ELITE SPORTS IN FINLAND

External international evaluation

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Finally, we also owe a big thanks to Minttu Korsberg, general secretary of the Finnish National Sports Council, who put a lot of work into arranging all the meetings with the Finnish stakeholders during our research visit in the spring of 2022 and coordinated the project on behalf of the Ministry.

We sincerely hope that the results presented in this report will help the Finnish elite sports system improve its performance in a way consistent with Finnish culture, tradition, and ambitions.

Aarhus and London, June 2022

Rasmus K. Storm & Klaus Nielsen

Executive summary

Main findings

Finland has a proud tradition of excellence in elite sports. Until the early 1950s, Finland was the fourth-best nation in the Olympics overall and by far the most medal-winning country per capita, and up to the 1990s, Finnish elite athletes still did well. Eurobarometer data shows that Finland is consistently top of the class in the EU concerning mass participation in sports.

Further, the training facilities for elite athletes in Finland are second to none, and public elite sports funding has increased in recent years and is now roughly at the level of the other Nordic countries. Still, there are significantly lower levels of private sponsorships available for Finnish elite sport leaving the total amount of resources behind the Finnish neighbours.

Despite the recent increases in public funding, Finland has experienced a radical decline in elite sports performance in the last three decades. This goes for Olympic and Paralympic sports. All appropriate measures of international competitiveness of its elite sports system show that it is now at a significantly lower level than the other Nordic countries. The decline is not caused by a lack of efforts to improve the system. Consecutive evaluative reports followed by reforms have so far failed to provide significant improvements.

This evaluation explores the reasons for this decline. It reports the results of a major study commissioned by the Finnish Ministry of Education and Culture. The characteristics of the Finnish elite sports system are analysed from an international perspective, emphasising a comparison with the other Nordic countries.

The conceptual framework of the study is inspired by the international SPLISS-study (de Bosscher et al., 2015) with an account of the features of the elite sport systems separated into nine 'pillars' (funding, governance, mass participation, talent identification and development, training facilities, coach provision and coach development, athletic and post-athletic career support, access to national and international competitions, and scientific research).

The study indicates significant issues at the level of governance, organisation, and structure. While improvements have been reached in recent years, the system is still complex, fragmented and bureaucratic, with unclear steering and division of labour or responsibilities, and little communication among an army of diverse stakeholders. Generally, there are no functional links between goal setting, strategy, implementation, and evaluation.

There are also deficiencies in relation to talent development, coaching and the links to research and science. However, the governance issues seem to be one of the primary causes of the Finnish decline.

The governance problems are strongly linked to broader historical developments and cultural issues deeply rooted in Finnish national identity. A poorly designed overall structure causes the malfunctioning interaction between organisations. Still, it is seemingly also related to lack of trust, flawed communication, strong norms of equality, and fear of failure, which various (doping) scandals have reinforced.

The consequences are a systemic risk averseness held in place by the relatively low legitimacy of elite sport in broader society and inherent resistance to set up clear performance goals. Further, reluctance to prioritise the pursuit of excellence rather than mass participation is institutionalised. Also, norms of independence of stakeholders are significant, making steering and aligned management difficult.

Recent studies show little trust between the interacting groups, i.e., the predominance of bonding rather than bridging social capital. There are also communication failures, which are primarily formal and bureaucratic rather than informal and open.

All of these issues constrain the development of Finnish elite sport. However, there are positive aspects of the system as well.

First, and as mentioned above, there have been some improvements in the system in recent years. The system's organisation, including the allocation of roles and responsibilities, is clearer, and more apparent steering with the High-Performance Unit (HPU) in the lead appears to be in place.

Second, Finland has one of the most active populations in Europe. This is evident due to the year-long focus on sport for all and physical activity in Finnish sports policy. Even though Finland experiences problems with decreasing participation levels and sedentary behaviour – as seen in many other western countries – the comparatively active population is a fruitful platform for future results.

Third, the structure around talent identification and development is better and has improved in recent years. The sports academy structure is strong, and its additional network of schools holds potential if further optimised.

Fourth, the recent reforms have focused on supporting the athlete's path at all development stages. This has been particularly successful for promising athletes (16-19 years old) as well as generous individual support of world-class athletes. Dual career support is well developed as well as post-career support, although to a lesser extent.

Fifth, training facilities in Finland are abundant and of high quality.

Sixth, the focus on improving the situation around coach provision and development is relevant and appears to have resulted in more competent coaches. This is likely to have an effect in the long run if the increased focus is withheld.

Seventh, the results show that Finnish elite sport to a large extent upholds international standards in regard to securing that athletes have access to national and international competitions. The necessary structure is in place. There is room for improvement, especially in relation to parasport. But the overall impression is that things have improved in recent years with the new Game Operations Program.

Finally, sports science in Finland is of internationally recognised high quality. It is concentrated at Jyväskylä University. One of its research institutes, KIHU has in last years shifted it focus from research to support services, and is working more tightly with the Finnish Olympic Committee/HPU.

It will take some time before the results of the recent, identified improvements can be seen in the international medal table. However, there is reason to believe that they will kick in, in the near future. However, there are additional issues that should be addressed in order to release the full potential of the Finnish system. These challenges are located at both organisational and structural levels.

In the below, adjustments to the current system are recommended.

Recommendations

The recommendations do not include suggestions that require a major increase in governmental funding of elite sport although some reallocation of financial support is suggested as well as several proposals that require a marginal increase in funding. Further, measures to increase private funding are recommended.

A general recommendation is to emphasise the need for serious efforts to improve goal setting and its link with strategy, implementation, and evaluation.

The current governance of elite sports in Finland is a network of independent organisations with the state as an important participant. The functioning of the network is not ideal but rather than suggesting major restructuring the recommendations focus on measures that will improve the network governance.

This includes better communication and dissemination of information, more frequent and less bureaucratic interaction, and more dialogue with the aim of developing a common understanding and common goals, as well as trust-building initiatives.

It is suggested to improve the legitimacy of elite sports in Finnish society through the development of explicit elite sports goals aligned with societal values and concerns such as good governance, sustainability, and ethics.

This requires a forum for continuous dialogue between the stakeholders in the elite sports system, the government, and relevant NGOs. An alternative suggestion is to establish an independent sports regulator. It is recommended to amend the Elite Sport Act formalising

the organisational framework for this ongoing dialogue and linking the support for elite sport to broader societal values and concerns.

In addition to these general suggestions, the report includes more than twenty specific recommendations:

- More professional management of sponsorships to improve private funding of elite sports
- Increased local government funding of elite sport through mutually beneficial involvement of local municipalities in the application of the HPU policies
- Better long-term planning
- Strengthened manpower and professionalisation in sports federations by linking continued support to organisational changes, including administrative routines and professional performance directors
- Sharpened prioritisation of the HPU support by reducing the number of supported federations and/or the introduction of a system of differentiated support related to the international standing and promise
- Better support for club administration and coaching
- Reallocation of financial support for mass participation to reflect the relative increase in self-organised activities
- Better coordination of talent identification and talent development in federations and clubs through knowledge transfer
- Better coordination of the activities of sports academy staff with responsibility for sport and study, respectively
- Support for league-based tournaments in paralympic team sports
- Inclusion of the sub-elite in the top-level support structure of the HPU
- Better post-career support and the introduction of a combination of sport and study/work as an explicit condition for individual financial support
- Efforts to attract young athletes to stay in sports institutes, including subsidies for transport and more attention to issues of lifestyle, entertainment and youth culture
- Funding for continuous upgrading of the facilities of the two main national training centres (Sports Institutes) to keep up with the international best practice
- A new consultative national unit with responsibility for coordinating and guiding the development, usage, and innovation of training facilities
- An appropriately supported career path for professional coaches
- Support for more professional coaches in the individual sports
- Specialist education in coaching paralympic athletes
- Improvement of coaching standards among Finnish coaches through better application of sports science in coaching practices
- Import of foreign coaches in situations with sub-level national coaching standards and a need for new inspiration
- More systematic efforts to host international sporting events including the establishment of a responsible organisation, possibly named: 'Sport Event Finland'

- Improve the strategic management of elite sport related research through better goal setting and implementation of strategies and the clarification of the competences of the stakeholders in the sports research network
- Increase in the practical application of sports science through marginal changes in research funding, giving HPU funds for incentivising research in priority areas of application
- More systematic search procedures for potentially relevant practical application of research projects, including better data collection and analysis
- A revision of the Sports Act linking elite sport to societal values and concerns and the formalisation of the organisational framework for an ongoing dialogue between the elite sport system, the government, and relevant NGOs

Introduction

The Finnish Ministry of Education and Culture, Division for Sport, has asked The Danish Institute for Sports Studies to evaluate the Finnish elite sports system from an international perspective. The focus is on both Olympic and Paralympic sports.

The project is part of a more extensive evaluation commissioned by the Ministry, including different working packages focusing on various aspects of Finnish elite sport. The Ministry has financed the evaluation and its working packages.

Still, because the Ministry – as is the case with other stakeholders covered in the analysis – is an object of the evaluation, the Secretariat of the National Sports Council has coordinated the evaluation to secure the objectivity of the results.

This report presents the analysis conducted, including an assessment of the Finnish system's historical and contemporary status and (international) performance.

Before and during the evaluation process, there has been an ongoing dialogue with a dedicated Finnish research team and the National Sports Council on various issues. The research team has commented on preliminary drafts of the report to correct common mistakes and errors.

However, the authors are responsible for the analysis, conclusions, and recommendations, which are formed independently from all stakeholders, the Ministry, and the National Sports Council.

The main area of interest follows from the terms of reference regarding the evaluation prepared by the Ministry[1], which can be summarised in the following question:

> "Why has Finnish elite sport experienced a general decline in international competitiveness over the latest decades?"

To address this question, the report progresses as follows: First, the analytical framework of the evaluation is presented, followed by an outline of the materials and methods used. The Finnish elite sports system is then examined following the structure laid out in the analytical framework section.

When relevant, the Finnish system and its performance are discussed and compared to other relevant nations – mainly the Nordic countries: Denmark, Norway, and Sweden – to understand strengths and weaknesses that can potentially be addressed to better the current situation.

[1] The full Terms of reference for the commissioned work can be found in Appendix 1.

In the final sections of the evaluation, results are discussed and summed up conclusively, and implications for and (potential) future perspectives of Finnish elite sport are presented together with relevant recommendations.

Conclusions and recommendations are also summarised in the executive summary at the report's start.

Analytical framework

To guide the research process and data collection, the evaluation uses the '**S**ports **P**olicy Factors **L**eading to **I**nternational **S**porting **S**uccess'-framework (SPLISS) (De Bosscher et al., 2008) as its analytical underpinning.

However, due to the time limits of the evaluation, it has not been possible to collect the same amount of data as in the full SPLISS-programme, which applies a pervasive data approach used to compare elite sport systems across nations.

Fully deployed, the SPLISS-framework would consist of data on 96 Critical Success Factors and 750 subfactors, including the view of athletes, coaches and performance directors on the elite sport system in question. This is beyond the resources of this evaluation.

Still, the framework including its pillar structure is used to structure and steer the work and relate the collected materials (see the materials and methods section) to get a coherent picture of the Finnish elite sport system and its performance.[2] There are several benefits associated with this approach.

First, the SPLISS-framework is one of the leading and most used frameworks for understanding how nations achieve international sporting success, and – second – it has been used successfully by the authors of this report to evaluate Danish and Greenlandic elite sports (Storm & Nielsen, 2021).

Third, by deploying this framework, it is possible to address structural, cultural, and societal factors that influence the Finnish elite sport system, its functions, and performance. This gives better and broader insights into the Finnish performance than if the evaluation only looked at the organisational setting of elite sport in Finland.

In short, the SPLISS-approach is based on the anticipation that determinants of international sporting success can be found on three distinct levels: The macro-, meso-, and micro-levels (De Bosscher et al., 2010).

Factors on the macro-level are characteristics that influence a nation's global sporting arms race capabilities but are difficult to change in the short run (De Bosscher et al., 2008). Cultural aspects, societal structure, wealth, population base and political characteristics of a nation – which affect its competitiveness in international elite sports – are such macro-level conditions that can only be changed in the long run.

However, these factors are essential to building national medal capabilities. According to De Bosscher et al. (2006) and Storm and Nielsen (2010), they account for roughly 50 per cent of the differences between the medal portfolios of nations.

[2] Finland has previously participated in the SPLISS-program, and that material is used in the evaluation. However, new research, data, and materials are added to produce a fully updated assessment.

Factors on the meso- and micro-level are determinants that can explain the success not captured by macro-level factors. At the micro-level, the athlete's immediate environment and personal characteristics affect medal potential. At the meso-level, the specific characteristics of a nation's elite sports policies affect the capabilities.

In the SPLISSS-model, the meso-level factors or pillars comprise:

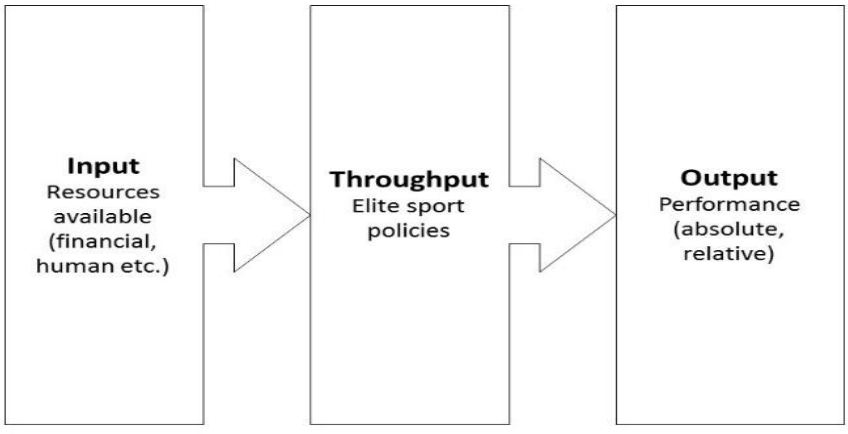
- Pillar 1: Direct national financial input into the system
- Pillar 2: Organisation and structure of elite sports policies in the nation
- Pillar 3: National mass sport participation levels and foundation
- Pillar 4: The national talent identification and development system
- Pillar 5: The national support of athletes' career and post-career
- Pillar 6: Training facilities
- Pillar 7: Coaching provision and coach(ing) development of the system
- Pillar 8: Access to national and international competitions of athletes
- Pillar 9: Scientific research programmes on and innovation of elite sport

According to De Bosscher et al. (2015) the importance of the meso-policy level is increasing in relation to international sporting success.

Assessing the Finnish elite sport system

By describing and evaluating the macro-, meso- and micro-level factors of Finnish elite sport, a coherent picture of the system can be made and further compared to international trends and other nations. For the specific assessment of the system, the evaluation report follows the model illustrated in figure 1.

Figure 1: Model for assessing the performance of the Finnish elite sports system



Source: The model is reproduced from Storm et al. (2016).

As can be seen, the success of nations in international elite sports is established when an input that comes in the form of different resources (for example, at the macro-level in the

form of societal wealth and the national population base or as micro-level attributes such as persons and their characteristics), is improved by throughputs into output which is prizes or medals won in international tournaments. The throughputs of the model consist of the national (elite) sport policies in a given nation and are found at the meso-level.

The report is structured around Figure, with input (at various levels) examined first, followed by a throughput and output analysis.

In addition to following the model in the analysis, it is essential to understand that the SPLISS-framework – while extremely helpful for getting a coherent understanding of how contemporary elite sport systems work – does not sufficiently take contextual and historical issues into account (Henry et al., 2020).

Elite sport systems are formed in historical, cultural, and national contexts, and this must be taken into consideration to understand them and guide future developments. Therefore, we start by describing some macro-level background developments that are important to understand the advantages and shortcomings of the Finnish system before we turn to examining its (contemporary) input, throughput, and output.

All the examinations unfold after presenting materials and methods used in the evaluation.

Materials and methods

Desk research and literature review

The project is mainly carried out using existing materials, and most of the evaluation is therefore produced as desk research and by reviewing existing (research) literature and data. The main sources used are published (academic) journal papers on the Finnish elite sports system, research reports, and governmental reports. The complete list of literature used can be found in the literature references list.

Online interviews

In addition to using published materials, 11 online interviews (using MS Teams) have been conducted to get deeper insights into the Finish elite sports system. The duration of the interviews was between 60 to 90 minutes, and close to all were recorded. All interviews were conducted between 20 January and 3 May 2022.

A complete list of all online interviews can be seen in appendix 2.

Research visit to Finland

In addition to the online interviews, a range of interview sessions (nine in total) were conducted during a four-day research visit to Finland from 13-17 March 2022.

The majority of the sessions had a workshop form with 2-5 stakeholders from or related to the Finnish elite sports system (for example, specific sports federations, sports academies, and the Ministry of Culture and Education) and the Danish researchers as participants.

The complete programme for the research visit can be found in appendix 3.

Almost all interviews have been recorded and used as background information for the analysis. Persons cited in the evaluation have cross-checked and approved their citations.

Objective data

To review the performance of Finnish elite athletes (including parasport), objective data on historical results from an extensive range of Olympic and Paralympic disciplines is deployed. The data used is based on the work by Storm and Nielsen (2010), Storm, Nielsen, and Thomsen (2016), and Storm and Nielsen (2021), and updated up until the 2022 Beijing Winter Olympics. Online available data on performance is used as well.

In order to achieve a more complete analysis of the international competitiveness of the Finnish elite sports system, these data are supplemented with data about disciplines outside the Olympic and Paralympic programme; e.g., Formula 1 and rallying, orienteering, ten-pin bowling, and cheerleading. A brief introduction to how competitiveness in international elite sports can be measured and applied to the analysis performed in this report can be found in the output section.

The external view and its implications

As mentioned in the introduction, the work presented in this report is part of a more extensive set of work packages, each focusing on different aspects of Finnish elite sport. The perspective in this report is explicitly the outside view, and this has implications for the analysis performed.

First and foremost, the research focuses on recent and contemporary problems identified in the collected data and materials. The report focuses on the overall and general problems characterising the system – seen from the outside – as a whole and does not dig deep into details, for example, regarding sports-specific issues or historical developments (unless they are seen as essential to the analysis and its conclusions). Such topics are mainly covered by the other working packages as part of the evaluation project and are primarily delivered by the Finnish research team.

Second, it is important to stress that while it is relevant to compare Finland to other nations, this is mainly done in relation to output (see the output section). A thorough analysis of the Finnish sports system (as a whole) compared to the other relevant nations – like the Nordic countries – is already done by authors like Stenbacka et al. (2018) and Andersen & Ronglan (2011), who all analyse Finland, Norway, Sweden, and Denmark. In this report, the findings from published comparative studies (together with other sources) are used where relevant to put our findings into perspective.

However, the authors of this report have a specific perspective due to in-depth knowledge of the Danish elite sport system, particularly Team Danmark. We will outline some comparative observations about the Finnish system seen from this perspective. This will also impact some recommendations for changes to the Finnish system.

Third, it is important to stress that the report has been prepared within resource and time constraints. The implications are that the report only presents the problems and challenges that have appeared in the data, interviews conducted and materials available. Other issues not identified in the research process might exist and may be necessary to investigate and address in the future.

However, the focus is on the most important challenges identified in the data and materials at hand due to the mentioned constraints. We touch more upon this issue in the final sections of the report.

Paralympic sport

The evaluation considers Paralympic sport as an integrated part of the analysis. As expected, the evaluation shows differences and similarities in how well the Finnish elite sports system supports and nurtures the development of Paralympic athletes compared to able-bodied athletes. If the parasport situation differs from how the systems work in general, this is explicitly reported in the respective sections.

The report only touches issues identified during the data collection and the analysis. Additional problems concerning Paralympic sport are not dealt with.

Macro-level background: A brief overview of the development of the Finnish elite sports system

Introduction[3]

The development of the Finnish elite sport system is complex. Even the contemporary structure and management of sport and elite sport is difficult to grasp.

To understand and assess the current Finnish performance (the system output) in international elite sport and the strengths and weaknesses (the throughputs) of the Finnish elite sport system, it is necessary to shed light on some critical macro-structural and historical trends that have formed the system.

Below, these aspects are touched upon. The section is divided into five sub-sections, each going over distinct historical periods.

The development of the sports movement 1900-1980

In the twentieth century, the Finnish Central Sports Organisation (SVUL), the first Finnish sports organisation, was established in 1906 and is labelled in political terms as 'bourgeois'. Shortly after its foundation, Swedish-speaking members left the organisation and established the Swedish Central Sports Association in 1912. After the Finnish civil war (1918), the Finnish Workers' Sports Federation was established in 1919 (Lehtonen & Mäkinen, 2020).

Further, a national sports board was founded in 1920 (Finnish Government, 2018) to decide on and provide grants and other forms of funding for Finnish sports organisations.

The organisational diversity of the sports movement at the start of the 1900s is interesting and reflects broader societal trends in Finland. It mirrored political-, class-, and language-based tensions that existed before and were further enhanced in the years leading up to the Finnish Civil War between the bourgeoisie and the working class (Itkonen & Salmikangas, 2015).

Until the end of the 20th Century, conflicts regarding the right to represent Finnish elite sport internationally have been central in the relationship between the Finnish Central Sports Organisation and the Finnish Workers' Sports Federation (Lämsä, 2012). From 1919 to 1939, the Finnish Central Sports Organisation held the right to represent Finland in international tournaments.

The Finnish Workers' Sports Federation, unsatisfied with this setup, contacted international workers' sports federations in order to send their athletes to separate international

[3] In this section, we structure the presentation around the paper on the development of the Finnish elite sports system written by Lämsä (2012), and Lehtonen and Mäkinen (2020). We only touch upon the most relevant parts of its complex development. A deeper analysis can be found in the referenced documents.

competitions. Other athletes broke with the Finnish Worker's Sports Federation and established the Finnish Central Sports Organisation.

The hosting of the planned 1940 Olympic Games in Helsinki and changes in the national political environment made the two organisations work more together. The new Helsinki Olympic Stadium became, according to Lämsä (2012), a catalyst for ongoing negotiations of cooperation between the Finnish Workers' Sports Federation and the Finnish Central Sports Organisation. However, the war between the Soviet Union and Finland (1939-1940) interrupted the process, thus withholding the diversity of the sports system.

Due to conflicts associated with the following debates on merging the two organisations, a part of The Finnish Workers' Sports Federation broke out and founded the Central League of Workers' Sports Clubs (TUK) in 1959 (Lämsä, 2012)

According to Lehtonen and Mäkinen (2019), the sports movement's highly politicised character continued until the collapse of the Finnish Central Sports Organisation in the 1990s. Until then, Finland had five organisations that could be labelled as 'main' or 'domain' sports organisations. At the same time, sport came to be used as a unifying cultural instrument despite the political tensions and organisational heterogeneity (Lämsä, 2012). Finland is, according to Laine (2006), one of the first nations to use sport politically and as a means of forming national identity.

Being a young nation placed in between the Eastern and Western blocs with historical Swedish and Russian relations means that Finland has had to balance its position and develop its own distinct identity. For example, external influence from the Soviet Union was strong in the 1950s and up until the 1980s (Ahlqvist & Moisio, 2014), while a shift towards the west took place in the late 1980s and early 1990s (Mäkinen et al., 2016).

(Elite) sport has had a function in this conflicting and changing balancing act. In short, sport can establish a national identity and a collective 'we-feeling' in a given nation. Elite sport creates a space for national identity-making through which unifying narratives of the country can be formed. In Finland, (elite) sport has provided such a space historically:

> "Sports was supposed to secure the feeling of collectivity, especially among the farmers and the working class, in order to create a unified national community in a country torn apart by the civil war of the 1918" (Laine, 2006, p. 69).

Despite the long-lasting organisational fragmentation, the broader effect was that elite sport, for many years, had a high level of legitimacy in Finnish society and was highly appreciated by the population due to its societal and nationalistic function. This was especially true in the years where Finnish athletes enjoyed high levels of sporting success in long-distance running, wrestling, cross country skiing and track and field, in particular.[4]

[4] We will go deeper into the development of the Finnish performance in international elite sport in the output section.

In 1966, some of the conflicts between the organisations were solved when Finnish athletes were set free to participate in any competition they wanted across the different organisations. Despite this progress, organisational fragmentation and other disputes continued. In the 1970s, the Finnish Olympic Committee, which mainly had limited tasks in arranging travel and selecting athletes for the international tournaments, declared itself the elite sports organisation of Finland.

In the following years – and despite resistance from the sports federations fearing a 'hostile' takeover of their role in developing Finnish elite sport – the Finnish Olympic Committee became the closest thing to an umbrella organisation for Finnish elite sport ever seen. Increased public funding followed in the 1970s (Lämsä, 2012) and a welfare state build-up resulted in an increased focus on sport and physical activity as well. This focus had already started with the work of the commission of Physical Fitness from 1966 to 1970, which promoted physical activity and sport for all.

According to Itkonen & Salmikangas (2015), the commission recommended that the Finnish sports policy should focus on mass participation and not on elite sports. This was taken up at the municipal level of policy making in particular.

The Sports Act of 1979 can be seen as the materialisation of this development with increased distribution of government funding to the various organisations of the sports movement. Further, sports clubs were entitled to receive funding through the municipalities.

The act came into force in 1980 (Finnish Government, 2018) and had all Finnish municipalities establish sports councils to work on sports for all development (Itkonen & Salmikangas, 2015). Indirectly, this has helped build the foundation of Finnish elite sport.

Reform process 1980s-1990: Increased focus on mass participation

> "After the idealistic era of amateurism, the proportional significance of elite and competitive sports in the field of physical activities weakened considerably by the 1980s. The Finnish government had come to view sport and physical activities from a much broader perspective (Koski 1999). In particular, physical activity became a core concept in the Finnish sports policy and education, and at the same time, the whole sector was increasingly characterised by greater diversification" (Koski & Lämsä, 2015, p. 432).

As indicated above, the Sports Act of 1979 expressed a strong focus on the promotion of mass participation and physical activity. Within this framework, the public sector was responsible for the (physical) framework covering public and civil society organisations – i.e. clubs and associations – which were then responsible for organising the activities. The intentions in the Sports Act further materialised in a boom in facility construction:

> "The 1980s were a decade of high activity in sports facility construction. A total of 9,400 new sports facilities were built in Finland" (Lämsä, 2012, p. 89).

Besides providing facilities for mass participation, and indirectly elite sport, the boom also supplemented the sports institute structure which was built in the 1940s and 1950s by the domain organisations and the federations(Lämsä, 2012). This structure, which was partly used for elite sport training camps, was further strengthened by the 1963 Act on Sports Institutes. Besides the boom in facility construction, the number of municipal employees working with sports in the municipalities with a focus on supporting voluntary sports clubs also increased. The overall rationale with respect to the organisational division of labour was:

> "(…) that civic actors such as sports clubs are responsible for arranging activities, whereas the public sector is to build and maintain the sports facilities" (Itkonen & Salmikangas, 2015, p. 550).

Despite the significant focus on mass participation and physical activity, growth in funding for elite sports continued in the 1980s, and the Finnish Olympic Committee got its first national elite sport plan in 1987 (Mäkinen, 2012).

Reform process 1990s-2008: The introduction of New Public Management

Mass participation and physical activity issues continued to be the focus of Finnish national sports policy after Finland joined the EU in 1995 and adopted the euros in 1999 (Lämsä, 2012). Further, New Public Management (NPM) ideas came to dominate the public sector, where neo-liberalisation now flourished (Ahlqvist & Moisio, 2014) together with ongoing crisis rhetoric regarding the welfare state and a push for innovation and reformation of the public sector.

Some of this was initiated by the recession Finland faced in the 1990s, which put pressure on public expenses. However, declining trade with Russia, a stronger connection to Western Europe, and therefore growing liberal market ideas are also part of the explanation (Mäkinen et al., 2019).

> "It [NPM, ed.] started to be assembled in the mid-1990s, under the premiership of the Social Democrats initially (1995–2003), was then strengthened during the two consecutive governments led by the Centre Party (2003–11) and has been further affirmed by the [at that time, ed] current centre-right coalition government" (Ahlqvist & Moisio, 2014, p. 31).

The development also applied to the sports sector where NPM-performance targets became a new steering approach (Giulianotti et al., 2019). In fact, Finland became the first nation to adapt principles of NPM in (elite) sports (Lämsä, 2012). In other words, a new performance-based funding logic was introduced.

In parallel, the economic recession initiated a struggle between the sports organisations for funding. But the battle took a turn against the organisations themselves due to overlapping management structures and questions were raised about whether slimming the structure could be a solution to the missing resources. Also, in the municipalities, there were budget

cuts and slimming of organisational and public procedures. For example, some culture and sports boards were merged to simplify decision-making, and funding for sports clubs became more project oriented (Itkonen & Salmikangas, 2015).

In 1992, the Finnish Central Sports Organisation – which was the biggest organisation with more than one million members – went bankrupt (Mäkinen et al., 2019). Even though the political aspects of the Finnish Sports Movements had waned, this further depoliticised Finnish sport and increased state interference.

Still, the sector remained complex, with many stakeholders and organisations operating independently. In 1993, the Finnish Sports Federation (FSF) was established (Lehtonen, 2017; Lehtonen & Mäkinen, 2019). In addition, three other domain organisations were 'named' by the Ministry of Education and Culture: Young Finland (YF), Sport For All (SFA), and the Finnish Olympic Committee (FOC).

These organisations were given the responsibility to provide sports activities and services to sports federations and other sports organisations, i.e., sport for children and youth, physical activity for adults and elite sport, respectively (all these domain organisations were members of the Finnish Sports Federation).

As mentioned above, it is clear that during this period the role of the state increased in Finnish sport. According to Mäkinen et al. (2016) tensions and conflicts about sports moved from having a political character founded in class and language-based differences (and organisations) – in a kind of corporatist model – to be more incorporated into the state administration.

Targets and goals were now set by the state and government apparatus, with the main sports organisations having less significance and not being in the lead. They were reduced to mere service and lobbying organisations:

> "The structural change meant a structural shutdown of the sports movements and the end of the competitive and elite sports hegemony in the Finnish sports culture" (Mäkinen et al., 2016, p. 271).

In this context, sport was increasingly seen as a tool to gain various kinds of social benefits, and the role of the state was to secure this. Further, the Sports Act of 1998 may be interpreted as giving sport an even broader significance than the Sports Act of 1979:

> "The 1998 Sport Act in Finland, for example, understood sport to be a force for providing diverse social benefits, such as health and welfare, the development of young people, environmental sustainability, cultural diversity and social equality" (Giulianotti et al., 2019, p. 542).

Further, the significance and legitimacy of elite sport declined at the political level and in the broader public during this period. Several events and scandals are the reason for this. First, the sporting results of the 1994 Lillehammer Olympics and the 1996 Atlanta Games

were disappointing. Finland won approximately half of the medals expected at the two games. Further, Lillehammer was one of the first times in modern history that Finnish athletes did not win a single gold medal. The crisis for Finnish elite sport was obvious.

The 2001 Lahti doping scandal added to the collective Finnish despair and further initiated a heated national debate on the values of Finnish elite sport and the contribution of elite sport more generally to Finnish national culture and society.

The doping scandal was significant and seen as highly shameful by the media and the Finnish population (Laine, 2006). In theoretical terms, the incident is no less than an "event of societal dislocation" (Storm & Wagner, 2015; Wagner & Storm, 2021), putting values and ethical questions to the forefront and re-activating fundamental identification issues in the Finnish society. The doped cross-country skiers, which were significant symbols of Finnish stamina and soul, "(…) failed to live up to Finnish cultural standards, and all Finns were now to be seen by the outside world as having lost face" (Laine, 2006, p. 74).

In short, the scandal "brought the discussion of Finnish national identity back to the old concern of not being 'good enough' to be (Western) European and brought back the age-old shame discourse and self-loathing to the Finns' minds" (Laine, 2006, p. 74).

This happened for example when Finnish newspapers, in the wake of the scandal, argued and feared that Finland was now – by other European nations (especially Norway and Sweden) – seen as the old East Germany, which had a systematic doping programme experimenting on athletes.

For a nation that would like to be seen as a modern, developed Western state that shares no resemblance with the old Eastern Bloc – the scandal was a significant cultural setback challenging Finnish self-esteem and dignity. One of the impacts of the Lahti World Nordic Skiing Championships was a further strengthening of the role of the state in managing elite sport (Mäkinen & Paavolainen, 2020).

Other social development processes affected the role of elite sport and its legitimacy in Finnish society as well. Developments in mass participation sports and the development of the private fitness sector took hold in the 2000s, which also experienced an individualisation of sports participation, especially in relation to adults. This development occurred in other Nordic nations as well, for example in Denmark (Storm & Hansen, 2021). Unorganised and lifestyle-oriented sports had, in short, weakened the importance of the traditional sports played in clubs and associations:

> "In the new pluralistic sports culture, traditional competitive sports lost their significance. This has partly been due to the increase in health-enhancing physical activities among children and youth. Competitive sports have had to compete with several other, often lighter forms of sports that have emerged on the sports scene" (Mäkinen et al., 2016, p. 274).

In the context of the low legitimacy of Finnish elite sport following the scandals and the institutionalised focus on mass participation and physical activity, elite sport suffered. This happened despite several strategic plans and initiatives to strengthen this part of the sports sector.

The implementation of NPM with the planned introduction of performance-based funding also failed (Mäkinen et al., 2019). One central problem was that there was no actual mechanism that ensured sanctions or adjustments if the goals of for example the national sports federations were not met (Mäkinen et al., 2016).

Reform process 2008-2017: From New Public Management to New Public Governance

In the late 2000s, there was a push to modernise the Finnish sports system. Historically, and as indicated earlier, public funding has been the most significant financial contributor to sport. But in contemporary Finland, households use increasing amounts of money on private-sector sports services (Finnish Government, 2018).

The increasing demand for activities organised by the market and the organisational fragmentation with many independent organisations and overlapping management procedures concerning mass participation sports combined with low-performance output in terms of medals initiated the work on a new reform.

For elite sports, it started with forming a working group in November 2008. The goal was to propose changes that could improve the long-term international performance with the expectation of measurable improvements in the 2020s.

In 2010, following the elite sports working group, a dedicated elite sports reform group, entitled HUMU, was created by the Finnish Ministry of Culture and Education. Working for two and a half years, it recommended the forming of an independent elite sports unit entitled 'the High Performance Unit' (HPU), which was founded and positioned inside the Finnish Olympic Committee in 2013.

On the mass participation side, the Finnish Sports Federation started a process with its member organisations resulting in a merging of Young Finland and Sport for All into the Finnish Sports Confederation (FSC) (Lehtonen, 2017). Therefore, between 2013 and 2015, Finland had two central sports organisations: The Finnish Olympic Committee (FOC) (including the HPU) and the Finnish Sports Confederation (FSC). In 2017, after a short period of unclear roles of the two organisations, they merged into one organisation under the name of the Finnish Olympic Committee (Mäkinen & Paavolainen, 2020).

The aims of this new organisational set-up were, on the one hand, to develop Finland into the most physically active nation in the world and, on the other, to secure that Finland would become positioned as the best Nordic nation in elite sport in 2020. From an organisational perspective, it is the HPU who are responsible for the elite part, while a physical activity unit has the responsibility for developing mass participation.

This period can be characterised as one where the Finnish system operates as a combination of state-led and organisational-led elements or – as described by Lehtonen et al. (2021) and Mäkinen (2019) – as a network. Put differently, a New Public Governance regime has materialised.

Recent and contemporary development 2017-2020: The network composition becomes clearer

In the most recent period of Finnish elite sport (2017-2021), steps towards a more precise composition of the NPG-model have been taken. The period was evaluated in an internal report (Mäkinen & Paavolainen, 2020).

In this period, the elite sports strategy was explicitly athlete-oriented, i.e., derived from the athlete's needs and putting this into the centre of the elite sports support system. Further, with the HPU heading the network, the network idea was more clearly articulated among the stakeholders and in the available literature for this report.

The objectives set for the strategy period 2017-2020 were according to Mäkinen & Paavolaining (2020, p. 5):

- Defining the roles and responsibilities of the actors in the elite sports network
- Reform of the support system for improving the efficiency of performance sports and its criteria
- Clarifying the management of elite sports

The performance target for elite sports was defined as the following for the period 2017-2020:

- 10 medals in the Olympic Games
- 10 medals in the Paralympic Games
- One team qualified for the Tokyo Summer Olympics

According to the internal evaluation roles, performance targets, and governance of Finnish elite sport were in fact better clarified, especially between the Ministry of Education and Culture and the Olympic Committee's HPU. Further, significant organisational decisions were made including the selection of six national Olympic centres located in Helsinki, Vuokatti-Ruka, Jyväskylä, Kuortane, Tampere, and Turku. In addition, criteria for operating sports academies were updated and in the autumn of 2020 – an assessment of these environments was carried out under the direction of the HPU.

From 2021, a new competence programme is being rolled out by the Finnish Institute of High Performance Sport (KIHU) (more on this in the governance, organisation and management section). Further, a prioritising of the resources was undertaken as the number of supported federations (by the HPU) was cut from 59 (Olympic and non-Olympic sports) to 48 (in 2020) (Mäkinen & Paavolainen, 2020). Other initiatives were taken to develop the

system further and improve performance. We will get back to this in more detail in the following sections, where the specific assessment of each part of the current system is done.

Summing up

The above brief overview of the development of the Finnish elite sport system clearly shows how complex and 'bumpy' the road towards the current situation has been. Several historical events and reforms have produced the current fragmented system, now operating in a network-like NPG form. However, in recent years, the system has aimed to establish clearer roles for its stakeholders and implement new programmes, with the HPU taking the lead.

The results of the historical developments and the materialisation of this new paradigm of network governance, the effectiveness of its organisation, and the characteristics of the other meso-level pillars are the objects of analysis in the coming sections.

However, the input side of the system is considered first. Then the evaluation commences by studying each of the meso-level pillars of the analytical framework described in the introductory sections of the report. Finally, the Finnish output is analysed before discussing the results, a conclusion, and the connected recommendations close the evaluation.

Macro- and meso-level input: Resources available to the Finnish elite sports system

Introduction

On the input side of any national elite (para)sports system, resources are important to gain a satisfying output. In short, resources in roughly "… equals medals out" (de Bosscher et al., 2015).

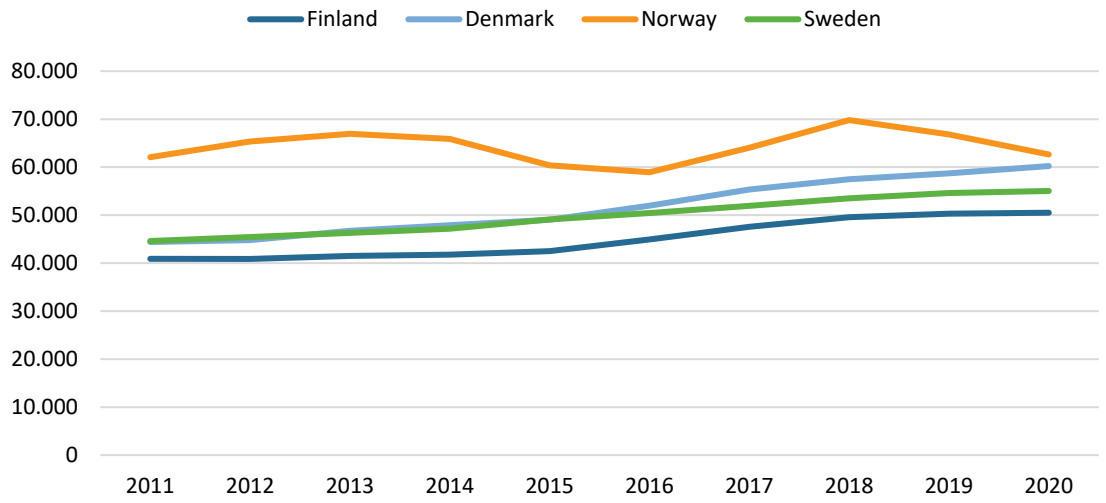
In accordance with our analytical framework, we, therefore, consider the number of resources available to Finnish elite sports to understand what expectations one can reasonably construct regarding the performance potential. Later, the expectations will be related to the (objective) output to assess whether the resources are used efficiently or if there is room for improvement.

Resources can come in various formats. However, in elite sports, the two most important ones are financial resources and human capital. Based on this, we operationalise the question of available input by studying the macro-level resources – national wealth and population – and the meso-level direct and indirect financial resources available to the Finnish system. We also compare the level of available resources to other relevant nations where data is available.

National wealth and population

Finland is a wealthy nation compared to other nations. In the World Bank database, Finland appears among the high-income nations. In a Nordic context, Finland ranks as number four. This can be seen in figure 2, illustrating Finland's GDP per Capita (PPP-values) development compared to other selected Nordic countries in the 2011-2020 period.

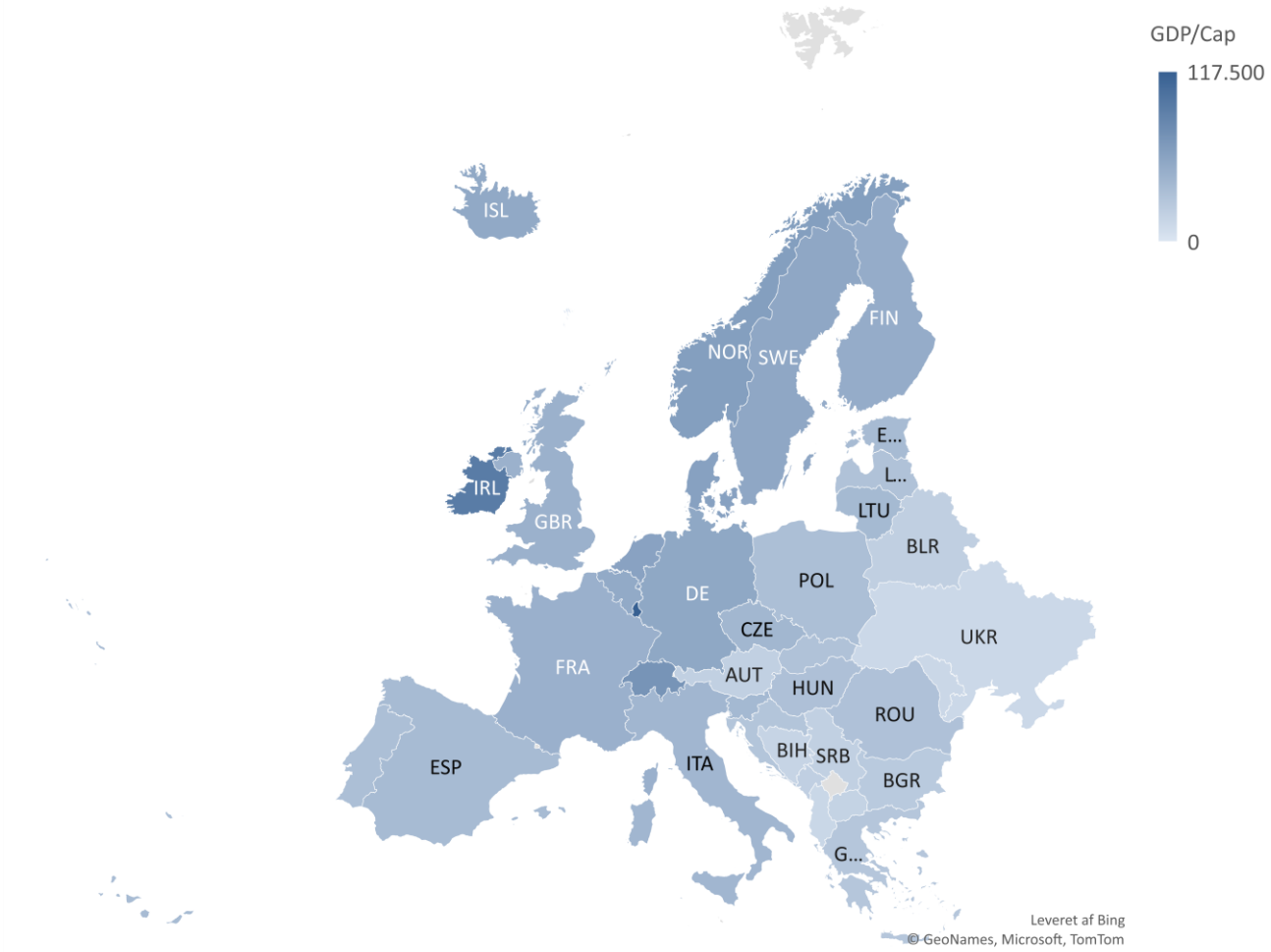
Figure 2: GDP/Cap (PPP) Development in Finland and other Nordic Countries 2011-2020



Source: WorldBank.org. GDP, (PPP) (values are displayed in current international $)

Even though Finland is less wealthy compared to Denmark, Norway, and Sweden, it is among the richest when compared to other European nations. This can be read from figure 3 displaying GDP (PPP) per Capita for selected European countries, which gives the expectation of a high level of performance output.

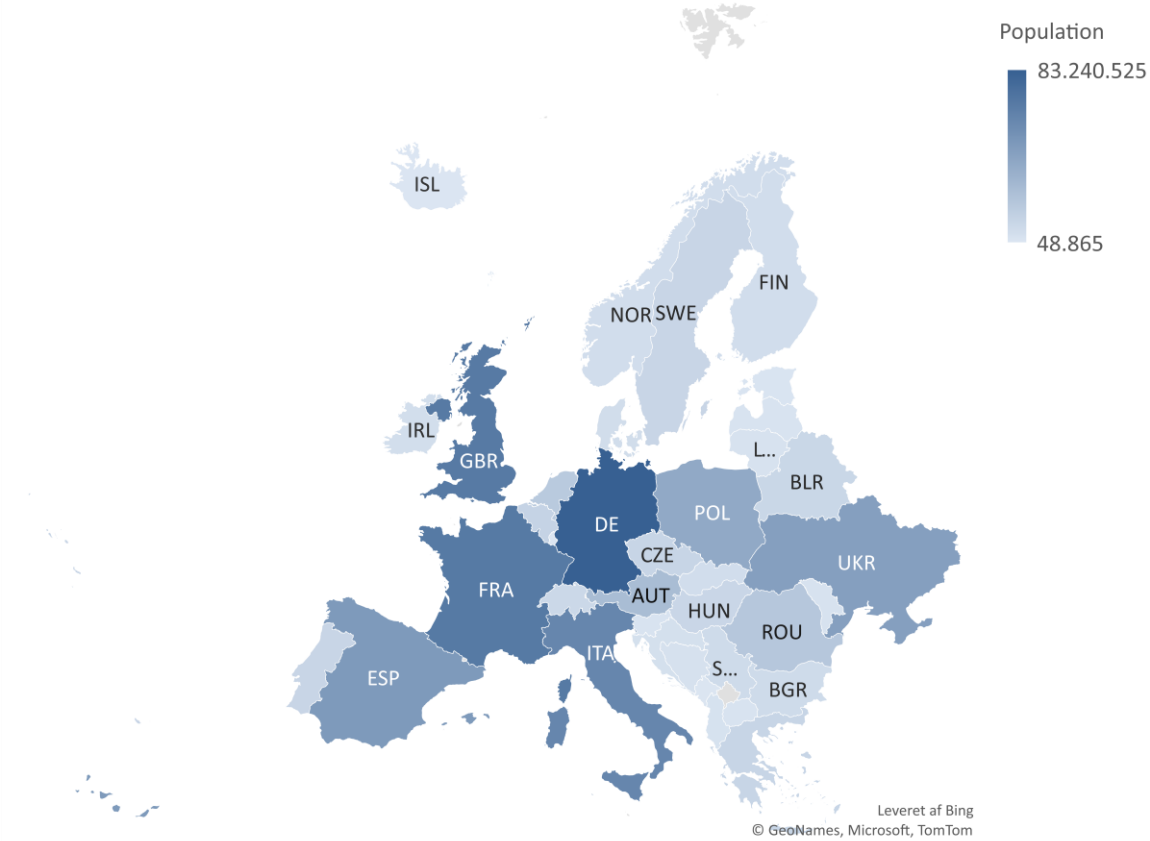
Figure 3: GDP/Cap (PPP) for European Countries 2020



Source: WorldBank.org. GDP, (PPP) (values are displayed in current international $). *Insufficient data for Kosovo.

As mentioned earlier, human capital resources are essential to becoming successful in international elite sport. For that matter, Finland is not that well off because it is a small nation. With around 5.6 million inhabitants, the expectation is a lower performance output. Figure 4 displays the size of the Finnish population compared to other selected European countries.

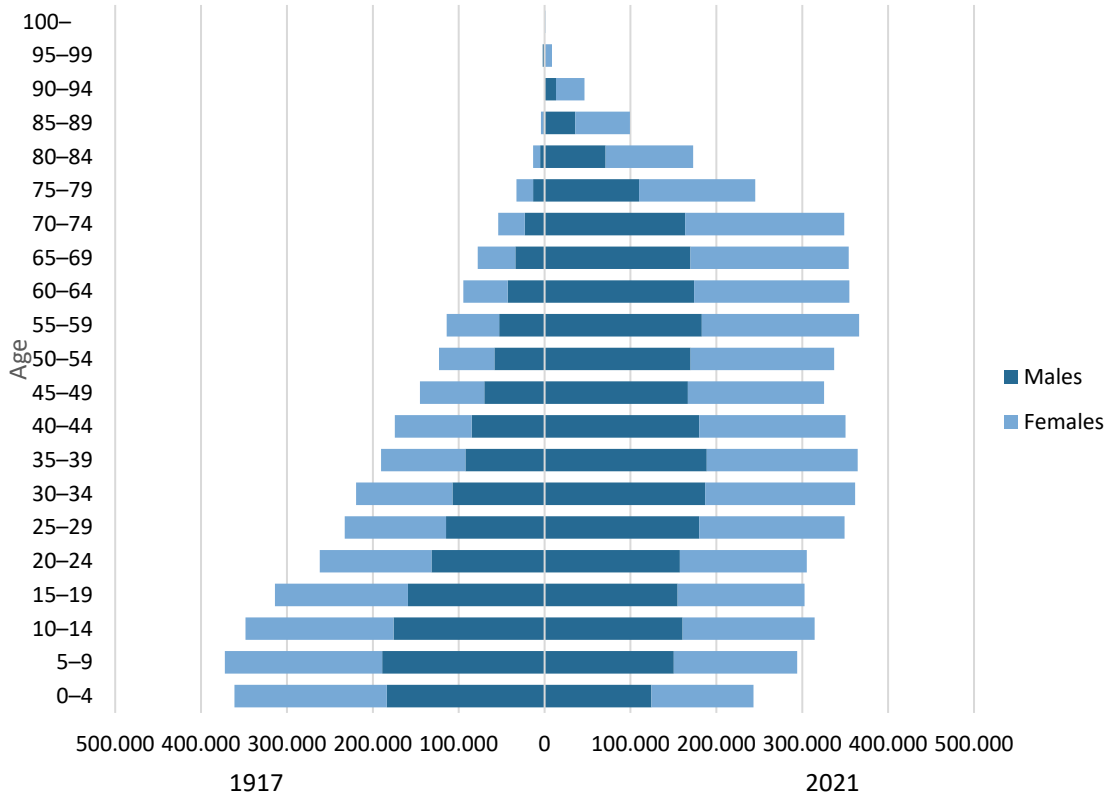
Figure 4: Population size in European countries



Source: WorldBank.org. Total Population 2020.

According to the conducted interviews, the demographical development of the Finnish population is also a challenge. As in many other European countries, the population is getting older, with the share of younger age groups decreasing. This means that there is a smaller talent pool to recruit from in the future, a fact confirmed by objective statistics displayed in figure 5.

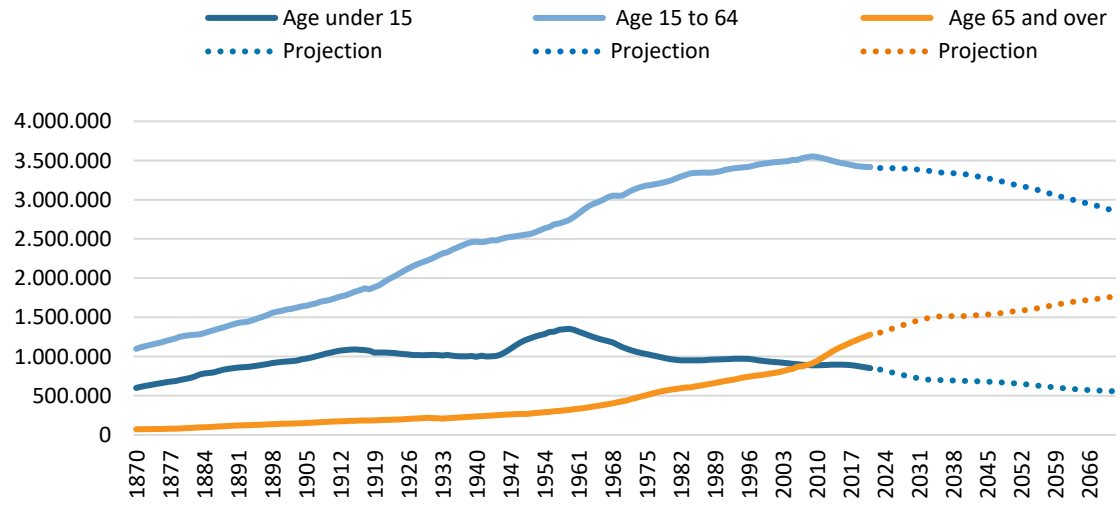
Figure 5: Population demographics in Finland, 1917 versus 2021



Source: Statistics Finland, Population Demographics

Compared to 1917, the population is clearly getting older. This development can also be seen in Figure displaying the development in different age groups and projecting the growth from 2022 and onwards.

Figure 6: Population development in Finland 1870-2021 and forward projection



Source: Statistics Finland, Population Demographics

What is especially worrying from a performance perspective is that the young age groups are significantly decreasing not only in objective historic numbers but also in the projections. As this is where future talents are to be recruited from, it can potentially affect future international competitiveness.

Similar demographic tendencies can be seen in most of the Western and other countries that dominate international sports, so this does not necessarily imply a weakening of international competitiveness. It is rather the relative decline of the share of the young age groups that matters. However, in a small country like Finland, the absolute decline also matters as this may mean that the number of potential elite athletes in some sports becomes so small that it will become difficult/impossible to maintain a proper support structure around them.

Pillar 1: Financial Investments

While the general wealth of a nation and the population size are essential macro-structural determinants of international sporting success, it is the direct and indirect financial resources allocated – out of the total national wealth – that matter most. The higher the absolute amount of funding allocated to elite sports, the higher the probability of winning medals. In the SPLISS-framework, this is captured in pillar 1 which "…examines public expenditures on sport and elite sport at national level by government, lotteries, NOCs and nationally co-ordinated sponsorship" (De Bosscher et al., 2015, p. 109).

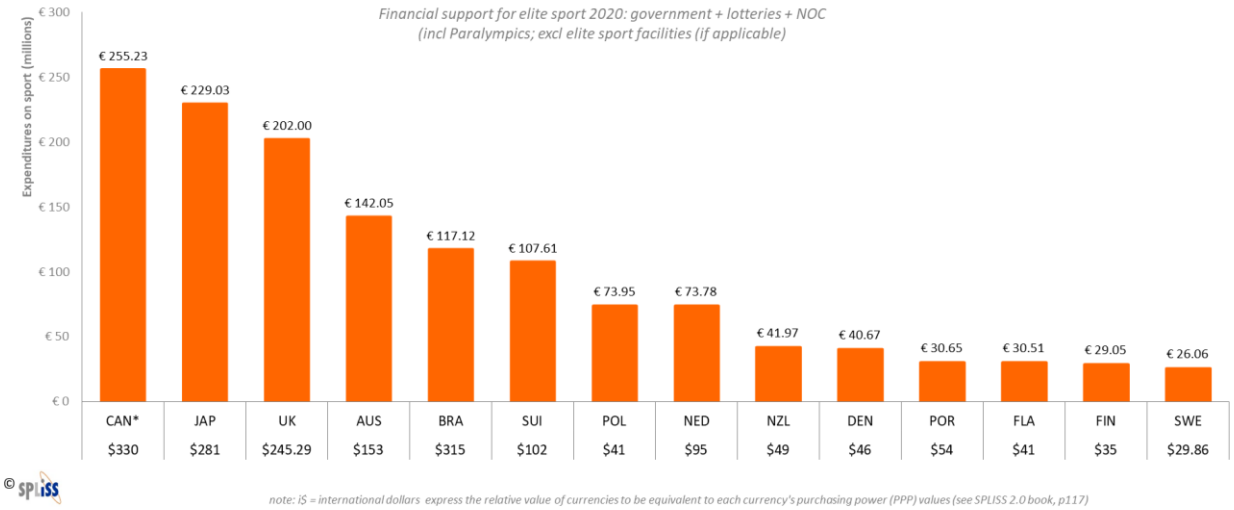
It is important to understand that only nationally coordinated funding is included in this pillar. Other local level or indirect funding streams – be they public (for example provided by municipalities) or private (for example provided by sponsors) – that (potentially) add to increasing the chances of international sporting success – are not part of the SPLISS-approach. This is because it is tricky and close to impossible to get a coherent picture of such revenue streams. It requires a high level of data detail that is not possible to reach within the resource constraints of the evaluation.

Further, reliable data on all relevant aspects does not exist. Therefore, the international comparison presented here is not unproblematic because it leaves out certain dimensions that from an ideal perspective should be included. The reader should take such issues into consideration when going over this part of the analysis.

According to the SPLISS-study conducted around the London 2012 Olympics, Finland scores below average on pillar 1 (de Bosscher et al., 2015). In a recent light version of the study (De Bosscher & Shibli, 2021) produced after the 2021 Tokyo Games, it is revealed that Finland is among the 14 participating nations that comparatively pours the least amount of financial resources into their elite sport system.

Where Finland provided around 29 million euros, larger nations like Canada, Japan and United Kingdom each spent more than 200 million euros in the year leading up to the Games in Tokyo in 2021 (Lämsä & Mäkinen, 2021). This can be seen from figure 7.

Figure 7: State-level elite sports expenditure, 2020



Source: Reproduced from De Bosscher & Shibli (2021). State-level elite sports expenditure in 2020. (NB! Belgium is handled in two separate administrative areas: Flandern and Wallonia).

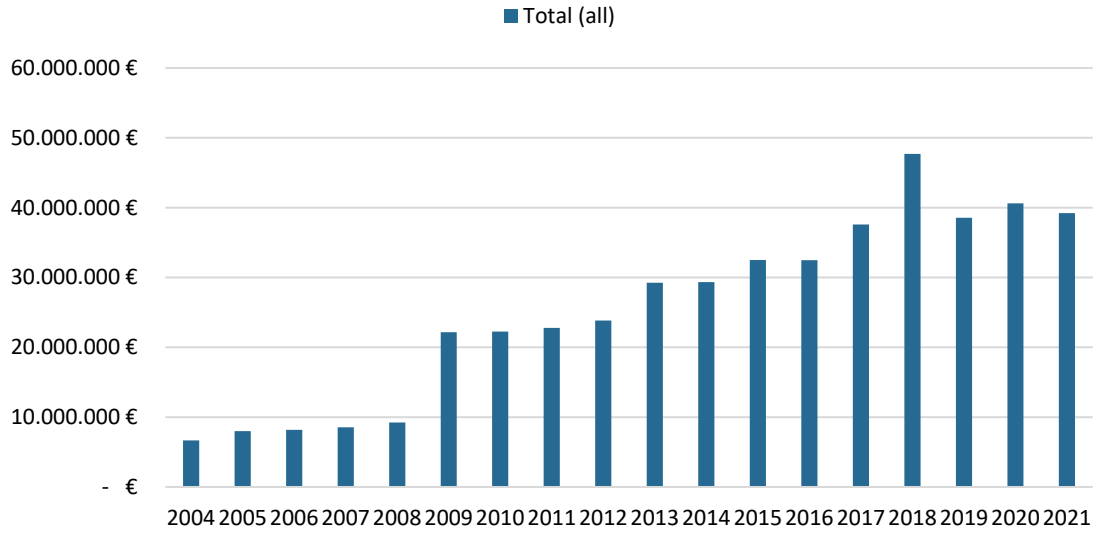
The figure also shows that, among the nations that are close to Finland in terms of inhabitants, New Zealand invested around 42 million euros and Denmark around 41 million euros in 2020. Only Sweden appears to be investing less. Even though the figures should be taken with appropriate caution, the numbers give the expectation of a relatively modest Finnish performance output.

> "For Finland, EUR 29.1 million includes the economic line of elite sports from the state's sports budget, totaling EUR 14.8 million (EUR 6.7 million for elite sports, EUR 2.3 million for athlete grants, EUR 0.3 million for URA Trust, EUR 1.7 million for KIHU and EUR 3.8 million for sports academies and coaching centres). This EUR 14.8 million includes project funding in accordance with the Report on sports Policy, targeted at sports academies and support for elite athletes and coaches through the elite sports unit in 2020-22. Other grants allocated to elite sports included EUR 1.6 million for international major events and EUR 3.1 million for additional support for general upper secondary schools in sports and vocational education and training, which comes from outside the state's sports budget. In addition, an estimate was made of EUR 2.0 million of the general subsidy for the Finnish Olympic Committee and EUR 7.0 million of the general subsidy for sports federations for elite sports. Further, it was estimated that EUR 0.5 million was allocated to elite sports for persons with disabilities, which was not allocated through an elite sports unit or grants" (Lämsä & Mäkinen, 2021, p. 3).

Government investments for the construction of new facilities were, however, excluded from the figures. On the other hand, grants for coaching centres at the Sports Institutes were included. Further, funding for the Finnish Sports Institutes (see the section on facilities) is included (Lämsä & Mäkinen, 2021).

The development in total governmental funding in the 2004-2021 period including state-level funding for facility construction, additional funding for athletes' pensions, and funding from extra COVID-19 state pools can be read from figure 8 (adjusted for inflation).

Figure 8: Development of total state-level funding for Finnish elite sport (including parasport), 2004-2021



Source: Official figures provided by the Ministry of Education and Culture. The figures include state athlete grants, URA-foundation athlete grants for dual career development, athletes' pensions, general subsidy to sports federations[5], KIHU subsidy, state general subsidy to Finnish Olympic Committee, state general subsidy to Paralympic Committee, state subsidies for sports academies, elite sports change group "Humu", Young Olympic Coaching programme subsidy, Team Ball project (state special subsidy targeted to foster elite-level team ball games in Finland), coach training development project, games (state subsidy for hosting international elite sport events), subsidies for elite sports facilities, subsidies for sports schools, subsidy for Finnish Center for Integrity in Sports (FINICS), and special COVID-19 programmes. The figures are adjusted for inflation.

As can be seen, the state-level funding has increased significantly over the last decade with a peak in 2018. This increase gives the expectation of higher output than previously seen. According to Stenbacka (2018),

> "Finland has significantly increased the share of elite sports in public sports resources in the 2010s. Before that, public funding for elite sports was significantly smaller than in the other Nordic countries. Establishing a high-performance sports unit, increasing subsidies for specific sports, building a sports Academy programme and resourcing led to a significant increase in Finland's publicly funded budget for elite sports. Despite this growth, public funding for top-level sports in Finland remains the smallest in absolute terms (11.6 million euros) and per capita (2.11 million euros) among the reference countries in 2016. However, this is almost as much as in Denmark, which received 12.4 million euros in absolute support for elite sports in 2016" (translated from the original source; p. 8).

Whether the increase in resources has had an impact is addressed in the output section.

Private sources of revenue

According to several of the stakeholders interviewed, revenues derived from private sponsorships and media rights deals are generally low in Finland compared to other Nordic

[5] According to the interviewed stakeholders, it is expected that that the federation itself invests at least the same sum as provided by the state.

countries. Many sports appear to be struggling to develop private sources of revenue streams.

Ice hockey, football and to a smaller extent basketball, are exceptions. These team sports are better off and have a decent amount of income from sponsors and the selling of media rights. Still, for other sports, it appears to be difficult to attract sponsor revenues in Finland.

According to a review performed by Sponsor Insight (2019), the size of the sponsorship market was 729 million euros in Sweden, 532 million euros in Norway and 262 million euros in Finland in 2019. Out of these totals, 70% (510 million euros) and 71% (377 million euros) were allocated to sports in Sweden and Norway, respectively, whereas the share was only 62% (162 million euros) in Finland (see also: Lämsä & Mäkinen, 2021).

While the growth in the sponsorship market in recent years has been bigger in Finland than in the other Nordic countries (Mäkinen & Paavolainen, 2020), the investment made by domestic companies in sports is significantly smaller than in other Nordic countries. There seem to be several reasons for this.

Several of the interviewees argue that scandals associated with Finnish elite sports have had a negative effect on the willingness of private sponsors to pour in resources. Several of the interviewed stakeholders mention the 2001 Lahti doping scandal where six Finnish cross-country skiers were caught for taking doping (Laine, 2006). Also, earlier cases, like the Martti Vainio case (a long-distance runner) in the 1984 Los Angeles Olympics (see also: Lämsä, 2012), are mentioned as potential causes of reluctance to sponsor Finnish athletes.

According to some of the interviewees, the reputation of sport in the corporate environment is not very good. One of the interviewees argues:

> "You should blame the sports society more than the business sector. We, generally speaking, have not been able to embed the elements of social responsibility, sustainability and respect of human rights, strongly enough into sponsorship deals. It's still too much old-fashioned, just to sell logos. Of course, it's not only that, but I think the big picture is. And the main explanation behind that is that we don't have enough real competence within the sports society of modern sportsmanship. We have, of course, good examples, we have excellent examples – but I think the big picture is that we are lacking know-how within the sport family itself"
>
> Interviewed stakeholder

The lack of professionalism and especially the lack of a positive reputation of sport in the business and corporate environment stand in contrast to the general interest in sport among the population. According to Mäkinen & Paavolainen (2020), the Finnish population favours sport to a very high degree. This is evidenced in recent surveys which saw the share of those interested in the international success of Finnish athletes rising from 59% in 2016 to 77% in 2018 (Mäkinen et al., 2018).

However, the same population surveys have also identified significant mistrust in relation to previous leadership and management of elite sports performed by the FOC (Mäkinen & Paavolainen, 2020). Even though trust with the FOC management in later surveys appeared to have been significantly rebuilt, the recent scandal where a FOC director stepped down due to allegations of inappropriate behaviour towards other employees in the FOC will very likely harm the chances of attracting private sponsorships in the future.

Second, and as indicated earlier, some interviewees point to a lack of professionalism in the sports sector towards the commercial sector. Somehow it appears that the sports sector has not been convincing or professional enough to make sponsorship deals attractive for firms and corporations.

Third, some interviewees argue that in Finland, public opinion has created a culture where the provision of funding – public or private – is mainly legitimate in relation to mass participation and not elite sport. Hosting of major sporting events in nations with human rights issues together with match-fixing, doping and other 'dark' aspects contributes to this culture of critically seeing elite sport as something that has lost its ethical and moral compass.

According to the interviews, there is widespread awareness of the problems of low private funding and as a response, a new Olympic Fund have been established in 2018 (Mäkinen & Paavolainen, 2020) with the aim of raising 40 million euros for the athletes through donations from private companies and individuals. In 2019, the Finnish government decided to double the donations.[6] At the time of writing, the result of this work does not look very promising with only around 5% of the target being raised in the first years of operation.

However, according to the interview with representatives from the HPU, in 2021 the HPU closed sponsorship deals of around 2.7 million euros, which is an all-time high. This indicates some progress in private sponsorships.

Summing up

Finland is a small but wealthy nation. Compared to other Nordic countries, the direct financial input is somewhere between Sweden and Denmark, with Finland having faced a significant increase in public funding in recent years. One crucial difference is that the sponsorship market appears to be small in Finland in terms of private sponsorships.

The reasons for this are manifold but centred around a lack of professionalism, reputational matters, and a preference for mass participation when it comes to funding. It is mainly ice hockey and football that attract a high level of sponsorship resources and earn revenues from media rights. Recently a new Olympic Fund has been established to attract more private money. However, the number of resources raised so far is low.

The low number of financial resources is a challenge to Finnish elite sport because it is the most essential pillar for international sporting success (De Bosscher et al., 2015). Therefore,

[6] https://www.olympiarahasto.fi/

in terms of medals, it is to the benefit of Finnish international performance that the direct government funding has increased over the latest decade. However, it is crucial to understand that while 'money in' in principle equals 'medals out', the law of diminishing returns to scale is at stake in international elite sport.

As pointed out in the SPLISS-study over time, more and more nations are investing (more) resources to become competitive internationally, thus raising the international price of a medal. The general implication is that increased national funding can be necessary to merely keep the level of competitiveness.

However, not only financial resources are essential to international sporting success. Nations can do other things to keep pace. In the coming sections, we turn to evaluate other factors of the SPLISS-framework that determines the success of the Finnish elite sport system. These are the throughput pillars that form the Finnish capabilities and must be managed by national policies to become competitive.

Meso-level throughput: Resource management

In the analytical framework for this evaluation, the national elite sport system is founded and evaluated at the meso-level. This is the area for national sports policies and initiatives that can be changed in the short run to create competitive advantages for the nation in question.

As mentioned earlier, population size or national wealth factors are essential to international sporting success. Still, they can only be changed in the long run. To improve international performance sports managers, politicians, and stakeholders responsible for national elite sport must focus on the meso-level.

In this section of the evaluation, we assess pillar 2 to pillar 9 of our analytical framework to get a coherent picture of how well the Finnish system manages its available resources. In the discussion section, the results of this assessment will be related to the output of the Finnish system to understand the causes of the current level of performance.

Pillar 2: Governance, organisation, and management of elite sports policies

The need for control and coordination is more pronounced in elite sport than in other sports settings. This can be achieved through proper structures and processes of the elite sport system's governance, organisation, and management.

This pillar has attracted primary and continuous attention in debates and reform attempts in Finland. The system is complex, with much bureaucracy, overlapping structures and responsibilities, and many independent stakeholders. As described in the introduction, much research and many reports have analysed the functioning of the system, resulting in several attempts to improve this through reforms.

Results

According to the SPLISS-study there is a significant correlation between medal performances and the score on this pillar. A key finding in the first SPLISS-study was that,

> "(...) countries with only one national co-ordinating elite sport body responsible for elite sport (and not sport for all) such as UK Sport or Olympiatoppen in Norway, have an advantage over countries where decision-making responsibilities are split between different organisations" (De Bosscher et al., 2008, p. 135).

This conclusion is modified in the second study. Instead, it is concluded "that it is not the countries with the most centralized approach that performs best, but rather those who best co-ordinate activities and collaborate with different partners" (De Bosscher et al., 2015, p. 135).

In Finland, the governance system is described as a network of several independent organisations in a state-led structure (Mäkinen & Paavolainen, 2020). Coordination and collaboration are crucial for the successful functioning of such a system.

Paralympic sport is fully integrated into the general structure. The interviewed stakeholders in parasport consider this a clear advantage compared to a separate parasports system as it provides better access to the support structure. It is seen to function well at the level of the NOC, in most sports federations, and for the established parasport elite. There are more problems at the club level in relation to recruitment of elite athletes and potential para-athletes with more severe disabilities.

In the most recent SPLISS-study (De Bosscher et al., 2015), Finland's score on this pillar is below the average of the sample nations. Among the causes for the low score are insufficient manpower and professionalism at the central level of organisations. Further, it is stressed that Finland spreads out support for elite sports thinly. Only Switzerland funds more sports.

A major report is the evaluation of the elite sport system by Lipponen (2017), which concludes that:

> "… there is currently no uniform framework, concepts and objectives for the strategic management of top-level sports as a whole. In its current form, top-level management does not function systematically based on continuous monitoring of development. Risk management in the management of the entire sports sector is so far random" (p.5).

The evaluation results show that top-level actors in elite sports have not been able to jointly find clear high-level goals that would effectively steer the fragmented field of stakeholders in Finnish sport. For this reason, cooperation between key elite sports actors does not harmonise measures and resources.

Lipponen (2017) evaluates the elite sports system from the point of view of strategic management. He identifies many problems, which are generally linked to the failure to set proper goals and to follow up. This includes elaboration of strategies, implementation with monitoring based on proper achievement metrics, evaluation of outcome compared to the goals, and subsequent rewards of successful behaviour and sanctions in case of failure.

The result is a lack of steering and poor leadership. The top-level elite sports organisations seldom articulate goals and targets, and there is little appetite for making them operational when they do so. It is seldom followed up with the allocation of responsibility for specific tasks in relation to the implementation. Further, outcomes are rarely evaluated with regard to impacts on future resource allocation. In other words, the functioning of the network governance of the elite sport system is far from living up to the ideals of strategic management.

This does not mean that network governance is generally dysfunctional and ineffective. On the contrary, governance by means of networks has unique potential advantages such as mobilisation of resources, minimisation of transaction costs, learning effects, and social embeddedness (Jones et al., 1997).

However, there are preconditions for processes in networks to work well. There must be channels for continuous interaction and effective communication as a prerequisite for developing shared understandings and consensual decisions. Mäkinen & Paavolainen (2020) make similar points in discussing the role of interpersonal trust and trust in the leading organisation in networks. Lipponen argues:

> "In some cases, misunderstandings are the result of weaknesses in inter-sectoral dynamics, a lack of dialogue and thus a lack of understanding" (Lipponen, 2017, p. 33).

Also crucial are cooperative intentions and a sufficient level of interpersonal and system trust. Those preconditions do not seem to exist in the Finnish elite sport system. The interaction is often formal and bureaucratic. According to the interviewed stakeholders, there are communication failures and a lack of trust.

The current elite sports governance structure represents an improvement compared to the previous structure. The Ministry of Education and Culture has the overall political responsibility for the system. The overall operational responsibility of the system is located at the dedicated elite sports unit in the Finnish Olympic Committee, the HPU, which directs the so-called top-phase programme (financial and non-financial support for around 300 top athletes) and the academy programme.

KIHU (The Finnish Institute of High Performance Sport) is responsible for sports science and its application and is in charge of the new competence programme. Other actors in the system are the sports academies, the sports institutes, and the sports federations. Other stakeholders are the elite athletes (supported by the FOC), the coaches (of elite athletes), academy athletes (about 4,500) and experts providing services.

All these actors are independent. There are no lines of command. To some extent, funding conditions influence stakeholders' decisions and behaviour, although most funding decisions are automatic and norm-based rather than discretionary.

The elite sports evaluation 2020 covers the strategy period 2017-20 (Mäkinen & Paavolainen, 2020), providing evidence of a significant recent improvement in the elite sport system. The report concludes that "the Finnish system of elite sports has become more centralised and better coordinated". Some of the evidence for this improvement is summarised below:

- Management of elite sports was clarified during the strategy period 2017-2020, especially between the Ministry of Education and Culture and the Olympic Committee's HPU

- For the first time, common success goals for elite sports were defined and agreed upon by the elite sports network actors (see more in the output chapter)
- The roles and responsibilities of the actors in the elite sports network were agreed on in accordance with the strategy. Elite sports activities and their development have mainly been carried out in accordance with agreed roles and responsibilities
- The development and support process of the support system for elite sports and the HPU was reformed in accordance with the strategy
- The HPU and actors in the elite sports network have mutual agreements that steer elite sports activities and the use of resources for elite sports
- Cooperation between the elite sports network continued to be developed, and the actors in the network were committed to shared goals and practices
- Major decisions on centralisation and prioritisation were made during the strategy period; for instance, six national training centres were selected
- The construction and operation of national networks for expert activities began. Expert activities as part of the daily training of athletes were considerably strengthened in the operating environments of elite sports
- The Finnish dual career model was developed significantly
- Extensive and continuously updated monitoring of competitions and success was launched, covering about 700 athletes, 64 sports forms, over 40 team sports and over 1,000 competitions during the regular year of competition. Work on a data strategy for performance sports was also launched

The report identifies advantages and inherent problems with the network governance that characterises the elite sport system (Mäkinen & Paavolainen, 2020, pp. 98–100). One of the remaining problems is the poor alignment of strategic and operative measures targeted at elite sports (ibid, p. 102).

The establishment of the HPU introduces some of the features of the centralised steering in the elite sport systems of the United Kingdom, New Zealand, Norway and Denmark, and to some extent, this has been a success. However, failures of network governance limit progress.

According to some of the interviews conducted as part of the preparation for this report, cooperation between HPU and KIHU is not without tension because of the different incentives of the two organisations (see more in the section on sports science support, scientific research and innovation).

The cooperation with the federations seems in some cases to be rather formal and bureaucratic. Further, the interaction between HPU and the Ministry is complicated by the formal division of labour between the two organisations in relation to individual and organisational funding.

The Ministry has the ultimate authority to make decisions while HPU makes recommendations. This is a source of dissatisfaction in HPU, which wants to have the authority to make the ultimate funding decision. The Ministry stresses that Finnish law makes it impossible to

delegate this decision. Mäkinen & Paavolainen (2020, p. 105) conclude that one of the management issues of elite sport that needs clarification concerns "allocating resources for elite sports and making a decision".

In some cases, the inter-organisational tension and conflicts are rooted in power struggles. Few organisations are happy to lose decision-making authority and independence even if the overall system effect is positive.

There has been an absence of decisive leadership which is needed to implement significant changes in the overall structure of the Finnish elite sport system. However, this may not be required. Centralised leadership with clear steering is not the only way to reform the system. Instead of structural reforms, improving the processual characteristics of a network-governed system is more relevant.

The problem of trust is especially important in this respect. Lehtonen et al. (2021) make essential observations that contribute to understanding the issues with network governance in the elite sport system. Based on data from interviews of key policymakers and a questionnaire survey targeting national governing bodies of sport, the study concludes that trust and personal relationships are crucial in this context.

However, personal trust and cumulated individual social capital appear to be more predominant than system trust. In other words, the functioning of the network depends on bonding social capital and suffers from a lack of bridging social capital. Lipponen (2017) makes a similar point.

> "To restore a culture of trust and strengthen credibility, we must adopt a culture of agreements. A broad-based view of society must be brought to decision-making bodies more than at present" (Lipponen, 2017, p. 41).

It can be concluded that it is crucial to initiate trust-building measures in the elite sports network. In the longer run, confidence in the benefits of the system interaction may compensate for this or add to the effects of more trust.

Summing up

Many reports have identified issues in relation to governance, organisation and management as major causes for the failures of the Finnish elite sports system. The reforms from the early 2010s have addressed and to some extent reduced the problems.

The establishment of the HPU has centralised responsibility in a network-based system. However, the system still suffers from significant deficiencies because of a general lack of operational goal setting linked to proper strategies, implementation, evaluation, and rewards/sanctions.

In addition, the reforms have had too much focus on structural reforms and too little focus on processes. There are issues of poorly functioning interaction because of lack of communication and dialogue and, not least, a lack of trust.

There is much personal trust among some participants of the networks but far less system trust. It is important to address these issues by building trust and better dialogue and communication.

Pillar 3: Sport participation and foundation

A high level of sports participation and physical activity among a nation's population is important because it builds a (potential) talent pool from where (future) athletes can be recruited. All other things being equal, this enhances the chances of international sporting success (De Bosscher, 2007).

A sound system foundation must be in place to achieve a high level of physical activity and mass participation. This means that organised sports and programmes at various levels should be institutionalised. For example, in the form of sports clubs and associations which organises sports activities for children, adolescents, and adults (De Bosscher et al., 2006). Private sector initiatives – for example in the form of fitness centres and gyms – or school programmes for physical activity and sport contributes to a robust platform structure catering for a potentially high level of mass participation (Storm & Hansen, 2021).

In the SPLISS-study (de Bosscher et al., 2015), the scores for Finland on pillar 3 were slightly above average among the nations included in the study. This indicates that the necessary foundation and talent pool is available – compared to the other SPLISS-nations. At least, and in this perspective, the required level of sports participation among the Finnish population seems to be at an acceptable level.

Compared to other nations, there is a strong focus on physical activity at the political level, with Finnish sports policy highly engaged in securing that children and adolescents can be physically active, exercise, or do sports (Giulianotti et al., 2019; Lethonen & Laine, 2020)

However, according to a recent Finnish government report on Finnish sports policy (Finnish Government, 2018), participation patterns in Finland are changing these years. This is the case with regard to adults, youth, and children alike.

Organised sports club activities still reach children and young people under the age of 14 together with young people between 15-18 years. Around two-thirds of young people in these age groups participate in clubs and associations (Kokko et al., 2019). According to the Ministry of Education and Culture (2010), more children and adolescents are now doing physical activity or sports in clubs. This is very positive because the club system is typically the primary channel for identifying and growing talent.

However, it is challenging to maintain interest in physical exercise and sport among teenagers in Finland. This is a potential problem for the elite sport system because it challenges

the size of the talent pool. Further, according to some of the interviewed stakeholders, the age of volunteers in the clubs and associations is increasing, indicating that it is challenging to recruit new volunteers.

This also poses a potential threat to the elite sport system because if the clubs and associations are facing challenges in recruiting new volunteers, the clubs are at risk of failing to offer new members good services and support.

The report mentioned earlier (Finnish Government, 2018) stresses that participating in sports activities, even in the clubs, is expensive and that many are excluded. It is also the impression following from the interviews that barriers to sports club participation exist due to high membership fees or expenses for equipment (at least in some sports).

Looking at the issue from a broader perspective, other potential problems need to be addressed to improve the score on this pillar.

One central problem appears to be sedentary behaviour and a general decline in physical activity and sports participation among various groups in the Finnish population. According to the two recent reports on physical activity for children and youth (LIKES Research Centre, 2018, 2021), "Overweight among children and adolescents has significantly increased in Finland over the past decades" (LIKES Research Centre, 2018, p. 34). Splitting the figures into age groups, it remains clear that all groups are affected and that "approximately 25% of 2-16-year-old boys and 16% of girls (…)" are overweight (ibid.) in Finland.

Further, data from the Finnish Defense Forces show that while the average height of conscripts has remained the same, the weight has, on average, increased by 7.3 kilos between 1993 to 2020 (LIKES Research Centre, 2021).

The physical activity reports generally leave the impression that children and young people up to 18 years of age do not meet the minimum recommendations of at least 60 minutes of physical activity per day. Physical activity peaks at around nine years and then falls with age.

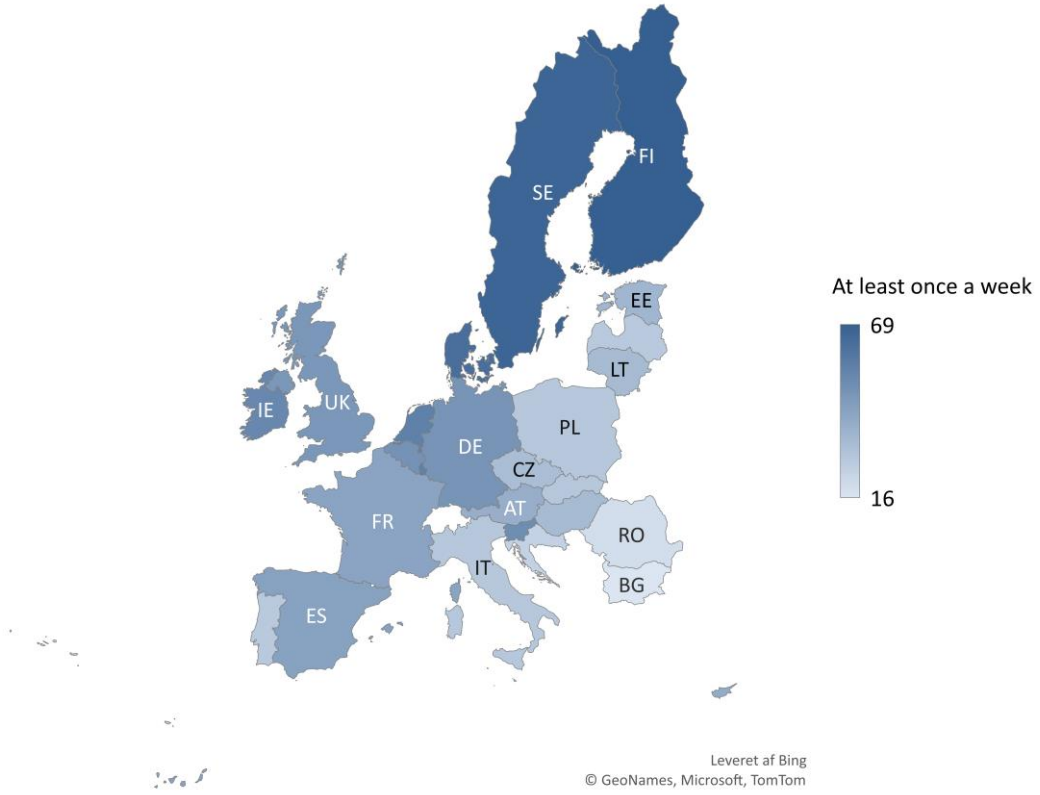
For people with physical disabilities and among ethnic groups, the level of activity is lower than for other populations and falls with age (LIKES Research Centre, 2021). In the interviews conducted, problems such as lack of assistance to the para-athletes and transportation to and from activities are mentioned as barriers to meeting the minimum physical activity recommendations – and are therefore also in a broader perspective barriers to building a larger talent pool.

There are positive aspects, though. For example, the proportion of 11-15-year-olds that meet the physical activity recommendations has increased over the last years. Also, a positive development among the least active adolescents (+15 years) is identified as the proportion of this group out of the total number of adolescents is declining (LIKES Research Centre, 2021). Still, though, the overall figures are worrying.

The evidence highlights that decreasing physical activity patterns are a matter of concern worldwide and not only a problem in Finland (Aubert et al., 2018; Tremblay et al., 2014). It is important to stress that Finland ranked well compared to the other 49 participating nations in the recent Global Matrix 3.0 Physical Activity Report Card Grades for Children and Youth report (Aubert et al., 2018).

For adults (+ 18 years), the most recent data from the Special Eurobarometer 472 on Sport and Physical Activity (where data is collected in 2018)[7] finds that Finland performs very well. This can be seen in figure 9, which displays the proportion of European member states' citizens engaged in sport or exercise for at least one week.

Figure 9: Proportion of citizens who engage in sport or exercise at least once a week (in per cent)



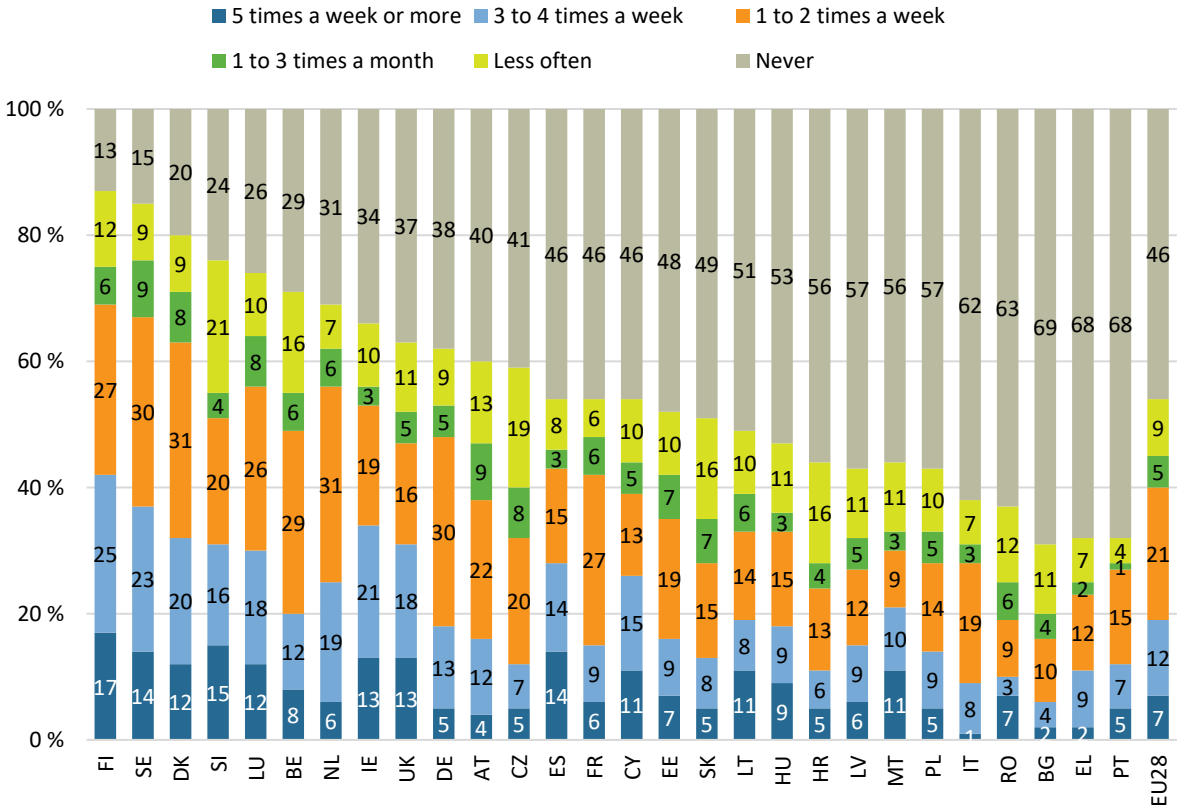
Source: (European Commission, 2018). Question: 'How often do you exercise or play sport?' (n = 28.031).

The Eurobarometer study generally finds the Nordic nations doing well in this regard. Digging deeper into the Eurobarometer data, the figures show that Finnish adults are among the most active in Europe.

This can be seen in figure 10, displaying the proportion of EU citizens who exercise or play sport by frequency and country. Finland is in the lead, followed by Sweden and Denmark.

[7] https://data.europa.eu/data/datasets/s2164_88_4_472_eng?locale=en

Figure 10: Proportion of EU citizens who do exercise or play sport by frequency and country (in per cent)

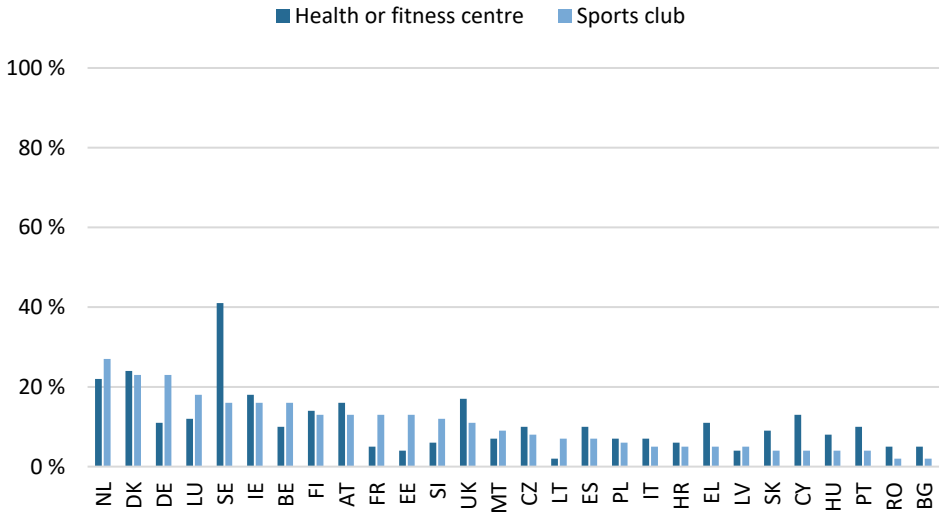


Source: (European Commission, 2018). Question: 'How often do you exercise or play sport?' (n = 28.031).

Regarding membership in sports clubs, which constitute the foundation of the sports system and the platform from where potential talents are recruited and developed, it can be seen from figure 11 that 13% of the adult population in Finland are members of sports clubs. 14% are members of (private) health or fitness clubs.

Sweden is on top with 41% of the adult population being members of a health or fitness club followed by Denmark (24%) and the Netherlands (22%).

Figure 11: Proportion of the adult population that are members of a sports clubs and/or health or fitness centre



Source: (European Commission, 2018). Question: 'Are you a member of any of the following clubs where you participate in sport or recreational physical activity? (n = 28.031).

In a follow-up question from the Eurobarometer survey (QB7), it is revealed that the adult population in Finland has the highest proportion of the population (67%) that practise sport and physical activity 'in a park outdoors, etc.'.

Seen in connection to the proportion that are members of health or fitness centres, this indicates that Finnish adults mainly practise sport or physical activity outside the organised sports clubs. While they are very active, it can be a potential problem in relation to elite sport that they are not part of the system that usually forms the basis of the recruitment system.

Especially for the group consisting of the youngest adults, this can be problematic because it potentially decreases the talent pool and potential number of Finns that can be recruited for elite sports.

The relationship between international elite sports success and mass participation and its importance to the elite sport system

While the fostering of mass participation appears to be imperative for creating a talent pool and subsequently achieving international sporting success for a nation, it is also often argued that successful nations, athletes, or sports teams inspire children, young people, and adults to exercise or take up sport themselves (De Bosscher et al., 2013).

For example, one of the recent reports on Finnish sports policy (Finnish Government, 2018) highlights that elite sport encourages mass participation. Some of the respondents interviewed in relation to the evaluation also alluded to this narrative of an existence of an 'elite-sport-success-trickle-down-effect'.

However, it is important to stress that elite sport only under certain conditions influences mass participation and inspires people to increase their physical activity levels or participate in sport.

Even though recent studies identify some evidence that elite sport success can affect mass participation (Weimar et al., 2014), the weight of the evidence points out that there is no automatic relationship in this regard (Chalip et al., 2017; Haut & Gaum, 2018; Storm et al., 2018; Storm & Jakobsen, 2021).

Some research even argues that too much focus on performance and competition – which is an inherent aspect of elite sport – can discourage people from participating in sport, exclude them, or even make them drop out (Bowers et al., 2011; Harris & Dowling, 2021; Sarrazin et al., 2002).

It is important to stress that what is often referred to as an inspirational effect is only one potential determinant of increased mass participation (de Cocq et al., 2021). For the potential of inspiration to materialise in reality, it seems that several other factors must be nurtured.

For example, sufficient facilities in the sports in question, well-educated coaches, public support for clubs and associations, and good governance in the clubs must be present for any positive effects to appear. If such issues are ignored, international sporting success will not affect broader participation patterns.

The relevance of this knowledge to the Finnish elite sport system – and the Finnish government – is that mass participation and physical activity must be prioritised to foster international elite sport success and build a talent pool.

However, this must be done by focusing on the factors that affect physical activity and mass participation and not – as often happens – by increasing the funding of the elite sport system at the expense of investments in physical activity and mass participation programmes. Often, spending cuts on mass participation and physical activity programmes are implemented while elite sports funding is increased based on the perceived trickle-down-effect narrative.

This is, however, counterproductive because international elite sport success will not affect broader participation rates – at least only marginally. Instead, focused mass participation and physical activity programmes should be implemented alongside elite sports investments to have an effect. Only with a mutual allocation of resources and dedicated programmes in both tracks can higher participation rates and medal counts be achieved.

Summing up

The general picture following the existing research on mass participation and physical activity in Finland is mixed. For adults, participation levels are among the highest in Europe, with other Nordic Countries also at the top. The data indicates that Finland in accordance

with the SPLISS-study (de Bosscher et al., 2015) scores high on this pillar and therefore has the potential to build a sufficient amount of talent.

There are, however, current problems that seem to hinder this. Recent developments indicate challenges with overweight and falling levels of sports participation and physical activity for children. Further, we see low participation rates among people with disabilities and ethnic groups.

For the able-bodied adults, participation rates look good, especially compared to other European nations. Still, most activities take place outside the normal recruitment structure for elite sport disciplines and therefore the foundation of the elite sport system appears challenged.

This must be addressed to strengthen international competitiveness. As mentioned above, this must be done not by applying to the trickle-down-effect narrative but by nurturing mass participation and physical activity for population groups while at the same time addressing the development of elite sports.

Pillar 4: Talent identification and development

> "Taking into account the outlined aspects to talent development (psychological, psychosocial and academic), Pillar 4 is concerned with the national strategies towards the identification of young talents and how talent development is facilitated in (…) different nations" (De Bosscher et al., 2015, p. 198).

As mentioned earlier, national talent identification and talent development systems are necessary for a nation to become successful in international elite sport (including parasport). Such systems are essential, especially for small countries, because the (potential) talent pool is comparatively lower than in nations with large populations.

From this perspective, Finland should pay special attention to this pillar because a well-functioning system could become an advantage in relation to international performance. This is even more pronounced in a situation where the share of young age groups in the Finnish population is in decline.

In the SPLISS-study (De Bosscher et al., 2015), Finland scores close to – but below – the average of the included sample of nations. Countries like Denmark and the Netherlands come out better. This indicates some challenges and that some parts of this area's work are not aligned or coordinated well. However, the impression from the interviews and the available data from this study is that this pillar is working relatively well in Finland. In some ways, it might even have improved since the data was collected for the SPLISS-study. Still, there are problems, especially concerning Paralympic sports.

Parallel systems

One of the central issues identified in the data material for this evaluation is that each federation more or less has its own approach to talent identification and talent development and that there is limited coordination or exchange of experiences between different sports.

According to the recent internal evaluation (Mäkinen & Paavolainen, 2020), each federation has the responsibility to secure talent identification and talent development within its specific sport, and while the internal evaluation states that there is knowledge sharing among federations, the HPU, and athletes that are part of the top-phase programme (more on this later) the evaluation has not identified such efforts at lower levels.

Also, at the club level, local cultures, traditions, and even coach-specific approaches are at play. Put differently; there are many parallel talent identification and talent development systems in the Finnish elite sports system.

According to Barker-Ruchti (2018), a national policy of athlete development was created at the start of the 2010s due to the 2010 elite sports reform. Labelled 'the athletes path' (Ministry of Education, 2010) the new programmes were developed to put the athletes at the heart of the national elite sport policy.

The policy divided the athlete development path into three distinct phases that should work as a model to secure a coherent development of elite sport in correspondence with Finnish culture and society: 1) Children's sports and physical activity phase, 2) young people's selection and investments phase and 3) the elite sports phase.

Where the first phase does not entail any specialisation and is mainly focused on letting children try out different sports, developing basic motor skills, and having fun, the second phase intensifies training and focuses on sports-specific skills in order to select (and identify) potential elite athletes for further specialisation. The third phase is the elite sports phase, where organised practice, systematic training and many hours are put into developing sporting excellence among the athletes selected as potential top athletes.

According to Barker-Ruchti (2018) and some interviewees, the 'athlete's path' policy was to be implemented as a framework for Finnish elite sport by the Finnish Sports Confederation and the HPU at the Olympic Committee. However, a large-scale implementation failed or was discontinued.

It is not fully clear why this happened. Still, some interviewees refer to talent identification as a 'wicked problem' due to the equality and sport for all values dominating the Finnish society and sports policies, which affect the elite sport system. Identifying talents and selecting them for a specific path is in some sense culturally inconsistent with these broader societal norms and can be seen as a plausible explanation for why it did not succeed. Other causes – or additional contributing factors – might exist but have not been identified during the evaluation process.

Even though talent identification and development takes place on an everyday basis in all sports – i.e., in the clubs and at the level of federations – it appears to be challenging to develop a common national system due to these societal value constraints. Further, already institutionalised sports-specific policies in the federations may have been a barrier to the implementation of the overall national ideas (Barker-Ruchti et al., 2018).

Currently, according to the conducted interviews, the HPU assists and advises the federations on issues of talent identification and development. Further, on the positive side, there are programmes in place in Finland to support the athletes – also on dual career issues. The overall idea is to build a full package of support functions around the athlete – both sporting and educational services.

One of these programmes is the Sports Academy Program which is the operative environment of talent development. The Sports Academy Program is led by the HPU and developed in 2017. It consists of 21 sports academies[8] spread out over the country with around 4,500 athletes attending. Two of these academies are national Olympic Training Centres as well. In the sports academies, the athletes are supported by various experts like nutritionists, physical trainers, doctors, and sports psychology experts.

Within the Sports Academy Program, 35 lower secondary sports schools (12-15 years), 15 upper secondary sports schools (16-19 years), and 16 vocational sports schools (16-21 years) take part in a form of network cooperation from where talents can work their way into the sports academies.

According to a recent internal evaluation of the Finnish elite sport system (Mäkinen & Paavolainen, 2020a), the activities in the sports academies and training centres received very positive comments in the surveys that were sent to stakeholders in the Finnish elite sport system (including parasport). It indicates that the legitimacy of the programme is high. Based on this, the objectives of this part of the elite sport system seem to be more or less achieved.

The interviews with stakeholders from the Finnish elite sport system give the same impression of the sports academies as well-functioning and providing a solid platform for developing young athletes.

However, in a recent study by Nikander et al. (2022), the Sports Academy Program is studied to understand whether it successfully adapts to dual career norms. The results show – in correspondence with the impression from this evaluation – that the programme greatly supports the athletes making it a highly attractive environment. Still, though, some challenges are found.

[8] It is important to understand that despite the fact that the Sports Academy Program is led by the HPU, all the sports academies are independent and act accordingly. They get some of their funding (which can be influenced by HPU) from the state budget to elite sports, but also from various other sources.

For example, some of the athletes supported by the programme said that the constant focus on sport and results had made them move out of the sports academies dormitories to get into environments focused on other aspects of life as well. Tensions between teachers and coaches were also found in the study.

These findings indicate that the Finnish system's balance between sports and civil education is not perfect. The impression from the study is that norms and values encourage athletes to strive for a sporting career more than for educational merits. Further, there were many examples of a lack of cooperation between sports and academic staff. Some athletes reported having to take care of many of the challenges themselves.

The Star Club programme

There are also programmes implemented at the club level to improve performance and create a talent pool. Even though it is mainly a sport for all initiative, the Star Club programme certifies clubs on certain quality criteria related to elite sport (blue label).[9] At the time of writing, 20 clubs (within four sports) have been approved and received the blue label. There are no available evaluations of this programme, but it can likely impact national performance – at least in the long run.

The role of the military

In Finland, the military offers possibilities for young athletes to serve as conscripts and continue to train significantly during duty. Around 200 Finns perform their military service at the Finnish Defence Forces sports school. For summer sports, the activities at the sports school are placed in Helsinki, and for winter sports in Kajaani (Vuokatti). To be accepted for the programme, the athletes must be at the national or international level in a sport on the Olympic programme or otherwise widely recognised.

Several daily hours of training are practised at the sports school, and weekends and evenings are available for additional training. In addition, the Defense Forces annually employ physical officers (12 in 2022) – all elite-level athletes – that assist the training and physical education of the Finnish troops.

It is difficult to assess the effect of the role of the military in relation to the Finnish elite sports system. But, having the military pour in resources and provide positions and programmes for athletes is a potential positive, supportive function.

Problems of progression: Missing links in the system

A central problem identified in the collected data and materials is that there seems to be a broken link between some of the phases in the athlete's path towards the international elite. This varies across sports.

[9] https://www.olympiakomitea.fi/seuratoiminta/tahtiseura-ohjelma/tahtiseurat-quality-programme-for-sports-clubs/

Examples of athletes that have reached the top without any support from the system is an indicator of this broken link,as emphasised by some of the interviewed stakeholders who mention that some have even won unexpected Olympic medals (curling (2006), shooting, and rowing (2008)).

They have, in some sense, reached the top despite sufficient help. While it is difficult to provide evidence for such claims, it is – on the other hand – clear from the interviews and materials available that critical questions can be raised in relation to the Finnish system's capabilities of pushing the talent pool all the way to the top.

Especially in relation to parasport, much appears to be left to coincidence. According to the interviewed stakeholders, barriers to sports participation are high for people with disabilities.

In recent years, digitalisation and esports have made it easier for people with disabilities to socialise online and participate in entertaining – and competitive – activities which make them less likely to get out and participate in 'real activities' in the physical space.

Even though parasports is integrated with the able-bodied sports in many disciplines, many clubs are not good at taking care of people with disabilities because they do not have the competencies to do it. Some interviewed stakeholders argue that while words and good intentions are manifold, the reality is different.

For many minor disabilities, it is easier to help and assist and integrate the athletes. But for people with more significant disabilities, the challenges are more considerable for the clubs. As mentioned earlier (see pillar 3 on sports participation and foundation), this is reflected in low physical activity and mass participation rates compared to able-bodied people. With a low number of participants, fewer are identified as talents and developed into the international elite.

In addition, there seems to be a gap between the top-elite and the level below. One of the stakeholders argues that while the HPU is good at supporting those already at a high level, those potential athletes and future generations of talent are not sufficiently nurtured.

> "We need to solve the problem of where to find the new athletes, how to recruit them, where do we recruit them if we find someone, so where can we say, where can you go, where to find the coach for you".
>
> Interviewed stakeholder

Another stakeholder argues that there has been a decline in the overall number of Paralympic athletes. While the number of top-level athletes supported by the Finnish system has been at the same level (around 50) for a long period, the pool of future top-level (para) elite athletes is in decline.

Most critically, there is currently no overall recruitment system for Paralympic athletes, which further contributed to this decline. It is worrying because the gap appears to grow with even fewer new athletes being recruited in recent years. According to the interviewed stakeholders, it is athletes that recruit new athletes.

However, this is done on a case-by-case basis and not systematically. Currently, many former para team sports are in decline in Finland. For example, according to one of the interviewed stakeholders, there is no longer a national league for wheelchair rugby. Basketball, sitting volleyball, and goalball face a significant decline in the number of participants as well. This is a general problem because team sports usually is a channel through which people with disabilities get started and continue to other individual sports later.

The interviewed stakeholders further argue that compared to other nations, the possibilities to live a satisfying life despite having a disability are high in Finland. Sport is not the only way to get personal recognition, receive training or other forms of education or generate income meaning that fewer people with disabilities are incentivised to become elite athletes compared to other nations where the same possibilities for people with disabilities are lacking.

The interviewed stakeholder argues that in nations without the same support system for people with disabilities, sport can be the only way to generate a career or get recognition.

It is the impression, however, that much is done by the parasport stakeholders to develop the organisational framework around Paralympic sport in Finland within the given (resource) constraints.

The problem related to the gap between the top-level athletes and the level below in Paralympic sports is also mentioned by stakeholders from able-bodied sports. From the materials and interviews, it appears that the HPU has intensified its focus on securing the best conditions for the around 205 athletes in the top-phase programme.

The dialogue between the federations and the evaluation of their performance – which is done by following a strict and very time-consuming annual schedule (Finnish Olympic Committee, 2021)[10] – have also increased. The HPU is now more focused on results and is putting relevant management tools in place to handle the procedures and make good performance plans in cooperation with the federations. All of this is consistent with the recommendations from existing research.

[10] The process consists of four stages where plans and goals are prepared, agreed upon, and evaluated. Comprehensive monitoring of the performance of the involved athletes and sports is part of the management of the supported projects. The amount of time used in the process has raised some criticism but the overall satisfaction with the programme and its management is high among the involved stakeholders (Mäkinen & Paavolainen, 2020).

However, according to the interviews, the new results-orientated focus has sparked some criticism among different stakeholders because more long-term talent development – it is said – is left aside because of the intensified focus on the top of the athlete pyramid.

The question is whether any results of this recent change in steering and management imposed by the HPU can be identified. Further, the question is whether the focus on (short-term) results has any negative effects. We will assess this in the discussion section following the analyses put forward in the output section and in the overall conclusions of the evaluation.

Summing up

While a previous attempt to develop a uniform talent identification and development system in Finland seems to have failed, many programmes now support athletes in the critical phases of their careers. It appears that the focus has sharpened in recent years, and the institutionalised programmes have improved the Finnish system on this pillar.

The sports academies and the related structure of sports institutes and national training centres, together with the work done by the federations and the HPU in the top-phase programme, seem reasonable and appear well suited to support improvements in terms of international sporting success. Further, the Star Club programme seems to be a potentially relevant initiative that could further assist the talent identification and development at the club level, where (upcoming) talents will start their (potential) career.

Some problems and challenges need to be addressed – for example, the micro-level cooperation between trainers, teachers, and other staff to better support the dual career aspects of the athlete environment. Also, the bureaucracy associated with the annual evaluations and agreements on support between the HPU and the federations might be loosened a bit. Further, the question is whether the sharpened focus on the best of the best athletes has negative consequences for the development of the coming generation and creates a gap – or a missing link in the Finnish elite sport system.

This being said, the overall impression is that even though there are constraints and values of equality working against it, talent identification and talent development are at the moment supported reasonably well in the Finnish system. In the next section, we will dive deeper into additional aspects of how well the top elite is supported in the contemporary Finnish system.

Pillar 5: Athletic career and post-career support

Elite athletes face varying challenges at different stages in their careers. This is linked to changes from talent development to sport at the senior level, participation in various types of competition, greater sports specialisation, more intensive training and, at least for some, a change from being an amateur to a professional.

At the same time, the athletes undergo psychological changes in the transition from adolescence to adulthood and changes in the character of their social networks, challenges of combining sport with study/work and, eventually, the transition from the athletic career to post-career roles.

Many countries support the development of talents and offer generous support to top athletes during their careers at the top level. Others provide more wholesale support to the athletes at various stages of their career in a more holistic approach involving post-career support as well.

Adopting such an approach is particularly needed in small countries with a limited talent pool as they cannot afford to lose potential top athletes if they want to maintain/improve international competitiveness. Holistic support is also more in line with welfare state policy in an effort to avoid that the pursuit of an elite sports career will lead to the eventual emergence of 'social losers'. Finland has adopted such an approach with an explicit focus on the 'athlete's path'.

Results

In the SPLISS-study, Finland scores above average in relation to this pillar. Whereas athletes in countries such as Australia, Canada, Switzerland and France receive direct funding to assist with their training and living costs, top athletes in Finland receive a monthly wage for full-time training, as is the case in the Netherlands and Belgium.

This represents a trend for athletes pursuing success in their sport to be increasingly treated as employees by the sponsoring organisation. Finland is among the four sample countries with the highest score concerning the total income of elite athletes, including income from sports activities and financial support. According to the SPLISS-study, athletes' average income correlates significantly with success in Olympic summer sports.

The SPLISS-study also covers coordinated non-financial support programmes for elite athletes including career assistance, lifestyle support, coaching support, training and competition support, legal support, sports science support, and sports medicine support. Finland is doing above average concerning the availability of such services but a little below average concerning athletes' perception of the quality of the services.

According to SPLISS-data collected around the 2012 Olympics, Finland scored low with respect to post-career support. This includes services aiming at preparing and assisting athletes for life after the end of the sports career such as financial support in the early post-career, study support, job offers, and personal assistance including psychological support. Such post-career support is typically provided during the athlete's career, whereas services after the end of the career are limited.

Part of the post-career support involves an effort to facilitate the combination of the sporting career with an academic/vocational career. In Denmark, such a combination was even an explicit condition for support when Team Denmark was introduced (Hansen, 2012).

Considering that post-career is an important part of the support programme for elite athletes in Finland in order to avoid the eventual emergence of 'social losers', it is surprising that Finland is performing comparatively poorly. Finland has recently initiated more post-career support. The combination of an athlete's career with the demands of education or part-time work is facilitated by dedicated staff in sports academies and the HPU.

Although the availability of post-career support was not evaluated highly by Finnish athletes ten years ago in comparison to athletes in other countries, it may be significant that there were fewer athletes in Finland than in any of the other sample countries apart from Japan who agreed with the statement that 'concerns about my future prospects outside sport negatively affect my ability to focus fully on being an elite athlete'. This may result from general societal characteristics, including the predominance of welfare state services in general.

The internal elite sports evaluation by Mäkinen and Paavolainen (2020) provides more updated evidence about athletes' career support and post-career support including the effect of the top-level programme with HPU in a leading role since 2018.

> "The key operating principle of the current strategy period has been an effort to strengthen an athlete-oriented, best-performing approach in which the best athletes practice continuous development in a joint effort, in the best possible coaching, and in the best conditions. The top-level programme … employs 6 full time and 2 part-time coordinators" (Mäkinen & Paavolainen, 2020, p. 20).

In addition to the financial support of around 300 top athletes, the programme includes support for coaching and training and the development of various expert services. The programmes seem well planned and implemented including sufficient monitoring processes. Major decisions on centralisation and prioritisation were made during this strategy period from 2017 to 2020. Priority support for selected sports was concentrated on 48 sports in 2020 compared to 59 sports in 2016.

Further, a programme for enhancing skills for elite sports performance titled 'The competence programme' has been agreed upon with KIHU but has not yet been initiated. A survey of athletes shows a high degree of satisfaction with expert activities. The same is the case with the possibility of pursuing a dual career (upper secondary and higher education) of high quality.

Although the availability and quality of athletes' career support and post-career support have improved in recent years and seem to be satisfactory in general, some issues need to be addressed.

First, the number of athletes covered by HPU-support is relatively low. This is obvious compared to Denmark where Team Danmark's support covers about one thousand athletes – at various levels, though – compared to about 300 in Finland. This creates a gap between the support offered by the sports academies and the top-level support by the HPU. It has

potentially negative effects on the recruitment of future top athletes. Further, it leaves the senior sub-elite, athletes with a performance level below the top athletes, out in the cold.

Second, the aim to support dual careers is partly compromised by professionalisation at an increasingly early age in some team sports (primarily ice hockey and football). The risk of producing 'social losers' due to youngsters chasing money and fame and ignoring education from an early age, but failing to hit the jackpot, is real and increasing. This can be framed as a societal cost of elite sports and it may counter efforts to increase the legitimacy of elite sports in the Finnish population. We will get back to his issue later in the report.

Third, there may be an issue with the quality of some of the expert services included in the coordinated non-financial support as indicated by SPLISS-data, although the recent internal evaluation points in a different direction. This may be particularly relevant in relation to post-career support, seemingly scoring relatively low. However, this may be less of a problem in a country like Finland with a well-developed general welfare system.

Summing up

The reforms in the last decades have been guided by a focus on the needs and paths of athletes. Finnish top athletes are now financially supported and able to live as professional athletes. At the same time, an increasing focus on dual careers has been supported by organisational initiatives and dedicated staff.

The sports academy system caters well for 16-19-year-old athletes, and the small group of top world-class athletes is also well serviced. However, little is done for other athletes above 19 years of age. Post-career support has been significantly improved in Finland in the last decade but may still need improvements.

Pillar 6: Training facilities

The availability and quality of training facilities are crucial for elite sport success. In the most recent SPLISS-study (De Bosscher et al., 2015), a high score on this pillar correlates significantly with international sporting success, in particular in summer sports.

Finland scores relatively low on this pillar which is surprising considering the impression from the stakeholder interviews as well as other data, which provides evidence of plenty of top quality training facilities.

Results

The supply of training facilities in Finland was boosted in three phases. First, there was a strong development of sport institutes in the period 1925-1970 and especially in the 1940s and 1950s. This was linked to the fragmented overall organisational structure of sport and also to the political promotion of regional interests. Most sports institutes are located in rural areas far from urban areas.

Second, the 1980s saw a huge expansion of sports facilities construction across Finland. A total of 9,400 new sports facilities were built in Finland during this decade (Lämsä, 2012). Third, there has been an expansion of facilities dedicated to elite sports in the last decade in connection with the development of sports academies and Olympic training centres.

The interviews with stakeholders show general satisfaction with the available training facilities. The former CEO of Team Danmark considers the Finnish training facilities the best in the Nordic countries.

It is recognised that not all sports academies have facilities of top quality. In this respect, the URHEA training centre in Helsinki is second to none, and the facilities in Vuakatti dedicated to winter sports are also of top quality. However, other sports academies are less well endowed with training facilities. In addition, several facilities require renovation. However, there is unanimous agreement among the stakeholders that this is an area where Finland is doing well.

However, whereas availability and quality of facilities are at a high level, other factors related to training facilities are causes for concern. The coordination and planning of facilities' usage, construction, and maintenance suffer from the complexity of the overall organisational structure with poor communication among many independent organisations (Mäkinen & Paavolainen, 2020). Likewise, in the SPLISS-study, Finland scores low in relation to nationally coordinated planning of facilities with records of facilities and mapping of the needs of athletes and coaches.

In the SPLISS-study, the situation in relation to the national coordination of facilities is described as follows:

> "It was found that Finland has no nationally co-ordinated training centre, and the facility structure for elite sport is complicated. Sport institutes (14), are the traditional centres in rural areas (…). They are mainly used for short-term training camps (…) and not solely for elite sport purposes (…). The Finnish Olympic Committee argued in 1987 that four institutes should be recognised as elite sport training centres, but only in 2013 did the Ministryof Education and Culture officially recognize three multi-sport training centres and three sport-specific training centre. However, as these institutes are independent and state funding only marginally contributes to elite sport, the centres deliver youth sport and health enhancing activities as well. Almost 30 Finnish NGBs co-operate with sport institutes in different ways" (De Bosscher et al., 2015, p. 270).

It is recognised in the recent SPLISS-report that the situation had been improved: "Over the past years, a local network of 19 sport academies has been developed in the largest cities to deliver athletes' daily training and education needs. This is coordinated by the NOC (De Bosscher et al., 2015).

Since then, the situation has been significantly improved through the development of new Olympics training centres and the centralisation of top-quality facilities in Helsinki (summer sports) and Vuokatti (winter sports).

However, whereas there are plenty of facilities, coordination and usage of facilities are far from optimal. A significant problem in this respect is the location of the sports institutes, which are in many cases located in remote rural areas. According to several interviewees, this is at odds with the preferences of young people who prefer an urban lifestyle and are consequently not keen to take advantage of the facilities of the sports institutes.

Another issue is elite athletes' access to the available facilities. The vast majority of the facilities are publicly owned and usage by elite athletes has to be balanced with usage by other groups. This is mostly critical with respect to indoor facilities such as sports halls, swimming pools and skating rinks.

In the SPLISS-study, Finland is among the small group of countries which do not provide priority access to training facilities to elite athletes. This is seemingly linked to the general priority of sport for all and mass participation. This may be well justified for many reasons, but it does constitute a problem for elite sports.

The SPLISS-study includes an assessment by top athletes and coaches of the quality of training facilities. Finland is one of the sample countries with the lowest shares of top athletes and international coaches who consider the quality of training facilities as '(very) sufficient'. This indicates that the training facilities are not as good as the numbers indicate. However, this has to some extent been rectified by the improvements in the last decade.

Summing up

Finland is well endowed with training facilities in both quantity and quality. In that sense, Finland is leading among the Nordic countries. However, this does not mean that there are no problems concerning elite sports. There are access problems related to many facilities shared between elite athletes and other users.

More importantly, the location of many of the sports institutes' facilities is problematic as the young athletes' preference for an urban lifestyle makes them reluctant to make use of these facilities, which are often located in rural areas far from urban conglomerations. Further, the coordination of facilities suffers from the organisational problems described in the section on Pillar 2.

Pillar 7: Coach provision and coach development

For athletes to succeed in national and international tournaments, it is imperative that they are coached well. A central task of a national elite sports policy is to ensure that the amount and quality of coaches are as high as possible at all levels of the system (De Bosscher et al., 2006).

The provision and development of coaches are secured in many ways. For example by developing coach recruitment and educational systems and by paying them or in other ways securing that they can devote time to become coaches, develop their skills, and even make a living from the profession.

In the SPLISS-study (de Bosscher et al., 2015), the results for Finland came out on average among the sample nations. Countries like Canada and Australia were among the top nations with a high level of development on this pillar.

As is the case with talent identification and talent development, for small nations with limited populations – like Finland – it is important that the available talents are nurtured and assisted, and this requires qualified coaches. Interestingly, the SPLISS study finds that the relationship to success in pillar 7 "(…) is stronger in winter sport than in summer sports" (De Bosscher et al., 2015, p. 280). With a history of winter sports success, it could potentially give Finland a comparative advantage to develop pillar 7.

Results

According to the strategy of the Finnish Olympic Committee 2021-2024, the key theme of future success for Finnish elite sport is centred around good and more professional coaching (Finnish Olympic Committee, 2022). Special attention was therefore paid to this issue in the recent internal evaluation (Mäkinen & Paavolainen, 2020). In many of the stakeholder interviews, issues related to this pillar were also raised.

According to the interviewees, there is room for improvement on this pillar. One of the central arguments put forward by many stakeholders is that there are too few coaches overall in Finland to facilitate a higher level of performance and international success. One of the fundamental reasons is that it is not sufficiently attractive to strive for a career as a (high-level) coach.

While there is a good coaching provision for the small group of world-class athletes that are part of the top-level programme, it is less so for other athletes (in the sub-elite) above 19 years of age.

The stakeholders' views are largely confirmed by results from previous studies on the issue, such as the recent internal evaluation (Mäkinen & Paavolainen, 2020). The study finds that only a few stakeholders feel that there are enough qualified coaches in their respective sports.

According to the report, the number of sports coaches in Finland is around 80,000 (Mäkinen & Paavolainen, 2020). 2,000 to 3,000 is estimated to work as professionals with the majority being employed in team sports like football, ice hockey and basketball. However, sports like skating and swimming also enjoy a high level of professional coaches.

Seen in a broader perspective, Finland has experienced a professionalisation of the sports sector during the 2010s, with an increasing number of coaches and athletes becoming professionals. This development can be read from table 1. Even though physical activity and recreational instructors are included, the figures indicate that a wider group of people are directly or indirectly involved in supporting various levels of sport and, therefore, top-level sports as professionals.

Table 1: Professional athletes, coaches, officials, and instructors in Finland 2012-2018

	2012	2013	2014	2015	2016	2017	2018
Athletes	718	699	650	633	669	678	747
Coaches and officials	994	1 255	1 556	1 667	1 970	2 239	2 485
Total	1712	1954	2,206	2,300	2,639	2,917	3,232
Physical activity and leisure time instructors	6 044	6 161	6 518	7 002	7 365	8 461	8 527
Total	7,756	8,115	8,724	9,302	10,004	11,378	11,759

Source: Employment, Statistics Finland. Reproduced from: Mäkinen & Paavolainen (2020)

Other improvements seem to have been made regarding this pillar in recent years. According to (Mäkinen & Paavolainen, 2020),

> "(…) in recent years, expert activities have been built to support the coaching processes, in which experts bring their competence to daily coaching and thus participate in the planning, implementation and monitoring of practical training. National expert networks have been established for physiotherapy, mental coaching, physical coaching, nutritional coaching, medical activities and double career activities" (p. 25).

Such networks are essential for sharing expert knowledge and evaluations of the activities seem to confirm this (Mäkinen & Paavolainen, 2020). Specifically, in 2018, a new coach programme was launched by the HPU to develop and share the competencies of top-level coaches (Olympic and Paralympic coaches, head coaches and youth Olympic coaches) across sports.

Further, due to the 2019 vocational education and training reform, the level of competence among coaches will potentially become higher. Also, the number of professional coaches is moving in the right direction. As indicated above, in 2012, Finland had around 1,200 professional coaches, representing a rise from 500 in 2002. This has risen to roughly 3,300 in 2019 (Mäkinen & Paavolainen, 2020).

Further, the competence level among each coach is generally higher, and coaches are also better supported by the system. In total, the network of coach development seems to work relatively well.

According to a survey conducted among stakeholders of the Finnish elite sports network who have been part of the internal evaluation (Mäkinen & Paavolainen, 2020), there are now more competent coaches at the various levels of competition in Finland.

Still, some survey respondents are raising critical remarks indicating that more should be done on this pillar. This is also the case with some of the interviewed stakeholders who point out that recruiting and developing future coaches for (senior) athletes is needed. Further, providing good employment opportunities is also required to keep them in the

profession. Otherwise, there is a risk that competent coaches are lost to other occupations. In addition, coaches of a high standard – even professional ones – are needed at the junior athlete level to support talent development and increase the quality of the work.

For Paralympic athletes, finding qualified coaches can be even more challenging than for able-bodied athletes because the needs of a Paralympic athlete can be very different from the general needs of Olympic athletes. It requires, in some sense, more competencies to coach Paralympic athletes because their disabilities can have unique traits specific to the athlete in question.

For coaches, it is easier to coach able-bodied athletes and it requires more time and creativity to lift potential paralympic athletes into the elite. According to one of the interviewed stakeholders, knowledge of parasport is generally not included in coach education programmes which further adds to the problem.

For example, according to one of the interviewed stakeholders, there are coaches employed at the sports academies to take care of athletes. Often, the coach is not fit, educated, or ready to care for Paralympic athletes.

In that case, the athlete in question is at risk of being left to him- or herself to find alternative coaching assistance. Therefore, competencies related to parasport athletes must be better integrated into the overall coach provision and coach development system.

The challenge is real – not only in relation to (missing) parasport coaches but also in relation to resource constraints in general because Paralympic athletes require more personnel (assistants), experts, and equipment to excel than able-bodied athletes.

Summing up

The materials and data at hand reveal that there has been an increased focus on coach recruitment and development in recent years in Finland. The competence level and number of coaches are growing, but some stakeholders point to problems in relation to this pillar. More coaches and higher competence are needed in both able-bodied and Paralympic sports.

However, the overall impression is that the Finnish system have experienced improvements in this regard. Further, it is likely to have an effect in the long run if the increased focus is withheld. Still, though, special attention to Paralympic sports is needed.

Pillar 8: National and international competition/events

Competing in national and international tournaments is essential for athletes to become competitive and succeed. An essential part of developing a successful elite sports system is, therefore, the system's ability to organise and structure a relevant competition schedule for the athletes. It is essential for the best athletes to compete regularly and against the best to

gain the necessary experience and learn how to improve for future tournaments (De Bosscher et al., 2006).

Staging international events is part of this pillar (de Bosscher et al., 2015). It is well known from many studies that hosting sporting events gives the athletes of the hosting nation a competitive advantage (Bernard & Busse, 2004; Scelles et al., 2020).

Improving the international standings of a nation can therefore be achieved strategically by hosting international events. For the athletes, competing in friendly environments – in their home country – can benefit their career development and prepare them for future challenges.

Results

In the recent SPLISS-study (de Bosscher et al., 2015), Finland scores well above average compared to the participating nations which indicates a well-functioning system in relation to this pillar. As is the case in other nations, there are well-developed national tournaments in all sports. The athletes can compete against competent opponents all year round – or in the regular season.

However, Finland is not at the top in all aspects of this pillar indicating some potential for improvement. For example, whereas Finland is among the top five nations in the sample regarding the rating of national competitions for youth athletes, this is the opposite concerning senior-level elite athletes, where Finland is rated among the five lowest-ranked nations.

Where the opportunities for participating in international tournaments are concerned, the SPLISS-study (de Bosscher et al., 2015) documents that the surveyed athletes from Finland were among those who were most satisfied compared to athletes (all age groups) from the other nations.

On average, 75% of the best athletes who responded to the surveys in the participating nations answered that they were happy with the number of international competitions they could participate in. For Finland, the response was positive for around 95% of the athletes. For coaches, the answers were not as high. The average was not very good, but still satisfactory.

The results regarding the opportunities to compete internationally are in accordance with the recent internal evaluation of Finnish elite sport (Mäkinen & Paavolainen, 2020).

At the HPU (FOC), a designated and extensive programme for the preparation for the (summer and winter) Olympics, the (summer, and winter) Youth Olympics as well as various European competitions has been developed in recent years. The programme, which according to the stakeholder interviews is entitled the 'Game Operations Programme' (see also the section on sports science support), handles and coordinates all preparations in

cooperation with the relevant stakeholders at the federation level (of the HPU-supported sports) such as team selections and team management.

Further, as part of the programme, special initiatives are taken to prepare athletes for the tournaments. This covers, for example, arranging training camps leading up to the events and planning the involvement of coaches, experts or medical staff or even arranging for access to special facilities as part of the preparations for future tournaments or events. As a part of the programme, data is collected to evaluate and improve future preparations.

From 2020, the preparation for summer and winter Paralympics and the management of teams related to that has also been a part of this programme at the HPU.

According to Mäkinen & Paavolainen (2020), the evaluations of programme activities in the 2017-2020 period show a high level of satisfaction with the programme among athletes, coaches, and other team members.

Further, in the data collected for this evaluation and based on the material at hand there is no indication that this pillar is not working in accordance with international standards.

This being said, there is no strategic plan for attracting international sporting events in Finland even though such a plan was to be developed following a report by FOC in 2018 (Finnish Olympic Committee, 2018). It has not been possible to uncover why this is the case. While attracting sporting events can be expensive and potentially a high-risk endeavour for nations, planning the potential hosting of sporting events is necessary to reach an optimal national elite sports policy system.

Besides this caveat, in short, the activities on this pillar and recent developments appear to be at a high level in Finland and fully competitive seen from an international perspective.

Summing up

The results on this pillar show that the Finnish elite sports system is doing well. Some of the material and data indicate that there might be room for improvements regarding national-level tournaments. However, it is also very likely that the quality, intensity, and level vary from sport to sport and that some sports are doing well compared to international standards. However, this report has not been able to go deeper into this issue.

The overall impression is that things have improved since the SPLISS-study with the new Game Operations Programme. The Finnish elite sports system is doing well concerning this pillar – besides issues related to the missing integration of overall planning for hosting international sporting event.

Pillar 9: Sport science support, scientific research, and innovation in elite sport

The use of scientific research for performance enhancement in elite sport has received increasing attention internationally in the last decades. This is obviously one of the areas where improvements can increase a nation's international competitiveness. According to the SPLISS-study:

> "The best performing nations in summer sports and winter sports generally score well in scientific research and innovation. They have a national sport research centre, and coordinate, disseminate and communicate scientific information well" (de Bosscher et al., 2015, p. 331).

In the SPLISS-study, Finland performs well on this pillar. Its score is above average, and it is clearly the best performing nation among the small countries included in the study. The Finnish elite sport system has been improved further in recent years through reforms related to this pillar.

Results

Sports science in Finland is mainly carried out in Jyväskylä University and a few research institutes (KIHU, Likes, UKK institute and Finnish Centres for Sport medicine). The quality of the sports research conducted in Finland is in high regard. It is renowned internationally as one of the top sports research institutes.

KIHU is of special relevance in the context of this report. The mission of KIHU (the Finnish Institute for High Performance Sport) is to "help improve Finnish sporting success by improving the quality and impact of coaching and training with strong scientific service to athletes and coaches together with domestic and international collaborators" (KIHU website).

Currently, KIHU has about 30 scientists, experts and support personnel. It works closely with 14 different national teams providing scientific support for their training. The annual budget is about 2.5 million euros. The vast majority of the funding is state support. The NOC/HPU funds elite sports research and development projects.

KIHU is responsible for R&D activities pertaining to Finnish elite sports, the development of expertise, and its realisation during an athlete's path. Even though KIHU's formal duties have remained essentially unchanged, KIHU's strategic position has experienced a significant change. KIHU has changed from an academic research establishment to a service organisation in the elite sports sector and is working more tightly with the Finnish Olympic Committee/the HPU.

It means that a significant part of KIHU's resources are targeted along HPU's goals in elite sport. KIHU and the Finnish Olympic Committee/HPU cooperate in many ways. One prominent example is the elaboration of the so-called Competence Programme, which was

part of the 2017-2020 overall strategy. Further, many research findings are being applied in practice in the Olympic training centres.

KIHU is an independent organisation. It decides on its own what to research and how to do it. This is a source of tension with the HPU. There are tensions between academic and applied research and between research and expert work and services. The tensions reflect a divide between the needs and incentives of researchers and practical users of research. Whereas the institutionally recognised end product of research efforts is a scientific publication, the university reward system does not incentivise the practical application of research results.

This divide exists everywhere but is more predominant in some national contexts. However, in some countries, it is counteracted and modified in various ways. In most countries, the elite sports research centres are integrated with the national training centres. Finland is, together with Brazil and South Korea, the only country covered by the SPLISS-study where this is not the case. The United Kingdom is a prominent example of another way to counteract the potential conflicts between research priorities and practical application through a well-funded institution, which the elite sports organisation governs entirely.

According to some of the interviews, several researchers at KIHU with social science expertise have left the institute in response to HPU's attempt to redirect KIHU's research in favour of potentially practical, applicable natural science research. This reflects important issues in relation to elite sport-related research.

To some extent, KIHU has lost its independence and neutral position. Resources are converted from independent research to more practical work. This is potentially a problem as critical research about HPU is crowded out. The same is the case with a longer-term perspective on Finnish elite sport.

Despite the inherent tensions between the incentives of university researchers and practical application of research, there are many examples of successful cooperation between academics and practitioners. This is also the case when other universities are involved. An example is a project about the use of innovative paint to make the surface of competitive sailing boats more water-resistant.

However, as one interviewee stressed, such success stories depend on scanning research by the HPU and establishing contacts with individual researchers, which is too much influenced by chance and coincidence.

A recent external assessment of KIHU concludes that KIHU has good expertise pertaining to the sports in which it is involved with a particular focus on physical performance and endurance sports (Valtion Liikuntaneuvoston, 2021, p. 6).

According to the assessment, KIHU plays a central role in the R&D activities pertaining to elite sports. However, it is subject to conflicting expectations in the environment:

> "KIHU is expected to form stronger networks with various parties active in the field of elite sports and organisations performing the R&D activities. Views on KIHU's actual activities and activities in which KIHU should be engaged vary greatly between the different stakeholder groups" (Valtion Liikuntaneuvoston, 2021, p. 6).

Further, it is emphasized that:

> "KIHU has comparatively few fundraising activities of its own, and this is a potential development area … KIHU does not monitor the effectiveness or impact of its activities or generate any related reports … In practice, the funding provided by the Ministry of Education and Culture does not involve any type of performance management or any other control processes" (Valtion Liikuntaneuvoston, 2021, p. 6).

The assessment recommendations include:

- The preparation of an elite sports R&D strategy
- Improving communication on KIHU's goals and operations
- Improving the utilisation of a variety of networks outside KIHU
- Boosting operations pertaining to the dissemination of information on KIHU's research operations
- Paying attention to the wellbeing of KIHU's personnel
- Developing effectiveness indicators
- sSrengthening the realisation of equality and non-discrimination principles as part of KIHU's strategy and management system
- Boosting the international aspect of KIHU's operations
- Clarifying the control relationship between KIHU, the Ministry of Education and Culture, and the Olympic Committee
- In particular, the role of the Olympic Committee in decisions on KIHU's funding must be assessed

The external assessment shows that the general weaknesses of the Finnish elite sport system also impact this pillar: The lack of proper goal setting and an explicit strategy as well as monitoring of effects. There are also problems of network governance, and clarification of inter-organisational relationships are needed.

It is important to further develop the cooperation between the HPU and KIHU. It is crucial to maintain the independence and neutrality of KIHU to protect the integrity of its research. However, more can be done to increase the practical application of research in Finland. One way to achieve this is through a marginal change in the funding of research.

It could improve the practical application of research if a minor part of it was withheld, or new funding was granted and used unilaterally by HPU to incentivise research in priority areas of application as well as a means to invite and search for practical research projects more systematically than currently.

One of the interviewees expressed frustration with the lack of openness to applying scientific research among coaches who follow experimental methods without regard for scientific knowledge. The example provided was from ski jumping, where updated scientific knowledge about the biomechanics of the jumping take-off is alleged to be known only by two persons in Finland amidst general ignorance among ski jumping coaches, which is much different from the situation in Norway.

However, this is probably not a general characteristic of the situation in Finland. The SPLISS-study measured the attitudes among elite athletes and coaches to the applicability of scientific research, new technology and innovation in their sport and the opportunities to use it.

Next to Switzerland, Finland is the country where the practical value of scientific research is rated highest among the sample nations by both athletes and coaches. In connection with a generally high educational level, this indicated a strong receptiveness in relation to the application of new science-based training methods and innovative equipment and design.

This is reflected in a relatively high level of dissemination of scientific knowledge among athletes and coaches. In the SPLISS study, Finland was among the countries where the highest share of coaches considered the dissemination of scientific knowledge sufficient. This reflects good communication between the researchers, the HPU, and the individuals responsible for the practical application.

Summing up

Sports science in Finland is mainly concentrated at Jyväskylä University, renowned for world-class research. KIHU is responsible for R&D activities on Finnish elite sports. As in many other countries, there is often a divide between the research theorists and the practical users. However, KIHU has recently changed its focus from academic research to a service organisation in the elite sports sector.

In many respects, the Finnish elite sport system functions well concerning this pillar. However, it suffers from the same governance problems as the system in general. Improvements in goal setting, strategy, implementation and network governance are needed. Further, a marginal change in the funding of sports research to grant HPU better possibilities for incentivising priority application of research while maintaining the independence of KIHU would be an advantage.

An external perspective on the Finnish elite sport system

The many reports and attempts to reform the Finnish elite sport system have to some extent looked abroad for inspiration from successful national models. One of the most detailed reports is by Stenbacka et al. (2018). The search for foreign inspiration has sensibly concentrated on successful models in countries broadly similar in terms of population size, economic level, culture, and political system.

This has mainly been the other Nordic countries and to some extent other small Western European countries. Further, there has been a particular interest in comparisons with the exceptionally successful elite sports system of New Zealand. The research literature includes comparisons with Australia in addition to Nordic comparisons (Green & Collins, 2008).

The premise is that the solutions must reflect the specific Finnish conditions and traditions, and the conclusion has been that it does not make sense to copy other systems wholesale. In particular, copying the structures of the successful Norwegian and Danish models and also the New Zealand system has been considered and explicitly rejected. This is a sensible conclusion. The success of these systems depends on societal and institutional features that do not exist (to the same extent) in Finland.

However, is it possible to copy some other systems' features and adapt them to the Finnish context? This has happened with the establishment of the HPU, which centralises overall responsibility for the elite sport system. There is potential for inspiration and selective copying of some aspects of successful foreign models.

The preceding sections have included occasional comparisons with other Nordic countries. This section provides an external view of the Finnish system from the Danish perspective.

The authors have in-depth knowledge of the Danish elite sport system with a focus on Team Danmark. In the Finnish elite sport debates, there has for good reasons (closeness, geography, role of winter sports) been more emphasis on comparisons with Norway and Sweden. We believe that a closer comparison with relevant aspects of the Danish system may contribute new perspectives to the discussion of elite sports reform in Finland.

Team Danmark

Denmark has never been a superpower in international elite sport, and performance expectations in Olympic Games and other major competitions have been low. However, in the 1970s Denmark suffered a decline in competitiveness.

In the 1972 Munich Olympics, Denmark only won a single medal, and the standing of its top athletes and national teams did not improve much over the rest of the decade. This initiated a political response, which resulted in an Elite Sports Act in the mid-1980s and the establishment of a separate state organisation with responsibility for elite sport, Team Danmark. This has resulted in a gradual development of a coherent Danish elite sport system

with significant impacts on the international standing of Danish elite sport, which has substantially improved since then.

The development is described in Hansen (2012) and Storm (2012). In this section, only a few aspects of this development with relevance for the analysis of the Finnish elite sports model will be outlined. The structure and the specific means of supporting elite sport through Team Danmark are relevant in this context.

However, they are well known in the Finnish elite sport policy community and will not be described here. On the other hand, other features of the Danish model have attracted less attention, but are perhaps more relevant as sources of inspiration concerning reforms of elite sport in Finland.

For instance, similar to the current situation in Finland, the legitimacy of elite sport was weak in Denmark at the time when Team Danmark was initiated. This has radically changed, which is partly caused by general societal changes. Still, it is also a result of the institutionalisation and governance of Team Danmark as an arms-length state organisation.

A Finnish government publication considers whether a separate Elite Sports Act is necessary (Taratsi, 2020). It concluded that this is neither necessary nor appropriate. Whereas the arguments for instead making amendments to the general Sports Act are sensible, the study does not consider the broader processual impacts of having a separate Elite Sports Act.

In Denmark, the process around the initiation of the legislation and the ongoing public discourse about elite sport has had significant long-term impacts on the legitimacy of elite sports. Today, support for elite sport in Denmark is uncontroversial and unquestioned, which was certainly not the case in the 1970s and 1980s (Hansen, 2012).

One of the reasons for this change is the inclusion of a crucial sentence in the Elite Sports Act. Government support was to be provided in a 'societal and socially responsible way'. Elite sports policy has explicitly been framed as part of the welfare state taking responsibility for developing elite sport in a way which is in sync with welfare state norms.

The implications of this conditional support include the explicit prohibition of support for certain problematic forms of elite sport pioneered by Eastern Germany and the Soviet Union, the initiation of dual careers for elite athletes, and a framework for continuous elite sports debate and reform.

After introducing the Elite Sports Act, it has become an essential precondition for support of elite sport that the elite sport system, and Team Danmark in particular, continuously adapt its functioning to what is considered responsible from a societal and social point view.

In other words, the explicit condition for support has become an anchor for continuous correction and adaptation. This has resulted in political and public debate and criticism and subsequent modifications in the form of amendments to the Act with the occurrence of features within the elite sports system which are generally not considered 'societally and socially responsible'.

For instance, this has been the case recently after evidence of coaching methods that were perceived as bullying came to light. It has forced Team Danmark and other actors in the elite sport system to behave in a preemptive way to ensure a continuous adaptation of the system to the prevailing societal norms.

There are similar examples of correction and adaptation in the modern Finnish elite sport system. However, the Danish Elite Sport Act has provided a framework for a more continuous and systematic process that has had profound consequences on the legitimacy of elite sport in Denmark.

The introduction of legislation appears to signal a change from an arms-length to a hands-on regulation by an interventionist state. In practice, this is far from reality. Team Danmark has been allowed to function as an arms-length professional organisation. There has been little direct state intervention, and the 'regulating' state is relatively small.

Only a handful of people are engaged in the administration of sports (including sport for all) in the Danish Ministry of Culture. Far fewer civil servants than in Finland work with elite sport. Team Danmark and the ministry negotiate contracts covering four-year Olympic cycles.

As long as the contracts are not being breached, there is no intervention by the state during the contract periods unless there is media attention on problematic developments in elite sport. Usually, the conduct must be out of sync with societal values, such as doping, bullying and harassment behaviour by coaches and managers and other ethically dubious phenomena for intervention to occur.

Such cases are quickly taken up at the political level due to the requirements of responsible and ethically correct behaviour. Team Danmark and the other actors in the elite sport system are consequently incentivised to take early preemptive measures, which often substitutes for political action to solve the problems.

The earned legitimacy of the elite sport system has wide-ranging impacts. It has allowed Team Danmark to take charge and make decisions despite opposition from other influential actors in the system.

An example of such leadership is the decision to introduce a tiered system of support giving priority to a small number of world-class sports which receive the bulk of the support, a number of development sports and support for individual talents in other sports.

Another effect of the earned legitimacy is the system's robustness in case of scandals. There have been many doping scandals in Danish cycling, one of them involving the high-profile case of Bjarne Riis, the winner of the Tour de France in 1996. None of the scandals has had an impact on the legitimacy of elite sport.

The contrast to the societal effect of the doping scandal at the 2001 World Championships in Nordic skiing is striking. Whereas the impact of the cycling scandal in Denmark was minor and short-term and without influence on neither public nor private funding of elite sport – not even of cycle sport – the effect in Finland was a devastating reputational blow and withdrawal of private funding of sport for almost a decade.

Whereas Danish sports politicians reacted by taking an active role in establishing WADA (the World Anti-Doping Agency), the reaction in Finland was shame and withdrawal (Laine, 2006).

The status of Team Danmark in the Danish elite sport system has not been uncontested. The major national umbrella organisation of sports federations (the National Olympic Committee and Sports Confederation of Denmark, DIF) has attempted to dismantle the system in favour of introducing a system like the Swedish model with no state-led organisation and overall responsibility placed in the umbrella organisation.

These failed efforts have not been guided by substantial criticism of the functioning of the existing system but rather by ideological allegiance to the autonomy of sports organisations and power struggle concerns.

Output: The performance and competitiveness of the Finnish elite sports system

Finland has a glorious past in elite sports. In the years between the two world wars, Finland was one of the best nations in the Olympic Games overall and no doubt the top nation in terms of total medals per capita. After World War II, international competition increased, and the number of Finnish medals declined.

However, Finland was still among the top 20 nations in the Olympic Summer Games until the 1980s and among the top 10 nations in the Olympic Winter Games until the early 1990s. Since then, results in the Olympic Games have been at a much lower level, particularly in the Summer Olympics.

The following analysis of output will look at the development of the international competitiveness of Finnish elite sports in general. The results in the Olympic Games will be studied in more detail. This includes not only medals but also top-8 results and other general performance indicators. The analysis of the results in Olympic sports also includes annual results in the years between the Olympics.

In addition, the performance of Finland in the major team sports is analysed in some detail. Further, the results of Finnish athletes in non-Olympic and paralympic sports are also analysed. Ideally, international elite sport competitiveness measures should include all sports, and weighing the results in different sports should reflect the relative popularity of each discipline and sport. The analysis will consist of two such measures.

When analysing the development of the international competitiveness of Finnish elite sports, it is important to interpret the trends in a broader context. It is evident that the international context matters.

From the 1950s until the collapse of the communist regimes in Eastern Europe and the Soviet Union, international elite sports results were heavily influenced by the unequal conditions as an effect of state amateurism in Eastern Europe and the Soviet Union (Dennis & Grix, 2012). This changed in the 1990s.

Boycotts heavily influenced the results of the Olympic Games in 1980 and 1984. Since the 1990s, the number of countries has increased (including 15 and 7 new countries after the dissolution of the Soviet Union and Yugoslavia, respectively). This has radically changed the competitive conditions and more so in some disciplines than others. Further, in recent decades, government funding of elite sports has increased substantially in many countries, altering and sharpening the international competition (De Bosscher et al., 2006).

As a yardstick in evaluating the development of the Finnish performance, we will use a comparison with countries of a similar size and with similar levels of economic, social, and cultural development as Finland. Most relevant is a comparison with the Scandinavian countries (Denmark, Norway and Sweden in the Summer Olympic Games; Norway and

Sweden in the Winter Olympic Games). This will be supplemented with comparisons with New Zealand, which is the most successful small country in Olympic summer sports.

Most analyses of international elite sport competitiveness focus on results in the Olympic Games, or more generally, on sports and disciplines at the Olympic Summer and Winter Games. There are good reasons for this focus. Olympic sports attract much political and media attention because of the visibility and popularity of the Olympic Games.

The results in the Olympic sports are generally seen as a reliable indicator of the performance level of national elite sport systems (Storm et al., 2016). The worldwide increase in government funding of elite sports is mainly motivated by efforts to improve performance and medal tallies in the Olympics. Consequently, the level of competitiveness is much higher in Olympic sports than in other sports.

There are several ways to measure national performance at the Olympic Games. First, the medal table shows the ranking of nations according to first gold medals, then silver medals in case of equal numbers of gold medals, and finally bronze medals in case of equal numbers of silver medals.

It is most often this measure which is prominent in the media. However, it is a flawed measure that attaches disproportional weight to gold medals in relation to other medals. It means, for instance, that a nation with only gold medals is ranked higher than nations with no gold medals but many other medals. A second measure ranks nations in accordance with the number of medals.

This does not suffer from the flaws of the medal table, but it may be seen as flawed in another way as it attaches equal weight to all medals. In any case, both the first and the second measure distinguish sharply between medals and places just outside the medals. Often, there are only marginal differences between medals and a place as number 4 or 5, and this may be caused by coincidence and marginal factors that do not reflect real differences in competitiveness.

A third measure takes account of this by including rankings close to the medals. In the following, we include such a measure including top-8 rankings in all Olympic disciplines with declining weights (gold: 8 points, silver: 7 points, bronze: 6 points, no. 4: 5 points … no 8: 1 point).

A fourth measure is the number of participants in the Olympics. In the past, this was not a reliable measure as each national Olympic committee was free to send participants without many formal constraints. However, formal qualification criteria introduced in recent decades make the number of participants more reliable as a performance measure.

The following analysis applies all four measures in an evaluation of the development of the Finnish performance in the Olympic Games. The Games only take place every fourth year. These are important milestones. However, focusing only on results in Olympic Games

while ignoring what happens in the years in-between the Olympics may give a distorted impression of the development of national competitiveness.

Compensating for this problem, we supplement the measures based on the performance in the Olympic Games with the same measures based on results in the Olympic disciplines in the years in-between the Olympics.[11]

The Olympic Summer Games: Medal table

Table 2 shows the medal table rankings for Finland and comparable countries in all Olympic Summer Games since 1920. Finland was among the best four nations in the three Olympics in the 1920s and maintained a very high ranking in all Olympics in the 1930s and the two first Olympics after World War II.

Table 2: Medal table ranking in Olympic Summer Games 1920-2020, selected nations

Games	Finland	Denmark	Norway	Sweden	New Zealand
1920	4	10	6	2	22
1924	2	12	7	8	23
1928	3	13	19	4	24
1932	7	20	No medals	4	22
1936	5	23	18	7	20
1948	6	10	19	2	No medals
1952	8	15	10	4	24
1956	13	20	22	6	16
1960	17	13	21	16	14
1964	12	18	No medals	17	12
1968	24	22	25	20	27
1972	14	25	21	11	23
1976	11	24	21	12	18
1980	12	16	No participation	11	No medals
1984	15	27	28	16	8
1988	25	23	21	32	18
1992	29	30	22	27	28
1996	40	19	30	29	26
2000	31	30	19	18	46

[11] Number of medals and top-8 points are calculated for each year in-between the Olympic Games. Results from world championships, world cups, world rankings or similar competitions are included for each of the disciplines at the programme of the forthcoming Olympic Games. The results are modified to fit the Olympics when the number of participants per discipline and the competition criteria (for instance whether there is a bronze medal match or two bronze medals) in the world championships in the years in-between the Olympic Games are different from the Olympics.

2004	62	34	17	19	24
2008	44	30	22	55	25
2012	60	29	35	37	15
2016	78	28	74	29	19
2020	85	25	20	23	13

Source: Data extracted from various websites.

After hosting the Olympics in 1952, Finland has never again been in the top 10 but remained in the top 20 in every Olympics until 1988 apart from 1968. Since then, the ranking of Finland has declined significantly from 31 (average 1988-96) to 46 (average 2000-08) and 74 (average 2012-20). The decline reflects a lower number of medals, and the steep decline in the most recent Olympics reflects the fact that Finland has only won one single gold medal in the last five Olympics.

The comparison with the other Nordic countries shows a slightly similar development regarding Sweden until the last two decades. Sweden was also a superpower in international elite sports until the 1950s. Sweden was a top-10 nation in every Olympics until 1960 and since then ranked in the top-20 until 1988. Since then, the ranking of Sweden has stabilised around number 30 in the rankings (average rankings in 1988-96, 2000-08 and 2012-2 were 29, 32 and 30, respectively.

The ranking of Norway has been remarkably stable. It has been ranked as no 18-25 in all Olympics since 1928 apart from a few outliers (1952, 1984, 1996 and 2012-16). Similarly, the ranking of Denmark has not varied much over the years. Denmark was ranked among the top 25 nations in all Olympics until 1980 with an average rank as number 17. In the ten Olympics since then, Denmark's average ranking has been number 27.5 with very little deviation from the average and marginal improvements in the last four Olympics.

Table 2 also shows the rankings of New Zealand. Contrary to all the Nordic countries New Zealand has improved its ranking significantly in the last three Olympics and has become a top-20 nation.

The Olympic Summer Games: Number of medals

The declining performance of Finnish athletes in the Summer Olympics is evident when measured in terms of medals won in each Games as shown in table 3. In the mid-war period, Finland never won less than 25 medals. Finland won more than 10 medals in all Games in the period 1948-1960, and since then only in 1988. The average number of medals declined to 4.3 medals per Games in 1992-2004 and further to only 2.5 medals per Games in the last four Olympics. This decline in the number of medals has happened despite a huge increase in the number of events in the Olympic Summer Games from 129 in 1936, to 203 in 1980), 300 in 2000 and 339 in 2022.

Table 3: Medals in Olympic Summer Games 1920-2020, selected nations

Games	Finland	Denmark	Norway	Sweden	New Zealand
1920	26	13	31	64	1
1924	34	9	10	29	1
1928	37	6	4	25	1
1932	25	6	0	23	1
1936	25	5	6	20	1
1948	19	20	7	44	0
1952	20	6	5	35	3
1956	22	4	3	19	2
1960	15	6	1	6	3
1964	5	6	0	8	5
1968	5	8	2	4	3
1972	4	1	4	16	3
1976	8	3	2	5	4
1980	6	5	No participation	12	0
1984	8	6	3	19	11
1988	12	4	5	11	13
1992	4	6	7	12	10
1996	5	6	7	8	6
2000	4	6	10	12	4
2004	4	8	6	7	5
2008	2	7	9	5	9
2012	4	9	4	8	13
2016	3	15	4	11	18
2020	1	11	8	9	20

Source: Data extracted from various websites.

Among the Nordic countries, Denmark stands out in relation to medals won. Denmark was never a superpower in Olympic sports and until the last two Olympics, Denmark never won more than 10 medals – apart from the atypical 1948 Games. In the period 1952-2000, the number of medals won by Danish athletes was remarkably stable with 5.2 medals on average per Games. Since then, the average has increased to 10 medals per Games with 15 and 11 medals in the last two Games.

Until the collapse of state amateurism in Eastern Europe, the performance of Norway was stable at a relatively low level. In the period 1952-1988, Norway never won more than 5 medals per Games. With the changed competitive context this improved to an average of 8 medals per Games in 1992-2008. Norway was again at this level in 2020 after two sub-par Games.

Sweden had been one of the best performing nations since the start of the Olympic Summer Games, but the golden age ended with only 6 medals in 1960. Since then, the trend has been less clear than in the other Nordic countries. However, there has been a slight decline in the most recent Olympic Games. In 1972-2000, Sweden won more than 10 medals in six of the eight Games. Since then, it has happened only once in four Games.

New Zealand did not win more than five medals in any Games until 1984. Its improvement since then has been particularly significant in the last two Olympics with 18 and 20 medals, respectively.

This shows that it is possible for a country to increase the number of medals in the current international competitive context. New Zealand, and to a lesser degree Denmark, represent striking contrasts to Finland in relation to medals at Olympic Summer Games.

The Olympic Summer Games: Top-8 points

Top-8 points show the extent to which each nation is competitive at a high level in a broad range of events. Whereas the data for medal table rankings and number of medals are heavily influenced by small margins and other factors which have only little to do with international competitiveness, this is much less the case for data that includes rankings in the top 8 per event. For small nations, this is particularly relevant as an indicator of the capability of an elite sports system of promoting excellence across sports.

Table 4 shows the development in the top-8 points for the Nordic countries and New Zealand. The trends are highly evident. Finland is the only country experiencing a significant decline. Since 2000, the average sum of top-8 points in the Olympics is about one-third of the average in the period 1964-1996. There was an improvement in 2020 compared to 2016 but Finland's top-8 points in the Tokyo Games were still one of the lowest ever. Sweden does almost as well after 2000 as in 1964-1998. Norway has improved much since 2000 compared to 1964-1996.

Table 4: Top-8 points in Olympic Summer Games 1996-2020, selected nations

Games	Finland	Denmark	Norway	Sweden	New Zealand
1964-1998 (average)	92	68	71	160	71
2000	48	92	145	145	63
2004	21	98	127	127	96
2008	51	87	106	106	124
2012	35	148	123	123	171
2016	14	135	30	131	204
2020	30	135	87	134	195

Source: Own calculations.

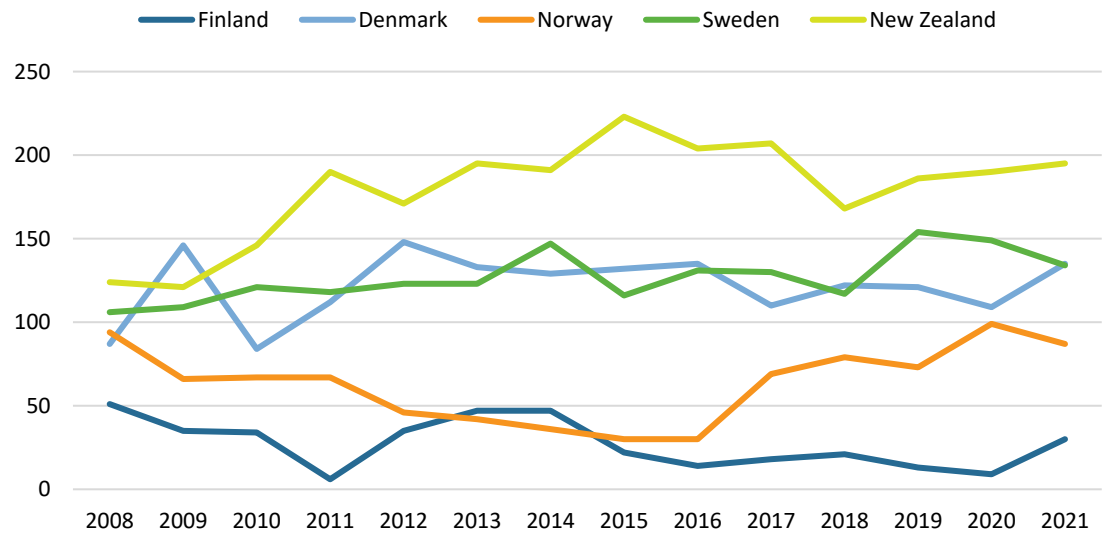
However, Norway's top-8 performance has declined significantly in the last two Olympics, contrary to its performance measured by medals. It seems that the Norwegian elite sports

system is capable of developing Olympic medalists out of a relatively low number of internationally competitive athletes.

Denmark has increased its top-8 points significantly in the last three Olympics and is now the best Nordic nation by this measure. New Zealand has experienced a steady increase of top-8 points since 2000 and is now clearly at a higher level than the Nordic countries.

Figure 12 shows the top-8 points for every year since 2008. The calculation of the figures in the years in-between the Olympic Games can be seen as a kind of simulated Olympic Games. For each discipline, the top-8 rankings in the annual world championships or the official world rankings are added up to a sum equivalent to what it would have been if there had been an Olympic Games in those years.

Figure 12: Annual top-8 points in Olympic Summer sports 2008-2021



Source: Own calculations

The figure is meant as a supplement to the data in table 4. The data fluctuates from year to year, but generally top-8 points in the years in-between the Olympic Games are at level with the figures at the Olympic Games. However, there are differences. Denmark does consistently better at the Olympic Games than in the preceding years in each Olympic cycle.

The opposite has most often been the case for Norway. Sweden has performed marginally better in Olympic Games than in the years before each Games whereas there is no clear trend for New Zealand. The decline in top-8 points for Finland is also evident from these data. The top-8 performance was better every year except one in the period 2008-2015 compared to the years since then.

In the Tokyo Olympics, Finland improved not only compared to 2016 but also compared to the four years since the previous Olympics, so this is a kind of renaissance. However, the top-8 points at the 2020 Olympics were still lower than in all years from 2008 to 2014, apart

from one. Further, Finland has experienced years with very weak results (2011, 2016, 2019 and 2020), with very few athletes ranked in top-8 in any discipline.

The Olympic Summer Games: Number of participants

Much fewer Finnish athletes qualify for the Olympic Summer Games compared to other Nordic countries and New Zealand as shown in table 5. Norway comes close, but in the 2020 Games, the number of qualified Norwegian athletes was almost double the Finnish number.

There has been a steady decline in the number of qualified athletes, and in 2020, fewer Finnish athletes qualified than in any of the preceding Olympics. Denmark has significantly improved its performance in the last two Olympics without an increase in the number of qualified athletes. The same is the case with New Zealand with only a moderate increase in the number of qualified participants.

Table 5: Participating athletes in Olympic Summer Games 1996-2020, selected nations

Games	Finland	Denmark	Norway	Sweden	New Zealand
1996	76	119	98	177	97
2000	70	97	93	150	151
2004	53	92	52	115	148
2008	58	84	85	124	182
2012	56	113	66	134	184
2016	54	121	62	152	199
2020	45	108	85	136	213

Source: Data extracted from various websites.

Finland in the Olympic Summer Games: Medal-winning sports

Table 6 shows which sports won medals for Finland in the Olympic Summer Games 1920-2020. Almost three-quarters of all medals (71%) were won in only two sports (athletics and wrestling with 114 and 83 medals, respectively). The share of medals won by these two sports has declined significantly over the years. Until 1952, athletics and wrestling won together 154 of 212 medals (73%). The share was 48% in 1956-1988 and 36% (9 of 25 medals) in 1992-2020.

Finland has also won many medals in gymnastics. In the period 1920 to 1968, Finnish gymnasts won 25 medals but none since then. In the five most recent Olympics (2000-2020), Finland has won medals in athletics (3) and wrestling (2), but more in shooting (4) and sailing (3).

Table 6: Finland's medals by summer sports 1920-2020

	Total	1920-1952	1956-1988	1992-2020
Athletics	114	86	22	6
Wrestling	83	68	12	3
Gymnastics	25	21	4	0
Shooting	21	11	6	4
Boxing	16	7	6	3
Sailing	11	6	2	3
Canoeing	10	9	0	1
Rowing	7	1	5	1
Mod. Pentahlon	5	1	4	0
Swimming	5	2	0	3
Archery	4	0	3	1
Weightlifting	3	0	3	0

Source: Data extracted from various websites.

The decline in the number of medals won in the sports in which Finland has traditionally excelled in the Summer Olympics can partly be explained by the broader competitive context in athletics and wrestling. Athletics is the sport with the toughest international competitive environment.

There are few technological and material constraints, making it possible for far more countries to be competitive than in other sports. Also, many countries with a far larger number of athletes have become competitive and European nations win fewer medals than previously, and it is not strange that Finnish athletics cannot maintain its previous position.

However, Finnish athletics experienced a revival in the Olympic Games during the 1970s and 1980s with 16 medals in total after having won only three medals in the three previous Olympics. This happened despite increasing international competition, including the dominance of athletes from the Soviet Union, East Germany, and other Eastern European countries. The collapse of the communist sport support systems gave better opportunities for Finnish success in the 1990s, but the opposite happened. Finland won only three medals in athletics in the 1990s and only six medals since 1988.

The decline in the number of medals won by Finnish wrestlers has also been particularly significant after 1988. This decline can to a large extent be explained by the strength of wrestling in the former Soviet Union. After the collapse of the USSR, 15 new nations were established.

Almost all of them win medals and are competitive in wrestling at an international level. Where Finnish wrestlers up until 1998 only had one opponent from the Soviet Union, they must now compete with almost equally strong wrestlers from all the 15 new nations. It is no wonder that Finnish wrestlers have been unable to win as many medals as previously.

In sum, the decline in Finland's results at Olympic Summer Games can to some extent be explained by the fact that the sports in which Finnish athletes have traditionally excelled have experienced particularly challenging changes in the international competitive context.

However, the distribution of Olympic medals across different sports also reflects the fact that the Finnish elite sports system has been unable to develop medal-winning athletes in other sports to an extent that could compensate for the fewer medals won by athletics and wrestling. Only a few athletes from other individual Olympic summer sports are at the world-class level. This is reflected in the low number of athletes receiving individual support from the Finnish Olympic Committee.

The Olympic Summer Games: Actual versus expected performance

Different nations have varying preconditions for doing well in elite sports. As mentioned in the earlier section on macro-level input, prior research (de Cocq et al., 2021; Storm et al., 2016) has shown that how big and rich a country is, is important for the international competitiveness of the elite sport system in question.

It is self-evident that economic strength and population size influence how well a nation performs in international elite sport competitions. Research shows that about half of the difference in competitiveness can be explained by these two variables. Other macro conditions such as political system, geography, population density, religion, and other cultural factors also influence how well a nation perform in elite sport.

The Danish Institute for Sports Studies has developed a unique method for evaluating whether nations do better or worse than you would expect from more or less advantageous macro conditions such as population and income level. The method compares the expected performance in the Olympic Summer Games with the actual outcomes.

In the calculations of a nation's expected performance, two of the variables are GDP per capita and population. Differences in religion and political system are also included in a regression model[12] for all nations with top-8 points to model the relation between these variables and actual performance as measured by top-8 points.

The model shows how well a nation performs when these macro conditions are taken into account. The calculations result in a residual for each nation. This can be either positive or negative. If it is positive, a nation's actual performance is better than expected. If it is negative, it is the other way round. The size of the residual shows how much a nation overperforms or underperforms.

[12] The regression model calculates the expected top-8 performance for a specific year based on the included nation's population, GDP, population density, and whether the nations were part of the Eastern bloc, are communist, or Muslim. The expected calculated performance is compared to the actual realised performance to show whether each of the included nations 'punch below or above their weight'. Model specifications are explained in Storm, Nielsen, and Thomsen (2016).

Table 7 shows the residuals for the ten nations with the highest residuals in 2016, 2017, 2018, and 2019, i.e., the most 'overperforming' countries in these years. The two highest-ranked nations in 2019 are Jamaica and Kenya, which are 'monocultures' with respect to elite sports like several other countries on the list. This means that they are only competitive in one or a few sports/disciplines. The only countries that are competitive on a broader set of sports/disciplines and have positive residuals among the top 10 are New Zealand, Australia, the Netherlands, and Great Britain.

Table 7: Ranking of nations according to 'residual'

	2016		2017		2018		2019	
	Ranking	Residual	Ranking	Residual	Ranking	Residual	Ranking	Residual
Jamaica	1	2.65	1	1.93	1	2,21	1	2.49
Kenya	2	2.14	4	1.61	2	1,70	2	1.68
Grenada	4	1.61	59	-0.04	-	-	3	1.64
New Zealand	3	1.90	3	1.69	3	1,47	4	1.48
Australia	8	1.49	5	1.36	5	1,38	5	1.46
Uzbekistan	35	0.65	17	0.90	9	1,19	6	1.28
Ethiopia	7	1.59	15	1.01	10	1,19	7	1.26
Netherlands	13	1.18	8	1.20	6	1,32	8	1.22
Mongolia	11	1.23	2	1.91	13	1,04	9	1.20
Great Britain	5	1.59	7	1.26	12	1,09	10	1.13
Denmark	12	1.21	22	0.77	17	0,87	25	0.76
Sweden	24	0.82	32	0.58	38	0,47	30	0.67
Norway	81	-0.57	50	0.09	49	0,22	53	0.01
Finland	94	-0.95	84	-0.93	82	-0,78	102	-1.34

Source: Own calculations. Ranking according to 'residual', i.e., over/underperformance in Olympic Summer sports in relation to macro-level conditions – ten highest-ranked nations in 2019 plus the Nordic countries

The table also shows the residuals for the Nordic countries in the four recent years (2016-19). The figures show that Denmark and Sweden consistently overperform. Norway underperformed in 2016, where it had an unusually bad Summer Olympics, but has since then overperformed – which has also been the case in all other years as shown in data not included in the table.

Finland on the other hand is consistently underperforming. The numerical value of the residual is often higher than the size of the positive residuals of the other Nordic countries. This means that Finland underperforms more than the other Nordic countries overperform. In terms of ranking of countries according to the residuals, Finland is very low. In 2019, Finland was in the bottom fifth of all countries with top-8 points.

The Olympic Winter Games: Medal table, number of medals and top-8 points

In this section, the performance of Finland in the Olympic Winter Games will be analysed by applying the same measures as used above. The section includes tables with similar data as included in the analysis of Finland's performance in the Olympic Summer Games. However, the different measures show – to a large extent – identical patterns, so the presentation of the analysis is much briefer and more condensed than the analysis of the tables above covering the Summer Games.

Further, no calculations of overperformance/underperformance (residuals) exist for the Winter Olympics sports which are much more dependent on climate and geography in a way which is difficult/impossible to model properly. The international comparison involves only Norway and Sweden, as Denmark and New Zealand are irrelevant in this respect.

The ranking of Finland on the medal table has declined significantly as can be seen in table 8. Finland was a top-10 nation in 14 of 16 Olympic Winter Games from 1924 to 1992. Since then, Finland has been ranked in the top 10 only once. In the medal tables in the last four Olympics, Finland has been ranked lower or equal (number 16-24) than in all the previous Olympics. This is not (mainly) because Finland wins fewer medals than before.

Table 8: Medal table ranking in Olympic Winter Games 1924-2020, selected nations

Games	Finland	Norway	Sweden
1924	2	1	7
1928	4	1	3
1932	5	2	3
1936	4	1	3
1948	8	1	1
1952	3	1	10
1956	3	7	5
1960	6	4	5
1964	4	3	7
1968	10	1	7
1972	15	7	10
1976	6	4	14
1980	7	8	5
1984	4	6	5
1988	4	12	5
1992	8	3	13
1994	16	2	10
1998	11	2	17
2002	8	1	19
2006	19	13	6
2010	24	4	7
2014	18	2	14
2018	18	1	6
2022	16	1	5

Source: Data extracted from various websites.

Table 9 shows that there is only a marginal – if any – reduction in the number of Finnish medals over time. However, this stability represents a relational decline. The number of sports and events in the Winter Olympics has increased significantly over the years which means that a stable number of medals represents a significant decline in the share of medals. The number of events increased from 17 (in 1936) to 39 in (1984), and from 68 (in 1998) to 109 in the most recent Games in 2022.

Table 9: Medals in Olympic Winter Games 1924-2020, selected nations

Games	Finland	Norway	Sweden
1924	11	17	2
1928	4	15	5
1932	3	10	3
1936	6	15	7
1948	6	10	10
1952	9	16	4
1956	7	4	10
1960	8	6	7
1964	10	15	7
1968	5	14	8
1972	5	12	4
1976	7	7	2
1980	9	10	4
1984	13	9	8
1988	7	5	6
1992	7	20	4
1994	6	26	3
1998	12	25	3
2002	7	25	7
2006	9	19	14
2010	5	23	11
2014	5	26	15
2018	6	39	14
2022	8	37	18

Source: Data extracted from various websites.

The other two Nordic winter sports nations have performed much better than Finland and have increased both medals won and medal table rankings. Norway was the top-ranked nation in five of the first six Winter Olympics and again in 1968.

However, in the period 1956-1988, winter sports athletes from the Nordic countries were handicapped by unequal conditions in the competition with the state funded athletes from the Soviet Union and Eastern Europe which meant lower rankings and a declining share of the medals.

From 1992, the situation changed radically with the collapse of the support systems in the former communist countries together with the establishment of Olympiatoppen and the extraordinary efforts before the hosting of the Games in 1994. Norway has since then most often been ranked first or second and apart from 2006 always among the top four nations.

In the last two Olympics, Norway was top of the leaderboard with far more medals than ever before. Sweden did not improve its ranking and number of medals in the 1990s as Norway did. However, from 2006, the performance of Swedish athletes at the Winter Olympics has improved significantly with more than 10 medals in every Games and ranking in the top 10 in four of five Olympics since then.

Table 10 with data about top-8 performance shows the same trends although less drastically. The performance of Finland measured by top-8 points was at a lower level in the four most recent Olympics than in 1998-2006. However, the performance improved marginally since 2010. Both Norway and Sweden have increased their top-8 points sum significantly in the last two Olympics, and even with the improvement in the 2022 Olympics, Finland has less than half the number of points of Sweden and less than a fourth of the Norwegian top-8 points.

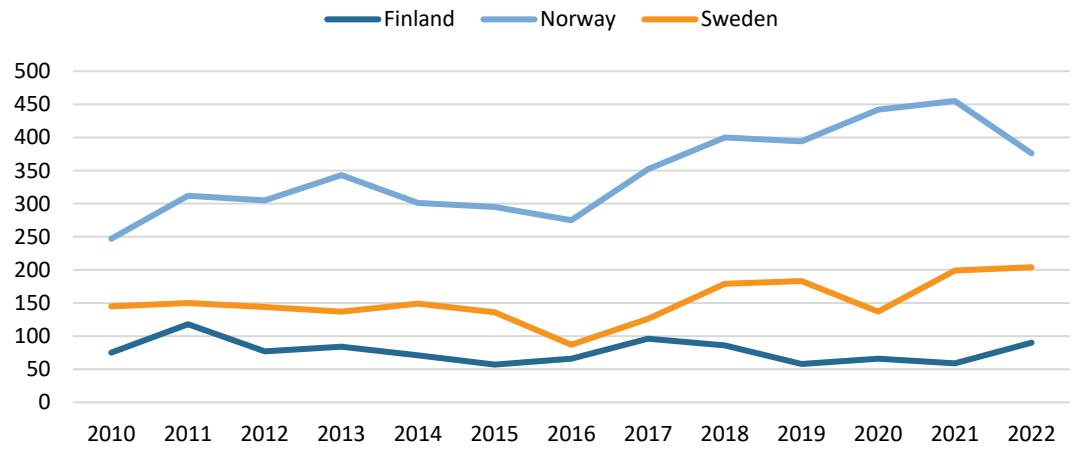
Table 10: Top-8 points in Olympic Winter Games 1998-2022, selected nations

Games	Finland	Norway	Sweden
1998	117	243	42
2002	102	266	79
2006	110	239	150
2010	75	247	145
2014	71	301	149
2018	86	400	179
2022	90	376	204

Source: Data extracted from relevant websites.

Figure 13 provides data on the top-8 points in all years including the years in-between the Olympic Games. The figure shows that the years prior to the Beijing Olympics were the worst since 2011. The much-improved performance in 2022 may reflect a turning point and a more permanent higher level. However, the performance in the three preceding years in the last Olympic cycle signals otherwise.

Figure13: Annual top-8 points in Olympic Winter sports 2010-2022



Finland in the Olympic Winter Games: Medal winning sports

Finland relies on only a few sports to win medals in the Winter Olympic Games. Table 11 shows that only cross-country skiing and ice hockey have contributed to the medal portfolio in the last four Olympics. The improved performance in 2022 was solely caused by a significant improvement in the performance of the Finnish cross-country skiers.

Table 11: Finland's medals by winter sports, 1924-2022

	1924-2022	2002	2006	2010	2014	2018	2022
Cross-country skiing	86		1	2	3	4	6
Speed skating	24						
Ski jumping	22	2	2				
Nordic combined	14	4	1				
Ice hockey	11		1	2	1	1	2
Biathlon	7						
Freestyle skiing	4	1	1				
Snowboarding	4	1					
Figure skating	2						
Alpine skiing	1		1				
Curling	1		1				

Source: Data extracted from relevant websites.

In the history of the Games, cross-country skiing has by far been the most successful sport with almost half of all medals won. The competitiveness of Finnish cross-country skiers declined in the aftermath of the doping scandals at the 2001 World Championships in Lahti, which is reflected in the low number of medals in the Games from 2002 to 2010. Ice hockey has become a reliable medal-winning sport with the women's team almost constantly winning bronze medals and the men's team also often among the top 3 and gold medal winners in 2022.

The second, third, and fourth-most medals have been won in speedskating, ski jumping and Nordic Combined. Finland has won no speed skating medals since 1968, and no medals in ski jumping and Nordic Combined since 2006. What's worse is that there have been no medal prospects and almost no athletes in top-8 in any of the three sports in the last decade. The same is the case with the Finnish biathletes with a couple of exceptions.

Finland has athletes in top-8 in some of the new alpine sports (freestyle and snowboarding), so the addition of many new events to the Winter Olympic programme should in principle not be to its disadvantage, but the medal prospects of Finland have become too dependent on the performance of its cross-country skiers.

Their performance in 2022 was much better than in the preceding years in the Olympic cycle where Norway almost won all championships and a large share of the medals. The

Norwegian skiers performed much worse in 2022. Finland's prospects are dependent on the question of whether this was an atypical exception or the start of a new trend.

Team sports

Team sports do not contribute much to the total number of events at the Olympics with only eight sports (both men and women) in the Summer Olympic programme and one sport in the Winter Olympic programme. The number of team sport events in the Summer Olympics is almost equivalent to the number of medals to be won in judo (15). This may be seen as a flaw when using the Olympic results as an indicator of the international competitiveness of nations' elite sport systems.

In this context, team sports should be given much more weight. In other words, if Finland does well in popular team sports with a large geographical spread, many participants, media interest, sponsorships, and private investments this might compensate for the poor performance in individual Olympic sports.

Finland is doing very well indeed in one major team sport. Finland is currently ranked number 1 and 3 in men's and women's ice hockey, respectively. Finland's men's ice hockey team has always been in the best group but did not win its first medal in the world championships until 1992. Since then, Finland has won medals in seven of ten Olympic Games and 15 of 29 world championships.

The Finnish women's ice hockey team has won medals in four of seven Olympic Games and 14 of 20 world championships and is becoming almost entrenched as number 3 in the IIHF's official world ranking. The improvement in Finnish results since 1992 only partly reflects the sporting effects of the collapse of the Soviet Union and the communist regime in Czechoslovakia. Finland has also become more competitive against traditional ice hockey superpowers like Canada and Sweden, and Finnish ice hockey's international performance is even on an upward trend.

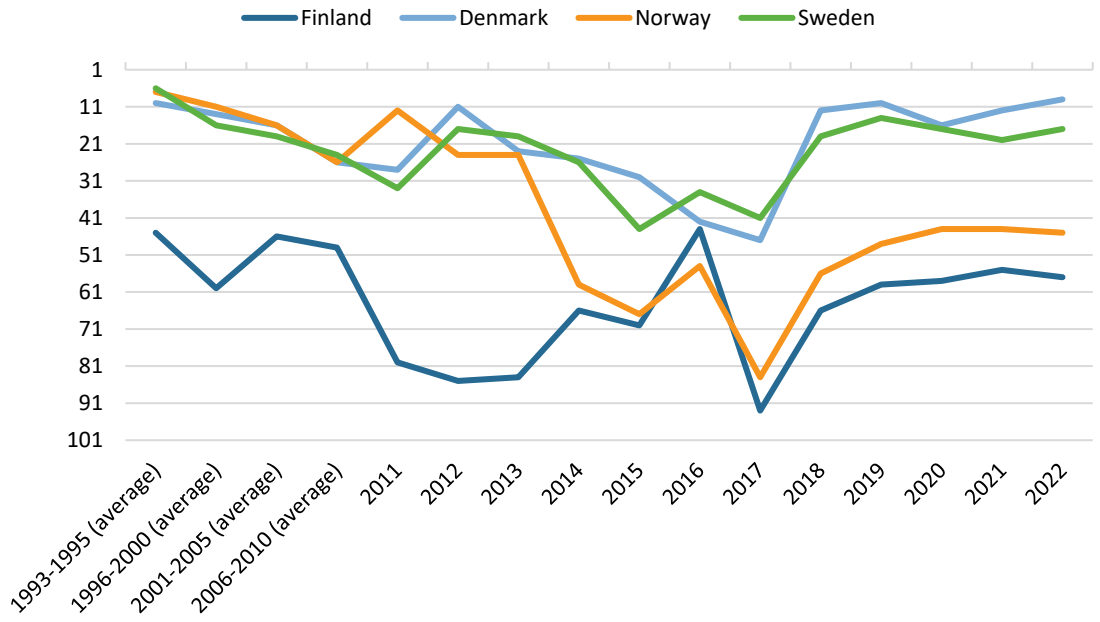
The other major team sport in Finland, and indeed the most popular sport globally, is football. Finnish football has experienced some success recently. The male team qualified for the finals in the European championship in 2021. Finland has also qualified for the finals in the European championships in women's football in 2022 and the European futsal championships in 2022. Only five European nations managed to qualify for all three tournaments. However, Finnish football is still at a rather low level compared to the other Nordic nations and the improvement in recent years.

Figure 14 shows FIFA's world ranking for men's teams. Finland's ranking is consistently at a much lower level than Denmark and Sweden and consistently lower than Norway. The improvement in the ranking of Finland in recent years is modest, and Finland's ranking is still lower than in the 2000s.

Finland has only qualified for the finals in EURO 2021 and never for the FIFA World Cup finals. The fact that Sweden, Denmark, and Norway have qualified for 12, 6 and 2 World

Cups and 7, 7, and 1 European championships, respectively, shows the extent of the gap between Finland and the other Nordic countries.

Figure 14: FIFA world ranking, men

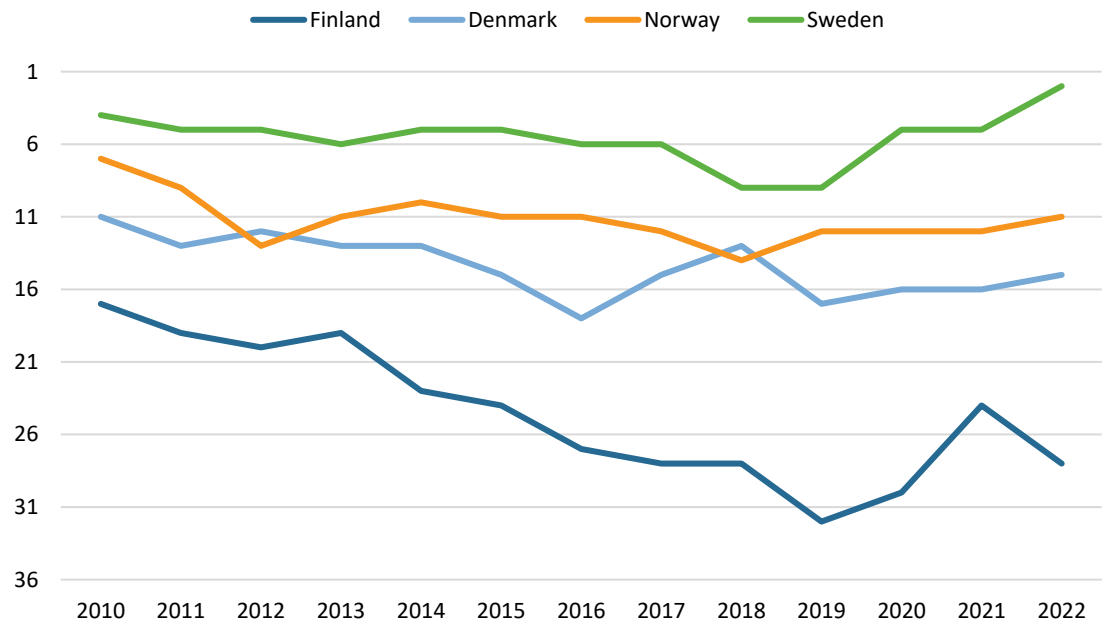


Source: Figures and calculations based on the first FIFA ranking each year: www.fifa.com. Ranking on the X-axis.

Figure 15 shows similar differences in FIFA's world ranking for women's teams. Finland is also here ranked consistently lower than the other Nordic countries, although the gap in terms of ranking is smaller than in men's football.

Whereas Finland has only qualified four times for the finals of the European championships and never for the FIFA World Cup, Sweden, Norway and Denmark have qualified for the World Cup 9, 8 and 4 times, respectively, and for the European championship 11, 12, and 8 times, respectively.

Figure 15: FIFA world ranking 2010-2022, women



Source: Figures and calculations based on the first FIFA ranking each year: www.fifa.com, the first year of ranking was 2003. Ranking on the X-axis.

On the other hand, Finland is clearly the best Nordic nation in futsal. Finland has won five of the six futsal Nordic championships it has participated in. Currently, Finland is doing better than ever. In 2022, the Finnish futsal team participated in the European championship finals for the first time as the first Nordic nation. Its final ranking was number 7. Finland is ranked number 18 in the world. The next-best Nordic nation (Denmark) is number 67.

Finland is doing well and is by far the best among the Nordic countries in men's basketball and men's volleyball. In basketball, Finland is currently ranked number 35 in the world and number 17 in Europe. It has participated in 17 of 41 European championships. Finland has qualified for the finals in the last five championships – twice being ranked as number 9. The men's volleyball team is also clearly better than its Nordic competitors. It is currently number 28 in FIVB's world ranking.

Further, in volleyball, Finland has participated in 19 of 32 European championships finals, including all eight championships since 2007, with a fourth place in 2007 and two eight places as the best results. Finnish men's basketball and volleyball teams are not at the highest level in the world. However, the achievements should not be underestimated considering the strong world-level competition in the two sports with a very high number of serious contenders.

The women's teams in basketball and volleyball are not at the same level. The basketball team is the third-best among the Nordic countries and has a world ranking as number 63. The volleyball team is ranked number 41 and is together with the Swedish national team best among the Nordic countries.

In handball, on the other hand, Finland is lagging far behind Denmark, Norway and Sweden which are all among the top nations in the world for both men and women. The Finnish men's team was number 14 in the world championship in 1954, but has not qualified for the finals since then.

The Finnish men's handball team has never qualified for the finals of the European championships. In the qualification for the 2022 European championship, the team was eliminated in the first qualification phase, which corresponds to a European ranking as number 32-36. The women's team has never qualified for the finals in a major championship.

Finland is not competitive in the four Olympic team sports which have not been mentioned so far (baseball/softball, field hockey, rugby 7s, and water polo). Thehighest current world ranking is number 53 for the women's rugby 7s team, and the best tournament result is 13th place in the men's water polo European championships in 1970.

Two of the most popular team sports worldwide (cricket and rugby union) are not included in the Olympics. Finland has a low rank as number 60 in cricket and number 88 in rugby union and is ranked last and second-last, respectively, among the four Nordic countries.

However, Finland excels in three other team sports which are also not part of the Olympics. In Finland, floorball is a very popular sport. Finland is currently ranked number 2 in the world after Sweden in both men's and women's floorball. Sweden and Finland have four titles each from the last eight men's championships. In the women's championships, Finland has won medals (6 silver and 2 bronze) in the last eight world championships.

Bandy is another sport where Finland wins medals in almost all world championships. This has happened in 31 of 39 tournaments. Finland is the third-ranked nation in the world.

Both floorball and bandy are small sports where only a few nations are serious competitors. The same is the case with American football outside of North America where Finland has historically been the best nation in Europe with five championships and nine other medals in the 15 championships from 1983 to 2021.

Paralympics

Table 12 and table 14 show the rankings of the Nordic countries in the medal tables in the Summer and Winter Paralympics. The rankings have an overall declining trend for all Nordic countries in both the Summer and Winter Paralympics. Finland's rankings are marginally lower than the ranking of the other three countries in the Summer Paralympics.

Finland does marginally better in the Paralympics than in the Summer Olympics whereas it is the other way round for the other Nordic countries. The same is the case in the Winter Paralympics. In the first eight Winter Paralympics, Finland and Norway were always

ranked in the top 10. However, only once in the last five Winter Paralympics has a Nordic country been in the top 10.

Table 12: Medal table ranking in Summer Paralympics 1960-2020, selected nations

Games	Finland	Denmark	Norway	Sweden
1960	15	No participation	6	No medals
1964	No participation	No participation	No participation	17
1968	No medals	No medals	13	17
1972	28	No medals	22	14
1976	13	24	16	9
1980	17	21	10	7
1984	15	10	10	4
1988	22	11	23	6
1992	17	11	10	9
1996	30	24	17	13
2000	43	19	40	29
2004	33	29	38	21
2008	40	35	43	24
2012	27	50	35	29
2016	56	51	32	49
2020	52	40	47	50

Source: Data extracted from relevantb websites.

Table 13 shows the number of medals in the Summer Paralympics for each of the Nordic countries. The table shows a huge decline in the number of medals won in each Paralympic Games. This is mostly an effect of the sharp reduction in the number of events and medal sets but it is also caused by a decline in the competitiveness of the Nordic countries. Finland is doing marginally worse than the other three countries.

This is also the case in another data set, Greater Sporting Nation[13], which includes other competitions in an overall ranking of countries in parasport. The ranking of the Nordic countries in parasport in 2021 is as follows: Sweden (23), Denmark (34), Norway (39) and Finland (43).

[13] https://greatestsportingnation.com/

Table 13: Medals in Summer Paralympics, 1960-2020

Games	Finland	Denmark	Norway	Sweden
1960	1	No participation	16	No medals
1964	No participation	No participation	No medals	1
1968	No medals	No medals	9	11
1972	3	No medals	10	17
1976	50	6	19	74
1980	40	17	36	91
1984	59	59	90	160
1988	50	64	37	103
1992	25	46	33	68
1996	13	41	20	37
2000	10	30	15	21
2004	8	15	5	21
2008	6	9	7	12
2012	6	5	8	12
2016	3	7	8	10
2020	5	5	4	8

Source: Data extracted from relevantb websites.

It is to some extent surprising that the Nordic welfare states with their well-developed support systems for people with disabilities are not doing better, and are even doing worse than in the Olympics. This may be because the material incentive for becoming a successful paralympic athlete is much higher in other countries where the marginal benefits of success are much higher than in the Nordic welfare states.

Table 14: Medal table ranking in Winter Paralympics 1960-2022, selected nations

Games	Finland	Norway	Sweden
1976	3	4	5
1980	2	1	4
1984	2	3	6
1988	4	1	9
1992	5	7	12
1994	7	1	8
1998	9	1	19
2002	9	3	19
2006	0	12	19
2010	17	12	19
2014	16	11	11
2018	16	14	24
2022	13	8	12

Source: Data extracted from relevantb websites.

Table 15: Medals in Winter Paralympics 1960-2022, selected nations

Games	Finland	Norway	Sweden
1976	22	12	20
1980	35	54	16
1984	34	41	14
1988	25	60	15
1992	14	14	4
1994	25	64	8
1998	19	40	6
2002	8	19	9
2006	0	5	1
2010	2	6	2
2014	1	4	4
2018	3	8	1
2022	4	7	7

Source: Data extracted from relevant websites.

Non-Olympic individual sports

To complete the analysis of Finnish elite sports performance it is important to also include a few individual sports. The biggest such sport – where Finland excels – is motorsports, most visibly Formula 1 and rallying. Further, Finland is ranked number 6 in the world in both orienteering and ten-pin bowling in the calculations by the Greatest Sporting Nation website. [14] In both sports, Finland regularly wins medals in world championships.

[14] https://greatestsportingnation.com/

Cheerleading is another sport in which Finland does well. In 2021, the IOC voted in favour of granting full recognition to the International Cheer Union and cheerleading. There is a chance that this will be followed by the inclusion of cheerleading as a new sport in the Olympic Games from 2028.

This promises to provide Finland with new medal opportunities, as Finland won the cheerleading world championships in 2018, 2019, 2021 and 2022. The strong Finnish tradition for top performance in gymnastics is still alive. Aesthetic group gymnastics is the biggest of the competitive forms of gymnastics in Finland. Finland has won ten world championships and is one of the top countries in the sport.

Composite measures

It is difficult and probably impossible to develop a measure for elite sports performance that aggregates athletes' performance in all sports using different weights for each discipline within each sport and each sport in order to make a sort of index for the strength of each national elite sport system.

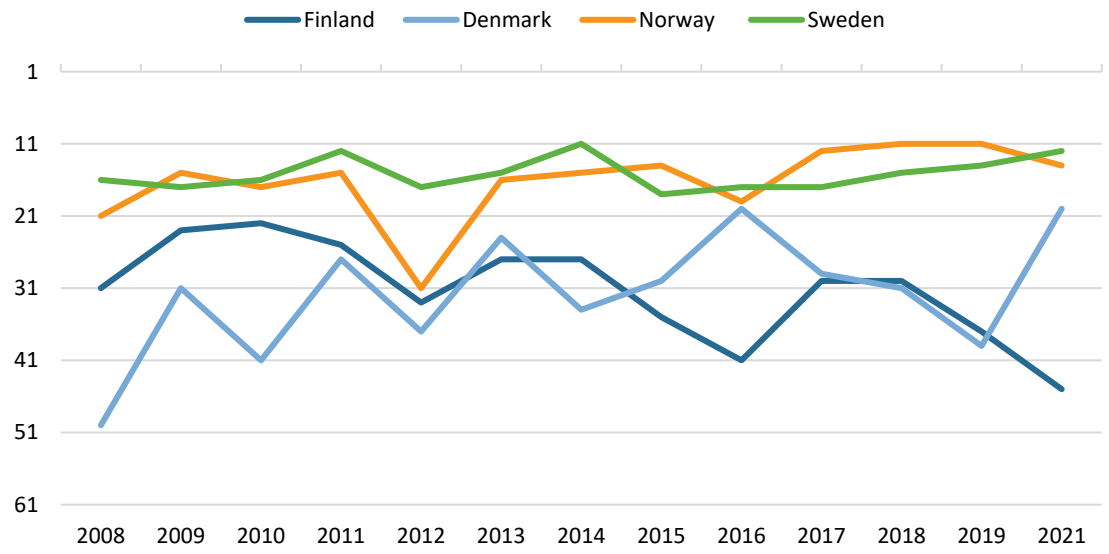
Two such composite measures exist: 'Greatest Sporting Nation' and 'World Ranking of Countries in Elite Sport'.[15] In both cases, the methodologies used are controversial. However, the attempts to develop such aggregate measures including all sports and the weighing of different sports and disciplines are interesting and admirable.

The ranking of the Nordic countries in the two composite measures is shown in figure 16 and figure 17. These measures provide a more positive view of the performance level of Finnish elite sports than indicated in the analysis above.

The 'Greatest Sporting Nation' ranks Finland at the same level as Denmark apart from a sudden decline in 2021, whereas Sweden and Norway are at a higher level. 'The World Ranking of Countries in Elite Sports' ranks Sweden at a higher level than the other three countries which are approximately at the same level.

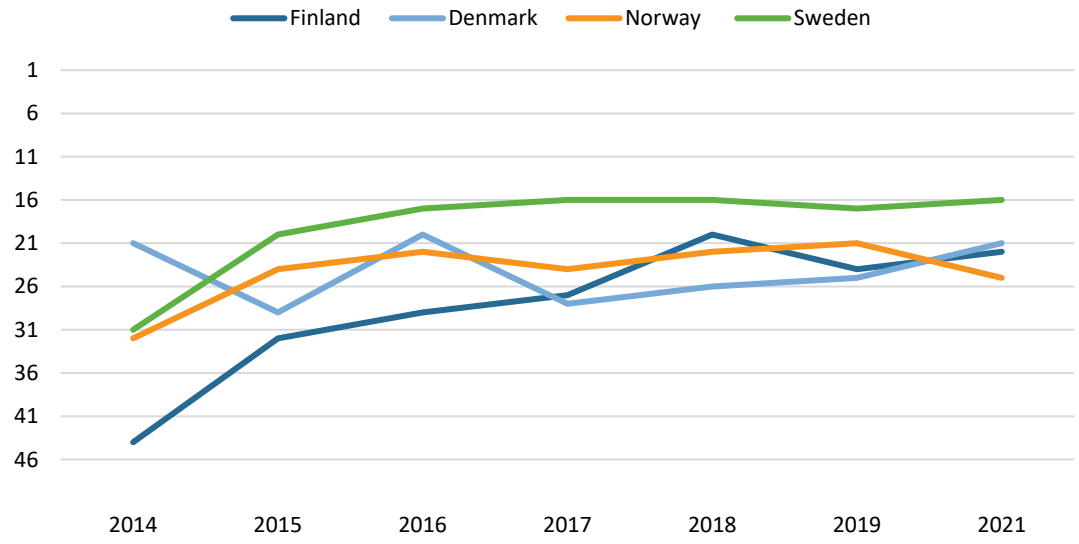
[15] https://www.worldsportranking.info/

Figure 16: 'Greatest Sporting Nation' standings 2008-2021



Source: https://greatestsportingnation.com/. Ranking on the X-axis.

Figure 17: 'World Ranking of Countries in Elite Sports' standings 2014-2021



Source: https://www.worldsportranking.info/. Ranking on the X-axis.

Goals and performance

Measures showing declining competitiveness and comparisons with other countries are one thing. Results compared to aspirations is another. It is relevant to evaluate whether this is the case, i.e., whether the output in terms of results lives up to the goals set by the Finnish elite sport organisations.

When the new elite sports policy was initiated in 2012, the goal was to become the best Nordic country in 2020. It is not difficult to see that Finnish elite sport has failed in its

efforts to achieve this ambitious goal. More modest and seemingly more realistic goals were part of the 2017-2020 strategic plan.

The performance target for elite sports was defined as the following by 2020:

- 10 medals in the Olympics Games
- 10 medals in the Paralympic Games
- One team qualified for the Tokyo Summer Olympics

These goals were almost met in 2021. Finland won ten medals in the Summer and Winter Olympics and eight medals in total in the two Paralympic Games. However, no team managed to qualify for the Tokyo Olympics.

The outcome reflects improved performance in the most recent summer and winter Olympics compared to the previous Olympics. It also shows more realistic goal setting and perhaps the implementation of elite sports policies that are instrumental in achieving the goals.

Summing up

There is no single objective method for measuring how well Finland is performing in international sports competitions. In this chapter, several measures are used to achieve an account of the international competitiveness of the Finnish elite sport system, which is as complete and nuanced as possible.

Most of the measures provide evidence that the performance level of Finnish elite sport has declined significantly, not only since the 'golden age' in the years between the two World Wars but also since the relatively successful 1990s. However, there are signs of a recent mini-revival.

The decline is most evident in the Olympic summer sports. The ranking in the medal table, the number of medals, the number of top-8 points, and the number of qualified participants at the Summer Olympics show a significant loss of international competitiveness. The comparison with other Nordic countries with almost similar population sizes, income, and culture show a much different development.

Whereas Sweden and Norway have maintained their position, Denmark has experienced a significant improvement. All three countries are now at a much higher level with respect to all performance measures in Olympic summer sports. They all overperform in relation to what is expected from macro-variables such as population and income whereas Finland underperforms.

Finland is doing relatively better in Olympic winter sports. However, all performance measures show an evident decline in winter sports as well. A comparison with Norway and Sweden shows an increasing gap in performance levels between Finland and the other two Nordic winter sports nations.

Finland has experienced declining competitiveness in a range of winter sports. This is reflected in the fact that Finland has won medals in only two sports in the last four Winter Olympics. Apart from ice hockey, all medals are won in cross-country skiing

Ice hockey is by far the most successful team sport in Finland. In the last two decades, both the men's and women's teams have won medals in more than half of all Olympic tournaments and World Championships.

The Finnish national men's football team has improved its ranking, but it has peaked around number 50 in the FIFA rankings and is far below Denmark, Norway and Sweden. On the other hand, Finland is the best Nordic nation in two other popular team sports with a wide geographical spread, basketball and volleyball.

However, in both sports, the performance level is not high enough to regularly qualify for the final rounds of international championships.

Further, Finland is among the top nations in the world in motorsports (Formula 1 and rally) and in minor sports such as orienteering, bowling, and cheerleading.

Although the rise of ice hockey bogs the trend, the overall decline in results is evident from the data. The data also provides clear evidence of a much lower performance level than other Nordic countries.

Discussion

In the above, we followed the analytical framework presented in the introductory sections and assessed the Finnish elite sport system's input, throughput, and output side.

In this section, we discuss and analyse the results of this assessment across the three main areas of the framework. We will put the relation between input and throughput, on the one side, and output, on the other, into focus to understand the strengths and weaknesses and – also importantly – the effectiveness of the system. This will be done by looking at the system in its contextual and environmental setting where international and national cultural factors influence the performance.

The main question to be answered is how well the current Finnish elite sport system converts the available input into output measured as competitiveness in international sporting tournaments, such as the Olympics. Following the discussion, we conclude and put forward recommendations on how the Finnish system can be improved concerning all pillars covered by the evaluation.

The declining Finnish international success: Why?

It is clear from the output section that Finnish elite sport has experienced a significant decline in international competitiveness during the latest decades.

To explain how this has happened and to answer this main question of the evaluation, a multitude of contributing factors must be taken into consideration. These factors can be identified at the (international and national) macro- as well as meso-level where national policies can be adjusted to improve future output performance.

Increased international competition and funding: International macro-level dynamics and challenges

First and foremost, it is important to understand that the Finnish elite sport system operates in an international environment that influences the possibilities of how likely it will succeed.

As pointed out by the SPLISS-study, the development in international elite sport – often named: "The international sporting arms race" (De Bosscher, 2007) – holds a certain dynamic where strategies imposed by other countries affect (de- or increase) the competitiveness of Finnish athletes.

As the investments in elite sport have increased globally, and nations are becoming strategic in their approach to elite sport, yesterday's funding, elite sport management, or improved policies might not be enough to remain competitive today. As pointed out by De Bosscher et al. (2015) increasing funding – or smarter management of resources – may be necessary just to remain at the same level of competitiveness.

Nations must therefore decide to what extent they wish to take part in the international sporting arms race, how much they will invest, and how – and to what extent – they will manage their resources in accordance with this dynamic.

As shown in the section on pillar 1, Finnish elite sports funding is not among the highest in Scandinavia. Internationally – and among the SPLISS-sample nations – it appears to be rather small. Also, the private investments are low.

Even though public funding has increased in recent years and the Finnish society is a wealthy one, it is relevant to consider the question of funding as one of the explanations behind the decrease in international results. Funding has increased globally, and higher funding is among the solutions if Finland wants to take up the challenge.

However, it is very important to understand that there are several additional problems that need to be addressed – no matter what the political answer to the question of funding is – if Finland wants to strive for higher international competitiveness. This is clear from the analysis conducted in this evaluation.

Societal changes and culture in Finland: National macro-level dynamics and challenges

One of these problems is the challenge of changing demographics. Being a small nation that is getting older and has a smaller number of people in younger age groups, the challenge of recruiting new athletes in both able-bodied and disability sports is significant. This evaluation cannot determine clearly whether these tendencies have already affected the current competitiveness, but there is no doubt that it will over the next decade if not counteracted in some way.

While some aspects of the Finnish system related to talent identification and development have improved during recent years, there is a constant need for further improvements and a common understanding among the Finnish stakeholders that more should be done in this regard.

For many European nations, changing demographics is a challenge, and those who can address it smartly will get a competitive advantage in the international sporting arms race. We return to possible solutions to this in the conclusion and recommendations section.

Focus on mass participation: A challenge of missing elite sport focus

In Finland, the focus is on mass participation and physical activity, as has been clear from the available data and materials, (Barker-Ruchti et al., 2018; Giulianotti et al., 2019; Green & Collins, 2008; Lehtonen, 2017), with relatively low funding to elite sport compared to mass participation.

Finland has previously been described as a fanatical sports nation due to the previous success of its elite athletes (Itkonen & Salmikangas, 2015). However, while there is evidence that elite sport is still very popular among the Finnish population, this has changed at the

political level over the years in sync with the development of the Finnish welfare state and an increasing (political) focus on sport for all and physical activity (Green & Collins, 2008; Lethonen & Laine, 2020).

From the analysis of pillar 3 (mass participation and foundation), it appears that Finland has been very successful in this regard. It is, by comparison, the nation with the highest level of mass participation in the European Union – even though participation patterns overall are in decline for all segments and age groups of the population.

The development proves that focused policies can work in the desired direction in the long-term. Therefore, should Finland decide to focus more on elite sport development, it is likely to have a high probability of success, if it is granted the same efforts and focus as mass participation.

However, should Finland choose to go down that road, the focus on mass participation and physical activity must be withheld. Without an active population, it will become difficult to achieve improvements due to the earlier mentioned issues of changing demographics. We will get back to this in the conclusion and recommendations section.

Ethical issues, norms and cultural values as a barrier to developing elite sports in Finland: The impact of 'the ghost of sisu"

The question of to what extent Finland wants to – or should – take part in the international sporting arms race is connected to the issue of the legitimacy of elite sport more generally in the Finnish society.

Based on the materials and data at hand, it remains clear that ethical issues, norms, and values in contemporary Finland constrain the willingness of political actors and commercial organisations – and even the general population – to support elite sport symbolically with (additional) funding. To some extent, these constraints are institutionalised as cultural forces in Finnish society that are barriers to the development of Finnish elite sport.

In practice, a culturally grounded low legitimacy of elite sport has hindered the Finnish elite sport system in developing as seen in other nations and has contributed to the declining competitiveness measured by output. The situation stands – for example – in contrast to the development in Denmark which during the 2000s faced growing levels of legitimacy for elite sport in the public and political sphere (Storm, 2012).

As mentioned in the macro-level background section, according to Laine (2006), sport can establish a national identity and a collective 'we-feeling' that the population in a given nation can apply to. Elite sport creates, in some sense, a legitimate space of nationalism and emotional identity-making through which national narratives and myths can be expressed and formed.

Sports has functioned as such a space in a young Finnish nation torn by civic and international wars and placed in the margins of central (Western) Europe in between the superpowers of the WWII and (post) Cold War period.

It is also in this space of cultural tendencies and diverging influences from different political-societal systems that the very position of elite sport in Finnish society is formed and where significant contradictory and mixed feelings towards it are grounded.

As mentioned earlier, many Finns are interested in elite sport and there is no doubt that sport is a phenomenon of cultural significance in Finland. It is a culturally and historically important issue, and many are physically active.

However, if the symbols of national identity fail, are objects of or subject to scandal, or are involved in cheating or troublesome behaviour disappointment is likely to be imposed on the collective (national) 'we', and the Finnish society is affected. According to the data and materials at hand for this evaluation, central incidents of significance to the Finnish society and Finnish elite sport have had such consequences and have constrained a positive development.

As mentioned earlier in the report, the 2001 Lahti doping scandal was such an incident of significance because it (re-)activated societal – and contradictory – values of shame and pride deeply rooted in Finnish culture (Laine, 2006). Earlier scandals like the case of the long-distance runner Martti Vainio, who was caught doping during the 1984 Los Angeles Olympics, are similar events of significance.

Put differently, the doping scandals – especially the Lahti-case – became symbols of national failure and shame because illegal substances were used to succeed, which ended up expressing that the Finns were inferior to other nations because they had to cheat to win.

The failure had – in a broader perspective – a negative impact of close to catastrophic proportions because the national soul was exposed as feared in Finnish shame and self-loathing discourses: Without honesty and stamina – or without 'sisu', which is "(…) an age-old Finnish cultural construct traditionally used to describe the ability of individuals to push through unbearable challenges" (Lahti, 2019, p. 62). According to Stoller (1996), sisu connotates determination, courage, guts, and will, and it is embodied by the ideal type figures of the brave soldier or the sports hero (Lahti, 2019).

More generally, sisu is a trait of personal character that has evolved "(…) into a positive quality and national narrative (…) partially backed by the Finnish long-distance running success in the 19th and 20th centuries" (Lahti, 2019, p. 62). In this sense, sisu is the backbone of Finnish national identity and because failing to live up to such a cultural narrative is shameful, it can lead to fear of engaging oneself in activities that can end up exposing you to negative sides of the cultural norms in question (you also run the risk of exposing yourself to people that see your failure, which in a collective 'we'-context becomes collectively shameful). This is backed up by the interviews conducted. Several of the interviewed

stakeholders mention that Finns are very hard on themselves when they fail the goals they setup - and communicate. It can be more or less the 'end of the world'.

Further, and because of the shame it imposed on the national 'we', the Lahti doping scandal significantly questioned the legitimacy of (elite) sport as the medium through which Finnish self-esteem and national pride could be expressed.

At the same time, it reactivated the cultural fear of being revealed as lacking sisu. While not directly establishing such a connection, one of the interviewed stakeholders refers to the phenomenons of self-loathing and shame discourse related to sisu as being institutionalised in risk-averse behaviour in the Finnish population. The interviewed stakeholders argue:

> "The tolerance for failure in Finland is so low that it leads to avoidance of risks and weak leadership. Especially in public service but also in general (…). Whatever the reason is, we are a very risk-averse society".
>
> Interviewed stakeholder

The interpretation of this evaluation is that these institutionalised norms of conduct and guilt and their effects can be labelled 'the ghost of sisu'. This ghost is a significant part of the explanation behind the low legitimacy enjoyed by elite sports in contemporary Finland, and why there has been limited will to support Finnish elite sport more generally. The ghost of sisu is – put differently – a cultural straitjacket (it is working in the shadows and behind the back of individuals) which further has limited the willingness to set up clear goals for Finnish international performance and manage the system in accordance with them.

Several of the interviewed stakeholders indicate that while there have been attempts to do so – for example by formulating the ten medals goal for the summer as well as the winter Olympics in the previous Olympic cycle, and, earlier in the form of NPM-reforms – in practice these goals have been managed very softly, if at all.

This relates to the ghost of sisu and the connected risk averseness. Some of the interviewed stakeholders argue that in the context of the Finnish sisu-culture, it is natural to protect the athletes against criticism if they fail their targets, but on the other hand, not paying attention to goals at all makes management difficult. We will discuss this issue later in this section.

Additional problems

According to some of the other interviewed stakeholders, it also contributes to the lack of legitimacy of Finnish elite sport that popular elite sports such as ice hockey express norms of violence. As also mentioned earlier in the report, commercial tendencies and developments, where young talents drop out of school to chase the dream of becoming professional athletes, and the lack of egalitarian values significant in Finnish culture, further challenges the cultural acceptance of elite sport. One of the interviewed researchers argue:

> "That kind of direction is very difficult for competitive top-level sport. Because top-level sport in the end is about putting people in [hierarchical, ed.] order based on their physical abilities. And it's a very unequal race because your genes define whether you can be a successful track and field athlete, or a successful ice hockey player, to a great extent. And in a way, in this current atmosphere that we have, the idea that there are these competitions where people are running, or cycling, or skiing, from point A to B, and the one who gets there first is, in a way, the best of this group of people, is very old-fashioned. And it goes completely against these current trends that are very powerful in Finnish society. And I think, in terms of legitimacy of top-level sport, this is the big question that must be answered in the future, if we are interested in keeping top-level sport societally, in any way, relevant in the future".
>
> Interviewed researcher

It is also mentioned that one of the best (former) Finnish ski jumpers, Matti Nykänen, contributed to a negative public opinion of his sport because he had a troubled life filled with violence and alcohol. Recent debates on human rights and gender issues and the problematic norms some of the host nations of major sporting events have on these issues further complicate things.

While these cultural and social factors – which are expressed through specific incidents and scandals – and the mentioned additional issues related to sport (violence, human rights and gender problems) are not the only determinants behind the declining Finnish competitiveness, it appears relatively clear that the mentioned legitimacy issues related to the acceptance of elite sport in the Finnish society have influenced the level of support politically, socially, and in terms of funding.

Putting Finnish elite sport in a better position, freeing it from this ghost of sisu and unnecessary low (national) self-esteem and risk averseness, and reestablishing its national legitimacy – both as a medium for national pride and function as a positive identity-building phenomenon in Finnish society is tricky and cannot be achieved in the short run.

However, initiatives should be taken and work on ethical issues, good governance, and development of socially accepted working methods and goals to ground Finnish elite sport can be implemented to achieve this. While much work is already going on in Finland, more focus is necessary. We will get back to how this is to be achieved in the conclusion and recommendations section.

Throughput reforms, upon reforms, upon reforms: National organisational issues and unclear roles of management

The data used in this evaluation reveals that the Finnish (elite) sports system has faced several reforms over the years. The amount of available materials and data further shows that many reports and evaluations have been produced to create a common ground for change and political decisions regarding reforms.

The system's strength is that it shows a capacity for reflection on its practices and evaluation of how things are going. There appears to be a strong culture in the Finnish society of

not making decisions that are not analysed from many perspectives and do not consider minority interests. Network governance fits well with this culture because no hegemonic force – at least at the surface – is allowed to push its power through. Principles of independence of stakeholders and organisations are respected to a high degree.

However, the weaknesses of this system are difficulties in implementing much more than incremental changes and the withholding of large-scale conflicting interests and tensions built around national, regional, and local poles (for example, the dual structure of the sports institutes and the sports academies).

Bargaining and existing power structures are institutionalised and preserved. The backlash is that steering becomes difficult and inefficient use of resources can be the effect hereof. The result of this is an overly complex system due to historical developments and compromises. This complexity hinders effective use of the available resources that would be achieved through more clear-cut chains of command and responsibility.

This being said, there is evidence to support that the recent developments and reforms have installed improvements in the system – which is now explicitly run as what in many documents is called "a network" – and that the effect of these programmes is likely to show in the coming years. Put this way, the network system is moving in the right direction. While significant changes potentially would be beneficial, it is not given that it would be better than making incremental changes.

At least it can be argued that the (potential) resistance against significant scale changes – and the time needed to make them work – is a challenge making such fundamental changes not worth the effort.

In the coming section, we will touch upon how the discussed constraints and problems in the Finnish system can be addressed and make recommendations in this regard. Not only on an overall level but also concerning each of the pillars analysed in this report.

Conclusion and recommendations: What can be done?

This evaluation has outlined various strengths and weaknesses of the Finnish elite sport system. Although there has been a moderate improvement in Finland's competitiveness in international elite sports in the last decade, it is evident that Finnish elite sport is underperforming at the international level.

The competitiveness of the Finnish elite sport system is not at the level of the other Nordic countries. There is an obvious potential for improvement if appropriate measures are taken. This section recommends a range of initiatives that can be deployed. The recommendations are built on the analysis in the prior sections of the report.

The recommendations depend on what the overall aims and goals are. This is not straightforward. Several sensible aims and goals can be included in a reform of the elite sport system that intends to improve the performance of Finnish elite athletes and, in the broader sense, the competitiveness of the Finnish elite sport system. There are at least three such aims and goals that require different solutions.

Three alternative aims

First, an improvement in Olympic sports is a potential alternative. It does not appear unrealistic to raise the level of Finnish athletes in summer sports to the performance level of the other Nordic countries. Over time, it should also be realistic to improve the Finnish standing in Olympic winter sports to be much closer to the level of Sweden and possibly Norway. There are no instant fixes, but it seems rather straightforward what may produce such effects in the longer run.

There are successful models to copy, not only the United Kingdom and Australia but also smaller countries such as Norway and Denmark. A modified version of these more centralised models with proven effects has already been introduced in Finland with the establishment of the HPU. However, a more full-blown adoption of the crucial features of these models is likely to produce the desired aims.

Second, the main aim could be to improve Finland's international standing in the most popular team sports. While a top world ranking such as in ice hockey is probably beyond the realistic goals for football, basketball and volleyball. However, there is a potential for significant improvements with appropriate investments and the foundation for such a push seems to be in place.

Third, the aim could be a general improvement of the performance level of Finnish elite sports in all sports. This can be achieved with reforms over a broad front as exemplified below. It may not lead to significant improvements in the strongly contested Olympic sports, but it may have other advantages.

Improvement in the performance in Olympic Summer sports is the predominant overall goal internationally for most policy initiatives to improve elite sport systems. This has to do

with issues of national prestige and pride related to performances and medal tables at the Olympic Summer Games.

It is also because of the widespread popularity of the sports included in the Summer Olympics. The general political priority of improvements for elite athletes in these sports means that they receive the bulk of public funding. This has also been the reason for the deliberate construction of elite sport systems in all rich countries. The same trends characterise Olympic winter sports, but much fewer nations are involved for obvious climatic reasons.

Most disciplines in the Olympics are individual sports. Team sports carry relatively little weight with 14 medal sets in total, which is less than the total number of weight classes in judo. For some team sports, the Olympics is not even the most prestigious tournament.

This is most obvious with football as with individual sports such as tennis and golf. Team sports have a much more important role in terms of mass participation, media interest, and money and mean more to most people than (other) Olympic sports. This provides a rationale for supporting team sports as the main aim of an elite sport policy. The recent trends in sports participation in Finland may reinforce such a rationale.

The most popular team sports can generate substantial funding through commercial activities, so public funding and support through a dedicated elite sport system are not as obviously needed as for Olympics sports in general. At least this is not the case at the very top level for men's teams in the most commercially viable sports.

However, such support is needed for grassroots team sports, facilities, minor team sports, and women's team sports. Athletes in team sports also need dual career and post-career support to the same degree or even more than athletes in individual sports.

Top-level clubs in some team sports fund academies and community work, but it would help a lot if more commercial income generated by the top-level could be redistributed to the sub-elite (lower leagues) and the grassroots level. However, even if this was the case, dedicated support and increased funding may have an important impact if an overall improvement of team sports is seen as the main aim of Finnish elite sports reform.

Wholesale adoption of elite sport systems in countries like New Zealand, Norway, and Denmark has been considered and rejected in reports about the future of Finnish elite sport (Stenbacka et al., 2018). This is not seen to fit Finnish priorities and tradition. However, the introduction of HPU can be seen as an attempt to follow a similar path with its emphasis on a centralised, (partly) autonomous organisation with overall and operational responsibility for support of elite sports.

This resembles High Performance Sport New Zealand, Olympiatoppen in Norway and Team Danmark in Denmark, although there are also significant differences. In the recommendations below, we will outline some changes which would improve the impact of HPU on the competitiveness of Finnish elite sports and better release the potential of adopting a

Finnish adaptation of the central characteristics of models that have proven successful elsewhere.

We will also suggest reforms and initiatives that will have a major impact if the overall goal is to improve Finland's standings in team sports. This is mostly in relation to mass participation, facilities, and coaching but also dual career and post-career support. We assume that improvements for team sports in general, including maintaining Finland's elevated international standing in ice hockey and improved international competitiveness in other team sports, is one of the aims of elite sport reform in Finland.

There is always a need to prioritise the use of resources and to provide a clear focus on reforms. We believe that dedicated pursuance of either of the two more specific aims (strengthening Olympic sports and team sports) require selectivity and prioritisation. This is particularly the case if significant improvement of competitiveness in Olympic summer sports is the primary goal.

However, it appears unlikely that this can receive political support in Finland. Consequently, we assume that the aim is a general improvement of the performance level of Finnish elite sports in all sports through reforms over a broad front. This is reflected in the following recommendations, which include suggestions for initiatives that will improve the Finnish elite sport system overall. They include suggestions that will contribute to improvements in relation to the more specific aims as well, which may be given priority if there is political will for a more targeted approach.

The recommendations focus mainly on financial support and governance issues, but there are also suggestions for improvements related to the other SPLISS-pillars. Finally, it is suggested how the legitimacy of elite sports in Finland can be increased.

Financial support

The distribution of financial support for Finnish sport reflects the high priority of mass participation relative to elite sports. Among the SPLISS-countries, Finland has the highest national expenditure on sport (lottery and government) per head of population, but one of the lowest expenditures on elite sport (de Bosscher et al., 2015, pp. 119–120). These data are from around 2012. However, the public funding for elite sports almost doubled from 2012 to 2018. Since then, there has been a slight decline.

More money is seldom a disadvantage, and more money for the support of Finnish elite sport would undoubtedly make improvements easier to achieve. Unfortunately, significant extra government funding for sport is hardly realistic. Increasing demand for financial support for other purposes combined with limits to tax-based government revenues make recommendations, which require a significant increase in central government money for sport, unrealistic.

However, while beneficial, such increased funding is not absolutely necessary. Much can be done through an improvement of the governance of the system, as outlined in the

following sections. There are also sources of funding that have not yet been effectively mobilised such as private funding (sponsorships and corporate grants) and local government support.

Private funding for elite sport in Finland is low compared to the other Nordic countries, and about half of it goes to only one sport (ice hockey). There is an obvious potential for an increase. Part of the reason for the low private funding of elite sport is a lack of professional management of sponsorship contacts. It appears that there is much to learn from other countries in this respect for both HPU, sports federations, and clubs.

A joint initiative to strengthen knowledge transfer would be helpful. The initiation of the Olympic Fund by the HPU is a step in the right direction. Still, its limited success is an indicator of the inherent difficulties of such initiatives and the need for more professionalism.

The problems with attracting corporate funding are linked to the issue of improving the legitimacy of elite sports, which will be discussed in more detail later in this section.

Whereas an increase in central government funding of elite sports may be constrained, there might be a potential for increased local government funding. In this respect, inspiration can be found in Denmark, where 24 municipalities cooperate and provide funding for local initiatives to support elite athletes.

The initiatives must provide local benefits and synergies with other local activities, but extra funding for elite sport, as well as a strengthening of the coherence of the elite sport system, may be the result if this is achieved.

While a significant overall increase in government funding may be out of the question, it may still be relevant to suggest a marginal funding increase. The Finnish sports system does not seem to have the capacity for major changes in resource allocation. Vested interests, powers of tradition, and strong norms of equal treatment make it difficult/impossible to change by internal forces.

Such changes require a political will to direct, steer, and enforce them, but this does not seem to exist. In other words, funding new initiatives require new sources of funding. At least a marginal funding increase would make the initiation of new initiatives much easier. This is the reason for suggesting a marginal increase in government financial support targeting specific purposes.

The targeted marginal funding could have an effect which is disproportionately larger than the actual amount indicates. Such funding could, for instance, be a way of satisfying the HPU's need for more practically applicable sports science while maintaining the operational autonomy of KIHU and developing a more symbiotic relationship between the two organisations. This requires new dedicated funding to the HPU and open competitive bids for funding of specific projects.

Other examples of targeted marginal funding include support for adaptation and redevelopment of facilities to better cater to the needs of elite athletes' as well as marginal support by the HPU for specific elite sports projects initiated by sports federations. In any case, the funding should be marginal. Further, it is crucial that the organisation responsible for allocating the funding has full discretion to follow its specific purpose.

Governance, organisation and management

Although significant improvements in the governance, organisation and management of elite sport have been achieved in the last five years there are still major problems in relation to the alignment of strategic and operative measures targeted at elite sport (Mäkinen & Paavolainen, 2020). The main conclusions in Lipponen (2017) are still relevant. Wholesale changes are needed concerning goal setting and its links with strategy, implementation, evaluation and reward/sanction.

Generally, goal setting needs to be more specific and closely linked to the strategy with operational means that direct implementation. The results should be monitored through relevant metrics, and the evaluation should have consequences for the future allocation of resources. The Finnish elite sport system is far from living up to this ideal. There are at least three types of problems that need to be addressed.

First, goal setting is often casual and lacks appropriate mechanisms of implementation. An example is the goal set in 2012 to be the best Nordic nation by the end of the 2017-20 period. This was not even close to being achieved. It was perhaps unrealistic in any case, but it was destined for failure anyway because of its lack of follow-up in terms of strategy and implementation.

The issue related to the lack of connection between strategy and implementation improved in the 2017-20 strategy period. However, compared to goal setting by Olympiatoppen and Team Danmark, it fails to link the goals to realistic goals for each sport and individual athletes and implement support designed to help achieve such specific, measurable goals.

Second, strategy and implementation are hampered by a lack of undisputed leadership and unclear allocation of responsibilities. Coordination is crucial in elite sports, and in the Finnish elite sport system coordination is low compared to other countries as documented in the SPLISS-study (de Bosscher et al., 2015).

The Finnish governance model is characterised as a network of autonomous organisations in a state-led system. While network governance has potential advantages, it also implies a risk of coordination failure because of the stakeholders' informality in terms of responsibilities. In recent years, important steps have been taken to strengthen leadership by the HPU and improve coordination of the network of independent organisations.

However, there is still some way to go in case Finland should decide to aim for the same clarity and operational efficiency led by reputed central organisations that characterise the elite sport systems in New Zealand, Norway, and Denmark.

Third, goal setting and implementation of strategies are often separated from evaluation and impacts on future resource allocations. In other words, how well the independent actors in the network live up to performance targets does not matter much.

Good performance is not rewarded and bad performance is not sanctioned. Resource allocation follows a predetermined formula and is not performance-based as in more successful elite sport systems where the allocated funding in four-year strategy periods is closely linked to performance in the previous period.

There are good arguments for modifying strict performance-based resource allocation by taking long-term prospects and contextual factors influencing performance into account. However, the absence of a formal and an actual link between performance and future support weakens the efficiency of resource allocation in the Finnish system and needs to be rectified.

The governance of the Finnish elite sport system can be improved through several more specific measures. One recommendation concerns the thoroughness of long-term planning. This has been improved in the most recent strategy period, but more could be done and planning for the long run is minimal. Of course, planning in a network-based system requires interaction and communication with relevant stakeholders, which needs strengthening and upgrading.

This is linked to the dissemination of information within the system, an area where Finland is doing relatively poorly. The same is the case with manpower and the professionalisation of sports organisations. The establishment of the HPU represents a much-needed boost of professionalism.

However, its manpower resources are still moderate compared to the elite sport organisations in Norway and Denmark, for instance, and additional resources for this purpose may well significantly improve the effectiveness of policy implementation. Further, most sports federations are ill-equipped in terms of manpower and professionalism for playing a constructive role in the coordination of elite sports policies.

The big team sports federations, and in particular the ice hockey federation, are well-endowed in this respect, but most federations are far from being in a similar situation. In Denmark, the level of professionalism of the sports federations has been improved through a process in which Team Danmark has demanded organisational changes in the federations, including administrative routines and professional performance directors, as a condition for financial support. Similar initiatives are being introduced in Finland, but lack of conditionality and semi-automatic allocation still dominate the HPU's funding of federations.

The problems related to lack of manpower and professionalism in sports federations are linked to the issue of prioritisation of the funding of elite sport. Compared to other countries, the funding is relatively thinly distributed.

A large number of sports federations receive support from the government via the HPU. Although the amount has been reduced in recent years, it is still relatively high. This is more of a problem in small countries with limited resources. The large number of supported federations makes it more difficult to achieve a high level of professionalism in the organisations.

Further, the thin distribution of support makes it difficult to provide the necessary support for the most internationally competitive sports. All successful elite sport systems in other small countries involve a sharper prioritisation of resource allocation.

For instance, in Denmark, there is a small number of top-level federations which receive the bulk of funding supplemented with a larger number of development federations and individual support for potential or actual internationally competitive elite athletes in other sports. Such a hierarchical system of differentiated support may not be feasible and suitable in Finland. Still, a sharper prioritisation with a concentration of funding on a smaller number of sports has the potential for increased international competitiveness of Finnish elite sport.

Finland has a highly diversified system of training centres (sports institutes) which adds to the complexity and increases the number of independent stakeholders in the elite sports network. The traditional system of sports institutes in primarily rural areas has been supplemented and integrated with sports academies in urban areas. The sports institutes serve other purposes than elite sports and no doubt have important impacts on local communities, but their functioning and location are not ideal from the point of view of increasing the performance level of Finnish elite sport.

There is a mismatch between the location of the sports institutes and the priorities of young athletes who typically prefer an urban lifestyle. The role of the sports institute in the Finnish elite sport system is limited, but there also seems to be a lack of clarity among sports institutes about how best to support elite sports and there is apparently a request for clearer guidance.

From the perspective of elite sport, it would be preferable to abolish the sports institutes and transfer the resources to the urban-based sports academies. However, this is both unrealistic and inappropriate considering the other purposes served by them.

Most of the recommendations about governance, organisation, and management concern changes in structure, and even a few such relatively minor changes in the structure can be expected to have positive effects. However, there are reasons to believe that improvements in processes are more critical and more urgent and will have a potentially more significant impact.

Such improvements include better communication and information dissemination, more dialogue, and more informal interaction. The research literature about the governance of a network as the Finnish elite sport system emphasises that such measures are crucial for

developing a shared understanding which is a precondition for well-functioning network governance.

Trust among individual stakeholders as well as trust in the system as such is absolutely crucial for successful network governance. A particular problem with the Finnish elite sports network is the low level of system trust. Studies show that whereas there is significant interpersonal trust among the key stakeholders, there is a lack of systemic trust (Lehtonen et al., 2021).

While key actors trust each other based on previous interaction, they typically do not trust the processes and outcomes of the elite sport system as such. The main issues are the tension between centralised authority and top-down management, on the one hand, and horizontal coordination and dialogue, on the other, fostering mistrust between organisations favouring each of the opposite forms of governance.

Whereas communication patterns can be changed relatively quickly, trust-building is more important but difficult/impossible to achieve in the short run. Often trust grows from other activities and from long-term societal changes that cannot be influenced by policy means.

The relatively low level of general trust in Finnish society compared to the other Nordic countries has impacts on the elite sport system as well, as trust breeds trust. This complicates the trust-building exercise. However, specific small steps are recommended.

More frequent interaction and cooperation about mini projects may help. More informal dialogue instead of, or in addition to, the formal bureaucratic procedures around annual meetings and reports is also recommended. Trust building typically involves an initial unilateral act of trust by one actor, which is then reciprocated by others.

Such unilateral actions showing trust should be initiated by both the HPU and the sports federations. The mere change of attitudes of the stakeholders indicating their willingness to trust is also essential. Over time, the success of the system in achieving its goals may in itself generate system trust, but this may not be in the cards for a while.

Issues related to the other pillars

Sports participation

One of the factors that must be prioritised to foster international elite sport success and build a talent pool is a high level of mass participation and physical activity. In this respect, Finland has a strong foundation. The Finnish population (children and adults) are among the most physically active in Europe and probably the world.

There is a strong organisational basis in terms of sports clubs and associations, which organise sports activities for children, adolescents, and adults. This is supplemented with private fitness centres and gyms, and school programmes for physical activity and sport. This reflects the politically solid priority of funding mass sports participation in Finland. This is a priority that is both well established and well justified. It is also beneficial for Finnish elite

sport as it provides a strong platform for building elite sport success by means of the other pillars.

There are challenges in terms of reduced physical activity and sports participation among teenagers as well as lifestyle-related deterioration of the general physical conditioning of teenagers and young people. These trends are not unique to Finland and the system's strong organisational and financial support makes it likely that the political will and the required resources can be found to confront these challenges.

However, the trends are serious considering the small population as it threatens to undermine the club structure beyond the big cities. Better support for club administration and coaching in clubs with a limited pool of potential volunteers is important to counteract these threats.

Another challenge is the large self-organised activity outside clubs, in nature or in private gyms. The financial support system needs to change to reflect these changed individual priorities.

In any case, mass participation needs to be generously supported for many reasons including the generation of a solid platform for elite sports success. Whereas mass participation among children and youngsters increases the likelihood of elite sport success, it is an unsubstantiated myth that elite sport success increases mass participation per se (Storm et al., 2018; Storm & Holum, 2021).

Talent identification and development

National talent identification and talent development systems are necessary components for a nation to become successful in international elite sports. Small nations can to some extent, compensate for their small size through an efficient talent identification and talent development. The importance of initiatives to strengthen talent identification and talent development has become even more pronounced in a situation where the share of young age groups in the Finnish population and the general physical conditioning of young people are in decline.

This pillar is working relatively well in Finland. Recent reforms, including the establishment of the sports academy system and the impacts of the focus on 'athlete's path' has significantly strengthened talent identification and talent development. Still, there are problems, not least concerning paralympic sports.

Systematic talent identification has negative connotations as it involves young people and sensitive issues such as too early specialisation, selectivity, social exclusion, exploitation, and abuse. It is out of sync with current Finnish values of equal treatment and opportunities. This limits what is regarded as acceptable means of talent identification.

The high share of young people involved in sports clubs creates good opportunities for identifying promising talents. Such activities must be pursued with sensitivity and constraints.

One problem with talent identification and talent development initiatives is a lack of coordination. There is no coordination at the national level but rather separate systems in different federations. The nature of the activities makes it sensible that the sports federations take the leading role.

However, coordination of talent identification and talent development activities through knowledge transfer by disseminating information about experiences would improve the situation. There is some knowledge sharing about talent identification and talent development at the level of national organisations but seemingly little or nothing at lower organisational levels.

The sports academies are an essential component in the elite sport system and their role in talent development is crucial. In general, it seems to work very well, although there are huge differences between the sports academies in this respect.

There is one problem, though, that requires dedicated action. The support for dual careers (typically a sports career and academic study at the same time) is an integrated part of the functioning of academies. The evidence points at frequent problems in coordinating the activities of staff with responsibility for sport and academic studies, respectively. The solution to such problems needs to be given priority.

Parasports experience similar problems in the recruitment of new elite athletes as able-bodied sports. The exclusive top is well-funded and otherwise supported, but potential newcomers experience difficulties. There are other issues in relation to talent identification and talent development in parasports, especially in team sports such as wheelchair rugby and goalball, where decreasing participation makes it challenging to form teams and maintain national leagues.

It requires similar reforms as described in the previous paragraph to solve this problem. In addition, more targeted support for or alternatives to league-based tournaments is needed.

Athletic career and post-career support

Finland has adopted a system for supporting athletes at various stages of their careers in a holistic approach involving post-career support as well. This is sensitive to the various challenges at different stages in an athlete's career and appears to be well-targeted, appropriately funded, and generally well-organised.

Holistic support is in line with welfare state policy to avoid that the pursuit of an elite sports career will lead to the eventual emergence of 'social losers'. Finland has adopted such an approach with an explicit focus on the 'athlete's path'.

Many countries support the development of talents and offer financial support to top athletes during their careers at the top level. In this respect, Finland is among the countries with the highest support for individual top athletes. In addition, the support system includes non-financial support for career assistance, lifestyle support, coaching support, training and competition support, legal support, sports science support, and sports medicine support.

Concerning the support for a top athlete's athletic career, Finland is doing well. An appropriate structure is in place, and the funding is sufficient. However, there are two areas where improvements are needed.

First, whereas the support system for promising athletes up to an age in the early 20s is well-developed and the support for a relatively small group of top-level athletes is equally well-developed, there seems to be a missing link. For athletes who are no longer involved in the academy system and still not at a performance level that qualifies for top-level support, there is little support.

This is generally the case for the sub-elite, i.e., athletes who are close but not quite at the top level. This means a risk for 'social losers' among youngsters who invest just as much time and energy in becoming a top athlete but do not quite make it. The missing link also involves a problem for talent development and recruitment of new top elite athletes.

The number of athletes involved in the Finnish top-level support programme is relatively small compared to other small countries. For instance, in Denmark, approximately 1,000 athletes benefit from Team Danmark support, whereas it is less than 300 in Finland. An expansion of the number of athletes receiving support including access to expert services would contribute to building the missing link.

Second, Finland scored below average in the SPLISS-study in relation to post-career support. This has been improved in the last decade, but this is an area where further improvement should be given priority with special attention to the sub-elite. It should be considered whether a combination of the sporting career with actual or realistic plans for an academic/vocational career should be an explicit condition for support.

Training facilities

The evidence regarding the availability and quality of training facilities is ambiguous. In the SPLISS-study (de Bosscher et al., 2015), Finland scored low, and interviews with athletes indicated a relatively low level of satisfaction with the training facilities.

However, other evidence contradicts this evaluation. Much of it indicates that Finland's training facilities may be better than in other Nordic countries. Also, the satisfaction among athletes and coaches with current training facilities is high. Facilities are abundant and available all around the country. The overall quality also seems to be high compared to other countries

With the initiation of sports academies and the centralisation of support for top athletes in two centres (existing sports institutes) for summer and winter sports, respectively, with top-quality facilities, the situation has improved significantly. This has happened in the last decade which may well be the reason for the discrepancies between the SPLISS-study and more recent evidence. However, there is still room for improvement in some respects.

First, the location of the sports sport institutes creates a problem with recruitment and elite sports relevance. Their location in relatively remote parts of Finland makes it difficult to attract young top athletes. It is difficult and perhaps impossible to solve this problem, but it may be ameliorated by various means.

For example, in addition to the focus on sport and study in the these centres (sports institutes), more attention on issues of lifestyle, entertainment, and youth culture may improve the situation. Further, subsidies for transport costs to facilitate frequent family visits and stays at the top sports academies may have a similar effect.

Second, the training facilities at the sports academies in Helsinki (summer sports) and Vuokatti (winter sports) are up to the best international standards, but the quality of the facilities at other sports academies and the sports centres are not at the same level. They would benefit from investment in improvements.

However, this should be balanced with the need for further funding for the two top academies to make it possible for them to keep up with the ever-improving standard of international facilities. In terms of raising elite sport performance, this is likely to be more important.

Third, the coordination of the building and use of training facilities leave much to be desired. This reflects the organisational complexity and inefficiency that characterise the Finnish sports system in general with many independent stakeholders and weak links between goals, strategy, and implementation.

A multitude of stakeholders makes independent decisions about facilities. There may be many good reasons for that – including historical ones – and elite sports usage is not the only concern, but it would be an advantage for Finnish elite sport with some coordination.

A new consultative national coordination unit would help. This could be established at the government level, but it could also be located in the HPU with the inclusion of stakeholder representatives.

Fourth, whereas the availability of training facilities is good, the access to the facilities of elite athletes is sometimes a problem, particularly for indoor facilities, swimming pools, and skating rinks. This problem requires local solutions, but the suggested consultative national coordination unit mentioned in the previous paragraph may supplement this with advice, guidance, and prioritisation.

Such a unit could also be tasked with developing and implementing innovative facilities. This could take the form of subsidies to projects after competitive applications like the Danish Foundation for Culture and Sports Facilities. This requires some extra funding.

Coach provision and coach development

The provision of enough qualified coaches is central to elite sport success. It is of particular interest in a Finnish context as evidence shows that this is especially so in winter sports. Coach provision has been given high priority in recent decades, particularly in the last ten years.

The number of professional coaches and officials increased 150% from 2012 to 2018. Coach development has been strengthened in recent years through the education system and interaction with specialists and experts. The 2019 vocational education training reform is expected to further increase the level of coaching competence.

The internal evaluation of Finnish elite sport (Mäkinen & Paavolainen, 2020) shows that the predominant stakeholder view is that there are still not enough qualified coaches. The problems related to retention of coaches with alternative career options and the challenges of choosing a career path as a coach are emphasised as major issues.

Coach provision and development are given high priority. It is a key theme in the strategy 2021-24 of the Finnish Olympic Committee. High-quality and more professional coaching is identified as a critical determinant for the future success of Finnish elite sport. This is arguably a sensible priority. Below are a few recommendations for more targeted support.

First, professional coaches need to develop an explicit and appropriately supported career path in cooperation with the coaches' organisation(s).

Second, the vast majority of professional coaches are employed in a few team sports, and there are very few professional coaches in individual sports apart from swimming and figure-skating. Support for more professional coaches in the individual sports with none or too few professional coaches could have a distinct impact on the performance level and chances for medals in many 'small' Olympic sports.

Third, there is a need for specialist education and the development of coaches for Paralympic athletes. This should address the problems in coaching disabled athletes at the club level, but it also seems to be a problem in the sports academies. How this is to be achieved must be further discussed, but a deliberate integration of 'the needs of different athletes' into existing coach education programmes would be a potential solution.

Fourth, there is an underutilised potential for improving coaching standards among Finnish coaches through better application of sports science in coaching. The absorption capacity among coaches towards innovative and novel training methods is high because of the high general educational level and positive attitudes among coaches towards the application of science. This potential could be mobilised utilising more structured cooperation

between KIHU and HPU, although additional marginal funding may be a facilitating condition.

Fifth, hiring foreign coaches may improve coaching quality in some contexts. This is not an alternative to the cumbersome improvements in the number and competence of Finnish coaches. It is not a 'silver bullet' in sports with insufficient coach provision. However, in some situations, it may introduce much-needed inspiration that may trickle down and improve coaching overall.

For instance, it seems to be one of the potential means to reverse the decline of Finnish ski jumping where coaching quality has deteriorated compared to the competitors.

National and international competition

This is a pillar where the Finnish elite sport system is doing well. There is a high level of satisfaction with the available opportunities to participate in national and international competitions among athletes and coaches. The satisfaction is also relatively high internationally, as shown in the SPLISS-study (de Bosscher et al., 2015).

The Finnish Olympic Committee has invested resources in a program (Game Operations Program) specialised in the preparation of Finnish athletes for the major multi-sport Games. In this respect Finland may be world leading. However, new initiatives are recommended in two areas.

First, research shows that hosting of international sporting events improves the performance level of the host country's top athletes, not only in the actual event but also in future events. Accordingly, it is likely to increase the competitiveness of the Finnish elite sport system if Finland could improve its record regarding such hostage roles. A more systematic approach, perhaps through a dedicated organisation such as Sport Event Denmark, is needed to achieve this goal.

Second, whereas appropriate national competitions and league are available in general, this is not the case for Paralympic team sports as previously mentioned. National parasport leagues are vulnerable to fall in participation, and the consequent closure of leagues negatively impacts recruitment for parasports in general. The negative dynamics need to be counteracted.

Sports science support, scientific research and innovation

Sport science in Finland is at a high level internationally, and the Finnish elite sport system makes good use of sport science support. The level of dissemination of scientific knowledge among athletes and coaches is high, and there are many examples of the successful practical application of scientific research. However, there is a clear potential for further improvement.

The research is concentrated in the Finnish Institute for High Performance Sport (KIHU) which is well endowed with resources, including manpower. It is well-reputed

internationally for its research. In most successful elite sport systems, the elite sport research centres are integrated with the national training centres. This is not the case in Finland. KIHU and the training centres are independent organisations. This is cause for tension between KIHU and the HPU as the HPU wants to prioritise directly applicable sport science whereas KIHU has conflicting incentives as part of the university system.

This tension is deeply rooted as the HPU and KIHU function as two different systems with different incentives, different modes of behaviour and different criteria for excellence. To some extent, the tension can be minimised by dialogue between the two organisations/systems, as is happening around the implementation of the skills enhancing Competence Programme, but the tension can never be eliminated.

It is an option to integrate new elite sport research centres with the two main national training centres in Helsinki and Vuokatti. This would require significant new funding or transfer of funds from KIHU to such new entities. This is an option characterised by potential benefits but also high risks and disruption.

A better option may be to increase practical application of research through a marginal change of the funding of research. It is suggested that a minor part of the research funding, and preferably new funding, is used unilaterally by the HPU to incentivise research in priority areas of application. At the same, it is important that the autonomy of research is maintained.

It is also suggested that the HPU initiates procedures to search for practical research projects in a more systematic way than currently. This requires better data collection and analysis.

Legitimacy issues

It is not difficult to identify measures that may improve the Finnish elite sport system in relation to the nine pillars that have structured most of the presentation of the system in this report as well as the above recommendation for improvement – especially if the improvements are linked to more financial resources. It is much more difficult to see what can be done to improve the system in relation to issues related to general societal characteristics, culture, and trends.

Such a crucial issue is the legitimacy of elite sport in Finland. It may seem strange to question whether Finnish elite sport is legitimate considering surveys showing that a very high percentage of the population is interested in the international success of Finnish athletes. The television attendance and the euphoria around the Finnish successes in the Olympic Winter Games in Beijing and the victory at the recent ice hockey world championships also seemingly runs counter to any claim that there is a legitimacy crisis for elite sport in Finland.

However, other indicators point in a different direction. Seen from the vantage point of Denmark, it appears obvious that the public and political discourse about elite sport is much different in Finland.

In Denmark, it was not at all predictable in the 1980s that specific elite sport support and a special Elite Sport Act would receive general support, and that elite sport funding and state responsibility for the development of elite sport would be unanimously accepted and become an uncontroversial non-issue during the following decades.

Earlier, the debates often contrasted elite sport and mass participation, with many arguing against the support of elite sport, partly because of its generic elitist character that was considered contrary to welfare state ideals of equality.

There have been echoes of such attitudes to elite sport in Finland until recently. Still, many give priority to grassroots sport and mass participation to the extent of marginalising support for elite sport.

Historical events indicate that legitimacy issues have had major impacts on attitudes and support for elite sport in Finland. As examined earlier, the doping scandals in Lahti twenty years ago had long shadows in the shape of a decade-long slump in the public support and private funding of elite sport.

The reactions to the Finnish doping scandals were much different from similar doping scandals in other countries. This indicates a relatively low legitimacy at the outset and that the impacts of the doping scandals radically lowered the legitimacy of elite sport.

There are signs that the legitimacy of elite sport has increased in the last decade. The share of the population who is interested in Finnish elite sport success is increasing. However, the past has enduring consequences. One of the long-term effects is the hesitance of Finnish companies to be associated with elite sport compared to companies in other Nordic countries.

This has impacts in the shape of low private funding for elite sport in Finland. Further, the legitimacy of elite sport is still challenged by welfare state and equality concerns. In addition, the legitimacy is actually or potentially challenged by new societal concerns such as climate change, human rights, gender issues, bullying, and (toxic) masculinity as also pointed out earlier.

Based on this, it is crucial to improve the legitimacy of elite sport in Finnish society. A few recommendations for achieving this are outlined below.

One of the main weaknesses of the Finnish system is the absence of clear time-bound overall goals that are evaluated and followed up. To steer a network or a system it is necessary to align the various stakeholders with the input of resources. There are no doubt deep-rooted macro-level explanations of the Finnish absence of vagueness of goals and failure of follow-up.

They may well be grounded in risk averseness and collective fears and shame as expressed through what we earlier have described as the ghost of sisu. However, it is crucial to try to overcome the consequences. It is essential to increase legitimacy by developing goals for Finnish elite sport to use as a beacon for development.

This can be achieved through the articulation of goals reflecting predominant societal values and concerns – as well as systematic efforts to ensure that the goals are being implemented – and pre-emptive efforts in case of developments within elite sport that violates the overall goals.

Such goal setting cannot be made on a whim. It requires intensive dialogue and communication and is linked to trust-building measures as discussed previously. Good governance, ethics, and sustainability are among the most important overall concerns that must receive a primary focus in the goal-setting of the elite sport system.

In recent years, there has been a significant focus on good governance issues related to sport. The Finnish Center for Integrity in Sports (FINCIS) was for example established in 2016 (Mäkinen & Paavolainen, 2020) and works on a range of issues such as antidoping, prevention of match-fixing, and spectator safety. This must be developed into operational means and integrated into overall goal-setting.

Ethical concerns have many dimensions partly included in the issues covered by good governance. However, this requires a more comprehensive approach grounded in a range of specific goals, including concerns for individual rights, bullying (physical and mental), abuse, racism, and other forms of discrimination.

Sustainability issues are another theme that requires pre-emptive measures to ensure increased legitimacy for elite sport. Lack of sustainability is a potential stumbling block for the future of elite sport with its extensive use of resources in its current forms.

This may soon become particularly acute in snow-based winter sports. Climate change and elite sport is a topic which has so far received little attention, but it may be crucial that the elite sport systems take pre-emptive action in this respect.

In the Finnish elite sport system, various initiatives and commendable efforts have already been taken in relation to all these issues. Adequate pre-emptive action by the stakeholders may work, but inertia, conservatism, and vested interests will make it difficult for the system to enact such changes.

This is why it may be a precondition for achieving this to develop a framework for a structured and binding dialogue between the elite sport system and its network of independent stakeholders, the government, and relevant NGOs.

An alternative option is establishing an independent sports regulator with the investigation and enforcement powers. This proposal has recently gained support in countries such as

the United Kingdom, where elite sport success has been pursued in ways which have subsequently been heavily criticised.

It may also be worth considering whether a revision of the Sports Act with inclusion of societal concerns and the organisational framework of ongoing dialogue is specified.

The Danish experience shows that a legal link to welfare state concerns leads to continuous dialogue and inter-systemic adaptation of the sports system to broader societal values. The same outcome may result in intensifying recent efforts by stakeholders, but it is likely to help anchor the efforts in a legal form.

Summing up the recommendations

Recommendations for improvement depend on what the aims are. The overall purpose of this report is to analyse the Finnish elite sport system to come up with suggestions for improvement.

However, this general aim can be interpreted in different ways. There are at least three alternative interpretations: First, an improvement of the performance in the (mostly individual) Olympics sports; second, an improvement of Finland's international standing in the big team sports; and third, overall improvement of the performance level in all sports. It must become clearer what the actual aims are.

We assume that there is a priority for the third interpretation of the aim. This summary outlines measures that could contribute to an overall improvement of the performance level across all sports including measures that may be given priority if the more selective aims are chosen.

The recommendations do not include suggestions that require a major increase in governmental funding of elite sport, although some reallocation of financial support is suggested as well as several proposals that require a marginal increase in funding.

A major increase in public financial support is deemed unrealistic but also unnecessary. Marginal increases, on the other hand, are necessary to achieve the overall aims. Fortunately, they can be expected to have impacts that are much more significant than the relatively minor amounts involved.

A major persistent problem with the Finnish elite sport system is its far from ideal overall structure with a multitude of independent decision-makers, lack of clear leadership, and failure of proper coordination. Many attempts at restructuring have been suggested and attempted. This report has not come up with a silver bullet.

No major restructuring of the current network system is recommended. Neither does the report include suggestions for a major change of the role of the state. Efforts should rather be directed towards better network governance; that is, improved functioning of the existing structure.

The governance of the elite sport system needs major changes in relation to goal setting and its links with strategy, implementation, evaluation, and reward/sanction. Generally, goal setting needs to be more specific and closely linked to strategy with operational means that direct implementation. The results should be monitored using relevant metrics, and the evaluation should have consequences for the future allocation of resources.

The recommendation includes proposals for minor structural changes, but improvement of processes is considered more important and can be expected to have more significant effects.

Such improvements include better communication and dissemination of information, more frequent and less bureaucratic interaction, and more dialogue to develop common understanding and common goals. Lack of trust in the system among its stakeholders is a major hurdle in efforts to improve network governance. Trust-building is a difficult but necessary exercise.

A crucial general issue is the legitimacy of elite sport in Finland. Historical events indicate that legitimacy issues have had major impacts on attitudes and support for elite sport in Finland.

There are signs that the legitimacy of elite sport has increased in the last decade. However, there are still important impacts of what can be seen as a deficit of legitimacy, and it is crucial to improve the legitimacy of elite sport in Finnish society.

It is suggested that this may be achieved through various means including the development of explicit elite sport goals aligned with societal values and concerns such as good governance, sustainability, and ethics.

It is suggested that this requires a forum for continuous dialogue between the stakeholders in the elite sport system, the government and relevant NGOs.

In addition to these general suggestions, the report includes more specific recommendations:

- More professional management of sponsorships to improve private funding of elite sports
- Increased local government funding of elite sport through mutually beneficial involvement of local municipalities in the application of the HPU policies
- Better long-term planning
- Strengthened manpower and professionalisation in sports federations by linking continued support to organisational changes, including administrative routines and professional performance directors
- Sharpened prioritisation of the HPU support by reducing the number of supported federations and/or the introduction of a system of differentiated support related to the international standing and promise
- Better support for club administration and coaching

- Reallocation of financial support for mass participation to reflect the relative increase in self-organised activities
- Better coordination of talent identification and talent development in federations and clubs through knowledge transfer
- Better coordination of the activities of sports academy staff with responsibility for sport and study, respectively
- Support for league-based tournaments in paralympic team sports
- Inclusion of the sub-elite in the top-level support structure of the HPU
- Better post-career support and the introduction of a combination of sport and study/work as an explicit condition for individual financial support
- Efforts to attract young athletes to stay in sports institutes, including subsidies for transport and more attention to issues of lifestyle, entertainment, and youth culture
- Funding for continuous upgrading of the facilities of the two main national training centres to keep up with the international best practice
- A new consultative national unit with responsibility for coordinating and guiding the development, usage, and innovation of training facilities
- An appropriately supported career path for professional coaches
- Support for more professional coaches in the individual sports
- Specialist education in coaching Paralympic athletes
- Improvement of coaching standards among Finnish coaches through better application of sports science in coaching practices
- Import of foreign coaches in situations with sub-level national coaching standards and a need for new inspiration
- More systematic efforts to host international sporting events including the establishment of a responsible organisation, possibly named: 'Sport Event Finland'
- Improve the strategic management of elite sport related research through better goal setting and implementation of strategies and the clarification of the competences of the stakeholders in the sports research network
- Increase in the practical application of sports science through marginal changes in research funding, giving HPU funds for incentivising research in priority areas of application
- More systematic search procedures for potentially relevant practical application of research projects, including better data collection and analysis
- A revision of the Sports Act linking elite sport to societal values and concerns and the formalisation of the organisational framework for an ongoing dialogue between the elite sport system, the government, and relevant NGOs

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Appendix 1: Terms of reference prepared by the Finnish Ministry of Education and Culture

Evaluation of elite sports in Finland - Work Package 5: International evaluation

1) Target of the evaluation
Evaluation of elite sports in Finland from an international perspective

2) Commissioned by
Ministry of Education and Culture, Division for Sport

3) Implementation
The evaluation will be commissioned as a procurement from an international operator. Ministry of Education and Culture / the secretariat of the National Sports Council is responsible for choosing the evaluator. The secretariat of the National Sports Council and the research group for the overall evaluation of elite sports in Finland will monitor and guide the implementation.

4) Schedule

- The evaluation will run from December 2021 to May 2022.
- Preliminary results of the evaluation will be delivered to the commissioning party on 13 May 2022.
- The finalised evaluation will be delivered to the commissioning party on 31 May 2022.

5) Main objective of the evaluation
To compare and evaluate Finland's current system of elite sports from an international perspective. The evaluation will produce information that can be used in the overall evaluation of Finnish elite sports.

6) Background to the evaluation
The Ministry of Education and Culture is tasked with creating the conditions for developing the system of elite sports in Finland. Central government funding for elite sports totalled about EUR 29 million in 20201. The Finnish Olympic Committee is responsible for the operative management of elite sports. The division of responsibilities between the Ministry and the Olympic Committee are agreed in the performance management document. A number of significant changes were made in the 2010s to the Finnish system of elite sports and to the way elite sports operate. The operative activities of a new elite sports unit were launched in 2013 as part of the activities of the Finnish Olympic Committee. The unit directs and coordinates the activities of the Finnish elite sports network, including Paralympic sports. Resources are allocated through the elite sports unit to supporting the everyday

lives of athletes, coaches and other actors in the network by means of three programmes (Elite Programme, Sports Academy Programme and Competence Programme).

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Several studies and evaluations related to elite sports have been carried out in the 2000s, for example: Nieminen working group (2008–2010), Harkimo working group (2016), internal evaluation of elite sports (2020) and external evaluation of elite sports (2017). 25 November 2021

7) Content of the evaluation
The Finnish system of elite sports (including Paralympic sports) needs to be compared and evaluated from an international perspective in the following areas:

A. Structural factors
- Definition of elite sports and key indicators
- Societal justification for elite sports from the point of view of public funding
- Objectives set for elite sports, their attainment and measurement
- Normative governance of elite sports (legislation)
- Financial resources for elite sports: public funding, private funding
- System of elite sports: roles of different actors (central government, organisations, various elite sports organisations, coaching centres, research institutes and universities/higher education institutions, companies), strategies, leadership and management, organisation and coordination of operative activities
- Elite sports environments and venues
- Competence in elite sports (such as the number and education of coaches, the scope of professional coaching, research, expert and innovation activities)

B. Cultural factors
- The impact of the country-specific characteristics of the culture of sports and physical activity on the country's elite sports and its potential for international success
- Attitudes of the population towards elite sports (appreciation of elite sports/different forms of sport/athletes, relationship between elite sports and physical activity)
- The international scope of elite sports (such as aiming for national/global success, investments in a broad national level/national team activities)

C. Societal factors
- Structure of the society (such as the welfare society)
- Structures affecting sports opportunities (possibility for a dual career, the income of athletes, etc.)
- Other societal factors that affect elite sports

In the evaluation, elite sports in Finland should be compared with reference countries. The reference countries (and possibly case-sports) will be selected together with those carrying out the evaluation.

8) Materials

The evaluation will be mainly based on existing completed materials. The National Sports Council and the Research Institute for Olympic Sports (KIHU) will assist in compiling the material. The party commissioning the evaluation is responsible for translating the key materials into English. New material will also be collected in the evaluation, for example by means of interviews.

9) Final product

- A written (spellchecked) report in English describing the material and method used in the evaluation, the outcomes, conclusions and recommendations.
- The National Sports Council will have the report translated into Finnish, and will commission the layout work and publish it in its publication series.

Appendix 2: Interviews conducted

#	Date	Person	Organisation	Form	Duration
1.	20.01.2022	Michael Andersen	Independent consultant, Former director of Team Danmark and former advisor to the HPU, Finnish Olympic Committee	Online	95 minutes
2.	21.01.2022	Jari Lämsä	Researcher, KIHU – Research Institute for Olympic Sports, Finland	Online	97 minutes
3.	27.01.2022	Jarmo Mäkinen	Researcher, KIHU – Research Institute for Olympic Sports, Finland	Online	80 minutes
4.	28.01.2022	Kati Lehtonnen	Senior Researcher at LIKES - Foundation for Sport and Health Sciences, Finland	Online	85 minutes
5.	10.02.2022	Svein Anderson	Professor, BI Norwegian Business School	Online	60 minutes
6.	11.02.2022	Markku Jokisipilä	Assistant Professor, Centre for Parliamentary Studies, University of Turku	Online	71 minutes
7.	21.02.2022	Riikka Juntunen	Secretary General, Finnish Paralympic Committee	Online	75 minutes
8.	11.03.2022	Jan Vapaavuori	President, The Finnish Olympic Committee.	Online	69 minutes
9.	07.04.2022	Outi Aarresola	Researcher, JAMK. University of Applied Science, Finland	Online	61 minutes
10.	22.04.2022	Aki Sola	Director, KIHU – Research Institute for Olympic Sports, Finland	Online	73 minutes
11.	03.05.2022	Toni Piispanen	Senior Specialist, National Sports Council / Paralympian	Online	63 Minutes

Appendix 3: Research visit programme and interviews

EVALUATION OF ELITE SPORTS IN FINLAND: International Evaluation
Workshop 14th – 17th March 2022, Finland
Rasmus Storm & Klaus Nielsen

MONDAY 14.3.

Location: Urhea Olympic Training Center (Helsinki), Room: Suomi-Finland, 4th floor

Session 1. Sports Academies

8:30 *Transport to Urhea*

9:00 Workshop with

- **Simo Tarvonen,** CEO, National Olympic Training Center Urhea
- **Janne Vuorinen,** Director, Olympiavalmennuskeskus Vuokatti-Ruka (Teams)
- **Mika Korpela**, Executive Director, Sport Academy of Turku Region
- **Reijo Jylhä**, Top sports coordinator, Lapin urheiluakatemia
- **Jari Karinkanta,** Coaching Director, Military sports

11:00 Tour in Urhea Campus

12:00 *Lunch in Restaurant Uppopulla*

Session 2. Sports Federations

13:00 Finnish Athletics Federation
Eeva Kantomäki, Head of Helsinki Training Centre
Tuomo Salonen, High-performance Director

13:45 Finnish Ski Association
Ismo Hämäläinen, Executive Director

14:30 *break*

14:45 **Tony Kilponen**, Executive Director, Finnish Swimming Federation
Janne Hänninen, Sport Director, Finnish Speed Skating Association

15:30 Finnish Gymnastics Federation
Maria Laakso, Secretary General
Emma Tast, Sports Director

16:15 *break*

16:30 **Hannu Tihinen,** Sports Director, Football Association of Finland
Matti Nurminen, Executive Director, Finnish Ice Hockey Association
Kimmo Oikarinen, General Manager, Finnish Ice Hockey Association
Ari Tammivaara, Managing Director, Finnish Basketball Association
Henrik Dettmann, Head Coach, Finnish Basketball Association

~17:30 *Transport to hotel*

TUESDAY 15.3.

Session 3. Sports Institutes

Location: Pajulahti Sports Institute (Lahti), Lounge: Rantasaunan takkahuone

8:00 *Transport to Pajulahti*

9:30 Workshop with

- **Petri Jakonen**, Managing Director, Eerikkilä Sports Instutute / Chairman of the Board, Finnish Sports Institutes
- **Tero Kuorikoski**, Director, Pajulahti Olympic and Paralympic training center
- **Jukka Tiikkaja**, Chief Operating Officer, Sport Institute of Finland
- **Jyri Pelkonen**, Director, Olympic Training Center Vuokatti (Teams)
- **Tapio Korjus**, Director, Kuortane Olympic Training Center (Teams)
- **Mikko Levola**, Managing Director, Olympic and Paralympic Training Center Pajulahti
- **Mikko Pohjola**, Director, Research & Development, Eerikkilä Sports Instutute

11:30 Tour in Pajulahti Campus

12:30 *Lunch*

13:30 *Transport to Helsinki*

Session 4. Finnish Olympic Committee

Location: Sporttitalo (Helsinki), room: Pariisi

15:00 Workshop with

- **Mikko Salonen**, CEO and Secretary General
- **Antti Paananen**, Director, Sports Academy Program

~17:30 *Transport to hotel*

WEDNESDAY 16.3.

Location: Ministry of Education and Culture (Helsinki), Meritullinkatu 10

Session 5. Ministry of Education and Culture

8:30 *Walk to the Ministry*

9:00 Workshop with

- **Esko Ranto**, Director General, Department for Youth and Sport Policy (Teams)
- **Tiina Kivisaari**, Director, Division for Sport
- **Kari Niemi-Nikkola**, Senior Advisor, Division for Sport
- **Hannu Tolonen**, Senior Specialist, Division for Sport
- **Samuli Rasila**, Senior Specialist, Division for Sport

room: Hopea cabinet

11:30 *Lunch in Vaskipohja restaurant (Hopea cabinet)*

Session 6. Finnish Researcher team (elite sport evaluation)

12:30 Workshop with

- **Karl-Erik Michelsen**, Professor, Lappeenranta University of Technology, LUT
- **Kalle Rantala**, Head of Exhibitions, Sports Museum of Finland
- **Kati Lehtonen**, Senior Researcher, PhD, LIKES/JAMK University of Applied Sciences
- **Jarmo Mäkinen**, Senior Researcher, PhD, Finnish Institute of High Performance Sport KIHU
- **Markku Jokisipilä**, Assistant Professor, Centre for Parliamentary Studies, University of Turku

room: Seminarium

15:30 *break*

Session 7. Other key persons

16.00 **Kimmo J. Lipponen**, CEO, Finnish Business and Society (FIBS), *writer of the previous external evaluation of Finnish elite sports*

room: Seminarium

~17:00 *Walk to the hotel*

THURSDAY 17.3.

Location: Ministry of Education and Culture, room: Potentia

8:30 *Walk to the Ministry*

Session 8. Paralympic Sports

9:00 **Riikka Juntunen**, Secretary General, Finnish Paralympic Committee
Kimmo Mustonen, Sports Director Paralympic sports, Finnish Olympic Committee

Session 9. Other researchers

10:00 **Vesa Linnamo**, Professor, University of Jyväskylä
Lauri Kettunen, Professor, Mathematical information technology, University of Jyväskylä

11:00 *End of the visit*

Idrættens
Analyseinstitut