



Australian Dragon Boat Federation - Paddler Pathway



Prepared by
Dr Danya Hodgetts
Partner, Dangerous Minds Consulting

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Development of AusDBF Paddler Pathway

Australia has experienced considerable international success, winning numerous medals at every World Nations and Asian Championships since 2010 when AusDBF introduced national selection. In order to ensure we continue to experience international success into the future, AusDBF must create and support high quality sustainable pathways for paddlers and coaches, with a clear, evidence-based methodology for how we identify and develop talent.

Maggie Boyce, 2016, Discussion Paper

In 2016, the Australian Dragon Boat Federation (AusDBF) identified the need for the development of a paddler pathway within the sport. The purpose of a paddler pathway is to determine the key features and requirements of participants at each stage of the pathway so that their needs can be best met.

Specifically, AusDBF want to:

- Establish and foster continuity from club level to elite performance in national squads.
- Guide AusDBF members along the pathway so that all members can achieve at their aspired level

A defined paddler pathway and participation plan is a pre-requisite to completing a Coaching Framework for National Coach Accreditation Scheme registration (NCAS), which has been identified as a priority for AusDBF.

Objective of AusDBF Paddler Pathway

The AusDBF Paddler Pathway serves to document the developmental stages in Dragon Boat Paddling from beginner through to Australian representation.

Specifically, the pathway will:

1. Outline the stages of development
2. Specify the focus and accountability at each stage
3. Articulate the physiological, technical and psychological competencies required at each level
4. Educate paddlers on how they can progress through each stage of the pathway, and their expectations
5. Identify the coaching and support services required at each stage

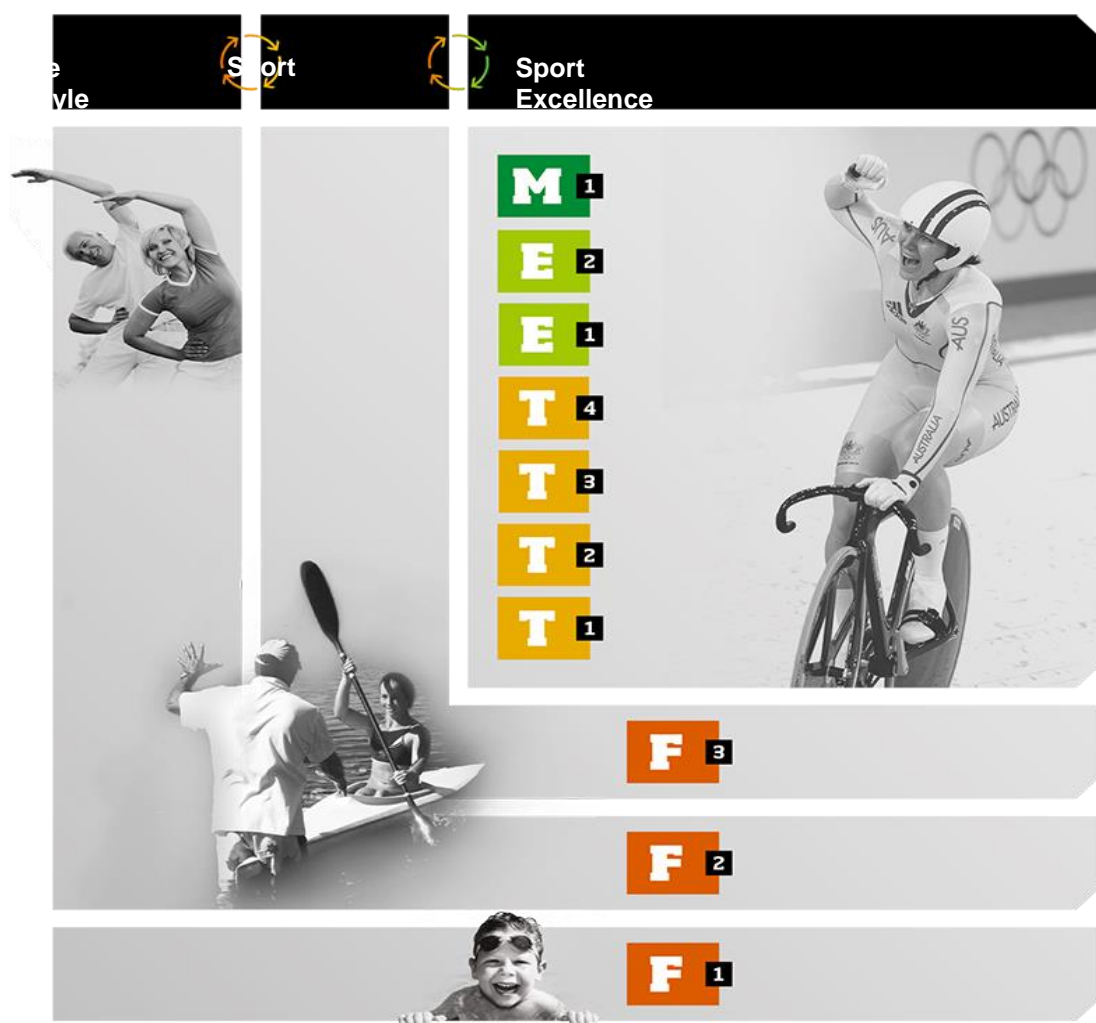
Commonly used acronyms and terms

NCAS	National Coach Accreditation Scheme. A quality assurance program conducted by the Australian Sports Commission.
ASC	Australian Sports Commission
AusDBF	Australian Dragon Boat Federation
FTEM	Foundation, Talent, Elite and Mastery Model
NSO	National Sports Organizations, the peak bodies for their respective sports in Australia
Steerer	Person at the back of the boat. In command of the boat, on-board safety and performance.
Paddler	Participant or racer in the sport of Dragon Boat Paddling.
Drummer	Person at the front of the boat using a drum. Keeps timing and crew cohesion in racing.
Coach	In charge of the development, delivery and review of programs and training plans. for paddlers. The coach delivers and reviews training programs as well as selecting teams for competitions. The coach is not usually in the boat, although the coach may be a steerer, or occasionally a paddler.

The Foundation, Talent, Elite and Mastery (FTEM) model

The Australian Sports Commission (ASC) have a number of resources available to athlete's pathways. While there are a number of different pathway models available, the most commonly used model by Australian NSOs is the FTEM model. This model covers the complete range of paddler participation and development, isn't chronologically prescriptive and has been empirically validated. A potential limitation of the FTEM model is that it has been developed with elite sport in mind, so this model works well for High Performance Planning. The ASC's market segmentation and existing AusDBF membership statistics can assist with the development of a participation plan to adequately address the needs of members at the Foundation level of the model.

It is important to consider that the FTEM shows progression right through to Australian representation. The nature of the model means that only a small number of paddlers will compete at these elite levels, and that most members will be satisfied operating at lower levels in the model. Regardless of a paddler's level in the model, it is the responsibility of AusDBF to provide rewarding experiences at their appropriate level. For example, a large majority of members will happily participate at the F3 "serious leisure" level. The competitions offered and coaching provided need to be able to meet the needs of this important market segment, while still servicing the needs of other members in the pathway.



Foundation: associated with the early development, refinement and expression of foundations of movement, leading to life-long physical literacy.

F1: Learning/re-learning and acquisition of basic movement

F2: Extension and refinement of movement

F3: Commitment to sport and/or active lifestyle: committed to regular training and formal or informal competition

Talent: these phases are designed to maximize the pre-elite paddler's talent potential and conversion to elite status while minimizing dropout or underachievement.

T1: Demonstration of potential

T2: Talent verification

T3: Practicing and achieving

Elite: achievement of a paddler status through selection and representation at the highest senior levels of sport.

E1: Senior elite representation

E2: Senior elite success

Mastery: sustained success through repeated success or accolades over multiple HP cycles.

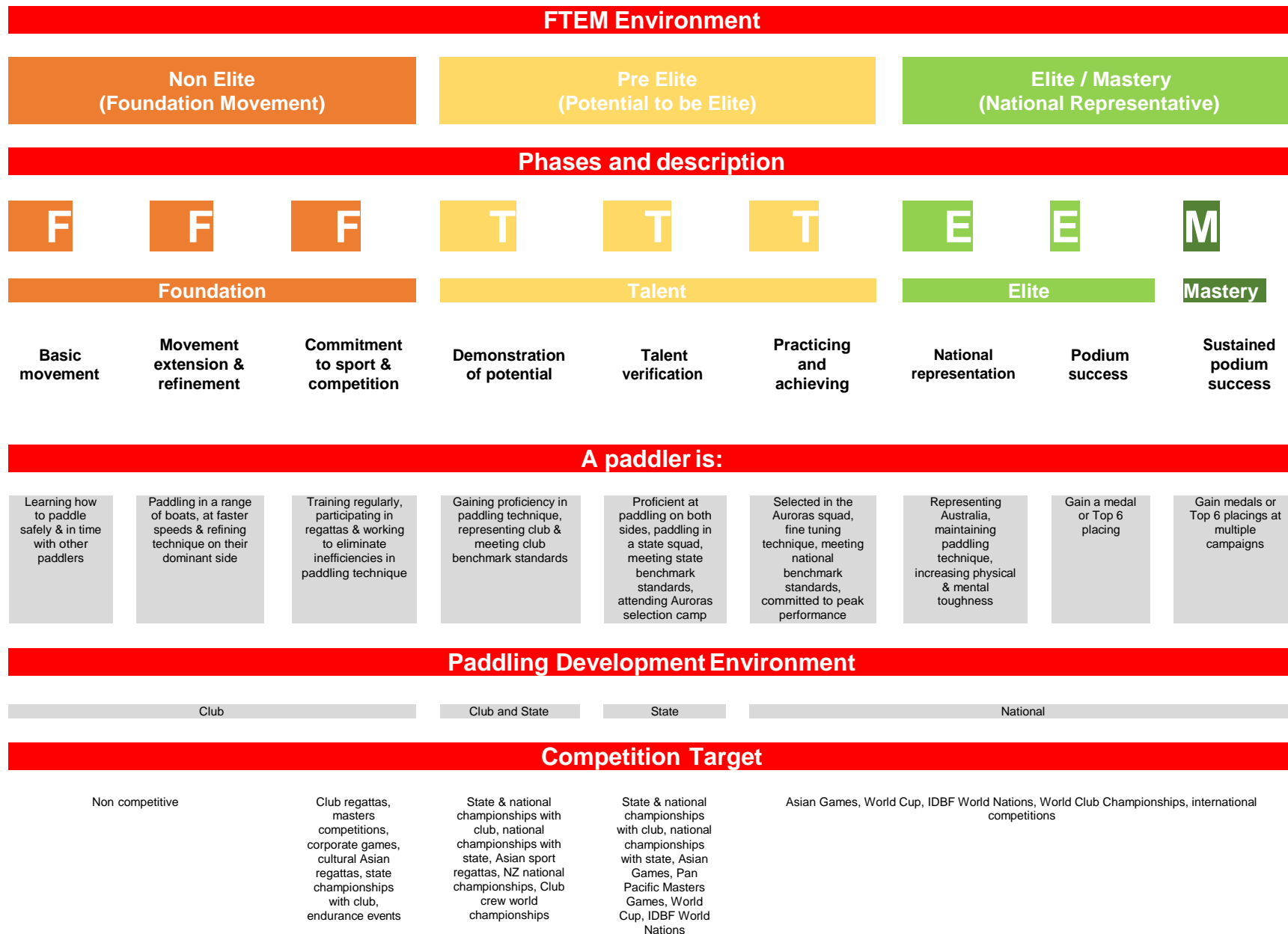
M1: Sustained elite success

Individual paddler development and progression

It is important to consider that individuals mature and develop at varying rates. While individuals might have a similar chronological age, their biological and training ages may differ significantly.

1. Biological age can vary greatly due to both genetic factors, environmental factors and the onset of puberty.
2. Training age (the length of time as an AusDBF paddler, or athlete in a sport with transferable physiological and technical requirements) will also influence progression and performance.
3. Experience and participation in other sports
4. A final consideration is the relative age effect, particularly in age-based categories such as juniors U16 and U18, Seniors A (40+), Seniors B (50+) and Seniors C (60+), where paddlers whose birthdays are not long after the cut-off date have an age advantage. For example, in Junior teams competing at the world Championships, a paddler who turns 18 on the 1st of January, has a 12-month advantage over a paddler who turns 18 on the 31st of December.

To address these considerations, age ranges have been included, but these should be considered as broad indicators rather than prescriptive quantifiers.



Foundation 1: Learning Basic Movement

The generic FTEM model refers to the first foundation as the learning (or re-learning) of basic movement skills. These skills include object control (kicking, throwing, catching), body control (balancing, tumbling and climbing), locomotive skills (running, jumping, hopping) and aquatic skills (floating, swimming and paddling). The combination of these skills are considered to be building blocks for sport specific skills. These skills are typically learned and practiced in informal settings and facilitated by parents.

Given the specialized nature of dragon boat paddling and the equipment required, this generic level needs to be expanded to detail the specific skills required for paddling within the formal context of a club environment. How this process is handled within clubs will differ due to club size and coaching systems. Some clubs may hold come and try days, or, form beginner crews. In other clubs, the paddler will join existing crews. At this early stage, the paddler is operating within the cognitive phase of skill acquisition. This phase can be quite short for adults, or might take longer with younger paddlers. The cognitive phase is complete when an athlete can reasonably complete the skill and can then begin practicing.

Phase details	
Development focus	1. Behave safely in the boat and on the water. 2. Paddle in time with other paddlers as part of a team 3. Experience a safe, enjoyable and low impact session.
Age range	10+
Training environment	Club setting
Technical development	Foundation 1 physical, technical and psychological competencies*
Typical sessions per week	1-2 x 45 mins sessions. This is the recommended maximum duration for this stage.
Coaching level	Club or Level 1 Coach
Phase accountability	Club

* listed in full for all levels at the end of this document to show detailed paddler progression



Foundation 2: Extension and Refinement of Movement

At this stage, paddlers focus on refining their skills and challenging themselves in different contexts. This might include paddling at faster speeds, different boat sizes or with more experienced crew. This phase begins the associative phase of skill acquisition, which is typically longer than the cognitive phase. This phase involves paddlers practicing until they can paddle accurately and consistently and technique becomes automated.

Phase details	
Development focus	1. Refine technique on dominant side 2. Extend technique to non-dominant side 3. Increase paddling strength and CV fitness 4. Maintain an emphasis on enjoyment
Age range	10+
Training environment	Club setting
Technical development	Foundation 2 physical, technical and psychological competencies
Typical sessions per week	1-2 x 1-hour sessions Basic land-based sessions introduced to increase range of movement and flexibility.
Coaching level	Club, Level 1, or trainee coach Strength & Conditioning trainer
Phase accountability	Club



Foundation 3: Commitment to Dragon Boat Paddling

At this stage, paddlers have mastered the basic skills of Dragon Boat Paddling. They regularly attend training and may also participate in regattas and/or endurance races. At this stage, they may also become a “serious leisure” paddler, who will combine travel to different locations around Australia or overseas, with Dragon Boat events. Paddlers are still in the associative phase of skill acquisition. They gradually eliminate inefficiencies and errors in their technique and improve speed, accuracy and consistency.

Phase details	
Development focus	<ol style="list-style-type: none">1. Have suitable technique to participate in competitive Dragon Boat paddling2. Have suitable strength and cardiovascular fitness to participate in competitive Dragon Boat paddling3. Have sufficient motivation to participate in competitive Dragon Boat paddling
Age range	10+
Training environment	Club setting
Technical development	Foundation 3 physical, technical and psychological competencies
Typical sessions per week	2-3 x 1 hr sessions 1-2 land-based sessions
Coaching level	Club, Level 1, or trainee coach Strength & Conditioning Coach
Competitions	Club regattas held in home State Masters competitions Corporate Games State Championships with Club Cultural Asian Regattas Endurance events (e.g. Ord, Hawkesbury, Tweed and Maroochydore)
Phase accountability	Club



Talent 1: Demonstration of potential

Paddlers reach this level through demonstrating potential to qualify for the Club Performance Crew and/or State Squad. This potential is demonstrated through:

- benchmark testing on land and on water
- competition results

In terms of skill acquisition, the paddler is either in the final stages of the associative phase or has moved to the autonomous phase of skill acquisition. They are beginning to, or can, perform the skill with maximum levels of proficiency with little thought to completing the movement.

Phase details	
Development focus	Demonstrating potential in future performance
Age range	10+ for State / National Championships, 12+ for International
Training environment	Club, State
Technical development	Talent 1 physical, technical and psychological competencies
Typical sessions per week	3-5 x 1-2 hr sessions 1-2 land-based sessions
Coaching level	State, Club, Level 1 or 2 Coach Strength & Conditioning Coach
Competitions	State Championships with club National Championships with club National Championships with State Squad Asian Sports regattas NZ National Championships Club Crew World Championships (Club)
Phase accountability	Club and State



Talent 2: Verification of talent

Paddlers attend the Australian Team (Auroras) selection camp. If the talent is verified at this stage, paddlers will qualify for selection into the National squad. Paddlers remain in the autonomous skill acquisition phase with the aim of maintaining their level of skill and motivating paddlers to continue striving for improvement – even when improvements are reduced. This skill acquisition phase may vary for paddlers, for example, if a paddler is identified as having potential, but has a flaw in technique, they may move back to the cognitive or associative phases while they acquire or the correct skill.

Phase details	
Development focus	Verifying future performance potential
Age range	12+
Training environment	Club, State
Technical development	Talent 2 physical, technical and psychological competencies
Typical sessions per week program based	3-7 x 1-2 hour sessions 2-4 land based sessions Introduction to psychological training for racing
Coaching level	Level 2, Level 3 Coach
Competitions	State Championships with club National Championships with club National Championships with State Squad Asian Games Pan Pacific Masters Games
Phase accountability	National



Talent 3: Practicing and achieving

Paddlers who progress to this stage have had their talent verified and have been qualified to train as a member of the Auroras squad. During this phase, paddlers are committed to progressing to the next phase, where they may be selected as a member of the national team. Paddlers need to maintain progress, or they will not maintain membership of the squad. Paddlers at this stage may be in a variety of skill acquisition phases, but the majority will be autonomous, allowing them to focus on other aspects of paddling.

Phase details	
Development focus	Demonstrate achievement of the physical, physiological, technical, tactical, psychological and behavioural competencies needed to gain National representation through selection in the Auroras team.
Age range	12+
Training environment	State, national
Technical development	Talent 3 physical, technical and psychological competencies
Typical sessions per week	3-7 x 1-2 hour sessions 2-4 land based sessions Psychological training for racing
Coaching level	Level 2, Level 3 Coach, input and guidance from National Coach
Competitions	State Championships with club National Championships with club National Championships with State Squad Asian Games World Cup IDBF World Nations and World Clubs Championships International competitions
Phase accountability	National

Elite 1: National representation

At this level, paddlers participate in international competition, through selection in the Auroras team. All paddlers at this stage should be at the autonomous phase of skill acquisition, with the emphasis being on technique maintenance and maintaining motivation for continuing paddling with the acquired technique at increased intensity levels and under a variety of conditions.

Phase details	
Development focus	Gaining best possible competition results
Age range	12+
Training environment	National
Technical development	Elite 1 physical, technical and psychological competencies
Typical sessions per week	3-7 x 1-2 hour sessions 3-4 land based sessions Psychological training
Coaching level	National Coach
Competitions	State Championships with club National Championships with club National Championships with State Squad Asian Games World Cup IDBF World Nations and World Clubs Championships
Phase accountability	National



Elite 2: National team success

At this level, the Auroras team achieves finals qualification and podium results at international competition.

Phase details	
Development focus	Qualify for finals at international completion Attain podium results at international competition
Age range	12+
Training environment	National
Technical development	Elite 2 physical, technical and psychological competencies
Typical sessions per week	3-7 x 1-2 hour sessions 3-4 land based sessions Psychological training
Coaching level	National Coach
Competitions	State Championships with club National Championships with club National Championships with State Squad Asian Games World Cup IDBF World Nations and World Clubs Championships
Phase accountability	National



Mastery 1: Sustained national team success

At this level, the Auroras team achieves sustained podium results in international competition. The athletes use a high level of self-discipline to attain a heightened level of performance and execution of skills. These skills are completely ingrained into physical and mental approach.

Phase details	
Development focus	Attain podium results over multiple campaigns
Age range	12+
Training environment	National
Technical development	Mastery 1 physical, technical and psychological competencies
Typical sessions per week program based	3-7 x 1-2 hour sessions 3-4 land based sessions Psychological training
Coaching level	National Coach
Competitions	Asian Games World Cup IDBF World Nations International championships
Phase accountability	National



Physical, technical and psychological competencies

Operation at a level of competency assumes the paddler meets all competencies from previous levels.

Phase	Physical /physiological	Technique / tactical	Psychological / behavioural
Foundation 1	<ul style="list-style-type: none"> Behave safely in the boat and on the water Engage in warm up exercises Engage in a safe, enjoyable and low impact introductory level water session 	<ul style="list-style-type: none"> Correctly enter and exit the boat Use correct posture and seating Demonstrate correct connection to paddle Display an understanding of timing Demonstrate understanding of instructions for boat management eg slowing / stopping the boat Demonstrate understanding of and intention to execute correct paddling technique. Perform basic paddling drills 	<ul style="list-style-type: none"> Follow steerer's directions Work with coaches to learn basic paddling skills Approach paddling with an emphasis on games and fun Operate successfully within a team environment to paddle a dragon boat Regular weekly attendance to training.
Foundation 2	<ul style="list-style-type: none"> Develop Dragon Boat paddling specific cardiovascular fitness Increase range of movement and flexibility 	<ul style="list-style-type: none"> Demonstrate correct paddling technique on dominant side Demonstrate improved technique on non-dominant side Sustain correct technique for longer periods Improve timing in water and during air work Increased understanding of boat movement 	<ul style="list-style-type: none"> Attend multiple training sessions per week Commit to land-based fitness programs Approach paddling with an emphasis on games and fun Develop confidence in technical ability

Phase	Physical /physiological	Technique / tactical	Psychological / Behavioural
Foundation 3	<ul style="list-style-type: none"> Paddle at a competitive pace Display cardiovascular fitness and strength for paddling at a competitive pace 	<ul style="list-style-type: none"> Complete race starts Demonstrate an associative paddling style: fewer errors and an overall improvement in technique at most or all phases of the stroke Paddle on both sides with sound technique 	<ul style="list-style-type: none"> Commit to attending local regattas Paddle at regattas at a sustained competitive pace Meet team requirements in all areas of Dragon Boat paddling (setting up, pack up etc.)
Talent 1	<ul style="list-style-type: none"> Meet, or potentially meet, club benchmark testing standards Paddle at the appropriate intensity when requested (e.g. starts) Demonstrate increased strength through land based training 	<ul style="list-style-type: none"> Perform the correct paddling with little conscious thought OR <ul style="list-style-type: none"> Demonstrate an associative paddling style: with few errors in technique at most or all phases of the stroke Identify a dominant or preferred side for paddling 	<ul style="list-style-type: none"> Achieve high level results at local regattas Demonstrate an intrinsic desire to improve Indicate their receptiveness to being coached
Talent 2	<ul style="list-style-type: none"> Meet State Squad benchmark standards Demonstrate a sustained commitment to land based training. 	<ul style="list-style-type: none"> Execute autonomous paddling technique correctly. OR <ul style="list-style-type: none"> Perform the correct paddling with little conscious thought Little conscious thought or autonomous paddling technique in a single craft Adjust to different paddling styles when requested. Interpret boat movement and adapt paddling technique if necessary 	<ul style="list-style-type: none"> Work effectively with the requirements of both Club and State Squad coaches Promote and support stability to blend into a composite crew Show a willingness to pursue high performance goals complementary to those of AusDBF

Phase	Physical / physiological	Technique / tactical	Psychological / behavioural
Talent 3	<ul style="list-style-type: none"> • Meet National Squad benchmark standards • Participation in national land based training programs 	<ul style="list-style-type: none"> • Focus on maintaining technique and making small continuous improvements on technique where necessary. 	<ul style="list-style-type: none"> • Work effectively with the requirements of both Club and State Squad coaches • Demonstrate perseverance and passion for long term goals • Demonstrate resilience in overcoming challenges • Employ a range of cognitive and behavioural training exercises (such as: relaxation; attention and arousal; and, visualization) to maintain peak psychological fitness • Contribute to the group cohesion of a high-performance squad
Elite 1	<ul style="list-style-type: none"> • Travel internationally and maintain peak physical conditioning • Remain injury free, or recover from injuries resulting from increased training volume 	<ul style="list-style-type: none"> • Execute autonomous paddling technique correctly on both dominant and non-dominant sides • Execute autonomous paddling technique correctly in a single craft • Execute autonomous paddling technique correctly in a small team craft • Paddle in a range of different sitting positions • Demonstrate connection between technique, strength, power output and connection to the water for optimal boat movement 	<ul style="list-style-type: none"> • Maintain the Code of Behaviour standards required of an Australian representative • Contribute to the group cohesion of an Australian Representative team • Maintain the intrinsic motivation to complete sustained high volume training programs • Employ an effective support team (e.g. physiotherapist, masseuse) • Apply optimal levels of relaxation, attention and arousal at the appropriate times

Phase	Physical / physiological	Technique / tactical	Psychological / Behavioural
Elite 2	<ul style="list-style-type: none"> • Consistently meet the national testing benchmarks whilst remaining injury and illness free. 	<ul style="list-style-type: none"> • Demonstrate biomechanical understanding for sustained performance / boat movement • Demonstrate adaptability to changing technical expectations • Demonstrate adaptability to conditions (craft, weather, distance) for optimal boat movement 	<ul style="list-style-type: none"> • Gain Top 10 ranking on individual National Testing benchmarks • Contribute to the group norms (i.e. standards of behaviour) of an Australian Representative team* • Mentor and guide newer members of the team
Mastery	<ul style="list-style-type: none"> • Consistently exceed the national testing benchmarks whilst remaining injury and illness free. 	<ul style="list-style-type: none"> • Consistently demonstrate biomechanical efficiency for sustaining elite performance / boat movement / boat movement • Demonstrate adaptability to changing technical expectations • Demonstrate adaptability to conditions for optimal performance / boat movement 	<ul style="list-style-type: none"> • Gain Top 5 ranking on individual National benchmarks for multiple international campaigns • Mentor and guide potential team leaders

* Research indicates that best team performances are reliant on commitment to both group cohesion (working together) and group norms (meeting standards of behaviour). Senior members of the team should be able to uphold and communicate group norms.

Australian Dragon Boat Federation National Team Benchmark Standards

14th IDBF World Nations Championships - Thailand 2019 - Required number of repetitions to get maximum points (10)								
		one arm snatch^1'+1'	bench press	sit ups 2'	pull ups	beep test*/**	VO max erg 2km^***	scoring exercises
Senior B	for 10 points	110 both arms	10	90	W 5 M 15	W - level 7 M - level 9	W 40 M 43	score from 5 exercises
Senior A	for 10 points	120 both arms	10	100	W 7 M 18	W - level 8 M - level 10	W 42 M 45	score from 5 exercises
Premier	for 10 points	120 both arms	10	100	W 9 M 20	W - level 10 M - level 11	W 50 M 53	score from 5 exercises
U24	for 10 points	120 both arms	10	100	W 9 M 20	W - level 10 M - level 11	W 50 M 53	score from 5 exercises
U24 but not 18 yet		Burpees in 2' W-50; M-60	75 in 1'	100	W 9 M 20	W - level 10 M - level 11	W 50 M 53	score from 5 exercises
		or 100 Upright row ^^2'						

Juniors U16 - U18			push ups 2' ***	sit ups 2'	pull ups	beep test***	VO max erg 2km ^^^	scoring exercises
Jun U18	for 10 points	Burpees in 1' G - 25; B - 30	G - 35 B - 55	80	G - 5 B - 15	G - level 9 B - level 10	G 47 B 50	score from 5 exercises
Jun U16	for 10 points	Burpees in 1' G - 25; B - 30	G - 25 B - 45	70	G - 3 B - 12	G - level 9 B - level 10	G 47 B 50	score from 5 exercises

Senior C			bench press	sit ups in 2' or 4' plank	pull ups		VO max erg 2km	
Senior C men		N/A	30kg max in 1'	70	10	N/A	41 @ resistance 6	score from 4 exercises
Senior C women		N/A	20kg max in 1'	70	Horizontal chin ups Max in 1"	N/A	37 @ resistance 4	score from 4 exercises

*	To get max score in the beep test athletes must complete required level (eg. Level 10 finishes when level 11 announced).							
**	Athletes who can't run due to medical conditions will perform 2000m rowing test on the concept 2 erg							
***	One push up every 2" with pause at the top point (straight arms), lowest point - elbows bend at 90 degrees							
^	Bottom point - hand on a knee level; Top point - hand on a level with chin							
^^	Bottom point - hands on a knee level; Top point - hand on a level with forehead							
^^^	ERG rowing only for athletes with legs or hips injuries							

Anyone who reached the required number of the repetitions will get 10 points (additional reps will not add more points to the score and athletes should not continue once the maximum has been reached). The points received from all exercises will be added together to calculate the final score for every athlete.

Example: Senior C male - one arm snatch - 38+40=78 (80/10=8; 78/8=9.75 points); sit ups - 67 (70/10=7; 67/7=9.57 points); chin ups - 12= 10 points ; total score = 9.75+9.57+10 = 29.32 points from 30 possible points.

***Fitness benchmark exercises and weight adjustments for
one arm snatch and bench press for Aurora team 2019***

Category	Women			Men		
	body weight	one arm snatch	bench press	body weight	one arm snatch	bench press
Senior C	Please see Senior C section on page 1 for details.					
Senior B	under 70 kg	16 kg	60% body/w	under 85 kg	24 kg	90% body/w
	over 70 kg	18 kg	60% body/w	over 85 kg	28kg	90% body/w
Senior A	under 70 kg	16 kg	70% body/w	under 85 kg	24 kg	100% body/w
	over 70 kg	18 kg	70% body/w	over 85 kg	28 kg	100% body/w
Premier & U24	under 70 kg	16 kg	75% body/w	under 85 kg	24 kg	100% body/w
	over 70 kg	20 kg	75% body/w	over 85 kg	28 kg	100% body/w
U24 but not 18 yet		Bench press	Upright row		Bench press	Upright row
		20 kg	15 kg		30 kg	20 kg

<i>Time to complete 4 tests (excludes Beep) at the selection camp</i>		
Categories	Men	Women
Seniors A and B	5'	5'
Premier and U24	4'30"	4'30"
U24 but not 18 yet	5'	5'