



**OCCUPATIONAL FRAMEWORK
SPORTS ACTIVITIES INDUSTRY**



**JABATAN PEMBANGUNAN KEMAHIRAN
KEMENTERIAN SUMBER MANUSIA**

Department of Skills Development
Ministry of Human Resources, Malaysia

First Printing 2016
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Ministry of Human Resources, Malaysia 2016

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Department of Skills Development (DSD)

Published in Malaysia by
Department of Skills Development (DSD)
Ministry of Human Resource
Level 7-8, Block D4, Complex D
Federal Government Administrative Centre
62530 Putrajaya, Malaysia
<http://www.dsd.gov.my>

Printed by
Golden Global Network (SA0124636-K)
No. 11, Jalan Reko Sentral 2,
Taman Reko Sentral, 43000 Kajang, Selangor
Tel: 03-8740 3420 Faks: 03-8739 8249

Perpustakaan Negara Malaysia

Cataloguing-in-Publication Data

Occupational Framework
Sport Activities Industry
ISBN 978-967-0572-727

ABSTRACT

An Occupational Framework (OF) is the outcome obtained from the process of identifying the work scope of the occupational areas in terms of competencies. It is used to analyse human resource competency requirements for the industry. The development of the Occupational Structure is a preliminary process in developing relevant National Occupational Skills Standard (NOSS). The NOSS in turn will be developed to be used as the basis to conduct skills training and certification of competent personnel. This document is divided into several chapters, the first two chapters being an industrial overview highlighting the definition and scope of the industry, the current analysis of the local industry and its skilled worker requirements, Government bodies and development plans supporting the growth of the industry, then the next chapter will explain the methodology used in Occupational Framework development such as qualitative analysis through brainstorming discussion sessions. Workshops were held to get a better understanding of the organisational structure, job titles, hierarchy objectives and main activities of the specified positions. The final chapters will present the findings of the Occupational Framework that is translated into the Occupational Structures, levels of competencies and critical job areas. These findings will in turn be the basis of reference for the development of the National Occupational Skills Standard (NOSS) document. The NOSS will serve not only as a reference of skills standards for certification but also as a guide to develop the skills training curriculum. In order to conduct the Occupational Framework on the Sports Activities Industry, all the information related to the aforesaid industry was gathered through literature review, surveys and further discussed in workshop sessions with experts from the industry.



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LIST OF ABBREVIATIONS

DESCUM	Development of Standard and Curriculum
DACUM	Development of A Curriculum
DSD	Department of Skills Development
OF	Occupational Framework
OD	Occupational Description
OS	Occupational Structure
MOSQF	Malaysian Occupational Skills Qualification Framework
MQA	Malaysia Qualification Agency
MSC	Malaysian Skills Certificate
NOSS	National Occupational Skills Standard



CHAPTER 1: INTRODUCTION

1.1 CHAPTER INTRODUCTION

This chapter will explain the objectives, scope and problem statement of the Occupational Framework for the Sports Activities Industry. The concept of Occupational Framework and its function in skills training and curriculum development is also elaborated in this chapter.

There have been various National Occupational Skills Standard (NOSS) documents developed for the Sports Activities Industry. However, a complete analysis on the Occupational Structure of the Sports Activities Industry has not been undertaken before this. Therefore, in order to identify the overall structure and available career paths in the industry, the Occupational Framework must be done on the Sports Activities Industry. Below are descriptions of important elements of the research.

i) National Skills Development Act 2006 (Act 652)

The National Skills Development Act 2006 (Act 652) came into effect on 1st September 2006 after it was officially gazetted on 29th June 2006, with the mandate of promoting, through skills training, the development and improvement of a person's abilities, which are needed for vocation, and to provide for other matters connected therewith. The Act 652 is significant because for the first time in the history of skills training in Malaysia, a legislation has been enacted solely and exclusively for skills training and development. In addition, the meaning and scope of skills training has been clarified and given a statutory interpretation that can be used to distinguish it from other components of the country's national education and training system. The Act 652 also provides for the implementation of a Malaysian Skills Certification System, leading to the award of five (5) levels of national skills qualification, namely Malaysian Skills Certificate Level 1,2 and 3; Malaysian Skills Diploma; and Malaysian Skills Advanced Diploma.



ii) Malaysia Qualification Framework (MQF)

The Malaysia Qualification Framework refers to the policy framework that satisfies both the national and internationally recognised qualifications. It comprises titles and guidelines, together with principles and protocols covering articulation and issuance of qualifications and statements of attainment. Elements of the qualification framework indicate the achievement for each qualification title. It will also provide progression routes for all the graduates in the respective occupational fields.

The MQF has eight levels of qualification in three sectors and supported by lifelong education pathways as shown in the chart 1. JPK governs the skills sector, in which there are five (5) levels of skills qualification. The definition for each level of skills qualification is specified in Malaysian Occupational Skills Qualification Framework (MOSQF).

MQF Levels	Sectors			Lifelong Learning
	Skills	Vocational and Technical	Higher Education	
8			Doctoral Degree	Accreditation of Prior Experiential Learning (APEL)
7			Masters Degree	
6			Bachelors Degree	
5	Malaysian Advanced Skills Diploma	Advanced Diploma	Advanced Diploma	
4	Malaysian Skills Diploma	Diploma	Diploma	
3	Malaysian Skills Certificate 3	Vocational and Technical Certificate	Certificate	
2	Malaysian Skills Certificate 2			
1	Malaysian Skills Certificate 1			

Figure 1.1 MQF Chart



iii) National Occupational Skills Standard (NOSS)

National Occupational Skills Standard (NOSS) is defined as a specification of the competencies expected of a skilled worker who is gainfully employed in Malaysia for an occupational area, level and pathway to achieve the competencies and is gazetted in Part IV of National Skills Development Act 652. NOSS is developed by the industry experts based on the needs of the industry and is utilized as the main tool in the implementation of Malaysian Skills Certification System in which the performance of existing industry workers and trainees are assessed based on NOSS for awarding of Malaysian Skills Certificate.

iv) Competency Based Training (CBT)

Competency Based Training (CBT) is an approach to vocational training which emphasizes on what a person can do in a work place as a result of education and training obtained. CBT is based on performance standards which are set by the industry with main focus on measuring the performance while taking into account knowledge and attitude rather than the duration taken to complete the course. CBT is a learner-centric; outcome-based approach to training which allows each individual to develop skills at their own pace for a similar outcome, thus meaning training practices can be customized for each individual to achieve a similar outcome. CBT concept is the basis of Malaysian Skills Certification system which is coordinated by JPK.

1.2 OBJECTIVE OF STUDY

The objectives of the study are as below:

- To produce an occupational structure (OS) from data analysis, interviews, site visits and focus group;
- To determine job descriptions of each job title from the OS; and
- To investigate the skills in demand in the industry.



1.3 SCOPE OF STUDY

The scope of work for the study to develop occupational framework are as listed below:

- To conduct literature review on the current industry;
- To consult with relevant industry representatives to obtain expert input from industry;
- To develop, disseminate and analyse survey and questionnaire's data from industries via industry representatives;
- To perform focus group discussion with the industry representatives, interviews, site visits and/or any other methods in order to achieve the study outcome.

1.4 BACKGROUND OF THE SPORTS ACTIVITIES INDUSTRY IN MALAYSIA

Sports can be defined simply as the whole range of competitive and non-competitive active pursuits that involve skill, strategy and chance in which human beings engage, at their own level, simply for enjoyment and training or to raise their performance to levels of publicly acclaimed excellence (Standeven and De Knop, 1999). Hinch and Higham (2001), however viewed sport as goal oriented, competitive and contest-based activities. Sport is also defined as an individual or group activity pursued for exercise or pleasure, often taking a competitive form (Smith and Collins, 1988 cited in Higham 1999). Therefore, we can define sports as physical activities involving individual or groups, competition-based, and is confined to specific rules.

Based on research work commissioned by Ministry of Youth and Sports, undertaken by Malaysian Institute for Research in Youth Development, entitled "*Sports Activities Industry in Malaysia: Contribution towards the Malaysia Gross Domestic Product*", defined the Sports Activities Industry as



any and all activities in relation to the products and services of sport in the public, commercial and voluntary sectors regardless of the objectives of the said sectors whether for profit or otherwise. ¹

Since, sports events are held at international level, such as World Cup Soccer and Olympic Games, therefore it is sensible to explore the definitions or models that are adopted by the major sporting nations. The findings are discussed in Chapter 2, Section 2.4.

Sports in Malaysia is an important part of Malaysian culture. In the spectating aspect, the spectators with most fans are football, hockey, rugby, badminton, volleyball, handball, basketball and martial arts. Malaysia has hosted several major sports events including the Commonwealth Games in 1998. The high growth potential of the Sports Activities Industry promises a lot of opportunities for the sports stakeholders.

The Ministry of Youth & Sports has embarked on a number of initiatives to make this a reality and to turn Malaysia's Sports Activities Industry into a major contributor to Malaysian economy. This will help Malaysia to achieve the goal of becoming a high-income nation by 2020. The Sports Activities Industry should be established as a market driven and results-oriented model. Through education and engagement, the key stakeholders should be aligned towards the single objective of developing the foundations for a strong, market driven and economically sustainable Sports Activities Industry. From sports marketing to sports medicine, the Sports Activities Industry has a very high potential as one of the main industries in Malaysia. The private sector is now looking to market their brands through sport and sponsorship, thus, moving from corporate social responsibility to a profit

¹Malaysian Institute for Research in Youth Development, entitled "*Sports industry in Malaysia: Contribution towards the Malaysia Gross Domestic Product*"



oriented industry. Malaysia is to host the SEA games in the year 2017 which will generate business opportunities and employment.²

Due to a number of Government initiatives, there will be a demand of skilled personnel in the Sports Activities Industry in various sectors. Through analysis, this research aims to identify the demand based on the Occupational Framework of the Sports Activities Industry. This is imperative as currently there is no existing research on the workforce requirement in the Sports Activities Industry.

1.5 CHAPTER CONCLUSION

In the light of recent economic development plans by Malaysia and recognition of Malaysian talent in the Sports Activities Industry, the demand for skilled personnel has increased and the development of skilled manpower is timely. With the Occupational Structure clearly defined, the industry stakeholders will be able to identify areas that will require more intensive efforts in human capital development. Although there have been past efforts in National Standards Development for the industry, the need for an Occupational Framework is required to determine the overall job areas that may not yet have been focused on. The Occupational Structure that will be the outcome of this analysis shall be utilised as a 'blueprint' for the manpower planning for the Sports Activities Industry.

²Sports industry in Malaysia: Contribution towards the Malaysia Gross Domestic Product" by Malaysian Institute for Research in Youth Development , Ministry of Youth and Sports (MYS) and IPPBM Research Associates - 2013



CHAPTER 2: LITERATURE REVIEW

2.1 CHAPTER INTRODUCTION

This chapter will focus on the explanation of the Sports Activities Industry, the current scenario in Malaysia, introduction to government policies, development plans, government bodies and industrial competitiveness at the international level pertaining to the Sports Activities Industry.

Findings in this chapter were obtained via literature review, observation, interviews with industry practitioners and discussions during workshops with development panel members. This literature review will be further discussed with panel members to obtain insight on the matters at hand from a practitioner's perspective.

2.2 STAKEHOLDERS

The stakeholders of Sports Activities Industry include:-

a) Regulatory and Statutory Bodies

The Government Agencies that are empowered by the legislations according to the scope and powers given in the Acts that control and regulate the sports athletes, management and events in Malaysia.

b) Sports Training Centres

Sports training centres that are managed by agencies under Ministry of Youth and Sports.

c) Sports Associations

Almost all sports in Malaysia are represented by associations that are responsible for the development of sports, where some of the sports associations are governing bodies to regulate and control the sports activities. However, in this literature, only the Government related sports councils are described in Table 2.1 below.



Table 2.1 : List of Stakeholders In Sports Activities

NO	ORGANISATIONS	ROLE, RESPONSIBILITIES, FUNCTION
A. REGULATORY BODIES		
1.	Ministry of Youth and Sports (<i>Kementerian Belia dan Sukan Malaysia</i>) ³	Ministry of Youth and Sports (KBS) trusted to fulfill Malaysia's Policy on Youth and Sports. The Ministry is responsible for : <ul style="list-style-type: none"> • Youth Development Management • Sports Development Management • Rakan Muda Development Management • Skills Development Management • Youth Organisations Registration Management • Sports Body Registration Management
2.	National Sports Council of Malaysia (<i>Majlis Sukan Negara</i>) ⁴	The National Sports Council (MSN- Majlis Sukan Negara) was established under the National Sports Council of Malaysia Act 1971 and the National Sports Council of Malaysia (Amendment) Act 1979. The National Sports Council of Malaysia is responsible to the promotion, development and outstanding achievements in sports at the highest levels.
3.	National Sports Institute (<i>Institut Sukan Negara</i>) ⁵	The National Sports Institute is established by the National Sports Institute Act 2011 (Act 729). It is an agency under the Ministry of Youth and Sports, which is responsible for the development of: <ul style="list-style-type: none"> • Sports science, • Sports medicine • Sports technology

³<http://www.kbs.gov.my>

⁴<http://www.nsc.gov.my/>

⁵<http://isn.gov.my/>



NO	ORGANISATIONS	ROLE, RESPONSIBILITIES, FUNCTION
4.	Malaysia Sports Commissioner Office (SCO- Sports Commissioners Office)	The SCO is responsible for managing the registration of sports body in Malaysia by the virtue of the Sports Development Act 1997 (Act 576).
5.	Olympic Council of Malaysia <i>/Majlis Olimpik Malaysia</i>	With reference to Sports Development Act 576, Part III, Clause 8 (1), “ The Olympic Council of Malaysia is recognized by the International Olympic Committee as the National Olympic Committee for Malaysia”. Clause 8(2)The Olympic Council of Malaysia shall be responsible that the participation of Malaysia in the Olympic Games, Asian Games, Commonwealth Games, South East Asian Games and other international athletics competitions is in accordance with the rules and regulations of the International Olympic Committee, the Olympic Council Of Asia, the Commonwealth Games Federation and other international sports bodies to which the Olympic Council of Malaysia is affiliated.
6.	Malaysia Stadium Corporation (MSC) (<i>Perbadanan Stadium Malaysia</i>)	The Malaysia Stadium Corporation (MSC), under the Malaysia Stadium Corporation Act 2010 (Act 717) has been entrusted by the government to establish, manage, operate and maintain the MSC’s stadiums



B. SPORTS TRAINING CENTRES		
1.	Youth Skills Golf Academy, Ministry Youth and Sports (<i>Akademi Kemahiran Belia Golf, Kementerian Belia & Sukan</i>)	The academy aims to provide more opportunities to locals especially youths to participate in the sport of golf. Among the courses offered are golf caddy and golf supervisor. Therefore, it offers entrance to youths in enrolling into the academy.
2.	National Coaching Academy (<i>Akademi Kejurulatihan Kebangsaan (AKK)</i> ⁶)	The main functions of AKK includes, being a reference center of excellence for sports coaching, recognition of coaches and coach education. AKK offers a comprehensive program of coaching education including a fully accredited sports coaching program under the National Coaching Certification Scheme (SPKK) from Cert I to III.
C. SPORTS COUNCILS / ASSOCIATIONS		
1.	Schools Sports Council, (<i>Majlis Sukan Sekolah Malaysia (MSSM)</i> ⁷)	Malaysian Schools Sports Council was established in 1968 and the name changed to Schools Sports Council of Malaysia (MSSM - Majlis Sukan Sekolah Malaysia) MSSM, under the Ministry of Education to improve the quality of sports in schools by organizing sports competitions and development programs. MSSM Championships are open to Malaysian students under the age of 18 years.

⁶<http://isn.gov.my/akademi-kejurulatihan-kebangsaan/>

⁷https://ms.wikipedia.org/wiki/Majlis_Sukan_Sekolah_Sekolah_Malaysia



SPORTS COUNCILS / ASSOCIATIONS		
2.	Malaysian Universities Sports Council (<i>Majlis Sukan Universiti Malaysia</i> ⁸ (MASUM))	<p>In 1974, sports competition was initiated by university officials in organising sports among university staff. Subsequently, in 1975 the sports among the university students was initiated. In 1983, Universities Sports Council and the Institute of Higher Education was formed. In 1985, that was a named changed, which is called Malaysian Universities Sports Council (MASUM – Majlis Sukan Universiti Malaysia).</p> <p>Participations of MASUM:-</p> <ul style="list-style-type: none"> ▪ Summer Universiade (WUG) ▪ World University Championship ▪ Asian University Championship ▪ Asean University Games (AUG)
3.	Malaysian Paralympic Council (<i>Majlis Paralimpik Malaysia</i>)	<p>Malaysian Paralympic Council (MPC) is the National Paralympic Committee (NPC) of Malaysia. The council was established on 18 May 1989 as Majlis Sukan Orang Cacat Malaysia. In 1996, it was renamed as Malaysian Paralympic Council⁹</p>

⁸<http://www.masum.org.my/>

⁹https://en.wikipedia.org/wiki/Malaysian_Paralympic_Council



SPORTS COUNCILS / ASSOCIATIONS		
4.	Sabah Sports Council (<i>Majlis Sukan Negeri Sabah</i>)	<p>Sabah Sports Council was established on 2 April 1972, located in Sandakan, in conjunction with Pesta Sukan Cup Hone progress. Sabah Sports Council was formally registered with the Registrar of Societies in 1966. To support the goals of the National Sports Council of Malaysia, Sabah Sports Council has become an affiliate member of the National Sports Council of Malaysia through the National Sports Council of Malaysia in 1979.</p> <p>Since its inception Sabah Sports Council headed by the Hon. Minister of Youth and Sports Sabah as the Sabah Sports Council Chairman and assisted by the Permanent Secretary, Ministry of Youth and Sports Minister cum Sabah Sports Council secretary. In 2008, the Sabah Sports Council has been restructured and a Director has been appointed to lead the Sabah Sports Council.¹⁰</p>

¹⁰ <http://www.msnsabah.com/sejarah>



2.3 GOVERNMENT LEGISLATION, POLICIES AND INITIATIVES,

Below are the legislations, policies and initiatives that are relevant to sports in Malaysia.

2.3.1 LEGISLATION AND POLICIES

i) National Sports Council Of Malaysia Act 1971 (Act 29) /*Akta Majlis Sukan Negara (1971)*

An Act for the establishment of the National Sports Council.

Among the functions are:-

- a) to co-ordinate the activities in respect of sports conducted by government departments or non-governmental agencies.
- b) to make recommendations to the Government as the methods, measures and policies to be adopted to facilitate the development of sports and where approved by Government, to implement and assist in the implementation thereof
- c) to promote sports locally and internationally and to participate in the development of sports in Malaysia
- d) to conduct surveys and investigations in respect of sports

ii) Sports Development Act 1997 (Act 576) /*Akta Pembangunan Sukan (1997)*

An Act to promote and facilitate the development and administration of sports in Malaysia.

Among the contents of the Act are:-

- a) Matters relating to sports development, such as ;
 - Guidelines in relation to sports development and bodies
 - Co-ordination of associations, agencies and bodies that are involved in sports
- b) Registration and supervision of sports associations
- c) Recognition of the Olympic Council of Malaysia as the National Olympic Committee of Malaysia.



iii) National Sports Institute Act 2011 (Act 729) / *Akta Institut Sukan Negara (2011)*

An Act to provide for the establishment of the National Sports Institute and to set out the functions and powers of the Institute.

Among the functions of the Institute are:-

- a) to recommend and review scientific methods and measures that enhance the performance of athletes
- b) to provide scientific, advisory, consultancy and related services in sports science and sports medicine
- c) to provide and conduct the necessary medical examination and treatment of sport persons.
- d) to conduct courses and training programmes in the field of sports science and sports medicine

iv) Stadium Incorporation Act 2010 (Act 717) / *Akta Perbadanan Stadium Malaysia 2010 (Act 717)*

Among the functions of the Incorporation as stipulated in Part II, Clause 4 of the Act 717 are as follows:-

- a) to establish, manage, operate and maintain stadiums in Malaysia;
- b) to implement policies and development programmes to ensure the viability of the stadiums;
- c) to promote the stadiums, at national and international level, as multi-purpose venues for sports, recreational, cultural, educational, commercial and entertainment events and such other events as the Incorporation thinks fit;
- d) to develop and provide at the stadiums such facilities and services of a commercial nature complementary to the stadiums, including residential accommodation;
- e) to provide technical, advisory, consultancy services and other services



v) National Sports Policy (2009) / *Dasar Sukan Negara* (2009)

National Sports Policy is a policy of sport for all. The policy includes a high performance sports and sports for all, based on the rationale that all these activities are part of a development plan initiated by the government for the people.

Sport contributes to the promotion of healthy competition, goodwill, tolerance, understanding, moral and physical qualities that provides a comfortable platform for integrating various ethnic groups in the country. Sports competitions are organised in accordance with regulations and the terms of the international sports federations, National Olympic Committee and National Sports Associations.¹¹

vi) International regulatory bodies and international legislative structure

- a) Rules & Regulations by Sports International Federation (IF)
 - South East Asian Level
 - Asian Level
 - World Level
- b) International Olympic Committee (IOC)
- c) Commonwealth Games Federation
- d) Olympic Council of Asia
- e) Sea Games Federation
- f) International Paralympics Committee
- g) World Anti Doping Agencies
- h) Professional Sports Association of the IOC Recognised International Sport Federations (ARISF), such as F1, MotoGP, Boxing, Golf and Billiard.

¹¹www.kbs.gov.my



2.3.2 ELEVENTH MALAYSIA PLAN (11TH MP)

During the Tenth Malaysia Plan, the wellbeing of the *rakyat* was enhanced through a relentless focus on healthcare services, public security, affordable housing, social integration and sports. For the Eleventh Malaysian Plan, “Sports for All” was promoted to encourage mass participation in sports, recreational, and fitness activities. A total of 417 programmes were conducted involving 175,600 participants including 2,600 Persons With Disabilities (PWD). Among the flagship programmes were Fit Malaysia and the Sports for All League. In addition, a total of 1,871 1Malaysia Futsal Courts and 89 gymnasiums were built to increase access to sport facilities for all levels of society.

The Talent Development Programme for high-performance sports was implemented to identify and train potential athletes to participate in major tournaments such as the SEA Games, Commonwealth Games, Asian Games and Olympic Games and world championships. To date, 23,670 potential athletes have attended special training programmes. In addition, 2,603 PWD athletes participated in the Persons with Disabilities Sports Carnival in 2012, 74 talented PWD athletes joined the MSN Paralympics Programme in 2013, and 135 PWD athletes participated in the 11th Asian Paralympics Games in South Korea in 2014.

Under the 11th Malaysian Plan, development plans for the Sports Activities Industry are listed under the Focus area F, which is entitled, “*Promoting sports for healthy living and unity*”. Sport is an important component in promoting an active and healthy lifestyle. Mass participation in sports will enhance social integration and unity among Malaysians. The vision is for 50% of Malaysians to embrace a sport culture, where sports and physical activities become an integral part of life, by 2020.



These aims will be realised through the following strategies:

i) Strategy F1:

Promoting mass sports participation at all levels of society to instil a sports culture. This will be achieved through stronger collaboration between the government, private sector, NGOs and community. The Government will focus on strategies to make Malaysia a sporting nation with extensive community participation in various sports, fitness, and recreational activities. Iconic programmes such as Fit Malaysia, Sports for All League, Sports for PWD, and futsal championships will be expanded. Public parks will be used for recreational and community sporting events. Collaboration among government, private sector, and NGOs in promoting and implementing sports programmes, as well as providing and maintaining sports facilities will be strengthened.

ii) Strategy F2:

Developing youth leadership in sports. This will be achieved through measures such as capability building programmes to build the capacity and professionalism of sports associations and NGOs. The Government will invest in more skill enhancement programmes to improve the professionalism of youth and leaders in sports and sports associations. Comprehensive sports leadership programmes, particularly in events, integrated sports management and coach education programmes will be enhanced to develop potential leaders in sports and sports-related activities.

iii) Strategy F3:

Developing high-performance athletes for global prominence through specialised training programmes, more rigorous compliance with international standards and the hosting of international sports events.

In preparation for the 2020 Olympic Games, talent identification programmes will be conducted at schools and institutions of higher education to identify potential athletes. Comprehensive training



programmes will also be developed and sports facilities improved. The development of high performance athletes will be supervised by a dedicated team, consisting of various experts. In addition, the capability of the Anti-Doping Agency of Malaysia (ADAMAS) will be enhanced to meet international standards and the requirements of the World Anti-Doping Agency in enforcing zero tolerance to doping. ADAMAS will also conduct awareness and education programmes on doping among athletes nationwide. Finally, Malaysia will continue to host international sports events and tournaments to provide a platform to showcase Malaysia's sporting talent.

2.3.3 SPORTS PROGRAMMES

i) SPORT DEVELOPMENT PLAN 2015 -2023

The Sports Development Plan 2015 - 2023, focuses on enhancing 5 core areas, primarily; Organizational management, Athlete management, Training facilities, Coach management and Championships management at three levels, ie, district, state and national level. There are 19 Core Sports (Sukan Teras) in the Sports Development Plan.

ii) PODIUM PROGRAMME

The PODIUM Programme is a dedicated national elite athlete preparation programme under National Sports (Institut Sukan Negara (ISN)) with the overall objective of achieving sporting excellence for the country.

The Podium programme is focused on producing more talent and potential athletes that have the potential to win medals at SEA Games, Commonwealth Games, Asian Games and Olympic Games. The selection of sports is based on several criteria such as track record, basic facilities existing at various levels and the ability of the association to implement the programmes.



Objectives of the PODIUM Programme:-

- Olympics: First gold medal in Tokyo (2020)
- Commonwealth Games: Restore top 10 finish in Gold Coast (2018)
- Asian Games: Restore top 10 finish in Jakarta (2018)
- 10 athletes in world top 6 rankings
- Sustainable sporting excellence beyond 2020¹²

iii) PROGRAM “KITA JUARA” 2017

“Kita Juara” programme launched in bid for SEA Games glory. “Kita Juara”, the name of the programme aimed at propelling Malaysia to the top of the medal standings in the 2017 Kuala Lumpur SEA Games. Malaysia emerged as the overall SEA Games champion for the first time when the 2001 edition was held here. Now, in a bid to reclaim the glory, the Ministry has laid out a three-phase programme to prepare the athletes over the next two years. The National Sports Council (NSC), the National Sports Institute (NSI) and the Olympic Council of Malaysia (OCM) will jointly coordinate the “Kita Juara” programme. The first phase, covering 12 months with about 800 athletes from the 38 shortlisted sports of the Games. The second phase, will see the athletes under the programme being exposed extensively to high level competition. The programme will conclude with the distillation of potential athletes for the Games. Those selected to represent Malaysia at the home Games will be put through systematic training and competition programmes to raise their performance level from April 2017 until the meet. The ‘Kita Juara’ programme will lay the foundation for future success. ¹³

¹²<http://isn.gov.my/en/podium-program/>

¹³<http://www.nsc.gov.my/program-atlet/>





Figure 2.1: Kita Juara Programme 2017

iv) BACK-UP PROGRAM (PROGRAM PELAPIS)

Pelapis Program is an ongoing long-term program to provide a pool of talented young athletes from as early as 13 years old to 21 years old, which has the potential to replace retiring senior athletes. The program is divided into three stages, namely, the National Back-Up Program (**Pelapis Kebangsaan**), Regional Back-Up Program (**Program Pelapis Serantau**), and State Back-Up Program (**Program Pelapis Negeri**).

v) iTRAIN / iTALENT (Paralympics)

Youth and Sports Ministry (KBS) created the **Inspire Program** as a measure seeking new talents in sports among people with disabilities (PWDs), especially for those who aspire to become Paralympics athletes in the country.



The program targets people with disabilities at the grassroots level across the country who have talent in the sport and it will be a bigger platform for people to play sports and recreation. People with disabilities are encouraged to join the camp which will be held in 119 districts nationwide, selected through a screening process to enter a two-day camp called iTALENT. A total of 1,400 participants will be identified to participate in the camp iTrain which will be held in each state for five days and they will be trained in any of Paralympics sports such as football sevens, archery, wheelchair basketball, weightlifting, goal ball, ping pong, badminton, cycling, swimming and lawn bowls.¹⁴

2.3.4 INITIATIVES FOR CREATING SPORTS AS A CULTURE

The Ministry Youth and Sports has a number of strategic action plans to encourage the public to adopt sports as a way of life and thereby enhance national unity. The Ministry has set a target of half our population participating regularly in sports as part of their life culture by 2020.¹⁵

i) NATIONAL SPORTS DAY (Hari Sukan Negara)

National Sports Day is a national agenda with the vision of producing more people who are healthy and so improving their productivity. Increased participation by communities in the program and sports activities at the National Sports Day. Objectives of the National Sports Day are intended to realize and inspire youth, to encourage and make sports as a culture to achieve the following:

- Increased awareness the importance of sport for creating a vibrant and active community.
- Encourage the development of the country's economy through the development of Sports Activities Industry.
- Increase the knowledge of sports among Malaysians.

¹⁴ <http://www.nsc.gov.my/kejohanan/sukan-paralimpik/>

¹⁵ Buku KBS Startegic Plan 2016-2020 (Strategik 3)



- Give recognition to Malaysians involved in the sports activities at the grassroots level.¹⁶

ii) FIT Malaysia

FitMalaysia is the brainchild of YB Khairy Jamaluddin, the Minister for Youth and Sports. The vision is to make Malaysia a fit, sporting nation. FitMalaysia is the springboard for Malaysians to achieve excellence in sports and in life. FitMalaysia events had been successfully launched all over Malaysia in 2015 (at all 14 states) by Ministry for Youth and Sports.

iii) FIT Masjid

The FIT Masjid is similar in nature with FITMalaysia, but the sports activities start from the compounds of mosques or the activities are carried within the area of the mosques.

¹⁶<http://www.nsc.gov.my/umum/10-oktober-hari-sukan-negara-2015/>



2.4 INDUSTRY AND MARKET INTELLIGENCE

Industry intelligence is the collection and distribution of data about an industry by using a variety of approaches. The industry will be able to utilise this information to make business decisions, manpower development and training requirements. Industry intelligence is critical for developing strategies in the areas of manpower development and the impact of those developments.

i) International Sports Achievements

Malaysia's achievements in major international sports tournaments continue to be encouraging. Malaysian athletes, Dato' Lee Chong Wei won a silver medal and Pandelesa Rinong Ak Pamg won a bronze medal in the 30th Olympic Games 2012 in London. Malaysia also excelled in various sporting events, namely the 20th Commonwealth Games 2014 in Glasgow, with six gold medals, 43 gold medals in the 27th SEA Games 2013 in Myanmar, and 15 gold medals in the 11th Asian Paralympic Games 2014 in Incheon, South Korea. In 2014, 36 Malaysian athletes were in the top 10 world ranking. Furthermore, Malaysian athletes like Dato' Lee Chong Wei and Dato' Nicol Ann David are international role models in their respective sports.¹⁷

ii) Global outlook of the industry

It has been widely recognized that sport activities could act as a “catalyst” for economic growth. A vast majority of literature that examines the benefits of sport activities focused mainly on the economic impact of hosting mega sport events. For instance, in the case of the FIFA World Cup, it was estimated the World Cup tourists' expenditure generated US\$1.35 billion of output and created 31,349 full-time equivalent jobs for South Korea. (Ahlert, G. and H. Preuss (2010))

Hence, hosting major international sporting events such as the Formula

¹⁷Sports industry in Malaysia: Contribution towards the Malaysia Gross Domestic Product” by Malaysian Institute for Research in Youth Development , Ministry of Youth and Sports (MYS) and IPPBM Research Associates - 2013



One GP Grand Prix Racing, Le Tour de Langkawi, and many other international mega-sport events annually generates income for the country. These sporting activities, in turn, stimulate a wide range of supporting industries; thus, **generating employment** and boosting national income.

The economic impacts of these mega sport events to hosting countries are very substantial. Based on this premise, many countries strive to position sports as an industry that impacts their domestic economy. A comprehensive industrial sector development plan, including product and service commercialization activities, would make sports a career. This will in turn will generate job opportunities, and strengthen the Sports Activities Industry as well as the supporting sectors.

iii) World Championships Terminology

The term 'world championships' depend on the nature of sport and the sporting body that governs or council of the sport in particular. A world championship is generally an international sports competition open to elite competitors from across the world, representing their nations, and winning such an event will be considered the highest or near highest achievement in the sport or contest.

- The title is usually awarded through a combination of specific contests or, less commonly, ranking systems (e.g. the International Cricket Championship) or a combination of the two (e.g. World Triathlon Championships)
- Considered the best nation, team, individual (or other entity) in the world in a particular field, although the notions of sport is to ensure that the competitor recognised is the best in an event, is not always the 'world champion' .
- A certain sports do not have a world championship, instead they may organise a world cup competition, or they may organize both. Often, the use of the term cup or championship in this sense is just a choice



of words. Some sports have multiple champions because of multiple organizations such as mixed martial arts, boxing and wrestling.

- A certain number of sports held world championships or world cups which are overshadowed, in terms of prestige, by the same events in the Olympic Games, the most prestigious multi-sports event.
- Some professional sports do not have a world championship or world cup, but rather hold a series of events recognised as the elite level in their field (e.g. tennis has a series of four Grand Slam events recognised as the pinnacle of the game, in addition to key team events, world tour finals and the Olympic Games, but the sport has no world championship or world cup to speak of).
- The **Youth Olympic Games (YOG)** is an international multi-sport event organized by the International Olympic Committee. The games are held every four years in staggered summer and winter events consistent with the current Olympic Games format. The first summer version was held in Singapore from 14 to 26 August 2010 while the first winter version was held in Innsbruck, Austria from 13 to 22 January 2012. The age limitation of the athletes is 14 to 18. On 6 July 2007, International Olympic Committee (IOC) members at the 119th IOC session in Guatemala City approved the creation of a youth version of the Olympic Games. These Games will also feature cultural exchange programs and opportunities for participants to meet Olympic athletes.
- Several other Olympic events for youth, like the European Youth Olympic Festival held every other year with summer and winter versions, and the Australian Youth Olympic Festival, have proven successful. The Youth Games are modeled after these sporting events.
- The 2017 Southeast Asian Games, officially known as the 29th Southeast Asian Games (*Sukan Asia Tenggara ke-29*) and commonly



known as Kuala Lumpur 2017 is a regional multi-sport event that will take place at Kuala Lumpur from 19 to 31 August 2017. It will be the sixth time that the South East Asian Games will be held in Malaysia.

iv) Sports Activities Industry Models In Major Sporting Nations

In general, the Sports Activities Industry is categorised according to the specific business and sports activities of the industry in a particular country.

Below are some examples:

a) In **China**:- classified six groupings; namely,

- fitness,
- sport entertainment,
- sport training and consulting,
- sport tourism,
- sport agency, and sport lottery

b) In **Korea** :the industry is classified into:

- sport facility businesses,
- sport product businesses, and
- sport service businesses.

c) In **Japan**, it is also classified into three groups:

- sport-related retail,
- facility and space management, and
- professional sport

d) In **USA**, is classified as below:

- sport entertainment
- sport products
- sport support organisations



v) Issues & Challenges of Sports

Like any other industry, Sports Activities Industry has its own issues and challenges. Here below are some of the issues and challenges related to this research.¹⁸

a) Public Participation in Sports

Inclusive participation of all segments of society in sporting events is still lacking and is seen as a challenge to ensure that sport continues to be a place of social cohesion. There is also the perception that certain sports are dominated by certain groups and ethnic groups. This prevents the participation of other ethnic groups.

b) Sports Facilities

Provision of sports facilities and infrastructure that is easily accessible is very important for the development of sports. The maintenance and upgrading the provision of sports facilities have been given priority to encourage the use of sports facilities, especially in districts and states. This is a constraint to foster a sports culture among the people. Sports facilities for disabled persons are also very limited and make it difficult for the disabled to practice sports activities.

c) Sports Association

Sports associations play an important role in the development of sports in the country. They are the key stakeholders in ensuring compliance with the standards of a sport and the standards set by international bodies. The compliances to the standards are to ensure that sport is developed in a holistic manner and based on merit. Sports associations in Malaysia must have a pro-active attitude in the development of grassroots talent and preparation of athletes at the highest level. Close cooperation with the sports development agencies

¹⁸ KBS Strategic Plan 2016-2020



in Malaysia is essential. Hence, the sports associations require officers to be trained in sports in line with international trends.

d) Athletes

The main challenge in the provision of world-class athletes are the necessity to start from the comprehensive approach to talent identification and into the match. Physical and mental training and all support systems are to be made available. All major agencies providing athletes need to work together to achieve the desired goals.

e) Coaching

Coach is the most important influence in the success of an athlete. A good coach can boost athletes' skills, ensuring athletes play best of their abilities, develop a strong character, and instill confidence in themselves. Often they are also an inspiration to athletes because of their experience as athletes themselves. Coaches need to have extensive knowledge in coaching a sport, especially the construction of a solid foundation for the training of athletes from a young age.

2.5 OCCUPATIONAL STRUCTURE OVERVIEW

The occupational structure overview includes a brief description on each sector/sub-sector of the Sports Activities Industry. According to the Malaysia Standard Industry Classification (MSIC 2008), Sports is listed under **Section R: Arts, Entertainment and Recreation**, under **Division 93: Sports Activities and Amusement and Recreation Activities**. The DSD has developed 28 NOSS for the Sports Activities Industry up until the year 2016 which can be found under the Sports And Recreation section of the NOSS registry.

The existing NOSS are as listed in Table 2.2



Table 2.2 : Summary of NOSS developed under the Sports Activities

Industry Sector

Area/Level	Level 5	Level 4	Level 3	Level 2	Level 1
Golf Operations	Not Available	Not Available	Touring Caddying Service	Golf Caddying Service	Not Available
Golf Operations	Not Available	Not Available	Not Available	Buggy Mechanic	Assistant Buggy Mechanic
Golf & Sports Operations	Golf and Sports Management	Golf and Sports Management	Golf and Sports Operation	Not Available	Not Available
Golf Course Maintenance	Golf Course Maintenance Management	Golf Course Maintenance Management	Golf Course Maintenance Operation	Not Available	Not Available
Golf Services	Head Golf Professional	Professional Golf Instructor	Not Available	Not Available	Not Available
Equestrian Industry	Equine Centre Management	Equine Centre Administration	Horse Care	Not Available	Not Available
Equestrian Industry	Not Available	Not Available	Stable Supervisor	Senior Stablehand	Stablehand
Athlete Preparation Management	Athlete Preparation Management	Athlete Preparation Management	Athlete Preparation Coordination	Not Available	Not Available
Cycling	Not Available	Not Available	Bicycle Repair and Maintenance	Bicycle Assembly and Service	Not Available
Sports Facility Maintenance	Not Available	Not Available	Sports Facility Maintenance Service	Not Available	Not Available
Sports Event Management	Not Available	Not Available	Sports Event Coordination	Not Available	Not Available
Sports Coaching	Not Available	Not Available	Sports Coaching	Not Available	Not Available
Martial Arts	Martial Arts Management	Martial Arts Coordination	Martial Arts Training	Not Available	Not Available



2.6 CHAPTER CONCLUSION

In summary the Sports Activities Industry in Malaysia has great potential in terms of economy and employment. It is apparent that the Government has given a lot of emphasis on sports development, through a number of initiatives

At the international arena, the athletes are expected to perform at the highest level. Based on the literature and information obtained from Focus Group, Sports is vis-à-vis Sports Activities Industry is interrelated with international sports governing bodies, with regards to sports rules & regulation and the administration of sports as a whole. Hence, in certain sports; for example football, is under the purview of FIFA's (Fédération Internationale de Football Association) rules & regulations. Therefore, athletes in Malaysia, that are participating at international levels must possess competencies at international standards.

Malaysia has many advantages and features that can be leveraged upon, to make it internationally competitive with potential talent, a skilled workforce and current technology and infrastructure.



CHAPTER 3: METHODOLOGY

3.1 CHAPTER INTRODUCTION

This chapter describes the methodology of the overall Occupational Framework process that was conducted throughout the Sports Activities Industry Occupational Framework analysis.

3.2 RESEARCH METHODOLOGY

Qualitative analysis was selected as the main method of obtaining input throughout this study. Qualitative research investigates the why and how of decision making, not just what, where, when. Hence, smaller but focused samples are more often used than large samples. It focuses on unique themes that illustrate the range of the meanings of the subject matter rather than the statistical significance of the occurrence. This process uses inductive reasoning, by which themes and categories emerge from the data through the researcher's careful examination and constant comparison. Qualitative research typically relies on the following methods for gathering information: Participant Observation, Non-participant Observation, Field Notes, Structured Interview, Semi-structured Interview, Unstructured Interview, and Analysis of documents and materials. A combination of these methods is applied in this study such as semi-structured interviews, participant observation, and discussion workshops.

Below are the methods used throughout the research conducted on the Sports Activities Industry:

Step 1: Preliminary Info Gathering

Preliminary information gathering was done via literature review/research and survey/questionnaires.



(i) Literature Review

A literature review on the Sports Activities Industry was carried out to get some insight of this industry in the context of the Malaysian scenario. The scope covered under this search includes definitions, current analysis of the sub-sectors/areas, current status of the Sports Activities Industry, skilled workers requirement in the local sub-sector and the industrial competition at international level. A Focus Group comprising Subject Matter Experts (SME) were selected from the industry to provide the relevant information for the items mentioned above.

The literature review was then presented to industry members to confirm the accuracy and relevancy to the industry.

(ii) Semi-Structured Surveys

Semi-structured surveys also served as a source of information, please refer to Annex 3: Questionnaire. The survey was used as the instrument to confirm the findings obtained through qualitative analysis obtained in the workshop sessions. The respondents consisted of representatives from the organization/agencies relevant to the sub-sectors of the Sports Activities Industry.

The questionnaire was developed by referring the findings from the workshops with industry panel members. The sectors, sub-sectors, job titles and skill sets were adapted to become guiding questions in the questionnaire.

The questionnaire consisted of various questions that are semi-structured and respondents from the industry were asked about the industry workforce requirements and industry background relevant to them.



(iii) Observation

An on-site observation of the working environment were conducted through visits to the industry during the focus group discussions and when developing the Occupational Descriptions. These site visits were useful in further understanding the various occupation in the actual working environment.

Step 2 : Engaging Industrial Experts

Industry experts were engaged by applying various mediums such as brainstorming, focus group, interview, on-site visit, emails etc.

Experts from the Sports Activities Industry were identified for further communication and contact. The lists of experts are included in the list of development panel members in Annex 2: List of Contributors. In the process of gathering the information, two (2) methods were adopted, namely; brainstorming and DACUM sessions, were attended by development panel members who discussed the different sectors and areas. Facts obtained during the literature review were also discussed and presented to the development panel members. The information gathered was then used as input to the Occupational Framework of the said sub-sector.

Workshops and interviews were conducted during the development of the Sports Activities Industry Occupational Framework. Follow up discussions with the expert panel members were done in smaller groups to verify the findings of the Occupational Framework. The details of the workshops are as listed below:



Table 3.1: List of Occupational Framework Development Sessions

Date	Venue	Activity
7 th – 8 th May 2016	IBIS Styles Cheras Hotel, Kuala Lumpur	<ul style="list-style-type: none"> • Confirmation of Preliminary Literature Search • Development of Questionnaire • Identification of Occupational Structure (Preliminary)
1 st June 2016	Majlis Sukan Negara	<ul style="list-style-type: none"> • Confirmation of Literature Review • Confirmation of Questionnaire
21 st June 2016	Sports Commission Office	<ul style="list-style-type: none"> • Industry engagement and site visit
24 th June 2016	Majlis Sukan Negara	<ul style="list-style-type: none"> • Industry engagement and site visit
19 th July 2016	Institut Sukan Negara	<ul style="list-style-type: none"> • Questionnaire workshop
23 rd – 24 th July 2016	IBIS Styles Cheras Hotel, Kuala Lumpur	<ul style="list-style-type: none"> • Development of Occupational Structure • Development of Occupational Description
11 th August 2016	Ministry of Youth and Sports	<ul style="list-style-type: none"> • Focus Group for Sports Event Management



Step 3 : Data Analysis

Based on the activities done as above, substantial data and information were collected. The data and information were discussed and analysed in development workshops, focus group discussions and interviews attended by selected key persons or experts from the public and private sub-sector.

The presence of the key persons or experts ensured that the development of the Occupational Framework is current and relevant.

Throughout the development process, the Sports Activities industry is analysed using the above methodology to identify the following:

- (a) Scope of the industry and its sub-sectors ;
- (b) Main areas;
- (c) Occupational groups of the sub-sector;
- (d) Job title;
- (e) Skills in Demand;
- (f) Hierarchy structure (Level 1 – 8); and
- (g) Occupational Description.

Step 4 : Occupational Structure (OS) Development

The Occupational Structure Development technique is explained in detail in the following section, 3.2.1, Occupational Structure Development.

Several elements were referred to when developing the Occupational Structure (OS) such as the following:

- Identification of sub-sector/area/sub-areas (MSIC)
- Identification of Job Title (Organization Structure etc)
- Identification of levelling based on MOSQF

Step 5 : Occupational Description Development

The Occupational Description Development technique is explained in detail in the following section, 3.2.2, Occupational Description Development. The Job Description reflects the competencies performed for a particular job.



Step 6 : Finalizing OA Document

The collated documents are finalised and presented in the format as prescribed by Department of Skills Development.

3.2.1 Occupational Structure Development

The Occupational Structure was developed based on the following processes:

(a) Identification of industry scope and boundaries with other industries

The identification of the industry scope is important so that when identifying the relevant sub-sectors and areas under the industry, it will define the segmentation of the particular industry to other relevant industries. This will eliminate the possibility of duplication between common areas. The rule of thumb is to avoid taking into account the organization chart as this will include many other industries such as marketing, administration, human resources and public relations. These areas are common across various industries and have a different set of skill sets. Grouping based on similar skill sets in terms of technical abilities is a determining factor. The MSIC and existing Occupational Structures in the DSD NOSS Registry were also used as a point of reference.

(b) Identification of sub-sector/area/sub-area

The coverage of a sub-sector should be able to accommodate a number of areas and sub-areas where applicable. Sub-sectors are identified as being components of an industry and can be clustered in terms of classification, segmentation or process driven.

(c) Identification of job titles

In order to identify job titles, it is important to obtain consensus from expert panel members that the job title is common between organizations either



Small, Medium or Enterprise (SME) and is easily accepted by practitioners in the industry.

(d) Leveling of job titles

Leveling of a job title is done based on the level of competency required to be deemed competent at a specific designation. The level descriptors in Annex 1 are used as reference when determining the different levels relevant to a specific job title.

3.2.2 Occupational Description Development

The Occupational Description (OD) is the detailed description of the main job scope of the job title. The OD is developed using a combination of brainstorming sessions with panel members and then the Occupational Descriptions would be compared to other available descriptions for the same job title. Below are the main steps in producing an OD for the respective job titles:

- (i) determine the main areas and sub-areas in the sub-sector;
- (ii) identify the job titles; and
- (iii) identify the job scope.

To describe the Occupational Description clearly, the statement must consist of a **Verb**, **Object** and **Qualifier**. The rationale of determining the description attributes is to facilitate NOSS development especially in job and competency analysis.

a) Object

The object is determined first before the verb and qualifier. It is the main determinant to distinguish one job to another. The objects are acquired from the industrial experts during a brainstorming session and written on DACUM cards so that all the experts can see the objects identified. Objects of those in the related sub-sector or area are determined as in the example below



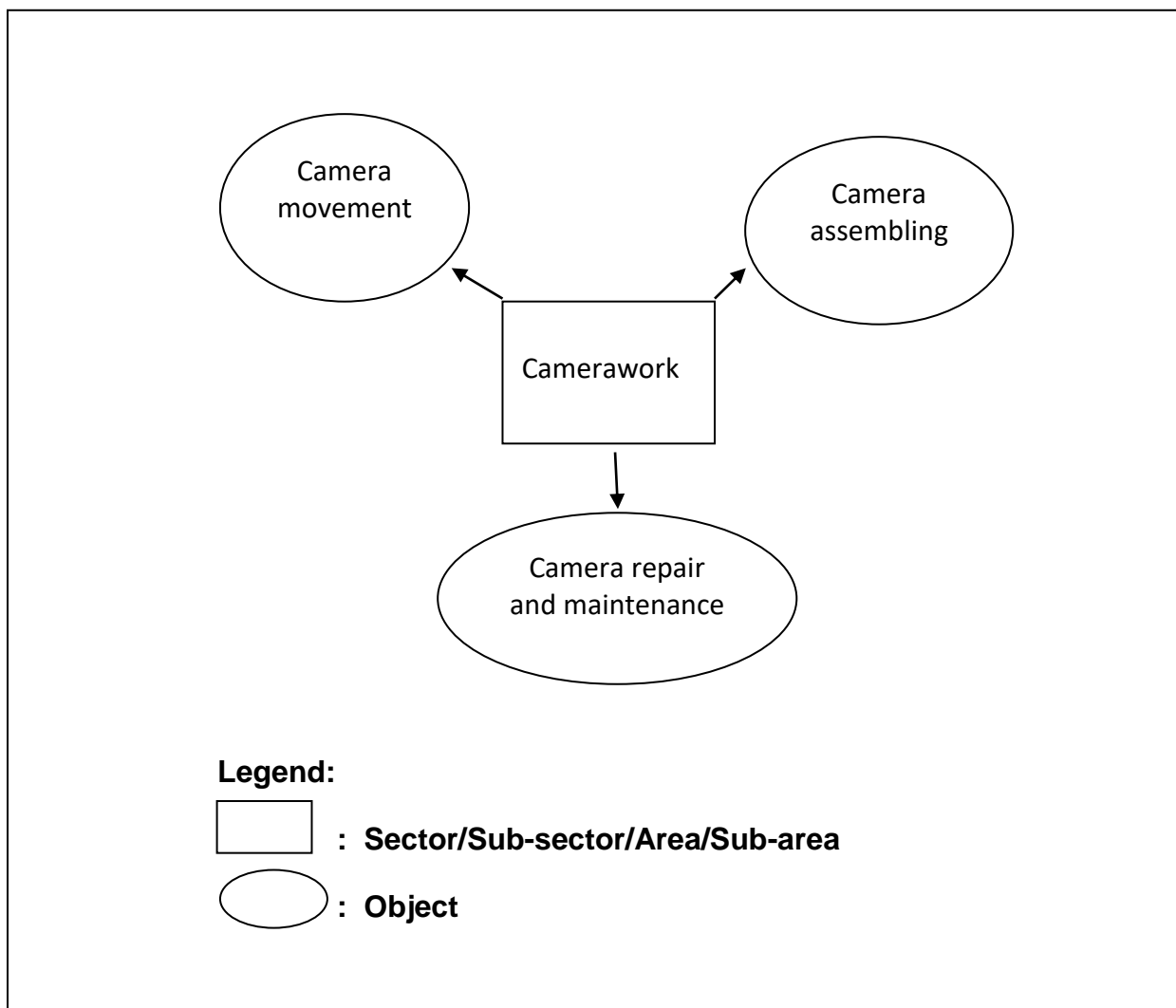


Figure 3.1: Example of Identifying Objects

b) Verb

The verb is then determined based on the level of difficulty of the identified job titles, such as below:

- **Object** :camera movement
- **Verb for Level 3 : Carry Out**
- **Verb for Level 4 : Coordinate**
- **Verb for Level 5 : Direct**



Hence, the contents of the job definitions will be as below:

- Director of Photography (Level 5)
- ✓ **Direct** camera movement + (qualifier)
- Cameraman (Level 4)
- ✓ **Coordinate** camera movement + (qualifier)
- Assistant Cameraman (Level 3)
- ✓ **Carry out** camera movement + (qualifier)

c) Qualifier

Based on the example above, the statement is not clear as there is no qualifier for the object, therefore a qualifier must be added to further clarify it. Below is an example:

- **Coordinate** camera movement during **film production**

3.3 CHAPTER CONCLUSION

This chapter has elaborated on the methodology used in the study which is through literature review, brainstorming sessions and Development of Standards and Curriculum (DESCUM). The development of the Occupational Structure and Occupational Description obtained and skills in demand identified through industry surveys will be presented in the next chapter, Chapter 4, Findings.



CHAPTER 4: FINDINGS

4.1 CHAPTER INTRODUCTION

The sectors and sub-sectors for the Sports Activities Industry were obtained through discussions with industry experts during the development workshop sessions and interviews. Based on the discussions held during development workshops, the development panel members determined that the Sports Activities industry in Malaysia is divided into 7 sectors which are:-

- a) Athlete
- b) Coach
- c) Sports Association Management
- d) Sports Event Management
- e) Sports Technical Official
- f) Sports Science
- g) Sports Medical

Research instruments used were focus group discussions, semi-structured surveys, interviews. Information was initially obtained from available material. This information was then analysed and used as the basis for the focus group workshops. During the focus group workshops, the information was re-analysed and grouped into three key theme areas which were:

- Industry Background
- Occupational Structure
- Skills in Demand

These key theme areas were then used as a guide and checklist to obtain information through focus group discussions with relevant stakeholders in Malaysia. The feedback and input obtained from the focus group



discussions were then analysed to determine the current industry scenario in Malaysia.

In order to obtain information on skills in demand and industry intelligence, semi-structured surveys were distributed to the respondents who were representatives of the relevant organisations. The input acquired from the meetings, interviews and survey responses were then reviewed.

4.2 COMPARATIVE STUDY ANALYSIS

This section consists of the outcome of comparing the existing Occupational Analysis (OA), NOSS and other relevant industry framework in other countries.

4.2.1 International Comparison – Sports Occupational Framework In Canada

On International comparison, the Government of Canada has identified Sports to be classified in their National Occupational Classification (NOC) to be in Major Group 52, Technical occupations in Art, Culture, Recreation and Sport. Similar to Malaysia's Occupational Structure which is mapped to the MSIC, the NOC is also mapped to the classification groups used by the Statistics Department. The Unit Group 525 includes the occupations as below:

- 5251 Athletes
- 5252 Coaches
- 5253 Sports officials and referees
- 5254 Program leaders and instructors in recreation, sport and fitness

4.2.2 Current Occupational Structures and National Occupational Skills Standards (NOSS)

Currently there are three (3) Occupational Structures (OS) and NOSS (National Occupational Skills Standards) developed by the Department of Skills Development (DSD), that are relevant to the sub-sectors in the Sports



Activities Industry Occupational Structure developed for the Sports Activities Industry Occupational Framework. The OS and NOSS available are as listed below:-

- Sports Tourism
- Building and Construction
- Finance and Business Services

4.2.3 Sports Tourism

With reference to Table 4.1, below, it can be seen that Sports Tourism covers the job scope of occupations in Sports Event Management from level 3 as Coordinators till level 7 as General Managers. The areas identified are Administration and Finance, Marketing and Operation. This is nearly similar to what was identified in the Sports Activities Industry Framework for Sports Event Management. (Please refer to Occupational Structure in Annex 4).

4.2.4 Building & Construction

With reference to Table 4.2, the Building and Construction Occupational Structure developed by the DSD includes the job scope for Sports Facilities Management under the Mechanical & Electrical Management and Facility Maintenance sub-sector.

4.2.5 Business and Finance

The Sports Association Management sub-sectors such as Accounts and Administration are similar to the NOSS developed under the Business and Finance sector included in the NOSS Registry.

Please refer to Table 4.3, for the job titles of the Public Relations, Sales and Marketing and Office Administration, where the NOSS for the respective job titles have been developed. Table 4.4 shows the Occupational Structure for Finance.



4.2.6 Comparison Between The Related OS Versus Sports Activities Industry OS

With reference to Table 4.5, below, is the matrix of existing OA and NOSS against the sectors identified under the Sports Activities Industry. This will serve as reference as to whether the development of the NOSS is required. The existing Occupational Structures; i.e. Building and Construction and Sports Tourism, will be referred to in terms of the Occupational Descriptions for the similar occupations.



Table 4.1 : Sports Tourism Occupational Structure

SECTOR	HOSPITALITY & TOURISM INDUSTRY					
SUB SECTOR	TOURISM EVENT MANAGEMENT					
	SPORTS TOURISM				EDUCATION TOURISM	ECO TOURISM
JOB AREA	ADMINISTRATI ON & FINANCE	MARKETING	OPERATION	SPORTS TOURISM CENTRE MANAGEMENT	EDUCATION CENTRE MANAGEMENT	ECO TOURISM CENTRE MANAGEMENT
LEVEL 8	-NO LEVEL -	-NO LEVEL -	-NO LEVEL –	SPORTS TOURISM CENTRE MANAGEMENT (NCS)	EDUCATION MANAGEMENT (NCS)	ECO TOURISM CENTRE MANAGEMENT (NCS)
LEVEL 7	SPORTS EVENT GENERAL MANAGER					
LEVEL 6	SPORTS EVENT MANAGER					
LEVEL 5	SPORTS EVENT ASSISTANT MANAGER*					
LEVEL 4	SPORTS EVENT EXECUTIVE*					
LEVEL 3	SPORTS EVENT ADMINISTRA TION & FINANCE COORDINAT OR*	SPORTS EVENT MARKETING COORDINATO R*	SPORTS EVENT OPERATION COORDINATOR*			
LEVEL 2	-NO LEVEL -	-NO LEVEL -	-NO LEVEL -			
LEVEL 1	-NO LEVEL -	-NO LEVEL -	-NO LEVEL –			



Table 4.2 : Building & Construction Occupational Structure

Sub-sector	Area	Job Area
1. Town & Country Planning	Pre-Consultancy	Project Assessment
		Technical
2. Building Survey	Consultancy	Project
		Technical
3. Architecture	Consultancy	Project
		Technical
	Construction	Project
4. Civil Engineering	Consultancy	Project
		Technical
	Construction	Roadwork
		Bridge
		Water Reticulation & Sewerage
		Earthwork / Retaining Wall / Geotechnical
		Structure/Fencing & Gate
5. Quantity Survey	Consultancy	Project
	Construction	Technical
6. Geometrics & Land Survey	Consultancy	Management
		Cadastral/Engineering Survey (C/Es)
		Utility Mapping
		Photogrammetry
		Hydrography
		Remote Sensing
		Geographic Information System (GIS)
7. Mechanical & Electrical Engineering	Consultancy	Project
		Technical
	Construction (Mechanical Engineering)	HVAC
		Plumbing
		Infrastructure
		Fire Protection
	Construction (Electrical Engineering)	HVAC
		Plumbing
		Infrastructure
		Fire Protection



Sub-sector	Area	Job Area
8. Landscape Architecture	Consultancy	Project
		Technical
9. Safety, Health & Environment	Consultancy	Project
		Technical
	Construction	Safety & Health
		Traffic Environment
10. Industrialized Building System (IBS)	Manufacturing	Precast
		Block
		Trusses – Steel & Timber
		Framing – Steel & Timber
		Formwork
	Installation	Precast
		Block
		Trusses – Steel & Timber
		Frame – Steel & Timber
		Formwork
11. Construction Machinery Plant & Operations	Construction	Crane
		Earthwork
		Building Machinery
		Road Construction
		Project
		Transport
		Workshop
12. Building Materials	Ready Mixed Concrete (RMC) Plant (Operation)	Production Plant
		Quality Control (QC)
13. Facility Maintenance	Post Construction	Mechanical
		Electrical
		Automation
		Piping
		Civil



	Penghantaran (Forwarding)	Pentadbir Elektronik (E-Administrator)	Sekretari Guaman	Sekretari (Secretary)
L5	FB-011-5:2013 Pengurusan Operasi Penghantaran Forwarding Operation Management	FB-025-5:2012 Pengurusan Pentadbiran Administrative Management		
L4	FB-011-4:2013 Operasi Penghantaran Forwarding Operation	FB-025-4:2012 Pengurusan Pentadbiran Administrative Management		
L3	FB-011-3:2013 Operasi Penghantaran Forwarding Operation	FB-024-3:2012 Penyeliaan Pengurusan Pejabat Office Administration Supervision	Tiada Tahap (No Level)	
L2	FB-011-2:2013 Operasi Penghantaran Forwarding Operation	FB-024-2:2012 Pengurusan Pejabat Office Administration	Tiada Tahap (No Level)	
L1	Tiada Tahap (No Level)			



	Jualan & Pemasaran (Sales & Marketing)	Pengiklanan (Advertising)	Perhubungan Awam (Public Relation)
L5	FB-018-5:2012 Pengurusan Jualan & Pemasaran <i>Sales & Marketing Management</i>	FB-019-5:2012 Pengurusan Pengiklanan & Promosi <i>Advertising & Promotion Management</i>	FB-051-5:2014 Pengurusan Sokongan Perhubungan Awam <i>Public Relations Support Management</i>
L4	FB-018-4:2012 Pentadbiran Jualan & Pemasaran <i>Sales & Marketing Administration</i>	FB-019-4:2012 Pembangunan Pengiklanan & Promosi <i>Advertising & Promotion Development</i> (18-12-2012)	FB-051-4:2014 Pentadbiran Sokongan Perhubungan Awam <i>Public Relations Support Administration</i> (25-09-2014)
L3	FB-018-3:2012 Operasi Jualan & Pemasaran <i>Sales & Marketing Operation</i>	FB-019-3:2012 Perkhidmatan Pengiklanan & Promosi <i>Advertising & Promotion Services</i>	FB-051-3:2014 Perkhidmatan Sokongan Perhubungan Awam <i>Public Relations Support Services</i>
L2	Tiada Tahap (No Level)		
L1			



Table 4.4 : Occupational Structure for Finance

LEVEL	FINANCE
L8	Chief Finance Officer (CFO)
L7	Finance Senior Manager
L6	Finance Manager
L5	Finance Assistant Manager
L4	Finance Executive
L3	Finance Officer
L2	Finance Clerk
L1	No Level



Table 4.5: Matrix of Existing OA and NOSS against Sports Activities Industry Sectors/Sub-sectors

No	SPORTS ACTIVITIES INDUSTRY		EXISTING OA/OF			NOSS								
	SECTOR	SUB-SECTOR	Sports Tourism	Building & Construction	Business & Fin. Services	Golf	Equestrian	Athlete Prep. Mamnt	Cycling	Sports Coaching	Martial Arts	Sports Facility Maintenance	Sports Event Management	Business & Finance
1	ATHLETE	Endurance Sport							X					
		Team Sport												
		Extreme Sport												
		Motor Sport												
		Aquatic Sport												
		Strength & Power Sport												
		Precision Sport				X	X							
		Combat Sport									X			
		Racket Sport												
2	COACH	Sports Coaching								X				



No	SPORTS ACTIVITIES INDUSTRY		EXISTING OA/OF			NOSS								
	SECTOR	SUB-SECTOR	Sports Tourism	Building & Construction	Business & Fin. Services	Golf	Equestrian	Athlete Prep. Mgmt	Cycling	Sports Coaching	Martial Arts	Sports Facility Maintenance	Sports Event Management	Business & Finance
4	SPORTS ASC. MANAGEMENT	Administration			X	X		X						X
		Accounts & Finance			X	X								X
5	SPORTS EVENT MANAGEMENT	Media & Communication	X											
		Sponsorship											X	
		Marketing			X									X
		Event Compliance	X											
		Sports Facilities Management		X										
		Protocol												
		Sports Event Support												
6	SPORTS TECHNICAL OFFICIAL	Adjudication												
		Sports Technical Accreditation												



No	SPORTS ACTIVITIES INDUSTRY		EXISTING OA/OF			NOSS								
	SUB-SECTOR	JOB AREAS	Sports Tourism	Building & Construction	Business & Fin. Services	Golf	Equestrian	Athlete Prep. Maint.	Cycling	Sports Coaching	Martial Arts	Sports Facility Maintenance	Sports Event Management	Business & Finance
7	SPORTS SCIENCE	Sports Psychology												
		Sports Conditioning												
		Sports Physiology												
		Sports Biomechanics												
		Sports Talent Identification												
		Sports Nutrition/ Dietician												
		Sports Performance Analysis												



No	SPORTS ACTIVITIES INDUSTRY		EXISTING OA/OF			NOSS								
	SUB-SECTOR	JOB AREAS	Sports Tourism	Building & Construction	Business & Fin. Services	Golf	Equestrian	Athlete Prep. Mgmt	Cycling	Sports Coaching	Martial Arts	Sports Facility Maintenance	Sports Event Management	Business & Finance
8	SPORTS MEDICAL	Sports Rehabilitation Physiotherapy												
		Sports Massage												
		Sports Therapy												
		Anti Doping												



4.3 SURVEY ANALYSIS

Based on the main key themes, a semi-structured survey was formulated to address each of the areas of discussion that will ultimately lead to the objective of the project. The survey comprised of 8 questions which were divided into 2 sections revolving the key themes identified during the focus group discussion. A sample of the questionnaire is included in this report in Annex 3.

The semi-structured survey was provided to the corresponding organisations prior to the workshops. However, certain issues or topics that were not covered by the respondents in their responses were asked during the interviews and focus group discussions. Generally during each meeting the main topics of discussion revolved around the topics in the questionnaire. One-on-one interviews with relevant personnel were conducted concurrently during the workshops but most workshop discussions consisted of a more collective discussion of pertaining issues. Material and samples of relevant documentation were provided for further comprehension during the meetings whereas web links and material were emailed to the researcher by the corresponding organisations.

Table 4.6 shows the details of the research done such as location, respondent, instruments or methods used and the related annex where the relevant documents can be referenced.

4.4 OCCUPATIONAL STRUCTURE

The identified sub-sectors for the Sports Activities industry were obtained through literature research and discussions with industry experts during the development workshop sessions and interviews. The Occupational Structures for these sub-sectors are included in this section, firstly the sub-sectors and relevant areas are shown, then following them will be the



Occupational Structures that show the common job titles in the industry and are presented under each relevant sub-sector and area.

Table 4.7 shows the summary of job titles according to sectors and sub-sectors.

Table 4.6: Qualitative Analysis of Industry Survey

RESEARCH OBJECTIVE	NO. OF RESPONDENTS	NO. OF ORGANISATIONS	LOCATION	INSTRUMENT/ METHOD	RELATED ANNEX
To produce occupational structure (OS) from data analysis, interviews, site visits and focus group;	6	3	IBIS Styles Hotel	Working Group/ Discussion Workshop	Refer Occupational Structure
To determine job descriptions of each job title from the OS;	6	3	IBIS Styles Hotel	Focus Group Discussion	Refer Job Descriptions
	3	3	Ministry of Youth & Sports, Putrajaya	Working Group/ Discussion Workshop	
To investigate the skills in demand in the industry.	43	9	Sports Commission, Office Bukit Jalil	Semi-structured Surveys	Refer Section 4.6 Chapter 4
Total of representatives and organisations visited	58	18	-	-	-



Table 4.7: Summary of Job Titles

No	SECTOR	SUB-SECTOR	LEVEL								NUMBER OF JOB TITLES IDENTIFIED
			1	2	3	4	5	6	7	8	
1	ATHLETE	Endurance Sport	-	1	1	1	1	-	-	-	36
		Team Sport	-	1	1	1	1	-	-	-	
		Extreme Sport	-	1	1	1	1	-	-	-	
		Motor Sport	-	1	1	1	1	-	-	-	
		Aquatic Sport	-	1	1	1	1	-	-	-	
		Strength & Power Sport	-	1	1	1	1	-	-	-	
		Precision Sport	-	1	1	1	1	-	-	-	
		Combat Sport	-	1	1	1	1	-	-	-	
		Racket Sport	-	1	1	1	1	-	-	-	
2	COACH	Sports Coaching	-	-	-	1	1	1	-	-	3
3	SPORTS ASSOCIATION MANAGEMENT	Accounts & Finance	-	1	1	1	1	-	-	-	6
		Administration	-	1	1						
4	SPORTS TECHNICAL OFFICIAL	Adjudication	-	1	1	1	1	1	-	-	8
		Sports Technical Accreditation	-	-	-	1	1	1	-	-	
5	SPORTS EVENT MANAGEMENT	Media & Communications	-	-	1	1	1	-	-	-	21
		Sponsorship	-	-	1	1	1	-	-	-	
		Marketing	-	-	-	1	1	-	-	-	
		Event Compliance	-	-	1	1	1	-	-	-	
		Sports Facilities Management	-	1	1	1	1	1	-	-	
		Protocol	-	-	1	1	1	-	-	-	
		Sports Event Support	-	1	1	-	-	-	-	-	



No	SECTOR	SUB-SECTOR	LEVEL								NUMBER OF JOB TITLES IDENTIFIED
			1	2	3	4	5	6	7	8	
6	SPORTS SCIENCE	Sports Psychology	-	-	-		1	1	1	1	23
		Sports Conditioning		-		1	1	1	1		
		Sports Physiology	-	-	-	-	1	1	1		
		Sports Biomechanics	-	-	-	-	1	1	1		
		Sports Talent Identification	-	-	-	-	1	1	1		
		Sports Nutrition/Dietitian	-	-	-	-	1	1	1		
		Sports Performance Analysis	-	-	-	-	1	1	1		
7	SPORTS MEDICAL	Sports Rehabilitation Physiotherapy	-	-	-	1	1	1	-	-	10
		Sports Massage	-	-	-	-	1	1	-	-	
		Sports Therapy	-	-	-	-	1	1	-	-	
		Anti Doping	-	1	1	1	-	-	-	-	
TOTAL NO. OF JOB TITLES IDENTIFIED			0	14	19	22	30	14	7	1	107

With reference to Table 4.7 above, here below is a brief description of each sector:

i. Athlete

This sector is very unique as compared to other sectors in the Sports Activities Industry. It is based on talents of more than 50 types of sports, and is divided into 9 categories (job areas) according to the



nature of sports. The jobs are categorised into levels of experience and achievement of athletes. This is a contemporary approach where almost all sports are either competitive or recreational sports can fall into one of the nine (9) categories.

This sub-sector includes the various types of sports categories, which are, endurance sport, team sport, extreme sport, motor sport, aquatic sport, strength & power sport, precision sport, combat sport and squash racket sport. The entry level is as a novice athlete at level 2, then as an intermediate athlete at level 3, as an advanced athlete at level 4 and the highest as an elite athlete at level 5.

ii. Coach

The occupations under this sector are related to sports coaching only. Under Sports Coaching the entry level is as a Coach at level 4, then as a Senior Coach at level 5 and as a Head Coach at level 6.

iii. Sports Association Management

Sports Association Management provides management, administration and financial competencies. The job areas do not fall under Sport Activities, but are under the Financial and Business sector. However those under this sector require knowledge and knowhow of managing Sports Associations. This sector involves the management of sports associations where the entry level is at level 2 as a clerk and the highest level is as a Sports Association Manager at level 5.

iv. Sports Technical Official

The sub-sectors include Adjudication and Sports Technical Accreditation. The similarities of career and competency progression can be seen based on the scope of authority, responsibility and



geographically. For example for the Adjudication sub-sector, the entry level is at Level 2 as a District Referee, Level 3 as a State referee, Level 4 as a National Referee, Level 5 as a Regional Referee and at Level 6 as an International Referee. For the Sports Technical Accreditation sub-sector, it can be seen that the progression is also by geographical areas. The occupations start at Level 4 as a National Technical Delegate, Level 5 as a Regional Technical Delegate, and Level 6 as an International Technical Delegate.

v. Sports Event Management

Under Sports Event Management there are 7 sub-sectors which are; Media & Communications, Sponsorship, Marketing, Event Compliance, Sports Facilities Management, Protocol and Sports Event Support.

For the Media & Communication sub-sector, the occupation starts at Level 3 as Media & Communication Assistant, Media & Communication Executives and Media & Communications Manager.

Sponsorship sub-sector has 3 levels, which include Sponsorship Manager at Level 5, Sponsorship at Level 4 and Sponsorship Assistant at Level 3. Marketing sub-sector has only 2 levels, ie Marketing Executive and Marketing Manager.

Event Compliance entry level starts at Level 3, which is called Event Compliance Technical Coordinator, followed by Event Compliance Assistant Technical Manager at Level 4 and Event Compliance Technical Manager at Level 5. Sports Facility Maintenance start at level 2 as Sports Facilities Technician and Sports Facilities Supervisor, Assistant Manager, Manager and Technical Specialist at level 3, 4 and 5 respectively.



As any other Event Management sub-sector, in Sports Activities Industry also requires Protocol personnel, which is categorised into 3 levels, i.e., Head of Protocol at Level 5, Protocol Officer at Level 4 and Protocol Assistant at Level 3. Sports Event Support sub-sector is a new sub-sector proposed by the panels, which is to cater for the sports events volunteers. 'Volunteers' are required to have specific sets of competencies in order to carry out their duties in any sports event.

vi. Sports Science

Sports Science and Sports Medical are very critical to the performance of athletes, to increase the capability of winning competitions. Sports Medical is explained in the following section.

The Sports Science sector covers the sub-sectors such as Sports Psychology, Sports Conditioning, Sports Physiology, Sports Biomechanics, Sports Identification, Sports Nutrition/Dietitian and Sports Performance Analysis. The respective occupations as Psychologist, Sports Performance Analyst, Bio mechanist, Nutritionist/Dietitian and Identification Officer start at level 5 and may progress to level 6 at senior level and at level 7 to lead their respective fields of specialisation. At level 8, they may become the Director of Sports Sciences. The Assistant Sports Conditioning Officer start as at level 4 and may progress to subsequent senior positions, where the highest level is at level 8, Director of Sports Sciences.

vii. Sports Medical

This sector consists of Sports Rehabilitation Physiotherapy, Sports Massage, Sports Therapy and Anti Doping. The Assistant Sports Physiotherapist starts at level 4 and may progress to subsequent senior positions, where the highest level is at level 6 as a Senior Sports Physiotherapist.



The personnel under Sports Massage and Sports Therapy start at level 3 as an Assistant Masseur and Assistant Therapist respectively. Whereas under Anti Doping, the entry level is at level 3 as an Anti Doping Chaperone and may proceed to Doping Control Officer at Level 4 and Anti-Doping Manager at Level 5.



4.5 OCCUPATIONAL DESCRIPTION

The Occupational Description describes the occupations under the Occupational Structure in terms of competencies and duties that they are designated to carry out as competent personnel. These Occupational Descriptions can be used as reference for employees, employers, practitioners, trainers and academicians alike.

The Occupational Descriptions in this chapter are organised according to sub-sectors, areas and hierarchy of levels. Please refer the details of these Occupational Descriptions in Annex 5 of this report.

4.6 SKILLS IN DEMAND

This section highlighted the skills in-demand which is a projected to be the skilled personnel requirement(s) in the Sports Activities Industry. Job titles under this category reflect the immediate industry requirement for skilled workers.

The identification of critical job titles is the essence of developing the Occupational Standard for the job so that formal training can be carried out and skilled workers can be produced and supplied to the industry.

Findings for this section were obtained via qualitative analysis during discussions through survey results.



Table 4.8: Skills In demand

SKILLS IN DEMAND	RATIONALE, CHALLENGES AND ISSUES	POTENTIAL STRATEGIES AND PROPOSED SOLUTIONS
1. SHORTAGES OF WORKFORCE		
Sports Dietician	No specialisation in sports dietician/ insufficient dieticians skilled and knowledgeable in sports	To prepare syllabus at universities or certification in skills and knowledge related to sports
Sports Psychologist	Insufficient manpower to handle the supply of the services for the athlete	Provide specialised certification courses for this area
Sports Physiologist	Insufficient manpower to handle the supply of the services for the athlete	Increase manpower
Sports Conditioning Officer	Insufficient manpower to fulfil the demand for physical sports services	Provide specialised certification courses for Physical Officer
Sports Technology Officer	Insufficient expertise in Sports Technology	Increase expertise in sports technology
Sports Sciences Officer	Insufficient local expertise in Sports Sciences	Increase expertise in sports science locally
Sports Association Manager	Monitoring and focus specifically on each sports association cannot be carried out	Increase chances of appointing more officers
Event Compliance Technical Manager	Events are held for international participants, hence the requirements are at international standards.	Increase manpower and provide training funds



SKILLS IN DEMAND	RATIONALE, CHALLENGES AND ISSUES	POTENTIAL STRATEGIES AND PROPOSED SOLUTIONS
Assistant Event Compliance Technical Coordinator	Events are held for international participants, hence the requirements are at international standards.	Increase manpower and provide training funds
All jobs in Sponsorships sub-sector	High turnover of staff. High demand in Sports Event Management job areas	Provide training to existing sports related personnel. It will expedite the supply of personnel in this job area
All jobs in Marketing Job areas of the Commercial Sub-sector	High turnover of staff. High demand in Marketing job areas	Provide training to TVET Diploma graduates that are have the interest and inclination to sports marketing.
Protocol Managers and Protocol Executives	High turnover of staff in these jobs. Currently there are no courses provided for these jobs.	Develop curriculum specifically for these jobs and provide training.
Sports Event Support personnel (Volunteers)	Requires a certain level of competencies and the demand for local and international sports events	Provide training to the existing volunteers
2. TECHNICAL SKILLS		
Research and Development (R&D) skills	Shortage of personnel in the industry with required R & D skills	Include required skills in training
Sports Psychology Skills & Counselling Skills	Shortage of personnel in the industry with required sports science knowledge	Include required skills in training
Skills in Sports Conditioning and Sports Science	Shortage of Sports Physiology Officers in the industry with required skills	Include required skills in training
Use of stamina testing tools according to protocol	Shortage of personnel in the industry with required skills in using scientific tools	Include required skills in training



SKILLS IN DEMAND	RATIONALE, CHALLENGES AND ISSUES	POTENTIAL STRATEGIES AND PROPOSED SOLUTIONS
Knowledge of Sports Biomechanics	Shortage of personnel in the industry with required skills in using scientific tools and sports analysis	Include required skills in training
Knowledge of Sports Analysis	Shortage of personnel in the industry with required knowledge in analysing collected data	Include required skills in training
Knowledge of Sports Legislations	Shortage of personnel in the industry with required knowledge in interpretation of legislation and sports association constitution	Include required skills in training
3. EMERGING SKILL NEEDS		
Nutrigenomics	Skills required for Dietitians	Introduce skills in training and certification
Skills in applying Sports psychology equipment	Skills required for Sports Psychologists	Introduce skills in training and certification
Monitoring in the form of bio-chemicals	Skills required for Sports Physiologists	Introduce skills in training and certification
Information Technology	Skills required for Sports Law personnel	Introduce skills in training and certification
Organisation Administration	Skills required for Sports Commission personnel	Introduce skills in training and certification
Simulation Analysis	Skills required for Sports Biomechanics personnel	Introduce skills in training and certification
3-Dimensional movement analysis	Skills required for Sports Biomechanics personnel	Introduce skills in training and certification
Sports Science technology	Skills required for Sports Science personnel	Introduce skills in training and certification



SKILLS IN DEMAND	RATIONALE, CHALLENGES AND ISSUES	POTENTIAL STRATEGIES AND PROPOSED SOLUTIONS
Emotional Intelligence	Skills required for athletes	Introduce EI in the curriculum
Social Intelligence	Skills for almost all jobs in Sports Activities Industry	Introduce SI in the curriculum



4.7 CHAPTER CONCLUSION

The sectors that have been identified reflect the main sectors in the Sports Activities industry. The visual representations of the Occupational Structures will enable the industry to be interpreted at a glance in terms of levels of competency and available career paths.

The Occupational Descriptions are elaborated in Annex 5 of this report, which outlined the responsibilities of a particular job. The skills in demand identified via the surveys and working groups, can assist the industry in identifying the rationale and challenges plus the proposed strategies to overcome skills shortage in the industry.

The National Occupational Skills Standards (NOSS) and the education and training curriculum can be developed from the job titles listed in the Sports Activities Industry Occupational Structure.



CHAPTER 5:

DISCUSSION, RECOMMENDATION & CONCLUSION

This chapter will further elaborate the conclusion obtained based on the synthesis of findings. This will be followed by the recommendations as put forth by the researcher based on input throughout the development of this Occupational Framework

5.1 DISCUSSION

This section will highlight the critical job titles which reflect skilled personnel requirement in the Sports Activities industry. Job titles under this category reflect the immediate industry requirement for skilled workers. The identification of critical job titles are the essence of developing the Occupational Standard for the job so that formal training can be carried out and skilled personnel can be produced and supplied to the industry.

It must be highlighted that other job titles are not considered as critical because the current number of personnel under these categories is sufficient, however it does not mean that it is not important.

Critical job titles are defined based on the following scenarios in order of importance:

- a) Shortages of skilled workers supply in the industry
- b) Shortages of workers for a particular job area in the industry
- c) Strategic assessment in terms of direction for both short term and long term periods



Table 5.1: List of Critical Job Titles

Item	Critical Job Title	Sub-Sector	Level
1.	District Referee	Sports Technical Official	2
2.	State Referee	Sports Technical Official	3
3.	Regional Referee	Sports Technical Official	5
4.	National Referee	Sports Technical Official	4
5.	Senior Coach	Coach	5
6.	Coach	Coach	4
7.	Sports Psychologist	Sports Science	5
8.	Sports Strength and Conditioning Officer	Sports Science	5
9.	Assistant Strength and Conditioning Officer	Sports Science	4
10.	Sports Physiologist	Sports Science	5
11.	Sports Biomechanist	Sports Science	5
12.	Sports Talent Identification Officer	Sports Science	5
13.	Sports Performance Analyst	Sports Science	5
14.	Sports Physiotherapist	Sports Medical	5
15.	Assistant Sports Physiotherapist	Sports Medical	4
16.	Sports Masseur	Sports Medical	5
17.	Sports Therapist	Sports Medical	5
18.	Media & Communication Manager	Sports Event Management	5
19.	Sponsorship Manager	Sports Event Management	5
20.	Sponsorship Executive	Sports Event Management	4
21.	Sponsorship Assistant	Sports Event Management	3
22.	Head of Protocol	Sports Event Management	5
23.	Protocol Officer	Sports Event Management	4



Table 5.1 above, shows the summary of job titles according to sub-sectors and job areas. It can be seen that there are a total of 23 critical job titles. Most of these critical job titles are in the Sports Sciences, Sports Technical Official and Sports Event Management sub-sectors.

Sports Science personnel require a higher level of competency as they will be dealing with scientific work relevant to sports. However not all of the job titles under Sport Science will be developed as NOSS, as most of the sub-sectors are regulated by certain acts under the Ministry of Health.

Sports Event Management personnel require the skills of managing, administering and co-ordinating sports events. They will be required to liaise with outsource companies relevant to the sports event. There is a demand for personnel under this sub-sector as currently there is a shortage of skilled personnel and to lessen the current cost of engaging personnel under sports event management.

5.2 RECOMMENDATION

Referring to Malaysia's economic plans and vision for the coming years, a framework of the Sports Activities Industry workforce has been identified. It is hoped that the result of this Occupational Framework will be used as a reference to fulfill the future plans of developing skilled personnel and certifying Malaysians in this industry towards improving the quality of the local industry, enhancing the performance of athletes and boosting Malaysia's global competitiveness.



There are several options when addressing or mitigating workforce gaps such as influencing supply, which may include establishing and maintaining partnerships with other Government agencies or departments, or educational institutions to increase external talent pools and also through the training of existing staff in line with new skills requirements.

Based on the above, specific recommendations are as follows:

- a) To continue and streamline efforts in NOSS development for areas under the Sports Activities Industry in line with the findings of this analysis. This includes the development of the NOSS for the sectors and sub-sectors that are in demand and have not been developed. The list of areas recommended for NOSS development are such as:

- Coach
- Sports Medical
- Sports Science
- Sports Technical Official
- Sports Event Management

- b) To encourage apprenticeship training (National Dual Training System –NDTS) in the industry to be run for the areas identified suitable.
- c) Promote certification of existing and experienced personnel in the industry through Accreditation via Prior Achievement (*Pengiktirafan Pencapaian Terdahulu – PPT*).

5.3 CONCLUSION

The conclusion is divided based on the earlier objectives of the OF as elaborated below:

Objective 1: Occupational Structure

As a result of the Sports Activities Industry Occupational Framework conducted together with expert panel members from various



organizations, a total of 7 main sectors and 107 job titles have been identified. A total of 19 critical job titles were identified in the focus group workshops and survey results from various areas of expertise. By planning and conducting the training and certification of Sports Activities Industry personnel in the near future, it is hoped that there will be a steady flow of local skilled and certified workers.

Objective 2: Occupational Descriptions

The Occupational Descriptions for all the different job titles were obtained during the workshops and further confirmed during the survey. These Occupational Descriptions will also serve as reference of job scope and the required competencies for NOSS development.

Objective 3: Skills In Demand

Based on the survey findings, the survey respondents highlighted the skills in demand (Please refer the details according to the respective areas in table 4.3) are as follows:

- Research and Development (R&D) skills
- Sports Psychology Skills & Counselling Skills
- Skills in Sports Conditioning and Sports Science
- Knowledge of Sports Biomechanics
- Knowledge of Sports Analysis
- Knowledge of Sports Legislation
- Nutrigenomics
- Monitoring in the form of bio-chemicals
- Organisation Administration
- Simulation Analysis
- 3-Dimensional movement analysis
- Emotional Intelligence (EQ)
- Social Intelligence (SQ)



The skills above are encouraged to be included in the training curriculum according to the respective areas in order to develop Sports Activities Industry workforces who are geared to achieve the level of skills required to be progressive and innovative at par with global levels.

Overall Conclusion

Referring to Malaysia's economic plans and vision for the coming years, a framework of the Sports Activities industry workforce has been identified. It is hoped that the result of the research and development work of the Occupational Framework for Sports Activities Industry will be able to be used as reference as how to fulfill the future plans of developing skilled personnel and certifying Malaysians in the Sports Activities Industry towards improving the quality of the local industry and at boosting Malaysia's global competitiveness.

It is envisaged that the Sports Activities Industry will contribute economic value to the nation and put Malaysia on the map in competitive sports.



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ANNEX 1:

MOSQF LEVEL DESCRIPTORS



MALAYSIAN OCCUPATIONAL SKILLS QUALIFICATION FRAMEWORK (MOSQF) LEVEL DESCRIPTOR

LEVELS	LEVEL DESCRIPTION
1	Competent in performing a range of varied work activities, most of which are routine and predictable .
2	Competent in performing a significant range of varied work activities , performed in a variety of context. Some of the activities are non-routine and required individual responsibility and autonomy.
3	Competent in performing a broad range of varied work activities , performed in a variety of context, most of which are complex and non-routine . There is considerable responsibility and autonomy and control or guidance of others is often required.
4	Competent in performing a broad range of complex technical or professional work activities carried out in a wide variety of contexts and with a substantial degree of personal responsibility and autonomy. Responsibility for the work of others and allocation of resources is often present. Higher level of technical skills should be demonstrated.
5	Competent in applying a significant range of fundamental principles and complex techniques across a wide and often unpredictable variety of contexts. Very substantial personal autonomy and often significant responsibility for the work of others and for the allocation of substantial resources feature strongly, as do personal accountabilities for analysis and diagnosis, design, planning, execution and evaluation . Specialisation of technical skills should be demonstrated.
6	Achievement at this level reflects the ability to refine and use relevant understanding, methods and skills to address complex problems that have limited definition . It includes taking responsibility for planning and developing courses of action that are able to underpin substantial change or development, as well as exercising broad autonomy and judgment . It also reflects an understanding of different perspectives, approaches of schools of thought and the theories that underpin them .
7	Achievement at this level reflects the ability to reformulate and use relevant understanding, methodologies and approaches to address problematic situations that involve many interacting factors. It includes taking responsibility for planning and developing courses of action that initiate or underpin substantial change or development, as well as exercising broad autonomy and judgment. It also reflects an understanding of theoretical and relevant methodological perspectives, and how they affect their sub-area of study or work .
8	Achievement at this level reflects the ability to develop original understanding and extend an sub-area of knowledge or professional practice. It reflects the ability to address problematic situations that involve many complexes, interacting factors through initiating, designing and undertaking research, development or strategic activities. It involves the exercise of broad autonomy, judgement and leadership in sharing responsibility for the development of a field of work or knowledge, or for creating substantial professional or organisational change. It also reflects a critical understanding of relevant theoretical and methodological perspectives and how they affect the field of knowledge or work.



ANNEX 2 : LIST OF CONTRIBUTORS



**SPORTS ACTIVITIES INDUSTRY
OCCUPATIONAL FRAMEWORK DEVELOPMENT
LIST OF INDUSTRY PANEL MEMBERS**

NO	NAME	EXPERTISE	POSITION	ORGANISATION
1	En. Ibrahim b. Mohd Yusoff	Sports Policy	Under Secretary of Policy and Strategic Planning Division	Ministry of Youth and Sports
2	Pn. Zuraifah Abd Rahim	Sports Management	Head of Directorate Centre	National Sports Institute
3	Pn. Chai Wen Jin	Sports Nutrition	Head of Professional Education Centre	National Sports Institute
4	En. Mohd Yuzaidi b. Usop	Sports Management	Head of Policy and Coordination Unit	National Sports Council
5	En. Muhammad Hasni b. Abdul Aziz	Sports Facilities	Head of Development Branch, Sports Facilities Division	National Sports Council
6	En. Joherman b. Amir	Sports Management	Head of Skills Sports Branch, Athletes Division	National Sports Council
7	En. Mohd Yazid b. Shoib	Sports Management	Head of Power and Strength Sports Branch, Athletes Division	National Sports Council
8	En. Nik Razeen A. Daud	Sports Association	Vice President	Squash Racquets Association of Malaysia
9	En. Emir b. Abdul Jalal	Sports Event Management	Chief Executive Officer	Le Tour de Langkawi
10	En. Asraf Khan b. Aman Khan	Sports Event Management	Chief Executive Officer	Super Xtreme Sdn. Bhd
11	En. Solahuddin b. Mohd. Saad	Sports Event Management	Head of Human Resource	Sepang International Circuit Sdn. Bhd



**SPORTS ACTIVITIES INDUSTRY
OCCUPATIONAL FRAMEWORK DEVELOPMENT
TECHNICAL EVALUATION COMMITTEE**

NO	NAME	POSITION	ORGANISATION
1	Dr. Hasnul Faizal b. Hushin Amri	Senior Lecturer, Sports and Recreation Management Sports and Recreation Faculty	University Technology Mara
2	En. Hazani b. Hashim	Director of Sports Management Division	National Sports Council
3	Pn. Faizah bt. Salleh	Head of unit. International Relations Policy	National Sports Institute
4	Pn. Farasyila Diana bt. Kamarudin	Assistant Sports Commissioner	Sports Commissioner 's Office
5	En. Mohd Damanhuri b. Mohd Nasir	Head of unit Corporate Communications	National Sports Institute
6	En. Syamsul Tahrin b. Mohd Tahir	Director Sports Development Branch	Ministry of Youth and Sports

**LIST OF OFFICERS OF DEPARTMENT OF SKILLS DEVELOPMENT(DSD)
INVOLVED IN THE SPORT ACTIVITIES INDUSTRY OCCUPATIONAL FRAMEWORK
DEVELOPMENT**

NO	NAME	POSITION/ ORGANISATION
1.	Pn. Siti Hasmah Binti Mustapha	Principal Assistant Director, DSD
2.	Pn. Noorita Binti Lateh	Senior Assistant Director, DSD
3.	Pn. Norazreen Binti Othman	Assistant Director, DSD
4.	En. Raghu a/l Thiyagarajan	Assistant Director, DSD



**LIST OF FACILITATORS AND RESEARCHER FOR THE SPORTS ACTIVITIES
INDUSTRY OCCUPATIONAL FRAMEWORK DEVELOPMENT**

FACILITATOR

DR. AMIRON ISMAIL

RESEARCHER

ROSLINA ISMAIL

EVARINA AMIRON

ROSNIZA ISMAIL

ANNEX 3:
QUESTIONNAIRE

BORANG SOAL SELIDIK KERANGKA PEKERJAAN BAGI INDUSTRI SUKAN

Analisis Kerangka Pekerjaan
Jabatan Pembangunan Kemahiran
Kementerian Sumber Manusia

SOAL SELIDIK KERANGKA PEKERJAAN BAGI INDUSTRI AKTIVITI SUKAN

Salam 1 Malaysia.

Jabatan Pembangunan Kemahiran (JPK), Kementerian Sumber Manusia, sedang menjalankan kaji selidik keatas Kerangka Pekerjaan Industri Sukan (*MSIC Code : R 931-Malaysia Standard Industry Clasification Code*). Analisis ini akan menghasilkan struktur pekerjaan, tajuk pekerjaan, dan deskripsi kerja, dimana ianya untuk kegunaan Kerajaan, sektor swasta, pelabur, majikan, pekerja, pendidik atau mana-mana kakitangan yang terlibat sama ada secara langsung atau tidak langsung dengan industri ini.

Kami ingin mengucapkan ribuan terima kasih atas kerjasama anda dalam menjawab soal selidik ini. Dapatan ini akan digunakan sebagai data lapangan untuk menjalankan analisis yang menyeluruh dalam Kerangka Pekerjaan Industri.

Sila isi tempat kosong yang disediakan. Sebarang kesulitan amat dikesali. Komunikasi lebih lanjut dengan responden akan dilakukan untuk mengesahkan hasil kajian kami.

BUTIRAN RESPONDEN

Nama : _____

Jawatan : _____

Organisasi : _____

Tarikh : _____

SEKSYEN 1 : TENAGA KERJA INDUSTRI

SOALAN 1 : PEKERJAAN ANDA DALAM INDUSTRI SUKAN

Sila isi nama dan kategori pekerjaan anda serta skop kerja mengikut bidang kerja yang berkaitan dengan anda dibawah ini: *(Hanya isi dalam kategori pekerjaan yang berkaitan dengan anda sahaja)*

BIDANG KERJA : _____

TAHAP PEKERJAAN	NAMA PEKERJAAN	SKOP KERJA
a) Pengkhususan dan Inovasi		
b) Pengurusan Teknikal		
c) Penyelarasan/Penyeliaan		
d) Operasi/Sokongan		

NOTA:

a) Pengkhususan dan Inovasi:

Pekerja perlu mempunyai kecekapan dalam inovasi dan pengkhususan berkaitan dengan bidang kerja tertentu.

b) Pengurusan Teknikal:

Pekerja yang bertanggungjawab untuk menguruskan aspek teknikal di bidang kerja.
The personnel is responsible for managing the technical aspects of the job area

c) Penyelarasan/Penyeliaan:

Pekerja bertanggungjawab untuk menyelia sekumpulan pekerja dibawah peneliaannya dan menyelaraskan aktiviti kerja di tempat kerja.

d) Operasi/Sokongan

Pekerja bertanggungjawab terhadap operasi jentera, peralatan, kerja sokongan dan lain-lain.

SOALAN 2 : BIDANG-BIDANG PEKERJAAN DALAM INDUSTRI SUKAN

ADAKAH ANDA BERSETUJU DENGAN BIDANG PEKERJAAN INDUSTRI SUKAN SEPERTI DIBAWAH INI.
SILA NYATAKAN BIDANG YANG ANDA TIDAK SETUJU DAN MENGAPA. (Sila rujuk Jadual 1, dibawah ini)

SPORTS ASSOCIATION MANAGEMENT	ATHLETE MANAGEMENT	ATHLETE	COACH	SPORTS SCIENCE	SPORTS OFFICIAL	SPORTS MEDICAL	EVENT MANAGEMENT	SPORTS TECHNICAL SUPPORT	SPORTS VENUE MANAGEMENT
Administration & Management	Sports Coordination	Team Sport	<i>Sports Coach</i>	Sports Conditioning	<i>Referee</i>	<i>Sports Masseur</i>	Security	Sport Technology	Sports Equipment Maintenance
Accounting & Finance	Sports Welfare	Extreme Sport	<i>Sports Instructor</i>	Sports Psychology	<i>Umpire</i>	Sports Therapy	Medical	Sports Equipment Technical Supports	Sports Venue Maintenance
Secretarial Support		Motor Sport		Sports Nutrition / Dietitian	<i>Linesman</i>	Athletic Training	Logistic		
Technical Delegation (<i>Ketua Delegate Technical (KDT)</i>)		Aquatic Sport		Sports Performance Analysis	<i>Wasit/Jury</i>	Sports Rehabilitation	Technical Coordination		
		Strength & Power Sport		Sports Physiology	<i>Technical Delegate</i>	Acupuncture	Protocol		
		Precision Sport		Sports Biomechanics	<i>Sports Judge</i>	Cupping	Anti Doping Coordination		
		Combat Sport		Sports Research	<i>Venue Coordinator</i>	Sports Physiotherapy			
		Racket Sport		Sports Talent Identification	<i>Commissar</i>	Anti Doping			

SOALAN 3: NAMA PEKERJAAN DALAM INDUSTRI SUKAN MENGIKUT BIDANG PEKERJAAN

DIBAWAH INI IALAH JADUAL UNTUK NAMA- NAMA PEKERJAAN UNTUK SETIAP BIDANG YANG TERDAPAT DALAM JADUAL 1.

Sila isikan nama–nama jawatan dalam Jadual 2, yang berkaitan dengan bidang anda.

Dibawah ini ialah contoh untuk mengisi Jadual 2

BIDANG UTAMA PEKERJAAN	BIDANG PEKERJAAN	TAHAP 1	TAHAP 2	TAHAP 3	TAHAP 4	TAHAP 5
		(Operasi)	(Operasi)	(Penyeliaan)	(Pengurusan Teknikal)	(Pengkhususan)
INFORMATION SYSTEM MANAGEMENT	Software Application	Assistant Programmer	Programmer	Analyst Programmer	Systems Analyst	Systems Manager
	Hardware System	Assistant Hardware Technician	Hardware Technician	Senior Technician	Assistant System Engineer	System Engineer

Jadual 1 : Bidang Pekerjaan Industri Aktiviti Sukan
(Occupational Area of Sports Activities Industry)

JADUAL 2 :NAMA-NAMA PEKERJAAN UNTUK BIDANG PEKERJAAN INDUSTRI SUKAN

BIDANG UTAMA PEKERJAAN	KATEGORI SUKAN (BIDANG PEKERJAAN)	TAHAP 1	TAHAP 2	TAHAP 3 (Kebangsaan)	TAHAP 4 (Senior)	TAHAP 5 (Elit)
		Daerah	Negeri			
1. Athlete	Team Sport					
	Extreme Sport					
	Motor Sport					
	Aquatic Sport					
	Strength & Power Sport					
	Precision Sport					
	Combat Sport					
	Racket Sport					
	Endurance					

BIDANG UTAMA PEKERJAAN	BIDANG PEKERJAAN	TAHAP 1	TAHAP 2	TAHAP 3 (Penyeliaan)	TAHAP 4 (Pengurusan Teknikal)	TAHAP 5 (Pengkhususan)
		(Operasi)	(Operasi)			
2. Sports Association Management	Administration & Management					
	Accounting & Finance					
	Secretarial Support					
	Technical Delegation					
3. Athlete Management	Sports Coordination					
	Sports Welfare					
4. Coach	Sports Coach					
	Sports Instructor					
5. Sports Science	Sports Conditioning					
	Sports Psychology					
	Sports Nutrition / Dietitian					
	Sports Performance Analysis					

BIDANG UTAMA PEKERJAAN	BIDANG PEKERJAAN	TAHAP 1	TAHAP 2	TAHAP 3 (Penyeliaan)	TAHAP 4 (Pengurusan Teknikal)	TAHAP 5 (Pengkhususan)
		(Operasi)	(Operasi)			
	<i>Sports Physiology</i>					
	<i>Sports Biomechanics</i>					
	<i>Sports Research</i>					
	<i>Sports Talent Identification</i>					
6. <i>Sports Official</i>	<i>Referee</i>					
	<i>Umpire</i>					
	<i>Linesman</i>					
	<i>Wasit/Jury</i>					
	<i>Technical Delegate</i>					
	<i>Sports Judge</i>					
	<i>Venue Coordinator</i>					

BIDANG UTAMA PEKERJAAN	BIDANG PEKERJAAN	TAHAP 1	TAHAP 2	TAHAP 3 (Penyeliaan)	TAHAP 4 (Pengurusan Teknikal)	TAHAP 5 (Pengkhususan)
		(Operasi)	(Operasi)			
	<i>Commisar</i>					
7. Sports Medical	<i>Sports Masseur</i>					
	<i>Sports Therapy</i>					
	<i>Atheletic Training</i>					
	<i>Sports Rehibition</i>					
	<i>Acupuncture</i>					
	<i>Cupping</i>					
	<i>Sports Physiotherapy</i>					
	<i>Anti Doping</i>					
6. Event Management	<i>Security</i>					
	<i>Medical</i>					

BIDANG UTAMA PEKERJAAN	BIDANG PEKERJAAN	TAHAP 1	TAHAP 2	TAHAP 3 (Penyeliaan)	TAHAP 4 (Pengurusan Teknikal)	TAHAP 5 (Pengkhususan)
		(Operasi)	(Operasi)			
	<i>Logistic</i>					
	<i>Technical Coordination</i>					
	<i>Protocol</i>					
	<i>Anti Doping Coordinaion</i>					
8. <i>Sports Technical Support</i>	<i>Sports Technology</i>					
	<i>Sports Equipment Support Technical</i>					
9. <i>Sports Venue Management</i>	<i>Sports Venue Maintenance</i>					
	<i>Sports Equipment Maintenance</i>					

SOALAN 4 : BIDANG PEKERJAAN YANG DIPERLUKAN (*JOBS IN DEMAND*)

Sila pilih Bidang Pekerjaan (Job Areas) daripada Jadual 2 diatas dan isikan didalam *column* A dibawah ini. Isikan nama pekerjaan yang diperlukan (*jobs in demand*) didalam *column* B. Seterusnya berikan jawapan didalam *column* C, D , E

(A) BIDANG PEKERJAAN (<i>JOB AREAS</i>)	(B) NAMA PEKERJAAN YANG DIPERLUKAN (<i>JOBS IN DEMAND</i>)	(C) SILA NYATAKAN JUSTIFIKASI KEPERLUAN	(D) ISU DAN CABARAN YANG BERKAITAN DENGAN KEPERLUAN TERHADAP PEKERJAAN	(E) CADANGAN PEYELESAIAN UNTUK MENYEDIAKAN TENAGA KERJA
CONTOH JAWAPAN <i>Sports Venue Management</i> (<i>rujuk jadual 1</i>)	<i>a) Juruteknik Penyelenggaraan Stadium</i>	<i>Pekerja tidak mencukupi</i>	<i>Bangunan stadium tidak dapat diselenggarakan mengikut jadual</i>	<i>Memberi peluang pekerjaan kepada belia menganggur dan memberi mereka pengetahuan dan latihan mengenai kerja ini</i>
1.				
2.				

(A) BIDANG PEKERJAAN <i>(JOB AREAS)</i>	(B) NAMA PEKERJAAN YANG DIPERLUKAN <i>(JOBS IN DEMAND)</i>	(C) SILA NYATAKAN JUSTIFIKASI KEPERLUAN	(D) ISU DAN CABARAN YANG BERKAITAN DENGAN KEPERLUAN TERHADAP PEKERJAAN	(E) CADANGAN PEYELESAIAN UNTUK MENYEDIAKAN TENAGA KERJA
3.				
4.				
5.				

SOALAN 5 : KEPERLUAN KEMAHIRAN PEKERJA YANG SEDIA ADA

Sila pilih Bidang Pekerjaan (Job Areas) daripada Jadual 2 diatas dan isikan didalam *column* A dibawah ini. Isikan nama pekerjaan yang memerlukan kemahiran tambahan dalam *column* B. Seterusnya berikan jawapan didalam *column* C, D , E dimana yang berkaitan.

(A) BIDANG KERJA	(B) NAMA PEKERJAAN & TAHAP	(C) KEMAHIRAN TEKNIKAL YANG DIPERLUKAN	(D) JURANG KEMAHIRAN (sila nyatakan kemahiran yang dalam kekurangan)	(E) KEMAHIRAN BARU (kemahiran yang tidak teras tetapi dikehendaki dalam masa terdekat, jika ada)
Contohs Jawapan <i>Sports Technical Support</i>	<i>Juruteknik Sukan – Tahap 2</i>	<i>Komunikasi Digital</i>	<i>Pengendalian Aset</i>	<i>Teknologi Hijau</i>
1.				
2.				
4.				

(A) BIDANG KERJA	(B) NAMA PEKERJAAN & TAHAP	(C) KEMAHIRAN TEKNIKAL YANG DIPERLUKAN	(D) JURANG KEMAHIRAN (sila nyatakan kemahiran yang dalam kekurangan)	(E) KEMAHIRAN BARU (kemahiran yang tidak teras tetapi dikehendaki dalam masa terdekat, jika ada)
6.				
8.				

SOALAN 6 : ISU DAN CABARAN INDUSTRI SUKAN

Sila tentukan tahap cabaran dan kesukaran yang dihadapi industri pada masa kini

NO	ITEM	SILA NYATAKAN CABARAN MENGIKUT SKALA								
		(1 – paling mencabar kepada sehingga, 9 – paling kurang mencabar) (tanda X dalam column yang berkenaan)								
		1	2	3	4	5	6	7	8	9
a)	Penyertaan orang awam dalam sukan									
b)	Kelengkapan sukan untuk orang awam									
c)	Pengurusan 'Venue' Sukan									
d)	Pengurusan Persatuan/ Badan Sukan									
e)	Kejurulatihan									
f)	Prestasi Atlit									
g)	(lain-lain cabaran/isu, jika ada									

SEKSYEN 2 : LATAR BELAKANG INDUSTRI

SOALAN 1:

Sila senaraikan badan-badan kawal selia utama dalam organisasi anda

SOALAN 2:

Sila senaraikan Akta yang berkaitan dalam bidang sukan / kerja anda

SOALAN 3:

Apakah program utama Kerajaan atau organisasi yang berkaitan dalam industri sukan, sekiranya ada, untuk menyokong pembangunan industri sukan ini?

SOALAN TAMAT
TERIMA KASIH ATAS KERJASAMA ANDA



ANNEX 4:

OCCUPATIONAL STRUCTURE (OS)



MSIC SECTION R: ARTS, ENTERTAINMENT AND RECREATION										
SPORTS ACTIVITIES INDUSTRY @ MSIC DIVISION 93: SPORTS ACTIVITIES AND AMUSEMENT AND RECREATION ACTIVITIES.										
SUB-SECTOR	ATHLETE									COACH
AREA /LEVEL	Endurance Sport	Team Sport	Extreme Sport	Motor Sport	Aquatic Sport	Strength &Power Sport	Precision Sport	Combat Sport	Racket Sport	Sports Coaching
LEVEL 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
LEVEL 7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
LEVEL 6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Head Coach
LEVEL 5	Endurance Sport Elite Athlete	Team Sport Elite Athlete	Extreme Sport Elite Athlete	Motor Sport Elite Athlete	Aquatic Sport Elite Athlete	Strength & Power Sport Elite Athlete	Precision Sport Elite Athlete	Combat Sport Elite Athlete	Racket Sport Elite Athlete	Senior Coach
LEVEL 4	Endurance Sport Advance Athlete	Team Sport Advance Athlete	Extreme Sport Advance Athlete	Motor Sport Advance Athlete	Aquatic Sport Advance Athlete	Strength &Power Sport Advance Athlete	Precision Sport Advance Athlete	Combat Sport Advance Athlete	Racket Sport Advance Athlete	Coach
LEVEL 3	Endurance Sport Intermediate Athlete	Team Sport Intermediate Athlete	Extreme Sport Intermediate Athlete	Motor Sport Intermediate Athlete	Aquatic Sport Intermediate Athlete	Strength &Power Sport Intermediate Athlete	Precision Sport Intermediate Athlete	Combat Sport Intermediate Athlete	Racket Sport Intermediate Athlete	N/A
LEVEL 2	Endurance Sport Novice Athlete	Team Sport Novice Athlete	Extreme Sport Novice Athlete	Motor Sport Novice Athlete	Aquatic Sport Novice Athlete	Strength &Power Sport Novice Athlete	Precision Sport Novice Athlete	Combat Sport Novice Athlete	Racket Sport Novice Athlete	N/A
LEVEL 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Note: ★ – Critical jobs



MSIC SECTION R: ARTS, ENTERTAINMENT AND RECREATION
SPORTS ACTIVITIES INDUSTRY @ MSIC DIVISION 93: SPORTS ACTIVITIES AND AMUSEMENT AND RECREATION ACTIVITIES.

SUB-SECTOR	SPORTS ASSOCIATION MANAGEMENT		SPORTS EVENT MANAGEMENT							SPORTS TECHNICAL OFFICIAL	
AREA /LEVEL	Accounts & Finance	Administration	Media & Communication	Sponsorship	Marketing	Event Compliance	Sports Facilities Management	Protocol	Sports Event Support	Adjudication	Sports Technical Accreditation
LEVEL 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
LEVEL 7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
LEVEL 6	N/A	N/A	N/A	N/A	N/A	N/A	Sports Facilities Tech. Specialist ★	N/A	N/A	International Referee ★	International Technical Delegate
LEVEL 5	Sports Association Manager		Media & Communication Manager ★	Sponsorship Manager ★	Marketing Manager ★	Event Compliance Technical Manager ★	Sports Facilities Manager ★	Head Of Protocol ★	N/A	Regional Referee ★	Regional Technical Delegate
LEVEL 4	Sports Association Assistant Manager		Media Executives	Sponsorship Executive ★	Marketing Executive ★	Event Compliance Asst. Technical Manager ★	Sports Facilities Assistant Manager ★	Protocol Officer ★	N/A	National Referee ★	National Technical Delegate
LEVEL 3	Accounts Executive	Sports Association executive	Media Assistant	Sponsorship Assistant ★	N/A	Event Compliance Technical Coordinator★	Sports Facilities Supervisor	Protocol Assistant	Senior Event Support Staff ★	State Referee ★	N/A
LEVEL 2	Accounts Clerk	Admin Clerk	N/A	N/A	N/A	N/A	Sports Facilities Technician	N/A	Event Support Staff ★	District Referee ★	N/A
LEVEL 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A



MSIC SECTION R: ARTS, ENTERTAINMENT AND RECREATION											
SPORTS ACTIVITIES INDUSTRY @ MSIC DIVISION 93: SPORTS ACTIVITIES AND AMUSEMENT AND RECREATION ACTIVITIES.											
SUB-SECTOR	SPORTS SCIENCE							SPORTS MEDICAL			
AREA /LEVEL	Sports Psychology	Sports Conditioning	Sports Physiology	Sports Biomechanics	Sports Talent Identification	Sports Nutrition/Dietician	Sports Performance Analysis	Sports Rehabilitation Physiotherapy	Sports Massage	Sports Therapy	Anti Doping
LEVEL 8	Director Of Sports Science							N/A	N/A	N/A	N/A
LEVEL 7	Lead Sports Psychologist ★	Lead Strength And Conditioning Officer ★	Lead Sports Physiologist★	Lead Sports Biomechanist ★	Lead Sports Talent Identification Officer ★	Lead Sports Nutritionist/ Dietician ★	Lead Sports Performance Analyst ★	N/A	N/A	N/A	N/A
LEVEL 6	Senior Sports Psychologist ★	Senior Strength And Conditioning Officer ★	Senior Sports Physiologist ★	Senior Sports Biomechanist ★	Senior Sports Talent Identification Officer ★	Senior Sports Nutritionist/ Dietician ★	Senior Sports Performance Analyst ★	Senior Sports Physiotherapist ★	Senior Sports Masseur ★	Senior Sports Therapist	N/A
LEVEL 5	Sports Psychologist ★	Strength And Conditioning Officer ★	Sports Physiologist ★	Sports Biomechanist ★	Sports Talent Identification Officer ★	Sports Nutritionist/ Dietician	Sports Performance Analyst ★	Sports Physiotherapist ★	Sports Masseur ★	Sports Therapist ★	Anti-Doping Manager
LEVEL 4	N/A	Assistant Strength And Conditioning Officer ★	N/A	N/A	N/A	N/A	N/A	Asst Sports Physiotherapist ★	N/A	N/A	Doping Control Officer
LEVEL 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Doping Control Chaperone
LEVEL 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
LEVEL 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A



ANNEX 5:
OCCUPATIONAL DESCRIPTION (OD)
(OD OF JOBS IN DEMAND)



**SUB-SECTOR : SPORTS TECHNICAL
AREA : ADJUDICATION**

DISTRICT REFEREE (LEVEL 2)

This job title has other names according to the categories of sports such as Soccer Referee, Softball Umpire, Volleyball Referee, and Diving Judge at District level. Referees, umpires and other sports officials preside over competitive athletic or sporting events to help maintain standards of play. They detect infractions and decide penalties according to the rules of the game.

Responsibilities may include:-

- Officiates at sporting events, games, or competitions, to maintain standards of play and to ensure that game rules are observed and starts races / competitions.
- Judge performances in sporting competitions in order to award points, impose scoring penalties and determine results.
- Signal participants or other officials to make them aware of infractions or to otherwise regulate play or competition.
- Keep track of event times, including race times and elapsed time during game segments, starting or stopping play when necessary.
- Resolve claims of rule infractions or complaints by participants and assess any necessary penalties, according to regulations.
- Verify scoring calculations before competition winners are announced.
- Direct participants to assigned areas such as starting blocks or penalty areas.
- Report to regulating organizations regarding sporting activities, complaints made, and actions taken or needed such as fines or other disciplinary actions.
- Confer with other sporting officials, coaches, players, and facility managers in order to provide information, coordinate activities, and discuss problems.

Knowledge, Skills, Attitude

A Referee needs :-

- to have a good communication skills
- a good vision officials must also be able to clearly observe an athlete's form for imperfections.
- a good stamina to stand, walk, run, or squat for long periods during games and events.



**SUB-SECTOR : SPORTS TECHNICAL
AREA : ADJUDICATION**

STATE REFEREE (LEVEL 3)

This job title has other names according to the categories of sports such as Soccer Referee, Softball Umpire, Volleyball Referee, and Diving Judge at State level. Referees, umpires and other sports officials preside over competitive athletic or sporting events to help maintain standards of play. They detect infractions and decide penalties according to the rules of the game.

Responsibilities may include:-

- Officiates at sporting events, games, or competitions, to maintain standards of play and to ensure that game rules are observed and starts races / competitions.
- Judge performances in sporting competitions in order to award points, impose scoring penalties and determine results.
- Signal participants or other officials to make them aware of infractions or to otherwise regulate play or competition.
- Keep track of event times, including race times and elapsed time during game segments, starting or stopping play when necessary.
- Resolve claims of rule infractions or complaints by participants and assess any necessary penalties, according to regulations.
- Verify scoring calculations before competition winners are announced.
- Direct participants to assigned areas such as starting blocks or penalty areas.
- Report to regulating organizations regarding sporting activities, complaints made, and actions taken or needed such as fines or other disciplinary actions.
- Confer with other sporting officials, coaches, players, and facility managers in order to provide information, coordinate activities, and discuss problems.
- Verify credentials of participants in sporting events, and make other qualifying determinations such as starting order or handicap number.

Knowledge, Skills, Attitude

A Referee needs :-

- to have a good communication skills
- decision making skills.
- a good vision officials must also be able to clearly observe an athlete's form for imperfections.



**SUB-SECTOR : SPORTS TECHNICAL
AREA : ADJUDICATION**

NATIONAL REFEREE (LEVEL 4)

This job title has other names according to the categories of sports such as Soccer Referee, Softball Umpire, Volleyball Referee, and Diving Judge at National level. Referees, umpires and other sports officials preside over competitive athletic or sporting events to help maintain standards of play. They detect infractions and decide penalties according to the rules of the game.

Responsibilities may include:-

- Officiates at sporting events, games, or competitions, to maintain standards of play and to ensure that game rules are observed and starts races / competitions.
- Judge performances in sporting competitions in order to award points, impose scoring penalties and determine results.
- Signal participants or other officials to make them aware of infractions or to otherwise regulate play or competition.
- Keep track of event times, including race times and elapsed time during game segments, starting or stopping play when necessary.
- Resolve claims of rule infractions or complaints by participants and assess any necessary penalties, according to regulations.
- Verify scoring calculations before competition winners are announced.
- Direct participants to assigned areas such as starting blocks or penalty areas.
- Report to regulating organizations regarding sporting activities, complaints made, and actions taken or needed such as fines or other disciplinary actions.
- Verify credentials of participants in sporting events, and make other qualifying determinations such as starting order or handicap number.

Knowledge, Skills, Attitude

A Referee needs :-

- to have a good communication skills
- to possess a good decision making skills.
- to have a good vision and must also be able to clearly observe an athlete's form for imperfections.



**SUB-SECTOR : SPORTS TECHNICAL
AREA : ADJUDICATION**

REGIONAL REFEREE (LEVEL 5)

This job title has other names according to the categories of sports such as Soccer Referee, Softball Umpire, Volleyball Referee, and Diving Judge at Regional level. Referees, umpires and other sports officials preside over competitive athletic or sporting events to help maintain standards of play. They detect infractions and decide penalties according to the rules of the game.

Responsibilities may include:-

- Officiates at sporting events, games, or competitions, to maintain standards of play and to ensure that game rules are observed and starts races / competitions.
- Judge performances in sporting competitions in order to award points, impose scoring penalties and determine results.
- Signal participants or other officials to make them aware of infractions or to otherwise regulate play or competition.
- Keep track of event times, including race times and elapsed time during game segments, starting or stopping play when necessary.
- Resolve claims of rule infractions or complaints by participants and assess any necessary penalties, according to regulations.
- Verify scoring calculations before competition winners are announced.
- Direct participants to assigned areas such as starting blocks or penalty areas.
- Report to regulating organizations regarding sporting activities, complaints made, and actions taken or needed such as fines or other disciplinary actions.
- Confer with other sporting officials, coaches, players, and facility managers in order to provide information, coordinate activities, and discuss problems.
- Verify credentials of participants in sporting events, and make other qualifying determinations such as starting order or handicap number.

Knowledge, Skills, Attitude

A Referee needs :-

- to have a good communication skills
- decision making skills.
- a good vision officials must also be able to clearly observe an athlete's form for imperfections.



SUB-SECTOR : COACH
AREA : SPORTS COACHING

COACH (LEVEL 4)

A Sports Coach to realise potential of individual in a sporting discipline through the provision of instruction, advice and encouragement. Coach is responsible for planning, organising and delivering an appropriate range of sports activities and programmes for individuals and teams. As a sports coach the primary job will be to provide expert training for athletes. Responsible for the athlete's skills development and ensuring peak performance and fitness are achieved during crucial times, such as competitions, tournaments, matches, trials and qualifying events.

Responsibilities may include:-

- Teaching relevant skills, tactics and techniques
- Monitoring and enhancing performance by providing tuition,
- Identifying strengths and weaknesses
- Advising about health and lifestyle issues
- Developing training programmes
- Undertaking administrative tasks
- Assisting with sports promotion/development

Knowledge, Skills, Attitude

A Referee needs :-

- to have a good communication skills
- decision making skills.
- physical fitness
- an excellent interpersonal skills
- to have a good communication skills
- teamwork skills



SUB-SECTOR : COACH
AREA : SPORTS COACHING

SENIOR COACH (LEVEL 5)

The Senior Coach's role is to manage the on-field performance of the club's senior team and develop the overall playing list. The role will also provide leadership within a sports organisation as a whole, assisting in the mentoring of the other coaches, recruitment, coordination of resources and junior development.

Responsibilities may include:-

- Assist in leading the club to the fulfillment of its strategic objectives
- Develop/revise code of conduct for coaching staff and players that supports the objectives of the Club on and off the field.
- Establish profile of all current players and a recruitment profile to supplement any perceived deficiencies, including, providing regular individual and group feedback, enhance skill and game and oversee appropriate fitness levels attained.
- Liaise with the Sports Organisation's executives to recruit Coaches and Assistant Coaches, assessment and appointment of junior grade coaches.
- Develop and establish an appropriate pre season and regular season training programs.
- Instruct the players placed under their care generally and to see that all players carry out sufficient training.
- Provide game day coaching expertise and leadership.
- Coordinate assistant coach(es) and support staff within clear match day roles.

Knowledge, Skills, Attitude

Head Coach needs :-

- to understand the complexities of team statistics
- to have the ability to judge talent
- to have a strong interpersonal skills to work effectively within a team and to develop and foster an environment for continuous learning.
- to have an excellence communication and leadership skills
- to demonstrate their knowledge of learning techniques to support player development.



SUB-SECTOR : SPORTS SCIENCE
AREA : SPORTS PSYCHOLOGY

SPORTS PSYCHOLOGIST (LEVEL 5)

A Sport Psychologist is responsible for the assessment, education and advice athletes, coaches and active individuals. The roles include design, implement and manage safe and effective psychological strategies that enhance health, fitness and optimal performance in training and competition. Sport psychologist also involved in developing sport psychology guidelines and recommendation, participating in applied research activities.

Responsibilities may include:

- Assist athletes in preparation for competition by identifying and dealing with the rules and regulations, needs and psychological demands of the sport through emotion, mood management, mental recovery, energy balance, attention focus, thought control
- Discover the athlete condition including medical history, psychological state (e.g. anxiety and confidence), training background, injury status, and periodisation phase.
- Conduct psychological assessment in the area of psychological skills training, goal setting, team cohesion, confidence, anxiety, mood
- Interpret result of psychological assessment in conjunction with result from other sports science assessment.
- Plan and design psychological intervention program including psychological education and advice, mental preparation and adjustment, psychological strategies for performance and also during injury rehabilitation
- Implement psychological intervention program on athletes and coaches involved in sport from amateur to elite professional level
- Evaluate outcome of the psychological intervention program on effectiveness and need for improvement
- Provide education session upon request in the form of lecture, education talk and activities
- Conduct and applying research in the field of sport psychology.

Knowledge, Skills, Attitude

A sport psychologist needs:

- to adhere to code of conduct
- understand legal and ethical responsibilities
- to practice as an autonomous professional



SUB-SECTOR : SPORTS SCIENCE
AREA : SPORTS CONDITIONING

ASSISTANT STRENGTH AND CONDITIONING OFFICER (LEVEL 4)

This role may also be called: Assistant and Strength and Conditioning Assistant Coach. An Assistant Strength and Conditioning Officer is responsible to support assist the Strength and Conditioning Officer for the assessment, education and advice athletes and active individuals. The roles include implement and administer safe and effective nutrition strategies that enhance health, fitness and optimal performance in training and competition. Strength and Conditioning also Officer participate in developing strength and conditioning guidelines and recommendation.

Responsibilities may include:

- Interpret the rules and regulation, needs and demand of sports that relates to training adaptation and exercise metabolism.
- Compile information on the athletes' condition including medical history, training background, injury status, and periodization phase.
- Assist the Officer in conducting strength and conditioning assessment in the area of strength and conditioning, strength and conditioning knowledge and practices.
- Collect data of the results of strength and conditioning assessment in conjunction with result from other sports science assessment.
- Assist in training intervention program including training plan, education and advice, strength and conditioning strategies.
- Assist in delivering education session upon request in the form of lecture, education talk and activities
- Assist in delivering training monitoring and recovery strategies in training camp, training centre, training venue and competition

Knowledge, Skills, Attitude

An Assistant Strength and Conditioning Officer needs:

- to adhere to code of conduct
- understand legal and ethical responsibilities
- to practice as an autonomous professional
- to demonstrate proficiency in communication skills



SUB-SECTOR : SPORTS SCIENCE
AREA : SPORTS CONDITIONING

SPORT STRENGTH AND CONDITIONING OFFICER (LEVEL 5)

This role may also be called: Strength and Conditioning Coach.

A Strength and Conditioning Officer is responsible for the assessment, education and advice athletes and active individuals. The roles include design, implement and manage safe and effective nutrition strategies that enhance health, fitness and optimal performance in training and competition. Strength and Conditioning also involved in developing strength and conditioning guidelines and recommendation, participating in applied research activities.

Responsibilities may include:

- Identified the rules and regulation, needs and demand of sports that relates to training adaptation and exercise metabolism.
- Discover the athlete condition including medical history, training background, injury status, and periodization phase.
- Conduct strength and conditioning assessment in the area of strength and conditioning, strength and conditioning knowledge and practices.
- Interpret result of strength and conditioning assessment in conjunction with result from other sports science assessment.
- Plan and implement training intervention program including training plan, education and advice, strength and conditioning strategies.
- Evaluate outcome of the training intervention program on effectiveness and need for training adaptation.
- Provide education session upon request in the form of lecture, education talk and activities
- Provide training monitoring and recovery strategies in training camp, training centre, training venue and competition

Knowledge, Skills, Attitude

A Strength and Conditioning Officer needs:

- to adhere to code of conduct
- understand legal and ethical responsibilities
- to practice as an autonomous professional
- to demonstrate proficiency in communication skills



SUB-SECTOR : SPORTS SCIENCE
AREA : SPORTS PHYSIOLOGY

SPORTS PHYSIOLOGIST (LEVEL 5)

A Sports Physiologist is responsible for identifying and quantifying the physical and physiological characteristics that contribute to performance in particular sports, and the most effective methods of manipulating these characteristics to enhance the possibility of success. The roles include measurement of a range of physiological variables including cardiovascular, neuromuscular, hormonal, blood and performance variables. Sports Physiologist also involved in developing physiological assessment guidelines and recommendation, participating in applied research activities.

Responsibilities may include:

- Identified physiological demands of sports that relates to training adaptation and exercise metabolism
- Discover the athlete condition including medical history, training background, injury status, and periodisation phase
- Conduct physiological assessment in the area of cardiovascular, neuromuscular, hormonal, blood, exercise physiology knowledge and practices
- Direct sports science support with laboratory and field-based testing and scientific activities.
- Interpret result of physiological assessment in conjunction with result from other sports science assessment
- Plan and implement training intervention program including training plan, education and advice, training-recovery strategies
- Evaluate outcome of the training intervention program on effectiveness and need for training adaptation
- Provide education session upon request in the form of lecture, education talk and activities
- Provide training monitoring and recovery strategies in training camp, training centre, training venue and competition

Knowledge, Skills, Attitude

A Sports Physiologist needs:

- to adhere to code of conduct
- understand legal and ethical responsibilities
- to practice as an autonomous professional
- to demonstrate proficient communication skills



SUB-SECTOR : SPORTS SCIENCE
AREA : SPORTS BIOMECHANICS

SPORTS BIOMECHANIST (LEVEL 5)

A Sports Biomechanist is responsible for the assessment, education and advice athletes/coaches and active individuals. The roles include design, implement and manage safe and effective sport biomechanics that enhance technical aspect and optimal performance in training and competition. Sports biomechanics also involved in developing sports biomechanics guidelines and recommendation, participating in applied research activities.

Responsibilities may include:

- Responsible for calibration of equipment's and maintenance of lab.
- Responsible for understanding the rules and regulation of the sport in which he attach to and provide the necessary support services.
- Discover the athletes physical condition including medical history, training background, injury status, technical / equipment and periodization phase in which the assessment is done.
- Designs, establishes, implements and interprets quality assured field and laboratory sport biomechanics test protocols in consultation with sport scientists, coaches and athletes.
- Collects biomechanical data during training and competition in order to better understand the biomechanical requirements of the sport.
- Provides state of the art information on biomechanical analysis to optimize technique and minimize injury to coaches and athletes.
- Prepares comprehensive specialist biomechanical reports for coaches and athletes including the interpretation of results
- Contributes to the establishment and maintenance of a database of test results from the field and laboratory

Knowledge, Skills, Attitude

A sports biomechanics needs:

- to adherence code of conduct
- understand legal and ethical responsibilities
- to practice as an autonomous professional
- to demonstrate proficient communication skills



SUB-SECTOR : SPORTS SCIENCE
AREA : SPORTS TALENT IDENTIFICATION

SPORTS TALENT IDENTIFICATION OFFICER (LEVEL 5)

A Talent Identification Sports Officer is responsible for the assessment, education, advice teachers and coaches. The role include long relationship, implement, collecting, analysing, and explaining complex data associated with talent identification and the prediction of potential to be an athlete.

Responsibilities may include:

- Working relationship with stakeholder to ensure that the talent identification operation processes are in place.
- Identify the rules and regulation, needs and demand of individual sports related to talent identification.
- Implement talent identification and development program in the school setting.
- Conduct talent identification assessment in the area of anthropometry and fitness components.
- Analyse the data collection and interpret the result of assessment and integrate with coaches' skill assessment.
- Communicating with stakeholders on the development and outcomes of the programme and tracking performance against agreed measures.
- Monitor a database system that will support the selection and contracting system for capturing and reporting data in relation to talent profiling, athlete performance history and trajectory.

Knowledge, Skills, Attitude

A talent identification needs:

- to have sports science knowledge of talent identification and development principles.
- to understand legal and ethical responsibilities.
- to have knowledge of the structure and operations.
- identify key stakeholder relationships.
- to have presentation and communication skills to a range of audiences and stakeholder



SUB-SECTOR : SPORTS SCIENCE
AREA : SPORTS PERFORMANCE ANALYSIS

SPORTS PERFORMANCE ANALYST (LEVEL 5)

A Sports Performance Analyst is responsible for the assessment, education and advice athletes/coaches and active individuals. The roles include design, implement and manage safe and effective Sport Performance Analysis that enhance tactical aspect and optimal performance in training and competition. Sports Performance Analyst also involved in developing Sports Performance Analysis guidelines and recommendation, participating in applied research activities.

Responsibilities may include:

- Calibration of equipment's and software related to Sport Performance Analysis.
- Establishes the athletes physical condition including medical history, training background, injury status, technical / equipment and periodization phase in which the assessment is done.
- Designs, establishes, implements and interprets quality assured field and laboratory sport performance analysis test protocols in consultation with sport scientists, coaches and athletes.
- Collects data during training and competition in order to better understand the biomechanical requirements of the sport.
- Provides state of the art information on performance analysis to optimize tactical and to coaches and athletes.
- Prepares comprehensive specialist biomechanical reports for coaches and athletes including the interpretation of results
- Contributes to the establishment and maintenance of a database of test results from the field and laboratory

Knowledge, Skills, Attitude

A sports performance analyst needs:

- to adhere to codes of conduct
- understand legal and ethical responsibilities
- to practice as an autonomous professional
- to demonstrate proficient communication skills



SUB-SECTOR : SPORTS SCIENCE

AREA : SPORTS REHABILITATION PHYSIOTHERAPY

SPORTS PHYSIOTHERAPIST (LEVEL 5)

A Sports Physiotherapist reports to the Senior Sport Physiotherapist is responsible in supervising the quality of practice among assistance Assistant Sport physiotherapist, developing treatment programmes and supervising progression of athlete's recovery

Responsibilities may include:

- Develops and implements safe and effective training programs for athletes
- Supervises injured athletes' training in cooperation with the, specialist doctor, coaches and other staffs;
- Coordinates scientific testing in cooperation with the Scientific Assessment team
- Perform fitness and field-testing on athletes for monitoring training progress
- Collaborates with other disciplines of the Scientific Conditioning Center and other centers as appropriate to the bio psychosocial operational model;
- Provides both local and overseas on-field support to elite sports teams;
- Organises, implements and assists in educational workshops and lectures for athletes, coaches and/or NSAs;
- Monitors the maintenance of the fitness area and equipment;
-

Knowledge, Skills, Attitude

A Sports Physiotherapist :

- must have the ability to educate, advise and motivate people
- needs to have a good communication skills and organizational skills
- needs to have an interest and ability in health science and sport
- to have experience in the treatment and management of sports injuries



SUB-SECTOR : SPORTS SCIENCE

AREA : SPORTS REHABILITATION PHYSIOTHERAPY

ASSISTANT SPORTS PHYSIOTHERAPIST (LEVEL 4)

A Sports Physiotherapist reports to the Sport Physiotherapist is responsible in developing treatment programs and supervising progression of athlete's recovery

Responsibilities may include:

- Develops and implements safe and effective training programs for athletes;
- Supervises injured athletes' training in cooperation with the, specialist doctor, coaches and other staffs;
- Coordinates scientific testing in cooperation with the Scientific Assessment team
- Conducts fitness and field-testing on athletes for monitoring training progress;
- Provides both local and overseas on-field support to elite sports teams;
- Maintains a database for all training records;
- Assists in educational workshops and lectures for athletes and coaches

Knowledge, Skills, Attitude

An Assistant Sports Physiotherapist :

- Must have the ability to educate, advise and motivate people
- A good communication skills, organizational and administration skills
- An excellent command of both spoken and written English.
- Knowledge of injury in sport and equal opportunity issues in the context of Malaysia are an added advantage.
- Needs to have an interest and ability in health science and sport



SUB-SECTOR : SPORTS SCIENCE
AREA : SPORTS MASSAGE

SPORTS MASSEURS (LEVEL 5)

Sports Masseurs is responsible for sports injury prevention techniques by using touch / soft tissue manipulation to massage and treat muscles that are sore as results of a sports related injury. Sports massage therapist develop an understanding about the therapeutic care of sports related injuries that inhibit physical activity.

Responsibilities may include:

- Assist senior/in provide teaching module and giving lecture on Sports massage to athletes, coaches and clients.
- Conducts a suitable massage technique for clients injury prevention and relaxation.
- Assists in preparing reports of equipment defects, faults, problems in accordance with procedures.
- Communicates with other team members and supervisor.
- Assists in preparing reports, statistics and documentation.
- Involve in medical coverage as first aider and sports masseur during training or tournament.

Knowledge, Skills, Attitude

A Sports Masseurs :

- Must adhere medical, occupational health and safety requirements
- Good sports massage skills at Basic Level , Level 1 and SKM
- Good communication skills
- Good time management
- The ability to work in flexible hours
- The ability to work in a team



SUB-SECTOR : SPORTS SCIENCE
AREA : SPORTS THERAPY

SPORT THERAPIST (LEVEL 5)

Sports Therapist helps injured athletes return to full performance, after injury. Injury treatment varies according to the sport or activity involved. A qualified Sports Therapist advises on prevention of injuries and can examine, assess and treat those that do occur, as well as helping with the rehabilitation process. Sports Therapists treat not only injured athletes, but also deal with many common muscular complaints such as back pain, mobility problems, postural problems and work related conditions.

Responsibilities:

- Follow instruction from the head of sport rehabilitation unit.
- Helping to prepare athletes both mentally and physically.
- Advising and teaching about stretching and warming up exercises suitable for every sport.
- Conducting an assessment of the fitness level of players or athletes and advising on exercises prior to return to training or competition.
- Checking injuries and strappings when necessary.
- Follow medical legal, occupational health and safety.
- Designing and monitoring rehabilitation programmes appropriate to the injury and/or sport and level.
- Discuss with sport physician/doctor if athletes require extra treatment or need referral to other practitioners.
- Communicate with Physiotherapist and other team member of the sport on rehabilitation programmes from the early stages of programme.
- Provide reports, statistics and documentation of athlete rehabilitation programmes.

Knowledge, Skills and Attitude:

A Sport Therapist needs :-

- to have a good knowledge in sport medicine/sport injuries and other relevant sport science discipline such as strength conditioning, biomechanics and exercise physiology.
- to possess good leadership and management skills.
- to have a good communication skills.
- to have ability to work in flexible hours.



SUB-SECTOR : SPORTS EVENT MANAGEMENT
AREA : MEDIA & COMMUNICATION

MEDIA AND COMMUNICATIONS MANAGER (LEVEL 5)

Media and Communications Manager perform a variety of tasks, such as the, press releases, bylined articles, white papers, corporate videos and marketing collateral, managing local and international delegates and participants. The manager is also involved in the preparation of presentations and/or speeches.

Responsibilities may include:-

- Approve write up for press releases, editorial, speech and printed collaterals.
- Manage the invitation for press conference, sports event launching, sponsors presentation and team presentation
- Co-ordinate interview for press conference, launching, daily race, CEO/Management and Ministry of Culture & Sports.
- Manage local and international media people.

Knowledge, Skills, Attitude

A Media and Communication Manager needs :-

- to be a confident communicator and presenter
- to have an excellent writing, editing, proofreading, layout and design, professional printing/publishing skills are essential, including ability to present concepts verbally
- to possess excellent organizational and planning skills
- to have project management and time management skills
- to possess a strong knowledge and understanding of current trends in digital media/social media
- to be self motivated with a positive and professional approach to management



SUB-SECTOR : SPORTS EVENT MANAGEMENT
AREA : SPONSORSHIP

SPONSORSHIP ASSISTANT (LEVEL 3)

The Sponsorship Assistant role exists primarily to assist the Sponsorship team and the Media & Marketing Coordinator to deliver all activities associated with servicing sponsors. The Sponsorship Assistant will also work closely with key event time personnel including event personnel, event stakeholders and sponsors, governments and event volunteers

Responsibilities may include:-

- Prior to the event
 - Develop sponsor activation schedules in consultation with the Sponsorship Executive to deliver on agreed campaign outcomes
 - Develop and maintain event time sponsor activation manuals
 - Execute sponsor activation activities
 - Assist in the programming and coordination of advertising in live streaming activities
 - Assist in managing invitations, RSVPs and hospitality services.
- During the event
 - Execute sponsor activation activities
 - Provide support to sponsors to ensure they are obtaining full advantage from their activation activities
- Post event
 - Assist in sponsor reporting procedures

Knowledge, Skills, Attitude

A Sponsorship Assistant needs :-

- an excellent organisational skills
- to have confidence communicating with internal and external stakeholders, including sponsors, staff, volunteers and VIPs.
- to have experience managing and interacting with a wide variety of people
- to have an excellent written and verbal communication skills
- to have the ability to work as part of a team
- to take proactive initiative
- to exercise judgment and work without supervision



SUB-SECTOR : SPORTS EVENT MANAGEMENT
AREA : SPONSORSHIP

SPONSORSHIP EXECUTIVES (LEVEL 4)

This job may also called Sponsorship Sales Executive and Sponsorship Account Executive. The Sponsorship Executive is responsible for the acquisition of new sponsors and business partnerships, generating revenue for the company by utilising its profile and status. The job requires a comprehensive understanding of the target audience/prospects for your products

Responsibilities may include:-

- Conduct relevant market research and analysis to identify key trends in business sectors' advertising and marketing strategies and provide a solution to those strategy needs.
- Carry out account management duties with the opportunity to up-sell and cross-sell
- Identify target brands, establish new relationships, and sell across an entire event portfolio
- Organise presentations to potential and existing clients to market sponsorship and exhibition opportunities to both new and existing clients of the company
- Prepare exciting and creative proposals to attract new sponsors at all levels for the tour, events and surrounding hospitality spaces
- Liaise with the operations teams regularly to ensure sponsor satisfaction in and around the building on deliverables according to contract
- Prepare contractual agreements for sponsors in accordance with company policy
- Manage the financial investment entailed in securing sponsorships, new attractions on site

Knowledge, Skills, Attitude

A Sponsorship Executive needs :-

- to have a good communication skills
- decision making skills.
- IT knowledge and ability to use office productivity tools.
- the ability to learn and quickly gain a working knowledge of new software
- the ability to plan and organise effectively ensuring maximum use of time throughout the day



SUB-SECTOR : SPORTS EVENT MANAGEMENT
AREA : SPONSORSHIP

SPONSORSHIP MANAGER (LEVEL 5)

The Sponsorship Manager is responsible for managing the overall sponsorship program, soliciting all sponsorship deals, and maximizing sponsorship revenue. The Sponsorship Manager will work as a team with the C-Level Executives and the Events Team. The Sponsorship Manager has the authority to carry out the job requirements and responsibilities.

Responsibilities may include:-

- Develop and implement overall sponsorship policy
- Meet with appropriate staff as needed to discuss ways to maximize all partnerships, and review status and leveraging possibilities of current relationships.
- Develop and implement overall sponsorship sales strategy
- Creatively use sponsorship assets to build and demonstrate innovative marketing programs which will add genuine value to potential clients
- Conduct presentation for event proposals and partnership packages.
- Negotiate sponsorships and review all deals and create activation proposals for sponsors that align with their strategy
- Work with sponsorship management companies in identifying prospects and selling sponsorships.
- Monitor graphic standards for logo usage, promotional restrictions and sponsor recognition program to ensure fees paid are proportionate to benefits delivered.
- Review and approve final sponsor identified materials, including advertisements, new releases, promotional and program related materials.
- Provide sponsors a measurement of their return on investment
- Manage all contractual rights and work with sponsors to deliver their activation goals

Knowledge, Skills, Attitude

A Sponsorship Manager needs :-

- to have a good communication skills
- decision making skills.



SUB-SECTOR : SPORTS EVENT MANAGEMENT
AREA : PROTOCOL

PROTOCOL OFFICER (LEVEL 4)

Protocol officers, sometimes called just "protocols".

The duty of a protocol officer is to foster understanding and cooperation between individuals, corporations, organizations and foreign bodies. A protocol officer's responsibilities vary with an organization, usually handle international relations for government officials.

Responsibilities may include:-

- Organise meetings and presentations at district, state and national levels
- Prepare protocol manuals for district, state and national levels
- Carry out tasks to call and confirm RSVP of invitations
- Organise and co-ordinate with related departments launching ceremonies and other related functions
- A protocol officer organizes events that involve international relations. He sends invitations and arranges to receive visitors, while planning for their parking and seating positions. He reviews ranks, positions and relationships of the foreign visitors when planning seating to avoid placements that cause discomfort or conflict during the ceremony.
- A protocol officer acts as a communication contact point between the invited guests and his employer's organization.

Knowledge, Skills, Attitude

A Protocol Officer needs :-

- to have a good communication skills
- to have an in-depth knowledge of protocols at state, national and international levels
- behavioral etiquette.



SUB-SECTOR : SPORTS EVENT MANAGEMENT
AREA : PROTOCOL

HEAD OF PROTOCOL (LEVEL 5)

The Head of Protocol has a main responsibility for the overall planning, directing and supervising of the full range of protocol and events services, and diplomatic liaison with representatives of States, and official partners.

Responsibilities may include:-

- Lead the creation of an events strategy in line corporate and communications goals and outline a roadmap for the short- and long-term execution of events.
- Oversee the planning and management of official events (receptions, exhibitions, etc.) and coordinate all protocol-related services as required.
- Provide advice to the CEO on protocol and event management-related matters.
- Assume management responsibility for the operations of the Protocol and Event Management in terms of human and financial resources, ensuring conformity with defined outcomes and objectives.
- Develop and maintain optimum relations with high-level contacts with authorities, international organizations,

Knowledge, Skills, Attitude

A Head of Protocol needs :-

- to have a good communication skills
- to have an in-depth knowledge of protocols at state, national and international levels
- behavioral etiquette.
- to respect individual and cultural differences, ethics and values.
- to build and promote partnerships.
- to have a strong planning and organizational skills. proven ability to work under pressure, and to maintain tact and composure at all times in such circumstances.
- to possess a high level of diplomatic skills and discretion.
- to have an excellent communication and interpersonal skills and ability to maintain effective partnerships and working relations in a multi-cultural, multi-ethnic environment with sensitivity and respect for diversity.

