1 11th National Health Assembly

2 Agenda item 2.3

NHA 11 /Main 3

19 October 2018

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E-Sports: Social Responsibility for Child Health

6 **1. Definition of Terms Used**

1.1 E-Sports In this case means online video game contests aimed at gaining prizes, and in
which there is more than one player. This is a new phenomenon that is popular and has grown at
a fast rate among the generation that has grown up in the age of digital games and the internet.
One is able to play on a closed network or internet network. The video game contest in which
there are many players has been a part of the culture of game playing for a long time i.e. since
2010

The definition of e-sports as in the E-Sports Federation dictionary and in which there is consensus on is that it is, "a video game contest". In addition, it was found that "online video game contest for awards" is used as the definition of "e-sports" in the video gaming industry. This has arisen from business operators in this field using e-sports to mean online video game contest and thus many children and youth join these activities.

18 1.2 Children is taken to mean here the population group that are below 18years of age,
 19 these being seen as a vulnerable group that has received much impact from past changes in
 20 communications technology.

1.3 Child wellness in this context means a situation of completeness of the child in the
 sense that he or she has gone through growth, development, and learning in physical, spiritual,
 emotional, intelligence, and social dimensions. All these developments to intertwine into a one
 whole and balanced state.

1.4 Organization of e-sport contests. In this case is meant the arrangement to have
 contests for playing of e-sports in order to find the winning team and a monetary prize or some
 award is given. The event is set in a large venue, capable of accommodating a large audience, or
 there are live relays via the media to cater for a larger number of spectators.

29 1.5 Social responsibility, in this context is taken to mean a state in which all sections of society that are connected to e-sports including those being responsible for e-sports such as 30 arranging e-sports competition, the players and the viewers of such. Social entities include all 31 sections of society at all levels i.e. the state policy level, the business operators, the locality, the 32 community, the school, and the family. They all have to have realization and knowledge on all 33 the factors involved in e-sports. This means also knowing about the negative impacts that might 34 have on the wellbeing of children. And the entities are expected to work collectively to shape a 35 system of organizing and managing e-sports events such as to make it creative, safe, and also 36 protect the children fully and done with efficiency, in order to assure wellness in children who 37 are the target group and wellness in the society as a whole. 38

The aforementioned principle is in accord with the international principle of managing issues affecting wellness of people, such as managing gambling responsibly. The management principle must include promotion and support for individuals, businesses, those making and implementing laws, and other related entities to work together to prevent negative factors impacting and decreasing any danger from such business operations to a minimum.

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1.6 Sports. The term sports in the dictionary or in international encyclopedias have been
defined as having at least 3 elements: 1) an activity by humans that is related to physical skills
and exercise. 2) the using of codes or rules for control 3) a competitive activity which leads to
results.

In addition, a clearer definition is given by the Global Association of International Sports Federations (GAISF). Sports means activity that 1) involves competition 2) uses skills not luck. Jobs not result in risks that endanger the health and safety of the players or those who participate in the competition, 4) does not harm any living beings, 5) does not rely on equipment from one sole producer.

6 The above definition is in accord with that of SportAccord in every respect. SportAccord 7 is the former name of GAISF, a big international federation covering members both inside and 8 outside the Olympics and includes many sport federations and covers many type of games. This 9 organization consists of 5 types of groups: 1) groups that mainly use the physical body in playing. 10 2) groups that use motors, mainly. 3) groups that mainly use coordination skills. 5) groups that 11 use support from animals.

The Encyclopedia of World Sports defines sports as an activity in which there must be at least 2 competitors and there must be rules for competition in which there must be a winner, and the aim at the start is to win. And winning must be due to the physical capability of sports player, though tactics and opportunity might play some role.

16 The Australian Sports Commission defines "sports" as an activity of humanity that uses 17 the body's capability in achieving results of winning or losing. The activity must be one of 18 exercising and / or using physical skills for competitive purposes and also have received 19 widespread acceptance as a sport.

Also, in the Encyclopedia of Children, it is noted that sports help children to develop physical skills, help them to exercise, to make new friends, to have fun, to learn how to function as a team member, to learn how to play fairly and by the rules, and build pride and selfconfidence. Participating in sports is a superb way to make children become lively, active, and also a best reward for furthering the mental health of children. Moreover, it has been proven that sports help children and youth to learn skills valuable for the management of life, including how to manage failure and success.

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28 **2. Problems and Needs.**

Presently, competition in playing video games online is gaining in popularity, and there is a trend of the state, the private sector, as well as educational institutions giving support to organize competitions on a widespread basis. At present, e-sports is a game with a large number of followers, plus it has been transformed into one being professionalized, with players making careers out of it, with prizes for contestants in the millions of dollars range. The increasing amount of monetary prizes and the growth in numbers of spectators attracts the gambling industries' interest, which are always searching for new gambling products and markets.

36 **2.1 The Problem in quantitative terms.**

2.1.1 Surveys on physical activities done by the Office of Enhancement of Wellness Lifestyle in the Thai Health Promotion Foundation in 2015, found that 71.7% of Thais do engage in physical activity, whereas children in the age group 6-14 years old was the only group that registered a decrease in physical activity from 67.6 % in 2012 to 64.8% in 2015 due to more sedentary behavior. From the survey, it was found that children and teenagers watch electronic screens 3.10 hours day in average, more so that other groups, and furthermore the trend is increasing. The results are Thai children lack physical activity and are getting fatter and fatter. Social change in this day makes children being obsessed with social media, addicted to games, and engrossed in using cell phones. And then there are other risk factors arising from their surroundings which lead to less physical activity among children and youth. This leads to health problems, especially the trend towards obesity, which is a source of non-communicable diseases, not to mention negative effects on memory and intelligence during the school years

6 2.1.2 The fact that gambling has been made to become a normal activity in society and thus permeates into everyday life results in children and youth falling under risk of gambling and 7 more and more are tempted by it, especially when there are opportunities to win monetary prizes. 8 This is all the more true for males, who have more tendencies to choose interactive type of 9 games. Therefore, there is great anxiety on the effects of widespread game playing which leads to 10 various forms of gambling products inserted into e-sports or online video game competition. A 11 study found that 91% of children age 5-14 years old and 81.1% of youth aged 15-24 years old 12 play electronic based games. Thus, gambling in e-sports might become another channel by which 13 children are induced to do gambling as a normal fun activity akin to gambling to bet on the 14 results of sports competition as in football. 15

16 **2.2 The problem in qualitative terms**₄

2.2.1 In the recent past, business groups involved, represented by Thailand E-Sports 17 18 Federation have tried to ask the Sports Authority of Thailand to acknowledge that Thailand E. Sports Federation be designated as a sports association. This was happening at a time when 19 children were addicted to games and concerned institutions were working with parents and 20 guardians on the treatment of this game addiction. In the event, the Ministry of Tourism and 21 Sports that oversees the Sports Authority of Thailand finally acknowledged that Thailand E-22 Sports Federation be registered as a sports association and allows it to organize contests and to 23 24 arrange the sending of sportspersons to compete overseas. In addition, it is to receive rights and benefits given out by the state, same as other sports association. Presently, e-sports activities are 25 widespread, focusing on nourishing professional game players with the target being children and 26 youth. But there is a lack of oversight standards in place, which thus might lead to a lack of 27 control of negative behavior and inability to counter the threat from technologies in the future 28 that are difficult to control. This will have negative impact on social well-being and development 29 30 of the child in terms of emotions, spirit, and correct understanding of health (National Institute for Child and Family Development, Mahidol University). Also, research data gathered by a team 31 of neuroscientists from Peking University China, working with Yale University researchers 32 distributed 66 research results during 2011-2017 which studied a group aged 16-30 years old with 33 internet gaming disorders (IGD) versus another group with good health. This they did by building 34 a live picture of the working of the brain. It was found that the grey matter in the brains of the 35 group addicted to games shrank. Plus, the front part of the brain responsible for the processing of 36 memory, analytical thinking, agility in thought, self-control and attention were deficient 37 compared to the control group that were healthy (2017). These research results lead to the worry 38 that addiction to sex or games with a fight element with the aim of winning produces a 39 mechanism of competition which emphasizes speed, use of force, intent to destroy, search for 40 tactics in order to win, which have negative effects on human resource development, resulting in 41 citizens lacking in analytical thinking and self-control. 42

2.2.2. The Association for Youth Radio or Media commissioned a research on e-sports
during 2017-18 on the topic of coping with the trend in favoring e-sports among teenage groups
globally, including Thailand. The Association's researcher, Ajarn (meaning Lecturer) Tham

Chuasatapanasim, found that academics and parents are worried about the organization of e-1 sports competition. Parents and guardians wanted data and information on e-sports to use in 2 forming an understanding, in communicating with their children, and in deciding whether to 3 allow gaming to become a part of their children's life. Academics think more interest should be 4 paid to: the overseeing such competition so it would be safe and also be protective of the child; 5 the management of business interests such that it does not exploit the innocence of children; and 6 7 to find measures to make parents, children, youth be more media literate or be aware of the effect of these online fight games. As for gamers, issues that are of interest to them and which they are 8 worried about are: spending time in playing games that would lead to addictive behavior, loss of 9 10 health, study and work time; the fact that actual opportunities for gaining income from professionally playing games is incommensurate with expenses in time and money; and the actual 11 income through winning rewards is still insignificant in Thailand. Therefore, there remains much 12 to do in terms of studies to build a knowledge set necessary to be up and aware of e-sports and to 13 14 prepare all society segments to cope, and to lay guidelines that business operators of online games with a fight element must follow, to show responsibility to society. 15

16 2.2.3 Betting on e-sports do have the risk of recruiting new gamblers into the gambling 17 network. These new gamblers' understanding about dangers might not be realistic, as is often the 18 case in betting sports. When a gambler likes an e-sports team, he or she might put money in that 19 team without regard to the principle of gambling responsibly. And since gambling of the type that 20 tries to guess the winner is a peer-surround activity, friends' pressure plays a big role and this 21 might lead to danger because the novice player might be pressured by friends to take the path of 22 betting, or to bet more money than he/she can afford.

A market research report done by "Pinnacle Sports", an American gambling company, pointed out that in 2014 gamblers on e-sports lost \$194 million and an estimated \$465 million in 2017. This company is the first online gambling company to enter the e-sports business, and reported that e-sports is the 7th largest betting arena for the company, larger than bets in rugby or golf sports. The company began its game betting business in 2010 and in 2014 it received a total of 1 million sports bets; currently gambling on e-sports is getting more popular.

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30 **3. Policy, Laws and Related Mechanisms.**

3.1 The 20 Year National Strategy (2017-2036) is one idea to develop the country that 31 takes into account the influence of rapid cultural change in the digital age. The 3rd point in this 32 strategy aims at developing and strengthening the capacity of the people, in order to make Thais 33 and Thai society possess strong roots for Thai development in the future. The aim is to nourish 34 people, including children and youth, so that they are physically, spiritually strong, and be more 35 international minded. The aim also is for Thais to gain analytical skills, have media, information, 36 37 and digital literacy (MIDL), so that all have the necessary skills to live in a state of wellbeing in society. 38

The 12th National Economic and Social Plan (2017-2021) adheres to the notion " people as the center of development", the idea being to develop people to be complete, to have discipline, a thirst for knowledge, to have knowledge, to have skills, and creative thinking. The 12th plan sets the target for Thais are be a person with a sense of completeness, be an active citizen, able to adjust to changing situations. The e-sports situation in Thailand is currently having an effect on the achievement of these objectives through its influence on children and youth, in terms of their priorities and conduct.

3.2 On 6 June 2017, the cabinet approved a strategy of promoting and safeguarding 1 children and youth in their use of online media covering 2017-2021 and tasked the Ministry of 2 Social Development and Human Security to set up the Child Online Protection Action Thailand 3 (COPAT Center) to be overseen by the Department of Children and Youth, its aim being to push 4 forward 4 strategies: 1) development of unified and effective mechanisms and networks. 2) 5 arrange for a system to protect and treat children and youth affected. 3) build a knowledge base 6 and do research. 4) enhancing the potential of children, youth, and the people surrounding them. 7 8 5) build public awareness. At the same time there will be in place a unit to monitor and inform concerned entities on potential online dangers that may impact on children and youth directly, so 9 that parents and all concerned parties would have a knowledge base and toolkits to cope with 10 situations, and to have the capacity to protect and help our youth, children, and grandchildren 11 faster and more efficiently. 12

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3.3 Spiritual well-being is an essential condition that will impact physical, mental, and well-being of people in the longer term. The National Health Act B.E. 2550 (2007) stated that "spiritual well-being" means a person has comprehensive knowledge, being aware of reality, has an understanding of the causes of good and evil, adheres to the idea of being useful, knowing what are wrong deeds, understanding of what is useful, of what is harmful. All these qualities will lead to a good and beautiful mind, one of being kind and compassionate"

If considering the context of environment and society that facilitates the forging of wellbeing, we can see the very important factor influencing the direction towards spiritual well-being and that is communications technology. The evidence is that the media which is a popular form of communication will influence people's thoughts, and is a factor determining their framework of thinking and degree of understanding of the current world situation. The media will unavoidably influence a person's behavior and his/her quality of life.

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3.4 The Child Protection Act B.E. 2546 (2003) specified that the overseeing of children 28 that might be involved in activities affecting their development and of children inclined to go into 29 gambling in Section 26 which states that it is forbidden to, whether the child agrees to or not, as 30 in point 7) force, threaten, use, induce, instigate, encourage, or allow a child to play sports or 31 commit any acts indicative of commercial exploitation in a manner which hinders the child's 32 growth and development or constitutes an act of torture against the child; 8) use or allow a child 33 to gamble in any form or enter into a gambling place, brothel, or other place where children are 34 not allowed. These are legal points that result in protection of children in certain e-sports 35 activities that might affect them and might eventually lead them to gambling. 36

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3.5 The Sports Authority Act (2nd revision) B.E. 2560 (2017) in Section 8 specifies that the 38 Sports Authority of Thailand is tasked with the following objectives: (1) to promote sports; (2) to 39 act as the focal point in the coordination relating to sports; (3) to study, analyse, research, and 40 prepare projects, work plan, and statistics relating to the promotion of sports including the 41 assessment; (4) to provide, assist, suggest, and cooperate in the preparation and undertaking of 42 sports activities; (5) to explore, build and renovate sports premises; (6) to contact and cooperate 43 with sports organisations or associations both within and outside the Kingdom; (7) to monitor and 44 supervise sports activities undertakings; (8) to launch, develop, promote, and support sports for 45 persons with disabilities; (9) to undertake any other acts relating to or for the benefit of sports. 46

3.6 The Consumer Protection Act B.E. 2522 (1979) in Section 20 on protection of the
consumer, specifies that The Office of the Consumer Protection Board has the following powers:
(1) to accept complaints made by consumers suffering grievances or injury in consequence of acts

of business operators for submission to the Board; (2) to monitor and observe business operators' 1 conduct amounting to violation of rights of consumers and cause to be undertaken tests or proof 2 of any goods or services as it deems appropriate and necessary for the protection of rights of 3 consumers; (3) to support or conduct studies of and research into problems in connection with 4 consumer protection in association with educational institutions and other agencies; (4) to 5 promote and support studies made available for consumers at all educational levels in connection 6 with safety and hazards possibly resulting from goods or services; (5) to disseminate technical 7 information and provide knowledge and studies to consumers with a view to creating 8 consumption behaviours contributing to health promotion, cost-effectiveness and exploitation of 9 natural resources for maximum benefits; (6) to co-ordinate with Government agencies or State 10 agencies with powers and responsibilities in connection with the control, promotion or 11 formulation of standards of goods or services; (7) to perform any other activities as entrusted by 12 the Board or specific Committees. 13

14 Section 22. An advertisement shall not contain any statement which is unfair to 15 consumers or any statement which may produce adverse effects on society at large, be it a 16 statement as to origins, conditions, qualities or characteristics of goods or services as well as the 17 delivery, procurement or use of goods or services

3.7 Gambling Act B.E. 2478 (1935), Section 12* states: Whoever organizes a game, or
 deceives people by trickery, or assists in making advertisement or announcement of the game, or
 invites people directly or indirectly to participate or to gamble in the game which is held without
 permission of the authority, or with such permission but is played in an unconventional manner.
 Or whoever participates or gambles in a game held in violation of the provisions of this Act or a
 Ministerial Regulation or the statements on the license shall be liable as follows:

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(1) Where the offence comes under games number 1 to 16 of List A, or raffle as part of number 16 of List B or similar games, the offender shall be liable to imprisonment for a term of three months to three years and to a fine of five hundred baht to five thousand baht, except where the offender is a player or gambler who is called client, in which case the offender is liable to imprisonment for a term not exceeding three years or to a fine not exceeding five thousand baht or to both.

31 (2) Where the offence comes under any other games mentioned in this Act, the offender 32 shall be liable to imprisonment for a term not exceeding two years or to a fine not exceeding two 33 thousand baht or to both, except where the offence comes under Section 4bis, in which case the 34 offender shall be liable to imprisonment for a term not exceeding on a year or to a fine not 35 exceeding one thousand baht or to both

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(* Section 12 was amended by the Gambling Act, (No.7) B.E.2504)

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38 **4. Issues for Analysis.**

39 The important issue to consider initially when one proposes to forge a collective responsibility for dealing with e-sports and child well-being, is the widespread phenomena of 40 organized e-sports competition but which still lacks the proper measures, rules and regulations, or 41 codes that are of international standards to shield and protect children. The situation is; there is 42 widespread dissemination of advertising communication inviting children to play e-sports; and 43 the rise in numbers of children addicted to games used in e-sports competition. These problems 44 have grown in severity since the acceptance of e-sports as sports by the Sports Authority of 45 Thailand. One can breakdown the problems for analysis this way. 46

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4.1 The problem of lack of proper standards, rules and regulations with respect to the 1 organization of e-sports events by state agencies, E-Sports Association of Federation, and 2 business operators. They are not ready in setting measures to cope with the various impacts that 3 might occur in a situation where there is promotion of a business in which children are the target 4 group. They also do not have measures in place to deal with businesses which have high potential 5 for generating negative impacts, and have not built up a sense of responsibility in e-sports. For 6 example, the problems are: that there is now no age restriction on the ages of children that are 7 allowed to play and compete; there are yet no standards for safety, transparency, and ethics; there 8 lacks also a specification of qualities to be had by business operators that support these 9 competitions, and there is no restrictions on persuasion of children to consume alcoholic drinks, 10 smoke cigarettes, and gamble via websites. There is also a lack of a central standard for running a 11 competition i.e. deciding winners, checking score counting, and a lack of preventive measures to 12 block the exploitation of contestants. In addition, there is no oversight on the children and youth 13 gambling through games that are used in e-sports competition. 14

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4.2 The problem of communicating the meaning of e-sports. This has led to 16 widespread organization of competitive events. The problem arises from the idea of discourse on 17 the issue that has been framed as "language determines meaning; meaning determines 18 knowledge, perception, and understanding; and meaning produces power and interests". 19 Therefore, when there was an acknowledgement by the authorities that e-sports is a sport, this 20 gives legitimacy to business and their supporters, who can now claim that playing video games 21 online to compete for prizes is a sport. Also, there is also an attempt to change perception of 22 children, youth, and society in general, to be that playing all games to compete and win is a 23 sport too. But in the context of child game addiction being a social problem of long standing 24 and increasing, especially after when e-sports was approved as a sport by the state authorities 25 involved, this has impacted negatively the physical and mental health of children, as well as 26 creating problems in many families. As such, the state agencies connected with sports and the 27 promotion of technology should show responsibility. This can be done by doing studies, 28 reviewing, and building correct understanding to find what the real meaning of e-sports is and 29 how to communicate this to society so that we are not dominated by the trend towards 30 organizing events aimed solely at exploiting children, without concern for impacts and burdens 31 on other segments of society, who have to deal with subsequent problems. 32

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34 4.3 The problem of lack of awareness of real motivations, true knowledge in e-sports. Since 2005, much news and reports have surfaced on these issues but it was only during 2009 35 that there was much more widespread discussion on this issue due to news from abroad filtering 36 in to the country about events organized with the idea of competition embedded in sports 37 having spectators and competition playing in teams. But the problem is that all news and 38 information flows such as about agendas, issues, perspectives, sources of knowledge are 39 determined by only a few groups either those that have a vested interest in e-sports or those 40 who are opposed to e-sports, the latter who do the critical commenting and warning on threats 41 from e-sports. The latter group comprises of academics, civil society workers, doctors and 42 institutions concerned with health and public health. In any case, on the way the media presents 43 the news, it tends to focus on solving problems and furthering the interests of business, more 44 than presenting to get parents and guardians to understand what e-sports is or what its effects 45 are, or about the economic factors surrounding e-sports in its entirety. 46

- 47 48
- 49 5. Ideas on Solving the Problems.

1 In order to create social responsibility for e-sports, which will lead to appropriate 2 protection and enhancement of well-being for children appropriate to their age-bracket, the 3 following ideas are proposed:

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Prepare agencies concerned with digital technology, online games, 5 5.1 telecommunications organizations, agencies concerned with study of well-being of 6 children, for them to be able to shield, protect, and treat problems of children arising 7 from e-sports. Such entities should together determine action guidelines or preventive 8 measures for children and youth in terms of managing access to online games, especially 9 children under 13 years of age should be prevented from accessing online media or digital 10 media without supervision from parents and guardians. Concerned parties should limit those 11 eligible for game playing for competition to be 18 years old or older, in accordance with 12 international standards. Furthermore, there should be measures to stop communication, 13 advertising, marketing, campaigning, persuading aiming at children below 13 years old to join 14 e-sports activities. Or to get people to refrain from communication, advertising that paints an 15 overoptimistic picture that playing games and joining in e-sports competition has a good effect 16 on life and one's future. For children between 13-18 years if they engage in activities, there has 17 to be specific measures designed for them that promote appropriate learning about e-sports 18 rather than teaching them about how to compete for prizes like what professionals do. And if 19 they are going to participate in e- sports activities, they have to inform parents and guardians 20 first and receive their approval. 21 22

In addition, there has to be a policy and measures absolutely forbidding competition in 23 video gaming inside educational institutions covering children from early childhood to 24 secondary school age, as well as having measures preventing placing of bets when playing e-25 sports because many websites both in Thai language and in other countries that have gambling 26 in e-sports competition, there is not yet in place measures to oversee this problem effectively. 27 There must also be measures totally forbidding sponsorship of people selling alcoholic drinks, 28 cigarettes, electronic cigarettes, and of gambling in e-sports competitive events played by 29 children and youth. Plus, prohibit the advertising of products by those who sponsor competitive 30 events, products that are alcoholic drinks and drinks claiming to have brain nourishing 31 properties that make people able to play games more competently and for longer stretches of 32 time. 33

5.2 Exchange and learning aiming at studying, reviewing, and setting guidelines on 35 correct communication about e-sports in its various dimensions and in a comprehensive 36 manner. E-sports is still an controversial in the society and no widespread acceptance at the 37 international level. In medical and public health circles there is some evidence that may have a 38 negative impact on the well-being of children. This evidence is in conflict with the prevailing 39 notion that sports that should have good effects on mental and physical health. It also goes 40 against the World Health Organization definition that internet and games addiction in this day is 41 a type of disease, meaning it is a problem of mental health arising from technological 42 advancement. In addition, the international meaning of sports is an activity of exercise in which 43 there is competition but competition to achieve strong health and in the process to gain 44 relaxation and entertainment as well. But e-sports are a video game played to gain prizes. Thus, 45 there should be research and studies done to come up with a correct definition of e-sports, and 46 to set the right kind of communication about e-sports and one that covers all dimensions, and 47 which is in accord with the accepted truth by the relevant sciences. 48

49 5.3 Promotion of media literacy on communications about the nature of online
 50 game competition. Steps should be taken to engender media literacy and awareness of the
 51 reality of e-sports. This should be done on a wide front covering the individual, family, school,

community, and national level. This is in order to build correct understanding of e-sports in 1 every dimension as follows: on the business perspective that firms do gain benefits from 2 children and youth participating in its organized activities; on the question of national economic 3 benefit arising from playing online games copyrighted abroad; on the dimension of facts and 4 opportunities concerning occupation and income of those who play e-sports; with regard to 5 expenses resulting from the playing of e-sports by children and youth. And lastly, the self-6 management aspect, so when this target group enters into e-sports competition it can do so with 7 safety and creativity, thus preventing negative things happening such as child game addiction, 8 gambling, cybercrime, disappointed school-record of students or student performance at 9 schools, mental and physical health of children and youth. 10 11 6. Issues to be considered by National Health Assembly. 12 Request that the National Health Assembly consider Document NHA 11 / draft 13 resolution 3, E-Sports: Social Responsibility for Child Health 14 15 16 7. References. 17 18 1) Tarm Chuasatapanasiri, research work of AACHA. 2018 19 2) Child Online Protection Action Thailand (COPAT), Situation Report on online Media 20 and Thai Children and Youth, 2017 21 22 3) National Institute for Child and Family Development, Mahidol University 4) Thai Health Promotion Foundation, Survey on the Situation on Physical Activity, by 23 the Office of Promotion of Well-Being, 2015 24 5) Australian Sports Commission 25 6) Global Association of International Sport Federations (GAISF) 26 7) Encyclopedia of Children's health 27 8) Encyclopedia of World Sport 28 9) NCPG Board of Directors, February 2018 29 10) Neuroscience and Biobehavioral Reviews. 83 (2017) 313-324 30 11) www.youthradioandmedia.org (Soh Soh Toh Yoh is the abbreviation) 31 32 33 34 35 36 37 38 39 40 41 42