be appointed for, but also further.
- 1.9 Classification has to be specific enough to achieve standardization, 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.

Appendix 1: Eligible Impairments / Health Conditions

1.1 Eligible Impairment Types PCH Athletes:

Eligible Impairment	Examples of Health Conditions
<p>Impaired Muscle Power</p> <p>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.</p>	<p>Examples of an Underlying Health Condition that can lead to Impaired Muscle Power include:</p> <p>spinal cord injury (complete or incomplete, tetra- or paraplegia or paraparesis), muscular dystrophy, post-polio syndrome and spina bifida.</p>
<p>Limb Deficiency</p> <p>Athletes with Limb Deficiency have total or partial absence of bones or joints</p>	<p>Examples of an Underlying Health Condition that can lead to Limb Deficiency include:</p> <p>traumatic amputation, illness (for example amputation due to bone cancer) or congenital limb deficiency (for example dysmelia).</p>
<p>Short Stature</p> <p>Athletes with Short Stature will have a reduced length in the bones of the upper limbs, lower limbs and/or trunk.</p>	<p>Examples of an Underlying Health Condition that can lead to Short Stature include:</p> <p>achondroplasia, growth hormone dysfunction, and osteogenesis imperfecta.</p>
<p>Hypertonia</p> <p>Athletes with hypertonia have an increase in muscle tension and a reduced ability of a muscle to stretch caused by damage to the central nervous system.</p>	<p>Examples of an Underlying Health Condition that can lead to Hypertonia include:</p> <p>Cerebral palsy, traumatic brain injury and stroke.</p>

<p>Ataxia</p> <p>Athletes with Ataxia have uncoordinated movements caused by damage to the central nervous system.</p>	<p>Examples of an Underlying Health Condition that can lead to Ataxia include: cerebral palsy, traumatic brain injury, stroke and multiple sclerosis.</p>
<p>Athetosis</p> <p>Athletes with Athetosis have continual slow involuntary movements.</p>	<p>Examples of an Underlying Health Condition that can lead to Athetosis include: cerebral palsy, traumatic brain injury and stroke.</p>
<p>Impaired Passive Range of Movement</p> <p>Athletes with Impaired Passive Range of Movement have a restriction or a lack of passive movement in one or more joints.</p>	<p>Examples of an Underlying Health Condition that can lead to Impaired Passive Range of Movement include: arthrogyrosis and contracture resulting from chronic joint immobilization or trauma affecting a joint.</p>

1.2 Non-Eligible Impairment Types for all (PCH) Athletes

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.
- Impairment metabolic functions; and
- Tics and mannerisms, stereotypes, and motor perseveration.

1.3 Health Conditions that are not Underlying Health Conditions for all (PCH) Athletes

A number of Health Conditions do not lead to an Eligible Impairment and are not Underlying Health Conditions. An Athlete who has a Health Condition (including, but not limited to, one of the Health Conditions listed in the above Appendix 1.1) but who does not have an *Underlying* Health Condition will not be eligible to compete in Para sport.

Health Conditions that primarily

- a) cause *pain*.
- b) primarily cause *fatigue*.
- c) primarily cause joint *hypermobility* or hypotonia;
- d) are primarily *psychological* or *psychosomatic* in nature do *not* lead to an Eligible Impairment.

Examples of Health Conditions that primarily cause *pain* include myofascial *pain*-dysfunction syndrome, fibromyalgia or complex regional pain syndrome.

An example of a Health Condition that primarily causes *fatigue* is chronic fatigue syndrome.

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

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

Appendix 2.

Minimum Impairment Criteria PCH

2.1 Classification formula PCH and classification profiles

Classification Formula PCH:

Sport Class = Arm profile (Ap) + Trunk profile (Tp)
(Arm profile is the profile of the playing arm).

Possible Arm profiles: *Ap 1.0, 1.5, 2.0, 2.5, 3.0, 3.5 and 4.0*

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

2.2 Minimum Impairment Criteria (MIC) in general

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

Ap 4.0 + Tp 0.5) is an eligible (4.5 class) player.

The player with the 5.0 profile (Ap 4.0 + Tp 1.0), will be a PCH Class 5.0 NE (Not Eligible) player.

2.3 Minimum Impairment Criteria (MIC) specific for each impairment type

See Schemes for the maximum Arm profile (4.0) and for the maximum Trunk profile (1.0)

Arm-profile (Ap)	Impairment athlete: Strength Instrument: MRC	Impairment athlete: Range of Motion Instrument: measuring degrees	Impairment athl.: Limb deficiency Instrument: - measuring length & - assessment impact i- deficiency on hitting, handling and reaching	Impairment athlete: Short Stature Instrument: measuring length & ROM in degrees	Impairment athlete: Coördination Instrument: RMT (repetitive movement tests) joints, ASAS (Austr. spasticity assessment scale)
Ap 4.0	MRC 4/5 4 movement couples indicate 4	ROM 76%-100% 5 movement couples indicate 4.0	No impact on Ballhandling & Hitting	Arm length > 38/34 cm ór 5 mov. couples indicate 4.0: ROM 76% - 100%	RMT: impairment fingers, wrist Indication: No catch or ASAS 1 catch
Ap 3.5	Mov. couple aa/ra = 3 Other couples indicate > 3.0	5 movement couples indicate ROM inbetween 3.0 and 4.0	Inbetween Ap 3.0 and Ap 4.0 Amputation: hand	Arm length < 38/34 cm ór 5 movement couples indicate ROM inbetween 3.0 - 4.0	RMT: impairment fingers, wrist, elbow, shoulder Indication: ASAS 2 biceps ór triceps

Arm Profile 4.0

- **Strength Impairment:**
Ap 4.0 means general profile of the playing arm of MRC 4 or MRC5.
- **Range of Movement (ROM) Impairment:**
Ap 4.0 means ROM falls into the 76% - 100% range of normal ROM of Shoulder, Elbow and Wrist / Hand.

- **Short Stature:**

Ap 4.0 means ROM 76% - 100% of normal ROM Shoulder, Elbow and Wrist / Hand.
Osteogenesis Imperfecta / Achondroplasia:

Ap 4.0 Men: Arm-length exceeds 38 cm and ROM 76% - 100% range.

Ap 4.0 Women: Arm length exceeds 34 cm and ROM 76% - 100% range.

- **Limb Deficiency / Amputation:**

Ap 4.0 means no amputation playing arm or an amputation of the playing arm which does have minimal impact on the sport specific activities Hitting, Ball-control and Reaching.

Additional: in case of lower limb amputation only, the sum of Arm profile and Trunk profile cannot exceed 4.5, which means that the Tp can be maximal 0.5 when the Ap is 4.0.

- **Coordination Impairment:**

Ap 4.0 means Arm without coordination limitations or Arm with Coordination impairment (only) in Fingers and Wrist with maximum 'catch' 1.

All of the above Arm profiles will lead to ineligible players, when their Trunk score is 1.0:

Ap 4.0 + Tp 1.0 = 5.0 = NE

A player can have the Trunk profile 1.0, but only in combination with the Arm profile max.

3.5:

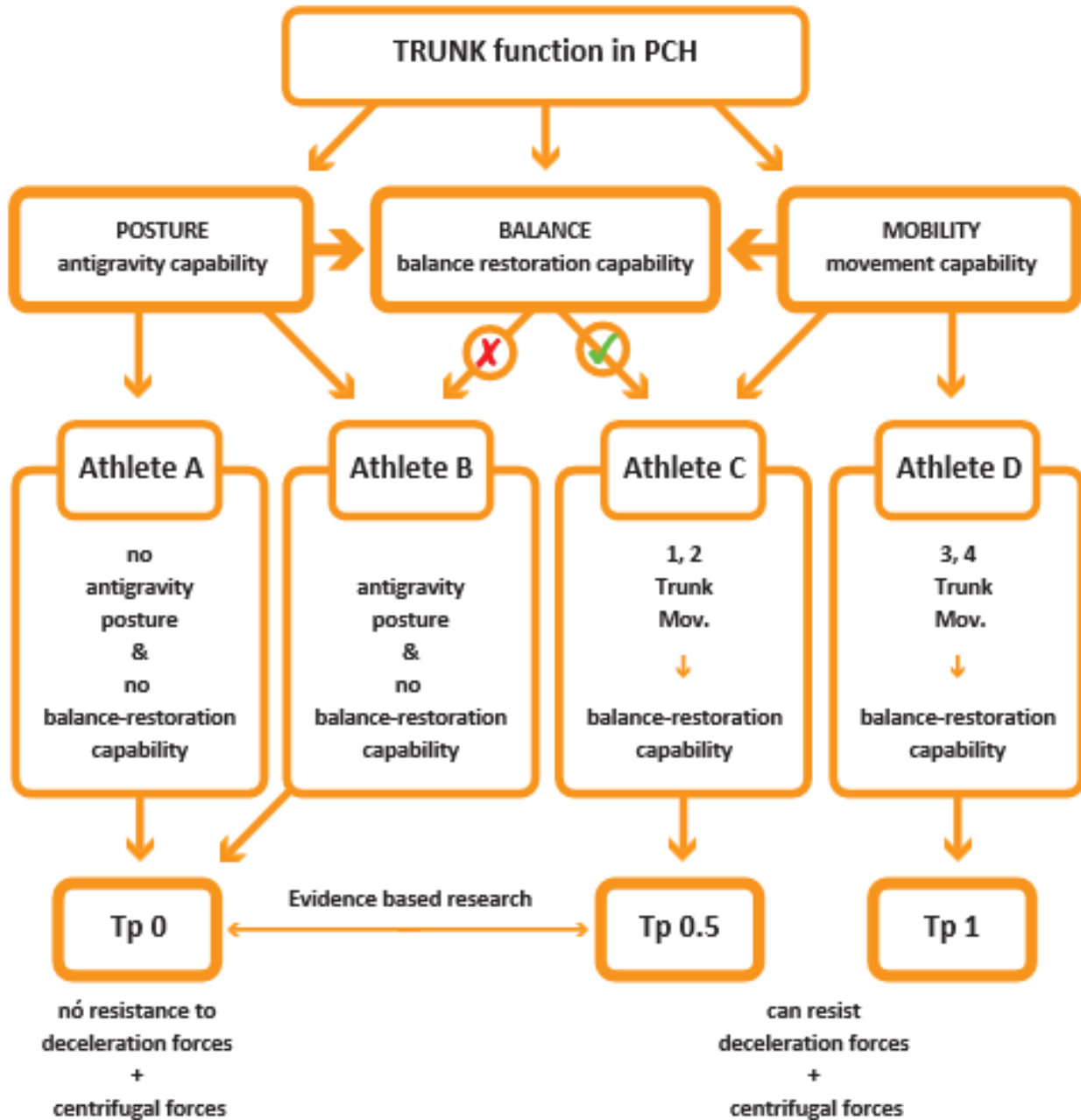
Ap 3.5 + Tp 1.0 = 4.5

Trunk profile 1.0:

3 or 4 active Trunk movements (from 4 possible Trunk movements).

Explanation: see Appendix 3 (assessment methodology) and 4 (assessment criteria).

Trunk function in PCH
Relation between 4 Athlete-types and 3 Trunk profiles



Anti-gravity posture alone (Athlete B), cannot counter the deceleration + centrifugal forces of the wheelchair. To counter these forces, there must be Balance-restoration capability (Athlete C + D).
 What is needed for that Balance-restoration capability? The answer to that question is: Movement capability: limited (Athlete C: 1 or 2 active movements) or full (Athlete D: 3 or 4 active movements) out of the 4 possible active movements: Forward flexion, (2) Rotation Left, (3) Rotation right, (4) Lateral flexion stickside.

Appendix 3.

Assessment Methodology PCH

3.1 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 'Medical Diagnostic Form' in part C. Attachment 1). This document can be downloaded from the IPCH website or can be requested from the IPCH 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 (typed) and 6 weeks before the athlete undergoes evaluation.

The Athlete should have an Eligible Impairment and underlying Health Condition.

If not: Sport Class 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 'Classification Consent Form' part C. Attachment 2).

The actual classification contains three steps:

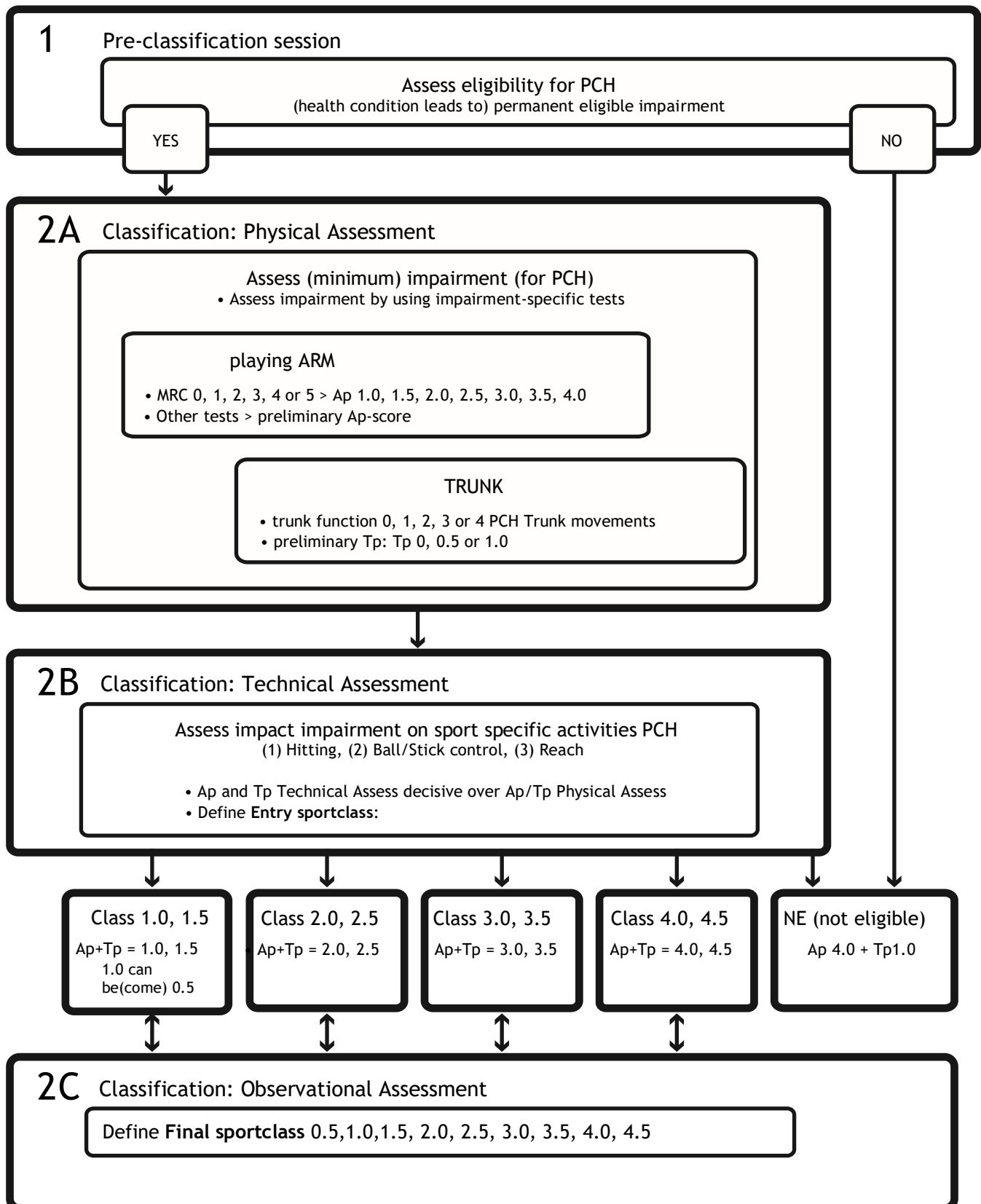
- *Physical Assessment,*
- *Technical Assessment*
- *Observational Assessment (Observational Assessment if needed, indicated by Tracking Code: OA).*

Physical Assessment and Technical Assessment are done in a non-competitive environment.

The PCH **Classification Form** will be used (see 'Classification Form' part C. Attachment 3) during these Assessments.

The **PCH classification process** is detailed in the following Scheme.

PCH classification process



Ap = Arm profile / Tp = Trunk profile

3.2 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,
- length measurement (+ impact assessment) for Limb Deficiency Impaired Athletes,
- length measurement and ROM testing for Athletes with Short Stature
- Coordination Tests for Coordination Impaired Athletes.

For the Trunk Assessment the (modified) TIC, Trunk Impairment Classification, will be used. See (Scheme) below.

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 / Amputations	Length Measurement/ Assessment impact	TIC tests
Short stature	PROM (goniometer / degrees and length measurement)	TIC tests
Hypertonia, Ataxia and Athetosis	Coordination tests/ASAS	TIC tests

3.2.1 Assessment Arm profile

Impaired Muscle Power

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

Test the playing arm: not the drive/ Joystick arm/hand

(unless to differentiate between 0.5 and 1.0).

Test the muscles / joint movements as described on the PCH Classification Form

(see part C, Attachment 3: "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 endpoint 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

- **Grade 2**

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 is often described as the horizontal plane of motion.

- **2 -** gravity eliminated movement that is more than half, but less than full range of motion
- **2 +** against gravity, up to half of full range of motion.

- **Grade 1**

Visually or by palpation, there is some contractile activity.

There is, however, no movement of the body part as a result of this minimal contractile activity.

→ **1+** Moves limb without gravity loading less than one half available ROM

- **Grade 0**

The grade 0 muscle is completely quiescent on palpation or visual inspection.

Impaired range of motion/Short Stature

PROM: 'Passive Range of Motion' involves placing a body part through its various directional motions, all without the activation of the athlete's 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 'Classification Form'

(see part C, Attachment 3 'Classification Form').

For Athletes with Osteogenesis Imperfecta / Achondroplasia or similar Health Conditions, the length of the playing arm will also be measured.

Impairment Limb deficiency / Amputation

Length Measurement. Describe eventually the anatomical malformation.

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

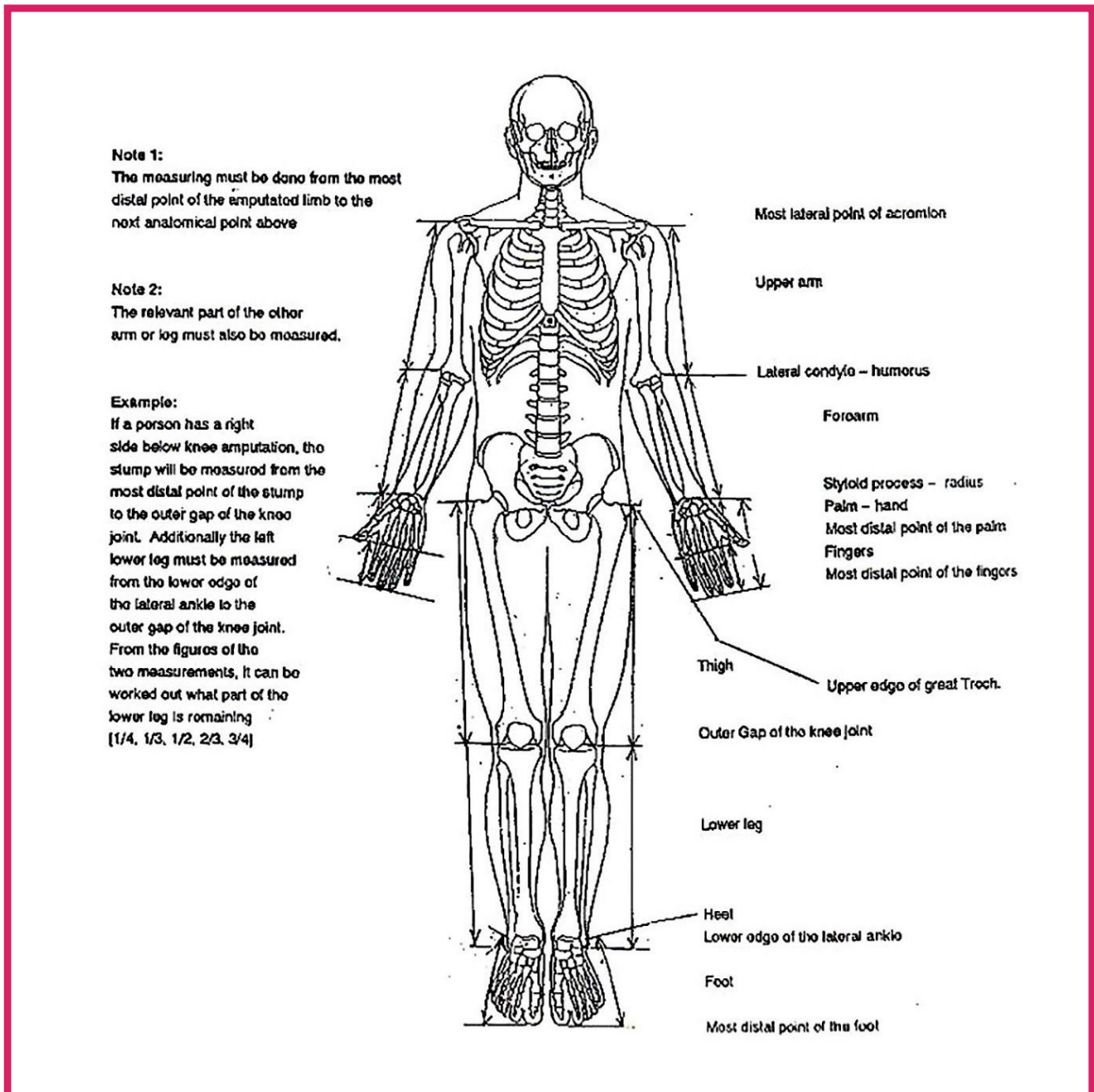
Loss of limb/limb deficiency should be highlighted to indicate where the limb loss is present. Figures of measurement should be accounted for from the distal point of the stump to the next marked measuring point on the body. The relevant parts of all limbs must be measured.

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 (below) 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 centimeters.



Impairment Coordination (Hypertonia, Ataxia, Athetose)

Coordination tests (Repetitive Movement tests) of shoulder, elbow, wrist and fingers of the playing arm (see Scheme below).

The athlete will be instructed to do quick alternating movements to detect type, location and severity of the coordination impairment.

1. 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.

2. Secondly

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

3. Thirdly

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

Level	Starting position	Targets	Movement
Fingers	Forearm and back of hand supported full length on table, elbow 90° flexion, palm facing up.	Begin=full finger extension. End=full finger flexion.	Finger flexion to full fist or maximum PROM if less. One side at a time.
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 10 90° or maximum PROM if less. One side at a time.
Forearm	Forearm and back of hand supported full length on table, elbow 90° flexion, forearm in maximum supination, palm facing up, fingers in extension.	Begin=table. End=table.	Pronation until palm on table. One side at a time.
Elbow	Forearm resting on table hand palm facing up with 45° angle between upper arm and table.	Begin=table. End= classifier's hands at 135°.	Elbow flexion to 135° or maximum PROM if less. One side at a time.
Shoulder	Shoulder elevation 45°, elbow extended, hand palm facing down resting on table.	Begin=table. End=classifier's hands at 135°.	Anterior flexion from start position to 135° or maximum PROM if less. One side at a time.

Table: description of the repetitive movements.

The ASAS (Australian Spasticity Assessment Scale) will be used to detect eventual 'catches' in biceps and / or triceps, forearm and wrist.

ASAS scores

0	No 'catch' on 'rapid passive movement' (RPM).
1	Catch occurs on RPM followed by release: there is no resistance to RPM throughout rest of range
2	Catch occurs in second half of available range (after halfway point during RPM and is followed by resistance throughout remaining range.
3	Catch occurs in first half of available range (up to and including halfway point) during RPM and is followed by resistance throughout the remaining range.
4	When attempting RPM, the body part appears fixed but moves on slow passive movement. Besides the Physical Assessment, the Technical Assessment is (very) necessary in order to be able to define the Entry Sports Class.

3.2.2 Assessment Trunk profile

The Trunk Impairment Tests from the scientific work from Altmann* are, modified, useful in the Trunk assessment of PCH athletes: the tests are clearly described and can be executed by the players very easily, are non-demanding and can be done in 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 the Trunk Assessment, only execution of Trunk movements to define the possibility to counter the decreasing and rotational forces of the powerchair and the reaching capabilities of a player.

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

See Trunk Tests TIC descriptions in part C. Attachment 4.

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

Trunk test 1: will in itself not differentiate between Trunk-profile 0 (zero: fail test 1) and Trunk-profile 0.5, while antigravity posture alone is not enough to counter the decreasing and centrifugal forces of the Powerchair which means: players who cannot counter the decreasing and rotational forces of the Powerchair, will still be assessed with the Trunk profile 0.

Trunk tests 3, 4 and 5 will discriminate between Trunk profile 0.5 and 1.0.

From Test 3 only the Trunk flexion will be taken into consideration: extension, behind the vertical, is not possible because of the high backrest.

From test 5 only the lateral flexion to the stick-side will be assessed: lateral flexion to the Joystick-side cannot be done due to the armrest with Joystick on it.

Which means that there are 4 effective trunk movements to assess in PCH:

1. Trunk Flexion forward
2. Trunk Rotation to the Left side,
3. Trunk Rotation to the Right side,
4. Trunk Lateral Flexion to the stick side.

The criteria for Tp 0, Tp 0.5 and Tp 1.0 will be described in Appendix 4.

3.3 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.

3.3.1 Activities that determine Proficiency in PCH

Three core determinants which determine the proficiency in PCH are:

1. Hitting power,
2. Ball / stick control,
3. 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 described as the vertical 'Volume of Action': the way the stick is used in the vertical plane.

2. Ball /stick control

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 maneuvers 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 powerchair which will limit the Reaching possibilities

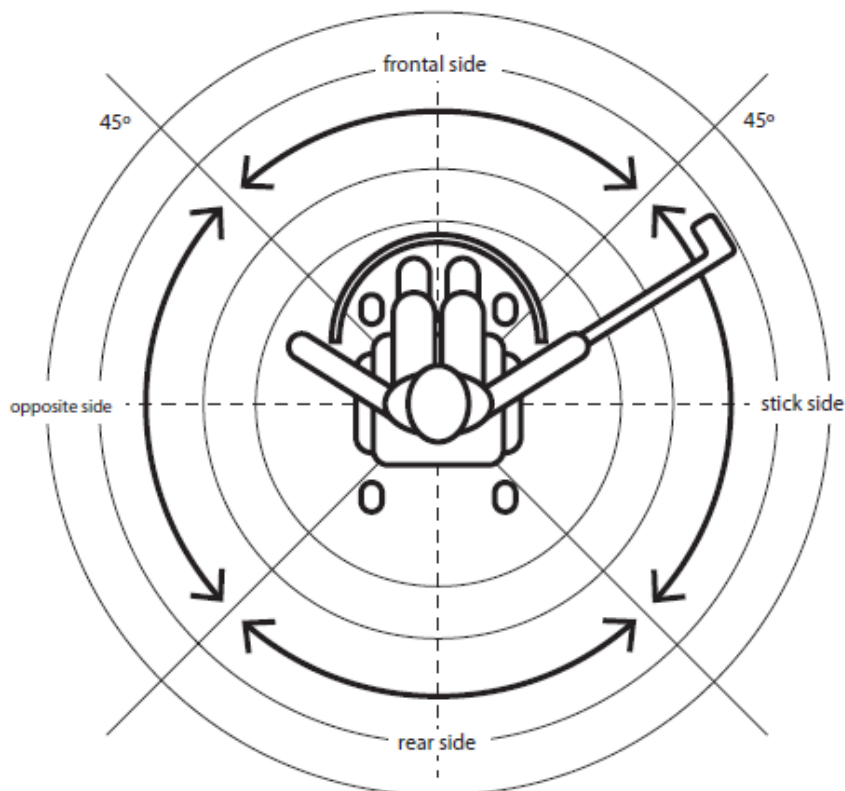
(see the drawings with Horizontal and Vertical 'Volume of Action' to define the different sides of the power- chair and Reaching circles).

IPCH Classification Form

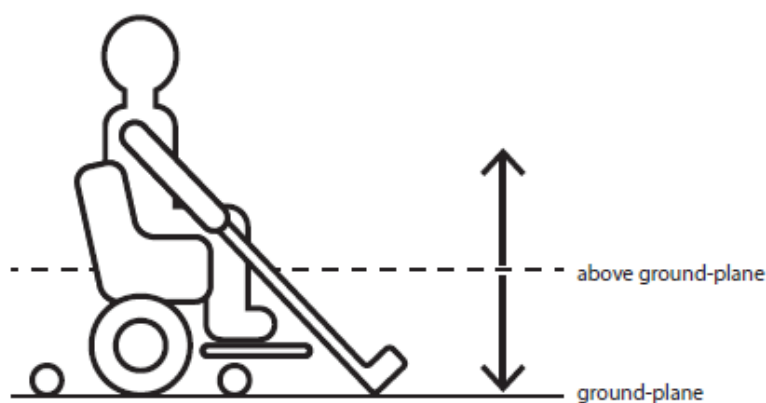
kvb | januari 2016



Horizontal 'Volume of Action'



Vertical 'Volume of Action'



With the Arm profile 4.0, 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.

3.3.2 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 types of Tests.

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

1. Hitting power,
2. Ball / stick control,
3. Reach.

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

In these Tests the above described term 'Volume of Action' will be used.

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: these 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:

1. only used in the ground-plane,
2. only used in the ground-plane and in the vertical space till seat height, or
3. used without compensations / passive movements in all 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 do 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 (fore hand) while driving the Powerchair. Same from the opposite side (back-hand) 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.

Test Instruction:

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 account 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.

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 stick- blade using (quick) forehand and backhand maneuvers: the goal is to define and check the Arm-profile (like in test 1).

Test 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 maneuvering the ball around one cone.

“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 maneuvering 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.

- 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 and not *how well* the test is performed.

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 stick blade, 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, rotation left / right and lateral flexion to stick side. 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/performance.

Test Instruction:

The athlete stands 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, rotate maximal to the left side, rotate maximal to the right side and lean maximally to the stick side (so for every Athlete the distances of the cones can be different).

Classifiers look for active movements, which means that 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.

“Do touch the basis of the three cones leaning as far as possible forward, rotate as far as possible sideward/rearwards to both sides and lean as far as possible to the stick side. 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. Concerning the use of armrest on the powerchair:

Trunk movements must be active movements. Classifiers do not classify passive movements / use of equipment. Look for the quality of the trunk movements: quickly executed versus slowly / time consuming.

PCH Classification Process Detail

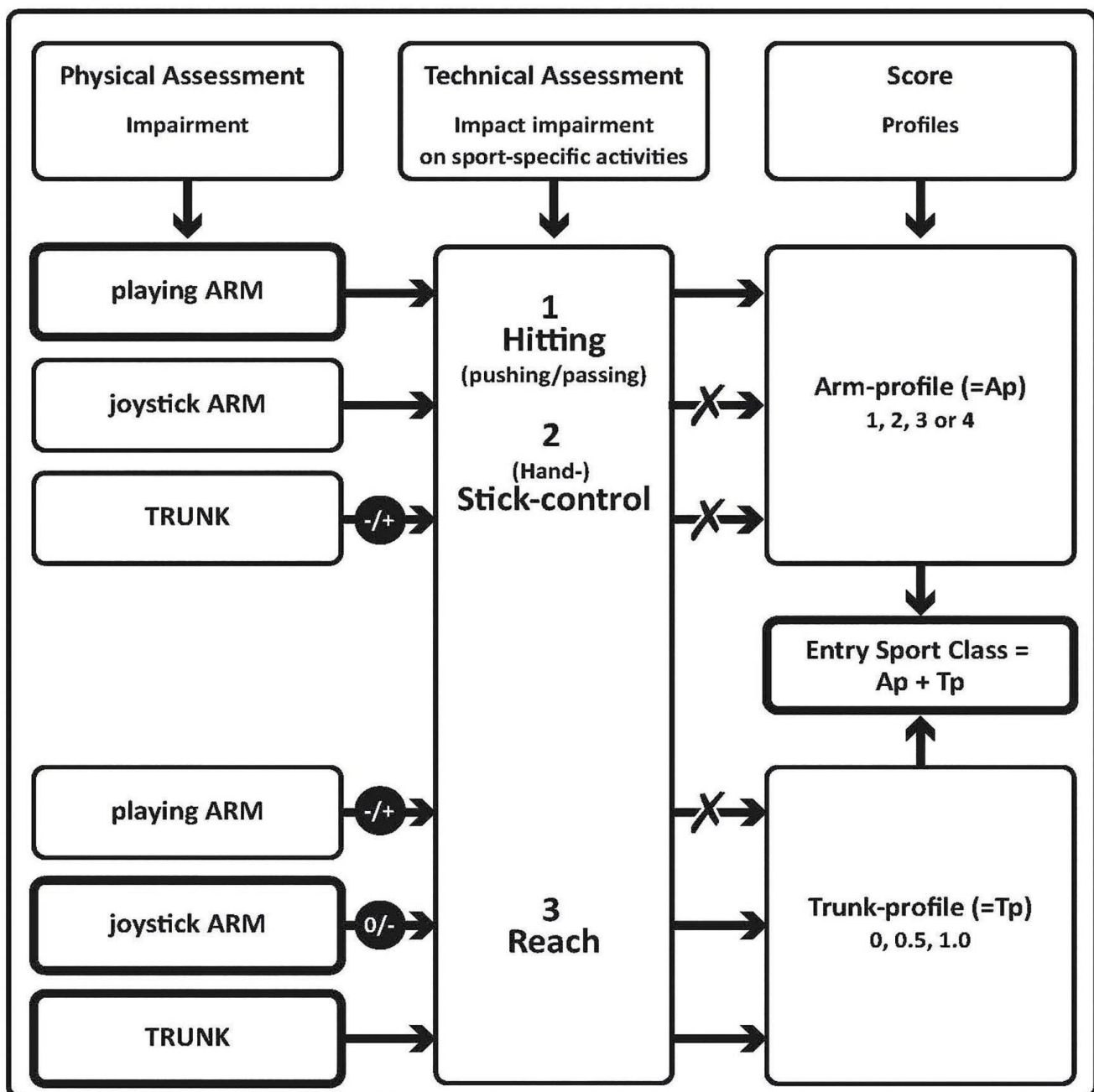
The PCH 'Classification Process Detail' Scheme do show the relation between the Physical Assessment, Technical Assessment and the Arm- and Trunk score profiles.

Also the impact of the Arm- and Trunk Impairment on the Sport Specific Activities:

1. Hitting power,
2. Ball / stick control,
3. Reach.

PCH Classification process detail

kvb 2017



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

3.4 Observational Assessment

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 '*Test Observation*'.

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

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** (Appendix 4 Assessment criteria) can be used for this purpose.
- The Classifier do constantly analyze both Arm profile and Trunk profile during the Game.
- Classifiers have the completed Classification Form of the specific player as basis for the Observation and use the specific Observation Form (see Appendix 4).

Classifiers do observe / analyze:

- (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.
- (4) *Trunk movements* of the Athlete.

All with the aim to get confirmation of the decisions made in the Physical and Technical.

Assessment concerning the Arm joint movements / 'movement couples' and Trunk movements as documented on the Classification Form.

Classifiers do analyze the above-mentioned joint movements and Trunk movements when looking at the PCH Sport Specific Activities which are:

- (1) Hitting/Passing
- (2) Receiving / Controlling the ball,
- (3) Reaching.

Classifiers analyze the above-mentioned joint movement couples / Trunk movements in the sport specific activities during *full effort* of the Athlete.

Appendix 4.

Assessment Criteria for the Allocation of a Sport Class in PCH

4.1 Assessment Criteria Arm profiles

4.1.1 PCH Arm profiles: A systematic approach

After the IWAS Powerchair Hockey World Championship 2018 a further differentiation was made in the PCH classes in 'half points', based on evidence-based research concerning the Trunk profiles.

That gave IPCH the opportunity to 'work' as well with half points in the Arm profiles, making the PCH classification system balanced and more precise: there will be no longer need to choose between, for example, Ap 2 or Ap 3, but it will be possible to decide on Ap 2.5. So the Ap 1.5, 2.5, 3.5 that have become now available.

On the followings pages the criteria for each Arm profile will be explained.

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 the Classifiers work can be more accurate and consistent.

4.1.2 Research

Research on the Arm profiles was done in spring 2018 on the classification data of 70 recently classified Dutch national players and on the classification data of another 70 international players from Italy, Switzerland, The Netherlands, Belgium, Germany, Finland and Denmark, 140 athlete data in total.

The results were discussed within the IPCH Classification Committee.

With the practical, systematic classification procedure described below Classifiers can quite easily make (more) reliable Arm profiles in full scores or half scores.

This will make the PCH classification system precise, balanced, accurate and consistent.

4.1.3 Physical Assessment:

4/5 Movement couples

4 kinematic 'movement couples' can be recognized 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.

1. 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 fifth 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 **strength impaired athlete**, the MRC of the pro- and supination is not scored in assessing the arm.

In assessing the **ROM** (ROM impairment as primary impairment of the athlete) it is, for sure, necessary to assess this fifth 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 ulnar deviation is assessed in the playing arm of athletes with ROM impairment (like Osteogenesis Imperfecta players), but not MRC measured in players with a strength impairment: the radial and ulnar deviation strength is already part of the already assessed strength of the wrist flexion and wrist extension.

Sub-Ap scores

Those 4 (strength 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 (Attachment 3).

Strength 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 strength scores from the movement couple is 1, then *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 both. When the agonist is MRC 2 or 3, but the antagonist is however MRC 1, then you speak of '*unopposed 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 arm segment 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, then 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 maneuvering to reposition the arm segment.

b. When the difference in MRC is 1 in a movement couple, for example 3/2, then take the lowest score: (sub-Ap score) '2' in this example.

Rational:

the efficiency of an opposed movement cannot be higher than the 'weakest link'.

c. When the difference in MRC is however 2 in a movement couple, for example 4/2, than take the average score: (sub-Ap score) '3' in this example. This will seldom occur as the movement with MRC 2 defines the total movement, the opposite movement will seldom be strong (MRC 4).

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 maximal *final Ap 1.5*, so not a higher final Ap score. In this case the upper arm is only passively hanging in the shoulder joint or can only move till 45 degrees, not higher.

- When the first movement couple aa/ra is 2: the player will receive the maximal *final Ap 2.5*, so not a higher final Ap score. In this case the upper arm *cannot* be placed in full available range anteflexion /abduction (scored as MRC 2) and the strength of the Deltoid muscle is scored as MRC 2. (Lower than 2.5 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 maximal *final Ap 3.5*, so not a higher final Ap score. In this case the upper arm does only have the strength of MRC 3 in the anteflexion/abduction and/or comparable weakness in the adduction/retroflexion movements (claviculaire pectoralis/sternale pectoralis, latissimus), 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 anteflexion/abduction (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-retroflexion/adduction (aa/ra) strength- score will determine the maximal final Ap for the strength 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 strength impaired athletes?

The Serratus score in combination with the total 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 strength impairments. Also, in the case of athletes with severe kyphoscoliosis, the Serratus can be impaired.

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 Volume Of Action (VOA), but also create an unstable shoulder while the upper arm (humerus) does not have a 'fixed' point from where it can initiate powerful 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 strength is so important for the (effective) arm movements of the PCH player. With this in mind we can now better distinguish between, especially, 2 and 2.5, 3.0 and 3.5.

For study on the Serratus:

'Daniels & Worthingham' - Muscle Testing, in order to be able to differentiate between the Serratus scores.

<https://www.youtube.com/watch?v=-tlcuAKTr1Y>

<https://www.youtube.com/watch?v=e8T7wLSqzx0>.

- **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 '1-1-1-2' 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 '1-1-1-3' 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 '1-1-2-2' 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 analyzing the impact they have together 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 not the Ap 2.5 profile.

Rational:

a non-functioning Serratus will cause a severely unstable shoulder joint which does not allow the upper arm 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.

- **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 not the 3.5 profile.

Rational:

The Deltoid muscle with grade MRC 3 will enabling the athlete to raise the arm against gravity in the available range (but cannot tolerate resistance).

However, the Serratus weakness can prevent the arm to raise maximal against gravity, while the Serratus is responsible for the last part in raising the arm.

That does not mean that the armscore is lower than 3: when the Deltoid is still MRC 3, the arm will get the 3 score, but not the 3.5 score when the Serratus is MRC 2.

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 powerful due to the inability to counter the reaction forces of the executed movements.

Example:

the athlete with Deltoid MRC 3 and 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 Deltoid MRC 3 and the first movement couple 3) can be given the maximal 3.5 Arm profile, depending on the other sub-Ap scores.

When in the case of an athlete with a Strength Impairment, the Deltoid is scored as MRC 4 and the first movement couple is, despite of that, scored as 3 based on the fact that the adduction/retroflexion is scored as MRC 3, the outcome of all 4 movement couples can still be 3.5 instead of 3.0: let the Technical Assessment be decisive in such a case.

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 '3-3-4-4-4' profile. This player will get the Ap 3.5.

Limb deficiency/Amputation athletes:

For the athletes with amputations the former Ap definitions based on length only was skipped. These definitions came from Wheelchair rugby where they make sense while in that sport the length of the amputated arm will determine the pushing capabilities of the manual driven wheelchair.

In PCH however the relation between length and motoric capability is less obvious: the first movement couple is still very important while this one will determine the strength and therefor the hitting power.

It will be necessary to analyze further the impact of the remaining length of the amputated arm on the total 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 IPCH will integrate those in the system.

4.1.4 Technical Assessment

The above will result in the Ap in the Physical assessment.

The evaluation of the players continues by assessing the motoric capacities in the Technical assessment.

After the Physical assessment Classifiers do have 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 analyze 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.

Test 1. Hitting Power Assessment

- **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 forearm 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. Ballhandling / Stick-control Assessment

- **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, 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.

Summary:

After the WC 2018 the PCH classification do 'work' with both half point Trunk profiles (Tp) and half point Arm profiles (Ap).

4 movement couples (strength 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) shoulder anteflexion/abduction – retroflexion/adduction,
- (2) shoulder exo rotation – endo rotation,
- (3) elbow flexion – extension,
- (4) wrist flexion – extension.

(5) pro- supination, as fifth movement couple, will also be scored in ROM impaired athletes.

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.

For strength 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 (shoulder anteflexion/abduction – retroflexion/adduction) will be leading: when scored '1', then the player will get the maximal final Ap 1.5, not higher. When scored '2', the player will get the maximal final Ap of 2.5, not higher. When scored '3', the player will get the maximal final Ap of 3.5, not 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, then the final Ap will be maximal 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 can also be decisive between 3.0 and 3.5: Deltoid MRC 3: when the Serratus score is MRC 2, then the maximal Ap will normally be 3.0. When the Serratus score is however also 3 (in this case with Deltoid MRC 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.

Table Arm profile criteria *:

Arm-profile (Ap)	Impairment athlete: Strength Instrument: MRC	Impairment athlete: Range of Motion Instrument: measuring degrees	Impairment athl.: Limb deficiency Instrument: - measuring length & - assessment impact l- deficiency on hitting, handling and reaching	Impairment athlete: Short Stature Instrument: measuring length & ROM in degrees	Impairment athlete: Coördination Instrument: RMT (repetitive movement tests) joints, ASAS (Austr. spasticity assessment scale)
Ap 4.0	MRC 4/5 4 movement couples indicate 4	ROM 76%-100% 5 movement couples indicate 4.0	No impact on Ballhandling & Hitting	Arm length > 38/34 cm ór 5 mov. couples indicate 4.0: ROM 76% - 100%	RMT: impairment fingers, wrist Indication: No catch or ASAS 1 catch
Ap 3.5	Mov. couple aa/ra = 3 Other couples indicate > 3.0	5 movement couples indicate ROM inbetween 3.0 and 4.0	Inbetween Ap 3.0 and Ap 4.0 Amputation: hand	Arm length <_ 38/34 cm ór 5 movement couples indicate ROM inbetween 3.0 - 4.0	RMT: impairment fingers, wrist, elbow, shoulder Indication: ASAS 2 biceps ór triceps
Ap 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 Ballhandling Amputation: half forearm	Arm length <_ 38/34 cm ánd 5 mov. couples indicate 3.5, ROM 51% - 75% 5 mov. couples indicate 3.0	RMT: impairment fingers, wrist, elbow, shoulder Indication: ASAS 2 catch biceps ánd triceps
Ap 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 Ap 2.0 and Ap 3.0 Amp. thr. elbow	5 movement couples indicate ROM inbetween 2.0 and 3.0	RMT: imp. fingers, wrist, elbow, shoulder Indication: ASAS 3 biceps ór triceps
Ap 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 Ballhandling & Hitting	ROM 26%-50% 5 mov. couples indicate 2.0	RMT: impairment fingers, wrist, elbow, shoulder Indication: ASAS 3 catch biceps ánd triceps
Ap 1.5	Mov. couple aa/ra = 1 other couples indicate 1.5	5 movement couples indicate ROM inbetween 1.0 and 2.0	Inbetween Ap 1.0 and Ap 2.0	5 movement couples indicate ROM inbetween 1.0 and 2.0	RMT: imp. fingers, wrist, elbow, shoulder Indication: ASAS 4 biceps ór triceps
Ap 1.0	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 uses T-stick	ROM 0%-25% 5 mov. couples indicate 1.0	RMT: impairment fingers, wrist, elbow, shoulder Indication: ASAS 4 catch biceps ánd triceps

Arm profile table indicating the different Arm profiles in PCH, KvB Januari 2020

* The 1.0 Arm profile will have a further differentiation in the 0.5 or 1.0 class profile. Only players without any Trunk function and without arm/hand/finger function can become 0.5 players. This differentiation in 0.5/1.0 is detailed on the additional Classification Form (+ flowchart) in the Attachment 3 and below.

Arm length criteria Short Stature:

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 length 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.

PHC Measurement (tool): distinction 0.5 versus 1.0

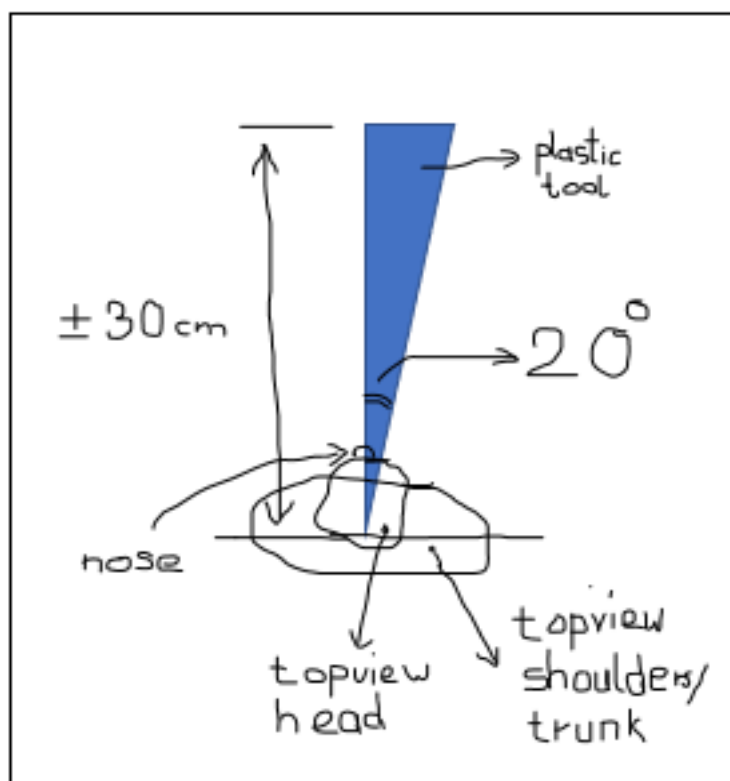
Measure athlete standing behind him/her with using 'tool' (20 degrees plastic piece)*. Eventually do stand on chair to have better view on top head athlete.

1. Place tool on head with point tool on line through shoulders
2. Athlete is facing forward: line tool through nose athlete.
3. Ask him/her to move head to (right) side but keep tool in start position above head. When nose do passes the 20 degrees (good to see from above): continue with hand/fingertesting: see (a) additional 0.5 – 1.0 classification form + (b) Flowchart.
When nose do not pass 20 degrees, ON EITHER SIDE, than athlete can be given the 0.5 class.

*20 degree tool can be made yourself by cutting 1/2 mm thick (colored) plastic with scissor.

This lightweight plastic tool can be taken with you when you go classify nationally or internationally.

This tool works better than your goniometer!



4.2 Assessment Criteria Trunk profiles

Introduction

In 2016 a first research on the Trunk Assessment was conducted by students of the University of applied science in The Hague/The Netherlands.

The research did lead to reconsider which athlete had a zero (0) trunk and which athlete had a 0.5 trunk: players with the trunk profile B (see Scheme Trunk profiles in Appendix 2, Minimal Impairment Criteria) were still scored with a zero (0) trunk score.

In 2019 a second research on the Trunk function done by the University of applied science in The Hague/The Netherlands was completed.

In that same timeframe the IPCH Classification Committee was analyzing data showing the fact that till 2019 only a small group of athletes were assessed with the 0 trunk scores, another small group of athletes with the 1.0 trunk score but a big group of athletes with the 0.5 trunk score.

The research question therefore was:

Could IPCH do better in the Trunk assessment?

Is the present Trunk Assessment not 'too rough' / not fine enough?

The Trunk assessment and evaluation criteria in the following pages are based on :

- (1) the latest research done on the Trunk,
- (2) former results of the previous research on the Trunk
- (3) results of discussion in the classifiers group in Lignano 2020
- (4) inputs from the coaches
- (5) discussion in the PCH classifiers committee.

The conclusion is that Assessment of the Trunk could be done better: maybe not all '0.5 trunk scores' were 0.5, but 0 or 1.0 trunk scores.

At first it was thought to add a 1.5 Trunk score to solve 'the big group 0.5 problem', but the discussion and analysis of the research data suggested to concentrate on doing a better Assessment of the existing Trunk profiles 0, 0.5 and 1.0.

In this part of the Classification Manual the refinement of the scoring system on the IPCH Classification Form with the purpose to give classifiers more tools for the Trunk Assessment and allow therefore a better job concerning the Trunk Assessment/Trunk scoring.

Trunk movements in general:

The Trunk has, normally, 6 movements:

- (1) Forward flexion (from the vertical position),
- (2) backward extension (from the vertical position),

- (3) Rotation to the left side,
- (4) Rotation to the right side,
- (5) Lateral flexion to the left side
- (6) Lateral flexion to the right side.

Trunk movements sport specific for PCH:

Sport specific for PCH however the Trunk do only have 4 of those movements!

- (1) Forward flexion (FF), no Backward extension due to, normally, high backrest preventing this movement,
- (2) Rotation to the left side (Rl),
- (3) Rotation to the right side (Rr)
- (4) Lateral flexion to the stick-side (Lf-ss)

There is no useful Lateral flexion to the Joystick side due to the fact that the arm is resting on the armrest to operate the Joystick and in this position the Trunk cannot lean to that side in pure lateral flexion: the Joystick arm on the armrest is preventing this.

Actions from the player on the joystick side will be executed with rotation to that side together with passive 'leaning' on the armrest on that side: not with lateral flexion. Which means that we can take only these 4 movements in consideration in our Trunk Assessment: not all 6.

Physical Assessment Trunk:

Instrument: TIC, Trunk Impairment Classification system.

But with PCH specific 'boundaries'/dividing lines between the Trunk plane movements to differ more correctly between the Trunk profiles 0, 0.5 and 1.0

- *Criterion for FF* = 30 degrees (< 30 means 'fail' and > 30 means 'succeed').
- *Criterion for Rl* = 30 degrees (< 30 means 'fail' and > 30 means 'succeed').
- *Criterion for Rr* = 30 degrees (< 30 means 'fail' and > 30 means 'succeed').
- *Criterion for Lf-ss* = plusminus 15 degrees = sternal notch at least in vertical line with the ASIS.

Notice: The 45 degrees as criterium for the FF (original in the TIC) is exchanged for the 30 degrees.

- This was the outcome of the second Research: 30 to 45 degrees forward will already significantly increase the Volume of Action/reaching in the forward plane, compared with players who do have less than 30 degrees forward plane movement possibility.
- The second, related, reason was: not to give players who have for example 40 degrees of FF the Tp 0 Trunk profile, while the aim is to protect absolutely the players

with Tp 0 which do, mostly, not have active movement possibilities.

- This modification to the original TIC test was discussed among the Classification Committee and also among Classifiers to get to the decision to put the 'boundary' between fulfilling the criteria and not fulfilling the criteria, in front of that original (TIC) 45 cut-off point: for that reason 30 degrees was chosen.

Lf-ss: 'plus-minus' 15 degrees while this depends on the length of the Trunk and the distance between both ASIS.

- When the trunk length (L5 up to sternal notch) is 40 cm (which is quite normal), the criterium 'sternal notch at least in vertical line with ASIS' (as TIC criterium) will be a trunk moving, at least, 15 degrees to the side.
- When following Karpandji (see scheme below) it seems logical to take the 30 degrees as criterium for Lf-ss and the 30 for FF and 30 for Rotation: all three are accomplished by the Thoracal trunk movement alone not considering the lumbar part of the spinal column.

However: the criterium 'sternal notch in line with ASIS' (= plusminus 15 degrees), coming from the research from Altmann, is easier to accomplish for the player compared with the criterium of 30 degrees, which means that the player will get the 1.0 trunk score easier when being able to fulfill this criterium (plus at least 2 other trunk movements: see criterium Tp 1.0 below)

In the Karpandji scheme (below) it can be seen that L5, L4 and L3 together (3 + 6 + 8) can already mean a Trunk hanging 17 degrees outwards.

Of course, there will be only an active Lf-ss movement when the Trunk muscles are able to work for the return movement.

Criterion for the 0 Trunk score (Tp 0):

*0 (zero) active plane movement with the above criteria:
when some active movements are possible, those movements stay within the ranges of 30 degrees (FF, Rl, Rr) and within the range of 15 degrees (Lf-ss) = sternal notch not above and beyond the asis.*

Criterion for the 0.5 Trunk score (Tp 0.5):

1 or 2 active trunk movements (out of the 4) with the above criteria.

Criterion for the 1.0 Trunk score (Tp 1.0):

3 or 4 active trunk movements (out of the 4) with the above criteria.

Technical Assessment Trunk:

Instrument: TICss = TIC sport specific = athlete assessed in wheelchair.

Criterion FF:

30 degrees: athlete may use strength Joystick-arm on armrest (because this is the realistic sport specific situation). The 30 criterion can be 30 degrees anywhere in the range of zero (vertical trunk position) to 90 degrees forward. The stick-arm is placed forward.

Criterion RL:

30 degrees: rotation in powerchair to the left side with stick in hand and trunk away from the backrest/not contacting the backrest. When the strength of the legs is used for the Trunk rotation, this is allowed while this is the actual realistic sport specific situation.

Criterion Rr:

30 degrees: rotation in powerchair to the right side with stick in hand and trunk away from the backrest/not contacting the backrest. When the strength of the legs is used for the Trunk rotation, this is allowed while this is the actual realistic sport specific situation.

Criterion Lf-ss:

15 degrees = sternal notch at least above the ASIS and actively come back. Player reaches sideways to the stickside without 'hanging' with the side of the trunk on the armrest. Joystick-arm with hand still on Joystick.

Look for the quality of the *return movement* when the athlete is doing *5 times* the specific movement (FF, RL, Rr and Lf-ss).

Preferred sequence Trunk movements

The preferred sequence of the Trunk movement repertoire of the PCH player is:

1. First the FF:

while this movement is in line with

- a. the look/visual direction (no head rotation needed),
- b. forward driving with powerwheelchair,
- c. muscle innervation (when SCI, spina bifida, polio),
- d. use of Joystick arm/hand to support the FF movement in the return movement
- e. actions which are needed not in front of the powerchair but more to the side, will first be done by rotating the powerwheelchair after which action again FF is the most appropriate movement for reaching.

2. Second the rotations:

the 60 % weight (of the total body mass) of the trunk + head stays in the vertical column when rotating on the vertical rotation axis, which is easier compared with movements where the trunk comes out of this vertical column with the result that the

gravity does play a role and anti-gravity muscle action is needed for the return movement.

3. Only third: Lf-ss,

which is the most difficult movement to make especially for the athlete with strength impairment: the trunk plus head (60% of total body weight) comes out of the vertical column which means that the gravity is working on the trunk making the return movement only possible when sufficient trunk muscle power on the side is available. The player will, if possible, first rotate the chair, after which the needed action is FF.

Only when this is not possible or there is no time to rotate the chair, the lateral action will be chosen.

Possible Assessment mistake:

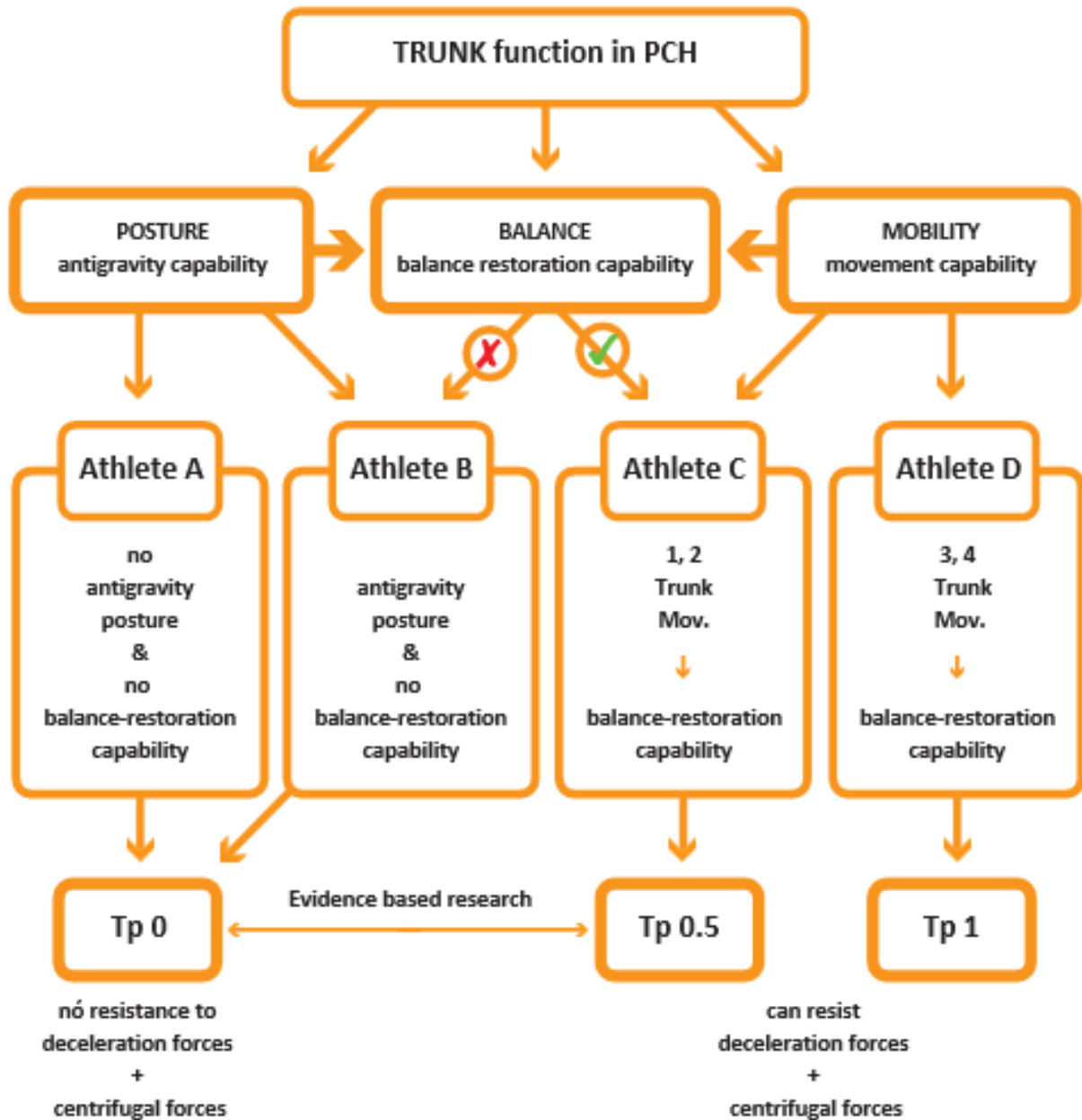
Players with a severe scoliosis mostly do have a double scoliosis to bring the shoulder girdle horizontal in order to bring the neck/head as far as possible vertical again.

Those players are fantastic in compensation movements, but are lacking rotation to at least one side and are lacking sideward movement to fulfil the 15 degree criterium: they cannot bring, actively, the sternal notch over the asis and come back to the vertical position with the trunk. Which means those players are lacking at least 2 out of the 4 possible trunk movements, so they should be given the Tp 0 or Tp 0.5 as highest score but not the Tp 1.0.

Relation PA (Physical Assessment) and TA (Technical Assessment).

The outcome of the TA is decisive in case of doubt between the PA trunk score and the TA trunk score, while the TA is the more realistic sport specific situation.

Trunk function in PCH
Relation between 4 Athlete-types and 3 Trunk profiles



Anti-gravity posture alone (Athlete B), cannot counter the deceleration + centrifugal forces of the wheelchair. To counter these forces, there must be Balance-restoration capability (Athlete C + D).
 What is needed for that Balance-restoration capability? The answer to that question is: Movement capability: limited (Athlete C: 1 or 2 active movements) or full (Athlete D: 3 or 4 active movements) out of the 4 possible active movements: Forward flexion, (2) Rotation Left, (3) Rotation right, (4) Lateral flexion stickside.

Kinematic analysis Trunk

Kees van Breukelen, MSc

Kapandji IA. The physiology of the joints. Volume 3: The trunk and the vertebral column. 2nd ed. Philadelphia (PA): Churchill Livingstone; 1984.

	Flexion	Extension	Rotation 1s	Lateral flex 1s
T1	2.5	1.5	4	2
T2	2.5 / 5	1.5 / 3	4 / 8	2 / 4
T3	2.5 / 7.5	1.5 / 4.5	4 / 12	2 / 6
T4	2.5 / 10	1.5 / 6	4 / 16	2 / 8
T5	2.5 / 12.5	1.5 / 7.5	4 / 20	2 / 10
T6	3 / 15.5	2 / 9.5	4 / 24	2 / 12
T7	3 / 18.5	2 / 11.5	4 / 28	2 / 14
T8	3 / 21.5	2 / 13.5	3 / 31	2 / 16
T9	3 / 24.5	2 / 15.5	2 / 33	2 / 18
T10	6 / 30.5	4 / 19.5	1 / 34	2 / 20
T11	7 / 37.5	5 / 24.5	1 / 35	5 / 25
T12	7 / 44.5	5 / 29.5	1 / 36	4 / 29
Thor.	45	30	35	30
L1	7	5	1	8
L2	8 / 15	5 / 10	1 / 2	6 / 14
L3	9 / 24	6 / 16	1 / 3	8 / 22
L4	9 / 33	6 / 22	1 / 4	6 / 28
L5	12 / 45	8 / 30	2 / 6	3 / 31
Lumbal	45	30	5	30
Total	90	60	40	60

4.3 PCH Sport Classes allocation

Now all the assessment criteria to define the Arm profile (4.1) and assessment criteria to define the Trunk profile (4.2) in both Physical Assessment and Technical Assessment have been explained.

By using those it is possible to give the athlete his/her Entry-sport class.

The combined outcome of PA and TA will define the Entry-sport class:

- a player can have 7 different Arm profiles (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 4.0 and Trunk-profile 1.0 has class 5.0 NE and is a not eligible player for Powerchair Hockey.

All players will play with their class scores on the floor, independently of used equipment (so independent from using T-stick or Handstick).

Each team (5 players) shall play with the **maximum total points of 12.0**

4.4 Assessment Criteria in Observational Assessment

Arm value definition and characteristics in PCH.

The activities listed are designed to facilitate decision making and offer an understanding of the activity limitation of the arm and rationale for the point value awarded.

They are by no means a complete list; each athlete will have a particular characteristic combination based on their individual activity limitation.

The 1.0, 2.0, 3.0 and 4.0 Arm profiles are described.

When characteristics of two profiles are observed, it will mean that the athlete does have an intermediate profile: 1.5, 2.5 or 3.5

It should be noted that trunk value (Tp) may enhance the arms potential activity by providing additional stability/balance restoration capability, ball receiving & controlling ability, hitting/pushing ability and reach but the value for this increased activity will be awarded in the trunk score. Do look at the Arm as if there would be zero trunk function.

VOA = Volume of Action

1.0 Arm (Ap 1.0)

Significant activity limitation due to:

- Loss of strength (see below)
- Loss of range of movement < 25%
- Limb length deficiency causing the athlete to use a T-stick.
- Coordination impairment in shoulder, elbow, wrist, and fingers / Indication: ASAS 4 biceps/triceps

Strength impairment:

No functionality (MRC 0/1) in shoulder anteflexion, abduction/retroflexion, adduction, so no movement in shoulder or maximal elevation/abduction movement till 45 degrees.

There can be muscle activity with maximal value MRC 3 in shoulder endo or exorotation, elbow flexion or extension or wrist flexion or extension, but there cannot be antagonistic muscle activity with muscle grade 2 or 3 in those joints: so only 3/1 or 2/1.

Shoulder endo/exo rotation 2/2,
Elbow flexion/extension 2/2,
Wrist flexion/extension 2/2 usually means 1.5 when in combination (when first movement couple is scored as 1).

General:

A. *VOA Horizontal:* Limited to: Arm is 'hanging' vertically with extended elbow and can maximum move till 45 degrees. Pro-supination possible.

Flexion or extension elbow/wrist possible: 'unopposed movement couple(s)'.

B. *VOA Vertical:* none

Sport specific:

A. Ball/stick control:

- *Receiving & controlling*
limited to receiving ball and transition backhand to forehand slow/ time consuming or even not possible and only seen in combination with Tp 0.5/1.0 + rotation chair.

- *Stickside handling:*
limited to only stick-side handling and only small covered area.

- *Opposite side handling:*
none

B. Pushing / Hitting:

limited to no vertical VOA

- *Forehand:*
Pushing instead of Hitting, slowly executed and only in one direction possible due to unopposed movement(s).

- *Backhand:*
limited to see Forehand

2.0 Arm (Ap 2.0)

In relation to a 1.0 arm the 2.0 arm will have either:

- Stronger shoulder joint (MRC 2) enabling them to, actively, move the upper arm.
- ROM: 25-50%
- A longer limb length (compared with Ap 1) reducing strongly both ballhandling and Hitting.
- Coordination impairment: RMT: imp. fingers, wrist, elbow, shoulder. Indication: ASAS 3 catch biceps and triceps

General:

A. VOA Horizontal:

Arm: Upper arm movement with weak / limited excursion: describing 'cone' with shoulder as top cone.

'Opposed movement couples' present, although weak or restricted.

B. VOA Vertical:

till seat height possible: mostly done by rotation chair in combination with Trunk movement

Sport specific:

A. Ball/stick control:

- Receiving & controlling:

limited to combination endo/exo rotation shoulder with pro/supination elbow: easier ball-control, but still slowly executed due to weakness or with severe restrictions due to ROM impairment.

- Stickside handling:

limited to only stick-side handling

- Opposite side handling:

none, unless done by Trunk rotation/chair rotation.

B. Pushing / Hitting:

- Forehand:

Pushing not limited to one direction, which means both Forehand and Backhand are possible. Still Pushing instead of Hitting.

- Backhand:

see Forehand.

3.0 Arm (Ap 3.0)

An athlete with a 3.0 arm will commonly have:

- In the case of weakness, stronger shoulder girdle (max MRC 3). The elbow joint can have some imbalance but can be close to normal strength. The same for the wrist/hand/fingers.
- ROM: 51-75%
- A limb length deficit reducing the Ballhandling, but not the Hitting.
- It should be noted that at this arm value there are athletes that demonstrate minimal activity limitation in the wrist/hand but still shoulder girdle limitation that reduces their potential to utilize their arm/hand in all positions in space (for example by reduced ROM) or do that with less quality (because of that MRC 3).
- Coordination impairment: found with repetitive movement tests and indication ASAS Catch 2 in biceps/triceps.

General:

A. VOA Horizontal:

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

B. VOA Vertical:

higher than seat height but still limited explosive or limited in ROM

Sport specific:

A. Ball/stick control:

- *Receiving & controlling:* preference forearm movements. Combination of lifting upper arm + flexion/extension elbow gives easier control, quicker forehand / backhand movements, quicker slalom.
- *Stickside handling:* possible to outer circles.
- *Opposite side handling:* yes, but without Trunk rotation limited mostly to inner circles.

B. Pushing / Hitting:

- *Forehand:* Hitting instead of Pushing but with limitation in shoulder movement couple(s), so with restricted power or ROM.
- *Backhand:* limited to same as Forehand

4.0 Arm (Ap 4.0)

At this point moving into the highest point arm capacity, one would expect the following presentations:

- Full proximal strength shoulder/elbow/wrist.
- ROM 76-100%
- Limb length deficit with no restrictions to Receiving/Controlling and Hitting
- Coordination impairment: impairment fingers/wrist possible but with no/minimal impact on sport specific activities. No catch or catch 1 found.

General:

A. VOA Horizontal:

Arm: shoulder movements not restricted. Complete arm movements without limitation in movement couples.

B. VOA Vertical:

no limitation.

Sport specific:

A. Ball/stick control:

- Receiving & controlling:

no restriction in receiving / ball control. Quick, efficient receiving/controlling and slalom without limitations.

- Stickside handling:

no limitation.

- Opposite side handling:

no limitations, but depending on Trunk capacity.

B. Pushing / Hitting:

- Forehand:

maximal vertical VOA: hard/not limited Hitting possible. 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.

- Backhand:

no limitation.

Part C:

Attachments



Attachment 1. IPCH Medical Diagnostic Form



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 classification@powerchairhockey.org no later than six (6) weeks before the athlete undergoes the evaluation.

Athlete Information

Last Name: _____

First Name: _____

Gender: Female Male Date of Birth: _____

Sport: **POWERCHAIR HOCKEY**

Years/months competing in the sport at national level: _____

Medical Information

Description of the Athlete's medical diagnosis and the loss of function this health condition results in:

Health condition is: progressive stable

Medical history:

Health condition is: acquired congenital

If acquired, age of onset: _____

Anticipated future procedure(s): _____



Medications:

Attachments

The athlete's health condition as stated on this form and the resulting impairment must fully explain the loss of function exhibited by the athlete during athlete evaluation. Otherwise no sport class can be allocated by the classification panel, as stipulated in the IPC Sport's classification rules.

Therefore, additional, recent and relevant medical documentation has to be attached to this form if the athlete has

- an impairment or diagnosis that cannot be ascertained by clear signs and symptoms;
- a complex or rare health condition, or multiple impairments;
- a spinal cord injury (recent ASIA scale results to be enclosed);
- one of the coordination related impairments ataxia, athetosis or hypertonia (Modified Ashworth Scale score to be enclosed).

Reports on additional testing by physicians, physiotherapists and other health professionals are welcomed, where relevant, to complement the medical diagnostic information.

The IPCH Sport and the Classification Panel may ask for further information to be submitted depending on the individual athlete's health condition and impairment.

I confirm that the above information is accurate

Name: _____

Healthcare profession: _____

Registration Authority and Number: _____

Address: _____

City: _____ Country: _____

Phone: _____ Email: _____

Date: _____ Signature: _____

2

Attachment 2 IPCH Consent Form



**IWAS Powerchair Hockey
(IPCH)**

Sport Section of the IWAS

The international Powerchair Hockey movement



Classification Consent Form

I, undersigned, (name)

(nation)

**will undergo the classification process, in accordance with the
IPCH Classification Articles as written below.**

Signature Athlete: Date :

In case the athlete has the age <18 signature of parent / guardian:

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 (art. 2.1.2 Classification Manual)

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 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.
- 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.

Attachment 3/a IPCH Classification Form

IPCH Classification Form

kvb | september 2019



Name (last)	<input type="text"/>	Country	<input type="text"/>
Name (first)	<input type="text"/>	Team	<input type="text"/> Nr <input type="text"/>
Date of birth	<input type="text"/>	Experience since	<input type="text"/>
Diagnosis	<input type="text"/>	Onset disability	<input type="text"/>
Prior PCH class	<input type="text"/>	Playing (arm)	<input type="text"/> Left / Right <input type="text"/> T-stick

Playing Arm (Impact) Impairment Measure

A) Physical Assessment

Joint	Score	Score	
	MRC/degrees	sub Ap scores from movement couples	
Shoulder			4 Mov. couples MRC
anteflexion/abd 180	<input type="text"/>	<input type="text"/>	Examples: 3/1=1*
retroflexion 60 / add serratus mrc	<input type="text"/>	<input type="text"/>	3/2=2
exorotation 90	<input type="text"/>	<input type="text"/>	4/2=3
endorotation 70	<input type="text"/>	<input type="text"/>	* 'unopposed' movement
Elbow			
flexion 150	<input type="text"/>	<input type="text"/>	
extension 180	<input type="text"/>	<input type="text"/>	
supination 86	<input type="text"/>	<input type="text"/>	5 Mov. couples ROM
pronation 86	<input type="text"/>	<input type="text"/>	Examples: 3/1=2
Wrist/Hand			3/2=2.5
flexion 80	<input type="text"/>	<input type="text"/>	4/2=3
extension 70	<input type="text"/>	<input type="text"/>	
radial dev. 20	<input type="text"/>	<input type="text"/>	
ulnair dev. 30	<input type="text"/>	<input type="text"/>	
fingerflexion	<input type="text"/>	<input type="text"/>	
thumb opp.	<input type="text"/>	<input type="text"/>	

Final Ap score Phys. Ass.=

Arm profile	Strenght MRC	ROM Degrees	AMP. Lenght & Impact on Handling Reaching	COÖRD. Joint
Ap 4	4/5	75%-100%		F,W + ASAS 1
Ap 3	3	50%-75%		F,W,E,S + ASAS 2 b/tr
Ap 2	2	25%-50%		F,W,E,S + ASAS 3 b/tr
Ap 1	0/1	0%-25%		F,W,E,S + ASAS 4 b/tr

B) Technical Assessment

• Test 1: Hitting (pushing/passing)	<input type="text"/>
• Test 2: Ball-handling Stick-control	<input type="text"/>
Final Ap score TA	<input type="text"/>

Trunk (Impact) Impairment Measure

A) Physical Assessment

- Athlete Trunk type A,B = 0
 Athlete Trunk type C = 0.5
 Athlete Trunk type D = 1.0

B) Technical Assessment

- Test 3: Reaching:
 Athlete Trunk type: A / B / C / D

Impairment joystick arm limits reaching? Yes/No

Final Tp score (after PA + TA)

Additional Information

Examined in playing chair?	<input type="text"/>	Yes/No
Headstrap	<input type="text"/>	Hip/pelvic belt
Cheststrap	<input type="text"/>	Knee strap
Belly Binder	<input type="text"/>	Foot strap
Spinal deformity	<input type="text"/>	
Contractures	<input type="text"/>	
Surgery	<input type="text"/>	
Spasticity	<input type="text"/>	
Ability to stand	<input type="text"/>	
Ability to ambulate	<input type="text"/>	

Ap + Tp = Class Status

T-stick (0.5 or 1.0) Class Status

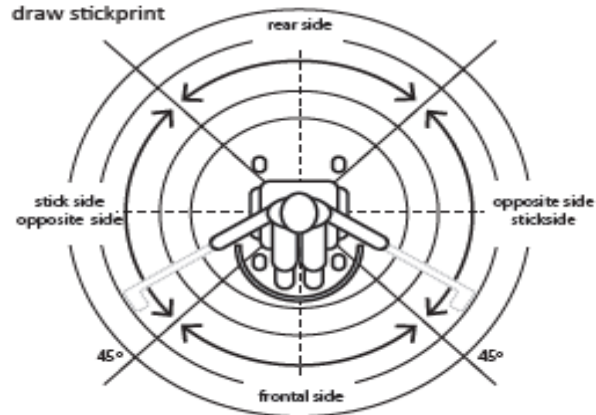
Classification Details

	date	class	status
Entry sportclass + Athlete notified of decision	<input type="text"/>	<input type="text"/>	<input type="text"/>
Final sportclass determined	<input type="text"/>	<input type="text"/>	<input type="text"/>
Tournament Location / date	<input type="text"/>		
Classifiers	<input type="text"/>		

Volume Of Action

draw stick

draw stickprint



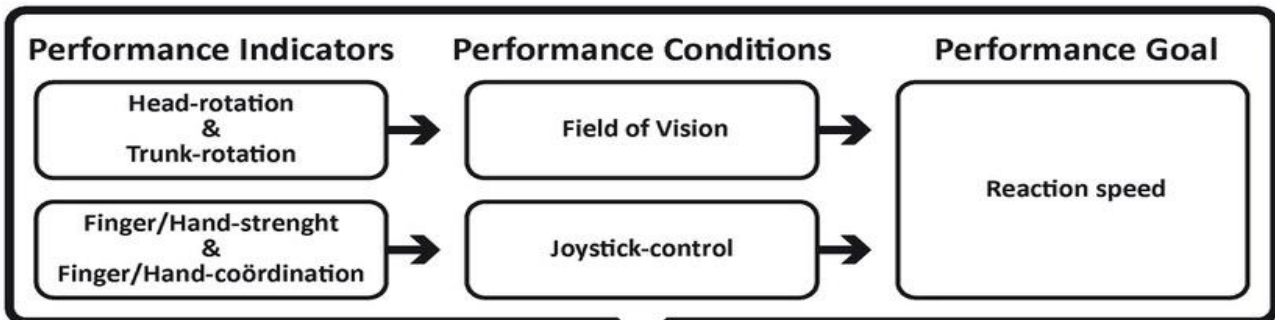
Attachment 3/b

IPCH Classification Form – 0.5/ 1 Athletes

Performance 0.5 / 1.0 PCH athletes

Kees van Breukelen MSc
July 2018

Name (last)	<input type="text"/>	Country	<input type="text"/>
Name (first)	<input type="text"/>	Team	<input type="text"/> Nr <input type="text"/>
Date of birth	<input type="text"/>	Experience since	<input type="text"/>
Diagnosis	<input type="text"/>	Onset disability	<input type="text"/>
Prior PCH class	<input type="text"/>	Joystick arm/hand	<input type="text"/> Left / Right

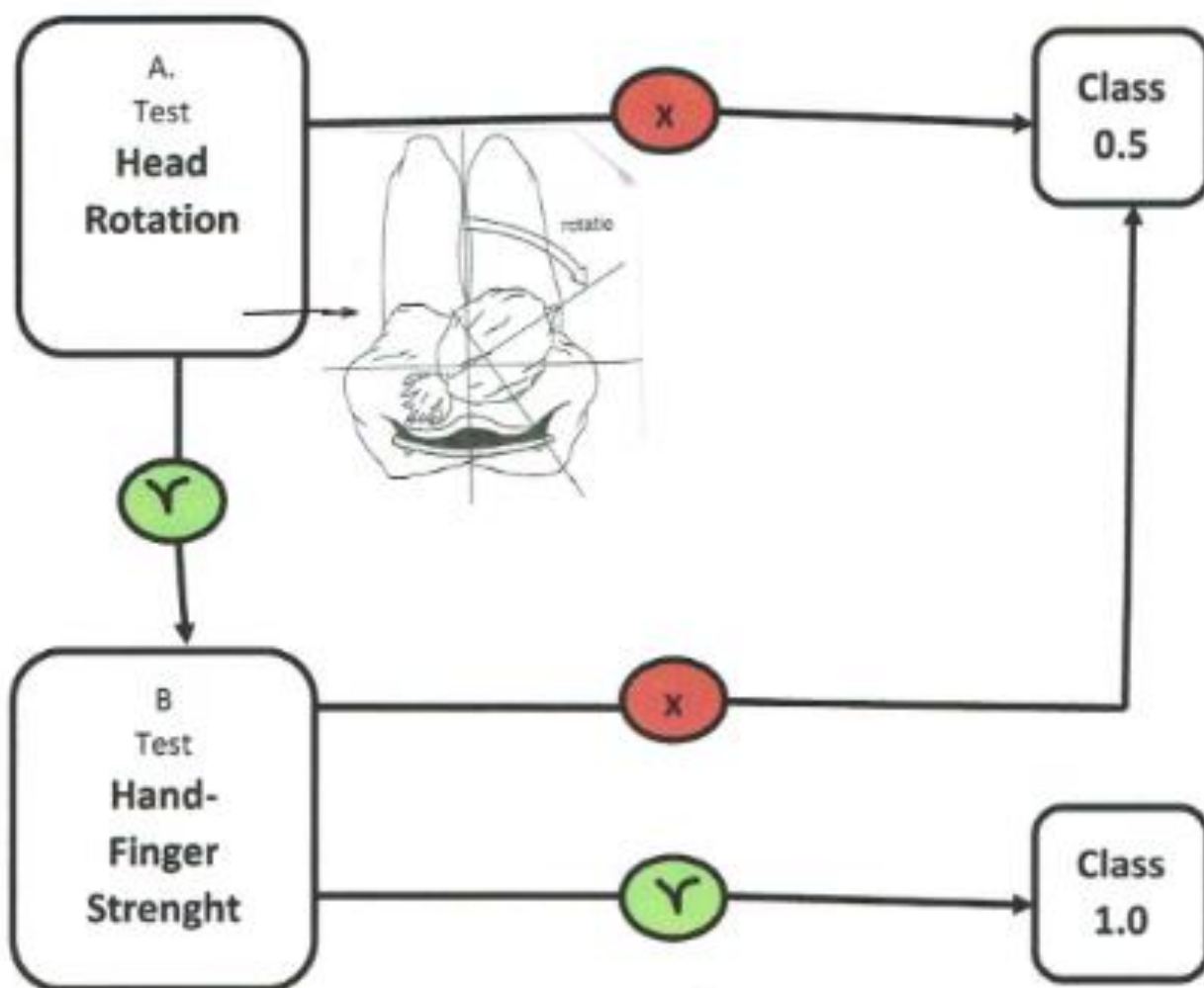


- 0.5**
1. Severely restricted Head-rotation limiting FoV, no Trunk-rotation
 2. Adapted Joystick-control / Mini-Joystick, because of severely restricted finger/hand function
-
- 1.0**
1. Head- or Trunk-rotation present and/or
 2. No Joystick adaptation because some finger/hand function available

0.5 - 1.0 Differentiation		
	Physical Assessment	Equipment Assessment
Indicator 1 Head rotation	<input type="checkbox"/> (only) eyes rotate to side: 0.5 indicator (small head movement allowed for 0.5)	<input type="checkbox"/> head/neck support lateral: 0.5 indicator <input type="checkbox"/> head/neck support only at rear: 1.0 indicator
Indicator 2 Finger/Hand strenght & Finger/Hand coördination	<input type="checkbox"/> one-handed control: 1.0 indicator <input type="checkbox"/> two-handed control: 0.5 indicator • Elbow flex/ext MRC 3: L <input type="checkbox"/> R <input type="checkbox"/> : 1.0 indicator MRC 2: L <input type="checkbox"/> R <input type="checkbox"/> MRC 1: L <input type="checkbox"/> R <input type="checkbox"/> : 0.5 indicator • Wrist flex/ext MRC 3: L <input type="checkbox"/> R <input type="checkbox"/> : 1.0 indicator MRC 2: L <input type="checkbox"/> R <input type="checkbox"/> MRC 1: L <input type="checkbox"/> R <input type="checkbox"/> : 0.5 indicator Test: <i>lifting hand from Joy-stick plateau:</i> <input type="checkbox"/> yes: 1.0 indicator <input type="checkbox"/> no: 0.5 indicator • Finger flex/ext MRC 3: L <input type="checkbox"/> R <input type="checkbox"/> : 1.0 indicator MRC 2: L <input type="checkbox"/> R <input type="checkbox"/> MRC 1: L <input type="checkbox"/> R <input type="checkbox"/> : 0.5 indicator • Pincet grip + strenght: Pincet gauge: gram Test: <i>holding + moving vertical pencil:</i> slow/quick/with resistance	<input type="checkbox"/> normal Joy-stick: 1.0 indicator <input type="checkbox"/> adapted Joy-stick: 0.5 indicator <input type="checkbox"/> mini Joy-stick: 0.5 indicator <input type="checkbox"/> wind-protector: 0.5 indicator <div style="border: 1px solid black; padding: 10px; min-height: 150px;"> Remarks: </div>

Attachment 3/c

Flowchart - 0.5/ 1 Athletes



Y = succeed = > 25% of normal range (80 degrees) = > 20 degrees to at least one side
X = fail = < 20 degrees on either side

Attachment 4

TIC (Trunk Impairment Classification): original TIC test descriptions.

For adapted (PCH) test criteria see Appendix 4.2

TRUNK TEST NO. 1 - SITTING STRAIGHT

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.

Evaluation

Observe sitting position after removing support from classifier's hands: straight /upright or kyphotic?

Observe stomach: flat or "quad belly".

Score: *Succeeds*

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

Score: *Fails*

Sits with marked kyphosis or with quad belly.



TRUNK TEST NO. 3 TRUNK FLEXION / EXTENSION

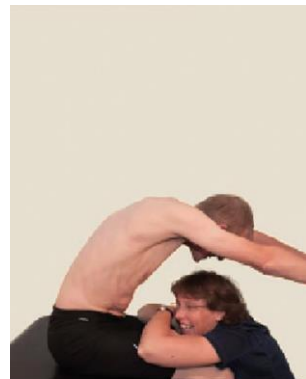
Test description

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.

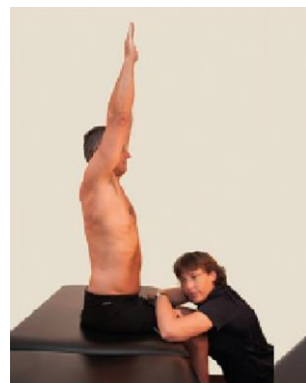


Evaluation

Observe movement, standing lateral to the athlete.

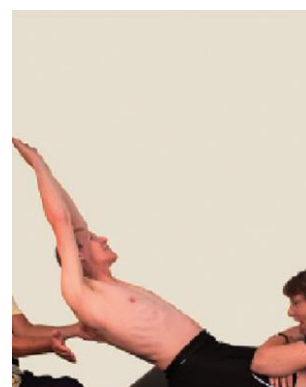
Score: *Succeeds*

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.



Score: *Fails*

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 Rotation

Test description

Athlete sitting on plinth, legs hanging over the edge of the plinth with the feet unsupported.

Arms crossed in front in 0° 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.

Evaluation

Observe from the front, back and lateral from the athlete,

Score: Succeeds

Athlete stays in upright position in sagittal plane.

Rotates 45° or more to both sides, measured in straight line between both shoulders and line between ASIS on both sides.

Score: Fails

Athlete does not rotate or rotates less than 45°, or athlete cannot maintain upright position in sagittal 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 TRUNK LATERAL FLEXION

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).

Evaluation

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

Score : Succeeds

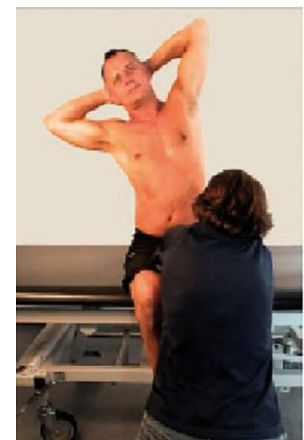
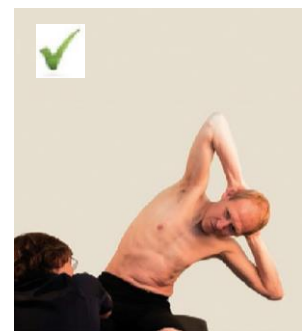
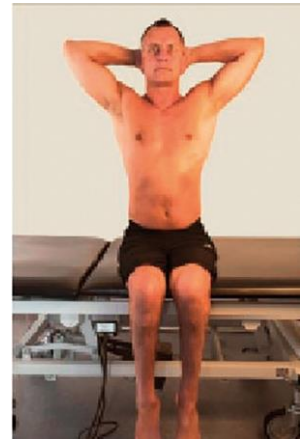
Athlete stays in upright position in sagittal plane and performs lateral flexion at least with suprasternal notch in vertical line above the ASIS to both sides. And can hold this position for two seconds before resuming the upright position.

Score : Fails

Athlete cannot perform lateral flexion to the level where the suprasternal notch is in a vertical line above the ASIS.

Or athlete cannot maintain straight position in sagittal plane while performing lateral flexion (e.g. Kyphotic posture).

Or performs 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.



Attachment 5

Organization Classification Session

IPCH OFFICIAL CLASSIFICATION SESSIONS

A national member organization may request IPCH to organize an Official Classification Session during:

- IPCH Officially sanctioned competitions
- IPCH Official events (including Official Friendly Matches)
- IPCH Development Events

The request should be sent to classification@powerchairhockey.org (and in cc to office@powerchairhockey.org) at least 6 months before the proposed date of the event.

If IPCH decides to approve the competition/event and IPCH Classification Session this will be communicated to the IPCH Head of Classification at least 4 months before the proposed date of the event.

The IPCH Head of Classification advises the IPCH Executive Committee for appointment of an IPCH Chief Classifier and as much classification panels as asked/needed.

The appointed classifiers will receive the confirmation of their appointment at least 3 months before the proposed date.

At least 6 weeks before the proposed date:

The IPCH SEC Classification Officer or the IPCH Technical Delegate appointed for the competition / event will receive from the Organizing Committee of the approved competition/event, and will share with the appointed Chief Classifier and/or with the Head of Classification:

- all necessary logistical and practical information (competition schedule, room for classification and available equipment, lodging and transfers of classifiers, administrative support, etc.)
- the list of the athletes to be classified.

National Federation will send to IPCH (classification@powerchairhockey.org) the Medical Diagnostic Forms of the Athletes, eventual request for Medical Reviews and any other relevant information or document related to the athletes to be classified.

At least 2 weeks before the proposed date of the event:

The IPCH Chief Classifier will suggest a detailed time schedule for the classification, including eventual protest classification, and in-competition-observation to the Sport Executive Committee or to the IPCH Technical Delegate for approval

The appointed IPCH Classifiers will normally 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 / IPCH.

IPCH CLASSIFICATION SESSIONS OUTSIDE OFFICIAL IPCH COMPETITION/EVENTS

In general, National organizations can request the organization of Classification Session also outside IPCH Officials Events and Competitions (for example during national competitions, national team training sessions, international tournament not officially sanctioned by IPCH, etc...).

According to Art 27.1 Special Provisions *"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. "

The request should be sent to classification@powerchairhockey.org (and in cc to office@powerchairhockey.org) at least 6 months before the proposed date of the event.

The Classification Officer will assess the proposal together with the Head of Classification and within the SEC in order to discuss and decide which parts of the Classification Session, if any, will be possible to be carried out and how to manage the results.

The National Organization requesting the Classification Session is responsible for the travel, local transportation, and accommodation (including meals) for the Classifiers IPCH will appoint for the Panel(s).

REQUIREMENTS & PRACTICAL INFORMATION FOR HOSTING AN IPCH CLASSIFICATION SESSION

- 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 in:
 - o 1 broad examination table, mechanically or electronically adjustable in height,
 - o 1 table
 - o 3 chairs for each classification panel,
 - o appropriate equipment (goniometer, tape measure, etc),
 - o administrative equipment (paper, pens, eventually ITC equipment).

Dimensions of the room: at least 20 m².

- To perform the **Technical Assessment** testing, a (sports) hall with a flat floor is necessary.

Equipment:

- o 1 table
- o 3 chairs for the classification panel,
- o 10 cones of 55 cm height and a diameter of 30 cm at the basis,
- o tape for taping lines on the floor,
- o match balls, administrative equipment (paper, pens, , eventually ITC equipment).

If possible, video registration equipment.

Attachment 6

IPCH Classifier Training & Certification Program

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

Participants profile:

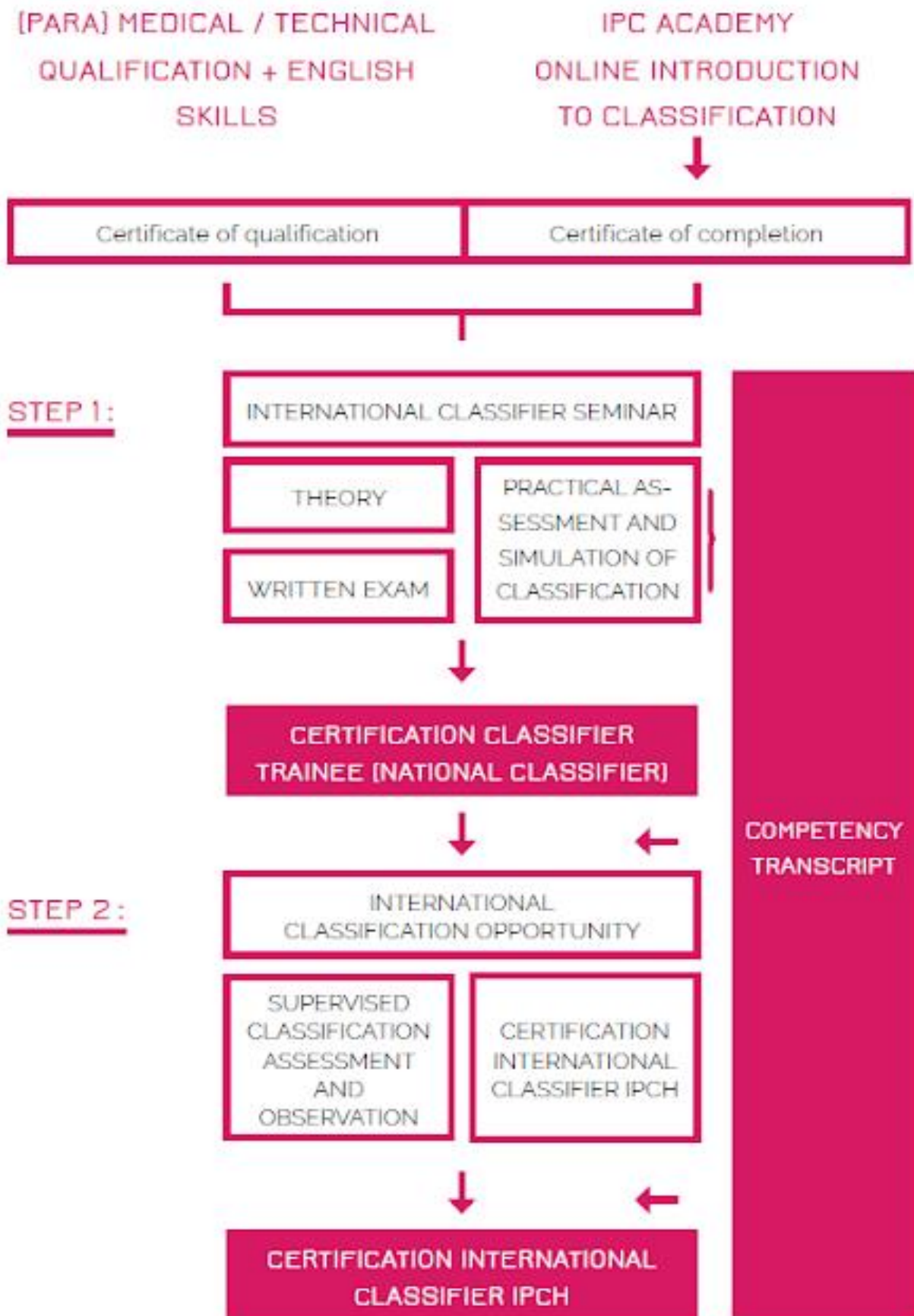
Candidates should have at least the following:

- Medical certification as a physician, physiotherapist and / or equivalent,
- A requisite level of anatomical, biomechanical, and sport-specific expertise in the sport of PCH
- All candidates need to master business level English.
- 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.

Pathway classifier training:



The PCH classifier pathway consists of 2 steps:

Step 1: PCH classifier seminar.

Contents, outcomes teaching models:

- Theoretical sessions (about classification steps, rules, assessments, procedures).
- Practical assessment training.
- Simulated Classification situations Video observation.
- Assessment through written exam and competency transcript (see 'learning outcomes').

Learning outcomes:

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
- IPC Rules and Regulations
- Understand Observation assessment.
- Learn how to effectively 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.

Program outcomes:

Participant will receive a certificate of completion.

Can serve as a National Classifier for their home NPC (if regulations of the NPC allow it).

Step 2: Participation in IPCH international classification opportunity

Participants profile:

- Have successfully completed Step 1
- Have no conflict of interest (e.g. not working as a National team physician or Therapist)
- Business level English
- Have experience as a National classifier,

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 'learning outcomes').

Learning outcomes:

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.

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.

Maintaining certification:

To maintain IPCH International Classifier certification a Classifier must:

- Classify at least once every 4 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.

Recertification after period of inactivity (more than 4 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 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 Classification Officer and from the Head of Classification.
- An 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.

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 recognized 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.

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 7

IPCH Classification Protest Form



**IWAS PowerChair Hockey
(IPCH)**
Sport Section of the IWAS



Classification Protest Form

Protest against classification decision concerning:

Name of Athlete:	
Nation:	
Date of Classification:	
Protested decision:	

Reason for the protest:

--

Please use backside if needed

Number and dates of documents attached to support the protest:	
Name of National Member Organisation of IWAS:	
Name:	Signature:

<i>To be filled in by the Chief Classifier</i>	
Received Fee:	
Receiving Date: <i>(of fee and documents)</i>	
Chief Classifier Name:	Signature :