

SINGAPORE GYMNASTICS

High Performance Development Framework

Overview

The purpose of this document is to clarify the standards required for clubs/programmes to be working in the High Performance Pathway (HPP), in Singapore. It is meant as a guide and template for clubs to aim to work with Singapore Gymnastics (SG) and become a 'Pathway Partner Club'. The details are based on best practice for athlete development internationally, and factor in elements that are unique to Singapore. To be clear, the High Performance Pathway is the path to high performance outcomes, as defined by Singapore Gymnastics' primary funding body, SportSG. Specifically, the end of this pathway is podium success at Olympic Games, World Championships and Asian Games. Admittedly these are very challenging goals, but the goals are clear and are used to inform all decisions.

The essential components of this document are drawn from the FTEM Models developed for each discipline. The FTEM framework¹ is internationally recognised, scientifically validated, and has been adopted by many countries throughout the world. Through the FTEM framework, this document outlines the requirements for athletes as they progress along the HPP.

Organisations involved in this pathway are optimally developing:

- the technical and physical capacity of the athlete.
- the daily training environment for the athlete.
- the expertise and qualifications of the coach.
- the sport science and sport medicine support staff that athletes will need.

Furthermore, it is important that athletes and coaches have appropriate training equipment and facilities, which will enable high performance success in the future. A general outline of these standards can be found in Appendix 1.

Key Components of a High Performance Programme

Technical

1. Competition
 - Athletes need to be competing in the appropriate division at National Championships for their age as required for SGDP invitation, or FIG Junior and Senior.
 - As athletes progress, additional competitive opportunities will be planned to ensure a balance of technical development and competition focus at training.
2. Skill Curriculum
 - Athletes need to be regularly tested on the Skill Curriculums developed for each discipline. These curriculums have been developed to fill any skill gaps from competition routine curriculums, and ensure that long term technical development is an equal focus to short term competition development. That is, that skills are being learned for future years as well as the current one.
 - Skill testing of national protocols will take place at a centralised location at designated times through the year.

¹ (FTEM Framework - Jason P. Gulbin, Morag J. Croser, Elissa J. Morley & Juanita R. Weissensteiner (2013) An integrated framework for the optimisation of sport and athlete development: A practitioner approach, Journal of Sports Sciences, 31:12, 1319-1331)

3. Individualised Technical Development

- Past a certain age (approximately 13 years), technical development will be individualised and one to four-year plans developed for each athlete (using Yearly Planning Instrument (YPI) or comparable documentation).
- Plans will document scheduled skill development and routine development, and will be reviewed regularly.
- Preparation of these plans will require a high level of understanding of the current FIG Code of Points, as well as current trends and possible future changes in the Code of Points.

Physical

1. Physical development is a critical part of high performance development. Without appropriate physical development, training for technical development athletes puts athletes at a far greater risk of long-term injury. They will also be limited in the skills they can develop in the future.
2. Physical testing of national protocols will take place at Singapore Gymnastics Development Programme (SGDP) camps, and National Training Centres where appropriate.

Daily Training Environment (DTE)

1. Training Facilities and Coaching Support
 - Facilities must have capacity to provide appropriate hours and sessions per week for training (as per Appendix 2).
 - Facilities must have the capacity to provide appropriate equipment (including, but not limited to, ceiling height, competition equivalent floor, trampoline for artistic gymnastics).
 - Facilities must have capacity for appropriate coach:athlete ratios which become more focused as athletes develop (as per Appendix 2).
 - Coaching must be able to provide for the development of the athletes, with additional specialist coaches as required (eg: ballet, choreography).
2. Sports Science/Sports Medicine
 - High quality Sports Science and Sports Medicine Support is a critical part of any HPP, and generally the most difficult aspect for a club aspiring to be involved.
 - High quality, sport specific medical and physiotherapy support is required from an early age in order to reduce the risk of long term injury and contribute to building a robust athlete for the future.
 - Over time Strength and Conditioning coaches will be required, as well as psychology, nutrition and athlete life support (to manage workload, scholarship choices and time management), as per Appendix 1.
 - Sports Science and Sports Medicine providers must have expertise in high performance sport as well as their discipline.
 - Critically, any SSSM strategies need to be consistent with the overall direction of Singapore Gymnastics, under direction of the Athlete Health Performance Manager (AHPM). There needs to be a strong relationship and good communication between SSSM, Coach, Athlete and the AHPM as the athlete develops.
3. Coach Development and Accreditation
 - FIG Academy participation is a critical component of coach development, underpinned by Singapore Gymnastics coach accreditation programme (as per Appendix 1).

- National Registry of Coaches (NROC) is equally critical, initially Provisional but then Full NROC accreditation (as per Appendix 1).
 - Coaches should undergo coach development activities by attending CoachSG and NYSI conferences annually (or agreed comparable activities).
 - Coaches should have Professional Development Plans and participate in continuous development activities that suit their interests and needs.
 - Head Coach must have international High Performance coaching experience, as well as qualifications.
4. Singapore Gymnastics High Performance Commitment
- Being part of SG Pathway Partner Club Programme requires the following commitments:
 - Clubs, athletes and coaches must be members of Singapore Gymnastics.
 - Clubs must be active participants and supporters of the Singapore Gymnastics Development Programme.
 - Clubs must be active participants in National Junior and Senior squad activities.
 - Clubs must be at least Star 3 Clubs in the Singapore Gymnastics Quality Assurance Programme.

Competition

- Key competitions, including National Championships and Singapore Open, are participated in annually (as per Appendix 1).
- Yearly plans (included in the YPI) will include other competitions and enable training, education and financial planning to ensure both skill development and competition training are properly periodised.

Singaporean Factors

- Consideration should always be given for Singapore's education system, particularly during exam times and critical years of schooling. These factors should be scheduled into coaches' long term planning to mitigate the effect on athlete physical and skill development.
- National Service plays a significant role in the long term development for MAG, both in gymnastics and education planning.

Singapore Gymnastics Philosophies

- There is an expectation that all participants in the SG Pathway Partner Club Programme adopt the following principles of Singapore Gymnastics with regard to athlete development:
 - Skill Development
 - As a general rule, the technical development at training should focus on the skills required for next year's competition, and be building blocks for internationally competitive athletes in the future. The skills for the current year's national championships are simply refined in the year of competition.
 - Child Safe Environment
 - Provide the safest possible environment for children to enjoy the sport at the High Performance level while still achieving.
 - It is not a 'win at all cost' philosophy. For Singapore to be competitive internationally we need as many gymnasts training for as long as possible. Therefore we need to ensure we retain and protect all athletes on the high performance pathway. Specifically, we need to reduce the risk of long term

injury and athlete burnout. The HP Development Framework is designed to facilitate this.

What does it mean to be a 'Pathway Partner Club'?

- Clubs who fulfil the requirement laid out in this document would be considered to be 'Pathway Partner Clubs' for that calendar year.
- Once this is ratified by Singapore Gymnastics, on an annual basis, clubs would be able to promote themselves as being a '202x Pathway Partner Club'.
- Singapore Gymnastics will promote all Pathway Partner Clubs on their website.
- It is important to note:
 - No funding is linked to the title of Pathway Partner Club. Funding from SportSG is specifically linked to National Training Centres and cannot be used for other purposes, particularly for-profit organisation.
 - No status for coaches to be 'National Coaches' is linked to the title of Pathway Partner Club.
 - No status for athletes to be 'National Athletes' is linked to the title of Pathway Partner Club. 'National Athletes' are members of the National Senior Squad and the National Junior Squad only.
 - There is no right transferred to Pathway Partner Clubs to represent Singapore. Representation of Singapore is done through trials for international events by National Squad members and managed by Singapore Gymnastics in its entirety.

How does a club apply to be a Pathway Partner Club?

- If a club would like to apply to become designated a Pathway Partner Club they must complete the Pathway Club Checklist (Appendix 3) and return it to Singapore Gymnastics to be ratified.
- The checklist covers all the requirements outlined in this Framework:
 - details of coaches
 - details for SSSM support staff
 - YPIs for National Squad athletes
 - inventory of facility and equipment, including but not limited to:
 - RG floor – appropriate international standard sprung floor
 - Trampoline for MAG/WAG
 - RG ceiling height – appropriate for international standard throws (12m).
- Once this is returned to SG and ratified the club will be designated a 'Pathway Partner Club' for the next rest of that year.

Other Relevant Documents

This document should be read in conjunction with the Club Quality Assurance Programme documentation.

Appendix 1

Daily Training Environment Guidelines

The guidelines below are generalised based on current trends in international gymnastics. There is some flexibility based on need. It is important to note that the key is for a network of SSSM Support to exist that called upon based on need.

Athlete Age (yr)	SSSM Support	SG Programme	Coach Accreditation	Competition Focus
7			Intermediate, NROC Provisional	National Championships
8	Sport Specific Medical and Physiotherapy	SGDP	Intermediate, NROC Provisional	National Championships
9	Sport Specific Medical and Physiotherapy	SGDP	Intermediate, NROC Provisional	National Championships and Singapore Open
10	Strength and Conditioning, Athlete Life, Sport Specific Medical and Physiotherapy	SGDP	Intermediate, FIG 1, NROC Full	National Championships and Singapore Open
11	Strength and Conditioning, Sport Specific Medical and Physiotherapy	SGDP	Intermediate, FIG 1, NROC Full	National Championships and Singapore Open
12	Strength and Conditioning, Athlete Life, Sport Specific Medical and Physiotherapy	SGDP	Intermediate, FIG 1, NROC Full	National Championships and Singapore Open
13	Strength and Conditioning, Psychology, Sport Specific Medical and Physiotherapy	National Junior Squad	FIG 2, NROC Full	Youth Olympic Games, Asian Junior Championships, World Junior Championships
14	Strength and Conditioning, Athlete Life, Psychology, Nutrition, Sport Specific Medical and Physiotherapy	National Junior Squad	FIG 2, NROC Full	Youth Olympic Games, Asian Junior Championships, World Junior Championships
15	SSSM Team managing holistic wellbeing of athlete under the direction of the Head Coach	National Junior Squad	FIG 2, NROC Full	Youth Olympic Games, Asian Junior Championships, World Junior Championships
16	SSSM Team managing holistic wellbeing of athlete under the direction of the Head Coach	National Junior/Senior Squad	FIG 3, NROC Full	World Cup, Asian Championships, Olympic Games, World Championships, Asian Games
17	SSSM Team managing holistic wellbeing of athlete under the direction of the Head Coach	National Junior/Senior Squad	FIG 3, NROC Full	World Cup, Asian Championships, Olympic Games, World Championships, Asian Games
18	SSSM Team managing holistic wellbeing of athlete under the direction of the Head Coach	National Senior Squad	FIG 3, NROC Full	World Cup, Asian Championships, Olympic Games, World Championships, Asian Games
19+	SSSM Team managing holistic wellbeing of athlete under the direction of the Head Coach	National Senior Squad	FIG 3, NROC Full	World Cup, Asian Championships, Olympic Games, World Championships, Asian Games

Appendix 2

Training Volume

Gymnastics is an early specialisation sport and requires a high volume of training. The following tables are guidelines for training volumes as athletes develop along the high performance pathway. They are based on FIG long term development models. As such it should be noted they do not take into account the unique nature of Singapore in terms of the education system and National Service. It should also be acknowledge that apparatus specialist as a Senior allows lower training volume. Lastly, it should be noted that there has been a trend towards fewer training hours over the past 10 years, to allow athletes adequate recovery time, reduce the risk of injury, and have athletes stay in the sport for as long as possible.

The guidelines for total hours (including gym training, ballet, choreography, strength and conditioning, Pilates, etc), number of sessions, and coach/athlete ratio are for Pathway Partner programmes. These programmes must have the capacity to offer this training volume, at the appropriate quality.

MAG

Age (yrs)	Hours per week	Sessions per week	Coach/Athlete Ratio
8	4 to 6	2 to 3	1 to 8
9	4 to 10	2 to 5	1 to 8
10	8 to 14	3 to 5	1 to 8
11	10 to 15	4 to 6	1 to 8
12	10 to 15	4 to 6	1 to 8
13	12 to 15	4 to 6	1 to 8
14	15 to 18	5 to 6	1 to 8
15	18 to 21	6 to 7	1 to 6
16	18 to 24	6 to 8	1 to 6
17	24	8	1 to 6
18	24	8	1 to 6
19+	27 to 30	9 to 10	1 to 6
22+	20 to 30	5 to 10+	1 to 6

WAG

Age (yrs)	Hours per week	Sessions per week	Coach/Athlete Ratio
8	2 to 6	1 to 3	1 to 8
9	5 to 10	2 to 4	1 to 8
10	9 to 12	3 to 5	1 to 8
11	10 to 15	4 to 6	1 to 8
12	15 to 18	5 to 6	1 to 8
13	18 to 21	6 to 7	1 to 6
14	18 to 21	6 to 7	1 to 6 (or below)
15	21 to 24	7 to 8	1 to 4
16	21 to 27	7 to 9	1 to 4 (or below)
17+	27 to 30	9 to 10	1 to 4 (or below)
22+	20 to 30	5 to 10+	1 to 4 (or below)

Age (yrs)	Hours per week	Sessions per week	Coach/Athlete Ratio
8	2 to 6	1 to 3	1 to 8
9	5 to 10	2 to 4	1 to 8
10	9 to 12	3 to 5	1 to 8
11	10 to 15	4 to 6	1 to 8
12	15 to 18	5 to 6	1 to 8
13	18 to 21	6 to 7	1 to 6
14	18 to 21	6 to 7	1 to 6 (or below)
15	21 to 24	7 to 8	1 to 4
16	21 to 27	7 to 9	1 to 4 (or below)
17+	27 to 30	9 to 10	1 to 4 (or below)
22 +	20 to 30	5 to 10+	1 to 4 (or below)



Appendix 3

Pathway Partner Club Checklist

Please complete this form and then submit to your Programme Manager. If you have any questions please contact your Programme Manager.

Details of Club

Name of Club	
Name of Discipline	
Name of Person Submitting	
Role of Person Submitting	
Contact email/phone	

Details of Coaches

Please list gymnastics coaches and other technical experts (eg: choreography, ballet) that work with National Squad and SGDP athletes.

Name (coaches and other experts)	Role	NROC Level	FIG Level

Coaches have Professional Development plans and will be supported to develop their skills. <i>Circle Yes or No.</i>	Yes/No
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Details of Sport Science/Sport Medicine support staff

Please list support staff that work with the National Squad and SGDP athletes.

Role	Name	Qualification	Contact email/phone
Medical			
Physiotherapy			
Nutrition			
Psychology			
S & C			
Athlete Life			
other			
other			

Athletes

Please attach any YPIs that have not already been submitted through SportSync.

All National Squad and potential National Squad athletes have YPIs	Yes/No
Required Athlete group sizes and hours can be accommodated within the constraints of venue and coaching hours	Yes/No

Facility Checklist

Artistic Gymnastics		Rhythmic Gymnastics	
International Standard Floor	Yes/No	International Standard Floor	Yes/No
Trampoline	Yes/No	12m Ceiling Height	Yes/No
Required Hours Are Available	Yes/No	Required Hours Are Available	Yes/No
International Standard Apparatus	Yes/No		

Signed by Club Official

I acknowledge that all the details on this form are accurate.

Club	
Name	
Role	
Signature	

Approved by Singapore Gymnastics

Singapore Gymnastics acknowledges that the club named above is considered a Pathway Partner Club for the calendar year.

Calendar Year of Eligibility	
Name	
Role	
Signature	