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# Global sporting performance of nations - A method for measuring the level of national sport's policies

Oh Jun Hyuk

Oh Jun Hyuk, 2019, Global sporting performance of nations - A method for measuring the level of national sport's policies

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# FACULTÉ DES SCIENCES SOCIALES ET POLITIQUES

# INSTITUT DES SCIENCES DU SPORT DE L'UNIVERSITÉ DE LAUSANNE

# Global sporting performance of nations - A method for measuring the level of national sport's policies

# THÈSE DE DOCTORAT

présentée à la

Faculté des Sciences Sociales et Politiques de l'Université de Lausanne

pour l'obtention du grade de

Docteur ès Sciences du sport et de l'éducation physique

par

OH Jun Hyuk

Directeur de thèse Emmanuel BAYLE, Professeur à l'Université de Lausanne

Jury

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> LAUSANNE 2019



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## IMPRIMATUR

Le Décanat de la Faculté des sciences sociales et politiques de l'Université de Lausanne, au nom du Conseil et sur proposition d'un jury formé des professeurs

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- Jean-Loup CHAPPELET, Professeur honoraire de l'Université de Lausanne
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- Fabien OHL, Professeur à l'Université de Lausanne
- Thierry ZINZT, Professeur à l'Université Catholique de Louvain

autorise, sans se prononcer sur les opinions du candidat, l'impression de la thèse de Monsieur Junhyuk OH, intitulée :

# « Global sporting performance of nations - A method for measuring the level of national sport's policies »

Jean-Philippe LERESCHE Doyen

Lausanne, le 25 mars 2019

#### ABSTRACT

[But de la recherche et questions] Cette étude vise à donner aux organisations nationales sportives dirigeantes des conseils approuvés et reconnus afin qu'elles puissent assurer leur gestion avec succès et obtenir un outil de mesure pour améliorer niveau de performance. Les questions de recherches (RQ) cherchent à atteindre cet objectif: RQ 1. Comment mesure-t-on les performances sportives des nations? et RQ 2. Comment les performances nationales des sports sont-elles mesurées? Les études 1 et 2 sont construites de façon à répondre respectivement aux RQ 1. et RQ. 2. [Etude 1] L'analyse de la littérature a conduit à comprendre le système sportif actuel, les aspects fondamentaux du succès des sports nationaux, et les conseils théoriques pour créer des critères et extraire des indicateurs. L'échantillonnage en boule de neige est employé afin de composer un panel d'experts et les entretiens semi-directifs sont mis en place avec la méthode Delphi. La Structure Durable du Système Sportif (SSOSS), le cadre compréhensif du système sportif, est développé depuis peu et l'Index de la Structure Durable du Système Sportif (ISSOSS) est établit sur ce fondement solide comme outil de mesure du degré de gestion sportive. [Etude 2] La révision de la littérature est centrée sur la compétitivité et l'attractivité pour comprendre les performances des nations. Les résultats des Objectifs du millénaire pour le développement (MDGs), publié par l'ONU, sont analysés en niveaux et appliqués aux 24 pays d'accueil des Jeux Olympiques. Utilisés pour voir le degré de développement des nations dans l'aide aux sports supprimer puissante. [Résultat Application] La performance sportive globale des nations (GSPN) est proposée en combinant l'ISSOSS (Etude 1) et l'analyse du MDGs (Etude 2). Ceci est appliqué à la Corée du Sud et à la Suisse pour évaluer et comparer l'état et la visibilité du niveau de gestion des sports dans chaque pays. [Implications et Contributions] Les implications et les contributions des aspects théoriques et pratiques sont considérées cela peut être supprimer (2 par 2). Les limites et les directions de futures recherches sont données à la fin.

#### ABSTRACT

[Research purpose and questions] This study is designed to let national sports governing bodies have a globally acknowledged guideline to achieve their management success and secure a measurable tool to upgrade the degree of performance. The research questions (RQ) are followed to attain the aim: RQ 1. How is the sporting performance of nations measured? And RQ 2. How is the nations' performance for sports measured? Study 1 and Study 2 are constructed to answer the RQ 1 and RQ 2 respectively. [Study 1] The literature analysis is conducted to comprehend the current sports system, the fundamental aspects of national sports success, and the theoretical guidelines for creating criteria and extracting indicators. The Snowball sampling is employed to compose the panel of experts, and the semi-structured interviews are performed with the Delphi method. The Sustainable Structure of Sports System (SSOSS), the comprehensive framework of sports galaxy, is newly developed and the Index for Sustainable Structure of Sports System (ISSOSS) is established on that sound foundation as a tool for measuring the degree of sports management. [Study 2] The literature review is carried out with a focus on competitiveness and attractiveness to understand the nations' performance. The results of the Millennium Development Goals (MDGs), published by the United Nations, are analysed in levels and applied to 24 Olympic host countries. It is employed to see the degree of nations' development for supporting sports under the dominant method of the Evidence-Based Management. [Result and Application] The Global Sporting Performance of Nations (GSPN) is invented by combining the ISSOSS (Study 1) and the analysed MDGs (Study 2). It is applied to the Republic of Korea and Switzerland to evaluate the degree of their sports management state and visibly compare each other. [Implications and Contributions] The implications and contributions of both academic and practical aspects are considered in order (2 by 2). The limitations and the directions for future research are provided at the end.

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<figure< th=""><th>4.05&gt;</th><th>Values of each Goal (Switzerland)</th><th>143</th></figure<>	4.05>	Values of each Goal (Switzerland)	143
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# I. INTRODUCTION

# 1.1. Research rationale

Sports is widely accepted as the core component to unite our global society, the economic resources that create added values, the tool for nations' development and cohesion, and the method for increasing national attractiveness. Furthermore, it plays a pivotal role to strengthen national identity and to enhance the country's positive image in international relations (Bayle, 2005a).

Many governments strive to achieve the beneficial interest of national sports success since they began realising the power of influence. The national sports is a sum of all performance that the governing bodies provide (top-down) and the citizens share in various forms (bottom-up).

Most nations put forth efforts to implement good governance to lead the sports society in the right direction. However, the meaning of 'right' has been interpreted differently and understood divergently depending on each cultural background because there is no proper 'globally recognised guideline' that considers at the full national view. So it has been acted in their ways respectively.

Accordingly, it has become a challenge that we face and cannot postpone. It is required to have a consistent form for all by formulating the standards of sports management although it would seem nebulous to complete (Stewart and Walsh, 1994). The creation should be functioning as a compass that always points to the same correct direction by transcending time and space in global sports.

#### 1.1.1. Global sports performance of nations

The Global Sporting Performance of Nations (GSPN) is the whole notion that encompasses all performance levels, gender, types of benefit and ownership. It is defined as the sum of tangible actions (e.g. event, game, competition, conference, forum, seminar) and intangible movement (e.g. education, health, well-being) performed by the national sports governing bodies - official/unofficial or formal/informal ones such as public, quasi-public, private; global, local; nonprofit, for-profit; corporate, voluntary; urban, rural; non-governmental, governmental, inter-governmental; Sport-for-all, elite; professional, amateur; knowledge generating (e.g. institutes, universities) or applying ones - at a global conception. So its index should be able to measure the overall impact (from negative to positive) and assist managers in finding multi-dimensional solutions and in having insights on implications.

In the study of sports management sciences, it has become essential to justify investments done in sports policies and to carry out the measurement on the socio-economic benefits, as the term of Sporting Performance has arisen as the central issue since the 2000s. Regrettably, some nations still focus on only the athletes' performance for their sports development, and some others merely base their actions on financial performance.

Few types of research care about the GSPN at large. So the form, comprised of collectively exhaustive factors, is necessary to be developed from the various perspectives of economic, environmental, organisational and social utility to evaluate the national sports' success in regards to strategy<sup>1</sup>), policy, and administration (Winand et al., 2010). The measurable factors must be tangible, applicable, strategic and operational (Bayle and Madella, 2002) as athletes' achievement is assessed by the countable indicators of victories or medals

Chandler (1966) defined it as "the determination of the basic long-term goals and objectives of an enterprise and the adoption of courses of action and the allocation of resources necessary for carrying out these goals". It is considered at the local, horizontal or vertical levels within the relationships of the actors (Hautbois et al., 2012).

so that the nations can upgrade their performance level in good faith.

The GSPN and the degree of national sports success are examined by looking how well the National Federations (NFs) work for their mission, along with vision and how the rest of National Sports Governing Bodies support NFs by placing at the centre.

#### 1.1.2. Global performance of nations for sports

Under the operational definition, the nations' performance means citizens' well-being that satisfy the minimum requirements of life, the sustainable living to possess cultural assets, and the social stability to maintain legacies.

It is hard to enjoy sociocultural heritage including sports if a nation is not free from primary threats such as poverty, hunger, lack of elementary education, poor health and diseases. Sports cannot exist itself without social background, and it receives a direct influence and an immediate impact from individuals' living circumstances.

Therefore, the nations' performance should be taken into account together when nations' sporting performance is under consideration (Jarvie, 2013).

# 1.2. Research purpose and questions

The purpose of the study is to measure the Global Sporting Performance of Nations. Two research questions (RQs) are established to attain the goal as follows.

RQ1. How is the sporting performance of nations measured? RQ2. How is the nations' performance for sports measured?

For effective communication and efficient paper use, the abbreviations are invited as shown in <Table 1.01>.

#### <Table 1.01> Abbreviation

No.	Abbreviation	Full name
01	AIFC	Association of International Federation by Condition
02	AIMS	Alliance of Independent Members of SportAccord
03	AIOWF	Association of International Olympic Winter Sports Federations
04	ANOC	Association of National Olympic Committees
05	ANOCA	Association of National Olympic Committees of Africa
06	ARISF	Association of IOC Recognised International Sports Federations
07	ASOIF	Association of Summer Olympic International Federations
08	CANOC	Continental Association of National Olympic Committees
09	CAS	Court of Arbitration for Sport
10	CF	Continental sport Federation
11	EBMgt	Evidence-Based Management
12	EOC	European Olympic Committees
13	EPRH	(Multi-sports) Event Platform Right Holder
14	FO	Functional Organisation
15	GAISF	Global Association of International Sports Federations
16	GDP	Gross Domestic Product
17	GPN	Global Performance of Nations
18	GSP	Global Sporting Performance
19	GSPN	Global Sporting Performance of Nation
20	ICAS	International Council of Arbitration for Sport
21	IF	International sport Federation
22	IOC	International Olympic Committee
23	ISSOSS	Index for Sustainable Structure of Sports System
24	MDGs	Millennium Development Goals
25	NF	National sport Federation

26	NFO	National Functional Organisation
27	NGB	National sports Governing Body
28	NOC	National Olympic Committee
29	NSO	National Sports Organisation
30	OCA	Olympic Council of Asia
31	ONOC	Oceania National Olympic Committees
32	PASO	Pan-American Sports Organisation
33	ROK	The Republic of Korea
34	RSC	Regional Sport Council
35	RSF	Regional Sport Federations
36	SDGs	Sustainable Development Goals
37	SSOSS	Sustainable Structure of Sports System
38	ТО	Temporary Organisation for games
39	UN	United Nations
40	YOG	Youth Olympic Games
41	WADA	World Anti-Doping Agency

# 1.3. Research design

The study was intended to attain its primary purpose. It was supported by two studies which are linked to RQ 1 and RQ 2 respectively, and consist of four phases (see <Figure 1.01>).



<Figure 1.01> The structure of the study

At the conceptual phase, the literature analysis was conducted 1) to understand the current sports system, the fundamental aspects of national sports success, and the theoretical guidelines for creating criteria and extracting indicators in Study 1 and 2) to comprehend the nations' performance with focus on competitiveness and attractiveness, and the appropriate material for the GPN under the EBMgt framework in Study 2.

At the empirical phase, the data collection was carried out by the mixed research method to ensure the robustness (Creswell and Clark, 2007). Each technique was presented with definition, procedure, characteristics, strengths, and limitations to improve the rigour of the research (Sandelowski, 1986) and demonstrate trustworthiness (Rodgers and Cowles, 1993). In

Study 1, the Snowball sampling was employed to compose the panel of experts, and the semi-structured interviews were performed with the Delphi method. In Study 2, the MDGs, integrated data from the UN, was analysed and applied to 24 Olympic host countries. It was fulfilled in the theoretical framework of the EBMgt, that secures substantiated facts under its methodological perfection and supports practitioners to base their determinations on the best-available evidence.

At the analytical phase, the visualised framework of the SSOSS was confirmed under the Graph theory, and the ISSOSS was established by gathering elements, compiling domains and validating indicators in Study 1. The state evaluation of the ROK and Switzerland was conducted with the detailed data of the MDGs in Study 2. The results were combined to build the synthesised concept of the GSPN.

At the application phase, the utilisation of the newly developed index was fulfilled within the real sports phenomena of the ROK and Switzerland. It led the NGBs to go beyond the descriptive level, presented the ideal direction with sound fundamentals, informed their sports competitiveness in the current challenging environment, and let researchers compare the sporting performance of nations.

The implications and contributions of both academic and practical area are discussed at the end. The limitations of the study and the suggestions for future research directions are followed. The details of each phase are as described in <Table 1.02>.

Phase	Content (to attain the research purpose)		
	Study 1 (to solve the RQ 1)	Study 2 (to solve the RQ 2)	
1. Conceptual	1. Literature analysis	1. Literature analysis	
phase	1) Purpose: (1) To understand the current sports system, (2) to find	<ol> <li>Purpose: (1) To understand the nations' performance for sports</li> </ol>	

<Table 1.02> Summary of research design

	the fundamental aspects for	development and (2) to employ the	
	national sports success, and (3) to	appropriate material under the	
	have the theoretical guidelines for	EBMgt framework	
	creating criteria and extracting	2) Area: Nations' performance for	
	indicators	sports	
	2) Area: (1) Sporting performance of		
	nations and (2) sports index		
	development		
	3) Material: Secondary sources such as (1) academic works, (2) official		
	reports (e.g. government documents), and (3) individual research		
2. Empirical	2. Data collection	2. Data collection	
phase	1) Purpose: To sketch (1) the	1) Purpose: To analyse and apply	
	SSOSS and (2) the ISSOSS	the MDGs to 24 Olympic host	
	2) Method: (1) Delphi method for the	countries	
	SSOSS (conducted by Snowball	2) Method: EBMgt	
	sampling to approach to target	3) Material: Secondary sources from	
	experts and performed	the UN	
	semi-structured interview) and (2)		
	experts' discussion for the ISSOSS		
	3) Material: Primary sources		
	4) Target: (1) National authorities and		
	(2) the experts from national		
	(public, quasi-public, and private		
	organisations) and international		
	sports movements		
3. Analytical	3. Finding analysis	3. Finding analysis	
phase	1) Purpose: To confirm the SSOSS	1) Purpose: To evaluate the ROK	
	and the ISSOSS	and Switzerland	
	2) Method: Experts' discussion	2) Method: EBMgt	
	3) Basis: Graph theory	3) Material: Secondary sources from	
		the UN	
4 Application	4. Result: Building the GSPN, combined the ISSOSS and the analysed MDGs 5. Utilisation and standardisation: (1) To evaluate the GSPN of the ROK and		
phase	Switzerland through the newly developed method and (2) to facilitate		
1	comparisons between nations and discover why and how a nation "perform"		
	better than the other	,	

# II. STUDY 1. GLOBAL SPORTS PERFORMANCE OF NATIONS

# 2.1. Literature review

The purpose of the literature review was to comprehend the current sports system, the fundamental aspects for national sports success - Value, Decision-maker, Strategic management, Governance, and Network - and the theoretical guidelines for creating criteria and extracting indicators.

The concept of 'performance' has been approached by the achievement of something tried to do, getting a high position in a particular field, working satisfactorily, or having an intended result. The National sporting performance was deemed as the high-level fruition of athletes in many case studies, but in this research, the more sustainable understanding was accomplished for synthetic comprehension.

In the 'Index development' part, universal studies were reviewed with particular guidelines regarding the creation of criteria and the extraction of sustainable indicators. On the basis, 'Sports index' section went deep into the context of sports. Principles of good governance in sports were carefully illuminated under national and global sports level and academic and field research view.

## 2.1.1. Sports performance of nations

Sports Performance of Nations is the sum of national sports activities performed by the sports entities and their related organisations. A large number of its studies have been

conducted in-depth by the scholars of Prof. Jean-Loup Chappelet and Prof. Emmanuel Bayle. They have been contributed from concept development to practical use through the divergent angles, such as taxonomy of performance for NGBs (Bayle and Madella, 2002), sports education and training (Bayle, 2005b), organisational performance of NFs (Madella, Bayle and Tome, 2005), relationship between strategy, management and operational performance (Bayle and Robinson, 2007), social impact of sports governance and management (Bayle et al., 2008), glocal<sup>2)</sup> vision (Chappelet, 2009), strategic management and planning (Chappelet, 2010), quantitative measurement of organizational performance (Winand, Zintz, Bayle and Robinson, 2010), politics and the Olympics (Chappelet, 2014), effect of heritage sporting event (Chappelet, 2015a)<sup>3)</sup>, mutual contribution between the Olympic host cities and the Olympic Movement (Chappelet, 2015b), practices and implementation of the corporate social responsibility in professional clubs (François and Bayle, 2015, 2017), administration and governance (Chappelet, 2016), policy towards NFs (Bayle, 2017), professionalization of NFs (Lang, Schlesinger, Lamprecht, Ruoranen, Klenk, Bayle, Clausen, Giauque and Nagel, 2018), relationship between sports governance and a country (Zaoui and Bayle, 2018), autonomy of sports (Chappelet, 2018a), and challenges and opportunities for Olympic host cities (Chappelet, 2018b).

The NGBs, the actors of the management, are the significant components of global sports. They impact on and are being influenced by all kinds of surrounded parties, such as people (e.g. athletes, coaches, referees, entourage, general public, spectators), sports groups (e.g. IOC, IF, event organisers), non-sports governing bodies (broadcasters, press, city, marketing partners), and value (e.g. vision, objectives, services, culture, policy, communication, image) as described in <Figure 2.01>. When it focuses on a host community, its frame comes up with a more unobstructed view that considers relations between people and organisations as shown in <Figure 2.02>.

<sup>2)</sup> The combined term of Global and Local.

<sup>3) &</sup>quot;A heritage sporting event can be defined as an event, generally involving a single sport, that has taken place in the same place for many years and that has been held regularly since its foundation" (Chappelet, 2015a).



<Figure 2.01> Shareholders of the Olympic Movement (Organizing Committee of the Olympic and Paralympic Games Rio, 2016)<sup>4)</sup>





The performance of NGBs can be understood at external and internal dimensions. At the external side, they combine features of both corporate and democratic governance, and develop cooperation between sports sector and its partners such as government ministries, health sector (public and private), non governmental organization, community groups, academic sector, commercial partners and sponsors (Chappelet, 2017) as described in <Figure 2.03>. On the other side, they contain regional associations and their clubs, and communicate through the internal decision making bodies as shown in <Figure 2.04>.

<sup>4)</sup> Adopted from the Organizing Committee of the Olympic and Paralympic Games Rio in Jan. 2016; Refer in more detail to <a href="https://www.olympic.org/rio-2016">https://www.olympic.org/rio-2016</a>.



<Figure 2.03> External partnership of NGBs (Finnish Olympic Committee, 2017)<sup>5)</sup>



<Figure 2.04> Internal partnership of NGBs (Finnish Olympic Committee, 2017)<sup>6)</sup>

Their performance should be contemplated on the frame of 'organisation', by excepting the Values or the not-formulaic group of people. The ultimate frame must begin with the NFs, then should extend the shape to the NGBs and international authorities (Robinson and Minikin, 2012), so that it could explain not only the relations but also the practical connection and the degree between certain entities, rather than just saying that 'many groups have relations in many ways'. The possible performance of NGBs is affected by the system of governance, the quality of an operating network, and the position in an industry. The actual one is powered by facilitators and inhibitors as described in <Figure 2.05>.

With the understanding above, the striving for the success of national sports has been continued by both tangible and intangible efforts. The significant part of the studies regarding those endeavours, consider five subjects: Values, Decision-makers, Strategic management, Governance, and Network.

<sup>5)</sup> Adopted from the Finnish Olympic Committee in Feb. 2017; Refer in more detail to <a href="https://www.scforh.info/">https://www.scforh.info/</a>.

Adopted from the Finnish Olympic Committee in Feb. 2017; Refer in more detail to <u>https://www.scforh.info/</u>.



<Figure 2.05> Factors affecting the performance of NGBs (Bayle and Robinson, 2007)

# 2.1.2. Factors affecting sports performance of nations

This study had reviewed 120 papers concerning the Sports performance of nations, which have been published since the year 2,000. It was realised that the topic had been approached mostly by five following themes in previous researches.

#### 2.1.2.1. Value

Values are the firm foundation of organisational design (Kikulis et al., 1992) and are directly related to organisations' structure and function (Amis et al., 2002) with constituents such as accountability, efficiency, excellence, fulfillment, loyalty, and productivity (Mackenzie, 1998). Values are the enduring beliefs supporting the vision and mission of a sports organisation (Gray, 1996) and thus should be shared with the members (Chappelet, 2011). They are

considered by two dimensions, individual (or personal) and organisational perspective (Kabanoff and Daly, 2002). The individual values shape the way that members experience the organisation (Desensi and Rosenberg, 1996) and contribute to the overall organisational values, forms, practices, and cultures (Hinings et al., 1996). The organisational values are the institutional goals, principles, and knowledge that determine decisions and guide behaviour of the members (Van der Wal et al., 2008) under the 'value system' (Argandoña, 2003).

Values are driven by the definite conception of ethics auditing in the process for arbitrating between dissimilarly held views (Garcia-Marza, 2005). To avoid vagueness, Zadek (1998) identified the quality principles - communication, comparability, completeness, continuous improvement, embeddedness, evolution, external verification, inclusivity and regularity - and Garcia-Marza (2005) listed the key themes - civic commitment, credibility, dialogue, dignity, environment, fairness, integrity, legality, responsibility and transparency. McNamee and Fleming (2007) proposed a framework from three different standpoints - individual, social and political - under the integrity of respect, equity and responsibility respectively as shown in <Figure 2.06>.



<Figure 2.06> A framework for the ethics audit of a public sector sports organisation (McNamee and Fleming, 2007) With such principles, sports organisations are driven by values. Those 'values-based organisations' (Belal, 2002) mean managing them by identifying core values, aligning the core values into a centre, and illuminating a leader's interest (Dolan et al., 2006). For organisations to work with values, they define first, communicate to all essential constituencies (Agle and Caldwell, 1999), and incorporate into their activities (Jaakson et al., 2004). The process of management by values is underlined by the value practice theory (Gehman et al., 2013) and applied to national sports organisations by different stages of progression - inactive, intuitive, institutional, inspirational - as shown in <Figure 2.07>.



<Figure 2.07> 4-I Values framework outlining the manifestation of Values within NSOs (Bell-Laroche et al., 2014)

The philosophy of 'management by values', which is a strategic management tool, has the potential to definitize the organisation's goal to inculcate values within culture (Amis et al., 2002), to increase employees' motivation (Paarlberg and Perry, 2007), to build engagement, to secure trust, to contribute to practical development of employees (Dolan and Garcia, 2002), to influence performance (Bell-Laroche et al., 2014), and to increase chance for managers to solve problems in an appropriate line in the vision (Dolan et al., 2006). It is sustained by social values and facilitates the developmental performance as described in <Figure 2.08>.



<Figure 2.08> Value-based model (Kerwin et al., 2014)

The organisational performance relies on decision-makers who are involved in value-adding processes (Freeman, 2010). Therefore, they should formulate what needs to be said (more than describe it) in certain situations (Gehman et al., 2013) and connect values to expectations and incentive systems (Paarlberg and Perry, 2007) by explicit ways (Bourne and Jenkins, 2013). In national sports organisation context, it is essential for the leaders to think of shared values in holistic fashions (Kanter, 2008), to recognise the role of values within community partnerships (Shaw and Allen, 2006), to enact seminal aspects of favorable features with function (Chelladurai and Haggerty, 1991), to connect espoused values and organisational effectiveness (Fletcher, 1992), to decide on the relative importance of values, to focus on developing values when transformed into actions, to guide organisational functioning (Kikulis et al., 2008). Besides, the leaders ought to put efforts for members to avoid confusion regarding desired outcomes (Jaakson et al., 2004), so that an expectation gap, established between intended values and those held by stakeholders (Bourne and Jenkins, 2013), could get narrow with the results of resilient culture (Dolan and Garcia, 2002).

The philosophy of values has been addressed in multifarious domain with the topic of sports governing body and service (cf. Hamm et al., 2008), organisational performance (cf. Ginsburg and Miller, 1992), organisational design change (cf. Kikulis et al., 1995b), management practices (cf. Schein, 1992), and strategic management (cf. Liedtka, 1989). Values are considered as the invisible and intangible resources that are nontradable (Dierickx and Cool, 1989), which define design, designate functioning, shape perceptions of role and responsibility (Mauws et al., 2003), impact on performance (Jiang et al., 2012), and dominate success of an organisation (Smart and Wolfe, 2003). The resources are deemed as assets that are tied semi-permanently to an organisation and intrinsically connected to competitive advantage (Barney, 1991). The advantage is based on capabilities (Grant, 2010) and strongly fortified by resource management as Wernerfelt (1984) argued: "What a firm wants is to create a situation where its resource position directly or indirectly make it more difficult for others to catch up".

Resources and its values have a decisive effect on the degree of bargaining power in negotiating the inter-organisational relationships (Cook and Emerson, 1984) and on the outcomes of interaction (Yan and Gray, 1994). The power in networks can be understood by the perspectives of access to essential resources and knowledge; control of the rules governing the resources exchange; control over decision-making (Strober, 2005); a function of organisation size; the effectiveness of coercive strategies; concentration of organisational inputs (Inkpen and Beamish, 1997); the degree of dependence (Thorelli, 1986); and a function of centrality as the hub in interconnected ties (Powell, 1990). Organisations focus on a managerial effort with the stakeholders<sup>7</sup>) (Pfeffer and Salancik, 1978) to maximise the relative power based on coercion, expertness, legitimacy, referent or reward (Hunt and Nevin, 1974). When an organisation is in a dependent position, it strives to enhance the potential through strategic association, coalition, union, or alliance to facilitate development. In a sports context, an NF produces values, and also it is the resource itself of the NOC. It formalises a system of sports governance and takes responsibility for competitive advantage.

#### 2.1.2.2. Decision-maker

In a sports organisation, values are managed by key members who guide a direction and make a decision such as shareholders, board members, CEO, and directors in office. Shareholders (or significant donors) of a non-profit organisation expect that management acts to achieve the goals in their best interest (Dallas, 1996). Therefore, they desire to monitor management and control the board and the CEO (Callen et al., 2003) in the same ways as stakeholders do so in for-profit organisations (Fama and Jensen, 1983). The expectations between shareholders and the board are likely to differ so the gap can lead to conflicts (Johnson et al., 2008), especially when management has substantial influence over the CEO regarding aspiration of particular strategies (Edwards and Cornforth, 2003).

<sup>7)</sup> It is defined as "any group or individual who can affect or is affected by the achievement of the organization's objective" (Freeman, 2010).

The board endeavours to manage a gap between shareholders and CEO as the mediator. Moreover, it takes roles of a defender of mission statement in the absence of a dominant stakeholder (Caers et al., 2006), a performance monitor (Yeh et al., 2009), a champion of mission achievement (Mueller et al., 2003), a provider of advice and counsel (Yeh and Taylor, 2008), and a strategist of financial policy and budgeting (Shilbury, 2001). Its job encompasses clarifying the mission of the staff in all activities, building an organisational structure (Stiles, 2001), scanning the market trend, and facilitating access to resources (Ong and Wan, 2008). The board has attributes of human (Kearns, 1995) and social capital (Zahra and Pearce, 1989). Its effectiveness is directly linked to organisational effectiveness (Herman and Renz, 1997), and managed by the calibre of the members (Papadimitriou, 2007), effort and attendance (Doherty et al., 2004), leadership (Hampel, 1998), independence (Higgs, 2003), transparency (Cadbury, 1992), diversity (Skirstad, 2009), dynamics (Van der Walt et al., 2006), motivation (Inglis, 1994), structure and performance (Papadimitriou, 1999), balance (Desensi and Rosenberg, 1996), demographics (Doherty, 2005), needs (Shibli et al., 1999), sincerity (O'Regan and Oster, 2005), relationship between group cohesion and individual satisfaction (Doherty and Carrón, 2003), ability to monitor (Olsen, 2000), ability to liaise with external groups, and insightful perspective (Bradshaw et al., 1992).

Since the NGBs are the non-for-profit, organisational success heavily relies on board behaviour. Therefore, it is considered essential to care for who sit on the board (McNulty and Pettigrew, 1999), how long the tenure is, how large it is, and how hybrid composition it has in terms of contribution and commitment (Cuskelly, 1995), so that the board could have stable administration and outsider perspectives with professional expertise (Taylor and O'Sullivan, 2009). The voluntary board is the most critical asset in a nonprofit sports organisation (Ferkins et al., 2009), and the unpaid executives are the core to succeed (Bayle and Robinson, 2007). Sports organisations are, nevertheless, in hard conditions that the board does not actively monitor management (Glaeser, 2003) because rigorous monitoring is deemed unnecessary to them (Miller, 2002).

In the sports governance domain, the board has been studied with CEO since there has been keen research interest in their relationships such as interaction (Searle, 1989), influence balance (McNulty and Pettigrew, 1999), relative role (Sapienza et al., 2000), power distribution (Hoye and Cuskelly, 2003b), and shared leadership (Inglis, 1997). Many studies underscore the positive aspects of their cooperation in designing and implementing agendas (Inglis and Weaver, 2000) but on the other hand, some point out the passive role of the board that spends time discussing whatever issues are laid before them, which documentation is prepared by the CEO, rather than focusing on important and urgent affairs (Hoye and Cuskelly, 2007). The CEO serves not only the principals but also the staff including volunteers, paid staff, directors. The steward primarily leads the plans with input developed by directors (Nadler, 2004) and clarify the nature of tasks of the staff (Schulz and Auld, 2006).

Their teamwork for promoting board performance is built on cooperation in sports governance, and the combined effort is explained by a simple input-output system (Cornforth, 2001). As independent variables, the primary inputs are board involvement with the factors of skills, experiences, behaviour, composition features, working style, quality, cohesion and devoting time (Pugliese and Wenstøp, 2007). The board involvement is continued in five strategic steps - taking strategic decisions; shaping strategic decisions; shaping content, context and conduct of strategy; co-leading strategy development; integrating strategy into board processes - as described in <Figure 2.09>.

The strategically capable board includes competent people (Brown, 2002), the function that board is involved alongside the CEO (Ruigrok et al., 2006), established frame of reference, and the flexible adaptation to environmental change as shown in <Figure 2.10>. It facilitates board processes and regional relationships (Siciliano, 2008) beyond compliance (Miller-Millesen, 2003), monitoring (Kerr and Werther, 2008), and ratification of strategy (Fiegener, 2005).



<Figure 2.09> Board involvement in strategy (Ferkins et al., 2009)



<Figure 2.10> Board strategic capability (Ferkins and Shilbury, 2012)

The input factors can be categorised into three parts (Hoye and Doherty, 2011) environmental (external), individual and organisational - and those have a significant effect on the board factors or the board performance<sup>8</sup>) (Holland and Jackson, 1998). In the input-output system, the outputs flow into the organisational performance and its effectiveness (Papadimitriou and Taylor, 2000) as described in <Figure 2.11>.

The environmental factors include market conditions (or industry turbulence), legal requirements, institutional pressures and inter-organisational relationships. The individual ones include effort, attendance, sociodemographics, motivation (Taylor et al., 1991), competency, experience (Nicholson and Kiel, 2004), commitment (Cuskelly et al., 1998), trust, satisfaction (Murphy and McIntyre, 2007), longevity (or turnover), intention to quit (Cuskelly and Boag, 2001), age, education, and performance (Hoye, 2007). The organisational ones include leader-member exchange relationships (Hoye, 2006), group social capital, firm size, management experience and capacity, professionalization (Auld and Godbey, 1998), age/lifecycle (Wood, 1992), constitutional requirements, recruitment practices and relationships with paid staff (Hoye and Cuskelly, 2003a). The board ones include structure, composition, diversity, subcommittee, selection, evaluation processes (Hoye and Cuskelly, 2004), communication (Hoye and Auld, 2001), induction, meeting practices, decision-making processes (Auld, 1997), evaluation, group dynamics, and board-staff relationships (Zahra and Pearce, 1989).

<sup>8)</sup> It is defined as the ability for a board to fulfil its roles (Hoye, 2004).



<Figure 2.11> Integrated model of board performance (Hoye and Doherty, 2011)

#### 2.1.2.3. Strategic management

The decision-makers are required to manage a sports organisation in a purpose-driven strategy<sup>9</sup>). Strategic management is considered by several features to attain organisational success, such as useful structures to avoid pitfalls (Frisby et al., 2004); fashions to gain legitimacy (DiMaggio and Powell, 1983); targeting a medal in competition; protecting service-to-mission; setting agendas and decision-making processes; emphasizing on the vision, mission and values; guiding future directions (Oliver, 1990); developing virtues of courage, fairness, honesty and respect (McNamee, 1995); evaluating the organisational culture (Sternberg, 2000); addressing moral and financial health (Magazine, 1999); monitoring social

The concept of strategy was developed for analysing private firms in the 1960s and applied to the public/nonprofit organisations including sports ones in the 1990s (Chappelet and Bayle, 2005).
strands of accounting, balance sheets and auditing (Gray, 2001); attracting a sports event<sup>10</sup>) (Chappelet et al., 2005); and eradicating vices of arrogance, dishonesty, racism, harassment and sexism (Birrell and Cole, 1994).

'Strategy' means thinking of an organisation's competitive position (Gopinath et al., 1994) and a set of plans intended to achieve desires (Edwards and Cornforth, 2003). It is contemplated at the interface between an organisation and its external environment (Hoye et al., 2006), and considered at the unique understanding between strategic focus and operational detail.

The strategic activity has been studied in terms of function, capability, involvement, contribution, processes<sup>11</sup>), thinking, execution, focus (Huse, 2005), decision-making (Forbes and Milliken, 1999), role (Roberts et al., 2005), development (Pettigrew and McNulty, 1998), and orientation (Ingley and Van der Walt, 2005). It is defined as roles relating to setting vision and mission, planning procedures, developing policy, and evaluating executive directors (Inglis et al., 1999). It involves making critical decisions and designing the future with an eye to the external community for an organisation to adapt to environmental changes (Van der Walt and Ingley, 2003). The 'input' context and the process of organisation influence on strategic activity (Dulewicz et al., 1995), and become the cause for the tactical perspective, which is a big-picture and long-term view (Wheelen and Hunger, 2000) to generate the competitive advantage (Oliver, 1997) by articulating cognitive maps and visual images (Huff and Jenkins, 2002).

<sup>10)</sup> Lee (2013) defined the Sport-event-hosting-strategy as "a series of decisions and activities by bidding organizations (cities/countries) which utilizes public funding and other resources under formal and informal institutional frameworks to regulate their involvement for supporting the successful bidding and hosting for sporting events, via employing management and marketing tools that coordinate and promote actions of related stakeholders, such as governments at different levels, sports organizations, commercial sponsors, volunteer groups, local community and event owners".

<sup>11)</sup> It covers the phases of analysis, vision, action, and control (Chappelet and Bayle, 2005).

Strategic sports management is dealt with the subjects of scientific achievement (Becker and Gerhart, 1996), productivity levels (Child, 1972) and financial results (Dess and Robinson, 1984). It seeks to attain competitive advantages at different levels - macro, meso, micro - with gradational factors (Mills, 1998) (see <Figure 2.12>).



<Figure 2.12> Integrated high-performance and mass sports development (Carney et al., 2012)

#### 2.1.2.4. Governance

Governance is defined as "a determination of the broad uses to which organisational resources will be deployed and the resolutions of conflicts among the myriad participants in organisations" (Daily et al., 2003) or "the reflexive self-organisation of independent actors involved in complex relations of reciprocal inter-dependence, with such self-organisation being based on continuing dialogue and resource-sharing to develop mutually beneficial joint projects and to manage the contradictions and dilemmas inevitably involved in such situation" (Jessop, 2003).

The organisations are divided into a public and private category (Cornforth, 2003), and the private sector diverges into for-profit and nonprofit one. The NGBs, which can belong to the public, quasi-public and private sector depending on each nation's conditions, tend to employ the traditional management for attaining goals (Havaris and Danylchuk, 2007), and stick to means of centralised decision making for consistency (Slack and Hinings, 1987). Those organisations are a set of interdependent ones involved in creating values and service (Stern et al., 1996) within the channel whereby organisations are structured by the flow of resources as described in <Figure 2.13>.



<Figure 2.13> The marketing channels in spectator sports (Morgan, 2002)

The channel of national sports with theoretical links are formed to satisfy the organisational strategy mainly (see <Figure 2.14>). The success of national sports mostly depend upon competitive advantage, success factors, capabilities, resources, management and power, and it relies heavily on the NOC's action as a principal molecular in that system.



<Figure 2.14> The Links among resources, capabilities and competitive advantage in NOCs (Robinson and Minikin, 2012)

The NGBs have encountered challenges and changes in their demanding environment including budgetary restraints, pressures for accountability, scrutiny of management practices (Thibault and Harvey, 1997), and uncertainty of long-term viability (Scissons, 2002). The continuously changing socio-economic environment is brought by not only rapidly evolving surroundings (Eisenhardt and Martin, 2000) but also professionalisation (Frisby, 1986) and restructuring (Malcolm et al., 2000) in nonprofit sports setting (Amis et al., 2004). The circumstances require organisations to be equipped with more efficient systems to adopt a new management attitude (Slack and Hinings, 1992).

The transformed organisation builds a network system by disregarding traditional structure and conventional forms of authority (Winkler, 2006). Within the system, sports governance is considered as the responsibility for functioning, direction and the institutionalised component of all sports codes. Obtaining sustainable advantages is performed by pursuing

partnerships to enhance access to resources, improve skills, and block moves of competitors (Gulati and Singh, 1998). Those advantages were studied mostly with professionalisation in the domain of sports management, which has a significant impact on changes in the organisational environment (Kikulis et al., 1989). Several models and policy factors were suggested to explain the way of elite-level success as described in <Figure 2.15>12) (Clumpner, 1994).



<Figure 2.15> Sports policy factors influencing the international success (De Bosscher et al., 2006)

### 2.1.2.5. Network

A network is defined as a set of objects that are connected (Villalba-Diez and Ordieres-Meré, 2016) or a group of interconnected people upon affective relations such as

<sup>12)</sup> Illustrated by an input-throughput-output mechanism with nine pillars, starting with financial support (pillar 1) to scientific research (pillar 9).

friendship or trust (Balkundi and Harrison, 2006). The success of national sports depends on the cooperation of actors in the network. The combined behaviour<sup>13</sup>) works as a means to access tangible (e.g. facilities, finance, insurance, and technology) and intangible resources (e.g. obtaining political power, expertise, and knowledge) (Barnes et al., 2007), enhances influence by associated strong ties (Knoke and Kuklinski, 1991), produces the reciprocity of collaborative advantages to implement a coordinated effort for achieving mutual objectives (Huxham and Vangen, 2004), helps to overcome the chronic limitations of traditional bureaucracies (Berry et al., 2004), resolves joint issues (Stockdale and Williams, 2007), develops synergy among organisations (Child and Faulkner, 1998), and reduces environmental uncertainty (Van de Ven, 1976). Its crucial strategy, composed of mutual dignity, respect, and exchange of a social kind (James, 1999), focuses upon the interdependence of parties (Sutton and Gladden, 1998) by considering structural and economic bonds (Provan and Milward, 2001).

Each bond establishes a structure (Granovetter, 1973) and shapes networks (Provan et al., 2005a) with different strength and various contents (Webster and Morrison, 2004). The networks take an antecedent role to outcomes (Berry et al., 2004) and the consequences rely on its concentration (Lewis, 2005). The network density, which is a degree to which the combined ties are centralised around one or some hubs (Kildiff and Tsai, 2003), considers the extent to which all possible linkages are present (Williams, 2005) and how the structures take on a concrete form between isolated and saturated shapes (Kenis and Knoke, 2002).

Everyone is directly or indirectly invested in one another, and its linkage draws multiple formations of the partnership (Webster and Morrison, 2004). Under consideration of the whole relationships system, their behaviours are observed by the parties (Alderson, 2006) such as various levels of government (Ferkins and Shilbury, 2010), nonprofit (Andreasen, 1996), private (Boase, 2000), corporate (Vail, 1994), for-profit (Doz and Hamel, 1998), sponsoring (Copeland

<sup>13)</sup> It is studied with the principles of relation(ship), interaction, link(age), negotiation, alliance (Kanter, 1994), partner(ship) (Thibault et al., 2003), connection (Hennart and Zeng, 2005), collaboration (Gray, 1989), and integration (Harrigan, 1995).

et al., 1996); professional (Cousens and Slack, 1996); event organizing (Erickson and Kushner, 1999); and knowledge-generating organisations (e.g. institutes, universities) (Quatman and Chelladurai, 2008).

Networks sports are considered with three dimensions interpersonal, in person-organisation, and inter-organisational relationships. All types are run by natural exchange to earn good reputations (Gulati and Gargiulo, 1999), diversify into new businesses, access new market or technologies (Clegg and Hardy, 1999), anticipate environmental changes (Kanter, 1989), enhance competitiveness, and take advantage of expertise (Peng and Kellogg, 2003). To keep each bond healthy, the interested parties take careful account of power balances to comply with the partners' conditions (Nichols et al., 2005), longevity of partnerships (Simmonds, 2000), stability via a shared destiny or history (Mueller and Loveridge, 1995), social pressures (Provan et al., 2004), reliance extent (Anderson and Jap, 2005), resource shortfalls (Gulati et al., 2000) and necessity (Roussin Isett and Provan, 2005).

An interpersonal alliance formation is an origin of creating relationships (Baum et al., 2000) and it functions as a chain in contributing to long-term maintenance (Kouwenhoven, 1993). Person-organisation relationships are the most common types in network studies and deemed as a derivative of interpersonal ones since shareholders (or stakeholders) include related ties with persons and individual decision-makers. Those types appear when people are considered as a root of a system, like an athlete supported by an entourage<sup>14)</sup> and a player under the management of phased governing bodies as illustrated in <Figure 2.16> and <Figure

<sup>14) &</sup>quot;The Entourage comprises all the people associated with the athletes, including, without limitation, managers, agents, coaches, physical trainers, medical staff, scientists, sports organisations, sponsors, lawyers and any person promoting the athlete's sporting career, including family members" (Adapted from the IOC Guidelines for the Conduct of the Athletes' Entourage; Retrieved 2018. 12. 31). <u>https://stillmed.olympic.org/media/Document%20Library/OlympicOrg/IOC/Who-We-Are/Commissions ons/Athletes-Entourage-Commission/EN-Guidelines-Conduct-of-the-Athlete-Entourage.pdf#\_ga=2 .58117546.1420450201.1549442276-265287977.1539561997</u>



2.17> (in a case of football) respectively.



<Figure 2.16> The network of relationships of a young athlete (Houlihan, 2008)

<Figure 2.17> Traditional hierarchical model of the government of football (Amara et al., 2005)

The inter-organisational relationship is a strategic action between organisations upon the objective of mutual benefits and common goals (Babiak, 2003) in the forms of alliances, agreement, licensing, co-branding, and consortia (Parmigiani and Rivera-Santos, 2011). The collaborative activity begins at the dyadic level and extends broadly with a third-party (Jones et al., 2017) as shown in <Figure 2.18> (in the case of football). It works to acquire additional and alternative resources (Provan et al., 1996) - human, infrastructure, social and financial ones (Wicker et al., 2013) - and has a decisive effect on the success of management in an ever-changing environment (Gazley, 2017). The unbalanced ties of stakeholders construct a systemic governance based on the multiple determinants (Nohria, 1992) - asymmetry, efficiency, legitimacy, necessity, reciprocity, and stability (Ring and Van de Ven, 1994) - and their interaction increases resilient (Sotiriadou, 2009), organizational capacity (Misener and Doherty, 2009), service quality (Misener and Doherty, 2013), the effectiveness of achieving desired outcomes (Babiak, 2009), the impact of interconnected nature (Babiak et al., 2018), and relationship processes such as consistency, balance, and engagement (Gazley and Guo, 2015).



stakeholders (Amara et al., 2005)

Understanding the relations can be begun at the grass root level, termed as a local sports club or community sports organisation. The clubs act to create liaison mechanisms with nonprofit organisations, corporations, local governments and agencies, and they operate as service providers to deliver sports programs for citizens. The local sports clubs, which has less structured shape, communicate through an informal channel (Sharpe, 2003) and rely on local governments for receiving support (Vos and Scheerder, 2014) such as permits on the usage of municipal sports fields or facilities (Horch, 1994).

By the paradigm shift due to globalisation and professionalisation, the significant changes occur not only at clubs of each level but in national sports environment (Amis and Slack, 2003). The clubs adopt more formalised managerial structures to survive (Guo and Acar, 2005) and develop relationships for financial support and the power/dependency balance as described in <Figure 2.19>.



<Figure 2.19> Network relationships within the channel (Morgan, 2002)

The national sports organisations get more links intensively and extensively (Harvey, 1989), so the exceptional or unexpected cases that are hard to find in traditional networks arise with the forms of inter-organisational relationships (Gray and Wood, 1991). Sometimes, it replaces the centre of gravity from the NOC to a new attractive party as illustrated in <Figure 2.20>.



<Figure 2.20> Networks of the Canadian Sports Centre (Babiak, 2007)

## 2.1.3. Sports index development

The studies about organisational performance and its effectiveness with indicators are widely performed in various research areas (e.g. Bennis, 1962). The ones of the guidelines of index development and the principles of sports index were collectively reviewed to consider the base in creating an index.

#### 2.1.3.1. Index development

The indicators have functions to show relative positions, reduce the number of complex interrelationships by simple formulation, summarise information flows, and develop feedback mechanism (Ciegis et al., 2009b). An index, which is a set of them, helps to maximise the 'organisational effectiveness'<sup>15</sup>) on the recognition of uniqueness when carrying out an evaluation (Steers, 1977).

In evaluation attempts, univariate models are criticised because they are hard to define and easy to reflect the researchers' biases (Steers, 1975). While, multivariate models have strengths to describe the relationships of variables and the effectiveness of organisations by contemplating multidimensional surroundings in nature (Georgopoulos and Tannenbaum, 1957).

The indicators should be characterised by the features of simplicity, broad coverage, and qualitative assessment possibility which allows trend-setting. The index should have an accurate technique for measurement, collection, analysis and evaluation (Ciegis et al., 2009b). Based on those characteristics, researchers have to formulate clear goals, and continuously revise (or correct) the barometer by respecting the advisements presented in <Table 2.01>.

<sup>15)</sup> It is defined as "an organisation's (or unit's) capacity to pursue and reach its operational objectives" (Hitt and Middlemist, 1979).

Author (year)	Advisement on indicator development <sup>16)</sup>
Ciegis et al.	The requirements to produce indicators are 1) technical soundness, 2)
(2009b)	understandability to non-experts, 3) relevance to the policy process and
	4) data availability.
Hitt and Middlemist	The criteria should 1) be based on the organisation's goals and
(1979)	objectives, 2) allow for comparative study of organisations and/or
	subunits that perform different functions and operate in different
	environments, 3) include not only productivity criteria but other relevant
	criteria as well, and 4) add both positive and negative (constraining)
	effectiveness criteria.
	The method should 1) include a procedure for determining the proper
	weightings of the different criteria, as well as their relationship to
	organisational effectiveness, 2) be applicable at different analytical
	levels (e.g. entire organisation versus subunit level), and 3) allow for
	the uniqueness of the organisation or subunit.
Moldan and Dahl	The indicator development involves methodological compromises of 1)
(2007)	technical feasibility, 2) public availability to use, and 3) systemic
	consistency.
Steers (1975)	The requirements to produce indicators are 1) flexibility, 2) account for
	differences among organisations, 3) account for the differential weights
	on the contribution rating, and 4) focus on the achievable goal.
Yuchtman and	The indicator should lead an organisation to 1) take itself as the focal
Seashore (1967)	frame of reference, rather than some external entity or some particular set
	of people, 2) treat the relations between the organisation and its
	environment as a central ingredient in the definition of effectiveness, 3)
	provide a theoretically general framework which is capable of
	encompassing different kinds of complex organisations, 4) provide some
	latitude for uniqueness, variability and change, with respect to the specific
	operations for assessing effectiveness which is applicable to any one
	organisation, while at the same time maintaining the unity of the underlying
	framework for comparative evaluation, and 5) provide some guide to the
	identification of performance and action variables relevant to organisational
	effectiveness and to the choice of variables for empirical use.

# <Table 2.01> Advisement on index development

16) Quoted from each source presented.

The interest of sustainable index has been increased in many areas such as for-profit and non-profit, governmental and non-governmental organisations (Hamid and Sanford, 2002). It involves multidimensional components presented in <Table 2.02> and focuses on the estimation of relationships between environmental and political circumstances (World Bank, 1997). The sustainable index is constructed by the knowledge system, which can be seen as information aggregation pyramid that raw data are at the base and indices are at the top (Pastille Consortium, 2002). The index is composed of sub-themes for multidisciplinary dimensions (Ghosh et al., 2006) that consider economic, environmental and social aspects (Tso et al., 2011).

<Table 2.02> Advisement on the sustainable indicator (or index)

Author (year)	Advisement on the sustainable indicator <sup>17)</sup>
Cash et al. (2002);	The attributes of sustainable indicators are 1) credibility, 2) legitimacy,
Parris and Kates	and 3) salience.
(2003)	
Ciegis et al.	The sustainable indicators should involve 1) society, 2) economics, 3)
(2009a)	corporate social responsibility, 4) environmental quality, 5) national
	activity, and 6) public activity.
Ciegis et al.	The sustainable indicators should be 1) informative, 2) easy to
(2009b)	understand, 3) easy to compute, 4) logical, 5) effective, 6) practical, 7)
	reliable, 8) summarising, and 9) based on accessible data.
North West	The accurate indicator should consider 1) policy relevance for users, 2)
Regional Assembly	policy utility for users, 3) analytical soundness, and 4) measurability.
(2003)	
Stevens (2005)	In developing new indicators, the challenge lies through 1) decoupling
	methods, 2) global approaches, and 3) composite indices.
Pastille Consortium	The sustainable indicators should be 1) scientifically valid (or
(2002)	analytically sound), 2) measurable, 3) comparable, 4) limited in number,
	5) related to a reasonable time horizon, 6) associated with a relevant
	spatial area, 7) capable of connecting to other indicators, 8) capable of
	aggregation, 9) transparent, and 10) accountable.

17) Quoted from each source presented.

The index which has a limited number of understandable indicators (Spangenberg, 2002) is used to measure the status of a given area as a simplified communication tool by guaranteeing continuity and functionality. The assessment is approached by an integrated set of indicators to evaluate both separated parts and their relationships in global, national, state, provincial, local, metropolitan scope. The model, which is a solid foundation to measure the progress of reaching goals, accounts for the functional and environmental uniqueness of the organisation (Hitt and Middlemist, 1979). Its results are utilised in agreements, validity consideration, and effectiveness to secure sustainability (Ciegis et al., 2009b).

The model with optimal sustainability indicators includes essential features of a system, and propose a sound trajectory of maintenance or improvement (Moldan and Dahl, 2007). However, a wrong set of indicators can be developed on the other hand when it tries to include all aspects and so becomes subjective and meaningless (Hueting and Reijinders, 2004). The incompetent indicators can make a communication function worthless and a society ununderstandable.

# 2.1.3.2. Sports index

A conceptual comprehension of 'sports governance' is diverse depending on different perspectives of approach (Thoma and Chalip, 1996). Thus, the indices should be considered from various angles in a vast sports field, and the methodology must be flexible to follow up the volatile situations with the adequate indicators striving for better assessment.

Sports governing bodies are mostly non-profit organisations, but due to increasing commercial activities, they behave like corporations (Parrish, 2001). They belong to either a global or national sports level, and drop the anchor on governmental or non-governmental ones in national level depending on their vocation.

Simply but firmly, 'Sports management' is begun with 'sports organisation management'. It is approached by good governance principles as presented in <Table 2.03>18).

### <Table 2.03> Principles of good governance in sports

Author (Year)	The contributed principles to construct the ISSOSS (Quoted from each
	source presented)
Chappelet and	The sports governance should have the principles of 1) transparency, 2)
Kübler-Mabbott	democracy, 3) accountability, 4) autonomy, and 5) social responsibility.
(2008)	
Chappelet and	The sports governance should include the principles of 1) organisational
Mrkonjic	transparency, 2) reporting transparency, 3) stakeholders' representation, 4)
(2013)	democratic process, 5) control mechanisms, 6) sports integrity, and 7) solidarity.
Council of	The sports governance should 1) include codes of sports ethics to prevent
Europe (2012);	unknown threats, 2) comply with the IOC recommendation, 3) introduce
TNS Opinion	supervisory mechanisms to achieve power balance between a president and
and Social	members, 4) control presidential election, 5) prevent any forms of conflict, 6)
(2014)	include athletes in the major decisions, 7) improve the provisions about
	examining candidatures for hosting sports events, operating arrangements to
	prevent and punish acts of self-interest, inviting outside observers, and 8) publish
	the details of income, expenditure and the remuneration of staff annually.
De Bosscher	the details of income, expenditure and the remuneration of staff annually. The sports governance should include the principles of 1) financial support,
De Bosscher et al. (2006,	<ul><li>the details of income, expenditure and the remuneration of staff annually.</li><li>The sports governance should include the principles of 1) financial support,</li><li>2) organisation and structure of sports policies, 3) initiation, 4) performance,</li></ul>
De Bosscher et al. (2006, 2010)	<ul> <li>the details of income, expenditure and the remuneration of staff annually.</li> <li>The sports governance should include the principles of 1) financial support,</li> <li>2) organisation and structure of sports policies, 3) initiation, 4) performance,</li> <li>5) excellence, 6) training facilities, 7) coaching provision, coach development,</li> </ul>
De Bosscher et al. (2006, 2010)	<ul> <li>the details of income, expenditure and the remuneration of staff annually.</li> <li>The sports governance should include the principles of 1) financial support,</li> <li>2) organisation and structure of sports policies, 3) initiation, 4) performance,</li> <li>5) excellence, 6) training facilities, 7) coaching provision, coach development,</li> <li>8) (inter)national competition, and 9) scientific research.</li> </ul>
De Bosscher et al. (2006, 2010) De Zwart and	<ul> <li>the details of income, expenditure and the remuneration of staff annually.</li> <li>The sports governance should include the principles of 1) financial support,</li> <li>2) organisation and structure of sports policies, 3) initiation, 4) performance,</li> <li>5) excellence, 6) training facilities, 7) coaching provision, coach development,</li> <li>8) (inter)national competition, and 9) scientific research.</li> <li>The sports governance should include the principles about 1) multiple</li> </ul>
De Bosscher et al. (2006, 2010) De Zwart and Gilligan (2008)	<ul> <li>the details of income, expenditure and the remuneration of staff annually.</li> <li>The sports governance should include the principles of 1) financial support,</li> <li>2) organisation and structure of sports policies, 3) initiation, 4) performance,</li> <li>5) excellence, 6) training facilities, 7) coaching provision, coach development,</li> <li>8) (inter)national competition, and 9) scientific research.</li> <li>The sports governance should include the principles about 1) multiple</li> <li>objectives and multiple stakeholders, 2) growing professionalism, 3) board</li> </ul>
De Bosscher et al. (2006, 2010) De Zwart and Gilligan (2008)	<ul> <li>the details of income, expenditure and the remuneration of staff annually.</li> <li>The sports governance should include the principles of 1) financial support,</li> <li>2) organisation and structure of sports policies, 3) initiation, 4) performance,</li> <li>5) excellence, 6) training facilities, 7) coaching provision, coach development,</li> <li>8) (inter)national competition, and 9) scientific research.</li> <li>The sports governance should include the principles about 1) multiple</li> <li>objectives and multiple stakeholders, 2) growing professionalism, 3) board</li> <li>representation and independence of directors, 4) 'league' considerations, and</li> </ul>
De Bosscher et al. (2006, 2010) De Zwart and Gilligan (2008)	<ul> <li>the details of income, expenditure and the remuneration of staff annually.</li> <li>The sports governance should include the principles of 1) financial support,</li> <li>2) organisation and structure of sports policies, 3) initiation, 4) performance,</li> <li>5) excellence, 6) training facilities, 7) coaching provision, coach development,</li> <li>8) (inter)national competition, and 9) scientific research.</li> <li>The sports governance should include the principles about 1) multiple</li> <li>objectives and multiple stakeholders, 2) growing professionalism, 3) board</li> <li>representation and independence of directors, 4) 'league' considerations, and</li> <li>5) achieving on-field success.</li> </ul>
De Bosscher et al. (2006, 2010) De Zwart and Gilligan (2008) European	<ul> <li>the details of income, expenditure and the remuneration of staff annually.</li> <li>The sports governance should include the principles of 1) financial support,</li> <li>2) organisation and structure of sports policies, 3) initiation, 4) performance,</li> <li>5) excellence, 6) training facilities, 7) coaching provision, coach development,</li> <li>8) (inter)national competition, and 9) scientific research.</li> <li>The sports governance should include the principles about 1) multiple</li> <li>objectives and multiple stakeholders, 2) growing professionalism, 3) board</li> <li>representation and independence of directors, 4) 'league' considerations, and</li> <li>5) achieving on-field success.</li> <li>The sports governance should include the principles of 1) autonomy within the</li> </ul>
De Bosscher et al. (2006, 2010) De Zwart and Gilligan (2008) European Commission	<ul> <li>the details of income, expenditure and the remuneration of staff annually.</li> <li>The sports governance should include the principles of 1) financial support,</li> <li>2) organisation and structure of sports policies, 3) initiation, 4) performance,</li> <li>5) excellence, 6) training facilities, 7) coaching provision, coach development,</li> <li>8) (inter)national competition, and 9) scientific research.</li> <li>The sports governance should include the principles about 1) multiple</li> <li>objectives and multiple stakeholders, 2) growing professionalism, 3) board</li> <li>representation and independence of directors, 4) 'league' considerations, and</li> <li>5) achieving on-field success.</li> <li>The sports governance should include the principles of 1) autonomy within the</li> <li>limits of the law, democracy, transparency and accountability in decision-making,</li> </ul>
De Bosscher et al. (2006, 2010) De Zwart and Gilligan (2008) European Commission (2011)	<ul> <li>the details of income, expenditure and the remuneration of staff annually.</li> <li>The sports governance should include the principles of 1) financial support,</li> <li>2) organisation and structure of sports policies, 3) initiation, 4) performance,</li> <li>5) excellence, 6) training facilities, 7) coaching provision, coach development,</li> <li>8) (inter)national competition, and 9) scientific research.</li> <li>The sports governance should include the principles about 1) multiple</li> <li>objectives and multiple stakeholders, 2) growing professionalism, 3) board</li> <li>representation and independence of directors, 4) 'league' considerations, and</li> <li>5) achieving on-field success.</li> <li>The sports governance should include the principles of 1) autonomy within the</li> <li>limits of the law, democracy, transparency and accountability in decision-making, and 2) inclusiveness in the representation of interested stakeholders.</li> </ul>
De Bosscher et al. (2006, 2010) De Zwart and Gilligan (2008) European Commission (2011) Governance in	<ul> <li>the details of income, expenditure and the remuneration of staff annually.</li> <li>The sports governance should include the principles of 1) financial support,</li> <li>2) organisation and structure of sports policies, 3) initiation, 4) performance,</li> <li>5) excellence, 6) training facilities, 7) coaching provision, coach development,</li> <li>8) (inter)national competition, and 9) scientific research.</li> <li>The sports governance should include the principles about 1) multiple</li> <li>objectives and multiple stakeholders, 2) growing professionalism, 3) board</li> <li>representation and independence of directors, 4) 'league' considerations, and</li> <li>5) achieving on-field success.</li> <li>The sports governance should include the principles of 1) autonomy within the</li> <li>limits of the law, democracy, transparency and accountability in decision-making,</li> <li>and 2) inclusiveness in the representation of interested stakeholders.</li> </ul>
De Bosscher et al. (2006, 2010) De Zwart and Gilligan (2008) European Commission (2011) Governance in Sport Working	<ul> <li>the details of income, expenditure and the remuneration of staff annually.</li> <li>The sports governance should include the principles of 1) financial support,</li> <li>2) organisation and structure of sports policies, 3) initiation, 4) performance,</li> <li>5) excellence, 6) training facilities, 7) coaching provision, coach development,</li> <li>8) (inter)national competition, and 9) scientific research.</li> <li>The sports governance should include the principles about 1) multiple</li> <li>objectives and multiple stakeholders, 2) growing professionalism, 3) board</li> <li>representation and independence of directors, 4) 'league' considerations, and</li> <li>5) achieving on-field success.</li> <li>The sports governance should include the principles of 1) autonomy within the</li> <li>limits of the law, democracy, transparency and accountability in decision-making,</li> <li>and 2) inclusiveness in the representation of interested stakeholders.</li> <li>The sports governance should include the principles of 1) role of the</li> <li>governing body, 2) structure, responsibility, accountability, 3) membership,</li> </ul>

18) The brief contents are displayed. The full version is placed at Appendix C.

	transparency, communication, 6) decisions and appeals, 7) conflict of
	interests, 8) solidarity, and 9) recognition of other interests.
Henry and Lee	The sports governance should include the principles of 1) transparency, 2)
(2004)	accountability, 3) democracy, 4) responsibility, 5) equity, 6) effectiveness,
	and 7) efficiency.
Institute of	The sports governance should include the principles of 1) accountability, 2)
Directors	responsibility, 3) transparency, 4) social responsibility, 5) independence, 6)
(2002)	fairness, and 7) discipline.
IOC (2008)	The sports governance should include the principles of 1) vision, mission,
	strategy, 2) structures, regulations, democratic process, 3) highest level of
	competence, integrity, ethical standards, 4) accountability, transparency, control,
	5) solidarity, development, 6) athletes' involvement, participation and care, and
	7) harmonious relations with governments while preserving autonomy.
IOC (2012)	The evaluation criteria for sports and disciplines are: 1) value added (general),
	2) governance, 3) history, tradition, 4) universality, 5) popularity, 6) athletes, 7)
	development of the IF/sport, and 8) finance.
Korea Institute	Sports governance should include the principles of 1) strategy, leadership, 2)
of Sport	core business, ethicality, and 3) financial management. The guidelines of the
Science (2014)	'Safe sports school' is necessary to be considered in the school sports context.
McNamee and	The sports governance should include the principles of 1) respect (individual
Fleming (2007)	level), 2) equity (social level), and 3) responsibility (political level).
Mowbray	The sports governance should include the standard of 1) structure, 2)
(2012)	partnership, communication, 3) planning, 4) performance, and 5) transparency.
Robinson and	The sports governance should include the principles of 1) governance, 2)
Minikin (2012)	management, 3) physical resources, 4) human resources, 5) finance, 6)
	communication, 7) sports activity, and 8) values.
Taylor and	The board of nonprofit organisation should 1) balance between members
O'Sullivan	possessing appropriate business expertise and members representing the
(2009)	broader membership of organisations, 2) be limited to between five and
	twelve members, thereby facilitating debate while also optimizing
	decision-making, 3) separate the roles of chairman and CEO to make the
	board more objective and independent, and 4) contain sufficient non-executive
	representation so as to ensure the independence of decision-making.

# 2.2. Methodology

'Warm call', a request to someone who has a positive relationship with the contact person, is recognised more effective than 'cold call', a request to someone randomly selected in a given field (Dwyer et al., 2000). In the research, the snowball sampling was employed to compose the panel of experts with the benefit of the 'warm call'.

The typical way of Delphi for the initial questions, that widely cast the research net (Linstone and Turoff, 1975), was compiled to get a broader scope of experts<sup>19</sup>). And after, the collected answers were clustered by factor analysis in each of two stages. The cautions of the process<sup>20</sup>) were respected with consideration of design rigours to ensure the issue of validity and credibility (Keeney et al., 2001).

The communication methods including face to face, telephone, web conference, and electronic mail interview were carried out in a flexible way depending on research conditions and characteristics of each stage.

# 2.2.1. Sampling and target experts

The sampling method, which is a unique facet of empirical research, takes a critical role to determine the quality of research in social science and influences generating particular knowledge of interactional state in qualitative research (Hay, 2000). The access manner to participants under ethical guidelines was deemed the substantive focus of the whole research<sup>21</sup>)

<sup>19)</sup> It was performed by pen and paper, and mail in the beginning (Silverman, 1981). Later, it has evolved with the advantage of information technology to the internet (Keil et al., 2002) and online surveys (Cabaniss, 2001).

<sup>20)</sup> Such as researcher transparency and reliability, that includes coding check (Bowling, 1997).

<sup>21)</sup> For example, the identity (or personality) of the participants was not revealed one another to prevent the authority or reputation of others in the process.

(Brody, 1998). That is to say, the access to certain specialists is utterly significant because the more sensitive study has the more challenging characteristics of the sampling approach (Faugier and Sargeant, 1997).

#### 2.2.1.1. Snowball sampling

Snowball sampling<sup>22</sup>) relies on the trait of the participants since its fundamental process is based on personal communication (Sadler et al., 2010). It works "when a researcher accesses informants through (the) contact information that is provided by other informants" (Noy, 2008). It is described as 'sampling tree' or 'stemmata of sampling' as presented in <Figure 2.21>.



The snowball, rolling down a hill, is operated by social pressure (Wasserman et al., 2005) and the rolling creates boundaries in respondents' social capital (Urry, 2003). The

<sup>22)</sup> Terms and concepts related to the Snowball sampling have been studied in many research areas in the names of respondent-driven sampling (Heckathorn, 1997), chain sampling, chain referral sampling, referral sampling (Biernacki and Waldorf, 1981) and link-tracing (Spreen, 1992).

boundaries act as a centre to the topic in a multistage process (Browne, 2005), carry far-reaching consequences (Giddens, 1984), reproduce social systems (Bourdieu, 1986), activate natural dynamics, and generate an organic type of knowledge (Noy, 2008). Social networks, besides, enable researchers to access to the individuals outside of the normal boundaries (Browne, 2005) - the hidden population, the 'hard-to-reach' potential participants, and the sensitive respondents such as lesbian, drug users, Acquired Immune Deficiency Syndrome carriers, and elders.

The limitations, on the other side, can be raised with the matter of recruitment challenges. It can be statistically unreliable to estimate 'saturation' of a sample (Sadler et al., 2010), for it is a non-probability method that does not recruit randomly and is not exhaustive in proportional selecting from all groups (Baxter and Eyles, 1997). The inherent limitations, besides, are argued over-representativeness of general phenomena (Miles and Huberman, 1984) and over bias in probability sampling that selects in unbalanced demographic characteristics based on the social networks (Faugier and Sargeant, 1997).

Nevertheless, biased sampling<sup>23</sup>) was inevitable since this research relies on the specific policymakers and particular strategy planners of national sporting performance. So the compensation was accomplished by supplementing the imbalances during the data analysis phase (Knoke and Yang, 2008).

### 2.2.1.2. Target experts

The 'expert' was determined as 1) those who have the more/better capability than the general in terms of task-specific knowledge, interpretation of meaning from information, storing and accessing information, detecting and recognizing structured patterns of play, using

<sup>23)</sup> In terms of certain characteristics such as nationality, gender, age, education level, sports background (or career), socioeconomic level.

situational probability data, and making rapid and appropriate decisions (Singer and Janelle, 1999); and 2) those who have 10-years or more experience in sports affairs. A 10-year commitment or 10,000 hours service accumulated is the minimum condition to reach a superior level of performance (Ericsson et al., 1993).

The requirements were communicated to the recommended when the rolling moved. The activation proceeded from the original to the third generation to compose the Delphi panel as described in <Figure 2.22>.



<Figure 2.22> Sampling tree (grey mark: interviewee; white mark: rejector)

The researcher and ten individual experts had time for building rapport and sharing the necessity of the research at the beginning. With the strengths of the method, the formation of sympathy did not require many minutes.

*Mr A* is a professor of Sports management. He has been publishing more than 140 articles since 1996-year and contributing his expertise for global sports governing bodies and institutions as a senior advisor. *Mr B* is a senior program manager at the IOC, serving the area of Youth Strategy. He has been working for the organisation for more than 20 years and supporting the Olympic IFs to maintain sustainability. *Mr D* is an executive board member of

the OCA, a board member of an IF, and a former member of the IOC. He has strength as a retired athlete who won a gold medal at an Olympic Games but has the limitation of academic knowledge such as analysis. Ms G is a senior manager at the Olympic Studies Center in Lausanne. She supports researchers with her intelligence of sports philosophy and history but has not enough practical experience at events such as a tournament. Mr H is a director of the OCA, a Deputy Secretary General of a CF, and a board member of an IF. He was a captain of his national sport team and after studied sports management (Master and PhD) in Germany. Mr / is a Secretary General of an IF and served as a Sports director of the IF for 14 years. He is a former athlete who holds five times world champion record but has a limitation that all of his careers are entirely linked to only one sport. Ms J is a Secretary General of a sports institution and an executive board member of an IF. She has been worked for five different organising committees, including the International Association of Athletics Federations World Championships, as a leader of journalism and mass communication department. Mr K is a vice president of an NF and a chief executive officer of the NF's sponsor. He is a former amateur athlete and currently performs in a professional field but does not have much experience at the international level. Mr L is a Secretary General of an NF, a head coach of a national team, and a sports director of a CF. He is a former athlete who participated in various mega events, but his knowledge entirely focuses on martial arts sports. Ms N is a researcher of a sports institution. She served the United Nations Office on Sport for Development and Peace in Geneva as a director and two of the Olympic IFs in Lausanne as a manager.

The demographic factors of the experts are as described in <Table 2.04>. They were participated in the semi-structured interview by answering the start questions: "What is it like the sustainable structure for global sporting performance of nations?". The SSOSS was constructed through the series of the results.

No	Na	Gender	Age range	Education	Nationality	Duty	Inte	rview	/	
	me			level		station	met			
							F	Е	Т	V
01	А	Male	40 or more to 50	Doctor	France	Switzerland	0	0	-	0
02	В	Male	50 or more to 60	Master	Switzerland	Switzerland	0	0	-	-
03	D	Male	40 or more to 50	Master	The ROK	The ROK	0	-	0	-
04	G	Female	50 or more to 60	Bachelor	Switzerland	Switzerland	0	0	-	-
05	Н	Male	50 or more to 60	Doctor	Iraq and United Arab		0	0	0	-
					Germany	Emirates				
06	I	Male	50 or more to 60	Bachelor	Germany	United Arab	0	0	0	-
						Emirates				
07	J	Female	40 or more to 50	Doctor	The ROK	The ROK	0	-	0	-
08	Κ	Male	50 or more to 60	Bachelor	Philippines	Philippines	0	0	0	-
09	L	Male	40 or more to 50	Bachelor	Thailand	Thailand	0	0	-	0
10	Ν	Female	40 or more to 50	Master	The ROK	Switzerland	0	0	0	-
			*E. Face to fac	e E Electr	onic mail <sup>.</sup> T <sup>.</sup>	Telenhone <sup>.</sup> V <sup>.</sup>	Vide		nfere	nce

<Table 2.04> Delphi panel

F: Face to face; E: Electronic mail; T: Telephone; V: Video conference

## 2.2.2. Delphi method

Since the Delphi method was developed for consensus building by the Rand Corporation in the 1950s (Dalkey and Helmer, 1963), the modified approaches have been carried out with the term of 'Policy Delphi' (Crisp et al., 1997). The method is defined as "an iterative process used to collect and distill the judgments of experts using a series of questionnaires interspersed with feedback" (Skulmoski et al., 2007) or "a series of structured group processes, each referred to as a round, to survey expert opinion and reach a group response" (Burt et al., 2009). This iterative process makes each round of questionnaires focus on emerging themes, problems, opportunities, solutions, or forecasts (Walker and Selfe, 1996) under the core principles of individual feedback, judgment assessment, and anonymity for individual responses (Steurer, 2011). The questionnaires of each round for exploring the creative idea were developed on the results of the previous inquiries.

A Delphi study consists of several rounds that respondents are involved in completing

iterative questionnaires (Hasson et al., 2000). The first round that used to formulate an idea was performed to define and describe the subject by asking one or more questions to participants (Steurer, 2011). A series of next round was accomplished to clarify the topic, organise a survey, and structure the questions for subsequent rounds with the feedback of the panel until the RQ was answered. Skulmoski et al. (2007) propagated 'three-round Delphi process' in particular as shown in <Figure 2.23>. The initial round can be begun either open-ended (Good, 1998) or narrow questions (Ayers, 1985).



<Figure 2.23> Three round Delphi process (Skulmoski et al., 2007)

The number of iteration depends on the topic, characteristics, survey design, experts' consensus, and desired result. Some insist that two or three rounds are adequate for most of the research (Delbecq et al., 1975) and some assert three to five rounds are required (Kincaid, 2003). More than three rounds are necessary when consensus is hard to reach (Graham et al., 2003) due to a heterogeneous peculiarity of participants. The response rate, however, can be decreased by participants' commitment declines (Keil et al., 2002) as the number of rounds increases (Thomson, 1990). Researchers should consider practical factors about participants<sup>24</sup>)

<sup>24)</sup> Such as the nature of the sample whether heterogeneous or homogeneous; decision quality or Delphi manageability tradeoff; and internal or external verification.

and their expertise<sup>25</sup> (Adler and Ziglio, 1996).

The investigation technique is selected depending on the desired result. Some take a quantitative method (cf. Shook, 1994), and some adopt the qualitative one (cf. Watson, 1985) for the advantages such as producing holistic understandings of data (Jennifer, 1996), engaging in natural conversations with the participants (Creswell, 1994), interpreting the phenomena that the participants place (Creswell, 1998), and allowing for more participants to be involved (Brown, 2007a). A few research employ both techniques (cf. Rosenbaum, 1985) since the means that has quasi-experimental nature can work for the data collection gap as a bridge (Walker and Selfe, 1996).

Delphi method has strengths in developing the taxonomy of created knowledge (Nambisan et al., 1999) that does not exist yet (Czinkota and Ronkainen, 1997). The approach is advantageous when a group communication process for exploring assumptions and identifying different opinions is about to be structured (Turoff and Hiltz, 1996) as a tool for judgment, decision-aiding, or forecasting<sup>26</sup>) (Rowe and Wright, 1999). Things that the anonymous response format that blocks interact between each other (Hasson et al., 2000) and convenient participating of experts via electronic communication, are deemed as strengths (Steurer, 2011) and the technique is modified to reinforce them with the classical features<sup>27</sup>) (Rowe and Wright, 1999). On the other side, some indicate the difficulty of generalising results as a limitation. Brown (2007a) identified the practical barriers with four features - 1) coordinating the 'paper-trail' and keeping careful records, 2) the time between rounds and participants' interest, 3) structured process and flexibility, and 4) non-verbal clues to respondents' opinions.

- 26) For example, scientific breakthroughs, automation, space progress, population control, vehicle highway systems, industrial robots, economic trends, intelligent internet, broadband, impact of technology in diverse areas, education, war prevention, weapon systems, health, and sales of a new product.
- 27) Such as anonymity of participants; iteration; controlled feedback; and statistical aggregation of group response.

<sup>25)</sup> Such as knowledge and experience of the issue; capacity, willingness, and sufficient time to participate; and effective communication skills.

# 2.3 Findings

Three round iteration was performed with the panel, and the output of each phase was analysed and corrected by them. Regarding the development of the SSOSS, the major parties were picked up through the open coding (e.g. The NF is the most critical unit in both national and international sports). Their general relations were constructed by the axial coding (e.g. NFs and NOC has rapport), and the connection strength between the parties was considered by the selective coding (e.g. NFs and NOC has a strong affiliation). A number of experts' discussion, based on the firm foundation of the literature, was the original method to compose the ISSOSS, which consists of pillars, sub-pillars, variables and indicators.

### 2.3.1 Sustainable Structure of Sports System (SSOSS)

The structure of the sports system is understood by behaviours of the leading agents, the 'sports organisations', rather than individuals or policy-making groups. A sports organisation is "a social entity involved in the sports industry; it is goal-directed with a consciously structured activity system and a relatively identifiable boundary" (Slack and Parent, 2006). In this study, the nonprofit bodies in the private sector (the classical governing bodies) are focused than the for-profit and the public ones.

The components of the system have their unique facets and are linked with each other with complex networks on multi-dimensional levels. Some are being created by newly appeared necessities, and some lost their reasons for existence in rapidly changing circumstances. By standing on the basis, the demand to establish a sustainable structure has been persisted to study sports system in an endurable way.

The ultimate body of sports organisations was completed under the name of 'SSOSS'.

The biomimicry is maintained on the same nexus in long-term regardless of geographical challenges and chronological changes. The fundamental idea is that the NF is the core playing a pivotal role among sports organisations, and connect one another by linking their missions. It is accepted as a member of NOC under official recognition, and affiliated with and governed by its IF, which exercises a specific, real and on-going sports activity (IOC, 2014).

The sports galaxy was approached by the full frame at national and international levels by sorting multitudinous expectations of stakeholders (see <Figure 2.24>). It was studied based on 'governing level' including public, quasi-public, private or voluntary; and governmental, quasi-governmental or non-governmental groups.



<Figure 2.24> Stakeholders expectations concerning an NSO (Bayle and Madella, 2002)

The relationships had spread out based on the Graph theory, that is the study of graphs and the systems of nodes (or vertices, points) connected in pairs by edges (or arcs, lines) (i.e. an ordered pair comprising a set of nodes with a set of edges) (Barnes, 1969).

### 2.3.1.1. The SSOSS at the national level

The sports organisations at a national level can be considered with seven perspectives, which are NOC, Government, RSCs, RSFs, Clubs, NFOs and Domestic partners. Each group is

classified by the analysis of the organisation's primary role.

Firstly, the NFs and the NOC are the spines that maintain the whole national sports system (see <Figure 2.25>). The NFs work on positive lines with their sport under one umbrella organisation (i.e. the NOC) which is developing, promoting and protecting sports within a country<sup>28)</sup>. According to the Korea Sport and Olympic Committee, it is expressed that the NOC's mission is "to enhance and enrich the quality of life by encouraging people to participate in sports, to elevate international sports competitiveness by supporting the National Federations and training athletes, and to contribute towards the development and harmony of the Olympic Movement worldwide."29)

Secondly, every organisation cannot be free from the influence of government in the domestic area, so the NFs are also under the care through the NOC and the RSCs. The NOC and the RSCs closely cooperate with the Ministry of Sports (i.e. Government) and with their local government respectively by securing autonomy (see <Figure 2.26>). The Governmental organisations, not only the Ministry of Sports but other ministries, take responsibilities to serve nationals with their respective strengths for social development such as sports development, sports for development, and development through sports (see examples of the Ministries in the ROK, <Table 2.05>).

<sup>28)</sup> Refer in more detail to https://www.olympic.org/ioc-governance-national-olympic-committees. 29) Refer in more detail to http://www.sports.or.kr/home/020101/0000/main.do.









<Table 2.05> Main objective of the Ministries' being

No	Organisation	Major role <sup>30)</sup> (Refer in more detail to)
01	Ministry of	Creating outcomes from the Culture Creation Fusion Belt; supporting
	Culture,	next-generation core contents development; reinforcing the tourism industry
	Sports and	competitiveness; enlarging the sports industry market; cultivating potential
	Tourism	creative human resources; discovering and developing core creative human
		resources; establishing the creator-oriented virtuous cycle system; extending
		the day of culture; experiencing cultures in daily life; enhancing
		customer-oriented cultural welfare; globalizing Korean values; enlarging the
		global contact point through the Korean Wave; communicating with the
		world (http://www.mcst.go.kr/english/ministry/vision/vision.jsp)
02	Ministry of	Providing an impetus for resolving international problems; developing
	Foreign	relations and expanding cooperation with major neighbouring countries;
	Affairs	promoting peace; playing a role as a responsible middle power contributing
		to world peace and progress; protecting the safety and rights of nationals
		residing abroad; expanding both public diplomacy and jobs diplomacy;
		strengthening the capacity for economic cooperation
		(http://www.mofa.go.kr/ENG/ministry/tasks/index.jsp?menu=m_50_40)
03	Ministry of	Providing education for all students; raising intelligent learners for society;
	Education	creating a safe and pleasant school environment; enhancing educational
		competitiveness (http://english.moe.go.kr/web/1717/site/contents/en/en_0275.jsp)

04	Ministry of	Building a happy society for all; building social safety nets for a better
	Health and	tomorrow; taking a life course approach to a healthy life; supporting a
	Welfare	stable life after retirement
		(http://www.mohw.go.kr/eng/sg/ssg0102mn.jsp?PAR_MENU_ID=1001&MENU_ID=100102)
05	Ministry of	Protecting the national territory from threats of environmental pollution and
	Environment	improving the quality of life for the public so that the people can enjoy the
		ambient natural environment, clean water and clear skies; contributing the
		global efforts to protect our one and only earth; enactment and
		amendment of environmental laws and regulations; introduction to
		environmental institutions; building up framework structure for environmental
		administration; drafting and implementation of mid-long term comprehensive
		measures for environmental conservation; setting up standards for
		regulations; providing administrative and financial support for environmental
		management to local governments; environmental cooperation with other
		countries (http://eng.me.go.kr/eng/web/index.do?menuId=6&findDepth=1)

Thirdly, the NFs support both professional and amateur clubs. The Professional clubs or the professional sports (and their associations) are the commercial organisations which compete against others of them regularly. They attract media, sponsor and paying spectators, and give salary to athletes for their performance. The Amateur clubs (and their associations) are a group of players, which is sterlingly formed to play sports at Sport-for-all level. Some are well-systemized and seem to be semi-professional ones under the recognition of the NF, but a large number of them do not have enough interchange of ideas with their NF except a few communication through the RSFs and the RSCs. 'Club' indicates an amateur club in this research (see <Figure 2.27>).

Fourthly, the RSFs take care of clubs of the same sports in their respective regions and work in between them and their NFs as a bridge, moderator and sometimes mediator. They deliver guidelines and notices from the control tower of the sport (i.e. the NF) to grassroots level members (i.e. clubs), report words on the other way round, and aid the

<sup>30)</sup> Quoted from the official website of each ministry on Apr. 2015.

composition to share information one another (see <Figure 2.28>). The RSFs mostly name them 'Region X+Sport Y+Federation' (e.g. Seoul Football Federation).



Fifthly, the RSCs serve clubs and its aggregations (i.e. the RSFs) within each regional boundary. The RSCs communicate with the NFs mostly through the RSFs for management of the respective sports (see <Figure 2.29>). They take a membrane role in between the outside and the regional organisations, and a bridge role between sports governing bodies and the regional governmental organisations, such as city, canton or province, so that the various parties could actively perform their missions within the territory. The RSCs used to name them 'Region X+Sports Council' (e.g. Seoul Sports Council).



<Figure 2.29> Organisation classification from a perspective of the RSC

Sixthly, if the organisations mentioned above are regarded as the bones, the NFOs can be understood as muscles of the system, which help to maintain balance based on the national governing bodies and redeem shortcomings when necessary (see <Figure 2.30>). The NFs are connected with the NFOs to foster better sports environment by grafting the remarkable points in terms of age, gender, disability, region, sports level. The NFOs include not only official organisations but ones out of government recognition, and they fall into two categories: functional organisations which behave with their strengths to attain purposes (see examples of the NFOs in the ROK, <Table 2.06>), and just one of the national branches of its FO.

<table 2.06=""></table>	Main	objective	of	the	NFO's	being	(in	case	of	the	ROK)	l
-------------------------	------	-----------	----	-----	-------	-------	-----	------	----	-----	------	---

No	Organisation	Major role <sup>31)</sup> (Refer in more detail to)
01	International	Assisting national governmental bodies and sports organisations at all
	Sports	levels in their policy development and execution for sports diplomatic
	Relations	activities; dedicating to prepare and train individuals to become active
	Foundation	agents on the international sports stage; supporting career transition of
		retiring and retired athletes; promoting healthy international relationships at
		the individual and government levels through sports philanthropy;
		providing support for corporate social responsibility amongst its industry
		partners ( <u>http://www.i-sr.org)</u>
02	Korea Sports	Helping people maintain health and vitality through participation in sports
	Promotion	and leisure activities; performing the following functions: 1) provision of
	Foundation	financial support to promote national sports, and the raising and distribution
		of funds; 2) installing and supporting sports facilities, and fostering the
		sports industry; 3) research in sports science; 4) projects commemorating
		the 24th Olympic games held in Seoul; and 5) supporting projects related
		to the development of youth ( <u>http://english.kspo.or.kr/?menuno=349)</u>
03	Korea	Performing the following missions: 1) development of sports policies for
	Institute of	changes in the sports environment in the 21st century; 2) R&D and
	Sport	distribution of ways to improve national health; 3) research and support for
	Science	improving the competence of elite athletes in games; 4) research and
		support for cultivating the sports industry; 5) development and supply of
		sports information; 6) cultivation of athletic coaches and amateur sports

		leaders; and 7) cultivation of professionals in the sports industry									
		(http://www.sports.re.kr/global/content/introduction/mh.do)									
04	Next	1) Fostering student-athletes talents; teaching advanced skills and									
	Generation	improving athletic performance; 2) improving the international knowledge									
	Sports	of sports professionals; providing foreign language education; developing									
	Talent	participants' capacities as global leaders; 3) providing educational training									
		program for athletic coaches: preventing violence; protecting human rights									
		in sports; supporting a training system allowing coaches to learn									
		systematic and scientific methods of teaching as well as developing their									
		onsite capacities ( <u>http://nest.kspo.or.kr/eng/project.html)</u>									
05	Society for	Developing study and scientific/practical research; sharing knowledge of									
	Sport	sports management; facilitating an educational exchange of information,									
	Management	experience and techniques ( <u>http://www.kssm.or.kr/English/main/main.jsp)</u>									

Lastly, the 'domestic partners' have relationships with national sports bodies when there are one or more mutual supplementation needs (see <Figure 2.31>). Partner types and their roles are featured in detail at the Partner section in the SSOSS at the international level part. The main difference is the geographical working area.



<Figure 2.30> Organisation classification from a perspective of the NFO



<Figure 2.31> Organisation classification from a perspective of Domestic partner (D.Ps)

<sup>31)</sup> Quoted from the official website of each organisation on Apr. 2015.

Based on the logic mentioned above, the SSOSS at the national level is designed as described in <Figure 2.32> and their relations of inclusion are as arranged in <Figure 2.33>.



<Figure 2.32> The SSOSS at the national level

		Local Governments	
NOC	RSC 1	RSC 2	
	RSF 1 (sum of clubs)	RSF 1 (sum of clubs)	•••
NF 1	RSF 2 (sum of clubs)	RSF 2 (sum of clubs)	
	i	:	
	RSF 1 (sum of clubs)	RSF 1 (sum of clubs)	
NF 2	RSF 2 (sum of clubs)	RSF 2 (sum of clubs)	
	i	:	
NF 3		•••	•••
:		•••	•••

<Figure 2.33> Relationships among parties in the SSOSS at the national level<sup>32</sup>)

### 2.3.1.2. The SSOSS at the international level

The NFs work as essential and fundamental elements between two backbones called the IF and the NOC, and they determine the structure and functions of a sports system. The IFs are the "international non-governmental organisations administering one or several sports at world level and encompassing organisations administering such sports at (the) national level",

<sup>32)</sup> The blue box and the black box include parties under NOC and Local government governing level respectively.

and the NOCs are the independent organisations representing their respective countries that develop, promote and protect the Olympic Movement (IOC, 2014).

The SSOSS is operated by various network forms by locating NFs in the centre, together with other parties that support the NFs in diverse ways. If an organisation severs a link from the NFs, that is the case that the organisation loses the reason for existence in the system. The NF strongly bond with the NOC, the CANOC and the ANOC under the perspective of a country; and with the CFs, the IFs, and the GAISF under the sports perspective as described in <Figure 2.34>.

			GAISF											
		ASOIF							ARISF	AIMS				
					IF1			IF2						
			CF1			CF1								
			NF	NF										
		NOC1	NF	NF							•••			
	OCA													
		NOC2												
ANOC		:									•••			
	EOC	:												
	PASO	:									•••			
	ONOC	:									•••			
	ANOCA	:												

<Figure 2.34> Relationships among parties in the SSOSS at the international level

For example, the ROK for a country and Taekwondo for a sports, the KTA (Korea Taekwondo Association) has immediate relationship with the KSOC (Korean Sport & Olympic Committee), the OCA and the ANOC under the perspective of a country; and with the ATU (Asian Taekwondo Union), the WT (World Taekwondo), the ASOIF and the GAISF by stages under the sports perspective as shown in <Figure 2.35>.



<Figure 2.35> Fundamental chain of the sports system

Based on the fundamental understanding, every organisation at the international level can be considered with five perspectives: IF, NOC, EPRH, FO and Partner.

Firstly, the NFs are involved in their sports' CFs and IFs, but some NFs are connected to the IFs directly without the middle stage. The mission of the IFs that are international non-governmental organisations as administering sports is to keep the integrity of their sport at world level; conserve their independence and autonomy; manage and monitor the various sports disciplines; supervise the development of athletes at every level; ensures the promotion and development of the sport; monitor the sports; guarantee regular organisation of games (or competitions); respect the rules of fair play; and propose idea to the EPRHs (regarding charter, the Movement, games, congress, commissions).<sup>33)</sup> The IFs are categorised into four AIFCs by the recognition of the GAISF and the IOC as presented in <Figure 2.36>.

<sup>33)</sup> Adapted from the IOC, https://www.olympic.org/ioc-governance-international-sports-federations.



<Figure 2.36> Organisation classification from a perspective of the IF

Each phased group is classified by the analysis of the organisation's dominant role as presented in <Table 2.07>. The IFs in the ASOIF and the AIOWF are classified by the GAISF and the IOC from the perspective of the Olympic Games, and the others in the ARISF and the AIMS are grouped by the GAISF.

<Table 2.07> Main objective of the IF association's being

No	Organisation	Major role <sup>34)</sup> (Refer in more detail to)	
01	GAISF	A nonprofit association, composed of autonomous and independent 93	
		international sports federations and other international organisations	
		contributing to sports in various fields (http://www.sportaccord.com/)	
02	ASOIF	Serving,	28 Summer Olympic IFs ( <u>http://www.asoif.com/</u> )
03	AIOWF	promoting and	7 Winter Olympic IFs
		protecting the	(https://www.olympic.org/ioc-governance-international-spor
		common and	ts-federations)
04	ARISF		35 IFs recognised by GAISF and IOC
		collective	(http://www.arisf.org/)
05	AIMS	interests of the	23 IFs recognised by GAISF (http://aimsisf.org/)
06	CF	Serving, promoting and protecting the common and collective interests of	
		the NFs at a continental level within an IF	

<sup>34)</sup> Each note is adapted from the respective official website or statute on Apr. 2015.
The recognition year of the IFs as the GAISF member is as described in <Figure 2.37> and the details - official full name, its acronym, governing sport, established year, modern Olympic debut year, GAISF recognition year, and source of information - are presented in 'Appendix A' by categorising into the ASOIF, the AIOWF, the ARISF, and the AIMS.



<Figure 2.37> Recognition year as the GAISF member IFs

Secondly, NFs are involved in their NOC. The mission of the NOCs is to protect the Olympic Movement; promote the fundamental principles of Olympism; develop athletes; support the development of both sport for all and high performance; organise educational programmes and train sports administrators; ensure that athletes attend the Olympic Games; and supervise the preliminary selection of bid cities to choose a candidate one in their respective countries.<sup>35</sup>) All NOCs are categorised into five CANOCs by the geographical recognition from the ANOC and the IOC as presented in <Figure 2.38>.

<sup>35)</sup> Adapted from the IOC, https://www.olympic.org/ioc-governance-national-olympic-committees.



<Figure 2.38> Organisation classification from a perspective of the NOC

Each phased group is classified by the analysis of the organisation's dominant role as presented in <Table 2.08>. The NOCs in each CANOC are classified by the ANOC and the IOC.

No	Organisation	Major role <sup>36)</sup> (Refer in more detail to)			
01	ANOC	Serving, promoting and protecting the common and collective interests of			
		the whole 204 NOCs in the world (http://www.acnolympic.org/)			
02	EOC	Serving, promoting	49 Europe NOCs (http://www.eurolympic.org/en/)		
03	OCA	and protecting the	44 Asia NOCs (http://www.ocasia.org/)		
04	PASO	and protecting the	41 America NOCs (http://www.paso-odepa.org/en/)		
05	ONOC	common and 17 Oceania NOCs (http://oceanianoc.org/)			
06	ANOCA	collective interests 53 Africa NOCs			
		of the ( <u>http://www.africaolympic.net/en/home/)</u>			

<Table 2.08> Main objective of the NOC association's being

The recognition year of the NOCs as the IOC member is as described in <Figure 2.39> and the details - country name, its code, NOC name, IOC recognition date, number of Olympic Games hosted, source of information - are presented in 'Appendix B' by categorising into the EOC, the OCA, the PASO, the ONOC and the ANOCA.

<sup>36)</sup> Each note is adapted from the respective official web site or statute on Apr. 2015.



<Figure 2.39> Recognition year as the IOC member NOCs

Thirdly, the NFs involved in both a sport's IF and a country's NOC work as the particles of international multi-sports events. The EPRHs provide their multi-sports event platform to the chosen IFs and NOCs, and strictly supervise the quality, shareholders and participants (McGillivray, 2016). It collaborates with the TOs for a specific event (or meeting, game) within a specific period as presented in <Figure 2.40>.



<Figure 2.40> Organisation classification from a perspective of the EPRH and the TO

The outstanding EPRHs are as presented in <Table 2.09> by the analysis of the organisation's dominant role. The IOC, for instance, proclaims that "the mission of the IOC is to promote Olympism throughout the world and to lead the Olympic Movement" (IOC, 2017).

No	Name of EPRH	Major role <sup>37)</sup> (Refer in more detail to)
01	International Olympic	Organising (summer and winter) Olympic Games and
	Committee	(summer and winter) YOG
		(https://www.olympic.org/the-ioc)
02	International Paralympic	Organising (summer and winter) Paralympic Games
	Committee	(https://www.paralympic.org/)
03	International University Sports	Organising (summer and winter) Universiades and
	Federation	World University Championships
		(http://www.fisu.net/en/International-university-sports-federa
		tion-3137.html)
04	International World Games	Organising the World Games
	Association	(http://www.theworldgames.org/)
05	International School Sport	Organising the Pan-American School Games and the
	Federation	World Schools Athletics Championships
		(http://www.isfsports.org/)
06	International Sports Federation	Organising the FISEC Summer Games as an
	for Catholic Schools (FISEC)	international school sports organisation with a Catholic
		signature ( <u>http://www.fisec.org/)</u>
07	International Workers and	Organising the CSIT World Sports Games

## <Table 2.09> Main objective of the EPRH's being

	Amateurs in Sports	(http://www.csit.tv/en/4)
	Confederation (CSIT)	
08	International Military Sports	Organising the (summer and winter) Military World
	Council	Games and Military World Championships
		(http://www.milsport.one/)
09	Union Sportive Internationale	Organising the World Police Championships
	des Polices	(http://internationalpolicesports.com/)
10	Committee of the International	Organising the International Children's Games
	Children's Games	(http://international-childrens-games.org/icg/)
11	International Masters Games	Organising the World Masters Games (https://imga.ch/)
	Association	
12	International Committee of	Organising the Deaflympics (previously called World
	Sports for the Deaf	Games for the Deaf) ( <u>http://www.ciss.org/)</u>
13	Special Olympics	Organising the (summer and winter) Special Olympics
		World Games (http://www.specialolympics.org/)
14	International Mind Sports	Organising the World Mind Sports Games
	Association	(http://www.imsaworld.com/wp/)
15	Organización Deportiva	Organising the South American Games, South American
	Suramericana	Beach Games and South American Youth Games as
		the association of NOCs of South America
		(http://www.odesur.org/?lang=en)
16	Central American and	Organising the Central American and Caribbean Games
	Caribbean Sports Organisation	(http://www.ttoc.org/index.php; Alternative source)
17	International Committee of	Organising the Mediterranean Games
	Mediterranean Games	(http://www.cijm.org.gr/en)
18	Commonwealth Games	Organising the Commonwealth Games
	Federation	(https://www.thecgf.com/)
19	Organización Deportiva	Organising the Central American and Caribbean Games
	Centroamericana y Caribe	(http://www.odecabe.org/)

The typical TOs are as presented in <Table 2.10> by the analysis of the organisation's dominant role. The mission of the Organising Committees of the Olympic Games, for example, is to cover every area where the Olympic Games organised (IOC, 2017).

<sup>37)</sup> Each note is adapted from the respective official web site or statute on Apr. 2015.

No	Name of TO <sup>38)</sup>	Major role	Source
01	Bid Committee	Working for games	e.g. Paris, the Candidate city of Olympic Games
		bidding	2024; on Jul. 2017; <u>http://www.paris2024.org/en</u> )
02	Organising	Working for games	e.g. PyeongChang 2018 Winter Olympic Games;
	Committee	organising	on Jul. 2017;
			https://www.pyeongchang2018.com/en/index)
03	Evaluation	Working for games	https://www.pyeongchang2018.com/en/index) e.g. IOC;
03	Evaluation Commission	Working for games evaluating	https://www.pyeongchang2018.com/en/index) e.g. IOC; https://www.olympic.org/evaluation-commission
03	Evaluation Commission Coordination	Working for games evaluating Working for games	https://www.pyeongchang2018.com/en/index) e.g. IOC; https://www.olympic.org/evaluation-commission e.g. IOC;

<Table 2.10> Main objective of the TO's being

Fourthly, the FOs are formed to accomplish good governance by establishing and linking their forte with various sports governing bodies. The intricate structure is based on mutual necessities and makes the system diversified. They resemble the NFOs in terms of conformation and responsibility but act on the international stage as independent institutes or umbrella organisations taking care of their national branches as presented in <Figure 2.41>.



<Figure 2.41> Organisation classification from a perspective of the FO

<sup>38)</sup> The terms of 'Committee' and 'Commission' are brought from the field without academic definitions and strict consideration with their difference since its discussion is far from the major purpose of the research.

The active FOs are presented in <Table 2.11> by the analysis of the organisation's dominant role. For example, the WADA works "to lead a collaborative worldwide movement for doping-free sport" under the vision, "A world where all athletes can compete in a doping-free sporting environment".<sup>39)</sup>

No	Organisation	Major role <sup>40)</sup> (Refer in more detail to)
01	International Federation of	Working as a network of a number of countries which aims
	Physical Education	to share information and disseminate resources on physical
		education and sports ( <u>http://www.fiepeurope.eu/</u> )
02	International Sport for All	Managing, planning, organising and directing sports for all
	Federation	to form a broad base of practitioners of the sports activities
		(http://www.fispt.net/)
03	Association for International	Promoting and facilitating access for every person to Sport
	Sport for All	for All and physical activity (http://www.tafisa.net/)
04	World Transplant Games	Demonstrating the benefits of organ transplantation, working
	Federation	to increase its public awareness and promoting participants'
		rehabilitation and wellbeing ( <u>http://wtgf.org/)</u>
05	International Olympic	Studying, enriching and promoting Olympism as a global
	Academy	institute ( <u>http://www.ioa.org.gr/</u> )
06	International Pierre de	Ensuring Pierre de Coubertin's ideals remained at the
	Coubertin Committee	philosophy of the Olympic Games and organising the Pierre
		de Coubertin forum (http://coubertin.org/pages/en/news.html)
07	International Committee for	Fostering sportsmanship in international competition and
	Fair Play	presenting awards at the World Fair Play Awards to recognise
		fair play acts (http://www.fairplayinternational.org/home)
08	International Council for	Organising world congress, regional congress, regional
	Health, Physical Education,	leadership conference, world forum, leadership
	Recreation, Sport and	conferences/session; and publishing the ICHPER•SD
	Dance (ICHPER•SD)	Journal of Research, world congress proceedings, regional
		congress proceedings, position papers and resolutions
		(http://www.ichpersd.org/)
09	Pan-Iberic Association of	Providing sports-related education to the countries in the
	Olympic Academies	Iberian Peninsula (Mallon and Heijmans, 2010)

<table 2.11=""> Main objective of the FO's beir</table>	١g
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39) Refer in more detail to https://www.wada-ama.org/en/who-we-are.

10	International Association for	Promoting non-violent in sports
	Non-Violent Sport	(http://www.uia.org/s/or/en/1100037715)
11	International Council of	Making scientific knowledge of sports and applying its
	Sport Science and Physical	results in the field of sports, physical activity and physical
	Education	education (https://www.icsspe.org/)
12	International Federation of	Assisting athletes in achieving optimal performance of
	Sports Medicine (FIMS)	genetic potential, health, nutrition, medical care and
		training; and organising the FIMS Sports Medicine
		Congress (http://www.fims.org/about/)
13	International Association for	Creating a platform for construction and management of
	Sports and Leisure Facilities	sports and leisure facilities; and establishing standards and
		guidelines for sports and leisure facilities (http://www.iaks.org/)
14	World Federation of the	Supporting and promoting the sporting goods industry by
	Sporting Goods Industry	providing the platform that the members forge their
		cooperation tools to promote fair trade (http://www.wfsgi.org/)
15	International Sports Press	Working as an association of National Sports Journalists'
	Association	Associations (http://www.aipsmedia.com/)
16	Federation Internationale du	Encouraging the values of the Sports Movement through
	Cinéma et Télévision	two mass-communication media, television and cinema
	Sportifs	(http://www.sportmoviestv.com/en/)
17	Sportifs International Association for	(http://www.sportmoviestv.com/en/) Bringing together experts in sports information and
17	Sportifs International Association for Sports Information	(http://www.sportmoviestv.com/en/) Bringing together experts in sports information and communication, generating information, and transferring
17	Sportifs International Association for Sports Information	(http://www.sportmoviestv.com/en/) Bringing together experts in sports information and communication, generating information, and transferring knowledge to sports practice
17	Sportifs International Association for Sports Information	(http://www.sportmoviestv.com/en/) Bringing together experts in sports information and communication, generating information, and transferring knowledge to sports practice (http://sportperformancecentres.org/news/iasi-international-ass
17	Sportifs International Association for Sports Information	(http://www.sportmoviestv.com/en/) Bringing together experts in sports information and communication, generating information, and transferring knowledge to sports practice (http://sportperformancecentres.org/news/iasi-international-ass ociation-sport-information)
17 18	Sportifs International Association for Sports Information World Olympians Association	(http://www.sportmoviestv.com/en/) Bringing together experts in sports information and communication, generating information, and transferring knowledge to sports practice (http://sportperformancecentres.org/news/iasi-international-ass ociation-sport-information) Supporting Olympians all over the world (http://olympians.org/) Dramating the Olympia ideals, capting pages and friendship
17 18 19	Sportifs International Association for Sports Information World Olympians Association International Olympic Truce	(http://www.sportmoviestv.com/en/) Bringing together experts in sports information and communication, generating information, and transferring knowledge to sports practice (http://sportperformancecentres.org/news/iasi-international-ass ociation-sport-information) Supporting Olympians all over the world (http://olympians.org/) Promoting the Olympic ideals, serving peace and friendship,
17 18 19	Sportifs International Association for Sports Information World Olympians Association International Olympic Truce Foundation (and its institute,	(http://www.sportmoviestv.com/en/) Bringing together experts in sports information and communication, generating information, and transferring knowledge to sports practice (http://sportperformancecentres.org/news/iasi-international-ass ociation-sport-information) Supporting Olympians all over the world (http://olympians.org/) Promoting the Olympic ideals, serving peace and friendship, cultivating international understanding, upholding the
17 18 19	Sportifs International Association for Sports Information World Olympians Association International Olympic Truce Foundation (and its institute, International Olympic Truce	(http://www.sportmoviestv.com/en/) Bringing together experts in sports information and communication, generating information, and transferring knowledge to sports practice (http://sportperformancecentres.org/news/iasi-international-ass ociation-sport-information) Supporting Olympians all over the world (http://olympians.org/) Promoting the Olympic ideals, serving peace and friendship, cultivating international understanding, upholding the observance of the Olympic Truce, and calling for all
17 18 19	Sportifs International Association for Sports Information World Olympians Association International Olympic Truce Foundation (and its institute, International Olympic Truce Centre)	(http://www.sportmoviestv.com/en/) Bringing together experts in sports information and communication, generating information, and transferring knowledge to sports practice (http://sportperformancecentres.org/news/iasi-international-ass ociation-sport-information) Supporting Olympians all over the world (http://olympians.org/) Promoting the Olympic ideals, serving peace and friendship, cultivating international understanding, upholding the observance of the Olympic Truce, and calling for all hostilities to cease during the Olympic Games and beyond
17 18 19	Sportifs International Association for Sports Information World Olympians Association International Olympic Truce Foundation (and its institute, International Olympic Truce Centre)	(http://www.sportmoviestv.com/en/) Bringing together experts in sports information and communication, generating information, and transferring knowledge to sports practice (http://sportperformancecentres.org/news/iasi-international-ass ociation-sport-information) Supporting Olympians all over the world (http://olympians.org/) Promoting the Olympic ideals, serving peace and friendship, cultivating international understanding, upholding the observance of the Olympic Truce, and calling for all hostilities to cease during the Olympic Games and beyond (http://www.olympictruce.org/index.php?lang=en)
17 18 19 20	Sportifs International Association for Sports Information World Olympians Association International Olympic Truce Foundation (and its institute, International Olympic Truce Centre) International Federation	(http://www.sportmoviestv.com/en/) Bringing together experts in sports information and communication, generating information, and transferring knowledge to sports practice (http://sportperformancecentres.org/news/iasi-international-ass ociation-sport-information) Supporting Olympians all over the world (http://olympians.org/) Promoting the Olympic ideals, serving peace and friendship, cultivating international understanding, upholding the observance of the Olympic Truce, and calling for all hostilities to cease during the Olympic Games and beyond (http://www.olympictruce.org/index.php?lang=en) Standardising the timekeeping systems used in the various
17 18 19 20	Sportifs International Association for Sports Information World Olympians Association International Olympic Truce Foundation (and its institute, International Olympic Truce Centre) International Federation Timekeepers	(http://www.sportmoviestv.com/en/) Bringing together experts in sports information and communication, generating information, and transferring knowledge to sports practice (http://sportperformancecentres.org/news/iasi-international-ass ociation-sport-information) Supporting Olympians all over the world (http://olympians.org/) Promoting the Olympic ideals, serving peace and friendship, cultivating international understanding, upholding the observance of the Olympic Truce, and calling for all hostilities to cease during the Olympic Games and beyond (http://www.olympictruce.org/index.php?lang=en) Standardising the timekeeping systems used in the various countries and the IFs to give them a common direction ever
17 18 19 20	Sportifs International Association for Sports Information World Olympians Association International Olympic Truce Foundation (and its institute, International Olympic Truce Centre) International Federation Timekeepers	(http://www.sportmoviestv.com/en/) Bringing together experts in sports information and communication, generating information, and transferring knowledge to sports practice (http://sportperformancecentres.org/news/iasi-international-ass ociation-sport-information) Supporting Olympians all over the world (http://olympians.org/) Promoting the Olympic ideals, serving peace and friendship, cultivating international understanding, upholding the observance of the Olympic Truce, and calling for all hostilities to cease during the Olympic Games and beyond (http://www.olympictruce.org/index.php?lang=en) Standardising the timekeeping systems used in the various countries and the IFs to give them a common direction ever closer to the requirements of the different sports disciplines
17 18 19 20	Sportifs International Association for Sports Information World Olympians Association International Olympic Truce Foundation (and its institute, International Olympic Truce Centre) International Federation Timekeepers	(http://www.sportmoviestv.com/en/) Bringing together experts in sports information and communication, generating information, and transferring knowledge to sports practice (http://sportperformancecentres.org/news/iasi-international-ass ociation-sport-information) Supporting Olympians all over the world (http://olympians.org/) Promoting the Olympic ideals, serving peace and friendship, cultivating international understanding, upholding the observance of the Olympic Truce, and calling for all hostilities to cease during the Olympic Games and beyond (http://www.olympictruce.org/index.php?lang=en) Standardising the timekeeping systems used in the various countries and the IFs to give them a common direction ever closer to the requirements of the different sports disciplines (http://www.ficinternational.org/INGLESE/doc/statutes_FIC.pdf)
17 18 19 20 21	Sportifs International Association for Sports Information World Olympians Association International Olympic Truce Foundation (and its institute, International Olympic Truce Centre) International Federation Timekeepers	(http://www.sportmoviestv.com/en/) Bringing together experts in sports information and communication, generating information, and transferring knowledge to sports practice (http://sportperformancecentres.org/news/iasi-international-ass ociation-sport-information) Supporting Olympians all over the world (http://olympians.org/) Promoting the Olympic ideals, serving peace and friendship, cultivating international understanding, upholding the observance of the Olympic Truce, and calling for all hostilities to cease during the Olympic Games and beyond (http://www.olympictruce.org/index.php?lang=en) Standardising the timekeeping systems used in the various countries and the IFs to give them a common direction ever closer to the requirements of the different sports disciplines (http://www.ficinternational.org/INGLESE/doc/statutes_FIC.pdf)

22	Right to Play	Educating and empowering children and youth to overcome
		the effects of poverty, conflict and disease by using the
		transformative power of sports, play and games
		(http://www.righttoplay.com/Pages/default.aspx)
23	Generations for Peace	Empowering youth to lead and cascade sustainable change
		in communities; peace-building with sport, art, advocacy
		and dialogue (http://www.generationsforpeace.org/en/)
24	Office of the Permanent	Participating as an observer in the sessions and the
	Observer for the IOC to the	General Assembly of the UN
	UN	(https://www.olympic.org/cooperation-with-the-un)
25	Court of Arbitration for Sport	Facilitating the resolution of sports-related disputes through
	(CAS) (and International	arbitration or mediation, and safeguard the independence of
	Council of Arbitration for	CAS and the rights of the parties
	Sport)	(http://www.tas-cas.org/en/index.html)
26	World Anti-Doping Agency	Promoting and coordinating the fight against doping in
		sports internationally ( <u>https://www.wada-ama.org/</u> )
27	Federation Internationale de	Promoting sports chiropractic around the world
	Chiropratique du Sport	(https://www.fics-sport.org/portal/index.php/en/)
28	International Wheelchair &	Governing the Wheelchair sports
	Amputee Sports Federation	(http://www.iwasf.com/iwasf/)
29	International Non-Olympic	Promoting Non-Olympic Games Internationally
	<b>A</b> 111	(http://www.pop.olympic.org/)
	Committee	(nup.//www.non-orympic.org/)
30	Fondation Internationale	Organising programmes of social development through
30	Committee Fondation Internationale OLYMPAFRICA	Organising programmes of social development through sports in Africa (Alternative source:
30	Committee Fondation Internationale OLYMPAFRICA	Organising programmes of social development through sports in Africa (Alternative source: http://www.sportcal.com/News/PressReleases/1032?size=100)
30 31	Committee Fondation Internationale OLYMPAFRICA European Non-Governmental	Organising programmes of social development through sports in Africa (Alternative source: <a href="http://www.sportcal.com/News/PressReleases/1032?size=100">http://www.sportcal.com/News/PressReleases/1032?size=100</a> ) Promoting the interests of sports organisations in Europe
30 31	Committee Fondation Internationale OLYMPAFRICA European Non-Governmental Sports Organisation	Organising programmes of social development through sports in Africa (Alternative source: <u>http://www.sportcal.com/News/PressReleases/1032?size=100)</u> Promoting the interests of sports organisations in Europe and working as the European umbrella organisation of the
30	Committee Fondation Internationale OLYMPAFRICA European Non-Governmental Sports Organisation	(http://www.hoh-olympic.org/)         Organising programmes of social development through sports in Africa (Alternative source:         http://www.sportcal.com/News/PressReleases/1032?size=100)         Promoting the interests of sports organisations in Europe and working as the European umbrella organisation of the NFs and the NOCs (http://www.engso.eu/)
30 31 32	Committee Fondation Internationale OLYMPAFRICA European Non-Governmental Sports Organisation European College of Sport	(http://www.hoh-olympic.org/)         Organising programmes of social development through sports in Africa (Alternative source:         http://www.sportcal.com/News/PressReleases/1032?size=100)         Promoting the interests of sports organisations in Europe and working as the European umbrella organisation of the NFs and the NOCs (http://www.engso.eu/)         Promoting science and research, with special attention to
30 31 32	Committee Fondation Internationale OLYMPAFRICA European Non-Governmental Sports Organisation European College of Sport Science	(http://www.hoh-olympic.org/)Organising programmes of social development throughsports in Africa (Alternative source:http://www.sportcal.com/News/PressReleases/1032?size=100)Promoting the interests of sports organisations in Europeand working as the European umbrella organisation of theNFs and the NOCs (http://www.engso.eu/)Promoting science and research, with special attention tothe interdisciplinary fields of sports science and sports
30 31 32	Committee Fondation Internationale OLYMPAFRICA European Non-Governmental Sports Organisation European College of Sport Science	(http://www.hoh-olympic.org/)Organising programmes of social development throughsports in Africa (Alternative source:http://www.sportcal.com/News/PressReleases/1032?size=100)Promoting the interests of sports organisations in Europeand working as the European umbrella organisation of theNFs and the NOCs (http://www.engso.eu/)Promoting science and research, with special attention tothe interdisciplinary fields of sports science and sportsmedicine; and organising annual scientific congresses that
30 31 32	Committee Fondation Internationale OLYMPAFRICA European Non-Governmental Sports Organisation European College of Sport Science	(http://www.hoh-olympic.org/)Organising programmes of social development throughsports in Africa (Alternative source:http://www.sportcal.com/News/PressReleases/1032?size=100)Promoting the interests of sports organisations in Europeand working as the European umbrella organisation of theNFs and the NOCs (http://www.engso.eu/)Promoting science and research, with special attention tothe interdisciplinary fields of sports science and sportsmedicine; and organising annual scientific congresses thatprovide a networking platform to share knowledge
30 31 32	Committee Fondation Internationale OLYMPAFRICA European Non-Governmental Sports Organisation European College of Sport Science	Organising programmes of social development through sports in Africa (Alternative source: http://www.sportcal.com/News/PressReleases/1032?size=100)         Promoting the interests of sports organisations in Europe and working as the European umbrella organisation of the NFs and the NOCs (http://www.engso.eu/)         Promoting science and research, with special attention to the interdisciplinary fields of sports science and sports medicine; and organising annual scientific congresses that provide a networking platform to share knowledge (http://sport-science.org/)
30 31 32 33	Committee Fondation Internationale OLYMPAFRICA European Non-Governmental Sports Organisation European College of Sport Science European Association for	(http://www.hoh-olympic.org/)Organising programmes of social development throughsports in Africa (Alternative source:http://www.sportcal.com/News/PressReleases/1032?size=100)Promoting the interests of sports organisations in Europeand working as the European umbrella organisation of theNFs and the NOCs (http://www.engso.eu/)Promoting science and research, with special attention tothe interdisciplinary fields of sports science and sportsmedicine; and organising annual scientific congresses thatprovide a networking platform to share knowledge(http://sport-science.org/)Promoting, encouraging, disseminating and developing
30 31 32 33	Committee Fondation Internationale OLYMPAFRICA European Non-Governmental Sports Organisation European College of Sport Science European Association for Sport Management	(http://www.hoh-olympic.org/)Organising programmes of social development throughsports in Africa (Alternative source:http://www.sportcal.com/News/PressReleases/1032?size=100)Promoting the interests of sports organisations in Europeand working as the European umbrella organisation of theNFs and the NOCs (http://www.engso.eu/)Promoting science and research, with special attention tothe interdisciplinary fields of sports science and sportsmedicine; and organising annual scientific congresses thatprovide a networking platform to share knowledge(http://sport-science.org/)Promoting, encouraging, disseminating and developingstudies, scientific/practical researches and scholarly writings
30 31 32 33	Committee         Fondation Internationale         OLYMPAFRICA         European Non-Governmental         Sports Organisation         European College of Sport         Science         European Association for         Sport Management	(http://www.hon-olympic.org/)Organising programmes of social development throughsports in Africa (Alternative source:http://www.sportcal.com/News/PressReleases/1032?size=100)Promoting the interests of sports organisations in Europeand working as the European umbrella organisation of theNFs and the NOCs (http://www.engso.eu/)Promoting science and research, with special attention tothe interdisciplinary fields of sports science and sportsmedicine; and organising annual scientific congresses thatprovide a networking platform to share knowledge(http://sport-science.org/)Promoting, encouraging, disseminating and developingstudies, scientific/practical researches and scholarly writingson sports management; facilitating the educational
30 31 32 33	Committee Fondation Internationale OLYMPAFRICA European Non-Governmental Sports Organisation European College of Sport Science European Association for Sport Management	(http://www.non-olympic.org/)Organising programmes of social development throughsports in Africa (Alternative source:http://www.sportcal.com/News/PressReleases/1032?size=100)Promoting the interests of sports organisations in Europeand working as the European umbrella organisation of theNFs and the NOCs (http://www.engso.eu/)Promoting science and research, with special attention tothe interdisciplinary fields of sports science and sportsmedicine; and organising annual scientific congresses thatprovide a networking platform to share knowledge(http://sport-science.org/)Promoting, encouraging, disseminating and developingstudies, scientific/practical researches and scholarly writingson sports management; facilitating the educationalexchange of information, experience and techniques

	(http://www.easm.net/)
34 North American Society for	Promoting, stimulating, and encouraging the study,
Sport Management	research, scholarly writing, and professional development in
	the area of sports management (https://www.nassm.com/)

Lastly, the NFs are connected with Partners<sup>41)</sup> on exclusive rights to foster better sports environment by grafting the strong points in terms of communication, promotion, financial condition, equipment supply. The Partners are extensively linked to particular parties in the structure according to their necessities as presented in <Figure 2.42>.



<Figure 2.42> Organisation classification from a perspective of the Partners (Ptnr)

The active partner types are presented in <Table 2.12> by the analysis of the organisation's dominant role. For example, the IOC is privately funded, and manages the sales of rights - media, sponsorship, supplier and licensing<sup>42</sup>).

<sup>40)</sup> Each note is adapted from the respective official web site or statute on Apr. 2015.

<sup>41)</sup> In this study, the Partners include commercial (or for-profit) organisations that are closely connected with athletes and the NPOs.

<sup>42)</sup> Refer in more detail to https://www.olympic.org/ioc-financing-revenue-sources-distribution.

<table< th=""><th>2.12&gt;</th><th>Main</th><th>objective</th><th>of</th><th>the</th><th>Partners'</th><th>being</th></table<>	2.12>	Main	objective	of	the	Partners'	being
--	-------	------	-----------	----	-----	-----------	-------

No	Organisation	Major role43) (Refer in more detail to)	
01	Broadcaster	On media of television, radio, mobile and internet platforms, being the	
		principal driver of the 1) funding of the Olympic Movement and the games;	
		2) growth of the global popularity; and 3) global representation and	
		promotion of the Olympic Movement, games and values	
		(https://www.olympic.org/sponsors)	
02	Sponsor	Supporting the Olympic Family from the business community; generating	
		revenue by the commercial partnership; and providing vital technical	
		services (https://www.olympic.org/broadcasters)	
03	Supplier	Providing critical areas of support, tangible or intangible services, and	
		products for the game's operations ( <u>https://www.olympic.org/suppliers</u> )	

Based on the phased logic, the SSOSS at the international level is understood as described in <Figure 2.43>.



<Figure 2.43> The SSOSS at the international level

## 2.3.1.3. The SSOSS at the comprehensive level

<sup>43)</sup> Each note is adapted from the respective official web on Apr. 2015.

The number of sports organisations is increasing as they are earning more powerful attractiveness. So the sports system has become an unconventional framework. The organisations classified into each group can be considered to be located in two or more groups according to the recognition of their dominant role, and migration between groups can be made if their acting is shifted or understood differently.

The comprehensive understanding of the SSOSS that combines the national and the international level is the first eventual finding of the Study 1 (see <Figure 2.44>). As the sports system is getting extended and more complex, it is compulsory for researchers and practitioners to focus on each organisation's dominant role, the ultimate goal, and their relationships, by examining whether a certain one is fundamental to another or the one cannot be imagined without the other.



<Figure 2.44> The SSOSS

## 2.3.2 Index for Sustainable Structure of Sports System (ISSOSS)

The ISSOSS is the precise index constructed on the SSOSS frame that measures the degree of success of nations' sports movement. It comprehends the sports development (or

national sports state) with the balanced tripodal perspectives, which are 1) the NFs, 2) the national level parties, and 3) the international level parties as described in <Figure 2.45>. Those subindices cover from the nature of vision and value (root level) to output and performance (fruit level).



<Figure 2.45> The ISSOSS with subindices

The specific parties that consist of each subindex and their concise relations are expressed as 'Practical SSOSS', described in <Figure 2.46>. The structure possesses fewer organisations comparing to the original one due to focusing on the salient governing bodies for index utilisation. The parties crashed out of the structure are Club, Partner (and Domestic partner), FO (and NFO), GAISF, AIFC and TO.

The Professional clubs are managed more like corporations under a market-driven system, and the amateur clubs are organised by spontaneous formation with their various purposes and scale. The Partners (and the Domestic Partners) and the Functional Organisations (and the NFOs) are requisite supporters for market growth but not ultimate sports governing bodies, which are hard to be laid under uniform principles. The GAISF and the AIFC are beyond the IF, which should be considered under different evaluation index designed from

the IF angle. The TOs are protean to define in a standardised way and demand to respect the events' inherent character game by game depending on cultural and societal background of host city (and country), needs of the times, and individual sport's peculiarity (especially in case of events that belong to the IF such as the World Championship or the World Cup).

The critical themes rendered by 'Literature review' - Value, Decision-maker, Strategic management, Governance, and Network - were considered as the cornerstone in composing the ISSOSS. To put it concretely, the sports consumers (including partially or fully involved, directly or indirectly related ones) are 'Value' itself since they are the reason of sports' existence, the main agent of sports phenomenon and the core purpose of benefits. It was respected in the Human Resource Management part in Subindex 1 and 2. The others were held in high estimation: 'Decision-maker' at the Human Resource Management part in Subindex 1 and 2 (sub-pillars of Board member, Committee member, Staff), 'Strategic management' at the Governance Resource Management part in Subindex 1 and 2 (a sub-pillar of Strategy), 'Governance' at the Governance Resource Management part in Subindex 1 and 2 (sub-pillars of Business and Finance), and 'Network' at both Governance Resource Management part in Subindex 1 and 2 (a sub-pillar of Relations) and entire Subindex 2-4 and 3.



<Figure 2.46> The Practical SSOSS and three Subindices

The first subindex is the guidelines for the core organisations (i.e. the NFs). It is comprised of two pillars - the Human Resource Management and the Governance Resource Management. The first pillar is all about care for persons and shareholders - 1) athlete (both elite level athletes and sport-for-all level players); 2) coach; 3) referee; 4) board member (president; vice-president; member); 5) committee member (chair; member); 6) staff (administrative staff; field staff); 7) entourage; 8) volunteer; and 9) spectator. The sub-pillars are considered through five standpoints - Parity, Transparency, Protection, Education, Performance. Under the operational definition in this paper, the Human Resource Management is understood as the unwavering support for embracing performers and dedicating to their well-being because sports is all about for the people and by the people regardless of time and space in any case. The second pillar is about successful management of sports organisations, comprised of four significant sub-pillars - 1) strategy (direction, inspection); 2) business (information; operation; communication; event); 3) finance (accounting; budget); and 4) relations (with RSC, RSF, Partner).

The second subindex focuses on four major national parties - NOC, RSC, RSF and Government. The constituents of NOC, RSC and RSF are similar to the ones of the NF (Subindex 1) because of their common roles and responsibilities as sports governing bodies. The Government (Subindex 2-4) has different pillars - Ministry of Sports (Relations with NOC), other governmental organisations (Relations with Ministry of Education; Ministry of Health; Ministry of Foreign Affairs; and Ministry of Environment), and Local governments (Relations with RSC). The variables of the pillars examine how well the governmental bodies support the NOC for sustainable development of sports.

The third subindex focuses on three major international parties - Sporting relations (Relations with IF and CF), Geographical relations (Relations with ANOC and CANOC), and Relations with EPRH. Each pillar is mainly composed of two variables, Membership and Partnership (see the entire index tree in <Figure 2.47>).



<Figure 2.47> Structure of the ISSOSS

Each subindex emphasises selecting mutually exclusive domains and collectively exhaustive indicators. The indicators are measurable to present the state of affairs quantitatively. They are answerable with 'Yes' or 'No' on the evidence-based facts, not perceived degree predicted from surveys. The ISSOSS, which is the second eventual finding of the Study 1, is composed of 427 questions as described in <Table 2.13>. The Delphi panel determined the weight for each subindex, saying that the gap should not be over 5 per cent to keep them balanced.

The evaluation is performed in two steps: 1) sum of each subindex and 2) calculation of values under the following formula. The values in each subindex of 1 (NFs), 2-2 (RSCs), and 2-3 (RSFs) indicate the number of relevant organisations.

Final value = Subindex 1 value (NF)\*0.2 (weight) + Subindex 2-1 value (national level\_NOC)\*0.15 (weight) + Subindex 2-2 value (national level\_RSC)\*0.15 (weight) + Subindex 2-3 value (national level\_RSF)\*0.15 (weight) + Subindex 2-4 value (national level\_Government)\*0.15 (weight) + Subindex 3 value (international level)\*0.2 (weight) =

 $\frac{\sum NF values}{No. of indicators * No. of NFs} * 100 * 0.2 + \frac{\sum NOC values}{No. of indicators} * 100 * 0.15 + \frac{\sum RSC values}{No. of indicators * No. of RSCs} * 100 * 0.15 + \frac{\sum RSF values}{No. of indicators * No. of RSCs} * 100 * 0.15 + \frac{\sum RSF values}{No. of indicators} * 100 * 0.15 + (\frac{\sum NF values}{No. of indicators} * 100 * 0.15 + (\frac{\sum NF values}{No. of NFs} * 100 + \frac{\sum NOC values}{No. of indicators} * 100) * 0.2$ 

Subind	Subindex 1. NF				
Pillar	Sub-p illar	Variable	Indicator	Note	
1.Hu	1.Athl	1.Parity	1. 1. 1. 1 The NF has gender parity in national level athletes.	The standard of parity is 30 per cent or more.	
man resou rce mana	ete		1. 1. 1. 2 The NF has a committee for women.	-	
			1. 1. 1. 3 The NF has a committee for the people in need.	'The people in need' is also called as the disabled, paralysed, impaired, challenged or differently abled people.	
nt		2.Transpar ency	1. 1. 2. 1 The NF presents the number of athletes and teams its website.	on Both elite and sport-for-all levels.	
			1. 1. 2. 2 The NF presents the qualification regulations (and system) for national athletes selection on its website	- 2.	
		3.Protection	1. 1. 3. 1 The NF has the Athlete committee.	-	
			1. 1. 3. 2 The NF presents the regulations for athletes' protect on its website.	tion E.g. health, insurance, environmental pollution.	
			1. 1. 3. 3 The NF supports for the retired athletes.	E.g. career transition program, pension, re-socialisation.	
		4.Education	1. 1. 4. 1 The NF provides education for athletes regularly.	E.g. rights, anti-doping, betting, match-fixing, rules, governance.	
		5.Performa nce	1. 1. 5. 1 The number of medals awarded is equal or increas over the last term.	ed In Olympic Games (Summer: 2012-2016 year; Winter: 2010-2014 year).	
			1. 1. 5. 2 The number of participants is equal or increased ov the last term.	ver In Olympic Games (Summer: 2012-2016 year; Winter: 2010-2014 year).	
			1. 1. 5. 3 A doping case has occurred.	Reverse evaluation (Yes: 0; No: 1).	
	2.Coa	1.Parity	1. 2. 1. 1 The NF has gender parity in national level coaches	. The standard of parity is 30 per cent or more.	
	ch	2.Transpar ency	1. 2. 2. 1 The NF presents the number of coaches on its website.	-	
			1. 2. 2. 2 The NF presents the qualification regulations (and system) for coach selection on its website.	-	

<Table 2.13> Index for Sustainable Structure of Sports System (ISSOSS)

	3.Protection	1. 2. 3. 1	The NF presents the regulations for coach protection on its website.	E.g. health, insurance, environmental pollution.
	4.Education	1. 2. 4. 1	The NF provides education for coaches regularly.	E.g. rights, anti-doping, betting, match-fixing, athlete protection, rules, governance.
3.Ref	1.Parity	1. 3. 1. 1	The NF has gender parity in national level referees.	The standard of parity is 30 per cent or more.
eree	2.Transpar ency	1. 3. 2. 1	The NF presents the number of referees on its website.	National and international level.
		1. 3. 2. 2	The NF presents the qualification regulations (and system) for referees selection on its website.	-
	3.Protection	1. 3. 3. 1	The NF has the Referee committee.	-
		1. 3. 3. 2	The NF presents the regulations for referee protection on its website.	E.g. health, insurance, environmental pollution.
	4.Education	1. 3. 4. 1	The NF provides education for referees regularly.	E.g. rights, anti-doping, betting, match-fixing, rules, governance.
4.Boa	1.Parity	1.4.1.1	The NF has gender parity in the board.	The standard of parity is 30 per cent or more.
rd memb er		1. 4. 1. 2	The NF includes diversified representatives on the board.	E.g. athletes, people in need, entourage, referees, RSFs, event organising committees, partners.
	2.Transpar ency	1. 4. 2. 1	The NF presents the necessary information of board members on its website.	E.g. name, gender, career, photograph.
		1. 4. 2. 2	The NF presents the election regulations for board members on its website.	E.g. term of office, renewal times, age, secret ballot, procedures.
		1. 4. 2. 3	The NF presents the regulations for board management on its website.	E.g. decision-making procedure and method.
		1. 4. 2. 4	The NF presents the agenda and minutes of a board meeting on its website.	Within one year after the meeting.
	3.Performa nce	1. 4. 3. 1	The NF has board meetings regularly.	-
5.Co mmitt	1.Parity	1. 5. 1. 1	The NF has gender parity in committees.	The standard of parity is 30 per cent or more in each committee; one committee at least.
ee	2.Transpar	1. 5. 2. 1	The NF presents the necessary information of	E.g. name, gender, career, photograph; one

memb	ency		committee members on its website.	committee at least.
er		1. 5. 2. 2	The NF presents the selection regulations for committee members on its website.	E.g. term of office, renewal times, age, secret ballot, procedures; one committee at least.
		1. 5. 2. 3	The NF presents the regulations for committee management on its website.	E.g. decision-making procedure and method; one committee at least.
		1. 5. 2. 4	The NF presents the agenda and minutes of a committee meeting on its website.	One committee at least; within one year after the meeting.
-		1. 5. 2. 5	The NF presents an annual report of respective committees on its website.	One committee at least.
	3.Performa nce	1. 5. 3. 1	The NF has committees' meetings regularly.	One committee at least.
6.Staf	1.Parity	1. 6. 1. 1	The NF has gender parity in staff.	The standard of parity is 30 per cent or more.
f	2.Transpar ency	1. 6. 2. 1	The NF presents the necessary information of directors on its website.	E.g. name, gender, career, photograph.
_		1. 6. 2. 2	The NF presents a job opening on its website.	For staff members on the payroll.
-	3.Protection	1. 6. 3. 1	The NF presents the regulations for staff protection on its website.	E.g. contract, salary, holiday, insurance.
7.Ent ourag e	1.Education	1. 7. 1. 1	The NF provides education to entourage such as parents and friends for the athletes' protection regularly.	E.g. rights, anti-doping, betting, match-fixing.
8.Vol untee	1.Transpar ency	1. 8. 1. 1	The NF presents the regulations for volunteer management on its website.	E.g. contract, benefits, insurance.
r		1. 8. 1. 2	The NF presents a job opening on its website.	For staff members on the payroll.
-	2.Performa nce	1. 8. 2. 1	The number of volunteers is equal or increased over the last year.	In national events.
		1. 8. 2. 2	The NF presents the satisfaction degree of volunteers.	Performed by survey or interview by the third party.
9.Spe ctator	1.Performa nce	1. 9. 1. 1	The NF presents the number of spectators at individual national events.	-
	-	1. 9. 1. 2	The number of spectators is equal or increased over the last year.	In national events and international events hosted in the domestic area.

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Pillar	Sub-p illar	Variable	Indicator		Note
2.Gov	1.Stra	1.Direction	2. 1. 1. 1	The NF presents the vision on its website.	-
ernan ce	tegy		2. 1. 1. 2	The NF's vision is to be aligned with the NOC's vision.	-
rce			2. 1. 1. 3	The NF presents the mission on its website.	-
mana			2. 1. 1. 4	The NF's mission is to be aligned with the NF's vision.	-
geme nt			2. 1. 1. 5	The NF presents an annual plan for its management on its website.	E.g. development, promotion, international relations, leisure, social responsibility, anti-doping, betting, environment.
		2.Inspectio n	2. 1. 2. 1	The NF receives an inspection indication from the inspector (or from the NOC).	Internal and external inspector.
			2. 1. 2. 2	The NF takes action for improvement on the recommended respect which is pointed out by the inspector (or from the NOC).	Internal and external inspector.
	2.Busi	1.Informatio	2. 2. 1. 1	The NF presents an organisation chart on its website.	-
	ness	n	2. 2. 1. 2	The NF presents an annual activity report on its website.	E.g. development, promotion, international relations, leisure, social responsibility, anti-doping, betting, environment.
			2. 2. 1. 3	The NF presents an introduction to the sport on its website.	E.g. rule, origin, history, equipment.
			2. 2. 1. 4	The NF presents codes of governance on its website.	E.g. ethics, integrity.
			2. 2. 1. 5	The NF presents the official notice on its website.	E.g. public announcement, newsletters, press releases.
			2. 2. 1. 6	The NF presents the regulations for secretariat management on its website.	E.g. decision-making procedure and method; avoiding individual signature for binding obligations.
			2. 2. 1. 7	The NF presents the archives on its website.	E.g. official documents, record, literature.
			2. 2. 1. 8	The NF presents the current state of its condition on its website.	E.g. activity management, partner contract, creating shared value.
		2.Operation	2. 2. 2. 1	The NF holds the General Assembly regularly.	The general meeting that members or

						shareholders get together can be named as congress, session or convention.
	2.	2.	2.	2	The NF manages a development program for the general public.	E.g. talent donation, athlete role model.
	2.	2.	2.	3	The NF presents the agenda and minutes of the General Assembly on its website.	The general meeting that members or shareholders get together can be named as congress, session or convention; within one year after the meeting.
	2.	2.	2.	4	The NF recognises NOC as a channel of complaint (or dispute) resolution.	-
	2.	2.	2.	5	The NF uses computer system for overall management.	E.g. event scheduling; registration; record management; selection; database; management of athletes, coaches and referees.
3.Communi cation	2.	2.	3.	1	The NF has a communication system (or channels) for all related bodies.	E.g. RSFs, shareholders, event participants.
	2.	2.	3.	2	The NF has channels to appeal.	-
	2.	2.	3.	3	The NF has channels for whistle-blowing.	-
4.Event	2.	2.	4.	1	The NF hosts a national event regularly.	At least one time per year.
	2.	2.	4.	2	The NF presents information about hosting events on its website.	National events and international events hosted in the domestic area; e.g. games' name, place, period, participants' list.
	2.	2.	4.	3	The NF presents information about participating in international events on its website.	E.g. games' name, place, period, participants' list.
	2.	2.	4.	4	The NF obtains insurance coverage when organising events.	E.g. calamity, injury.
	2.	2.	4.	5	The NF presents event results on its website.	National and international events.
	2.	2.	4.	6	The NF presents the regulations for event management.	E.g. facility, transportation, accommodation, meal.
	2.	2.	4.	7	The NF presents the qualification system for the selection of event host city on its website.	Including procedure and minimum requirements
	2.	2.	4.	8	The NF supports legacy program for event host	E.g. sporting, social, economic, urban, and

		communities.	environmental legacy; tangible and intangil legacy.
3.Fina	1.Accountin	2. 3. 1. 1 The NF uses account computing system.	-
nce	g	2. 3. 1. 2 The NF presents the regulations (or manual) for accounting on its website.	-
		2. 3. 1. 3 The NF is inspected by the auditor regarding annual financial statements.	I Internal and external auditor.
		2. 3. 1. 4 The NF presents an annual accounting report on its website.	Alternatively, financial statements.
	2.Budget	2. 3. 2. 1 The NF has a document retention system.	For financial management review.
		2. 3. 2. 2 The NF presents the details of income, expenditure and balance on its website regularly.	-
		2. 3. 2. 3 The NF has the regulations for remuneration (or benefits) for all relevant people.	E.g. board member, committee member, s volunteer.
		2. 3. 2. 4 The NF makes money through self-financing.	-
4.Rel	1.RSC	2. 4. 1. 1 The NF protects the autonomy of the RSCs.	-
ations	2.RSF	2. 4. 2. 1 The NF provides financial support for the RSFs.	-
		2. 4. 2. 2 The NF shares its vision and mission with the RSFs	5
		2. 4. 2. 3 The NF has regular meetings with the RSFs.	-
		2. 4. 2. 4 The NF has a monitoring system for the RSFs.	-
		2. 4. 2. 5 The NF protects the autonomy of the RSFs.	-
		2. 4. 2. 6 The NF presents the current state of the RSF on its website.	E.g. event hosting and participation, the presidency, the number of athletes and coaches.
	3.Partner	2. 4. 3. 1 The NF presents the regulations for partner management on its website.	E.g. contract period, benefits, rights.
		2. 4. 3. 2 The NF has partners.	E.g. sponsor, supplier, media (broadcastin rights of national events), supporter.

Subindex 2-1. NOC (ISSOSS at the national level)

Pillar	Sub-p illar	Variable	Indicator		Note
1.Hu 1	1.Athl	1.Parity	1. 1. 1. 1	The NOC has gender parity in national level athletes.	The standard of parity is 30 per cent or more.
man	ete		1. 1. 1. 2	The NOC has a committee for women.	-
resou rce mana geme nt			1. 1. 1. 3	The NOC has a committee for the people in need.	Admitted if a nation has a separated organisation/bureau/office for the people in need (e.g. National Paralympic Committee). 'The people in need' is also called as the disabled, paralysed, impaired, challenged or differently abled people.
		2.Transpar ency	1. 1. 2. 1	The NOC presents the number of athletes and teams of respective sport on its website.	Both elite and sport-for-all levels.
		Ĩ	1. 1. 2. 2	The NOC presents the qualification regulations (and system) for national athletes selection on its website.	-
		3.Protection	1. 1. 3. 1	The NOC has the Athlete committee.	-
			1. 1. 3. 2	The NOC presents the regulations for athletes' protection on its website.	E.g. health, insurance, environmental pollution.
			1. 1. 3. 3	The NOC supports for the retired athletes.	E.g. career transition program, pension, re-socialisation.
		4.Education	1. 1. 4. 1	The NOC provides education for athletes regularly.	E.g. rights, anti-doping, betting, match-fixing, rules, governance.
		5.Performa nce	1. 1. 5. 1	The number of medals awarded is equal or increased over the last term.	In Olympic Games (Summer: 2012-2016 year; Winter: 2010-2014 year).
			1. 1. 5. 2	The number of participants is equal or increased over the last term.	In Olympic Games (Summer: 2012-2016 year; Winter: 2010-2014 year).
			1. 1. 5. 3	A doping case has occurred.	Reverse evaluation (Yes: 0; No: 1).
	2.Coa	1.Parity	1. 2. 1. 1	The NOC has gender parity in national level coaches.	The standard of parity is 30 per cent or more.
	ch	2.Transpar ency	1. 2. 2. 1	The NOC presents the number of national coaches of respective sport on its website.	-
		3.Protection	1. 2. 3. 1	The NOC presents the regulations for coach protection on its website.	E.g. health, insurance, environmental pollution.

	4.Education	1. 2. 4. 1	The NOC provides education for coaches regularly.	E.g. rights, anti-doping, betting, match-fixing, athlete protection, rules, governance.
3.Ref	1.Parity	1. 3. 1. 1	The NOC has gender parity in national level referees.	The standard of parity is 30 per cent or more.
eree	2.Transpar ency	1. 3. 2. 1	The NOC presents the number of referees of respective sport on its website.	National and international level.
	3.Protection	1. 3. 3. 1	The NOC presents the regulations for referee protection on its website.	E.g. health, insurance, environmental pollution.
	4.Education	1. 3. 4. 1	The NOC provides education for referees regularly.	E.g. rights, anti-doping, betting, match-fixing, rules, governance.
4.Boa	1.Parity	1.4.1.1	The NOC has gender parity in the board.	The standard of parity is 30 per cent or more.
rd memb er		1. 4. 1. 2	The NOC includes diversified representatives on the board.	E.g. athletes, people in need, entourage, referees, NFs, event organising committees, partners.
	2.Transpar ency	1. 4. 2. 1	The NOC presents the necessary information of board members on its website.	E.g. name, gender, career, photograph.
		1. 4. 2. 2	The NOC presents the election regulations for board members on its website.	E.g. term of office, renewal times, age, secret ballot, procedures.
		1. 4. 2. 3	The NOC presents the regulations for board management on its website.	E.g. decision-making procedure and method.
		1. 4. 2. 4	The NOC presents the agenda and minutes of a board meeting on its website.	Within one year after the meeting.
	3.Performa nce	1. 4. 3. 1	The NOC has board meetings regularly.	-
5.Co mmitt ee memb	1.Parity	1. 5. 1. 1	The NOC has gender parity in committees.	The standard of parity is 30 per cent or more in each committee; one committee at least.
	2.Transpar ency	1. 5. 2. 1	The NOC presents the necessary information of committee members on its website.	E.g. name, gender, career, photograph; one committee at least.
ei		1. 5. 2. 2	The NOC presents the selection regulations for committee members on its website.	E.g. term of office, renewal times, age, secret ballot, procedures; one committee at least.
		1. 5. 2. 3	The NOC presents the regulations for committee management on its website.	E.g. decision-making procedure and method; one committee at least.

			1. 5. 2. 4	The NOC presents the agenda and minutes of a committee meeting on its website.	One committee at least; within one year after the meeting.
			1. 5. 2. 5	The NOC presents an annual report of respective committees on its website.	One committee at least.
		3.Performa nce	1. 5. 3. 1	The NOC has committees' meetings regularly.	One committee at least.
	6.Staf	1.Parity	1. 6. 1. 1	The NOC has gender parity in staff.	The standard of parity is 30 per cent or more.
	f	2.Transpar ency	1. 6. 2. 1	The NOC presents the necessary information of directors on its website.	E.g. name, gender, career, photograph.
			1. 6. 2. 2	The NOC presents a job opening on its website.	For staff members on the payroll.
		3.Protection	1. 6. 3. 1	The NOC presents the regulations for staff protection on its website.	E.g. contract, salary, holiday, insurance.
	7.Ent ourag e	1.Education	1. 7. 1. 1	The NOC provides education to entourage such as parents and friends for the athletes' protection regularly.	E.g. rights, anti-doping, betting, match-fixing.
	8.Vol untee	1.Transpar ency	1. 8. 1. 1	The NOC presents the regulations for volunteer management on its website.	E.g. contract, benefits, insurance.
	r		1. 8. 1. 2	The NOC presents a job opening on its website.	For staff members on the payroll.
		2.Performa nce	1. 8. 2. 1	The number of volunteers is equal or increased over the last year.	In national multi-events.
			1. 8. 2. 2	The NOC presents the satisfaction degree of volunteers.	Performed by survey or interview by the third party.
	9.Spe ctator	1.Performa nce	1. 9. 1. 1	The NOC presents the number of spectators in respective national multi-events.	-
			1. 9. 1. 2	The number of spectators is equal or increased over the last year.	In national multi-events and international multi-events hosted in the domestic area.
Pillar	Sub-p illar	Variable	Indicator		Note
2.Gov	1.Stra	1.Direction	2. 1. 1. 1	The NOC presents the vision on its website.	-
ernan	tegy		2. 1. 1. 2	The NOC's vision is to be aligned with the Olympism.	-
ce			2. 1. 1. 3	The NOC presents the mission on its website.	-

resou rce			2. 1. 1. 4 The NOC's mission is to be aligned with the NOC's vision.	S -
mana geme nt			2. 1. 1. 5 The NOC presents an annual plan for its managem on its website.	nent E.g. development, promotion, international relations, leisure, social responsibility, anti-doping, betting, environment.
		2.Inspectio n	2. 1. 2. 1 The NOC receives an inspection indication from the inspector.	e Internal and external inspector.
			2. 1. 2. 2 The NOC takes action for improvement on the recommended respect which is pointed out by the inspector.	Internal and external inspector.
	2.Busi	1.Informatio	2. 2. 1. 1 The NOC presents an organisation chart on its web	site
	ness	n	2. 2. 1. 2 The NOC presents an annual activity report on its website.	E.g. development, promotion, international relations, leisure, social responsibility, anti-doping, betting, environment.
			2. 2. 1. 3 The NOC presents codes of governance on its website.	E.g. ethics, integrity.
			2. 2. 1. 4 The NOC presents the official notice on its website.	E.g. public announcement, newsletters, press releases.
			2. 2. 1. 5 The NOC presents the regulations for secretariat management on its website.	E.g. decision-making procedure and method; avoiding individual signature for binding obligations.
			2. 2. 1. 6 The NOC presents the archives on its website.	E.g. official documents, record, literature.
			2. 2. 1. 7 The NOC presents the current state of its condition its website.	on E.g. activity management, partner contract, creating shared value.
		2.Operation	2. 2. 2. 1 The NOC holds the General Assembly regularly.	The general meeting that members or shareholders get together can be named as congress, session or convention.
			2. 2. 2. The NOC presents the agenda and minutes of the General Assembly on its website.	The general meeting that members or shareholders get together can be named as congress, session or convention; within one year after the meeting.
			2. 2. 3 The NOC uses computer system for overall	E.g. event scheduling; registration; record

			management.	management; selection; database; management of athletes, coaches and referees.
	3.Communi cation	2. 2. 3. 1	The NOC has a communication system (or channels) for all related bodies.	E.g. NFs, shareholders, event participants.
		2. 2. 3. 2	The NOC has channels to appeal.	-
		2. 2. 3. 3	The NOC has channels for whistle-blowing.	-
	4.Event	2. 2. 4. 1	The NOC hosts a national event regularly.	At least one time per year.
		2. 2. 4. 2	The NOC presents information about hosting events on its website.	National events and international events in the domestic area; e.g. games' name, place, period, participants' list.
		2. 2. 4. 3	The NOC presents information about participating in international events on its website.	E.g. games' name, place, period, participants' list.
		2. 2. 4. 4	The NOC obtains insurance coverage when organising events.	E.g. calamity, injury.
		2. 2. 4. 5	The NOC presents event results on its website.	National and international events.
		2. 2. 4. 6	The NOC presents the regulations for national multi-event management.	E.g. facility, transportation, accommodation, meal.
		2. 2. 4. 7	The NOC presents the qualification system for the selection of event host city on its website.	Including procedure and minimum requirements
		2. 2. 4. 8	The NOC supports legacy program for event host communities.	E.g. sporting, social, economic, urban, and environmental legacy; tangible and intangible legacy.
3.Fina	1.Accountin	2. 3. 1. 1	The NOC uses account computing system.	-
nce	g	2. 3. 1. 2	The NOC presents the regulations (or manual) for accounting on its website.	-
		2. 3. 1. 3	The NOC is inspected by the auditor regarding annual financial statements.	Internal and external auditor.
		2. 3. 1. 4	The NOC presents an annual accounting report on its website.	Alternatively, financial statements.
	2.Budget	2. 3. 2. 1	The NOC has a document retention system.	For financial management review.
		2. 3. 2. 2	The NOC presents the details of income, expenditure	-

	and balance on its website regularly.	
	2. 3. 2. 3 The NOC has the regulations for remuneration (or benefits) for all relevant people.	E.g. board member, committee member, staff, volunteer.
	2. 3. 2. 4 The NOC makes money through self-financing.	-
4.Rel 1.NF	2. 4. 1. 1 The NOC provides financial support for the NFs.	-
ations	2. 4. 1. 2 The NOC shares its vision and mission with the NFs.	-
	2. 4. 1. 3 The NOC has regular meetings with the NFs.	-
	2. 4. 1. 4 The NOC has a monitoring system for the NFs.	-
	2. 4. 1. 5 The NOC protects the autonomy of the NFs.	-
	2. 4. 1. 6 The NOC presents the current state of the NFs on its website.	E.g. event hosting and participation, the presidency, the number of athletes and coaches.
2.RSC	2. 4. 2. 1 The NOC shares its vision and mission with the RSCs.	-
	2. 4. 2. 2 The NOC has regular meetings with the RSCs.	-
	2. 4. 2. 3 The NOC protects the autonomy of the RSC.	-
	2. 4. 2. 4 The NOC presents the current state of the RSC on its website.	E.g. event hosting and participation, the presidency, the number of athletes and coaches.
3.Partner	2. 4. 3. 1 The NOC presents the regulations for partner management on its website.	E.g. contract period, benefits, rights.
	2. 4. 3. 2 The NOC has partners.	E.g. sponsor, supplier, media (broadcasting

Subinde	ex 2-2. I	RSC (ISSOSS	at the national level)	
Pillar	Sub-p illar	Variable	Indicator	Note
1.Hu man	1.Athl ete	1.Parity	1. 1. 1. 1 The RSC has gender parity in regional level athletes.	The standard of parity is 30 per cent or more; the athletes who compete in national events.
resou			1. 1. 1. 2 The RSC has a committee for women.	Alternatively, the department for women.

rce mana geme nt		1. 1. 1. 3	The RSC has a committee for the people in need.	Alternatively, the department for the people in need; admitted if a region has a separated organisation/bureau/office for the people in need (e.g. Regional Paralympic Committee). 'The people in need' is also called as the disabled, paralysed, impaired, challenged or differently abled people.
	2.Transpar ency	1. 1. 2. 1	The RSC presents the number of athletes and teams of respective sport on its website.	Both elite and sport-for-all levels.
		1. 1. 2. 2	The RSC presents the qualification regulations (and system) for regional athletes selection on its website.	-
	3.Protection	1. 1. 3. 1	The RSC has the Athlete committee.	Alternatively, the department for athletes.
		1. 1. 3. 2	The RSC presents the regulations for athletes' protection on its website.	E.g. health, insurance, environmental pollution.
		1. 1. 3. 3	The RSC supports for the retired athletes.	E.g. career transition program, pension, re-socialisation.
	4.Education	1. 1. 4. 1	The RSC provides education for athletes regularly.	E.g. rights, anti-doping, betting, match-fixing, rules, governance.
	5.Performa nce	1. 1. 5. 1	The number of participants is equal or increased over the last term.	In Summer and Winter national games hosted by the NOC.
		1. 1. 5. 2	A doping case has occurred.	Reverse evaluation (Yes: 0; No: 1).
2.Coa ch	1.Parity	1. 2. 1. 1	The RSC has gender parity in regional level coaches.	The standard of parity is 30 per cent or more; the ones who participate in national events.
	2.Transpar ency	1. 2. 2. 1	The RSC presents the number of regional coaches of respective sport on its website.	-
	3.Protection	1. 2. 3. 1	The RSC presents the regulations for coach protection on its website.	E.g. health, insurance, environmental pollution.
	4.Education	1. 2. 4. 1	The RSC provides education for coaches regularly.	E.g. rights, anti-doping, betting, match-fixing, athlete protection, rules, governance.
3.Ref eree	1.Parity	1. 3. 1. 1	The RSC has gender parity in regional level referees.	The standard of parity is 30 per cent or more; the ones who participate in national events.
	2.Transpar	1. 3. 2. 1	The RSC presents the number of referees of	Regional and national level.

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	ency		respective sport on its website.	
	3.Protection	1. 3. 3. 1	The RSC presents the regulations for referee protection on its website.	E.g. health, insurance, environmental pollution.
	4.Education	1. 3. 4. 1	The RSC provides education for referees regularly.	E.g. rights, anti-doping, betting, match-fixing, rules, governance.
4.Boa	1.Parity	1.4.1.1	The RSC has gender parity in the board.	The standard of parity is 30 per cent or more.
rd memb er		1. 4. 1. 2	The RSC includes diversified representatives on the board.	E.g. athletes, people in need, entourage, referees, RSFs, event organising committees, partners.
	2.Transpar ency	1. 4. 2. 1	The RSC presents the necessary information of board members on its website.	E.g. name, gender, career, photograph.
		1. 4. 2. 2	The RSC presents the election regulations for board members on its website.	E.g. term of office, renewal times, age, secret ballot, procedures.
		1. 4. 2. 3	The RSC presents the regulations for board management on its website.	E.g. decision-making procedure and method.
		1. 4. 2. 4	The RSC presents the agenda and minutes of a board meeting on its website.	Within one year after the meeting.
	3.Performa nce	1. 4. 3. 1	The RSC has board meetings regularly.	-
5.Co mmitt	1.Parity	1. 5. 1. 1	The RSC has gender parity in committees.	The standard of parity is 30 per cent or more in each committee; one committee at least.
ee memb er	2.Transpar ency	1. 5. 2. 1	The RSC presents the necessary information of committee members on its website.	E.g. name, gender, career, photograph; one committee at least.
		1. 5. 2. 2	The RSC presents the selection regulations for committee members on its website.	E.g. term of office, renewal times, age, secret ballot, procedures; one committee at least.
		1. 5. 2. 3	The RSC presents the regulations for committee management on its website.	E.g. decision-making procedure and method; one committee at least.
		1. 5. 2. 4	The RSC presents the agenda and minutes of a committee meeting on its website.	One committee at least; within one year after the meeting.
		1. 5. 2. 5	The RSC presents an annual report of respective committees on its website.	One committee at least.

		3.Performa nce	1.5.3.1 T	The RSC has committees' meetings regularly.	One committee at least.
	6.Staf	1.Parity	1. 6. 1. 1 T	The RSC has gender parity in staff.	The standard of parity is 30 per cent or more.
	f	2.Transpar ency	1. 6. 2. 1 T d	The RSC presents the necessary information of directors on its website.	E.g. name, gender, career, photograph.
			1. 6. 2. 2 T	The RSC presents a job opening on its website.	For staff members on the payroll.
		3.Protection	1. 6. 3. 1 T o	The RSC presents the regulations for staff protection on its website.	E.g. contract, salary, holiday, insurance.
7.Ent ourag e		1.Education	1.7.1.1 T p r	The RSC provides education to entourage such as parents and friends for the athletes' protection regularly.	E.g. rights, anti-doping, betting, match-fixing.
	8.Vol 1.Transpa untee ency		1.8.1.1 T n	The RSC presents the regulations for volunteer management on its website.	E.g. contract, benefits, insurance.
	r		1.8.1.2 T	The RSC presents a job opening on its website.	For staff members on the payroll.
		2.Performa nce	1. 8. 2. 1 T tl	The number of volunteers is equal or increased over the last year.	In regional multi-events.
			1.8.2.2 T v	The RSC presents the satisfaction degree of volunteers.	Performed by survey or interview by the third party.
	9.Spe ctator	1.Performa nce	1. 9. 1. 1 T r	The RSC presents the number of spectators in respective regional multi-events.	-
			1. 9. 1. 2 T tl	The number of spectators is equal or increased over the last year.	In regional multi-events and national multi-events hosted in the region.
Pillar	Sub-p illar	Variable	Indicator		Note
2.Gov	1.Stra	1.Direction	2. 1. 1. 1 T	The RSC presents the vision on its website.	-
ernan ce resou	tegy		2. 1. 1. 2 T	The RSC's vision is to be aligned with NOC's vision.	-
			2. 1. 1. 3 T	The RSC presents the mission on its website.	-
rce			2. 1. 1. 4 T	The RSC's mission is to be aligned with the RSC's vision.	-
mana geme nt			2. 1. 1. 5 T o	The RSC presents an annual plan for its management on its website.	E.g. development, promotion, international relations, leisure, social responsibility, anti-doping, betting, environment.

	2.Inspectio n	2. 1. 2. 1	The RSC receives an inspection indication from the inspector.	Internal and external inspector.
		2. 1. 2. 2	The RSC takes action for improvement on the recommended respect which is pointed out by the inspector.	Internal and external inspector.
2.Busi	1.Informatio	2. 2. 1. 1	The RSC presents an organisation chart on its website.	-
ness	n	2. 2. 1. 2	The RSC presents an annual activity report on its website.	E.g. development, promotion, international relations, leisure, social responsibility, anti-doping, betting, environment.
		2. 2. 1. 3	The RSC presents codes of governance on its website.	E.g. ethics, integrity.
		2. 2. 1. 4	The RSC presents the official notice on its website.	E.g. public announcement, newsletters, press releases.
		2. 2. 1. 5	The RSC presents the regulations for secretariat management on its website.	E.g. decision-making procedure and method; avoiding individual signature for binding obligations.
		2. 2. 1. 6	The RSC presents the archives on its website.	E.g. official documents, record, literature.
		2. 2. 1. 7	The RSC presents the current state of its condition on its website.	E.g. activity management, partner contract, creating shared value.
	2.Operation	2. 2. 2. 1	The RSC holds the General Assembly regularly.	The general meeting that members or shareholders get together can be named as congress, session or convention.
		2. 2. 2. 2	The RSC presents the agenda and minutes of the General Assembly on its website.	The general meeting that members or shareholders get together can be named as congress, session or convention; within one year after the meeting.
		2. 2. 2. 3	The RSC uses computer system for overall management.	E.g. event scheduling; registration; record management; selection; database; management of athletes, coaches and referees.
		2. 2. 2. 4	The RSC recognises the NOC as a channel of complaint (or dispute) resolution.	-
	3.Communi	2. 2. 3. 1	The RSC has a communication system (or channels)	E.g. RSFs, shareholders, event participants.

	cation		for all related bodies.	
		2. 2. 3. 2	The RSC has channels to appeal.	-
		2. 2. 3. 3	The RSC has channels for whistle-blowing.	-
	4.Event	2. 2. 4. 1	The RSC hosts a regional event regularly.	At least one time per year.
		2. 2. 4. 2	The RSC presents information about hosting events on its website.	Regional events; e.g. games' name, place, period, participants' list.
		2. 2. 4. 3	The RSC presents information about participating in national events on its website.	E.g. games' name, place, period, participants' list.
		2. 2. 4. 4	The RSC obtains insurance coverage when organising events.	E.g. calamity, injury.
		2. 2. 4. 5	The RSC presents event results on its website.	National events.
		2. 2. 4. 6	The RSC presents the regulations for regional event management.	E.g. facility, transportation, accommodation, meal.
		2. 2. 4. 7	The RSC supports legacy program for event host communities.	E.g. sporting, social, economic, urban, and environmental legacy; tangible and intangible legacy.
3.Fina	1.Accountin	2. 3. 1. 1	The RSC uses account computing system.	-
nce	g	2. 3. 1. 2	The RSC presents the regulations (or manual) for accounting on its website.	-
		2. 3. 1. 3	The RSC is inspected by the auditor regarding annual financial statements.	Internal and external auditor.
		2. 3. 1. 4	The RSC presents an annual accounting report on its website.	Alternatively, financial statements.
	2.Budget	2. 3. 2. 1	The RSC has a document retention system.	For financial management review.
		2. 3. 2. 2	The RSC presents the details of income, expenditure and balance on its website regularly.	-
		2. 3. 2. 3	The RSC has the regulations for remuneration (or benefits) for all relevant people.	E.g. board member, committee member, staff, volunteer.
		2. 3. 2. 4	The RSC makes money through self-financing.	-
4.Rel	1.RSF	2. 4. 1. 1	The RSC provides financial support for the RSFs.	-

ations		2.4.1.2 Th	he RSC shares its vision and mission with the RSFs.	-
		2. 4. 1. 3 Th	he RSC has regular meetings with the RSFs.	-
		2. 4. 1. 4 Th	he RSC has a monitoring system of the RSFs.	-
		2.4.1.5 Th	he RSC protects the autonomy of the RSFs.	-
		2. 4. 1. 6 Th its	he RSC presents the current state of the RSFs on s website.	E.g. event hosting and participation, the presidency, the number of athletes and coaches.
	2.Club	2. 4. 2. 1 Th	he RSC has a monitoring system for clubs.	-
	3.Partner	2.4.3.1 Tr m	he RSC presents the regulations for partner anagement on its website.	E.g. contract period, benefits, rights.
		2. 4. 3. 2 Th	he RSC has partners.	E.g. sponsor, supplier, media (broadcasting rights of regional events), supporter.

Subindex 2-3. RSF	(ISSOSS	at the	national	level)	
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Pillar	Sub-p illar	Variable	Indicator	Note
1.Hu man	1.Athl ete	nl 1.Parity	1. 1. 1. 1 The RSF has gender parity in regional level athletes.	The standard of parity is 30 per cent or more; the athletes who compete in national events.
resou			1. 1. 1. 2 The RSF has a committee for women.	-
rce mana geme nt			1. 1. 1. 3 The RSF has a committee for the people in need.	'The people in need' is also called as the disabled, paralysed, impaired, challenged or differently abled people.
		2.Transpar ency	1. 1. 2. 1 The RSF presents the number of athletes and teams on its website.	Both elite and sport-for-all levels.
			1. 1. 2. 2 The RSF presents the qualification regulations (and system) for regional athletes selection on its website.	-
		3.Protection	1. 1. 3. 1 The RSF has the Athlete committee.	-
				1. 1. 3. 2 The RSF presents the regulations for athletes' protection on its website.
			1. 1. 3. 3 The RSF supports for retired athletes.	E.g. career transition program, pension,

				re-socialisation.
	4.Education	1. 1. 4. 1	The RSF provides education for athletes regularly.	E.g. rights, anti-doping, betting, match-fixing, rules, governance.
	5.Performa nce	1. 1. 5. 1	The number of medals awarded is equal or increased over the last term.	In Summer and Winter national games hosted by the NOC.
		1. 1. 5. 2	The number of participants is equal or increased over the last term.	In Summer and Winter national games hosted by the NOC.
		1. 1. 5. 3	A doping case has occurred.	Reverse evaluation (Yes: 0; No: 1).
2.Coa ch	1.Parity	1. 2. 1. 1	The RSF has gender parity in regional level coaches.	The standard of parity is 30 per cent or more; the ones who participate in national events.
	2.Transpar	1. 2. 2. 1	The RSF presents the number of coaches on its website.	-
	ency	1. 2. 2. 2	The RSF presents the qualification regulations (and system) for coach selection on its website.	-
	3.Protection	1. 2. 3. 1	The RSF presents the regulations for coach protection on its website.	E.g. health, insurance, environmental pollution.
	4.Education	1. 2. 4. 1	The RSF provides education for coaches regularly.	E.g. rights, anti-doping, betting, match-fixing, athlete protection, rules, governance.
3.Ref eree	1.Parity	1. 3. 1. 1	The RSF has gender parity in regional level referees.	The standard of parity is 30 per cent or more; the ones who participate in national events.
	2.Transpar ency	1. 3. 2. 1	The RSF presents the number of referees on its website.	Regional and national level.
		1. 3. 2. 2	The RSF presents the qualification regulations (and system) for referees selection on its website.	-
	3.Protection	1. 3. 3. 1	The RSF has the Referee committee.	-
		1. 3. 3. 2	The RSF presents the regulations for referee protection on its website.	E.g. health, insurance, environmental pollution.
	4.Education	1. 3. 4. 1	The RSF provides education for referees regularly.	E.g. rights, anti-doping, betting, match-fixing, rules, governance.
4.Boa	1.Parity	1. 4. 1. 1	The RSF has gender parity in the board.	The standard of parity is 30 per cent or more.
rd memb		1. 4. 1. 2	The RSF includes diversified representatives on the board.	E.g. athletes, people in need, entourage, referees, RSFs, event organising committees,
Global sporting performance of nations - A method for measuring the level of national sport's policies

er		partners.
2.Transpar ency	1. 4. 2. 1 The RSF presents the necessary information of board members on its website.	E.g. name, gender, career, photograph.
	1. 4. 2. 2 The RSF presents the election regulations for board members on its website.	E.g. term of office, renewal times, age, secret ballot, procedures.
	1. 4. 2. 3 The RSF presents the regulations for board management on its website.	E.g. decision-making procedure and method.
	1. 4. 2. 4 The RSF presents the agenda and minutes of a board meeting on its website.	Within one year after the meeting.
3.Performa nce	1. 4. 3. 1 The RSF has board meetings regularly.	-
5.Co 1.Parity mmitt	1. 5. 1. 1 The RSF has gender parity in committees.	The standard of parity is 30 per cent or more in each committee; one committee at least.
ee 2.Transpar memb ency	1. 5. 2. 1 The RSF presents the necessary information of committee members on its website.	E.g. name, gender, career, photograph; one committee at least.
er	1. 5. 2. 2 The RSF presents the selection regulations for committee members on its website.	E.g. term of office, renewal times, age, secret ballot, procedures; one committee at least.
	1. 5. 2. 3 The RSF presents the regulations for committee management on its website.	E.g. decision-making procedure and method; one committee at least.
	1. 5. 2. 4 The RSF presents the agenda and minutes of a committee meeting on its website.	One committee at least; within one year after the meeting.
	1. 5. 2. 5 The RSF presents an annual report of respective committees on its website.	One committee at least.
3.Performa nce	1. 5. 3. 1 The RSF has committees' meetings regularly.	One committee at least.
6.Staf 1.Parity	1. 6. 1. 1 The RSF has gender parity in staff.	The standard of parity is 30 per cent or more.
f 2.Transpar ency	1. 6. 2. 1 The RSF presents the necessary information of directors on its website.	E.g. name, gender, career, photograph.
	1. 6. 2. 2 The RSF presents a job opening on its website.	For staff members on the payroll.
3.Protection	1. 6. 3. 1 The RSF presents the regulations for staff protection on its website.	E.g. contract, salary, holiday, insurance.

	7.Ent ourag e	1.Education	1. 7. 1. 1	The RSF provides education to entourage such as parents and friends for the athletes' protection regularly.	E.g. rights, anti-doping, betting, match-fixing.
	8.Vol untee	1.Transpar ency	1. 8. 1. 1	The RSF presents the regulations for volunteer management on its website.	E.g. contract, benefits, insurance.
	r		1. 8. 1. 2	The RSF presents a job opening on its website.	For staff members on the payroll.
		2.Performa nce	1. 8. 2. 1	The number of volunteers is equal or increased over the last year.	In regional events.
			1. 8. 2. 2	The RSF presents the satisfaction degree of volunteers.	Performed by survey or interview by the third party.
	9.Spe ctator	1.Performa nce	1. 9. 1. 1	The RSF presents the number of spectators in respective regional events.	-
			1. 9. 1. 2	The number of spectators is equal or increased over the last year.	In regional events and national events hosted in the region.
Pillar	Sub-p illar	Variable	Indicator		Note
2.Gov	1.Stra	1.Direction	2. 1. 1. 1	The RSF presents the vision on its website.	-
ernan	tegy		2. 1. 1. 2	The RSF's vision is to be aligned with the NF's vision.	-
resou			2. 1. 1. 3	The RSF presents the mission on its website.	-
rce mana			2. 1. 1. 4	The RSF's mission is to be aligned with the RSF's vision.	-
geme nt			2. 1. 1. 5	The RSF presents an annual plan for its management on its website.	E.g. development, promotion, international relations, leisure, social responsibility, anti-doping, betting, environment.
		2.Inspectio n	2. 1. 2. 1	The RSF receives an inspection indication from the inspector (or from the NF).	Internal and external inspector.
			2. 1. 2. 2	The RSF takes action for improvement on the recommended respect which is pointed out by the inspector (or from the NF).	Internal and external inspector.
	2.Busi	1.Informatio	2. 2. 1. 1	The RSF presents an organisation chart on its website.	-
	ness	n	2. 2. 1. 2	The RSF presents an annual activity report on its	E.g. development, promotion, international

		website.	relations, leisure, social responsibility, anti-doping, betting, environment.
	2. 2. 1. 3	The RSF presents an introduction to the sport on its website.	E.g. rule, origin, history, equipment.
	2. 2. 1. 4	The RSF presents codes of governance on its website.	E.g. ethics, integrity.
	2. 2. 1. 5	The RSF presents the official notice on its website.	E.g. public announcement, newsletters, press releases.
	2. 2. 1. 6	The RSF presents the regulations for secretariat management on its website.	E.g. decision-making procedure and method; avoiding individual signature for binding obligations.
	2. 2. 1. 7	The RSF presents the archives on its website.	E.g. official documents, record, literature.
	2. 2. 1. 8	The RSF presents the current state of its condition on its website.	E.g. activity management, partner contract, creating shared value.
2.Operation	2. 2. 2. 1	The RSF holds the General Assembly regularly.	The general meeting that members or shareholders get together can be named as congress, session or convention.
	2. 2. 2. 2	The RSF manages a development program for the general public.	E.g. talent donation, athlete role model.
	2. 2. 2. 3	The RSF presents the agenda and minutes of the General Assembly on its website.	The general meeting that members or shareholders get together can be named as congress, session or convention; within one year after the meeting.
	2. 2. 2. 4	The RSF recognises the NF as a channel of complaint (or dispute) resolution.	-
	2. 2. 2. 5	The RSF uses computer system for overall management.	E.g. event scheduling; registration; record management; selection; database; management of athletes, coaches and referees.
3.Communi cation	2. 2. 3. 1	The RSF has a communication system (or channels) for all related bodies.	E.g. clubs, shareholders, event participants.
	2. 2. 3. 2	The RSF has channels to appeal.	-
	2. 2. 3. 3	The RSF has channels for whistle-blowing.	-

	4.Event	2, 2, 4, 1	The RSE hosts a regional event regularly.	At least one time per year.
		2. 2. 4. 2	The RSF presents information about hosting events on its website.	Regional events and national events hosted in the region; e.g. games' name, place, period, participants' list.
		2. 2. 4. 3	The RSF presents information about participating in national events on its website.	E.g. games' name, place, period, participants' list.
		2. 2. 4. 4	The RSF obtains insurance coverage when organising events.	E.g. calamity, injury.
		2. 2. 4. 5	The RSF presents event results on its website.	Regional and national events.
		2. 2. 4. 6	The RSF presents the regulations for event management.	E.g. facility, transportation, accommodation, meal.
		2. 2. 4. 7	The RSF supports legacy program for event host communities.	E.g. sporting, social, economic, urban, and environmental legacy; tangible and intangible legacy.
3.Fina	1.Accountin	2. 3. 1. 1	The RSF uses account computing system.	-
nce	g	2. 3. 1. 2	The RSF presents the regulations (or manual) for accounting on its website.	-
		2. 3. 1. 3	The RSF is inspected by the auditor regarding annual financial statements.	Internal and external auditor.
		2. 3. 1. 4	The RSF presents an accounting report on its website.	Alternatively, financial statements.
	2.Budget	2. 3. 2. 1	The RSF has a document retention system.	For financial management review.
		2. 3. 2. 2	The RSF presents the details of income, expenditure and balance on its website regularly.	-
		2. 3. 2. 3	The RSF has the regulations for remuneration (or benefits) for all relevant people.	E.g. board member, committee member, staff, volunteer.
		2. 3. 2. 4	The RSF makes money through self-financing.	-
4.Rel	1.Club	2.4.1.1	The RSF shares its vision and mission with the Clubs.	-
ations		2. 4. 1. 2	The RSF has a monitoring system for the Clubs.	-
		2.4.1.3	The RSF protects the autonomy of the Clubs.	-
		2. 4. 1. 4	The RSF presents the current state of the Clubs on its	E.g. event hosting and participation, the

			website.	presidency, the number of athletes and coaches.
	2.Partner	2. 4. 2.	<ol> <li>The RSF presents the regulations for partner management on its website.</li> </ol>	E.g. contract period, benefits, rights.
		2. 4. 2.	2 The RSF has partners.	E.g. sponsor, supplier, media (broadcasting rights of regional events), supporter.
Subinde	ex 2-4. Government (I	SSOSS a	the national level)	
Pillar	Variable	Indicator		Note
1.Mini stry of	1.Relations with NOC	1. 1	1 The Ministry of Sports includes the NOC when developing an annual plan.	E.g. development, promotion, international relations, leisure, social responsibility, anti-doping, betting, environment.
Sport s		1. 1	2 The Ministry of Sports provides financial support for the NOC.	-
		1. 1	3 The Ministry of Sports has a monitoring system for the NOC in terms of financial affairs.	-
		1. 1	4 The Ministry of Sports protects the autonomy of the NOC.	-
2.Oth er gover nment al organi sation s	1.Relations with the Ministry of Education	2. 1	1 The Ministry of Education includes the NOC when developing an annual plan of sports regarding the physical education of students in schools.	E.g. elementary, middle, and high school.
		2. 1	2 The Ministry of Education shares activity reports with the NOC regarding physical education.	-
	2.Relations with the Ministry of Health	2. 2	1 The Ministry of Health includes the NOC when developing an annual plan of sports regarding the good health of the public.	-
		2. 2	2 The Ministry of Health shares activity reports with the NOC regarding health promotion.	-
	3.Relations with the Ministry of Foreign Affairs	2. 3	1 The Ministry of Foreign Affairs includes the NOC when developing an annual plan of sports regarding international relations.	E.g. sports diplomacy, international cooperation through sports.
		2. 3	2 The Ministry of Foreign Affairs shares activity reports	-

			with the NOC regarding international relations through sports.	
	4.Relations with the Ministry of Environment	2. 4	I The Ministry of Environment includes the NOC when developing an annual plan of sports regarding environment protection for sustainable management.	-
		2. 4 2	2 The Ministry of Environment shares activity reports with the NOC regarding environment protection.	-
3.Loc al Gover nment s	1.Relations with RSC	3. 1	Local governments include the RSC when developing an annual plan of regional sports.	E.g. development, promotion, relations, leisure, social responsibility, anti-doping, betting, environment.
		3. 1 2	2 Local governments provide financial support for the RSC.	-
		3. 1 3	3 Local governments have a monitoring system for the RSC in terms of financial affairs.	-
		3. 1 4	Local governments protect the autonomy of the RSC.	-

Subind	ex 3. ISSOSS	at the	international	level	
Pillar	Sub-pillar	Varia ble	Indicator		Note
1.Spo	1.Relations	1.Me	1. 1. 1. 1	The NF's mission is to be aligned with the IF's mission.	-
rting	with IF	mbers	1. 1. 1. 2	The NF has the membership of its IF.	Under respect to the IF's regulation.
relatio ns		пр	1. 1. 1. 3	The NF reports the current state of its condition to the IF.	On-demand; e.g. event hosting and participation, the presidency, the number of athletes and coaches.
			1. 1. 1. 4	The NF has a communication system (or channels) with the IF.	-
		2.Part	1. 1. 2. 1	The NF participates in meetings held by the IF.	-
		nershi	1. 1. 2. 2	The NF participates in games held by the IF.	-
		þ	1. 1. 2. 3	The NF has hosted the IF's events in the domestic area for the last five years.	In cooperation with a city.
			1. 1. 2. 4	The NF has hosted the IF's meetings in the domestic	In cooperation with a city.

				area for the last five years.	
			1. 1. 2. 5	The NF has its representative members in the IF.	In the board or committees.
	2.Relations with CF	ons 1.Me mbers	1. 2. 1 1	The NF's mission is to be aligned with the CF's mission.	-
		hip	1. 2. 1 2	The NF has the membership of its CF.	Under respect to the CF's regulation.
			1. 2. 1 3	The NF reports the current state of its condition to the CF.	On-demand; e.g. event hosting and participation, the presidency, the number of athletes and coaches.
			1. 2. 1 4	The NF has a communication system (or channels) with the CF.	-
		2.Part	1. 2. 2 1	The NF participates in meetings held by the CF.	-
		nershi	1. 2. 2 2	The NF participates in games held by the CF.	-
		р	1. 2. 2 3	The NF has hosted the CF's events in the domestic area for the last five years.	In cooperation with a city.
			1. 2. 2 4	The NF has hosted the CF's meetings in the domestic area for the last five years.	In cooperation with a city.
			1. 2. 2 5	The NF has its representative members in the CF.	In the board or committees.
2.Geo graphi	1.Relations with ANOC	1.Me mbers	2. 1. 1. 1	The NOC's mission is to be aligned with the ANOC's mission.	-
cal		hip	2. 1. 1. 2	The NOC has the membership of the ANOC.	Under respect to the ANOC's regulation.
relatio ns			2. 1. 1. 3	The NOC reports the current state of its condition to the ANOC.	On-demand; e.g. event hosting and participation, the presidency, the number of athletes and coaches.
			2. 1. 1. 4	The NOC has a communication system (or channels) with the ANOC.	-
		2.Part	2. 1. 2. 1	The NOC participates in meetings held by the ANOC.	-
		nershi p	2. 1. 2. 2	The NOC has hosted the ANOC's meetings in the domestic area for the last five years.	In cooperation with a city.
			2. 1. 2. 3	The NOC has its representative members in the ANOC.	In the board or committees.
	2.Relations	1.Me	2. 2. 1. 1	The NOC's mission is to be aligned with the CANOC's	-

with	mbers		mission.	
CANOC	hip	2. 2. 1. 2	The NOC has the membership of the CANOC.	Under respect to CANOC's regulation.
		2. 2. 1. 3	The NOC reports the current state of its condition to the CANOC.	On-demand; e.g. event hosting and participation, the presidency, the number of athletes and coaches.
		2. 2. 1. 4	The NOC has a communication system (or channels) with the CANOC.	-
	2.Part	2. 2. 2. 1	The NOC participates in meetings held by the CANOC.	-
	nershi	2. 2. 2. 2	The NOC participates in games held by the CANOC.	-
	μ	2. 2. 2. 3	The NOC has hosted the CANOC's events in the domestic area for the last five years.	In cooperation with a city.
		2. 2. 2. 4	The NOC has hosted the CANOC's meetings in the domestic area for the last five years.	In cooperation with a city.
		2. 2. 2. 5	The NOC has its representative members in the CANOC.	In the board or committees.
3.Relations with	1.Me mbers hip	3 1. 1	The NOC has the membership of the IOC.	-
EPRH <sup>44)</sup>		3 1. 2	The NOC has a communication system (or channels) with the IOC.	-
	2.Part nershi p	3 2. 1	The NOC participates in meetings held by the IOC	E.g. Session, Committee meetings, Forum.
		3 2. 2	The NOC participates in games held by the IOC.	E.g. Olympic Games (Summer and Winter), Youth Olympic Games (Summer and Winter).
		3 2. 3	The NOC has ever hosted the IOC's events in the domestic area.	In cooperation with a city; e.g. Olympic Games (Summer and Winter), Youth Olympic Games (Summer and Winter).
		3 2. 4	The NOC has ever hosted the IOC's meetings in the domestic area.	In cooperation with a city; e.g. Session, Committee meetings, Forum.
		3 2. 5	The NOC has its representative members in the IOC.	In the board or committees.

<sup>44)</sup> The IOC is selected as the representative organisation of the EPRHs for measurement.

# III. STUDY 2. GLOBAL PERFORMANCE OF NATIONS FOR SPORTS

## 3.1. Literature review

The degree of a nation's development tends to have a positive correlation with the nation's sports development (Memon et al., 2011). The developing countries that show low performance regarding social development or struggle in fundamental problems are in a hard situation to support sports due to lack of necessary resources in terms of infrastructure, venue, field, system, management, control and monitoring. A nation's culture is also closely associated with the nation's sports culture (Jarvie, 2013). It is "a description of a particular way of life, which expresses certain meanings and values not only in art and learning but also in institutions and ordinary behavior." (Williams, 1961). It influences on human activities including sports as a form of cultural practice (Bird and Stevens, 2003) and is influenced by sports on the regeneration of national identities in the globalisation process (Nauright, 2004). Its distinct features are all unique depending on the citizens' habits (or minds), philosophy, and (social, political and economic) situations (Kondratenko, 2015).

Therefore, nations' performance (development and culture) should be prudently taken into account by considering how the community serve the public to maintain an ordinary life when looking at their sports. In this chapter, the national performance is studied by the sensible approach upon the understanding of national competitiveness and attractiveness to examine countries' substructural conditions. And also, the concept of 'sustainability<sup>45</sup>' is concerned to constitute a base of the research. Since the 1980s, when the UN adopted it as a

<sup>45)</sup> The 'sustainable' is "1) able to be maintained at a certain rate or level, 2) conserving an ecological balance by avoiding depletion of natural resources, or 3) able to be upheld or defended" (the Oxford English Dictionary, 2015).

momentous agenda for our future generations<sup>46</sup>), it has been employed in various studies as described in <Table 3.01>.

Dimension	Definition or Note <sup>47)</sup>
Ecological	The property of biological systems to keep diverse and productive for an
dimension	indefinite period (e.g. long-lived wetlands and healthy forests) (James, 2014).
	Entailing the scope of organic and human activity (Leemans and Groot, 2003).
Environme	The closed systems that maintain processes of productivity by replacing resources
ntal	used by people with that of value by those same individuals (Melvin, 2014).
dimension	It should respect the following criteria: 1) Renewable resources provide a
	regenerating yield, 2) Non-renewable resources have the equivalent development
	of renewable substitutes, and 3) Waste generation is less than the assimilative
	capacity of the environment (Daly, 1990).
	Management of human consumption which is the human impacts on the
	environment such as food, energy, materials, oceans, freshwater, land, and
	atmosphere (Michaelis and Sylvia, 2004).
Economic	The specification of a set of actions to be taken by present persons that will
dimension	not diminish the prospects of future persons to enjoy levels of consumption,
	wealth, utility, or welfare comparable to those enjoyed by present persons
	(Bromley, 2008).
	Targeting the areas of 1) the environmental effects of unconstrained economic
	growth; 2) the consequences of nature as an economic externality; and 3) the
	economics possibility taking greater account of the implications of market
	behaviour (Hawken et al., 2013).
	Having the explicit goals of 1) sustainable scale, 2) fair distribution, and 3)
	efficient allocation (Daly and Farley, 2011).
	Including the studies of 1) societal metabolism and 2) resource throughput of
	the economic system relating to environmental quality (Costanza et al., 2014).
Business	Incorporation of values into a core business with no trade-off in price or quality
dimension	(Laszlo and Zhexembayeva, 2011).
	Integrating ecological concerns with social and economic ones in business
	practices (Kinsley and Lovins, 1995)
Social	A social challenge that entails law planning transport lifestyles and ethical
000101	r coolar chanoligo that ontailo law, planning, transport, incotyles, and ethodi

<Table 3.01> Understanding of 'sustainability' in different dimensions

46) Refer in more detail to <u>http://www.un-documents.net/wced-ocf.htm</u> and <u>http://www.un-documents.net/ocf-02.htm</u>.

dimension	consumerism (Fawcett et al., 2012).
	Forms of adjusting individual lifestyles which conserve natural resources (Black
	and Cherrier, 2010).
	Quality of human life while living in the eco-systems (International Union for
	Conservation of Nature et al., 2013).
	Understood as 1) a call to action, 2) a task in progress or journey, and 3) a
	political process (Milne et al., 2006).
	Including the components of 1) improved education, 2) political empowerment of
	women, 3) higher regard for social justice, and 4) intergenerational equity
	_(Cohen, 2003).
	The holistic project that involves the humanity, not a domain exclusive to a
	scientific researcher, environmental activists, business leaders; Improving human
	well-being and social equity while reducing environmental risks and ecological
	scarcities (Magdoff and Foster, 2011).
	Integrating social, cultural, health-related ecologic, economic, environmental, and
	monetary aspects (Soderbaum, 2012).
Scientific	Using strategies and technology to break the link between economic growth and
dimension	resource depletion (Ruffing, 2007).
	Proactive innovation that minimises negative impact and maintains balance to
	ensure the desirable Earth for all now and in the future; The endurance of
	systems and processes (Magee et al., 2013).
General	Socio-ecological process characterised by the pursuance of universal ideals; Its
dimension	principles are 1) reducing dependence on fossil fuels and underground resources,
	2) reducing dependence on unnatural substances, 3) reducing encroachment upon
	nature, and 4) meeting human needs reasonably (Wandemberg, 2015).
	It has eco-friendly forms of 1) reorganising living conditions, 2) reappraising
	economic sectors, 3) working renewable practices, 4) using science to develop
	green technologies, and 5) designing flexible systems (Zhang and Babovic, 2012).

## 3.1.1. National competitiveness

Many nations desire to seize the initiative in global agenda setting and international cooperation. Therefore, countries that wish to increase confidence in the international community put forth a multilateral effort to improve their national competitiveness. However, the notion of

<sup>47)</sup> Quoted from each source presented.

'National competitiveness' or 'Competitiveness of nations' is still debatable (Lee, 2010), for the term is adapted in various ways depending on each nation's purpose and each users' taste. To economists, it is understood as a relatively straightforward factor (Kravis and Lipsey, 1967) determined by exchange rates, land costs (Reinert, 1995), relative unit labor (Marsh and Tokarick, 1996) and parity measures of absolute exchange rates versus purchasing power (Manzur et al., 1999); The business scholars perceive it as a compound of institutional elements and systemic factors that is related to macro and micro-economic activities of firms; and business managers see it as a mixture of narrow and broad academic conceptions in practical terms (Thompson, 2004). In general, the National Competitiveness is defined as "the ability of a country to create value-added and thus increase national wealth" (International Institute for Management Development, 1996) or "the ability of a national economy to achieve sustained high rates of economic growth, as measured by the annual change in GDP per person" (Schwab, 1996).

There are accompanying words when the National Competitiveness is mentioned. Firstly, 'institution', which has a profound effect on economic growth, is considered with peculiarities of factor accumulation, innovation and resource allocation (Acemoglu et al., 2005). When it is under comparative analysis with 'organisation', the distinction provides frameworks which consist of micro- (organisation) and macro-level (institution) variables (Lee, 2010). Secondly, 'economic performance' measured by the GDP per capita is discussed when analysed at industry-level. The competitiveness depends on the sum of firms' competitive success and the ability to achieve a relatively high or rising level of productivity in the industries (Porter, 1990). It is positively linked with the institutional factors such as organisational loyalty (Clague, 2003), transparency, absence of corruption, honest market competition (Mauro, 1995), property rights (Leblang, 1996), rule (Brunetti et al., 1998), law (Posner, 1998), free, and developed infrastructures (Grier and Tullock, 1989). Thirdly, 'trade performance' is considered with its strategic policies and the role of (absolute and relative) productivity in the market (Spencer and Brander, 1983). Lastly, 'ideology' comes on the scene as the ability of a nation to define and attain goals in the global era (Lodge, 2009). As it can be worked as a nation's competitive advantage, the National Competitiveness can be increased by dealing with a set of values that people trust.

As the interest of the National Competitiveness increases, governments have begun recognising the need to manage a story of their nations with subtlety and sensitivity<sup>48</sup>) (Pilon, 2005). The effort has been termed as the National Brand or the Nation Branding (Olins, 2002) under the definition of "the total sum of all perceptions of a nation in the mind of international stakeholders" (Fan, 2008a). The Nation branding is understood as a cross-cultural communication that passes the process of awareness-attraction-preference (Fan, 2008a) by concerning how a whole nation presents itself to targets (Anholt, 2006). Its strategy determines the realistic and compelling vision (Anholt, 1998), and the repositioned brand that consists of the political, economic and cultural brand (Fan, 2002). For example, France has been putting enormous efforts to manage their nation's image and reputation since the seventeenth century because they believe that a national brand is one of the principal sources of the National Competitiveness (Melissen, 2005).

Several attempts to evaluate the National Competitiveness have been performed, such as the Global Competitiveness Report (GCR) from the World Economic Forum<sup>50)</sup> and the World Competitiveness Yearbook (WCY) from the International Institute for Management Developmen t<sup>51)</sup>. The GCR ranks countries based on the Global Competitiveness Index that integrates the micro- and macroeconomic competitiveness fundamentals, and the WCY gauges national competitiveness based on the reports provided by political and economic institutions of each country (Garelli, 2001).

<sup>48)</sup> The government-driven storytelling can matter to enhance a country's attractiveness and promote themselves (Wells and Wint, 1990).

<sup>49)</sup> Such as multinational enterprises or transnational corporations.

<sup>50)</sup> Refer in more detail to https://www.weforum.org/.

<sup>51)</sup> Refer in more detail to https://www.imd.org/.

The notion of National Competitiveness is popular among politicians who have little support from business academics (Thurow, 1992). However, some economists and management scholars make arguments against it with the reasons that it has the feeble links between theoretical and empirical structure (Krugman, 1994), the disharmony between macro- and micro-level variables (Cho and Moon, 2005), the methodological weaknesses that mix macroeconomic and micro-level survey data (Grant, 1991), the ambiguity of indicators (Lall, 2001), the obscurity of measurement (Buckley et al., 1988), and lack of coherence (Reich, 1990).

#### 3.1.2. National attractiveness

After the Cold War era, the structure of the international regime, such as territorial system composed of states, have undergone various changes (Rosecrance, 1986) from the hard views that a state's interests are concerned by material resources, geography, population and political influence (Schweller, 1999), to soft aspects such as technology, education, ideology, institutions, economic growth, culture, political worth, social value and foreign policies (Nye, 2003a). The flow makes nations consider the means how to embrace Soft/Smart power (Nye, 2004) and increase attractiveness which is a quality that arouses an interest, causes desire/allure, provides pleasure/delight, appeals to the senses through beauty/charm, or draws mind of a target (Ortony et al., 1990)<sup>52</sup>).

The power in a country has the natural features that expand domain to other countries by spreading influences (Wight, 1978), and the expanded power gives internal pressure and external threats/opportunities (Schweller, 1994). Power preserves the balance of tension onto both allies and rivals (Nye, 2001). When the trials of power distribution among states are failed,

<sup>52)</sup> See more studies concerning the National Attractiveness in the areas of the International Business Research (e.g. Manrai et al., 2001), the International Tourism Research (e.g. Gearing et al., 1974), and the International Migration Research (e.g. Sjaastad, 1962).

the endeavours for maintaining balance could lead to war under the justification of peacebuilding and stability (Nye, 2004). The factors of the power, which consist of national attractiveness, are considered by social functions, networking and foreign policy (Domett, 2005).

Hard power is a coercive force to reach specific objectives performed by the military force, economic influence, physical resources, or science/technology development (Berridge, 1995). It is direct, immediate, straight and visible (Nye, 2008). However, the world politics that faces many changes become too complex to simply accept it, and its limitations are challenged by the understanding of interdependence among nations (Nye, 1990). The limitations of Hard power tactics had brought the concept of Soft power (Roslycky, 2011). Since Nye coined the term in contrast to Hard power, the new conceptual approach contributed to a better understanding of power mechanisms of international relations and foreign policies. The term was the middle ground of previous studies such as referent power (Raven and French, 1959) and national morale (Morgenthau, 1985).

Soft Power is "the cultural soft creative elasticity of a nation and is integrated and generated by the operation of national systems, spiritual creative elasticity and unconscious and passionate creative elasticity" (Tang et al., 2012). The inventor of the term, Joseph Nye, defined it as presented in <Table 3.02>. It is relative, intangible, context-based, and less coercive under the assumption that the ability to shape preferences of others are linked to the political and societal sectors (Ding, 2010). The attractive power draws social attention through mediation and persuasion that are strategic principles combined symbolic elements with ideological values (Armitage and Nye, 2007). Soft power is correlated with national security because it provides a superior template for international relations (Riordan, 2003). It opens the new perspectives of negotiation and promotes the power of influence by merging cultural values, networks, public morale, leadership and the activity of civilian organisations (Brito, 2010). Soft power is hard to measure, evaluate or control because the effect is indirect from diversified sources and takes a long time to appear (Gilpin, 1983). Nonetheless, a study of the

Rand Corporation tried to suggest an indicating question to investigate a country's attractivenes s<sup>53</sup>), "Where would you like to live other than your own country?"<sup>54</sup>) (Treverton and Jones, 2005).

Source (Year)	Definition of 'Soft power' by Joseph Nye <sup>55)</sup>
Bound to lead (1990)	A dynamic created by a nation whereby other ones seek to
	imitate, become closer to that nation and align its interests
	accordingly; getting others to do what you want
Soft power (2004)	The ability to get what you want through attraction rather than
	coercion or payments; a country's ability to influence other
	countries' behaviour or the ability to shape what others want,
	without using hard or coercive power; the ability to shape the
	preferences of others; the ability to get others to want the
	outcome you want because of your cultural or ideological appeal
The challenge of soft	A country's cultural and ideological appeal. It is the ability to get
power (1999)	desired outcomes through attraction instead of force
Think again: soft power	The ability to alter the behaviour of others to get what you want
(2006)	and there are three ways to do that: coercion (sticks), payments
	(carrots) and attraction (soft power)
Why military power is no	Getting people to want what you want
longer enough (2003b)	

<Table 3.02> Definition of 'Soft power'

Wang (2006) identified two matters that require attention when Soft power is considered in international relations. First, many actors have different perspectives on the same policy depending on target countries. It is classified into two types: High Soft power if its targets are elites, and Low Soft power if its target is broader public (Kurlantzick, 2006). The question, "To whom is it Soft power?" should be concerned more important than that "Who can

55) Quoted from each source presented.

<sup>53)</sup> The country attractiveness can be defined as "the degree to which a country is preferred to others in the eyes of its relevant stakeholders on the basis of certain criteria including tangible and intangible elements" (Lee, 2013).

<sup>54)</sup> The country with more attractive attributes can have a higher possibility of being chosen (Lee et al., 2010).

develop it per se?", "Who actually possesses it?", "What consists of it?", or "To whom is it relevant?" (Fan, 2008a). Secondly, the policymaking at a state level needs to be more prudent than at a personal (or individual) level. The policymakers have realised that it is hard to apply because of each country's cultural sensitivities, identities, and pluralities that lead opinion (Oglesby, 2009). Therefore, the actors focusing on authentic dialogue should be aware of that Soft power depends on the regional persuasiveness of information (De Lima, 2007) so that the options for the betterment of relationship building could be explored for collaborative opportunities (Hoagland, 2004).

The relative power of nations does not remain constant because competition becomes more comprehensive (Kenneth, 1979), and the growth rate goes uneven among different societies (Kennedy, 1987). As policymakers realise the importance of a harmonious combination of Hard power and Soft power, the concept of Smart Power is developed by Joseph Nye for more fruitful results. Smart power is defined as "the ability to combine Hard and Soft power into a winning strategy" (Nye, 2004) or "the full range of tools at disposal-diplomatic, economic, military, political, legal, and cultural-picking the right tool, or combination of tools, for each situation" (Clinton and US Senate Foreign Relations Committee, 2009). Success or failure of foreign policy with Smart power depends on the balance adjustment of two powers. Hard power is the fundamental nature of Soft power, and Soft power is not the simple sum of two but is a geopolitical tool that works together to complement by recognising their potential ability (Gill and Huang, 2006).

Smart power is appeared to be a well-thought-out strategy for determining action intelligently, that considers national/international context, cultural characteristics, current political system, and economic influences (Brito, 2010). It makes an intelligent diplomatic approach for resolution of conflicts and also centres upon 'sustainability', which becomes a fundamental notion of making policies and a basic concept to develop a country over the long run. Before

the 21st century, the more significant part of sustainability research considers environmental matters and natural resources; the interconnectedness of all life must be respected; and each one gives consideration with the responsibility for the effects of another life form. As the interest of sustainable movement increases, sustainable development becomes more popular subjects in vast research areas. Sustainable development (or sustainability science), which is a conversation of values that challenge the development sociology (Ratner, 2004), indicates the holistic approach that leads humans to sustainability by balancing local and global efforts without degrading the natural environment (Robert et al., 2005). It includes the domains of ecology, economics, politics, culture, tourism, democracy, society, environment, education, industry, ethics, policy, food, public relations, future generations, long-term thinking, resource use, finance, human rights, justice, peace, community, physiology, research and innovation (Kahle and Gurel-Atay, 2013). The interdependent parts can mutually reinforce and cannot exist without the others in the long run (Morelli, 2011). The studies of National Sustainability are applied as cornerstones to understand the national attractiveness. Its strategies - plan, method and system - have been implemented with multifarious phenomena in large fields.

## 3.2. Methodology

The evidence-based access has adapted to understand the Global Performance of Nations for sports. The methodology is accurate to handle substantive data and lucid to secure the objectivity (Lee, 1997) in both general management (Barends et al., 2014) and public management (Shillabeer et al., 2011). It is "about making decisions through the conscientious, explicit, and judicious use of four sources of information: practitioner expertise and judgment, evidence from the local context, a critical evaluation of the best available research evidence, and the perspectives of those people who might be affected by the decision" (Briner, 2009). It is epistemologically defined as a management approach that decisions are made upon logic and reliable data (Pfeffer and Sutton, 2006b). Briner et al. (2009) argued that the EBMgt takes place at the intersection of four elements - 1) Evaluated external evidence; 2) Stakeholders; 3) Context, organisational actors, circumstances; and 4) Practitioner experience and judgments - as described in <Figure 3.01>, and provided obvious answers to the question of "What is the EBMgt?" as presented in <Table 3.03>.



<Figure 3.01> Four elements of the EBMgt (Briner et al., 2009)

Since the 1970s when the approach was developed by the United Kingdom's health field (Cochrane, 1972), the techniques that promote effective decision-making and the meta-analysis, have got the limelight from practitioners and researchers in predictive validity studies (Yates, 1990). On and later, it is widely performed in practitioner judgment in manifold realms such as healthcare management (Champagne and Lemieux-Charles, 2004), software development (Dyba et al., 2005), medicine (Sackett et al., 2000), crime prevention (Welsh and Farrington, 2006), and education (Pring and Thomas, 2004). Nevertheless, a few controversies remain concerning resource use (Silk et al., 2010) and the effectiveness of implementing (Rowe, 2009).

Table 5.05 Meaning of the Ebiligt (adapted from brine) et al., 200	<table< th=""><th>3.03&gt;</th><th>Meaning</th><th>of the</th><th>EBMgt</th><th>(adapted</th><th>from</th><th>Briner</th><th>et</th><th>al.,</th><th>200</th></table<>	3.03>	Meaning	of the	EBMgt	(adapted	from	Briner	et	al.,	200
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No.	The EBMgt is	Note
01	Something managers and practitioners do	Not scholars do
02	Something practitioners already did	Not a brand-new way
03	About the practice of management	Not conducting a particular type of
		academic research
04	A group of the related approaches to	Not a single approach
	decision making	
05	A way of thinking concerning decision	Not a rigid and one-size-fits-all formula
	making	
06	About using different types of material	Not about privileging evidence from an
		academic study
07	About using wide and different kinds of	Not using only certain types of evidence
07	About using wide and different kinds of	Not using only certain types of evidence
07	About using wide and different kinds of research evidence	Not using only certain types of evidence
07	About using wide and different kinds of research evidence Using research evidence as one of the	Not using only certain types of evidence Not a research evidence telling
07	About using wide and different kinds of research evidence Using research evidence as one of the several sources	Not using only certain types of evidence Not a research evidence telling practitioners should do something
07 08 09	About using wide and different kinds of research evidence Using research evidence as one of the several sources A way of getting existing management	Not using only certain types of evidence Not a research evidence telling practitioners should do something Not about conducting research only
07 08 09	About using wide and different kinds of research evidence Using research evidence as one of the several sources A way of getting existing management research	Not using only certain types of evidence Not a research evidence telling practitioners should do something Not about conducting research only regarding management practices
07 08 09 10	About using wide and different kinds of research evidence Using research evidence as one of the several sources A way of getting existing management research Helping both the process and outcome of	Not using only certain types of evidence Not a research evidence telling practitioners should do something Not about conducting research only regarding management practices Not solutions to all management problems
07 08 09 10	About using wide and different kinds of research evidence Using research evidence as one of the several sources A way of getting existing management research Helping both the process and outcome of decision making	Not using only certain types of evidence Not a research evidence telling practitioners should do something Not about conducting research only regarding management practices Not solutions to all management problems

## 3.3. Findings

Sports phenomena tend to spread out more firmly where the social environment is more stable. The EBMgt was considered to gauge the stability of 'development for sports'. The MDGs was employed as the indicator of the national competitiveness and attractiveness, which are studied in the Literature Review. The degree of its achievement was taken into account with the countries that hosted the Olympic games, and the results of the respective values were analysed and applied to the ROK and Switzerland for arithmetic comparison.

#### 3.3.1. MDGs employment

The MDGs is the set of quantified targets for reducing extreme poverty<sup>56)</sup>. The eight international development goals presented in <Figure 3.02><sup>57)</sup> was introduced from the UN Millennium Declaration in September 2000<sup>58)</sup> and settled in further agreement at the 2005 World Summit<sup>59)</sup>. The UN, together with its member states, the agencies of the UN system, and the specialised international organisations (e.g. IMF, WB, OECD), moves with one accord to promote the comprehensive approach for tackling severe problems simultaneously and to monitor progress achieved towards implementing the agreement. It reveals the state of social affairs whether the nations arrive in the level that can pay attention to sports movements, which is superior to the stage of preserving fundamental human rights, or not floundering in life and death due to deficiency of indispensable requisites.

<sup>56)</sup> Refer in more detail to http://www.unmillenniumproject.org/goals/.

<sup>57)</sup> Adapted from http://www.un.org/millenniumgoals/.

<sup>58)</sup> Refer in more detail to http://www.un.org/millennium/declaration/ares552e.htm.

<sup>59)</sup> Refer in more detail to https://documents-dds-ny.un.org/doc/UNDOC/GEN/N05/487/60/PDF/N0548760.pdf?OpenElement.



<Figure 3.02> The MDGs

The monitoring was performed in a set of time-bound from 1990 to 2015 with measurable indicators compiled by the international authorities in close collaboration with the national statistical services. The details of the MDGs with the primary source of each indicator are as presented in <Table 3.04>.

#### <Table 3.04> The MDGs60)

Level <sup>61)</sup>	Indicator for monitoring progress <sup>62)</sup>	Major sources*
G1.	Eradicate extreme poverty and hunger	<b>,</b>
T1.A.	Halve, between 1990 and 2015, the proportion of people whose inc	come is less
	than one dollar a day	
<u>(</u> )1.01.	Proportion of population below \$1.25 (PPP) per day	WB; UNDP
<u>(</u> )1.02.	Poverty gap ratio	MC, WB
<u>(</u> )1.03.	Share of poorest quintile in national consumption	UNDESA, WB
T1.B.	Achieve full and productive employment and decent work for all, in	cluding women
	and young people	
<u>i</u> 1.04.	Growth rate of GDP per person employed	WB
<u>(</u> )1.05.	Employment-to-population ratio	ILO; UNFPA
<u>(</u> )1.06.	Proportion of employed people living below \$1.25 (PPP) per day	ILO; WB
<u>(</u> )1.07.	Proportion of own-account and contributing family workers in total	ILO; WB
	employment	
T1.C.	Halve, between 1990 and 2015, the proportion of people who suffe	r from hunger
<u>(</u> )1.08.	Prevalence of underweight children under-five years of age	UNICEF; WHO
í)1.09.	Proportion of population below minimum level of dietary energy	FAO; WFP

60) Adapted from the official website of the MDGs, United Nations; Refer in more detail to http://millenniumindicators.un.org/unsd/mi/mi\_goals.asp.

	consumption	
G2.	Achieve universal primary education	
T2.A.	Ensure that, by 2015, children everywhere, boys and girls alike, wil	I be able to
	complete a full course of primary schooling	
<u>(</u> )2.01.	Net enrolment ratio in primary education	UNESCO
<u>(</u> )2.02.	Proportion of pupils starting grade 1 who reach last grade of primary	UNESCO
<u>(</u> )2.03.	Literacy rate of 15-24 year-olds, women and men	UNESCO
G3.	Promote gender equality and empower women	
T3.A.	Eliminate gender disparity in primary and secondary education, pref	erably by 2005,
<u> </u>	and in all levels of education no later than 2015	
(J3.01.	Railos of gins to boys in primary, secondary and tertiary	UNESCO,
	education	OHCHR
<u>(</u> )3.02.	Share of women in wage employment in the non-agricultural sector	ILO; UNW
<u>(</u> )3.03.	Proportion of seats held by women in national parliament	IPU; UNW
G4.	Reduce child mortality	
T4.A.	Reduce by two-thirds, between 1990 and 2015, the under-five mort	ality rate
<u>(</u> )4.01.	Under-five mortality rate	UNICEF; WHO
<u>(</u> )4.02.	Infant mortality rate	UNICEF; WHO
<u>(</u> )4.03.	Proportion of 1-year-old children immunised against measles	UNICEF; WHO
G5.	Improve maternal health	
T5.A.	Reduce by three-quarters, between 1990 and 2015, the maternal m	ortality ratio
<u>(</u> )5.01.	Maternal mortality ratio	UNICEF; WHO
<u>(</u> )5.02.	Proportion of births attended by skilled health personnel	UNICEF; WHO
T5.B.	Achieve, by 2015, universal access to reproductive health	
<u>(</u> )5.03.	Contraceptive prevalence rate	UNICEF; WHO
<u>(</u> )5.04.	Adolescent birth rate	UNICEF; WHO
<u>(</u> )5.05.	Antenatal care coverage (at least one visit and at least four visits)	UNICEF; WHO
<u>(</u> )5.06.	Unmet need for family planning	UNICEF; WHO
G6.	Combat HIV/AIDS, malaria and other diseases	
T6.A.	Have halted by 2015 and begun to reverse the spread of HIV/AIDS	6
()6.01.	HIV prevalence among population aged 15-24 years	UNAIDS; WHO
<u>()</u> 6.02.	Condom use at last high-risk sex	UNICEF; WHO
<u>()</u> 6.03.	Proportion of population aged 15-24 years with comprehensive	UNICEF; WHO
	correct knowledge of HIV/AIDS	
(i) <b>6</b> .04.	Ratio of school attendance of orphans to school attendance of	UNICEF;
	non-orphans aged 10-14 years	UNAIDS
T6.B.	Achieve, by 2010, universal access to treatment for HIV/AIDS for a	ll those who
	need it	
()6.05.	Proportion of population with advanced HIV infection with access	UNAIDS; WHO
	to antiretroviral drugs	
T6.C.	Have halted by 2015 and begun to reverse the incidence of malari	a and other
	major diseases	
()6.06.	Incidence and death rates associated with malaria	WHO
()6.07.	Proportion of children under 5 sleeping under insecticide-treated	WHO
	· · ·	

	bednets	
()6.08.	Proportion of children under 5 with fever who are treated with	UNICEF; WHO
	appropriate anti-malarial drugs	
(i) <b>6</b> .09.	Incidence, prevalence and death rates associated with tuberculosis	WHO
<u>(</u> )6.10.	Proportion of tuberculosis cases detected and cured under directly	WHO
	observed treatment short course	
G7.	Ensure environmental sustainability	
T7.A.	Integrate the principles of sustainable development into country poli	cies and
	programmes and reverse the loss of environmental resources	
T7.B.	Reduce biodiversity loss, achieving, by 2010, a significant reduction in	n the rate of loss
()7.01.	Proportion of land area covered by forest	FAO
()7.02.	CO <sub>2</sub> emissions, total, per capita and per \$1 GDP (PPP)	UNEP
()7.03.	Consumption of ozone-depleting substances	UNEP; UNEPOS
()7.04.	Proportion of fish stocks within safe biological limits	UNEP; WCMC
()7.05.	Proportion of total water resources used	IEA, WB
07.00.	Proportion of terrestrial and marine areas protected	UNEP; WCIVIC
<u> </u>	Halve by 2015 the proportion of people without sustainable access	
17.0.	Traive, by 2010, the proportion of people without sustainable access	
	drinking water and basic sanitation	
(1)7.08.	Proportion of population using an improved drinking water source	UNICEF; WHO
<u>()</u> 7.09.	Proportion of population using an improved sanitation facility	UNICEF; WHO
1/11	By ZUZU to have achieved a significant improvement in the lives o	T AT DATACT TITLE
17.0.		i al least 100
	million slum dwellers	
()7.10.	million slum dwellers Proportion of urban population living in slums	UN-HABITAT;
<sup>(17.10.</sup>	million slum dwellers Proportion of urban population living in slums	UN-HABITAT; UNHCR
(i)7.10. G8.	million slum dwellers Proportion of urban population living in slums Develop a global partnership for development	UN-HABITAT; UNHCR
()7.10. ()7.10. ()7.10. ()7.10.	million slum dwellers Proportion of urban population living in slums Develop a global partnership for development Develop further an open, rule-based, predictable, non-discriminatory	UN-HABITAT; UNHCR trading and
(i)7.10. G8. T8.A.	<ul> <li>Develop a global partnership for development</li> <li>Develop further an open, rule-based, predictable, non-discriminatory</li> <li>financial system. Includes a commitment to good governance, development</li> </ul>	UN-HABITAT; UNHCR trading and lopment and
()7.10. <u>G8.</u> T8.A.	million slum dwellers Proportion of urban population living in slums Develop a global partnership for development Develop further an open, rule-based, predictable, non-discriminatory financial system. Includes a commitment to good governance, deve poverty reduction - both nationally and internationally	UN-HABITAT; UNHCR trading and lopment and
(i)7.10. <u>G8.</u> T8.A. T8.B.	<ul> <li>Develop a global partnership for development</li> <li>Develop a global partnership for development</li> <li>Develop further an open, rule-based, predictable, non-discriminatory</li> <li>financial system. Includes a commitment to good governance, deve</li> <li>poverty reduction - both nationally and internationally</li> <li>Address the special needs of the least developed countries. Include</li> </ul>	UN-HABITAT; UNHCR trading and lopment and s: tariff and
()7.10. <u>G8.</u> T8.A. T8.B.	<ul> <li>Develop a global partnership for development</li> <li>Develop a global partnership for development</li> <li>Develop further an open, rule-based, predictable, non-discriminatory</li> <li>financial system. Includes a commitment to good governance, deve</li> <li>poverty reduction - both nationally and internationally</li> <li>Address the special needs of the least developed countries. Include</li> </ul>	UN-HABITAT; UNHCR trading and lopment and s: tariff and ced programme
(i)7.10.         G8.         T8.A.         T8.B.	<ul> <li>Develop a global partnership for development</li> <li>Develop a global partnership for development</li> <li>Develop further an open, rule-based, predictable, non-discriminatory</li> <li>financial system. Includes a commitment to good governance, deve</li> <li>poverty reduction - both nationally and internationally</li> <li>Address the special needs of the least developed countries. Include</li> <li>quota-free access for the least developed countries' exports; enhance</li> <li>of debt relief for heavily indebted poor countries (HIPC) and cancell</li> </ul>	UN-HABITAT; UNHCR trading and lopment and s: tariff and ced programme lation of official
(i)7.10.         G8.         T8.A.         T8.B.	<ul> <li>Diversion of urban population living in slums</li> <li>Develop a global partnership for development</li> <li>Develop further an open, rule-based, predictable, non-discriminatory</li> <li>financial system. Includes a commitment to good governance, deve</li> <li>poverty reduction - both nationally and internationally</li> <li>Address the special needs of the least developed countries. Include</li> <li>quota-free access for the least developed countries' exports; enhance</li> <li>of debt relief for heavily indebted poor countries (HIPC) and cancell</li> <li>bilateral debt; and more generous ODA for countries committed to p</li> </ul>	UN-HABITAT; UNHCR trading and lopment and s: tariff and ced programme lation of official poverty reduction
(i) 7.10.         G8.         T8.A.         T8.B.         T8.C.	<ul> <li>Diversion of under a digninicative improvement in the investor of million slum dwellers</li> <li>Proportion of urban population living in slums</li> <li>Develop a global partnership for development</li> <li>Develop further an open, rule-based, predictable, non-discriminatory</li> <li>financial system. Includes a commitment to good governance, developed reduction - both nationally and internationally</li> <li>Address the special needs of the least developed countries. Include quota-free access for the least developed countries' exports; enhance of debt relief for heavily indebted poor countries (HIPC) and cancell bilateral debt; and more generous ODA for countries committed to p Address the special needs of landlocked developing countries and</li> </ul>	UN-HABITAT; UNHCR trading and lopment and s: tariff and sed programme lation of official poverty reduction small island
(i)7.10.         G8.         T8.A.         T8.B.         T8.C.	<ul> <li>Develop a global partnership for development</li> <li>Develop a global partnership for development</li> <li>Develop further an open, rule-based, predictable, non-discriminatory</li> <li>financial system. Includes a commitment to good governance, deve</li> <li>poverty reduction - both nationally and internationally</li> <li>Address the special needs of the least developed countries. Include</li> <li>quota-free access for the least developed countries' exports; enhance</li> <li>of debt relief for heavily indebted poor countries (HIPC) and cancell</li> <li>bilateral debt; and more generous ODA for countries committed to p</li> <li>Address the special needs of landlocked developing countries and</li> <li>developing States (through the Programme of Action for the Sustain</li> </ul>	UN-HABITAT; UNHCR trading and lopment and s: tariff and ced programme lation of official coverty reduction small island nable
(i)7.10.         G8.         T8.A.         T8.B.         T8.C.	<ul> <li>Diversion of urban population living in slums</li> <li>Develop a global partnership for development</li> <li>Develop further an open, rule-based, predictable, non-discriminatory</li> <li>financial system. Includes a commitment to good governance, deve</li> <li>poverty reduction - both nationally and internationally</li> <li>Address the special needs of the least developed countries. Include</li> <li>quota-free access for the least developed countries' exports; enhance</li> <li>of debt relief for heavily indebted poor countries (HIPC) and cancell</li> <li>bilateral debt; and more generous ODA for countries committed to p</li> <li>Address the special needs of landlocked developing countries and</li> <li>developing States (through the Programme of Action for the Sustain</li> <li>Development of Small Island Developing States and the outcome or</li> </ul>	UN-HABITAT; UNHCR trading and lopment and s: tariff and ced programme lation of official coverty reduction small island nable f the
(i)7.10.         G8.         T8.A.         T8.B.         T8.C.	<ul> <li>million slum dwellers</li> <li>Proportion of urban population living in slums</li> <li>Develop a global partnership for development</li> <li>Develop further an open, rule-based, predictable, non-discriminatory</li> <li>financial system. Includes a commitment to good governance, deve</li> <li>poverty reduction - both nationally and internationally</li> <li>Address the special needs of the least developed countries. Include</li> <li>quota-free access for the least developed countries' exports; enhance</li> <li>of debt relief for heavily indebted poor countries (HIPC) and cancell</li> <li>bilateral debt; and more generous ODA for countries committed to p</li> <li>Address the special needs of landlocked developing countries and</li> <li>developing States (through the Programme of Action for the Sustain</li> <li>Development of Small Island Developing States and the outcome of</li> <li>twenty-second special session of the General Assembly)</li> </ul>	UN-HABITAT; UNHCR trading and lopment and s: tariff and ced programme lation of official coverty reduction small island nable ff the
(i)7.10.         G8.         T8.A.         T8.B.         T8.C.         T8.D.	<ul> <li>Develop a global partnership for development</li> <li>Develop a global partnership for development</li> <li>Develop further an open, rule-based, predictable, non-discriminatory</li> <li>financial system. Includes a commitment to good governance, deve</li> <li>poverty reduction - both nationally and internationally</li> <li>Address the special needs of the least developed countries. Include</li> <li>quota-free access for the least developed countries' exports; enhance</li> <li>of debt relief for heavily indebted poor countries (HIPC) and cancell</li> <li>bilateral debt; and more generous ODA for countries committed to p</li> <li>Address the special needs of landlocked developing countries and</li> <li>developing States (through the Programme of Action for the Sustain</li> <li>Development of Small Island Developing States and the outcome of</li> <li>twenty-second special session of the General Assembly)</li> </ul>	UN-HABITAT; UNHCR trading and lopment and s: tariff and ced programme lation of official coverty reduction small island nable of the through national
(i) 7.10.         G8.         T8.A.         T8.B.         T8.C.         T8.D.	<ul> <li>by Lock, to have denoted a significant improvement in the lives of million slum dwellers</li> <li>Proportion of urban population living in slums</li> <li>Develop a global partnership for development</li> <li>Develop further an open, rule-based, predictable, non-discriminatory financial system. Includes a commitment to good governance, deve poverty reduction - both nationally and internationally</li> <li>Address the special needs of the least developed countries. Include quota-free access for the least developed countries' exports; enhance of debt relief for heavily indebted poor countries (HIPC) and cancell bilateral debt; and more generous ODA for countries committed to p Address the special needs of landlocked developing countries and developing States (through the Programme of Action for the Sustain Development of Small Island Developing States and the outcome of twenty-second special session of the General Assembly)</li> <li>Deal comprehensively with the debt problems of developing countries and international measures in order to make debt sustainable in the</li> </ul>	UN-HABITAT; UNHCR trading and lopment and s: tariff and ced programme lation of official coverty reduction small island nable ff the through national long-term
<ul> <li>(i) 7.10.</li> <li>G8.</li> <li>T8.A.</li> <li>T8.B.</li> <li>T8.C.</li> <li>T8.D.</li> <li>(i) 8.01.</li> </ul>	<ul> <li>million slum dwellers</li> <li>Proportion of urban population living in slums</li> <li>Develop a global partnership for development</li> <li>Develop further an open, rule-based, predictable, non-discriminatory</li> <li>financial system. Includes a commitment to good governance, deve</li> <li>poverty reduction - both nationally and internationally</li> <li>Address the special needs of the least developed countries. Include</li> <li>quota-free access for the least developed countries' exports; enhance</li> <li>of debt relief for heavily indebted poor countries (HIPC) and cancell</li> <li>bilateral debt; and more generous ODA for countries committed to p</li> <li>Address the special needs of landlocked developing countries and</li> <li>developing States (through the Programme of Action for the Sustain</li> <li>Development of Small Island Developing States and the outcome of</li> <li>twenty-second special session of the General Assembly)</li> <li>Deal comprehensively with the debt problems of developing countries</li> <li>and international measures in order to make debt sustainable in the</li> </ul>	UN-HABITAT; UNHCR trading and lopment and s: tariff and ation of official poverty reduction small island nable of the through national long-term OECD

	percentage of OECD/DAC donors' gross national income	
<u>(</u> )8.02.	Proportion of total bilateral, sector-allocable ODA of OECD/DAC	OECD
	donors to basic social services (basic education, primary health	
	care, nutrition, safe water and sanitation)	
<b>(i)8.03</b> .	Proportion of bilateral official development assistance of	OECD
	OECD/DAC donors that is untied	
<u>(</u> )8.04.	ODA received in landlocked developing countries as a proportion	OECD
	of their gross national incomes	
<u>(</u> )8.05.	ODA received in small island developing States as a proportion	OECD
	of their gross national incomes	
<u>(</u> )8.06.	Proportion of total developed country imports (by value and	UNCTAD; ITC
	excluding arms) from developing countries and least developed	
	countries, admitted free of duty	
()8.07.	Average tariffs imposed by developed countries on agricultural	UNCTAD;
	products and textiles and clothing from developing countries	WTO
()8.08.	Agricultural support estimate for OECD countries as a percentage	IFAD; OECD
	of their gross domestic product	
<u>(</u> )8.09.	Proportion of ODA provided to help build trade capacity	OECD; WTO
<u>(</u> )8.10.	Total number of countries that have reached their HIPC decision	IMF; WB
	points and number that have reached their HIPC completion	
	points (cumulative)	
<u>(</u> )8.11.	Debt relief committed under HIPC and MDRI Initiatives	IMF; WB
()8.12.	Debt service as a percentage of exports of goods and services	IMF; WB
T8.E.	In cooperation with pharmaceutical companies, provide access to a	fordable
	essential drugs in developing countries	
()8.13.	Proportion of population with access to affordable essential drugs	WHO; UNDG
	on a sustainable basis	
T8.F.	In cooperation with the private sector, make available the benefits of	of new
	technologies, especially information and communications	
<u>()</u> 8.14.	Fixed-telephone subscriptions per 100 inhabitants	ITU
()8.15.	Mobile-cellular subscriptions per 100 inhabitants	
0.10. Note: [In	idicator 7 1-7 71 involved in Target 7 A-7 B: [Indicator 8 1-8 12] involved	 ed in Target
8.A-8.D	[Indicator 8.1-8.12] Some indicators are monitored separately for the	least developed
countries	(IDCs) landlocked developing countries, and small island developing	a States:
[Indicato	r 8.1-8.5] Official development assistance (ODA); [Indicator 8.6-8.9] M	larket access;
[Indicato	r 8.10-8.12] Debt sustainability	

<sup>\*</sup> The major sources are: FAO (Food & Agriculture Organisation: http://www.fao.org/sustainable-development-goals/en/); IEA (International Energy Agency:

https://www.iea.org/); IFAD (International Fund for Agricultural Development: https://www.ifad.org/what/partnership/tags/mlun/1815547); ILO (International Labour Organisation: http://www.ilo.org/pardev/lang--en/index.htm); IMF (International Monetary Fund: http://www.imf.org/external/np/exr/facts/mdg.htm); IPU (Inter-Parliamentary Union: http://ipu.org/english/home.htm); ITC (International Trade Centre: http://www.intracen.org/); ITU (International Telecommunications Union: http://www.itu.int/en/ITU-D/Statistics/Pages/intlcoop/mdg/default.aspx); MC (Millennium Campaign: http://www.endpoverty2015.org/); OECD (Organisation for Economic Co-operation and Development: http://www.oecd.org/); OHCHR (Office of the High Commissioner for Human Rights: http://www.ohchr.org/EN/Issues/MDG/Pages/MDGIndex.aspx); UNAIDS (Joint UN Programme on HIV/AIDS: http://www.unaids.org/); UNCTAD (UN Conference on Trade and Development: http://unctad.org/en/Pages/Home.aspx); UNDESA (UN Department of Economic & Social Affairs: http://mdgs.un.org/unsd/mdg/Default.aspx); UNDG (UN Development Group: https://undg.org/); UNDP (United Nations Development Programme: http://www.undp.org/content/undp/en/home/ourwork/overview.html); UNEP (UN Environment Programme: http://www.unep.org/); UNEPOS (UNEP Ozone Secretariat: http://ozone.unep.org/); UNESCO (UN Educational, Scientific and Cultural Organisation: http://www.unesco.org/new/en/education/themes/leading-the-international-agenda/education-for-all /education-and-the-mdgs/); UNFPA (UN Population Fund: http://www.unfpa.org/icpd); UNHCR (UN Refugee Agency: http://www.unhcr.org/); UNICEF (UN Children's Fund: http://www.unicef.org/mdg/); UNW (UN Women: http://www.unwomen.org/en); UN-HABITAT (UN Human Settlements Programme: http://unhabitat.org/); WB (World Bank: http://data.worldbank.org/); WCMC (UNEP-World Convervation Monitoring Center: https://www.unep-wcmc.org/); WFP (World Food Programme: http://www.wfp.org/); WHO (World Health Organisation: http://www.who.int/topics/millennium\_development\_goals/en/); WTO (World Trade Organisation: https://www.wto.org/english/thewto\_e/coher\_e/mdg\_e/mdg\_e.htm).

## 3.3.2. MDGs performance in the Olympic host nations

The entire countries which hosted Olympic Games<sup>63</sup>) from the inaugural event in 1896

<sup>61)</sup> G: goal; T: target; (i): indicator.

<sup>62)</sup> Refer in more detail to http://mdgs.un.org/unsd/mi/wiki/MainPage.ashx.

<sup>63) &#</sup>x27;The Olympic host nations' is inspired by the concept of the Organisation for Economic Co-operation and Development (OECD). The international organisation cooperates with 36 member countries to attain the mission: "The mission of the OECD is to promote policies that will improve the economic and social well-being of people around the world. The OECD provides a forum in which governments can work together to share experiences and seek solutions to common problems. We work with governments to understand what drives economic, social and environmental change. We measure productivity and global flows of trade and investment. We analyse and compare data to predict future trends. We set international standards on a wide range of things, from agriculture and tax to the safety of

to the 2016 year, including summer, winter and youth games, were selected to monitor the progress of the MDGs (see <Table 3.05><sup>64</sup>)). It was deemed that the fact hosting such a mega event can mean they are relatively freer from the initial conditions of life such as poverty and hunger (MDGs Goal 1) and have more development capacity such as communication and global partnership (MDGs Goal 8) than others which have not the availability. In other words, those countries are supposed to satisfy the necessary conditions for 'development for sports'.

The corresponding 24 countries were: Australia, Austria, Belgium, Bosnia and Herzegovina, Brazil, Canada, China (excluding Hong Kong and Macao), Finland, France (excluding French Guiana and French Polynesia), Germany, Greece, Italy, Japan, the ROK, Mexico, Netherlands (excluding Netherlands Antilles), Norway, Russia, Singapore, Spain, Sweden, Switzerland, the United Kingdom (including England, Scotland, Wales, and Nothern Ireland), and the United States of America (excluding United States Virgin Islands). Measurable indicators analysed them<sup>65)</sup>.

The figures show periodical windows, elucidate the consequences, and let the achievement of the MDGs be comparable among the countries in each period from 1990 to 2015. The detail values of 24 countries are presented in Appendix D with each state as a unit. The values corresponding to twenty-four nations, five to twenty-three ones, and less than five ones are presented in Appendix E, in Appendix F and omitted respectively<sup>66)67</sup>) according to the classification in <Table 3.06>.

chemicals." (Adapted from the official website of the Organisation for Economic Co-operation and Development; Refer in more detail to http://www.oecd.org/about/).

<sup>64)</sup> Refer in more detail to https://www.olympic.org/olympic-games.

<sup>65)</sup> The original data, collected from the previously mentioned various sources, are adapted from the "Millennium Development Goals Indicators: The official United Nations site for the MDG Indicators", 2015, <a href="http://mdgs.un.org/unsd/mdg/Data.aspx">http://mdgs.un.org/unsd/mdg/Data.aspx</a>.

<sup>66)</sup> The nations which are not applicable are due to missing data in the source material.

<sup>67)</sup> The figures in Appendix E and Appendix F are presented with the calculated average of a certain period.

### <Table 3.05> Olympic host country

No	Year	City	Olympic	Date	Country	Continent	No. of	No. of	No. of
			Games				participated	participated	events
			to us a						
			туре				athletes	countries	
01	2016	Rio	Summer	05 AUG - 21 AUG	Brazil	America	11,237	207	306
02	2016	Lillehammer	Youth	12 FEB - 21 FEB	Norway	Europe	1,100	71	70
03	2014	Nanjing	Youth	16 AUG - 28 AUG	People's Republic of China	Asia	3,579	203	222
04	2014	Sochi	Winter	07 FEB - 23 FEB	Russian Federation	Europe	2,780	88	98
05	2012	Innsbruck	Youth	13 JAN - 22 JAN	Austria	Europe	1,022	69	63
06	2012	London	Summer	27 JUL - 12 AUG	Great Britain	Europe	10,568	204	302
07	2010	Singapore	Youth	14 AUG - 26 AUG	Singapore	Asia	3,524	204	201
08	2010	Vancouver	Winter	12 FEB - 28 FEB	Canada	America	2,566	82	86
09	2008	Beijing	Summer	08 AUG - 24 AUG	People's Republic of China	Asia	10,942	204	302
10	2006	Turin	Winter	10 FEB - 26 FEB	Italy	Europe	2,508	80	84
11	2004	Athens	Summer	13 AUG - 29 AUG	Greece	Europe	10,625	201	301
12	2002	Salt Lake	Winter	08 FEB - 24 FEB	United States of America	America	-	77	80
13	2000	Sydney	Summer	15 SEP - 01 OCT	Australia	Oceania	10,651	199	300
14	1998	Nagano	Winter	07 FEB - 22 FEB	Japan	Asia	2,176	72	68
15	1996	Atlanta	Summer	19 JUL - 04 AUG	United States of America	America	10,318	197	271
16	1994	Lillehammer	Winter	12 FEB - 27 FEB	Norway	Europe	1,737	67	61
17	1992	Barcelona	Summer	25 JUL - 09 AUG	Spain	Europe	9,356	169	257
18	1992	Albertville	Winter	08 FEB - 23 FEB	France	Europe	1,801	64	57
19	1988	Seoul	Summer	17 SEP - 02 OCT	ROK	Asia	8,397	159	237
20	1988	Calgary	Winter	13 FEB - 28 FEB	Canada	America	1,423	57	46
21	1984	Los Angeles	Summer	28 JUL - 12 AUG	United States of America	America	6,829	140	221
22	1984	Sarajevo	Winter	08 FEB - 19 FEB	Bosnia and Herzegovina	Europe	1,272	49	39
23	1980	Moscow	Summer	19 JUL - 03 AUG	Russian Federation	Europe	5,179	80	203
24	1980	Lake Placid	Winter	13 FEB - 24 FEB	United States of America	Europe	1,072	37	38

25	1976	Montreal	Summer	17 JUL - 01 AUG	Canada	America	6,084	92	198
26	1976	Innsbruck	Winter	04 FEB - 15 FEB	Austria	Europe	1,123	37	37
27	1972	Munich	Summer	26 AUG - 11 SEP	Germany	Europe	7,134	121	195
28	1972	Sapporo	Winter	03 FEB - 13 FEB	Japan	Asia	1,006	35	35
29	1968	Mexico	Summer	12 OCT - 27 OCT	Mexico	America	5,516	112	172
30	1968	Grenoble	Winter	06 FEB - 18 FEB	France	Europe	1,158	37	35
31	1964	Tokyo	Summer	10 OCT - 24 OCT	Japan	Asia	5,152	93	163
32	1964	Innsbruck	Winter	29 JAN - 09 FEB	Austria	Europe	1,091	36	34
33	1960	Rome	Summer	25 AUG - 11 SEP	Italy	Europe	5,338	83	150
34	1960	Squaw Valley	Winter	18 FEB - 28 FEB	United States of America	America	665	30	27
35	1956	Melbourne-Stockholm	Summer	22 NOV - 08 DEC	Australia	Oceania	3,314	72	151
36	1956	Cortina D'Ampezzo	Winter	26 JAN - 05 FEB	Italy	Europe	821	32	24
37	1952	Helsinki	Summer	19 JUL - 03 AUG	Finland	Europe	4,955	69	149
38	1952	Oslo	Winter	14 FEB - 25 FEB	Norway	Europe	694	30	22
39	1948	London	Summer	29 JUL - 14 AUG	Great Britain	Europe	4,104	59	136
40	1948	St. Moritz	Winter	30 JAN - 08 FEB	Switzerland	Europe	669	28	22
41	1936	Berlin	Summer	01 AUG - 16 AUG	Germany	Europe	3,963	49	129
42	1936	Garmisch-Partenkirchen	Winter	06 FEB - 16 FEB	Germany	Europe	646	28	17
43	1932	Los Angeles	Summer	30 JUL - 14 AUG	United States of America	America	1,334	37	117
44	1932	Lake Placid	Winter	04 FEB - 15 FEB	United States of America	America	252	17	14
45	1928	Amsterdam	Summer	17 MAY - 12 AUG	Netherlands	Europe	2,883	46	109
46	1928	St. Moritz	Winter	11 FEB - 19 FEB	Switzerland	Europe	464	25	14
47	1924	Paris	Summer	04 MAY - 27 JUL	France	Europe	3,088	44	126
48	1924	Chamonix	Winter	25 JAN - 05 FEB	France	Europe	258	16	16
49	1920	Antwerp	Summer	20 APR - 12 SEP	Belgium	Europe	2,622	29	156
50	1912	Stockholm	Summer	05 MAY - 27 JUL	Sweden	Europe	2,407	28	102
51	1908	London	Summer	27 APR - 31 OCT	Great Britain	Europe	2,008	22	110
52	1904	St Louis	Summer	01 JUL - 23 NOV	United States of America	America	651	12	95
53	1900	Paris	Summer	14 MAY - 28 OCT	France	Europe	997	24	95
54	1896	Athens	Summer	06 APR - 15 APR	Greece	Europe	241	14	43

	MDG	S	Number of			
			applic	cable nat	tions*	
Goal	Target	Indicator	24	5-23	0-4	
G1	T1.A	<u>(</u> )1.01	0	0	1	
		<u>(</u> )1.02	0	0	1	
		<u>(</u> )1.03	0	1	0	
	T1.B	í)1.04	1	0	0	
		<u>(</u> )1.05	1	0	0	
		í)1.06	0	1	0	
		<u>(</u> )1.07	0	1	0	
	T1.C	í)1.08	0	1	0	
		<u>(</u> )1.09	0	1	0	
	Subtota	1	2	5	2	
G2	T2.A	<u>()</u> 2.01	0	1	0	
		<u>(</u> )2.02	0	1	0	
		<u>(</u> )2.03	0	1	0	
	Subtota	12	0	3	0	
G3	T3.A	<u>(</u> )3.01	0	1	0	
		()3.02	1	0	0	
		<u>()</u> 3.03	1	0	0	
	Subtota	3	2	1	0	
G4	T4.A	<u></u> ()4.01	1	0	0	
		<u>(</u> )4.02	1	0	0	
		<u>(</u> )4.03	1	0	0	
	Subtota	4	3	0	0	
G5	T5.A	()5.01	1	0	0	
		()5.02	0	1	0	
	T5.B	í) <b>5.0</b> 3	1	0	0	
		<u>(</u> )5.04	1	0	0	
		í) <b>5.05</b>	0	1	0	
		<u>()</u> 5.06	0	1	0	
	Subtota	5	3	3	0	
G6	T6.A	<u>()</u> 6.01	0	1	0	
		<u>()</u> 6.02	0	0	1	
		<u>()</u> 6.03	0	0	1	
		<u>()</u> 6.04	0	0	1	
	T6.B	<u>()</u> 6.05	0	0	1	
	T6.C	<u>()</u> 6.06	0	0	1	
		<u>()</u> 6.07	0	0	1	
		<u>()6.08</u>	0	0	1	
		<u>()</u> 6.09	1	0	0	
		06.10	1	0	0	
	Subtota	16	2	1	7	

<table 3<="" th=""><th>3.06&gt;</th><th>Classification</th><th>of</th><th>presentation</th></table>	3.06>	Classification	of	presentation
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	MDG	s	Number of		
			appli	cable na	tions
Goal	Target	Indicator	24	5-23	0-4
G7	T7.A	<u>(</u> )7.01	1	0	0
	T7 B	í)7.02	0	1	0
	17.0	()7.03	0	1	0
		í)7.04	0	0	1
		()7.05	0	1	0
		í) <b>7.0</b> 6	1	0	0
		í) <b>7.0</b> 7	0	0	1
	T7.C	í) <b>7.08</b>	1	0	0
		í) <b>7</b> .09	1	0	0
	T7.D	<u>(</u> )7.10	0	0	1
	Subtota	17	4	3	3
G8	T8.A	<u>(</u> )8.01	0	1	0
	T8 B	<u>()</u> 8.02	0	1	0
	10.0	<u>()</u> 8.03	0	1	0
	T8.C	í) <b>8.0</b> 4	0	0	1
	T8.D	<u>()</u> 8.05	0	0	1
		í) <b>8.0</b> 6	0	0	1
		<u>()</u> 8.07	0	0	1
		í)8.08	0	1	0
		<u>()</u> 8.09	0	1	0
		<u>(</u> )8.10	0	0	1
		<u>(</u> )8.11	0	0	1
		<u>(</u> )8.12	0	0	1
	T8.E	<u>(</u> )8.13	0	0	1
	T8.F	<u>(</u> )8.14	1	0	0
		<u>(</u> )8.15	1	0	0
		<u>(</u> )8.16	1	0	0
	Subtota	8	3	5	8
	Tota		19	21	20
				60	

\* 1: Applicable; 0: Not applicable

There were conspicuous peculiarities. In 'Goal 1. Eradicate extreme poverty and hunger', Northern Europe countries such as Sweden, Norway and Finland have relatively small income gap between the rich and the poor (Indicator 1.03). Development of China and Singapore is moving forward remarkably (Indicator 1.04). China has a better economic condition in terms of employment (Indicator 1.05) but still struggles in hunger due to income imbalance (Indicator 1.09).

In 'Goal 2. Achieve universal primary education', China has a lower ratio than others at enrolment of primary school (Indicator 2.01). Switzerland pupils are least in completing their primary education (Indicator 2.02).

In 'Goal 3. Promote gender equality and empower women', most of the nations have accomplished gender parity but not at the tertiary level enrolment in the ROK and China (Indicator 3.01), keep increasing the share of women in wage employment (Indicator 3.02), and share seats with women in national parliament (Indicator 3.03).

In 'Goal 4. Reduce child mortality', all nations show a tendency of decrease in mortality of children under five (Indicator 4.01) and of infants between 0 and 1 year (Indicator 4.02). They have attained 90 per cent in children 1-year-old immunised against measles, except Austria (Indicator 4.03).

In 'Goal 5. Improve maternal health', Russian Federation, Mexico, China and Brazil have a higher ratio in maternal mortality though it is decreasing as time goes by (Indicator 5.01). Mexico, China and Brazil have been secured circumstances of births attended by skilled health personnel drastically (Indicator 5.02). Married women in Bosnia and Herzegovina use contraceptive at least frequency (Indicator 5.03). Mexico and Brazil show the highest rate of adolescent birth (Indicator 5.04). Most nations have attained antenatal care coverage (Indicator 5.05).

In 'Goal 6. Combat HIV/AIDS, malaria and other diseases', Russian Federation, the ROK and China have a relatively high rate in tuberculosis death (Indicator 6.09). Finland and Canada have a low rate in treatment success of tuberculosis though their detection rate of it is higher than 80 per cent (Indicator 6.10).

In 'Goal 7. Ensure environmental sustainability', Sweden, the ROK, Japan, Finland and Brazil keep a higher proportion of land area covered by forest (Indicator 7.01). The United States of America is the highest in Carbon dioxide emissions (Indicator 7.02) and in consumption of all ozone-depleting substances (Indicator 7.03). The ROK and Belgium are high in water resources used (Indicator 7.05). Germany is the highest in terrestrial and marine areas protected to total area (Indicator 7.06). Most nations have secured improved drinking water sources (Indicator 7.08) and sanitation facilities (Indicator 7.09).

In 'Goal 8. Develop a global partnership for development', Sweden, Norway and Netherlands are actively participating in official development assistance (Indicator 8.01). The United States of America is highly contributing to essential social services (Indicator 8.02). The ROK and Japan give positive aid for official development assistance provided to help build trade capacity (Indicator 8.09). Citizens in many nations including Finland are moving from fixed-telephone (Indicator 8.14) to mobile-cellular (Indicator 8.15). The number of internet users is increasing in all countries (Indicator 8.16).

#### 3.3.3. MDGs evaluation in the ROK and Switzerland

The indicators of the MDGs, which are available to the ROK and Switzerland, are adapted selectively to evaluate and compare the status of 'development for sports' as described in <Table 3.07>.

<table 3.07=""></table>	Technical	note for	MDGs	measure <sup>68)</sup>
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Indicato	Measurement note in detail	The	Switz
r		ROK	erland
1.03	Poorest quintile's share in national income or consumption, percentage	n/a	0
1.04 <sup>69)</sup>	GDP (Gross Domestic Product) per capita (current US\$)	0	0
1.05	Employment-to-population ratio, both sexes, percentage	0	0
1.07 <sup>70)</sup>	Proportion of own-account and contributing family workers in total	0	0
	employment, both sexes, percentage		
1.08	Children under 5 moderately or severely underweight, percentage	0	n/a
1.09	Population undernourished, percentage	0	0
2.01	Total net enrolment ratio in primary education, both sexes	0	0
2.02	Percentage of pupils starting grade 1 who reach last grade of	0	0
	primary, both sexes		
3.01(p)	Gender Parity Index in primary level enrolment	0	0
3.01(s)	Gender Parity Index in secondary level enrolment	0	0
3.01(t)	Gender Parity Index in tertiary level enrolment	0	0
3.02	Share of women in wage employment in the non-agricultural sector	0	0
3.03	Seats held by women in national parliament, percentage	0	0
4.01	Children under five mortality rate per 1,000 live births	0	0
4.02	Infant mortality rate (0-1 year) per 1,000 live births	0	0
4.03	Children 1-year-old immunised against measles, percentage	0	0
5.01	Maternal mortality ratio per 100,000 live births	0	0
5.02	Births attended by skilled health personnel, percentage	0	0
5.03	Current contraceptive use among married women 15-49 years old,	0	0
	any method, percentage		
5.04	Adolescent birth rate, per 1,000 women	0	0
6.01	People living with HIV (Human Immunodeficiency Virus), 15-49 years	n/a	0
	old, percentage		
6.06(n)	Notified cases of malaria per 100,000 population	0	n/a
6.09(d)	Tuberculosis death rate per year per 100,000 population - Mid-point	0	0
6.09(i)	Tuberculosis incidence rate per year per 100,000 population - Mid-point	0	0
6.09(p)	Tuberculosis prevalence rate per 100,000 population - Mid-point	0	0
6.10(d)	Tuberculosis detection rate under DOTS (Directly Observed Treatment	0	0
	Short course strategy), percentage		
6.10(t)	Tuberculosis treatment success rate under DOTS, percentage	0	n/a
7.01	Proportion of land area covered by forest, percentage	0	0
7.02(k)	CO <sub>2</sub> (Carbon dioxide) emissions, kg CO <sub>2</sub> per \$1 GDP (PPP,	0	0
. ,	Purchasing Power Parity)		
7.02(m)	CO <sub>2</sub> emissions, metric tonnes of CO <sub>2</sub> per capita	0	0
7.02(t)	CO <sub>2</sub> emissions, thousand metric tonnes of CO <sub>2</sub>	n/a	0
			-

68) The indicators that has no value at the ROK and Switzerland are not presented. Adapted from the "Indicators for monitoring the Millenium Development Goals: Definitions, rationale, concepts and sources". Refer in more detail to <a href="http://mdgs.un.org/unsd/mi/wiki/MainPage.ashx">http://mdgs.un.org/unsd/mi/wiki/MainPage.ashx</a>.

7.03	Consumption of all Ozone-Depleting Substances in ODP (Ozone	0	0
	Depletion Potential) metric tonnes		
7.05	Proportion of total water resources used, percentage	0	0
7.06	Terrestrial and marine areas protected to total territorial area, percentage	0	0
7.08	Proportion of the population using improved drinking water sources, total	0	0
7.09	Proportion of the population using improved sanitation facilities, total	0	0
8.01(a)	Net ODA (Official Development Assistance) as percentage of	0	0
	OECD/DAC (Organisation for Economic Co-operation and		
	Development/Development Assistance Committee) donors GNI (Gross		
	National Income)		
8.01(t)	Net ODA to LDCs (Least developed countries) as percentage of	0	0
	OECD/DAC donors GNI		
8.02	ODA to basic social services as percentage of sector-allocable ODA	0	0
8.03	ODA that is untied, percentage	0	0
8.06(d)	Developed country imports from developing countries, admitted	0	n/a
	duty-free, percentage		
8.08	Agricultural support estimate for OECD countries as a percentage of	0	0
	their GDP		
8.09	ODA provided to help build trade capacity, percentage	0	0
8.14	Fixed-telephone subscriptions per 100 inhabitants	0	0
8.15	Mobile-cellular subscriptions per 100 inhabitants	0	0
8.16	Internet users per 100 inhabitants	0	0

The evaluation was performed by the following steps: 1) calculation of average value for each period from 1990 to 2015 - (1) 1990-1994, (2) 1995-1999, (3) 2000-2004, (4) 2005-2009, and (5) 2010-2015); 2) presentment of the lowest value with the country name and year; 3) presentment of the highest value with the country name and year; 4) dividing the values from the lowest to the highest into five equal parts; and 5) grading the latest value of each indicator in accordance with <Table 3.08>.

<sup>69)</sup> The values are from the World Bank (<u>http://data.worldbank.org/indicator/NY.GDP.PCAP.CD?locations=KR</u>). The original indicator is "Growth rate of GDP per person employed, percentage". Growth rate is inefficient to compare countries due to the ceiling effect of the developed countries.

<sup>70)</sup> The self-employment is not appropriate to compare between countries because it can be decent or vulnerable depending on national circumstances.

<Table 3.08> Status evaluation

Grade	Degree	Range
1	Very low level	From 0 to 20 per cent below
2	Low level	From 20 to 40 per cent below
3	Middle level	From 40 to 60 per cent below
4	High level	From 60 to 80 per cent below
5	Very high level	From 80 and above

Each grade is summed into the subtotal of respective goals, and the subtotals were computed for total value under the following formula. The MDGs achievement computation of the ROK and Switzerland, which is the eventual finding of the Study 2, is as presented in <Table 3.09> and in <Table 3.10> respectively.

 $Total \ value = (Goal \ 1 \ value + Goal \ 2 \ value + Goal \ 3 \ value + Goal \ 4 \ value + Goal \ 5$   $value + Goal \ 6 \ value + Goal \ 7 \ value + Goal \ 8 \ value) \ / \ 8 \ * \ 100$   $= \left(\frac{Subtotal \ of \ Goal \ 1}{No \cdot of \ valid \ indicators \ *5} \ *100 \ + \frac{Subtotal \ of \ Goal \ 2}{No \cdot of \ valid \ indicators \ *5}} \ *100 \ + \frac{Subtotal \ of \ Goal \ 4}{No \cdot of \ valid \ indicators \ *5}} \ *100 \ + \frac{Subtotal \ of \ Goal \ 4}{No \cdot of \ valid \ indicators \ *5}} \ *100 \ + \frac{Subtotal \ of \ Goal \ 4}{No \cdot of \ valid \ indicators \ *5}} \ *100 \ + \frac{Subtotal \ of \ Goal \ 6}{No \cdot of \ valid \ indicators \ *5}} \ *100 \ + \frac{Subtotal \ of \ Goal \ 6}{No \cdot of \ valid \ indicators \ *5}} \ *100 \ + \frac{Subtotal \ of \ Goal \ 6}{No \cdot of \ valid \ indicators \ *5}} \ *100 \ + \frac{Subtotal \ of \ Goal \ 6}{No \cdot of \ valid \ indicators \ *5}} \ *100 \ + \frac{Subtotal \ of \ Goal \ 6}{No \cdot of \ valid \ indicators \ *5}} \ *100 \ + \frac{Subtotal \ of \ Goal \ 6}{No \cdot of \ valid \ indicators \ *5}} \ *100 \ + \frac{Subtotal \ of \ Goal \ 6}{No \cdot of \ valid \ indicators \ *5}} \ *100 \ + \frac{Subtotal \ of \ Goal \ 6}{No \cdot of \ valid \ indicators \ *5}} \ *100 \ + \frac{Subtotal \ of \ Goal \ 6}{No \cdot of \ valid \ indicators \ *5}} \ *100 \ + \frac{Subtotal \ of \ Goal \ 6}{No \cdot of \ valid \ indicators \ *5}} \ *100 \ + \frac{Subtotal \ 6}{No \cdot of \ valid \ indicators \ *5}} \ *100 \ + \frac{Subtotal \ 6}{No \cdot of \ valid \ indicators \ *5}} \ *100 \ + \frac{Subtotal \ 6}{No \cdot of \ valid \ indicators \ *5}} \ *100 \ + \frac{Subtotal \ 6}{No \cdot of \ valid \ indicators \ *5}} \ *100 \ + \frac{Subtotal \ 6}{No \cdot of \ valid \ indicators \ *5}} \ *100 \ + \frac{Subtotal \ 6}{No \cdot of \ valid \ indicators \ *5}} \ *100 \ + \frac{Subtotal \ 6}{No \cdot of \ valid \ indicators \ *5}} \ *100 \ + \frac{Subtotal \ 6}{No \cdot of \ valid \ indicators \ *5}} \ *100 \ + \frac{Subtotal \ 6}{No \cdot of \ valid \ indicators \ *5}} \ *100 \ + \frac{Subtotal \ 6}{No \cdot of \ valid \ indicators \ *5} \ *100 \ + \frac{Subtotal \ 6}{No \cdot of \ valid \ indicators \ *5} \ *100 \ + \frac{Subtotal \ 6}{No \cdot of \ valid \ ind$ 

Indicator	1990-	1995-	2000-	2005-	2010-	Degree o	f The Lowest value (country,	The Highest value (country,
72)	1994	1999	2004	2009	2015	achieveme	nt year) <sup>74)</sup>	year) <sup>75)</sup>
						73)		
1.0476)	8320.532	11284.25	13226.64	20297.93	25328.29	2	1408.14619 (Yemen, 2013)	101449.968 (Luxembourg,
	271	25	76	1	496			2015)
1.05	59.26	59.12	59.32	59.46	59.18	3	29.4 (Samoa, 2012)	87.4 (The Republic of
								Moldova, 2009)
1.07	-	-	28.46	25.53	-	-	0.2 (Qatar, 2013)	91.2 (Ethiopia, 2005)
1.08	-	-	-	-	0.60	5	0.5 (Chile, 2013; The United	48.6 (Timor-Leste, 2007)
							States of America, 2012)	
1.09	5.00	5.00	5.00	5.00	5.00	5	5 (Albania, 2015 et al.)	57.6 (Haiti, 2005)
				Goal	1. Subtotal	15		
2.01	99.28	98.92	99.62	99.44	98.73	5	35.1 (Liberia, 2006)	100 (United Kingdom, 2005;
								Japan, 2012)
2.02	-	99.20	98.40	98.50	99.30	5	24.8 (Uganda, 2010)	100 (Japan, 2009)
Goal 2. Subtotal					2. Subtotal	10		
3.01 (p)	1.01	1.02	1.00	0.99	0.99	4 (av	e.) 0.55 (Somalia, 2007)	1.26 (Marshall Islands, 2005)
3.01 (s)	0.97	1.00	1.00	0.99	0.99	3 2.6	0.32 (Afghanistan, 2005)	1.78 (Niue, 2005)
3.01 (t)	0.53	0.60	0.62	0.68	0.75	1	0 (Monaco, 2013 et al.)	6.76 (Qatar, 2012)
3.02	37.90	38.64	40.96	42.04	42.73	4	6.2 (Yemen, 2007)	55.4 (Bermuda, 2012)

<Table 3.09> MDGs achievement computation of the ROK<sup>71</sup>)

71) The presented value is average in the period; the row of no value is not displayed; source: Millennium Development Goals Indicators: The official United Nations site for the MDG Indicators (<u>http://mdgs.un.org/unsd/mdg/Data.aspx</u>); Millennium Development Goals, World Bank (<u>http://databank.worldbank.org/data/Views/Reports/ReportWidgetCustom.aspx?Report\_Name=MDG-Table&Id=c658ae98&inf=n</u>); The World Bank - IBRD, IDA (<u>http://data.worldbank.org/country/korea-rep?view=chart</u>); World Development Indicators, World Bank (<u>http://databank.worldbank.org/data/reports.aspx?source=2&country=AFG</u>).
| 3.03             | 2.00     | 3.23     | 5.38     | 13.58   | 15.30      |   | 2      | 0 (Belize, 2012 et al.)         | 63.8 (Rwanda, 2015)           |
|------------------|----------|----------|----------|---------|------------|---|--------|---------------------------------|-------------------------------|
|                  |          |          |          | Goal 3  | . Subtotal |   | 8.67   |                                 |                               |
| 4.01             | 6.44     | 5.44     | 6.28     | 4.88    | 3.93       |   | 5      | 2 (Luxembourg, 2013)            | 204.5 (Angola, 2005)          |
| 4.02             | 5.50     | 4.68     | 5.38     | 4.20    | 3.35       |   | 5      | 1.6 (Iceland, 2013;             | 127.5 (Sierra Leone, 2005)    |
|                  |          |          |          |         |            |   |        | Luxembourg, 2013)               |                               |
| 4.03             | 92.60    | 88.40    | 96.60    | 95.00   | 98.75      |   | 5      | 25 (The Central African         | 99 (Kuwait, 2013 et al.)      |
|                  |          |          |          |         |            |   |        | Republic, 2013)                 |                               |
|                  |          |          |          | Goal 4  | . Subtotal |   | 15     |                                 |                               |
| 5.01             | 20.00    | 17.80    | 14.60    | 14.00   | 12.83      |   | 5      | 3 (Greece, 2015 et al.)         | 1990 (Sierra Leone, 2005)     |
| 5.02             | 98.00    | 100.00   | -        | -       | -          |   | 5      | 5.7 (Ethiopia, 2005)            | 100 (Kazakhstan, 2010 et al.) |
| 5.03             | 78.40    | 80.50    | 81.90    | 79.93   | -          |   | 5      | 3.5 (South Sudan, 2006)         | 88.4 (Norway, 2005)           |
| 5.04             | 4.20     | 3.15     | 2.46     | 2.04    | 1.80       |   | 5      | 0.7 (Democratic People's        | 229 (The Central African      |
|                  |          |          |          |         |            |   |        | Republic of Korea, 2008)        | Republic, 2009)               |
| Goal 5. Subtotal |          |          |          |         | 20         |   |        |                                 |                               |
| 6.06 (n)         | -        | -        | -        | -       | 70.00      |   | 5      | 0 (Kyrgyzstan, 2012 et al.)     | 38424 (Guinea, 2012)          |
| 6.09 (d)         | 10.60    | 9.26     | 7.94     | 6.02    | 5.40       | 5 | (ave.) | 0 (Anguilla, 2013 et al.)       | 147 (Namibia, 2005)           |
| 6.09 (i)         | 136.80   | 88.00    | 84.80    | 101.80  | 100.50     | 5 | 5      | 0 (Bermuda, 2013 et al.)        | 1518 (Namibia, 2005)          |
| 6.09 (p)         | 214.40   | 194.80   | 177.00   | 161.00  | 147.50     | 5 |        | 0 (Tokelau, 2013)               | 1389 (Namibia, 2005)          |
| 6.10 (d)         | 85.00    | 91.00    | 84.00    | 87.00   | 89.50      | 3 | (ave.) | 0 (Anguilla, 2013; Barbados,    | 170 (Wallis and Futuna        |
|                  |          |          |          |         |            |   | 4      | 2011)                           | Islands, 2013)                |
| 6.10 (t)         | 71.00    | 77.75    | 81.60    | 83.00   | 83.67      | 5 |        | 0 (The Cook Islands, 2012 et    | 100 (Barbados, 2012 et al.)   |
|                  |          |          |          |         |            |   |        | al.)                            |                               |
|                  |          |          |          | Goal 6  | . Subtotal |   | 14     |                                 |                               |
| 7.01             | 64.50    | -        | 63.70    | 63.40   | 63.00      |   | 4      | 0 (Faeroe Islands, 2010 et al.) | 98.5 (French Guiana, 2005)    |
| 7.02 (k)         | 1.00     | 1.00     | 0.00     | 0.00    | -          | 5 | (ave.) | 0 (ROK, 2010)                   | 0.94 (Ukraine, 2005)          |
| 7.02 (m)         | 8.00     | 10.00    | 10.00    | 11.00   | -          | 4 | 4.5    | 2.1 (Monaco, 2011)              | 26.4 (Luxembourg, 2005)       |
| 7.03             | 23676.20 | 12914.52 | 10558.72 | 4936.60 | 2053.63    |   | 5      | -474.6 (Israel, 2011)           | 31160.1 (China, 2005)         |
| 7.05             | -        | _        | 36.50    | -       |            |   | 5      | 0.1 (Iceland, 2005 et al.)      | 1866.7 (The United Arab       |

									Emirates, 2005)
7.06	1.85	-	1.87	-	2.61	1	1	0 (Anguilla, 2014 et al.)	99.72 (Monaco, 2014)
7.08	90.00	91.80	94.60	97.20	98.00	5	5	28 (Somalia, 2005)	100 (Bhutan, 2015 et al.)
7.09	100.00	100.00	100.00	100.00	100.00	5	5	7 (South Sudan, 2015)	100 (Palau, 2015 et al.)
				Goal 7	7. Subtotal	29	9.5		
8.01 (a)	0.02	0.04	0.05	0.08	0.13	1	(ave.)	0.05 (ROK, 2006)	1.12 (Sweden, 2009)
8.01 (t)	0.00	0.01	0.01	0.02	0.05	1	1	0.01 (ROK, 2006)	0.4 (Luxembourg, 2010)
8.02	-	-	-	12.32	8.11	1	1	0 (Greece, 2013)	42.87 (Canada, 2011)
8.03	-	0.50	2.12	22.68	50.90	3	3	1.9 (ROK, 2006)	100 (Norway, 2013)
8.06 (d)	-	44.53	53.94	61.96	70.37	4	1	0 (Western Sahara, 2006)	100 (Angola, 2012 et al.)
8.08	6.68	4.69	3.42	2.55	2.06	4	1	0.13 (Australia, 2013; Israel,	3.21 (Turkey, 2006)
								2007)	
8.09	-	-	-	66.70	42.88	4	1	0.1 (Greece, 2012)	69.1 (Japan, 2008)
8.14	35.57	46.12	54.36	50.67	60.38	3	3	0 (The Democratic Republic of	132.95 (Monaco, 2014)
								the Congo, 2014 et al.)	
8.15	0.88	21.61	68.24	90.92	109.70	2	2	0 (Wallis and Futuna Islands,	322.95 (Macao, 2014)
								2014 et al.)	
8.16	0.15	7.27	59.78	78.60	84.13	5	5	0 (Democratic People's	98.16 (Iceland, 2014)
								Republic of Korea, 2014	
	Goal 8. Subtotal 27								

<sup>72)</sup> The blue coloured indicator refers to reverse grading, that the country which has higher value receive a lower grade.

<sup>73)</sup> Evaluation is based on the latest term of each indicator, red coloured.

<sup>74)</sup> The value is in-between 2005-2015 year; Degree: 1.

<sup>75)</sup> The value is in-between 2005-2015 year; Degree: 5.

<sup>76)</sup> The values are replaced to the GDP 2015.

Indicator	1990-	1995-	2000-	2005-	2010-	De	gree of	The Lowest value (country,	The Highest value (country,
78)	1994	1999	2004	2009	2015	achi	evement	year) <sup>80)</sup>	year) <sup>81)</sup>
							79)		
1.03	5.30	-	7.67	-	-		3	1.9 (Honduras, 2005; Bolivia, 2005)	13.4 (Azerbaijan, 2005)
1.0482)	39163.00	43529.12	43781.02	63432.30	82663.88		5	1408.14619 (Yemen, 2013)	101449.968 (Luxembourg,
	668	03	84	16	029				2015)
1.05	66.00	65.12	65.38	65.04	65.15		4	29.4 (Samoa, 2012)	87.4 (The Republic of
									Moldova, 2009)
1.07	9.15	9.82	10.24	9.70	9.18		-	0.2 (Qatar, 2013)	91.2 (Ethiopia, 2005)
1.09	5.00	5.00	5.00	5.00	5.00		5	5 (Albania, 2015 et al.)	57.6 (Haiti, 2005)
				Goal <sup>2</sup>	1. Subtotal		17		
2.01	83.54	93.13	99.16	98.22	99.13		5	35.1 (Liberia, 2006)	100 (United Kingdom, 2005;
									Japan, 2012)
2.02	49.70	68.70	-	-	-		3	24.8 (Uganda, 2010)	100 (Japan, 2009)
				Goal 2	2. Subtotal		8		
3.01 (p)	1.00	1.00	1.00	1.00	1.00	4	(ave.)	0.55 (Somalia, 2007)	1.26 (Marshall Islands, 2005)
3.01 (s)	0.94	0.93	0.94	0.95	0.97	3	2.67	0.32 (Afghanistan, 2005)	1.78 (Niue, 2005)
3.01 (t)	0.56	0.66	0.78	0.94	0.99	1		0 (Monaco, 2013 et al.)	6.76 (Qatar, 2012)
3.02	43.54	44.96	46.54	46.56	46.98		5	6.2 (Yemen, 2007)	55.4 (Bermuda, 2012)
3.03	14.00	21.00	23.30	26.40	29.50		3	0 (Belize, 2012 et al.)	63.8 (Rwanda, 2015)

<Table 3.10> MDGs achievement computation of Switzerland<sup>77</sup>)

77) The presented value is average in the period; the row of no value is not displayed; source: Millennium Development Goals Indicators: The official United Nations site for the MDG Indicators (<u>http://mdgs.un.org/unsd/mdg/Data.aspx</u>); Millennium Development Goals, World Bank (<u>http://databank.worldbank.org/data/Views/Reports/ReportWidgetCustom.aspx?Report\_Name=MDG-Table&Id=c658ae98&inf=n</u>); The World Bank - IBRD, IDA (<u>http://data.worldbank.org/country/korea-rep?view=chart</u>); World Development Indicators, World Bank (<u>http://databank.worldbank.org/data/reports.aspx?source=2&country=AFG</u>).

				Goal 3	. Subtotal	1	10.67		
4.01	7.48	5.98	5.44	4.84	4.35		5	2 (Luxembourg, 2013)	204.5 (Angola, 2005)
4.02	6.10	4.92	4.54	4.10	3.73		5	1.6 (Iceland, 2013;	127.5 (Sierra Leone, 2005)
								Luxembourg, 2013)	
4.03	84.40	82.40	82.00	89.00	92.75		5	25 (The Central African	99 (Kuwait, 2013 et al.)
								Republic, 2013)	
				Goal 4	. Subtotal		15		
5.01	8.00	7.40	6.60	6.20	5.50		5	3 (Greece, 2015 et al.)	1990 (Sierra Leone, 2005)
5.02	-	-	100.00	-	-		5	5.7 (Ethiopia, 2005)	100 (Kazakhstan, 2010 et al.)
5.03	-	82.00	-	-	-		5	3.5 (South Sudan, 2006)	88.4 (Norway, 2005)
5.04	6.84	5.66	5.44	4.48	3.50		5	0.7 (Democratic People's	229 (The Central African
								Republic of Korea, 2008)	Republic, 2009)
				Goal 5	. Subtotal		20		
6.01	0.26	0.30	0.33	0.35	0.35		5	0.01 (Bangladesh, 2013 et al.)	27.42 (Swaziland, 2012)
6.09 (d)	1.02	0.56	0.32	0.26	0.23	5	(ave.)	0 (Anguilla, 2013 et al.)	147 (Namibia, 2005)
6.09 (i)	17.80	12.20	9.10	7.38	6.83	5	5	0 (Bermuda, 2013 et al.)	1518 (Namibia, 2005)
6.09 (p)	22.40	15.40	11.60	9.36	8.68	5		0 (Tokelau, 2013)	1389 (Namibia, 2005)
6.10 (d)	86.80	89.00	86.20	85.20	88.00		3	0 (Anguilla, 2013; Barbados,	170 (Wallis and Futuna
								2011)	Islands, 2013)
				Goal 6	. Subtotal		13		
7.01	28.80	-	29.90	30.40	31.00		2	0 (Faeroe Islands, 2010 et al.)	98.5 (French Guiana, 2005)
7.02 (k)	0.14	0.14	0.13	0.11	0.10	5	(ave.)	0.1 (Switzerland, 2012)	0.94 (Ukraine, 2005)
7.02 (m)	6.58	6.24	6.16	5.94	5.53	5	5	2.1 (Monaco, 2011)	26.4 (Luxembourg, 2005)
7.02 (t)	44793.04	44248.70	44675.18	45171.70	43673.97	5		79.2 (Monaco, 2011)	6116441 (The United States of
									America, 2007)
7.03	2143.20	89.28	20.38	5.20	1.33		5	-474.6 (Israel, 2011)	31160.1 (China, 2005)
7.05	-	-	4.90	-	-		5	0.1 (Iceland, 2005 et al.)	1866.7 (United Arab Emirates, 2005)
7.06	0.70	-	5.21	-	9.93		1	0 (Anguilla, 2014 et al.)	99.72 (Monaco, 2014)

7.08	100.00	100.00	100.00	100.00	100.00		5	28 (Somalia, 2005)	100 (Bhutan, 2015 et al.)
7.09	100.00	100.00	100.00	100.00	100.00		5	7 (South Sudan, 2015)	100 (Palau, 2015 et al.)
Goal 7. Subt			. Subtotal		28				
8.01 (a)	0.35	0.32	0.34	0.41	0.45	2	(ave.)	0.05 (ROK, 2006)	1.12 (Sweden, 2009)
8.01 (t)	0.12	0.10	0.10	0.11	0.12	2	2	0.01 (ROK, 2006)	0.4 (Luxembourg, 2010)
8.02	-	10.55	14.81	7.40	14.49		2	0 (Greece, 2013)	42.87 (Canada, 2011)
8.03	83.45	89.52	95.60	97.72	92.05		5	1.9 (ROK, 2006)	100 (Norway, 2013)
8.08	2.79	2.28	1.80	1.28	0.99		2	0.13 (Australia, 2013; Israel, 2007)	3.21 (Turkey, 2006)
8.09		-	-	27.04	26.85		2	0.1 (Greece, 2012)	69.1 (Japan, 2008)
8.14	60.82	66.87	73.36	66.22	58.82		3	0 (The Democratic Republic of	132.95 (Monaco, 2014)
								the Congo, 2014 et al.)	
8.15	3.23	19.44	77.51	107.36	131.98		3	0 (Wallis and Futuna Islands,	322.95 (Macao, 2014)
								2014 et al.)	
8.16	1.68	16.40	59.30	76.70	85.53		5	0 (Democratic People's	98.16 (Iceland, 2014)
_								Republic of Korea, 2014	
Goal 8. Subtotal							24		

79) Evaluation is based on the latest term of each indicator, red coloured.

<sup>78)</sup> The blue coloured indicator refers to reverse grading, that the country which has higher value receive a lower grade.

<sup>80)</sup> The value is in-between 2005-2015 year; Degree: 1.

<sup>81)</sup> The value is in-between 2005-2015 year: Degree: 5.

<sup>82)</sup> The values are replaced to the GDP 2015.

# **IV. RESULT AND APPLICATION**

The GSPN Evaluation is the combined output of both the ISSOSS established on the fundamental frame of the SSOSS (the finding of Study 1) and the analysed MDGs predicated upon the theoretical background known as the EBMgt (the finding of Study 2), as described in <Figure 4.01>.

The balanced tool was applied to the ROK and Switzerland to evaluate their sports state in an obvious way by looking at both 'sports development' and 'development for sports' together.



<Figure 4.01> The GSPN Evaluation

# 4.1. GSPN application to the ROK

### 4.1.1. Application of the ISSOSS

The table of 'the Achievement computation (Appendix G34)' is filled up with the information of 56 NFs which are full members of the NOC, 17 RSCs recognised by the NOC and Government, and the RSFs which are intersection organisations between the NFs and the RSCs. The associated materials are presented in 'Appendix G1-G33' as described in <Table 4.01>. Subindex 2-1, Subindex 2-4 and Subindex 3 identify the state with dummy variables with only two possible values - 0=not applicable and 1=applicable.

Three substantial alterations were considered. Firstly, the Korean governing bodies of Baseball and Softball were merged on June 2016 due to the establishment of the World Baseball Softball Confederation in 2013 by the merger between the International Baseball Federation and the International Softball Federation. Secondly, Sejong City was recognised as the seventeenth local government in July 2012. Sports organisations also had set up since then. Thirdly, the Korean Olympic Committee and the Korea Council of Sport for All were merged into the Korean Sport & Olympic Committee in March 2016. Therefore, all materials of the RSCs and the Regional Councils of Sport for All were combined accordingly.

Table	Name of table	Associated Subindex in
No.		evaluation
G01	Clubs and members in each region and sports	2-2. RSC
G02	Teams and athletes in each region and sport	1. NF; 2-2. RSC
G03	Sports venues in each region and sports	2-2. RSC
G04	State of national and international games by sports	1. NF; 2-1. NOC; 3.
		International level parties
G05	State of national and international events by region	1. NF; 2-1. NOC; 2-2. RSC;
		3. International level parties

<Table 4.01> Contents of Appendix G, 'The sports states of the ROK'

G06	Sports institute	2-4. Government
G07	Number of Physical Education teachers in Middle and	2-4. Government
	High school	
G08	Number of Koreans working for the international sports	1. NF; 2-1. NOC; 3.
	governing body	International level parties
<u>G09</u>	Annual state of Pro sports	1. NF
G10	Government's annual investment in the sports industry	2-4. Government
	for development	
G11	Turnover of the sports industry	2-4. Government
G12	Participation in physical activity	2-4. Government
G13	Leisure activity	2-4. Government
G14	Physical fitness	2-4. Government
G15	Physical characteristics	2-4. Government
G16	Pension for athletes by sports	1. NF; 2-1. NOC
G17	Pension for sports people by category	1. NF; 2-1. NOC
G18	Regional council of the Korea Paralympic Committee	2-2. RSC
G19	National Federations of the Korea Paralympic Committee	1. NF
G20	Number of people in need in each region and sports	1. NF; 2-2. RSC
G21	The Korea national games for the people in need	1. NF; 2-1. NOC
G22	Budget for the people in need	2-4. Government
G23	Organisation chart	2-1. NOC
G24	The Current state of the NFs	1. NF
G25	Branches of Korea Council of Sport for All	1. NF
G26	The Current state of the RSC	2-2. RSC
G27	Branches of the Korea Council of Sport for All	2-2. RSC
G28	Code and Location of the RSC	2-2. RSC
G29	Fact of RSF existence	1. NF; 2-2. RSC
G30	Budget for sports	2-1. NOC; 2-4. Government
G31	Olympic performance of the ROK since 1972	2-1. NOC
G32	Government's budget for sports	2-4. Government
G33	Support from local government	2-2. RSC

The value of each subindex is rendered in 'Appendix G34'. The results of each subindex were gathered and calculated by the mentioned computation above. The total and final value are as described in <Table 4.02>.

		Subindex	No. of	Weight	Value
			indicators		
1		National Sports Federation	96	0.20	0.724
2	1	The NOC (National level 1)	93	0.15	0.817
	2	The RSC (National level 2)	89	0.15	0.684
	3	The RSF (National level 3)	92	0.15	0.000
	4	Government (National level 4)	16	0.15	0.824
3		International level	41	0.20	0.914
		Final value <sup>83)</sup>		1	0.676

#### <Table 4.02> ISSOSS achievement of the ROK

The result of the International level (Subindex 3) achieves the highest point (0.914), and the RSC level (Subindex 2-2) took the lowest value (0.684) as described in <Figure 4.02>. The RSFs were not examined because more than eighty per cent of them did not fulfil the essential requisites for organisation composition. The understanding of the RSC's low performance is discussed at the Limitation part.



<Figure 4.02> Values of each Subindex (the ROK)

### 4.1.2. Application of the MDGs

<sup>83)</sup> Final value = 0.724\*0.2 + 0.817\*0.15 + 0.684\*0.15 + 0\*0.15 + 0.824\*0.15 + 0.914\*0.2=0.676.

The results of each Goal was gathered and calculated by the mentioned computation above. The total and final value is as described in <Table 4.03>.

Goal no.	Subtotal of Goal	No. of valid indicators	Goal value
Goal 1	15.00	4	75.00
Goal 2	10.00	2	100.00
Goal 3	8.67	3	57.80
Goal 4	15.00	3	100.00
Goal 5	20.00	4	100.00
Goal 6	14.00	3	93.33
Goal 7	29.50	7	84.29
Goal 8	27.00	9	60.00
		Total va	alue 670.42
		Final valu	e <sup>84)</sup> 83.80

<Table 4.03> MDGs achievement of the ROK

The Goals of 2 (Achieve universal primary education), 4 (Reduce child mortality) and 5 (Improve maternal health) have attained the highest value (100.00), and Goal 3 (Promote gender equality and empower women) has reached the lowest value (57.80) as described in <Figure 4.03>. The result demonstrates that the ROK is placed in the top 83.80 per cent among the UN member nations in terms of social development.



<Figure 4.03> Values of each Goal (the ROK)

84) Final value=Total value/No. of goals.

# 4.2. GSPN application to Switzerland

### 4.2.1. Application of the ISSOSS

The table of 'the Achievement computation (Appendix H07)' is filled up with the information of 70 NFs which are official members of the NOC, 26 RSCs recognised by the NOC and Government, and the RSFs which are intersection organisations between the NFs and the RSCs. The associated materials are presented in 'Appendix H01-H06' as described in <Table 4.04>. Subindex 2-1, Subindex 2-4 and Subindex 3 identify the state with dummy variables with only two possible values - 0=not applicable and 1=applicable.

<table 4.0<="" th=""><th>4&gt; Contents</th><th>of Appendix</th><th>H, 'The</th><th>sports</th><th>states</th><th>of</th><th>Switzerland'</th></table>	4> Contents	of Appendix	H, 'The	sports	states	of	Switzerland'
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Table	Name of table	Associated Subindex in
No.		evaluation
H01	Organisation chart of Switzerland Olympic Committee	2-1. NOC
H02	National Federations recognised by Switzerland	1. NF
	Olympic Committee	
H03	Contributions of Switzerland NOC for sports	1. NF; 2-1. NOC
	federations	
H04	Current state of RSC (offices cantonaux du sport)	2-2. RSC
H05	Budget 2015-2017 of Switzerland NOC	2-1. NOC; 2-4. Government
H06	Olympic performance of Switzerland since 1972	2-1. NOC

The value of each subindex is rendered in 'Appendix H07'. The results of each subindex were gathered and calculated by the mentioned computation above. The total and final value are as described in <Table 4.05>.

		Subindex	No. of	Weight	Value
			indicators		
1		National Sports Federation	96	0.20	0.467
2	1	NOC (National level 1)	93	0.15	0.806
	2	RSC (National level 2)	89	0.15	0.295
	3	RSF (National level 3)	92	0.15	0.000
	4	Government (National level 4)	16	0.15	1.000
3		International level	41	0.20	0.835
		Final value <sup>85)</sup>		1	0.576

<table< th=""><th>4.05&gt;</th><th>ISSOSS</th><th>achievement</th><th>of</th><th>Switzerland</th></table<>	4.05>	ISSOSS	achievement	of	Switzerland
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The result of the Government level (Subindex 2-4) achieves the highest point (1.000), and the NF level (Subindex 1) took the lowest value (0.467) as described in <Figure 4.04>. The RSFs were not examined because more than eighty per cent of them did not fulfil the essential requisites for organisation composition. The understanding of the RSC's low performance is discussed at the Limitation part.



<Figure 4.04> Values of each Subindex (Switzerland)

### 4.2.2. Application of the MDGs

<sup>85)</sup> Final value = 0.467\*0.2 + 0.806\*0.15 + 0.295\*0.15 + 0\*0.15 + 1.000\*0.15 + 0.835\*0.2 = 0.576.

The results of each Goal was gathered and calculated by the mentioned computation above. The total and final value is as described in <Table 4.06>.

Goal no.	Subtotal of Goal	No. of valid indicators	Goal value
Goal 1	17.00	4	85.00
Goal 2	8.00	2	80.00
Goal 3	10.67	3	71.13
Goal 4	15.00	3	100.00
Goal 5	20.00	4	100.00
Goal 6	13.00	3	86.67
Goal 7	28.00	7	80.00
Goal 8	24.00	8	60.00
		Total va	ue 662.80
		Final value	.86) 82.85

<Table 4.06> MDGs achievement of Switzerland

The Goals of 4 (Reduce child mortality) and 5 (Improve maternal health) have attained the highest value (100.00), and the Goal 8 (Develop a global partnership for development) has reached the lowest value (60.00) as described in <Figure 4.05>. The result demonstrates that Switzerland is placed in the top 82.85 per cent among the UN member nations in terms of social development.



<Figure 4.05> Values of each Goal (Switzerland)

<sup>86)</sup> Final value=Total value/No. of Goals.

### 4.3. Comparison between nations

The ROK is located in East Asia, and Switzerland is in Western Europe. There are 8,884km distance and 8 hours difference<sup>87</sup>). Two nations have inherent facets - economy, society, culture, atmosphere, history, environment and infrastructure - and the general information prove it accordingly (see <Table 4.07> and Appendix I. Comparison between the ROK and Switzerland by the numbers).

< I able	4.07>	General	comparison	

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No	General Information <sup>88)</sup>	Base Year	The ROK	Switzerland
1	Population*	2018	51164	8544
2	Surface area (square kilometre)	2015	100284	41291
3	Population density (per square kilometre)*	2018	526.2	216.2
4	Sex ratio (male per 100 female)*	2018	100.1	98.3
5	Capital city population	2018	9963.5	422.2
6	Exchange rate (per US\$)	2017	1070.5	1
		*Projected	d estimate: Mediu	m fertility variant

The GSPN Evaluation measures Sports affairs and the surroundings of two different nations. Regarding the ISSOSS, the ROK performs better than Switzerland in the management of the NF, the NOC, the RSC and the International level. But the result of NF performance can be changed due to the different number of targets because the analysed NFs were the full members of Korea NOC and the official ones of Switzerland NOC. The official members encompass not only full but also associate and recognised ones, and it can make the denominator increased. The RSCs in Switzerland were not operated as independent entities, and it disturbed their autonomous development at last. Switzerland carries out better than the ROK at the Government level (see <Figure 4.06>).

<sup>87)</sup> The distance from the Seoul city hall to the Bern town hall; The ROK is Greenwich Mean Time (GMT) +1 and Switzerland is GMT +9.

<sup>88)</sup> Adapted from the United Nations, the Republic of Korea page (<u>http://data.un.org/en/iso/kr.html</u>) and Switzerland page (<u>http://data.un.org/en/iso/ch.html</u>).

The attainment of the nations is analogous in the MDGs. The ROK has achieved a higher position at Goal 2 (Achieve universal primary education), 6 (Combat HIV/AIDS, malaria and other diseases) and 7 (Ensure environmental sustainability). Switzerland has accomplished better at Goal 1 (Eradicate extreme poverty and hunger) and 3 (Promote gender equality and empower women). They have shown similar performance at Goal 4 (Reduce child mortality), 5 (Improve maternal health) and 8 (Develop a global partnership for development) (see <Figure 4.07>).



<Figure 4.07> The MDGs comparison

The ISSOSS results are  $67.6_{ROK}$  and  $57.6_{Switzerland}$ , and the MDGs results are  $83.8_{ROK}$ and 82.9<sub>Switzerland</sub> (see <Figure 4.08>). The following formula calculated the overall value.

Comprehensive value<sub>Rok</sub> = Final value of the ISSOSS<sub>Rok</sub> \* Final value of the MDGs<sub>Rok</sub> /10,000\*100 Comprehensive value<sub>Switzerland</sub> = Final value of the ISSOSS<sub>Switzerland</sub> \* Final value of the MDGs<sub>Switzerland</sub> /10,000\*100

In conclusion, the success degree of the ROK and Switzerland is 56.6 and 47.8 out of

#### 100 respectively.



Some conditions could vary the points of the ISSOSS: First, the membership quality of the NFs (Subindex 1; e.g. official, full, associated, recognised member); second, the management type of the RSCs (Subindex 2-2; e.g. dependent or independent in relation with their local governments); third, the establishment of the RSFs (Subindex 2-3); fourth, the number of indicators of the Subindex 2-4 and Subindex 3 that are low comparing to other categories; and fifth, the weight of each section by scientific basis. Regarding the MDGs analysis, it could be thought that the value can be different depending on the addition or modification of the missing data. However, the official report had completed synthetically, so there is no way for researchers to intervene partially.

<sup>89)</sup> Assuming if the RSF, which is not calculated in this research, gets full value, the ROK and Switzerland achieve 69.2 and 60.2 respectively as presented with the dotted lines.

# V. DISCUSSION AND CONCLUSION

The main idea of the research began with a simple question, 'Which country is the best in the world in terms of sports management?'. The curiosity was spread like a neural network to further questions: 'Is the country successful concerning (inter)national sports?', 'What is the sports' success, and how can it be achieved?', 'What is the way to develop (inter)national sports, and how can it be performed?'.

It was realised that the 'measurement' is essential to discuss success or development tangibly and consider the comparative understanding (e.g. best, better, good, bad, worse, worst). So, this study was launched to provide the frame of nations' sports management and to measure the Global Sporting Performance of Nations.

Sports is involved in a society, and also constitute a particular society itself that is a natural phenomenon among human beings. Therefore, both environments should be comprehended together due to their interdependence. The respective societies generated each research question: the RQ 1. 'How is the sporting performance of nations measured?' and the RQ 2. 'How is the nations' performance for sports measured?'. Two complementary sub-studies were built to solve each question: Study 1. for the RQ 1 and Study 2. for the RQ 2.

The Study 1 and Study 2, composed of Literature Review, Methodology, and Findings, were constructed to produce the respective answers on the Introduction and the results were applied to the ROK and Switzerland by evaluating their GSPN state<sup>90</sup>). The Discussion section covers the whole flow of the paper, and academic and practical views considered the substance in terms of implication and contributions. The limitation and the suggestion for future research directions are followed.

<sup>90)</sup> As Annesley (2010) argued that "the most important information is not what (the) results show but what (the) results mean".

In conclusion, there were four significant fruits from the study: the SSOSS (Study 1), the ISSOSS (Study 1), the MDGs application (Study 2), and the GSPN (Result and Application).

The SSOSS works as the map of sports relations that shows from micro (national) to macro angle (international) so that researchers could find the location 'where I am' and the direction 'where/how to go'. The ISSOSS that is developed on the five ground principles - Value, Decision-maker, Strategic management, Governance, and Network - functions as the guideline for sports organisations to walk on the right way altogether, and measures the degree of sports management. The outcome of the ISSOSS accounts for the 'Global sports performance of nations'.

The MDGs result, which is the consensus that has earned illustrious fame from global institutes and multitude governments, has now become comparable data by substituting 5-degree for each indicator and respective goals. The converted source demonstrates the nations' situation concerning development and stability, and explains nations' competitiveness and attractiveness visibly by maximising the strengths of the EBMgt. The outcome of the altered MDGs accounts for the 'Global performance of nations for sports'.

The GSPN Evaluation shows the success degree of sports management. It is the combination established on the mutual supplementation of each study that produces the balanced information of inside and outside of sports. The cohesion facilitates quantitative comparison between nations as proved by the cases of the ROK and Switzerland, and discovers why and how a country performs better than the other.

### 5.1. Academic implications and contributions

Sports Performance of Nations has been linked to legacy studies (Engalycheva and Chappelet, 2015). The legacy of a sporting event, which is "a dream to be pursued rather than a certainty to be achieved", takes account of various benefits like the economy, transport, tourism, infrastructure, and social impacts (Chappelet, 2012). The five factors affecting sports performance of nations were scrutinised and employed as the cornerstones of the final index. The articles about the means for index development and the existing principles in sports field were reviewed to develop the 'Sports index' methodically.

The national competitiveness and attractiveness were widely looked through to study 'Global performance of nations for sports'. It was revealed that the EBMgt was the best to see nations' state on a year-on-year basis, and the MDGs was the most uncontroversial material in terms of reliability and communication compared to other data (Pagliani, 2007).

Those academic strategies and process are described below with the combined outcome to better understand the 'Global performance of sports and nations' in our time.

### 5.1.1. Global sports performance of nations

As the Sun in the Solar system is a great beginning to comprehend the universe, the NFs had received the first call on the visualised model designed with the incremental deployment of associated organisations. The articulated framework of the whole sports networks explains to scholars every relationship of each essential party with connection strengths based on a principled foundation of their significant roles, rather than simply parade referential bodies.

Many studies concerning global sports used to focus on the IOC or the Organising

Committees for the Olympic Games (e.g. Ferrand et al., 2012) because the Olympics is one of the most heavyweight multi-event and has the leverage accordingly. However, new models are inevitable when it comes to the context of a single event, a small-size competition, or a national level game (Slack and Hinings, 1992).

By virtue of the newly developed framework, the sports researchers are now able to clearly understand the ultimate system, to employ the model in their respective research regardless of perspectives or approaches, to put flesh on the bones of the SSOSS gradually to extend idea with diverse topics, and to penetrate deep into particular research sphere.

The SSOSS is designed through the Delphi method which relies on a panel of experts (Brown, 1968) because the methodology was convinced as the best to draw an entire map of sports world based on the current real phenomena. The experts were communicated with in person (face-to-face meeting) at the very beginning and through the other routes depending on the experts' convenience such as video conference, telephone, and electronic mail. The respective participant was interviewed individually and blocked the information of other respondents to avoid the usual problems of 'group dynamics'. It was revealed that the NF is the right point to start understanding the global sports movements in the first round; the three levels - national, international, and comprehensive one - are appropriate to dive into all relations of sports parties at the second round; and the nodes and edges have complementary cooperation as described with the SSOSS at the last round. The experts were recruited by the Snowball sampling to reach concisely in the big pool (Voicu and Babonea, 2011).

The SSOSS produced the 'Practical SSOSS' as the fundamental frame for sustainable sports index. The index made a composite statistic, summarised (and ranked) specific observations, and worked as the multidisciplinary tool for quantitative evaluation of national sports success (Hawken and Munck, 2013). Its three sub-indices - 1) NFs, 2) National parties (NOC, Gov, RSC, and RSF), and 3) International ones (IF, CF, CANOC, ANOC, and EPRH) -

provided good guidelines for each governing body to move in the right way. The components pillars, sub-pillars, variables, and indicators - were built with the academic requisites as the footholds on the principle of the 'MECE (mutually exclusive and collectively exhaustive)<sup>(91)</sup>. There were five requirements to maintain the body of sports organisation - 1) Value, 2) Decision-maker, 3) Strategic management, 4) Governance and 5) Network - and they were found through the analysis of 120 sports articles published since the year 2,000<sup>92)</sup>.

Firstly, the 'Value' is something that sports people place meaning with importance or usefulness. It provides an internal reference about goodness or benefit, and influence an individual's behaviour (Rokeach, 1973). It may help to surmount common obstacles but also give rise to conflicts between differing worldviews (Maiese, 2003). The Value can be thought relative or absolute (Tukiainen, 2011), intrinsic or extrinsic (Riukas, 1998), positive or negative, protected or trade-off (Ritov and Baron, 1999), personal or communal, or idealized or realized depending on the nature of communication, generations, cultural background, or socialization (Roth, 2013). The Values in sports considers fairness, ethics, respect, goodness, self-control, courage and persistence (Fish and Magee, 2003); and encompasses the leadership, partnership, fellowship and membership (Goldstein and Iso-Ahola, 2006). The people, not only athletes but also coaches and administrators (Rudd and Stoll, 1998), who are pleased with it may treat others as they would like to be treated, but who do not keep it in mind may cause cheating, breaking rules, blaming others, refusing responsibility, reacting immature (or improper) fashion, lowering opponent's self-esteem, or citing unfavorable condition without respect and politeness (Feezell, 1986).

Secondly, based on the Values, the Board members in sports organisation manages the cognitive process that identifies issues, decides on a direction, and chooses alternatives. The Decision-makers are influenced by environmental complexity with different possible states

<sup>91)</sup> Refer in more detail to http://www.mckinsey.com.

<sup>92)</sup> The methodology was inspired by the Policy Management (De Bruijn and Heuvelhof, 2002).

(Godfrey-Smith, 2002) and by the quality and quantity of information (Foley, 1995). They perform problem analysis first before making decision (Kepner and Tregoe, 1997), develop a model to predict (Monahan, 2000), and follow the process to reach the outcome<sup>93</sup>). Additionally, regarding the process, Brown (2007b), Pijanowski (2009), and Griffin (2006) proposed seven steps<sup>94</sup>), introduced eight stages lectured at the Arkanas Program<sup>95</sup>), and suggested four phases<sup>96</sup>) respectively. The Decision-makers should be aware of biases because people tend to gather facts that they support (Blackhart and Kline, 2005); screen out information that they think unimportant (Drake, 1993); discount undesirable information (Sharot et al., 2011); distort perception as they believe (Chua et al., 2004); overestimate the probability of positive events in the future (Sharot, 2011); react to primary effect (Plous, 1993) and framing effect (Perneger and Agoritsas, 2011); and avoid risky condition (Schacter et al., 2009) and colleague/peer pressure (Gardner and Steinberg, 2005).

Thirdly, the Decision-makers who drive sports organisations pursue 'Strategic management'. Since the 1960s<sup>97</sup>), it happens around the strategic convergence (Hamel and Ruben, 2000), scenario (Wack, 1985), planning (Mintzberg, 1994), thinking (Mintzberg, 1987), formulation (Mintzberg and Lampel, 1999), implementation (Baylis, 2016), making activity (Markides, 1999), and process (Slater and Narver, 1995); and covers the tactical means like resource management towards the objectives (Hammer and Champy, 2009), response to

- 95) (1) Establishing community, (2) Perception, (3) Interpretation, (4) Judgment, (5) Motivation,
  (6) Courage and Character, (7) Reflection in action, and (8) Reflection on action.
- 96) (1) Orientation, (2) Conflict, (3) Emergence, and (4) Reinforcement.
- 97) The terminology 'strategy' was used in regard to war and politics until the year 1960 (Kiechel, 2010).

<sup>93)</sup> Such as GOFER (acronym) (Mann et al., 1988) - Goals clarification, Options generation, Facts-finding, Consideration of Effects, and Review and implementation - and DECIDE (acronym) (Guo, 2008) - Define the problem, Establish the criteria, Consider all the alternatives, Identify the best alternative, Develop and implement a plan of action, and Evaluate and monitor the solution and feedback when necessary.

<sup>94) (1)</sup> Outline the goal and outcome, (2) Gather data, (3) Develop alternatives (e.g. brainstorming), (4) List pros and cons of each alternative, (5) Make the decision, (6) Immediately take action to implement it, and (7) Learn from and reflect on the decision-making.

questions about how the institution competes (Senge, 1993), consideration both internal factors and external environments (Nag et al., 2007), decision of what to do and what not to do (Chaffee, 1985), adoption of courses of action (Whittington, 2001), distinctive differentiation from the other services (Ghemawat, 2002), gap clarification between the current reality and the goals (Ansoff, 1987), management of internal resistance to change (Teece et al., 1999), approach to shaping the future (Mckeown, 2013), inclusion feedback for the next round of planning (Hill et al., 2014), adjustment during implementation (Farnham and Horton, 1993), innovation driven by resource depletion (Muriuki et al., 2017), direction setting (Berry, 1995), definition of organisation (Kearney, 1992), consistent guide provision (De Wit and Meyer, 2010), determination of the primary long-term goals (Selznick, 2011), establishment of vision (Zaleznik, 1992), conquest of information uncertainty (Isenberg, 1987), and allocation of resources (Barney, 1991). When the sports leaders develop it, they should consider the aspects of the organisation in a socio-economic context (Stacey, 1995) such as changing speed (Isenberg, 1986), action timing (Abell, 1978), trend towards accelerating rates of change (Toffler, 1970), creative process of self-renewal (Moore, 1995), consumer experience (Pine and Gilmore, 2011), customer service (Reichheld et al., 1990), and its quality (Deming and Edwards, 1982). The strategic technique relative to sports is required to consult the management models for analysis and synthesis98) and to borrow/contemplate the package of elements for making sure of balanced studies (see the examples in <Table 5.01>).

<sup>98)</sup> Such as Experience curve (Henderson, 1974), Growth-share matrix (Hax and Majluf, 1983), Five forces (Porter, 2008), Three generic strategies (Porter, 1980), The value chain (Porter, 2001), Competitive advantage (Porter, 1985), Core competence (Prahalad and Hamel, 1999), or Responsive evaluation (Cameron, 2014).

No	Element (Author, year)	Contents
1	Four concepts of corporate	1) Portfolio management, 2) Restructuring, 3) Transferring
	strategy (Porter, 1987)	skills, and 4) Sharing activities.
2	Eight areas that	1) Market standing, 2) Innovation, 3) Productivity, 4) Physical
	objectives should be set	and financial resources, 5) Worker performance and attitude,
	(Drucker, 1954)	6) Profitability, 7) Manager performance and development,
		and 8) Public responsibility.
3	Four sources of	1) New technologies, 2) Globalization, 3) Cultural pluralism,
	discontinuity (Drucker, 1969)	and 4) Knowledge capital.
4	Four traits of successful	1) Sensitivity to the business environment, 2) Cohesion and
	companies (De Geus,	identity, 3) Tolerance and decentralisation, and 4)
	1997)	Conservative financing.
5	Three good strategies	1) A diagnosis that defines or explains the nature of the
	that are a mixture of	challenge, 2) A guiding policy for dealing with the challenge,
	thought and action	and 3) A set of coherent actions that are designed to carry
	(Richard, 2011)	out the guiding policy.
6	Seven elements of	Strategic Management 1) involves adapting the organisation
	strategic management	to its business environment, 2) is fluid and complex. Change
	(Chaffee, 1985)	creates novel combinations of circumstances requiring
		unstructured non-repetitive responses, 3) affects the entire
		organisation by providing direction, 4) involves both strategy
		formation and also strategy implementation, 5) is partially
		planned and partially unplanned, 6) is done at several
		levels: overall corporate strategy and individual business
		strategies, and 7) involves both conceptual and analytical
		thought processes.
7	Eleven operation forces	1) Time, 2) Opposing forces, 3) Politics, 4) Perception, 5)
	(Mulcaster, 2008)	Holistic effects, 6) Adding value, 7) Incentives, 8) Learning
		capabilities, 9) Opportunity cost, 10) Risk, and 11) Style.
8	Five disciplines of a	1) Personal responsibility, self-reliance, and mastery, 2)
	learning organisation	Mental models, 3) Shared vision, 4) Team learning, and 5)
	(Senge, 1990)	Systems thinking.
9	Four manners that an	1) People can continuously expand their capacity to learn
	organisation needs to be	and be productive, 2) New patterns of thinking are nurtured,
	structured (Senge, 1990)	3) Collective aspirations are encouraged, and 4) People are
		encouraged to see the 'whole picture' together.

<Table 5.01> Elements for strategic management

Fourthly, the Strategic Management of sports on Value by the Decision-makers is accomplished with the 'Governance'. The governance is understood as all the processes in governing an organisation (Nooteboom, 1996); the interaction among actors that leads to creation, reinforcement, or production (Hufty, 2011); and the ways that all the conditions are run (e.g. rules, regulations, laws, norms, custom, or actions) (Bevir, 2012) by the body that has responsibility and authority, such as legal entities (e.g. state, government, institution, market, society, firm, or corporation) and socio-political groups (e.g. network, citizens, race, tribe, family, or religious denomination) (Williamson, 1979). The World Bank defined it as "the manner in which power is exercised in the management of a country's economic and social resources for development"99) and "the traditions and institutions by which authority in a country is exercised "100). It has been studied at diverse perspectives such as public (Osborne, 2010), private (Pattberg, 2005), global (Finkelstein, 1995), local (Bardhan and Mookherjee, 2006), non-profit (Bradshaw et al., 2007), for-profit (Low, 2006), corporate (La Porta et al., 2000), voluntary (Knorringa et al., 2011), urban (Pierre, 1999), rural (Edwards et al., 2001), non-governmental (O'Rourke, 2006), governmental (Wang and Zhao, 2005), inter-governmental (Kheng-Lian and Robinson, 2002), formal and informal one (Calabrò and Mussolino, 2013). Every area related to our lives<sup>101</sup>) like sports movements needs governance standardised by a proper 'system'. The system under the social science view is defined as "a regularly interacting or interdependent group of items forming a unified whole"102). It is 'designed' by human beings (rather than 'natural' or 'engineering' in this paper); transformed to open, closed, or isolated one by the exchange of matter and energy with its surroundings (Bailey, 1994); 'soft' in people's harmonious living (not 'hard' as in scientific techniques) (Checkland and Scholes, 1999); and normative ethics, cultural or behavioral patterns that basically consists of inputs of consuming and outputs of producing (Buckley, 1967). Therefore, sports should be managed by the

<sup>99)</sup> Refer in more detail to

http://documents.worldbank.org/curated/en/604951468739447676/pdf/multi-page.pdf.

<sup>100)</sup> Refer in more detail to http://web.worldbank.org/archive/website01020/WEB/0\_CON-3.HTM.

<sup>101)</sup> For example, organisational, inter-organisational, environmental, land, energy, economics, politics, internet, information technology, project, contract, and trade area.

<sup>102)</sup> https://www.merriam-webster.com/dictionary/system. Retrieved 2017. 12. 28.

'governance' and 'system' on the appeared theories to maintain sustainable development.

Lastly, the sports 'network' includes the abovementioned four requisites of a sports governing body. It is composed by the natural power motivated by 'Value', formed by 'Decision-makers' according to 'Strategic Management', and a more basic and broader concept of 'Governance' and 'System'. A network<sup>103</sup>) is a social structure determined by actors (nodes) who share values and belief and their interactions (edges) on social ties of both hierarchical and leaderless nature (Moreira et al., 2006). The formation, characterised by dense clusters of secure connections (Burt, 2004), leads to predictive models of particular phenomena (Lewis, 2011), links to different classes of entities for stability or changes<sup>104</sup>) (Hill and Braha, 2010), bridges structural holes to access information from divergent sources (Burt, 2009), and expands the working domain through interdependent (or coupled) nodes (Buldyrev et al., 2010). It is understood by the graph theory and examined by three levels - 1) micro level: beginning the research with an individual (actor, ego) or small group (dyadic, triadic, subset) (Jones and Volpe, 2011); 2) meso level: low density and beginning with a population size between the micro- and macro-level (such as randomly distributed networks, scale-free networks) (Cranmer and Desmarais, 2010); and 3) macro level: tracing the outcomes of interactions over a large population (such as meta-networks, large-scale networks, complex networks) (Strogatz, 2001). Networking is a social activity performed in the system by people to seek potential partners, to form relationships (or to build social capital), to share information, and to promote mutual opportunities (Österle et al., 2011).

### 5.1.2. Global performance of nations for sports

<sup>103)</sup> Network in the view of social science only, not the semantic, cognitive, economics, transportation, phycology, physical, medicine, telecommunications, computer, electrical, ecological, climatology, physics, finance, chemical, and biological one in this paper.

<sup>104)</sup> Such as new individuals, groups, nation-states, websites, publications, topics, leaders, tasks, events, locations, beliefs.

The Nation's performance was studied with the literature of Competitiveness and Attractiveness. The Attractiveness was understood through the power theories (Hard, Soft, and Smart power) and the Sustainability concept was linked with Smart power to enlarge the idea.

Firstly, the higher level of 'national competitiveness' is thought as the better for a national performance. It has been the interest as a research topic in various fields, especially in business, management, and public administration. This study placed more weight on the Public Administration perspective with the support of the well-being-based approach (rather than the product-based or the service-based) and the sustainable advantage (rather than the comparative or the differential such as access to natural resources or achievements of the targeted image/identity). The country that earned the competitive has the leverage to obtain resources from inside and outside of the territory; to improve social, economic, and cultural conditions for enhancing citizens' quality of life; and to attract investors or firms to do business (Ochel and Röhn, 2006). When entirely focused on the government, it can be analysed through four levels and then aggregates the results from each level to compute the total score - 1) input: resources, infrastructure, and expenditure; 2) throughput: human, fiscal, capacity, governance, policy, operation, system, and process; 3) output: production, growth rate, performance, improvement level, and immediate goal achievement; and 4) outcome: satisfaction (degree of happiness), social capital, and ultimate goal achievement (Center for Government Competitiveness, 2016).

Secondly, the 'national attractiveness' is a multidisciplinary study at the crossroad of economic assessment and political/legal assessment (Bazi and Firzli, 2011). The attractors are (inherent or exhibited) value, (natural or cultural) environment, historical significance, and positive image (Boeing, 2016); and they make people connect with the positive experience, which is the combination of bullish thought (or desire, expect) and optimistic emotion/feeling (Haanel, 1934). It continues to emotional attachment and commitment (Oh, 2012); let people wish to visit or live in the country (Redden, 1999); and brings the growth of government/local

revenues, employment, and infrastructure investment. The ultimate 'national attractiveness' can effectively accompany with Smart power. It is "an approach that underscores the necessity of a strong military, but also invests heavily in alliances, partnerships, and institutions at all levels to expand one's influence and establish the legitimacy of one's action" (Armitage and Nye, 2007) and "involves the strategic use of diplomacy, persuasion, capacity building, and the projection of power and influence in ways that are cost-effective and have political and social legitimacy" (Crocker et al., 2007). The power aligns its tactics to preserve the attraction in transitioning from a theory to a practice by contemplating five factors - 1) maintaining a flexible balance (requiring government agencies to adapt their priorities), 2) the rule of law (a legal framework for the use of capabilities), 3) organisational roadblocks (lack either the appropriate authority or resources), 4) financing smart power (re-balanced budget for non-military foreign affairs programs to receive more), and 5) strategic communications (mitigating negative perceptions by discussing the nature of threats) (Hageman et al., 2009) - and it finds sustainable ways to blend resources for the new context of power diffusion in a multipolar world (Nye, 2011).

Lastly, the 'national sustainability' is deemed as a root of the 'national attractiveness' and works as base research of the 'Smart power'. Sustainability is a process characterized by the pursuit of common ideals (Wandemberg, 2016), consideration for the life of future generation that emphasizes a long-term thinking (Waite, 2013), creation of successful places that promote well-being (Woodcraft et al., 2012), and the ability to sustain/continue resources that constitute a means of achieving better standards of living (Anand and Sen, 1996). The national sustainability balances local and global efforts to meet social development, harmonises economic growth and basic human needs without degrading the natural environment (Kates et al., 2005); calls to action of '4-re' - reduce, reuse, recycle, and restore - in collaboration with the international organisations and projects<sup>105</sup>) (Bindewald, 2013); sets clear targets beyond

<sup>105)</sup> Such as UN, United Nations Educational Scientific and Cultural Organisation, Agenda 21, UN World Population Prospects, UN Global Compact Cities Programme, United Nations Environment Programme, UN Population Fund, Worldwide Fund for Nature, United Cities and Local Governments, International Union for the Conservation of Nature, and UN World

unfocused ones like 'liberty' or 'justice' (Blewitt, 2014); searches for models to avert sudden and uncontrolled collapse; and satisfies the basal requirements of citizens (Finn, 2009).

The concept focused on 'conservation management' in the 1960s, but it has been stretched out to the meaning of 'the quality of growth' changes (O'Riordan, 2000). Its increasing pillars are mostly located in/between 1) human-related systems that give back to the community like volunteering time or charitable donations (Anand and Sen, 2000) - social governance, structure, life, integration, influence, equity, amenity, capital, support, responsibility, connectivity, cohesion, development, maturity, health, human (or individual) relations, embeddedness, rights, adaptation, freedoms, resilience, aesthetics, knowledge, expressions, lifestyle, occupation, cultural beliefs, diversity, heritage, practice, competence, vibrancy, economic prosperity, political justice, ethics, peace, livability, labour, placemaking, democracy, safety, security, reporting, infrastructure, education, traditions, reputation, modernization, housing, industry, international relations, tourism, law, manufacture, intellectual capital, transition, policy, transport, government, services, and organisations, and 2) nature-related systems (International Union for Conservation of Nature et al., 2013) - innovation that minimizes negative impact on nature; environmentally-friendly chemical engineering; designing systems in a reversible manner; waste and emission leakage; engineering technologies (carbon-neutral fuel, energy storage systems, pumped-storage hydroelectricity); renewable resource; agriculture; food; architecture; construction; physiology; management of human consumption with regard to population growth; regenerative forces or energy (solar energy, water, ocean, soil, land, air, wind, vegetation, minerals, and biomass); and conservation of natural resources (thought of depletion, damage and pollution). They are not mutually exclusive but interdependent by complementarity (Morelli, 2011). The pillars are being studied with a set of clear indicators to make sustainability tangible (Delai and Takahashi, 2011) and adjusted through empirical observations (Reed et al., 2006).

The researchers confronting the applied social sciences follow the flow of the

Commission on Environment and Development.

scientific-inquiry approach - 1) Research in the relevant subdiscipline, 2) Dissemination of the research, and 3) Application of its findings - and after the problem-solving approach - 1) Stakeholders define the problem together, 2) Team solves the problem by means of eclectic theory and interventions, and 3) Stakeholders communicate solution and method (Hodgkinson and Herriot, 2002). The shift of manner for knowledge production springs from four environmental pressures - 1) The changing nature of demand, 2) The type of new problems, 3) Distributed research skills, and 4) Development of technologies that makes anyone access high-quality information (Hodgkinson and Herriot, 2002). However, those approaches have limits concerning the result analysis because a series of subjectiveness managed all the steps.

It is required to secure objectiveness with 'numbers' to avoid varying interpretation influenced by academic trends or performers' beliefs. The indisputable material lets a country stand on the next level by overcoming the bounds and continues development regardless of the social atmosphere. It is obvious when comparing the advanced and the underdeveloped countries and investigating their process of growth. In this study, the EBMgt<sup>106</sup>), relatively new to the public management area, is employed because it shows the real fact and supports decision-makers to direct the right way (Rousseau, 2012).

The management tool places primary emphasis on the research evidence (APA Presidential Task Force on Evidence-Based Practice, 2006) and develops the organisation's practice on the firm foundation (Pring and Thomas, 2004) along with a justified research design (Rubin and Parrish, 2007). The quantitative research considers the circumstances (Rousseau, 2006), organisation culture (Pfeffer and Sutton, 2006b), and ethical concerns (Walshe and Rundall, 2001); requires systematic collection of data through observation or experiment (Pfeffer and Sutton, 2006a) and expert knowledge in translating the results (Fischer et al., 2016); and relies on scientific information and analytical skills rather than hearsay, gossip, comment, rumor,

<sup>106)</sup> That has been also studied with the names of 'results-focused management', 'managing for outcomes', or 'evidence-informed practice'.

story, tale, myth, opinion, abstraction, rhetoric, discourse, tip, advice, self deception, bias, favoritism, preference, prejudice, belief, fallacy, advocacy or custom (Mercer and Pignotti, 2007). However, the EBMgt does not mean that it is neutral, value-free descriptions or suitable for all (Morrell, 2008) because there can be a translation gap between researchers and practitioners (Rousseau et al., 2008) and different ways of looking at the society (Learmonth, 2008).

#### 5.1.3. Global performance of sports and nations

A nation's performance behaves like the white of an egg when Sports performance is considered as the yolk. They coexist in the same environment, being that the former covers the latter, but do not lose their distinctive nature. Their relationship is complementary rather than competitive and keeps resilient balance by resisting to be mixed. Each party can be studied separately to see its inside, but both should be understood together when it comes to the vital force.

The GSPN is the balanced outlook that contemplates both sports and its surroundings (i.e. the end product that combines the results of Study 1 and Study 2) and encompasses various dimensions with different perspectives (e.g. individual, social, educational, economic, financial, environmental, organisational, managerial and administrative sides). Its objective appraisal was carried out by scientific computation, not by the qualitative method which relies on the perceived degree of respondents.

This research contributes to scholars to have a reliable instrument for comparative evaluation with facts on numerical values. The inclusive method, approached by the mutual supplementation way at both 'sports development' and 'development for sports', supports readers to realise the global sports things with a well-balanced angle.

### 5.2. Practical implications and contributions

There have been proposed several models that explain global sports from particular perspectives, but they have limitations to understand when looking at the whole system. It is because they overlooked the core organisation as the starting point of the picture. This study has developed a sustainable structure beginning with the NF, and placed it at the centre of the global sports network. It added other parties one by one under consistent basis at a national, international and comprehensive level. On the framework, an index was proposed to see 'Global sports performance of nations' clearly, to evaluate the degree of national sports state quantitatively, and to develop nations' sports environment with multi-dimensional process synthetically. Because if it is not able to be measured, it is not able to be improved (Lord Kelvin, 1883).

The MDGs performance of 24 nations that hosted the Olympic Games was analysed by eight goals<sup>107)</sup> and compared one another. It shows the annual situation of the 'Global performance of nations for sports'. By taking a step forward, the ROK and Switzerland were selected to investigate the degree of achievement per indicator.

The ISSOSS and the analysed MDGs diagnosed the nations' social condition (i.e. Global performance of sports and nations) and let researchers and practitioners compare the performance with numbers.

### 5.2.1. Global sports performance of nations

The SSOSS was built on the understanding that all sports organisations are ligaments and sinews that enrich the sports world as one body. It has become the big picture of the

<sup>107)</sup> The MDGs consists of 8 Goals. Each goal consists of several Targets. Each target consists of several indicators. The number of total indicators is 60.

sports ecosystem that the people and organisations coexist in a given sector together with the complex relationships which occur between them and their environment.

The working level members in a field can now easily realise the location 'where we are' in the light of their role and responsibility, and strategically make decisions by understanding where to proceed, whom to cooperate with, and how to find a solution through the map of the SSOSS.

The ISSOSS, established on the SSOSS theory, can be welcomed by the umbrella institutions - especially by the ANOC, the 5 CANOCs<sup>108</sup>), and the IOC - in evaluation of the national sports state by the aid of the 206 respective NOCs<sup>109</sup>) when they recognise the necessity of all-in-one management tool to point the common goals.

The decision-makers in the association can remind their priorities with it, which plugged into vision and missions, and awaken them to the philosophy of management that 'human beings' (from partially related to fully involved ones) are the purpose of organisations' existence.

### 5.2.2. Global performance of nations for sports

The IOC regarded the UN as the highest level partner<sup>110</sup>) and vice versa<sup>111</sup>). Their cooperation brought the international organisations and sports entities under the common goals of the MDGs to transform our world better (Forman, 2009).

<sup>108)</sup> Those entities are 1) Olympic Council of Asia, 2) European Olympic Committees, 3) Oceania National Olympic Committees, 4) Pan-American Sports Organisation, and 5) Association of National Olympic Committees of Africa; Refer in more detail to <u>http://www.acnolympic.org/about-anoc/organisation/structure/</u>.

<sup>109)</sup> Refer in more detail to <u>http://www.acnolympic.org/nocs/nocs-directory/</u> (ANOC; Retrieved 1st April 2017); <u>https://www.olympic.org/national-olympic-committees</u> (IOC; Retrieved 1st April 2017).

<sup>110)</sup> Refer in more detail to https://www.olympic.org/cooperation-with-the-un.

<sup>111)</sup> Refer in more detail to http://www.un.org/press/en/2016/sg2231.doc.htm.

The MDGs movement increased living standards by emphasizing on human rights, human capital and infrastructure; built confidence among the practice subjects such as government, civil society and development partners; strengthened the commitment of countries; let the problems be problems; encouraged aid and information sharing; aroused complementary projects for well-being<sup>112</sup>); and guided all nations in government expenditure and progress determination (United Nations, 2008). There is no doubt that the worldwide project is the greatly supported action and its data set is the most reliable material in our time even though it should remedy some shortcomings, such as insufficient responds to individual healthcare profiles (Subramanian et al., 2011), duplicative measurements that share limited resources, lack of thorough justification behind the chosen objectives (Shahani, 2009), low analytical power due to missing data (Attaran, 2005), and consideration of disparities in developing nations (Kabeer, 2010).

The vast number of research fellows have been analysing it with assiduity on the EBMgt foundation and applying it to their study area since the report was published in July 2015<sup>113</sup>). It is deemed that this study is the pioneering endeavour to combine the universally recognised big data with sports management context. The sports' administrators can now actively employ the eight goals when seeking manner to walk the sustainable path. For example, the Goal 3 (Promote gender equality and empower women) and its data can be considered with gender parity in games regarding an athlete, coach, referee, board member, committee member, staff, entourage, volunteer, and spectator.

The MDGs results gave a detailed account of citizens' situation in twenty-four nations that hosted Olympic Games and generated answers whether the society is ready to greet such cultural assets of sports. It came into view that the 19 indicators (out of 60) were satisfied with

<sup>112)</sup> Such as the UN Millennium Campaign, the Millennium Villages Project, the Global Poverty Project, the UN\_HABITAT's Strategy, the Micah Challenge, and the World We Want 2015.

<sup>113)</sup> Refer in more detail to http://www.un.org/millenniumgoals/2015 MDG Report/pdf/MDG%202015%20rev%20(July%201).pdf.

all countries (24), and they accomplished the 'Goal 4' (Reduce child mortality), the 'T7C' (Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation), and the 'T8F' (In cooperation with the private sector, make available the benefits of new technologies, especially information and communications). Those governments need to rearrange their investment to upgrade other Goal (or Target), or lead other nations to achieve them as well. On the other hand, there were 20 indicators (out of 60) met by less than 5 countries, and three targets were the salient cases - the 'T6B' (Achieve, by 2010, universal access to treatment for HIV/AIDS for all those who need it), the 'T7D' (By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers), and the 'T8E' (In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries). The thing that even the Olympic host countries are struggling could be deemed harder for other nations to attain the goals.

Two countries among the 24 nations - the ROK and Switzerland - were analysed in detail for quantitative comparison. Each indicator of the newest group was graded into 5 degrees (Likert scale) between the lowest and highest value to take into account the distribution. Each one was calculated into subtotal (each goal from 1 to 8), and they were computed into the final value.

### 5.2.3. Global performance of sports and nations

The ISSOSS and the MDGs have transformed into the GSPN through the way of the characterised analysis. The GSPN Evaluation plays roles 1) as a status report informing that a particular city is qualified to host an event by making sure of requirements not only sports things but also security, infrastructure, and human rights; 2) as a cooperation tool between umbrella organisations and their branches (e.g. IF-NFs, CF-NFs, ANOC-NOCs, and CANOC-NOCs) in terms of membership, loyalty, regulation respect, and management ability, so that they can serve appropriately, take control consistently, and distribute supporting fund

transparently; and 3) as a roadmap for applicant and candidate cities to be able to reduce the cost of bidding and organising in advance.
## 5.3. Limitations

The limitations had occurred in applying the GSPN Evaluation to the ROK and Switzerland. There were five limitations concerning the ROK. Firstly, sports had been managed by two different governing bodies - the Korean Olympic Committee and the Korea Council of Sport for All - and merged into the Korean Sport and Olympic Committee (KSOC) in March 2016. Secondly, the RSCs (regional branches of the Korean Olympic Committee) and the Regional Councils of Sport for All (regional branches of the Korea Council of Sport for All) were merged into the (united) RSCs after the establishment of the KSOC. Thirdly, the Korea Baseball Softball Association was formed by the mergence between the Korea Baseball Association and the Korea Softball Federation in June 2016 followed by the establishment of the World Baseball Softball Confederation in 2013. The materials before mergence were presented in separated forms, so the pertinent data were united/collected by the author. It could mean that it is impossible to keep complete objectiveness and guarantee perfect consistency. Fourthly, only full members of the NOC were handled as the NFs because almost the whole associate and recognised members were hard to be called 'organisation' in terms of function and operation. The final value could be decreased if the category of the NFs included them. Lastly, the RSC in Sejong city were not operated suitably comparing to the other ones because the seventeenth local government established in July 2012 were not fully ready to care for their member sports.

Three limitations were raised in the application to Switzerland. Firstly, the information access to web pages and understanding the contents were not easy to the author whose mother tongue is not German or French. Thus the readers should pay due regard to the constraints that the uncounted value could mean 'not available', 'not presented (but available)', 'missing data' or 'not found (by the author)'. Secondly, many NFs were managed like big clubs rather than proper umbrella organisations. The reasons seemed that several sports have only one club each due to the low level of popularity, the low number of participants, or small size

of a country; or they seek convenient management style that takes control with one vast body by including small groups. The NFs were not classified depending on their circumstances (e.g. official, full, associate, recognised), so the evaluation was performed with total seventy organisations, and the large denominator brought down the final score in the end. Lastly, the sports in respective regions was supervised by local governments (called Cantons) in the same body as a form of office or department, rather than independent RSCs<sup>114</sup>). Therefore, the relations between the RSCs and local governments was estimated as best, but worst, on the other hand, in terms of regional sports management such as game, athletes, coach, and referee.

The common limitations arose from four viewpoints. Firstly, the tonnes of raw materials, which filled up the 'Achievement computation', were updated on an irregular basis and presented in the different type of modes. So the collected data cannot be correct in the point of consistency. Secondly, the condition of the RSFs was not assessed because most of the m<sup>115</sup>) did not fulfil the essential requisites for organisation composition such as basic principles, fundamental system, and communication tool (e.g. website). They seemed more like the parts of the NFs or the RSCs than the independent entities that keep autonomous right. Thirdly, the MDGs results had missing data in some sections of nation, indicator and period, so the closest value was adopted for computation when necessary. Lastly, the number of Delphi panel was not so enough due to low accessibility and a high refusal rate.

<sup>114)</sup> In evaluation, therefore, the 'committee' is replaced to 'department' (e.g. the RSC has the department for women).

<sup>115)</sup> More than 80 per cent in the ROK and more than 95 per cent in Switzerland.

## 5.4. Suggestion for future research directions

The improvements of the limitations mentioned above are the first suggestions for the next research. It will be great to study the GSP of the ROK with the combined statistics of the KSOC, the (united) RSCs including the new city of Sejong, and the NFs covering the information of baseball-softball. The study quality of the GSP of Switzerland will be upgraded when investigated with/by the researcher whose mother tongue is German or French.

Secondly, the evaluation can be conducted more widely if the Practical SSOSS expands the subject to 'Clubs', if the network is calculated (e.g. size, density, and average path length), and if the interactions are considered on the Network theory and the Graph theory with the various types of graphs such as Undirected graph - edges have no orientation - or Directed graph - edges have orientations (Bondy and Murty, 1976). The Graph theory has been employed by many types of relations and processes in social, communication, information, mathematics, physical, biological, chemistry, physics, electrical, and computer science system<sup>116</sup>) (e.g. Mashaghi et al., 2004).

Thirdly, the output of the aggregated ISSOSS by a large number of nations would be momentous assets to look into the sports situation of nations in all and compare them by nation or continent<sup>117</sup>). Further, its time series analysis can make decision-makers to keep eyes on their movements to observe tendency and not to fall into failure.

Fourthly, there would be a necessity to categorise the nations into levels depending on their sports management performance since the readiness and capacity of the NGBs are all different. When grouping, it should take account of nations' characteristics such as cultural,

<sup>116)</sup> Such as website, social media, data organisation, computational devices, and flow of computation.

<sup>117)</sup> Some nations do not distinguish NF, RSF and Club, and do not understand RSC as an office or department of the local government.

social, political and economic situation; the number of population; the size of the territory; and accomplishment degree of each indicator<sup>118</sup>). The classified nations could generate further research subjects within and between groups, and each party can be applied to a differential or phased criteria. In other words, A group (very high-level nations) is required to keep all clauses, but other ones can satisfy the simplified parameters<sup>119</sup>). For doing that, the variables (or the Sub-pillars) should be selected depending on the significance by stages. All the information should be gathered by the NOCs so that they could collect accurate data from not only web pages but also total directional ways such as interview (face to face, phone, mail or email) and survey (online or offline).

Lastly, the GSPN should institute the SDGs<sup>120)</sup> in the future inquiry since the UN had proclaimed it as the successor to the MDGs in 2015. The sports supports for the 'Transforming our world: the 2030 Agenda for Sustainable Development' as a facilitator as the IOC clarified, "the IOC believes in the potential of sport to help achieve eleven of the SDGs established by this UN Agenda 2030: SDG 3, SDG 4, SDG 5, SDG 8, SDG 11, SDG 12, SDG 13, SDG 14, SDG 15, SDG 16 and SDG 17"<sup>121</sup>). The goals are, 1) End poverty in all its forms everywhere, 2) End hunger, achieve food security and improved nutrition and promote sustainable agriculture, 3) Ensure healthy lives and promote well-being for all at all ages, 4) Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all, 5)

https://sustainabledevelopment.un.org/content/documents/11803Official-List-of-Proposed-SDG-I ndicators.pdf).

<sup>118)</sup> There can be a case that a developed country does not need to have a regulation for staff's rights in sports field because the society is already satisfied with the Labor Standards Law or human righe very-low level naevel.

<sup>119) &#</sup>x27;Subindex 2-1 NOC' should be the priority, to begin with in case of the very-low-level nations.

<sup>120)</sup> The practical starting point is the March 2016 (the 47th session of the UN Statistical Commission) and the report of the Commission, which included the framework, was taken note in June 2016 (at its 70th session). The number of indicators is 230 (the total number of indicators listed is 241 but 9 of them was repeated under two or three different targets) (Report of the Inter-Agency and Expert Group on Sustainable Development Goal Indicators (E/CN.3/2016/2/Rev.1). Adapted from <a href="https://curtainable.dov/lopment.up.org/content/documents/11802Official\_list.ef">https://curtainable.dov/lopment.up.org/content/documents/11802Official\_list.ef</a> Proposed SDC I.

<sup>121)</sup> Refer in more detail to https://www.olympic.org/cooperation-with-the-un.

Achieve gender equality and empower all women and girls, 6) Ensure availability and sustainable management of water and sanitation for all, 7) Ensure access to affordable, reliable, sustainable and modern energy for all, 8) Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all, 9) Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation, 10) Reduce inequality within and among countries, 11) Make cities and human settlements inclusive, safe, resilient and sustainable, 12) Ensure sustainable consumption and production patterns, 13) Take urgent action to combat climate change and its impacts, 14) Conserve and sustainably use the oceans, seas and marine resources for sustainable development, 15) Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss, 16) Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels, 17) Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development.

## **APPENDICES**

## Appendix A: The GAISF member IFs (that belong to the ASOIF, the AIOWF, the ARISF, and the AIMS)

No	Sport/Discipline (Acronym of the IF)	Name of the IF (source: official website of each IF)	Establi shed year	Modern Olympi c debut year	GAISF recogni tion year
01	Archery (WA)	World Archery (http://www.worldarchery.org)	1931	1900	1968
02	Athletics (IAAF)	International Association of Athletics Federations ( <u>http://www.iaaf.org</u> )	1912	1896	-
03	Badminton (BWF)	Badminton World Federation (http://www.bwfbadminton.org)	1934	1992	1978
04	Basketball (FIBA)	International Basketball Federation (http://www.fiba.com)	1932	1936	1976
05	Boxing (AIBA)	International Boxing Association (http://www.aiba.org)	1920	1904	1968
06	Canoe - Slalom, Sprint (ICF)	International Canoe Federation (http://www.canoeicf.com)	1946	1936	1967
07	Cycling - BMX, Mountain Bike, Road, Track (UCI)	Union Cycliste Internationale (http://www.uci.ch)	1900	1896	1967
08	Diving, Swimming, Synchronised Swimming, Water Polo (FINA)	International Swimming Federation (https://www.fina.org)	1908	1896	1967
09	Equestrian - Dressage, Eventing, Jumping (FEI)	International Equestrian Federation (http://www.fei.org)	1921	1900	1973
10	Fencing (FIE)	International Fencing Federation (http://www.fie.org)	1913	1896	1967
11	Football (FIFA)	International Association Football Federation (http://www.fifa.com)	1904	1908	1970
12	Golf (IGF)	International Golf Federation (http://www.igfgolf.org)	1958	2016	2009
13	Gymnastics - Artistic, Rhythmic, Trampoline (FIG)	International Gymnastics Federation (http://www.fig-gymnastics.com)	1881	1896	1967
14	Handball (IHF)	International Handball Federation (http://www.ihf.info)	1946	1972	1967
15	Hockey (FIH)	International Hockey Federation (http://www.fih.ch)	1924	1908	1967
16	Judo (IJF)	International Judo Federation (http://www.ijf.org)	1951	1964	1967
17	Modern Pentathlon	International Modern Pentathlon	1948	1912	1967

## <A01> ASOIF members (collected by the author)

	(UIPM)	Union (http://www.pentathlon.org)			
18	Rowing (FISA)	World Rowing Federation (http://www.worldrowing.com)	1892	1900	-
19	Rugby (WR)	World Rugby ( <u>http://www.worldrugby.org</u> )	1886	2016	1987
20	Sailing (ISAF)	International Sailing Federation (http://www.sailing.org)	1907	1900	1971
21	Shooting (ISSF)	International Shooting Sport Federation ( <u>http://www.issf-sports.org</u> )	1907	1998	-
22	Table tennis (ITTF)	International Table Tennis Federation (http://www.ittf.com)	1926	1988	1971
23	Taekwondo (WT)	World Taekwondo (http://www.worldtaekwondofederation.net)	1973	2000	1975
24	Tennis (ITF)	International Tennis Federation (http://www.itftennis.com)	1924	1977	1977
25	Triathlon (ITU)	International Triathlon Union (http://www.triathlon.org)	1989	2000	1989
26	Volleyball, Beach Volleyball (FIVB)	International Volleyball Federation (http://www.fivb.org)	1947	1964	1967
27	Weightlifting (IWF)	International Weightlifting Federation (http://www.iwf.net)	1905	1896	1967
28	Wrestling - Freestyle, Greco-roman (FILA)	United World Wrestling (http://www.unitedworldwrestling.org)	1905	1896	1967

7 10					
No	Sport/Discipline (Acronym of the IF)	Name of the IF (source: official website of each IF)	Establi shed year	Modern Olympi c debut	GAISF recogni tion year
				year	
01	Biathlon (IBU)	International Biathlon Union (http://www.biathlonworld.com)	1993	1960	1998
02	Bobsleigh, Skeleton (FIBT)	International Bobsleigh and Tobogganing Federation (http://www.fibt.com)	1923	1924	1967
03	Curling (WCF)	World Curling Federation (http://www.worldcurling.org)	1966	1924	1989
04	Ice hockey (IIHF)	International Ice Hockey Federation (http://www.iihf.com)	1908	1924	1967
05	Luge (FIL)	International Luge Federation (http://www.fil-luge.org)	1957	1964	1967
06	Skating - Figure, Short track speed, Speed (ISU)	International Skating Union (http://www.isu.org)	1892	1924	1967
07	Skiing - Alpine, Cross Country, Freestyle, Nordic Combined, Ski Jumping; Snowboard (FIS)	International Ski Federation (http://www.fis-ski.com)	1924	1924	1967

### <A02> AIOWF members (collected by the author)

Numbe r of the NFs 109

66

238

25

209

135

234

112 121

186

105

96

60

65

189

No	Sport/Discipline (Acronym of the IF)	Name of the IF (source: official website of each IF)	Establi shed year	GAISF recogni tion year
01	Air Sports (FAI)	Fédération Aéronautique Internationale ( <u>http://www.fai.org</u> )	1905	1993
02	American Football (IFAF)	International Federation of American Football ( <u>http://www.ifaf.info</u> )	1998	2005
03	Automobile (FIA)	Fédération Internationale de l'Automobile ( <u>http://www.fia.com</u> )	1904	2013
04	Bandy (FIB)	Federation of International Bandy (http://www.worldbandy.com)	1955	2004
05	Baseball-Softball (WBSC)	World Baseball Softball Confederation (http://www.wbsc.org)	2013	2014
06	Billiard Sports (WCBS)	World Confederation of Billiards Sports ( <u>http://www.wcbs-billiards.org</u> )	1992	1995
07	Boules (MSB)	Confédération Mondiale des Sports de Boules (http://www.cmsboules.org)	1985	1987
08	Bowling (WB)	World Bowling (http://www.worldbowling.org)	1952	1975
09	Bridge (WBF)	World Bridge Federation (http://www.worldbridge.org)	1958	2000
10	Chess (FIDE)	World Chess Federation (http://www.fide.com)	1924	2000
11	Cricket (ICC)	International Cricket Council (http://www.icc-cricket.com)	1909	2002
12	Dance Sport (WDSF)	World DanceSport Federation (http://www.worlddancesport.org)	1957	1991
13	Floorball (IFF)	International Floorball Federation (http://www.floorball.org)	1986	2000
14	Flying Disc (WFDF)	World Flying Disc Federation (http://www.wfdf.org)	1985	1987
15	Karate (WKF)	World Karate Federation (http://www.wkf.net)	1970	1976
16	Korfball (IKF)	International Korfball Federation (http://www.ikf.org)	1933	1982
17	Life-saving (ILS)	International Life Saving Federation (http://www.ilsf.org)	1910	1973

#### <A03> ARISF members (collected by the author)

67 144 18 Motorcycle racing Fédération Internationale de 1904 1967 112 (FIM) Motocyclisme (http://www.fim-live.com) 19 Mountaineering and International Climbing and 1932 1991 85 Climbing (UIAA) Mountaineering Federation (http://www.theuiaa.org) 20 Netball (INF) 1960 1986 78 International Netball Federation (http://www.netball.org) 21 Orienteering (IOF) International Orienteering Federation 1961 1973 80 (http://www.orienteering.org) 22 Pelota Vasca (FIPV) 1929 1976 Federación Internacional de Pelota 33 Vasca (http://www.fipv.net) 23 Polo (FIP) 1983 Federation of International Polo 1992 83 (http://www.fippolo.com)

24	Powerboating (UIM)	International Union of Powerboating (http://www.uimpowerboating.com)	1922	1974	56
25	Racquetball (IRF)	International Racquetball Federation (http://www.internationalracquetball.com)	1979	1981	82
26	Roller Sports (FIRS)	Fédération Internationale Roller Sports ( <u>http://www.rollersports.org</u> )	1924	1968	115
27	Ski Mountaineering (ISMF)	International Ski Mountaineering Federation ( <u>http://www.ismf-ski.org</u> )	2008	2010	31
28	Sport Climbing (IFSC)	International Federation of Sport Climbing (http://www.ifsc-climbing.org)	2007	2007	87
29	Squash (WSF)	World Squash Federation (http://www.worldsquash.org)	1967	1984	145
30	Sumo (IFS)	International Sumo Federation (http://www.ifs-sumo.org)	1992	1999	84
31	Surfing (ISA)	International Surfing Association (http://www.isasurf.org)	1964	1982	98
32	Tug of War (TWIF)	Tug of War International Federation (http://www.tugofwar-twif.org)	1960	1975	69
33	Underwater sports (CMAS)	World Underwater Federation (http://www.cmas.org)	1958	1978	131
34	Water Ski & Wakeboard (IWWF)	International Waterski & Wakeboard Federation (http://www.iwwfed.com)	1946	1969	94
35	Wushu (IWUF)	International Wushu Federation (http://www.iwuf.org)	1990	1994	146

<a04></a04>	AIMS	members	(collected	by	the	author)	)
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No	Sport/Discipline (Acronym of the IF)	Name of the IF (source: official website of each IF)	Establi shed year	GAISF recogni tion	Numbe r of the
	····· /·· =>	· · · · · · · · · · · · · · · · · · ·		year	NFs
01	Aikido (IAF)	International Aikido Federation (http://www.aikido-international.org)	1976	1984	49
02	Bodybuilding (IFBB)	International Federation of Bodybuilding and Fitness (http://www.ifbb.com)	1946	1969	191
03	Casting (ICSF)	International Casting Sport Federation (http://www.icsf-castingsport.com)	1955	1973	31
04	Cheer (ICU)	International Cheer Union (http://cheerunion.org)	2004	2013	105
05	Darts (WDF)	World Darts Federation (http://www.dartswdf.com/)	1974	2007	69
06	Dragon Boat (IDBF)	International Dragon Boat Federation (http://www.idbf.org)	1991	2007	62
07	Draughts (FMJD)	Federation Mondiale Du Jeu De Dames (http://www.fmjd.org)	1947	2003	50
08	Fistball (IFA)	International Fistball Association (http://www.ifa-fistball.com)	1960	1980	52
09	Go (IGF)	International Go Federation (http://www.intergofed.org)	1982	2004	75
10	Icestocksport (IFI)	International Federation of Icestocksport (http://www.eisstock.org)	1950	2011	42
11	Jiu-jitsu (JJIF)	Jiu-jitsu International Federation (http://www.jjif.info)	1998	1993	121
12	Kendo (FIK)	International Kendo Federation (http://www.kendo-fik.org)	1970	2006	57
13	Kickboxing (WAKO)	World Association of Kickboxing Organisations (http://www.wakoweb.com/en)	1976	2006	118
14	Lacrosse (FIL)	Federation of International Lacrosse (http://www.filacrosse.com)	2008	2012	77
15	Muaythai (IFMA)	International Federation of Muaythai Amateur (http://www.ifmamuaythai.org)	1993	2006	130
16	Powerlifting (IPF)	International Powerlifting Federation (http://www.powerlifting-ipf.com)	1971	1976	97
17	Sambo (FIAS)	Federation Internationale De Sambo (http://www.sambo.com)	1923	1985	82
18	Savate (FISAV)	Federation Internationale de Savate (http://fisavate.org)	1985	2010	90
19	Sepaktakraw (ISTAF)	International Sepaktakraw Federation (http://www.sepaktakraw.org)	1988	2001	30
20	Sleddog (IFSS)	International Federation of Sleddog Sports (http://www.sleddogsport.net)	1985	1987	49
21	Soft Tennis (ISTF)	International Soft Tennis Federation (http://www.soft-tennis.org)	1999	2004	61
22	Angling (CIPS)	Confederation Internationale De La Peche Sportive (http://www.cips-fips.com)	1952	2005	115
23	Minigolf (WMF)	World Minigolf Sport Federation (http://www.minigolfsport.com)	1963	2000	47

# Appendix B: The IOC and the ANOC member NOCs (that belong to the EOC, the OCA, the PASO, the ONOC, and the ANOCA)

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No	Country (Code)	Name of the NOC (source: official website of each NOC)	IOC recognition date (D M Y)	No. of Olympic Games hosted
01	Albania (ALB)	Albanian National Olympic Committee (http://www.nocalbania.org.al)	01 01 1959	0
02	Andorra (AND)	Comitè Olímpic Andorrà (http://www.coa.ad)	01 01 1975	0
03	Armenia (ARM)	National Olympic Committee of Armenia (http://www.armnoc.am)	01 01 1993	0
04	Austria (AUT)	Österreichisches Olympisches Comité (http://www.olympia.at)	01 01 1912	3
	※ Host city and	year: Innsbruck 2012 (YOG), Innsbruck 1976,	Innsbruck 1964	
05	Azerbaijan (AZE)	National Olympic Committee of the Azerbaijani Republic ( <u>http://www.noc-aze.org</u> )	01 01 1993	0
06	Belarus (BLR)	National Olympic Committee of the Republic of Belarus ( <u>http://www.noc.by</u> )	01 01 1993	0
07	Belgium (BEL)	Comité Olympique et Interfédéral Belge (http://www.olympic.be)	01 01 1906	1
	※ Host city and	year: Antwerp 1920		
08	Bosnia and	Olympic Committee of Bosnia and	01 01 1993	1
	Herzegovina (BIH)	Herzegovina ( <u>http://www.okbih.ba</u> )		
	※ Host city and	year: Sarajevo 1984		
09	Bulgaria (BUL)	Bulgarian Olympic Committee (http://www.bgolympic.org)	01 01 1924	0
10	Croatia (CRO)	Croatian Olympic Committee (http://www.hoo.hr)	01 01 1993	0
11	Cyprus (CYP)	The Cyprus National Olympic Committee (http://www.olympic.org.cy)	01 01 1978	0
12	Czech Republic (CZE)	Czech Olympic Committee (http://www.olympic.cz)	01 01 1993	0
13	Denmark (DEN)	National Olympic Committee and Sports Confederation of Denmark (http://www.dif.dk)	01 01 1905	0
14	Estonia (EST)	Estonian Olympic Committee (http://www.eok.ee)	01 01 1991	0
15	Finland (FIN)	Finnish Olympic Committee (http://www.noc.fi)	01 01 1907	1
	※ Host city and	year: Helsinki 1952		
16	Former Yugoslav Republic of Macedonia (MKD)	Olympic Committee of the Former Yugoslav Republic of Macedonia ( <u>http://www.mok.org.mk</u> )	01 01 1993	0
17	France (FRA)	Comité National Olympique et Sportif Français ( <u>http://www.franceolympique.com</u> )	01 01 1894	5
	※ Host city and Paris 1900	year: Albertville 1992, Grenoble 1968, Paris 1	924, Chamonix	1924,

#### <B01> EOC members (collected by the author)

18	Georgia (GEO)	Georgian National Olympic Committee	01	01	1993	0
19	Germany (GER)	Deutscher Olympischer Sportbund (http://www.dosb.de)	01	01	1895	3
	※ Host city and	vear: Munich 1972. Berlin 1936. Garmisch-Pa	artenł	kirch	nen 1936	
20	Great Britain (GBR)	British Olympic Association (http://www.olympics.org.uk)	01	01	1905	3
	※ Host city and	year: London 2012, London 1948, London 19	908			
21	Greece (GRE)	Comité Olympique Hellénique (http://www.hoc.gr)	01	01	1895	2
	※ Host city and	year: Athens 2004, Athens 1896				
22	Hungary (HUN)	Hungarian Olympic Committee (http://www.olympic-hun.org)	01	01	1895	0
23	Iceland (ISL)	National Olympic and Sports Association of Iceland (http://www.olympic.is)	01	01	1935	0
24	Ireland (IRL)	Olympic Council of Ireland	01	01	1922	0
25	Israel (ISR)	The Olympic Committee of Israel (http://www.olympic.one.co.il)	01	01	1952	0
26	Italy (ITA)	Comitato Olimpico Nazionale Italiano (http://www.coni.it)	01	01	1915	3
	※ Host city and	year: Turin 2006, Rome 1960, Cortina D'amp	ezzo	19	56	
27	Latvia (LAT)	Latvian Olympic Committee (http://www.olimpiade.lv)	01	01	1991	0
28	Liechtenstein (LIE)	Liechtenstein Olympic Committee (http://www.olympic.li)	01	01	1935	0
29	Lithuania (LTU)	National Olympic Committee of Lithuania (http://www.ltok.lt)	01	01	1991	0
30	Luxembourg (LUX)	Comité Olympique et Sportif	01	01	1912	0
31	Malta (MLT)	Maltese Olympic Committee	01	01	1936	0
32	Monaco (MON)	Comité Olympique Monégasque (http://www.comite-olympique.mc)	01	01	1953	0
33	Montenegro (MNE)	Montenegrin Olympic Committee (http://www.cokcg.org)	01	01	2007	0
34	Netherlands (NED)	Nederlands Olympisch Comité* Nederlandse Sport Federatie (http://www.nocnsf.nl)	01	01	1912	1
	※ Host city and	year: Amsterdam 1928				
35	Norway (NOR)	Norwegian Olympic and Paralympic Committee and Confederation of Sports (http://www.idrett.no)	01	01	1900	3
	※ Host city and	year: Lillehammer 2016 (YOG), Lillehammer	1994	, O	slo 1952	
36	Poland (POL)	Polish Olympic Committee (http://www.olimpijski.pl)	01	01	1919	0
37	Portugal (POR)	Comité Olímpico de Portugal (http://www.comiteolimpicoportugal.pt)	01	01	1909	0
38	Republic of Moldova (MDA)	National Olympic and Sports Committee of the Republic of Moldova (http://www.olympic.md)	01	01	1993	0
39	Romania (ROU)	Romanian Olympic and Sports Committee (http://www.cosr.ro)	01	01	1914	0

40	Russian Federation (RUS)	Russian Olympic Committee (http://www.roc.ru)	01	01	1993	2
	※ Host city and	year: Sochi 2014, Moscow 1980				
41	San Marino (SMR)	Comitato Olimpico Nazionale Sammarinese (http://www.cons.sm)	01	01	1959	0
42	Serbia (SRB)	Olympic Committee of Serbia (http://www.oks.org.rs)	01	01	1912	0
43	Slovakia (SVK)	Slovak Olympic Committee (http://www.olympic.sk)	01	01	1993	0
44	Slovenia (SLO)	Olympic Committee of Slovenia Association of Sports Federations (http://www.olympic.si)	01	01	1993	0
45	Spain (ESP)	Comité Olímpico Español (http://www.coe.es)	01	01	1912	1
	※ Host city and	year: Barcelona 1992				
46	Sweden (SWE)	Swedish Olympic Committee (http://www.sok.se)	01	01	1913	1
	※ Host city and	year: Stockholm 1912				
47	Switzerland (SUI)	Swiss Olympic Association (http://www.swissolympic.ch)	01	01	1912	2
	※ Host city and	year: St. Moritz 1948, St. Moritz 1928				
48	Turkey (TUR)	Turkish Olympic Committee (http://www.olimpiyat.org.tr)	01	01	1911	0
49	Ukraine (UKR)	National Olympic Committee of Ukraine	01	01	1993	0

<b02> OCA</b02>	members	(collected	by	the	author)	)
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No	Country (Code)	Name of the NOC (source: official website of each NOC)	IOC recognition date (D M Y)	No. of Olympic Games hosted
01	Afghanistan (AFG)	National Olympic Committee of the Islamic Republic of Afghanistan (http://www.olympic.af)	01 01 1936	0
02	Bahrain (BRN)	Bahrain Olympic Committee (http://www.boc.bh)	01 01 1979	0
03	Bangladesh (BAN)	Bangladesh Olympic Association (http://www.nocban.org)	01 01 1980	0
4	Bhutan (BHU)	Bhutan Olympic Committee (http://bhutanolympiccommittee.org)	01 01 1983	0
5	Brunei Darussalam (BRU)	Brunei Darussalam National Olympic Council ( <u>http://www.bruneiolympic.org</u> )	01 01 1984	0
6	Cambodia (CAM)	National Olympic Committee of Cambodia (http://www.camnoc.org)	01 01 1995	0
7	Chinese Taipei (TPE)	Chinese Taipei Olympic Committee (http://www.tpenoc.net)	01 01 1960	0
8	Democratic People's Republic of Korea (PRK)	Olympic Committee of the Democratic People's Republic of Korea (n/a)	01 01 1957	0
9	Hong Kong (HKG)	Sports Federation and Olympic Committee of Hong Kong, China ( <u>http://www.hkolympic.org</u> )	01 01 1951	0
10	India (IND)	Indian Olympic Association (http://www.olympic.ind.in)	01 01 1927	0
11	Indonesia (INA)	Komite Olimpiade Indonesia (http://www.nocindonesia.or.id)	01 01 1952	0
12	Iraq (IRQ)	National Olympic Committee of Iraq (http://www.nociraq.iq)	01 01 1948	0
13	Islamic Republic of Iran (IRI)	National Olympic Committee of the Islamic Republic of Iran (http://www.olympic.ir)	01 01 1947	0
14	Japan (JPN)	Japanese Olympic Committee (http://www.joc.or.jp)	01 01 1912	3
	※ Host city and	year: Nagano 1998, Sapporo 1972, Tokyo 19	964	
15	Jordan (JOR)	Jordan Olympic Committee (http://www.joc.jo)	01 01 1963	0
16	Kazakhstan (KAZ)	National Olympic Committee of the Republic of Kazakhstan (http://www.olympic.kz)	01 01 1993	0
17	Kuwait (KUW)	Kuwait Olympic Committee (n/a)	01 01 1966	0
10		National Olympic Committee of the Kyrgyz	01 01 1003	0
10	(KGZ)	Republic (http://www.olympic.kg)	01 01 1993	0
19	Lao People's Democratic Republic (LAO)	National Olympic Committee of Lao (http://www.olympiclao.org)	01 01 1979	0
20	Lebanon (LBN)	Lebanese Olympic Committee (http://www.lebolymp.org)	01 01 1948	0
21	Malaysia (MAS)	Olympic Council of Malaysia	01 01 1954	0

		(http://www.olympic.org.my)			
22	Maldives (MDV)	Maldives Olympic Committee (http://www.nocmaldives.org)	01 0	1 1985	0
23	Mongolia (MGL)	Mongolian National Olympic Committee (n/a)	01 0	1 1962	0
24	Myanmar (MYA)	Myanmar Olympic Committee (http://www.myasoc.org)	01 0	1 1947	0
25	Nepal (NEP)	Nepal Olympic Committee (http://www.nocnepal.org.np)	01 0	1 1963	0
26	Oman (OMA)	Oman Olympic Committee (http://www.omanolympic.org.om)	01 0	1 1982	0
27	Pakistan (PAK)	akistan (PAK) Pakistan Olympic Association (http://www.nocpakistan.org)		1 1948	0
28	Palestine (PLE)	Palestine (PLE) Palestine Olympic Committee (http://www.poc.ps)		1 1995	0
29	People's Republic of China (CHN)	Chinese Olympic Committee (http://www.olympic.cn)	01 0	1 1979	2
	※ Host city and	year: Beijing 2008, Nanjing 2014 (YOG)			
30	Philippines (PHI)	Philippine Olympic Committee (http://www.olympic.ph)	01 0	1 1929	0
31	Qatar (QAT)	Qatar Olympic Committee (http://www.olympic.ga)	01 0	1 1980	0
32	ROK (KOR)	Korean Olympic Committee (http://www.sports.or.kr/eng)	01 0	1 1947	1
	※ Host city and	year: Seoul 1988			
33	Saudi Arabia (KSA)	Saudi Arabian Olympic Committee (http://olympic.sa)	01 0	1 1965	0
34	Singapore (SGP)	Singapore National Olympic Council (http://www.singaporeolympics.com)	01 0	1 1948	1
	₩ Host city and	vear: Singapore 2010 (YOG)			
35	Sri Lanka (SRI)	National Olympic Committee of Sri Lanka	01 0	1 1937	0
36	Syrian Arab Republic (SYR)	Syrian Olympic Committee (http://www.syriaolymp.org)	01 0	1 1948	0
37	Tadjikistan	National Olympic Committee of the Republic of Tajikistan (http://www.olympic.ti)	01 0	1 1993	0
38	Thailand (THA)	National Olympic Committee of Thailand	01 0	1 1950	0
39	Timor-Leste	Comitê Olímpico Nacional de Timor-Leste	01 0	1 2003	0
40	Turkmenistan	National Olympic Committee of	01 0	1 1993	0
-	(TKM)	Turkmenistan (n/a)			-
41	United Arab Emirates (UAE)	United Arab Emirates National Olympic Committee (http://www.uaenoc.ae)	01 0	1 1980	0
42	Uzbekistan (UZB)	National Olympic Committee of the Republic of Uzbekistan (http://www.olympic.uz)	01 0	1 1993	0
43	Vietnam (VIE)	Vietnam Olympic Committee	01 0	1 1979	0
44	Yemen (YEM)	Yemen Olympic Committee (https://www.yemnoc.org)	01 0	1 1981	0

No	Country (Code)	Name of the NOC (source: official website of each NOC)	IOC recognition date (D M Y)	No. of Olympic Games hosted
01	Antigua and Barbuda (ANT)	The Antigua and Barbuda Olympic Association (http://antiguaolympiccommittee.com)	01 01 1976	0
02	Argentina (ARG)	Comité Olímpico Argentino (http://www.coarg.org.ar)	01 01 1923	0
03	Aruba (ARU)	Comité Olímpico Arubano (http://www.olympicaruba.com)	01 01 1986	0
04	Bahamas (BAH)	Bahamas Olympic Committee (http://www.bahamasolympiccommittee.org)	01 01 1952	0
05	Barbados (BAR)	The Barbados Olympic Association Inc. (http://www.olympic.org.bb)	01 01 1951	0
06	Belize (BIZ)	Belize Olympic and Commonwealth Games Association (n/a)	01 01 1968	0
07	Bermuda (BER)	Bermuda Olympic Association (http://www.olympics.bm)	01 01 1936	0
08	Bolivia (BOL)	Comité Olímpico Boliviano (http://www.cobol.org.bo)	01 01 1936	0
09	Brazil (BRA)	Comitê Olímpico do Brasil (http://www.cob.org.br)	01 01 1935	1
	※ Host city and	year: Rio 2016		
10	British Virgin Islands (IVB)	British Virgin Islands Olympic Committee (http://www.bviolympics.org)	01 01 1982	0
11	Canada (CAN)	Canadian Olympic Committee (http://www.olympic.ca)	01 01 1907	3
	※ Host city and	year: Vancouver 2010, Calgary 1988, Montre	al 1976	
12	Cayman Islands (CAY)	Cayman Islands Olympic Committee (http://www.caymanolympic.org.ky)	01 01 1976	0
13	Chile (CHI)	Comité Olímpico de Chile (http://www.coch.cl)	01 01 1934	0
14	Colombia (COL)	Comité Olímpico Colombiano (http://www.coc.org.co)	01 01 1948	0
15	Costa Rica (CRC)	Comité Olímpico Nacional de Costa Rica (http://www.concrc.org)	01 01 1936	0
16	Cuba (CUB)	Comité Olímpico Cubano (n/a)	01 01 1955	0
17	Dominica (DMA)	Dominica Olympic Committee (http://www.doc.dm)	01 01 1993	0
18	Dominican Republic (DOM)	Comité Olímpico Dominicano (http://www.colimdo.org)	01 01 1954	0
19	Ecuador (ECU)	Comité Olímpico Ecuatoriano (http://www.coe.org.ec)	01 01 1959	0
20	El Salvador (ESA)	Comité Olímpico de El Salvador (http://www.teamesa.org)	01 01 1938	0
21	Grenada (GRN)	The Grenada Olympic Committee (http://www.grenadaolympic.com)	01 01 1984	0
22	Guatemala (GUA)	Comité Olímpico Guatemalteco (http://www.cog.org.gt)	01 01 1947	0

## <B03> PASO members (collected by the author)

23	Guyana (GUY)	Guyana Olympic Association (n/a)	01	01	1948	0	
24	Haiti (HAI)	Comité Olympique Haïtien (n/a)	01	01	1924	0	
25	Honduras	Comité Olímpico Hondureño	01	01	1956	0	
	(HUN)		04	04	4000	0	
20	Jamaica (JAIVI)	Jamaica Olympic Association	01	01	1936	0	
27	Maxiaa (MEX)	( <u>nup.//www.jamaicaolympicassociation.com</u> )	01	01	1002	1	
21		(http://www.com.org.mx)	01	01	1923	I	
	i ≫ Host city and	vear: Mexico 1968					
28	Nicaraqua (NCA)	Comité Olímpico Nicaragüense (p/a)	01	01	1959	0	
20	Panama (PAN)	Comité Olímpico de Panamá	01	01	1947	0	
20		(http://www.copanama.com)	01	01	1041	0	
30	Paraguay (PAR)	Comité Olímpico Paraguavo	01	01	1970	0	
		(http://www.cop.org.py)	-	-		-	
31	Peru (PER)	Comité Olímpico Peruano	01	01	1936	0	
	. ,	(http://www.coperu.org)					
32	Puerto Rico	Comité Olímpico de Puerto Rico	01	01	1948	0	
	(PUR)	(http://www.copur.pr)					
33	Saint Kitts and	St. Kitts and Nevis Olympic Committee	01	01	1993	0	
	Nevis (SKN)	(http://www.sknoc.org)					
34	Saint Lucia	St Lucia Olympic Committee	01	01	1993	0	
	(LCA)	(http://www.slunoc.org)					
35	Saint Vincent and	The St Vincent and the Grenadines	01	01	1987	0	
	the Grenadines	National Olympic Committee					
	(VIN)	(http://www.svgnoc.org)					
36	Suriname	Surinaams Olympisch Comité (n/a)	01	01	1959	0	
	(SUR)						
37	Trinidad and	Trinidad and Tobago Olympic Committee	01	01	1947	0	
	Tobago (TTO)	(http://www.ttoc.org)					
38	United States	United States Olympic Committee	01	01	1894	8	
	of America	(http://www.teamusa.org)					
	(USA)						
	※ Host city and	year: Salt Lake City 2002, Atlanta 1996, Los A	ngeles	19	84, Lake	e Placid	
	1980, Squaw Valley 1960, Los Angeles 1932, Lake Placid 1932, St Louis 1904						
39	Uruguay (URU)	Comité Olímpico Uruguayo	01	01	1923	0	
		(http://www.cou.org.uy)					
40	Venezuela	Comité Olímpico Venezolano	01	01	1935	0	
	(VEN)	(http://www.covoficial.com)					
41	Virgin Islands	Virgin Islands Olympic Committee	01	01	1967	0	
	(ISV)	(http://www.virginislandsolympics.org)					

No	Country (Code)	Name of the NOC (source: official website of each NOC)	IOC recognition date (D M Y)	No. of Olympic Games hosted
01	American Samoa (ASA)	American Samoa National Olympic Committee ( <u>http://www.oceaniasport.com/amsam</u> )	01 01 1987	0
02	Australia (AUS)	Australian Olympic Committee Inc. (http://www.olympics.com.au)	01 01 1895	2
	※ Host city and	year: Sydney 2000, Melbourne - Stockholm 1	956	
03	Cook Islands (COK)	Cook Islands Sports and National Olympic Committee (http://www.oceaniasport.com/cookis)	01 01 1986	0
04	Federated States of Micronesia (FSM)	Federated States of Micronesia National Olympic Committee (http://www.oceaniasport.com/fsm)	01 01 1997	0
05	Fiji (FIJ)	Fiji Association of Sports and National Olympic Committee (http://www.fijiolympiccommittee.com)	01 01 1955	0
06	Guam (GUM)	Guam National Olympic Committee (http://www.oceaniasport.com/guam)	01 01 1986	0
07	Kiribati (KIR)	Kiribati National Olympic Committee (http://www.oceaniasport.com/kiribati)	01 01 2003	0
08	Marshall Islands (MHL)	Marshall Islands National Olympic Committee (http://www.oceaniasport.com/marshalls)	01 01 2006	0
09	Nauru (NRU)	Nauru Olympic Committee (http://www.oceaniasport.com/nauru)	01 01 1994	0
10	New Zealand (NZL)	New Zealand Olympic Committee Inc. (http://www.olympic.org.nz)	01 01 1919	0
11	Palau (PLW)	Palau National Olympic Committee (http://www.palaunoc.sportingpulse.net)	01 01 1999	0
12	Papua New Guinea (PNG)	Papua New Guinea Olympic Committee	01 01 1974	0
13	Samoa (until 1996 Western Samoa) (SAM)	Samoa Association of Sports and National Olympic Committee Inc. ( <u>http://www.sasnoc.org/</u> )	01 01 1983	0
14	Solomon Islands (SOL)	National Olympic Committee of Solomon Islands (http://www.oceaniasport.com/solomon)	01 01 1983	0
15	Tonga (TGA)	Tonga Sports Association and National Olympic Committee (http://www.oceaniasport.com/tonga)	01 01 1984	0
16	Tuvalu (TUV)	Tuvalu Association of Sports and National Olympic Committee (http://www.oceaniasport.com/tuvalu)	01 01 2007	0
17	Vanuatu (VAN)	Vanuatu Association of Sports and National Olympic Committee (http://www.oceaniasport.com/vanuatu)	01 01 1987	0

## <B04> ONOC members (collected by the author)

		· · · · · · · · · · · · · · · · · · ·		
No	Country (Code)	Name of the NOC (source: official website of each NOC)	IOC recognition date (D M Y)	No. of Olympic Games hosted
01	Algeria (ALG)	Comité Olympique et Sportif Algérien (http://www.coalgerie.com)	01 01 1964	0
02	Angola (ANG)	Comité Olímpico Angolano (n/a)	01 01 1980	0
03	Benin (BEN)	Comité National Olympique et Sportif Béninois (n/a)	01 01 1962	0
04	Botswana (BOT)	Botswana National Olympic Committee (http://www.botswananoc.org)	01 01 1980	0
05	Burkina Faso (BUR)	Comité National Olympique et des Sports Burkinabè (n/a)	01 01 1972	0
06	Burundi (BDI)	Comité National Olympique du Burundi (http://www.cnobdi.org)	01 01 1993	0
07	Cameroon (CMR)	Comité National Olympique et Sportif du Cameroun ( <u>http://www.cnosc.com</u> )	01 01 1963	0
08	Cape Verde (CPV)	Comité Olímpico Cabo-Verdiano (n/a)	01 01 1993	0
09	Central African Republic (CAF)	Comité National Olympique et Sportif Centrafricain (n/a)	01 01 1965	0
10	Chad (CHA)	Comité Olympique et Sportif Tchadien (n/a)	01 01 1964	0
11	Comoros (COM)	Comité Olympique et Sportif des Iles Comores (n/a)	01 01 1993	0
12	Congo (CGO)	Comité National Olympique et Sportif Congolais (n/a)	01 01 1964	0
13	Côte d'Ivoire (CIV)	Comité National Olympique de Côte d'Ivoire (n/a)	01 01 1963	0
14	Democratic Republic of the Congo (COD)	Comité Olympique Congolais (n/a)	01 01 1968	0
15	Djibouti (DJI)	Comité National Olympique et Sportif Djiboutien (n/a)	01 01 1984	0
16	Egypt (EGY)	Egyptian Olympic Committee (http://www.egyptianolympic.org)	01 01 1910	0
17	Equatorial Guinea (GEQ)	Comité Olímpico de Guinea Ecuatorial (n/a)	01 01 1984	0
18	Eritrea (ERI)	Eritrean National Olympic Committee (n/a)	01 01 1999	0
19	Ethiopia (ETH)	Ethiopian Olympic Committee (n/a)	01 01 1954	0
20	Gabon (GAB)	Comité Olympique Gabonais (n/a)	01 01 1968	0
21	Gambia (GAM)	The Gambia National Olympic Committee (http://www.gnoc.gm)	01 01 1976	0
22	Ghana (GHA)	Ghana Olympic Committee (n/a)	01 01 1951	0
23	Guinea (GUI)	Comité National Olympique et Sportif Guinéen (n/a)	01 01 1965	0
24	Guinea-Bissau (GBS)	Comité Olímpico da Guiné-Bissau (n/a)	01 01 1995	0
25	Kenya (KEN)	National Olympic Committee Kenya (n/a)	01 01 1955	0
26	Lesotho (LES)	Lesotho National Olympic Committee (http://www.olympics.org.ls)	01 01 1972	0

## <B05> ANOCA members (collected by the author)

27	Liberia (LBR)	Liberia National Olympic Committee (n/a)	01	01	1955	0
28	Libya (LBA)	Libyan Olympic Committee (http://www.olympic.ly)	01	01	1963	0
29	Madagascar (MAD)	Comité Olympique Malgache (n/a)	01	01	1964	0
30	Malawi (MAW)	Malawi Olympic Committee (http://www.moc.org.mw)	01	01	1968	0
31	Mali (MLI)	Comité National Olympique et Sportif du Mali (http://www.maliolympique.org)	01	01	1963	0
32	Mauritania (MTN)	Comité National Olympique et Sportif Mauritanien (n/a)	01	01	1979	0
33	Mauritius (MRI)	Mauritius Olympic Committee (http://www.mauritiussportscouncil.com)	01	01	1972	0
34	Morocco (MAR)	Comité National Olympique Marocain (http://www.marocolympique.org)	01	01	1959	0
35	Mozambique (MOZ)	Comité Olímpico Nacional de Moçambique (n/a)	01	01	1979	0
36	Namibia (NAM)	Namibia National Olympic Committee (http://www.nnoc-namibia.com)	01	01	1991	0
37	Niger (NIG)	Comité Olympique et Sportif National du Niger (n/a)	01	01	1964	0
38	Nigeria (NGR)	Nigeria Olympic Committee Inc. (http://www.nigerianoc.org)	01	01	1951	0
39	Rwanda (RWA)	Comité National Olympique et Sportif du Rwanda (http://www.olympicrwanda.org)	01	01	1984	0
40	Sao Tome and Principe (STP)	Comité Olímpico de São Tomé e Príncipe (http://www.comiteolimpicostp.org)	01	01	1993	0
41	Senegal (SEN)	Comité National Olympique et Sportif Sénégalais (http://senegalolympique.com)	01	01	1963	0
42	Seychelles (SEY)	Seychelles Olympic and Commonwealth Games Association (n/a)	01	01	1979	0
43	Sierra Leone (SLE)	National Olympic Committee of Sierra Leone (http://www.nocsl.org)	01	01	1964	0
44	Somalia (SOM)	Somali Olympic Committee (http://www.nocsom.org)	01	01	1972	0
45	South Africa (RSA)	South African Sports Confederation and Olympic Committee (http://www.sascoc.co.za)	01	01	1991	0
46	Sudan (SUD)	Sudan Olympic Committee (n/a)	01	01	1959	0
47	Swaziland (SWZ)	Swaziland Olympic and Commonwealth Games Association (http://socga.org.sz)	01	01	1972	0
48	Togo (TOG)	Comité National Olympique du Togo (n/a)	01	01	1965	0
49	Tunisia (TUN)	Comité National Olympique Tunisien (http://www.cnot.org.tn)	01	01	1957	0
50	Uganda (UGA)	Uganda Olympic Committee (http://www.nocuganda.org)	01	01	1956	0
51	United Republic of Tanzania (TAN)	Tanzania Olympic Committee (http://www.noctanzania.org)	01	01	1968	0
52	Zambia (ZAM)	National Olympic Committee of Zambia (http://www.nocz.co.zm)	01	01	1963	0
53	Zimbabwe (ZIM)	Zimbabwe Olympic Committee (http://zoc.co.zw)	01	01	1980	0

## Appendix C: The principles of good governance in sports (collected and analysed by the author)

Author (Year)	The contributed principles to construct the ISSOSS in direct or indirect ways (Quoted from each source presented)	<ul> <li>[1] Interests (concerning the ISSOSS)</li> <li>[2] Limitations (concerning the ISSOSS)</li> <li>[3] Research level (global or national study)</li> <li>[4] Research area (academic or field base)</li> </ul>
Chappelet and Kübler-Mab bott (2008)	The sports governance should have the principles of 1) transparency, 2) democracy, 3) accountability, 4) autonomy, and 5) social responsibility.	<ul><li>[1] Studied the IOC with a balanced view - inner and outer</li><li>[2] Fully focused on the IOC and its operation system</li><li>[3] Global sports level study</li><li>[4] Academic research</li></ul>
Chappelet and Mrkonjic (2013)	The sports governance should include the principles of 1) organisational transparency, 2) reporting transparency, 3) stakeholders' representation, 4) democratic process, 5) control mechanisms, 6) sports integrity, and 7) solidarity.	<ul><li>[1] Introduced existing principles; Measured with Likert scale</li><li>[2] Fully focused on the international sports governing bodies</li><li>[3] Global sports level study</li><li>[4] Academic research</li></ul>
Council of Europe (2012); TNS Opinion and Social (2014)	The sports governance should 1) include codes of sports ethics to prevent unknown threats, 2) comply with the IOC recommendation (The Basic Universal Principles of Good Governance of the Olympic and Sports Movement, 2008 version), 3) introduce supervisory mechanisms to achieve power balance between a president and members, 4) control presidential election (e.g. term of office, renewal times, encouraging multiple candidates, gender equality), 5) prevent any forms of conflict, 6) include athletes in the major decisions, 7) improve the provisions about examining candidatures for hosting sports events, operating arrangements to prevent and punish acts of self-interest, inviting outside observers, and 8) publish the details of income, expenditure and the remuneration of staff annually.	<ol> <li>Rendered the principles that are arisen as the significant issues in the twenty-first century</li> <li>Weak at relationships consideration of the principles themselves. Necessary to concern the methodology of the 'collective exhaustiveness'</li> <li>Global sports level study</li> <li>Field research</li> </ol>
De Bosscher et al. (2006, 2010)	The sports governance should include the principles of 1) financial support, 2) organisation and structure of sports policies: an integrated approach to policy development, 3) initiation: foundation; participation, 4) performance: talent identification; talent development system, 5) excellence: athletes' support; athletes' post-career support, 6) training facilities, 7) coaching provision, coach development, 8) (inter)national competition, and 9) scientific research.	<ol> <li>Mixed research methods between quantitative and qualitative approach; The comparative study on the phased approach</li> <li>Fully focused on the elite sports level</li> <li>National sports level study</li> <li>Academic research</li> </ol>

De Zwart and Gilligan (2008)	The sports governance should include the principles about 1) multiple objectives and multiple stakeholders, 2) growing professionalism, 3) board representation and independence of directors, 4) 'league' considerations, and 5) achieving on-field success.	<ol> <li>Reviewed global and national corporate governance schemes</li> <li>Lack of process of result derivation and shape of the good governance</li> <li>Global sports level study</li> <li>Academic research</li> </ol>
European Commission (2011)	The sports governance should include the principles of 1) autonomy within the limits of the law, democracy, transparency and accountability in decision-making, and 2) inclusiveness in the representation of interested stakeholders.	<ol> <li>Studied sports at diverse dimensions with its social influence</li> <li>Not enough systematic grounds for choosing the dimensions</li> <li>Global sports level study</li> <li>Field research</li> </ol>
Governance in Sport Working Group (2001)	The sports governance should include the principles of 1) role of the governing body, 2) structure, responsibility, accountability, 3) membership, size of the governing body, 4) democracy, elections, appointments, 5) transparency, communication, 6) decisions and appeals, 7) conflict of interests, 8) solidarity, and 9) recognition of other interests.	<ol> <li>Provided 'Checklist' for sports governing bodies to ensure 'good governance' in their activities</li> <li>Presented principles without a binding template</li> <li>Global sports level study</li> <li>Field research</li> </ol>
Henry and Lee (2004)	The sports governance should include the principles of 1) transparency, 2) accountability, 3) democracy, 4) responsibility, 5) equity, 6) effectiveness, and 7) efficiency.	<ol> <li>Studied 'good governance' in the sports context with detailed examples for practical use</li> <li>Listed principles that are not intended to be exhaustive</li> <li>Global sports level study</li> <li>Academic research</li> </ol>
Institute of Directors (2002)	The sports governance should include the principles of 1) accountability, 2) responsibility, 3) transparency, 4) social responsibility, 5) independence, 6) fairness, and 7) discipline.	<ol> <li>Dealt with the new concept of 'sustainability'</li> <li>Selectively applicable to the entities of public, quasi-public and private depending on their management circumstances</li> <li>Global sports level study</li> <li>Field research</li> </ol>
International Olympic Committee (2008, 2012)	The sports governance should include the principles of (2008 version): 1) vision, mission, strategy, 2) structures, regulations and democratic process: structures; clear regulations; governing bodies; representative governing bodies; democratic processes; attributions of the respective bodies; decision-making; conflicts of interests;	<ul> <li>[1] Provided clear guidelines with concise words for all members of the Olympic Movement (after consultation with not only IOC members but also various shareholders such as IFs and NOCs)</li> <li>[2] Necessary to specify the object of each theme; The</li> </ul>

election or renewal of office-bearers on a regular basis; decisions and appeals. 3) highest level of competence, integrity and ethical standards: competence of the members of the executive body: power of signature; internal management, communication and coordination: risk management: appointment of the members of the management; code of ethics and ethical issues, 4) accountability, transparency and control: accountability; processes and mechanisms; transparency and communication: financial matters (applicable laws. rules, procedures and standards); internal control system; education and training, 5) solidarity and development: distribution with resources; equity; development, 6) athletes' involvement, participation and care: right to participate and involvement of the athletes in the Olympic and Sports Movement and governing bodies; protection of athletes; health; fight against doping; insurance; fairness and fair play: athletes' education and career management. 7) harmonious relations with governments while preserving autonomy: cooperation, coordination and consultation: complementary missions: maintain and preserve the autonomy of sports.

The evaluation criteria for sports and disciplines are (2012 version): 1) value added (general), 2) governance: good governance basic principles; strategic planning process; gender equity in elected bodies; illegal and irregular betting, 3) history and tradition: sport/IF; Olympic games; World championships; other multi-sports games, 4) universality: number of affiliated national federations; active member national federations: global spread of excellence - Olympic games: global spread of excellence - World championships, 5) popularity: general public appeal; youth appeal; athletes; spectators - Olympic games; spectators - World championships; media - World championships; press coverage; television coverage - Olympic games: digital media: sponsors, 6) athletes: athlete representation; athletes' commission: athlete career programme: athletes' entourage: athletes' health, 7) development of the IF/sport: scope of development programme; technical evolution of the sport; gender equity: sport for all: transparency and fairness on the field of play: environment, 8) finance: accounting; income & expenditure; venue

results rely on the answer from the concerned organisation which is the subject of the appraisal [3] Global sports level study [4] Field research

	costs at the Olympic games; technology requirements; television	
Korea Institute of Sport Science (2014)	Sports governance should include the principles of 1) Strategy and leadership: vision and development plan (establishment and amendment; sharing and implement); responsible management (election and overall management; management of the secretariat and the affiliated bodies); policy enforcement of NOC (gender equality; inspection indication and its improvement action; fulfillment of improvement demand; use of computer system), 2) Core business, and ethicality: rationality of sports promotion (sports promotion; system for sports promotion); rationality of elite athlete promotion (promotion of elite athlete; system of elite athlete promotion); rationality of event management (event management; system of event management; referee system); rationality of international relations (international relationship; system of international relations); rationality of selection (coach selection; athlete selection); ethicality of core business (prevention of violence; securement of ethicality), 3) Financial management; transparency of fund management; effort for accounting management improvement); budget management (propriety of budget use; effort of reduction); financial result (operating expense; profit from an own project; effort of creating profit).	<ul> <li>[1] Evaluated NFs by categorising groups according to their development statuses such as finance and management</li> <li>[2] Limited territory to the ROK</li> <li>[3] National sports level study</li> <li>[4] Field research</li> </ul>
	The guidelines of the 'Safe sports school' is necessary to be considered in the school sports context. The principles are: 1) creating a comprehensive athletic health care administrative system, 2) providing or coordinating pre-participation physical examinations, 3) promoting safe and appropriate practice and competition facilities, 4) planning for selection, fit, function and proper maintenance of athletic equipment, 5) providing a permanent, appropriately equipped area to evaluate and treat injured athletes, 6) developing injury and illness prevention strategies, including protocols for environmental conditions, 7) providing or facilitate injury intervention, 8) creating and rehearse venue-specific Emergency Action Plans, 9) providing	

	or facilitating psychosocial consultation and nutritional counseling/education, 10) educating athletes and parents about the potential benefits and risks in sports as well as their responsibilities; Refer in more detail to https://www.nata.org/advocacy/youth-sports-safety/safe-sports-schools.	
McNamee and Fleming (2007)	The sports governance should include the principles of 1) Respect (individual level): beneficence, civility, confidentiality, honesty, loyalty, non-abuse, non-discrimination, non-exploitation, non-harassment, privacy, 2) equity (social level): diversity, fairness, recognition, tolerance, transparency, 3) responsibility (political level): accountability, effectiveness, efficiency, trustworthiness.	<ol> <li>Articulated a theoretical terrain of the ethics audit</li> <li>Fully focused on the public sector organisations</li> <li>Global sports level study</li> <li>Academic research</li> </ol>
Mowbray (2012)	The sports governance should include the standard of 1) structure, 2) partnership, communication, 3) planning, 4) performance, and 5) transparency.	<ol> <li>Acknowledged that good governance relies on the quality of the people participated or involved in (which are the value itself)</li> <li>Consideration of delicate relationships among the NGBs</li> <li>National sports level study</li> <li>Academic research</li> </ol>
Robinson and Minikin (2012)	The sports governance should include the principles of 1) Governance: rules; regulations; policies; strategic planning, 2) management: organisational structure; roles; practices, 3) physical resources: access to equipment and facilities; availability of equipment and facilities, 4) human resources: type; diversity; planning; management practices, 5) finance: record keeping; accounting; planning, 6) communication: methods used; technology available, 7) sports activity: competition; athlete preparation; development programmes; training, 8) values: cultural; attitudinal; behavioral.	<ol> <li>Competitive advantages that lead to strategic success; Resource-based view; NFs are admitted as the central resource of the NOC</li> <li>Focused on athletes and their performance</li> <li>National sports level study</li> <li>Academic research</li> </ol>
Taylor and O'Sullivan (2009)	The board of nonprofit organisation should 1) balance between members possessing appropriate business expertise and members representing the broader membership of organisations, 2) be limited to between five and twelve members, thereby facilitating debate while also optimizing decision-making, 3) separate the roles of chairman and CEO to make the board more objective and independent, and 4) contain sufficient non-executive representation so as to ensure the independence of decision-making.	<ol> <li>Suggested an appropriate board structure for the NGBs</li> <li>Limited territory to the United Kingdom</li> <li>National sports level study</li> <li>Academic research</li> </ol>

# Appendix D: MDGs achievement of nations that hosted Olympic Games (excluding the ROK and Switzerland)<sup>1)</sup>

<d0< th=""><th>1&gt; Period</th><th>lical achieveme</th><th>nt of Australia</th><th>(average</th><th>calculated by</th><th>the author)</th></d0<>	1> Period	lical achieveme	nt of Australia	(average	calculated by	the author)
No	Indicator	1990-1994	1995-1999	2000-2004	2005-2009	2010-2015
01	1.03	n/a	6.80	6.95	n/a	n/a
02	1.04	1.87	2.32	1.39	0.58	1.13
03	1.05	57.00	58.16	59.46	61.94	61.78
04	1.07	11.24	10.78	10.26	9.40	n/a
05	1.09	5.00	5.00	5.00	5.00	5.00
06	2.01	96.68	94.46	94.32	95.76	96.88
07	3.01	1.00	1.00	1.00	1.00	1.00
08	3.01	1.01	1.01	0.98	0.97	0.95
09	3.01	1.10	1.12	1.23	1.29	1.38
10	3.02	44.38	45.40	46.72	47.14	47.23
11	3.03	6.10	17.77	24.26	25.50	25.68
12	4.01	8.18	6.66	6.02	5.38	4.38
13	4.02	6.74	5.50	4.98	4.52	3.68
14	4.03	86.00	85.80	93.00	94.00	94.00
15	5.01	8.00	8.40	8.00	7.00	6.17
16	5.02	100.00	100.00	n/a	n/a	n/a
17	5.03	n/a	66.70	70.80	72.30	n/a
18	5.04	20.86	19.26	16.70	15.78	14.90
19	5.05	n/a	n/a	n/a	92.00	n/a
20	5.05	100.00	n/a	n/a	98.30	n/a
21	6.01	0.14	0.13	0.14	0.14	0.17
22	6.09	0.32	0.20	0.20	0.22	0.20
23	6.09	6.64	6.54	5.88	6.26	6.40
24	6.09	8.36	8.28	7.40	7.96	8.05
25	6.10	86.60	86.75	86.80	87.40	86.25
26	6.10	n/a	67.00	78.20	83.20	80.67
27	7.01	20.10	n/a	20.20	20.00	19.40
28	7.02	0.57	0.54	0.50	0.46	0.43
29	7.02	16.16	17.24	18.26	18.40	17.53
30	7.02	282887.68	320320.32	360091.74	391616.22	398452.27
31	7.03	6291.50	1230.56	340.76	90.52	13.80
32	7.05	n/a	4.50	4.40	3.80	3.55
33	7.06	6.64	n/a	8.72	n/a	29.03
34	7.08	100.00	100.00	100.00	100.00	100.00
35	7.09	100.00	100.00	100.00	100.00	100.00
36	8.01	0.36	0.28	0.26	0.30	0.32
37	8.01	0.07	0.05	0.06	0.07	0.10
38	8.02	n/a	18.45	17.59	12.57	15.89
39	8.03	46.92	80.18	67.54	89.90	99.57
40	8.08	0.50	0.35	0.23	0.21	0.15
41	8.09	n/a	n/a	n/a	12.80	15.00
42	8.14	47.33	50.31	52.05	46.96	44.51
43	8.15	3.26	23.63	63.85	97.49	109.74
44	8.16	1.53	18.80	49.73	68.87	80.41

Values are adapted from the "Millennium Development Goals Indicators: The official United Nations site for the MDG Indicators", 2015, <u>http://mdgs.un.org/unsd/mdg/Data.aspx</u>; the presented values are the calculated average of the specification period; 'n/a' means missing data

No	Indicator	1990-1994	1995-1999	2000-2004	2005-2009	2010-2015
01	1.03	7.90	7.55	8.55	n/a	n/a
02	1.04	0.44	2.80	1.57	-0.37	0.92
03	1.05	54.66	56.36	56.46	57.82	58.58
04	1.07	n/a	9.04	8.34	8.78	8.80
05	1.09	5.00	5.00	5.00	5.00	5.00
06	2.02	n/a	97.10	97.40	97.52	99.57
07	3.01	0.99	0.99	0.99	0.99	1.00
08	3.01	0.93	0.95	0.95	0.96	0.96
09	3.01	0.89	0.98	1.14	1.19	1.19
10	3.02	42.22	43.00	44.90	46.86	47.83
11	3.03	11.50	26.40	29.64	32.02	29.07
12	4.01	8.48	6.12	5.28	4.68	4.13
13	4.02	7.12	5.10	4.38	3.86	3.38
14	4.03	60.00	76.00	77.00	78.60	76.00
15	5.01	7.60	5.40	4.80	4.20	4.00
16	5.02	100.00	n/a	n/a	n/a	n/a
17	5.03	n/a	50.90	n/a	69.60	n/a
18	5.04	21.86	15.10	13.23	11.50	9.13
19	5.05	100.00	n/a	n/a	n/a	n/a
20	6.09	1.64	1.02	0.70	0.54	0.38
21	6.09	20.60	18.20	14.60	10.94	8.75
22	6.09	26.20	23.60	19.00	14.00	11.25
23	6.10	85.00	88.80	85.80	88.25	87.50
24	6.10	n/a	80.40	70.60	70.50	72.00
25	7.01	45.80	n/a	46.50	46.80	47.10
26	7.02	0.25	0.24	0.23	0.21	0.19
27	7.02	7.94	8.26	8.98	8.94	8.30
28	7.02	61815.86	66107.80	72760.00	74275.68	70151.10
29	7.03	1458.92	n/a	n/a	n/a	n/a
30	7.05	4.90	4.70	4.70	n/a	n/a
31	7.06	19.18	n/a	25.57	n/a	28.35
32	7.08	100.00	100.00	100.00	100.00	100.00
33	7.09	100.00	100.00	100.00	100.00	100.00
34	8.01	0.14	0.24	0.25	0.44	0.28
35	8.01	0.06	0.05	0.07	0.08	0.08
36	8.02	n/a	7.17	7.24	9.18	2.24
37	8.03	50.40	45.68	56.28	80.24	58.23
38	8.09	n/a	n/a	n/a	16.36	21.28
39	8.14	44.35	49.00	48.35	41.63	39.62
40	8.15	2.19	21.69	85.53	120.56	153.76
41	8.16	0.64	11.36	41.29	67.46	79.11

#### <D02> Periodical achievement of Austria (average calculated by the author)

-00			ent of Deigium	lavolago	calculated by	
No	Indicator	1990-1994	1995-1999	2000-2004	2005-2009	2010-2015
01	1.03	9.50	8.80	8.40	) n/a	n/a
02	1.04	0.57	1.41	1.31	-0.16	0.51
03	1.05	45.62	46.18	48.02	2 49.24	49.30
04	1.07	16.28	15.26	10.96	6 10.32	10.30
05	1.09	5.00	5.00	5.00	) 5.00	5.00
06	2.01	95.88	97.37	98.54	98.12	98.93
07	2.02	84.90	n/a	n/a	a 92.88	97.20
08	3.01	1.00	0.99	0.99	) 1.00	1.00
09	3.01	1.03	1.07	1.08	3 0.97	1.01
_10	3.01	0.99	1.06	1.16	§ 1.24	1.27
11	3.02	40.24	42.08	43.96	6 46.12	47.65
12	3.03	8.50	12.47	25.70	) 34.94	38.98
13	4.01	9.14	6.74	5.42	<u>4.80</u>	4.45
14	4.02	7.58	5.56	4.46	3.90	3.58
15	4.03	77.40	79.20	82.00	92.00	94.50
16	5.01	9.00	9.40	8.40	) 8.00	7.33
_17	5.03	78.40	56.50	75.10	) n/a	70.40
18	5.04	10.87	10.16	10.82	2 10.43	8.87
19	5.06	3.40	n/a	n/a	n/a	n/a
20	6.09	1.04	0.92	0.60	0.46	0.25
21	6.09	16.80	14.60	13.00	) 10.80	9.43
_22	6.09	21.20	18.80	16.20	) 13.20	11.75
23	6.10	87.80	84.00	89.80	) 84.80	90.75
24	6.10	n/a	60.00	66.40	) 62.00	78.33
25	7.01	22.40	n/a	22.00	) 22.20	22.40
26	7.02	0.38	0.36	0.32	2 0.27	0.23
27	7.02	11.98	12.30	12.20	) 11.04	9.67
28	7.02	120531.50	125562.96	126219.06	6 117845.98	106119.77
_29	7.05	n/a	41.60	41.20	) 34.00	n/a
30	7.06	6.57	n/a	14.58	3 n/a	24.25
31	7.08	100.00	100.00	100.00	) 100.00	100.00
32	7.09	100.00	100.00	100.00	) 100.00	100.00
33	8.01	0.39	0.34	0.43	3 0.50	0.51
34	8.01	0.13	0.09	0.19	0.18	0.20
35	8.02	n/a	18.97	17.77	7 18.32	12.50
36	8.03	19.70	46.30	91.98	93.16	94.80
37	8.09	n/a	n/a	n/a	a 27.38	28.95
38	8.14	42.19	46.92	47.90	) 44.46	42.01
39	8.15	0.70	12.97	75.65	5 99.73	112.22
40	8.16	0.20	6.11	42.18	63.20	80.90

## <D03> Periodical achievement of Belgium (average calculated by the author)

	1	, , , , , , , , , , , , , , , , , , , ,	4005 4000	0000 000 (	0005 0000	0040 0045
No	Indicator	1990-1994	1995-1999	2000-2004	2005-2009	2010-2015
01	1.01	n/a	n/a	0.20	0.00	n/a
_02	1.02	n/a	n/a	0.05	0.00	n/a
03	1.03	n/a	n/a	8.10	7.50	n/a
04	1.04	n/a	n/a	n/a	1.07	1.98
05	1.05	n/a	n/a	n/a	31.90	32.03
06	1.06	n/a	n/a	0.10	0.00	n/a
07	1.07	n/a	n/a	n/a	27.20	26.13
08	1.08	n/a	n/a	4.20	1.60	1.50
09	1.09	5.00	5.00	5.00	5.00	5.00
10	2.02	n/a	n/a	n/a	98.70	82.23
11	2.03	n/a	n/a	99.80	n/a	99.70
12	3.02	n/a	n/a	n/a	35.35	36.93
13	3.03	n/a	n/a	17.28	14.30	20.22
14	4.01	16.10	11.60	8.50	8.10	7.05
15	4.02	14.20	10.20	7.46	7.10	6.13
16	4.03	52.33	75.20	86.60	89.60	92.00
17	5.01	27.00	20.20	15.60	13.80	12.00
18	5.02	97.40	n/a	99.78	99.60	99.90
19	5.03	n/a	n/a	47.50	35.70	45.80
20	5.04	41.30	27.45	16.10	15.02	12.30
21	5.05	n/a	n/a	n/a	n/a	84.20
22	5.05	n/a	n/a	99.20	98.90	87.00
23	5.06	n/a	n/a	n/a	n/a	9.00
24	6.02	n/a	n/a	n/a	n/a	71.00
25	6.02	n/a	n/a	n/a	71.00	71.40
26	6.03	n/a	n/a	n/a	n/a	47.40
27	6.03	n/a	n/a	n/a	43.50	47.60
28	6.09	6.76	6.30	5.80	5.36	4.98
29	6.09	83.60	92.60	84.60	67.80	52.00
30	6.09	127.00	140.60	128.60	102.20	78.75
31	6.10	57.60	77.20	65.60	74.40	67.50
32	6.10	95.00	84.40	95.80	95.80	84.67
33	7 01	43.20		42 70	42 70	42 70
34	7.03	44 74	62 70	221.64	29.62	4 03
35	7.05				0.90	0.90
36	7.06	0.03	n/a	0.04	0.00	1 28
37	7.08	97.00	97.00	98.00	98.80	99.67
38	7.00	95.00	95.00	95.00	95.00	95.00
39	8 12	00.00 n/a	8.00		3.28	<u>4 95</u>
40	8 14	12 25	<u> </u>	22.24	26.13	
<u></u>	8 15	0.00	0.72	10.22	£4.00	20.00 86.69
41	0.10 8.16	0.00	0.40	19.00	20.25	50.00
44	0.10	0.00	0.10	4.07	29.00	JZ.30

## <D04> Periodical achievement of Bosnia and Herzegovina (average calculated by the author)

$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	No	Indicator	1990-1994	1995-1999	2000-2004	2005-2009	2010-2015
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	01	1.01	16.27	10.30	9.20	5.70	4.15
03         1.03         2.50         2.38         2.60         3.04         3.35           04         1.04         2.82         0.90         -0.35         1.48         1.10           05         1.05         55.60         61.50         63.14         61.57           06         1.06         9.85         6.54         6.05         3.86         n/a           07         1.07         33.43         352.0         32.32         26.58         n/a           08         1.08         n/a         4.50         3.70         2.20         n/a           09         1.09         14.38         13.34         9.40         5.00         5.00           10         2.02         67.83         n/a         68.225         n/a         n/a           11         2.03         n/a         n/a         95.50         97.83         98.20           12         3.02         42.00         44.23         46.50         46.93         47.23           13         303         5.30         6.30         7.08         8.80         8.70           14         4.01         55.94         41.10         28.58         20.06         14.95 </td <td>02</td> <td>1.02</td> <td>6.70</td> <td>4.36</td> <td>4.03</td> <td>2.68</td> <td>2.30</td>	02	1.02	6.70	4.36	4.03	2.68	2.30
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	03	1.03	2.50	2.38	2.60	3.04	3.35
D5         1.05         56.50         55.60         61.50         63.14         61.57           06         1.06         9.85         6.54         6.05         3.86         n/a           07         1.07         33.43         35.20         32.32         26.58         n/a           09         1.09         14.38         13.34         9.40         5.00         5.00           10         2.02         67.83         n/a         82.25         n/a         n/a           11         2.03         n/a         n/a         95.50         97.83         98.20           12         3.02         42.00         44.23         46.50         46.93         47.23           13         3.03         5.30         6.30         7.08         8.80         8.70           14         4.01         55.94         41.10         28.58         20.06         14.95           15         4.02         47.18         35.58         25.26         17.90         13.38           16         4.03         83.20         92.00         98.40         99.00         99.10           19         5.03         n/a         76.0         n/a         80.30<	04	1.04	2.82	0.90	-0.35	1.48	1.10
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	05	1.05	56.50	55.60	61.50	63.14	61.57
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	06	1.06	9.85	6.54	6.05	3.86	n/a
08 $1.08$ $n/a$ $4.50$ $3.70$ $2.20$ $n/a$ $09$ $1.09$ $14.38$ $13.34$ $9.40$ $5.00$ $5.00$ $10$ $2.02$ $67.83$ $n/a$ $82.25$ $n/a$ $n/a$ $11$ $2.03$ $n/a$ $n/a$ $85.50$ $97.83$ $98.20$ $12$ $3.02$ $42.00$ $44.23$ $46.50$ $46.93$ $47.23$ $13$ $3.03$ $5.30$ $6.30$ $7.08$ $8.80$ $8.70$ $14$ $4.01$ $55.94$ $41.10$ $28.58$ $20.06$ $41.95$ $15$ $4.02$ $47.18$ $35.58$ $25.26$ $17.90$ $13.38$ $16$ $40.3$ $83.20$ $92.00$ $98.40$ $99.00$ $99.00$ $17$ $50.1$ $96.00$ $87.00$ $n/a$ $80.30$ $n/a$ $12$ $50.5$ $n/a$ $76.70$ $n/a$ $80.30$ $n/a$ <td>07</td> <td>1.07</td> <td>33.43</td> <td>35.20</td> <td>32.32</td> <td>26.58</td> <td>n/a</td>	07	1.07	33.43	35.20	32.32	26.58	n/a
09         1.09         14.38         13.34         9.40         5.00         5.00           10         2.02         67.83         n/a         82.25         n/a         n/a         n/a           11         2.03         n/a         n/a         95.50         97.83         98.20           12         3.02         42.00         44.23         46.50         46.93         47.23           13         3.03         5.30         6.30         7.08         8.80         8.70           14         4.01         55.94         41.10         28.58         20.06         14.95           15         4.02         47.18         35.58         25.26         17.90         13.38           16         4.03         83.20         92.00         98.40         99.00         99.00           17         5.01         96.00         87.00         63.60         66.60         53.67           18         5.02         n/a         87.60         n/a         80.30         n/a           20         5.04         n/a         86.80         82.22         72.22         66.10           21         5.05         n/a         85.70         97.00	08	1.08	n/a	4.50	3.70	2.20	n/a
10         2.02 $67.83$ n/a $82.25$ $n/a$ $n/a$ 11         2.03 $n'a$ $n/a$ $95.50$ $97.83$ $98.20$ 12         3.02 $42.00$ $44.23$ $46.50$ $46.93$ $47.23$ 13         3.03 $5.30$ $6.30$ $7.08$ $8.80$ $8.70$ 14 $4.01$ $55.94$ $41.10$ $28.58$ $20.06$ $14.95$ 15 $4.02$ $47.18$ $35.58$ $25.26$ $17.90$ $13.86$ 16 $4.03$ $83.20$ $92.00$ $98.40$ $99.00$ $99.00$ 17 $5.01$ $96.00$ $87.00$ $63.60$ $66.60$ $53.67$ 18 $5.02$ $n/a$ $87.60$ $n/a$ $80.30$ $n/a$ 20 $5.04$ $n/a$ $86.80$ $82.22$ $72.22$ $66.10$ 21 $5.05$ $n/a$ $85.70$ $97.00$ $97.53$ $n/a$	09	1.09	14.38	13.34	9.40	5.00	5.00
11         2.03         n/a         n/a         95.50         97.83         98.20           12         3.02         42.00         44.23         46.50         46.93         47.23           13         3.03         5.30         6.30         7.08         8.80         8.70           14         4.01         55.94         41.10         28.58         20.06         14.95           15         4.02         47.18         35.58         25.26         17.90         13.38           16         4.03         83.20         92.00         98.40         99.00         99.00           17         5.01         96.00         87.00         63.60         66.60         53.67           18         5.02         n/a         87.60         n/a         97.00         98.10           19         5.03         n/a         76.70         n/a         80.30         89.25           20         5.04         n/a         85.70         97.00         97.53         n/a           23         5.06         n/a         10.80         n/a         6.00         n/a           23         5.06         n/a         n/a         17.93         17.83 </td <td>10</td> <td>2.02</td> <td>67.83</td> <td>n/a</td> <td>82.25</td> <td>n/a</td> <td>n/a</td>	10	2.02	67.83	n/a	82.25	n/a	n/a
12         3.02         42.00         44.23         46.50         46.93         47.23           13         3.03         5.30         6.30         7.08         8.80         8.70           14         4.01         55.94         41.10         28.58         20.06         14.95           15         4.02         47.18         35.58         25.26         17.90         13.38           16         4.03         83.20         92.00         98.40         99.00         99.00           17         5.01         96.00         87.60         n/a         97.00         98.10           19         5.03         n/a         76.70         n/a         80.30         n/a           20         5.04         n/a         86.80         82.22         72.22         66.10           21         5.05         n/a         85.70         97.00         97.53         n/a           23         5.06         n/a         10.80         n/a         6.00         n/a           23         5.06         n/a         10.4         n/a         n/a         n/a           24         6.01         n/a         n/a         n/a         n/a	11	2.03	n/a	n/a	95.50	97.83	98.20
13         3.03         5.30         6.30         7.08         8.80         8.70           14         4.01         55.94         41.10         28.58         20.06         14.95           15         4.02         47.18         35.58         25.26         17.90         13.38           16         4.03         83.20         92.00         98.40         99.00         99.00           17         5.01         96.00         87.00         63.60         66.60         53.67           18         5.02         n/a         87.60         n/a         97.00         98.10           19         5.03         n/a         76.70         n/a         80.30         n/a           20         5.04         n/a         86.80         82.22         72.22         66.00         n/a           23         5.06         n/a         10.80         n/a         88.80         89.25           25         6.02         n/a         17.4         75.30         n/a           24         6.01         n/a         n/a         n/a         n/a           27         6.04         n/a         1.99         n/a         n/a <td< td=""><td>12</td><td>3.02</td><td>42.00</td><td>44.23</td><td>46.50</td><td>46.93</td><td>47.23</td></td<>	12	3.02	42.00	44.23	46.50	46.93	47.23
144.01 $55.94$ 41.10 $28.58$ $20.06$ $14.95$ 154.0247.18 $35.58$ $25.26$ $17.90$ $13.38$ 164.03 $83.20$ $92.00$ $98.40$ $99.00$ $99.00$ 175.01 $96.00$ $87.00$ $63.60$ $66.60$ $53.67$ 18 $5.02$ $n/a$ $87.60$ $n/a$ $97.00$ $98.10$ 19 $5.03$ $n/a$ $76.70$ $n/a$ $80.30$ $n/a$ 20 $5.04$ $n/a$ $86.80$ $82.22$ $72.22$ $66.10$ 21 $5.05$ $n/a$ $75.90$ $n/a$ $88.80$ $89.25$ 22 $5.05$ $n/a$ $85.70$ $97.00$ $97.53$ $n/a$ 23 $5.06$ $n/a$ $10.80$ $n/a$ $6.00$ $n/a$ 24 $6.01$ $n/a$ $n/a$ $n/a$ $n/a$ $0.55$ 25 $6.02$ $n/a$ $32.10$ $n/a$ $n/a$ $n/a$ 26 $6.02$ $n/a$ $32.10$ $n/a$ $n/a$ $n/a$ 27 $6.06$ $n/a$ $n/a$ $n/a$ $n/a$ $n/a$ 28 $6.05$ $n/a$ $n/a$ $n/a$ $n/a$ $1.00$ 30 $6.06$ $n/a$ $n/a$ $n/a$ $n/a$ $1.00$ 30 $6.06$ $n/a$ $n/a$ $n/a$ $1.00$ 30 $6.06$ $n/a$ $n/a$ $n/a$ $1.02$ 316 $6.09$ $78.40$ $67.00$ $56.40$ $49.20$ $46.75$	13	3.03	5.30	6.30	7.08	8.80	8.70
15 $4.02$ $47.18$ $35.58$ $25.26$ $17.90$ $13.38$ 16 $4.03$ $83.20$ $92.00$ $98.40$ $99.00$ $99.00$ 17 $5.01$ $96.00$ $87.00$ $63.60$ $66.60$ $53.67$ 18 $5.02$ $n/a$ $87.60$ $n/a$ $97.00$ $98.10$ 19 $5.03$ $n/a$ $76.70$ $n/a$ $80.30$ $n/a$ 20 $5.04$ $n/a$ $86.80$ $82.22$ $72.22$ $66.10$ 21 $5.05$ $n/a$ $75.90$ $n/a$ $88.80$ $89.25$ 22 $5.05$ $n/a$ $85.70$ $97.00$ $97.53$ $n/a$ 23 $5.06$ $n/a$ $10.80$ $n/a$ $6.00$ $n/a$ 24 $6.01$ $n/a$ $10.80$ $n/a$ $n/a$ $n/a$ 26 $6.02$ $n/a$ $59.30$ $n/a$ $n/a$ $n/a$ 26 $6.02$ $n/a$ $0.96$ $n/a$ $n/a$ $n/a$ 28 $6.05$ $n/a$ $n/a$ $n/a$ $n/a$ $1.00$ 30 $6.06$ $n/a$ $n/a$ $n/a$ $n/a$ $1.00$ 30 $6.06$ $n/a$ $n/a$ $n/a$ $1.28$ $2.45$ 32 $6.09$ $78.40$ $67.00$ $56.40$ $49.20$ $46.75$ 33 $6.09$ $115.60$ $89.40$ $69.60$ $57.40$ $56.75$ 34 $6.10$ $66.25$ $78.20$ $80.40$ $82.60$ $82.00$ 35 $6.10$ $70.00$ <td>14</td> <td>4.01</td> <td>55.94</td> <td>41.10</td> <td>28.58</td> <td>20.06</td> <td>14.95</td>	14	4.01	55.94	41.10	28.58	20.06	14.95
164.0383.2092.0098.4099.0099.00175.0196.0087.0063.6066.6053.67185.02n/a87.60n/a97.0098.10195.03n/a76.70n/a80.30n/a205.04n/a86.8082.2272.2266.10215.05n/a85.7097.0097.53n/a235.06n/a10.80n/a6.00n/a246.01n/a10.80n/a6.00n/a256.02n/a59.30n/an/an/a266.02n/a0.96n/an/an/a276.04n/a0.96n/an/an/a286.05n/an/an/an/a1.00306.06n/an/an/a1.002.85326.0978.4067.0056.4049.2046.75336.09115.6089.4069.6057.4056.75346.1066.2578.2080.4082.6082.00356.1070.0036.4071.0070.4072.33367.0169.00n/a10.22n/a20.37407.0889.8092.2094.4096.0079.70397.05n/a0.60n/a20.3740407.0323861.2410602.96 <td>15</td> <td>4.02</td> <td>47.18</td> <td>35.58</td> <td>25.26</td> <td>17.90</td> <td>13.38</td>	15	4.02	47.18	35.58	25.26	17.90	13.38
175.0196.00 $87.00$ $63.60$ $66.60$ $53.67$ 18 $5.02$ $n/a$ $87.60$ $n/a$ $97.00$ $98.10$ 19 $5.03$ $n/a$ $76.70$ $n/a$ $80.30$ $n/a$ 20 $5.04$ $n/a$ $86.80$ $82.22$ $72.22$ $66.10$ 21 $5.05$ $n/a$ $75.90$ $n/a$ $88.80$ $89.25$ 22 $5.05$ $n/a$ $85.70$ $97.00$ $97.53$ $n/a$ 23 $5.06$ $n/a$ $10.80$ $n/a$ $6.00$ $n/a$ 24 $6.01$ $n/a$ $n/a$ $n/a$ $n/a$ $0.55$ 25 $6.02$ $n/a$ $59.30$ $n/a$ $n/a$ $n/a$ 26 $6.02$ $n/a$ $32.10$ $n/a$ $n/a$ $n/a$ 27 $6.04$ $n/a$ $n/a$ $n/a$ $n/a$ $n/a$ 28 $6.05$ $n/a$ $n/a$ $n/a$ $n/a$ $n/a$ 29 $6.06$ $n/a$ $n/a$ $n/a$ $n/a$ $n/a$ 30 $6.06$ $n/a$ $n/a$ $n/a$ $n/a$ $1.00$ 30 $6.06$ $n/a$ $n/a$ $n/a$ $1.00$ 31 $6.09$ $5.38$ $5.04$ $3.94$ $2.98$ $2.45$ 32 $6.09$ $78.40$ $67.00$ $56.40$ $49.20$ $46.75$ 33 $6.09$ $115.60$ $89.40$ $69.60$ $57.40$ $56.75$ 34 $6.10$ $66.25$ $78.20$ $80.40$ $82.60$	16	4.03	83.20	92.00	98.40	99.00	99.00
185.02n/a87.60n/a97.0098.10195.03n/a76.70n/a80.30n/a205.04n/a86.8082.2272.2266.10215.05n/a75.90n/a88.8089.25225.05n/a85.7097.0097.53n/a235.06n/a10.80n/a6.00n/a246.01n/an/an/an/a0.55256.02n/a59.30n/an/an/a266.02n/a32.10n/an/an/a276.04n/an/an/an/an/a286.05n/an/an/an/an/a296.06n/an/an/an/a1.00306.095.385.043.942.982.45326.0978.4067.0056.4049.2046.75336.09115.6089.4069.6057.4056.75346.1066.2578.2080.4082.6082.00356.1070.0036.4071.0070.4072.33367.0169.00n/a10.22n/a20.37407.0889.8092.2094.4096.0097.67417.0968.4072.4076.0078.8082.00377.0323861.2410602.96	17	5.01	96.00	87.00	63.60	66.60	53.67
195.03n/a76.70n/a80.30n/a205.04n/a86.80 $82.22$ 72.2266.10215.05n/a75.90n/a88.8089.25225.05n/a85.7097.0097.53n/a235.06n/a10.80n/a6.00n/a246.01n/an/an/an/a0.55256.02n/a59.30n/an/an/a266.02n/a32.10n/an/an/a276.04n/an/an/an/an/a286.05n/an/an/an/a1.00306.06n/an/an/a1.00306.06n/an/an/a1.00316.095.385.043.942.982.45326.0978.4067.0056.4049.2046.75346.1066.2578.2080.4082.6082.00356.1070.0036.4071.0070.4072.33367.0169.00n/a10.22n/a20.37407.0889.8092.2094.4096.0097.67417.0968.4072.4076.0078.8082.00377.0323861.2410602.966003.221537.561207.70387.05n/a0.60n/a27.97 <t< td=""><td>18</td><td>5.02</td><td>n/a</td><td>87.60</td><td>n/a</td><td>97.00</td><td>98.10</td></t<>	18	5.02	n/a	87.60	n/a	97.00	98.10
20 $5.04$ $n/a$ $86.80$ $82.22$ $72.22$ $66.10$ $21$ $5.05$ $n/a$ $75.90$ $n/a$ $88.80$ $89.25$ $22$ $5.05$ $n/a$ $85.70$ $97.00$ $97.53$ $n/a$ $23$ $5.06$ $n/a$ $10.80$ $n/a$ $6.00$ $n/a$ $24$ $6.01$ $n/a$ $n/a$ $n/a$ $n/a$ $0.55$ $55$ $6.02$ $n/a$ $59.30$ $n/a$ $n/a$ $n/a$ $26$ $6.02$ $n/a$ $32.10$ $n/a$ $n/a$ $n/a$ $27$ $6.04$ $n/a$ $0.96$ $n/a$ $n/a$ $n/a$ $28$ $6.05$ $n/a$ $n/a$ $n/a$ $n/a$ $n/a$ $28$ $6.06$ $n/a$ $n/a$ $n/a$ $n/a$ $1.00$ $30$ $6.06$ $n/a$ $n/a$ $n/a$ $n/a$ $1.00$ $30$ $6.06$ $n/a$ $n/a$ $n/a$ $n/a$ $1.81.00$ $31$ $6.09$ $78.40$ $67.00$ $56.40$ $49.20$ $46.75$ $33$ $6.09$ $115.60$ $89.40$ $69.60$ $57.40$ $56.75$ $34$ $6.10$ $66.25$ $78.20$ $80.40$ $82.60$ $82.00$ $35$ $6.10$ $70.00$ $n/a$ $0.70$ $0.90$ $36$ $7.01$ $69.00$ $n/a$ $0.70$ $0.90$ $37$ $7.03$ $23861.24$ $10602.96$ $6003.22$ $1537.56$ $1207.70$ $38$ $7.05$ $n/a$ </td <td>19</td> <td>5.03</td> <td>n/a</td> <td>76.70</td> <td>n/a</td> <td>80.30</td> <td>n/a</td>	19	5.03	n/a	76.70	n/a	80.30	n/a
21 $5.05$ $n'a$ $75.90$ $n/a$ $88.80$ $89.25$ $22$ $5.05$ $n/a$ $85.70$ $97.00$ $97.53$ $n/a$ $23$ $5.06$ $n/a$ $10.80$ $n/a$ $6.00$ $n/a$ $24$ $6.01$ $n'a$ $n/a$ $n/a$ $n/a$ $0.55$ $25$ $6.02$ $n/a$ $59.30$ $n/a$ $n/a$ $n/a$ $26$ $6.02$ $n/a$ $32.10$ $n/a$ $n/a$ $n/a$ $26$ $6.02$ $n/a$ $n/a$ $n/a$ $n/a$ $27$ $6.04$ $n/a$ $n/a$ $n/a$ $n/a$ $27$ $6.04$ $n/a$ $n/a$ $n/a$ $n/a$ $28$ $6.05$ $n/a$ $n/a$ $n/a$ $n/a$ $29$ $6.06$ $n/a$ $n/a$ $n/a$ $n/a$ $29$ $6.06$ $n/a$ $n/a$ $n/a$ $n/a$ $29$ $6.06$ $n/a$ $n/a$ $n/a$ $1.00$ $30$ $6.06$ $n/a$ $n/a$ $n/a$ $1.00$ $31$ $6.09$ $78.40$ $67.00$ $56.40$ $49.20$ $46.75$ $33$ $6.09$ $115.60$ $89.40$ $69.60$ $57.40$ $34$ $6.10$ $66.25$ $78.20$ $80.40$ $82.60$ $82.00$ $35$ $6.10$ $70.00$ $36.40$ $71.00$ $70.40$ $72.33$ $36$ $7.01$ $69.00$ $n/a$ $0.70$ $0.90$ $37$ $7.03$ $23861.24$ $10602.96$ $6003$	20	5.04	n/a	86.80	82.22	72.22	66.10
22 $5.05$ $n'a$ $85.70$ $97.00$ $97.53$ $n/a$ $23$ $5.06$ $n/a$ $10.80$ $n/a$ $6.00$ $n/a$ $24$ $6.01$ $n/a$ $n/a$ $n/a$ $n/a$ $n/a$ $24$ $6.01$ $n/a$ $n/a$ $n/a$ $n/a$ $n/a$ $24$ $6.01$ $n/a$ $n/a$ $n/a$ $n/a$ $n/a$ $25$ $6.02$ $n/a$ $59.30$ $n/a$ $n/a$ $n/a$ $26$ $6.02$ $n/a$ $32.10$ $n/a$ $n/a$ $n/a$ $27$ $6.04$ $n/a$ $0.96$ $n/a$ $n/a$ $n/a$ $27$ $6.04$ $n/a$ $n/a$ $n/a$ $n/a$ $n/a$ $27$ $6.06$ $n/a$ $n/a$ $n/a$ $n/a$ $28$ $6.05$ $n/a$ $n/a$ $n/a$ $n/a$ $29$ $6.06$ $n/a$ $n/a$ $n/a$ $n/a$ $29$ $6.06$ $n/a$ $n/a$ $n/a$ $1.00$ $30$ $6.06$ $n/a$ $n/a$ $n/a$ $1.00$ $30$ $6.06$ $n/a$ $n/a$ $n/a$ $1.00$ $31$ $6.09$ $78.40$ $67.00$ $56.40$ $49.20$ $46.75$ $33$ $6.10$ $66.25$ $78.20$ $80.40$ $82.60$ $32$ $6.10$ $70.00$ $36.40$ $71.00$ $70.40$ $72.33$ $36$ $7.01$ $69.00$ $n/a$ $0.70$ $0.90$ $39$ $7.06$ $4.73$ $n/a$ $1$	21	5.05	n/a	75.90	n/a	88.80	89.25
23 $5.06$ $n/a$ $10.80$ $n/a$ $6.00$ $n/a$ $24$ $6.01$ $n/a$ $n/a$ $n/a$ $n/a$ $n/a$ $0.55$ $25$ $6.02$ $n/a$ $59.30$ $n/a$ $n/a$ $n/a$ $26$ $6.02$ $n/a$ $32.10$ $n/a$ $n/a$ $n/a$ $27$ $6.04$ $n/a$ $0.96$ $n/a$ $n/a$ $n/a$ $27$ $6.04$ $n/a$ $0.96$ $n/a$ $n/a$ $n/a$ $28$ $6.05$ $n/a$ $n/a$ $n/a$ $n/a$ $n/a$ $29$ $6.06$ $n/a$ $n/a$ $n/a$ $n/a$ $1.00$ $30$ $6.06$ $n/a$ $n/a$ $n/a$ $n/a$ $1.00$ $30$ $6.06$ $n/a$ $n/a$ $n/a$ $1.4$ $32$ $6.09$ $78.40$ $67.00$ $56.40$ $49.20$ $46.75$ $33$ $6.09$ $115.60$ $89.40$ $69.60$ $57.40$ $32$ $6.10$ $70.00$ $36.40$ $71.00$ $70.40$ $72.33$ $36$ $7.01$ $69.00$ $n/a$ $65.60$ $63.70$ $62.40$ $37$ $7.03$ $23861.24$ $10602.96$ $6003.22$ $1537.56$ $1207.70$ $38$ $7.05$ $n/a$ $0.60$ $n/a$ $27.97$ $22.30$ $41$ $7.09$ $68.40$ $72.40$ $76.00$ $78.80$ $82.00$ $42$ $7.10$ $36.70$ $34.10$ $31.50$ $27.97$ $22.30$ $43$ $8.06$ </td <td>22</td> <td>5.05</td> <td>n/a</td> <td>85.70</td> <td>97.00</td> <td>97.53</td> <td>n/a</td>	22	5.05	n/a	85.70	97.00	97.53	n/a
24 $6.01$ $n/a$ $n/a$ $n/a$ $n/a$ $n/a$ $0.55$ $25$ $6.02$ $n/a$ $59.30$ $n/a$ $n/a$ $n/a$ $n/a$ $26$ $6.02$ $n/a$ $32.10$ $n/a$ $n/a$ $n/a$ $n/a$ $27$ $6.04$ $n/a$ $0.96$ $n/a$ $n/a$ $n/a$ $n/a$ $27$ $6.04$ $n/a$ $0.96$ $n/a$ $n/a$ $n/a$ $n/a$ $28$ $6.05$ $n/a$ $n/a$ $n/a$ $n/a$ $n/a$ $n/a$ $28$ $6.06$ $n/a$ $n/a$ $n/a$ $n/a$ $n/a$ $1.6$ $30$ $6.06$ $n/a$ $n/a$ $n/a$ $n/a$ $1.6$ $2.85$ $29$ $6.06$ $n/a$ $n/a$ $n/a$ $n/a$ $1.6$ $2.85$ $30$ $6.06$ $n/a$ $n/a$ $n/a$ $n/a$ $1.6$ $2.85$ $31$ $6.09$ $5.38$ $5.04$ $3.94$ $2.98$ $2.45$ $32$ $6.09$ $7.8.40$ $67.00$ $56.40$ $49.20$ $46.75$ $33$ $6.09$ $115.60$ $89.40$ $69.60$ $57.40$ $56.75$ $34$ $6.10$ $66.25$ $78.20$ $80.40$ $82.60$ $82.00$ $35$ $6.10$ $70.00$ $36.40$ $71.00$ $70.40$ $72.33$ $36$ $7.01$ $69.00$ $n/a$ $0.70$ $0.90$ $37$ $7.03$ $23861.24$ $10602.96$ $6003.22$ $1537.56$ $1207.70$	23	5.06	n/a	10.80	n/a	6.00	n/a
25 $6.02$ $n/a$ $59.30$ $n/a$ $n/a$ $n/a$ $26$ $6.02$ $n/a$ $32.10$ $n/a$ $n/a$ $n/a$ $n/a$ $27$ $6.04$ $n/a$ $0.96$ $n/a$ $n/a$ $n/a$ $n/a$ $27$ $6.04$ $n/a$ $0.96$ $n/a$ $n/a$ $n/a$ $n/a$ $28$ $6.05$ $n/a$ $n/a$ $n/a$ $n/a$ $n/a$ $n/a$ $28$ $6.05$ $n/a$ $n/a$ $n/a$ $n/a$ $n/a$ $1.00$ $30$ $6.06$ $n/a$ $n/a$ $n/a$ $n/a$ $1.00$ $31$ $6.09$ $5.38$ $5.04$ $3.94$ $2.98$ $2.45$ $32$ $6.09$ $78.40$ $67.00$ $56.40$ $49.20$ $46.75$ $34$ $6.10$ $66.25$ $78.20$ $80.40$ $82.60$ $82.00$ $35$ $6.10$ $70.00$ $36.40$ $71.00$ $70.40$ $72.33$ $36$ $7.01$ $69.00$ $n/a$ $65.60$ $63.70$ $62.40$ $37$ $7.03$ $23861.24$ $10602.96$ $6003.22$ $1537.56$ $1207.70$ $38$ $7.05$ $n/a$ $0.60$ $n/a$ $0.70$ $0.90$ $39$ $7.06$ $4.73$ $n/a$ $10.22$ $n/a$ $20.37$ $40$ $7.08$ $89.80$ $92.20$ $94.40$ $96.00$ $97.67$ $41$ $7.09$ $68.40$ $72.40$ $76.00$ $78.80$ $82.00$ $42$ $7.10$ $36.70$ <td>24</td> <td>6.01</td> <td>n/a</td> <td>n/a</td> <td>n/a</td> <td>n/a</td> <td>0.55</td>	24	6.01	n/a	n/a	n/a	n/a	0.55
26 $6.02$ $n/a$ $32.10$ $n/a$ $n/a$ $n/a$ $27$ $6.04$ $n/a$ $0.96$ $n/a$ $n/a$ $n/a$ $28$ $6.05$ $n/a$ $n/a$ $n/a$ $n/a$ $n/a$ $28$ $6.05$ $n/a$ $n/a$ $n/a$ $n/a$ $n/a$ $28$ $6.06$ $n/a$ $n/a$ $n/a$ $n/a$ $1/a$ $30$ $6.06$ $n/a$ $n/a$ $n/a$ $n/a$ $1/a$ $31$ $6.09$ $5.38$ $5.04$ $3.94$ $2.98$ $2.45$ $32$ $6.09$ $78.40$ $67.00$ $56.40$ $49.20$ $46.75$ $33$ $6.09$ $115.60$ $89.40$ $69.60$ $57.40$ $56.75$ $34$ $6.10$ $66.25$ $78.20$ $80.40$ $82.60$ $82.00$ $35$ $6.10$ $70.00$ $36.40$ $71.00$ $70.40$ $72.33$ $36$ $7.01$ $69.00$ $n/a$ $0.70$ $0.90$ $37$ $7.03$ $23861.24$ $10602.96$ $6003.22$ $1537.56$ $1207.70$ $38$ $7.05$ $n/a$ $0.60$ $n/a$ $0.70$ $0.90$ $39$ $7.06$ $4.73$ $n/a$ $10.22$ $n/a$ $20.37$ $40$ $7.08$ $89.80$ $92.20$ $94.40$ $96.00$ $97.67$ $41$ $7.09$ $68.40$ $72.40$ $76.00$ $78.80$ $82.00$ $42$ $7.10$ $36.70$ $34.10$ $31.50$ $27.97$ $22.30$ $43$	25	6.02	n/a	59.30	n/a	n/a	n/a
27 $6.04$ $n/a$ $n/a$ $0.96$ $n/a$ $n/a$ $n/a$ $n/a$ $28$ $6.05$ $n/a$ $n/a$ $n/a$ $n/a$ $n/a$ $n/a$ $n/a$ $28$ $6.06$ $n/a$ $n/a$ $n/a$ $n/a$ $n/a$ $1.00$ $30$ $6.06$ $n/a$ $n/a$ $n/a$ $n/a$ $1.00$ $30$ $6.06$ $n/a$ $n/a$ $n/a$ $n/a$ $1.00$ $31$ $6.09$ $5.38$ $5.04$ $3.94$ $2.98$ $2.45$ $32$ $6.09$ $78.40$ $67.00$ $56.40$ $49.20$ $46.75$ $33$ $6.09$ $115.60$ $89.40$ $69.60$ $57.40$ $56.75$ $34$ $6.10$ $66.25$ $78.20$ $80.40$ $82.60$ $82.00$ $35$ $6.10$ $70.00$ $36.40$ $71.00$ $70.40$ $72.33$ $36$ $7.01$ $69.00$ $n/a$ $65.60$ $63.70$ $62.40$ $37$ $7.03$ $23861.24$ $10602.96$ $6003.22$ $1537.56$ $1207.70$ $38$ $7.05$ $n/a$ $0.60$ $n/a$ $0.70$ $0.90$ $39$ $7.06$ $4.73$ $n/a$ $10.22$ $n/a$ $20.37$ $40$ $7.08$ $89.80$ $92.20$ $94.40$ $96.00$ $97.67$ $41$ $7.09$ $68.40$ $72.40$ $76.00$ $78.80$ $82.00$ $42$ $7.10$ $36.70$ $34.10$ $31.50$ $27.97$ $22.30$ $43$ $8.06$ <td>26</td> <td>6.02</td> <td>n/a</td> <td>32.10</td> <td>n/a</td> <td>n/a</td> <td>n/a</td>	26	6.02	n/a	32.10	n/a	n/a	n/a
28 $6.05$ $n/a$ $n/a$ $n/a$ $n/a$ $n/a$ $n/a$ $28$ $6.05$ $n/a$ $n/a$ $n/a$ $n/a$ $n/a$ $1.00$ $30$ $6.06$ $n/a$ $n/a$ $n/a$ $n/a$ $n/a$ $1.00$ $31$ $6.09$ $5.38$ $5.04$ $3.94$ $2.98$ $2.45$ $32$ $6.09$ $78.40$ $67.00$ $56.40$ $49.20$ $46.75$ $33$ $6.09$ $115.60$ $89.40$ $69.60$ $57.40$ $56.75$ $34$ $6.10$ $66.25$ $78.20$ $80.40$ $82.60$ $82.00$ $35$ $6.10$ $70.00$ $36.40$ $71.00$ $70.40$ $72.33$ $36$ $7.01$ $69.00$ $n/a$ $65.60$ $63.70$ $62.40$ $37$ $7.03$ $23861.24$ $10602.96$ $6003.22$ $1537.56$ $1207.70$ $38$ $7.05$ $n/a$ $0.60$ $n/a$ $0.70$ $0.90$ $39$ $7.06$ $4.73$ $n/a$ $10.22$ $n/a$ $20.37$ $40$ $7.08$ $89.80$ $92.20$ $94.40$ $96.00$ $97.67$ $41$ $7.09$ $68.40$ $72.40$ $76.00$ $78.80$ $82.00$ $42$ $7.10$ $36.70$ $34.10$ $31.50$ $27.97$ $22.30$ $43$ $8.06$ $n/a$ $71.55$ $75.86$ $80.28$ $84.67$ $44$ $8.12$ $16.04$ $27.12$ $31.68$ $15.38$ $6.18$ $45$ $8.14$ $6.96$ <	27	6.04	n/a	0.96	n/a	n/a	n/a
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	28	6.05	n/a		n/a	84 10	92 85
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	29	6.06		n/a n/a			1 00
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	30	6.06		n/a			1381.00
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	31	6.09	5.38	5.04	3.94	2.98	2.45
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	32	6.09	78 40	67.00	56 40	49.20	46 75
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	33	6.09	115.60	89.40	69.60	57.40	56 75
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	34	6 10	66 25	78.20	80.40	82.60	82.00
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	35	6.10	70.00	36.40	71.00	70.40	72.33
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	36	7 01	69.00		65.60	63 70	62 40
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	37	7.03	23861 24	10602.96	6003 22	1537.56	1207 70
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	38	7.05		0.60		0.70	0.90
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	39	7.06	4 73		10.22		20.37
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	40	7.08	89.80	92.20	94.40	96.00	97.67
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	41	7.09	68.40	72 40	76.00	78.80	82.00
12       110       00.10       01.10       01.00       21.01       121.00         43       8.06       n/a       71.55       75.86       80.28       84.67         44       8.12       16.04       27.12       31.68       15.38       6.18         45       8.14       6.96       10.78       20.72       21.14       22.01         46       8.15       0.10       3.63       22.03       65.84       123.83         47       8.16       0.02       0.97       9.77       30.63       48.71	42	7 10	36.70	34 10	31.50	27.97	22.30
44       8.12       16.04       27.12       31.68       15.38       6.18         45       8.14       6.96       10.78       20.72       21.14       22.01         46       8.15       0.10       3.63       22.03       65.84       123.83         47       8.16       0.02       0.97       9.77       30.63       48.71	43	8.06		71 55	75.86	80.28	84.67
45         8.14         6.96         10.78         20.72         21.14         22.01           46         8.15         0.10         3.63         22.03         65.84         123.83           47         8.16         0.02         0.97         9.77         30.63         48.71	44	8 12	16.04	27 12	31.68	15.38	6 18
46         8.15         0.10         3.63         22.03         65.84         123.83           47         8.16         0.02         0.97         9.77         30.63         48.71	45	8 14	6 QA	10.78	20.72	21 14	22.01
47         8.16         0.02         0.97         9.77         30.63         48.71	46	8 15	0.00	3.63	20.72	65.84	122.01
	47	8.16	0.02	0.97	9.77	30.63	48.71

## <D05> Periodical achievement of Brazil (average calculated by the author)

	o> Period	lical achieveme	ent of Canada	(average c	alculated by t	ne aumor)
No	Indicator	1990-1994	1995-1999	2000-2004	2005-2009	2010-2015
01	1.03	7.55	7.10	6.90	7.20	7.10
02	1.04	1.50	1.55	0.89	0.14	1.21
03	1.05	59.20	59.30	61.82	62.76	61.75
04	1.09	5.00	5.00	5.00	5.00	5.00
05	2.01	96.40	96.95	99.90	n/a	99.10
06	2.02	n/a	98.00	n/a	n/a	n/a
07	3.01	0.99	1.00	1.00	1.00	1.01
08	3.01	1.00	1.00	1.02	0.98	0.98
09	3.01	1.21	1.26	1.34	n/a	n/a
10	3.02	47.72	48.08	48.94	49.60	49.88
11	3.03	13.30	19.73	20.60	21.22	24.00
12	4.01	7.72	6.56	6.16	5.90	5.38
13	4.02	6.38	5.48	5.24	5.12	4.73
14	4.03	93.60	96.20	95.00	94.60	97.00
15	5.01	7.80	9.00	9.00	8.80	7.50
16	5.02	n/a	98.00	98.30	100.00	99.90
17	5.03	n/a	77.35	74.00	n/a	n/a
18	5.04	25.14	20.98	15.20	13.80	13.05
19	5.05	n/a	n/a	n/a	99.00	n/a
20	5.05	n/a	n/a	n/a	100.00	n/a
21	6.09	0.42	0.38	0.30	0.28	0.20
22	6.09	8.26	7.32	6.12	5.32	5.00
23	6.09	9.98	9.06	7.56	6.52	6.15
24	6.10	87.40	86.80	86.60	88.40	87.25
25	6.10	n/a	38.33	43.80	70.60	55.75
26	7.01	34.10	n/a	34.10	34.10	34.10
27	7.02	0.53	0.52	0.48	0.43	0.39
28	7.02	16.36	17.38	18.30	17.36	16.07
29	7.02	463135.12	519086.44	572638.90	572449.46	554081.50
30	7.03	7287.02	1716.54	847.28	502.84	62.70
31	7.06	3.77	n/a	4.63	n/a	6.24
32	7.08	100.00	100.00	100.00	100.00	100.00
33	7.09	100.00	100.00	100.00	100.00	100.00
34	8.01	0.45	0.32	0.25	0.31	0.30
35	8.01	0.12	0.07	0.06	0.11	0.12
36	8.02	n/a	8.81	24.67	28.93	28.32
37	8.03	53.54	33.96	45.46	78.64	99.58
38	8.08	1.20	0.76	0.77	0.65	0.56
39	8.09	n/a	n/a	n/a	18.16	26.30
40	8.14	57.37	62.84	66.33	55.55	50.50
41	8.15	3.92	15.03	37.98	61.69	79.33
42	8.16	1.08	17.42	60.65	74.85	83.84

## <D06> Periodical achievement of Canada (average calculated by the author)

No	Indicator	1990-1994	1995-1999	2000-2004	2005-2009	2010-2015
01	1.01	57.80	36.70	28.10	14.05	7.75
02	1.02	19.55	11.15	8.60	3.50	1.65
03	1.03	7.70	6.80	5.50	4.90	4.70
04	1.04	11.49	7.89	8.33	10.95	8.48
05	1.05	78.30	76.34	73.38	70.66	68.33
06	1.06	55.20	41.80	28.00	13.45	n/a
07	1.08	13.40	8.80	7.10	3.90	3.40
08	1.09	23.45	17.92	15.96	14.62	10.78
09	2.01	93.12	87.17	n/a	n/a	n/a
10	2.02	86.90	78.03	n/a	n/a	n/a
11	2.03	94.30	n/a	98.90	n/a	99.60
12	3.01	0.92	0.98	1.01	1.00	1.00
13	3.01	0.77	0.87	0.96	1.03	1.02
14	3.01	0.53	n/a	0.86	0.99	1.12
15	3.02	37.38	38.64	n/a	n/a	n/a
16	3.03	21.30	21.40	21.48	20.54	22.03
17	4.01	52.04	43.50	31.60	20.24	14.20
18	4.02	40.90	34.90	26.18	17.30	12.20
19	4.03	86.60	82.80	85.00	93.80	99.00
20	5.01	87.00	65.20	54.00	42.80	30.50
21	5.02	89.16	93.25	96.76	98.42	99.75
22	5.03	84.60	83.80	86.90	84.60	n/a
23	5.04	14.70	9.54	4.46	5.24	n/a
24	5.05	72.73	84.94	89.68	90.72	94.60
25	5.06	3.30	2.70	2.30	n/a	n/a
26	6.06	n/a	n/a	n/a	n/a	0.00
27	6.06	n/a	n/a	n/a	n/a	2.00
28	6.09	16.60	11.52	7.34	4.86	3.38
29	6.09	142.80	120.40	101.80	86.00	74.00
30	6.09	207.80	185.80	158.60	126.00	101.25
31	6.10	20.60	31.20	43.00	83.00	87.50
32	6.10	45.50	94.40	93.00	92.80	95.00
33	7.01	16.70	n/a	18.80	20.50	21.90
34	7.03	88025.86	110154.42	59590.68	24827.02	19974.95
35	7.05	17.60	18.50	n/a	19.50	n/a
36	7.06	12.38	n/a	14.18	n/a	15.61
37	7.08	69.80	76.60	82.80	88.60	93.50
38	7.09	50.00	55.40	61.20	67.20	73.67
39	7.10	43.60	40.50	37.30	31.00	25.20
40	8.06	n/a	38.43	57.68	66.80	68.97
41	8.12	9.82	7.50	3.34	0.76	0.50
42	8.14	1.18	5.75	17.16	26.06	19.97
43	8.15	0.04	1.44	16.01	41.74	79.40
44	8.16	0.00	0.18	4.50	17.31	42.00

## <D07> Periodical achievement of China (average calculated by the author)

-00				(average ou	ioulated by the	
No	Indicator	1990-1994	1995-1999	2000-2004	2005-2009	2010-2015
01	1.03	10.70	10.80	9.45	9.20	9.20
02	1.04	3.35	2.56	2.55	0.22	0.71
03	1.05	60.00	57.12	60.80	62.30	61.00
04	1.07	n/a	11.22	8.82	8.94	9.38
05	1.09	5.00	5.00	5.00	5.00	5.00
06	2.01	98.85	99.04	99.14	97.40	98.55
07	2.02	94.17	99.45	99.54	99.54	99.53
08	3.01	1.00	1.00	0.99	0.99	0.99
09	3.01	1.19	1.13	1.09	1.05	1.06
10	3.01	1.15	1.18	1.21	1.23	1.22
11	3.02	51.64	50.98	50.60	51.10	51.38
12	3.03	31.50	33.50	36.80	39.20	41.67
13	4.01	6.10	4.76	4.10	3.48	2.80
14	4.02	5.02	3.92	3.36	2.84	2.30
15	4.03	98.20	96.80	96.40	97.40	97.25
16	5.01	5.60	5.00	4.20	3.60	3.00
17	5.02	100.00	n/a	n/a	n/a	n/a
18	5.03	77.40	n/a	n/a	n/a	n/a
19	5.04	11.50	9.35	10.68	9.22	7.65
20	5.05	100.00	n/a	99.80	n/a	n/a
21	6.09	1.80	1.56	1.04	0.52	0.35
22	6.09	16.00	13.20	9.80	6.84	6.50
23	6.09	19.80	16.80	12.68	8.66	8.65
24	6.10	84.20	91.00	84.40	91.80	82.00
25	6.10	n/a	n/a	n/a	40.67	43.67
26	7.01	72.00	n/a	73.90	72.90	72.90
27	7.02	0.43	0.39	0.35	0.29	0.27
28	7.02	11.28	11.74	12.48	11.48	10.57
29	7.02	56693.72	60336.74	64864.76	60755.74	56874.97
30	7.03	1399.64	n/a	n/a	n/a	n/a
31	7.05	2.10	2.40	2.10	1.50	n/a
32	7.06	3.96	n/a	13.54	n/a	14.07
33	7.08	100.00	100.00	100.00	100.00	100.00
34	7.09	97.00	97.00	97.60	98.00	98.00
35	8.01	0.57	0.32	0.34	0.45	0.55
36	8.01	0.20	0.09	0.11	0.15	0.19
37	8.02	n/a	8.79	14.07	10.24	9.29
38	8.03	48.32	75.22	86.33	90.98	87.63
39	8.09	n/a	n/a	n/a	28.74	32.03
40	8.14	54.38	55.29	51.21	33.47	17.08
41	8.15	8.43	42.06	85.17	119.09	154.15
42	8.16	2.24	21.58	56.88	80.22	89.87

#### <D08> Periodical achievement of Finland (average calculated by the author)

	• • • • • • •			(		
No	Indicator	1990-1994	1995-1999	2000-2004	2005-2009	2010-2015
01	1.03	7.90	n/a	8.10	7.80	n/a
02	1.04	1.44	1.70	0.37	-0.17	1.11
03	1.05	49.74	48.84	50.90	51.70	51.18
04	1.07	10.04	8.26	6.86	6.50	7.08
05	1.09	5.00	5.00	5.00	5.00	5.00
06	2.01	96.88	98.63	98.80	99.26	99.05
07	2.02	n/a	98.00	n/a	n/a	n/a
08	3.01	0.98	0.99	0.99	0.99	1.00
09	3.01	1.04	0.99	1.00	1.00	1.01
10	3.01	1.20	1.25	1.24	1.26	1.25
11	3.02	45.32	46.56	47.40	49.10	49.35
12	3.03	6.90	9.40	11.42	14.60	22.67
13	4.01	8.06	5.90	5.08	4.42	4.20
14	4.02	6.64	4.84	4.18	3.62	3.50
15	4.03	75.80	83.00	86.00	88.80	89.00
16	5.01	14.80	13.40	11.20	10.00	8.83
17	5.02	99.00	n/a	n/a	n/a	n/a
18	5.03	74.50	n/a	79.20	75.60	n/a
19	5.04	8.36	7.46	8.40	9.38	9.35
20	5.05	99.00	n/a	99.80	n/a	n/a
21	5.06	7.40	n/a	n/a	1.70	n/a
22	6.09	1.64	1.34	0.96	0.64	0.58
23	6.09	19.60	15.60	11.40	10.32	8.95
24	6.09	24.80	20.60	14.80	13.20	11.00
25	6.10	80.80	77.20	82.60	80.40	82.75
26	7.01	26.40	n/a	27.90	28.60	29.00
27	7.02	0.23	0.22	0.19	0.17	0.15
28	7.02	6.82	6.78	6.68	6.28	5.63
29	7.02	403615.70	411885.20	417212.14	406424.44	374913.43
30	7.05	17.90	14.40	15.30	14.80	n/a
31	7.06	6.83	n/a	13.69	n/a	25.73
32	7.08	100.00	100.00	100.00	100.00	100.00
33	7.09	99.00	99.00	99.00	99.00	99.00
34	8.01	0.62	0.45	0.36	0.44	0.44
35	8.01	0.17	0.10	0.13	0.11	0.12
36	8.02	n/a	1.04	4.25	6.71	7.76
37	8.03	57.70	59.92	82.68	90.86	94.78
38	8.09	n/a	n/a	n/a	28.36	31.65
39	8.14	52.28	57.15	56.54	57.44	62.13
40	8.15	0.89	14.39	63.46	87.11	96.34
41	8.16	0.39	4.79	29.22	59.62	80.44

## <D09> Periodical achievement of France (average calculated by the author)

וטר		lical achieveni	ent of Germa	ny (average	calculated by	ule aution)
No	Indicator	1990-1994	1995-1999	2000-2004	2005-2009	2010-2015
01	1.03	8.30	n/a	8.50	8.30	8.30
02	1.04	2.25	1.59	1.27	-0.87	0.85
03	1.05	54.20	52.48	52.26	53.74	56.45
04	1.07	5.48	5.72	6.26	7.14	6.73
05	1.08	n/a	n/a	n/a	1.10	n/a
06	1.09	5.00	5.00	5.00	5.00	5.00
07	2.01	n/a	100.00	98.32	99.48	99.55
08	2.02	95.05	95.15	98.80	96.80	96.43
09	3.01	1.00	0.99	0.99	1.00	1.00
10	3.01	0.97	0.98	0.98	0.97	0.95
_11	3.01	0.77	0.85	n/a	n/a	0.93
12	3.02	42.85	44.32	46.14	47.08	47.90
_13	3.03	n/a	27.77	31.58	32.00	34.07
14	4.01	7.62	5.96	5.12	4.50	4.05
_15	4.02	6.22	4.88	4.20	3.72	3.35
_16	4.03	80.80	91.60	94.20	96.60	97.00
_17	5.01	10.20	8.60	7.80	7.00	6.50
18	5.03	70.10	n/a	n/a	66.20	n/a
19	5.04	11.45	9.50	11.33	9.84	8.10
20	5.05	n/a	n/a	100.00	n/a	n/a
21	6.01	0.09	0.09	0.10	0.12	0.43
_22	6.09	1.08	0.76	0.50	0.40	0.40
_23	6.09	19.60	15.00	10.08	6.56	5.63
24	6.09	25.00	19.80	13.00	8.38	7.18
25	6.10	87.40	87.20	86.20	86.40	87.25
26	6.10	n/a	55.33	71.00	69.60	74.33
_27	7.01	30.80	n/a	31.80	31.80	31.80
_28	7.02	0.37	0.32	0.29	0.26	0.24
_29	7.02	11.96	11.06	10.68	10.10	9.90
30	7.02	977106.40	921773.58	893055.34	844048.60	820520.10
31	7.05	n/a	29.40	25.40	20.90	n/a
32	7.06	19.21	n/a	27.66	n/a	38.46
33	7.08	100.00	100.00	100.00	100.00	100.00
34	7.09	99.00	99.00	99.00	99.00	99.00
35	8.01	0.37	0.29	0.27	0.36	0.39
36	8.01	0.09	0.07	0.08	0.09	0.10
37	8.02	n/a	10.58	11.37	9.41	7.62
38	8.03	62.62	73.02	90.24	95.00	96.13
39	8.09	n/a	n/a	n/a	31.72	37.68
40	8.14	43.26	54.20	63.33	63.75	60.40
41	8.15	1.47	13.15	71.59	112.95	113.81
42	8.16	0.44	8.47	46.26	74.61	83.20

## <D10> Periodical achievement of Germany (average calculated by the author)
					· · · · · · · · · · · · · · · · · · ·	/
No	Indicator	1990-1994	1995-1999	2000-2004	2005-2009	2010-2015
01	1.03	n/a	5.80	6.85	6.70	6.50
02	1.04	0.59	2.52	2.65	0.16	-0.86
03	1.05	45.00	44.82	45.98	48.74	42.38
04	1.07	40.42	37.50	31.30	27.42	29.05
05	1.09	5.00	5.00	5.00	5.00	5.00
06	2.01	92.78	92.20	98.50	99.77	99.63
07	2.02	n/a	n/a	97.90	97.45	93.65
08	2.03	99.00	n/a	98.90	n/a	99.40
09	3.01	1.00	1.01	0.99	1.00	1.00
10	3.01	0.98	1.03	1.03	0.97	0.97
11	3.01	1.00	1.05	1.14	1.12	1.04
12	3.02	35.68	38.18	39.94	41.20	42.20
13	3.03	6.70	6.30	8.22	13.88	19.72
14	4.01	11.44	9.24	6.82	5.08	4.55
15	4.02	10.32	8.26	5.98	4.38	3.85
16	4.03	72.40	85.40	92.20	98.20	99.00
17	5.01	4.60	4.00	3.20	3.00	3.00
18	5.03	n/a	61.30	76.20	n/a	n/a
19	5.04	16.62	11.58	10.44	11.44	9.40
20	6.09	1.76	0.98	0.88	0.86	0.70
21	6.09	9.70	9.60	7.10	6.08	5.10
22	6.09	12.60	12.40	9.06	7.88	6.48
23	6.10	87.67	92.40	79.60	90.60	84.50
24	7.01	25.60	n/a	27.90	29.10	30.30
25	7.02	0.38	0.38	0.35	0.31	0.31
26	7.02	8.12	8.56	9.62	9.96	8.43
27	7.02	83988.42	92795.08	106032.62	110368.90	93827.13
28	7.05	10.30	n/a	13.50	13.80	n/a
29	7.06	2.14	n/a	6.03	n/a	8.56
30	7.08	98.00	98.60	99.00	99.80	100.00
31	7.09	93.20	94.60	96.40	97.60	99.00
32	8.01	n/a	0.15	0.19	0.18	0.13
33	8.01	n/a	0.01	0.03	0.04	0.03
34	8.02	n/a	n/a	13.43	13.86	1.66
35	8.03	n/a	3.30	34.30	48.54	67.45
36	8.09	n/a	n/a	n/a	10.48	8.08
37	8.14	43.12	50.02	54.84	52.78	49.73
38	8.15	0.38	14.12	75.26	109.53	114.32
39	8.16	0.13	2.82	14.79	34.55	54.84

#### <D11> Periodical achievement of Greece (average calculated by the author)

No	Indicator	1990-1994	1995-1999	2000-2004	2005-2009	2010-2015
01	1.03	6.90	5.85	6.15	6.40	6.10
02	1.04	2.19	1.40	-0.21	-0.96	0.12
03	1.05	44.08	41.96	44.30	45.56	43.93
04	1.07	20.68	16.14	16.42	18.94	18.23
05	1.09	5.00	5.00	5.00	5.00	5.00
06	2.01	n/a	99.53	99.50	99.32	98.97
07	2.02	n/a	94.30	97.75	99.56	99.40
08	2.03	n/a	n/a	99.80	n/a	99.90
09	3.01	1.01	0.99	0.99	0.99	0.99
10	3.01	1.00	0.99	0.97	0.99	0.99
11	3.01	1.01	1.22	1.32	1.40	1.42
12	3.02	36.42	38.64	41.38	43.16	44.95
13	3.03	12.90	11.10	11.00	15.78	24.67
14	4.01	8.86	6.64	4.98	4.22	3.80
15	4.02	7.64	5.66	4.24	3.60	3.20
16	4.03	48.60	57.40	80.40	89.00	90.25
17	5.01	7.40	5.80	4.80	4.00	4.00
18	5.03	n/a	62.70	n/a	n/a	n/a
19	5.04	8.17	6.56	6.93	6.90	6.33
20	5.05	n/a	n/a	68.10	n/a	n/a
21	5.05	n/a	n/a	99.00	n/a	n/a
22	5.06	n/a	11.80	n/a	n/a	n/a
23	6.01	0.28	0.29	0.30	0.29	0.28
24	6.09	1.04	1.06	0.76	0.60	0.50
25	6.09	9.18	9.74	8.00	7.58	6.53
26	6.09	11.80	12.80	9.96	9.76	8.23
27	6.10	87.80	86.00	87.20	84.20	87.50
28	6.10	n/a	74.80	72.00	n/a	n/a
29	7.01	25.80	n/a	28.50	29.80	31.10
30	7.02	0.24	0.23	0.22	0.21	0.19
31	7.02	7.54	7.88	8.26	7.82	6.73
32	7.02	429950.90	447593.54	475403.86	465110.68	408346.43
33	7.05	n/a	n/a	23.60	n/a	n/a
34	7.06	2.18	n/a	6.87	n/a	13.32
35	7.08	100.00	100.00	100.00	100.00	100.00
36	7.09	100.00	100.00	100.00	100.00	100.00
37	8.01	0.31	0.16	0.16	0.21	0.16
38	8.01	0.08	0.05	0.07	0.06	0.06
39	8.02	n/a	12.01	14.83	10.14	11.85
40	8.03	34.82	47.98	23.00	72.62	75.25
41	8.09	n/a	n/a	n/a	36.86	30.30
42	8.14	41.42	45.09	46.64	40.06	35.53
43	8.15	1.78	25.62	92.75	141.87	157.13
44	8.16	0.09	4.55	28.13	41.43	56.86

### <D12> Periodical achievement of Italy (average calculated by the author)

No	Indicator	1990-1994	1995-1999	2000-2004	2005-2009	2010-2015
01	1.03	n/a	n/a	n/a	7.40	n/a
02	1.04	0.53	0.75	1.80	-0.14	1.80
03	1.05	62.24	60.96	58.30	57.66	56.85
04	1.07	17.28	14.64	12.90	11.15	n/a
05	1.09	5.00	5.00	5.00	5.00	5.00
06	2.01	100.00	100.00	100.00	100.00	99.97
07	2.02	n/a	100.00	99.94	99.98	99.85
08	3.01	1.00	1.00	1.00	1.00	1.00
09	3.01	1.02	1.01	1.01	1.00	1.00
10	3.01	0.71	0.84	0.87	0.89	0.90
11	3.02	38.52	39.38	40.60	41.72	42.85
12	3.03	1.40	4.67	6.72	8.86	9.82
13	4.01	6.10	5.22	4.16	3.50	3.13
14	4.02	4.42	3.78	3.04	2.58	2.25
15	4.03	72.40	94.20	97.60	96.00	94.75
16	5.01	12.40	10.40	8.60	6.40	5.83
17	5.02	100.00	100.00	n/a	n/a	n/a
18	5.03	60.17	57.03	53.95	54.30	n/a
19	5.04	3.82	4.30	5.76	5.00	4.47
20	6.09	2.80	2.40	1.98	1.82	1.75
21	6.09	45.60	39.00	31.20	22.40	19.50
22	6.09	58.20	49.60	40.00	28.80	25.25
23	6.10	87.00	87.40	86.20	87.40	86.50
24	6.10	n/a	59.50	56.00	52.00	55.00
25	7.01	68.40	n/a	68.20	68.40	68.50
26	7.02	0.31	0.31	0.31	0.28	0.28
27	7.02	9.44	9.76	10.02	9.74	9.70
28	7.02	1162258.22	1223682.80	1263513.28	1239309.66	1235769.97
29	7.03	97979.60	12632.52	3847.20	979.86	152.15
30	7.05	21.30	20.70	20.90	n/a	n/a
31	7.06	1.97	n/a	2.02	n/a	2.09
32	7.08	100.00	100.00	100.00	100.00	100.00
33	7.09	100.00	100.00	100.00	100.00	100.00
34	8.01	0.30	0.24	0.23	0.21	0.19
35	8.01	0.05	0.04	0.05	0.06	0.09
36	8.02	n/a	3.40	5.82	6.65	4.92
37	8.03	92.58	96.96	88.30	94.34	90.83
38	8.08	1.72	1.59	1.36	1.11	1.25
39	8.09	n/a	n/a	n/a	57.46	62.53
40	8.14	46.74	50.64	48.14	44.11	50.17
41	8.15	1.69	28.93	63.48	83.38	109.71
42	8.16	0.27	9.98	45.19	72.66	83.41

### <D13> Periodical achievement of Japan (average calculated by the author)

No	Indicator	1990-1994	1995-1999	2000-2004	2005-2009	2010-2015
01	1.01	4.20	8.25	3.67	2.27	0.85
02	1.02	0.65	2.05	0.80	0.80	0.20
03	1.03	4.10	4.25	4.33	4.40	4.90
04	1.04	1.23	-0.09	0.29	0.17	0.21
05	1.05	56.80	57.12	56.94	57.50	57.30
06	1.06	2.80	5.35	2.37	0.55	n/a
07	1.07	34.37	35.52	32.30	29.85	n/a
08	1.08	n/a	8.15	n/a	3.40	2.80
09	1.09	6.75	5.76	5.18	5.06	5.00
10	2.01	97.22	96.44	97.90	94.90	97.38
11	2.02	76.08	83.86	89.88	92.82	95.13
12	2.03	95.40	n/a	97.27	98.12	98.60
13	3.01	0.96	0.93	0.96	0.99	1.00
14	3.01	0.99	1.00	1.02	1.04	1.08
15	3.01	0.81	0.89	0.96	0.97	0.96
16	3.02	35.70	36.28	37.30	39.38	39.83
17	3.03	12.00	15.27	17.76	23.16	32.03
18	4.01	41.68	31.02	22.80	18.42	15.65
19	4.02	33.62	25.78	19.38	15.80	13.45
20	4.03	84.20	92.80	95.80	96.00	95.25
21	5.01	87.40	82.80	63.60	51.60	41.17
22	5.02	83.80	85.70	n/a	94.13	95.05
23	5.03	63.10	67.45	74.50	71.70	n/a
24	5.04	90.30	84.46	84.02	81.26	85.73
25	5.05	n/a	n/a	n/a	87.30	92.60
26	5.05	n/a	86.10	n/a	96.75	97.60
27	5.06	n/a	14.10	9.90	10.90	n/a
28	6.01	0.11	0.15	0.19	0.23	0.23
29	6.05	n/a	n/a	n/a	80.30	81.50
30	6.06	n/a	n/a	n/a	n/a	0.00
31	6.06	n/a	n/a	n/a	n/a	48.00
32	6.09	6.66	4.66	3.04	2.22	1.98
33	6.09	54.20	37.00	25.20	20.20	21.00
34	6.09	110.00	63.40	37.00	27.60	26.25
35	6.10	31.60	54.40	67.40	79.80	82.00
36	6.10	63.00	70.40	80.50	79.00	81.33
37	7.01	36.20	n/a	34.30	33.70	33.30
38	7.03	15336.24	5896.82	4815.96	2222.88	1424.33
39	7.05	n/a	n/a	15.70	17.00	17.20
40	7.06	1.00	n/a	3.62	n/a	6.02
41	7.08	83.60	86.80	89.80	92.60	95.33
42	7.09	68.00	72.40	76.40	80.20	83.83
43	7.10	23.10	21.50	19.90	14.40	11.10
44	8.06	n/a	85.85	96.40	99.36	99.53
45	8.08	2.40	0.89	1.12	0.73	0.71
46	8.12	20.70	19.66	12.98	9.08	6.53
47	8.14	7.60	9.64	14.12	17.50	16.99
48	8.15	0.33	2.88	24.30	57.51	81.49
49	8.16	0.02	0.81	10.20	21.12	39.17

### <D14> Periodical achievement of Mexico (average calculated by the author)

No	Indicator	1990-1994	1995-1999	2000-2004	2005-2009	2010-2015
01	1.03	7.20	9.00	7.80	8.40	8.40
02	1.04	0.38	1.24	0.34	0.60	0.81
03	1.05	54.04	57.54	62.42	63.58	61.68
04	1.07	8.36	8.16	8.12	9.16	11.53
05	1.09	5.00	5.00	5.00	5.00	5.00
06	2.01	95.78	99.60	98.92	99.08	98.93
07	2.02	n/a	98.40	98.35	n/a	n/a
08	3.01	1.02	0.98	0.98	0.98	0.99
09	3.01	0.93	0.96	0.97	0.98	0.99
10	3.01	0.86	0.96	1.06	1.09	1.11
_11	3.02	39.58	41.94	44.74	47.38	49.15
12	3.03	21.30	32.87	36.28	38.14	39.68
13	4.01	7.70	6.56	5.90	5.00	4.23
14	4.02	6.30	5.40	4.86	4.16	3.53
15	4.03	94.00	95.00	95.60	95.80	96.00
16	5.01	12.20	13.20	13.00	9.40	7.33
17	5.02	n/a	100.00	n/a	n/a	n/a
18	5.03	78.50	71.00	67.00	69.00	n/a
19	5.04	5.44	4.54	5.38	4.44	4.80
20	6.09	0.26	0.26	0.24	0.18	0.13
21	6.09	11.20	11.20	9.08	7.56	6.38
22	6.09	14.60	14.60	11.40	9.46	7.95
23	6.10	88.00	84.80	91.40	83.20	88.00
24	6.10	81.00	75.40	78.00	84.00	83.67
25	7.01	10.20	n/a	10.60	10.80	10.80
26	7.02	0.33	0.29	0.26	0.24	0.23
27	7.02	10.86	11.06	11.00	10.54	10.30
28	7.02	163835.30	172232.78	176434.42	173139.34	171556.93
29	7.05	8.80	n/a	9.80	12.60	11.70
30	7.06	4.50	n/a	11.35	n/a	18.06
31	7.08	100.00	100.00	100.00	100.00	100.00
32	7.09	98.00	98.00	98.00	98.00	98.00
33	8.01	0.85	0.80	0.80	0.81	0.72
34	8.01	0.24	0.21	0.27	0.23	0.18
35	8.02	n/a	17.07	23.07	23.69	12.78
36	8.03	61.60	86.22	88.78	90.26	96.55
37	8.09	n/a	n/a	n/a	19.96	27.95
38	8.14	48.99	56.85	52.12	45.06	42.85
39	8.15	1.18	17.04	78.56	113.34	116.99
40	8.16	1.48	18.32	57.50	85.51	92.43

# <D15> Periodical achievement of Netherlands (average calculated by the author)

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No	Indicator	1990-1994	1995-1999	2000-2004	2005-2009	2010-2015
01	1.03	10.00	8.80	9.2	5 9.30	9.00
02	1.04	3.64	1.67	2.1	5 -0.59	0.26
03	1.05	64.78	69.10	70.32	2 70.40	69.08
04	1.07	n/a	6.36	5.80	6 5.96	5.28
05	1.09	5.00	5.00	5.00	0 5.00	5.00
06	2.01	99.32	99.04	99.72	2 98.90	99.33
07	2.02	95.33	99.25	99.24	4 99.22	98.77
08	3.01	1.00	1.00	1.00	0 1.00	1.00
09	3.01	1.00	0.98	1.02	2 0.99	0.98
10	3.01	1.20	1.32	1.5 <sup>-</sup>	1 1.57	1.57
_11	3.02	47.50	47.98	48.74	4 49.20	49.15
12	3.03	35.80	37.40	36.28	8 37.24	39.60
13	4.01	7.30	5.28	4.52	2 3.72	3.00
14	4.02	5.88	4.26	3.64	4 2.98	2.43
15	4.03	92.80	91.60	88.00	0 92.00	93.25
16	5.01	7.00	7.00	6.80	0 6.20	5.33
17	5.03	n/a	86.50	n/a	a 88.40	n/a
18	5.04	15.76	12.86	9.88	8 8.98	6.75
19	6.09	0.34	0.32	0.20	6 0.14	0.13
20	6.09	7.30	5.88	6.68	8 7.16	7.70
21	6.09	9.36	7.48	8.50	6 9.12	9.85
22	6.10	87.20	86.20	90.20	0 85.80	86.00
23	6.10	n/a	69.40	84.40	0 84.60	85.33
24	7.01	30.00	n/a	30.60	0 31.80	33.10
25	7.02	0.18	0.17	0.10	6 0.15	0.15
26	7.02	8.20	9.22	9.48	8 9.32	9.03
27	7.02	35243.34	40757.60	43057.40	6 44008.08	44760.33
28	7.03	1064.20	57.08	-32.80	6 -50.16	0.35
29	7.05	n/a	n/a	0.60	0 0.70	n/a
30	7.06	6.46	n/a	6.8	1 n/a	9.08
31	7.08	100.00	100.00	100.00	0 100.00	100.00
32	7.09	98.00	98.00	98.00	0 98.00	98.00
33	8.01	1.10	0.86	0.8	5 0.95	1.00
34	8.01	0.49	0.33	0.3	3 0.34	0.31
35	8.02	n/a	14.00	15.28	8 18.48	12.41
36	8.03	80.55	89.08	99.12	2 99.86	100.00
37	8.08	2.92	2.02	1.4	1 0.95	0.88
38	8.09	n/a	n/a	n/a	a 22.32	37.35
39	8.14	52.84	57.22	50.5	7 41.62	27.93
40	8.15	7.79	39.12	84.5	1 106.72	115.83
41	8.16	2.25	21.53	68.93	3 86.82	94.58

### <D16> Periodical achievement of Norway (average calculated by the author)

No	Indicator	1990-1994	1995-1999	2000-2004	2005-2009	2010-2015
01	1.01	1.50	2.75	0.63	0.10	n/a
02	1.02	0.10	0.55	0.15	0.00	n/a
03	1.03	4.40	5.35	6.25	6.74	n/a
04	1.04	-6.81	-0.49	5.44	3.38	2.65
05	1.05	63.97	56.28	59.28	62.26	64.08
06	1.06	0.90	1.55	0.25	0.02	n/a
07	1.07	1.17	3.64	6.28	4.74	n/a
08	1.09	5.00	5.00	5.00	5.00	5.00
09	2.01	96.60	93.20	n/a	94.03	97.27
10	2.02	92.00	92.95	98.20	95.37	96.95
11	2.03	n/a	n/a	99.70	n/a	99.70
12	3.01	1.00	0.99	0.99	1.00	1.01
13	3.01	1.02	n/a	1.00	0.98	0.98
14	3.01	1.23	n/a	1.33	1.35	1.29
15	3.02	50.57	50.18	50.66	50.92	50.58
16	3.03	n/a	10.20	8.08	11.48	13.73
17	4.01	26.14	25.42	20.66	14.56	10.93
18	4.02	22.06	21.46	17.64	12.52	9.38
19	4.03	84.00	91.00	97.80	98.80	98.00
20	5.01	72.40	66.20	51.00	34.80	26.17
21	5.02	99.14	99.10	99.30	99.53	99.70
22	5.03	64.65	64.35	83.80	79.50	68.00
23	5.04	50.20	35.42	27.58	28.10	26.53
24	5.06	n/a	n/a	n/a	n/a	8.00
25	6.09	10.90	17.80	22.00	20.00	14.00
26	6.09	67.00	110.40	134.40	125.00	96.50
27	6.09	110.20	169.00	206.40	184.40	125.50
28	6.10	58.60	68.40	67.00	71.80	81.25
29	6.10	n/a	64.40	65.60	68.40	66.67
30	7.01	49.40	n/a	49.40	49.40	49.40
31	7.02	0.87	0.87	0.70	0.54	0.51
32	7.02	13.86	10.14	10.38	10.98	11.43
33	7.02	2059414.14	1502196.42	1508465.60	1574120.88	1637904.40
34	7.03	57377.10	15509.06	5888.30	1203.60	992.98
35	7.05	n/a	1.70	1.50	n/a	n/a
36	7.06	3.59	n/a	8.36	n/a	8.75
37	7.08	93.80	94.40	95.20	96.00	96.83
38	7.09	73.00	73.00	72.20	72.00	72.00
39	8.14	15.26	18.84	24.12	30.63	29.50
40	8.15	0.01	0.40	19.13	121.27	152.17
41	8.16	0.02	0.54	6.04	22.75	58.86

### <D17> Periodical achievement of Russia (average calculated by the author)

ושי			it of olligap		calculated by	
No	Indicator	1990-1994	1995-1999	2000-2004	2005-2009	2010-2015
01	1.04	10.45	2.77	4.97	2.04	5.11
02	1.05	62.34	61.53	60.28	62.30	63.70
03	1.07	8.50	9.15	9.98	10.00	9.20
04	1.08	n/a	n/a	3.30	n/a	n/a
05	2.02	n/a	n/a	n/a	98.70	n/a
06	2.03	99.00	n/a	99.50	n/a	99.80
07	3.02	42.93	42.56	43.58	45.25	46.80
08	3.03	4.90	4.03	10.08	21.10	23.97
09	4.01	6.42	4.76	3.46	2.86	2.80
10	4.02	5.12	3.74	2.68	2.26	2.20
11	4.03	89.40	97.00	94.60	94.80	95.00
12	5.01	11.20	15.20	17.60	14.40	11.00
13	5.02	n/a	100.00	n/a	n/a	n/a
14	5.03	65.00	62.00	n/a	n/a	n/a
15	5.04	7.34	6.52	6.24	5.02	3.18
16	6.09	3.40	3.64	2.64	1.92	1.75
17	6.09	63.60	59.60	44.20	34.20	42.50
18	6.09	81.20	76.40	56.20	42.40	53.25
19	6.10	86.00	89.60	85.40	88.00	86.00
20	6.10	88.00	87.67	76.00	82.00	79.67
21	7.01	2.90	n/a	2.90	2.90	2.90
22	7.03	2600.82	288.74	173.84	208.00	151.15
23	7.06	2.52	n/a	3.28	n/a	3.39
24	7.08	100.00	100.00	100.00	100.00	100.00
25	7.09	99.00	99.80	100.00	100.00	100.00
26	8.05	0.02	0.02	n/a	n/a	n/a
27	8.06	n/a	67.13	82.86	85.62	84.27
28	8.14	36.84	45.52	46.30	39.63	46.88
29	8.15	4.10	23.21	79.97	119.50	190.43
30	8.16	0.52	13.69	48.10	65.58	94.25

#### <D18> Periodical achievement of Singapore (average calculated by the author)

No	Indicator	1990-1994	1995-1999	2000-2004	2005-2009	2010-2015
01	1.03	7.60	5.90	6.85	6.80	5.40
02	1.04	2.82	0.08	-0.59	0.76	1.75
03	1.05	41.52	41.74	48.42	52.66	46.38
04	1.07	21.44	18.20	13.64	12.08	11.83
05	1.09	5.00	5.00	5.00	5.00	5.00
06	2.01	99.86	99.83	99.86	99.78	99.43
07	2.02	n/a	n/a	n/a	98.00	97.45
08	2.03	99.60	n/a	n/a	99.58	99.67
09	3.01	0.98	0.98	0.99	0.99	1.00
10	3.01	1.08	1.08	1.06	1.06	1.01
11	3.01	1.09	1.17	1.19	1.23	1.23
12	3.02	33.82	36.86	40.24	44.32	46.18
13	3.03	14.60	24.67	26.96	36.18	37.67
14	4.01	10.00	7.40	6.20	5.24	4.38
15	4.02	8.42	6.16	5.20	4.42	3.73
16	4.03	89.40	92.20	96.40	97.40	96.00
17	5.01	6.00	5.40	5.20	5.00	5.00
18	5.03	n/a	76.40	n/a	65.70	n/a
19	5.04	10.08	7.65	10.10	12.52	9.87
20	5.06	n/a	11.80	n/a	n/a	n/a
21	6.01	0.46	0.49	0.47	0.44	0.43
22	6.09	2.00	1.42	0.92	0.70	0.55
23	6.09	26.20	25.40	21.40	19.20	15.00
24	6.09	32.60	31.20	26.00	23.00	18.25
25	6.10	88.00	87.20	84.80	88.00	86.00
26	6.10	n/a	n/a	n/a	n/a	70.67
27	7.01	27.70	n/a	34.00	34.60	36.40
28	7.02	0.25	0.25	0.25	0.22	0.18
29	7.02	6.14	6.76	7.86	7.68	6.00
30	7.02	239441.46	268624.74	325786.16	342569.70	279312.30
31	7.05	33.00	30.90	31.90	28.70	28.60
32	7.06	2.77	n/a	8.56	n/a	10.18
33	7.08	100.00	100.00	100.00	100.00	100.00
34	7.09	100.00	100.00	100.00	100.00	100.00
35	8.01	0.25	0.23	0.25	0.37	0.24
36	8.01	0.03	0.03	0.05	0.09	0.07
37	8.02	n/a	12.56	13.47	19.04	15.40
38	8.03	n/a	26.60	59.90	80.84	85.68
39	8.09	n/a	n/a	n/a	28.78	25.95
40	8.14	35.09	39.92	42.48	44.98	42.04
41	8.15	0.52	14.94	78.62	106.37	109.49
42	8.16	0.11	3.19	27.22	55.07	70.21

#### <D19> Periodical achievement of Spain (average calculated by the author)

			ent of Oweden	laverage	calculated by	
No	Indicator	1990-1994	1995-1999	2000-2004	2005-2009	2010-2015
01	1.03	9.30	9.10	9.10	9.50	n/a
02	1.04	3.21	2.83	2.18	0.05	1.29
03	1.05	68.04	63.90	67.06	66.38	65.25
04	1.07	n/a	7.78	6.92	6.78	6.83
05	1.09	5.00	5.00	5.00	5.00	5.00
06	2.01	99.74	99.55	98.96	96.92	99.50
07	2.02	91.53	98.30	98.94	99.24	97.65
08	3.01	1.00	1.02	1.02	2 1.00	1.02
09	3.01	1.08	1.20	1.19	0.99	1.02
_10	3.01	1.23	1.32	1.51	1.56	1.54
_11	3.02	51.26	50.86	50.80	50.20	50.00
12	3.03	38.40	41.17	43.74	46.38	44.90
13	4.01	6.10	4.38	3.96	3.32	3.03
14	4.02	5.12	3.66	3.28	3 2.72	2.43
15	4.03	96.40	94.40	94.20	96.40	97.00
16	5.01	7.20	6.00	5.20	5.00	4.00
17	5.03	n/a	75.20	n/a	n n/a	n/a
18	5.04	11.88	6.20	6.23	5.92	4.66
19	5.05	n/a	n/a	100.00	) n/a	n/a
20	6.09	0.48	0.42	0.22	0.22	0.15
21	6.09	7.52	6.30	5.36	6.36	7.13
22	6.09	9.68	8.14	6.70	8.24	9.03
23	6.10	87.00	87.60	84.20	88.00	87.25
24	6.10	n/a	n/a	72.20	75.60	86.00
25	7.01	66.50	n/a	66.70	68.70	68.70
26	7.02	0.22	0.20	0.16	0.13	0.12
27	7.02	6.66	6.62	6.22	5.56	5.17
28	7.02	57694.12	58574.84	55516.52	50975.38	48826.40
29	7.03	1486.16	n/a	n/a	n n/a	n/a
30	7.05	1.70	1.60	1.50	1.50	n/a
31	7.06	5.23	n/a	11.13	s n/a	13.03
32	7.08	100.00	100.00	100.00	100.00	100.00
33	7.09	99.00	99.00	99.00	99.00	99.00
34	8.01	0.96	0.76	0.80	1.00	1.01
35	8.01	0.33	0.22	0.25	o 0.31	0.31
36	8.02	n/a	12.85	17.24	14.23	13.66
37	8.03	83.82	83.62	93.78	99.62	98.55
38	8.09	n/a	n/a	n/a	ı 20.28	20.25
39	8.14	68.26	69.54	65.77	59.30	44.49
40	8.15	8.82	38.18	87.60	107.51	123.26
41	8.16	1.67	22.55	66.21	87.12	92.65

### <D20> Periodical achievement of Sweden (average calculated by the author)

No	Indicator	1990-1994	1995-1999	2000-2004	2005-2009	2010-2015
01	1.03	6.60	6.05	6.50	5.70	5.80
02	1.04	2.90	1.75	2.23	0.16	0.68
03	1.05	57.44	57.74	59.46	59.62	58.20
04	1.07	9.83	9.70	9.44	10.44	11.80
05	1.09	5.00	5.00	5.00	5.00	5.00
06	2.01	97.70	99.90	99.84	99.54	99.75
07	3.01	1.00	1.00	1.00	1.00	1.00
08	3.01	1.02	1.00	1.02	1.02	1.02
09	3.01	0.98	1.09	1.27	1.40	1.36
10	3.02	47.90	47.86	48.60	49.00	49.23
11	3.03	6.30	15.30	18.10	19.30	21.95
12	4.01	8.28	6.92	6.36	5.74	4.90
13	4.02	7.04	5.86	5.38	4.86	4.13
14	4.03	90.20	90.00	84.20	85.00	91.75
15	5.01	10.40	11.00	12.00	11.00	9.50
16	5.02	n/a	99.00	n/a	n/a	n/a
17	5.03	76.00	79.33	81.40	82.80	n/a
18	5.04	30.60	30.12	27.13	25.75	21.25
19	6.01	0.08	0.10	0.17	0.25	0.31
20	6.09	0.84	0.82	0.70	0.64	0.50
21	6.09	12.20	12.00	12.40	15.00	14.25
22	6.09	15.20	14.80	15.80	18.80	17.50
23	6.10	89.00	89.00	89.00	89.00	89.00
24	6.10	n/a	n/a	71.00	78.40	82.00
25	7.01	10.80	n/a	11.50	11.70	11.90
26	7.02	0.38	0.32	0.28	0.24	0.21
27	7.02	10.06	9.48	9.36	8.82	7.73
28	7.02	580362.42	556560.32	560476.70	540131.52	484152.40
29	7.05	8.20	8.20	10.60	8.80	n/a
30	7.06	6.07	n/a	7.68	n/a	13.77
31	7.08	100.00	100.00	100.00	100.00	100.00
32	7.09	99.00	99.00	99.00	99.00	99.00
33	8.01	0.30	0.27	0.33	0.46	0.62
34	8.01	0.09	0.07	0.12	0.15	0.21
35	8.02	n/a	21.48	29.44	26.63	19.85
36	8.03	59.30	83.08	97.08	100.00	100.00
37	8.09	n/a	n/a	n/a	20.02	25.25
38	8.14	46.41	54.42	58.43	55.46	53.04
39	8.15	3.50	21.84	85.03	118.29	124.04
40	8.16	0.42	9.67	49.44	75.17	87.86

# <D21> Periodical achievement of United Kingdom (average calculated by the author)

<d2< th=""><th>2&gt; Period</th><th>lical achievement</th><th>t of United</th><th>States (average</th><th>calculated b</th><th>by the author)</th></d2<>	2> Period	lical achievement	t of United	States (average	calculated b	by the author)
No	Indicator	1990-1994	1995-1999	2000-2004	2005-2009	2010-2015
01	1.03	5.30	5.20	5.25	4.60	4.70
02	1.04	1.66	2.35	1.82	0.83	1.45
03	1.05	62.04	63.66	63.08	62.06	58.53
04	1.08	0.90	4.70	3.38	2.03	2.25
05	1.09	5.00	5.00	5.00	5.00	5.00
06	2.01	95.88	95.93	95.28	95.36	92.95
07	3.01	0.99	1.01	1.00	1.00	0.99
08	3.01	1.01	1.02	1.01	1.01	1.00
09	3.01	1.26	1.31	1.36	1.41	1.39
10	3.02	47.06	47.36	47.50	47.60	47.90
11	3.03	6.60	12.23	13.98	16.04	17.65
12	4.01	10.50	8.98	8.22	7.78	7.15
13	4.02	8.80	7.54	6.94	6.60	6.10
14	4.03	86.60	90.80	91.80	91.60	91.75
15	5.01	12.00	11.40	12.80	14.00	14.00
16	5.02	n/a	99.00	n/a	n/a	99.20
17	5.03	70.70	76.40	72.80	77.10	76.40
18	5.04	57.50	51.88	42.62	40.50	29.98
19	5.05	n/a	n/a	n/a	n/a	96.60
20	5.06	6.00	n/a	6.30	5.80	8.00
21	6.09	0.66	0.42	0.28	0.20	0.20
22	6.09	11.20	8.42	6.06	4.98	3.70
23	6.09	14.00	10.22	7.42	6.18	4.58
24	6.10	87.40	86.60	87.20	86.80	87.00
25	6.10	72.00	79.40	83.20	80.00	76.67
26	7.01	32.30	n/a	32.80	33.00	33.20
27	7.02	0.54	0.49	0.44	0.40	0.36
28	7.02	19.68	20.26	20.26	19.30	17.43
29	7.02	5185995.86	5641007.74	5953216.52	5934269.56	5557046.27
30	7.03	191017.84	14097.14	13705.36	8147.82	1151.58
31	7.05	15.00	15.20	15.30	15.50	n/a
32	7.06	10.45	n/a	11.86	n/a	14.82
33	7.08	98.60	99.00	99.00	99.00	99.00
34	7.09	100.00	100.00	100.00	100.00	100.00
35	8.01	0.18	0.10	0.13	0.19	0.19
36	8.01	0.04	0.02	0.03	0.05	0.07
37	8.02	n/a	19.28	22.03	30.34	38.97
38	8.03	n/a	n/a	n/a	69.13	65.58
39	8.08	0.81	0.70	0.64	0.50	0.50
40	8.09	n/a	n/a	n/a	25.08	20.53
41	8.14	55.46	63.25	64.41	53.80	43.77
42	8.15	4.89	20.89	49.88	80.10	95.45
43	8.16	2.16	22.64	55.48	71.38	78.46

### Appendix E: MDGs results corresponding twenty-four nations



<E03> Indicator 3.02. Share of women in wage employment in the non-agricultural sector



<E02> Indicator 1.05. Employmentto-population ratio, both sexes, percentage



<E04> Indicator 3.03. Seats held by women in national parliament, percentage





<E05> Indicator 4.01. Children under five mortality rate per 1,000 live births

immunised against measles, percentage



<E06> Indicator 4.02. Infant mortality rate (0-1 year) per 1,000 live births



<E08> Indicator 5.01. Maternal mortality ratio per 100,000 live births



<E09> Indicator 5.03. Current contraceptive use among married women 15-49 years old, any method, percentage



<E10> Indicator 5.04. Adolescent birth rate,

#### per 1,000 women



<E11> Indicator 6.09. Tuberculosis death rate (d), incidence rate (i), prevalence rate (p); per year per 100,000 population (mid-point)



<E12> Indicator 6.10. Tuberculosis detection rate (d), treatment success rate (t); under DOTS, percentage (mid-point)



<E14> Indicator 7.06. Terrestrial and marine areas protected to total territorial area, percentage



<E13> Indicator 7.01. Proportion of land area covered by forest, percentage



<E15> Indicator 7.08. Proportion of the population using improved drinking water sources, total





### <E16> Indicator 7.09. Proportion of the population using improved sanitation facilities, total



subscriptions per 100 inhabitants



## <E17> Indicator 8.14. Fixed-telephone subscriptions per 100 inhabitants



<E19> Indicator 8.16. Internet users per 100 inhabitants



### Appendix F: MDGs results corresponding five to twenty-three nations

<F01> Indicator 1.03. Poorest quintile's share in national income or consumption, percentage



<F02> Indicator 1.06. Proportion of employed people living below \$1.25 (PPP) per day



<F03> Indicator 1.07. Proportion of own-account and contributing family workers in total employment, both sexes, percentage



<F04> Indicator 1.08. Prevalence of underweight children under-five years of age





### <F05> Indicator 1.09. Population undernourished, percentage

<F07> Indicator 2.02. Percentage of pupils starting grade 1 who reach last grade of primary, both sexes



# <F06> Indicator 2.01. Total net enrolment ratio in primary education, both sexes



<F08> Indicator 2.03. Literacy rate of 15-24 year-olds, women and men



<F09> Indicator 3.01. Gender Parity Index in primary (p), secondary (s), tertiary (t) level enrolment



## <F10> Indicator 5.02. Births attended by skilled health personnel, percentage









<F12> Indicator 5.06. Unmet need for family planning, total, percentage

<F13> Indicator 6.01. HIV prevalence among population aged 15-24 years



<F14> Indicator 7.02. CO<sub>2</sub>, kg CO<sub>2</sub> per \$1 GDP (k); metric tons of CO<sub>2</sub> per capita (m); thousand metric tons of CO<sub>2</sub> (t)





#### <F15> Indicator 7.03. Consumption of all Ozone-Depleting Substances in ODP metric tons

# <F16> Indicator 7.05. Proportion of total water resources used, percentage



<F17> Indicator 8.01. Net ODA as percentage of OECD/DAC donors GNI (a), to LDCs as percentage of OECD/DAC donors GNI (t)





<F18> Indicator 8.02. ODA to basic social services as percentage of sector-allocable ODA





<F20> Indicator 8.08. Agricultural support estimate for OECD countries as a percentage of their GDP



<F21> Indicator 8.09. ODA provided to help build trade capacity, percentage



### Appendix G: The sports states of the ROK

#### <G01> Clubs and members in each region and sports (as of 2016)<sup>2</sup>)

			01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	Total
			Seoul	Busan	Daegu	Incheon	Gwangj	Daejeon	Ulsan	Sejong	Gyeong	Gangwo	Chungb	Chungn	Jeonbu	Jeonna	Gyeong	Gyeong	Jeju	
							u				gi	n	uk	am	k	m	buk	nam		
									[1] Numb	er of clu	bs / [2]	Number	of memb	ers in clu	ıbs					
01	Kendo <sup>3)</sup>	[1]	425	181	161	100	107	182	69	4	241	80	81	65	80	98	121	180	37	2212
		[2]	25686	9964	3730	7499	6135	14790	2136	159	12065	4175	2378	4068	2808	3833	4574	4487	1726	110213
02	Gateball	[1]	531	267	243	150	280	159	115	14	730	480	316	313	399	376	414	563	483	5833
		[2]	15290	5997	5641	4980	11533	28273	4579	254	11841	8911	7166	11843	9166	8728	11381	19272	7400	172255
03	Martial arts	[1]	14	1	5	13	7	10	3	1	26	0	4	7	12	5	19	5	0	132
		[2]	356	19	171	648	112	265	105	565	1003	0	196	425	911	93	345	115	0	5329
04	Light aircraft	[1]	0	0	0	0	0	5	0	0	0	0	0	0	0	0	6	0	0	11
		[2]	0	0	0	0	0	80	0	0	0	0	0	0	0	0	106	0	0	186
05	Golf <sup>4)</sup>	[1]	148	281	310	37	199	85	112	10	327	147	264	155	189	177	226	388	97	3152
		[2]	7217	8291	6614	1822	4800	16674	2241	306	7520	4581	9035	7790	6977	3639	12174	15084	2689	117454
06	National Archery	[1]	50	12	22	18	1	24	39	9	112	73	79	50	37	95	42	158	8	829
		[2]	6914	300	478	797	1	2691	1052	235	2964	2453	2602	3375	1054	1929	1376	4000	440	32661
07	Fishing	[1]	171	45	7	10	45	40	32	0	14	29	53	37	4	45	50	50	27	659
		[2]	10253	699	99	444	2880	15642	1136	0	235	2014	690	1957	/21	1108	1431	2239	499	42047
80	Boxing	[1]	130	/	/	/	15	10	4	3	/8	31	30	32	8	4	49	8/	5	507
		[2]	10538	195	142	817	317	308	110	146	2529	819	842	1095	492	8/	1275	2752	139	22603
09	Basketball	[1]	481	38	61	81	122	130	1020	0	409	2774	153	97	41	224	6/	191	54	2338
40	Dorto	[2]	12074	1203	1405	3000	5443	30459	1929	0	02/3	3//1	3092	2003	3023	1325	1004	4324	690	67024
10	Darts	[1]	195	58	0	4	0	0	0	0	192	0	2	52	1	0	0	0	0	504
11	Hypogastric	[1]	34	14	11	3	2	13	12	0	3	0	8	0	0	4	16	25	2	147
	breathing	[2]	2755	530	459	83	401	488	223	0	115	0	142	0	0	300	578	733	100	6907
12	Billiards	[1]	406	87	18	88	54	34	54	2	70	56	96	29	78	28	47	82	17	1246
12		[2]	14554	2899	1036	2585	2558	3996	1707	105	1392	989	1800	2499	2138	954	1739	4712	304	45967
13	Mountaineering	[1]	450	30	62	45	92	492	20	1	178	61	153	130	95	135	53	181	78	2256
10	Ŭ	[2]	22029	1427	3182	6120	23445	19580	505	35	8227	1548	6714	16930	8329	4038	4240	15411	2347	144107
14	Racquetball	[1]	59	3	22	0	0	19	20	0	37	0	2	2	0	8	9	1	1	183
		[2]	2740	129	523	0	0	539	394	0	1181	0	262	137	0	519	406	19	9	6858
15	Rugby	[1]	10	13	0	5	0	0	1	0	4	8	0	0	0	0	13	0	0	54
		[2]	560	710	0	431	0	0	23	0	352	101	0	0	0	0	164	0	0	2341

2) Refer in more detail to the Korean Sports and Olympic Committee (https://www.sports.or.kr/index.do)

16	Wrestling	[1]	0	0	0	0	0	1	2	0	2	5	0	2	0	0	1	1	0	14
		[2]	0	0	0	0	0	51	53	0	299	111	0	120	0	0	8	28	0	670
17	Recreation	[1]	15	11	7	1	122	6	11	0	19	11	18	102	2	7	5	6	9	352
		[2]	232	1423	265	1	19764	745	336	0	324	194	659	5113	207	442	138	181	320	30344
18	Leisure Sports	[1]	7	22	2	1	0	4	14	0	6	6	1	4	2	0	0	2	1	72
		[2]	142	1189	78	111	0	59	251	0	1084	121	87	266	273	0	0	1214	1	4876
19	Lawn Bowling	[1]	3	1	1	0	0	2	1	0	2	1	18	2	1	0	0	9	0	41
		[2]	6	1	1	0	0	49	22	0	2	4	1298	104	32	0	0	310	0	1829
20	Motorsports	[1]	2	0	0	0	0	23	1	1	2	6	0	0	1	0	4	5	0	45
		[2]	67	0	0	0	0	12178	16	24	171	107	0	0	1	0	51	101	0	12716
21	Muay Thai	[1]	58	12	12	0	33	4	2	0	3	5	4	4	26	4	15	18	0	200
		[2]	3492	510	357	0	748	1396	30	0	239	173	68	798	770	159	507	820	0	10067
22	American Football	[1]	0	1	19	0	0	5	0	0	0	0	0	0	1	0	0	0	0	26
		[2]	0	1	245	0	0	196	0	0	0	0	0	0	32	0	0	0	0	474
23	Folk Sports	[1]	1	4	0	0	0	1	3	1	14	0	17	4	125	0	27	0	3	200
		[2]	0	417	0	0	0	814	32	1	7792	0	1475	211	4481	0	883	0	150	16256
24	Baduk	[1]	41	12	1	10	42	8	5	0	42	90	34	25	42	13	33	11	1	410
		[2]	1569	458	1	985	724	6350	323	0	1189	2002	1228	1861	2211	389	984	301	50	20625
25	Volleyball	[1]	311	165	27	6	373	45	420	5	284	160	190	212	196	749	154	472	28	3797
		[2]	9440	5295	417	53	12333	16315	12971	180	4816	3018	4430	9029	4065	14059	4616	13619	640	115296
26	Badminton	[1]	772	452	274	125	440	125	288	16	431	293	226	401	210	472	368	757	167	5817
		[2]	44927	31956	11101	7369	34764	31668	13250	942	20167	15782	8995	26294	9774	21261	34335	32656	7560	352801
27	Bodybuilding	[1]	129	96	109	15	70	96	36	1	85	108	51	52	15	33	122	167	33	1218
		[2]	4734	18456	3857	353	4827	9814	986	62	5422	12223	1691	2712	2730	727	22869	3878	1417	96758
28	Boccia	[1]	5	0	0	0	0	3	0	0	1	1	1	3	0	0	0	0	0	14
		[2]	90	0	0	0	0	18	0	0	21	58	26	1196	0	0	0	0	0	1409
29	Bowling	[1]	702	461	296	248	239	98	219	42	450	329	466	171	173	430	273	352	37	4986
		[2]	25731	10513	7496	4231	8421	6410	4060	561	5842	6439	7084	7899	4991	25570	8284	11664	1097	146293
30	Boomerang	[1]	1	1	0	0	0	0	0	0	0	0	1	1	0	1	0	12	0	17
		[2]	26	30	0	0	0	0	0	0	0	0	21	19	0	42	0	365	0	503
31	Shooting	[1]	40	8	12	2	0	4	0	0	36	43	37	11	15	1	4	29	6	248
		[2]	914	103	304	1	0	205	0	0	908	674	1505	518	389	37	121	603	92	6374
32	Cycling	[1]	408	99	89	54	63	289	42	1	118	142	68	76	73	109	81	161	66	1939
		[2]	19632	8722	3173	3242	5317	4936	1891	1	4305	3964	1298	5776	4892	2486	5054	8917	1784	85390
33	Gymnastics	[1]	492	525	250	178	653	350	237	21	507	370	706	781	402	313	620	823	305	7533
		[2]	23448	72105	10457	7075	29608	25878	7870	1478	18388	13974	22709	39460	38168	10008	36818	26698	9668	393810
34	Crossbow	[1]	1	0	0	0	0	3	0	0	1	0	0	0	0	0	0	0	0	5
		[2]	101	0	0	0	0	3	0	0	21	0	0	0	0	0	0	0	0	125
35	Softball	[1]	5	0	3	0	95	3	0	0	22	8	1	0	0	6	2	0	2	147
		[2]	333	0	50	0	5738	512	0	0	456	84	15	0	0	110	104	0	100	7502
36	Swimming	[1]	190	203	115	9	219	75	59	6	176	199	113	83	99	89	95	127	63	1920

		[2]	9647	11097	3813	415	13091	5823	2204	69	10452	12033	4880	6162	9667	3097	9751	6375	3190	111766
37	Water ski	[1]	15	14	13	0	0	2	0	0	12	1	14	14	15	19	0	25	1	145
		[2]	924	397	354	0	0	57	0	0	312	41	637	1021	1496	853	0	704	50	6846
38	Skating	[1]	4	2	3	1	54	3	14	0	21	30	4	8	3	0	5	2	1	155
		[2]	7	164	57	1	3105	97	724	0	512	1253	106	281	177	0	527	95	1	7107
39	Squash	[1]	41	37	30	14	62	3	49	0	87	20	20	36	2	13	39	153	9	615
		[2]	565	1251	1299	1423	1220	3	1298	0	2971	6275	467	1983	922	497	757	4403	161	25495
40	Ski	[1]	62	20	39	7	24	7	12	0	91	83	35	41	20	1	20	14	2	478
		[2]	495	728	1510	55	1588	65	189	0	1833	2062	1887	2582	461	56	880	2011	20	16422
41	Scuba diving	[1]	11	2	1	19	0	27	16	0	53	46	14	25	27	11	17	37	14	320
		[2]	317	177	18	1170	0	220	589	0	1455	1301	225	932	632	258	406	805	882	9387
42	Paragliding	[1]	7	22	3	5	43	7	32	5	96	41	16	50	20	38	30	118	2	535
		[2]	196	571	43	54	3054	384	522	121	1219	1459	407	2329	685	687	351	3200	44	15326
43	Equestrian	[1]	15	5	10	0	5	4	4	0	41	12	26	36	28	7	41	51	29	314
		[2]	578	419	357	0	312	4	58	0	964	222	922	2594	876	126	2066	1031	327	10856
44	Survival game	[1]	11	1	0	4	0	26	1	0	4	10	6	6	1	6	0	4	4	84
		[2]	1001	58	0	213	0	10901	80	0	170	143	219	154	16	208	0	117	449	13729
45	Athletics	[1]	264	67	298	10	83	31	233	5	283	236	216	248	98	117	111	495	71	2866
		[2]	14230	1508	18628	1890	4424	3082	3528	188	13860	9561	5887	11312	11128	2399	16475	79737	1687	199524
46	Ice Hockey	[1]	7	0	0	0	0	4	0	0	34	10	4	1	0	2	1	2	7	72
		[2]	233	0	0	0	0	126	0	0	947	279	351	45	0	399	1	2	217	2600
47	Baseball	[1]	356	171	362	431	268	506	144	2	819	314	255	245	148	127	305	395	110	4958
		[2]	13376	6070	7515	14720	10894	23536	4207	2	19145	10802	6593	13267	5092	2789	8629	8927	2835	158399
48	Archery	[1]	2	1	0	1	0	0	14	0	14	2	2	3	0	1	1	2	0	43
		[2]	1	18	0	12	0	0	168	0	211	13	53	154	0	1	1	44	0	676
49	Roller skating	[1]	2	0	0	7	0	3	1	0	0	1	2	2	0	0	0	1	0	19
		[2]	50	0	0	40	0	53	21	0	0	19	89	13	0	0	0	25	0	310
50	Walking	[1]	93	36	67	4	65	71	18	0	18	18	75	39	169	2	51	147	7	880
		[2]	4313	3746	2864	741	50403	11396	375	0	733	1832	3543	13549	15913	55	4577	14598	402	129040
51	Weightlifting	[1]	3	2	0	0	0	3	0	0	5	5	3	3	1	0	3	3	0	31
		[2]	287	53	0	0	0	53	0	0	165	/8	89	64	28	0	4/	58	0	922
52	Orienteering	[1]	0	/	0	3	0	1	1	0	0	0	1	0	0	0	3	1	1	18
		[2]	0	426	0	195	0	51	20	0	0	0	50	0	0	0	5	18	115	880
53	Yoga	[1]	101	261	233	49	385	59	1/4	1	134	95	142	109	30	42	57	225	34	2131
	0.11	[2]	3827	14038	10507	2206	22523	11993	3258	3	3885	8762	5566	5416	873	1291	3261	6131	1315	104855
54	Sailing	[1]	16	1/	0	0	0	3	4	0	4	6	0	4	0	/	1	23	5	90
		[2]	379	440	0	0	0	3	166	0	81	189	0	183	0	1/0	36	412	157	2216
55	vvoodball	[1]	22	0	0	0	0	5	0	0	1/	0	4	2	0	0	0	0	0	50
50	14/	[2]	1114	0	0	0	0	401	0	0	653	0	159	137	0	0	0	0	0	2464
56	Wushu	[1]	55	0	27	31	30	3	15	0	64	1/	13	12	44	6	16	37	40	410
		[2]	1808	Ű	/66	1284	661	72	414	0	2165	583	595	1599	1319	65	347	963	1244	13885

57	Windsurfing	[1]	40	28	0	0	5	0	9	0	2	22	0	2	1	33	15	26	4	187
		[2]	5298	1753	0	0	393	0	194	0	170	358	0	209	16	713	223	805	64	10196
58	Judo	[1]	39	3	53	0	0	2	2	0	23	21	15	14	40	3	24	87	8	334
		[2]	1366	162	1887	0	0	2	9	0	722	594	453	2072	1685	110	524	1778	175	11539
59	Inline skating	[1]	120	85	19	88	47	16	16	0	208	92	48	34	26	63	43	84	12	1001
		[2]	4498	4916	776	2857	3462	1324	323	0	5501	1775	1628	1665	1064	2348	2330	1969	537	36973
60	Soft tennis	[1]	38	29	122	0	110	3	5	0	15	15	72	3	26	117	99	85	31	770
		[2]	1748	627	3258	0	4645	13	60	0	541	229	2846	62	1128	2257	4075	1860	516	23865
61	Foot volleyball	[1]	498	247	175	105	164	70	155	3	876	297	268	177	133	165	311	255	126	4025
		[2]	18097	6849	4534	4583	7243	2601	3134	281	14312	5933	4307	5371	3096	2310	21407	6184	1676	111918
62	Combined martial	[1]	54	35	27	26	47	8	0	0	92	6	7	2	5	34	14	17	0	374
	arts	[2]	1900	1087	1252	982	3843	200	0	0	2751	239	568	44	149	646	291	889	0	14841
63	Jumping rope	[1]	242	155	95	74	99	14	33	0	130	27	50	30	17	10	58	119	15	1168
		[2]	11082	7718	3484	4468	3706	3648	1147	0	5314	1557	1309	3458	1112	316	2019	4695	603	55636
64	Tug of war	[1]	54	40	18	3	40	0	1	0	12	1	21	47	50	62	14	3	0	366
		[2]	2797	1929	336	91	1687	0	21	0	125	127	465	2039	2111	1076	892	90	0	13786
65	Triathlon	[1]	32	54	22	13	14	5	14	1	67	29	10	6	9	13	24	20	16	349
		[2]	3172	2769	2174	329	488	131	502	9	2257	669	289	709	167	206	444	338	422	15075
66	Football	[1]	1546	594	320	423	484	655	687	31	2234	888	511	759	365	705	778	940	586	12506
-		[2]	203296	26424	10281	27881	29371	15102	16097	1621	72030	34471	18607	37570	16965	22577	25666	24407	22796	605162
67	Canoe	[1]	24	12	4	18	0	2	5	0	4	5	7	6	3	2	15	9	4	120
		[2]	1432	408	140	1654	0	84	84	0	65	139	211	339	97	16	361	252	94	5376
68	Climbing	[1]	7	7	11	0	1	21	1	0	21	5	19	9	0	0	1	10	3	116
		[2]	356	436	228	0	12	21	48	0	5/3	/4	395	435	0	0	42	345	33	2998
69	Kickboxing	[1]	29	1	0	0	2	4	0	0	12	8	3	16	22	0	0	2	0	99
	<b>-</b>	[2]	524	/	0	0	118	106	0	0	461	317	63	//8	/54	0	0	184	0	3312
70	l'able tennis	[1]	486	654	414	154	215	159	164	15	430	221	563	345	133	216	282	602	58	5111
74	Teelsuande	[2]	22297	20077	13103	6710	11400	19475	5254	343	12323	0204	1/009	12306	5190	4/00	10044	1/052	1304	195295
/1	Taekwondo	[1]	46007	201	0000	411	135	2244	9	2	200	130	107	42	120	2702	101	190	40	3400
70	Reduction martial	[2]	40237	10629	0020	11030	40	2311	297	20	20000	3914	2760	2/09	9217	3/02	5901	2002	1007	14/411
12	bouyguaru maniar	[1]	0770	0	166	588	2872	105	51	0	2507	551	0	242	361	1106	102	151	57	18800
70	Econoing	[4]	3110	0	100	000	2072	105	1	0	2337	551	0	242	16	1190	192	1.01	0	E1
13	rending	[1]	1042	0	22	0	0	50	0	0	61	102	0	0	1012	0	104	50	0	2542
74	Futcal	[2]	301	100	22	145	13	237	181	1	267	200	53	70	05	105	194	57	0	2043
74	i utsai	[1]	14196	14654	£200	2252	2200	20170	2700	22	4001	0190	2017	6024	2000	195	12062	2076	0	116040
75	Dodgoball	[2]	14100	14034	0309	2232	2209	32078	3790		4001	9100	2017	35	21	1019	12003	2270	11	301
15	Dougebail	[2]	2/2	1120	0	1/77	770	228	10	0	847	126	950	3026	1024	512	185	29 818	/12	12666
76	Field Hockey	[4]	16	1	11	3	2	0	19	0	17	120	13	1	024	0	0		-+12	86
10	riciu ricotey	[2]	293	1	410	80	26	0	0	0	307	924	197	1	624	0	0		0	2951
77	Aikido	[4]	293	55	1410	219	351	45	62	5	285	924	127	94	103	104	130	180	57	2330
11	AINIUU	11	219	55	141	219	551	40	02	J	200	53	121	34	105	104	150	100	51	2000

		[2]	17271	2873	5624	13606	19123	22848	4213	731	15590	3183	5083	5389	4849	3019	3981	5322	2187	134892
78	Aeronautics	[1]	6	0	0	3	0	1	0	0	8	0	2	0	0	0	3	0	2	25
		[2]	716	0	0	182	0	106	0	0	203	0	249	0	0	0	175	0	40	1671
79	Handball	[1]	86	14	25	38	34	6	9	0	21	8	5	10	16	4	30	14	8	328
		[2]	12102	276	387	540	805	147	154	0	314	158	93	387	521	175	1163	291	180	17693
80	X-game	[1]	14	7	1	0	1	45	2	2	1	7	1	13	0	1	3	10	1	109
		[2]	998	372	1	0	1	1957	14	237	1	99	16	550	0	12	324	254	1	4837
81	Sepaktacraw	[1]	2	0	0	0	0	10	0	0	20	5	0	0	0	0	0	0	0	37
		[2]	102	0	0	0	0	4255	0	0	101	52	0	0	0	0	0	0	0	4510
82	Hang-gliding	[1]	7	1	1	8	0	1	0	0	2	0	0	0	0	1	1	4	0	26
		[2]	266	36	14	119	0	100	0	0	114	0	0	0	0	645	114	112	0	1520
83	Flying disc	[1]	6	17	13	1	2	0	9	0	3	29	15	15	1	0	21	17	0	149
		[2]	382	461	634	153	149	0	225	0	25	148	1218	549	3	0	1010	534	0	5491
84	Karate	[1]	0	0	2	0	12	3	1	0	0	0	8	2	0	0	0	2	0	30
		[2]	0	0	3	0	575	3	52	0	0	0	262	782	0	0	0	62	0	1739
85	Mixed martial arts	[1]	66	0	0	6	10	5	0	0	0	1	0	0	6	0	0	0	0	94
		[2]	4859	0	0	106	246	5	0	0	0	111	0	0	66	0	0	0	0	5393
86	Cheerleading	[1]	18	1	0	0	10	0	0	0	0	0	0	1	0	0	0	1	0	31
07	Create steeling	[2]	1075	591	0	0	320	0	0	0	0	0	0	69	0	0	0	1	0	2056
87	Spons stacking	[1]	0	205	0	0	0	0	0	0	0	0	10	1	0	0	0	0	0	4
- 00	Curling	[2]	21	395	0	0	0	0	0	0	0	0	19	20	0	0	0	0	0	440
88	Curning	[1]	1323	47	0	0	0	0	0	0	0		0	0	0	0	0	0	0	1468
00	Danco Sports <sup>5</sup> )	[2]	307	245	513	120	344	76	123	0	118	90	117	200	157	0	228	255	105	3214
09	Dance Spons-	[2]	17307	12/01	16238	129	18086	11003	3524	0	4425	4471	3/81	0020	1854	2356	7852	9651	2700	134404
00	Tee ball	[4]	77	12-131	102.30	1	10300	2	0024	0	4423	1 / דיד	1	10	3	2000	0.002	3031	36	176
90		[2]	1674	345	93	23	366	57	0	0	133	7	28	719	48	0	0	249	683	4425
Q1	Trekking	[1]	0	1	0	0	25	0	0	0	0	0	0	0	0	0	0	2.10	0	28
51		[2]	0	22	0	0	4744	0	0	0	0	0	0	0	0	0	0	40	0	4806
92	Jiu-jitsu	[1]	0	1	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	5
02		[2]	0	2	0	0	108	0	0	0	0	144	0	0	0	0	0	0	0	254
93	Floorball	[1]	1	0	0	0	5	0	0	0	1	6	0	3	3	0	0	0	10	29
		[2]	2	0	0	0	89	0	0	0	1	124	0	163	43	0	0	0	145	567
94	Aerobics	[1]	20	99	14	1	11	5	3	1	0	11	66	36	5	1	5	14	10	302
		[2]	1045	4596	402	2	1241	5031	76	8	0	635	3119	4044	11	26	283	480	409	21408
95	Tennis	[1]	400	513	586	215	177	128	262	24	505	251	255	206	174	255	436	445	143	4975
		[2]	20013	29181	19902	9877	44709	22128	7905	665	15051	8401	7824	10026	6901	8393	14585	12937	3616	242114
96	National martial	[1]	667	132	57	54	143	83	5	1	24	24	81	64	18	7	10	43	58	1471
	arts <sup>6)</sup>	[2]	45909	25705	17468	12929	35367	8800	8182	117	32019	7465	7893	10264	8210	3569	6701	16546	4607	251751
	Total	[1]	13728	7231	6432	3987	6900	4803	4388	237	12287	6350	6527	6007	4519	6106	6528	10146	3221	109397
		[2]	794760	409720	225239	184518	497008	473711	131436	9499	408893	239837	205074	344113	233203	177642	328863	421551	96941	5182008

#### <G02> Teams and athletes in each region and sport (as of 2014)<sup>7</sup>)

			W	hole Cour	ntry	01	1	0	2	0	3	0	4	0	5	0	6	0	7	0	8	09	9	1	0	11	1	1:	2	13	3	14	4	1	5	10	6	1	7
		Seoul Busan Daegu Incheon Gwan		ngj	Daej	eon	Uls	san	Sej	ong	Gye	ong	Gan	gwo	Chu	ngb	Chu	ngn	Jeon	ibuk	Jeor	nna	Gye	ong	Gye	ong	Je	eju											
														U								g	i	r	۱	ul	<b>(</b>	ar	n			m	۱	bu	ık	na	ım		
			Т	М	F	М	F	М	F	М	F	М	F	М	F	М	F	М	F	М	F	М	F	М	F	М	F	М	F	М	F	М	F	М	F	М	F	М	F
									[	1] Nu	mber o	of regi	ional t	eams	in ead	ch spo	ort / [2	2] Nur	mber o	of regi	onal a	thletes	s in e	ach s	port (T	: total	; M: r	nale;	F: fen	nale)									
01	Total	[1]	18,9	11,7	7,26	1,51	995	671	398	649	378	543	350	426	255	386	270	297	218	73	33	2,12	1,28	740	471	583	369	602	389	558	376	567	342	711	443	770	478	329	195
			78	15	3	0																6	9																
		[2]	120,	92,6	28,0	13,2	3,39	4,91	1,51	4,17	1,52	4,18	1,60	3,21	1,06	2,53	1,13	1,94	861	420	91	17,7	4,48	5,59	1,84	4,00	1,57	4,45	1,59	4,71	1,58	4,64	1,40	5,59	1,89	6,49	1,75	5 2,13	3 703
			696	34	62	11	0	1	8	8	5	1	4	3	5	6	1	4				15	3	0	6	2	4	8	6	8	7	3	2	4	3	0	8	7	
02	Kendo	[1]	353	261	92	32	13	18	7	17	3	9	6	9	3	9	1	7	3	4	n/a	45	24	12	3	21	3	11	5	11	3	11	1	14	5	21	8	10	4
		[2]	2,00	1,80	205	162	32	91	7	75	3	68	10	78	5	47	1	37	7	33	n/a	345	72	79	7	153	9	65	5	75	9	124	7	130	13	171	12	70	6
			8	3																																			
03	Karate	[1]	177	124	53	4	1	6	1	14	3	2	1	26	14	5	1	7	6	n/a	n/a	15	7	1	n/a	n/a	n/a	6	1	n/a	1	3	n/a	18	11	6	4	11	2
		[2]	441	334	107	10	1	9	1	28	6	6	2	98	27	24	13	14	7	n/a	n/a	24	8	1	n/a	n/a	n/a	41	12	n/a	1	5	n/a	28	18		8	35	3
04	Golf	[1]	1,03	597	437	94	74	28	15	19	13	24	10	35	27	24	17	15	11	2	1	134	102	26	28	22	18	28	20	32	23	31	22	28	25	35	14	20	17
			4	. ==																	_																		
		[2]	2,83	1,79	1,03	207	141	94	51	62	41	64	22	81	39	51	27	30	17	6	3	544	289	87	65	96	64	143	82	69	52	78	43	//	44	72	32	37	25
			5	8	/												_																						
05	Nation	[1]	107	400	307	11	10	100	4	5	4	12	9	5	4	6	5	1	5	107	4	91	75	37	22	18	16	30	26	21	15	44	31	30	23	63	48	6	6
	al	[2]	11,6	10,2	1,37	345	83	163	29	88	10	332	42	192	32	150	28	244	41	137	13	2,07	321	966	81	482	69	745	96	621	79	990	87	/52	147	1,75	196	199	25
	arahari		24	45	9																	1														6			
	archery					•	-	-		-	-	-		_			•	-	•			•	-	-	•			_	•	-				-					
06	Modern	[1]	118	69	49	6	1	8	4	5	2	2	1	3	4	4	3	5	2	n/a	n/a	6	1	5	3	3	1	2	2	5	3	4	2	5	4	3	3	3	1
	pentath	[2]	430	313	117	47	17	24	1	23	5	8	1	18	8	16	11	24	4	n/a	n/a	31	17	18	11	15	1	8	8	14	3	18	1	24	1	11	9	14	1
07		[4]	000	110	04	07	0	7		0	0	0	0	4	-		0		0	1	- 1-	40	0		_	0	-	-		0		_	4	-	4			_	
07	Basket	[1]	200	119	81	2/	9	/	4	8	6	6	6	4	5	4	3	4	3	n/a	n/a	13	8	4	5	8	5	5	4	0	4	5	4	5	4	8		5	4
	ball	[2]	2,46	1,58	878	384	92	85	45	94	67	81	60	53	55	46	31	53	29	n/a	n/a	208	100	57	48	93	53	62	42	79	40	67	42	88	49	85	63	53	50
00	Dillions	[1]	111	0 64	47	5	6	2	2	1	1	3	2	2	2	2	2	1	1	1	n/2	28	18	1	2	3	1	5	1	2	2	2	1	1	1	1	1	1	1
08	Billiard	11	111	04	47	5	0	2	2	4	1	5	2	2	2	2	2		I	1	n/a	20	10	I	2	5	1	5	4	2	2	2	I.	I	I	1		I	'

3) Kendo includes Haidong gumdo

4) Golf includes 1) ground golf, 2) park golf, 3) screen (or indoor) golf

5) Dance Sports includes 1) Practical dance, 2) Life dance, 3) Traditional dance, 4) Belly dance, 5) Korean popular music dance

6) National martial arts includes 1) Ssireum, 2) Gyeongdang, 3) Gukmudo, 4) Guksundo, 5) Gukhakgigong, 6) Gungsudo, 7) Gigong, 8) Gicheonmun, 9) Taegeukkwon, 10) Taekkyeon, 11) Hwalgido, 12) Sunsul, 13) Haidong martial arts, 14) Mujeokdo, 15) Traditional martial arts

7) Refer in more detail to the Korean Sports and Olympic Committee (https://www.sports.or.kr/index.do)

		[2] 850	767	83	154	17	47	4	55	7	30	4	23	3	14	5	16	1	4	n/a	221	24	23	2	25	1	27	8	24	2	27	2	25	1	31	1	21	1
09	Dance	[1] 309	131	178	15	16	5	5	5	7	7	18	10	14	10	10	2	4	1	1	15	19	10	15	1	1	10	14	11	10	13	20	7	9	4	4	5	11
	sport	[2] 621	264	357	22	33	19	16	12	14	18	48	15	26	16	20	8	7	9	8	37	39	15	19	9	11	18	25	21	20	19	30	10	13	6	7	10	21
10	Ruaby	[1] 57	55	2	12	n/a	4	n/a	3	n/a	3	n/a	2	n/a	2	n/a	n/a	n/a	n/a	n/a	8	1	1	n/a	3	n/a	3	n/a	3	n/a	3	n/a	4	n/a	2	n/a	2	n/a
	0,	[2] 1,40	1,38	24	299	n/a	98	n/a	76	n/a	77	n/a	43	0	41	n/a	n/a	n/a	n/a	n/a	224	9	25	n/a	76	n/a	70	n/a	59	n/a	93	n/a	111	n/a	40	n/a	52	n/a
		8	4																																			
11	Wrestli	[1] 238	177	61	20	12	11	2	8	4	12	3	8	4	7	4	6	2	3	2	17	2	20	3	9	2	6	3	11	4	8	3	14	5	11	2	6	4
	na	[2] 1,79	1,58	210	241	54	111	4	80	14	117	10	90	22	72	15	32	3	11	3	154	7	106	9	91	5	67	5	115	6	65	11	111	14	87	12	38	16
	ng	8	8																																			
12	Luge	[1] 9	5	4	3	2	n/a	n/a	n/a	1	n/a	1	1	n/a	1	n/a	n/a	n/a	n/a	n/a																		
		[2] 27	17	10	5	4	n/a	n/a	n/a	1	n/a	11	5	n/a	1	n/a	n/a	n/a	n/a	n/a																		
13	Biathlo	[1] 83	47	36	4	2	8	6	n/a	n/a	n/a	n/a	1	1	n/a	1	n/a	n/a	n/a	n/a	9	6	9	6	1	2	1	n/a	11	9	2	3	1	n/a	n/a	n/a	n/a	n/a
	n	[2] 309	187	122	16	7	28	11	n/a	n/a	n/a	n/a	6	5	n/a	1	n/a	n/a	n/a	n/a	40	22	37	20	4	3	4	n/a	44	38	4	15	4	n/a	n/a	n/a	n/a	n/a
14	Bobsle	[1] 26	18	8	6	2	1	1	n/a	4	1	4	2	n/a	1	1	n/a	2	1	n/a																		
	igh	[2] 110	79	31	28	12	10	6	n/a	11	2	25	9	n/a	1	2	n/a	3	1	n/a																		
15	Volley	[1] 207	125	82	9	9	10	7	5	6	6	4	6	4	5	3	4	4	2	n/a	18	8	9	5	10	6	9	5	6	4	8	4	7	5	10	6	1	2
	hall	[2] 2,50	1,57	923	115	101	108	71	71	77	80	49	76	47	60	28	45	32	32	n/a	265	85	81	61	120	62	102	59	86	50	108	52	90	58	128	71	12	20
	Dali	2	9																																			
16	Badmi	[1] 301	164	137	9	8	5	7	11	12	9	8	7	8	4	3	5	4	n/a	n/a	30	13	9	8	12	8	8	10	12	9	8	8	10	10	17	11	8	10
	nton	[2] 2,11	1,22	891	101	74	58	61	75	81	77	40	59	34	29	22	37	29	n/a	n/a	207	97	67	46	83	55	81	63	88	64	52	47	68	55	114	63	28	60
	intoni	5	4																																			
17	Bodyb	[1] 639	515	124	95	41	62	16	38	9	26	7	32	4	16	4	11	1	3	n/a	78	16	13	4	11	1	14	1	11	3	13	1	37	8	50		4	1
	uildina	[2] 2,00	1,75	251	414	101	270	42	102	13	95	20	101	5	26	5	30	1	10	n/a	277	30	30	4	27	1	44	3	14	3	19	2	130	12	156	8	12	1
		9	8																																			
18	Boxing	[1] 608	496	112	85	21	24	4	36	10	20	5	11	1	11	2	9	3	4	1	97	20	34	/	11	4	35	6	27	/	26	6	33	8	19	5	14	2
		[2] 2,01	1,83	174	226	38	46	1	148	15	86	1	50	1	51	4	37	3	1	1	401	34	83	8	64	5	210	10	56	1	80	8	166	16	73	1	52	3
		0	6	404		40		0	40	0			40	-	7	7		0			45	0.4	0	-	-	-	04	40		0		0	40		45		7	
19	Bowlin	[1] 301	200	101	14 52	13	/	9	13	8	14	14	10	5	1	/	4	3	2	n/a	45	121	8	5	5	5	21	18	4	3	14	8	10	14	15	40	/	4
	g	[2] 1,00 8	921	007	55	44	57	30	01	43	00	40	44	10	40	31	10	14	9	II/a	205	131	22	20	22	30	133	117	20	0	50	30	34	50	40	40	41	21
20	Skatin	[1] 834	312	522	72	152	26	46	21	35	8	19	17	14	9	13	1	17	n/a	2	85	132	26	20	14	14	2	5	8	24	5	8	12	9	5	12	1	n/a
	a	[2] 1,65	713	944	188	277	34	59	58	98	9	25	29	25	9	18	1	26	n/a	3	182	222	95	54	22	21	16	16	24	55	5	11	34	19	5	15	2	n/a
	y	7																																				
21	Baduk	[1] 397	322	75	49	13	10	1	52	15	17	3	9	4	10	3	8	2	n/a	1	65	13	13	1	10	2	5	2	13	1	38	9	6	1	9	3	8	1
		[2] 893	728	165	146	26	17	8	93	24	34	8	15	9	17	8	12	6	n/a	1	116	16	23	5	24	6	10	7	25	1	142	21	16	4	18	10	20	5
22	Shooti	[1] 517	270	247	52	38	13	9	10	15	11	14	7	9	12	12	14	13	1	n/a	36	30	24	19	15	15	11	11	12	10	12	11	14	14	22	20	4	7
	na	[2] 3,70	2,42	1,28	324	181	139	63	196	82	95	75	87	47	98	58	79	56	1	n/a	351	130	242	117	106	105	72	56	120	48	89	59	149	89	258	92	16	25
	9	5	2	3																																		

23	Cyclin	[1] 185	127	58	18	7	6	4	6	3	5	3	4	3	6	4	3	1	n/a	n/a	24	5	7	2	6	3	10	2	6	3	5	3	11	8	9	5	n/a	2
	g	[2] 797	571	226	71	27	24	12	20	7	18	14	19	9	28	16	32	1	n/a	n/a	97	19	44	9	22	13	43	4	29	16	25	19	60	34	37	18	n/a	8
24	Alpine	[1] 590	355	235	49	39	28	21	25	17	8	3	24	10	11	5	4	3	4	4	47	39	26	16	13	12	19	7	12	11	18	6	32	23	25	15	10	4
	•	[2] 1,70	1,18	517	176	77	98	50	80	22	34	9	86	31	45	25	27	6	18	14	105	80	88	28	58	22	44	15	27	13	42	10	167	76	65	30	23	9
		0	3																																			
25	Sepakt	[1] 50	31	19	1	n/a	2	1	2	1	2	1	n/a	n/a	1	1	1	1	2	1	3	1	1	2	2	1	3	1	2	1	2	1	3	2	2	3	2	1
	akraw	[2] 266	183	83	6	n/a	14	5	12	4	10	4	n/a	n/a	4	4	4	3	11	4	20	6	8	8	11	4	14	5	11	4	14	5	18	11	12	12	14	4
26	Softhal	[1] 33	n/a	33	n/a	4	n/a	3	n/a	2	n/a	1	n/a	2	n/a	3	n/a	1	n/a	n/a	n/a	2	n/a	1	n/a	2	n/a	3	n/a	1	n/a	2	n/a	3	n/a	2	n/a	1
20	Julia	[2] 505	n/a	505	n/a	81	n/a	42	n/a	28	n/a	14	n/a	30	n/a	52	n/a	11	n/a	n/a	n/a	28	n/a	11	n/a	31	n/a	39	n/a	17	n/a	32	n/a	44	n/a	29	n/a	16
		[=]																																				
27	Waters	[1] 176	110	66	26	14	2	n/a	5	3	3	2	1	n/a	1	n/a	n/a	n/a	1	1	32	16	10	11	3	1	4	2	4	6	7	5	7	2	4	3	n/a	n/a
	ki	[2] 390	279	111	47	21	4	n/a	14	3	10	8	1	n/a	4	n/a	n/a	n/a	1	1	92	28	31	17	5	3	9	2	11	11	20	10	14	2	16	5	n/a	n/a
28	Swim	[1] 1.31	710	600	124	119	43	36	48	32	34	23	9	8	37	24	15	17	4	4	144	120	33	27	45	41	55	44	28	26	23	21	19	17	27	26	22	14
20	Swim	0		000						02	0.	20	0	0	0.				·	·			00						20	20	20					20		
	ming	[2] 3.75	2.23	1.52	322	278	152	108	143	71	116	85	30	21	104	51	47	41	16	7	352	265	137	73	117	102	184	114	147	89	107	55	103	55	101	69	54	39
		6	2	4																																		
20	Under	[1] 151	93	58	15	7	6	2	6	2	5	1	3	3	4	4	2	n/a	n/a	n/a	28	15	7	8	3	1	6	9	3	2	1	n/a	1	1	2	2	1	1
25	under	[2] 340	229	111	39	11	19	4	21	5	7	1	7	11	12	13	2	n/a	n/a	n/a	52	25	15	8	4	1	21	15	3	2	2	n/a	5	5	10	8	10	2
	water																																					
30	Ski	[1] 345	223	122	42	22	18	6	14	9	9	4	/	3	6	3	1	2	1	n/a	41	26	35	21	12	5	2	1	12	10	6	6	6	3	11	1	n/a	n/a
		[2] 859	598	261	81	35	32	14	36	10	1/	5	15	9	10	3	1	2	1	n/a	84	50	196	/4	23	1	1/	1	38	30	19	1/	13	3	15	1	n/a	
31	Squas	[1] 196	127	69	19	6	9	8	5	3	11	8	4	3	3	3	8	/	1	n/a	20	10	5	1	8	4	6	3	3	2	4	2	6	5	8	3	/	1
	h	[2] 390	259	131	33	15	22	12	10	6	21	15	18	11	9	1	13	9	3	n/a	33	15	6	4	15	6	22	10	11	5	6	4	15	6	14	5	8	1
32	Equest	[1] 175	109	66	10	11	4	2	2	2	3	2	6	1	1	1	2	n/a	2	1	28	17	7	n/a	3	2	9	3	10	7	5	4	12	8	3	2	2	3
		[2] 509	369	140	36	27	14	2	4	4	6	3	11	1	10	1	8	n/a	7	1	96	41	12	n/a	9	3	22	13	32	14	23	8	52	15	14	4	13	3
	rian												_																									
33	Ssireu	[1] 235	235	n/a	11	n/a	12	n/a	10	n/a	12	n/a	/	n/a	5	n/a	10	n/a	5	n/a	36	n/a	12	n/a	18	n/a	21	n/a	12	n/a	16	n/a	20	n/a	19	n/a	9	/a
	m	[2] 1,75	1,75	n/a	111	n/a	86	n/a	79	n/a	125	n/a	52	n/a	34	n/a	82	n/a	21	n/a	283	n/a	95	n/a	131	n/a	134	n/a	80	n/a	141	n/a	135	n/a	120	n/a	44	n/a
		3	3	50		0.1	-	•		-	•		•	•	•	•		,				40	•			,	,	,					•	-			,	
34	Ice	[1] 150	94	56	41	21	5	3	6	5	3	1	3	2	3	3	n/a	n/a	n/a	n/a	24	16	3	1	n/a	n/a	n/a	n/a	1	1	1	n/a	3	2	1	1	n/a	n/a
	hockey	[2] 2,20	2,03	229	825	88	94	12	118	15	42	3	53	10	15	13	n/a	n/a	n/a	n/a	567	61	127	10	n/a	n/a	n/a	n/a	21	5	19	n/a	64	9	26	3	n/a	n/a
		6	1		07				40		40		10						-		50		40	1			10				45		10		45			
35	Baseb	[1] 449	445	4	6/	n/a	23	n/a	13	n/a	18	n/a	16	n/a	5	n/a	3	n/a	1	n/a	50	n/a	13	n/a	11	n/a	12	n/a	14	n/a	15	1	13	n/a	15	n/a	6	n/a
	all	[2] 10,6	10,6	4	2,03	n/a	659	n/a	413	n/a	512	n/a	448	n/a	151	n/a	67	n/a	33	n/a	1,20	n/a	296	n/a	295	n/a	281	n/a	405	n/a	329	1	288	n/a	355	n/a	152	n/a
00	Analas	15	11	100	9	16	10	10	15	10	17	15	0	7	10	0	0	11	1	nla	5	22	20	21	10	21	0	0	7	11	0	11	14	12	0	12	2	
36	Archer	[1] 404	205	199	19	61	1Z	20	10	20	1/	10	9	1	10	9	0	11	2	n/a	20	23	20	21	70	21	9	0	1	10	0	11	62	12	9	12	3 11	-2
	у	[∠] 1,03 5	900	000	09	01	55	30	07	30	100	19	40	44	55	40	51	43	3	n/a	155	114	94	04	10	75	49	33	30	49	23	42	03	54	55	40		'
37	Weight	[1] 323	190	133	4	6	9	6	8	4	14	10	11	10	7	6	6	5	n/a	n/a	29	17	22	15	12	8	14	9	9	6	14	5	9	9	13	10	9	7
01	a cigili	1.1			-	-	-	-	-					• •	-	-	-	-								-		-	-	-		-	-	-			-	

	lifting	[2]	1,21 4	842	372	49	30	48	20	47	12	59	27	41	23	22	14	19	21	n/a	n/a	136	36	64	45	59	19	63	21	58	14	35	15	47	29	76	31	19	15
38	Orient	[1]	55	34	21	5	3	17	14	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	9	2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	1	n/a	n/a	n/a	n/a	n/a
	ooring																																						
	eening																																						
		[2]	190	143	47	14	7	104	31	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	16	3	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	5	n/a	n/a	n/a	n/a	n/a
30	Sailing	[1]	179	129	50	16	10	18	7	3	n/a	5	1	1	n/a	1	1	5	1	1	n/a	10	2	3	1	2	1	7	4	4	3	9	5	4	n/a	17	6	5	2
00	Cannig	[2] 4	433	353	80	30	16	52	14	12	n/a	14	1	4	n/a	3	1	11	2	1	n/a	20	5	8	1	5	3	27	5	13	6	31	7	10	n/a	46	8	8	2
40	Wushu	[1] ;	394	277	117	8	6	7	1	20	14	13	2	5	1	7	4	11	3	6	n/a	52	24	26	10	9	4	11	3	20	5	6	4	42	15	21	13	13	8
		[2]	1,09	888	204	31	15	16	1	53	24	21	2	16	2	28	6	20	3	11	n/a	182	39	111	27	33	6	50	8	38	8	15	4	168	29	76	19	19	11
		:	2																																				
41	Judo	[1]	533	341	192	35	14	17	11	13	9	21	7	6	5	12	6	11	9	n/a	n/a	49	27	28	19	14	5	31	20	15	10	12	6	35	18	17	12	24	13
		[2]	3,36	2,50	860	238	86	153	50	89	43	138	35	33	12	95	23	52	29	n/a	n/a	500	171	190	89	104	29	166	49	145	45	108	36	296	75	108	55	91	32
		1	8	8																																			
42	Triathl	[1]	110	65	45	7	6	5	5	6	3	3	2	1	n/a	2	2	2	n/a	1	1	10	6	2	3	4	n/a	3	2	2	1	1	n/a	5	5	6	6	4	3
	on	[2]	228	147	81	11	8	8	6	10	7	6	4	3	n/a	4	6	6	n/a	4	3	26	13	5	4	12	n/a	5	4	5	3	4	n/a	12	9	12	10	11	4
43	Athleti	[1]	1,64	893	747	56	52	31	25	45	26	34	38	16	10	25	24	25	18	11	6	157	141	66	55	67	53	51	42	59	48	55	44	74	67	93	77	28	21
10	7 11 11 0 11		0																																				
	CS	[2]	6,58	4,04	2,54	417	228	210	97	178	87	184	158	100	47	112	68	71	60	19	12	980	563	222	159	202	118	163	110	253	185	296	206	325	200	229	171	84	73
		1	7	5	2																																		
44	Roller	[1]	298	175	123	20	10	7	3	11	8	5	3	4	3	7	3	6	4	n/a	n/a	31	20	10	9	18	13	9	8	7	7	10	11	13	10	13	9	4	2
	norts	[2]	1,01	688	328	110	19	10	4	23	23	12	10	36	8	12	12	11	9	n/a	n/a	235	61	30	25	60	37	19	17	38	26	31	30	27	21	29	23	5	3
	ponto		6																																				
45	Soft	[1]	235	136	99	7	6	5	4	13	7	8	6	8	3	7	6	4	4	n/a	n/a	11	8	12	8	13	9	7	4	7	7	9	9	11	9	9	8	5	1
	tennis	[2]	1,63	982	651	43	39	37	32	137	50	60	42	43	23	47	41	34	23	n/a	n/a	84	61	88	52	82	65	57	24	46	30	75	66	73	61	44	35	32	7
10	<u> </u>	[4]	3	50	40	•	7	0	0	-		4	0	0	0	0			1		1	_	7	0	0	0	•		0	0		0	0	0		0			
46	Rowin	[1] 3	80 80	30	42	0	20	57	3	2	1	4	2 15	2	3	3	2	n/a	n/a	n/a	n/a	20	1	3	3	3	3	4	3 10	2 16	6	2 12	3	3	7	26	4	n/a	n/a
	g	[2]	022	417	205	52	29	57		20	4	22	15	0	10	10	2	n/a	n/a	n/a	n/a	39	41	19		50	19	21	10	10	0	12	19	15	1	50	15	n/a	n/a
47	Gymn	[1]	556	210	346	21	62	18	20	11	13	15	17	11	19	9	14	9	13	n/a	n/a	26	56	10	16	13	12	11	29	11	21	12	9	14	16	16	24	3	5
	actice	[2]	2,26	742	1,52	118	201	46	81	31	74	38	83	34	81	23	62	27	66	n/a	n/a	115	176	43	67	31	88	54	143	45	131	30	21	53	131	42	96	12	20
	astics	:	3		1																																		
48	Footba	[1] 8	840	738	102	132	11	33	3	32	7	29	4	21	5	19	7	16	6	n/a	n/a	192	16	35	5	23	6	27	4	38	7	29	4	37	4	50	7	25	6
	Ш	[2]	22,7	21,2	1,58	3,91	106	977	18	791	96	846	94	673	82	486	108	503	112	n/a	n/a	5,19	232	1,11	114	670	98	691	72	1,29	63	882	72	1,09	87	1,45	136	631	91
		9	98	17	1	6																4		8						2				3		4			
49	Cricket	[1]	3	1	2	n/a	n/a	n/a	n/a	n/a	n/a	1	2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	/a
50	0	[2]	145	2	23	n/a	n/a	n/a	n/a	n/a	n/a	2	23	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	1
50	Canoe	[1]	140 646	90	102	/ 51	ۍ ۵	20 20	ა 6	21	2	38	ວ 19	6	n/a	26 26	5 12	4	n/a	n/a	n/a	0	5 24	30	25	33	1 27	1	4	2 21	3 7	4	∠ 11	1	4	35	4 9	∠ 1/	1
		[4]	040	404	192	51	0	20	0	31	9	30	10	0	n/d	20	12	10	n/a	n/d	n/a	42	24	39	20	33	21	30	17	∠ I	1	<b>∠</b> I		24	19	35	0	14	

#### Global sporting performance of nations - A method for measuring the level of national sport's policies

Global sporting	performance of	f nations -	A me	ethod for	measuring	the	level	of	national	sport's	policies

51	Curling	[1] 108	56	52	12	14	2	2	2	4	2	2	3	3	1	1	1	n/a	1	n/a	4	5	4	2	6	4	2	n/a	4	5	4	3	6	5	2	2	n/a	n/a
		[2] 799	435	364	100	71	47	39	18	29	11	13	18	21	7	6	6	n/a	7	n/a	26	39	27	11	39	32	8	n/a	26	35	45	16	35	40	15	12	n/a	n/a
52	Table	[1] 266	132	134	9	10	8	8	6	7	7	12	4	3	6	5	4	4	n/a	n/a	19	26	11	9	8	10	14	9	4	5	7	6	13	10	9	7	3	3
	tonnio	[2] 1,70	852	848	72	76	35	40	53	44	57	89	29	23	40	41	18	32	n/a	n/a	122	168	65	36	39	38	104	61	24	37	40	33	87	72	51	42	16	16
	tennis	0																																				
53	Taekw	[1] 2	1	1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	1	1	n/a															
	ondo	[2] 7	5	2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	5	2	n/a															
54	Taekk	[1] 323	197	126	19	9	15	9	2	1	16	14	6	4	11	10	12	8	n/a	n/a	37	18	6	5	13	8	4	1	16	8	7	6	n/a	n/a	28	21	5	4
		[2] 1,02	726	295	79	28	42	14	10	11	67	30	17	8	40	20	36	18	n/a	n/a	176	51	19	8	40	10	5	1	46	45	28	13	n/a	n/a	91	29	30	9
	yon	1																																				
55	Tennis	[1] 377	207	170	23	14	8	7	8	9	8	8	4	4	7	6	7	7	1	3	51	40	20	16	13	7	9	6	8	6	5	4	15	14	11	12	9	7
		[2] 1,56	933	632	101	69	33	21	35	21	33	25	24	19	25	23	35	21	5	17	225	130	115	77	55	26	39	23	38	25	24	21	76	59	42	37	28	18
		5																																				
56	Fencin	[1] 261	135	126	20	17	13	12	4	4	7	7	11	6	10	9	5	6	n/a	n/a	15	15	7	6	8	6	4	8	12	8	7	10	4	5	7	6	1	1
		[2] 1,63	887	745	151	118	68	69	54	15	43	54	51	35	88	56	26	24	n/a	n/a	100	89	47	35	57	37	14	37	77	69	33	54	29	27	46	25	3	1
	g	2																																				
57	Hocke	[1] 82	42	40	6	3	2	1	2	4	3	3	3	2	2	2	n/a	n/a	n/a	n/a	5	6	1	2	2	2	3	3	2	2	2	3	5	3	3	3	1	1
		[2] 1,45	747	708	103	61	30	20	38	79	50	47	54	32	32	34	n/a	n/a	n/a	n/a	94	93	12	27	33	37	52	54	32	43	41	53	89	52	57	58	30	18
	у	5																																				
58	Handb	[1] 168	88	80	7	8	6	4	5	6	5	8	6	5	4	3	2	3	n/a	n/a	10	6	8	8	7	7	6	5	5	4	4	3	5	4	5	6	3	n/a
		[2] 2,32	1,24	1,08	90	109	85	74	77	73	83	119	75	56	53	35	19	42	n/a	n/a	144	75	116	118	96	109	90	58	74	59	56	39	76	44	76	72	37	n/a
	all	9	7	2																																		
59	Kabad	[1] 18	13	5	n/a	n/a	7	4	n/a	2	n/a	1	n/a	n/a	n/a	n/a	n/a	1	1	n/a	n/a	2	n/a	n/a	n/a													
	di	[2] 164	114	50	n/a	n/a	74	49	n/a	6	n/a	1	n/a	n/a	n/a	n/a	n/a	16	1	n/a	n/a	17	n/a	n/a	n/a													
60	Kickho	[1] 229	174	55	22	9	n/a	n/a	16	6	14	3	5	n/a	1	1	n/a	n/a	n/a	n/a	53	14	10	3	21	6	9	5	6	2	6	n/a	4	2	n/a	n/a	7	4
00	NICKDU					<u> </u>									·	·		,u												-			·	-			·	
	xing	[2] 502	428	74	33	10	n/a	n/a	49	10	36	4	5	n/a	15	4	n/a	n/a	n/a	n/a	144	19	15	3	49	7	32	9	12	2	7	n/a	5	2	n/a	n/a	26	4

		Se	90	Bus	Dae	Inch	Gwa	Daej	Ulsa	Sejo	Gye	Gan	Chu	Chu	Jeon	Jeon	Gye	Gye	Jeju	Total
		ul		an	gu	eon	ngju	eon	n	ng	ongg	gwo	ngbu	ngna	buk	nam	ongb	ongn		
											i	n	k	m			uk	am		
							[1]	Numbe	r of pu	blic ver	nues /	[2] Nun	nber of	registe	ered ve	nues				
01	Athletics	[1]	3	3	6	4	2	3	5	n/a	43	30	15	13	18	24	31	30	12	242
02	Football	[1]	64	32	24	28	18	13	27	2	169	56	28	18	93	68	55	139	18	852
03	Hockey	[1]	1	1	1	2	n/a	n/a	n/a	n/a	3	2	1	2	n/a	2	n/a	1	n/a	16
04	Baseball	[1]	12	8	8	6	6	1	1	1	52	18	8	10	16	11	20	21	3	202
05	Cycling	[1]	1	1	1	1	n/a	1	n/a	n/a	1	2	1	n/a	1	1	n/a	1	n/a	12
06	Tennis	[1]	60	25	20	30	17	9	7	4	143	68	29	30	56	52	48	90	8	696
07	Ssireum	[1]	n/a	1	2	1	1	1	1	n/a	10	4	1	1	7	7	9	5	1	52
08	Gateball	[1]	6	16	3	26	10	15	6	10	212	153	91	198	125	172	38	127	18	1,226
09	Swimming	[1]	89	22	14	16	9	17	9	4	69	15	10	5	17	17	21	21	2	357
		[2]	97	26	22	15	10	23	16	n/a	170	42	8	31	25	36	32	31	23	607
10	Roller sports	[1]	14	15	3	4	2	2	2	1	29	10	8	5	6	8	12	20	2	143
11	Shooting	[1]	n/a	1	1	1	n/a	n/a	1	n/a	1	5	3	1	1	1	4	4	n/a	24
12	National	[1]	8	2	3	7	3	5	4	2	42	31	14	21	15	36	15	38	5	251
	Archery																			
13	Archery	[1]	1	1	2	2	1	1	1	n/a	5	2	3	n/a	1	1	1	n/a	n/a	22
14	Equestrian	[1]	1	2	2	n/a	1	1	n/a	n/a	1	3	n/a	1	2	1	3	n/a	n/a	18
		[2]	1	2	n/a	3	n/a	n/a	1	1	56	6	3	10	11	12	22	16	34	178
15	Golf (indoor)	[1]	32	6	n/a	2	2	n/a	n/a	n/a	6	6	2	n/a	2	5	5	5	1	74
	. , _	[2] 2,	032	545	541	377	186	261	420	17	2,576	342	315	330	302	337	590	605	152	9,928
16	Golf (field)	[2]	n/a	8	2	9	4	3	4	2	147	58	37	21	25	35	46	33	40	474

### <G03> Sports venues in each region and sports (as of 2014)<sup>8)</sup>

8) Refer in more detail to the Korea Sports Promotion Foundation (http://english.kspo.or.kr/)

17	Rowing,	[1]	n/a	1	n/a	n/a	n/a	n/a	n/a	n/a	2	1	4	n/a	n/a	2	n/a	1	n/a	11
	Canoeing	[2]	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	2	n/a	2
18	Sailing	[1]	n/a	1	n/a	n/a	n/a	n/a	n/a	n/a	1	2	1	1	1	2	1	7	n/a	17
		[2]	1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	1	n/a	1	1	11	3	18
19	Skating	[1]	3	1	1	n/a	1	1	n/a	n/a	7	2	n/a	1	1	n/a	1	2	n/a	21
		[2]	11	4	2	1	n/a	1	n/a	n/a	7	3	2	4	1	1	5	n/a	1	43
20	Ski	[1]	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	3	n/a	n/a	n/a	n/a	n/a	n/a	n/a	3
		[2]	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	5	10	1	n/a	1	n/a	n/a	1	n/a	18
21	Car racing	[2]	n/a	n/a	n/a	1	n/a	n/a	n/a	n/a	1	2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	4
22	Billiards	[2]	4,456	1,045	624	1,404	956	603	515	72	5,461	861	759	917	1,013	1,123	1,144	1,207	296	22,456
23	Dance	[2]	120	65	103	32	43	53	29	6	198	32	11	28	42	41	57	66	57	928
	Sports																			
24	Martial art	[2]	2,466	875	750	828	454	443	400	49	3,716	358	339	526	556	476	768	842	170	13,848
25	Sled	[2]	5	4	3	3	1	2	1	n/a	37	37	8	10	8	9	11	8	1	148
26	Martial art	[1]	4	2	4	2	2	-	-	-	4	11	3	-	2	4	4	3	1	
	arena																			
27	Village	[1]	2,372	952	446	817	527	339	202	14	2,510	1,262	1,174	646	604	954	1,705	1,303	219	16,042
	sports facility	[2]	1,933	529	372	323	227	249	174	14	1,613	189	189	227	211	192	357	485	79	7,363
28	General	[1]	123	29	17	24	15	19	12	8	200	69	33	45	56	58	58	84	25	875
	stadium	[2]	86	19	15	4	8	7	1	n/a	62	6	8	6	4	4	15	10	3	258
29	Leisure	[1]	84	19	9	16	12	11	6	5	79	22	17	17	30	19	30	36	6	
	facility																			
30	Ball games	[1]	25	5	3	5	2	7	6	3	94	34	12	25	22	33	23	40	16	

No.	Sport	Sport Number of Number of Number of international games held					Number of international Games			
		national	national Elite	in Korea		participated (held in	out-of-Korea)			
		Sport-for-all	sport games	Number of games	Number of	Number of games	Number of			
		games hosted <sup>10)</sup>	hosted <sup>11)</sup>	participated	Participants	participated	Participants			
01	Athletics	4	23	11	141	6	143			
02	Football	6	41	22	163	84	272			
03	Tennis	2	23	35	12	197	270			
04	Soft tennis	3	15	1	10	16	289			
05	Table tennis	4	14	2	28	31	553			
06	Handball	2	12	1	3	11	222			
07	Weightlifting	n/a	5	n/a	n/a	9	177			
08	Boxing	n/a	7	1	67	10	116			
09	Skating	3	24	2	41	34	315			
10	Judo	n/a	14	1	42	12	317			
11	Gymnastics	2	16	2	58	21	179			
12	Cycling	6	5	3	60	19	207			
13	Basketball	5	13	1	7	8	220			
14	Volleyball	3	13	6	32	17	313			
15	Rugby	n/a	7	2	4	12	304			
16	Wrestling	n/a	6	n/a	n/a	12	229			
17	Swimming	1	7	n/a	n/a	2	15			
18	Baseball	8	19	n/a	n/a	3	117			
19	Ski	2	11	14	4	33	127			
20	Equestrian	8	11	1	11	4	14			
21	Ice hockey	2	7	4	8	11	350			

### <G04> State of national and international games by sports (as of 2014)<sup>9)</sup>

9) Refer in more detail to the Korean Sports and Olympic Committee (https://www.sports.or.kr/index.do)
Global sporting performance of nations - A method for measuring the level of national sport's policies

22	Kendo (Kumdo)	3	16	n/a	n/a	n/a	n/a
23	Shooting	4	11	1	2	7	231
24	Fencing	n/a	8	3	73	71	615
25	Taekwondo	4	17	1	74	11	188
26	Badminton	3	7	4	64	32	828
27	Rowing	n/a	6	1	19	7	53
28	Roller sports	3	5	4	18	8	1,063
29	Sailing	n/a	5	2	30	13	75
30	Bowling	3	9	1	19	4	60
31	Archery	n/a	9	1	20	8	126
32	Canoeing	n/a	5	n/a	n/a	8	59
33	Golf	9	12	1	24	12	50
34	Modern Pentathlon	n/a	5	1	6	9	84
35	Waterski	n/a	3	n/a	n/a	7	39
36	Alpine	3	6	3	48	28	286
37	Bodybuilding	3	5	n/a	n/a	7	33
38	Sepaktakraw	n/a	3	1	13	7	120
39	Underwater	6	4	1	5	4	47
40	Wushu	n/a	2	n/a	n/a	4	46
41	Softball	n/a	3	n/a	n/a	2	45
42	Bobsleigh.Skeleton	n/a	2	n/a	n/a	29	114
43	Curling	n/a	6	6	18	50	700
44	Triathlon	6	8	2	40	10	23
45	Biathlon	n/a	3	n/a	n/a	12	66
46	Squash	3	5	n/a	n/a	4	60
47	Billiard	18	1	2	41	25	155
48	Karate	n/a	4	2	38	4	78
49	Dance Sports	n/a	1	n/a	n/a	9	178

Global sporting performance of nations - A method for measuring the level of national sport's policies

50	Luge	n/a	2	n/a	n/a	6	35
51	Baduk	n/a	2	6	55	4	20
52	Kabadi	n/a	2	1	4	10	116
53	Aerobics	n/a	n/a	1	10	3	129
54	National Archery	2	7	n/a	n/a	n/a	n/a
55	Taekkyeon	4	4	n/a	n/a	n/a	n/a
56	Hockey	3	6	n/a	n/a	n/a	n/a
57	Ssireum	1	7	n/a	n/a	n/a	n/a
	Total	139	494	154	1,312	967	10,471

<sup>10)</sup> It includes the games of President's Cup, Prime minister's Cup, Minister's Cup, and President's Cup of Korea Olympic Committee. And there are some more sports (number of games) included: Gateball (5), Windsurfing and Kiteboarding (3), Foot volleyball (14), Futsal (6), Aikido (4), Gliding (3), Tug of war (3), Kukmudo (3), Gukhakgigong (3), Fishing (3), Wushu (3), Combined martial art (2), Racquetball (4), Ground Golf (3), Park Golf (2), and Skipping rope (3).

<sup>11)</sup> It includes the games of President's Cup, Prime minister's Cup, Minister's Cup, and President's Cup of Korea Olympic Committee.

		Number of participants in the		Number of participants in the			Number of participants in the			Number of		No. of				
		Korea	national	l sports	summer	Korea national sports winter			Korea national sports summer			games hosted		internat		
			ga	mes			games			games of Youth						ional
		Total	Staff	At	hlete	Total	Staff	Ath	lete	Total	Staff	At	hlete	National	Internat	meetin
				Male	Female			Male	Female			Male	Female	games	ional	gs
															games	hosted
01	Seoul	1,821	430	866	525	711	146	396	169	1,127	280	484	363	31	22	6
02	Busan	1,566	367	803	396	205	49	95	61	1,061	319	445	297	4	5	1
03	Daegu	1,452	389	694	369	268	69	113	86	1,113	313	479	321	6	3	n/a
04	Incheon	1,522	344	707	471	162	67	66	29	1,099	300	478	321	17	21	6
05	Gwangju	1,312	316	650	346	197	79	69	49	988	288	428	272	3	2	n/a
06	Daejeon	1,405	379	671	355	96	38	39	19	1,081	322	454	305	4	2	n/a
07	Ulsan	1,014	294	476	244	59	46	6	7	870	286	350	234	5	3	n/a
08	Sejong	335	108	194	33	15	10	5	n/a	162	73	62	27	n/a	n/a	n/a
09	Gyeonggi	2,049	471	982	596	518	117	241	160	1,197	335	491	371	16	15	n/a
10	Gangwon	1,447	304	738	405	421	92	251	78	991	259	431	301	65	29	n/a
11	Chungbuk	1,497	379	708	410	174	75	57	42	1,065	295	452	318	28	2	1
12	Chungnam	1,661	410	819	432	74	38	30	6	1,046	312	450	284	14	2	n/a
13	Jeonbuk	1,501	362	744	395	317	117	102	98	1,088	305	468	315	13	11	n/a
14	Jeonnam	1,651	423	803	425	159	82	37	40	1,092	308	459	325	37	8	n/a
15	Gyeongbuk	1,728	409	821	498	188	65	86	37	1,071	284	463	324	59	19	2
16	Gyeongnam	1,710	413	833	464	86	41	28	17	1,110	305	475	330	19	6	n/a
17	Jeju	1,136	240	547	349	15	8	7	n/a	639	155	332	152	12	4	1

## <G05> State of national and international events by region (as of 2014)<sup>12</sup>)

12) Refer in more detail to the Korean Sports and Olympic Committee (https://www.sports.or.kr/index.do)

<g06> S</g06>	ports	institute	(as	of	2014)	13)
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Institute	Classification			No. of students
Sports department in College	No. of department			248
	No. of students	Male		16,470
		Female		3,741
		Total		20,211
	No. of staff	Male		260
		Female		52
		Total		312
Sports department in University	No. of department			540
	No. of students	Male		59,184
		Female		17,921
		Total		77,150
	No. of staff	Male		1,259
		Female		322
		Total		1,581
Sports department in graduate school	No. of department	Master		348
		Doctor		116
	No. of students	Master	Male	5,419
			Female	2,458
			Total	7,877
		Doctor	Male	1,072
			Female	636
			Total	1,707
	No. of staff	Male		32
		Female		22
		Total		54
No. of sports-related Societies				17
No. of sports research centres affiliated with universities				51

<sup>13)</sup> Refer in more detail to the Korean Educational Development Institute (https://www.kedi.re.kr/khome/main/webhome/Home.do)

Region	Middle	High scho	ol (16-18	Region	Middle	High scho	ool (16-18	Region	Middle	High scho	ol (16-18
	school	yea	rs)		school	yea	ars)		school	yea	irs)
	(13-15	General	Industrial		(13-15	General	Industrial		(13-15	General	Industrial
	years)	high	high		years)	high	high		years)	high	high
		school	school			school	school			school	school
01. Seoul	1,467	722	347	07. Ulsan	213	102	36	13. Jeonbuk	386	177	55
National	8	4	1	National	n/a	n/a	n/a	National	n/a	2	2
Public	1,098	283	129	Public	200	77	28	Public	286	57	30
Private	361	435	217	Private	13	25	8	Private	100	118	23
02. Busan	532	260	146	08. Sejong	31	11	6	14. Jeonnam	405	145	89
National	n/a	4	4	National	n/a	n/a	n/a	National	n/a	n/a	n/a
Public	427	111	72	Public	31	8	6	Public	341	75	69
Private	105	145	70	Private	n/a	3	n/a	Private	64	70	20
03. Daegu	415	192	121	09. Gyeonggi	2,096	1,232	220	15. Gyongbuk	499	230	89
National	4	3	n/a	National	n/a	n/a	n/a	National	n/a	n/a	2
Public	312	60	76	Public	1,898	925	128	Public	373	87	55
Private	99	129	45	Private	198	307	92	Private	126	143	32
04. Incheon	439	238	86	10. Gangwon	310	143	38	16. Gyongnam	596	279	97
National	n/a	n/a	2	National	n/a	3	n/a	National	3	2	n/a
Public	415	170	62	Public	282	101	33	Public	459	159	65
Private	24	68	22	Private	28	39	5	Private	134	118	32
05. Gwangju	296	123	35	11. Chungbuk	287	103	55	17. Jeju	108	41	17
National	3	3	n/a	National	7	3	n/a	National	4	2	n/a
Public	216	31	21	Public	244	63	45	Public	87	20	17
Private	77	89	14	Private	36	37	10	Private	17	19	n/a
06. Daejeon	273	120	63	12. Chungnam	362	173	57				
National	n/a	n/a	n/a	National	2	1	n/a				
Public	240	59	38	Public	292	111	44				
Private	33	61	25	Private	68	61	13				

## <G07> Number of Physical Education teachers in Middle and High school (as of 2014)<sup>14</sup>)

<sup>14)</sup> Refer in more detail to the Ministry of Education (http://www.moe.go.kr/main.do?s=english)

			International spe	orts federation			Asian sports federation			
		Executive	O a such a vist	0	Otherm	Executive	O a sure ta wiset	0	Otherne	
		board	Secretariat	Committee	Others	board	Secretariat	Committee	Others	
01	Athletics	7	n/a	1	2	1	n/a	6	3	
02	Football	5	n/a	n/a	4	n/a	n/a	8	2	
03	Soft tennis	8	1	2	3	1	n/a	2	n/a	
04	Table tennis	4	n/a	1	1	2	n/a	3	n/a	
05	Handball	1	n/a	n/a	1	n/a	n/a	3	1	
06	Weightlifting	1	n/a	n/a	1	1	1	1	2	
07	Boxing	3	n/a	1	n/a	1	n/a	n/a	n/a	
08	Skating	3	n/a	n/a	2	2	1	2	n/a	
09	Judo	3	n/a	1	2	1	n/a	2	1	
10	Gymnastics	2	n/a	1	1	1	n/a	3	n/a	
11	Cycling	1	n/a	1	n/a	2	1	n/a	n/a	
12	Westling	2	n/a	2	n/a	1	n/a	n/a	n/a	
13	Baseball	3	n/a	1	2	1	n/a	2	n/a	
14	Ski	19	1	n/a	18	2	1	n/a	n/a	
15	Kumdo	2	1	1	n/a	n/a	n/a	n/a	n/a	
16	Biathlon	2	1	1	n/a	2	1	n/a	n/a	
17	Shooting	4	n/a	1	3	n/a	n/a	2	n/a	
18	Fencing	2	n/a	1	1	n/a	n/a	n/a	n/a	
19	Taekwondo	8	2	5	n/a	n/a	n/a	n/a	n/a	
20	Rowing	1	n/a	n/a	1	n/a	n/a	n/a	n/a	
21	Roller sports	1	n/a	n/a	1	1	n/a	2	n/a	
22	Sailing	1	n/a	n/a	1	n/a	n/a	2	2	

# <G08> Number of Koreans working for the international sports governing body (as of 2014)<sup>15</sup>)

15) Refer in more detail to the Korean Sports and Olympic Committee (https://www.sports.or.kr/index.do)

Global sporting performance of nations - A method for measuring the level of national sport's policies

23	Archery	6	n/a	n/a	5	1	6	n/a	n/a
24	Modern pentathlon	3	1	1	1	2	n/a	1	n/a
25	Waterski	1	n/a	n/a	1	1	n/a	7	n/a
26	Alpine	2	n/a	1	1	1	1	n/a	n/a
27	Climbing	2	n/a	n/a	2	n/a	n/a	n/a	n/a
28	Mountain ski	1	n/a	n/a	1	1	n/a	n/a	n/a
29	Bodybuilding	1	n/a	1	n/a	n/a	n/a	n/a	n/a
30	Sepaktakraw	1	1	n/a	n/a	1	n/a	1	n/a
31	Underwater	2	n/a	1	1	n/a	n/a	n/a	n/a
32	Dance Sports	2	n/a	n/a	n/a	n/a	n/a	1	n/a
33	Triathlon	1	n/a	1	n/a	1	n/a	4	1
34	Kabadi	2	n/a	n/a	n/a	1	n/a	n/a	n/a
35	Bobsleigh	3	n/a	n/a	1	n/a	n/a	n/a	n/a
36	Softball	1	n/a	n/a	1	1	n/a	n/a	n/a
37	Luge	1	1	n/a	n/a	n/a	n/a	n/a	n/a
38	Golf	1	n/a	1	n/a	1	n/a	n/a	n/a
39	Baduk	5	1	n/a	n/a	1	1	n/a	n/a
40	Swimming	1	n/a	n/a	1	1	n/a	9	n/a
41	Volleyball	1	n/a	1	n/a	2	n/a	5	1
42	Equestrian	n/a	n/a	n/a	n/a	1	1	n/a	n/a
43	Hockey	n/a	n/a	n/a	n/a	3	n/a	11	n/a
44	Badminton	n/a	n/a	n/a	n/a	1	n/a	3	n/a
45	Wushu	n/a	n/a	n/a	n/a	1	n/a	1	n/a
46	Billiard	n/a	1						
47	Squash	n/a	n/a	n/a	n/a	1	n/a	4	n/a
48	Karate	n/a	n/a	n/a	n/a	1	n/a	1	n/a
49	Bowling	n/a	n/a	n/a	n/a	1	n/a	n/a	n/a
50	Tennis	n/a	n/a	n/a	n/a	1	n/a	n/a	n/a

			2007	2008	2009	2010	2011	2012	2013	2014
Baseball		No. of teams	n/a	n/a	8	8	8	9	10	10
		No. of athletes	n/a	n/a	509	487	530	536	591	597
		No. of games	517	518	549	547	548	548	593	591
		Average no. of spectators	8,531	10,881	11,562	11,402	13,055	13,747	11,373	11,429
Football		No. of teams	n/a	n/a	15	16	16	16	22	22
		No. of athletes	n/a	n/a	609	595	672	613	728	731
		No. of games	254	253	256	210	283	338	266	229
		Average no. of spectators	10,814	11,642	10,983	12,873	10,709	7,157	7,656	8,115
Basketball	Male	No. of teams	n/a	n/a	10	10	10	10	10	10
		No. of athletes	n/a	n/a	153	139	180	183	189	191
		No. of games	291	292	296	293	292	294	300	301
		Average no. of spectators	3,987	4,080	4,152	3,870	3,955	4,537	4,092	4,458
	Female	No. of teams	n/a	n/a	6	6	6	6	6	6
		No. of athletes	n/a	n/a	102	88	99	102	110	107
		No. of games	267	118	130	130	115	131	113	112
		Average no. of spectators	1,164	1,100	1,206	705	1,445	1,150	1,237	1,417
Volleyball		No. of teams	n/a	n/a	n/a	12	12	12	13	13
		No. of athletes	n/a	n/a	n/a	271	183	180	203	223
		No. of games	187	189	189	216	210	245	210	227
		Average no. of spectators	1,253	1,472	1,471	1,479	1,774	1,744	1,525	1,967
Ssireum		No. of teams	n/a	n/a	1	1	1	1	1	1
		No. of athletes	n/a	n/a	12	11	13	13	12	11
Golf	Male	No. of athletes	n/a	n/a	5,383	5,667	5,709	5,823	5,359	6,632
	Female	No. of athletes	n/a	n/a	1,539	1,627	1,602	1,617	1,827	1,853
Bowling		No. of teams	n/a	n/a	20	20	20	20		
		No. of athletes	n/a	n/a	426	425	428	425	451	478
Boxing		No. of athletes	n/a	n/a	n/a	314	140	160	168	172

## <G09> Annual state of Pro Sports<sup>16</sup>)

16) Refer in more detail to the Korea Pro Sports Association (http://www.prosports.or.kr/)

Year	Project		Fund (unit: UDS)	Total (unit: USD)
2008	Continued	2	400,000	2,811,600
	New	22	2,411,600	
2009	Continued	11	1,726,000	5,752,950
	New	12	4,026,950	
2010	Continued	8	4,617,498	6,747,498
	New	8	2,130,000	
2011	Continued	7	4,292,000	6,541,500
	New	8	2,249,000	
2012	Continued	4	1,550,000	6,949,500
	New	12	5,399,500	
2013	Continued	11	6,200,000	6,900,000
	New	4	700,000	
2014	Continued	5	2,800,000	8,100,000
	New	19	5,300,000	

#### <G10> Government's annual investment in the sports industry for development<sup>17</sup>)

<sup>17)</sup> Refer in more detail to the Ministry of Culture, Sports and Tourism (http://www.mcst.go.kr/english/index.jsp)

Pillar	Theme	Turnover (unit: a hundred	Ratio (%)
		thousand USD)	
Manufacturing business	Beverages	n/a	n/a
	Textile products; clothes	37,630	9.2
	Bag; shoes	11,998	2.9
	Sporting equipment	15,827	3.9
	Subtotal	65,455	16.1
Facility and service	Venue management	33,352	8.2
	Sports service management	16,478	4.0
	Management of golf course and ski resort	48,985	12.0
	Sports facility management	45,918	11.3
	Management of water sports facility	777	0.2
	Gambling and betting	92,968	22.8
	Leisure management	171	0.0
	Subtotal	238,649	58.5
Leasing service and	Wholesale trade	51,024	12.5
distribution	Retail business	37,791	9.3
	Leasing service of recreation goods	1,166	0.3
	Subtotal	89,981	22.1
Institute	Training centre	13,603	3.3
	Subtotal	13,603	3.3
	Total	407,686	100

# <G11> Turnover of the sports industry (as of 2014)<sup>18</sup>)

<sup>18)</sup> Refer in more detail to the Korea Sports Promotion Foundation (http://english.kspo.or.kr/)

		Total	Male	Female	10-19	20-29	30-39	40-49	50-59	60-69	over 70
					years						
Participation	Everyday	5.5	6.0	5.0	3.3	3.3	3.3	4.7	6.8	10.0	10.7
rate of	Six times a week	4.0	4.3	3.8	3.1	3.0	2.7	3.7	4.8	6.9	5.2
nhysical	Five times a week	5.9	5.7	6.2	5.2	8.9	6.3	5.1	5.7	5.4	4.2
priysical	Four times a week	5.2	5.1	5.3	3.8	6.9	5.0	5.2	5.4	5.5	3.9
activity	Three times a week	12.7	11.0	14.4	11.0	14.2	13.2	14.8	13.1	11.3	8.4
	Two times a week	10.2	11.2	9.2	12.5	10.9	9.9	10.7	10.1	8.9	6.9
	Once a week	11.2	14.3	8.2	15.8	8.8	12.7	11.7	11.5	9.9	5.6
	Two or Three times a month	10.8	13.7	7.9	8.2	7.5	8.8	12.7	13.8	13.1	10.7
	Not at all	34.5	28.8	40.0	37.1	36.5	38.1	31.2	28.7	28.8	44.3
Participating	Walking	38.7	29.8	49.2	15.5	26.3	33.9	36.3	44.8	57.5	73.3
sport for	Alpine	22.8	25.9	19.2	2.7	10.1	23.6	28.3	37.8	31.0	14.6
nhysical	Fitness	11.8	13.5	9.9	4.7	24.1	18.3	11.9	9.9	5.5	1.6
priysical	Football	8.7	15.7	0.6	27.7	13.8	7.6	6.0	4.2	0.9	0.4
activity	Cycling	7.1	10.2	3.4	9.9	8.3	8.2	6.3	5.8	5.5	5.3
	Badminton	6.7	6.5	7.0	13.8	6.1	7.8	7.9	5.2	2.8	0.4
	Swimming	6.2	4.8	7.9	3.8	9.0	8.3	7.4	3.9	5.4	4.3
	Yoga	4.8	0.3	10.0	1.5	9.4	4.8	4.0	3.8	4.7	5.9
	Basketball	3.4	5.7	0.6	19.2	5.3	1.0	0.2	0.1	0.0	0.0
	Stretching	3.2	2.3	4.2	2.8	2.0	1.8	2.1	3.2	5.6	8.2
	Golf	3.1	5.0	0.9	0.2	0.4	4.1	6.4	4.7	1.5	0.5
	Skipping rope	2.8	1.0	4.8	12.5	3.3	1.2	1.9	0.6	0.3	0.3
	Fishing	2.6	4.5	0.2	0.0	0.8	2.3	2.9	5.2	3.5	1.5

19) Refer in more detail to the Ministry of Culture, Sports and Tourism (<u>http://www.mcst.go.kr/english/index.jsp</u>). The survey was performed with 9,000 respondents from Aug. to Sep. 2014.

	Aerobics	2.4	0.1	5.2	0.2	1.2	2.7	4.4	2.8	2.5	1.4
	Table tennis	1.9	2.4	1.4	2.9	1.5	2.4	2.1	2.2	0.7	0.8
	Tennis	1.7	2.6	0.6	0.5	3.1	1.9	2.5	1.7	0.7	0.2
	Running	1.7	2.2	1.1	2.3	2.3	1.5	1.8	1.4	1.5	0.9
	Foot volleyball	1.6	2.8	0.2	2.5	2.1	1.3	2.2	1.6	0.4	0.0
	Others	13.1	15.6	9.7	24.6	16.9	16.7	9.3	8.7	6.3	9.1
Participation	Dawn/Morning	15.3	17.0	13.1	3.3	8.9	12.8	18.4	20.1	22.0	24.0
time for	Before-noon	20.5	18.0	23.6	10.3	10.0	20.0	24.4	26.2	24.6	27.2
nhycical	Lunch time	2.3	2.9	1.5	4.3	3.8	3.1	1.5	1.1	1.3	0.8
priysical	Afternoon	16.5	17.2	15.6	41.7	18.3	11.7	13.5	10.6	11.2	11.4
activity	Evening	22.0	20.1	24.5	17.6	33.1	27.0	23.5	18.7	15.0	11.1
	Irregular	23.5	24.9	21.7	22.8	25.8	25.4	18.8	23.4	25.9	25.5
Places for	School	16.8	20.0	12.9	51.6	17.7	11.2	12.1	11.0	9.2	7.1
physical	Private facility	6.2	5.2	7.4	3.3	13.1	8.5	7.1	4.0	3.4	1.6
activity	Fitness center	5.6	6.1	4.9	2.7	12.7	7.8	5.5	4.5	2.3	0.5
activity	Village sports centre	5.3	4.0	6.8	4.0	3.6	3.5	5.3	5.8	6.0	11.5
	Public sports facility	3.0	2.4	3.7	1.6	3.4	4.0	2.6	4.1	2.3	1.9
	Sports for All Gym	2.9	2.1	3.9	1.0	3.1	3.8	4.3	3.3	1.8	1.0
	Welfare facility	2.5	0.9	4.3	0.5	0.8	1.3	2.7	2.4	4.3	7.7
	Others	57.7	59.2	56.1	35.3	45.7	59.9	60.3	64.9	70.7	68.7
Time spending	Under 0.5 hours	0.6	0.6	0.7	1.1	0.3	0.1	0.6	0.3	1.3	1.5
for Physical	0.5-1 hours	16.9	13.4	21.3	23.7	14.4	14.8	14.4	14.2	17.2	28.1
activity	1-1.5 hours	38.4	31.8	46.9	41.7	39.6	35.8	37.1	35.4	41.5	43.6
activity	1.5-2 hours	11.3	11.1	11.4	10.9	14.3	13.2	8.9	10.4	10.3	11.6
	2-3 hours	18.5	23.3	12.3	17.4	22.8	19.9	20.2	19.0	14.1	9.0
	Over 3 hours	14.3	19.7	7.3	5.1	8.5	16.3	18.8	20.6	15.7	6.1
Participation	Health improvement	45.5	43.4	48.0	31.9	33.4	40.0	45.0	53.4	59.8	62.5
purpose of	Weight loss	13.8	9.1	19.3	14.4	24.1	16.1	14.8	10.5	5.6	6.4

physical	Leisure	18.8	21.2	16.0	16.5	18.8	20.3	20.5	18.4	19.5	15.3
activitv	Stress release	5.7	6.9	4.2	11.3	6.9	6.2	4.9	4.5	3.4	1.4
	Fun	4.6	5.8	3.2	9.9	7.0	3.4	3.4	3.0	3.2	3.2
	Self-satisfaction	4.4	4.8	3.8	5.8	3.1	6.6	4.5	3.5	2.5	3.8
	Social relationship	3.7	5.2	1.9	4.4	3.9	4.2	4.0	3.4	3.0	1.7
	Physical performance	2.5	2.8	2.1	4.7	2.3	2.4	1.1	2.3	2.3	3.7
	Family ties	0.8	0.5	1.0	0.7	0.4	0.8	1.5	0.7	0.4	0.2
	Time killing	0.3	0.3	0.4	0.4	0.0	0.1	0.3	0.3	0.3	1.8
Strategy for	Time securing	33.1	33.5	32.7	36.6	35.5	35.0	33.1	33.1	29.7	24.6
increasing	Accessibility increasing	15.9	15.6	16.4	15.2	17.3	15.5	15.3	16.6	15.9	15.5
nhysical	Health improvement	13.5	12.7	14.5	11.0	10.0	8.9	13.5	14.6	15.4	27.5
priysical	Earning growth	9.3	9.6	9.0	5.3	9.0	11.1	10.3	8.7	12.1	8.1
activity	Increase of concerns	8.5	9.3	7.5	9.1	8.9	9.9	9.4	7.3	6.9	6.5
	Allocating budget	8.3	7.8	8.9	6.1	7.5	10.3	9.5	8.1	9.0	6.2
	Programs extension	4.1	4.1	4.2	7.9	3.8	3.6	3.2	3.8	3.9	3.1
	Accompanying partner	3.9	4.2	3.6	4.5	3.6	2.9	3.1	5.0	3.8	5.2
	Information extension	2.7	2.8	2.6	3.6	4.0	2.3	2.0	2.4	2.3	2.6
	Trainer's level upgrade	0.6	0.5	0.6	0.7	0.3	0.6	0.5	0.5	1.0	0.6
Frequency of	1-2 times a year	61.8	59.9	66.4	73.2	55.6	58.6	62.1	66.0	61.9	49.6
sports	1-2 times six months	21.8	22.2	20.5	15.9	26.5	23.2	20.6	17.8	18.5	33.4
ottonding	1-2 times three months	11.2	11.9	9.5	6.5	11.5	13.0	12.5	9.9	17.2	12.5
attenuing	1-2 times a month	5.1	5.6	3.6	4.0	6.4	4.5	4.9	6.3	2.3	4.5
	1-2 times & over a week	0.2	0.3	0.0	0.3	0.0	0.7	0.0	0.0	0.0	0.0
Spectator	Baseball	55.5	56.8	52.3	39.0	67.3	65.0	47.9	57.8	35.4	33.6
experience	Soccer	34.8	37.1	28.9	42.4	27.9	32.4	43.9	27.7	30.9	29.6
	Basketball	5.5	5.4	5.8	9.8	5.5	4.7	4.2	3.5	4.0	3.8
	Volleyball	2.3	1.8	3.6	4.1	2.1	1.2	1.2	2.8	6.9	3.8
	Badminton	2.0	1.3	3.9	0.4	0.9	1.9	4.0	4.1	3.3	0.0

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	Taekwondo	1.0	1.1	0.9	4.3	0.2	0.3	0.3	0.5	1.6	0.0
-	Running	0.9	0.7	1.4	2.3	0.0	0.5	0.6	1.8	1.5	3.7
	Gateball	0.8	0.5	1.4	0.0	0.0	0.0	0.0	0.0	8.7	28.3
-	Foot Volleyball	0.7	0.7	1.0	0.0	1.7	0.3	1.0	0.7	0.0	0.0
	Golf	0.7	0.9	0.4	0.0	0.0	0.5	2.7	0.7	1.2	0.0
-	Tennis	0.7	0.4	1.3	0.2	0.5	0.3	0.2	2.3	4.6	1.8
-	Swimming	0.5	0.0	1.6	0.6	0.0	0.6	0.2	1.7	0.0	0.0
-	Table tennis	0.3	0.4	0.2	0.4	0.0	0.3	0.2	1.2	1.2	0.0
	Others	2.5	2.5	4.2	4.5	1.7	1.9	3.2	2.3	4.8	10.1

		Leisure	Hours (Wee	ekday / We	eekend)		Types of Leisure Activities								
-	N/A	Under	3-5	5-7	Over	Average	Sport	Mass	Cultural	Trip	Recreati	Rest	Sports	Others	
		3 hours	hours	hours	7 hours	-minute		Entertai	activity		on		Spectati		
								nment					ng		
Total	0.3	44.4	39.1	11.4	4.7	187.60	33.1	8.1	2.1	5.2	50.1	73.6	1.8	53.2	
	0.1	10.7	31.6	32.4	25.2	321.80	55.1	0.1	2.1	5.2	50.1	75.0	1.0	JJ.Z	
Male	0.3	46.9	40.6	9.2	3.0	177.90	120	73	1 0	57	56.2	68 1	35	15.0	
	0.1	8.9	30.9	32.7	27.4	332.85	42.0	7.5	1.5	5.7	50.2	00.1	5.5	40.9	
Fomalo	0.3	42.0	37.7	13.6	6.4	197.26	23.3	8.0	23	17	11	70	0.2	60 5	
remale	0.1	12.5	32.3	32.0	23.0	310.81		0.9	2.5	4.7	44	19	0.2	00.5	
10-19 years —	0.5	52.4	36.7	9.3	1.2	162.80	27.0	10.3	16	1 1	78 1	58 7	17	56 3	
	0.2	10.4	30.9	31.7	26.9	327.82	27.0	10.5	1.0	1.1	70.1	50.7	1.7	50.5	
20.20 voors	0.4	44.1	44.2	8.9	2.4	178.17	21.9	10.0	1 9	1	67.9	52	2.4	50.1	
20-29 years	0.0	8.2	29.3	31.7	30.8	345.72	21.0	10.2	1.0	4	07.0	55	5.4	39.1	
30-30 veare -	0.2	51.9	38.9	8.3	0.8	162.13	28.0	13.2	2.2	10.1	58 7	68.0	3	46.7	
JU-J9 years	0.2	11.5	35.5	32.3	20.6	303.15	20.9	13.2	2.2	10.1	56.7	00.9	3	40.7	
40.40 years	0.3	50.8	38.5	7.7	2.7	167.93	20 /	63	2	6.9	16.6	70.9	15	10.2	
40-49 years	0.2	11.6	35.0	32.2	21.1	305.06	50.4	0.5	Z	0.0	40.0	79.0	1.5	49.5	
50 50 vooro	0.0	46.0	39.7	10.9	3.3	180.16	12.0	26	2.2	5 5	27.2	017	1 0	<b>E1 0</b>	
JU-J9 years	0.1	12.0	33.0	31.5	23.4	309.78	42.0	5.0	2.2	5.5	57.2	01.7	1.5	51.0	
60.60 vooro	0.3	31.5	41.8	16.2	10.2	227.42	20.2	0.7	2	20	20.2	96 4	0.7	56.0	
60-69 years —	0.0	11.2	28.1	34.9	25.9	329.79	30.3	0.7	3	2.0	20.3	00.4	0.7	50.9	
over 70	0.3	18.0	32.8	27.7	21.2	295.19	00.7	0.0	0.0	0.0	00.0	00.0	0.0	<b>E0 E</b>	
years	0.2	8.7	23.4	33.8	34.0	359.32	ZŎ./	0.6	2.3	2.2	22.3	92.6	0.2	58.5	

## <G13> Leisure activity (as of 2014)<sup>20</sup>) (unit: %)

20) Refer in more detail to the Ministry of Culture, Sports and Tourism (<u>http://www.mcst.go.kr/english/index.jsp</u>). The survey was performed with 9,000 respondents from Aug. to Sep. 2014 (plural response).

	Muscle E	ndurance	Flexibility	y (Sit &	Muscle	Power	50m Rur	nning (In	20m Shutt	le Run (In	Grip Stre	ength (In
	(Sit-Up;	times)	Reac	h; In	(Standing L	ong Jump;	seco	ond)	Num	ber)	kç	g)
			Centim	etres)	In Centimetres)							
Age	Male	Female	Male	Female	Male Female		Male	Female	Male	Female	Male	Female
19-24	48.5	35.2	15.2	17.6	228.6	161.7	7.7	9.9	53.3	30.8	43.0	25.1
25-29	44.2	29.9	10.9	16.2	221.6	145.7	8.1	10.3	46.7	26.1	43.4	25.7
30-34	40.1	27.5	10.9	15.9	216.7 148.4		8.9	10.8	41.4	25.2	44.5	25.3
35-39	40.2	24.0	10.3	15.0	211.8	147.4	9.9	11.2	34.0	23.0	43.7	25.4
40-44	37.6	22.3	9.5	14.9	205.4	145.0	8.9	12.4	38.5	21.2	42.2	25.3
45-49	30.9	20.1	9.2	14.7	195.8	138.6	9.6	12.1	37.6	19.8	43.3	25.1
50-54	29.2	15.9	9.2	15.4	182.5	127.8	10.1	12.8	28.8	18.0	40.0	24.5
55-59	25.0	11.5	7.1	14.9	174.4	117.3	10.9	14.7	27.3	15.9	38.9	23.2
over 60	19.9	9.5	7.1	15.0	156.0	104.8	11.9	14.7	19.8	12.5	35.5	22.3
over 65	14.1	7.3	5.8	12.2	n/a n/a		n/a	n/a	n/a	n/a	30.7	20.3

## <G14> Physical fitness (as of 2013)<sup>21)</sup>

<sup>21)</sup> Refer in more detail to the Ministry of Culture, Sports and Tourism (http://www.mcst.go.kr/english/index.jsp).

	Heig	ht (In	Weig	ht (In	Body Composition (In Percent)							Body	Mass	
	centin	netres)	Kilogra	immes)									Index	(kg/m²)
Age	Male	Female	Male	Female		Ма	le			Ferr	nale		Male	Female
					Breast	st Abdom Thigh Body			Triceps	Supraili	Thigh	Body		
					Circle	en Compo				ac		Compo		
								sition				sition		
19-24	175.5	161.7	72.2	54.9	10.1	17.3	13.3	11.3	18.9	18.5	20.9	22.8	23.4	20.9
25-29	175.8	162.6	75.6	55.4	11.6	19.1	13.6	12.9	18.5	18.2	21.3	23.2	24.4	20.9
30-34	175.6	161.6	74.9	56.3	13.4	21.9	15.0	15.2	19.2	20.3	21.3	24.3	24.2	21.6
35-39	175.2	160.8	75.3	56.8	14.2	22.8	15.1	16.3	19.2	20.3	21.5	24.7	24.5	21.9
40-44	172.8	159.6	71.9	58.4	12.8	20.9	13.5	15.5	19.6	21.9	21.8	25.8	24.1	22.9
45-49	171.7	158.7	72.4	58.3	13.4	20.7	13.8	16.2	20.0	23.2	22.2	26.8	24.6	23.1
50-54	169.5	157.4	71.2	58.4	15.4	22.0	14.4	18.0	20.2	23.3	21.3	26.8	24.7	23.6
55-59	169.5	156.1	68.6	57.0	13.9	21.7	12.9	17.5	20.8	24.5	21.7	27.8	23.9	23.4
over 60	167.5	155.4	68.4	57.8	14.1	21.6	12.2	17.9	20.1	23.5	20.4	27.3	24.4	23.9
over 65	165.1	153.7	63.8	56.7	12.8	21.0	10.9	18.2	19.1	23.7	19.4	27.2	23.0	23.9

# <G15> Physical characteristics (as of 2013)<sup>22)</sup>

22) Refer in more detail to the Ministry of Culture, Sports and Tourism (http://www.mcst.go.kr/english/index.jsp).

# <G16> Pension for athletes by sports (as of 2014)<sup>23</sup>) (unit: USD)

Nc	Name	Total	al Monthly		All at	١	Nc Name	Total	Monthly			All at			
		-	Less	300-	600-	Above	Once				Less	300-	600-	Above	Once
			than	600	900	900					than	600	900	900	
			300								300				
01	Golf	12	n/a	10	2	n/a	n/a	2	0 Weight Lifting	14	n/a	5	4	5	n/a
02	Modern pentathlon	7	n/a	7	n/a	n/a	n/a	2	21 Sailing	6	1	5	n/a	n/a	n/a
03	Basketball	17	1	7	9	n/a	n/a	2	2 Wushu	12	n/a	9	1	2	n/a
04	Rugby	21	n/a	21	n/a	n/a	n/a	2	3 Judo	45	4	15	11	15	n/a
05	Wrestling	22	n/a	8	4	10	n/a	2	Athletics	10	n/a	8	n/a	2	n/a
06	Volleyball	22	1	21	n/a	n/a	n/a	2	25 Soft tennis	46	n/a	16	15	15	n/a
07	Badminton	57	n/a	22	20	14	1	2	6 Gymnastics	14	n/a	7	1	6	n/a
08	Bodybuilding	5	n/a	5	n/a	n/a	n/a	2	7 Football	21	n/a	21	n/a	n/a	n/a
09	Boxing	13	n/a	7	3	3	n/a	2	8 Canoeing	n/a	n/a	n/a	n/a	n/a	n/a
10	Bowling	39	1	22	8	8	n/a	2	9 Table tennis	28	n/a	6	9	13	n/a
11	Skating	77	1	22	9	45	n/a	3	0 Taekwondo	81	n/a	57	11	13	n/a
12	Shooting	42	1	21	9	11	n/a	_3	31 Tennis	10	n/a	7	3	n/a	n/a
13	Cycling	12	1	9	2	n/a	n/a	3	2 Fencing	30	2	12	8	8	n/a
14	Sepaktakraw	13	n/a	10	2	1	n/a	3	3 Hockey	51	6	9	22	14	n/a
15	Swimming	3	n/a	1	1	1	n/a	3	4 Handball	98	n/a	28	26	44	n/a
16	Ski	4	n/a	4	n/a	n/a	n/a	3	5 Billiard	1	n/a	n/a	1	n/a	n/a
17	Equestrian	8	1	5	2	n/a	n/a	3	6 Roller sports	3	n/a	2	n/a	1	n/a
18	Baseball	59	3	21	11	24	n/a	_3	87 Baduk	2	n/a	2	n/a	n/a	n/a
19	Archery	71	1	26	13	31	n/a		Total	976	24	458	207	286	1

<sup>23)</sup> Refer in more detail to the Korea Sports Promotion Foundation (http://english.kspo.or.kr/)

No.	Category	No. of persons	Pension amount (unit: USD)
01	Special subsidy	1	38,714
02	Subsidy for coaches	1,496	285,000
03	Pension for the people in need	1	7,200
04	Pension for research	976	8,188,000
05	Pension for coaches' research	96	576,900
06	General scholarship	658	400,000
07	Scholarship for studying in a foreign country	2	53,737
08	Pension for retired athletes	286	420,914
	Total	3,516	9,970,465

# <G17> Pension for sports people by category (as of 2014)<sup>24</sup>)

<sup>24)</sup> Refer in more detail to the Korea Sports Promotion Foundation (http://english.kspo.or.kr/)

No	Name	Year of	No. of full-time	No. of sports venue for	Source (official website)
		establishment	staff	the people in need	
01	Seoul	2007	13	3	http://www.ssad.or.kr/main/main.php
02	Busan	2006	32	2	http://www.bsad.or.kr/renew/main.php
03	Daegu	2006	10	2	http://dasad.or.kr/
04	Incheon	2007	11	1	http://www.i-sports.or.kr/
05	Gwangju	2007	9	1	http://www.gjsad.or.kr/
06	Daejeon	2007	24	3	http://www.djsad.or.kr/html/kr/index.html
07	Ulsan	2008	6	1	http://ulsad.or.kr/main/main.html
08	Sejong	2014	2	0	http://sjsad.or.kr/
09	Gyeonggi	2006	24	4	http://ggsad.gg.go.kr/
10	Gangwon	2007	20	0	http://www.gwsad.or.kr/
11	Chungbuk	2006	22	1	http://cbsad.or.kr/bod/index_true.php
12	Chungnam	2007	10	2	http://www.cnsad.or.kr/index.do
13	Jeonbuk	2006	23	1	http://jbsad.or.kr/intro.html
14	Jeonnam	2007	18	2	http://www.jnsad.or.kr/
15	Gyeongbuk	2007	20	4	http://www.gbsad.or.kr/2013/main/main.php
16	Gyeongnam	2006	22	1	http://www.gnsad.or.kr/
17	Jeju	2007	48	0	http://www.jesad.or.kr/
	Total		314	28	

## <G18> Regional Council of the Korea Paralympic Committee (as of 2014)<sup>25)</sup>

25) Refer in more detail to the Korea Paralympic Committee (http://english.koreanpc.kr/)

#### <G19> National Federations of the Korea Paralympic Committee (as of 2014)<sup>26</sup>)

No	Name	Year	No. of	No. of	No. of	No. of participants			No.	of athle	tes rece	iving	Source (official
		of	region	qualifi	participa				monthl	y pensi	on (unit:	USD)	website)
		establ	al	ed	tion in	Total	Staff	Athlet	Total	less	600-8	Over	
		ishme	memb	instruc	internati			е		than	00	800	
		nt	er	tors	onal					600			
			offices		games								
01	Korea Blind Goalball	2006	13	1	<u> </u>	20	8	12	n/a	n/a	n/a	n/a	http://kbgf.kosad.kr/
	Federation												
02	Korea Wheelchair Basketball	1997	12	n/a	1	16	4	12	n/a	n/a	n/a	n/a	www.kwbf.or.kr
	Federation												
03	Korea Dance Sport	2002	12	n/a	1	15	4	11	n/a	n/a	n/a	n/a	http://kdsfd.kosad.kr/
	Federation for the Disabled												
04	Korea Wheelchair Rugby	2004	12	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	www.kwra.kr
	Association												
05	Korea Bowls for the	1992	16	n/a	n/a	n/a	n/a	n/a	2	1	1	n/a	http://lawnbowl.kosad.
	Disabled												<u>kr/</u>
06	Korea Volleyball Association	2006	13	n/a	1	12	3	9	n/a	n/a	n/a	n/a	http://kovad.or.kr/
	for the Disabled												
07	Korea Badminton	2000	16	n/a	n/a	n/a	n/a	n/a	15	1	1	13	http://kbad.kosad.kr/
	Association for the Disabled												
08	Korean Boccia Federation	2006	13	1	1	22	11	11	17	4	2	11	http://k-boccia.kosad.k

26) The 9 recognized federations are not included, which name (year of establishment) are Kumdo (2005), Golf (2004), Baduk (1999), Dart (2007), e-Sports (2008), Billiards (2009), Gateball (2008), Waterski (2010), and National archery (2010). Refer in more detail to the Korea Paralympic Committee (http://english.koreanpc.kr/)

	for the Disabled												r/
09	Korea Bowling Association	2002	16	1	1	18	4	14	17	2	4	11	http://kdba.kosad.kr/
	for the Disabled												
10	Korea Shooting Federation	1997	12	1	1	23	9	14	27	2	3	22	http://ksfd.kosad.kr/
	for the Disabled												
11	Korea Disabled Cycling	1993	11	n/a	2	20	8	12	5	n/a	2	3	http://kdcf.kr/
	Federation												
12	Korea Disabled Swimming	2003	10	1	n/a	n/a	n/a	n/a	9	5	n/a	4	http://swimming.kosad.
	Federation												<u>kr/default/</u>
13	Korea Adaptive Ski	2001	3	1	3	14	8	6	1	n/a	1	n/a	http://kasa.kosad.kr/ko
	Association												r/main.asp
14	Korea Ice Hockey	2003	4	1	n/a	http://kihad.kosad.kr/							
	Association for the Disabled												
15	Korea Disabled Archery	2004	10	1	1	16	5	11	22	4	2	16	http://archery.kosad.kr/
	Association												
16	Korea Powerlifting	1996	13	1	1	8	2	6	10	3	3	4	http://kdpf.kosad.kr/
	Federation for the Disabled												
17	Korea Disabled Sailing	2006	8	n/a	1	2	1	1	n/a	n/a	n/a	n/a	http://kdsaf.kosad.kr/
	Federation												
18	Korea Judo Federation for	1988	8	1	1	10	3	7	11	3	3	5	http://www.kjfd.or.kr/
	Disabled												
19	Korea Athletics Association	2002	13	1	1	29	9	20	35	7	8	20	http://kafd.kosad.kr/
	for the Disabled												
20	Korea Para-Rowing	2006	10	1	1	7	3	4	n/a	n/a	n/a	n/a	http://kara.kosad.kr/
	Association												

21	Korea Football Association	2007	11	n/a	1	12	3	9	n/a	n/a	n/a	n/a	http://kofad.kosad.kr/
	for the Disabled												
22	Korea Wheelchair Curling	2007	8	1	1	8	3	5	5	n/a	5	n/a	http://curling.kosad.kr/
	Association												
23	Korea Para Table Tennis	1993	16	1	1	22	5	17	45	12	8	25	http://tt.kosad.or.kr/
	Association												
24	Korea Taekwondo	2006	16	n/a	n/a	n/a	n/a	n/a	10	n/a	1	9	http://kotad.kosad.kr/
	Association for the Disabled												
25	Korea Tennis Association	1993	13	1	2	18	6	12	n/a	n/a	n/a	n/a	http://www.ktad.org/
	for the Disabled												
26	Korea Wheelchair Fencing	2004	12	1	1	12	4	8	3	n/a	1	2	http://wfencing.kosad.k
	Association												<u>r/</u>
27	Korea Equestrian	2011	16	n/a	http://kead.kosad.kr/								
	Association for Disabled												
28	Korea Differently Able	2006	16	n/a									
	People Golf Association												
29	Korea Billiard Association	2009	16	n/a	http://kobad.kr/								
	for the Disabled												
	Total		333	16	24	304	103	201	234	44	45	145	

#### <G20> Number of people in need in each region and sports<sup>27</sup>)

				-			-		· · ·	-	-					-	-			
			Seou	Busa	Inch	Dae	Gwa	Daej	Ulsa	Gye	Gan	Chu	Chu	Jeon	Jeon	Gye	Gyeo	Jeju	Sejo	Total
			I	n	eon	gu	ngju	eon	n	ongg	gwo	ngbu	ngna	buk	nam	ongb	ngna		ng	
										i	n	k	m			uk	m			
		[1]	No. of	region	al male	athlete	es (as c	of 2014)	)											
		[2]	No. of	region	al fema	le athle	etes (as	of 201	4)											
		[3]	Sum c	of athlet	tes (as	of 2014	4)													
		[4]	Numbe	er of cl	ubs at	sport-fo	r-all lev	el (as o	of 2015	)										
		[5]	Numbe	er of pl	ayers a	it sport-	for-all l	evel (as	s of 201	15)										
01	Archery	[1]	5	4	5	. 7	9	6	3	<u>,</u> 10	0	0	1	2	6	4	6	0	n/a	69
		[2]	4	0	1	3	4	0	3	1	0	0	0	0	1	1	1	0	n/a	21
		[3]	9	4	6	10	13	6	6	11	0	0	1	2	7	5	7	0	n/a	90
		[4]	1	1	1	1	1	0	0	0	0	0	0	0	1	0	1	0	0	11
		[5]	5	17	1	3	18	0	0	0	0	0	0	0	1	0	10	0	0	60
02	Athletics	[1]	137	67	33	64	29	74	32	121	53	44	54	47	41	65	58	18	n/a	938
		[2]	48	15	21	26	17	27	15	37	22	30	30	25	22	36	28	12	n/a	413
		[3]	185	82	54	90	46	101	47	158	75	74	84	72	63	101	86	30	n/a	1,351
		[4]	0	1	1	0	0	2	0	1	0	0	1	1	0	2	1	0	1	14
		[5]	0	20	1	0	0	3	0	9	0	0	1	0	0	0	17	0	1	56
03	Badmint	[1]	29	20	16	20	37	29	13	93	18	27	28	16	23	25	18	15	n/a	428
	on	[2]	12	8	6	14	16	21	3	25	9	10	12	13	1	7	0	5	n/a	164
		[3]	41	28	22	34	53	50	16	118	27	37	40	29	24	32	18	20	n/a	592
		[4]	9	6	22	10	6	7	3	15	4	9	5	1	8	5	7	2	2	123
		[5]	96	118	87	71	92	12	37	119	41	16	20	1	80	62	111	18	11	986
04	Boccia	[1]	50	51	7	20	29	14	13	54	43	31	22	21	30	12	35	9	n/a	442

27) Refer in more detail to the Korea Paralympic Committee (http://english.koreanpc.kr/)

Giobal sponing penormance of nations - A method for measuring the level of national sponts policies	Global sporting p	performance of	nations - A	A method	for	measuring	the	level	of	national	sport's	policies
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	[2]	19	19	2	7	9	9	7	26	12	6	6	5	5	4	13	3	n/a	154
	[3]	69	70	9	27	38	23	20	80	55	37	28	26	35	16	48	12	n/a	596
	[4]	14	5	4	1	3	4	0	6	4	2	2	5	6	7	3	0	0	70
	[5]	90	68	4	9	48	6	0	25	10	2	14	69	26	39	45	0	0	460
05 Cycling	[1]	21	6	17	3	5	8	3	12	15	14	4	3	5	6	2	4	n/a	129
	[2]	4	1	6	0	0	2	2	2	5	2	0	1	0	0	0	3	n/a	30
	[3]	25	7	23	3	5	10	5	14	20	16	4	4	5	6	2	7	n/a	159
	[4]	2	0	1	0	1	0	1	0	2	1	1	0	0	0	1	3	0	17
	[5]	15	0	1	0	4	0	11	0	2	1	2	0	0	0	22	4	0	67
06 Fencing	[1]	3	3	3	5	5	0	4	3	7	7	6	2	5	0	0	0	n/a	54
	[2]	0	0	0	0	1	0	0	3	3	1	2	0	1	0	0	0	n/a	13
	[3]	3	3	3	5	6	0	4	6	10	8	8	2	6	0	0	0	n/a	67
	[4]	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	6
	[5]	0	10	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	16
07 Goalball	[1]	14	6	14	0	0	6	8	6	0	9	8	16	5	7	8	0	n/a	108
	[2]	8	0	8	0	0	0	0	5	0	6	11	0	0	0	4	0	n/a	44
	[3]	22	6	22	0	0	6	8	11	0	15	19	16	5	7	12	0	n/a	152
	[4]	1	0	0	0	0	0	0	4	0	1	0	0	0	0	1	0	0	11
	[5]	10	0	0	0	0	0	0	14	0	1	0	0	0	0	9	0	0	39
08 Judo	[1]	8	8	6	1	0	18	4	9	0	4	6	1	11	11	3	0	n/a	91
	[2]	4	0	0	2	0	2	0	1	0	1	0	0	0	3	0	0	n/a	15
	[3]	12	8	6	3	0	20	4	10	0	5	6	1	11	14	3	0	n/a	106
	[4]	1	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	9
	[5]	3	15	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	26
09 Lawn	[1]	116	82	92	65	41	40	15	90	60	78	53	48	65	38	19	35	n/a	938
bowls	[2]	32	31	21	38	18	27	3	39	10	40	29	30	24	8	5	19	n/a	376
	[3]	148	113	113	103	59	67	18	129	70	118	82	78	89	46	24	54	n/a	1,314
	[4]	7	6	3	3	2	3	2	4	4	3	1	4	4	4	2	4	0	60

		[5]	101	90	13	87	27	7	20	45	17	42	1	85	35	35	27	6	0	643
10	Weightlift	[1]	44	51	48	15	19	44	54	57	30	59	27	19	28	27	3	13	n/a	539
	ina	[2]	18	17	16	4	5	18	41	15	12	27	13	3	11	24	6	3	n/a	235
	ing	[3]	62	68	64	19	24	62	95	72	42	86	40	22	39	51	9	16	n/a	774
		[4]	3	1	3	0	1	0	0	0	1	2	0	0	1	0	1	0	1	17
		[5]	29	13	10	0	26	0	0	0	1	2	0	0	30	0	15	0	1	131
11	Shooting	[1]	25	10	12	19	11	9	3	42	10	7	6	11	4	6	21	0	n/a	197
		[2]	8	3	3	5	2	1	0	5	4	1	3	3	1	2	4	0	n/a	47
		[3]	33	13	15	24	13	10	3	47	14	8	9	14	5	8	25	0	n/a	244
		[4]	3	0	1	1	1	1	0	1	0	0	1	0	1	0	7	0	0	21
		[5]	16	0	6	14	20	1	0	1	0	0	1	0	8	0	120	0	0	192
12	Football	[1]	148	77	90	84	45	82	74	129	89	96	56	50	58	88	126	26	n/a	1,319
		[2]	2	2	0	3	0	2	1	8	0	4	0	0	0	4	5	2	n/a	35
		[3]	150	79	90	87	45	84	75	137	89	100	56	50	58	92	131	28	n/a	1,354
		[4]	10	3	7	2	1	4	6	9	5	0	2	1	5	7	11	1	1	78
		[5]	142	65	23	2	14	4	34	112	14	0	2	1	29	92	198	1	1	738
13	Swimmin	[1]	65	48	16	17	29	48	17	98	13	22	7	13	27	24	42	31	n/a	518
	a	[2]	23	8	6	11	10	14	11	31	2	6	0	8	7	10	13	11	n/a	173
	9	[3]	88	56	22	28	39	62	28	129	15	28	7	21	34	34	55	42	n/a	691
		[4]	10	2	7	1	2	8	2	6	3	2	0	2	3	4	8	7	0	71
		[5]	193	47	7	22	48	9	33	62	7	2	0	32	3	14	138	37	0	659
14	Table	[1]	85	24	63	71	76	56	32	167	58	26	88	25	45	83	108	17	n/a	1,025
	tennis	[2]	27	8	22	34	27	21	14	79	11	7	34	5	5	30	37	8	n/a	371
	tornito	[3]	112	32	85	105	103	77	46	246	69	33	122	30	50	113	145	25	n/a	1,396
		[4]	16	8	29	6	5	14	8	16	8	7	9	5	7	9	28	3	4	182
		[5]	247	100	100	103	110	24	97	162	42	24	28	22	55	93	429	10	4	1,651
15	Volleybal	[1]	31	0	9	10	12	20	10	27	12	24	19	36	37	0	0	11	n/a	259
	I																			

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		P												1 · · · · ·	

	[2]	12	0	7	0	18	6	6	2	0	0	10	0	0	0	15	10	n/a	88
	[3]	43	0	16	10	30	26	16	29	12	24	29	36	37	0	15	21	n/a	347
	[4]	4	0	2	0	1	0	2	2	5	2	0	3	2	0	3	1	0	31
	[5]	62	0	15	0	18	0	2	45	29	3	0	29	2	0	42	13	0	265
16 Basketba	[1]	63	18	21	38	17	24	26	77	51	20	40	26	9	23	6	23	n/a	483
Ш	[2]	9	0	0	10	0	0	0	10	0	0	0	0	0	0	0	0	n/a	31
	[3]	72	18	21	48	17	24	26	87	51	20	40	26	9	23	6	23	n/a	514
	[4]	14	2	5	2	0	2	6	7	3	0	1	0	0	0	0	0	0	46
	[5]	135	13	12	20	0	8	15	40	22	0	1	0	0	0	0	0	0	271
17 Tennis	[1]	10	4	14	11	4	5	5	24	3	9	5	6	17	2	3	3	n/a	126
	[2]	4	0	2	4	3	0	0	4	0	3	0	0	3	0	1	0	n/a	26
	[3]	14	4	16	15	7	5	5	28	3	12	5	6	20	2	4	3	n/a	152
	[4]	2	0	1	1	1	1	0	3	0	1	1	2	1	1	1	0	0	20
	[5]	26	0	4	10	11	1	0	18	0	13	1	8	21	8	17	0	0	143
18 Bowling	[1]	54	35	30	35	33	47	23	107	11	34	30	20	16	42	38	16	n/a	572
	[2]	20	19	16	15	14	19	14	58	6	11	12	6	6	17	12	12	n/a	259
	[3]	74	54	46	50	47	66	37	165	17	45	42	26	22	59	50	28	n/a	831
	[4]	14	4	23	5	1	17	8	31	9	13	6	3	9	7	27	2	2	183
	[5]	178	65	61	51	16	24	41	283	51	13	22	31	113	59	408	11	2	1,432
19 Rugby	[1]	18	16	14	12	0	24	0	17	7	8	13	0	0	15	8	0	n/a	153
	[2]	1	3	1	1	0	4	0	1	0	0	3	0	0	2	0	0	n/a	18
	[3]	19	19	15	13	0	28	0	18	7	8	16	0	0	17	8	0	n/a	171
	[4]	1	2	1	0	1	1	0	1	0	1	1	0	0	1	1	0	0	15
	[5]	18	22	1	0	1	14	0	9	0	1	1	0	0	8	8	0	0	88
20 Golf	[1]	90	30	12	11	28	21	11	191	28	28	63	15	14	57	20	21	n/a	641
	[2]	39	9	9	8	11	8	6	82	10	13	26	7	8	20	7	11	n/a	276
	[3]	129	39	21	19	39	29	17	273	38	41	89	22	22	77	27	32	n/a	917
	[4]	19	4	1	5	4	1	3	19	4	7	2	2	1	6	7	1	0	90

		[5]	202	57	12	38	127	1	12	125	12	29	2	4	45	53	107	17	0	848
21 Rowi	ing	[1]	51	5	17	10	8	17	2	23	3	13	14	2	10	13	15	0	n/a	204
	• -	[2]	24	6	10	4	9	9	1	16	3	6	10	1	6	12	3	0	n/a	122
	-	[3]	75	11	27	14	17	26	3	39	6	19	24	3	16	25	18	0	n/a	326
	-	[4]	2	1	3	0	0	1	0	2	1	1	0	0	1	1	1	0	1	18
		[5]	37	3	16	0	0	2	0	2	6	1	0	0	9	1	26	0	1	108
22 Danc	e	[1]	7	1	3	12	5	2	5	15	6	0	2	7	4	12	0	1	n/a	83
Snor	ts _	[2]	13	1	3	7	2	1	4	15	6	0	1	3	3	15	0	1	n/a	77
opon		[3]	20	2	6	19	7	3	9	30	12	0	3	10	7	27	0	2	n/a	160
	_	[4]	2	0	6	1	2	1	2	6	2	0	0	0	0	0	0	0	0	26
		[5]	2	0	17	1	38	1	9	16	8	0	0	0	0	0	0	0	0	97
23 Sailir	ng _	[1]	0	8	4	0	0	7	3	12	0	0	3	0	0	0	8	6	n/a	52
	_	[2]	0	1	2	0	0	0	0	0	0	0	1	0	0	0	1	1	n/a	8
	_	[3]	0	9	6	0	0	7	3	12	0	0	4	0	0	0	9	7	n/a	60
	_	[4]	0	1	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0	8
		[5]	0	13	0	0	0	0	0	34	2	0	0	0	0	0	11	0	0	65
24 Ski	_	[1]	15	4	16	1	4	2	3	13	11	9	2	0	1	5	1	0	n/a	88
	-	[2]	6	3	10	2	0	0	2	2	3	10	0	1	2	3	2	0	n/a	48
	_	[3]	21	7	26	3	4	2	5	15	14	19	2	1	3	8	3	0	n/a	136
	_	[4]	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	8
		[5]	0	0	8	0	0	0	0	56	0	0	0	0	0	0	0	0	0	69
25 Ice	_	[1]	15	0	7	0	0	0	0	9	14	0	13	0	0	0	0	0	n/a	59
sledo	ae -	[2]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	n/a	2
		[3]	15	0	7	0	0	0	0	9	14	0	13	0	0	0	0	0	n/a	61
NOCK	ey _	[4]	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	6
		[5]	0	0	2	0	0	0	0	12	0	0	0	0	0	0	0	0	0	19
26 Curlii	ng _	[1]	9	4	4	3	4	4	0	14	4	4	4	4	4	5	6	0	n/a	74
		[2]	3	1	1	2	2	3	0	3	2	1	2	1	1	2	1	0	n/a	27

	[3]	12	5	5	5	6	7	0	17	6	5	6	5	5	7	7	0	n/a	101
	[4]	3	1	2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	12
	[5]	20	1	14	0	0	12	0	9	0	0	0	0	0	0	0	0	0	61
27 Billiard	[1]	13	24	12	11	18	32	12	111	25	26	65	22	48	22	26	25	n/a	493
	[2]	1	2	0	2	1	5	4	13	2	4	12	2	11	3	9	3	n/a	76
	[3]	14	26	12	13	19	37	16	124	27	30	77	24	59	25	35	28	n/a	569
	[4]	2	2	2	0	1	2	3	10	3	4	3	3	6	1	6	0	2	52
	[5]	16	35	3	0	13	3	29	109	4	25	31	24	42	15	78	0	2	432
28 Taekwo	on [1]	19	1	1	0	5	16	3	69	0	0	0	16	1	2	1	2	n/a	137
do	[2]	11	0	0	0	1	9	0	29	0	0	3	0	1	0	0	1	n/a	57
üü	[3]	30	1	1	0	6	25	3	98	0	0	3	16	2	2	1	3	n/a	194
	[4]	1	0	3	0	0	6	0	1	0	1	0	0	2	1	0	0	1	19
	[5]	12	0	21	0	0	8	0	1	0	1	0	0	11	20	0	0	1	79
29 e-sport	s <u>[1]</u>	1	3	0	33	0	4	3	66	0	7	13	4	14	11	13	2	n/a	175
	[2]	0	0	0	12	0	0	1	11	0	5	1	0	5	0	1	1	n/a	39
	[3]	1	3	0	45	0	4	4	77	0	12	14	4	19	11	14	3	n/a	214
30 Gateba	[1]	224	8	23	26	35	28	0	218	19	103	18	78	46	59	213	19	n/a	1,118
	[2]	83	10	6	14	15	15	0	101	9	33	5	33	13	33	71	12	n/a	455
	[3]	307	18	29	40	50	43	0	319	28	136	23	111	59	92	284	31	n/a	1,573
	[4]	15	2	0	1	1	1	0	6	5	5	3	17	5	3	39	4	2	111
	[5]	67	61	0	1	47	1	0	52	10	17	3	108	23	13	639	7	2	1,054
31 Floorba	ıll [1]	9	9	8	8	0	0	8	10	0	7	0	12	0	0	9	0	n/a	81
	[2]	0	0	0	0	0	0	2	5	0	1	0	0	0	0	0	0	n/a	10
	[3]	9	9	8	8	0	0	10	15	0	8	0	12	0	0	9	0	n/a	91
	[4]	3	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	9
	[5]	19	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	26
32 Disc g	olf [1]	4	7	0	4	0	0	0	11	0	11	0	7	12	4	3	0	n/a	64
	[2]	3	2	0	4	0	0	0	6	0	6	0	3	6	4	2	0	n/a	38

	Global sporting	performance of	f nations -	A method	for	measuring	the	level	of	national	sport's	policies
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		[3]	7	9	0	8	0	0	0	17	0	17	0	10	18	8	5	0	n/a	102
33	Equestri	[1]	0	0	0	3	0	0	0	1	0	0	0	0	10	0	0	0	n/a	15
	an	[2]	0	0	0	7	0	0	0	2	0	0	0	0	5	0	0	0	n/a	16
	an	[3]	0	0	0	10	0	0	0	3	0	0	0	0	15	0	0	0	n/a	31
		[4]	0	0	0	0	0	0	0	0	0	2	0	0	1	1	0	0	0	8
		[5]	0	0	0	0	0	0	0	0	0	2	0	0	1	8	0	0	0	16
34	Kumdo	[4]	2	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	9
	(Kendo)	[5]	2	0	7	0	0	15	0	0	0	0	0	0	0	0	25	0	0	54
35	National	[4]	0	1	1	1	0	0	0	0	0	0	0	0	1	1	1	0	0	10
	Archery	[5]	0	10	2	11	0	0	0	0	0	0	0	0	10	8	11	0	0	57
36	Fishing	[4]	0	0	1	0	0	0	0	1	0	0	0	0	0	1	1	0	0	8
		[5]	0	0	1	0	0	0	0	16	0	0	0	0	0	22	17	0	0	61
37	New	[4]	1	1	9	0	0	0	8	0	0	0	0	0	11	0	1	0	0	35
	sports	[5]	1	8	30	0	0	0	57	0	0	0	0	0	30	0	16	0	0	147
38	Dart	[4]	1	0	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0	8
		[5]	1	0	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0	9
39	Alpine	[4]	5	3	1	1	1	0	1	4	0	0	0	0	0	0	4	0	0	24
		[5]	195	103	1	1	18	0	9	11	0	0	0	0	0	0	69	0	0	412
40	Recreati	[4]	0	0	2	0	0	0	0	0	0	0	0	0	1	0	1	0	0	8
	on	[5]	0	0	3	0	0	0	0	0	0	0	0	0	1	0	15	0	0	24
41	Maratho	[4]	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1	0	0	8
	n	[5]	44	0	1	0	0	0	0	0	0	0	0	0	11	0	18	0	0	79
42	Baduk	[4]	0	2	3	0	0	0	0	0	1	0	0	1	0	0	3	0	0	14
		[5]	0	35	3	0	0	0	0	0	2	0	0	12	0	0	58	0	0	115
43	Skating	[4]	1	0	1	0	1	0	0	3	0	1	0	0	0	2	0	0	0	13
		[5]	1	0	2	0	13	0	0	44	0	1	0	0	0	44	0	0	0	110

11																				
44	Life	[4]	10	0	6	0	0	2	7	1	1	2	0	0	4	3	1	0	0	41
	dance	[5]	43	0	6	0	0	2	53	10	6	2	0	0	4	18	17	0	0	166
45	Waterski	[4]	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	6
		[5]	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	7
46	Underwa	[4]	0	0	0	0	0	2	0	1	0	2	0	0	0	0	0	0	0	9
	ter	[5]	0	0	0	0	0	2	0	1	0	2	0	0	0	0	0	0	0	10
47	Stretchin	[4]	14	0	0	0	0	0	0	0	0	2	0	0	1	1	0	0	0	22
	g	[5]	14	0	0	0	0	0	0	0	0	4	0	0	1	10	0	0	0	34
48	Baseball	[4]	3	1	1	1	0	2	0	2	0	1	0	0	1	0	0	0	0	16
		[5]	41	13	13	8	0	2	0	18	0	13	0	0	25	0	0	0	0	138
49	Aerobics	[4]	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	7
		[5]	1	0	9	0	0	0	7	0	0	0	0	0	0	0	0	0	0	22
50	Yoga	[4]	1	0	8	1	0	3	0	1	0	1	0	0	4	4	1	0	0	28
		[5]	1	0	21	5	0	3	0	1	0	1	0	0	7	45	48	0	0	137
51	Skipping	[4]	2	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	8
	ropo	[5]	2	0	1	0	Δ	Ο	0	1	0	Δ	0	0	0	Δ	0	^	0	9
	Tope	[-]	2	0	1	0	0	0	0	I	0	0		0	0	0	0	0	0	
52	Roller	[4]	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	5
52	Roller sports	[4] [5]	0 0	0 0 0	0 0	0 0 0	0 0 0	0 0 0	1 1	0 0	0 0 0	0 0 0	0 0	0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0	5 6
52	Roller sports Foot	[4] [5] [4]	0 0 0	0 0 0 0	0 0 1	0 0 0	0 0 0	0 0 0	1 1 0	0 0 0	0 0 0 1	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0 2	0 0 0 0	0 0 0	0 0 0	5 6 8
52	Roller sports Foot volleyball	[4] [5] [4] [5]	0 0 0 0	0 0 0 0	0 0 1 1	0 0 0 0 0	0 0 0 0	0 0 0 0	0 1 1 0 0	0 0 0 0	0 0 1 1	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 2 7	0 0 0 0	0 0 0 0 0	0 0 0 0	5 6 8 14
52 53 54	Roller sports Foot volleyball Gymnast	[4] [5] [4] [5] [4]	2 0 0 0 0 0	0 0 0 0 0	0 0 1 1 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 1 1 0 0 0	0 0 0 0 0	0 0 1 1 0	0 0 0 0 0 0	0 0 0 0	0 0 0 0 0	0 0 0 0 0 5	0 0 2 7 0	0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	5 6 8 14 9
52 53 54	Roller sports Foot volleyball Gymnast ics	[4] [5] [4] [5] [4] [5]	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 1 1 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 1 1 0 0 0 0	0 0 0 0 0 0	0 0 1 1 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 5 8	0 0 2 7 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	5 6 8 14 9 13
52 53 54 55	Roller sports Foot volleyball Gymnast ics Taekkye	[4] [5] [4] [5] [4] [5] [4]	2 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 1 1 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 1	0 1 1 0 0 0 0 0 0	0 0 0 0 0 0 0 1	0 0 1 1 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 5 8 0	0 0 2 7 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	5 6 8 14 9 13 6
52 53 54 55	Roller sports Foot volleyball Gymnast ics Taekkye on	[4] [5] [4] [5] [4] [5] [4] [5]	2 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0	0 0 1 1 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 1 4	0 1 1 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 1 1	0 0 1 1 0 0 0 0	0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0	0 0 0 0 5 8 0 0	0 0 2 7 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0	5 6 8 14 9 13 6 10

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	cycling	[5]	0	0	0	0	0	0	0	33	2	0	0	0	0	9	0	0	0	49
57	Special	[4]	9	0	3	0	0	21	5	1	2	2	0	0	0	13	0	0	0	60
	physical	[5]	21	0	15	0	0	24	33	13	19	3	0	0	0	93	0	0	0	226
	activity																			
58	Futsal	[4]	0	0	0	0	0	1	0	2	1	1	0	1	0	1	0	0	0	11
		[5]	0	0	0	0	0	1	0	2	2	1	0	9	0	11	0	0	0	31
59	Flying	[4]	1	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	1	7
	disc	[5]	1	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	1	8
60	Aikido	[4]	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	6
		[5]	0	13	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	19
61	Hand	[4]	1	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	1	8
	cycling	[5]	11	0	1	0	0	1	0	0	0	0	0	0	0	0	12	0	1	30
62	Fitness	[4]	2	0	5	0	0	0	0	0	0	1	1	0	1	2	0	0	1	16
		[5]	4	0	12	0	0	0	0	0	0	16	1	0	1	24	0	0	1	63
63	T-ball	[4]	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	5
		[5]	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	1	13

#### <G21> The Korea national games for the people in need<sup>28)</sup>

	-		Winter	games		Participants in the 34th Summer											
	Host	No.	Р	articipar	its		Host	No.	Participants				games (2014)				
	year	of	Athle	Offici	Total		year	of	Athlet	Offici	Total	No.	Place	Athlet	Offici	Total	
		sports	tes	als				sports	es	als				es	als		
20th	2000	17	1,375	492	1,867	1st	2004	4	100	50	150	01	Seoul	454	208	662	
21st	2001	17	1,500	520	2,020	2nd	2005	3	80	70	150	02	Busan	305	193	498	
22nd <sup>29)</sup>	n/a	n/a	n/a	n/a	n/a	3rd	2006	4	102	107	209	03	Daegu	358	113	471	
23rd	2003	17	1,500	520	2,020	4th	2007	4	117	107	224	04	Incheon	396	154	550	
24th	2004	17	1,656	635	2,291	5th	2008	4	215	231	446	05	Gwangju	266	125	391	
25th	2005	18	1,885	701	2,586	6th	2009	5	304	125	429	06	Daejeon	326	129	455	
26th	2006	19	2,462	810	3,272	7th	2010	5	330	330	660	07	Ulsan	281	184	465	
27th	2007	22	2,991	1,040	4,031	8th	2011	4	338	347	685	08	Sejong	36	42	78	
28th	2008	23	3,987	1,472	5,459	9th	2012	4	365	366	731	09	Gyeonggi	473	186	659	
29th	2009	24	4,692	1,653	6,350	10th	2013	4	372	366	738	10	Gangwon	272	135	407	
30th	2010	24	4,825	1,013	6,746	11th	2014	5	344	385	729	11	Chungbuk	341	174	515	
31st	2011	27	4,964	2,131	7,905							12	Chungnam	289	143	432	
32nd	2012	27	4,839	2,156	6,995							13	Jeonbuk	221	155	376	
33rd	2013	27	5,153	2,265	7,419							14	Jeonnam	250	127	377	
34th	2014	26	5,029	2,431	7,460							15	Gyeongbuk	358	144	502	
												16	Gyeongnam	223	91	314	
												17	Jeju	180	128	308	

29) Canceled due to FIFA world cup hosted in Republid of Korea and Busan Asian Games

<sup>28)</sup> Refer in more detail to the Korea Paralympic Committee (http://english.koreanpc.kr/)

<g22></g22>	Budget	for	the	people	in	need <sup>30)</sup>	(unit:	а	thousand	USD)	)
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• • •	•		,						
Year	2006	2007	2008	2009	2010	2011	2012	2013	2014
Budget of Korea Paralympic	10,936	19,634	26,018	36,387	30,560	34,393	46,889	55,886	66,423
Committee									
Fund from Korea Sports	5,633	9,395	21,214	26,069	20,369	23,790	30,814	31,561	40,147
Promotion Foundation									

<sup>30)</sup> Refer in more detail to the Korea Paralympic Committee (http://english.koreanpc.kr/)

## <G23> Organisation chart of KSOC (as of 2016)<sup>31)</sup>



31) Adapted from https://www.sports.or.kr/home/020102/0050/main.do

## <G24> Current state of NFs<sup>32</sup>) (as of 2016)

No	Name	Year	No.	No.	No.	No	of Natio	nal	No. of registered			No. of	Referees	(as of	No. of coaches		Budget	Source (official
		of	of	of	of	athlete	es (as of	2014)	athletes	etes <sup>33)</sup> (as of 2014)			2014)		(as of 2014)		(year) (unit:	website)
		establ	board	com	com	Male	Fema	Total	Male	Fema	Total	Natio	Intern	Total	Natio	Qualifi	USD)	
		ishme	mem	mitte	mittee		le			le		nal	ation		nal	ed		
		nt	bers	es	mem							level	al		level	level		
					bers								level					
01	Badminton Korea	1957	27	6	52	20	20	40	1,201	842	2,043	1,761	13	1,774	6	12,991	13383524	http://www.bka.kr
	Association																(2016)	
02	Boxing Association of	1934	26	8	70	20	6	26	968	55	1,023	327	41	368	5	2,235	2174129	http://boxing.sports.
	Korea																(2016)	<u>or.kr</u>
03	Korea Amateur Baduk	2005	22	4	20	n/a	n/a	n/a	605	202	807	n/a	n/a	n/a	n/a	n/a	2810655	http://www.kbaduk.
	Association																(2015)	<u>ar.kr</u>
04	Korea Archery	1983	29	8	53	12	12	24	886	808	1,694	532	3	535	8	n/a	5540000	http://www.archery.
	Association																(2016)	<u>or.kr</u>
05	Korea Aerobic Federation	2015	n/a	10	n/a	n/a	n/a	n/a	302	1,392	1,694	333	39	n/a	n/a	13,970	n/a (n/a)	http://www.aerobic.
																		<u>or.kr/</u>
06	Korea Association of	1945	30	10	79	24	7	31	3,618	2,256	5,874	4,033	2	4,035	9	n/a	6912854	http://www.kaaf.or.
	Athletics Federations																(2016)	<u>kr</u>
07	Korea Baseball	1946	23	7	44	24	n/a	24	7,881	5	7,886	350	n/a	350	3	1,353	7429593	http://www.korea-b
	Association																(2015)	<u>aseball.com</u>
08	Korea Basketball	1931	23	5	n/a	12	12	24	1,498	802	2,300	3,333	116	3,449	4	5,898	5780142	http://www.koreaba
	Association																(2016)	sketball.or.kr
09	Korea Biathlon Union	1982	n/a	3	26	8	8	16	96	72	168	193	22	215	4	n/a	2241597	http://www.korbia.o
																	(2015)	<u>r.kr</u>

32) Both 9 associate members (Orienteering, Aeronautics, Racquetball, Kickboxing, Cricket, Floorball, e-Sports, Yongmudo, Chess) and 8 recognized members (Motor cycle, Bridge, Muay Thai, Sambo, Foot volleyball, Automobile racing, Polo, Cheerleading) are not included in the list.

33) Including entire levels (i.g., youth, etc.)
| 10 | Korea Billiards Federation | 1981 | 19  | 5   | n/a | n/a | n/a | n/a | 764   | 91    | 855   | 128   | 44  | 172   | n/a | 729   | 1726035   | http://kbf.sports.or.  |
|----|----------------------------|------|-----|-----|-----|-----|-----|-----|-------|-------|-------|-------|-----|-------|-----|-------|-----------|------------------------|
|    |                            |      |     |     |     |     |     |     |       |       |       |       |     |       |     |       | (2015)    | <u>kr/</u>             |
| 11 | Korea Bobsleigh Skeleton   | 1989 | 22  | n/a | n/a | 12  | 5   | 17  | 48    | 10    | 58    | 8     | 9   | 17    | 3   | n/a   | 3503592   | http://www.kbsf.or.    |
|    | Federation                 |      |     |     |     |     |     |     |       |       |       |       |     |       |     |       | (2016)    | <u>kr/</u>             |
| 12 | Korea Bowling              | 1969 | n/a | 10  | n/a | 8   | 8   | 16  | 801   | 593   | 1,394 | n/a   | n/a | n/a   | 4   | 6,765 | n/a (n/a) | http://www.bowling.    |
|    | Association                |      |     |     |     |     |     |     |       |       |       |       |     |       |     |       |           | <u>or.kr/</u>          |
| 13 | Korea Curling Federation   | 1994 | 22  | 5   | 37  | 5   | 5   | 10  | 253   | 208   | 461   | 240   | n/a | 240   | 4   | n/a   | 4419740   | http://curling.sports. |
|    |                            |      |     |     |     |     |     |     |       |       |       |       |     |       |     |       | (2016)    | <u>or.kr</u>           |
| 14 | Korea Cycling Federation   | 1945 | 45  | 4   | 46  | 18  | 16  | 34  | 584   | 218   | 802   | 300   | 2   | 302   | 6   | 337   | 7094000   | http://www.cycling.    |
|    |                            |      |     |     |     |     |     |     |       |       |       |       |     |       |     |       | (2015)    | <u>or.kr</u>           |
| 15 | Korea Equestrian           | 1945 | 27  | 6   | 52  | 12  | n/a | 12  | 365   | 166   | 531   | 54    | 16  | 71    | 3   | 1,314 | 6172395   | http://kef.sports.or.  |
|    | Federation                 |      |     |     |     |     |     |     |       |       |       |       |     |       |     |       | (2016)    | <u>kr/</u>             |
| 16 | Korea Football             | 1933 | 19  | 7   | 80  | 20  | 18  | 38  | 24,00 | 1,682 | 25,68 | 7,650 | 28  | 7,678 | 4   | 8,890 | 77384793  | http://www.kfa.or.kr   |
|    | Association                |      |     |     |     |     |     |     | 6     |       | 8     |       |     |       |     |       | (2015)    |                        |
| 17 | Korea Golf Association     | 1965 | 29  | 9   | 92  | 8   | 8   | 16  | 1,524 | 1,036 | 2,560 | 18    | 5   | 23    | 3   | 9,925 | 4977500   | http://www.kgagolf.    |
|    |                            |      |     |     |     |     |     |     |       |       |       |       |     |       |     |       | (2015)    | <u>or.kr</u>           |
| 18 | Korea Gymnastics           | 1945 | 28  | 15  | 121 | 14  | 20  | 34  | 455   | 542   | 997   | 220   | 9   | 229   | 10  | 36    | 3655763   | http://www.gymnast     |
|    | Association                |      |     |     |     |     |     |     |       |       |       |       |     |       |     |       | (2016)    | ics.or.kr              |
| 19 | Korea Handball             | 1945 | 29  | 13  | n/a | 24  | 24  | 48  | 1,176 | 1,005 | 2,181 | 354   | 14  | 336   | 6   | n/a   | 8059714   | http://www.handball    |
|    | Federation                 |      |     |     |     |     |     |     |       |       |       |       |     |       |     |       | (2015)    | korea.com              |
| 20 | Korea Hockey               | 1947 | 23  | 10  | n/a | 24  | 24  | 48  | 772   | 678   | 1,450 | 70    | 10  | 368   | 6   | n/a   | 3566436   | http://koreahockey.    |
|    | Association                |      |     |     |     |     |     |     |       |       |       |       |     |       |     |       | (2014)    | <u>co.kr</u>           |
| 21 | Korea Ice Hockey           | 1930 | 25  | 6   | 105 | 22  | 21  | 43  | 1,909 | 197   | 2,106 | 63    | 34  | 97    | 4   | n/a   | 6367220   | http://www.kiha.or.    |
|    | Association                |      |     |     |     |     |     |     |       |       |       |       |     |       |     |       | (2016)    | <u>kr</u>              |
| 22 | Korea Judo Association     | 1945 | 27  | 19  | 208 | 18  | 18  | 36  | 2,259 | 824   | 3,083 | 838   | 58  | 896   | 6   | 2,267 | 5772547   | http://judo.sports.or  |
|    |                            |      |     |     |     |     |     |     |       |       |       |       |     |       |     |       | (2016)    | <u>.kr</u>             |
| 23 | Korea Kabaddi              | 2002 | 19  | 5   | n/a | 12  | 12  | 24  | 81    | 29    | 110   | 315   | 21  | 372   | 2   | n/a   | n/a (n/a) | http://kabaddi.sport   |
|    | Association                |      |     |     |     |     |     |     |       |       |       |       |     |       |     |       |           | <u>s.or.kr/</u>        |
| 24 | Korea Karatedo             | 1962 | n/a | n/a | n/a | 5   | 5   | 10  | 164   | 43    | 207   | 274   | 31  | 305   | 2   | n/a   | n/a (n/a) | http://www.karated     |

	Federation																	o.or.kr
25	Korea Kumdo Association	1953	30	14	160	n/a	n/a	n/a	1,427	158	1,585	2,333	33	2,366	n/a	1,732	2883351	http://www.kumdo.
																	(2015)	org
26	Korea Luge Federation	1989	16	3	24	4	4	8	22	6	28	6	6	12	2	n/a	1805031	http://luge.sports.or
																	(2015)	.kr
27	Korea Modern Pentathlon	1982	27	6	49	8	8	16	283	123	406	50	55	105	5	n/a	3406884	http://www.pentathl
	Federation																(2016)	on.or.kr
28	Korea National Archery	1922	27	3	19	n/a	n/a	n/a	9,015	1,234	10,24	1,461	n/a	1,461	n/a	n/a	617200 (2015)	http://kungdo.sport
	Association										9							s.or.kr
29	Korea Roller Sports	1972	n/a	13	81	n/a	n/a	n/a	667	299	966	69	15	84	n/a	544	1315660	http://www.krsf.or.k
	Federation																(2015)	r
30	Korea Rugby Union	1946	24	8	n/a	18	14	32	1,187	11	1,198	51	1	52	4	127	2044210	http://rugby.sports.
																	(2014)	or.kr
31	Korea Sailing Federation	1979	25	5	41	20	10	30	266	55	321	26	2	28	5	456	4121051	http://www.ksaf.org
																	(2016)	
32	Korea Sepaktakraw	1988	18	7	26	12	12	24	168	73	241	644	54	698	4	29	4918188	http://www.sepakta
	Association																(2016)	kraw.or.kr
33	Korea Shooting	1955	29	8	73	35	29	64	2,199	1,163	3,362	368	189	557	12	n/a	5480224	http://www.shootin
	Federation																(2016)	g.or.kr
34	Korea Skating Union	1945	30	15	114	21	25	46	478	773	1,251	157	59	216	7	1,070	10743448	http://www.skating.
																	(2014)	<u>or.kr</u>
35	Korea Ski Association	1946	27	11	n/a	35	10	45	225	102	327	1,482	50	1,532	12	1,491	12585022	http://ski.sports.or.k
																	(2016)	<u>r</u>
36	Korea Soft Tennis	1920	21	n/a	n/a	8	8	16	930	611	1,541	190	95	285	2	241	n/a (n/a)	http://softtennis.spo
	Association																	<u>rts.or.kr</u>
37	Korea Squash Federation	1989	27	8	55	5	5	10	222	108	330	123	16	139	2	3,024	776261 (2015)	http://koreasquash.
																		<u>or.kr</u>
38	Korea Ssireum	1927	27	11	98	n/a	n/a	n/a	1,661	n/a	1,661	287	n/a	287	n/a	409	5523167	http://ssireum.sport
	Association																(2015)	<u>s.or.kr</u>

39	Korea Swimming	1946	30	8	78	37	22	59	2,028	1,371	3,399	14,60	38	14,64	10	22,643	5626316	http://swimming.sp
	Federation											2		0			(2015)	orts.or.kr
40	Korea Table Tennis	1945	30	8	64	10	10	20	754	796	1,550	1,221	283	1,504	4	4,284	4165366	http://koreatta.sport
	Association																(2015)	s.or.kr/intro.html
41	Korea Taekkyon	1984	17	n/a	n/a	n/a	n/a	n/a	718	277	995	596	n/a	929	n/a	n/a	451228 (2015)	http://www.koreata
	Federation																	ekkyon.com/
42	Korea Taekwondo	1961	26	26	453	16	16	32	8,256	2,939	11,19	23,12	1,344	1,961	6	22,961	9419149	http://www.koreata
	Association										5	2					(2015)	ekwondo.org
43	Korea Tennis Association	1945	n/a	9	40	6	6	12	924	649	1,573	911	18	2,892	2	5,632	3045673	http://www.kortenni
																	(2015)	<u>s.co.kr</u>
44	Korea Triathlon	1987	23	8	43	4	4	8	99	57	156	2,883	9	179	2	n/a	1949184	http://www.triathlon
	Federation																(2016)	<u>.or.kr</u>
45	Korea Underwater	1968	25	9	46	n/a	n/a	n/a	200	122	322	505	21	526	n/a	225	1871316	http://www.kua.or.k
	Association																(2015)	<u>r</u>
46	Korea Volleyball	1945	27	14	n/a	14	14	28	1,502	822	2,324	617	15	632	4	2,844	4280000	http://www.kva.or.k
	Association																(2016)	<u>r</u>
47	Korea Waterski and	1979	28	7	43	n/a	n/a	n/a	190	92	282	1,539	143	1,682	n/a	280	582799 (2015)	http://www.waterski
	Wakeboard Association																	<u>net.org</u>
48	Korea Weightlifting	1936	29	9	76	16	14	30	723	363	1,086	421	178	599	6	n/a	2327853	http://www.weightlif
	Federation																(2015)	ting.or.kr
49	Korea Wrestling	1946	26	9	90	28	8	36	1,501	221	1,722	47	66	113	8	396	3813546	http://www.kor-wre
	Federation																(2014)	stling.or.kr
50	Korea Wushu Association	1989	24	14	81	8	5	13	776	193	969	686	48	734	3	951	1313858	http://wushu.sports.
																	(2016)	<u>ar.kr</u>
51	Korean Alpine Federation	1962	30	16	255	n/a	n/a	n/a	1,101	519	1,620	380	10	390	n/a	356	3261817	http://www.kaf.or.kr
																	(2016)	
52	Korean Bodybuilding and	1987	24	9	82	n/a	n/a	n/a	1,595	267	1,862	729	67	796	n/a	54,052	637453 (2015)	http://bodybuilding.
	Fitness Federation																	sports.or.kr
53	Korean Canoe Federation	1983	24	10	57	13	6	19	396	159	555	302	13	315	3	301	2182967	http://www.canoe.o

																	(2015)	<u>r.kr</u>
54	Korean Federation of	2001	n/a	1	13	n/a	n/a	n/a	242	319	561	248	29	277	n/a	n/a	607903 (2015)	http://www.kfds.or.
	DanceSport																	<u>kr/</u>
55	Korean Fencing	1947	28	8	72	24	24	48	831	693	1,524	143	36	80	6	n/a	4778607	http://fencing.sport
	Federation																(2015)	<u>s.or.kr</u>
56	Korean Rowing	1962	28	8	49	9	11	20	392	189	581	214	20	234	3	228	3059952	http://rowing.sports.
	Association																(2016)	<u>or.kr</u>

# <G25> Branches of Korea Council of Sport for All (NF level; as of 2014)

No	Sports	Year of	Bud	get (unit: US	SD)	No	Sports	Year of	Budg	et (unit: US	SD)
		establis	2014	Own	Total			establis	2014	Own	Total
		hment						hment			
01	Football	1991	1 888 000	734 000	2 622 000	25	Tug-of-war	1999	173 000	26 000	2 622 000
02	Athletics	1991	277 000	178,000	455,000	26	Basehall	1999	621,000	308 000	455 000
02	Badminton	1001	1 007 000	487,000	1 494 000	20	Baskethall	1000	612,000	272 000	1 494 000
04	Gateball	1991	1,429,000	1.039.000	2.468.000	28	Kukmudo	1999	164,000	25.000	2.468.000
05	Cycling	1991	1 254 000	551 000	1 805 000	29	Golf	2000	357 000	259 000	1 805 000
06	Skating	1991	590,000	115 000	705.000	30	Billiards	2000	657,000	227 000	705 000
07	Windsurfing &	1001	249,000	111,000	360,000	31	Kumdo	2000	564,000	133,000	360,000
07	windsuring &	1335	243,000	111,000	300,000	51	Rumuo	2001	304,000	155,000	300,000
	kiteboarding										
08	Table tennis	1993	801,000	308,000	1,109,000	32	Taekwondo	2001	533,000	393,000	1,109,000
09	Tennis	1993	814,000	545,000	1,359,000	33	Gukhakgigong	1999	738,000	135,000	1,359,000
10	Foot volleyball	1994	436,000	125,000	561,000	34	Alpine	2003	574,000	150,000	724,000
11	Volleyball	1994	441,000	334,000	775,000	35	Ssireum	2004	2,556,000	873,000	3,429,000
12	Shooting	1995	299,000	95,000	394,000	36	Roller sports	2003	428,000	89,000	517,000
13	Archery	1994	738,000	46,000	784,000	37	Fishing	2001	226,000	46,000	272,000
14	Ski	1996	621,000	193,000	814,000	38	Triathlon	2002	944,000	755,000	1,699,000
15	Underwater	1997	364,000	263,000	627,000	39	Swimming	2003	235,000	41,000	276,000
16	Bowling	1997	677,000	350,000	1,027,000	40	Wushu	2004	366,000	98,000	464,000
17	Taekkyon	1998	492,000	147,000	639,000	41	Squash	1999	165,000	47,000	212,000
18	Aerobics	1999	651,000	100,000	751,000	42	Combined martial art	1999	153,000	53,000	206,000
19	Futsal	1999	567,000	308,000	875,000	43	Racquetball	2003	137,000	45,000	182,000
20	Aikido	1999	372,000	223,000	595,000	44	Ground Golf	2009	255,000	78,000	333,000
21	Gliding	1999	221,000	100,000	321,000	45	Park golf	2009	212,000	98,000	310,000

22	Soft tennis	1999	392,000	114,000	506,000	46	Skipping rope	2009	303,000	153,000	456,000
23	Body Building	1999	172,000	62,000	234,000	47	Handball	2009	308,000	205,000	513,000
24	Equestrian	1999	2,807,000	839,000	3,646,000	48	Ice hockey	2001	266,000	17,000	283,000
49	Field hockey	1999	150,000	72,000	0						
50	Free tennis	2009	320,000	41,000	0						
51	Flying disc	2009	130,000	50,000	0						
52	Dodgeball	2010	689,000	145,000	0						
53	Walking	2011	401,000	154,000	0						
54	Dance Sports	2009	419,000	294,000	0						
55	Traditional Sunsul	2010	87,000	65,000	0						
56	Softball	2009	20,000	20,000	0						
57	Woodball	2009	108,000	98,000	0						
58	Baduk	2009	105,000	10,000	0						
59	Rugby	2009	40,000	40,000	0						
60	Sailing	2009	20,000	20,000	0						
61	Bodyguard martial art	2009	85,000	65,000	0						
62	Belly dance	2010	50,000	50,000	0						
63	Mixed martial art	2010	40,000	20,000	0						
64	Karate	2010	81,000	6,000	0						
65	Life dance	2010	35,000	35,000	0						

# <G26> Current state of RSC (as of 2016)

NI.	N	Year of	No. of board	No. of full-time	Budget (unit:	Source (official website of each
NO	Name	establishment	members <sup>34)</sup>	staff	USD)	RSC)
01	Seoul Sports Council	1953	37	31	16,265,289	http://www.seoulsports.or.kr/
02	Busan Sports Council	1963	57	21	19,901,752	http://www.sports.busan.kr
03	Daegu Sports Council	1981	37	16	17,386,421	http://www.daegusports.or.kr/index.php
04	Incheon Sports Council	1981	50	130	38,021,370	http://www.icsports.or.kr/
05	Gwangju Sports Council	1986	43	46	7,830,000	http://www.gwangjusports.org/
06	Daejeon Sports Council	1989	35	16	13,369,186	http://www.djsc.or.kr
07	Ulsan Sports Council	1997	33	16	13,212,407	http://www.ussc.or.kr
08	Sejong Sports Council	2012	24	5	2,627,056	http://www.sejongsc.or.kr/
09	Gyeonggi Sports Council	1946	46	21	20,560,000	http://www.ggsports.or.kr
10	Gangwon Sports Council	1946	31	15	22,181,437	http://www.gwsports.or.kr
11	Chungbuk Sports Council	1946	53	15	11,816,153	http://www.cbsports.or.kr
12	Chungnam Sports Council	1927	32	16	17,024,593	http://www.cnsports.or.kr/
13	Jeonbuk Sports Council	1947	35	14	14,905,639	http://jbsports.or.kr
14	Jeonnam Sports Council	1945	34	15	12,155,815	http://www.jnsports.or.kr/
15	Gyeongbuk Sports Council	1949	44	12	14,064,174	http://www.gbsports.or.kr
16	Gyeongnam Sports Council	1945	37	11	17,295,302	http://gnsports.or.kr/
17	Jeju Sports Council	1951	37	18	3,886,410	http://www.jejusports.or.kr
	Total		665	418	262,503,004	

34) President of each RSC is the mayor of the region (the ex-officio)

# <G27> Branches of the Korea Council of Sport for All

### <G28> Code and Location of RSC

(RSC level; as of 2014)

No	Name	Year of	Budget (unit:	No	Name	Code	Location
		establish	USD)				
		ment					
01	Seoul Council of Sport for All	1990	23,009,000	01	Seoul	SE	
02	Busan Council of Sport for All	1991	12,746,000	02	Busan	BU	
03	Daegu Council of Sport for All	1991	8,870,000	03	Daegu	DG	GW
04	Incheon Council of Sport for All	1991	9,888,000	04	Incheon	IN	SE
05	Gwangju Council of Sport for All	1991	6,824,000	05	Gwangju	GJ	GG
06	Daejeon Council of Sport for All	1991	9,555,000	06	Daejeon	DJ	
07	Ulsan Council of Sport for All	1997	8,299,000	07	Ulsan	UL	CB
08	Sejong Council of Sport for All	2013	1,034,000	08	Sejong	SJ	CN SJ GB
09	Gyeonggi Council of Sport for All	1990	47,527,000	09	Gyeonggi	GG	U
10	Gangwon Council of Sport for All	1991	30,379,000	10	Gangwon	GW	DG
11	Chungbuk Council of Sport for All	1990	15,336,000	11	Chungbuk	СВ	JB
12	Chungnam Council of Sport for All	1991	14,777,000	12	Chungnam	CN	GN GN
13	Jeonbuk Council of Sport for All	1990	20,960,000	13	Jeonbuk	JB	GJ
14	Jeonnam Council of Sport for All	1990	20,477,000	14	Jeonnam	JN	JN JN
15	Gyeongbuk Council of Sport for All	1990	23,449,000	15	Gyeongbuk	GB	
16	Gyeongnam Council of Sport for All	1990	21,187,000	16	Gyeongnam	GN	~ 6
17	Jeju Council of Sport for All	1991	7,498,000	17	Jeju	JJ	L.
	Total		274,317,000				

	Region	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	Total
		Seo	Bus	Dae	Inch	Gwa	Daej	Ulsa	Sejo	Gye	Gan	Chu	Chu	Jeon	Jeon	Gyeo	Gyeo	Jeju	
		u <b> </b> 37)	an <sup>38)</sup>	gu <sup>39)</sup>	eon	ngju	eon	n <sup>43)</sup>	ng	ongg	gwo	ngbu	ngna	buk	nam	ngbu	ngna	50)	
Sports <sup>36)</sup>				-	40)	41)	42)		-	j44)	n <sup>45)</sup>	k <sup>46)</sup>	m	47)		k <sup>48)</sup>	m <sup>49)</sup>		
01 Aerobic		1	1	1	1	1	1	1	0	0	0	0	0	0	0	1	1	0	9
02 Alpine		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17
03 Archery		1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	16
04 Athletics	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17
05 Badmin	ton	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17
06 Baduk		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17
07 Baseba	8	1	1	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	15
Softball																			
08 Basketb	all	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	16
09 Biathlon	ľ	1	1	0	1	1	1	0	0	1	1	1	0	1	1	0	0	0	10
10 Billiards		1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	16
11 Bobsleig	gh	1	1	0	0	1	0	0	0	1	1	1	0	1	0	0	1	0	8
Skeleto	n																		
12 Bodybuik	ding	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17
13 Bowling		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17
14 Boxing		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17
15 Canoe		0	1	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	14
16 Curling		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17
17 Cycling		1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	16

#### <G29> Fact of RSF existence<sup>35)</sup>

35) The values in each cell indicate the number of applicable organisations. '1' and '0' stands for 'available' and 'unavailable' condition respectively. The sheet is updated as of April 2017. The case is counted as 'available' if a RSF is a member of its IF, but not registered in its RSC.

18 DanceSport	1	1	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	15
19 Equestrian	0	1	1	1	0	1	1	0	1	1	0	1	1	1	1	1	1	13
20 Fencing	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0	15
21 Football	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17
22 Golf	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17
23 Gymnastics	1	1	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	15
24 Handball	1	1	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	15
25 Hockey	0	1	1	1	1	1	0	0	1	1	1	1	1	0	1	1	1	13
26 Ice Hockey	1	1	1	1	0	1	0	0	1	1	0	0	1	0	1	1	0	10
27 Judo	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17
28 Kabaddi	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
29 Karatedo	0	1	1	1	1	1	1	0	1	0	1	0	1	0	0	1	1	11
30 Kumdo	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17
31 Luge	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	3
32 Modern Pentathlon	0	1	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	14
33 National Archery	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	16
34 Roller Sports	1	1	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	15
35 Rowing	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	0	14
36 Rugby	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	0	14
37 Sailing	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17
38 Sepaktakraw	0	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	15
39 Shooting	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17
40 Skating	1	1	1	1	1	1	1	0	1	1	1	1	1	0	0	1	1	14
41 Ski	1	1	1	1	1	1	1	0	1	1	1	1	1	0	1	1	0	14
42 Soft Tennis	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	16
43 Squash	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17
44 Ssireum	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	16
45 Swimming	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17

46	Table Tennis	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	16
47	Taekkyon	1	1	1	1	1	1	1	0	1	0	1	1	1	1	0	1	1	14
48	Taekwondo	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17
49	Tennis	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17
50	Triathlon	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	16
51	Underwater	1	1	1	1	1	1	0	0	1	1	1	1	1	0	0	1	1	13
52	Volleyball	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17
53	Waterski &	1	1	1	1	1	1	1	0	1	1	1	1	1	0	1	1	0	14
	Wakeboard																		
54	Weightlifting	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	16
55	Wrestling	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17
56	Wushu	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17
	Total	48	55	53	54	51	53	47	23	54	51	50	49	54	38	48	53	45	826

36) Full member NFs of Korean Olympic Committee

37) RSFs in Seoul, which are not presented in the table: Gateball, Windsurfing, Futsal, Foot volleyball, Gukhakgigong (National martial arts), Tug-of-war, Aikido, Traditional martial arts, Paragliding, Racquetball, Gukmudo (National martial arts), Combination martial arts, Traditional dance, Fishing, Skipping rope, Park golf, Walking, Mixed martial arts, Netball, Cheerleading, Bodyguard martial arts, Ground golf, Yoga, Teeball, Kickboxing

38) RSFs in Busan, which are not presented in the table: Foot volleyball, Gateball, Gukhakgigong, Ground golf, Park golf, Skipping rope, Fishing, Paragliding, Yoga, Kickboxing, Aikido, Combination martial arts, Kukmudo, Walking, Cheerleading, Flying disc, Surfing

39) RSFs in Daegu, which are not presented in the table: Gateball, Gukhakgigong, Foot volleyball, Park golf, Fishing, Racquetball, Combination martial arts, Skipping rope, Tug-of-war, Paragliding, Free tennis, Walking, Ground golf, American football, Kickboxing, Teeball, Flying disc, Aikido, Yoga

40) RSFs in Incheon, which are not presented in the table: Biathlon, Cricket, Kickboxing

41) RSFs in Gwangju, which are not presented in the table: Walking, Gateball, Gukmudo, Gukhakgigong, Fishing, Recreation, Mujeokdo (National martial arts), Belly dance, Yoga, Mixed martial arts, Foot volleyball, Combination martial arts, Skipping rope, Cheerleading, Trekking, Bodyguard martial arts, Teeball, Park golf, Paragliding, Floorball, Dodge ball, Aikido

42) RSFs in Daejeon, which are not presented in the table: Gateball, Gukhakgigong, Ground golf, Fishing, Netball, Aquarobics, Woodball, Foot volleyball, Skipping rope, Cheerleading, Kickboxing, Teeball, Park golf, Paragliding, Free tennis, Flying disc, Floorball, Dodge ball, Aikido, Futsal

43) RSFs in Ulsan, which are not presented in the table: Orienteering, Gateball, Aikido, Foot volleyball, Gukhakgigong, Ground golf, Skipping rope, Combination martial arts, Paragliding, Gukmudo, Racquetball, Wood ball, Bodybuard martial arts, Yoga, Park golf

44) RSFs in Gyeonggi, which are not presented in the table: Kickboxing

45) RSFs in Gangwon, which are not presented in the table: Kickboxing

## <G30> Budget for sports (as of 2014)

Budg	get of the Korean Olympi	c Committee	Bud	get of the Korea Council	of sport for all	Fun	d expense of the	Korea sports promotion
(unit	: a thousand USD)		(unit	: a thousand USD)		four	dation (unit: a the	ousand USD)
No.	Category	Budget	No.	Category	Budget	No.	Category	Expense
1	Government subsidies	14,286	1	Government subsidies	n/a	1	Elite sports	208,900
2	Fund from the Korea	185,277	2	Fund from the Korea	74,403	2	Sport for all	207,200
	sports promotion			sports promotion				
	foundation			foundation				
3	Accumulated fund for	14,286	3	Own business	4,246	3	School sports	416,100
	public services							
4	Others	12,689	4	Others	n/a	4	Others	62,900
	Total	226,538		Total	78,649		Total	895,100

<sup>46)</sup> RSFs in Chungbuk, which are not presented in the table: Kickboxing

<sup>47)</sup> RSFs in Jeonbuk, which are not presented in the table: Gateball, Park golf, Ground golf, Gukhakgigong, Aikido, Paragliding, Foot volleyball, Tug-of-war, Bodyguard martial arts, Dodge ball, Kickboxing, Netball

<sup>48)</sup> RSFs in Gyeongbuk, which are not presented in the table: Gateball, Gukhakgigong, Ground golf, Fishing, Foot volleyball, Combination martial arts, Flying Disc, Aikido

<sup>49)</sup> RSFs in Gyeongnam, which are not presented in the table: Gateball, Gukhakgigong, Ground golf, Fishing, Yoga, Foot volleyball, Skipping rope, Park golf, Paragliding, Aikido, Flying disc, Teeball

<sup>50)</sup> RSFs in Jeju, which are not presented in the table: Gateball, Gukhakgigong, Ground golf, Fishing, Foot volleyball, Skipping rope, Park golf, Paragliding, Aikido, Teeball, Free tennis, Flying disc, Walking, Racquetball, Kickboxing, Bodyguard martial arts, Dodge ball, Floorball

	Year	City	No. of medal sets	Gold	Silver	Bronze	Total	Score <sup>51)</sup>	No. of participants
Summer	2016	Rio	306	9	3	9	21	42	204
	2012	London	302	13	8	7	28	62	248
	2008	Beijing	302	13	10	8	31	67	267
	2004	Athens	301	9	12	9	30	60	267
	2000	Sydney	300	8	10	10	28	54	286
	1996	Atlanta	271	7	15	5	27	56	312
	1992	Barcelona	257	12	5	12	29	58	247
	1988	Seoul	237	12	10	11	33	67	477
	1984	Los Angeles	221	6	6	7	19	37	210
	1980	Moscow	203	n/a	n/a	n/a	n/a	n/a	n/a
	1976	Montreal	198	1	1	4	6	9	50
	1972	Munich	195	0	1	0	1	2	46
Winter	2014	Sochi	98	3	3	2	8	17	71
	2010	Vancouver	86	6	6	2	14	32	46
	2006	Turin	84	6	3	2	11	26	40
	2002	Salt Lake	78	2	2	0	4	10	48
	1998	Nagano	68	3	1	2	6	13	38
	1994	Lillehammer	61	4	1	1	6	15	24
	1992	Albertville	57	2	1	1	4	9	25
	1988	Calgary	46	0	0	0	0	0	28
	1984	Sarajevo	39	0	0	0	0	0	15
	1980	Lake Placid	38	0	0	0	0	0	10
	1976	Innsbruck	37	0	0	0	0	0	3
	1972	Sapporo	35	0	0	0	0	0	5
Youth - Summer	2014	Nanjing	386	5	7	7	19	36	73
	2010	Singapore	159	11	3	4	18	43	72
Youth - Winter	2016	Lillehammer	210	10	3	3	16	39	29
	2012	Innsbruck	174	6	3	2	11	26	28

# <G31> Olympic performance of ROK since 1972

51) Medal tally: Number of Gold medal \* 3 + Number of Silver medal \* 2 + Number of Bronze medal \* 1 (Donald, 1972)

# <G32> Government's budget for sports (as of 2014)

(unit: a hundred thousand USD)

(unit: a thousand USD)

Year	Government	Ministry of Cult	ture, Sports and	Sports Department			
	budget (A)	Τοι	ırism				
		Budget (B)	Ratio (B/A, %)	Budget (C)	Ratio (C/A, %)		
1993	407,641	2,377	0.58	428	0.10		
1995	557,805	3,838	0.69	511	0.09		
1997	705,284	5,245	0.74	1,541	0.21		
1998	807,629	6,183	0.76	1,816	0.22		
1999	884,850	6,943	0.78	1,572	0.18		
2000	946,199	9,149	0.96	1,799	0.19		
2001	1,002,246	9,706	0.96	1,639	0.16		
2002	1,060,963	10,991	1.03	1,589	0.15		
2003	1,114,831	11,401	1.02	1,425	0.13		
2004	1,183,560	15,340	1.30	1,093	0.09		
2005	1,343,704	15,676	1.17	1,137	0.08		
2006	1,448,076	9,644	0.66	1,489	0.10		
2007	1,641,435	12,681	0.77	1,812	0.11		
2008	1,782,797	15,136	0.85	2,343	0.13		
2009	2,041,000	16,579	0.81	2,135	0.11		
2010	2,053,312	18,166	0.88	1,529	0.07		
2011	2,099,303	19,603	0.93	1,559	0.07		
2012	2,231,384	20,933	0.94	1,514	0.07		
2013	2,436,433	22,706	0.94	1,715	0.07		
2014	2,507,885	23,258	0.93	1,488	0.06		

	· · · · · · · · · · · · · · · · · · ·		/
	Budget category of Sports Dep	artment,	Ministry
	(2014)		
No.	Category	Budget	
1	Sport for all		146,491
2	Elite sports		n/a
3	International relations		1,011
4	Sports industry		985
5	Sports for the people in need		110
6	Others		241
	Total		148,838

		Number of	f civil servants	for sports (as	of 2014)	Buc	Budget (as of 2015)				
		Administrative	Technical	Extraordinary	Total	Annual budget (A)	Sports budget (B)	B/A×100 (%)			
		official	post	civil service							
01	Seoul	76	164	12	240	36,265,922,000	326,240,000	0.9			
02	Busan	36	68	5	104	13,757,124,000	117,757,000	0.86			
03	Daegu	36	66	3	102	7,715,575,000	134,796,000	1.75			
04	Incheon	19	3	0	22	8,713,584,000	112,498,000	1.29			
05	Gwangju	43	70	17	113	6,111,001,000	184,363,000	3.02			
06	Daejeon	28	57	61	85	4,581,523,000	79,217,000	1.73			
07	Ulsan	32	36	35	68	4,540,851,000	98,698,000	2.17			
08	Sejong	2	2	0	4	917,000,000	10,618,000	1.16			
09	Gyeonggi	12	5	0	17	36,878,534,000	498,489,000	1.35			
10	Gangwon	9	4	1	13	10,899,252,000	257,135,000	2.35			
11	Chungbuk	16	3	0	19	9,581,988,000	180,928,000	1.89			
12	Chungnam	10	3	1	13	12,846,004,000	245,762,000	1.91			
13	Jeonbuk	11	6	1	17	12,305,942,000	138,884,000	1.12			
14	Jeonnam	12	1	0	13	14,350,573,000	207,484,000	1.44			
15	Gyeongbuk	11	1	0	12	17,170,614,000	236,198,000	1.38			
16	Gyeongnam	17	2	0	19	16,925,227,000	265,218,000	1.56			
17	Jeju	9	3	1	12	4,133,283,000	68,466,000	1.66			
	Total	379	494	137	873	217,693,997,000	3,162,751,000	1.5			

# <G33> Support from local government (unit: USD)

# <G34> ISSOSS achievement computation of the ROK

	Subindex 1. NF		Subindex 2-1. NOC (ISSOSS at the national level)						
No. Indicator No. Value	No Indicator No. Value	No. Indicator No. Value	No. Indicator No. Value	No. Indicator No. Value	No. Indicator No. Value				
01 1. 1. 1. 1 37 /56	34 1. 5. 2. 3 56 /56	67 2. 2. 2. 4 56 /56	01 1. 1. 1. 1 1	34 1. 5. 3. 1 1	67 2. 2. 4. 2 1				
02 1. 1. 1. 2 11 /56	35 1. 5. 2. 4 0 /56	68 2. 2. 2. 5 56 /56	02 1. 1. 1. 2 1	35 1. 6. 1. 1 1	68 2. 2. 4. 3 1				
03 1. 1. 1. 3 24 /56	36 1. 5. 2. 5 0 /56	69 2. 2. 3. 1 56 /56	03 1. 1. 1. 3 1	36 1. 6. 2. 1 0	69 2. 2. 4. 4 1				
04 1. 1. 2. 1 43 /56	37 1. 5. 3. 1 56 /56	70 2. 2. 3. 2 56 /56	04 1. 1. 2. 1 1	37 1. 6. 2. 2 1	70 2. 2. 4. 5 1				
05 1. 1. 2. 2 56 /56	38 1. 6. 1. 1 4 /56	71 2. 2. 3. 3 56 /56	05 1. 1. 2. 2 1	38 1. 6. 3. 1 1	71 2. 2. 4. 6 1				
06 1. 1. 3. 1 31 /56	39 1. 6. 2. 1 6 /56	72 2. 2. 4. 1 56 /56	06 1. 1. 3. 1 1	39 1. 7. 1. 1 0	72 2. 2. 4. 7 1				
07 1. 1. 3. 2 56 /56	40 1. 6. 2. 2 56 /56	73 2. 2. 4. 2 56 /56	07 1. 1. 3. 2 1	40 1. 8. 1. 1 0	73 2. 2. 4. 8 0				
08 1. 1. 3. 3 56 /56	41 1. 6. 3. 1 56 /56	74 2. 2. 4. 3 56 /56	08 1. 1. 3. 3 1	41 1. 8. 1. 2 1	74 2. 3. 1. 1 1				
09 1. 1. 4. 1 56 /56	42 1. 7. 1. 1 0 /56	75 2. 2. 4. 4 56 /56	09 1. 1. 4. 1 1	42 1. 8. 2. 1 0	75 2. 3. 1. 2 1				
10 1. 1. 5. 1 8 /35	43 1. 8. 1. 1 0 /56	76 2. 2. 4. 5 56 /56	<u>10 1. 1. 5. 1 0</u>	43 1. 8. 2. 2 0	76 2. 3. 1. 3 1				
11 1. 1. 5. 2 18 /35	44 1. 8. 1. 2 56 /56	77 2. 2. 4. 6 56 /56	<u>11 1. 1. 5. 2 0</u>	44 1. 9. 1. 1 0	77 2. 3. 1. 4 1				
12 1. 1. 5. 3 48 /56	45 1. 8. 2. 1 0 /56	78 2. 2. 4. 7 0 /56	<u>12 1. 1. 5. 3 0</u>	45 1. 9. 1. 2 0	78 2. 3. 2. 1 1				
13 1. 2. 1. 1 0 /56	46 1. 8. 2. 2 0 /56	79 2. 2. 4. 8 0 /56	<u>13 1. 2. 1. 1 0</u>	46 2. 1. 1. 1 1	79 2. 3. 2. 2 1				
14 1. 2. 2. 1 56 /56	47 1. 9. 1. 1 0 /56	80 2. 3. 1. 1 56 /56	<u>14 1. 2. 2. 1 1</u>	47 2. 1. 1. 2 1	80 2. 3. 2. 3 0				
15 1. 2. 2. 2 56 /56	48 1. 9. 1. 2 0 /56	81 2. 3. 1. 2 56 /56	<u>15 1. 2. 3. 1 1</u>	48 2. 1. 1. 3 1	81 2. 3. 2. 4 1				
16 1. 2. 3. 1 56 /56	49 2. 1. 1. 1 29 /56	82 2. 3. 1. 3 56 /56	<u>16 1. 2. 4. 1 1</u>	49 2. 1. 1. 4 1	82 2. 4. 1. 1 1				
17 1. 2. 4. 1 56 /56	50 2. 1. 1. 2 29 /56	83 2. 3. 1. 4 56 /56	<u>17 1. 3. 1. 1 0</u>	50 2. 1. 1. 5 1	83 2. 4. 1. 2 1				
18 1. 3. 1. 1 0 /56	51 2. 1. 1. 3 27 /56	84 2. 3. 2. 1 56 /56	<u>18 1. 3. 2. 1 1</u>	<u>51 2. 1. 2. 1 1</u>	84 2. 4. 1. 3 1				
19 1. 3. 2. 1 56 /56	52 2. 1. 1. 4 27 /56	85 2. 3. 2. 2 56 /56	<u>19 1. 3. 3. 1 1</u>	<u>52 2. 1. 2. 2 1</u>	85 2. 4. 1. 4 1				
20 1. 3. 2. 2 56 /56	53 2. 1. 1. 5 56 /56	86 2. 3. 2. 3 0 /56	20 1. 3. 4. 1 1	53 2. 2. 1. 1 1	86 2. 4. 1. 5 1				
21 1. 3. 3. 1 31 /56	54 2. 1. 2. 1 56 /56	87 2. 3. 2. 4 28 /56	<u>21 1. 4. 1. 1 0</u>	54 2. 2. 1. 2 1	87 2. 4. 1. 6 1				
22 1. 3. 3. 2 56 /56	55 2. 1. 2. 2 56 /56	88 2. 4. 1. 1 56 /56	22 1. 4. 1. 2 1	55 2. 2. 1. 3 1	88 2. 4. 2. 1 1				
23 1. 3. 4. 1 56 /56	56 2. 2. 1. 1 52 /56	89 2. 4. 2. 1 28 /56	23 1. 4. 2. 1 1	56 2. 2. 1. 4 1	89 2. 4. 2. 2 1				
24 1. 4. 1. 1 3 /56	57 2. 2. 1. 2 56 /56	90 2. 4. 2. 2 29 /56	<u>24 1. 4. 2. 2 1</u>	57 2. 2. 1. 5 1	90 2. 4. 2. 3 1				
25 1. 4. 1. 2 56 /56	58 2. 2. 1. 3 56 /56	91 2. 4. 2. 3 56 /56	25 1. 4. 2. 3 1	58 2. 2. 1. 6 1	91 2. 4. 2. 4 1				
26 1. 4. 2. 1 36 /56	59 2. 2. 1. 4 56 /56	92 2. 4. 2. 4 56 /56	26 1. 4. 2. 4 1	59 2. 2. 1. 7 1	92 2. 4. 3. 1 0				
27 1. 4. 2. 2 56 /56	60 2. 2. 1. 5 56 /56	93 2. 4. 2. 5 56 /56	27 1. 4. 3. 1 1	60 2. 2. 2. 1 1	93 2. 4. 3. 2 1				
28 1. 4. 2. 3 56 /56	61 2. 2. 1. 6 56 /56	94 2. 4. 2. 6 56 /56	28 1. 5. 1. 1 1	61 2. 2. 2. 2 1	Total value 0.817				
29 1. 4. 2. 4 56 /56	62 2. 2. 1. 7 56 /56	95 2. 4. 3. 1 0 /56	<u>29 1. 5. 2. 1 1</u>	<u>62 2. 2. 2. 3 1</u>					
30 1. 4. 3. 1 56 /56	63 2. 2. 1. 8 56 /56	96 2. 4. 3. 2 56 /56	30 1. 5. 2. 2 1	63 2. 2. 3. 1 1					
31 1. 5. 1. 1 9 /56	64 2. 2. 2. 1 56 /56	Total value 0.724	31 1. 5. 2. 3 1	64 2. 2. 3. 2 1					
32 1. 5. 2. 1 13 /56	65 2. 2. 2. 2 56 /56		32 1. 5. 2. 4 1	65 2. 2. 3. 3 1					
33 1. 5. 2. 2 56 /56	66 2. 2. 2. 3 56 /56		33 1. 5. 2. 5 0	66 2. 2. 4. 1 1					

Subindex	2-2. RSC (ISSOSS at the na	tional level)	Subindex 2-3. RSF (ISSOSS at the national level)						
No. Indicator No. Value	No. Indicator No. Value	No. Indicator No. Value	No. Indicator No. Value	No. Indicator No. Value	No. Indicator No. Value				
01 1. 1. 1. 1 0 /17	34 1. 6. 1. 1 3 /17	67 2. 2. 4. 2 17 /17	01 1. 1. 1. 1 -	34 1. 5. 2. 3 -	67 2. 2. 2. 4 -				
02 1. 1. 1. 2 6 /17	35 1. 6. 2. 1 17 /17	68 2. 2. 4. 3 17 /17	02 1. 1. 1. 2 -	35 1. 5. 2. 4 -	68 2. 2. 2. 5 -				
03 1. 1. 1. 3 17 /17	36 1. 6. 2. 2 17 /17	69 2. 2. 4. 4 17 /17	03 1. 1. 1. 3 -	36 1. 5. 2. 5 -	69 2. 2. 3. 1 -				
04 1. 1. 2. 1 17 /17	37 1. 6. 3. 1 17 /17	70 2. 2. 4. 5 17 /17	04 1. 1. 2. 1 -	37 1. 5. 3. 1 -	70 2. 2. 3. 2 -				
05 1. 1. 2. 2 17 /17	38 1. 7. 1. 1 0 /17	71 2. 2. 4. 6 17 /17	05 1. 1. 2. 2 -	38 1. 6. 1. 1 -	71 2. 2. 3. 3 -				
06 1. 1. 3. 1 1 /17	39 1. 8. 1. 1 0 /17	72 2. 2. 4. 7 0 /17	06 1. 1. 3. 1 -	39 1. 6. 2. 1 -	72 2. 2. 4. 1 -				
07 1. 1. 3. 2 17 /17	40 1. 8. 1. 2 17 /17	73 2. 3. 1. 1 17 /17	07 1. 1. 3. 2 -	40 1. 6. 2. 2 -	73 2. 2. 4. 2 -				
08 1. 1. 3. 3 0 /17	41 1. 8. 2. 1 0 /17	74 2. 3. 1. 2 17 /17	08 1. 1. 3. 3 -	41 1. 6. 3. 1 -	74 2. 2. 4. 3 -				
09 1. 1. 4. 1 17 /17	42 1. 8. 2. 2 0 /17	75 2. 3. 1. 3 17 /17	09 1. 1. 4. 1 -	<u>42 1. 7. 1. 1 -</u>	75 2. 2. 4. 4 -				
10 1. 1. 5. 1 0 /17	43 1. 9. 1. 1 0 /17	76 2. 3. 1. 4 17 /17	<u>10 1. 1. 5. 1 -</u>	43 1. 8. 1. 1 -	76 2. 2. 4. 5 -				
11 1. 1. 5. 2 17 /17	44 1. 9. 1. 2 0 /17	77 2. 3. 2. 1 17 /17	<u>11 1. 1. 5. 2 -</u>	44 1. 8. 1. 2 -	77 2. 2. 4. 6 -				
12 1. 2. 1. 1 0 /17	45 2. 1. 1. 1 11 /17	78 2. 3. 2. 2 17 /17	<u>12 1. 1. 5. 3 -</u>	<u>45 1. 8. 2. 1 -</u>	78 2. 2. 4. 7 -				
<u>13 1. 2. 2. 1 17 /17</u>	46 2. 1. 1. 2 11 /17	79 2. 3. 2. 3 0 /17	<u>13 1. 2. 1. 1 -</u>	46 1. 8. 2. 2 -	<u>79 2. 3. 1. 1 -</u>				
14 1. 2. 3. 1 17 /17	47 2. 1. 1. 3 9 /17	80 2. 3. 2. 4 17 /17	<u>14 1. 2. 2. 1 -</u>	<u>47 1. 9. 1. 1 -</u>	80 2. 3. 1. 2 -				
<u>15 1. 2. 4. 1 0 /17</u>	48 2. 1. 1. 4 9 /17	<u>81 2. 4. 1. 1 0 /17</u>	<u>15 1. 2. 2. 2 -</u>	<u>48 1. 9. 1. 2 -</u>	<u>81 2. 3. 1. 3 -</u>				
<u>16 1. 3. 1. 1 0 /17</u>	49 2. 1. 1. 5 17 /17	82 2. 4. 1. 2 11 /17	<u>16 1. 2. 3. 1 -</u>	<u>49 2. 1. 1. 1 -</u>	82 2. 3. 1. 4 -				
<u>17 1. 3. 2. 1 0 /17</u>	50 2. 1. 2. 1 17 /17	83 2. 4. 1. 3 16 /17	<u>17 1. 2. 4. 1 -</u>	<u>50 2. 1. 1. 2 -</u>	83 2. 3. 2. 1 -				
<u>18 1. 3. 3. 1 17 /17</u>	<u>51 2. 1. 2. 2 17 /17</u>	84 2. 4. 1. 4 17 /17	<u>18 1. 3. 1. 1 -</u>	<u>51 2. 1. 1. 3 -</u>	84 2. 3. 2. 2 -				
<u>19 1. 3. 4. 1 0 /17</u>	<u>52 2. 2. 1. 1 15 /17</u>	<u>85 2. 4. 1. 5 17 /17</u>	<u>19 1. 3. 2. 1 -</u>	<u>52 2. 1. 1. 4 -</u>	<u>85 2. 3. 2. 3 -</u>				
20 1. 4. 1. 1 2 /17	<u>53 2. 2. 1. 2 17 /17</u>	86 2. 4. 1. 6 15 /17	<u>20 1. 3. 2. 2 -</u>	<u>53 2. 1. 1. 5 -</u>	86 2. 3. 2. 4 -				
21 1. 4. 1. 2 17 /17	<u>54 2. 2. 1. 3 17 /17</u>	87 2. 4. 2. 1 0 /17	<u>21 1. 3. 3. 1 -</u>	<u>54 2. 1. 2. 1 -</u>	<u>87 2. 4. 1. 1 -</u>				
22 1. 4. 2. 1 17 /17	<u>55 2. 2. 1. 4 17 /17</u>	88 2. 4. 3. 1 0 /17	22 1. 3. 3. 2 -	<u>55 2. 1. 2. 2 -</u>	88 2. 4. 1. 2 -				
23 1. 4. 2. 2 17 /17	<u>56 2. 2. 1. 5 1/ /1/</u>	89 2. 4. 3. 2 4 /1/	23 1. 3. 4. 1 -	<u>56 2. 2. 1. 1 -</u>	89 2. 4. 1. 3 -				
24 1. 4. 2. 3 17 /17	<u>57 2. 2. 1. 6 17 /17</u>	I otal value 0.684	<u>24 1. 4. 1. 1 -</u>	<u>57 2. 2. 1. 2 -</u>	90 2. 4. 1. 4 -				
<u>25 1. 4. 2. 4 17 /17</u>	<u>58 2. 2. 1. / 1/ /1/</u>		<u>25 1. 4. 1. 2</u> -	<u>58 2. 2. 1. 3</u> -	91 2. 4. 2. 1 -				
26 1. 4. 3. 1 17 /17	<u>59 2. 2. 2. 1 17 /17</u>		<u>26 1. 4. 2. 1 -</u>	<u>59 2. 2. 1. 4</u> -	92 2. 4. 2. 2 -				
27 1. 5. 1. 1 2 /17	<u>60 2. 2. 2. 2 17 /17</u>		27 1. 4. 2. 2 -	<u>60 2. 2. 1. 5 -</u>	I otal value -				
28 1. 5. 2. 1 2 /1/	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		<u>28 1. 4. 2. 3 -</u>	<u>61 2. 2. 1. 6 -</u>					
29 1. 5. 2. 2 17 /17	62 2. 2. 2. 4 17 /17		29 1. 4. 2. 4 -	62 2. 2. 1. 7 -					
30 1. 5. 2. 3 17 /17	<u>63 2. 2. 3. 1 17 /17</u>		30 1. 4. 3. 1 -	<u>63 2. 2. 1. 8 -</u>					
<u>31 1. 5. 2. 4 1/ /1/</u> <u>22 4 5 2 5 0 (17</u>	<u>04 Z. Z. 3. Z 1/ /1/</u>		31 1. 5. 1. 1 -	04 2. 2. 2. 1 -					
32 1. 5. 2. 5 0 /1/	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		<u>32 1. 5. 2. 1 -</u>	<u>66 2 2 2 2 - </u>					
33 1. 5. 3. 1 1/ /1/	00 2. 2. 4. 1 1/ /1/		<u>33</u> 1. 5. 2. 2 -	00 2. 2. 2. 3 -					

	S	ubir	ndex 2-4.	Government	(ISSOSS	at	the	national	level)
No. Indicato	or N	No.	Value						
01 1. 1.	-	1	1						
02 1. 1.	-	2	1						
03 1. 1.	-	3	1						
04 1. 1.	-	4	1						
05 2. 1.	-	1	1						
06 2. 1.	-	2	1						
07 2. 2.	-	1	1						
08 2. 2.	-	2	1						
09 2. 3.	-	1	1						
10 2. 3.	-	2	1						
11 2. 4.	-	1	0						
12 2. 4.	-	2	0						
13 3. 1.	-	1	1						
14 3. 1.	-	2	1						
15 3. 1.	-	3	1						
16 3. 1.	-	4	1						
Total va	lue	•	0.824						

				S	Subir	Idex	3.	ISS	0	SS	at	the	interna	tional	level
No.	In	dicat	tor N	lo.	Va	alue		No.	lr	ndica	ator	No.	Value		
01	1.	1.	1.	1	53	/53	-	34	2.	2.	2.	5	1		
02	1.	1.	1.	2	53	/53	-	35	3.	-	1.	1	1		
03	1.	1.	1.	3	53	/53		36	3.	-	1.	2	1		
04	1.	1.	1.	4	53	/53	_	37	3.	-	2.	1	1		
05	1.	1.	2.	1	53	/53	_	38	3.	-	2.	2	1		
06	1.	1.	2.	2	53	/53	_	39	3.	-	2.	3	1		
07	1.	1.	2.	3	18	/53	_	40	3.	-	2.	4	1		
80	1.	1.	2.	4	18	/53	_	41	3.	-	2.	5	1		
09	1.	1.	2.	5	41	/53	_		Tot	al v	valu	e	0.914		
10	1.	2.	1	1	53	/53	_								
11	1.	2.	1	2	53	/53	_								
12	1.	2.	1	3	53	/53	_								
13	1.	2.	1	4	53	/53	_								
14	1.	2.	2	1	53	/53	_								
15	1.	2.	2	2	53	/53	_								
16	1.	2.	2	3	6	/53	_								
17	1.	2.	2	4	6	/53	_								
18	1.	2.	2	5	42	/53	_								
19	2.	1.	1.	1		1	_								
20	2.	1.	1.	2		1	_								
21	2.	1.	1.	3		1	_								
22	2.	1.	1.	4		1	-								
23	2.	1.	2.	1		1	_								
24	2.	1.	2.	2		1	_								
25	2.	1.	2.	3		1	_								
26	2.	2.	1.	1		1	_								
27	2.	2.	1.	2		1	-								
28	2.	2.	1.	3		1	-								
29	2.	2.	1.	4		1	_								
30	2.	2.	2.	1		1	_								
31	2.	2.	2.	2		1	_								
32	2.	2.	2.	3		1	_								
33	2.	2.	2.	4		1	-								

#### Social and Political Sciences, University of Lausanne

# Appendix H: The sports states of Switzerland

<H01> Organisation chart of Switzerland Olympic Committee (as of 2016)<sup>52</sup>)



<sup>52)</sup> Adapted from http://www.swissolympic.ch/Ueber-uns/Organisation/Organigramm

No	Name	Foundatio	Admission	Players N		NFs <sup>54)</sup>	Source (official website)
		n year	Swiss	No. of	No. of	-	
			Olympic	members	clubs		
01	Aéro-Club de Suisse	1901	1940	22,278	399	1	www.aeroclub.ch
02	Club Alpin Suisse	1863	1965	125,500	112	1	www.sac-cas.ch
03	Fédération Suisse de Football Américain	1982	1989	2,100	20	1	www.safv.ch
04	SwissArchery Association	1953	1967	1,538	87	1	www.swissarchery.org
05	Association fédérale de tir à l'arbalète	1898	1986	2,403	122	1	www.easv.ch
06	Association pour le trafic, sport et loisirs	1916	1950	4,900	83	0	www.a-t-b.ch
07	Auto Sport Suisse	2004	1971	3,309	109	1	www.motorsport.ch
08	swiss badminton	1954	1955	38,611	260	1	www.swiss-badminton.ch
09	Fédération suisse de baseball et softball	1981	1989	854	19	1	www.swiss-baseball.ch
10	Swiss Basketball	1929	1938	15,125	205	1	www.swissbasketball.ch
11	Fédération Suisse de Billard	1909	1966	4,489	83	1	www.billardverband.ch
12	Swiss Sliding	1903	1922	1,550	14	1	www.swiss-sliding.ch
13	Fédération Suisse de Boccia	1933	1950	3,484	126	1	www.federbocce.ch
14	Fédération Suisse de Sport-Boules	1933	1946	500	10	1	-
15	SwissBoxing	1913	1930	9,019	78	1	www.swissboxing.ch
16	Fédération Suisse du Casting	1959	1973	648	10	1	www.castingsport.ch
17	Unions Chrétiennes Suisses	1910	1940	27,098	395	0	www.cevi.ch
18	SWISSCURLING ASSOCIATION	1942	1946	11,920	161	1	www.curling.ch
19	Swiss Cycling	1883	1922	46,334	517	1	www.swiss-cycling.ch
20	Fédération Suisse de danse sportive	1954	1973	9,054	60	1	www.sdsf.ch
21	Swiss Disc Sports Association	1980	-	855	33	1	www.swissdiscsports.ch
22	Swiss Ice Hockey Federation	1908	1926	70,822	273	1	www.sihf.ch

# <H02> National Federations recognised by Switzerland Olympic Committee (as of 2016)<sup>53</sup>)

53) Refer in more detail to http://www.swissolympic.ch/fr/Home

23	Union Suisse de Patinage	1911	1938	8,458	85	1	www.swissiceskating.ch
24	Fédération Suisse d'Eisstock	1956	1971	4,750	29	1	www.eisstocksport.ch
25	Swiss Fencing	1914	1947	2,794	50	1	www.swiss-fencing.ch
26	Association suisse de sport corporatif	1941	1947	42,559	421	0	www.firmensport.ch
27	Association Suisse de Football	1895	1922	272,000	1'450	1	www.football.ch
28	Fédération Suisse d'Haltérophilie Amateur	1946	1949	1,652	6	1	www.swiss-weightlifting.ch
29	Association Suisse de Golf	1902	1946	76,693	94	1	www.golfsuisse.ch
30	Fédération Suisse de Handball	1974	1974	18,336	270	1	www.handball.ch
31	Fédération Suisse de Vol Libre	1974	1995	14,782	105	1	www.shv-fsvl.ch
32	Fédération Suisse du Sport Universitaire	1932	1938	132,927	16	0	www.shsv.ch
33	Swiss Hockey	1919	1923	3,180	22	1	www.swisshockey.org
34	Association Fédérale de Hornuss	1902	1978	8,357	192	1	www.ehv.ch
35	Fédération Suisse Inline Hockey	1990	-	3,260	44	1	www.fsih.ch
36	Fédération Suisse de Judo & Ju-Jitsu	1937	1942	48,600	303	1	www.sjv.ch
37	Association Suisse des Cadets	1936	1941	2,200	16	0	www.kadettenverband.ch
38	Fédération Suisse de Canoë - Kayak	1925	1939	3,497	53	1	www.swisscanoe.ch
39	Swiss Karate Federation	1970	1986	13,000	242	1	www.karate.ch
40	Société Suisse de Sauvetage	1933	1947	27,500	132	1	www.slrg.ch
41	Swiss Athletics	1971	1971	130,000	479	1	www.swiss-athletics.ch
42	Swiss Minigolf	1978	1981	1,699	57	1	www.swissminigolf.ch
43	Fédération Motocycliste Suisse	1914	1949	7,063	182	1	www.swissmoto.org
44	Fédération Suisse des Amis de la Nature	1905	1958	19,649	167	0	www.naturfreunde.ch
45	Union sportive suisse des transports publics	1932	1943	8,430	52	0	www.svse.ch
46	Swiss Orienteering	1959	1978	8,351	89	1	www.swiss-orienteering.ch
47	Association suisse des paraplégiques	1980	1994	10,719	27	0	www.spv.ch
48	Pentathlon Suisse	1943	1946	410	5	1	www.pentathlonsuisse.ch
49	Fédération Suisse de Pétanque	1952	1974	12,764	151	1	www.petanque-fsp.ch
50	Mouvement Scout de Suisse	1913	1941	44,826	602	0	www.pbs.ch

51	Fédération Suisse des Sports Equestres	1900	1922	62,000	475	1	www.fnch.ch
52	PluSport Sport Handicap Suisse	1960	1974	10,240	90	0	www.plusport.ch
53	Association Sportive Suisse des Pontonniers	1893	1941	8,762	41	1	www.pontonier.ch
54	Fédération Suisse de Rink-Hockey	1924	1952	1,017	23	1	www.rollhockey.ch
55	Fédération Suisse de Roller Skating	1924	1944	912	22	1	www.rollsport.ch
56	Fédération Suisse des Sociétés d'Aviron	1886	1922	9,823	86	1	www.swissrowing.ch
57	Fédération Suisse de Rugby	1972	1977	2,458	30	1	www.suisserugby.com
58	Swiss Sailing	1939	1940	24,464	147	1	www.swiss-sailing.ch
59	Fédération Suisse des Echecs	1889	2000	6,406	251	1	www.swisschess.ch
60	Fédération sportive suisse de tir	1824	1941	138,110	3'067	1	www.swissshooting.ch
61	Fédération Suisse de Natation	1918	1922	67,000	200	1	www.swiss-swimming.ch
62	Swiss-Ski	1904	1922	101,524	810	1	www.swiss-ski.ch
63	Swiss Snow Bike	1967	1970	200	7	1	www.snowbike.ch
64	Association Suisse d'Education Physique à l'école	1858	1922	4,222	25	0	www.svss.ch
65	Association sportive suisse des Quilleurs	1931	1939	3,072	198	1	www.sskv.ch
66	Sport Union Schweiz	1919	1936	42,764	270	0	www.sportunionschweiz.ch
67	SWISS SQUASH - Fédération Suisse de Squash	1973	1977	2,315	70	1	www.squash.ch
68	Swiss Street Hockey Association	1990	2002	1,400	32	1	www.ssha.ch
69	Swissfit	2004	-	56,134	488	0	www.swissfit.org
70	Swiss Taekwondo	1976	-	3,600	38	1	www.taekwondo.ch
71	Fédération Suisse de Lutte à la Corde	1976	1979	2,398	29	1	www.seilziehen.ch
72	Swiss Tennis	1896	1923	226,323	839	1	www.swisstennis.ch
73	Swiss Table Tennis	1931	1943	18,871	295	1	www.swisstabletennis.ch
74	Swiss Triathlon	1985	1989	5,000	70	1	www.swisstriathlon.ch
75	Fédération Suisse de Gymnastique	1832	1922	385,661	3'288	1	www.stv-fsg.ch
76	Fédération Suisse de Twirling Bâton	1972	1980	287	13	1	www.fstb-twirling.ch
77	swiss unihockey	1985	1989	28,874	446	1	www.swissunihockey.ch
78	Association Suisse des Sous-Officiers	1864	-	8,000	120	0	www.suov.ch/cms/index.php

79	Fédération Suisse de Sports Subaquatiques	1957	1967	6,000	144	1	www.susv.ch
80	Swiss Volley	1958	1960	34,366	611	1	www.volleyball.ch
81	Fédération Suisse de Tourisme Pédestre	1934	1984	41,949	26	1	www.wandern.ch
82	Schweizer Wasserfahrverband	2001	1941	6,516	30	0	www.wasserfahren.ch
83	Fédération Suisse de Ski Nautique et de Wakeboard	1947	1954	1,854	38	1	www.waterski.ch
84	Swiss Wrestling Federation	1973	1973	2,224	29	1	www.swisswrestling.ch
85	Swiss Wushu	1995	-	5,950	60	1	www.swisswushu.ch
	Total			2,645,593	13,067	70	

<sup>54) 1:</sup> Applicable; 0: Not applicable; sorting NFs from national organisations related to sports such as NFOs

# <H03> Contributions of Switzerland NOC for sports federations<sup>55)</sup>

No.	Verband (Association)	Verbandsbeitrag	Gesamtbeitrag gemäss	Sportgrossanlass:	Durchschnitt	Note
		"BASIS" (Association	Leistungsvereinbarung <sup>56)</sup> (Total	Sportförderung	pro Jahr	57)
		contribution "BASIS")	contribution according to benefit	(Sportgrossanlass:	(Average per	
			agreement)	Sports promotion)	year)	
01	Swiss-Ski	300'000	16'890'000	2'400'000	4'897'500	
02	Schweizerischer Turnverband	600'000	3'483'000	600'000	1'561'000	
03	Swiss Cycling	150'000	3'155'000	500'000	1'268'333	
04	Swiss Athletics	450'000	2'115'000	600'000	1'055'000	
05	Swiss Volley	150'000	2'160'000	600'000	970'000	
06	Swiss Tennis	450'000	2'160'000	0	870'000	
07	Schweizerischer Schwimmverband	300'000	2'167'500	0	822'500	
08	Swiss Triathlon	24'000	1'933'500	360'000	772'500	
09	Schweizerischer Verband für Pferdesport	150'000	1'755'000	0	635'000	
10	Schweizer Schiesssportverband	450'000	1'455'000	0	635'000	
11	Swiss Ice Hockey Federation	300'000	2'160'000	0	615'000	*
12	SWISSCURLING ASSOCIATION	48'000	2'230'000	150'000	607'000	
13	Swiss-Fencing	12'000	1'401'000	400'000	604'333	
14	Swiss Sailing	96'000	1'522'500	0	539'500	
15	Schweizerischer Judo- & Ju-Jitsu-Verband	150'000	1'462'500	0	537'500	
16	Swiss Rowing	48'000	1'527'000	0	525'000	
17	Swiss Sliding	12'000	2'012'000	0	506'000	
18	Schweizerischer Handball-Verband	96'000	1'377'900	0	491'300	
19	Swiss Orienteering	48'000	1'287'000	0	445'000	
20	Schweizer Alpen-Club	300'000	998'750	0	432'917	
21	Schweizerischer Fussballverband	600'000	648'000	0	416'000	*
22	Swiss Unihockey	96'000	1'140'000	0	412'000	
23	Schweizer Hochschulsport-Verband	225'000	425'000	0	216'667	
24	Schweizerischer Golfverband	300'000	270'000	0	190'000	
25	Schweizer Paraplegiker-Vereinigung	48'000	510'000	0	186'000	
26	PLUSPORT Behindertensport Schweiz	48'000	510'000	0	186'000	
27	swiss badminton	48'000	492'000	0	180'000	

28	Aero-Club der Schweiz	96'000	361'000	0	152'333
29	Swiss Ice Skating	48'000	560'000	0	152'000
30	Schweizerischer Kanu-Verband	12'000	405'000	0	139'000
31	Schweizerischer Taekwondo Verband	12'000	390'000	0	134'000
32	Swiss Basketball	48'000	348'000	0	132'000
33	Schweizerischer Amateurringerverband	12'000	378'000	0	130'000
34	Swiss Hockey	12'000	345'000	0	119'000
35	Schweizerischer Squash Verband	12'000	292'800	0	101'600
36	Swiss Karate Federation	48'000	255'000	0	101'000
37	Schweizerischer Hängegleiter-Verband	48'000	174'900	0	74'300
38	swissfit	192'800	0	0	64'267
39	Schweizer Tauzieh-Verband	12'000	168'000	0	60'000
40	Schweizerischer Wasserski und Wakeboard Verband	12'000	168'000	0	60'000
41	Swiss Table Tennis	66'000	90'000	0	52'000
42	Sport Union Schweiz	143'400	0	0	47'800
43	Pentathlon Suisse	12'000	108'000	0	40'000
44	Schweizerischer Rollhockeyverband	12'000	99'000	0	37'000
45	Swiss DanceSport Federation	26'700	82'500	0	36'400
46	Swiss Archery Association	12'000	90'000	0	34'000
47	SwissBoxing	12'000	90'000	0	34'000
48	Schweizerischer Rollsport Verband	12'000	82'500	0	31'500
49	Föderation der Motorradfahrer der Schweiz	24'000	67'500	0	30'500
50	Schweizerische Lebensrettungs-Gesellschaft	90'000	0	0	30'000
51	Schweizerischer Schachbund	60'000	24'000	0	28'000
52	Swiss Wushu Federation	24'000	60'000	0	28'000
53	Schweizerischer Firmensportverband	75'000	0	0	25'000
54	Eidgenössischer Armbrustschützen-Verband	12'000	60'000	0	24'000
55	Schweizerischer Billard Verband	12'000	60'000	0	24'000
56	Schweizerischer Inline Hockey Verband	12'000	60'000	0	24'000
57	Schweizerischer Eisstock-Verband	12'000	80'000	0	23'000
58	Pfadibewegung Schweiz	63'900	0	0	21'300
59	Schweizerischer Sportverband öffentlicher Verkehr	51'900	0	0	17'300
60	Schweiz. Amateur-Gewichtheber-Verband	12'000	37'500	0	16'500

61	Schweizerischer Rugby-Verband	12'000	37'500	0	16'500
62	Eidgenössischer Hornusserverband	48'000	0	0	16'000
63	Schweizer Unterwasser-Sport-Verband	15'000	22'500	0	12'500
64	Schweizerischer American Football Verband	12'000	22'500	0	11'500
65	Swiss Baseball and Softball Federation	12'000	22'500	0	11'500
66	Schweizerischer Boccia-Verband	12'000	22'500	0	11'500
67	Schweizerischer Boules-Verband	12'000	22'500	0	11'500
68	Schweizerischer Castingsport-Verband	12'000	22'500	0	11'500
69	Swiss Minigolf	12'000	22'500	0	11'500
70	Schweizerischer Pétanque-Verband	12'000	22'500	0	11'500
71	Schweizerischer Sportkegler-Verband	12'000	22'500	0	11'500
72	Swiss Street Hockey Association	12'000	22'500	0	11'500
73	Schweizerischer Twirling Bâton Verband	12'000	22'500	0	11'500
74	Swiss Snow Bike	12'000	30'000	0	10'500
75	Naturfreunde Schweiz	27'000	0	0	9'000
76	Schweizerischer Pontonier-Sportverband	24'000	0	0	8'000
77	Schweizer Wanderwege	24'000	0	0	8'000
78	Cevi Schweiz (Fachausschuss Sport)	18'000	0	0	6'000
79	Schweizer Wasserfahrverband	12'000	0	0	4'000
80	Kadettenverband Schweiz	9'000	0	0	3'000
81	ATB Schweiz, Verband für Sport-Freizeit-Verkehr	6'000	0	0	2'000
82	Auto Sport Schweiz	6'000	0	0	2'000
83	Schweiz. Verband für Sport in der Schule	6'000	0	0	2'000
84	Swiss Disc Sports Association	6'000	0	0	2'000
		CHF	75'263'050		

<sup>55)</sup> Summer sports federations (01.01.2014 - 31.12.2016) and winter sports federations (01.07.2014 - 30.06.2018); Refer in more detail to http://www.swissolympic.ch/Home

<sup>56)</sup> Including 1) Ausbildung & Leistungssport-Management (Training & Performance Management), 2) Nachwuchs & Elite (Young talent and elite), 3) Olympia (Olympics)

<sup>57)</sup> Two federations receive additional direct payments from the Sport Toto Society => Football annually around CHF 4.6 million and hockey a year around CHF 2.3 million

# <H04> Current state of RSC (offices cantonaux du sport; 2016)58)

		Code of			
NO	Name of office	Canton	Name of Canton	Office location	Source (official website)
01	Departement Bildung, Kultur und Sport	AG	Aargau	Aarau	https://www.ag.ch/de/bks/bks.jsp
	Aargau, Sektion Sport				
02	Kantonales Sportamt Appenzell	Al	Appenzell	Appenzell	https://www.ai.ch/themen/freizeit-und-sport/sport?se
			Innerrhoden		archterm=sport
03	Fachstelle Sport	AR	Appenzell	Herisau	https://www.ar.ch/verwaltung/departement-bildung-u
			Ausserrhoden		nd-kultur/amt-fuer-volksschule-und-sport/abteilung-s
					port/
04	Amt für Bevölkerungsschutz, Sport und	BE	Bern	Bern	http://www.pom.be.ch/bsm
	Militär (BSM), Abteilung Sport	_			_
	OSSM, Service du sport	-		La Neuveville	
05	Sportamt Baselland	BL	Basel-Landschaft	Pratteln	https://www.baselland.ch/politik-und-behorden/direkti
					onen/bildungs-kultur-und-sportdirektion/sport
06	Sportamt Basel-Stadt	BS	Basel-Stadt	Basel	http://www.jfs.bs.ch/fuer-sportlerinnen-und-sportler.ht
					<u>ml</u>
07	Service cantonal du sport	FR	Fribourg	Fribourg	http://www.fr.ch/sspo/fr/pub/index.cfm
08	Service Jeunesse + Sport	GE	Geneva	Carouge	http://ge.ch/sport/jeunesse-et-sport/presentation
09	Fachstelle Sport	GL	Glarus	Glarus	http://www.gl.ch/xml_1/internet/de/application/d1256/
					d33/d135/d506/f514.cfm
10	Amt für Volksschule und Sport,	GR	Graubünden	Chur	http://www.gr.ch/DE/institutionen/verwaltung/ekud/av

58) Refer in more detail to http://www.swissolympic.ch/fr/Home

	graubündenSPORT				s/ueberuns/Seiten/startseite.aspx
11	Office des sports du canton du Jura	JU	Jura	Porrentruy	http://www.jura.ch/sport
12	Sportförderung Kanton Luzern	LU	Luzern	Luzern	https://sport.lu.ch/
13	Service cantonal des sports	NE	Neuchâtel	Colombier	http://www.ne.ch/autorites/DJSC/SSPO/Pages/accueil
					.aspx
14	Amt für Volksschulen und Sport Nidwalden	NW	Nidwalden	Stans	http://www.nw.ch/de/verwaltung/bildungsdirektion/am
					tschulesport/
15	Bildungs- und Kulturdepartement Obwalden,	OW	Obwalden	Sarnen	http://www.ow.ch/de/verwaltung/departemente/welco
	Abteilung Sport				me.php?departement_id=19
16	Amt für Sport	SG	St. Gallen	St. Gallen	http://www.sg.ch/home/bildung/sport.html
17	Kantonales Sportamt Schaffhausen	SH	Schaffhausen	Schaffhausen	http://www.sh.ch/Sport.615.0.html
18	Kantonale Sportfachstelle	SO	Solothurn	Solothurn	https://www.so.ch/verwaltung/departement-fuer-bildu
					ng-und-kultur/amt-fuer-kultur-und-sport/
19	Amt für Volksschule und Sport Kanton	SZ	Schwyz	Schwyz	https://www.sz.ch/privatpersonen/bildung-schulen-sp
	Schwyz				ort/sport.html/72-512-468-465
20	Sportamt Thurgau	TG	Thurgau	Frauenfeld	https://sportamt.tg.ch/ueber-uns.html/1407
21	Ufficio cantonale dello sport	TI	Ticino	Bellinzona	http://www4.ti.ch/decs/sa/us/ufficio/
22	Amt für Kultur und Sport Kanton Uri	UR	Uri	Altdorf	http://www.ur.ch/de/verwaltung/verwaltungorg/?amt_i
					<u>d=834</u>
23	Service de l'éducation physique et du sport	VD	Vaud	Lausanne	http://www.vd.ch/autorites/departements/decs/educat
					ion-physique-et-sport/
24	Office Jeunesse et Sports et Fonds du	VS	Valais	Sion	https://www.vs.ch/web/sajfs/office-du-sport
	Sport Valais				
25	Amt für Sport des Kantons Zug	ZG	Zug	Zug	https://www.zg.ch/behoerden/direktion-fur-bildung-un
				-	d-kultur/amt-fur-sport
					<u>a Katanant-Idi-Sport</u>



## <H05> Budget 2015-2017 of Switzerland NOC<sup>59</sup>)

Betriebsrechnung (Operating accounts)	Budget 2017	%	Budget 2016	%	Budget 2015	%
Erhaltene Zuwendungen (Grants received)	-	-	-	-	-	-
Beiträge der öffentlichen Hand (Contributions from the public sector)	51'761'400	93.5	39'980'400	89.2	41'116'199	88.4
Erlöse aus Lieferungen und Leistungen (Proceeds from deliveries and services)	3'597'000	6.5	4'836'500	10.8	5'397'317	11.6
Betriebsertrag (Operating income)	55'358'400	100	44'816'900	100	46'513'516	100
Entrichtete Beiträge und Zuwendungen (Contributions paid and contributions)	45'015'700	79.4	36'386'200	76.3	35'531'790	75.9
Personalaufwand (Personnel expenses)	7'032'600	12.4	6'669'500	14.0	7'167'252	15.3
Sachaufwand (Expenditure of materials)	4'142'300	7.3	4'164'700	8.7	3'586'987	7.7
Abschreibungen (Depreciation)	533'500	0.9	485'000	1.0	542'250	1.2
Betriebsaufwand (Operating expenses)	56'724'100	100	47'705'400	100	46'828'279	100
Betriebsergebnis (Operating result)	-1'365'700	-2.4	-2'888'500	-6.1	-314'764	-0.7
Finanzergebnis (Financial results)	494'000	0.9	477'500	1.0	396'913	0.8
Ausserordentliches Ergebnis (Extraordinary result)	0	-	5'000	0.0	0	-
Ergebnis vor Veränderung des Fondskapitals (Earnings before changes in fund	-871'700	-1.5	-2'406'000	-5.0	82'150	0.2
capital)						
Veränderung des Fondskapitals (Change in fund capital)	0	-	0	-	0	-
Jahresergbnis - vor Veränderung des Organisationskapitals (Annual income -	-871'700	-1.5	-2'406'000	-5.0	82'150	0.2
before changes in the organisational capital)						
Veränderung des gebundenen Kapitals (Change in tied capital)	711'000		1'667'500		-30'741	
Veränderung des freien Kapitals (Change in free capital)	160'700		738'500		-51'409	

<sup>59)</sup> Adopted from the Swiss Olympic Annual Report 2015; Refer in more detail to http://www.swissolympic.ch/Home

	Year	City	No. of medal sets	Gold	Silver	Bronze	Total	Score <sup>61)</sup>	No. of participa	ints (Male/Female)
Summer	2016	Rio	306	3	2	2	151	15	105	(46 / 59)
	2012	London	302	2	2	0	133	10	102	(31 / 71)
	2008	Beijing	302	2	1	4	122	12	85	(37 / 48)
	2004	Athens	301	1	1	3	138	8	98	(40 / 58)
	2000	Sydney	300	1	6	2	145	17	106	(39 / 67)
	1996	Atlanta	271	4	3	0	162	18	119	(43 / 76)
	1992	Barcelona	257	1	0	0	139	3	109	(30 / 79)
	1988	Seoul	237	0	2	2	123	6	98	(25 / 73)
	1984	Los Angeles	221	0	4	4	167	12	137	(30 / 107)
	1980	Moscow	203	2	0	0	91	6	83	(8 / 75)
	1976	Montreal	198	1	1	2	61	7	57	(4 / 53)
	1972	Munich	195	0	3	0	193	6	163	(30 / 133)
Winter	2014	Sochi	98	6	3	2	234	26	163	(71 / 92)
	2010	Vancouver	86	6	0	3	203	21	146	(57 / 89)
	2006	Turin	84	5	4	5	187	28	131	(56 / 75)
	2002	Salt Lake	78	3	2	6	144	19	114	(30 / 84)
	1998	Nagano	68	2	2	3	93	13	74	(19 / 55)
	1994	Lillehammer	61	3	4	2	80	19	62	(18 / 44)
	1992	Albertville	57	1	0	2	97	5	80	(17 / 63)
	1988	Calgary	46	5	5	5	85	30	71	(14 / 57)
	1984	Sarajevo	39	2	2	1	55	11	42	(13 / 29)
	1980	Lake Placid	38	1	1	3	60	8	49	(11 / 38)
	1976	Innsbruck	37	1	3	1	73	10	65	(8 / 57)
	1972	Sapporo	35	4	3	3	68	21	62	(6 / 56)
Youth - Summer	2014	Nanjing	386	0	0	0	0	0	-	-
	2010	Singapore	159	0	0	0	0	0	-	-
Youth - Winter	2016	Lillehammer	210	4	3	4	0	22	-	-
	2012	Innsbruck	174	3	0	5	0	14	-	-

## <H06> Olympic performance of Switzerland since 197260)

60) Adopted from the Swiss Olympic Committee; Refer in more detail to <u>http://www.swissolympic.ch/Medien/Publikationen/Verschiedene-Publikationen-online-abrufbar</u>

61) Medal tally: Number of Gold medal \* 3 + Number of Silver medal \* 2 + Number of Bronze medal \* 1 (Donald, 1972)

# <H07> ISSOSS achievement computation of Switzerland

	Subindex 1. NF		Subindex 2-1. NOC (ISSOSS at the national level)				
No. Indicator No. Value	No. Indicator No. Value	No. Indicator No. Value	No. Indicator No. Value	No. Indicator No. Value	No. Indicator No. Value		
01 1. 1. 1. 1 35 /70	34 1. 5. 2. 3 0 /70	67 2. 2. 2. 4 70 /70	01 1. 1. 1. 1 1	34 1. 5. 3. 1 1	67 2. 2. 4. 2 1		
02 1. 1. 1. 2 0 /70	35 1. 5. 2. 4 0 /70	68 2. 2. 2. 5 70 /70	02 1. 1. 1. 2 0	35 1. 6. 1. 1 0	68 2. 2. 4. 3 1		
03 1. 1. 1. 3 0 /70	36 1. 5. 2. 5 0 /70	69 2. 2. 3. 1 70 /70	03 1. 1. 1. 3 1	36 1. 6. 2. 1 1	69 2. 2. 4. 4 1		
04 1. 1. 2. 1 20 /70	37 1. 5. 3. 1 1 /70	70 2. 2. 3. 2 70 /70	04 1. 1. 2. 1 0	37 1. 6. 2. 2 1	70 2. 2. 4. 5 1		
05 1. 1. 2. 2 35 /70	38 1. 6. 1. 1 19 /70	71 2. 2. 3. 3 70 /70	05 1. 1. 2. 2 1	38 1. 6. 3. 1 1	71 2. 2. 4. 6 1		
06 1. 1. 3. 1 6 /70	39 1. 6. 2. 1 28 /70	72 2. 2. 4. 1 63 /70	06 1. 1. 3. 1 1	39 1. 7. 1. 1 0	72 2. 2. 4. 7 0		
07 1. 1. 3. 2 63 /70	40 1. 6. 2. 2 35 /70	73 2. 2. 4. 2 63 /70	07 1. 1. 3. 2 1	40 1. 8. 1. 1 1	73 2. 2. 4. 8 0		
08 1. 1. 3. 3 35 /70	41 1. 6. 3. 1 17 /70	74 2. 2. 4. 3 35 /70	08 1. 1. 3. 3 1	41 1. 8. 1. 2 1	74 2. 3. 1. 1 1		
09 1. 1. 4. 1 35 /70	42 1. 7. 1. 1 0 /70	75 2. 2. 4. 4 70 /70	09 1. 1. 4. 1 1	42 1. 8. 2. 1 0	<u>75 2. 3. 1. 2 1</u>		
10 1. 1. 5. 1 5 /35	43 1. 8. 1. 1 0 /70	76 2. 2. 4. 5 35 /70	<u>10 1. 1. 5. 1 1</u>	43 1. 8. 2. 2 0	76 2. 3. 1. 3 1		
11 1. 1. 5. 2 15 /35	44 1. 8. 1. 2 20 /70	77 2. 2. 4. 6 33 /70	<u>11 1. 1. 5. 2 1</u>	44 1. 9. 1. 1 0	77 2. 3. 1. 4 1		
<u>12 1. 1. 5. 3 70 /70</u>	45 1. 8. 2. 1 0 /70	<u>78 2. 2. 4. 7 0 /70</u>	<u>12 1. 1. 5. 3 0</u>	<u>45 1. 9. 1. 2 0</u>	<u>78 2. 3. 2. 1 1</u>		
<u>13 1. 2. 1. 1 0 /70</u>	46 1. 8. 2. 2 0 /70	<u>79 2. 2. 4. 8 0 /70</u>	<u>13 1. 2. 1. 1 0</u>	<u>46 2. 1. 1. 1 1</u>	<u>79 2. 3. 2. 2 1</u>		
<u>14 1. 2. 2. 1 0 /70</u>	47 1. 9. 1. 1 0 /70	80 2. 3. 1. 1 70 /70	<u>14 1. 2. 2. 1 0</u>	<u>47 2. 1. 1. 2 1</u>	80 2. 3. 2. 3 0		
<u>15 1. 2. 2. 2 35 /70</u>	48 1. 9. 1. 2 0 /70	81 2. 3. 1. 2 18 /70	<u>15 1. 2. 3. 1 1</u>	<u>48 2. 1. 1. 3 1</u>	<u>81 2. 3. 2. 4 1</u>		
<u>16 1. 2. 3. 1 35 /70</u>	49 2. 1. 1. 1 63 /70	82 2. 3. 1. 3 70 /70	<u>16 1. 2. 4. 1 1</u>	<u>49 2. 1. 1. 4 1</u>	82 2. 4. 1. 1 1		
<u>1/ 1. 2. 4. 1 0 //0</u>	<u>50 2. 1. 1. 2 63 //0</u>	83 2. 3. 1. 4 7 //0	<u>1/ 1. 3. 1. 1 0</u>	<u>50 2. 1. 1. 5 1</u>	83 2. 4. 1. 2 1		
<u>18 1. 3. 1. 1 0 //0</u>	<u>51 2. 1. 1. 3 63 //0</u>	84 2. 3. 2. 1 64 //0	<u>18 1. 3. 2. 1 0</u>	<u>51 2. 1. 2. 1 1</u>	<u>84 2. 4. 1. 3 1</u>		
<u>19 1. 3. 2. 1 0 //0</u>	<u>52 2. 1. 1. 4 63 //0</u>	85 2. 3. 2. 2 7 //0	<u>19 1. 3. 3. 1 1</u>	<u>52 2. 1. 2. 2 1</u>	85 2. 4. 1. 4 1		
20 1. 3. 2. 2 20 //0	53 2. 1. 1. 5 7 /70	86 2. 3. 2. 3 0 //0	20 1. 3. 4. 1 1	53 2. 2. 1. 1 1	<u>86 2. 4. 1. 5 1</u>		
21 1. 3. 3. 1 0 //0	<u>54 2. 1. 2. 1 /0 //0</u>	8/ 2. 3. 2. 4 63 //0	<u>21 1. 4. 1. 1 0</u>	<u>54 2. 2. 1. 2 1</u>	<u>87 2. 4. 1. 6 1</u>		
22 1. 3. 3. 2 20 //0	<u>55 2. 1. 2. 2 70 /70</u>	88 2. 4. 1. 1 68 //0	22 1. 4. 1. 2 1	<u>55 2. 2. 1. 3 1</u>	88 2. 4. 2. 1 1		
23 1. 3. 4. 1 0 $70$	<u>56 2. 2. 1. 1 37 /70</u>	89 2. 4. 2. 1 0 //0	23 1. 4. 2. 1 1	<u>56 2. 2. 1. 4 1</u>	<u>89 2. 4. 2. 2 1</u>		
24 1. 4. 1. 1 28 //0	<u>57 Z. Z. 1. Z 33 /70</u>	90 2. 4. 2. 2 63 //0	<u>24 1. 4. 2. 2 1</u>	<u>57 2. 2. 1. 5 1</u>	90 2. 4. 2. 3 1		
25 1. 4. 1. 2 63 //0	<u>58 2. 2. 1. 3 68 //U</u>	91 2. 4. 2. 3 0 //0	<u>25 1. 4. 2. 3 1</u>	<u>58 2. 2. 1. 6 1</u>	91 2. 4. 2. 4 1		
20 1. 4. 2. 1 35 //0	<u>59 2. 2. 1. 4 63 //0</u>	92 2. 4. 2. 4 20 //0		<u>59 Z. Z. I. 7 I</u>	92 2. 4. 3. 1 1		
27 1. 4. 2. 2 28 770	<u>60 2. 2. 1. 5 59 //0</u>	93 2. 4. 2. 5 63 //0	$\frac{27}{29}$ 1. 4. 3. 1 1	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	93 2. 4. 3. 2 1		
	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	94 2. 4. 2. 6 33 //0	20 1. 5. 1. 1 1	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			
29 1. 4. 2. 4 20 //0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	95 2. 4. 3. 1 0 //0	29 1. 5. 2. 1 1	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			
<u>30 1. 4. 3. 1 00 //0</u> <u>21 1 5 1 1 25 /70</u>	<u>64 2 2 2 1 68 /70</u>		30 1. 5. 2. 2 1	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			
31 1. 5. 1. 1 35 //0	<u>65 2 2 2 2 68 /70</u>		31 1. 3. 2. 3 1	<u>04 2. 2. 3. 2 1</u> 65 2 2 3 3 1			
32 1 5 2 2 20 /70	<u>66 2 2 2 3 35 /70</u>		32 1 5 2 5 1				
33 I. 3. Z. Z ZU //U	00 2. 2. 2. 3 33 //0		33 I. J. Z. J I	00 Z. Z. 4. I 1			

Subindex	2-2. RSC (ISSOSS at the na	ational level)	Subindex 2-3. RSF (ISSOSS at the national level)			
No. Indicator No. Value	No. Indicator No. Value	No. Indicator No. Value	No. Indicator No. Value	No. Indicator No. Value	No. Indicator No. Value	
01 1. 1. 1. 1 0 /26	34 1. 6. 1. 1 8 /26	67 2. 2. 4. 2 2 /26	01 1. 1. 1. 1 -	34 1. 5. 2. 3 -	67 2. 2. 2. 4 -	
02 1. 1. 1. 2 0 /26	35 1. 6. 2. 1 10 /26	68 2. 2. 4. 3 0 /26	02 1. 1. 1. 2 -	35 1. 5. 2. 4 -	68 2. 2. 2. 5 -	
03 1. 1. 1. 3 1 /26	36 1. 6. 2. 2 1 /26	69 2. 2. 4. 4 26 /26	03 1. 1. 1. 3 -	36 1. 5. 2. 5 -	69 2. 2. 3. 1 -	
04 1. 1. 2. 1 0 /26	37 1. 6. 3. 1 0 /26	70 2. 2. 4. 5 0 /26	04 1. 1. 2. 1 -	37 1. 5. 3. 1 -	70 2. 2. 3. 2 -	
05 1. 1. 2. 2 0 /26	38 1. 7. 1. 1 0 /26	71 2. 2. 4. 6 1 /26	05 1. 1. 2. 2 -	38 1. 6. 1. 1 -	71 2. 2. 3. 3 -	
06 1. 1. 3. 1 0 /26	39 1. 8. 1. 1 0 /26	72 2. 2. 4. 7 0 /26	06 1. 1. 3. 1 -	39 1. 6. 2. 1 -	72 2. 2. 4. 1 -	
07 1. 1. 3. 2 0 /26	40 1. 8. 1. 2 0 /26	73 2. 3. 1. 1 26 /26	07 1. 1. 3. 2 -	40 1. 6. 2. 2 -	73 2. 2. 4. 2 -	
08 1. 1. 3. 3 26 /26	41 1. 8. 2. 1 0 /26	74 2. 3. 1. 2 1 /26	08 1. 1. 3. 3 -	41 1. 6. 3. 1 -	74 2. 2. 4. 3 -	
09 1. 1. 4. 1 0 /26	42 1. 8. 2. 2 0 /26	75 2. 3. 1. 3 26 /26	<u>09 1. 1. 4. 1 - </u>	<u>42 1. 7. 1. 1 - </u>	75 2. 2. 4. 4 -	
10 1. 1. 5. 1 0 /26	43 1. 9. 1. 1 0 /26	76 2. 3. 1. 4 26 /26	<u>10 1. 1. 5. 1 - </u>	<u>43 1. 8. 1. 1 -</u>	76 2. 2. 4. 5 -	
11 1. 1. 5. 2 0 /26	44 1. 9. 1. 2 0 /26	77 2. 3. 2. 1 26 /26	<u>11 1. 1. 5. 2 -</u>	44 1. 8. 1. 2 -	77 2. 2. 4. 6 -	
12 1. 2. 1. 1 0 /26	45 2. 1. 1. 1 26 /26	78 2. 3. 2. 2 1 /26	<u>12 1. 1. 5. 3 -</u>	45 1. 8. 2. 1 -	78 2. 2. 4. 7 -	
13 1. 2. 2. 1 0 /26	46 2. 1. 1. 2 26 /26	79 2. 3. 2. 3 1 /26	<u>13 1. 2. 1. 1 -</u>	46 1. 8. 2. 2 -	<u>79 2. 3. 1. 1 -</u>	
14 1. 2. 3. 1 0 /26	47 2. 1. 1. 3 26 /26	80 2. 3. 2. 4 4 /26	<u>14 1. 2. 2. 1 -</u>	<u>47 1. 9. 1. 1 -</u>	80 2. 3. 1. 2 -	
15 1. 2. 4. 1 0 /26	48 2. 1. 1. 4 26 /26	81 2. 4. 1. 1 3 /26	<u>15 1. 2. 2. 2 -</u>	<u>48 1. 9. 1. 2 -</u>	<u>81 2. 3. 1. 3 -</u>	
16 1. 3. 1. 1 0 /26	49 2. 1. 1. 5 1 /26	82 2. 4. 1. 2 3 /26	<u>16 1. 2. 3. 1 -</u>	<u>49 2. 1. 1. 1 -</u>	82 2. 3. 1. 4 -	
<u>17 1. 3. 2. 1 0 /26</u>	50 2. 1. 2. 1 26 /26	83 2. 4. 1. 3 3 /26	<u>17 1. 2. 4. 1 -</u>	<u>50 2. 1. 1. 2 -</u>	83 2. 3. 2. 1 -	
<u>18 1. 3. 3. 1 0 /26</u>	<u>51 2. 1. 2. 2 26 /26</u>	84 2. 4. 1. 4 3 /26	<u>18 1. 3. 1. 1 -</u>	<u>51 2. 1. 1. 3 -</u>	84 2. 3. 2. 2 -	
19 1. 3. 4. 1 0 /26	52 2. 2. 1. 1 7 /26	85 2. 4. 1. 5 3 /26	<u>19 1. 3. 2. 1 -</u>	<u>52 2. 1. 1. 4 -</u>	85 2. 3. 2. 3 -	
20 1. 4. 1. 1 2 /26	<u>53 2. 2. 1. 2 17 /26</u>	86 2. 4. 1. 6 0 /26	<u>20 1. 3. 2. 2 -</u>	<u>53 2. 1. 1. 5 -</u>	86 2. 3. 2. 4 -	
21 1. 4. 1. 2 2 /26	<u>54 2. 2. 1. 3 26 /26</u>	87 2. 4. 2. 1 26 /26	<u>21 1. 3. 3. 1 -</u>	<u>54 2. 1. 2. 1 -</u>	<u>87 2. 4. 1. 1 -</u>	
22 1. 4. 2. 1 2 /26	55 2. 2. 1. 4 26 /26	88 2. 4. 3. 1 1 /26	<u>22 1. 3. 3. 2 -</u>	<u>55 2. 1. 2. 2 -</u>	88 2. 4. 1. 2 -	
23 1. 4. 2. 2 0 /26	<u>56 2. 2. 1. 5 0 /26</u>	89 2. 4. 3. 2 4 /26	23 1. 3. 4. 1 -	<u>56 2. 2. 1. 1 -</u>	89 2. 4. 1. 3 -	
24 1. 4. 2. 3 0 /26	57 2. 2. 1. 6 26 /26	lotal value 0.295	<u>24 1. 4. 1. 1 -</u>	<u>57 2. 2. 1. 2 -</u>	90 2. 4. 1. 4 -	
25 1. 4. 2. 4 0 /26	<u>58 2. 2. 1. 7 26 /26</u>		<u>25 1. 4. 1. 2 -</u>	<u>58 2. 2. 1. 3</u> -	91 2. 4. 2. 1 -	
<u>26 1. 4. 3. 1 1 /26</u>	<u>59 2. 2. 2. 1 26 /26</u>		<u>26 1. 4. 2. 1 -</u>	<u>59 2. 2. 1. 4</u> -	92 2. 4. 2. 2 -	
27 1. 5. 1. 1 0 /26	<u>60 2. 2. 2. 2 26 /26</u>		27 1. 4. 2. 2 -	<u>60 2. 2. 1. 5 -</u>	lotal value -	
<u>28 1. 5. 2. 1 0 /26</u>	<u>61 2. 2. 2. 3 26 /26</u>		<u>28 1. 4. 2. 3 -</u>	<u>61 2. 2. 1. 6 -</u>		
29 1. 5. 2. 2 0 /26	<u>62 2. 2. 2. 4 0 /26</u>		<u>29 1. 4. 2. 4</u> -	<u>62 2. 2. 1. 7 -</u>		
30 1. 5. 2. 3 0 /26	<u>63 2. 2. 3. 1 26 /26</u>		<u>30 1. 4. 3. 1 -</u>	<u>63 2. 2. 1. 8 -</u>		
<u>31 1. 5. 2. 4 U /26</u>	<u>64 2. 2. 3. 2 26 /26</u>		<u>31 1. 5. 1. 1 -</u>	<u>64 2. 2. 2. 1 -</u>		
<u>32 1. 5. 2. 5 0 /26</u>	<u>65 2. 2. 3. 3 26 /26</u>		<u>32 1. 5. 2. 1 -</u>	<u>65 2. 2. 2. 2 -</u>		
33 1. 5. 3. 1 0 /26	06 2. 2. 4. 1 2 /26		33 1. 5. 2. 2 -	66 2. 2. 2. 3 -		

Subino	lex 2-4.	Government (ISSOSS at the national level)		Subindex 3.	ISSOSS at the	international	level
No. Indicator No.	Value		No. Indicator No.	Value	No. Indicator No.	Value	
01 1. 1 1	1		01 1. 1. 1. 1	68 /70	34 2. 2. 2. 5	1	
02 1. 1 2	1		02 1. 1. 1. 2	2 60 /70	35 3 1. 1	1	
03 1. 1 3	1		03 1. 1. 1. 3	3 60 /70	36 3 1. 2	1	
04 1. 1 4	1		04 1. 1. 1. 4	60 /70	37 3 2. 1	1	
05 2. 1 1	1		05 1. 1. 2. 1	60 /70	38 3 2. 2	1	
06 2. 1 2	1		06 1. 1. 2. 2	2 60 /70	39 3 2. 3	0	
07 2. 2 1	1		07 1. 1. 2. 3	3 35 /70	40 3 2. 4	1	
08 2. 2 2	1		08 1. 1. 2. 4	35 /70	41 3 2. 5	1	
09 2. 3 1	1		09 1. 1. 2. 5	5 34 /70	Total value	0.835	
10 2. 3 2	1		10 1. 2. 1 1	60 /70			
11 2. 4 1	1		11 1. 2. 1 2	2 60 /70			
12 2. 4 2	1		12 1. 2. 1 3	8 60 /70			
13 3. 1 1	1		13 1. 2. 1 4	60 /70			
14 3. 1 2	1		14 1. 2. 2 1	60 /70			
15 3. 1 3	1		15 1. 2. 2 2	2 60 /70			
16 3. 1 4	1		16 1. 2. 2 3	3 33 /70			
Total value	1.000		17 1. 2. 2 4	33 /70			
			18 1. 2. 2 5	5 28 /70			
			19 2. 1. 1. 1	1			
			20 2. 1. 1. 2	2 1			
			21 2. 1. 1. 3	3 1			
			22 2. 1. 1. 4	↓ 1			
			23 2. 1. 2. 1	1			
			24 2. 1. 2. 2	2 1			

25 2. 1. 2. 3

26 2. 2. 1. 1

27 2. 2. 1. 2

28 2. 2. 1. 3

29 2. 2. 1. 4

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# Appendix I: Comparison between the ROK and Switzerland by the numbers

No	Economic indicators (2018Y)	The ROK	Switzerland
01	GDP: Gross domestic product (million current US\$) (2016Y)	1411246	668851
02	GDP growth rate (annual %, const. 2010 prices) (2016Y)	2.8	1.4
03	GDP per capita (current US\$) (2016Y)	27785	79609
04	Economy: Agriculture (% of Gross Value Added) (Data	2.2	0.7
	classified according to ISIC Rev. 4) (2016Y)		
05	Economy: Industry (% of Gross Value Added) (2016Y)	38.6	25.8
06	Economy: Services and other activity (% of GVA) (2016Y)	59.2	73.5
07	Employment in agriculture (% of employed) (Estimate)	4.8	3.4
08	Employment in industry (% of employed) (Estimate)	24.6	20.6
09	Employment in services (% employed) (Estimate)	70.6	76
10	Unemployment rate (% of labour force) (Estimate)	3.7	4.9
11	Labour force participation rate (female/male pop. %) (Estimate)	52.2/73.2	62.8/73.9
12	CPI: Consumer Price Index (2010=100) (Calculated by the	113	98
	Statistics Division of the United Nations from national indices)		
	(0047)()		
40	(2017Y)	402	101
13	Agricultural production index (2004-2006=100) (2016Y)	103	101
14	index of industrial production (2005=100) (Excluding water	151	130
	and waste management) (2014Y)		
15	International trade: exports (million current US\$) (2017Y)	573627	299309
16	International trade: imports (million current US\$) (2017Y)	478469	267501
17	International trade: balance (million current US\$) (2017Y)	95158	31807
18	Balance of payments, current account (million US\$) (2017Y)	78460	66558
No	Social indicators (2018Y)	The ROK	Switzerland
01	Population growth rate (average annual %) (Data refers to a	0.4	1.2
	5-year period preceding the reference year) (2015Y)		
02	Urban population (% of total population)	81.5	73.8
03	Urban population growth rate (average annual %) (Data refers	0.3	1.2
	to a 5-year period preceding the reference year) (2015Y)		
04	Eertility rate total (live births per woman) (Data refers to a	12	1.5
0.			1.0
05	5-year period preceding the reference year) (2015Y)	04 4/77 0	04 0/00 F
05	Life expectancy at birth (remales/males, years) (Data refers	84.4/77.9	84.8/80.5
	to a 5-year period preceding the reference year) (2015Y)		
06	Population age distribution (0-14/60+ years old, %) (Projected	13.4/21.1	14.9/24.5
	estimate; medium fertility variant)		
07	International migrant stock (000/% of total pop.) (Refers to	1151.9/2.3	2506.4/29.6
	foreign citizens) (2017V)		
08	Refugees and others of concern to LINHCR (2017V)	Q /	11 <u>/</u> 8
00	Infant mortality rate (per 1 000 live hirths) (Data refers to a	<del>ع.د</del> ع	2.0
09	mant mortality rate (per 1 000 live billing) (Data releas to a	5	5.9

5-year period preceding the reference year) (2015Y)		
10 Health: Current expenditure (% of GDP) (2015Y)	7.4	12.1
11 Health: Physicians (per 1000 pop.) (2016Y)	2.3	4.2
12 Education: Government expenditure (% of GDP)	5.1 (2015Y)	5.1 (2014Y)
13 Education: Primary gross enrol. ratio (f/m per 100 pop.)	97.8/97.4	104.0/104.8
	(2015Y)	(2016Y)
14 Education: Secondary gross enrol, ratio (f/m per 100 pop.)	100.3/100.1	100.3/104.2
···	(0045)()	(00.40)()
	(2015Y)	(2016Y)
15 Education: Tertiary gross enrol. ratio (f/m per 100 pop.)	80.6/104.6	58.4/57.3
	(2015Y)	(2016Y)
16 Intentional homicide rate (per 100000 pop.) (2016Y)	0.7	0.5
17 Seats held by women in National Parliaments (%)	17	32.5
No Environment and infrastructure indicators (2018Y)	The ROK	Switzerland
01 Individuals using the Internet (per 100 inhabitants) (2016Y)	92.7	89.4
02 Research & Development expenditure (% of GDP)	4.2 (2015Y)	3 (2012Y)
03 Threatened species (number) (2017Y)	111	74
04 Forested area (% of land area) (2015Y) (Estimate)	63.4	31.7
05 CO2 emission estimates (million tons/tons per capita) (2014Y)	587.2/11.7	35.3/4.3
06 Energy production, primary (Petajoules) (2015Y)	2116	509
07 Energy supply per capita (Gigajoules) (2015Y)	226	123
08 Tourist/visitor arrivals at national borders 000 (2016Y)	17242	9205
09 Important sites for terrestrial biodiversity protected (%)	36.6	35.2
10 Pop. using improved drinking water (urban/rural, %) (2015Y)	99.7/87.9	100.0/100.0
11 Pop. using improved sanitation facilities (urban/rural, %) (2015Y)	100.0/100.0	99.9/99.8
12 Net Official Development Assist. disburseds (% of GNI) (2017Y)	0.14	0.46
Adapted from the United Nations, the Republic of Korea page (ht	tp://data.un.org/e	en/iso/kr.html)

and Switzerland page (http://data.un.org/en/iso/ch.html)
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