

Briefing Note

Research strategy for the scientific review of the FEI classification system for Para-equestrian sport

Background

The current International Paralympic Committee (IPC) Classification Code¹ describes the purpose of sport classification as:

"...to define who competes in Para-sport and to ensure that the impact of Impairment in each event is minimised. To achieve this purpose, an IF must develop and implement a Classification system that complies with the Code and the International Standards"

The Code describes the purpose of a sport classification system as being:

"to define who is eligible to compete in Para-sport and consequently has the opportunity to reach the goal of becoming a Paralympic Athlete; and (2) group Athletes into Sport Classes which aim to ensure that the impact of Impairment is minimised and sporting excellence determines which Athlete or team is ultimately victorious."

To achieve the above, the sport classification system must be both sport specific and evidence based.

To comply with the IPC Classification Code the FEI is required to:

1. Develop sports-specific classification systems through multidisciplinary scientific research. Such research must be evidence-based and focus on the relationship between Impairment and key performance determinants.
2. Ensure athlete input is solicited to assist in research and improvement in classification systems
3. Ensure that classification research complies with internationally recognised ethical standards and research practices

The classification system currently used by the FEI for Para equestrian sport was developed in the early 1990s as the outcome of unpublished PhD research conducted by Dr Christine Meaden. A Profile system for the purpose of classification was developed for use in classification of athletes with impairment. The system was applied to the evaluation of athletes for Para equestrian sport. Since then, the system has undergone minor modifications but remains, at large, the same system as first developed.

Objective

The objective of the FEI classification research strategy is to achieve a FEI Classification System that meets the following criteria:

- Supports the purpose and conceptual basis for a robust and transparent classification system for Para equestrian and specifically dressage
- Sport specific for Para equestrian and dressage
- Has been developed in accordance with the best evidence available
- Objectively measures eligible impairment and thereby determines the Minimum Impairment Criteria for the discipline of dressage
- Objectively measures the extent to which athletes are able to execute the specific tasks and activities fundamental to the discipline of dressage
- Determine the requirements of each competition class and group Athletes into Sport Classes according to how much their Impairment affects fundamental activities in the discipline of dressage

The steps² for ensuring any classification system meets the above criteria include:

¹ <http://www.paralympic.org/classification-code>

² Tweedy, S. Evidence-based classification – what is it, why is it important and how can it be achieved? 2008 Classifying Disability & Sports Technology Conference, Singapore 20th - 22nd November 2008

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- Identify eligible impairments for Para equestrian- dressage
- Develop reliable measures impairment (for example, hypertonia, range of movement)
- Define the Minimal Impairment Criteria for each eligible impairment
- Develop standardized measures of performance for the discipline of dressage
- Evaluate the relative strength of association between impairment and performance using multivariate analysis

In working to meet the above criteria and in compliance with the 2015 IPC Athlete Classification Code, the FEI will consult with the IPC who must be provided an opportunity to submit feedback and comments.

Benefit

A range of benefits will be realized from a classification system that meets the above criteria. These include:

- ✓ Athletes, classifiers and other stakeholders can be confident the system meets its designated purpose
- ✓ Promoting grassroots participation in Para-sports by people with an Impairment
- ✓ Competition that rewards athletes for their skill
- ✓ Compliance with the IPC Classification Code
- ✓ Continued inclusion in the Paralympic program

Principles

The approach determined in this strategy is underpinned by the following principles which underpin this research strategy include:

- Respect for the knowledge and expertise that all involved can contribute
- Collaboration with identified partners to achieve the objective and
- Consultation with key stakeholders including athletes and those with expertise in the sport of para dressage
- Partnerships that work to achieve the desired outcome
- Realize the review of the current system in several steps that can build upon each other but are staged to allow adequate consultation with stakeholders and consolidation of the information to enable implementation of outcomes along the way
- Implement any significant change slowly, following a process of intensive stakeholder consultation including athletes, coaches and administrators
- Ensure the compilation of sufficient scientific evidence in the short and long term
- Aim for research partnerships that will lead to scientific publications in peer reviewed journals in order to ensure a certain validity of the research outcome

Goals

Our objective will be realised through the FEI classification research strategy and the achievement of staged goals. These goals have been grouped as either short, medium or long term and anticipated time frames assigned. The goals provide the scaffold for the development of an evidence based classification system for Para equestrian-dressage.

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Tweedy³ has identified the key steps required to support a research framework for evidence based classification systems. These steps are:

Step 1 *Specify impairment types eligible for Para equestrian* - e.g. hypertonia.

Step 2 *Identify the determinants of sport performance – to be completed*

Step 3a *Develop valid measures of impairment* – (ratio scaled; reliable; precise; training resistant; specific to one impairment and account for the greatest variance in performance)

Step 3b *Develop standardised sport specific measures that measure the determinants of performance*

Step 4 *Assess the relative strength between measures of impairment and sport specific measures of performance determinants* - looked at relationship between trunk impairment classification and activities of the sport. Need to consider use of equipment and compensating aids on this.

Step 5 *Use outcomes from step 4 to determine minimum impairment criteria, number of classes and class profiles.*

The FEI has decided to base their classification research strategy on the above framework to achieve the following goals:

Short term (1-2 years)

1. Develop a research strategy
2. Establish a research partnership with a suitable institution
3. Achieve Steps 1- 3a above

Medium term (3-4 years)

4. Achieve Steps 3b-5 above

Long term (5-6 years and ongoing)

5. Build on the evidence to support the new classification system
6. Conduct ongoing classification related research

Conclusion

The FEI is committed to achieving an evidence based classification system through a research strategy which will result in strong collaborative partnerships with relevant research institutions who have access to the knowledge, expertise and resources required to achieve this objective.

³ Tweedy, S; Beckman, E and Connick, M. Paralympic Classification: Conceptual Basis, Current Methods and Research Update. 2014. American Academy of Physical Medicine and Rehabilitation, Vol.6, S11-S17.