



INTERNATIONAL DRAGON BOAT FEDERATION PARA ATHLETES COMMISSION

FRAMEWORK RULES FOR PARADRAGON COMPETITIONS

1. Introduction

- 1.1 Currently, the IDBF *Rules of Racing* do not specifically address competitions where there are teams that comprise or include 'impaired' athletes. The IDBF Para Athletes Commission (IDBF-PAC) was set up (in October 2017) to, amongst other things, develop the necessary set of rules that would help in making racing between such teams meaningful.
- 1.2 In commencing its work, IDBF-PAC noted that the International Canoe Federation (ICF) took some 10 years between issuing a first draft of race regulations for paracanoe and when a 'steady state' was finally achieved; even now though, ICF continues to keep its regulations under constant review and regularly issues amendments as necessary to reflect current thinking. IDBF-PAC therefore has no expectation that the first (draft) set of rules outlined below will develop without significant change. However, it is a starting point.
- 1.3 To complicate matters further, dragon boating also faces a challenge not shared by most other 'para' sports – the number of athletes that comprise a team (small or standard boat) is comparatively high.



1.4 IDBF-PAC was determined that the rules would be inclusive of as wide a range of impairments as possible (and not limit consideration only to those with quite specific impairments). In this way, IDBF-PAC felt that greater participation of 'impaired' athletes could be encouraged by providing opportunities for crews with different impairments to compete against each other in a reasonably fair way.

1.5 Finally, IDBF-PAC felt that Breast Cancer Survivors (BCS) already had a well-established race category and this should not form part of the IDBF-PAC remit unless the BCS community wishes, or IDBF directs, otherwise.

2. 'Para', 'Impaired', and 'Paradragons'

2.1 The terms 'para' and 'impaired' are deemed interchangeable by IDBF-PAC but it is noted that other organisations such as the International Paralympic Committee (IPC) are fairly prescriptive about which impairments qualify an individual for 'para' status. IDBF-PAC considered the approach adopted by IPC to be too restrictive for dragon boating.

2.2 At its Council Meeting on 23 July 2018, IDBF provisionally adopted the term 'paradragon' to describe dragon boaters with impairments and also to describe a race category where a proportion of the participants are para athletes¹. In the event no reasons could be found not to use this term, it will in due course be formally adopted.

2.3 IDBF-PAC therefore considers that a paradragon is an athlete who has some form of physical, psychological, neurological, sensory or intellectual impairment that affects the way in which he or she participates in the sport of dragon boating. However, IDBF-PAC recognises that every impairment is

¹ Note: This assumes use of 'para' (in any form) does not fall foul of any specific protection accorded to that term by the International Paralympic Committee



different and will affect the individual to a greater of lesser extent. For example, someone who has lost three limbs will be fundamentally disadvantaged compared to someone who has lost the sight in one eye. The mix of impairments potentially within one crew could be significantly different to that of another crew and to race such crews against each other could be inherently unfair.

- 2.4 IDBF-PAC has therefore set out to try to assess the impact of a range of impairments on an individual's ability to participate in the sport of dragon boating. A matrix of 'scores' for each impairment is then proposed together with a methodology for trying to ensure fair competition (refer Section 6).

3. Factors affecting performance

- 3.1 Regardless of any impairment, human performance in competitive sporting activities is affected by a range of factors, particularly:

- Age
- Gender
- Environment

3.2 Age.

- In general, the human body attains peak physical performance between the ages of 20 to 30. Younger people become stronger and fitter as they approach this 'peak' age while performance will fall thereafter with increasing age.



- Dragon boat races are normally conducted around age categories. However, IDBF-PAC decided that the relatively low numbers of para athletes in the sport would likely mean, certainly initially, that few competitions would be able to run similar age-based competitions. It was therefore felt that age itself needed to be considered in the framework rules (and only an 'open' category be offered initially).

3.3 Gender.

- In general, males are capable of greater physical strength and exertion than females.
- As for age (discussed above), IDBF-PAC felt that numbers - certainly initially - would likely preclude all-women or even 'Mixed' races in impaired categories. Again, IDBF-PAC felt that para dragon races should all be 'Open' but with a positive recognition for females.

3.4 Environment. The general environment will influence performance, whether that is geographical (for example, a dragon boat crew located in a desert area or in a frozen wasteland will be at a disadvantage to those who have ready access to benign rivers or lakes), or socio-economic (where the conditions are simply not supportive of a dragon boat team). IDBF-PAC noted the effect the environment can play but decided not to try to take this into account as this factor is not confined to paradragons.



4. Impairments and dragon boating

- 4.1 Impairments can affect athletic performance, but to very different degrees depending on the activity being undertaken. For example, a visually-impaired person may struggle to play tennis but could excel at weightlifting or tug-of-war. IDBF-PAC therefore considers that the effect of these impairments on performance in dragon boating is sport-specific, and that no views expressed in this rulebook are intended to be seen as generic.
- 4.2 Impairments not only affect performance directly, they can also affect the ability of the person to train. For example, a visually-impaired athlete might struggle to get to training without the assistance of a sighted person (perhaps to drive a car to the training venue) while getting to training may not pose the same problem to someone with two prosthetic legs. But it is entirely possible that the visually-impaired athlete could be the better paddler of the two, all other things being equal.
- 4.3 The most effective dragon boaters use their legs, their arms and shoulders, and their core (torso). Although IDBF-PAC is not aware of any academic papers describing the proportions of output able to be delivered by these three principal parts of the body while paddling a dragon boat, it is generally accepted that, for other types of paddling, the legs can contribute up to about a maximum of about 7%, with the remainder being equally delivered by the arms and shoulders, and the core (up to about 45-48% each). Thus (and this is borne out by paracanoe and canoe racing results), a paradrone with a missing lower limb or with a prosthetic lower limb can deliver results almost as good (but definitely not as good) as an otherwise unimpaired paddler.



- 4.4 Those with a missing upper limb are probably the most disadvantaged, even if some form of prosthetic has been fitted. Very close in terms of impairment are those with spinal impairment as they do not have the trunk function and stability of those without such impairments. At the other end of the disadvantage scale are those with sensory impairments and some psychological conditions.
- 4.5 IDBF-PAC has identified a range of impairments and attempted to 'rank' them in order of disadvantage. IDBF-PAC fully accepts that there will always be exceptional para athletes who will seem to defy the general classification it has developed. However, IDBF-PAC notes that this is also the case anyway for unimpaired paddlers (in theory for example – and hence the IDBF age classification categories - a 45 year old man should not be as fit and strong as the average 22 year old man but there will definitely be such men around).
- 4.6 The effect of multiple impairments is very difficult to assess - for example, where on the scale of disadvantage would someone who is both deaf and missing a lower limb compare to individuals with only one of these impairments? IDBF-PAC considers that the approach used in other paddling sports (specifically Va'a and paracanoe) can be followed until further work has been possible – in these sports, the 'worst' impairment is used to determine the level of impairment and no specific consideration is given to the effect of multiple (unrelated) impairments.



5. Race categories

5.1 IDBF has approved the following paradragon race categories²:

- Full Paradragon (PD1)
- Partial Paradragon (PD2)
- Specific Paradragon (PD3)

These categories have been developed to maximise the opportunity for participation in order to make the sport as inclusive as possible. Note that there is no proposal at this stage to have age-based categories, women or mixed team competitions; all crews will be 'open'.

5.2 Full Paradragon (PD1). The Full Paradragon race category (shortened to PD1) requires that every paddler in the boat (small or standard) has a recognised impairment. Paddlers need not have the same or similar impairments but must, together, satisfy the 'scoring' requirement described in Section 6 below. The steerer and the drummer need not be paradragons themselves but, if they are, anyway do not form part of the overall team score per Section 6 below.

5.3 Partial Paradragon (PD2). The Partial Paradragon race category (PD2) broadens the scope for participation by paradragons by allowing teams to comprise a mix of paradragons and unimpaired paddlers. Half of the paddlers can be unimpaired. The paradragons need not have the same or similar impairments but must, together, satisfy the 'scoring' requirement described in Section 6.2 below. The steerer and the drummer need not be paradragons themselves but, if they are, anyway do not form part of the overall score per Section 6.2 below (neither do the unimpaired paddlers).

² IDBF Council Meeting, Szeged, 23 July 2018



5.4 Specific Paradrakon (PD3). The Specific Paradrakon race category (PD3) provides the opportunity for paddlers with similar impairments to race each other. For example, a PD3 race category could be provided for teams where all the paddlers are blind or profoundly visually impaired and a different one where all the athletes have total or profound hearing loss. It could be that, over time, these categories are better defined and accepted: for example, PD3V might be the classification for a team of Visually impaired paddlers and PD3H for those with loss of Hearing, and with more detailed rules on how these impairments are determined.

6. Proposed approach to dealing with a range of impairments within a team

6.1 As a point of reference, IDBF-PAC considers that a 20-40 year old male without any impairment (ie the age span for the majority of paddlers in the IDBF 'Premier' age category) is the benchmark against which all others should be measured. In these rules for Paradrakon racing, such a paddler would be accorded 20 points.

6.2 A 20-40 year old male paddler who is missing an upper limb is considered severely disadvantaged and would be accorded 4 points (ie he or she is considered capable of delivering only about 20% of the contribution of an unimpaired paddler of the same age and gender).

6.3 Between the extremes outlined in Sections 6.1 and 6.2 above, IDBF-PAC has developed a table of the points attributable to particular impairments, as well as to the effects of age and gender. It is emphasised that this does not yet represent an authoritative viewpoint, but is to be used for race events for the time being. Over time it is anticipated that the table will evolve to include more categories and to adjust, as necessary, attributable points based on experience and professional advice. The table can be found at Annex A.



- 6.4 Unlike paracanoe and Va'a (where an athlete's impairment is formally recorded and 'registered' by an approved 'classifier' and generally remains with that athlete forever), IDBF-PAC recommends that dragon boating undertakes these assessments 'on the day' for the time being (while recognising that, as paradragon events become more competitive, a more structured and formal approach to classification will eventually have to be introduced).
- 6.5 In the event that an athlete's impairment is not listed in Annex A, two options are available:
- Prior to a competition. The details of the impairment should be provided to IDBF-PAC (by email to chair-para@idbf.org). These will be assessed, and a 'score' determined for the impairment. As necessary, Annex A will be amended.
 - At a competition. The race official nominated by IDBF to confirm assessments will be empowered to determine an 'on the spot' score for any impairment not listed in Annex A. Such a score will be temporary, and Annex A will not be amended. The score will not be able to be appealed at the event by the athlete or his or her governing body.

Clearly, the scoring of impairments at the time of competition is not preferred because appropriate medical advice may not be readily available, and the time pressures of competition may anyway preclude proper assessment. If an impairment is not listed in Annex A, and is considered to materially affect the ability of someone to participate in dragon boating, it would be much better for the impairment to be properly assessed before the competition starts.



6.6 PD1 Race Category. Annex A below provides the mechanism for calculating the points attributable to each paddler. IDBF-PAC then proposes the following maximum points for PD1:

Table 1 – Maximum points for PD1 category

	Paddlers	Maximum allowable points
Standard	20	320
	19	304
	18	288
	17	272
	16	256
Small	10	160
	9	144
	8	128

6.7 PD2 Race Category. Annex A below provides the mechanism for calculating the points attributable to each paddler. Table 2 below shows the maximum points for a crew in a PD2 race category. Note that:

- the unimpaired paddlers can be of any age or gender and do not attract any points - instead, the only consideration is how many are included; and
- if there is an odd number of paddlers then a team can choose to have one more unimpaired paddler than impaired paddlers but, to keep it as fair as possible for the other teams, the maximum points for the unimpaired paddlers is reduced



Table 2 – Maximum points for PD2 category

	Total Paddlers	Number impaired paddlers	Maximum allowable points for impaired paddlers
Standard	20	10	160
	19	10	160
		9	128
	18	9	144
	17	9	144
		8	112
16	8	128	
Small	10	5	80
	9	5	80
		4	56
	8	4	64

7. Adaptive equipment

- 7.1 For some impairments, adaptive equipment may be necessary for the athlete to be able to compete at all. For example, if the athlete has a lower limb deficiency with no stump, or has a significant lower spinal injury, he or she may not be able to remain stable on the seat and/or 'recover' to the upright position after each stroke; in such cases, some form of strapping and/or adapted seat with a backrest may be required.
- 7.2 Those with a missing or damaged upper limb may require a prosthesis or equipment that will allow the athlete to hold the paddle and then be able to produce force through the paddle into the water.



7.3 IDBF-PAC has not yet had the time to consider properly how adaptive equipment might be incorporated into a paradragon team, or how any such equipment might be assessed in a consistent and fair way. Until formal rules are developed and approved, race organisers are to use their discretion to ensure that any equipment used does not confer a material advantage to the paddler.

8. Safety

8.1 Safety is paramount and paradragon races will create hazards and risks not normally present with unimpaired racing.

8.2 Enhanced risk assessments will be required for:

- The venue / facilities / first aid response on site
- Racing (extra safety boats may be needed)
- Conditions (may make racing inherently less safe due to wind speed etc)
- Boat safety (is the helm satisfied that the crew can paddle safely?)
- Adaptive equipment (if used – is it 'safe'?)

8.3 Buoyancy aids may need to be mandated.

8.4 Consideration may need to be given, in exceptional circumstances, to requiring fully unimpaired and experienced paddlers to be part of a PD1 crew. In such circumstances, the organisers are to ensure that each participating team is treated equally.

8.5 **IDBF-PAC acknowledges that further work on safety aspects will be required.**



9. Other matters not yet considered by IDBF-PAC

9.1 IDBF-PAC considers that the following issues will eventually need developing before a comprehensive, fair, and useable scoring system can be properly adopted:

- Classification personnel – personnel approved by IDBF to undertake classification work
- Athlete evaluation – the process by which an athlete’s impairment is assessed and classified
- Protests and appeals – the process by which a protest can be made and considered about the classification of an athlete’s impairment, and the process by which an athlete can appeal against the classification of his or her impairment
- Data protection and record keeping – how data collected about individual athletes is maintained
- The process by which the ‘rulebook’ can be updated to reflect latest research and/or experience



POINTS SYSTEM TO CLASSIFY IMPAIRMENTS

Impairment	Remarks	Points (Note 2)	Gender	Age (Note 1)			
			Female	U20	Senior A	Senior B	Senior C
Psychological	Covers a range of mental disorders or conditions that influence emotions, cognitions, and/or behaviours. Includes PTSD, depression, anxiety, schizophrenia, and bipolar disorder	18					
Visual	All paddlers should also be blindfolded						
Passive range of movement – lower limbs excluding hips	Restriction or a lack of passive movement in one or more joints caused by chronic joint immobilisation or trauma affecting a joint						
Hearing – fully deaf	Straight line races						
	Longer distance (>1km) and turn races	16					
Limb deficiency - loss of lower limb(s)	Use of prosthesis permissible	17					
Passive range of movement – hips		16					
Passive range of movement – upper limbs	Where athlete cannot raise arm >90deg or has lack of hand grip or missing digits	15					
Limb deficiency – lower limb(s) – no stump on one or both sides		13					
Muscle power - paraplegia		12					
Neurological	Ataxia, spasticity, athetosis, stroke and multiple sclerosis	10					
Limb deficiency - loss of one upper limb		4					
Muscle power - tetraplegia		2					

Notes:

- (1) Determined per IDBF Competition Regulations
- (2) Based on an unimpaired male paddler scoring 20 points (Sect 6.1 above)

Examples:

1. A female para athlete with Ataxia and aged 45 would attract 7 points (10 for impairment less 2 for gender and less a further 1 for being Senior A)
2. A male para athlete with loss of one upper limb and aged 62 would attract 1 point (4 for impairment less 3 for being Senior C)
3. A female para athlete, visually impaired and aged 19 would attract 15 points (18 for impairment less 2 for gender and a further 1 for being under 20 years of age)